VILLAGE OF PALATINE

VILLAGE HALL - COUNCIL CHAMBERS
200 E. WOOD STREET
PALATINE, IL 60067-5339 – (847) 359-9050
http://www.palatine.il.us

VILLAGE COUNCIL & COMMITTEE OF THE WHOLE

MINUTES

JULY 11, 2022

Regular Meeting **7:00 PM**

I. ROLL CALL – Time: 7:00 PM

Attendee Name	Title	Status	Arrived
Jim Schwantz	Mayor	Absent	
Tim Millar	District 1 Councilman	Present	
Scott Lamerand	District 2 Councilman	Present	
Doug Myslinski	District 3 Councilman	Present	
Greg Solberg	District 4 Councilman	Present	
Kollin Kozlowski	District 5 Councilman	Present	
Brad Helms	District 6 Councilman	Present	

Also Present:
Village Clerk Marg Duer, Village Manager Reid Ottesen, Village Attorney Patrick Brankin, Director of Community Development Mike Jacobs, Director of Planning & Zoning Ben Vyverberg, Director of Public Works Matt Barry, Village Engineer George Ruppert, Police Chief Dave Daigle, Fire Chief Patrick Gratzianna, and Director of Human Resources Pam Jackson

II. ELECTION OF MAYOR PRO TEM

In the absence of Mayor Schwantz, Clerk Duer opened the floor for nominations for Mayor Pro Tem for this evening's meeting.

1. Motion to Elect Mayor pro Tem **- Motion Carried by Voice Vote**

   Councilman Myslinski nominated Councilman Lamerand to serve as Mayor Pro Tem this evening. Councilman Solberg seconded.

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Doug Myslinski, District 3 Councilman
SECONDER:	Greg Solberg, District 4 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Schwantz

III. PLEDGE TO THE FLAG – Time: 7:01 PM

Mayor Pro /Tem Scott Lamerand invited everyone to stand and join him in the Pledge to the Flag.

IV. APPROVAL OF MINUTES

1. Village Council & Committee of the Whole - Regular Meeting - June 20, 2022 **- Accepted**

RESULT:	**ACCEPTED [UNANIMOUS]**
MOVER:	Doug Myslinski, District 3 Councilman
SECONDER:	Greg Solberg, District 4 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

V. MAYOR'S REPORT

1. As Submitted **-**

Mayor Pro Tem Lamerand announced upcoming events:

Wednesday July 13: 7PM-9PM
Adult Battle of the Bands
Fred P. Hall Amphitheater

The previously announced SWANCC Document Destruction and Electronics Recycling Event scheduled for Saturday, July 23, 2022 has been cancelled.

The Village of Palatine's Beautification Commission is accepting nominations for the 2022 Hometown Pride Awards. Nominations must be received by July 22. Visit Palatine.il.us for more information.

Mayor Pro Tem Lamerand expressed appreciation to Jaycees, from the Council and the community.

VI. RECESS TO THE COMMITTEE OF THE WHOLE

Recess to Committee of the Whole **- Motion Carried by Voice Vote**

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Tim Millar, District 1 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

VII. COMMITTEE OF THE WHOLE

A. FIRE POLICY & COMMUNITY INFORMATION COMMITTEE – Time: 7:02 PM

DOUG MYSLINSKI, CHAIRMAN

1. Consider a Motion Granting a Waiver of the Village's Sound Amplification Ordinance, the Temporary Closure of a Portion of Bothwell Street, and a Temporary Amendment to Lamplighter's Licensed Premises All in Conjunction with the Proposed 'Pipes for Pits' Event on August 7, 2022 at Lamplighter Inn, 60 N. Bothwell Street **- Approved by Voice Vote** (Council District: Six)

   Village Manager Reid Ottesen presented Lamplighter's and Bomb Shell Bullies' (Bully Breed Rescue) 'Pipes for Pits' proposed event on Sunday, August 7, from 3 to 6 PM, Sunday, August 7 on the east side of Lamplighter Inn on Bothwell Street, between Wilson and Station Streets. Bothwell Street will be closed from approximately noon to 7:30 PM on August 7. The proposed event will include one food truck, amplified acoustic music, and alcohol sales by Lamplighter Inn, as approved for previous events.

   Lindsey Stuckey, Lamplighters, explained the fund-raising event and expressed appreciation for support. She noted that dogs are not invited.

RESULT:	**APPROVED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Schwantz

2. As Submitted **-**

   Nothing was submitted.

B. POLICE POLICY & CODE SERVICES COMMITTEE – Time: 7:05 PM

BRAD HELMS, CHAIRMAN

1. Consider an Ordinance Granting a Variation for Lot Coverage to Permit a Rear Yard Patio at 32 S. Kerwood Street **- Motion Carried by Voice Vote** (Council District: Six)

   Planning & Zoning Director Ben Vyverberg presented the petitioner's request for a Variation to replace an existing crushed-gravel patio with a smaller concrete patio in the rear yard of a sub-standard lot, permitting 54% lot coverage (maximum 45%). The ZBA voted unanimously to approve a Lot Coverage Variation and staff concurs.

   Councilman Helms noted that the new surface is not permeable as the gravel was, but drainage is approved.

Dona Martin, 32 S. Kerwood, noted that the gravel surface is very unsteady, and the new surface will be more stable.

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Doug Myslinski, District 3 Councilman
SECONDER:	Tim Millar, District 1 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Schwantz

2. Consider an Ordinance Granting a Special Use for a Fence to be Located in the Side Yard Abutting a Street and Abutting the Side Lot Line of an Adjacent Front Yard at 1070 N. Cardinal Drive **- Motion Carried by Voice Vote** (Council District: Four)

   Planning & Zoning Director Ben Vyverberg presented the petitioner's request for a Special Use to replace an existing 4-foot fence with a 6-foot solid vinyl fence in the same location, setback 10 feet from the side property line. All four adjacent property owners have submitted letters of consent. The ZBA voted unanimously to approve a Special Use and staff concurs.

   Councilman Millar stated that he supports this Special Use only because of the unique lot and angle of the fence line that does not interfere with sight lines.

   In response to Councilman Myslinski, Vyverberg stated landscaping exists and is required.

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Scott Lamerand, District 2 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Schwantz

3. Consider an Ordinance Granting a Variation for Lot Coverage to Permit a Rear Yard Deck at 110 N. Benton Street **- Motion Carried by Voice Vote** (Council District: Six)

   Planning & Zoning Director Ben Vyverberg presented the petitioner's request for a variation to permit the lot coverage to be 58%, (maximum permitted 45% - an addition of approximately 20 square feet to the overall lot coverage). Vyverberg noted that it is a substandard lot, about half of a regular lot. The 5.1 feet rear lot-line setback for the deck, approved in 1996, will be maintained. The ZBA voted unanimously to approve the Lot Coverage Variation and staff concurs.

   Councilman Kozlowski noted that decks are generally porous below. In response to Kozlowski, drainage and weed barrier is not necessary under a

deck.

Village Manager clarified lot coverage and building coverage as they effect massing.

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Tim Millar, District 1 Councilman
SECONDER:	Scott Lamerand, District 2 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Schwantz

4. Consider an Ordinance Granting a Special Use to Permit an Indoor Sports and Recreational Facility (Kid's Empire) at 619 E. Dundee Road **- Motion Carried by Voice Vote** (Council District: Three)

   Planning & Zoning Director Ben Vyverberg presented the petitioner's request for a Special Use to permit an indoor sports & recreation center under the franchise name “Kid's Empire” in a currently vacant space located between Hobby Lobby and Petco. Parking is sufficient. The ZBA voted unanimously to approve a Special Use and staff concurs.

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Doug Myslinski, District 3 Councilman
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Schwantz

5. Consider an Ordinance Approving a Special Use Transfer to Permit the Continued Operation of a Service Station and Mart at 1228 E. Dundee Road **- Motion Carried by Voice Vote** (Council District: Four)

   Planning & Zoning Director Ben Vyverberg presented Casey's request for a Special Use transfer to permit continued operation of a service station, automobile laundry, and food mart, originally approved in 1986. Staff recommends approval.

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Schwantz

6. As Submitted **-**

   Nothing was submitted.

C. COMMUNITY & ECONOMIC DEVELOPMENT COMMITTEE – Time: 7:16 PM

KOLLIN KOZLOWSKI, CHAIRMAN

1. 2240 - 2296 N. Rand Road (Council District: Three)

Motion was for A and B

Planning & Zoning Director Ben Vyverberg presented The Missner Group's intention to consolidate 7 existing properties into one lot and develop a new warehouse/distribution or light manufacturing use, with associated office uses. The approximately 145,000 square foot building is being developed speculatively. Although parking is sufficient for anticipated uses, staff recommends a condition to implement additional parking, with Village direction, if needed. Traffic study, indicating a right-in, right-out traffic plan, was reviewed.

Councilman Kozlowski noted traffic concerns. Village Manager Reid Ottesen stated that IDOT is strict, and time of day impacts traffic conditions.

In response to Councilman Millar, Vyverberg stated sidewalks will be installed along Rand Road. Landscaping is planned throughout. The Plan Commission voted 4-1 to approve the requested Preliminary and Final Planned Development, Preliminary and Final Plat of Subdivision, and Rezoning from B-5 to Planned Development and staff concurs.

Lawrence Freedman, attorney for the petitioner, apologized that traffic engineer is not present, and noted that IDOT is in agreement with traffic plan. Ottesen sited options to get onto 53. This project is speculation, users will determine traffic volume and times.

Ben Vyverberg explained The Missner Group's request for the Cook County 6B Tax Classification program, designed to encourage industrial/manufacturing development through the reduction of a property's tax assessment over a twelve-year period. The Petitioner anticipates the proposed redevelopment will result in a total investment of nearly $20,000,000. Following completion, the Subject Property is projected to have a market value of approximately $19,500,000, generating an estimated $8,455,000 in total taxes over the life of the Class 6b Tax Incentive (or approximately $626,000 per year). Properties are assessed at 10% of market value for the first 10 years, 15% for the 11th year, and 20% in the 12th year. In absence of this incentive, the property would normally be assessed at 25% of its market value. Staff recommends approval.

RESULT:	**ADOPTED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Doug Myslinski, District 3 Councilman
SECONDER:	Scott Lamerand, District 2 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Schwantz

A. Consider Ordinances and a Resolution Granting Preliminary & Final Planned Development, Preliminary & Final Plat of Subdivision, and Rezoning to Planned Development for the Properties Located at 2240-2296 N. Rand Road **- Motion Carried by Voice Vote** (Council District: Three)

B. Consider a Resolution of Support for the Filing of a 6B Cook County Tax Classification Application for the Property Located at 2240-2296 N. Rand Road **- Adopted by Voice Vote** (Council District: Three)

2. Motion to Approve an Ordinance Granting Site Plan Review for the Proposed Redevelopment of the Property at 301 W. Johnson Street **- Motion Carried by Voice Vote** (Council District: Two)

Planning & Zoning Director Ben Vyverberg presented Northpointe Development Corporation's intent to acquire and redevelop the former Kinsch Florist/Garden Center property into 58 residential units contained within a single building. The property is presently zoned R-3 Multi-Family District, with 2.1 parking spaces per unit, and the proposed development complies with all the R-3 zoning requirements and bulk standards. The architecture and proposed building materials comply with the Downtown Design Guidelines. The proposed building and parking are located northeast of the creek, and no improvements are proposed on the west side of the creek. A condition of the proposed Ordinance would memorialize the west side of the creek as a conservation easement and would protect the single-family homes in that area. Staff recommends approval.

In response to Councilman Millar, Village Manager Reid Ottesen stated that parking has been established and traffic engineering will be studied when the project is completed.

Jake Victor, Antioc, IL., petitioner, was present for comments.

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Scott Lamerand, District 2 Councilman
SECONDER:	Doug Myslinski, District 3 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Schwantz

3. As Submitted **-**

Nothing was submitted.

D. INFRASTRUCTURE & ENVIRONMENT COMMITTEE – Time: 7:32 PM

SCOTT LAMERAND, CHAIRMAN

1. Amend Traffic Code

The motion was to approve Items A., B., and C.

Village Manager Reid Ottesen explained the drop-off/pick-up section of South Rose Street from Kenilworth Avenue to the creek for students attending Paddock Elementary School, has resulted in traffic congestion in the area. Staff recommends the no parking restriction be added to the Village Code.

Ottesen stated in response to increased traffic congestion in the area of Paddock School, and unsafe vehicular maneuvers, staff recommends all bus traffic enter the area from westbound on Johnson Street and turn south on Washington Court to the school, and prohibition of left turns for all other vehicles be added to the Village Code.

Ottesen stated, in conjunction with Community Consolidated School District 15's amended start times for all District schools, and to accommodate school bus traffic, the new times for the no left turns near Paddock and Lincoln School should be 8 a.m. to 9:30 a.m., Monday through Friday.

RESULT:	**ADOPTED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Schwantz

A. Consider an Ordinance Amending Section 18-81 of the Code of Ordinances to Add a No Parking Restriction on South Rose Street from Kenilworth Avenue to a Point 250 Feet North **- Motion Carried by Voice Vote** (Council District: Two)

B. Consider an Ordinance Amending Section 18-66 of the Palatine Code of Ordinances to Add No Left Turns from Westbound Johnson Street to Southbound Washington Court **- Motion Carried by Voice Vote** (Council District: Two)

C. Consider an Ordinance Amending Section 18-66 of the Palatine Code of Ordinances to Modify the No Left Turns for Eastbound Farm Gate Lane into the Lincoln Elementary School Parking Lot **- Motion Carried by Voice Vote** (Council District: Six)

2. Consider a Motion Authorizing the Village Manager to Execute Amendment 1 to the Pole Replacement Agreement with Verizon Wireless **- Approved by Voice Vote**

Village Manager Reid Ottesen reported Verizon Wireless has approached the

Village to amend the Pole Replacement Maintenance and License Agreement to add six additional street light pole designs to the current Exhibit A and recommended approval.

Joseph Harwell, manager for Verizon, Rolling Meadows, was present to respond to questions.

RESULT:	**APPROVED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Doug Myslinski, District 3 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Schwantz

3. Consider a Motion Authorizing the Village Manager to Execute Amendment 3 to the Agreement for Use of the Rights-of-Way with Verizon Access/MCImetro **- Approved by Voice Vote**

   Village Manager Reid Ottesen recommended approval of MCImetro Access' request for an additional amendment to the Agreement with Palatine for a major expansion to address Verizon's business needs for at least 18 months and to provide better, more reliable coverage for Palatine's residents, businesses, and first responders.

RESULT:	**APPROVED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Doug Myslinski, District 3 Councilman
SECONDER:	Tim Millar, District 1 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Schwantz

4. As Submitted **-**

   Nothing was submitted.

E. ADMINISTRATION, TECHNOLOGY & COMMUNITY HEALTH COMMITTEE – Time: 7:37 PM

GREG SOLBERG, CHAIRMAN

1. Consideration of a Motion Approving an Intergovernmental Agreement (IGA) with Harper College for the Storage of a Bike Sharing Rack, Within the Train Station Parking Lot **- Approved by Voice Vote** (Council District: Six)

   Village Manager Reid Ottesen recommended that the Village partner with Harper's bike-sharing service (Koloni) to provide a second bike rack location, near the train station with time limitation of 5 AM - 10:30 PM for rental. Koloni is responsible for providing the bikes, all payments.

RESULT:	**APPROVED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Schwantz

2. Consider an Ordinance Amending Chapter 2 of the Code of Ordinances of the Village of Palatine Related to the Sale of Real Estate **- Motion Carried by Voice Vote**

   Village Manager Reid Ottesen recommended exercising our Home Rule discretion in methods of disposal of Village real estate and methods of publishing the property on the Village's website for a minimum of two weeks. Anything within a Tax Increment Financing District would still need to follow the Notice of Development Opportunity process. The Council would still be required to have a 3/4 majority vote to dispose of the property, as was the previous requirement.

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Kollin Kozlowski, District 5 Councilman
SECONDER:	Scott Lamerand, District 2 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Schwantz

3. Consider a Motion to Approve an Intergovernmental Agreement with the City of Evanston for the Use and Maintenance of Two Motorcycles **- Approved by Voice Vote**

   Village Manager Reid Ottesen recommended an IGA with Evanston for the use of two motorcycles to allow two Palatine Police Officers to enroll in a two-week certification training course where our 100% electric motorcycle is prohibited. The IGA would fully indemnify Evanston, and Palatine would cover all operating costs and any repairs caused by our use.

RESULT:	**APPROVED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Kollin Kozlowski, District 5 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Schwantz

4. As Submitted **-**

   Nothing was submitted.

F. BUSINESS FINANCE & BUDGET COMMITTEE – Time: 7:41 PM

TIM MILLAR, CHAIRMAN

1. As Submitted **-**

   Councilman Kozlowski asked if prior approval is necessary for the warrant prior to the August 1st Village Council meeting. Village Manager Reid Ottesen responded no, Village Code allows the Village Manager's approval to be ratified at the next meeting.

VIII. RECONVENE THE VILLAGE COUNCIL MEETING – Time: 7:41 PM

Reconvene the Village Council Meeting **- Motion Carried by Voice Vote**

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

IX. CONSENT AGENDA

All items are considered to be routine by the Village Council and will be enacted by one motion, with waiver of first reading. There will be no separate discussion of these items unless a Council Member so requests, in which event the item will be removed from the Consent Agenda and considered in its normal sequence on the agenda.

RESULT:	**ADOPTED BY ROLL CALL [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Schwantz

1. Consider a Motion Ratifying the Village Manager's Approval of 2022 Warrant # 13 **- Approved**

2. Consider a Motion Granting a Waiver of the Village's Sound Amplification Ordinance, the Temporary Closure of a Portion of Bothwell Street, and a Temporary Amendment to Lamplighter's Licensed Premises All in Conjunction with the Proposed 'Pipes for Pits' Event on August 7, 2022 at Lamplighter Inn, 60 N. Bothwell Street **- Approved** (Council District: Six)

3. Consider an Ordinance Granting a Variation for Lot Coverage to Permit a Rear Yard Patio at 32 S. Kerwood Street **- Approved** (Council District: Six)

   Ordinance #O-64-22

4. Consider an Ordinance Granting a Special Use for a Fence to be Located in the Side Yard Abutting a Street and Abutting the Side Lot Line of an Adjacent Front Yard at 1070 N. Cardinal Drive **- Approved** (Council District: Four)

   Ordinance #O-65-22

5. Consider an Ordinance Granting a Variation for Lot Coverage to Permit a Rear Yard Deck at 110 N. Benton Street **- Approved** (Council District: Six)

   Ordinance #O-66-72

6. Consider an Ordinance Granting a Special Use to Permit an Indoor Sports and Recreational Facility (Kid's Empire) at 619 E. Dundee Road **- Approved** (Council District: Three)

   Ordinance #O-67-22

7. Consider an Ordinance Approving a Special Use Transfer to Permit the Continued Operation of a Service Station and Mart at 1228 E. Dundee Road **- Approved** (Council District: Four)

   Ordinance #O-68-22

8. Consider Ordinances and a Resolution Granting Preliminary & Final Planned Development, Preliminary & Final Plat of Subdivision, and Rezoning to Planned Development for the Properties Located at 2240-2296 N. Rand Road **- Approved** (Council District: Three)

   Ordinance #O-69-22 Final Planned Development
   Ordinance #O-70-22 Rezone
   Resolution #R-16-22 Final Plat of Subdivision

9. Consider a Resolution of Support for the Filing of a 6B Cook County Tax Classification Application for the Property Located at 2240-2296 N. Rand Road **- Adopted by Roll Call** (Council District: Three)

   Resolution #R-17-22

10. Motion to Approve an Ordinance Granting Site Plan Review for the Proposed Redevelopment of the Property at 301 W. Johnson Street **- Approved** (Council District: Two)

    Ordinance #O-71-22

11. Consider an Ordinance Amending Section 18-81 of the Code of Ordinances to Add a No Parking Restriction on South Rose Street from Kenilworth Avenue to a Point 250 Feet North **- Approved** (Council District: Two)

    Ordinance #O-72-22

12. Consider an Ordinance Amending Section 18-66 of the Palatine Code of Ordinances to Add No Left Turns from Westbound Johnson Street to Southbound Washington Court **- Approved** (Council District: Two)

    Ordinance #O-72-22

13. Consider an Ordinance Amending Section 18-66 of the Palatine Code of Ordinances to Modify the No Left Turns for Eastbound Farm Gate Lane into the Lincoln Elementary School Parking Lot **- Approved** (Council District: Six)

    Ordinance #O-72-22

14. Consider a Motion Authorizing the Village Manager to Execute Amendment 1 to the Pole Replacement Agreement with Verizon Wireless **- Approved**

15. Consider a Motion Authorizing the Village Manager to Execute Amendment 3 to the Agreement for Use of the Rights-of-Way with Verizon Access/MCImetro **- Approved**

16. Consideration of a Motion Approving an Intergovernmental Agreement (IGA) with Harper College for the Storage of a Bike Sharing Rack, Within the Train Station Parking Lot **- Approved** (Council District: Six)

17. Consider an Ordinance Amending Chapter 2 of the Code of Ordinances of the Village of Palatine Related to the Sale of Real Estate **- Approved**

    Ordinance #O-73-22

18. Consider a Motion to Approve an Intergovernmental Agreement with the City of Evanston for the Use and Maintenance of Two Motorcycles **- Approved**

19. Consider a Motion to Amend the 2022 Fee Schedule Supplement of the Village of Palatine's Code of Ordinances **- Approved**

20. Consider an Ordinance Amending the Code of Ordinances, Articles I, II, III, IV and V of Chapter 10 Regulations **- Approved**

    Ordinance #O-74-22

X. REPORTS OF STANDING COMMITTEE

A. ADMINISTRATION, TECHNOLOGY & COMMUNITY HEALTH COMMITTEE

GREG SOLBERG, CHAIRMAN

1. As Submitted **-**

   No Report

B. BUSINESS FINANCE & BUDGET COMMITTEE

TIM MILLAR, CHAIRMAN

1. As Submitted **-**

No Report

C. COMMUNITY & ECONOMIC DEVELOPMENT COMMITTEE – Time: 7:42 PM

KOLLIN KOZLOWSKI, CHAIRMAN

1. As Submitted **-**

No Report

D. FIRE POLICY & COMMUNITY INFORMATION COMMITTEE – Time: 7:42 PM

DOUG MYSLINSKI, CHAIRMAN

1. As Submitted **-**

No Report

E. INFRASTRUCTURE & ENVIRONMENT COMMITTEE – Time: 7:42 PM

SCOTT LAMERAND, CHAIRMAN

1. As Submitted **-**

No Report

F. POLICE POLICY & CODE SERVICES COMMITTEE – Time: 7:43 PM

BRAD HELMS, CHAIRMAN

1. As Submitted **-**

No Report

XI. REPORTS OF THE VILLAGE OFFICERS – Time: 7:43 PM

A. VILLAGE MANAGER – Time: 7:43 PM

1. As Submitted **-**

Village Manager Reid Ottesen added that Councilman Myslinski will hold the newly defined District 3 Residents' meeting on Thursday, July 28, at 7PM in the Council Chambers.

B. VILLAGE CLERK

1. As Submitted **-**

   No Report

C. VILLAGE ATTORNEY

1. As Submitted **-**

   No Report

XII. CLOSED SESSION AS REQUIRED – Time: 7:43 PM
No Closed Session requested.

XIII.RECOGNITION OF AUDIENCE
No one came forward.

XIV. ADJOURNMENT – Time: 7:43 PM

Adjourn the Village Council Meeting **- Motion Carried by Voice Vote**

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Schwantz

SUBMITTED BY:

Margaret R. Duer
Village Clerk

VILLAGE OF PALATINE

VILLAGE HALL - COUNCIL CHAMBERS
200 E. WOOD STREET
PALATINE, IL 60067-5339 – (847) 359-9050
http://www.palatine.il.us

VILLAGE COUNCIL & COMMITTEE OF THE WHOLE

MINUTES

JUNE 20, 2022

Regular Meeting **7:00 PM**

Minutes Acceptance: Minutes of Jun 20, 2022 7:00 PM (APPROVAL OF MINUTES)

I. ROLL CALL – Time: 7:00 PM

Attendee Name	Title	Status	Arrived
Jim Schwantz	Mayor	Present	
Tim Millar	District 1 Councilman	Present	
Scott Lamerand	District 2 Councilman	Present	
Doug Myslinski	District 3 Councilman	Present	
Greg Solberg	District 4 Councilman	Present	
Kollin Kozlowski	District 5 Councilman	Present	
Brad Helms	District 6 Councilman	Present	

Also Present:
Village Manager Reid Ottesen, Deputy Village Manager Hadley Skeffington-Vos, Village Attorney Nick Standiford, Director of Planning & Zoning Ben Vyverberg, Director of Public Works Matt Barry, Police Chief Dave Daigle, Fire Chief Patrick Gratzianna, IT Director Larry Schroth, Director of Human Resources Pam Jackson and Deputy Village Clerk Doris Sadik

II. PLEDGE TO THE FLAG

Mayor Schwantz invited everyone to stand and join him in the Pledge to the Flag.

III. APPROVAL OF MINUTES

1. Village Council & Committee of the Whole - Regular Meeting - June 13, 2022 - **Accepted**

RESULT:	**ACCEPTED [UNANIMOUS]**
MOVER:	Doug Myslinski, District 3 Councilman
SECONDER:	Greg Solberg, District 4 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

IV. MAYOR'S REPORT

1. Certificates of Recognition for Palatine High School Boys Gymnastics Team - 1st Place at IHSA State Finals **-**

   Mayor Schwantz recognized the Palatine High School Boys Gymnastics Team for their 1st Place finish at the 2022 IHSA Championship under the leadership of Head Coach Scott Hagel. Coach Hagel expressed great pride in the team and explained each team members' accomplishments. Schwantz provided Certificates of Recognition to all the team members.

2. As Submitted **-**

   Friday June 24 through Sunday June 26
   Greek Fest Drive
   St. Nectarios Greek Orthodox Church

   Thursday June 30 through Monday July 4
   Palatine Jaycees Hometown Fest
   Community Park

   Monday July 4: Village offices will be closed for Independence Day

V. RECESS TO THE COMMITTEE OF THE WHOLE – Time: 7:08 PM

Recess to the Committee of the Whole **- Motion Carried by Voice Vote**

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Tim Millar, District 1 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

VI. COMMITTEE OF THE WHOLE

A. POLICE POLICY & CODE SERVICES COMMITTEE

BRAD HELMS, CHAIRMAN

1. Consider an Ordinance Granting a Variation to Permit a Driveway Expansion to Create a Circular Driveway which Exceeds the Maximum Allowed Driveway Width at 587 W. Lake Cook Road **- Motion Carried by Voice Vote** (Council District: Three)

   Director of Planning & Zoning Ben Vyverberg presented the petitioner's request to construct a circular residential driveway to be a total of 76.5 feet in width, instead of the maximum permitted 30 feet, and for the driveway to be 28 feet in width, within 5 feet of the lot line, instead of the maximum permitted

Minutes Acceptance: Minutes of Jun 20, 2022 7:00 PM (APPROVAL OF MINUTES)

25 feet. Vyverberg explained the 45 mph speed limit on Lake Cook Road is reasoning for the expanded driveway. The Zoning Board of Appeals voted unanimously to recommend the request and staff concurs.

In response to Councilman Helms, Vyverberg reported there are no issues with the fire hydrant.

Councilman Millar raised a concern with circular driveways becoming parking lots and would prefer some restriction for egress not storage. Vyverberg mentioned there is no limit to the number of cars on the exterior of the property.

In response to Councilman Helms, Village Manager Reid Ottesen reported the Code requires cars to be parked on a paved surface and not overhang sidewalks. In a review of the code for circular driveways, we could add some landscape requirement within the front yard. Currently, there is nothing in the code that prohibits cars to be parked all the way around the circular driveway. In this case, given the nature of Lake Cook Road being a more commercial area, it is a different characteristic. For true residential areas we could require some type of screening mechanism.

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Doug Myslinski, District 3 Councilman
SECONDER:	Scott Lamerand, District 2 Councilman
AYES:	Schwantz, Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

2. Consider an Ordinance Granting a Special Use to Permit a Medical Office (Chiropractic Office) at 60 W. Illinois Avenue **- Motion Carried by Voice Vote** (Council District: Two)

Director of Planning and Zoning Ben Vyverberg presented the Petitioner's request to relocate an existing Chiropractic office to 60 W. Illinois Avenue. Based on the proposed use there is no additional parking required. The Zoning Board voted unanimously to approve and staff concurs.

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Scott Lamerand, District 2 Councilman
SECONDER:	Doug Myslinski, District 3 Councilman
AYES:	Schwantz, Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

3. Consider an Ordinance Approving a Special Use Transfer to Permit the Continued Operation of Mexico Uno Restaurant at 15 N. Brockway Street **- Motion Carried by Voice Vote** (Council District: Six)

Director of Planning and Zoning Ben Vyverberg presented Mexico Uno's request to acquire the business and seek approval of a Special Use Transfer to Jaime and Marta Gonzalez to permit the continued operation of Mexico Uno. Other than the ownership change, the Petitioner is not proposing any

Minutes Acceptance: Minutes of Jun 20, 2022 7:00 PM (APPROVAL OF MINUTES)

other changes. Staff recommends approval.

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Tim Millar, District 1 Councilman
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Schwantz, Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

4. Consider an Ordinance Granting a Variation to Permit a Driveway Expansion to Exceed the Maximum Allowed Driveway Width, within Five (5) Feet of the Lot Line at 102 N. Crescent Avenue **- Motion Failed by Roll Call** (Council District: One)

   Director of Planning and Zoning Ben Vyverberg explained the Petitioner's variation request to permit a driveway expansion by 9 feet and 30 feet in width due to having more cars than garage space and difficulty maneuvering the vehicles. A concern from staff included the fire hydrant south of the expansion, which could incur damage from turning movements. Staff identified several properties in the surrounding neighborhood, which have expanded driveways, but are compliant with the maximum width tapered to a maximum of 25 feet within five (5) feet of the lot line. Staff feels the nine feet expansion is excessive. The Zoning Board of Appeals voted unanimously to recommend denial and staff concurs. The Code requires a super majority favorable vote of the Village Council to approve the requested relief.

   In response to Councilman Kozlowski regarding lot coverage, Vyverberg explained there is no lot coverage consideration with the 9 feet expansion, which is all on their property. The apron remains in as is condition.

   Councilman Millar verified if the request is denied tonight, they could come back to Council without a variance and without the one-year waiting period if they complied with the 25 feet with tapering. Vyverberg confirmed and added a permit would be required.

   Village Manager Ottesen explained they could expand 9 feet by the house, but need to keep 5 feet within the lot line to meet the requirement.

   Councilman Myslinski questioned why the petitioner did not want to taper. The Petitioner was not present to answer.

RESULT:	**MOTION FAILED BY ROLL CALL [0 TO 7]**
MOVER:	Tim Millar, District 1 Councilman
SECONDER:	Scott Lamerand, District 2 Councilman
NAYS:	Schwantz, Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

5. Consider an Ordinance Increasing Class D (Restaurant) Liquor Licenses by Nine **- Motion Carried by Voice Vote** (Council District: Multiple)

   Village Manager Reid Ottesen reported with adoption of the Chapter 3 Code

Minutes Acceptance: Minutes of Jun 20, 2022 7:00 PM (APPROVAL OF MINUTES)

Amendment in July, there is no longer a Class D-1 liquor license. Holders of the Class D-1 license will now receive the Class D license with the 2 AM closing time, except for Gators and Durty Nellies, which have their own separate hours with the Late Close license.

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Kollin Kozlowski, District 5 Councilman
SECONDER:	Tim Millar, District 1 Councilman
AYES:	Schwantz, Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

6. Consider an Ordinance Decreasing the Number of Class D-1 (Restaurant with Extended Hours) Liquor Licenses by Nine **- Motion Carried by Voice Vote** (Council District: Multiple)

   Village Manager Reid Ottesen explained with the creation of the new Class D license, the D-1 classification is eliminated.

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Jim Schwantz, Mayor
SECONDER:	Doug Myslinski, District 3 Councilman
AYES:	Schwantz, Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

7. Consider an Ordinance Decreasing the Number of Class A Liquor Licenses by Two for Oak Alley Saloon, 783 N. Quentin Road and The Wine Cellar, 361 W. Northwest Highway **- Motion Carried by Voice Vote** (Council District: Multiple)

   Village Manager Reid Ottesen reported that Oak Alley Saloon closed operation and The Wine Cellar decided to drop their Class A Tavern license. The Class A license has not been available for a number of years, these 2 licenses were grand fathered in. Next month a Code Amendment will be presented before the Council to formerly eliminate this classification from the Code.

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Doug Myslinski, District 3 Councilman
SECONDER:	Tim Millar, District 1 Councilman
AYES:	Schwantz, Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

8. Consider an Ordinance Creating Nine Class VG Liquor Licenses **- Motion Carried by Voice Vote** (Council District: Multiple)

   Village Manager Reid Ottesen reported that 12 people have applied for the Video Gaming license, nine of these license holders are doing this in their existing tenant space. The other three may require some zoning relief due to expansion of their space or changing their underlying use.

Minutes Acceptance: Minutes of Jun 20, 2022 7:00 PM (APPROVAL OF MINUTES)

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Kollin Kozlowski, District 5 Councilman
SECONDER:	Greg Solberg, District 4 Councilman
AYES:	Schwantz, Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

9. As Submitted **-**

   Nothing was submitted.

B. COMMUNITY & ECONOMIC DEVELOPMENT COMMITTEE

KOLLIN KOZLOWSKI, CHAIRMAN

1. Consider a Motion Opening the 30-Day Public Review and Comment Period for the 2022 CDBG Action Plan **- Approved by Voice Vote**

   Director of Planning and Zoning Ben Vyverberg reported on the draft 2022 CDBG Action Plan and to initiate the 30-day public review and comment period. The Village's anticipated CDGB entitlement amount is $479,813. Vyverberg summarized the CDGB Administration costs, public improvement projects, allotment of the 2022 funding and social service agencies.

   Village Manager Reid Ottesen suggested taking a closer look at the return in investment; expending small dollar allocations to some agencies can take more administrative time in monitoring site visits. The Village may be able to deliver stronger services by increasing funding to other agencies so they can do more. This may result in a better return on investment. We need to consider how many people they serve and the cost involved. Council may see some changes next year.

   In response to Mayor Schwantz regarding the decrease in funding, Ottesen explained that it is based on the formula HUD is using.

RESULT:	**APPROVED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Jim Schwantz, Mayor
SECONDER:	Tim Millar, District 1 Councilman
AYES:	Schwantz, Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

2. Historical Preservation Presentation **-**

   Village Manager Reid Ottesen reported that in November of 2021 staff researched historical preservation in other communities and how we can assist with historical preservation within our community. It has been a learning process with opportunities to partner with our Historical Society and offer monetary resources to work towards a stronger organization.

   Deputy Village Manager Skeffington-Vos presented a proposed partnership that may include an annual monetary contribution, Village liaison to the Historical Society Board, GIS services, maps, tours, events, and cross

Minutes Acceptance: Minutes of Jun 20, 2022 7:00 PM (APPROVAL OF MINUTES)

promotion of Historical Society events. Annual contributions include plaques, digitizing records, events/programs and historical photography. The digital partnership would consist of a dedicated page on the Village website to outline resources to research property.

Village Manager Reid Ottesen reported on future opportunities and explained having a historical preservation component to the Comprehensive Plan. This could provide us the opportunity to bring in an outside consultant to assist with historic preservation.

Joe Petykowski, 11811 King Court in Huntley, IL and Susan Minott, 951 E. Baldwin, Palatine IL addressed the Council. Joe Petykowski thanked the Village and Council for the opportunity to work together on historical preservation. People enjoy attending Palatine events such as the Farmers' Market and civic events; they love the history. We will offer any assistance and appreciate having historical information available on the Village website.

Ottesen presented survey data that shows Arlington Heights has a Design Commission but no formal Historical Commission or Historical District. Barrington had the most robust Architectural Review Commission and a survey, which found that most people purchased their homes due to the location of the downtown/train station and schools. Only 9% decided to purchase homes in Barrington due to historical preservation. Ottesen reviewed the statistics for Palatine, which showed development, redevelopment and investment in historic homes is happening in Palatine. Downtown residential investment is as strong as in other parts of the Village. There is not a lack of investment in the downtown area of Palatine. A Historic Preservation Ordinance could result in restrictions for exterior changes/modifications, are usually limited to a certain area or district, require the establishment of a Historical Preservation Commission or District and permission for demolition and penalties for non-compliance.

Staff hesitates to establish formal ordinances that restrict property owners in what they can or cannot do with their own property or infringe on private property rights. We want to be a resource for steps in how you can obtain historic landmark designation for a property. Staff would not recommend any formal ordinance that would restrict private property rights. The fall budget will show dollars allocated to the Historical Society.

Councilman Kozlowski concurs with the Village Manger not to restrict on private property rights with ordinances.

In response to Mayor Schwantz regarding the responsibility in maintaining the grounds of the Clayson House, Joe Petykowski confirmed that the Palatine Library, Palatine Park District and the Historical Society have an Intergovernmental Agreement regarding ownership and maintaining the grounds. The Village is not involved in this agreement.

Minutes Acceptance: Minutes of Jun 20, 2022 7:00 PM (APPROVAL OF MINUTES)

Ottesen mentioned funding allocation from the Village could go towards plaques, GIS services, mapping and research. The Village wants to foster a partnership with the Historical Society. This is an investment in our past and in our future.

Councilman Helms agrees with preserving history and fostering a partnership with the Historical Society and concurs with not having restrictions on private residences. With restrictions, there could be issues with property owners trying to sell their homes.

Ottesen mentioned that private property owners can add restrictions to their homes if they prefer.

In response to Councilman Helms, Petykowski reported that people want to know the history of the area. The historical society offers walking tours, stories, pictures and historical plaque designation.

Phillip Etter addressed the Council and explained why they initiated the conversation regarding historical preservation after purchasing their home. He is thankful that the Palatine community was very accepting and that the Historical Society will benefit through this partnership.

Ottesen expressed that the Historical Society and the community as a whole benefit from this partnership

Council concurs with staff recommendations.

3. As Submitted **-**

Nothing was submitted.

C. INFRASTRUCTURE & ENVIRONMENT COMMITTEE

SCOTT LAMERAND, CHAIRMAN

1. Baldwin Road Culvert Improvement Project

Motion is for Items A. and B.

Director of Public Works Matt Barry reported on the culverts that carry Buffalo Creek require full replacement at Baldwin Road north of Dundee for water main replacement. The Village was successful in getting a grant for Phase I and II for design engineering creating the construction plan. One secures the Federal Funding participation to be reimbursed 80 percent. It is recommended the Phase II Engineering Services Agreement with Cioba Group be approved in the amount of $158,444.

Minutes Acceptance: Minutes of Jun 20, 2022 7:00 PM (APPROVAL OF MINUTES)

RESULT:	**ADOPTED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Doug Myslinski, District 3 Councilman
AYES:	Schwantz, Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

A. Consider a Motion to Approve a Local Public Agency Agreement for Federal Participation for the Baldwin Road Culvert Replacement Phase II Engineering **- Approved** (Council District: Multiple)

B. Consider a Motion Approving an Agreement with Ciorba Group for Engineering Services for Phase II for the Baldwin Road Culvert Replacement **- Approved** (Council District: Multiple)

2. Palatine & Quentin Road Improvement Project

Motion is for Items A., B. and C.

Director of Public Works Matt Barry reported on the improvement of Palatine Road from Quentin to Smith Street with the maintenance responsibility of IDOT eligible for Federal Aid. This project improvement plan is consistent with a public outreach study. The first part is to secure federal funding for design engineering. Secondly, Phase II Engineering creates construction plan and contract specification. A qualification based selection process was followed to select the consulting engineer, Bollinger, Lach & Associates. A design engineering agreement for roadway lighting is not eligible for federal aid, therefore is a stand-alone agreement with local funding. Staff recommends approval of an agreement with Bollinger, Lach & Associates for this project in the amount of $45,825. It is optimistic to look for construction starting in 2024.

RESULT:	**ADOPTED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Tim Millar, District 1 Councilman
AYES:	Schwantz, Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

A. Consider a Motion to Approve a Local Public Agency Agreement for Federal Participation for the Improvement of Palatine Road from Quentin Road to Smith Street **- Approved** (Council District: Multiple)

B. Consider a Motion Approving an Agreement with Bollinger, Lach & Associates for Engineering Services for Phase II of Palatine Road Reconstruction **- Approved** (Council District: Multiple)

C. Consider a Motion Approving an Agreement with Bollinger, Lach & Associates for Engineering Services for Roadway Lighting of Palatine Road from Quentin Road to Smith Street **- Approved** (Council District: Multiple)

Minutes Acceptance: Minutes of Jun 20, 2022 7:00 PM (APPROVAL OF MINUTES)

3. Consider a Motion to Approve a Proposal for Engineering Services for the Illinois Avenue Improvements Phase I and Phase II Design **- Approved by Voice Vote** (Council District: Two)

   Director of Public Works Matt Barry reported on proceeding with Phase I and II Engineering simultaneously for the resurfacing rehabilitation for Illinois Avenue from Quentin to Plum Grove Road to take advantage of Federal funding. The resurfacing rehabilitation has a favorable rating being 1st on the contingency list for federal participation. Staff recommends advancing with Phase I and II to support acceleration of future federal aid.

   In response to Councilman Lamerand, Barry mentioned spending the $150,000 now will put the Village in a strong position to obtain federal aid.

   Village Manager Reid Ottesen explained that keeping strong fund balances makes it possible for the Village to take advantage of federal grants.

RESULT:	**APPROVED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Jim Schwantz, Mayor
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Schwantz, Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

4. Consider a Motion to Award a Contract for the 2022 Water Main Replacement Contract 1 Project **- Approved by Voice Vote**

   Director of Public Works Matt Barry reported that Chewink Court, Wren Avenue, Willow Wood Drive, Willow Court and Salem Court are recommended for water main replacement. Due to supply chain cost increases, the low bid was $1,948,736, higher than the engineer's estimate. Staff reached an agreement with Concept Plumbing to reduce the scope of the work, reducing the cost of the proposed work to $1,675,000. Staff recommends the contract be awarded to Concept Plumbing.

   Funding is available in the water fund of the 2022 Capital Improvement Program for subsequent water projects later in the year.

RESULT:	**APPROVED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Tim Millar, District 1 Councilman
SECONDER:	Doug Myslinski, District 3 Councilman
AYES:	Schwantz, Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

5. As Submitted **-**

   Nothing was submitted.

Minutes Acceptance: Minutes of Jun 20, 2022 7:00 PM (APPROVAL OF MINUTES)

D. ADMINISTRATION, TECHNOLOGY & COMMUNITY HEALTH COMMITTEE

GREG SOLBERG, CHAIRMAN

1. Consider a Motion to Authorize the Village Manager to Execute a Contract for Snow and Ice Control Services at the Gateway Center Parking Deck **- Approved by Voice Vote** (Council District: Six)

   Director of Public Works Matt Barry reported to execute a contract with M & B Landscaping for 2022-2025 snow and ice control services at the Parking Deck. After nearly 15 years with no price increases, a multi-year contract with recommended hourly rate adjustments is proposed. It is recommended that de-icing material be considered a reimbursable to the contractor, recognizing the uncertain material costs for the next three years.

   In response to Councilman Myslinski, Barry confirmed that snow will continue to be piled on the north side.

RESULT:	**APPROVED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Schwantz, Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

2. Consider a Resolution to Approve an Intergovernmental Agreement Between the Village of Palatine and the Palatine Township Road District for Snow and Ice Control Services **- Adopted by Voice Vote**

   Director of Public Works Matt Barry reported to continue a one-year agreement with the Palatine Township for snow and ice control services. This year brings a decrease from last year due to the decrease in the FEMA Schedule of equipment rates. Staff is recommending continuing this relationship with the Township at a lower cost.

RESULT:	**ADOPTED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Jim Schwantz, Mayor
SECONDER:	Scott Lamerand, District 2 Councilman
AYES:	Schwantz, Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

3. As Submitted **-**

   Nothing was submitted.

E. BUSINESS FINANCE & BUDGET COMMITTEE

TIM MILLAR, CHAIRMAN

1. Consider a Motion to Authorize the Village Manager to Purchase 2022 Budgeted Vehicles and 2023 Light Duty Fleet Consistent with the Capital Improvement Plan **- Approved by Voice Vote**

Minutes Acceptance: Minutes of Jun 20, 2022 7:00 PM (APPROVAL OF MINUTES)

Village Manager Reid Ottesen reported on a unique request involving the supply chain issues where cooperative bids are opening for only 2-3 days. This short time frame does not allow staff to obtain council approval to take advantage of the lower prices for trucks. It is recommended to allow staff to move forward with purchasing in order to lock in prices when the opportunity arises, staying within our 5-year capital plan. Fleet purchases will be heavy next year and we want to avoid larger expenditures down the road.

In response to Councilman Millar's question regarding added retail cost, Ottesen mentioned if the vehicle is marked up, it is not in our best interest to purchase. It's important for the Village to keep on cycle with Public Works and Police fleet vehicles.

RESULT:	**APPROVED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Jim Schwantz, Mayor
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Schwantz, Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

2. As Submitted **-**

Nothing was submitted.

F. FIRE POLICY & COMMUNITY INFORMATION COMMITTEE

DOUG MYSLINSKI, CHAIRMAN

1. As Submitted **-**

Nothing was submitted.

VII. RECONVENE THE VILLAGE COUNCIL MEETING – Time: 8:00 PM

Reconvene the Village Council Meeting **- Motion Carried by Voice Vote**

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Tim Millar, District 1 Councilman
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

VIII.CONSENT AGENDA

All items are considered to be routine by the Village Council and will be enacted by one motion, with waiver of first reading. There will be no separate discussion of these items unless a Council Member so requests, in which event the item will be removed from the Consent Agenda and considered in its normal sequence on the agenda.

Minutes Acceptance: Minutes of Jun 20, 2022 7:00 PM (APPROVAL OF MINUTES)

RESULT:	**ADOPTED BY ROLL CALL [UNANIMOUS]**
MOVER:	Scott Lamerand, District 2 Councilman
SECONDER:	Doug Myslinski, District 3 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

1. Consider a Motion to Approve 2022 Warrant #12 **- Approved**

2. Consider an Ordinance Granting a Variation to Permit a Driveway Expansion to Create a Circular Driveway which Exceeds the Maximum Allowed Driveway Width at 587 W. Lake Cook Road **- Approved** (Council District: Three)

   Ordinance #O-57-22

3. Consider an Ordinance Granting a Special Use to Permit a Medical Office (Chiropractic Office) at 60 W. Illinois Avenue **- Approved** (Council District: Two)

   Ordinance #O-58-22

4. Consider an Ordinance Approving a Special Use Transfer to Permit the Continued Operation of Mexico Uno Restaurant at 15 N. Brockway Street **- Approved** (Council District: Six)

   Ordinance #O-59-22

5. Consider an Ordinance Increasing Class D (Restaurant) Liquor Licenses by Nine **- Approved** (Council District: Multiple)

   Ordinance #O-60-22

6. Consider an Ordinance Decreasing the Number of Class D-1 (Restaurant with Extended Hours) Liquor Licenses by Nine **- Approved** (Council District: Multiple)

   Ordinance #O-61-22

7. Consider an Ordinance Decreasing the Number of Class A Liquor Licenses by Two for Oak Alley Saloon, 783 N. Quentin Road and The Wine Cellar, 361 W. Northwest Highway **- Approved** (Council District: Multiple)

   Ordinance #O-62-22

8. Consider an Ordinance Creating Nine Class VG Liquor Licenses **- Approved** (Council District: Multiple)

   Ordinance #O-63-22

9. Consider a Motion Opening the 30-Day Public Review and Comment Period for the 2022 CDBG Action Plan **- Approved**

Minutes Acceptance: Minutes of Jun 20, 2022 7:00 PM (APPROVAL OF MINUTES)

10. Consider a Motion to Approve a Local Public Agency Agreement for Federal Participation for the Baldwin Road Culvert Replacement Phase II Engineering **- Approved** (Council District: Multiple)

11. Consider a Motion Approving an Agreement with Ciorba Group for Engineering Services for Phase II for the Baldwin Road Culvert Replacement **- Approved** (Council District: Multiple)

12. Consider a Motion to Approve a Local Public Agency Agreement for Federal Participation for the Improvement of Palatine Road from Quentin Road to Smith Street **- Approved** (Council District: Multiple)

13. Consider a Motion Approving an Agreement with Bollinger, Lach & Associates for Engineering Services for Phase II of Palatine Road Reconstruction **- Approved** (Council District: Multiple)

14. Consider a Motion Approving an Agreement with Bollinger, Lach & Associates for Engineering Services for Roadway Lighting of Palatine Road from Quentin Road to Smith Street **- Approved** (Council District: Multiple)

15. Consider a Motion to Approve a Proposal for Engineering Services for the Illinois Avenue Improvements Phase I and Phase II Design **- Approved** (Council District: Two)

16. Consider a Motion to Award a Contract for the 2022 Water Main Replacement Contract 1 Project **- Approved**

17. Consider a Motion to Authorize the Village Manager to Execute a Contract for Snow and Ice Control Services at the Gateway Center Parking Deck **- Approved** (Council District: Six)

18. Consider a Resolution to Approve an Intergovernmental Agreement Between the Village of Palatine and the Palatine Township Road District for Snow and Ice Control Services **- Adopted by Roll Call**

    Resolution #R-15-22

19. Consider a Motion to Authorize the Village Manager to Purchase 2022 Budgeted Vehicles and 2023 Light Duty Fleet Consistent with the Capital Improvement Plan **- Approved**

IX. REPORTS OF STANDING COMMITTEE

A. ADMINISTRATION, TECHNOLOGY & COMMUNITY HEALTH COMMITTEE

GREG SOLBERG, CHAIRMAN

1. As Submitted **-**

   No Report

Minutes Acceptance: Minutes of Jun 20, 2022 7:00 PM (APPROVAL OF MINUTES)

B. BUSINESS FINANCE & BUDGET COMMITTEE

TIM MILLAR, CHAIRMAN

1. As Submitted **-**

   No Report

C. COMMUNITY & ECONOMIC DEVELOPMENT COMMITTEE

KOLLIN KOZLOWSKI, CHAIRMAN

1. As Submitted **-**

   No Report

D. FIRE POLICY & COMMUNITY INFORMATION COMMITTEE

DOUG MYSLINSKI, CHAIRMAN

1. As Submitted **-**

   No Report

E. INFRASTRUCTURE & ENVIRONMENT COMMITTEE

SCOTT LAMERAND, CHAIRMAN

1. As Submitted **-**

   No Report

F. POLICE POLICY & CODE SERVICES COMMITTEE

BRAD HELMS, CHAIRMAN

1. Consider an Ordinance Granting a Variation to Permit a Driveway Expansion to Exceed the Maximum Allowed Driveway Width, within Five (5) Feet of the Lot Line at 102 N. Crescent Avenue **- Motion Failed by Roll Call** (Council District: One)

RESULT:	**MOTION FAILED BY ROLL CALL [0 TO 6]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Scott Lamerand, District 2 Councilman
NAYS:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

2. As Submitted **-**

   No Report

Minutes Acceptance: Minutes of Jun 20, 2022 7:00 PM (APPROVAL OF MINUTES)

X. REPORTS OF THE VILLAGE OFFICERS

A. VILLAGE MANAGER

1. As Submitted -

   No Report

B. VILLAGE CLERK

1. As Submitted -

   No Report

C. VILLAGE ATTORNEY

1. As Submitted -

   No Report

XI. CLOSED SESSION AS REQUIRED

No Closed Session requested.

XII. RECOGNITION OF AUDIENCE

No one came forward

XIII. ADJOURNMENT – Time: 8:10 PM

Adjourn the Village Council Meeting **- Motion Carried by Voice Vote**

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Tim Millar, District 1 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms

SUBMITTED BY:

Doris Sadik
Deputy Village Clerk

Minutes Acceptance: Minutes of Jun 20, 2022 7:00 PM (APPROVAL OF MINUTES)

Consider a Motion Granting a Waiver of the Village's Sound Amplification Ordinance, the Temporary Closure of a Portion of Bothwell Street, and a Temporary Amendment to Lamplighter's Licensed Premises All in Conjunction with the Proposed 'Pipes for Pits' Event on August 7, 2022 at Lamplighter Inn, 60 N. Bothwell Street

BACKGROUND:
Bomb Shell Bullies (Bully Breed Rescue) is partnering with Lamplighters Inn, 60 N. Bothwell, for the 'Pipes for Pits' event on Sunday, August 7, 2022. To proceed with the proposed event, the Petitioners are requesting approval of the following:

- **Waiver of the Village's Sound Amplification Ordinance;**
- **Temporary Closure of a Portion of Bothwell Street; and**
- **Temporary amendment to the licensed premises of Lamplighter Inn's existing Liquor License all to allow for the 'Pipes for Pits' event on Sunday, August 7, 2022 (from 4 to 7 PM).**

KEY ISSUES:
- The proposed event would be held from 4 to 7 PM on Sunday, August 7, 2022 on the east side of Lamplighter Inn (within Bothwell Street, between Wilson and Station Streets). The closure of Bothwell Street would occur from approximately 2 to 8:00 PM on Sunday, August 7.

- The proposed event will include one food truck, amplified sound from an acoustic music player using one speaker and a microphone, and alcohol sales by Lamplighter Inn.

- The Council has previously approved this event, in 2021, at Lamplighter Inn.

ALTERNATIVES:

1. Approve the waiver of the Village's Sound Amplification Ordinance, temporary closure of a portion of Bothwell Street, and temporary amendment to the licensed premises of Lamplighter Inn's existing Liquor License all to allow for the 'Pipes for Pits' event on Sunday, August 7, 2022.

2. Do not approve the waiver of the Village's Sound Amplification Ordinance, temporary closure of a portion of Bothwell Street, and temporary amendment to the licensed premises of Lamplighter Inn's existing Liquor License all to allow for the 'Pipes for Pits' event on Sunday, August 7, 2022.

RECOMMENDATION:
Staff recommends action at the Village Council’s discretion.

ACTION REQUIRED:
A motion to approve the waiver of the Village's Sound Amplification Ordinance, temporary closure of a portion of Bothwell Street, and temporary amendment to the

licensed premises of Lamplighter Inn's existing Liquor License all to allow for the 'Pipes for Pits' event on Sunday, August 7, 2022.

ATTACHMENTS:

- Pipes for Pits
- Pipes for Pits Map

RESULT:	**APPROVED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

VILLAGE OF PALATINE
SPECIAL EVENT PERMIT APPLICATION

THIS FORM MUST BE COMPLETED IN FULL AND SUBMITTED 60 DAYS PRIOR TO THE EVENT
Village Manager's Office, 200 E. Wood St., Palatine, IL 60067 Fax: 847-359-9094

INSTRUCTIONS: PLEASE TYPE OR PRINT CLEARLY. INCOMPLETE APPLICATIONS WILL NOT BE PROCESSED.

GENERAL EVENT INFORMATION

Name of Event: Pipes For Pits

Exact Address of Event: 60 N. Bothwell St. Palatine, IL 60067

Type of Event (Check all applicable)

☐ Festival ☐ Run/Walk ☐ Parade ☐ Car Show ☐ Craft Fair ☐ Fireworks ☑ Other Fundraiser

Date(s) of Event	Hours of Event	Total Hours (Step-up - Tear down)
Aug. 7th 2022	4-7pm	6hrs (2-8pm)

Phone number/website for publication	Estimated attendance	Last years actual attendance
847-991-2420	200pl	150ppl

Describe the event's community and/or cultural benefit

Our annual Fundraiser to support Bombshell Bullies and give the town a fun, family orientated event.

SPONSORING ORGANIZATION INFORMATION

Name of Sponsoring Organization	Contact person from Sponsoring Organization
Lamplighter Inn Tavern & Grille	Lindsey Stucka

Sponsoring Organization Address	City	Zip
60 N. Bothwell St.	Palatine	60067

Phone Number	E-Mail	Website
847-991-2420	lstucka78@gmail.com	Lamplighters.com

ORGANIZER/COORDINATOR INFORMATION

Name of Organizer/Coordinator	E-mail
Lamplighter Inn Tavern & Grille	lstucka78@gmail.com

Organizer/Coordinator Address	City	Zip
60 N. Bothwell St.	Palatine	60067

Phone Number	Cell Phone Number	Fax Number
847-991-2420	224-223-2602	

EMERGENCY CONTACT INFORMATION

Name of Emergency Contact	E-mail
Lindsey Stucka	lstucka78@gmail.com

Emergency Contact Address	City	Zip
935 N. Countryside Dr. Apt 220	Palatine	60067

Phone Number (24hours)	Cell Phone Number	Fax Number
224-223-2602	224-223-2602	

Attachment: Pipes for Pits (Lamplighter Pipes for Pits Event - August 7, 2022)

VILLAGE OF PALATINE
SPECIAL EVENT PERMIT APPLICATION

THIS FORM MUST BE COMPLETED IN FULL AND SUBMITTED 60 DAYS PRIOR TO THE EVENT
Village Manager's Office, 200 E. Wood St., Palatine, IL 60067 Fax: 847-359-9094

INSTRUCTIONS: PLEASE TYPE OR PRINT CLEARLY. INCOMPLETE APPLICATIONS WILL NOT BE PROCESSED.

EVENT OVERVIEW

Are you providing/serving food at your event that is considered potentially hazardous, being prepared on-site, or being re-packed and sold in bulk? Below are some foods exempt from a permit (not all are listed): -Pre-packaged, non-potentially hazardous foods (i.e. packaged cookies, chips, crackers, bread, etc.) -Non-potentially hazardous, minimally cut, unprocessed fruits or vegetables (ie. apples, bananas, etc.) QUESTIONS ON WHAT QUALIFIES AS EXEMPT? CALL (847) 359-9090.	☐ Yes ☐ No not sure 1 food truck	If yes, how may vendors? There will be a fe Each vendor must submit a Temporary Food Event Permit Application 14 days prior to the event. Applications can be found at: https://permits.palatine.il.us/EnerGov_Prod/SelfService/PalatineLProd#/home Questions? Contact (847) 359-9090. Please see application for full details on what is required.
Are you erecting either: (1) tent(s) larger than 20'x40' (or 800 sq. ft.) or (2) that accommodates more than 100 people or (3) temporary structure(s) (ie. stage) taller than 2' in height or (4) that will be equipped with temporary electrical power?	☐ Yes ☑ No	If yes, you must submit a Temporary Structure Permit Application 30 days prior to the event. Applications can be found at: https://permits.palatine.il.us/EnerGov_Prod/SelfService/PalatineLProd#/home Questions? Contact (847) 359-9037. Electric submissions are required. Please see application for full details on what is required.
Are you serving alcoholic beverages at your event?	☑ Yes ☐ No	Alcohol vendors must submit a Special Event Liquor License 60 days prior to the event. You must obtain a Special Event Liquor License for each liquor vendor. Applications can be found at: http://www.palatine.il.us/events/forms/applications.aspx. Questions? Contact (847) 359-9031.
Will the event include a Race/Walk or Parade?	☐ Yes ☑ No	If yes, you must complete, Page 3, Section 1.
Will electronic sound amplification equipment or a public address system be used at the event?	☑ Yes ☐ No	If yes, you must complete, Page 3, Section 2.
Are you utilizing any public parking lots, Village streets or other Village property for your event?	☑ Yes ☐ No	If yes, you must complete, Page 3, Section 3.

ACKNOWLEDGEMENT/SIGNATURE

By signing this document, I certify that the information provided above is correct. I agree to conduct the special event in compliance with all applicable codes, ordinances, laws and the conditions contained in the special event permit.

Signature of Organizer

Date 7/6/22

Application must include the following documentation

- ☐ Special Event Application (Page 1, 2, 3, 4)
- ☐ Certificate of Insurance (see Section 5)
- ☐ Site Plan and/or Race/Parade Route Map

**You MUST submit a new site plan or parade/race route on an annual basis.*

APPLICATIONS WITH MISSING INFORMATION WILL NOT BE PROCESSED.

Attachment: Pipes for Pits (Lamplighter Pipes for Pits Event - August 7, 2022)

VILLAGE OF PALATINE
SPECIAL EVENT PERMIT APPLICATION

THIS FORM MUST BE COMPLETED IN FULL AND SUBMITTED 60 DAYS PRIOR TO THE EVENT
Village Manager's Office, 200 E. Wood St., Palatine, IL 60067 Fax: 847-359-9094

INSTRUCTIONS: PLEASE TYPE OR PRINT CLEARLY. INCOMPLETE APPLICATIONS WILL NOT BE PROCESSED.

Pipes For Pits
Name of Event

SECTION 1: RACE/WALK, PARADE INFORMATION ☐ Not Applicable

Starting Location	Ending Location
Approximate Number of Attendees (runners/marchers)	Approximate Number of Vehicles (cars/floats)
Location of Assemble (Registration)	Location of Personal Vehicle Parking

Please attach a course map, with location of the staging area, start/finish lines, and water/first aid stations

SECTION 2: NOISE CONTROL PLAN ☐ Not Applicable

Please attach a Site Plan, with the location of the stages and sound systems, the location and direction of all speakers, and the proximity to residential properties

Amplified sound will be used from: (am/pm)	Amplified sound will be used to: (am/pm)
4-7pm	4-7pm

Describe the sound system(s)
There will be an Acoustic artist with one speaker.

Explain how the sound will be controlled and identify the means by which it can be further controlled if necessary:
There will be a sound dial on the speaker that may be turned down.

The Village has the right to require applicants to revise locations, hours, or plans to control amplified music/speech.

SECTION 3: PARKING LOT/PROPERTY USAGE/CLOSURE INFORMATION ☐ Not Applicable

Public Parking Lot / Property Intended for "Event"

Lot Number or Location	Date of Closure	Time of Closure	Date to Reopen	Time of Reopen
Parking spots next to Lamps shared by Salon MHM	8/7/22	2pm	8/7/22	8pm

1. No staking in the street or public parking lot is permitted.
2. Only chalk or other Village approved marking is permitted (no spray paint).
3. Any debris/stains must be removed immediately prior to the opening of the street/public parking lot.
4. No structures may be erected on any street/public parking Lot without prior approval/permit.

Attachment: Pipes for Pits (Lamplighter Pipes for Pits Event - August 7, 2022)

VILLAGE OF PALATINE
SPECIAL EVENT PERMIT APPLICATION

THIS FORM MUST BE COMPLETED IN FULL AND SUBMITTED 60 DAYS PRIOR TO THE EVENT
Village Manager's Office, 200 E. Wood St., Palatine, IL 60067 Fax: 847-359-9094

INSTRUCTIONS: PLEASE TYPE OR PRINT CLEARLY. INCOMPLETE APPLICATIONS WILL NOT BE PROCESSED.

SECTION 4: INDEMNITY/HOLD HARMLESS AGREEMENT

Name of Sponsoring Organization
Lamplighter Inn Tavern & Grille

Name of Event
Show Me Your Pits

Date(s) of Event
Sunday, Aug 7th 2022

To the fullest extent permitted by law, the Organization hereby agrees to defend, indemnify and hold harmless the Village of Palatine, its officials, agents and employees, against all injuries, deaths, loss, damages, claims, patent claims, suits, liabilities, judgments, cost and expenses, which may in any way accrue against the Village of Palatine, its officials, agents and employees, arising in whole or in part or in consequence of the Event, and/or its employees, and or subcontractors' participation in Event, or which may in any way result therefore. The Organization shall, at its own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefore or incurred in connection therewith, and, if any judgment shall be rendered against the Village of Palatine, its officials, agents and employees, in any such action, the Organization shall, at its own expense, satisfy and discharge the same.

The Organization expressly understands and agrees that any performance bond or insurance policies required by the Village of Palatine, or otherwise provided by the Organization shall in no way limit the responsibility to indemnify, keep and save harmless and defend the Village of Palatine, its officials, agents and employees as herein provided.

The Organization expressly understands and agrees that the Village shall be named as an additional insured party on the insurance policy and that the Organization shall have no permission or authority to engage in the Event until evidence deemed acceptable to the Village has been provided to establish that the Village has been named as an additional insured party on the insurance policy .

Lindsey Stecka — SIGNATURE

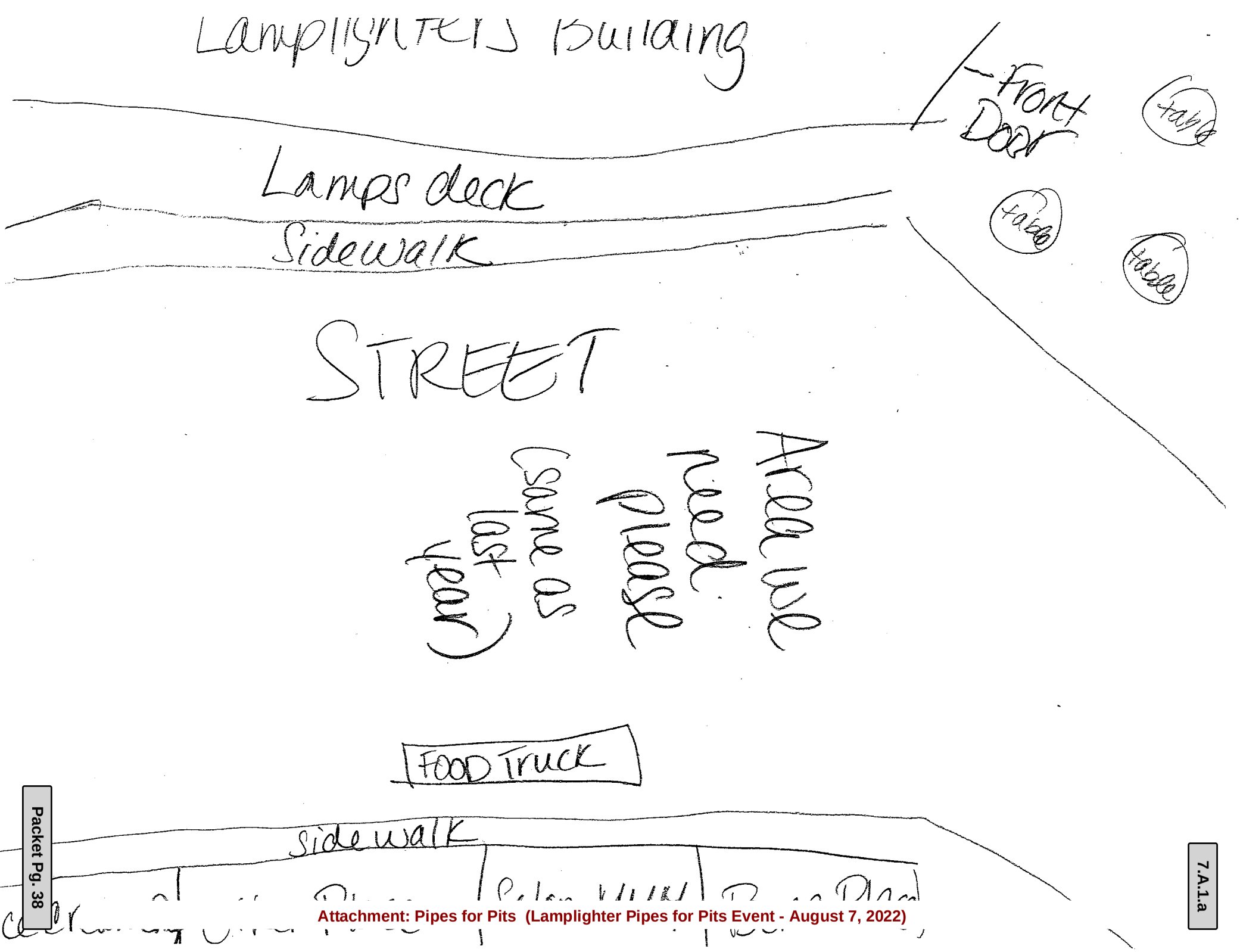
Lindsey Stecka	General Manager	7/6/22
PRINT NAME	TITLE/POSITION	DATE

SECTION 5: INSURANCE REQUIREMENTS

INSURANCE REQUIREMENTS

Sponsoring Organization will be required to provide an original Certificate of Insurance, as well as the additional insured endorsement evidencing the following insurance minimums: Commercial General Liability - minimum $1,000,000 per occurrence. Final acceptance of applicant is contingent on applicant naming the Village of Palatine, their employees, agents and officials as additional insured on a primary and non-contributory basis.

Attachment: Pipes for Pits (Lamplighter Pipes for Pits Event - August 7, 2022)


Lamplighters Building
Front Door
Lamps deck
Sidewalk
table
table
STREET
Area we need please
Same as last year
FOOD Truck
Sidewalk

Attachment: Pipes for Pits Map (Lamplighter Pipes for Pits Event - August 7, 2022)

Consider an Ordinance Granting a Variation for Lot Coverage to Permit a Rear Yard Patio at 32 S. Kerwood Street

BACKGROUND:
The Petitioner is proposing to replace an existing crushed-gravel patio with a smaller concrete patio in the rear yard of the Subject Property. The proposed patio will add approximately 331 square feet to the total existing lot coverage, bringing the total lot coverage from 48% up to approximately 54%. Therefore, the Petitioner is requesting:

> **Variation to permit lot coverage to be 54%, instead of the maximum permitted 45%.**

KEY ISSUES:

- The Subject Property's existing lot size is nonconforming in lot area and is 26% smaller than the current minimum required 9,000 square feet. The surrounding lots in this subdivision are of comparable size and most of the homes have rear yard patio areas.

- In addition to the home, the property contains a 490 square foot detached garage. The existing lot coverage is approximately 48% (3,200 square feet) which exceeds the maximum 45% lot coverage by 207 square feet.

- The Petitioner is proposing to replace the existing crushed gravel patio in the rear yard of Subject Property with a concrete patio. The new patio will add approximately 331 square feet to the total existing lot coverage, bringing the total proposed lot coverage to approximately 54% (3,531 square feet). However, the proposed patio will have a smaller overall footprint than the existing gravel patio. A portion of the proposed patio also serves as a sidewalk to the driveway/detached garage.

- The Code requires a standard Variation to permit an increase in the lot coverage to 54% (3,531 square feet) instead of the maximum 45% (2,993 square feet), which is a difference of 538 square feet.

ALTERNATIVES:

1. Approve the Variation for lot coverage to permit a rear yard patio.
2. Do not approve the Variation for lot coverage to permit a rear yard patio.

RECOMMENDATION:

Public Hearing**:**	ZBA meeting on June 28, 2022
Residents testifying:	None.
Vote:	The ZBA voted unanimously approve a Lot Coverage Variation, and Staff concurs.

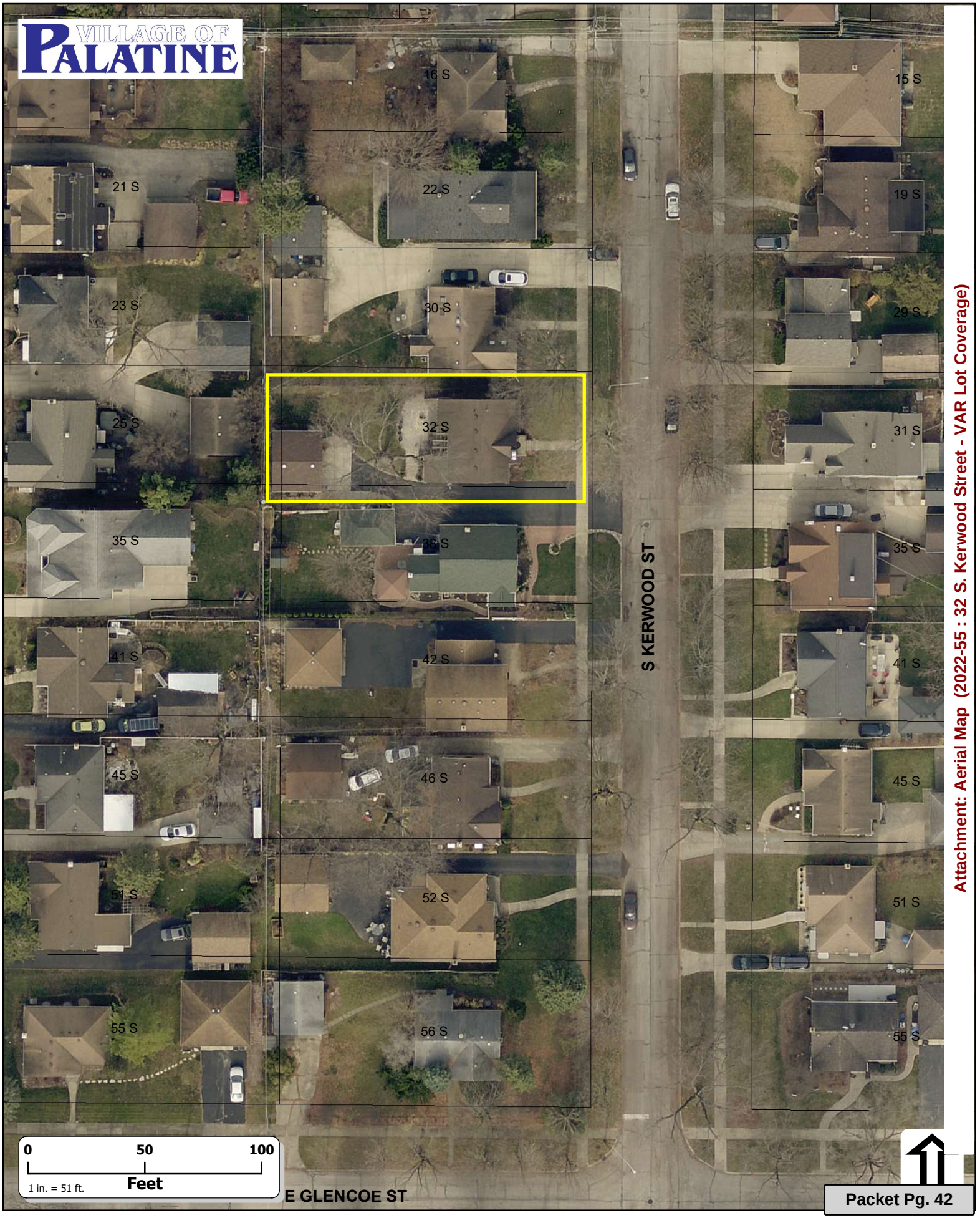
ACTION REQUIRED:
A motion to approve the ordinance granting Variation for lot coverage to permit a rear yard patio at 32 S. Kerwood Street.

ATTACHMENTS:

- Aerial Map
- ORD VAR 32 S Kerwood St
- EXHIBIT - Site Plan
- June 28, 2022 ZBA Materials
- Draft ZBA Minutes

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Doug Myslinski, District 3 Councilman
SECONDER:	Tim Millar, District 1 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

32 S. Kerwood Street



Attachment: Aerial Map (2022-55 : 32 S. Kerwood Street - VAR Lot Coverage)

ORDINANCE NO. _____

AN ORDINANCE GRANTING A VARIATION
32 S. KERWOOD STREET

WHEREAS, pursuant to a petition and public hearing on June 28, 2022, of which public notice was given as required by law, the Zoning Board of Appeals of the Village of Palatine, in accordance with the Zoning Ordinance of the Village of Palatine, in such case made and provided, has held such public hearing and reported their findings relative to a request for a Variation to permit lot coverage to be 54%, instead of the maximum permitted 45% pursuant to Section 10.06 (g) (1) (b) of the Palatine Zoning Ordinance, legally described property:

LOT 21 IN BLOCK 2 IN PRAIRIE VIEW ADDITION TO PALATINE, BEING A SUBDIVISION OF THAT PART OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF SECTION 23, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, LYING NORTH OF THE CHICAGO AND NORTHWESTERN RAILWAY (EXCEPT THE WEST 7 ACRES THEREOF), IN COOK COUNTY, ILLINOIS.

Commonly known as 32 S. Kerwood Street (02-23-102-019-0000).

NOW, THEREFORE, BE IT ORDAINED, by the Mayor and Village Council of the Village of Palatine, Cook County, Illinois, acting in the exercise of their home rule power that:

SECTION 1: Variation to permit lot coverage to be 54%, instead of the maximum permitted 45% pursuant to Section 10.06 (g) (1) (b) of the Palatine Zoning Ordinance, subject to the following condition(s):

Attachment: ORD VAR 32 S Kerwood St (2022-55 : 32 S. Kerwood Street - VAR Lot Coverage)

1. **The Variation shall substantially conform to the Site Plan and submitted by the Petitioner's agent, John Pancorvo, except as such plans may be changed to conform to Village of Palatine Codes and Ordinances.**
2. **All excavated material must be removed off site, in a matter acceptable to the Village Engineer.**

SECTION 2: **That a copy of the public notice is attached hereto and form a part of this ordinance.**

SECTION 3: **That this ordinance shall be in full force and effect from and after its passage and approval as provided by law.**

PASSED: This _____day of _____, 2022

AYES:_____ NAYS:_____ ABSENT:_____ PASS:_____

APPROVED by me this _____day of _____, 2022

_____
Mayor of the Village of Palatine

ATTESTED and FILED in the office of the Village Clerk this

_____day of _____, 2022

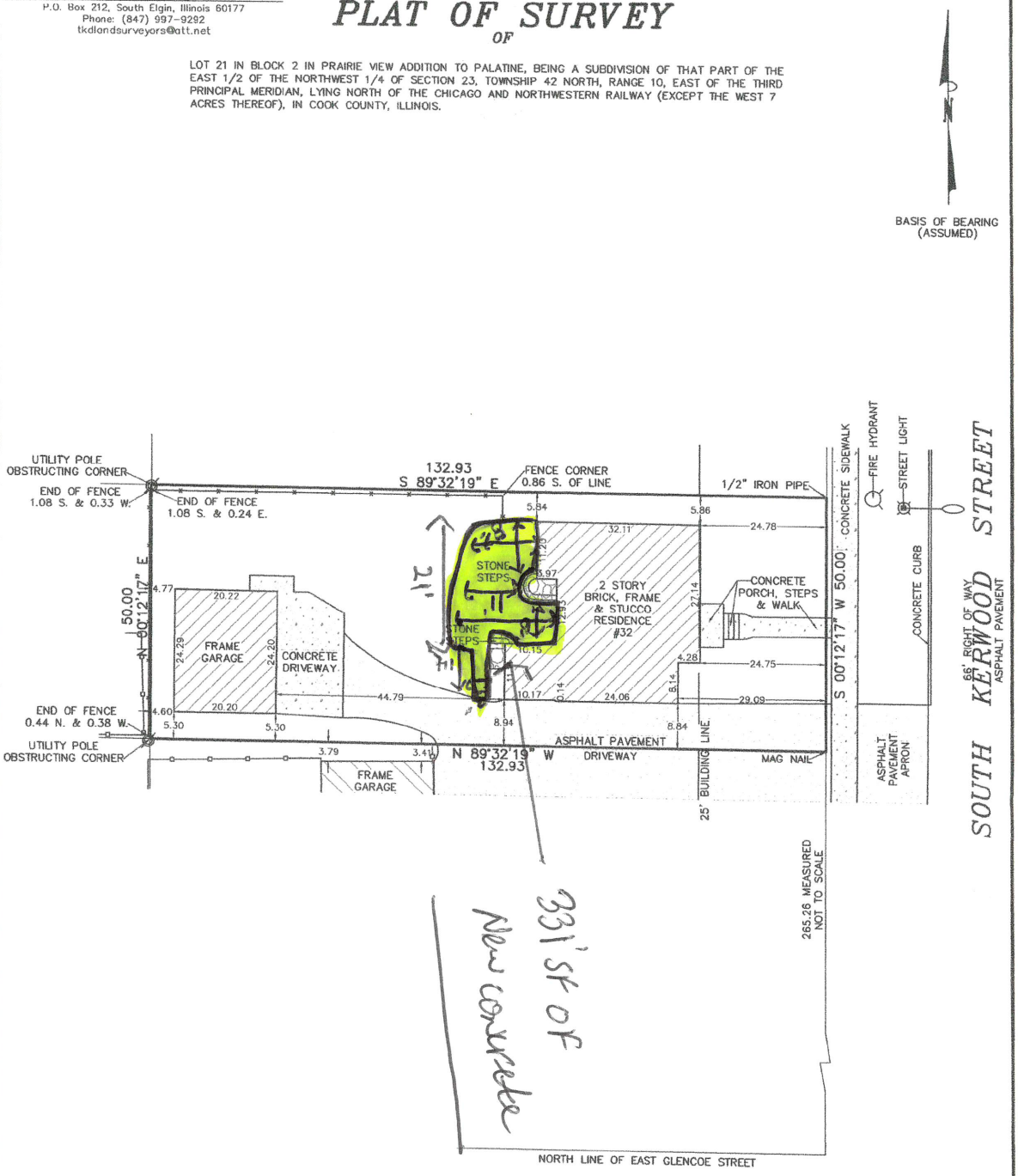
_____
Village Clerk

Attachment: ORD VAR 32 S Kerwood St (2022-55 : 32 S. Kerwood Street - VAR Lot Coverage)

T.K.D. Land Surveyors, Inc.
P.O. Box 212, South Elgin, Illinois 60177
Phone: (847) 997-9292
tkdlandsurveyors@att.net

PLAT OF SURVEY
OF

LOT 21 IN BLOCK 2 IN PRAIRIE VIEW ADDITION TO PALATINE, BEING A SUBDIVISION OF THAT PART OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF SECTION 23, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, LYING NORTH OF THE CHICAGO AND NORTHWESTERN RAILWAY (EXCEPT THE WEST 7 ACRES THEREOF), IN COOK COUNTY, ILLINOIS.



LEGEND

CHAIN LINK FENCE

WOOD FENCE

MEASURED LOT AREA = 6,646 SQ. FT. (0.153 ACRES)

* All dimensions shown are given in feet & decimal parts thereof
* No angles or distances are to be assumed by scaling
* Legal description, building lines and easements are taken from recorded subdivision plat and/or other available documentation. Refer to title policy, deed or local jurisdiction for building setbacks and easements not shown hereon and report any discrepancies.

Scale: 1"=20'
Order # 21-357
Address: 32 S. Kerwood St. Palatine, IL 60067
P.I.N. 02-23-102-019-0000
Ordered by: Erickson Law Office, Ltd.

KEITH E. DELANEY
035-003385
PROFESSIONAL LAND SURVEYOR
STATE OF ILLINOIS
SOUTH ELGIN, ILLINOIS

THIS SURVEY IS VALID ONLY WITH EMBOSSED SEAL

STATE OF ILLINOIS } SS.
COUNTY OF KANE }

I, Keith E. DeLaney, an Illinois Professional Land Surveyor do hereby certify that I have surveyed the above described property, and that the above plat is a correct representation of said survey.

Lic. Exp. 11-30-22

Keith E. DeLaney Illinois P.L.S. #035-003385

Dated: July 22, 2021

Field work completed: July 22, 2021

Professional Design Firm Lic. No. 184.005204
This professional service conforms to the current Illinois minimum standards for a boundary survey.

Attachment: EXHIBIT - Site Plan (2022-55 : 32 S. Kerwood Street - VAR Lot Coverage)

VILLAGE OF PALATINE

VILLAGE OF PALATINE
Zoning Board of Appeals

SCHEDULED 06/28/22 07:00 PM

CASE STAFF STATEMENT (ID # 7670)

32 S. Kerwood Street

TO: Palatine Zoning Board of Appeals
Jan Wood, Chair

FROM: Alex Bradshaw

PETITIONER: Dona Martin / John Pancorvo (agent)

CASE NUMBER: 22-23

ADDRESS: 32 S. Kerwood Street

PROPOSAL:
Variation to permit lot coverage to be 54%, instead of the maximum permitted 45%.

LOCATION: 32 S. Kerwood Street District 6 (Helms)	**CURRENT ZONING:** R-2 Single-Family Residential

SURROUNDING CONDITIONS:

North:	R-2 Single-Family Residential
South	R-2 Single-Family Residential
East:	R-2 Single-Family Residential
West:	R-2 Single-Family Residential

BACKGROUND:
The Petitioner is proposing to replace an existing crushed-gravel patio with a concrete patio in the rear yard of the Subject Property. The proposed patio will add approximately 331 square feet to the total existing lot coverage, bringing the total lot coverage from 48% up to approximately 54%. Therefore, the Petitioner is requesting:

Variation to permit lot coverage to be 54%, instead of the maximum permitted 45%.

SITE ANALYSIS:

- The Subject Property is zoned R-2 Single Family. The property is located within the Prairie View Addition To Palatine Subdivision and the lot is approximately 6,650 square feet. It was annexed into the Village in 1869 and the existing lot size is non-conforming in lot area and 26% smaller than the current minimum required 9,000 square feet. The surrounding lots in this subdivision are comparably sized, and most of the homes have rear yard patio areas.

Attachment: June 28, 2022 ZBA Materials (2022-55 : 32 S. Kerwood Street - VAR Lot Coverage)

- In addition to the home, the property contains a 490 sf detached garage. The existing lot coverage is approximately 48% (3,200 sf) which exceeds the maximum 45% lot coverage by 207 sf.
- The Petitioner is proposing to replace the existing crushed gravel patio in the rear yard of Subject Property, with a concrete patio that is smaller than the existing gravel area. The new patio will add approximately 331 sf to the total existing lot coverage, bringing the total proposed lot coverage to approximately 54% (3,531 sf).
- The Code requires a standard Variation to permit an increase in the lot coverage to 54% (3,531 sf) instead of the maximum 45% (2,993 sf), being a difference of 538 sf.
- Per the submitted application, the Petitioner indicates that there is justification for relief, due to the existing gravel patio not being suitable to the homeowner considering her age and health conditions.
- The existing building coverage is within the 35% allowed by Code. The proposed patio complies with the required setbacks for a permitted obstruction.

DEPARTMENTAL REVIEWS:

Community Services	No Issues Identified.
Engineering	All excavated material must be removed off site.
Environmental Health	N/A
Fire Prevention	N/A
Public Works	N/A
Police	N/A

STANDARDS FOR A VARIATION: Standards for a Variation are found in Section 14.03 D (1) and (2) of the Zoning Code. Specifically, the Petitioners must show that the property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations governing the district in which it is located; that the plight of the owner is due to unique circumstances; and that the variation, if granted, will not alter the essential character of the locality. The Petition for Variation is attached, and the Petitioners have attempted to address the required standards.

STAFF RECOMMENDATION:

The Petitioner is proposing to construct a new concrete patio to replace an existing crushed gravel patio. Staff agrees that a concrete patio would be significantly safer more accessible than the crushed gravel. The Subject Property is smaller than standard R-2 Zoned residential properties, and the proposed patio has a smaller overall footprint than the existing. With that said, Staff has not identified any potential negative impacts to the surrounding neighborhood. Therefore, Staff recommends approval of the Variation, subject to the following conditions:

Attachment: June 28, 2022 ZBA Materials (2022-55 : 32 S. Kerwood Street - VAR Lot Coverage)

1. The Variation shall substantially conform to the site plan submitted by the Petitioner's agent, John Pancorvo, except as such plans may be changed to conform to Villages Codes and Ordinances.

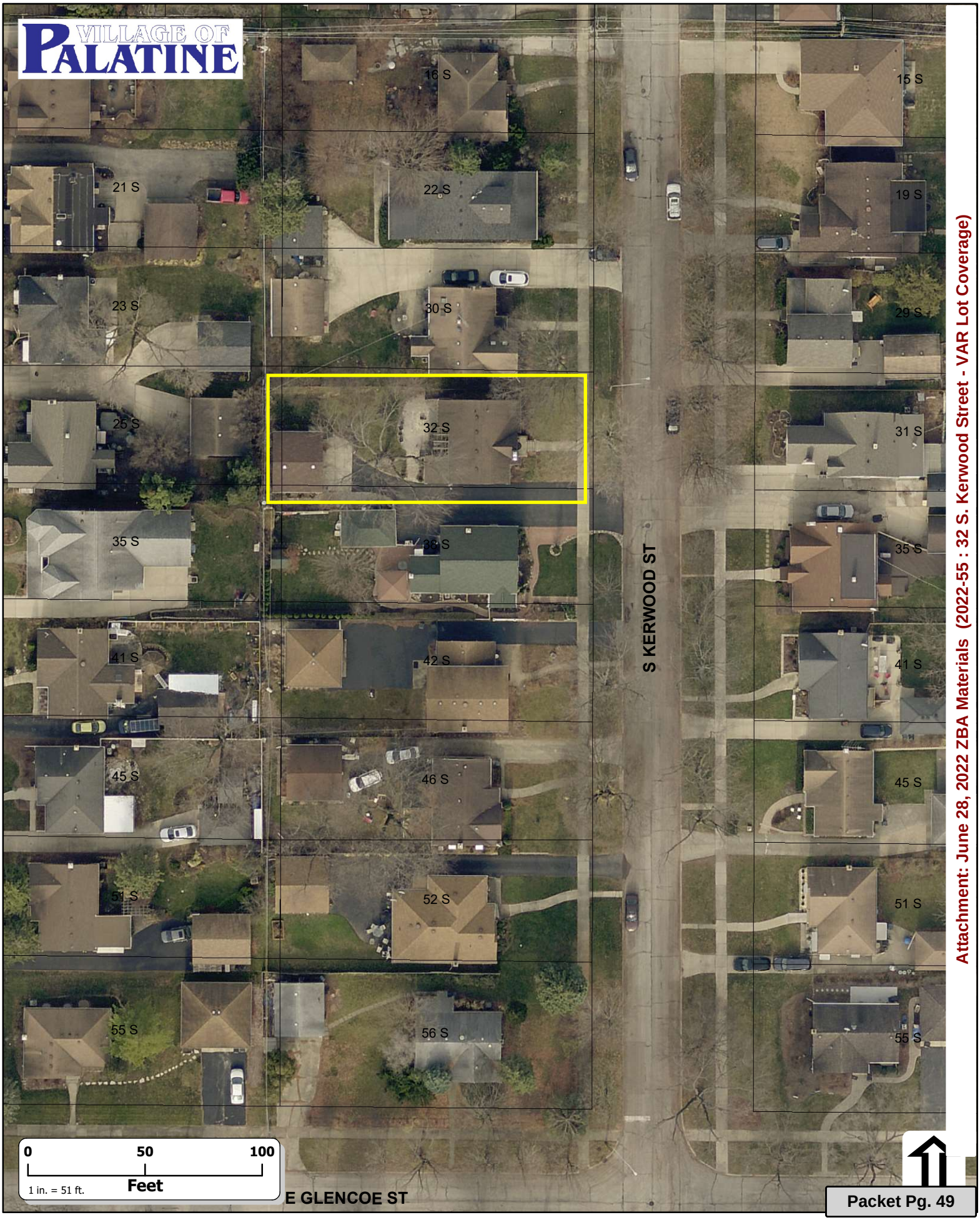
2. All excavated material must be removed off site in a matter acceptable to the Village Engineer.

ATTACHMENTS:

- Aerial Map
- Application
- Plat of Survey - Site Plan
- Public Notice

Attachment: June 28, 2022 ZBA Materials (2022-55 : 32 S. Kerwood Street - VAR Lot Coverage)

32 S. Kerwood Street



Attachment: June 28, 2022 ZBA Materials (2022-55 : 32 S. Kerwood Street - VAR Lot Coverage)

SPECIAL USE & VARIATION APPLICATION

PALATINE
Department of Planning & Zoning
200 E. Wood Street · Palatine, IL · 60067-5339
Telephone: (847) 359-9047 · Fax (847) 963-6247

Office Use Only		
	Project Planner	Zoning Case #
	Filing Fee	Notification Deadline
	ZBA Public Hearing Date	Village Council Date

RECEIVED
JUN 03 2022
PLANNING & ZONING DEPARTMENT
date received

Background Information

PETITIONER(S) — **Business Name (if applicable)**
Dona Martin

Subject Property Address
32 S. Kerwood St. Palatine, IL 60067

AUTHORIZED AGENT (if applicable) — **Business Name (if applicable)**
John Pancorvo — J&J Pavement Repairs Inc.

Address — City/State/Zip Code
12 W. College Dr. #D Arlington Heights, IL 60004

Telephone	Fax	Email
847-363-0958	847-397-8851	jjpave1982@gmail.com

Relationship to Petitioner (contractor, architect, etc.)
Contractor

TYPE OF APPLICATION (check one)

□ Special Use □ Special Use Amendment ■ Variation Expand Patio Beyond the impervious surface %

Existing Zoning District	Existing Land Use	Proposed Land Use
		Patio

Generally describe your request:

Home currently exceeds impervious surface requirements. Custome purchased the home in 2021 and was left with a loose gravel patio which is not suitable considering her age and health conditions. She would greatly appreciate being able to put a concrete patio in that area which would look better, and be safer overall compared to what is there now. Customer originally wanted approx 600 sf but is kindly requesting 331 sf instead.

Attachment: June 28, 2022 ZBA Materials (2022-55 : 32 S. Kerwood Street - VAR Lot Coverage)

PALATINE

VARIATION

Required Materials

- ☐ Filing Fee of $ _____
- ☐ Application Form
- ☐ Plat of Survey (must show all current improvements and be sealed by an Illinois certified surveyor)
- ☐ Site Plan & Floor plan (dimension, location, and setbacks of all existing and proposed buildings) – **one 11x17 copy each, electronic version preferred**
- ☐ Real Estate Interest Disclosure Form (see attached)
- ☐ Proof of Ownership or Lease (e.g. Title Insurance Policy, Deed, or Purchase Contract)

Additional Materials (as required by the Village)

- ☐ Elevation Plan (front, side, and rear elevations of a proposed building), and/or Floor Plan (proposed interior layout) – **one 11x17 copy of each plan, electronic versions preferred**
- ☐ Engineering Plans (must indicate existing conditions, topography, storm water management, tree preservation, utility connections, detention calculations, and a cost estimate)
- ☐ Photographs (e.g. ground-level or aerials)
- ☐ Other materials as deemed necessary by the Village

Petitioner Justification

The Petitioner is required to present specific evidence related to each of the following standards to justify the request (paraphrased from Section 14.03 of the Palatine Zoning Ordinance). Answer the items below and attach a separate sheet if necessary. ***If you are applying for a Special Use only, you do not need to answer these items.***

1. That the property cannot yield a reasonable return if used only under the conditions allowed by the regulations governing the zoning district in which it is located

yes

2. That the plight of the owner is due to unique circumstances

yes.

3. That the variation, if granted, will not alter the essential character of the locality

yes

4. In order to supplement the above standards, the Zoning Board of Appeals may also consider the following:
   a. The particular surroundings, shape, or topographical conditions of the property
   b. A unique hardship for the property not generally applicable to other properties in the same zoning district
   c. The request is not based on a desire to make more money out of the property
   d. The petitioner has not created the alleged hardship for the property
   e. The request will not be detrimental to the public welfare or other properties in the neighborhood
   f. The request will not impair the supply of light and air to adjacent properties, substantially increase the danger of fire, endanger the public safety, or substantially diminish or impair neighboring property values

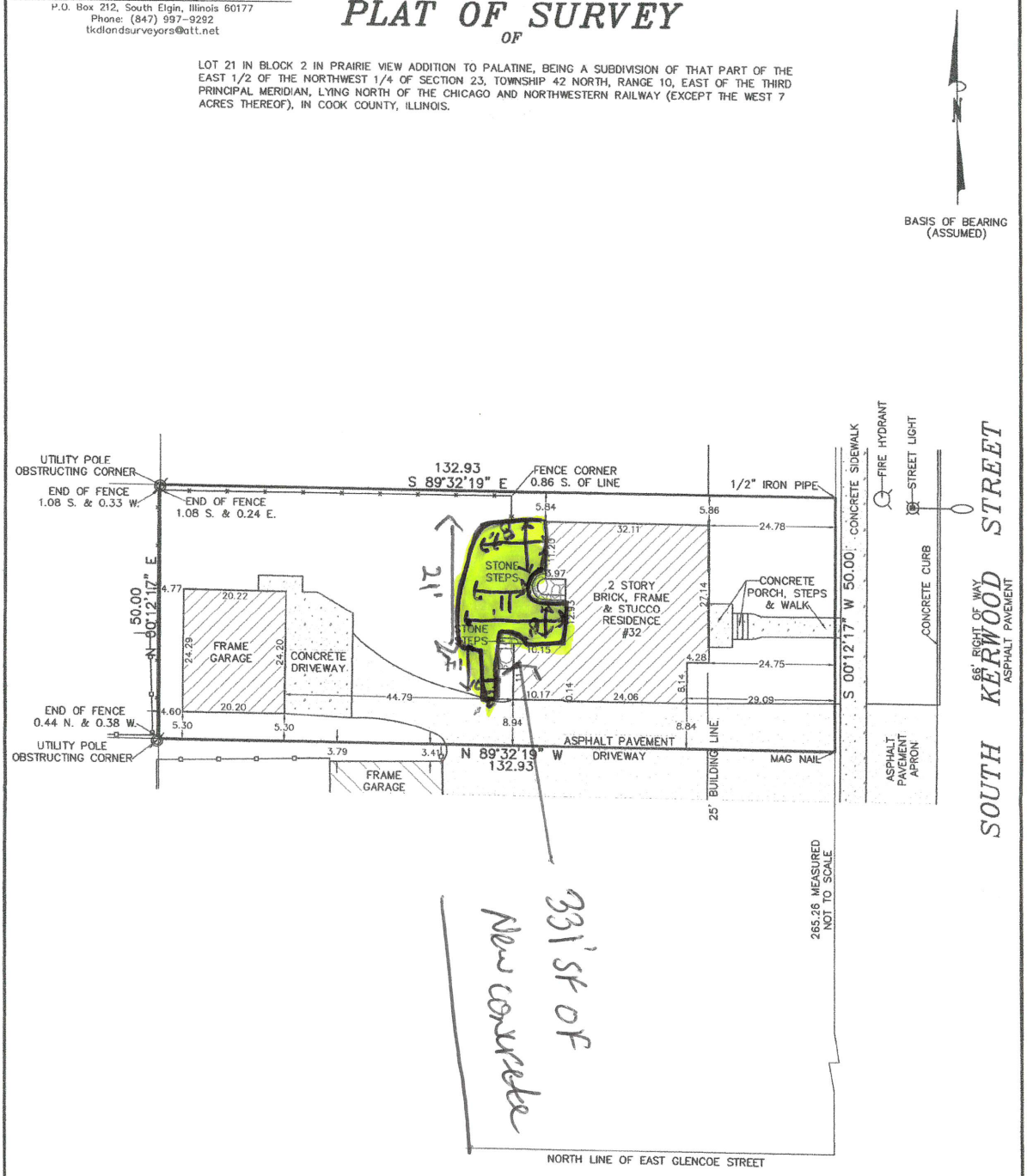
Homeowner is elderly. The stove she was left with when purchasi
The home is unsafe. She has had ankle surgery, Lives alone an
needs a stable patio

Attachment: June 28, 2022 ZBA Materials (2022-55 : 32 S. Kerwood Street - VAR Lot Coverage)

T.K.D. Land Surveyors, Inc.
P.O. Box 212, South Elgin, Illinois 60177
Phone: (847) 997-9292
tkdlandsurveyors@att.net

PLAT OF SURVEY
OF

LOT 21 IN BLOCK 2 IN PRAIRIE VIEW ADDITION TO PALATINE, BEING A SUBDIVISION OF THAT PART OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF SECTION 23, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, LYING NORTH OF THE CHICAGO AND NORTHWESTERN RAILWAY (EXCEPT THE WEST 7 ACRES THEREOF), IN COOK COUNTY, ILLINOIS.



LEGEND

CHAIN LINK FENCE

WOOD FENCE

MEASURED LOT AREA = 6,646 SQ. FT. (0.153 ACRES)

* All dimensions shown are given in feet & decimal parts thereof
* No angles or distances are to be assumed by scaling
* Legal description, building lines and easements are taken from recorded subdivision plat and/or other available documentation. Refer to title policy, deed or local jurisdiction for building setbacks and easements not shown hereon and report any discrepancies.

Scale: 1"=20'
Order # 21-357
Address: 32 S. Kerwood St.
Palatine, IL 60067
P.I.N. 02-23-102-019-0000
Ordered by: Erickson Law Office, Ltd.

KEITH E. DELANEY
035-003385
PROFESSIONAL
LAND SURVEYOR
STATE OF
ILLINOIS
SOUTH ELGIN, ILLINOIS

THIS SURVEY IS VALID ONLY WITH EMBOSSED SEAL

STATE OF ILLINOIS }
COUNTY OF KANE } ss.

I, Keith E. DeLaney, an Illinois Professional Land Surveyor do hereby certify that I have surveyed the above described property, and that the above plat is a correct representation of said survey.

Lic. Exp. 11-30-22

Keith E. DeLaney Illinois P.L.S. #035-003385

Dated: July 22, 2021

Field work completed: July 22, 2021

Professional Design Firm Lic. No. 184.005204
This professional service conforms to the current Illinois minimum standards for a boundary survey.

Attachment: June 28, 2022 ZBA Materials (2022-55 : 32 S. Kerwood Street - VAR Lot Coverage)

PUBLIC NOTICE
A Public Hearing will be held before the Palatine Zoning Board of Appeals on Tuesday, June 28, 2022 at 7 PM, in the Village Council Chambers at Palatine Village Hall, 200 E. Wood Street, relative to a request for the following:
Variation to permit lot coverage to be 54%, instead of the maximum permitted 45%.
The property is commonly known as 32 S. Kerwood Street (02-23-102-019-0000).
The Petitioner is proposing to replace an existing crushed-gravel patio with a concrete patio in the rear yard of the Subject Property. The proposed patio will add approximately 331 square feet to the total existing lot coverage, bringing the total lot coverage from 48% up to approximately 54%.
The above petition has been filed by Dona Martin and is available for examination in the office of the Village Clerk, 200 E. Wood Street.
FILE #: 22-23
VILLAGE OF PALATINE
Jan Wood, Chair
Palatine Zoning Board of Appeals
DATED: This 13th day of June, 2022
Published in Daily Herald June 13, 2022 (4584014)

CERTIFICATE OF PUBLICATION

Paddock Publications, Inc.

Northwest Suburbs
Daily Herald

Corporation organized and existing under and by virtue of the laws c the State of Illinois, DOES HEREBY CERTIFY that it is the publisl of the **Northwest Suburbs DAILY HERALD**. That said **Northwes Suburbs DAILY HERALD** is a secular newspaper, published in Arlington Heights and has been circulated daily in the Village(s) of: Arlington Heights, Barrington, Barrington Hills, Bartlett, Buffalo Gr Deer Park, Des Plaines, Elk Grove, Franklin Park, Glenview, Hanover Park, Hoffman Estates,Inverness, Melrose Park,Morton Gr Mt Prospect, Niles, Northbrook, Northfield, Northlake, Palatine, Park Ridge, Prospect Heights, River Grove, Rolling Meadows, Rosemont, Schaumburg,Schiller Park, South Barrington, Streamwoo Wheeling, Wilmette

County(ies) of Cook
and State of Illinois, continuously for more than one year prior to th date of the first publication of the notice hereinafter referred to and general circulation throughout said Village(s), County(ies) and State

I further certify that the Northwest Suburbs DAILY HERALD is a newspaper as defined in "an Act to revise the law in relation to noti as amended in 1992 Illinois Compiled Statutes, Chapter 715, Act 5, Section 1 and 5. That a notice of which the annexed printed slip is a copy, was published 06/13/2022
in said Northwest Suburbs DAILY HERALD.

IN WITNESS WHEREOF, the undersigned, the said PADDOCK PUBLICATIONS, Inc., has caused this certificate to be signed by, t authorized agent, at Arlington Heights, Illinois.

PADDOCK PUBLICATIONS, INC.
DAILY HERALD NEWSPAPERS

BY Paula Raetz
Designee of the Publisher and Officer of the Daily Herald

Control # 4584014

Attachment: June 28, 2022 ZBA Materials (2022-55 : 32 S. Kerwood Street - VAR Lot Coverage)

3. 32 S. Kerwood Street

Notice was published in the Daily Herald on June 13, 2022 and mailed to the owners of the surrounding properties.

Petitioner's Exhibits:
1. Application for Variation
2. Proof of Ownership
3. Plat of Survey / Site Plan
4. Public Notice

Sworn in petitioner: Ms. Dona Martin 32 S Kerwood Street and John Pancorvo contractor 12 W College Dr.
Mr. Pancorvo explained homeowner recently bought the house. He referred to the existing conditions slides to show the paver steps off back door leading to an unsafe loose-gravel patio. He explained the original plan was to follow the outline of the existing stone coming out a little farther into back yard being approx. 640sqft. Mr. Pancorvo stated zoning flagged the permit submittal for percentage of impervious surface which was over due to lot being smaller. He stated they shrunk the patio to approx. 331sqft. He stated the main reason for the request is to make the unsafe patio more stable. He referred to the existing conditions slide to show the orange marks to show proposed new dimensions. Mr. Pancorvo stated they are hiring a professional landscaper to landscape around and the proposed patio for a nicer look and to be safer and it won't negatively affect drainage of neighboring properties. He stated the patio is not visible from the front. He stated they have obtained letters of consent from neighbors.

Mr. Pirog asked if the reduced size is big enough.
Ms. Martin stated she would have liked it bigger to fit all the chairs but main issue is the loose gravel is not safe.

Mr. Pirog asked if loose gravel does not count on coverage.
Mr. Bradshaw states loose gravel is not considered as impervious surface.

Mr. Luszczak asked if they considered pavers.
Mr. Pancorvo explained regular pavers are impervious and permeable pavers are higher cost.

Ms. Wood asked if letter of support were submitted.
Ms. Martin stated they were already submitted.

Ms. Roth-Wurster asked about water issues.
Ms. Martin answered, no.

Mr. Pirog expressed concern that the size is not adequate.
Mr. Pancorvo explained they tried to appease to staff and get her the safe patio she needs.

Attachment: Draft ZBA Minutes (2022-55 : 32 S. Kerwood Street - VAR Lot Coverage)

Ms. Wood asked about the letters.
Mr. Bradshaw explained they were attached to the site plan he listed the 3 addresses that submitted.(30,38,& 23 S Kerwood)

Ms. Wood asked if it would have to be re-noticed to make bigger.
Mr. Bradshaw answered, yes.

Ms. Martin stated the notice went out with the original size request.

Discussion on the size of proposed patio.

Mr. Pancorvo stated it will be a decent size patio. He stated the pictures don't show it clearly. He stated no one will fall off the patio.

Mr. Bradshaw gave a brief overview stating the subject property is zoned R-2 and annexed into the Village in 1869. He stated the existing lot is nonconforming in lot area with the surrounding lots being comparable in size, and most had rear patio areas. Mr. Bradshaw stated the existing lot coverage is approximately 48% (3,200 sf) which exceeds the maximum 45% lot coverage by 207 sf. And the new patio will add approximately 331 sf to the total existing lot coverage, bringing the total proposed lot coverage to approximately 54% (3,531 sf). Mr. Bradshaw explained the Code requires a standard Variation to permit an increase in the lot coverage to 54% (3,531 sf) instead of the maximum 45% (2,993 sf), being a difference of 538 sf. He stated Community Services and Engineering have reviewed and Engineering has one comment requiring all excavated material to be removed off site.

STAFF RECOMMENDATION:

The Petitioner is proposing to construct a new concrete patio to replace an existing crushed gravel patio. Staff agrees that a concrete patio would be significantly safer more accessible than the crushed gravel. The Subject Property is smaller than standard R-2 Zoned residential properties, and the proposed patio has a smaller overall footprint than the existing. With that said, Staff has not identified any potential negative impacts to the surrounding neighborhood. Therefore, Staff recommends approval of the Variation, subject to the following conditions:

1. The Variation shall substantially conform to the site plan submitted by the Petitioner's agent, John Pancorvo, except as such plans may be changed to conform to Villages Codes and Ordinances.

2. All excavated material must be removed off site in a matter acceptable to the Village Engineer.

There were no further questions. The public hearing was closed.

Attachment: Draft ZBA Minutes (2022-55 : 32 S. Kerwood Street - VAR Lot Coverage)

Ms. Roth-Wurster made a motion to approve subject staff's conditions; seconded by Mr. Pirog

DELIBERATIONS:

Ms. Roth-Wurster spoke to the standards stating reasonable return improving a gravel patio into a concrete patio would make a difference in the home. She stated when looking at lot coverage water issues are the concern but Engineering has reviewed and that's not the case. She stated this will be safer and won't be seen from the street.

Ms. Wood spoke to reasonable return and uniqueness with smaller lot. She stated there is a patio there now, and they are making it smaller and won't be seen from the front yard. She stated she thinks the standards have been met.

Ms. Wood summarized that this request has met the standards and was unanimously approved by a vote of 4-0. This item will tentatively go to Village Council on July 11, 2022

RESULT:	**RECOMMENDED TO APPROVE [UNANIMOUS]**
MOVER:	Cindy Roth-Wurster, Commissioner
SECONDER:	John Pirog, Commissioner
AYES:	Roth-Wurster, Wood, Luszczak, Pirog
ABSENT:	McGinn, Cavanaugh

Attachment: Draft ZBA Minutes (2022-55 : 32 S. Kerwood Street - VAR Lot Coverage)

Consider an Ordinance Granting a Special Use for a Fence to be Located in the Side Yard Abutting a Street and Abutting the Side Lot Line of an Adjacent Front Yard at 1070 N. Cardinal Drive

BACKGROUND:
The Petitioners are proposing to replace an existing 4-foot fence with a 6-foot solid vinyl fence in the same location, approximately 10 feet from the side yard lot line abutting Olde Virginia Road. Therefore, the Petitioners are requesting approval of the following:

> **Special Use to permit a fence in the side yard abutting a street where the side lot line of said yard abuts the side lot line of the front yard of an adjacent lot.**

KEY ISSUES:

- The proposed fence will remain setback 10 feet from the side property line abutting Olde Virginia Road. Although it is not required by the Zoning Ordinance, there is existing landscaping that will remain and be maintained between the fence and the property line.

- The proposed fence will abut the 20 foot front yard of 1070 E. Olde Virginia Road (adjacent lot to the north). With the proposed 10-foot setback, there should be little impact to the driveway visibility of the adjacent lot on Olde Virginia Road.

- The property directly across Cardinal Drive from the Subject Property, 1071 E. Cardinal Drive, has an existing non-conforming 6-foot solid fence that is setback approximately 13 feet from the side lot line abutting Olde Virginia Road.

- The Petitioners have received letters of consent from all four directly adjacent property owners within a one property radius.

ALTERNATIVES:

1. Approve the Special Use for a fence in the side yard abutting a street.
2. Do not approve the Special Use for a fence in the side yard abutting a street.

RECOMMENDATION:

Public Hearing**:**	ZBA meeting on June 28, 2022
Residents testifying:	None.
Vote:	The ZBA voted unanimously approve a Special Use to permit a fence in the side yard abutting a street and Staff concurs.

ACTION REQUIRED:
A motion to approve the ordinance granting a Special Use for a fence in the side yard abutting a street at 1070 N. Cardinal Drive.

ATTACHMENTS:

- Aerial map
- ORD SU 1070 N Cardinal Dr
- EXHIBIT - Site Plan
- EXHIBIT - Sample Elevation
- June 28, 2022 ZBA Materials
- Draft ZBA Minutes

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Scott Lamerand, District 2 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

1070 N. Cardinal Drive

Attachment: Aerial map (2022-56 : 1070 N. Cardinal Drive - SU Fence)

ORDINANCE NO. _____

AN ORDINANCE GRANTING A SPECIAL USE TO PERMIT A FENCE IN THE SIDE YARD ABUTTING A STREET AT 1070 N. CARDINAL DRIVE

WHEREAS, pursuant to a petition and public hearing on June 28, 2022, of which public notice was given as required by law, the Zoning Board of Appeals of the Village of Palatine, in accordance with the Zoning Ordinance of the Village of Palatine, in such case made and provided, has held such public hearing and reported their findings, relative to a request for a Special Use to permit a fence to be located in the side yard abutting a street, which abuts the side lot line of an adjacent front yard, pursuant to Section 6.03 (b) (6) (b) of the Village of Palatine Zoning Ordinance, on the following legally described property:

LOT 65 IN MEADOW LAKE SUBDIVISION (A PLANNED UNIT DEVELOPMENT) IN THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 42 NORTH, RANGE 10 EAS OF THE THRID PRINCIPAL MERIDIAN, ALL IN COOK COUNTY, ILLINOIS.

commonly known as 1070 N. Cardinal Dive (02-12-314-018-0000).

NOW, THEREFORE, BE IT ORDAINED, by the Mayor and Village Council of the Village of Palatine, Cook County, Illinois, acting in the exercise of their home rule power that:

SECTION 1: A Special Use to permit a fence to be located in the side yard abutting a street, which abuts the side lot line of an adjacent front yard, pursuant to Section 6.03 (b) (6) (b) of the Village of Palatine Zoning Ordinance, is hereby granted, subject to the following condition(s):

Attachment: ORD SU 1070 N Cardinal Dr [Revision 1] (2022-56 : 1070 N. Cardinal Drive - SU Fence)

1. **The Special Use shall substantially conform to the site plan and elevation plan submitted by the Petitioners, Jacek and Marta Brzostowski, except as said plans may be changed to conform to the Village Code of Ordinances.**

SECTION 2: **That a copy of the public notice be attached hereto and form a part of this ordinance.**

SECTION 3: **That this ordinance shall be in full force and effect from and after its passage and approval as provided by law.**

PASSED: This _____day of _____, 2022

AYES:_____ NAYS:_____ ABSENT:_____ PASS:_____

APPROVED by me this _____day of _____, 2022

_____
Mayor of the Village of Palatine

ATTESTED and FILED in the office of the Village Clerk this

_____day of _____, 2022

_____
Village Clerk

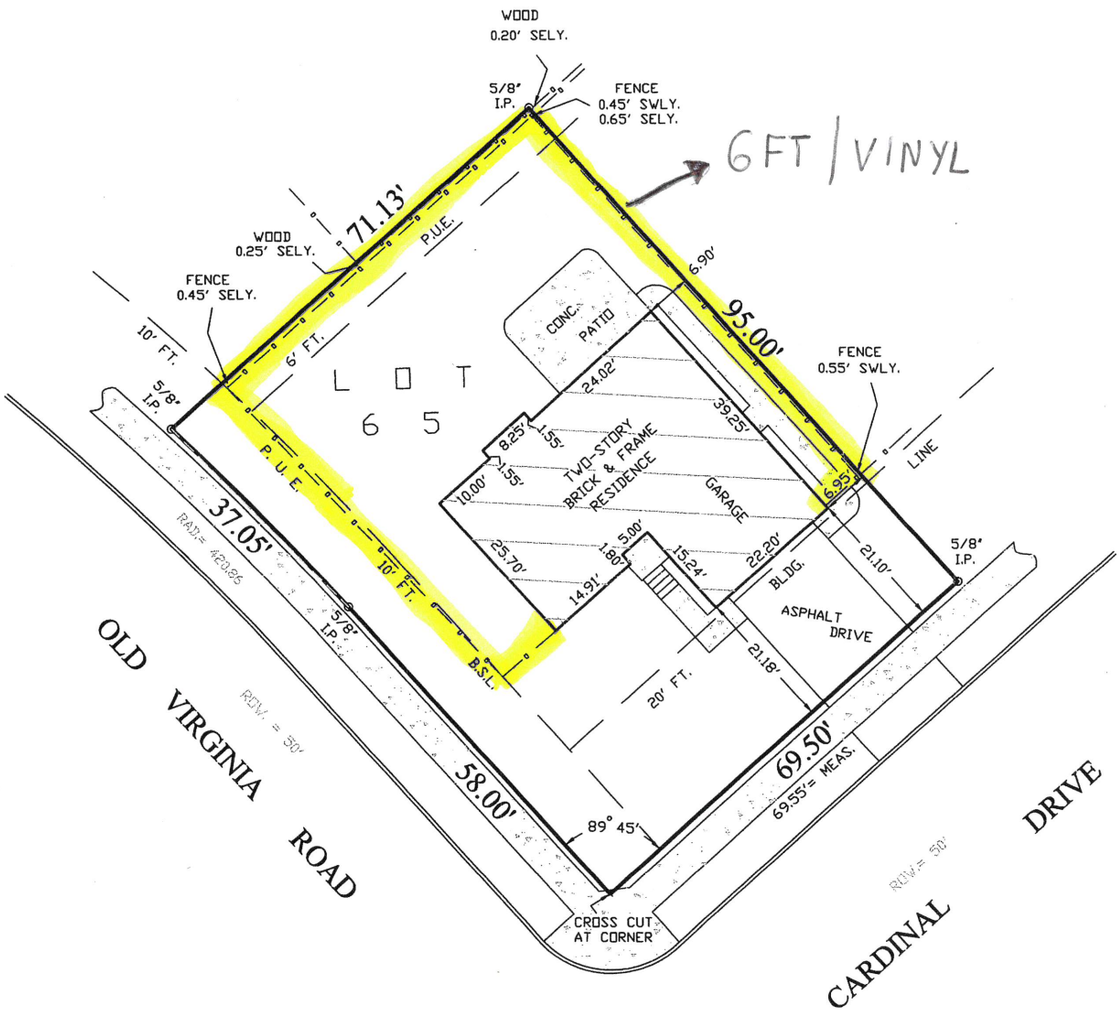
Attachment: ORD SU 1070 N Cardinal Dr [Revision 1] (2022-56 : 1070 N. Cardinal Drive - SU Fence)

PLAT OF SURVEY
OF

SCALE: 1" = 20 FEET

N
W E
S

LOT 65 IN MEADOW LAKE SUBDIVISION (A PLANNED UNIT DEVELOPMENT) IN THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ALL IN COOK COUNTY, ILLINOIS.



NOTE: EASEMENTS

M.U.E.= MUNICIPAL UTILITY EASEMENT
P.U.E.= PUBLIC UTILITY EASEMENT
D.E.= DRAINAGE EASEMENT
B.S.L.= BUILDING SETBACK LINE

STATE OF ILLINOIS)
COUNTY OF KANE) SS:

I, ANDREW J. TOBIN, DO HEREBY CERTIFY THAT I HAVE SURVEYED THE ABOVE DESCRIBED PROPERTY ACCORDING TO THE OFFICIAL RECORD, AND THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS OF PRACTICE FOR BOUNDARY SURVEYS.

BY: Andrew J. Tobin
PROFESSIONAL LAND SURVEYOR
LICENSE NO. 35-3519
EXPIRES 11/30/22

ANDREW TOBIN 35-3519 PROFESSIONAL LAND SURVEYOR ILLINOIS

ANY DISCREPANCY IN MEASUREMENTS SHOULD BE PROMPTLY REPORTED TO THE SURVEYOR FOR EXPLANATION OR CORRECTION.

COMPARE THE DESCRIPTION ON THIS PLAT WITH DEED. REFER TO DEEDS FOR EASEMENTS AND BUILDING LINES.

THIS SURVEY IS ONLY VALID WHEN ACCOMPANIED BY AN EMBOSSED SEAL.

DATED: NOVEMBER 22, 2021
PREPARED FOR: SAMMONS LAW OFFICE
PROPERTY ADDRESS: 1070 N CARDINAL DR
PALATINE, ILLINOIS
SELLER: WRONSKI
SURVEY ORDER NO: 21638

INDICATES FOUND STAKE ○
INDICATES SET STAKE ●
CHAIN LINK FENCING —x—x—
WOOD FENCING —o—
INDICATES CONCRETE

ANDREW J. TOBIN
P.O. BOX 42 DUNDEE, ILLINOIS.60118 847-695-4235

Attachment: EXHIBIT - Site Plan (2022-56 : 1070 N. Cardinal Drive - SU Fence)

Attachment: EXHIBIT - Sample Elevation (2022-56 : 1070 N. Cardinal Drive - SU Fence)

VILLAGE OF PALATINE

VILLAGE OF PALATINE
Zoning Board of Appeals

SCHEDULED 06/28/22 07:00 PM

CASE STAFF STATEMENT (ID # 7643)

1070 N. Cardinal Drive

TO: Palatine Zoning Board of Appeals
Jan Wood, Chair

FROM: Alex Bradshaw

PETITIONER: Jacek & Marta Brzostowski

CASE NUMBER: 22-21

ADDRESS: 1070 N. Cardinal Drive

PROPOSAL:
Special Use to permit a fence in the side yard abutting a street where the side lot line of said yard abuts the side lot line of the front yard of an adjacent lot.

LOCATION: 1070 N. Cardinal Drive District 4 (Solberg)	**CURRENT ZONING:** Planned Development

SURROUNDING CONDITIONS:

North:	P - Planned Development (Single-Family Residential)
South	P - Planned Development (Single-Family Residential)
East:	P - Planned Development (Single-Family Residential)
West:	P - Planned Development (Single-Family Residential)

BACKGROUND:
The Petitioners are proposing to replace an existing fence four (4)-foot fence with a six (6)-foot solid vinyl fence in the same location, approximately ten (10) feet from the side yard lot line abutting E. Olde Virginia Road. Therefore, the Petitioners are requesting:

> **Special Use to permit a fence in the side yard abutting a street where the side lot line of said yard abuts the side lot line of the front yard of an adjacent lot.**

SITE ANALYSIS:

- The Subject Property is zoned P, Planned Development (Meadowlake Subdivision) and contains a single-family residence. The lot is located at the NE corner of North Cardinal Drive and East Olde Virginia Road.
- The Petitioners are proposing to replace an existing, four (4) foot, open-style picket

Attachment: June 28, 2022 ZBA Materials (2022-56 : 1070 N. Cardinal Drive - SU Fence)

fence in the side yard abutting the street, which abuts the front yard of their adjacent neighbor to the NW (1070 E. Olde Virginia Rd). The new proposed fence will be in the same location, but will be a six (6) foot, solid, vinyl fence.

- The proposed fence will remain setback 10 feet from the side property line abutting E. Olde Virginia Rd. Although it is not required by the Zoning Ordinance, there is existing landscaping that will remain between the fence and the property line.
- The proposed fence abuts the 20 foot front yard of 1070 E. Olde Virginia Rd. It appears that with the ten (10) foot setback, there will be little impact on the visibility from the driveway of the Olde Virginia Rd property.
- The property across Cardinal Drive from the Subject Property, 1071 E. Cardinal, has an existing non-conforming six (6) foot solid fence that is setback approximately 13 feet from the side lot line abutting Olde Virginia Rd.
- The Petitioners have received letters of consent from all four directly adjacent property owners.

DEPARTMENTAL REVIEWS:

Community Services	No Issues Identified.
Engineering	No Issues Identified.
Environmental Health	N/A
Fire Prevention	N/A
Public Works	N/A
Police	N/A

STANDARDS FOR SPECIAL USE: Since this Petition is not for a use publicly operated or traditionally affected with the public interest, those standards under Section 14.05 D (2) and (3) are applicable. Specifically, the Petitioners must show that the Special Use, if granted, is so designed, located, and proposed to be operated that the public health, safety, and welfare will be protected and will not cause substantial injury to the value of other property in the neighborhood in which it is located. The Petitioners have attempted to address the required standards.

(5) With respect to front yard fencing and fencing in a rear yard/side yard abutting a street, he following additional standards must be met:

a. Will meet the following aesthetic criteria:
   i. Will not destroy existing vistas in the area;
   ii. Will enhance the appearance of the homes and the streets in the area; and
   iii. Will not detract from the overall appearance of the community; or
b. The fencing is found to be necessary to protect private property or the safety

Attachment: June 28, 2022 ZBA Materials (2022-56 : 1070 N. Cardinal Drive - SU Fence)

of the inhabitants of the property.

STAFF RECOMMENDATION:

The Petitioners are proposing to replace an existing 4-foot open style fence with a 6-foot solid fence. The proposed fence will be in the exact location as the existing fence, which is set back approximately 10 feet from the side property line that abuts Olde Virginia Road. Said property line also abuts the side lot line of the front yard of the adjacent lot to the north. Per Code, the required setback is 20 feet. The Petitioner has received letters of consent from all four directly adjacent property owners, including 1070 E. Olde Virginia Rd (directly north).

The existing landscaping between the existing fence and the side lot line abutting the street will remain to provide an effective buffer. Ultimately, Staff did not identify any negative impacts the proposed fence would have on the surrounding neighborhood. Therefore, Staff recommends approval of the proposed Special Use with the following condition:

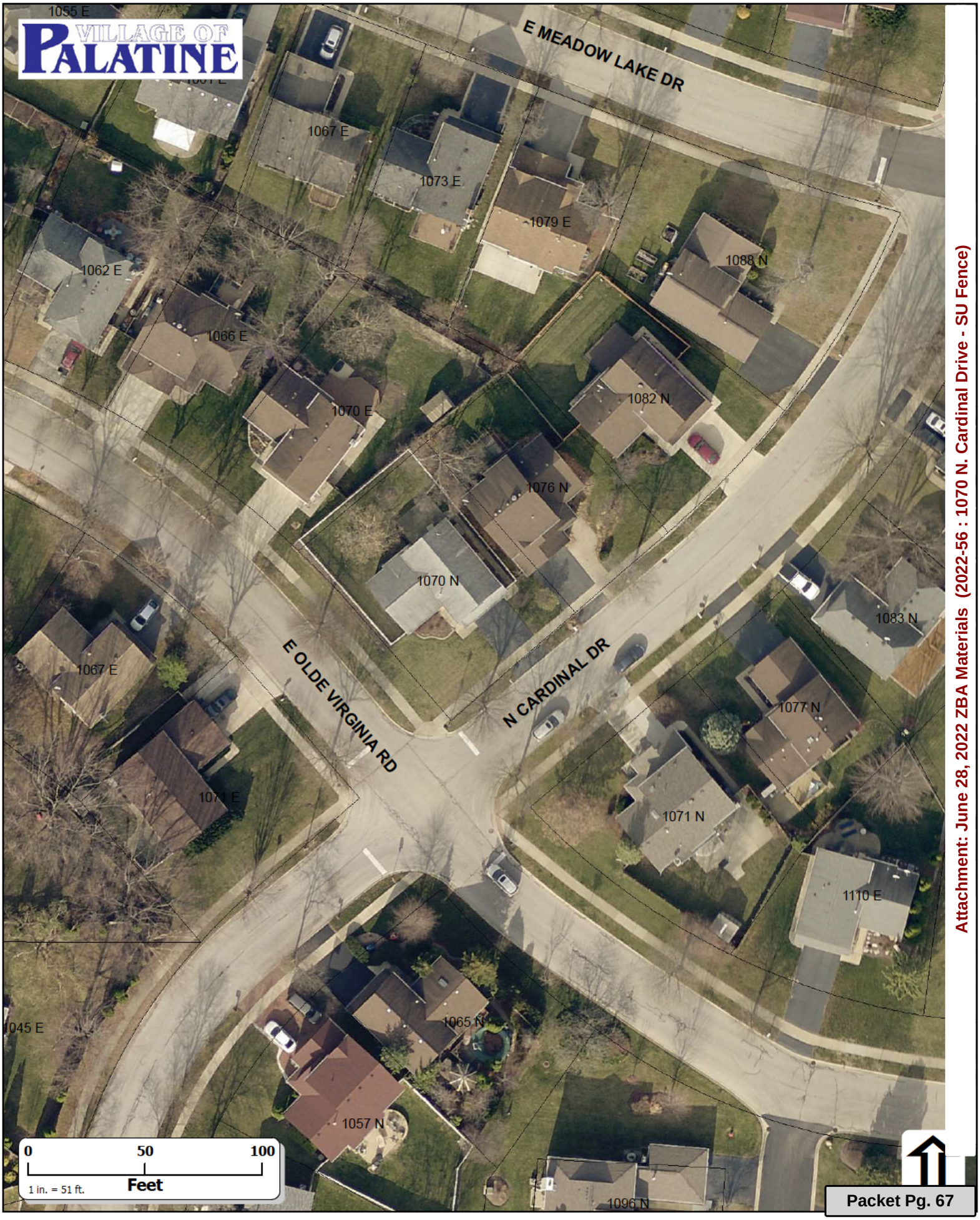
1. The Special Use shall substantially conform to the site plan and elevation plan submitted by the Petitioners, Jacek and Marta Brzostowski, except as said plans may be changed to conform to the Village's Codes and Ordinances.

ATTACHMENTS:

- Aerial Map
- Application
- Plat of Survey - Site Plan
- Existing Conditions
- Fence Elevation (SAMPLE)
- Neighbor Consent Forms
- Public Notice

Attachment: June 28, 2022 ZBA Materials (2022-56 : 1070 N. Cardinal Drive - SU Fence)

1070 N. Cardinal Drive



Attachment: June 28, 2022 ZBA Materials (2022-56 : 1070 N. Cardinal Drive - SU Fence)

VILLAGE OF PALATINE

SPECIAL USE & VARIATION APPLICATION

Department of Planning & Zoning
200 E. Wood Street · Palatine, IL · 60067-5339
Telephone: (847) 359-9047 · Fax (847) 963-6247

Office Use Only		
	Project Planner	Zoning Case #
	Filing Fee	Notification Deadline
	ZBA Public Hearing Date	Village Council Date

RECEIVED
MAY 24 2022
PLANNING & ZONING DEPARTMENT
date received

Background Information

PETITIONER(S) — **Business Name (if applicable)**

JACEK AND MARTA BRZOSTOWSKI

Subject Property Address

1070 N CARDINAL DR PALATINE IL 60074

AUTHORIZED AGENT (if applicable) — **Business Name (if applicable)**

Address — City/State/Zip Code

Telephone	Fax	Email

Relationship to Petitioner (contractor, architect, etc.)

TYPE OF APPLICATION (check one)

☑ Special Use ☐ Special Use Amendment ☐ Variation

Existing Zoning District	Existing Land Use	Proposed Land Use

Generally describe your request:

We would like to replace ~~our~~ our existing fence with a 6 foot vinyl fence.

Attachment: June 28, 2022 ZBA Materials (2022-56 : 1070 N. Cardinal Drive - SU Fence)

VILLAGE OF PALATINE

SPECIAL USE

Required Materials

- ☐ Filing Fee of $ _____
- ☐ Application Form
- ☐ Plat of Survey (must show all current improvements and be sealed by an Illinois certified surveyor)
- ☐ Site Plan & Floor plan (dimension, location, and setbacks of all existing and proposed buildings) – **one 11x17 copy each, electronic version preferred**
- ☐ Real Estate Interest Disclosure Form (see attached)
- ☐ Proof of Ownership or Lease (e.g. Title Insurance Policy, Deed, or Purchase Contract)
- ☐ Business Plan (if applicable; including, but not limited to nature of business, hours of operation, number of employees, and menu)

Additional Materials (as required by the Village)

- ☐ Elevation Plan (front, side, and rear elevations of a proposed building), and/or Floor Plan (proposed interior layout) – **one 11x17 copy of each plan, electronic versions preferred**
- ☐ Engineering Plans (must indicate existing conditions, topography, storm water management, tree preservation, utility connections, detention calculations, and a cost estimate)
- ☐ Photographs (e.g. ground-level or aerials)
- ☐ Other materials as deemed necessary by the Village

Petitioner Justification

The Petitioner is required to present specific evidence related to each of the following standards to justify the request (paraphrased from Section 14.05 of the Palatine Zoning Ordinance). Answer the items below and attach a separate sheet if necessary. ***If you are applying for a Variation only, you do not need to answer these items.***

1. The use is deemed necessary for the public convenience at that location

YES

2. The use is designed, located, and proposed to be operated that the public health, safety and welfare will be protected

YES

3. The use will not cause substantial injury to nearby property values

YES

4. With respect to live entertainment uses, the use shall not:
   a. Produce noise levels so great as to constitute an unreasonable interference for persons outside the confines of the establishment
   b. Impose undue health, sanitation or safety burdens on the village
   c. Create excessive demands on the Village of Palatine Police Department
   d. Be of a nature otherwise prohibited by law or village ordinance
5. For fence standards, see Section 14.05 of the Palatine Zoning Ordinance

YES

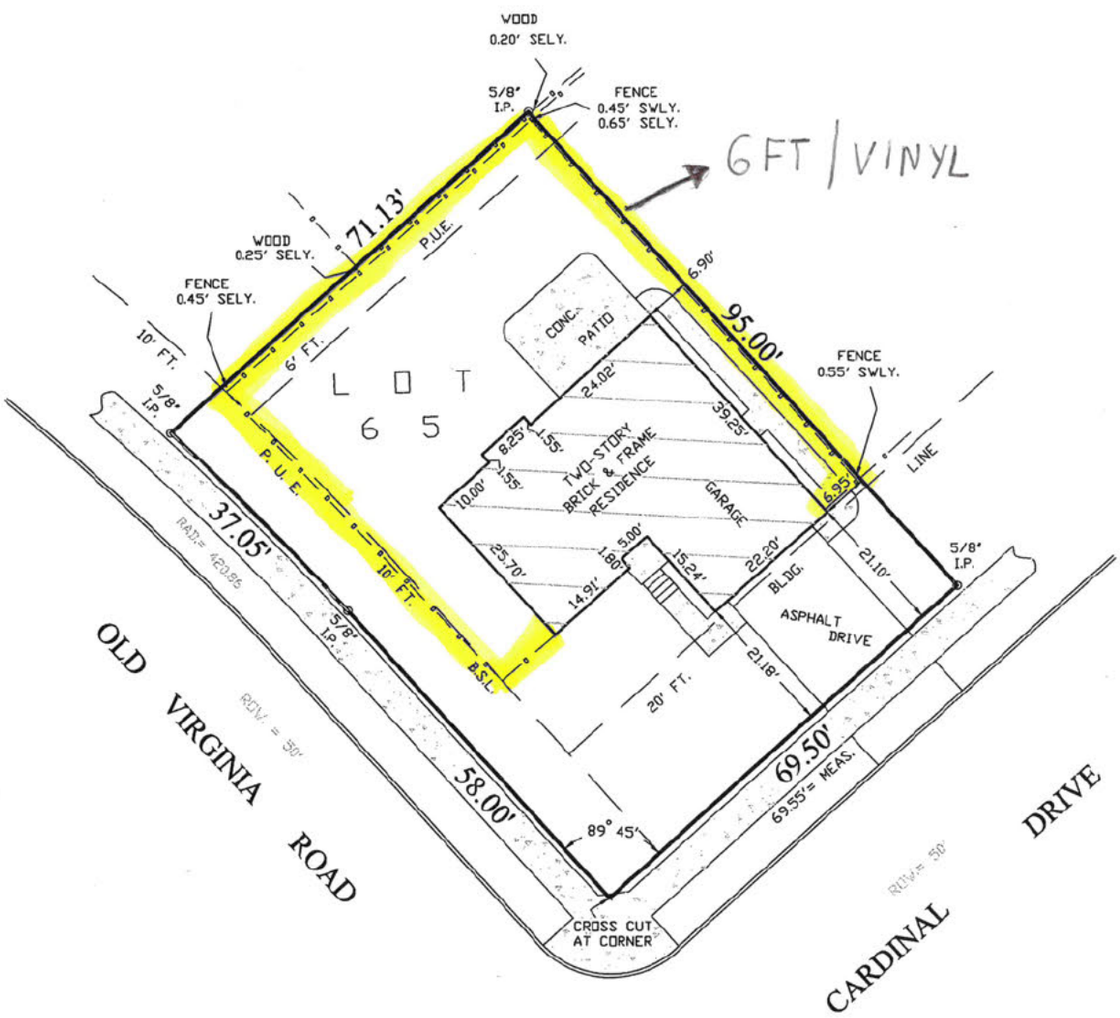
Attachment: June 28, 2022 ZBA Materials (2022-56 : 1070 N. Cardinal Drive - SU Fence)

PLAT OF SURVEY
OF

SCALE: 1" = 20 FEET

N
W E
S

LOT 65 IN MEADOW LAKE SUBDIVISION (A PLANNED UNIT DEVELOPMENT) IN THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ALL IN COOK COUNTY, ILLINOIS.



NOTE: EASEMENTS

M.U.E.= MUNICIPAL UTILITY EASEMENT
P.U.E.= PUBLIC UTILITY EASEMENT
D.E.= DRAINAGE EASEMENT
B.S.L.= BUILDING SETBACK LINE

STATE OF ILLINOIS)
COUNTY OF KANE) SS:

I, ANDREW J. TOBIN, DO HEREBY CERTIFY THAT I HAVE SURVEYED THE ABOVE DESCRIBED PROPERTY ACCORDING TO THE OFFICIAL RECORD, AND THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS OF PRACTICE FOR BOUNDARY SURVEYS.

BY: Andrew J. Tobin
PROFESSIONAL LAND SURVEYOR
LICENSE NO. 35-3519
EXPIRES 11/30/22

ANY DISCREPANCY IN MEASUREMENTS SHOULD BE PROMPTLY REPORTED TO THE SURVEYOR FOR EXPLANATION OR CORRECTION.

COMPARE THE DESCRIPTION ON THIS PLAT WITH DEED. REFER TO DEEDS FOR EASEMENTS AND BUILDING LINES.

THIS SURVEY IS ONLY VALID WHEN ACCOMPANIED BY AN EMBOSSED SEAL.

ANDREW TOBIN 35-3519 PROFESSIONAL LAND SURVEYOR ILLINOIS

DATED: NOVEMBER 22, 2021
PREPARED FOR: SAMMONS LAW OFFICE
PROPERTY ADDRESS: 1070 N CARDINAL DR
PALATINE, ILLINOIS
SELLER: WRONSKI
SURVEY ORDER NO: 21638

INDICATES FOUND STAKE ○
INDICATES SET STAKE ●
CHAIN LINK FENCING
WOOD FENCING
INDICATES CONCRETE

ANDREW J. TOBIN
P.O. BOX 42 DUNDEE, ILLINOIS.60118 847-695-4235

Attachment: June 28, 2022 ZBA Materials (2022-56 : 1070 N. Cardinal Drive - SU Fence)

Attachment: June 28, 2022 ZBA Materials (2022-56 : 1070 N. Cardinal Drive - SU Fence)

VILLAGE OF PALATINE

NEIGHBOR APPROVAL LETTER FOR FENCE CONSTRUCTION

DATE: 5/27/2022

FENCE CONSTRUCTION ADDRESS:

1070 N CARDINAL DR

PALATINE IL 60074

I, TATYANA Zentalis, have been made aware of my neighbor's fence construction project. I have seen or have had explained to me the proposal made by my neighbor to erect a fence at this address.

ADDRESS DESCRIPTION & NOTES:

⊙ _____

⊙ I understand the replacement fence will be 6 feet total in height.

⊙ This fence will separate other property from mine and I agree on the location of the lot line.

⊙ I understand that any existing fence may have to be removed in favor of the new fence.

NEIGHBOR'S NAME AND ADDRESS (PRINTED CLEARLY WITH PHONE NUMBER):

1070E Olde Virginia Rd

Palatine IL 60074

TATYANA Zentalis

PHONE: [redacted]

NEIGHBOR'S SIGNATURE TAT

Attachment: June 28, 2022 ZBA Materials (2022-56 : 1070 N. Cardinal Drive - SU Fence)

VILLAGE OF PALATINE

NEIGHBOR APPROVAL LETTER FOR FENCE CONSTRUCTION

DATE: 3/15/22

FENCE CONSTRUCTION ADDRESS:

1070 N CARDINAL DR

PALATINE IL 60074

I, David Whitford, have been made aware of my neighbor's fence construction project. I have seen or have had explained to me the proposal made by my neighbor to erect a fence at this address.

ADDRESS DESCRIPTION & NOTES:

⊙ _____

⊙ I understand the replacement fence will be 6 feet total in height.

⊙ This fence will separate other property from mine and I agree on the location of the lot line.

⊙ I understand that any existing fence may have to be removed in favor of the new fence.

NEIGHBOR'S NAME AND ADDRESS (PRINTED CLEARLY WITH PHONE NUMBER):

David Whitford

1076 N Cardinal Dr

Palatine IL 60074

PHONE: [redacted]

NEIGHBOR'S SIGNATURE: _____

Attachment: June 28, 2022 ZBA Materials (2022-56 : 1070 N. Cardinal Drive - SU Fence)

VILLAGE OF PALATINE

NEIGHBOR APPROVAL LETTER FOR FENCE CONSTRUCTION

DATE: 5.15.22

FENCE CONSTRUCTION ADDRESS:

1070 N CARDINAL DR

PALATINE IL 60074

I, George Iliopoulos, have been made aware of my neighbor's fence construction project. I have seen or have had explained to me the proposal made by my neighbor to erect a fence at this address.

ADDRESS DESCRIPTION & NOTES:

⊙ _____

⊙ I understand the replacement fence will be 6 feet total in height.

⊙ This fence will separate other property from mine and I agree on the location of the lot line.

⊙ I understand that any existing fence may have to be removed in favor of the new fence.

NEIGHBOR'S NAME AND ADDRESS (PRINTED CLEARLY WITH PHONE NUMBER):

GEORGE ILIOPOULOS

1071 N CARDINAL DR

PALATINE IL 60074

PHONE: [redacted]

NEIGHBOR'S SIGNATURE George Iliopoulos

Attachment: June 28, 2022 ZBA Materials (2022-56 : 1070 N. Cardinal Drive - SU Fence)

VILLAGE OF PALATINE

NEIGHBOR APPROVAL LETTER FOR FENCE CONSTRUCTION

DATE: 05/16/2022

FENCE CONSTRUCTION ADDRESS:

1070 N CARDINAL DR

PALATINE IL 60074

I, JULIA FERNANDEZ, have been made aware of my neighbor's fence construction project. I have seen or have had explained to me the proposal made by my neighbor to erect a fence at this address.

ADDRESS DESCRIPTION & NOTES:

⊙ _____

⊙ I understand the replacement fence will be 6 feet total in height.

⊙ This fence will separate other property from mine and I agree on the location of the lot line.

⊙ I understand that any existing fence may have to be removed in favor of the new fence.

NEIGHBOR'S NAME AND ADDRESS (PRINTED CLEARLY WITH PHONE NUMBER):

Julia Fernandez

1071 E. Olde Virginia Rd

Palatine IL 60074

PHONE: [redacted]

NEIGHBOR'S SIGNATURE Julia Fernandez

Attachment: June 28, 2022 ZBA Materials (2022-56 : 1070 N. Cardinal Drive - SU Fence)

PUBLIC NOTICE
A Public Hearing will be held before the Palatine Zoning Board of Appeals on Tuesday, June 28, 2022 at 7 PM, in the Village Council Chambers at Palatine Village Hall, 200 E. Wood Street, relative to a request for the following:
Special Use to permit a fence in the side yard abutting a street where the side lot line of said yard abuts the side lot line of the front yard of an adjacent lot.
The property is commonly known as 1070 N. Cardinal Drive (02-12-314-018-0000).
The Petitioners are proposing to replace an existing fence with a 6-foot solid vinyl fence located approximately 10 feet from the side yard abutting a street lot line along E. Olde Virginia Road.
The above petition has been filed by Jacek and Marta Brzostowski and is available for examination in the office of the Village Clerk, 200 E. Wood Street.
FILE #: 22-21
VILLAGE OF PALATINE
Jan Wood, Chair
Palatine Zoning Board of Appeals
DATED: This 13th day of June, 2022
Published in Daily Herald June 13, 2022 (4584018)

CERTIFICATE OF PUBLICATION

Paddock Publications, Inc.

Northwest Suburbs

Daily Herald

Corporation organized and existing under and by virtue of the laws of the State of Illinois, DOES HEREBY CERTIFY that it is the publisher of the **Northwest Suburbs DAILY HERALD**. That said **Northwest Suburbs DAILY HERALD** is a secular newspaper, published in Arlington Heights and has been circulated daily in the Village(s) of: Arlington Heights, Barrington, Barrington Hills, Bartlett, Buffalo Grove, Deer Park, Des Plaines, Elk Grove, Franklin Park, Glenview, Hanover Park, Hoffman Estates,Inverness, Melrose Park,Morton Grove, Mt Prospect, Niles, Northbrook, Northfield, Northlake, Palatine, Park Ridge, Prospect Heights, River Grove, Rolling Meadows, Rosemont, Schaumburg,Schiller Park, South Barrington, Streamwood, Wheeling, Wilmette

County(ies) of Cook
and State of Illinois, continuously for more than one year prior to the date of the first publication of the notice hereinafter referred to and general circulation throughout said Village(s), County(ies) and State.

I further certify that the Northwest Suburbs DAILY HERALD is a newspaper as defined in "an Act to revise the law in relation to notices as amended in 1992 Illinois Compiled Statutes, Chapter 715, Act 5, Section 1 and 5. That a notice of which the annexed printed slip is a copy, was published 06/13/2022
in said Northwest Suburbs DAILY HERALD.

IN WITNESS WHEREOF, the undersigned, the said PADDOCK PUBLICATIONS, Inc., has caused this certificate to be signed by, its authorized agent, at Arlington Heights, Illinois.

PADDOCK PUBLICATIONS, INC.
DAILY HERALD NEWSPAPERS

BY Paula Raetz
Designee of the Publisher and Officer of the Daily Herald

Control # 4584018

Attachment: June 28, 2022 ZBA Materials (2022-56 : 1070 N. Cardinal Drive - SU Fence)

III. PUBLIC HEARING

1. 1070 N. Cardinal Drive

   Notice was published in the Daily Herald on June 13, 2022 and mailed to the owners of the surrounding properties.

Petitioner's Exhibits:

1. Application for Special Use
2. Proof of Ownership
3. Plat of Survey/ Site Plan
4. Existing Conditions
5. Fence Elevation (sample)
6. Neighbor Consent Forms
7. Public Notice

Sworn in staff: Ms. Lyn Bremanis and Mr. Alex Bradshaw

Sworn in the petitioner: Ms. Marta Brzostowski 1017 N Cardinal Dr
Ms. Brzostowski stated they currently have a picket fence around the property that is old and not in good condition. She stated they want to replace with a private solid 6ft white fence for privacy. Ms. Brzostowski stated the picket style allows trash from street to enter her yard. She explained the fence is important for privacy to be able to sit in the yard and enjoy quiet. She spoke to the standards stating it won't destroy the vistas because it will be nicer than the old one and will not distract from the overall appearance of the community. Ms. Brzostowski stated they put in a new driveway and looking to update property and make more comfortable.

Mr. Pirog asked if any other homes have a 6ft high fence.
Ms. Brzostowski stated the other corners do referring to aerial to show 2 other houses.

Mr. Pirog pointed out they still have to clean garbage outside the fence.
Ms. Brzostowski agreed stating they will keep it nice with landscaping.

Ms. Roth-Wurster clarified they are replacing in the same location just changing style.
Ms. Brzostowski answered yes.

Ms. Wood referred to the existing conditions slide and pointed out the fence looks in good condition. She asked why the 6ft solid would enhance the area.
Ms. Brzostowski explained the fence would block visibility of their stuff in yard. She pointed out the neighbors submitted consent letters and are happy with the new fence.

Mr. Luszczak asked staff why they need relief.

Attachment: Draft ZBA Minutes (2022-56 : 1070 N. Cardinal Drive - SU Fence)

Mr. Bradshaw explained they are replacing the fence in the same place but changing from 4ft to 6ft. He explained it is pre-existing non-conforming. He further explained the only way to replace without relief is to replace with the same height and style.

Mr. Bradshaw gave a brief overview explaining the proposed fence will remain setback 10ft with existing landscaping to remain. He stated the proposed fence abuts the 20 foot front yard of 1070 E. Olde Virginia Rd. He stated the petitioners have received letters of consent from all four directly adjacent property owners. Mr. Bradshaw pointed out the property across Cardinal Drive from the Subject Property, 1071 E. Cardinal, has an existing non-conforming six (6) foot solid fence that is setback approximately 13 feet from the side lot line abutting Olde Virginia Rd. He stated it is not uncommon in the area to see these type of fences in these locations. Mr. Bradshaw stated Community Services and Engineering have reviewed and had no issues.

Ms. Roth-Wurster asked about the distance between the fence and sidewalk in the slide.
Mr. Bradshaw spoke to the other properties in the area having similar fences approx. 13ft off line.

STAFF RECOMMENDATION:
The Petitioners are proposing to replace an existing 4-foot open style fence with a 6-foot solid fence. The proposed fence will be in the exact location as the existing fence, which is set back approximately 10 feet from the side property line that abuts Olde Virginia Road. Said property line also abuts the side lot line of the front yard of the adjacent lot to the north. Per Code, the required setback is 20 feet. The Petitioner has received letters of consent from all four directly adjacent property owners, including 1070 E. Olde Virginia Rd (directly north).

The existing landscaping between the existing fence and the side lot line abutting the street will remain to provide an effective buffer. Ultimately, Staff did not identify any negative impacts the proposed fence would have on the surrounding neighborhood. Therefore, Staff recommends approval of the proposed Special Use with the following condition:

1. The Special Use shall substantially conform to the site plan and elevation plan submitted by the Petitioners, Jacek and Marta Brzostowski, except as said plans may be changed to conform to the Village's Codes and Ordinances.

There were no further questions. The public hearing was closed.

Mr. Pirog made a motion to approve subject staff's conditions; seconded by Ms. Roth-Wurster

DELIBERATIONS:
Mr. Pirog spoke to the standards stating he thinks it meets all besides enhancing the appearance. He pointed out the neighbors are ok with it and there are others

Attachment: Draft ZBA Minutes (2022-56 : 1070 N. Cardinal Drive - SU Fence)

in community.

Ms. Roth-Wurster agreed with Mr. Pirog. She stated it is not too close to street and there was a fence there before and had no line of site issues.

Ms. Wood agreed with Mr. Pirog. She pointed out Staff and the neighbors feel it's acceptable and there are other homes in area with similar fences.
Ms. Wood summarized that this request has met the standards and was unanimously approved by a vote of 4-0. This item will tentatively go to Village Council on July 11, 2022

RESULT:	**RECOMMENDED TO APPROVE [UNANIMOUS]**
MOVER:	John Pirog, Commissioner
SECONDER:	Cindy Roth-Wurster, Commissioner
AYES:	Roth-Wurster, Wood, Luszczak, Pirog
ABSENT:	McGinn, Cavanaugh

Attachment: Draft ZBA Minutes (2022-56 : 1070 N. Cardinal Drive - SU Fence)

Consider an Ordinance Granting a Variation for Lot Coverage to Permit a Rear Yard Deck at 110 N. Benton Street

BACKGROUND:
The Petitioners are proposing to replace and reconfigure an existing deck off the rear of the residence. A variation was previously granted to allow the existing deck to exceed the current maximum lot coverage by 11%. The proposed deck will add approximately 20 square feet to the total lot coverage and will maintain the existing setbacks. Therefore, the Petitioners are requesting:

Variation to permit the lot coverage to be 58%, instead of the maximum permitted 45%

KEY ISSUES:
- The Subject Property is substandard in lot area at approximately 4,356 square feet in size.

- The Subject Property contains a 498 square foot detached garage and an approximately 220 square foot existing deck. The current lot coverage is approximately 57% (2,499 square feet), which exceeds the maximum 45% lot coverage by roughly 540 square feet.

- The Petitioner is proposing to replace and reconfigure the deck of the rear of the home which will add approximately 20 square feet to the overall lot coverage. The deck was originally granted setback relief in 1996 to permit a 5.1-foot setback from the rear lot line (O-203-96), per the submitted Site Plan this setback will be maintained.

ALTERNATIVES:

1. Approve the Variation for lot coverage to permit a rear yard deck.
2. Do not approve the Variation for lot coverage to permit a rear yard deck.

RECOMMENDATION:

Public Hearing**:**	ZBA meeting on June 28, 2022
Residents testifying:	None.
Vote:	The ZBA voted unanimously approve a Lot Coverage Variation and Staff concurs.

ACTION REQUIRED:
A motion to approve the ordinance granting Variation for lot coverage to permit a rear yard deck at 110 N. Benton Street.

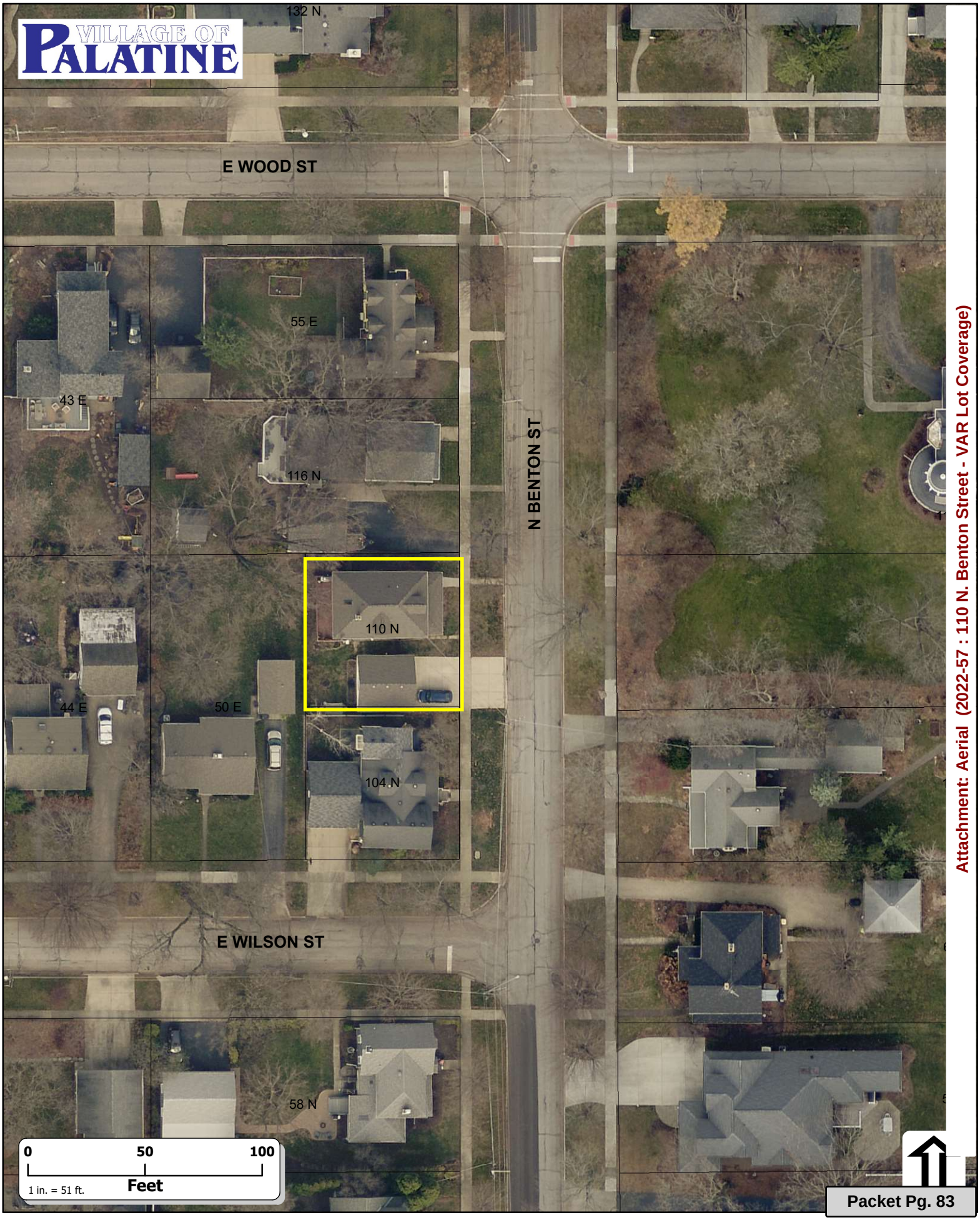
ATTACHMENTS:

- Aerial
- 110 N Benton Street - Existing & Proposed Deck
- ORD VAR 110 N Benton St
- EXHIBIT - Site Plan

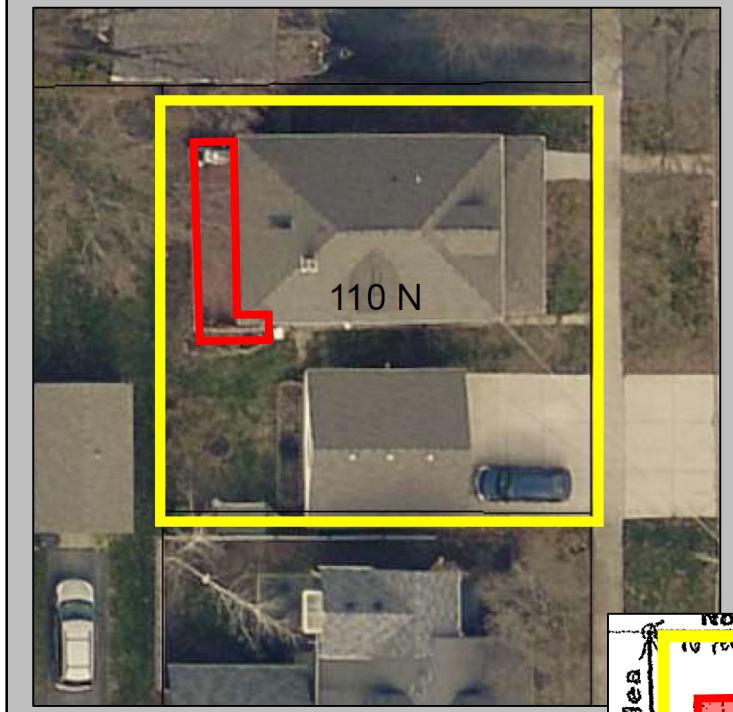
- June 28, 2022 ZBA Materials
- Draft ZBA Minutes

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Tim Millar, District 1 Councilman
SECONDER:	Scott Lamerand, District 2 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

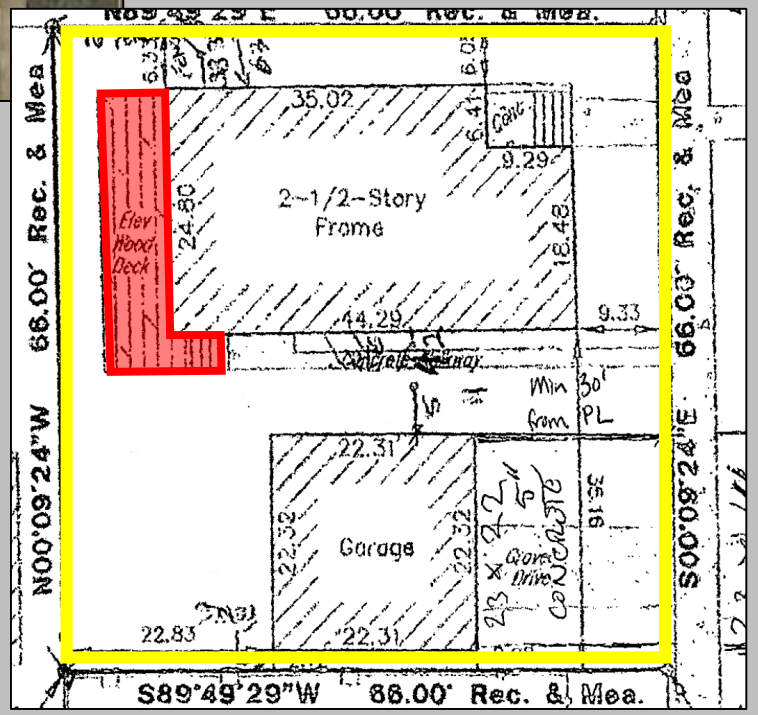
110 N. Benton Street



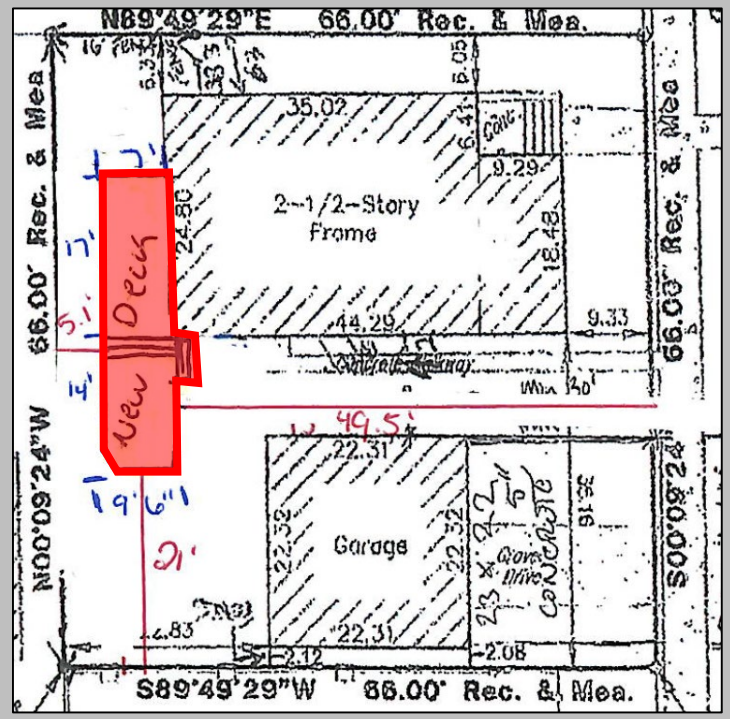
Attachment: Aerial (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

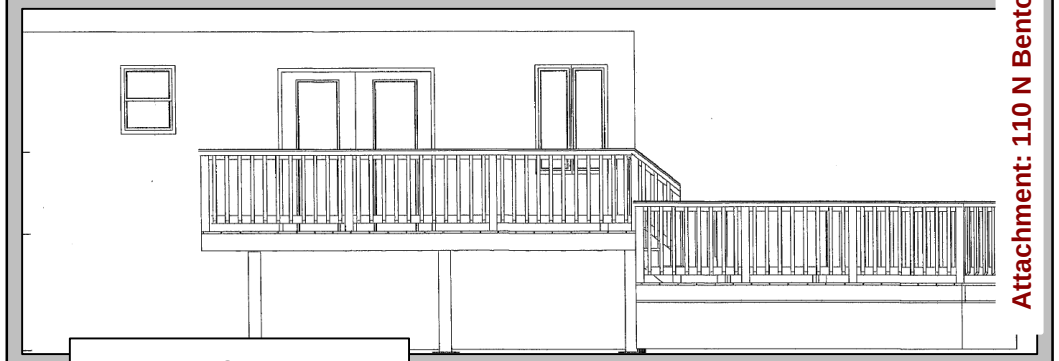


Existing



Proposed





Rear Elevation

Attachment: 110 N Benton Street - Existing & Proposed Deck (2022-57 : 110 N. Benton

ORDINANCE NO. _____

AN ORDINANCE GRANTING A VARIATION
110 N. BENTON STREET

WHEREAS, pursuant to a petition and public hearing on June 28, 2022, of which public notice was given as required by law, the Zoning Board of Appeals of the Village of Palatine, in accordance with the Zoning Ordinance of the Village of Palatine, in such case made and provided, has held such public hearing and reported their findings relative to a request for a Variation to permit lot coverage to be 58%, instead of the maximum permitted 45% pursuant to Section 10.06 (g) (1) (b) of the Palatine Zoning Ordinance, legally described property:

> **ALL OF THE FOLLOWING DESCRIBED REAL ESTATE SITUATED IN COOK COUNTY, IN THE STATE OF ILLINOIS, TO WIT: THE NORTH 1/2 OF LOT 8 IN BLOCK E IN THE VILLAGE OF PALATINE, ACCORDING TO THE MAP OF WOOD'S SUBDIVISION RECORDED DECEMBER 7, 1855 AS DOCUMENT 652237, A SUBDIVISION IN THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 14, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.**
>
> **Commonly known as 110 N. Benton Street (02-14-322-008-0000).**

NOW, THEREFORE, BE IT ORDAINED, by the Mayor and Village Council of the Village of Palatine, Cook County, Illinois, acting in the exercise of their home rule power that:

SECTION 1: Variation to permit lot coverage to be 58%, instead of the maximum permitted 45% pursuant to Section 10.06 (g) (1) (b) of the Palatine Zoning Ordinance, subject to the following condition(s):

Attachment: ORD VAR 110 N Benton St (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

1. **The Variation shall substantially conform to the Site Plan and submitted by the Petitioners, Randy & Rebecca Poznan, except as such plans may be changed to conform to Village of Palatine Codes and Ordinances.**

SECTION 2: **That a copy of the public notice is attached hereto and form a part of this ordinance.**

SECTION 3: **That this ordinance shall be in full force and effect from and after its passage and approval as provided by law.**

PASSED: This _____day of _____, 2022

AYES:_____ NAYS:_____ ABSENT:_____ PASS:_____

APPROVED by me this _____day of _____, 2022

_____
Mayor of the Village of Palatine

ATTESTED and FILED in the office of the Village Clerk this

_____day of _____, 2022

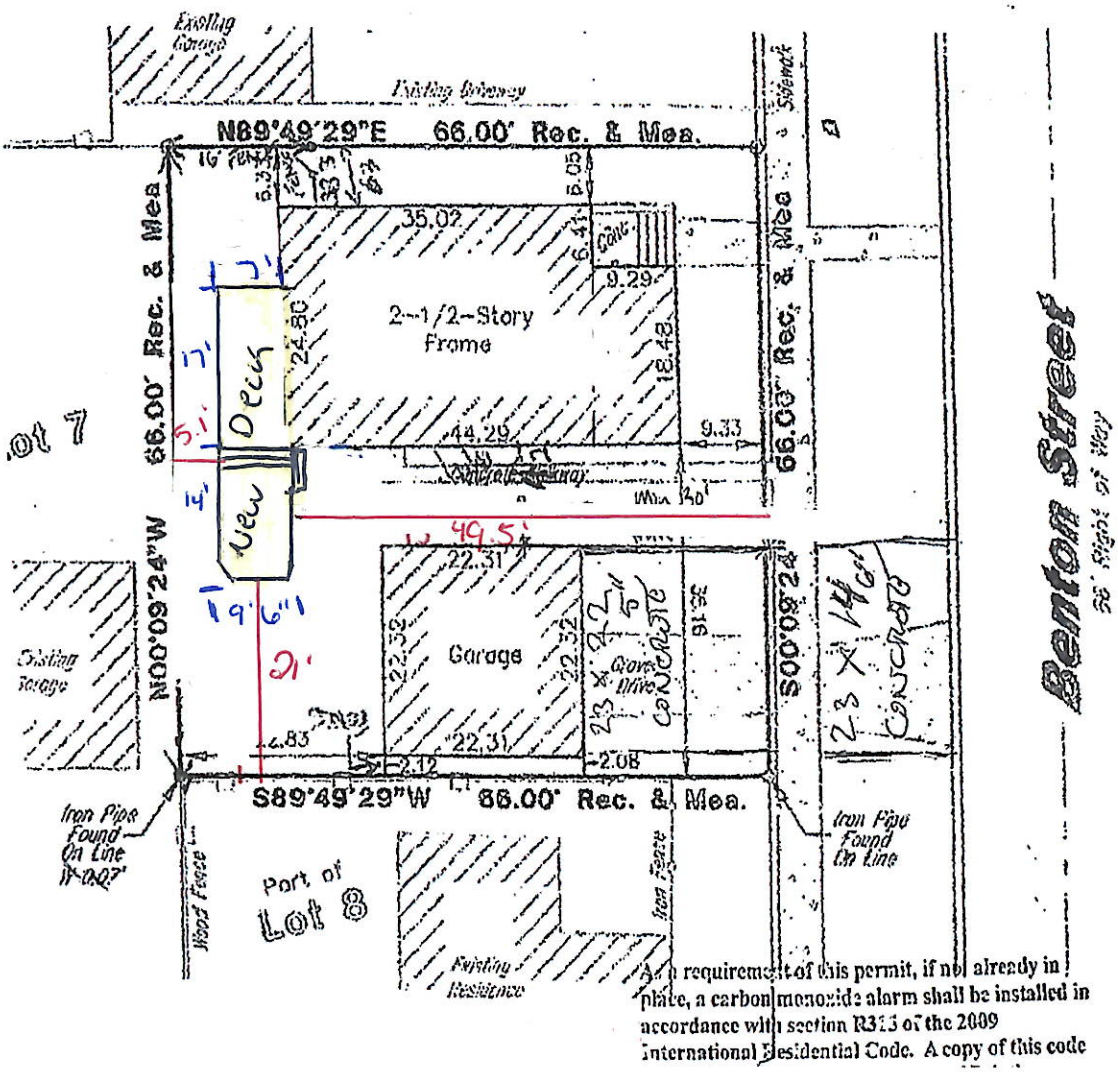
_____
Village Clerk

Attachment: ORD VAR 110 N Benton St (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

Scale 1:2

RECEIVED AUG 0 ... PREVENTION

THE NORTH 1/2 OF LOT 8 IN BLOCK E IN THE VILLAGE OF PALATINE, ACCORDING TO THE MAP OF WOOD'S SUBDIVISION RECORDED DECEMBER 7, 1855 AS DOCUMENT 652237, AS SUBDIVISION IN THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 14, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.



As a requirement of this permit, if not already in place, a carbon monoxide alarm shall be installed in accordance with section R313 of the 2009 International Residential Code. A copy of this code

Attachment: EXHIBIT - Site Plan (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

VILLAGE OF PALATINE

VILLAGE OF PALATINE
Zoning Board of Appeals

SCHEDULED 06/28/22 07:00 PM

CASE STAFF STATEMENT (ID # 7644)

110 N. Benton Street

TO: Palatine Zoning Board of Appeals
Jan Wood, Chair

FROM: Alex Bradshaw

PETITIONER: Randy & Rebecca Poznan / Danielle Scaccia (architect)

CASE NUMBER: 22-20

ADDRESS: 110 N. Benton Street

PROPOSAL:
Standard Variation to permit lot coverage to be 58%, instead of the maximum permitted 45%.

LOCATION:	110 N. Benton Street District 6 (Helms)	**CURRENT ZONING:**	R-2 Single-Family Residential

SURROUNDING CONDITIONS:

North:	R-2 Single-Family Residential
South	R-2 Single-Family Residential
East:	R-2 Single-Family Residential
West:	R-2 Single-Family Residential

BACKGROUND:
The Petitioners are proposing to replace and reconfigure an existing deck off the rear of the residence. A Variation was previously granted to allow the existing deck to exceed the current maximum lot coverage by 11%. The proposed deck will add approximately 20 square feet to the total lot coverage, and will maintain the existing setbacks. Therefore, the Petitioners are requesting:

Variation to permit the lot coverage to be 58%, instead of the maximum permitted 45%.

SITE ANALYSIS:

- The Subject Property is zoned R-2 Single Family. The property is located within the Territory Included in the Town of Palatine Subdivision and is substandard at approximately 4,356 square feet in size. It was annexed into the Village in 1869.

Attachment: June 28, 2022 ZBA Materials (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

- In addition to the home, the property contains a 498 sf detached garage, an approximately 35 sf shed, and an approximately 220 sf existing deck. The existing lot coverage is approximately 57% (2,499 sf) which exceeds the maximum 45% lot coverage by 540 sf.
- The Petitioner is proposing to replace and reconfigure the deck of the rear of the home which will add approximately 20 sf to the overall lot coverage. The deck was originally granted setback relief in 1996 to permit a 5.1-foot setback from the rear lot line (O-203-96), per the submitted Site Plan this setback will be maintained.
- The Petitioner is seeking a Standard Variation to permit an increase in the lot coverage to 58% lot coverage (2,527 sf) instead of the maximum 45% (1,960 sf) being a difference of 567 sf.
- The existing building coverage is approximately 35% and meets Code.

DEPARTMENTAL REVIEWS:

Community Services	No Issues Identified.
Engineering	No Issues Identified.
Environmental Health	N/A
Fire Prevention	N/A
Public Works	N/A
Police	N/A

STANDARDS FOR A VARIATION: Standards for a Variation are found in Section 14.03 D (1) and (2) of the Zoning Code. Specifically, the Petitioners must show that the property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations governing the district in which it is located; that the plight of the owner is due to unique circumstances; and that the variation, if granted, will not alter the essential character of the locality. The Petition for Variation is attached, and the Petitioners have attempted to address the required standards.

STAFF RECOMMENDATION:
The Petitioners are requesting to replace and reconfigure the existing deck off the rear of their home. At 57%, the property currently exceeds the maximum lot coverage (45%) as the existing deck received a Variation in 1996 for setback relief, and was approved prior to lot coverage regulations. As the proposed deck will maintain the previously granted setback, Staff believes it will not alter the essential character of the area.

The proposed deck will further increase the overall lot coverage that already exceeds the maximum permitted. The Village Engineer did not identify any storm water management issues with the Subject Property. However, the Subject Property size is

Attachment: June 28, 2022 ZBA Materials (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

substandard and creates a hardship for the homeowner, restricting improvements to the lot.

Therefore, Staff recommends approval of the requested Variation, subject to the following condition:

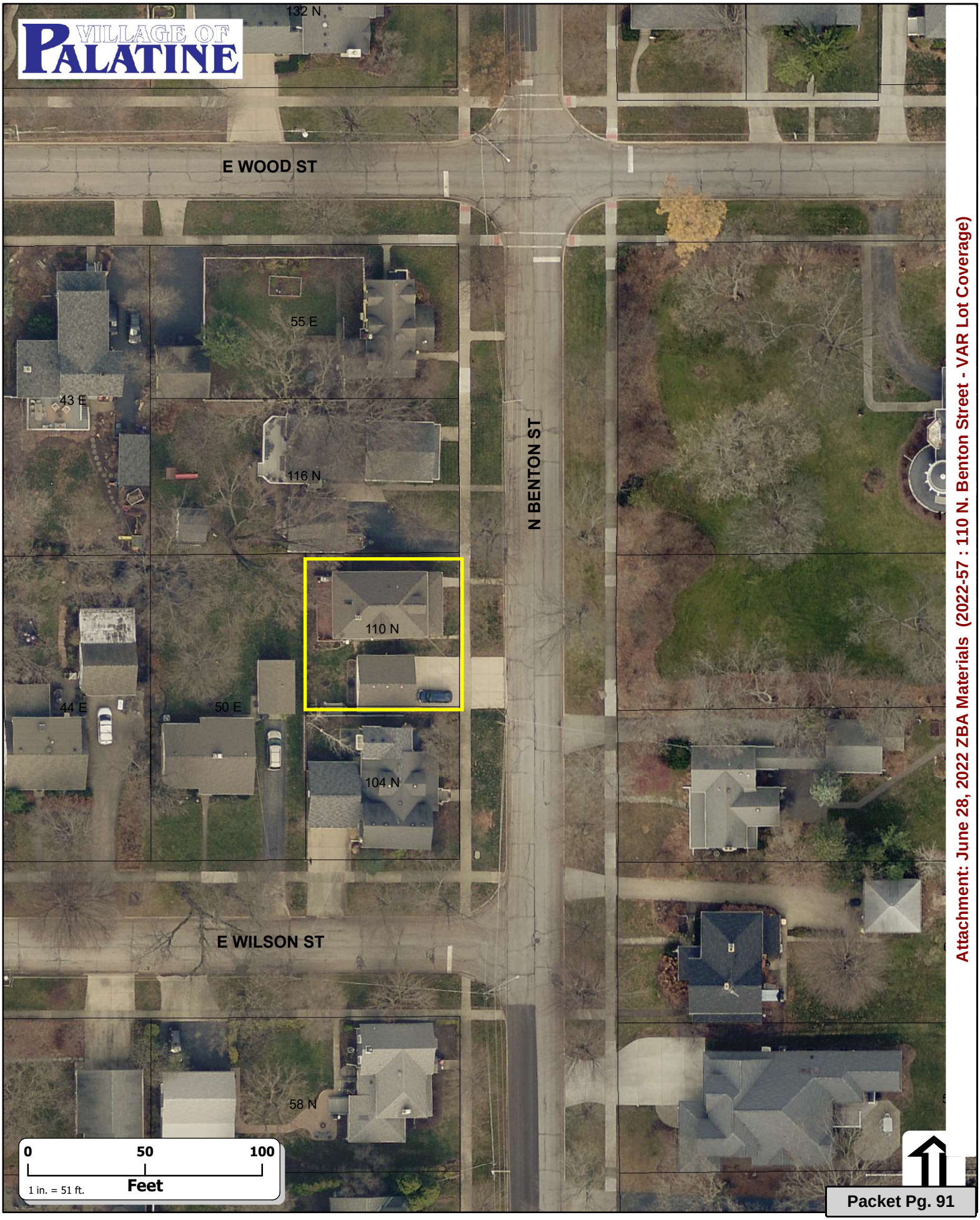
1. The Variation shall substantially conform to the site plan submitted by the Petitioners, Randy & Rebecca Poznan on 5/19/2022, except as such plans may be changed to conform to the Village's Codes and Ordinances.

ATTACHMENTS:

- Aerial
- Application
- Plat of Survey
- Site Plan
- Elevations
- Public Notice

Attachment: June 28, 2022 ZBA Materials (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

110 N. Benton Street



Attachment: June 28, 2022 ZBA Materials (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

VILLAGE OF PALATINE

SPECIAL USE & VARIATION APPLICATION

Department of Planning & Zoning
200 E. Wood Street · Palatine, IL · 60067-5339
Telephone: (847) 359-9047 · Fax (847) 963-6247

Office Use Only		
	Project Planner	Zoning Case #
	Filing Fee	Notification Deadline
	ZBA Public Hearing Date	Village Council Date

RECEIVED
MAY 19 2022
PLANNING & ZONING
DEPARTMENT
date received

Background Information

PETITIONER(S) **Business Name (if applicable)**
Randy & Rebecca Poznan

Subject Property Address
110 N Benton St Palatine, IL 60067

AUTHORIZED AGENT (if applicable) **Business Name (if applicable)**
Danielle Scaccia - Archadeck of Chicagoland

Address: 395 W Northwest Hwy Ste A Palatine, IL 60067
City/State/Zip Code:

Telephone	Fax	Email
847-496-4333		dscaccia@archadeck.net

Relationship to Petitioner (contractor, architect, etc.)
Contractor

TYPE OF APPLICATION (check one)

■ Special Use □ Special Use Amendment ■ Variation

Existing Zoning District	Existing Land Use	Proposed Land Use

Generally describe your request:
Demolition of existing deck, knock down footings, and demo 3' x 5' area where existing stairs land. Construction of new Deck and stairs.

Attachment: June 28, 2022 ZBA Materials (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

VILLAGE OF PALATINE

VARIATION

Required Materials

- ☐ Filing Fee of $ _____
- ☐ Application Form
- ☐ Plat of Survey (must show all current improvements and be sealed by an Illinois certified surveyor)
- ☐ Site Plan & Floor plan (dimension, location, and setbacks of all existing and proposed buildings) – **one 11x17 copy each, electronic version preferred**
- ☐ Real Estate Interest Disclosure Form (see attached)
- ☐ Proof of Ownership or Lease (e.g. Title Insurance Policy, Deed, or Purchase Contract)

Additional Materials (as required by the Village)

- ☐ Elevation Plan (front, side, and rear elevations of a proposed building), and/or Floor Plan (proposed interior layout) – **one 11x17 copy of each plan, electronic versions preferred**
- ☐ Engineering Plans (must indicate existing conditions, topography, storm water management, tree preservation, utility connections, detention calculations, and a cost estimate)
- ☐ Photographs (e.g. ground-level or aerials)
- ☐ Other materials as deemed necessary by the Village

Petitioner Justification

The Petitioner is required to present specific evidence related to each of the following standards to justify the request (paraphrased from Section 14.03 of the Palatine Zoning Ordinance). Answer the items below and attach a separate sheet if necessary. ***If you are applying for a Special Use only, you do not need to answer these items.***

1. That the property cannot yield a reasonable return if used only under the conditions allowed by the regulations governing the zoning district in which it is located

The property can not yield a reasonable return if used only under the conditions allowed by the regulations governing the zoning district in which it is located as the back yard is significantly smaller, adding the structure would allow for a more functional use of the space.

2. That the plight of the owner is due to unique circumstances

The plight of the owner is unique as their back and side yards are significantly smaller than those of surrounding areas, with the side yard being a more functional area. The project would allow a more functional use of their space.

3. That the variation, if granted, will not alter the essential character of the locality

The variation, if granted, will not alter the essential character of the locality.

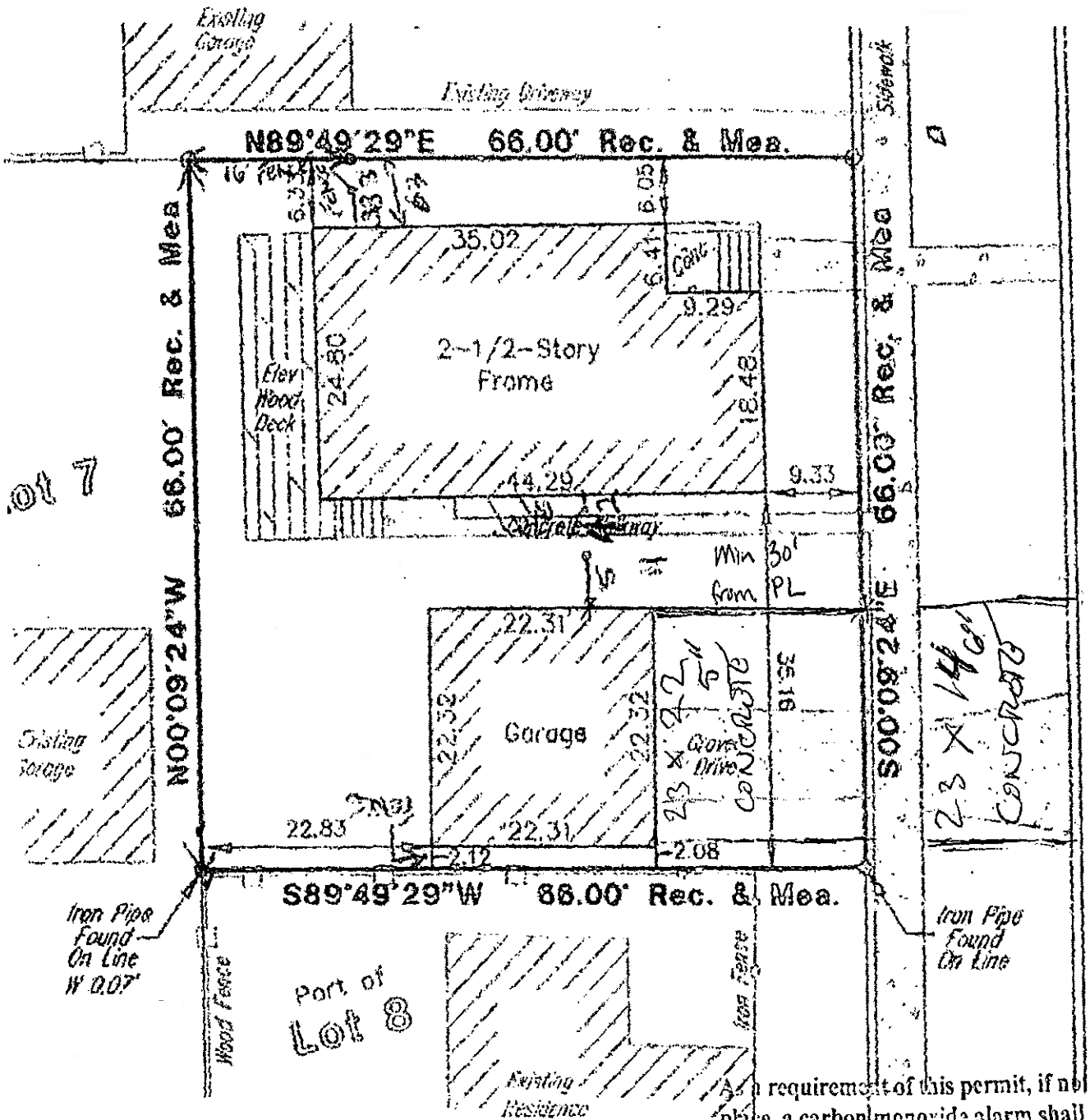
4. In order to supplement the above standards, the Zoning Board of Appeals may also consider the following:
   a. The particular surroundings, shape, or topographical conditions of the property
   b. A unique hardship for the property not generally applicable to other properties in the same zoning district
   c. The request is not based on a desire to make more money out of the property
   d. The petitioner has not created the alleged hardship for the property
   e. The request will not be detrimental to the public welfare or other properties in the neighborhood
   f. The request will not impair the supply of light and air to adjacent properties, substantially increase the danger of fire, endanger the public safety, or substantially diminish or impair neighboring property values

The particular shape of the property allows for a more usable side yard, which is unique to this property compared to surrounding properties. The request is not based off of the desire to make more money out of the property, it is to allow the client to have a private and functional outdoor living space. The request is not detrimental to the publlic welfare or other properties in the neighborhood, and the request will not impair the supply of light and air to adjacent properties, it will not increase danger of fire or endanger public safty, it will not diminish or impair neighboring property values.

Attachment: June 28, 2022 ZBA Materials (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

RECEIVED
AUG
PREVENTION

THE NORTH 1/2 OF LOT 8 IN BLOCK E IN THE VILLAGE OF PALATINE, ACCORDING TO THE M
OF WOOD'S SUBDIVISION RECORDED DECEMBER 7, 1855 AS DOCUMENT 652237, AS
SUBDIVISION IN THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 14, TOWNSHIP 42 NOR
RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.



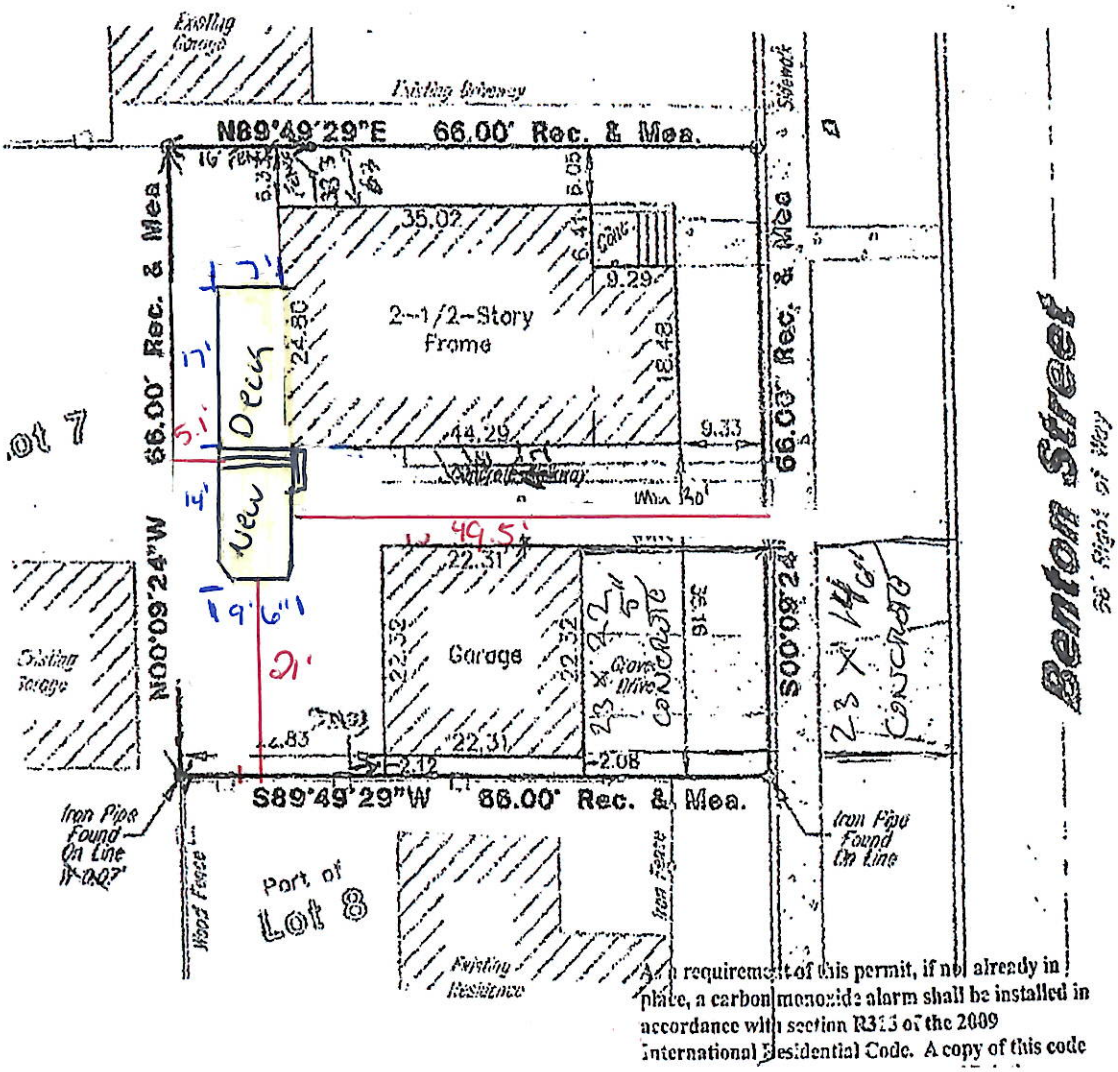
As a requirement of this permit, if not already in place, a carbon monoxide alarm shall be installed in accordance with section R315 of the International Residential Code. A copy of this code

Attachment: June 28, 2022 ZBA Materials (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

Scale 1:2

RECEIVED AUG 0 ... PREVENTION

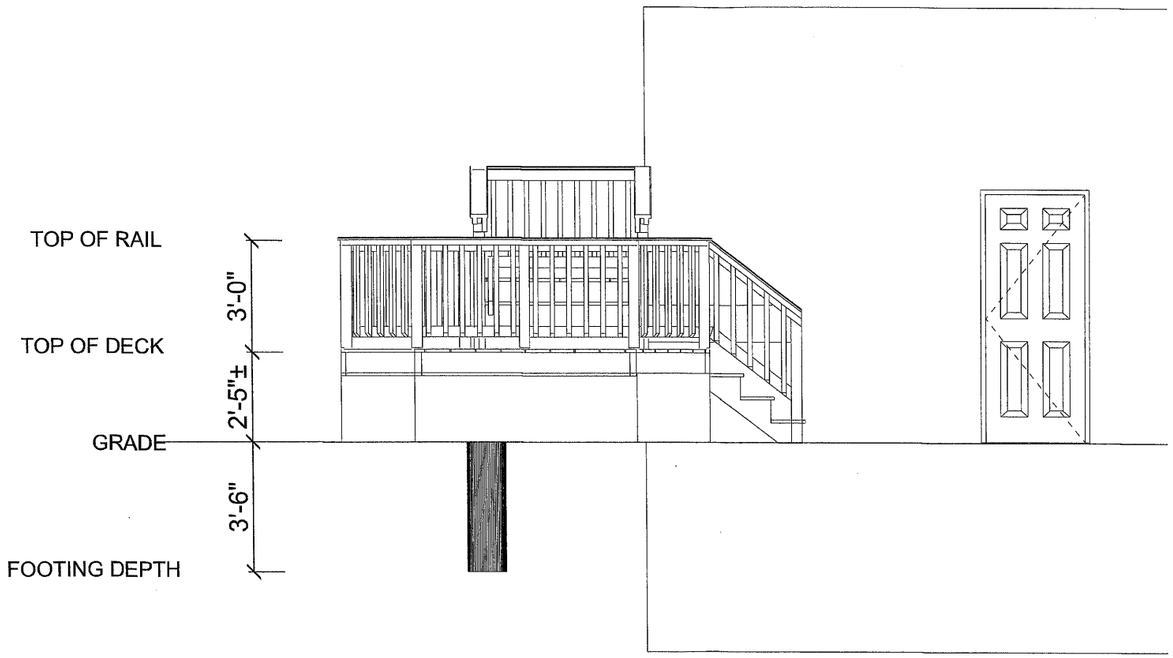
THE NORTH 1/2 OF LOT 8 IN BLOCK E IN THE VILLAGE OF PALATINE, ACCORDING TO THE MAP OF WOOD'S SUBDIVISION RECORDED DECEMBER 7, 1855 AS DOCUMENT 652237, AS SUBDIVISION IN THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 14, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.



As a requirement of this permit, if not already in place, a carbon monoxide alarm shall be installed in accordance with section R313 of the 2009 International Residential Code. A copy of this code

Attachment: June 28, 2022 ZBA Materials (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

All dimensions are approximate. In the event of a difference between the drawn and written dimensions, the written dimension shall prevail. Due to local differences in building codes and regulations, and specific site conditions, these drawings may need to be modified by the builder to comply with such local codes and regulations, or site conditions.



FRONT ELEVATION

SHEET DESCRIPTION

SHEET:

1/4

Front Elevation
SCALE: 1/4" = 1'-0"

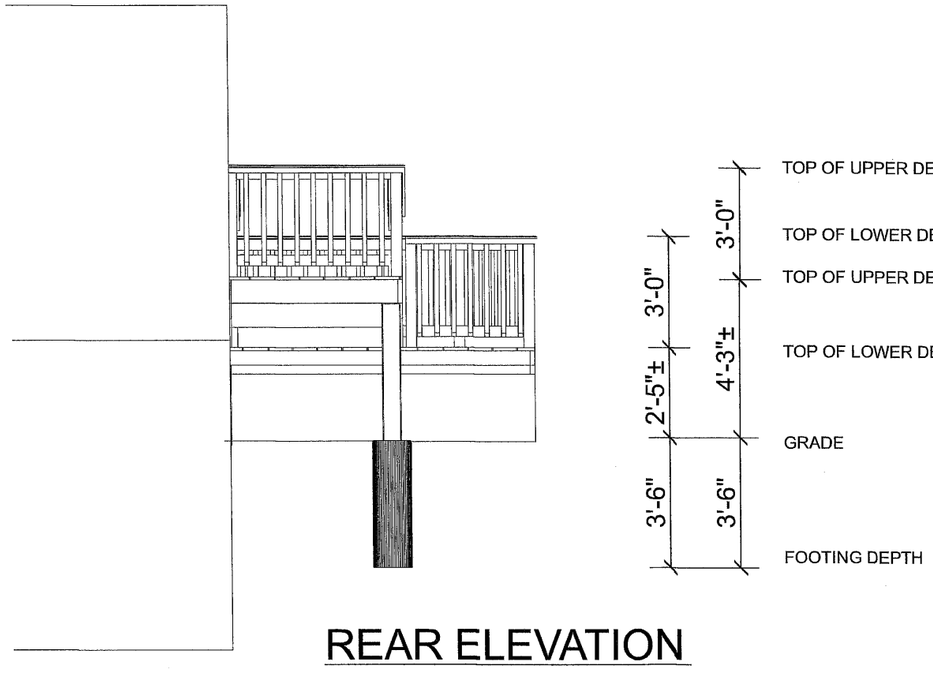
Prepared by:
Integrity Enterprises, INC.
DBA: Archadeck of Chicagoland
395 W Northwest Highway
Palatine, IL 60067

Construction & Drafting Department
©2017 Archadeck Franchising Corporation
All rights reserved. Unauthorized
duplication is a violation of
all applicable laws.

-Poznan-100797
110 N. Benton St.
Palatine, IL 60067
DRAWN BY: Integrity Ent. (CRK)
5/4/22

Attachment: June 28, 2022 ZBA Materials (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

All dimensions are approximate. In the event of a difference between the drawn and written dimensions, the written dimension shall prevail. Due to local differences in building codes and regulations, and specific site conditions, these drawings may need to be modified by the builder to comply with such local codes and regulations, or site conditions.



REAR ELEVATION

SHEET DESCRIPTION

SHEET:

2/4

Rear Elevation
SCALE: 1/4" = 1'-0"

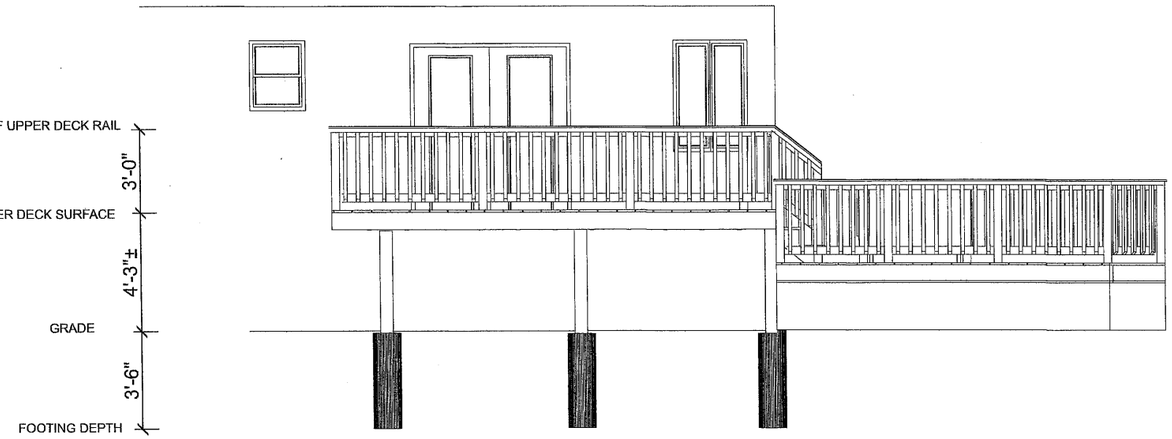
Prepared by:
Integrity Enterprises, INC.
DBA: Archadeck of Chicagoland
395 W Northwest Highway
Palatine, IL 60067

Construction & Drafting Department
©2017 Archadeck Franchising Corporation
All rights reserved. Unauthorized
duplication is a violation of
all applicable laws.

-Poznan-100797
110 N. Benton St.
Palatine, IL 60067
DRAWN BY: Integrity Ent. (CRK)
5/4/22

Attachment: June 28, 2022 ZBA Materials (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

All dimensions are approximate. In the event of a difference between the drawn and written dimensions, the written dimension shall prevail. Due to local differences in building codes and regulations, and specific site conditions, these drawings may need to be modified by the builder to comply with such local codes and regulations, or site conditions.



LEFT ELEVATION

SHEET DESCRIPTION

SHEET:

3/4

Left Elevation
SCALE:3/16" = 1'-0"

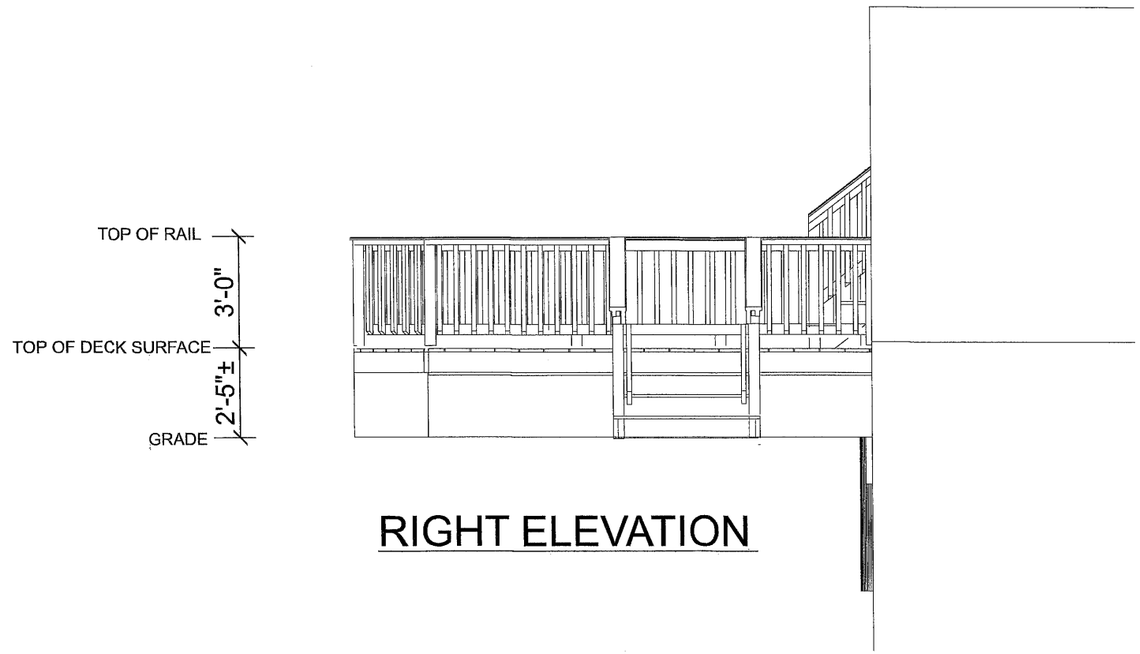
Prepared by:
Integrity Enterprises, INC.
DBA: Archadeck of Chicagoland
395 W Northwest Highway
Palatine, IL 60067

Construction & Drafting Department
©2017 Archadeck Franchising Corporation
All rights reserved. Unauthorized
duplication is a violation of
all applicable laws.

-Poznan-100797
110 N. Benton St.
Palatine, IL 60067
DRAWN BY: Integrity Ent. (CRK)
5/4/22

Attachment: June 28, 2022 ZBA Materials (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

All dimensions are approximate. In the event of a difference between the drawn and written dimensions, the written dimension shall prevail. Due to local differences in building codes and regulations, and specific site conditions, these drawings may need to be modified by the builder to comply with such local codes and regulations, or site conditions.



RIGHT ELEVATION

SHEET DESCRIPTION

SHEET:

4/4

Right Elevation
SCALE: 1/4" = 1'-0"

Prepared by:
Integrity Enterprises, INC.
DBA: Archadeck of Chicagoland
395 W Northwest Highway
Palatine, IL 60067

Construction & Drafting Department
©2017 Archadeck Franchising Corporation
All rights reserved. Unauthorized
duplication is a violation of
all applicable laws.

-Poznan-100797
110 N. Benton St.
Palatine, IL 60067
DRAWN BY: Integrity Ent. (CRK)
5/4/22

Attachment: June 28, 2022 ZBA Materials (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

PUBLIC NOTICE
A Public Hearing will be held before the Palatine Zoning Board of Appeals on Tuesday, June 28, 2022 at 7 PM, in the Village Council Chambers at Palatine Village Hall, 200 E. Wood Street, relative to a request for the following:
Variation to permit lot coverage to be 58%, instead of the maximum permitted 45%.
The property is commonly known as 110 N. Benton Street (02-14-322-008-0000).
The Petitioners are proposing to replace and reconfigure an existing deck off the rear of the residence. A Variation was previously granted to allow the existing deck to exceed the current maximum lot coverage by 11%. The proposed deck will add approximately 20 square feet to the total lot coverage, and will maintain the existing setbacks.
The above petition has been filed by Randy and Rebecca Poznan and is available for examination in the office of the Village Clerk, 200 E. Wood Street.
FILE #: 22-20
VILLAGE OF PALATINE
Jan Wood, Chair
Palatine Zoning Board of Appeals
DATED: This 13th day of June, 2022
Published in Daily Herald June 13, 2022 (4584015)

CERTIFICATE OF PUBLICATION

Paddock Publications, Inc.

Northwest Suburbs
Daily Herald

Corporation organized and existing under and by virtue of the laws o the State of Illinois, DOES HEREBY CERTIFY that it is the publish of the **Northwest Suburbs DAILY HERALD**. That said **Northwes Suburbs DAILY HERALD** is a secular newspaper, published in Arlington Heights and has been circulated daily in the Village(s) of: Arlington Heights, Barrington, Barrington Hills, Bartlett, Buffalo Gr Deer Park, Des Plaines, Elk Grove, Franklin Park, Glenview, Hanover Park, Hoffman Estates,Inverness, Melrose Park,Morton Gr Mt Prospect, Niles, Northbrook, Northfield, Northlake, Palatine, Park Ridge, Prospect Heights, River Grove, Rolling Meadows, Rosemont, Schaumburg,Schiller Park, South Barrington, Streamwoo Wheeling, Wilmette

County(ies) of Cook
and State of Illinois, continuously for more than one year prior to th date of the first publication of the notice hereinafter referred to and i general circulation throughout said Village(s), County(ies) and State

I further certify that the Northwest Suburbs DAILY HERALD is a newspaper as defined in "an Act to revise the law in relation to notic as amended in 1992 Illinois Compiled Statutes, Chapter 715, Act 5, Section 1 and 5. That a notice of which the annexed printed slip is a copy, was published 06/13/2022
in said Northwest Suburbs DAILY HERALD.

IN WITNESS WHEREOF, the undersigned, the said PADDOCK PUBLICATIONS, Inc., has caused this certificate to be signed by, t authorized agent, at Arlington Heights, Illinois.

PADDOCK PUBLICATIONS, INC.
DAILY HERALD NEWSPAPERS

BY Paula Battaglia
Designee of the Publisher and Officer of the Daily Herald

Control # 4584015

Attachment: June 28, 2022 ZBA Materials (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

4. 110 N. Benton Street

Notice was published in the Daily Herald on June 13, 2022 and mailed to the owners of the surrounding properties.

Petitioner's Exhibits:

1. Application for Variation
2. Proof of Ownership
3. Plat of Survey
4. Site Plan
5. Elevations
6. Public Notice

Sworn in the petitioner: Mr. Chris Curry Representative of Archadeck of Chicagoland 395 W Northwest Hwy

Mr. Curry stated they are proposing to demolish the existing deck and build new deck that encroaches into the setback. He explained with the yard layout this is the only way to make good yard space. He stated it won't alter the locality and will allow more functional use of the yard and increase the value of property.

Ms. Wood asked about the variation for the existing deck.
Mr. Bradshaw explained the existing deck received a variation for setback relief was given in 1996.

Ms. Wood asked if this is bigger.
Mr. Curry explained the new deck is approx. 237 sq.ft.

Ms. Wood asked how much bigger the new deck is.
Mr. Curry stated they are demoing approx. 175sqft and the new one is approx. 236 sq.ft.

Ms. Wood asked if they just want a bigger deck.
Mr. Curry explained they are adding the lower area to add more functionality to use in backyard.

Ms. Wood asked staff about lot coverage percentages.
Mr. Bradshaw stated the existing is approx. 57% and they are increasing to approx. 58%.

Ms. Wood asked if they were approved previously for the 57%.
Mr. Bradshaw answered, yes.

Mr. Bradshaw gave a brief overview stating the subject property is zoned R2 single family and annexed into Village in 1869. He stated it is a substandard lot with approx. 4350 sqft. He stated the existing lot coverage is approximately 57% (2,499 sf) which exceeds the maximum 45% lot coverage by 540 sf. Mr. Bradshaw stated the petitioner is proposing to reconfigure the deck adding

Attachment: Draft ZBA Minutes (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

approximately 20 sqft to the overall lot coverage. He pointed out the existing deck was granted setback relief in 1996 and this setback will be maintained. He stated Community Services and Engineering have reviewed and have no issues.

Mr. Pirog clarified the setback is maintained and asked where the increase is.
Mr. Bradshaw referred to existing condition to show area of removal and expansion.

Ms. Roth-Wurster clarified there are differences in the existing and proposed elevations.
Mr. Bradshaw answered, yes.

STAFF RECOMMENDATION:
The Petitioners are requesting to replace and reconfigure the existing deck off the rear of their home. At 57%, the property currently exceeds the maximum lot coverage (45%) as the existing deck received a Variation in 1996 for setback relief, and was approved prior to lot coverage regulations. As the proposed deck will maintain the previously granted setback, Staff believes it will not alter the essential character of the area.

The proposed deck will further increase the overall lot coverage that already exceeds the maximum permitted. The Village Engineer did not identify any storm water management issues with the Subject Property. However, the Subject Property size is substandard and creates a hardship for the homeowner, restricting improvements to the lot.

Therefore, Staff recommends approval of the requested Variation, subject to the following condition:

1. The Variation shall substantially conform to the site plan submitted by the Petitioners, Randy & Rebecca Poznan on 5/19/2022, except as such plans may be changed to conform to the Village's Codes and Ordinances

There were no further questions. The public hearing was closed.

Mr. Pirog made a motion to approve subject staff's conditions; seconded by Ms. Roth-Wurster

DELIBERATIONS:
Mr. Pirog spoke to the standards. He stated the deck is currently in place not increasing distance to the property line. He pointed out the uniqueness with the substandard lot size.

Ms. Roth-Wurster agreed with Mr. Pirog. She stated it is unique circumstance and won't alter character of neighborhood. She stated Archadeck does a nice job and it will allow better use of deck. She stated there is no water issues so is less concerned with lot coverage.

Attachment: Draft ZBA Minutes (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

Ms. Wood spoke to the reasonable return and uniqueness. She stated it is a slight increase in lot coverage and no issues in past with storm water. She stated she thinks the standards have been met.

Ms. Wood summarized that this request has met the standards and was unanimously approved by a vote of 4-0. This item will tentatively go to Village Council on July 11, 2022

RESULT:	**RECOMMENDED TO APPROVE [UNANIMOUS]**
MOVER:	John Pirog, Commissioner
SECONDER:	Cindy Roth-Wurster, Commissioner
AYES:	Roth-Wurster, Wood, Luszczak, Pirog
ABSENT:	McGinn, Cavanaugh

Attachment: Draft ZBA Minutes (2022-57 : 110 N. Benton Street - VAR Lot Coverage)

Consider an Ordinance Granting a Special Use to Permit an Indoor Sports and Recreational Facility (Kid's Empire) at 619 E. Dundee Road

BACKGROUND:
The Petitioners are proposing to open an indoor play center, under the franchise name "Kid's Empire". Therefore, they are requesting approval of the following:

Special Use to permit an indoor sports and recreation facility.

KEY ISSUES:

- Kids Empire is an indoor playground chain, with multiple locations across the country, currently 4 locations in the Chicago area. Deer Grove Centre is zoned Planned Development and follows the B-2 use list.
- The tenant space is approximately 10,584 square feet and is currently vacant. It is located between Hobby Lobby and Petco in the shopping center.
- The proposed hours of operation are identified below, with peak hours occurring Monday - Friday 4 PM - 8 PM and Saturday and Sundays 2 PM - 6 PM:
    - Monday - Thursday 10 AM - 8 PM
    - Friday - Sunday 10 AM - 10 PM
- The business plan indicates 5-7 employees per shift, with an average occupancy of 142 guests and an approximate parent/child ratio of 90 parents and 52 children.
- Including Kids Empire, there are 23 excess parking spaces within the shopping center.

ALTERNATIVES:
1. Approve the Special Use to Permit an Indoor Sports and Recreational Facility.
2. Do not approve the Special Use to Permit an Indoor Sports and Recreational Facility.

RECOMMENDATION:

Public Hearing**:**	ZBA meeting on June 28, 2022
Residents testifying:	None.
Vote:	The ZBA voted unanimously approve a Special Use to Permit an Indoor Sports and Recreational Facility and Staff concurs.

ACTION REQUIRED:
A motion to approve the ordinance granting Special Use to Permit an Indoor Sports and Recreational Facility at 619 E. Dundee Road.

ATTACHMENTS:

- Aerial Map
- ORD SU 619 E. Dundee Road
- EXHIBIT - Plat of Survey

- EXHIBIT - Floor Plan
- EXHIBIT - Business Plan
- ZBA Materials 6-28-22
- DRAFT ZBA Minutes 6-28-22

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Doug Myslinski, District 3 Councilman
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

619 E Dundee Road

Attachment: Aerial Map (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)

ORDINANCE NO. _____

AN ORDINANCE GRANTING A SPECIAL USE TO PERMIT
AN INDOOR SPORTS AND RECREATION FACILITY AT 619 E DUNDEE ROAD

WHEREAS, pursuant to a petition and public hearing on June 28, 2022, of which public notice was given as required by law, the Zoning Board of Appeals of the Village of Palatine, in accordance with the Zoning Ordinance of the Village of Palatine, in such case made and provided, has held such public hearing and reported their findings relative to a request for a Special Use to permit an indoor sports and recreational facility ("Kid's Empire") pursuant to Section 11.03 (d) (17) of the Palatine Zoning Ordinance, on the following legally described property:

PARCEL 1: LOTS 2, 5, 7 AND 8 AND LOT 4(EXCEPT THAT PART OF LOT 4 CONVEYED TO THE ILLINOIS DEPARMENT OF TRANSPORATION BY WARRENTY DEED RECORDED APRIL 18, 1996 AS DOCUMENT 96294440 AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT THE EASTERNMOST CORNER: THENCE SOUTH 72 DEGREES 16 MINUTES 22 SECONDS WEST, A DISTANCE OF 10.801 M (35.44 FEET): THENCE NORTH-190 DEGREES 00 MINUTES 00 SECONDS WEST.A DISTANCE OF 4.734 M (15.53 FEET);THENCE SOUTH 20 DEGREES 40 MINUTES 20 SECONDS WEST, A DISTANCE OF 14.450 (47.41 FEET); THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, A DISTANCE OF 14,935 M (49,00 FEET); THENCE NORTH 25 DEGREES 58 MINUTES 13 SECONDS WEST, A DISTANCE OF 15.038 M (49.34 FEET); THENCE NORTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, A DISTANCE OF 38.100 M (125.00 FEET): THENCE NORTH 85 DEGREES 36 MINUTES 43 SECONDS WEST, A DISTANCE OF 42.985 M (141.03 FEET) TO A POINT ON THE NORTH LINE OF SAID LOT 4); 1HENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS EAST ALONG SAID NORTH LINE, A DISTANCE OF 122.602 M (402.24 FEET) TO THE POINT OF BEGINNING) IN DEER GROVE CENTRE, BEING A SUBDIVISION OF PART OF TH NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 42 NORTH, RANGE 10, EAST OF TI-IE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 6, 1995 AS DOCUMENT 95849083. IN COOK COUNTY, I LLINOIS,

Commonly known as 619 E. Dundee Road (02-11-209-008-0000).

NOW, THEREFORE, BE IT ORDAINED, by the Mayor and Village Council of the Village

Attachment: ORD SU 619 E. Dundee Road (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)

of Palatine, Cook County, Illinois, acting in the exercise of their home rule power that:

SECTION 1: A Special Use to permit an indoor sports and recreational facility ("Kid's Empire") pursuant to Section 11.03 (d) (17) of the Palatine Zoning Ordinance is hereby granted, subject to the following condition(s):

1. **The Special Use shall substantially conform to the floor plan and the business plan submitted by the Petitioner on 4/30/22, except as such plan may be changed to conform to Village Codes and Ordinances.**

SECTION 2: That a copy of the public notice be attached hereto and form a part of this ordinance.

SECTION 3: That this ordinance shall be in full force and effect from and after its passage and approval as provided by law.

PASSED: This _____day of _____, 2022

AYES:_____ NAYS:_____ ABSENT:_____ PASS:_____

APPROVED by me this _____day of _____, 2022

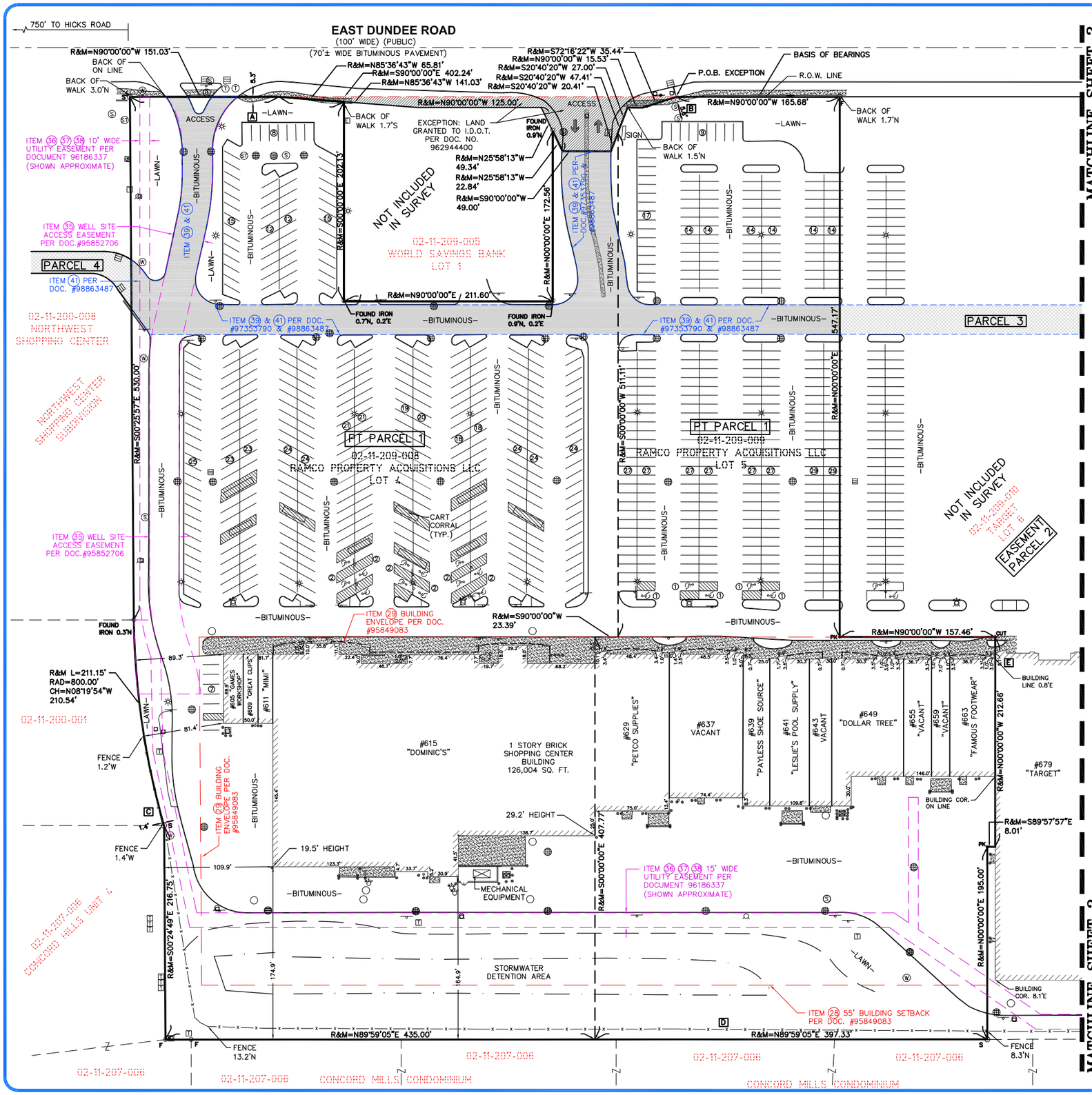
_____
Mayor of the Village of Palatine

ATTESTED and FILED in the office of the Village Clerk this

_____day of _____, 2022

_____
Village Clerk

Attachment: ORD SU 619 E. Dundee Road (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)



LEGAL DESCRIPTION

PARCEL 1: LOTS 2, 5, 7 AND 8 AND LOT 4 (EXCEPT THAT PART OF LOT 4 CONVEYED TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION BY WARRANTY DEED RECORDED APRIL 18, 1996 AS DOCUMENT 96294440 AND MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE EASTERNMOST CORNER; THENCE SOUTH 72 DEGREES 16 MINUTES 22 SECONDS WEST, A DISTANCE OF 10,801 M (35,44 FEET); THENCE NORTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, A DISTANCE OF 4,734 M (15,53 FEET); THENCE SOUTH 20 DEGREES 40 MINUTES 20 SECONDS WEST, A DISTANCE OF 14,450 (47,41 FEET); THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, A DISTANCE OF 14,935 M (49,00 FEET); THENCE NORTH 25 DEGREES 08 MINUTES 13 SECONDS WEST, A DISTANCE OF 15,039 M (49,34 FEET); THENCE NORTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, A DISTANCE OF 38,100 M (125,00 FEET); THENCE NORTH 85 DEGREES 36 MINUTES 43 SECONDS WEST, A DISTANCE OF 42,985 M (141,00 FEET) TO A POINT ON THE NORTH LINE OF SAID LOT 4; THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS EAST ALONG SAID NORTH LINE, A DISTANCE OF 122,602 M (402,24 FEET) TO THE POINT OF BEGINNING) IN DEER GROVE CENTRE, BEING A SUBDIVISION OF PART OF THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 6, 1995 AS DOCUMENT 95849083, IN COOK COUNTY, ILLINOIS.

PARCEL 2: EASEMENTS FOR INGRESS, EGRESS, UTILITIES, CONSTRUCTION, MAINTENANCE, RECONSTRUCTION AND PARKING FOR THE BENEFIT OF PARCEL 1, AS CREATED BY OPERATION AND EASEMENT AGREEMENT RECORDED DECEMBER 7, 1995 AS DOCUMENT 95852706 UPON, OVER AND ACROSS LOT 6 IN DEER GROVE CENTRE, BEING A SUBDIVISION OF PART OF THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 6, 1995 AS DOCUMENT 95849083, IN COOK COUNTY, ILLINOIS.

The property hereon described is the same as the pertinent property as described in First American Title Insurance Company, Commitment No. NCS-574859-CHI2, dated March 20, 2013, Revision Info: Rev. April 1, 2013

PARCEL 3:
A NON-EXCLUSIVE EASEMENT FOR INGRESS, EGRESS, PASSAGE AND DELIVERY BY VEHICLES FOR THE BENEFIT OF PARCEL 1, AS CREATED BY CROSS-ACCESS EASEMENT AGREEMENT RECORDED MAY 19, 1997 AS DOCUMENT 97353790, OVER AND ACROSS THE "EASEMENT PREMISES" AS DESIGNATED ON EXHIBIT "B-2" AND LEGALLY DESCRIBED AS LOTS 1 AND 1A IN HOME DEPOT PALATINE SUBDIVISION, BEING A SUBDIVISION OF PART OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 19, 1997 AS DOCUMENT 97353781, IN COOK COUNTY, ILLINOIS AND LOT 6 IN DEER GROVE CENTRE, BEING A SUBDIVISION OF PART OF THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 6, 1995 AS DOCUMENT 95849083, IN COOK COUNTY, ILLINOIS.

PARCEL 4:
A NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS FOR THE BENEFIT OF PARCEL 1 AS CREATED BY CROSS ACCESS EASEMENT AGREEMENT RECORDED SEPTEMBER 25, 1998 AS DOCUMENT 98863487, ONLY OVER THE PORTION OF THE CROSS ACCESS EASEMENT (THE "PERPETUAL ACCESS DRIVES") OVER A PORTIONS OF LOTS 1 AND 2 IN DELGADO AND REIN'S FERNDALE MARKET, A SUBDIVISION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 6, 1958 AS DOCUMENT 17198718, THE LAND FULLY DESCRIBED IN EXHIBIT "C" ATTACHED THERETO, IN COOK COUNTY, ILLINOIS.

NOTE: PARCELS 3 AND 4 ARE NOT A PART OF THE ABOVE REFERENCED TITLE COMMITMENT.

NOTES CORRESPONDING TO SCHEDULE "B"

Per the title commitment issued by First American Title Insurance Company as Commitment No. NCS-574859-CHI2, dated March 20, 2013.
Revision Info: Rev. April 1, 2013

10. Memorandum of lease made by E.C.K.E., L.L.C., Lessor, to Dominick's Finer Foods, Inc., Lessee, for a term of twenty years, recorded December 7, 1995 as Document 95852708, and the terms, conditions and provisions contained therein, and the rights of all parties claiming by, through or thereunder. (AFFECTS LOTS 1, 2, 3, 4, 5, 7 AND 8, BLANKET IN NATURE, NOT A SURVEY MATTER)

11. Subordination, Attornment and Non-Disturbance Agreement, recorded December 7, 2000 as Document 00962371, made between Great Lakes Principals, Dominick's Finer Foods, Inc., and LaSalle Bank National Association. (AFFECTS LOTS 2, 5, 7 AND 8 OF PARCEL 1, BLANKET IN NATURE AND PARCEL 2, BLANKET IN NATURE REGARDING INGRESS AND EGRESS, UTILITIES, CONSTRUCTION, MAINTENANCE, RECONSTRUCTION AND PARKING, NOT A SURVEY MATTER)

12. Lease made by E.C.K.E., L.L.C., Lessor, to Super Trak Corporation, Lessee, and the covenants and conditions therein contained, as disclosed by Memorandum dated April 29, 1996, and
recorded May 20, 1996 as Document 96381334, and the rights of all parties claiming by, through or thereunder. (AFFECTS SHOPPING CENTER AREA, BLANKET IN NATURE, NOT A SURVEY MATTER)

28. 55 foot building line as shown on plat of Deer Grove Centre Subdivision aforesaid, recorded December 6, 1995 as Document 95849083.
(AFFECTS LOTS 4, 5, 7 AND 8 OF PARCEL 1 AS SHOWN.)

29. Building envelope restriction as established by the plat of Deer Grove Centre Subdivision, recorded December 6, 1995 as Document 95849083.
(AFFECTS LOTS 4, 5, 7 AND 8 OF PARCEL 1 AS SHOWN.)

30. Restrictions on access as established by the plat of Deer Grove Centre Subdivision, recorded December 6, 1995 as Document 95849083, providing that Lot 4 shall have direct access to Dundee Road and that Lots 1, 2, 3, 5, 7 and 8 have no direct access to Dundee Road. (AFFECTS LOTS 2, 5, 7 AND 8 OF PARCEL 1, BLANKET IN NATURE.)

31. Restriction in the plat of Deer Grove Centre Subdivision, recorded December 6, 1995 as Document 95849083, that the owner of Lot 8 shall provide cross easement rights to the owner of the existing development adjacent to its eastern line. (AFFECTS LOT 8 OF PARCEL 1, BLANKET IN NATURE.)

32. Restriction in the plat of Deer Grove Centre Subdivision, recorded December 6, 1995 as Document 95849083, that the owner of Lot 4 shall provide cross access easement rights to the owner of the existing development adjacent to its eastern line. (AFFECTS LOT 4 OF PARCEL 1, BLANKET IN NATURE.)

33. Operation and Easement Agreement between Dayton Hudson Corporation and E.C.K.E., L.L.C., recorded December 7, 1995 as Document 95852706, for ingress and egress, parking, public utilities, maintenance and administration fees, permitted uses, location lighting, signs, insurance, real estate taxes and such further terms, conditions and limitations contained therein.
First amendment to Operation and Easement Agreement, recorded November 13, 1996 as Document 96864726.
Subordination of mortgage recorded February 14, 1997 as Document 97107409, made by LaSalle National Bank, subordinating its interest under mortgage recorded as Document 95852710, to the easement rights granted in the Operation and Easement Agreement, recorded as Document 95852706. (AFFECTS AND BENEFITS ALL OF PARCEL 1 AND PARCEL 2, BLANKET IN NATURE REGARDING INGRESS AND EGRESS, PARKING AND PEDESTRIAN TRAFFIC.)

34. Agreement to execute a cross access agreement between the Village of Palatine, E.C.K.E., L.L.C., and Dayton Hudson Corporation, recorded December 7, 1995 as Document 95852707. (AFFECTS AND BENEFITS LOTS 2, 4, 5, 7 AND 8 OF PARCEL 1, BLANKET IN NATURE.)

35. Easements in favor of the Village of Palatine and the public for bike path and to the Village of Palatine for ingress and egress to well site, as set forth in Operation and Easement Agreement, recorded December 7, 1995 as Document 95852706, and the terms, conditions and limitations contained therein. (affects Lots 4 and 8, Parcel 1)
(AFFECTS LOT 8 OF PARCEL 1 AS SHOWN.)

36. Easement in favor of Northern Illinois Gas for the installation, maintenance, repair, relocation, removal and renewal of gas mains, granted by Instrument recorded as Document 96186337, and the terms and conditions thereof. (AFFECTS LOTS 4, 5, 7 AND 8 OF PARCEL 1, DOCUMENT NOT LEGIBLE, SHOWN APPROXIMATE.)

37. Easement in favor of Commonwealth Edison Company and Illinois Bell Telephone Company, and/or their successors and assigns, for pole lines, conduits and maintenance purposes, as granted by Instrument recorded as Document 96186337, recorded on March 12, 1996, and the terms and conditions thereof.
(AFFECTS LOTS 4, 5, 7 AND 8, PARCEL 1, DOCUMENT NOT LEGIBLE, SHOWN APPROXIMATE.)

38. Declaration of Restrictive Covenant recorded February 14, 1997 as Document 97107407, made by E.C.K.E., L.L.C., to Apple South, Inc., which provides that so long as Lot 3 in Deer Grove Centre is used as a full-service casual dining restaurant, no portion of the land shall be used for the same purpose, and the terms, provisions and conditions contained therein. (AFFECTS LOTS 4, 5, 7 AND 8 OF PARCEL 1, DOCUMENT NOT LEGIBLE, SHOWN APPROXIMATE.)

39. Cross Access Easement Agreement between E.C.K.E., L.L.C., Dayton Hudson Corporation, Credit Suisse Leasing 92A, L.P., and Parkway Bank and Trust Company, as Trustee under Trust No. 2137, recorded May 19, 1997 as Document 97353790, and the terms and conditions thereof. (BENEFITS LOTS 2, 4, 5, 7 AND 8 AS TO CROSS ACCESS EASEMENT OVER PARCEL EASTERLY OF AND ADJACENT TO LOT 8 OF PARCEL 1. AFFECTS LOTS 2, 4, 5, 7 AND 8 AS TO UTILITY EASEMENT GRANTED TO PARCEL EASTERLY OF AND ADJACENT TO LOT 8 OF PARCEL 1, BLANKET IN NATURE. AFFECTS LOTS 4, 5, 7 AND 8 AS TO CROSS ACCESS EASEMENT GRANTED TO PARCEL EASTERLY OF AND ADJACENT TO LOT 8 OF PARCEL 1, SHOWN AS HATCHED AREA HEREON.)

40. Easement in favor of Commonwealth Edison Company and Illinois Bell Telephone Company, and/or their successors in interest, for pole lines, conduits and maintenance purposes, as granted by Instrument recorded as Document 97513619, recorded July 16, 1997, and the terms and conditions thereof.
(affects Lot 8, Parcel 1) (AFFECTS LOT 8 OF PARCEL 1 AS SHOWN.)

41. Cross Access Easement Agreement recorded September 25, 1998 as Document 98863487, made by and between E.C.K.E., L.L.C., Northwest Shopping Center Supermarket Phase, L.L.C., and Dayton Hudson Corporation, and the terms and conditions thereof. (BENEFITS LOTS 2, 4, 5, 7 AND 8 AS TO CROSS ACCESS EASEMENT OVER PARCEL WESTERLY OF AND ADJACENT TO LOT 4 OF PARCEL 1. AFFECTS LOTS 4, 5, 7 AND 8 AS TO CROSS ACCESS EASEMENT GRANTED TO PARCEL WESTERLY OF AND ADJACENT TO LOT 4 OF PARCEL 1, SHOWN AS HATCHED AREA HEREON.)

42. Storm sewer line running North and South across the land, depicted on plat of survey as disclosed by prior title evidence. (affects Lots 4 and 8, Parcel 1) (DOCUMENT NO PROVIDED.)

43. Overhead electrical lines along the East line of the land, depicted on plat of survey as disclosed by prior title evidence. (affects Lot 8, Parcel 1) (DOCUMENT NO PROVIDED.)

44. Water main along the West line of the land, as disclosed by plat of survey, depicted on plat of survey as disclosed by prior title evidence. (affects Lot 4, Parcel 1) (DOCUMENT NO PROVIDED.)

45. Terms, conditions and provisions of the document creating the easement described in Schedule A, together with the rights of the adjoining owners in and to the concurrent use of said easement. (BENEFITS PARCEL 1 AND LOTS 2, 5, 7 AND 8 AND LOT 4 (EXCEPT THAT PART OF LOT 4 CONVEYED TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION), (AFFECTS PARCEL 2, NO DESCRIPTION PROVIDED)

ALTA/ACSM LAND TITLE SURVEY

SURVEYOR'S CERTIFICATE:

To: Ramco-Gershenson Properties L.P., Wells Fargo Bank N.A., Zodiac Title Services LLC and First American Title Insurance Company:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2011 Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 6(b), 7(a), 7(b)(1), 7(c), 8, 9, 11(a), 13, 14, 16, 17 and 18 of Table A thereof. The field work was completed on April 29, 2013.

Date of Map: August 23, 2013

Randy J. Kolehouse
PS No. 2986
Expires November 30, 2014

PROFESSIONAL LAND SURVEYOR — RANDY J. KOLEHOUSE 2986 — GRAND RAPIDS, MICHIGAN — STATE OF ILLINOIS

Williams & Works
a tradition of service
engineers planners surveyors
administrator@williams-works.com
549 Ottawa Ave NW
Grand Rapids, MI 49503
616.224.1500 phone,
616.224.1501 facsimile

DRAWN BY: J.M.F.
CHECKED BY: R.J.K.
DWG. NO.: 209104.034

NO.	DATE	REVISION
1.	5/1/13	ORCDDS REVISIONS
2.	5/13/13	ORCDDS REVISIONS
3.	7/19/13	ORCDDS REVISIONS
4.	8/23/13	ADDED PARCELS 2 & 3
5.		

SHEET TITLE
ALTA/ACSM LAND TITLE SURVEY

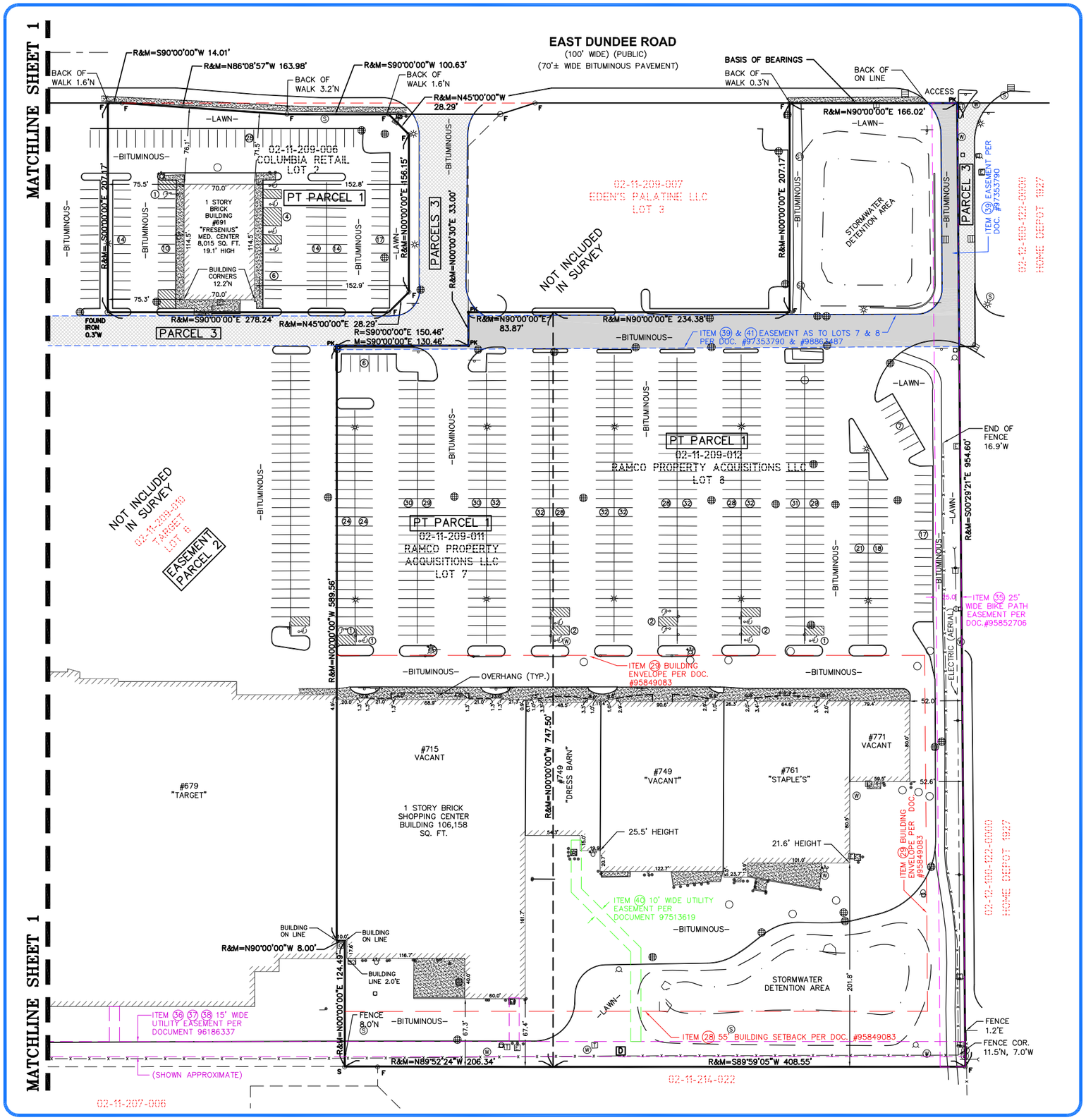
PROJECT
DEER GROVE SHOPPING CENTER
615 E. DUNDEE ROAD
PALATINE, IL 60074

OLD REPUBLIC COMMERCIAL DUE DILIGENCE SERVICES
A MEMBER OF THE OLD REPUBLIC TITLE INSURANCE GROUP
Preston Park Financial Center East
4965 Preston Park Blvd #620
Plano, TX 75093
P:(972) 943-5300 F:(972) 943-5339

SHEET 1 OF 2

PROJECT NUMBER
112753-SU

Attachment: EXHIBIT - Plat of Survey (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)



STATEMENT OF ENCROACHMENTS

- A Concrete sidewalk encroaches onto the north side of Parcel No. 02-11-209-008 a maximum distance of 5.3 feet, as shown.
- B Concrete sidewalk encroaches onto the north side of Parcel No. 02-11-209-009 a maximum distance of 5.6 feet, as shown.
- C Fence encroaches onto parcel to the west of Parcel No. 02-11-209-008 a maximum distance 1.4 feet, as shown.
- D Fence does not run true with lot lines.
- E The northeast corner of the building on Lot 5 appears to encroach 0.8 feet, as shown.

GENERAL NOTES

- No observable evidence of earth-moving work, building construction or building additions within recent months was found at the time of survey.
- No information as to changes in street right-of-way was provided.
- No observable evidence of street or sidewalk construction or repairs was found at the time of survey.
- No observable evidence of site use as a solid waste dump, sump or sanitary landfill was found at the time of the survey.
- No observable evidence that the site is used as a cemetery was found at the time of the survey.
- Project site has direct and/or indirect access to East Dundee Road, a public right-of-way maintained by the County of Cook.
- All utilities as shown are approximate locations derived from actual measurements and available records. They should not be interpreted to be in exact location nor should it be assumed that they are the only utilities in the area.
- The legal description has a closure within acceptable limits for a survey of this nature.
- The property hereon described creates a mathematically closed figure with no gaps, gores or overlaps.
- Parcel 4 is an off site easement benefitting the subject property. Item 20 of Schedule "A" was not a part of this project, therefore improvements within said easement were not mapped.

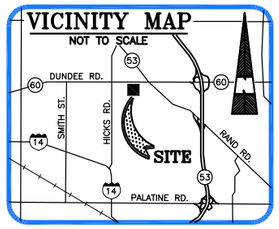
LAND AREA

Lot 4 (Parcel No. 02-11-209-008):	404,575 Sq. Ft. (9.29 Acres)±
Lot 5 (Parcel No. 02-11-209-009):	285,964 Sq. Ft. (6.56 Acres)±
Lot 2 (Parcel No. 02-11-209-006):	59,157 Sq. Ft. (1.36 Acres)±
Lot 7 (Parcel No. 02-11-209-011):	154,913 Sq. Ft. (3.56 Acres)±
Lot 8 (Parcel No. 02-11-209-012):	337,563 Sq. Ft. (7.75 Acres)±
Total:	1,242,172 Sq. Ft. (28.52 Acres)±

PROPERTY PICTURE

VICINITY MAP

NOT TO SCALE



BASIS OF BEARINGS

Bearings are based on the Plat of Subdivision of Grove Shopping Center as recorded in Document No. 95849083, Cook County Records, using a bearing of North 90°00'00" East for the south line of East Dundee Road.

PARKING STALLS

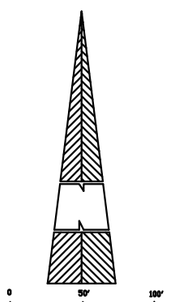
Lot 2:		Remainder:		Overall:	
Regular:	103	Regular:	1251	Regular:	1354
Handicap:	5	Handicap:	26	Handicap:	31
Total:	108	Total:	1277	Total:	1385

ZONING NOTES

ZONING INFORMATION NOT PROVIDED TO THE SURVEYOR.

FLOOD NOTE: By graphic plotting only, this property is in Zone X (unshaded) of the Flood Insurance Rate Map, Map No. 17031C0044J, which bears an effective date of August 19, 2008 and IS NOT in a Special Flood Hazard Area. By online research dated July 18, 2011 to the National Flood Insurance Program (http://msc.fema.gov) we have learned this community participates in the program. No field surveying was performed to determine this zone and an elevation certificate may be needed to verify this determination or apply for a variance from the Federal Emergency Management Agency.

LEGEND



- +CUT - X CUT
- PK - FOUND PK NAIL
- F - FOUND 5/8" REBAR
- S - SET 5/8" REBAR
- TRAFFIC DIRECTION
- LAND HOOK
- GUY ANCHOR
- SIGN
- BOLLARD
- LIGHT POLE
- POWER POLE
- HANDICAP PARKING
- #PARKING SPOTS
- R= -RECORD
- M= -MEASURED
- SQ. FT. -SQUARE FEET
- COR. -CORNER
- CH -CHORD
- P.O.B. -POINT OF BEGINNING
- RAD. -RADIUS
- I.D.O.T. -ILLINOIS DEPARTMENT OF TRANSPORTATION
- ELEC TRANS BOX
- E - ELECTRIC METER
- T - TELEPHONE RISER
- T - TELEPHONE MANHOLE
- GAS VALVE
- G - GAS METER
- ST - STORM MANHOLE
- SQUARE CATCH BASIN
- ROUND CATCH BASIN
- S - SANITARY MANHOLE
- WATER SHUTOFF
- HYDRANT
- W - WATER MANHOLE
- WATER HANDHOLE
- MANHOLE
- -BUILDING OVERHANG
- -CONCRETE
- -AREA AFFECTED BY CROSS ACCESS EASEMENTS CONTAINED IN ITEMS 39 AND 41 OF SCHEDULE B
- -NO PARKING AREA

DRAWN BY: J.M.F.
CHECKED BY: R.J.K.
DWG. NO.: 209104.034

NO.	DATE	REVISION
1.	5/1/13	ORCDDS REVISIONS
2.	5/13/13	ORCDDS REVISIONS
3.	7/19/13	ORCDDS REVISIONS
4.	8/23/13	ADDED PARCELS 2 & 3
5.		

SHEET TITLE ALTA/ACSM LAND TITLE SURVEY

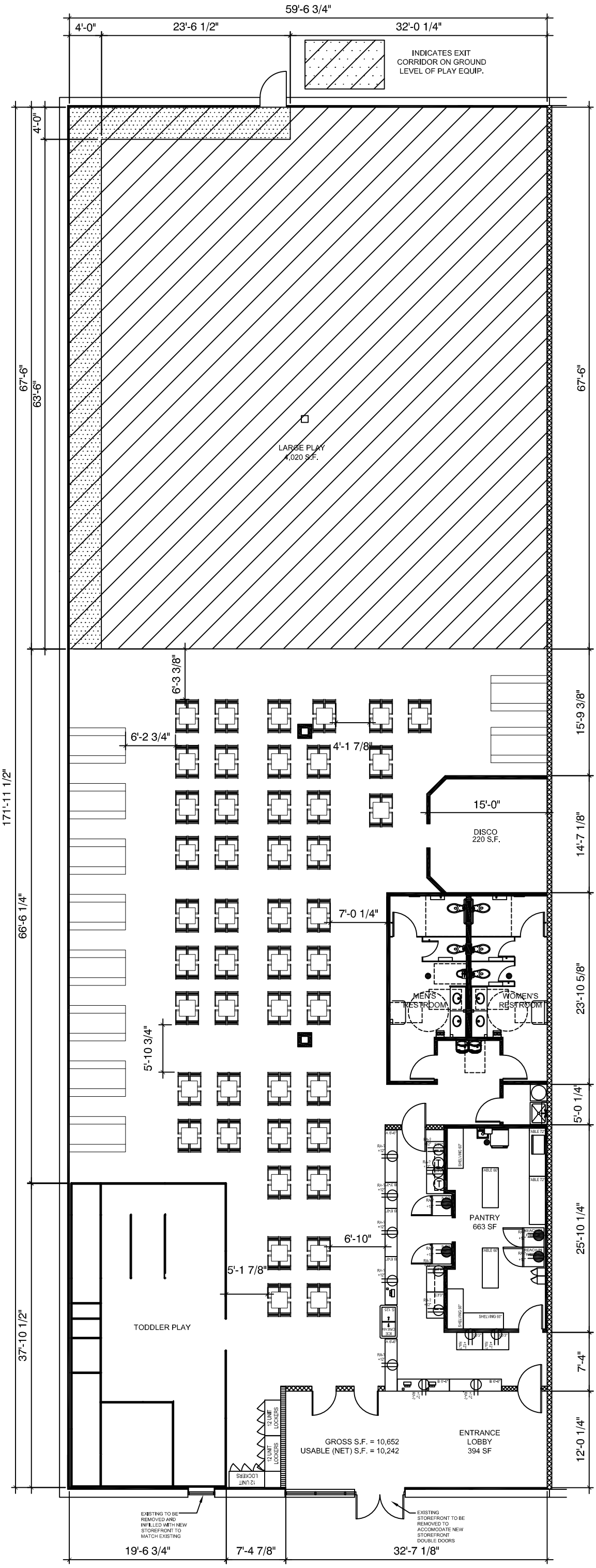
PROJECT
DEER GROVE SHOPPING CENTER
615 E. DUNDEE ROAD
PALATINE, IL 60074

OLD REPUBLIC COMMERCIAL DUE DILIGENCE SERVICES
A MEMBER OF THE OLD REPUBLIC TITLE INSURANCE GROUP
Preston Park Financial Center East
4965 Preston Park Blvd #620
Plano, TX 75093
P:(972) 943-5300 F:(972) 943-5339

SHEET 2 OF 2

PROJECT NUMBER 112753-SU

Attachment: EXHIBIT - Plat of Survey (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)



Attachment: EXHIBIT - Floor Plan (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)

Lyn Bremanis, Planner Planning & Zoning
Department 200 E. Wood Street
Palatine, IL 60067

April 30, 2022

RE: Special Use - Business plan for Kids Empire

Mrs. Bremanis,

Kids Empire formally requests the Village of Palatine, IL Planning Commission's consideration for a Special Use Request to allow us to build out and operate a Kids Empire indoor playground.

We are proposing to build out and operate within the approx. 10,584 gross S.F. space located at 627 Dundee Road #A-300, Palatine, IL.

Kids Empire is an indoor playground for children 12 years old and under. We have a large two-story playground and a smaller "toddler" playground for toddlers and infants. All children must be accompanied by a parent or guardian as we do not accept or allow drop offs, not even for reserved birthday parties or other group events like girl scouts events, etc. We are not a day care and we do not prepare or cook any food on the premises.

Kids Empire sells pre-packaged foods like chips, candy, cookies, and bottled drinks such as water, juice, and soda. Pizza and cakes are an "on demand" option for reserved birthday parties only. Our Operations team will contract with a local caterer or baker, and pizzeria. Pizza and cakes are not stored on premises and are only brought in at the time of the parties, thus we do not have a need to heat or cool these items. All plates, cups, and utensils are single use so there is no need for a 3-comp sink or other ware washing equipment. Leftovers are either given to party goers or thrown away after the party.

Our Hours of Operations are Monday through Thursday from 10am to 8pm and Friday through Sunday from 10am to 10pm and we staff 5 to 7 employees during our busiest peak shifts. Our peak hours on Monday's thru Friday's are 4pm to 8pm and Saturday's and Sunday's are from 2pm to 6pm.

Our average occupancy is approx. 142 guests per day with an approx. parent/child ratio of 90 parents and 52 children.

If you should have any questions, please do not hesitate to contact me.

Best Regards,

Alton M Klein
Dir. of Design and Entitlements
714-292-2491

Attachment: EXHIBIT - Business Plan (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)

VILLAGE OF PALATINE

VILLAGE OF PALATINE
Zoning Board of Appeals

SCHEDULED 06/28/22 07:00 PM

CASE STAFF STATEMENT (ID # 7715)

619 E. Dundee Road

TO: Palatine Zoning Board of Appeals
Jan Wood, Chair

FROM: Lyn Bremanis

PETITIONER: Alton Klein, Project Manager Kids Empire

CASE NUMBER: 22-17

ADDRESS: 619 E Dundee Road

PROPOSAL:
Special Use to permit an indoor sports and recreational facilities pursuant to Section 11.03 (d) (17) of the Palatine Zoning Ordinance.

LOCATION: 619 E Dundee Road	**CURRENT ZONING:** Planned Development - Shopping Center

SURROUNDING CONDITIONS:

North:	R-2 Single Family Residential
South	Planned Development - Townhomes
East:	Planned Development - Shopping Center
West:	Planned Development - Shopping Center

BACKGROUND:
The petitioners are proposing to open an indoor play center under the franchise "Kid's Empire". Therefore, they are requesting:

- **Special Use to permit an indoor sports and recreation facility**

SITE ANALYSIS:

- Kids Empire is an Indoor Playground chain, with multiple location across the country, and currently have 4 locations in the Chicago area. The Subject Property is zoned Planned Development, Deer Grove Centre, which follows the B-2 use list.

- The tenant space is approximately 10,584 square feet and is currently vacant. It is located between Hobby Lobby and Petco in the Deer Grove Centre.

Attachment: ZBA Materials 6-28-22 (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)

- The proposed hours of operation are below, with peak hours occurring Monday - Friday 4 PM - 8 PM and Saturday and Sundays 2 PM - 6 PM:
    - Monday - Thursday 10 AM - 8 PM
    - Friday - Sunday 10 AM - 10 PM
- The business plan indicates that there are 5-7 employees per shift, with an average occupancy of 142 guests and an approximate parent/child ratio of 90 parents and 52 children.
- Pre-packaged food will be available for purchase on site and will offer catering of pizzas and cakes for parties.
- This area in front of this section of the shopping plaza current has 394 parking spaces. Including the proposed use, 371 parking spaces are required. Therefore, the parking lot is over parked by 23 spaces.

DEPARTMENTAL REVIEWS:

Community Services	No issues Identified
Engineering	N/A
Environmental Health	No issues Identified
Fire Prevention	No issues Identified
Public Works	N/A
Police	N/A

STANDARDS FOR SPECIAL USE: Since this Petition is not for a use publicly operated or traditionally affected with the public interest, those standards under Section 14.05 D (2) and (3) are applicable. Specifically, the Petitioners must show that the Special Use, if granted, is so designed, located, and proposed to be operated that the public health, safety, and welfare will be protected and will not cause substantial injury to the value of other property in the neighborhood in which it is located. The Petitioners have attempted to address the required standards.

STAFF RECOMMENDATION:
The proposed business is occupying a vacant space in the Deer Grove Shopping Center. This use is compatible with the other retail, service, and restaurant uses that presently occupy the shopping center. The proposed use should not alter the essential character of the locality. Therefore, Staff recommends approval of the Special Use, subject to the following conditions:

1. The Special Use shall substantially conform to the floor plan and business plan prepared by the petitioner dated 04/30/2022, except such plans may be changed

Attachment: ZBA Materials 6-28-22 (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)

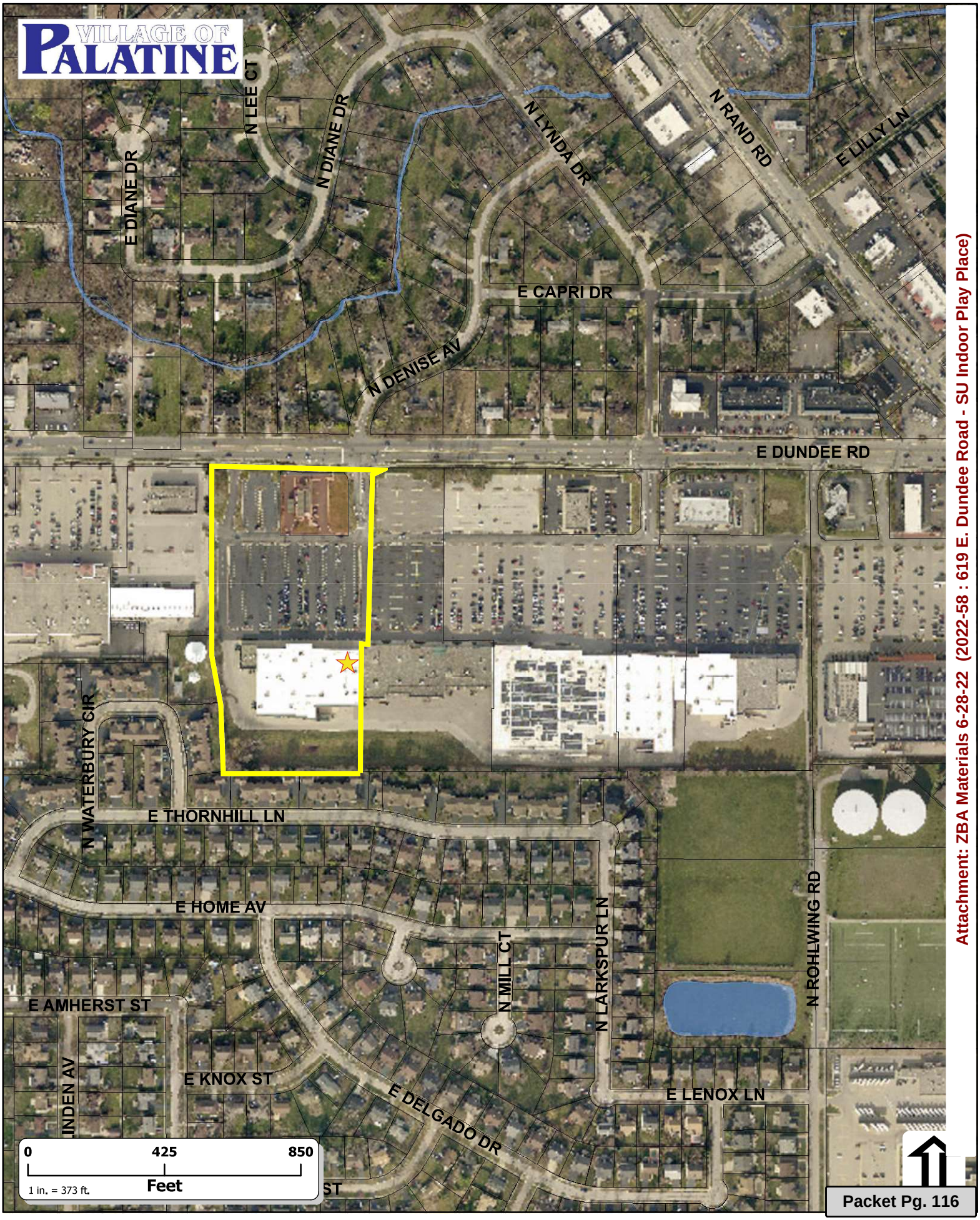
to conform to Village Codes and Ordinances.

ATTACHMENTS:

- Aerial Map
- Application
- Plat of Survey
- Business Plan
- Floor Plan
- Elevation
- Public Notice

Attachment: ZBA Materials 6-28-22 (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)

619 E Dundee Road



Attachment: ZBA Materials 6-28-22 (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)

VILLAGE OF PALATINE

SPECIAL USE & VARIATION APPLICATION

Department of Planning & Zoning
200 E. Wood Street · Palatine, IL · 60067-5339
Telephone: (847) 359-9047 · Fax (847) 963-6247

Office Use Only		
	Project Planner	Zoning Case #
	Filing Fee	Notification Deadline
	ZBA Public Hearing Date	Village Council Date

date received

Background Information

PETITIONER(S) — **Business Name (if applicable)**

HAIM ELBAZ — KIDS EMPIRE

Subject Property Address

615 DUNDEE #A-300, PALATINE, IL

AUTHORIZED AGENT (if applicable) — **Business Name (if applicable)**

ALON KLEIN

Address — City/State/Zip Code

620 ARROW HIGHWAY, LA VERNE, CA 91750

Telephone	Fax	Email
714-292-2491	—	ALON@KIDSEMPIRE.US

Relationship to Petitioner (contractor, architect, etc.)

DIR. OF DESIGN & ENTITLEMENTS FOR HAIM ELBAZ & KIDS EMPIRE

TYPE OF APPLICATION (check one)

☒ Special Use ☐ Special Use Amendment ☐ Variation

Existing Zoning District	Existing Land Use	Proposed Land Use
B-2	RETAIL	RETAIL

Generally describe your request:

REQUEST CONSIDERATION AND APPROVAL FOR KIDS EMPIRE, WHICH IS AN INDOOR RECREATIONAL CONCEPT FOR CHILDREN 12 YEARS OLD & UNDER, TO BE LOCATED IN THE DEER GROVE CENTER, LOCATED @ 615 DUNDEE RD #A-300 (CURRENTLY VACANT).

Attachment: ZBA Materials 6-28-22 (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)

VILLAGE OF PALATINE

SPECIAL USE

Required Materials

- ☐ Filing Fee of $ _____
- ☐ Application Form
- ☐ Plat of Survey (must show all current improvements and be sealed by an Illinois certified surveyor)
- ☐ Site Plan & Floor plan (dimension, location, and setbacks of all existing and proposed buildings) – **one 11x17 copy each, electronic version preferred**
- ☐ Real Estate Interest Disclosure Form (see attached)
- ☐ Proof of Ownership or Lease (e.g. Title Insurance Policy, Deed, or Purchase Contract)
- ☐ Business Plan (if applicable; including, but not limited to nature of business, hours of operation, number of employees, and menu)

Additional Materials (as required by the Village)

- ☐ Elevation Plan (front, side, and rear elevations of a proposed building), and/or Floor Plan (proposed interior layout) – **one 11x17 copy of each plan, electronic versions preferred**
- ☐ Engineering Plans (must indicate existing conditions, topography, storm water management, tree preservation, utility connections, detention calculations, and a cost estimate)
- ☐ Photographs (e.g. ground-level or aerials)
- ☐ Other materials as deemed necessary by the Village

Petitioner Justification

The Petitioner is required to present specific evidence related to each of the following standards to justify the request (paraphrased from Section 14.05 of the Palatine Zoning Ordinance). Answer the items below and attach a separate sheet if necessary. ***If you are applying for a Variation only, you do not need to answer these items.***

1. The use is deemed necessary for the public convenience at that location

THERE IS A DEMAND FOR PLACES SUCH AS KIDS EMPIRE FOR CHILDREN TO GO TO BE ABLE TO PLAY IN A SAFE, FUN, & ENVIRONMENTALLY CONTROLED SPACE.

2. The use is designed, located, and proposed to be operated that the public health, safety and welfare will be protected

ALL KIDS EMPIRES ARE DESIGNED & OPERATED WITH THE UTMOST CONSIDERATION FOR OUR GUEST SAFETY & HEALTH.

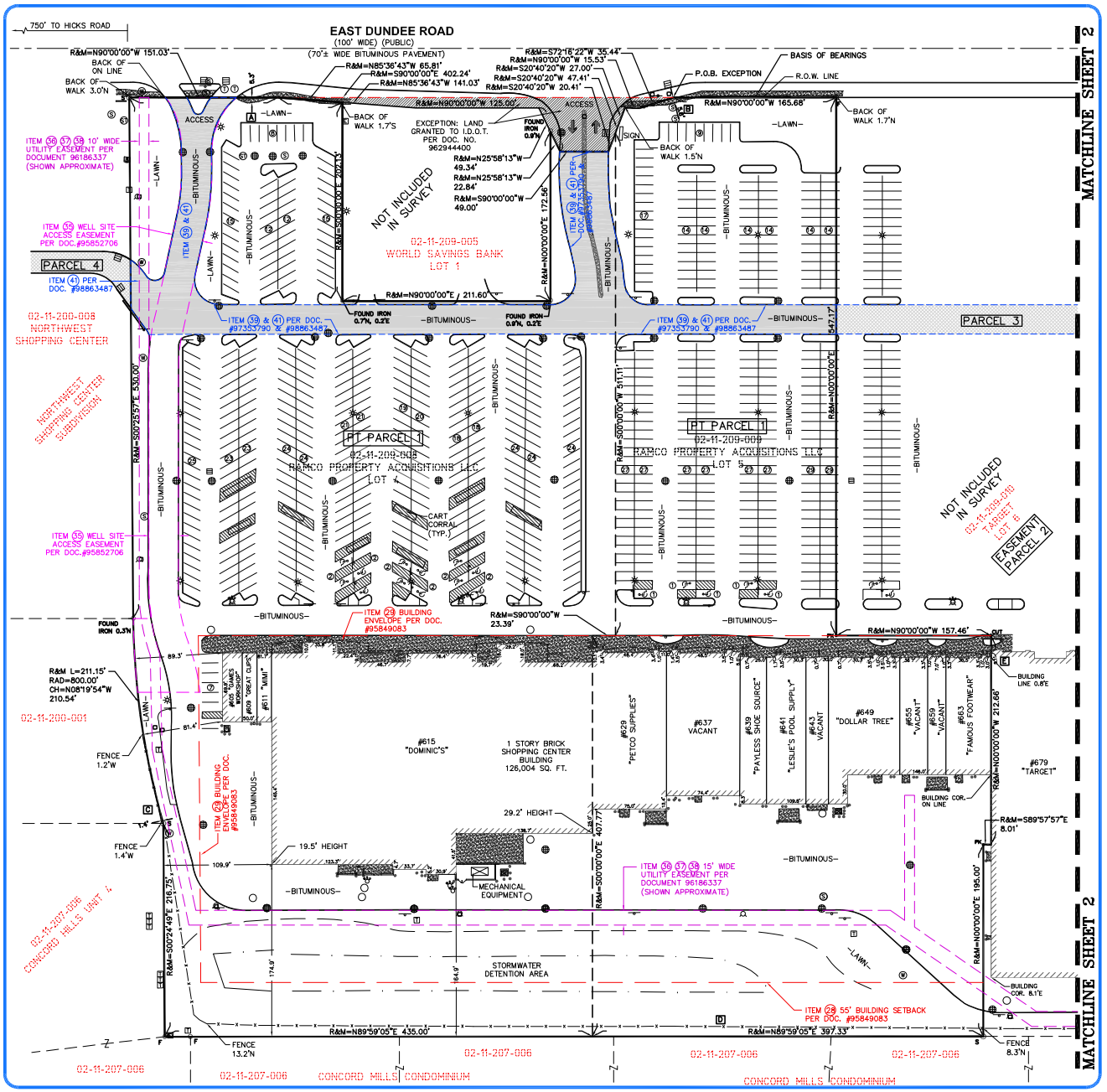
3. The use will not cause substantial injury to nearby property values

KIDS EMPIRE WILL NOT & DOES NOT POSE A THREAT TO NEARBY PROPERTY VALUES. IN FACT WE FIND THAT COMMUNITIES ARE WELCOMING BECAUSE WE OFFER A SAFE & FUN PLACE FOR KIDS TO PLAY.

4. With respect to live entertainment uses, the use shall not:
   a. Produce noise levels so great as to constitute an unreasonable interference for persons outside the confines of the establishment
   b. Impose undue health, sanitation or safety burdens on the village
   c. Create excessive demands on the Village of Palatine Police Department
   d. Be of a nature otherwise prohibited by law or village ordinance
5. For fence standards, see Section 14.05 of the Palatine Zoning Ordinance

KIDS EMPIRE HAS A MUSIC SYSTEM BUT IT CANNOT BE HEARD OUTSIDE THE PREMISIS. WE ALIGN OURSELVES W/ THE ESTABLISHED COMMUNITY GUIDELINES FOR HEALTH & SAFETY, AND WE DO NOT CREATE EXCESSIVE DEMANDS ON THE COMMUNITIES WE OPEN AND OPERATE IN.

Attachment: ZBA Materials 6-28-22 (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)



LEGAL DESCRIPTION

PARCEL 1: LOTS 3, 6, 7 AND 8 AND LOT 4 (EXCEPT THAT PART OF LOT 4 CONVEYED TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION BY WARRANTY DEED RECORDED APRIL 19, 1996 AS DOCUMENT 96096440 AND MORE PARTICULARLY DESCRIBED AS FOLLOWS) BEGINNING AT THE EASTERNMOST CORNER THENCE SOUTH 72 DEGREES 16 MINUTES 22 SECONDS WEST, A DISTANCE OF 10.201 M (35.44 FEET) THENCE NORTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, A DISTANCE OF 4.734 M (15.53 FEET) THENCE SOUTH 20 DEGREES 40 MINUTES 20 SECONDS WEST, A DISTANCE OF 14.450 (47.41 FEET) THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, A DISTANCE OF 14.205 M (46.60 FEET) THENCE NORTH 25 DEGREES 58 MINUTES 13 SECONDS WEST, A DISTANCE OF 15.038 M (49.34 FEET) THENCE NORTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, A DISTANCE OF 35.100 M (115.20 FEET) THENCE NORTH 85 DEGREES 36 MINUTES 43 SECONDS WEST, A DISTANCE OF 42.985 M (141.03 FEET) TO A POINT ON THE NORTH LINE OF SAID LOT 4z THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS EAST ALONG SAID NORTH LINE, A DISTANCE OF 122.600 M (402.24 FEET) TO THE POINT OF BEGINNING IN DEER GROVE CENTRE, BEING A SUBDIVISION OF PART OF THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 6, 1995 AS DOCUMENT 95849083, IN COOK COUNTY, ILLINOIS.

PARCEL 2: EASEMENTS FOR INGRESS, EGRESS, UTILITIES, CONSTRUCTION, MAINTENANCE, RECONSTRUCTION AND PARKING FOR THE BENEFIT OF PARCEL 1, AS CREATED BY OPERATION AND EASEMENT AGREEMENT RECORDED DECEMBER 7, 1995 AS DOCUMENT 95852706 UPON, OVER AND ACROSS LOT 6 IN DEER GROVE CENTRE, BEING A SUBDIVISION OF PART OF THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 6, 1995 AS DOCUMENT 95849083, IN COOK COUNTY, ILLINOIS.

The property hereon described is the same as the pertinent property as described in First American Title Insurance Company, Commitment No. NCS-574856-CHI2, dated March 20, 2013, Revision Intic Rev. April 1, 2013

PARCEL 3: A NON-EXCLUSIVE EASEMENT FOR INGRESS, EGRESS, PASSAGE AND DELIVERY BY VEHICLES FOR THE BENEFIT OF PARCEL 1, AS CREATED BY CROSS-ACCESS EASEMENT AGREEMENT RECORDED MAY 16, 1997 AS DOCUMENT 97353790, OVER AND ACROSS THE "EASEMENT PREMISES" AS DESIGNATED ON EXHIBIT "D" AND LEGALLY DESCRIBED AS LOTS 1 AND 1A IN HOME DEPOT PALATINE SUBDIVISION BEING A SUBDIVISION OF PART OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 19, 1997 AS DOCUMENT 97353791, IN COOK COUNTY, ILLINOIS AND LOT 6 IN DEER GROVE CENTRE, BEING A SUBDIVISION OF PART OF THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 6, 1995 AS DOCUMENT 95849083, IN COOK COUNTY, ILLINOIS.

PARCEL 4: A NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS FOR THE BENEFIT OF PARCEL 1 AS CREATED BY CROSS ACCESS EASEMENT AGREEMENT RECORDED SEPTEMBER 25, 1998 AS DOCUMENT 98863487, ONLY OVER THE PORTION OF THE CROSS ACCESS EASEMENT (THE "PERPETUAL ACCESS DRIVES") OVER A PORTIONS OF LOTS 1 AND 2 IN DELGADO AND REIN'S FERNDALE MARKET, A SUBDIVISION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 6, 1955 AS DOCUMENT 17198718 THE LAND FULLY DESCRIBED IN EXHIBIT "C" ATTACHED THERETO, IN COOK COUNTY, ILLINOIS.

NOTE: PARCELS 3 AND 4 ARE NOT A PART OF THE ABOVE REFERENCED TITLE COMMITMENT.

NOTES CORRESPONDING TO SCHEDULE "B"

Per the title commitment issued by First American Title Insurance Company as Commitment No. NCS-574856-CHI2, dated March 20, 2013, Revision Intic Rev. April 1, 2013

10. Memorandum of lease made by E.C.K.E., L.L.C., Lessor, to Dominick's Finer Foods, Inc., Lessee, for a term of twenty years, recorded December 7, 1995 as Document 95852708, and the terms, conditions and provisions contained therein, and the rights of all parties claiming by, through or thereunder. (AFFECTS LOTS 1, 2, 3, 4, 5, 7 AND 8, BLANKET IN NATURE, NOT A SURVEY MATTER)

11. Subordination, Attornment and Non-Disturbance Agreement, recorded December 7, 2000 as Document 00862575, made between Great Lakes Principals, Dominick's Finer Foods, Inc., and LaSalle Bank National Association. (AFFECTS LOTS 2, 3, 7 AND 8 OF PARCEL 3, BLANKET IN NATURE AND PARCEL 2, BLANKET IN NATURE REGARDING INGRESS AND EGRESS, UTILITIES, CONSTRUCTION, MAINTENANCE, RECONSTRUCTION AND PARKING, NOT A SURVEY MATTER)

12. Lease made by E.C.K.E., L.L.C., Lessor, to Super Trak Corporation, Lessee, and the covenants and conditions therein contained, as disclosed by Memorandum dated April 29, 1996, and recorded May 20, 1996 as Document 96181334, and the rights of all parties claiming by, through or thereunder. (AFFECTS SHOPPING CENTER AREA, BLANKET IN NATURE, NOT A SURVEY MATTER)

28. 55 foot building line as shown on plat of Deer Grove Centre Subdivision aforesaid, recorded December 6, 1995 as Document 95849083. (AFFECTS LOTS 4, 5, 7 AND 8 OF PARCEL 1 AS SHOWN.)

29. Building envelope restriction as established by the plat of Deer Grove Centre Subdivision, recorded December 6, 1995 as Document 95849083. (AFFECTS LOTS 4, 5, 7 AND 8 OF PARCEL 1 AS SHOWN.)

30. Restrictions on access as established by the plat of Deer Grove Centre Subdivision, recorded December 6, 1995 as Document 95849083, providing that Lot 4 shall have direct access to Dundee Road and that Lots 1, 2, 3, 5, 7 and 8 have no direct access to Dundee Road. (AFFECTS LOTS 1, 2, 3, 5, 7 AND 8 OF PARCEL 1, BLANKET IN NATURE.)

31. Restriction in the plat of Deer Grove Centre Subdivision, recorded December 6, 1995 as Document 95849083, that the owner of Lot 8 shall provide cross easement rights to the owner of the existing development adjacent to its eastern line. (AFFECTS LOT 8 OF PARCEL 1, BLANKET IN NATURE.)

32. Restriction in the plat of Deer Grove Centre Subdivision, recorded December 6, 1995 as Document 95849083, that the owner of Lot 4 shall provide cross access easements rights to the owner of the existing development adjacent to its eastern line. (AFFECTS LOT 4 OF PARCEL 1, BLANKET IN NATURE.)

33. Operation and Easement Agreement between Dayton Hudson Corporation and E.C.K.E., L.L.C., recorded December 7, 1995 as Document 95852706, for ingress and egress, parking, public utilities, maintenance and administration fees, permitted uses, location lighting, signs, insurance, real estate taxes and such further terms, conditions and limitations contained therein.
First amendment to Operation and Easement Agreement, recorded November 13, 1996 as Document 96864726.
Subordination of mortgage recorded February 16, 1997 as Document 97107407, made by Lasalle Bank, subordinating its interest under mortgage recorded as Document 95852710, to the easement rights granted to the Operation and Easement Agreement, recorded as Document 95852706. (AFFECTS AND BENEFITS ALL OF PARCEL 1 AND PARCEL 2, BLANKET IN NATURE REGARDING INGRESS & EGRESS, PARKING AND RECIPROCAL EASEMENTS)

34. Agreement to execute a cross access agreement between the Village of Palatine, E.C.K.E., L.L.C. and Dayton Hudson Corporation, recorded December 7, 1995 as Document 95852707. (AFFECTS AND BENEFITS LOTS 2, 4, 5, 7 AND 8 OF PARCEL 1, BLANKET IN NATURE.)

35. Easements in favor of the Village of Palatine and the public for bike path and to the Village of Palatine for ingress and egress to well site, as set forth in Operation and Easement Agreement, recorded December 7, 1995 as Document 95852706, and the terms, conditions and limitations contained therein. (affects Lots 4 and 8, Parcel 1) (AFFECTS LOT 8 OF PARCEL 1 AS SHOWN.)

36. Easement in favor of Northern Illinois Gas for the installation, maintenance, repair, relocation, removal and renewal of gas mains, granted by Instrument recorded as Document 96186337, and the terms and conditions thereof. (AFFECTS LOTS 4, 5, 7 AND 8 OF PARCEL 3, DOCUMENT NOT LEGIBLE, SHOWN APPROXIMATE.)

37. Easement in favor of Commonwealth Edison Company and Illinois Bell Telephone Company, and/or their successors and assigns, for pole lines, conduits and maintenance purposes, as granted by Instrument recorded as Document 96186337, recorded on March 12, 1996, and the terms and conditions thereof. (AFFECTS LOTS 4, 5, 7 AND 8, PARCEL 1, DOCUMENT NOT LEGIBLE, SHOWN APPROXIMATE.)

38. Declaration of Restrictive Covenant recorded February 16, 1997 as Document 97107407, made by E.C.K.E., L.L.C., in Apple South, Inc., which provides that so long as Lot 3 in Deer Grove Centre is used as a 60-service casual dining restaurant, no portion of the land shall be used for the same purpose, and the terms, provisions and conditions contained therein. (AFFECTS LOTS 4, 5, 7 AND 8 OF PARCEL 1, DOCUMENT NOT LEGIBLE, SHOWN APPROXIMATE.)

39. Grant Access Easement Agreement between E.C.K.E., L.L.C., Dayton Hudson Corporation, Credit Suisse Leasing 92A, L.P., and Parkway Bank and Trust Company, as Trustee under Trust No. 3537, recorded May 15, 1997 as Document 97355790, and the terms and conditions thereof. (BENEFITS LOTS 2, 4, 5, 7 AND 8 AS TO CROSS ACCESS EASEMENT OVER PARCEL EASTERLY OF AND ADJACENT TO LOT 5 OF PARCEL 1. AFFECTS LOTS 2, 4, 5, 7 AND 8 AS TO UTILITY EASEMENT GRANTED TO PARCEL EASTERLY OF AND ADJACENT TO LOT 5 OF PARCEL 1, BLANKET IN NATURE. AFFECTS LOTS 4, 5, 7 AND 8 AS TO CROSS ACCESS EASEMENT GRANTED TO PARCEL EASTERLY OF AND ADJACENT TO LOT 5 OF PARCEL 1, SHOWN AS HATCHED AREA HEREON.)

40. Easement in favor of Commonwealth Edison Company and Illinois Bell Telephone Company, and/or their successors interest, for pole lines, conduits and maintenance purposes, as granted by instrument recorded as Document 97134919, recorded July 16, 1997, and the terms and conditions thereof. (affects Lot 8, Parcel 1) (AFFECTS LOT 8 OF PARCEL 1 AS SHOWN.)

41. Cross Access Easement Agreement recorded September 25, 1998 as Document 98863487, made by and between F.C.K.E., L.L.C., Northwest Shopping Center Supermarket Phase, L.L.C., and Dayton Hudson Corporation, and the terms and conditions thereof. (BENEFITS LOTS 2, 4, 5, 7 AND 8 AS TO CROSS ACCESS EASEMENT OVER PARCEL WESTERLY OF AND ADJACENT TO LOT 1 OF PARCEL 3. AFFECTS LOTS 4, 5, 7 AND 8 AS TO CROSS ACCESS EASEMENT GRANTED TO PARCEL WESTERLY OF AND ADJACENT TO LOT 4 OF PARCEL 1, SHOWN AS HATCHED AREA HEREON.)

42. Storm sewer line running North and South across the land, depicted on plat of survey as disclosed by prior title evidence. (affects Lots 4 and 8, Parcel 1) (DOCUMENT NO PROVIDED.)

43. Overhead electrical lines along the East line of the land, depicted on plat of survey as disclosed by prior title evidence. (affects Lot 8, Parcel 1) (DOCUMENT NO PROVIDED.)

44. Water main along the West line of the land, as disclosed by plat of survey, depicted on plat of survey as disclosed by prior title evidence. (affects Lot 4, Parcel 1) (DOCUMENT NO PROVIDED.)

45. Terms, conditions and provisions of the document creating the easement described in Schedule A, together with the rights of the adjoining owners in and to the unobstructed use of and entrance. (BENEFITS PARCEL 3 AND LOTS 2, 5, 7 AND 8 AND LOT 4 (EXCEPT THAT PART OF LOT 4 CONVEYED TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION) (AFFECTS PARCEL 2, NO DESCRIPTION PROVIDED)

ALTA/ACSM LAND TITLE SURVEY

SURVEYOR'S CERTIFICATE:

To: Ramco-Gershenson Properties L.P., Wells Fargo Bank N.A., Zodiac Title Services LLC and First American Title Insurance Company:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2011 Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 6(b), 7(a), 7(b)(1), 7(c), 8, 9, 11(a), 13, 14, 16, 17 and 18 of Table A thereof. The field work was completed on April 29, 2013.

Date of Map: August 23, 2013

Randy J. Kolenkow
PS No. 2986
Expires November 30, 2014

PROFESSIONAL LAND SURVEYOR — RANDY J. KOLENKOW — 2986 — GRAND RAPIDS MICHIGAN — STATE OF ILLINOIS

Williams & Works
a division of Service Corporation
549 Ottawa Ave. NW
Grand Rapids, MI 49503
616.224.1500 phone
616.224.1501 facsimile

DRAWN BY: J.M.F
CHECKED BY: R.J.K
DWG. NO.: 209104

NO.	DATE	REVISION
1.	5/1/13	ORCDS REVISIONS
2.	5/13/13	ORCDS REVISIONS
3.	7/16/13	ORCDS REVISIONS
4.	8/23/13	ADDED PARCELS 2 & 3

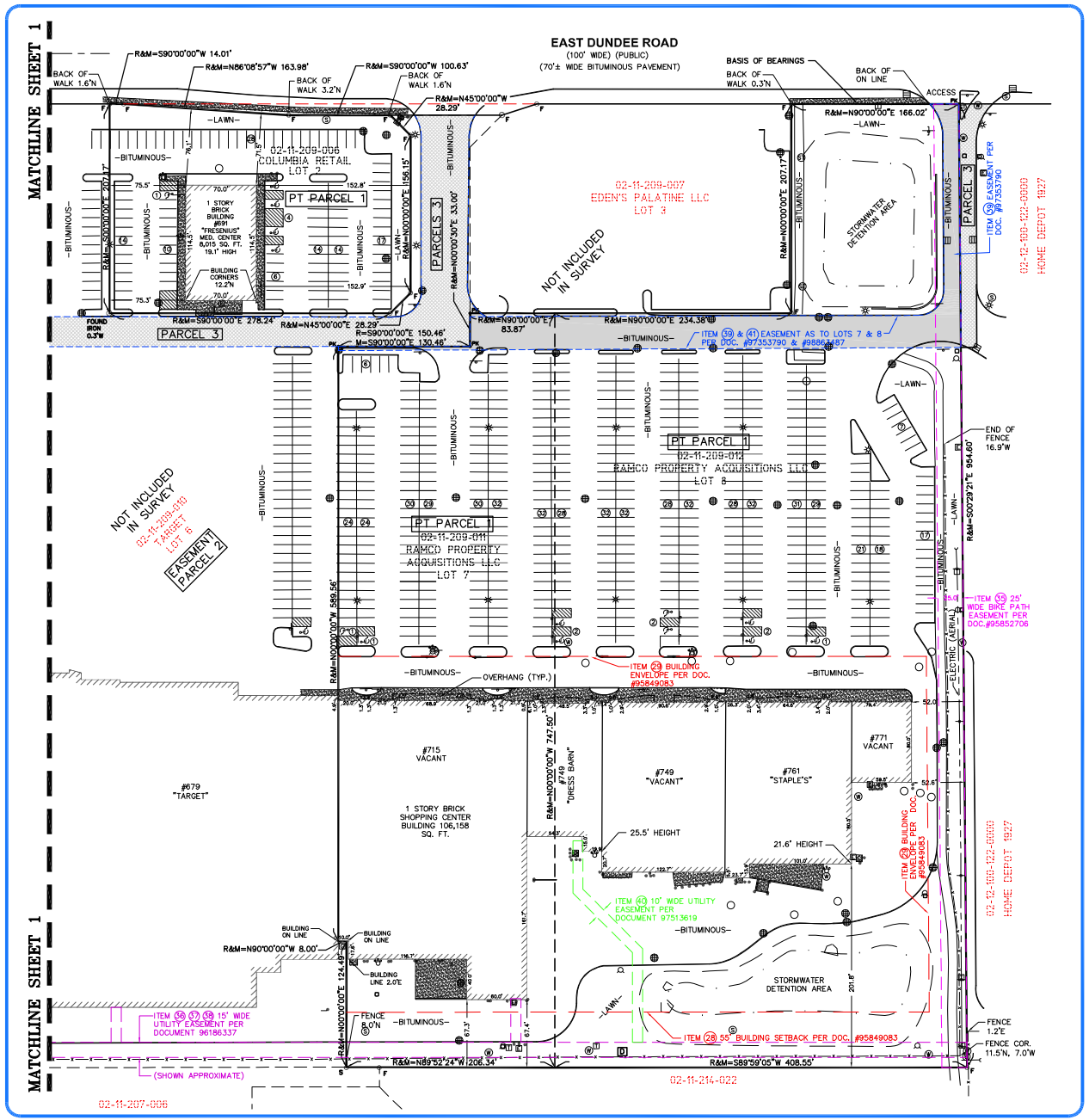
SHEET TITLE: ALTA/ACSM LAND TITLE SURVEY
PROJECT: DEER GROVE SHOPPING CENTER
615 E. DUNDEE ROAD

OLD REPUBLIC COMMERCIAL DUE DILIGENCE SERVICES
A MEMBER OF THE OLD REPUBLIC TITLE INSURANCE GROUP
Preston Park Financial Center East
4965 Preston Park Blvd #620
Plano, TX 75093

SHEET 1 OF 2

PROJECT NUMBER 112753-SU

Attachment: ZBA Materials 6-28-22 (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)



STATEMENT OF ENCROACHMENTS

- A — Concrete sidewalk encroaches onto the north side of Parcel No. 02-11-209-008 a maximum distance of 5.3 feet, as shown.
- B — Concrete sidewalk encroaches onto the north side of Parcel No. 02-11-209-009 a maximum distance of 5.6 feet, as shown.
- C — Fence encroaches onto parcel to the west of Parcel No. 02-11-209-008 a maximum distance 1.4 feet, as shown.
- D — Fence does not run true with lot lines.
- E — The northeast corner of the building on Lot 5 appears to encroach 0.8 feet, as shown.

GENERAL NOTES

- No observable evidence of earth-moving work, building construction or building additions within recent months was found at the time of survey.
- No information as to changes in street right-of-way was provided.
- No observable evidence of street or sidewalk construction or repairs was found at the time of survey.
- No observable evidence of site use as a solid waste dump, sump or sanitary landfill was found at the time of the survey.
- No observable evidence that the site is used as a cemetery was found at the time of the survey.
- Project site has direct and/or indirect access to East Dundee Road, a public right-of-way maintained by the County of Cook.
- All utilities as shown are approximate locations derived from actual measurements and available records. They should not be interpreted to be in exact location nor should it be assumed that they are the only utilities in the area.
- The legal description has a closure within acceptable limits for a survey of this nature.
- The property hereon described creates a mathematically closed figure with no gaps, gores or overlaps.
- Parcel 4 is an off site easement benefitting the subject property. Item 20 of Schedule "A" was not a part of this project, therefore improvements within said easement were not mapped.

LAND AREA

Lot 4 (Parcel No. 02-11-209-008): 404,575 Sq. Ft. (9.29 Acres)±

Lot 5 (Parcel No. 02-11-209-009): 285,964 Sq. Ft. (6.56 Acres)±

Lot 2 (Parcel No. 02-11-209-006): 59,157 Sq. Ft. (1.36 Acres)±

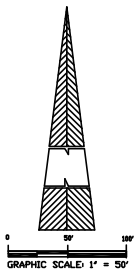
Lot 7 (Parcel No. 02-11-209-011): 154,913 Sq. Ft. (3.56 Acres)±

Lot 8 (Parcel No. 02-11-209-012): 337,563 Sq. Ft. (7.75 Acres)±

Total: 1,242,172 Sq. Ft. (28.52 Acres)±

PROPERTY PICTURE

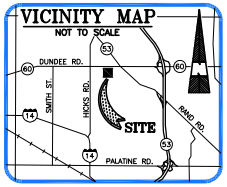
LEGEND



- +CUT - X CUT
- PK - FOUND PK NAIL
- F - FOUND 5/8" REBAR
- S - SET 5/8" REBAR
- TRAFFIC DIRECTION
- LAND HOOK
- GUY ANCHOR
- SIGN
- BOLLARD
- LIGHT POLE
- POWER POLE
- HANDICAP PARKING
- (P) -PARKING SPOTS
- R= -RECORD
- M= -MEASURED
- SQ. FT. -SQUARE FEET
- COR. -CORNER
- CH -CHORD
- P.O.B. -POINT OF BEGINNING
- RAD. -RADIUS
- I.D.O.T. -ILLINOIS DEPARTMENT OF TRANSPORTATION
- ELEC TRANS BOX
- ELECTRIC METER
- TELEPHONE RISER
- TELEPHONE MANHOLE
- GAS VALVE
- GAS METER
- STORM MANHOLE
- SQUARE CATCH BASIN
- ROUND CATCH BASIN
- SANITARY MANHOLE
- WATER SHUTOFF
- HYDRANT
- WATER MANHOLE
- WATER HANDHOLE
- MANHOLE
- -BUILDING OVERHANG
- -CONCRETE
- -AREA AFFECTED BY CROSS ACCESS EASEMENTS CONTAINED IN ITEMS 39 AND 41 OF SCHEDULE B
- -NO PARKING AREA

VICINITY MAP

NOT TO SCALE



BASIS OF BEARINGS

Bearings are based on the Plat of Subdivision of Grove Shopping Center as recorded in Document No. 95849083, Cook County Records, using a bearing of North 90°00'00" East for the south line of East Dundee Road.

PARKING STALLS

Lot 2:	Remainder:	Overall:
Regular: 103	Regular: 1251	Regular: 1354
Handicap: 5	Handicap: 26	Handicap: 31
Total: 108	Total: 1277	Total: 1385

ZONING NOTES

ZONING INFORMATION NOT PROVIDED TO THE SURVEYOR

FLOOD NOTE: By graphic plotting only, this property is in Zone X (unshaded) of the Flood Insurance Rate Map, Map No. 17031C0044J, which bears an effective date of August 19, 2008 and IS NOT in a Special Flood Hazard Area. By online research dated July 15, 2011 to the National Flood Insurance Program (http://msc.fema.gov) we have learned this community participates in the program. No field surveying was performed to determine this zone and an elevation certificate may be needed to verify this determination or apply for a variance from the Federal Emergency Management Agency.

DRAWN BY: J.M.F
CHECKED BY: R.J.K
DWG. NO.: 209104

NO.	DATE	REVISION
1.	5/1/13	ORCDS REVISIONS
2.	5/13/13	ORCDS REVISIONS
3.	7/16/13	ORCDS REVISIONS
4.	8/23/13	ADDED PARCELS 2 & 3

SHEET TITLE: ALTA/ACSM LAND TITLE SURVEY

PROJECT: DEER GROVE SHOPPING CENTER
615 E. DUNDEE ROAD

OLD REPUBLIC COMMERCIAL DUE DILIGENCE SERVICES
A NUMBER OF THE OLD REPUBLIC TITLE INSURANCE GROUP
Preston Park Financial Center East
4965 Preston Park Blvd #620
Plano, TX 75093

SHEET 2 OF 2

PROJECT NUMBER: 112753-SU

Attachment: ZBA Materials 6-28-22 (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)

Lyn Bremanis, Planner Planning & Zoning
Department 200 E. Wood Street
Palatine, IL 60067

April 30, 2022

RE: Special Use - Business plan for Kids Empire

Mrs. Bremanis,

Kids Empire formally requests the Village of Palatine, IL Planning Commission's consideration for a Special Use Request to allow us to build out and operate a Kids Empire indoor playground.

We are proposing to build out and operate within the approx. 10,584 gross S.F. space located at 627 Dundee Road #A-300, Palatine, IL.

Kids Empire is an indoor playground for children 12 years old and under. We have a large two-story playground and a smaller "toddler" playground for toddlers and infants. All children must be accompanied by a parent or guardian as we do not accept or allow drop offs, not even for reserved birthday parties or other group events like girl scouts events, etc. We are not a day care and we do not prepare or cook any food on the premises.

Kids Empire sells pre-packaged foods like chips, candy, cookies, and bottled drinks such as water, juice, and soda. Pizza and cakes are an "on demand" option for reserved birthday parties only. Our Operations team will contract with a local caterer or baker, and pizzeria. Pizza and cakes are not stored on premises and are only brought in at the time of the parties, thus we do not have a need to heat or cool these items. All plates, cups, and utensils are single use so there is no need for a 3-comp sink or other ware washing equipment. Leftovers are either given to party goers or thrown away after the party.

Our Hours of Operations are Monday through Thursday from 10am to 8pm and Friday through Sunday from 10am to 10pm and we staff 5 to 7 employees during our busiest peak shifts. Our peak hours on Monday's thru Friday's are 4pm to 8pm and Saturday's and Sunday's are from 2pm to 6pm.

Our average occupancy is approx. 142 guests per day with an approx. parent/child ratio of 90 parents and 52 children.

If you should have any questions, please do not hesitate to contact me.

Best Regards,

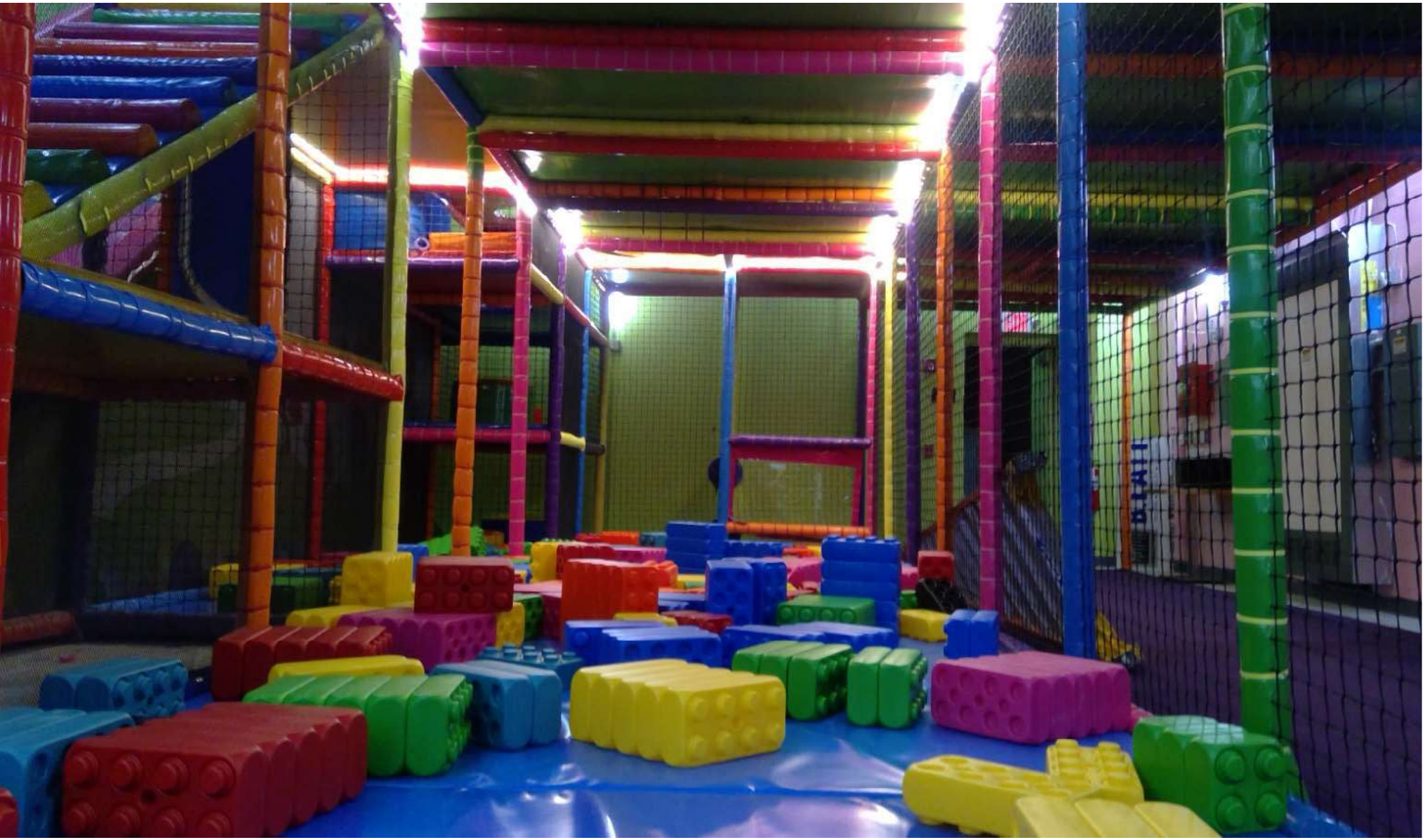
Alton M Klein
Dir. of Design and Entitlements
714-292-2491

Attachment: ZBA Materials 6-28-22 (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)

Attachment: ZBA Materials 6-28-22 (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)

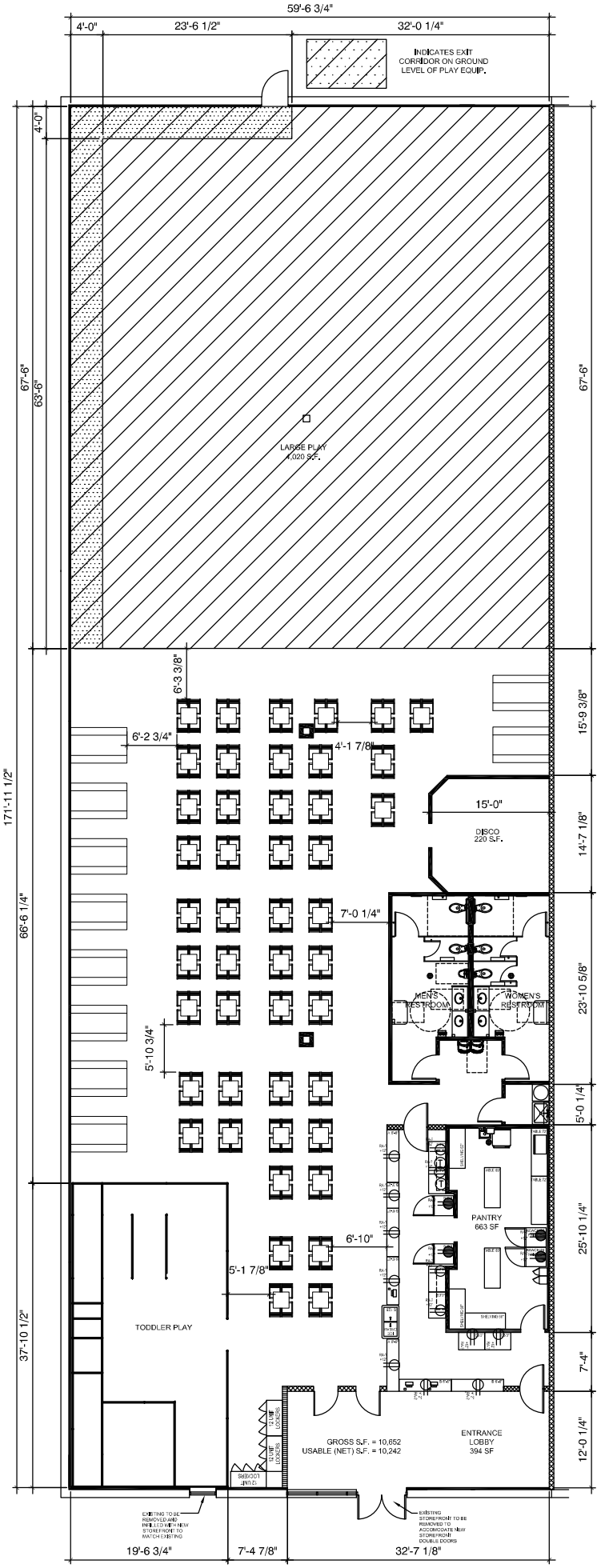
Attachment: ZBA Materials 6-28-22 (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)

Attachment: ZBA Materials 6-28-22 (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)



SNACK

ENTRANCE FEES
$15
PER CHILD
$129
$1
$5
BIRTHDAY PARTIES
WELCOME!



Attachment: ZBA Materials 6-28-22 (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)
Attachment: Floor Plan (619 E Dundee Road - SU indoor play place)

CONSTRUCTION REVIEW

APPROVED AS NOTED

By Erin Seelig at 9:34 am, May 26, 2022

RPT REALTY APPROVAL AND/OR COMMENTS BY RPT REALTY'S CONSTRUCTION DEPARTMENT IN NO WAY ABROGATES OR MODIFIES THE TERMS OF THE LEASE AGREEMENT NOR DOES SAID APPROVAL SUPERSEDE ANY BUILDING CODES OR ORDINANCES

Speed Quality Signs
Design - Fabrication - Installation
www.speedqualitysigns.com
Lic. #873011

Office: 714-751-5778
Cell: 714-356-8893
E-mail: info@speedqualitysigns.com
Address: 635 S. Santa Fe Street Santa Ana Ca 92705

This sign is intended to be installed in accordance with the requirements of article 600 of the National Electric code and/or other applicable local codes. This includes proper groundign and bonding of the sign.

Project: Kids Empire		
Location: 627 Dundee Road #A-300, Palatine, IL		
Contact: Haim Elbaz		
Date: 5/9/22	Sales & Design SQS	Job#00001887

Approval Signatures

Client:_____

Landlord:_____

Attachment: ZBA Materials 6-28-22 (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)

PUBLIC NOTICE
A Public Hearing will be held before the Palatine Zoning Board of Appeals on Tuesday, June 28, 2022 at 7 PM, in the Village Council Chambers at Palatine Village Hall, 200 E. Wood Street, relative to a request for the following:
Special Use to permit an indoor sports and recreational facility.
The property is commonly known as 619 E. Dundee Road (02-11-209-008-0000).
The Petitioner is proposing to open an indoor children's playground and recreational facility, (Kids Empire franchise) at the subject property.
The above petition has been filed by Haim Elbaz and is available for examination in the office of the Village Clerk, 200 E. Wood Street.
FILE #: 22-17
VILLAGE OF PALATINE
Jan Wood, Chair
Palatine Zoning Board of Appeals
DATED: This 13th day of June, 2022
Published in Daily Herald June 13, 2022 (4584017)

CERTIFICATE OF PUBLICATION

Paddock Publications, Inc.

Northwest Suburbs
Daily Herald

Corporation organized and existing under and by virtue of the laws o the State of Illinois, DOES HEREBY CERTIFY that it is the publish of the **Northwest Suburbs DAILY HERALD**. That said **Northwes Suburbs DAILY HERALD** is a secular newspaper, published in Arlington Heights and has been circulated daily in the Village(s) of: Arlington Heights, Barrington, Barrington Hills, Bartlett, Buffalo Gr Deer Park, Des Plaines, Elk Grove, Franklin Park, Glenview, Hanover Park, Hoffman Estates,Inverness, Melrose Park,Morton Gr Mt Prospect, Niles, Northbrook, Northfield, Northlake, Palatine, Park Ridge, Prospect Heights, River Grove, Rolling Meadows, Rosemont, Schaumburg,Schiller Park, South Barrington, Streamwoo Wheeling, Wilmette

County(ies) of Cook
and State of Illinois, continuously for more than one year prior to th date of the first publication of the notice hereinafter referred to and i general circulation throughout said Village(s), County(ies) and State

I further certify that the Northwest Suburbs DAILY HERALD is a newspaper as defined in "an Act to revise the law in relation to notic as amended in 1992 Illinois Compiled Statutes, Chapter 715, Act 5, Section 1 and 5. That a notice of which the annexed printed slip is a copy, was published 06/13/2022
in said Northwest Suburbs DAILY HERALD.

IN WITNESS WHEREOF, the undersigned, the said PADDOCK PUBLICATIONS, Inc., has caused this certificate to be signed by, t authorized agent, at Arlington Heights, Illinois.

PADDOCK PUBLICATIONS, INC.
DAILY HERALD NEWSPAPERS

BY Paula Raetz
Designee of the Publisher and Officer of the Daily Herald

Control # 4584017

Attachment: ZBA Materials 6-28-22 (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)

5. 619 E. Dundee Road

Notice was published in the Daily Herald on June 13, 2022 and mailed to the owners of the surrounding properties.

Petitioner's Exhibits:

1. Application for Special Use
2. Proof of Ownership
3. Plat of Survey
4. Business Plan
5. Floor Plan
6. Elevation
7. Public Notice

Sworn in the petitioner: Mr. Alton Klein director of Design and Entitlements for Kids Empire 620 Arrow Highway California

Mr. Klein stated Kids Empire is an indoor playground for kids 12 and under. He referred to slides to show proposed play equipment. He stated they do not offer drop off services and required parents to be with children at all times. Mr. Klein stated they sell only prepackaged food. He stated during birthday parties they will contract with local bakery and pizzeria to provide those items. He explained these items will be provided on demand because they will have no storage facility for them. He stated these type of facilities are in demand for children to play in a safe area. Mr. Klein stated they currently have 35 parks open and design and operate within the realm of the local jurisdictions public health and welfare with the considerations of their guest public safety and health. He stated they have employees on site to monitor child safety and clean every night. He stated they would not cause injury to property values. Mr. Klein referred to slide to show location next to Hobby Lobby and stated they will have no music outside.

Ms. Wood pointed out there is a lot of parking so there is no concern. She stated there is a lot of seating that takes up a lot of the floor plan. She asked about parents being required to stay for birthday parties.
Mr. Klein stated they don't want to be in a daycare use. He stated the parents are responsible for their own children even during parties.

Ms. Roth-Wurster asked if this size is standard.
Mr. Klein explained their locations range in size. He spoke to other venues they have. He agreed there are many tables but stated they never get to capacity.

Ms. Bremanis gave a brief overview of the business plan including hours and staff and guest occupancy. She stated the parking plaza is well over parked. She stated Community Services, Environmental Health and Fire Prevention have all reviewed and did not identify any issues. Ms. Bremanis referred to the existing conditions slides to show conceptual sign and location.

STAFF RECOMMENDATION:

Attachment: DRAFT ZBA Minutes 6-28-22 (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)

The proposed business is occupying a vacant space in the Deer Grove Shopping Center. This use is compatible with the other retail, service, and restaurant uses that presently occupy the shopping center. The proposed use should not alter the essential character of the locality. Therefore, Staff recommends approval of the Special Use, subject to the following conditions:

1. The Special Use shall substantially conform to the floor plan and business plan prepared by the petitioner dated 04/30/2022, except such plans may be changed to conform to Village Codes and Ordinances.

There were no further questions. The public hearing was closed.

Mr. Pirog made a motion to approve subject staff's conditions; seconded by Ms. Roth-Wurster

DELIBERATIONS:

Mr. Pirog stated it is a good use of property. He stated he likes that parent have to stay for safety issues.

Ms. Roth-Wurster stated it meet the standards. She pointed out they have a lot of locations and there are no parking issues.

Ms. Wood stated the standards have been met. She stated there is a need for indoor recreation facilities in Palatine.

Ms. Wood summarized that this request has met the standards and was unanimously approved by a vote of 4-0. This item will tentatively go to Village Council on July 11, 2022

RESULT:	**RECOMMENDED TO APPROVE [UNANIMOUS]**
MOVER:	John Pirog, Commissioner
SECONDER:	Cindy Roth-Wurster, Commissioner
AYES:	Roth-Wurster, Wood, Luszczak, Pirog
ABSENT:	McGinn, Cavanaugh

Attachment: DRAFT ZBA Minutes 6-28-22 (2022-58 : 619 E. Dundee Road - SU Indoor Play Place)

Consider an Ordinance Approving a Special Use Transfer to Permit the Continued Operation of a Service Station and Mart at 1228 E. Dundee Road

BACKGROUND:
The Special Use for a service station, automobile laundry, and food mart was originally approved in 1986. Casey's is requesting to acquire the business and is therefore requesting approval of the following:

- Transfer of Special Use #O-124-86 to permit the continued operation of service station, automobile laundry, and food mart at 1228 E. Dundee Road.

KEY ISSUES:

- The Subject Property, zoned B-2 General Business District, contains an existing service station, automobile laundry, and food mart (Bucky's Mobil). The Special Use was initially approved in September 1986 (Ordinance #O-124-86), transferred in December of 2015 (O-162-15), and transferred in February 2019 (O-012-19).

- Other than the ownership change, the Petitioner is not proposing any other changes. The gas station will operate as a Casey's.

- Any changes to the floor plan or business operations would require additional Village review. Staff also advised the Petitioner about the temporary sign regulations, as part of the Special Use transfer application process.

ALTERNATIVES:

1. Recommend approval of the Special Use Transfer.
2. Do not recommend approval of the Special Use Transfer.

RECOMMENDATION:
Staff recommends approval of the Special Use Transfer at 1228 E. Dundee Road.

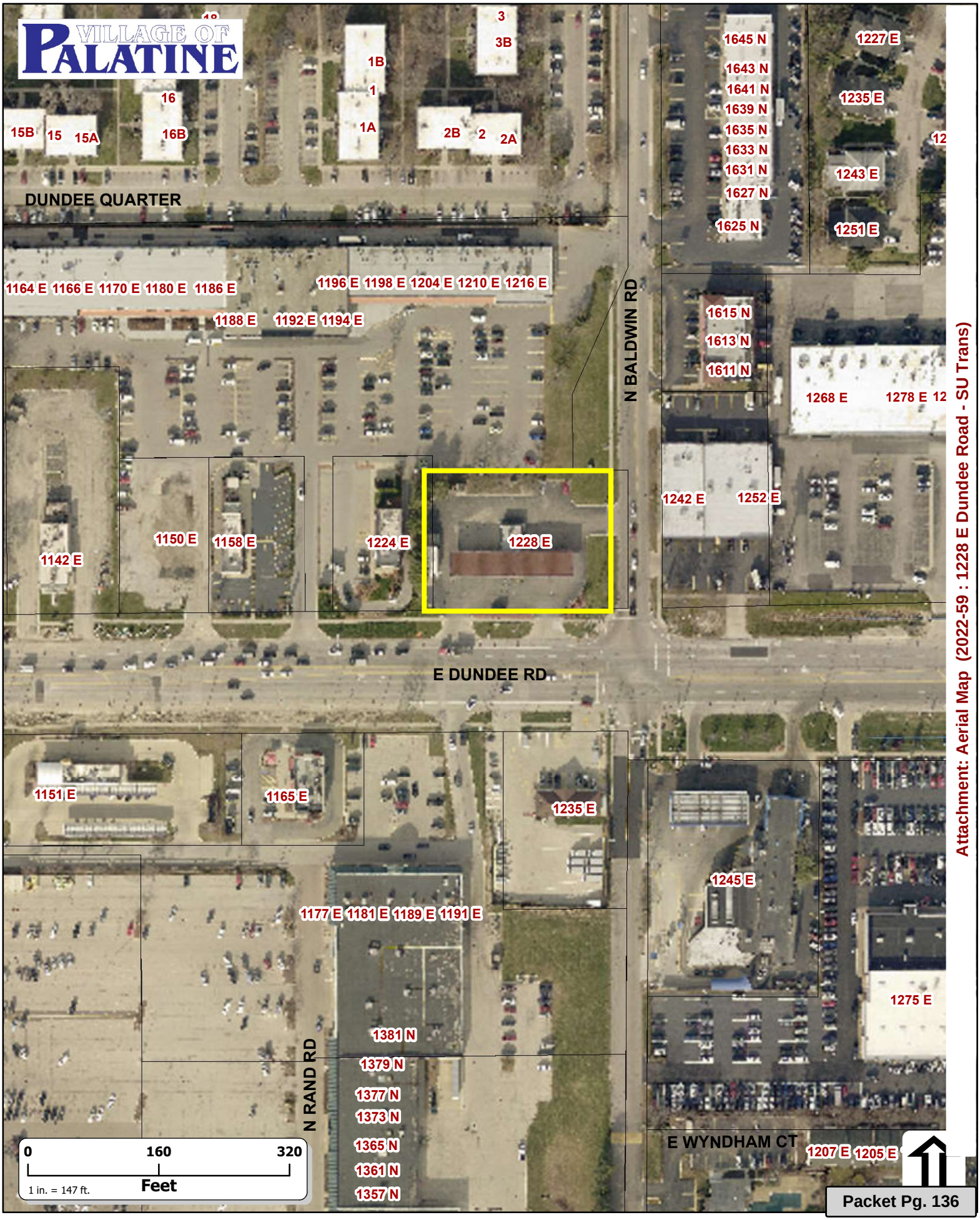
ACTION REQUIRED:
A motion to approve the Special Use Transfer of Ordinance # O-124-86 to Casey's Retail Company (Casey's #6419) to permit the continued operation of a service station, automobile laundry and food mart at 1228 E. Dundee Road.

ATTACHMENTS:

- Aerial Map
- ORD SUT 1228 E Dundee Rd
- Special Use Ordiance #O-124-86
- Application

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

1228 E. Dundee Road



Attachment: Aerial Map (2022-59 : 1228 E Dundee Road - SU Trans)

ORDINANCE NO._____

**AN ORDINANCE TRANSFERRING
SPECIAL USE ORDINANCE #O-124-86, AS AMENDED,
1228 E. DUNDEE ROAD**

WHEREAS, Ordinance #O-124-86 granted a Special Use for a service station, automobile laundry and food mart on the property commonly known as 1228 E. Dundee Road; and

WHEREAS, pursuant to Section 14.05(h) in Appendix A of the Village of Palatine Code of Ordinances, in the event of the sale or lease of this business, the Special Use may be transferred after review and consent of the Village Council; and

WHEREAS, since the Village Council did meet on July 11, 2022, to review a request by Casey's Retail Company that the Special Use be transferred to permit the continued operation of a service station, automobile laundry, and food mart, with no substantial changes and it was the recommendation of the Village Council that the transfer of the Special Use to Casey's Retail Company (Casey's #6419) be approved without amendment.

NOW, THEREFORE, BE IT ORDAINED, by the Mayor and Village Council of the Village of Palatine:

SECTION 1: That the Special Use granted by Ordinance #O-124-86 is hereby transferred to Casey's Retail Company (Casey's #6419), to permit the continued operation of a service station, automobile laundry, and food mart.

SECTION 2: All conditions of Special Use Ordinance #O-124-86 shall remain in full force and effect.

DATED: This _____day of _____, 2022

AYES:_____ NAYS:_____ ABSENT:_____ PASS:_____

APPROVED by me this _____day of _____, 2022

_____
Mayor of the Village of Palatine

ATTEST and FILE in the office of the Village Clerk

this ____ day of _____, 2022.

_____
Village Clerk

Attachment: ORD SUT 1228 E Dundee Rd (2022-59 : 1228 E Dundee Road - SU Trans)

ORDINANCE NO. O-124-86

AN ORDINANCE
GRANTING A SPECIAL USE
FOR AN AUTOMOBILE SERVICE STATION,
AUTOMOBILE LAUNDRY, AND
SIGN VARIATIONS
1228 DUNDEE ROAD

WHEREAS, pursuant to a petition and public hearing, held on September 15, 1986; of which public notice was given as required by law, the Planning, Building and Zoning Committee of the Palatine Village Board, in accordance with the Municipal Code of the Village of Palatine, in such case made and provided, has held such public hearing and reported its findings to the President and Board of Trustees of the Village of Palatine on the following legally described property:

The West 170 feet of the East 236 feet of the North 170 feet of the South 240 feet of the East 1/2 of the Southwest 1/4 of Section 1, Township 42 North, Range 10, East of the Third Principal Meridian in Cook County, Illinois.

ALSO:
The East 66 feet of the North 170 feet of the South 240 feet of the East 1/2 of the Southwest 1/4 of Section 1, Township 42 North, Range 10 East of the Third Principal meridian, in Cook County, Illinois,
Commonly known as 1228 Dundee Road (northwest corner of Dundee and Baldwin Roads).

(hereinafter sometimes called the "subject property")

NOW, THEREFORE, BE IT ORDAINED, by the President and Board of Trustees of the Village of Palatine, Cook County, Illinois, acting in the exercise of their home rule power, that:

SECTION 1: A special use be granted for an automobile service station and automobile laundry pursuant to Section 6.03 of Appendix A, Zoning Ordinance of the Village of Palatine.

SECTION 2: A variation of five (5) square feet be granted to allow a ground sign of 105 square feet instead of the 100 square feet maximum allowed in Section 15-62, Code of Ordinances, Palatine, Illinois.

Attachment: Special Use Ordiance #O-124-86 (2022-59 : 1228 E Dundee Road - SU Trans)

SECTION 3: A variation of four (4) feet be granted to allow a ground sign to be four (4) feet above grade at the lowest point instead of eight (8) feet minimum allowed in Section 15-64 of the Code of Ordinances, Palatine, Illinois.

SECTION 4: That the petition for special use, a copy of the public notice and the report of the Planning, Building and Zoning Committee be attached hereto and form a part of this ordinance.

SECTION 5: That this ordinance shall be in full force and effect from and after its passage and approval as provided by law.

PASSED: This 29 day of September, 1986

AYES: 6 NAYS: 0 ABSENT: 0 PASS: 0

APPROVED by me this 29 day of September, 1986

Frank R. Mueller
President of the Village of Palatine

ATTESTED and FILED in the office of the Village Clerk this 29 day of September, 1986

Sheila L. Mullen
Village Clerk

Attachment: Special Use Ordiance #O-124-86 (2022-59 : 1228 E Dundee Road - SU Trans)

DEPT. OF COMMUNITY DEVELOPMENT
VILLAGE OF PALATINE

PETITION FOR HEARING

LEAVE BLANK

Zoning Docket # _____

Property recorded in Torrens _____

Filing fee $ _____

7.B.5.c

PLEASE CHECK APPLICABLE PROCEEDING:

__X__ Rezoning __X__ Special Use __X__ Variation

PLEASE PRINT OR TYPE IN INK _____ Planned Development

1. Name of Petitioner(s): Mobil Oil Corporation

   Address: 3225 Gallows Rd. Fairfax Virginia 22037
   City, State, Zip

   Telephone No: 703- 849 - 3504 Business Telephone No: _____

2. Authorized Agent of petitioner (if different):

   Name: Charles Wagner

   Address: Box 941006 Schaumburg, Il 60194
   City, State, Zip

   Telephone No: 351 - 9043

3. Property interest of Petitioner(s) Owner
   Owner, Lessee, Contract Purchase

4. Address of the property for which this application is being filed.
   1228 Dundee Road Palatine, Illinois

5. All existing land uses on the property are:
   Gasoline facility with convenience foods

6. The proposed use(s) on the property, if this petition is approved (are): Gasoline facility with Mobil Mart and rollover brush car wash in a separate building

7. Current zoning of property in question: C4 in Cook County

8. State the specific action requested. Cite ordinance numbers and distances where applicable. (Examples: Variation from Section 5. Variation to permit a four (4) foot side yard, or zoning change to B-1 Shopping Center District, etc.).
   Annexation
   Zoning change from R1 to B2
   Special Use for gasoline facility, Mobil Mart, and car wash
   Identification sign size variation 27.303 Sec. 15.62
   Ground sign open space variation 27.304 Sec. 15.63

9. The applicant's signature below indicates that the information contained in this application and on any accompanying documents is true and correct to the best of his (her) knowledge.

8/23/86
Date

C. Wagner

SUBSCRIBED and SWORN to before me this 23 day of August, 1986.

Notary Public

My Commission Expires _____

Attachment: Special Use Ordiance #O-124-86 (2022-59 : 1228 E Dundee Road - SU Trans)

FOR: Administration FROM: Community Development RFK DATE: 9/15/86

7.B.5.c

X ORDINANCE
RESOLUTION
MOTION
PUBLIC HEARING
DISCUSSION ONLY

DESCRIPTION Consider Ordinance Granting Special Use and Variations for 1228 East Dundee Road. (Mobil Oil)

DISTRICT: 4 (after annexation)

BACKGROUND

Petitioner requests special uses for a service station and an automobile laundry for 1228 East Dundee Road as part of annexation and rezoning. "B-2" zoning allows service stations and car washes as special uses. Two sign variations are requested; (1) a variation of five (5) feet to allow a ground sign of 105 square feet instead of 100 square feet maximum allowed in Section 15-62 of the Municipal Code, and (2) a variation of four (4) feet to allow a ground sign to be four (4) feet above grade at the lowest point instead of eight (8) feet minimum allowed in Section 15-64. The referenced sections are not in the Village Zoning Ordinance, but are in Chapter 15 of the Municipal Code which authorizes the Village Board to grant variations from the code.

DISCUSSION The proposed uses on the site are designed for the protection of neighboring property and provides plenty of stacking or queing area for cars. Neighboring property will not be negatively impacted by the design. The variation in signage is slight. The variations are needed to provide the site with Mobil's standard sign package, which is modern looking signage that blends in with the landscaping. The proposed sign would be permitted in the County without variation, if the petitioner chose to do the redevelopment in the County.

NOTE: THIS ORDINANCE WAS APPROVED UNANIMOUSLY IN COMMITTEE ON 9/15/86

ALTERNATIVES

1) Approve ordinance.
2) Do not approve ordinance.

RECOMMENDATION OR CONCLUSION Staff recommends approval of the special uses and variations. The standards for both actions are met. It will not injure surrounding property values or the public health, safety, and welfare.

BUDGET IMPACT

1) Annual Village Property Tax Revenue of $2,600.
2) Annual Village Sales Tax Revenue of $1,000.

ACTION REQUIRED Motion to recommend approval of ordinance granting special uses and variations to 1228 East Dundee Road.

BK:ev

Attachment: Special Use Ordiance #O-124-86 (2022-59 : 1228 E Dundee Road - SU Trans)

VILLAGE OF PALATINE

SPECIAL USE TRANSFER

Department of Planning & Zoning
200 E. Wood Street · Palatine, IL · 60067-5339
Telephone: (847) 359-9047 · Fax (847) 963-6247

Required Materials

- Application Form
- Business Plan (including but not limited to nature of business, hours or operation, number of employees, floor plan, menu, and any proposed changes to the business
- Proof of Ownership

Business Owner(s):

CASEY'S RETAIL COMPANY

ONE SE CONVENIENCE BLVD, P.O. BOX 3001, ANKENY, IA 50021

Subject Property Address:

1228 E DUNDEE RD, PALATINE, IL 60074

The owner(s) listed above are requesting that Special Use Ordinance # 0-124-86 be transferred from BUCHANAN ENERGY (N), LLC to individuals(s) and/or company listed above. I have read the ordinance(s) and agree to comply with all applicable ordinance(s) and any conditions contained therein. As the new business owner(s), the following changes (if any) are proposed to the business operation and/or floor plan:

THE OWNERSHIP OF THIS LOCATION HAS CHANGED FROM BUCHANAN ENERGY (N), LLC TO CASEY'S RETAIL COMPANY. ALL OFFICERS, EMPLOYEES, AND STORE OPERATIONS WILL REMAIN THE SAME. THIS IS A CONVENIENCE STORE/GAS STATION, OFFERING A VARIETY OF PREPARED/PRE-PACKAGED FOOD AND BEVERAGE ITEMS, AUTOMOTIVE ITEMS, TOBACCO PRODUCTS, ALCOHOL PRODUCTS, GASOLINE/DIESEL, AND OTHER CONVENIENCE ITEMS. PLEASE SEE OUR UPDATED MENU AT WWW.CASEYS.COM.

I understand that if the Village determines the nature or characteristics of the business will substantially change, a new Special Use may be required.

Attachment: Application (2022-59 : 1228 E Dundee Road - SU Trans)

VILLAGE OF PALATINE

Signature Page

Petitioner's Signature

I affirm that the information contained on page 1 herein and in any accompanying documents is accurate to the best of my knowledge.

FOR CASEY'S RETAIL COMPANY, BY DOUGLAS M. BEECH, ASSISTANT SECRETARY

06/30/2022

Name

Date

Signature

Signature of Consent from Landlord, Property Owner(s), or Former Operator

I consent to the Special Use Transfer of the above mentioned property and that the information contained on page 1 herein and in any accompanying documents is accurate to the best of my knowledge.

FOR BUCHANAN ENERGY (N), LLC, BY STEPHEN P. BRAMLAGE, PRESIDENT

06/30/2022

Name

Date

Signature

Attachment: Application (2022-59 : 1228 E Dundee Road - SU Trans)

Consider Ordinances and a Resolution Granting Preliminary & Final Planned Development, Preliminary & Final Plat of Subdivision, and Rezoning to Planned Development for the Properties Located at 2240-2296 N. Rand Road

BACKGROUND:

The Missner Group intends to consolidate 7 existing properties into one lot and develop a new warehouse/distribution or light manufacturing use, with associated office uses. Therefore, the Petitioner is requesting approval of the following:

1. **Preliminary & Final Planned Development;**
2. **Preliminary & Final Plat of Subdivision to permit a 145,000 square foot warehouse/distribution/light manufacturing/assembly building; and**
3. **Rezoning from B-5 to Planned Development.**

- The approximately 145,000 square foot building is being developed speculatively, within the anticipated tenancy identified above. As part of the Planned Development conditions, Staff is requiring that a specific business plan is submitted for each tenant to ensure compliance with the identified underlying B-5 uses lists, with the expanded uses to include warehousing, distribution, and light manufacturing/assembly.

- The proposed architecture includes pre-cast concrete panels, metal coping panels, and a combination of vision and spandrel/tempered glass. The architecture is comparable to other recently approved buildings in the Village, such as Midwest Industrial Funds (Weber property) and LPC (Algonquin Road).

- A Traffic Impact Study (TIS) was submitted as part of the Planned Development application materials. The TIS indicates that there is both sufficient capacity for the anticipated proposed traffic, and the Rand Road access systems are adequate to accommodate the traffic and will ensure that flexible access is provided. The northern access will be right-in/right-out and the southern access will provide full access to the site.

- The proposed site plan includes 156 parking spaces (including 16 future parking spaces on the north side of the building). The site plan anticipates 10% of the building could be occupied with office uses, with the remaining 90% utilized for warehouse/distribution. The following table summarizes the potentially required and provided parking for the site:

	Required parking	**Provided parking**	**Additional parking provided, if required by the Village**
Office - 10% (14,540)	**1/300 square feet 48 spaces**		

Warehouse- 90% (130,867)	**1/1,000 square feet 131 spaces**		
Total parking spaces	**179 spaces**	**140 spaces, included; 16 future parking spaces on the north side of the building=156 parking spaces.**	**30 parking spaces, within the trailer parking stall area on the west side of the building = 186 parking spaces total.**

- Through the review process, Staff directed the Petitioner to identify additional parking spaces to be added, within the trailer parking area. While Staff is initially comfortable with the provided parking, we are also recommending a condition to implement additional parking, at the direction of the Village, if the tenant composition or parking demand increases.

ALTERNATIVES:

1. Approve the Preliminary and Final Planned Development, Final Subdivision, and Rezoning from B-5 to Planned Development, for the proposed Missner Group development.

2. Do not approve the Preliminary and Final Planned Development, Final Subdivision, and Rezoning from B-5 to Planned Development, for the proposed Missner Group development.

RECOMMENDATION:

Public Hearing:	Plan Commission - June 21, 2022
Residents testifying:	0
Vote:	The Plan Commission voted 4-1 to approve the requested Preliminary and Final Planned Development, Preliminary and Final Plat of Subdivision, and Rezoning from B-5 to Planned Development and Staff concurs.

ACTION REQUIRED:

A motion to approve the Preliminary and Final Planned Development, Preliminary and Final Plat of Subdivision, and Rezoning from B-5 to Planned Development at 2240-2296 N. Rand Road.

ATTACHMENTS:

- Aerial Map
- ORD - Preliminary and Final Planned Development
- Legal Description - PRE-FINAL PLANNED DEVELOPMENT
- EXHIBIT - ENG PLANS

- TMG Rand Rd. Building Elevations
- EXHIBIT - ARCH - Permit Set
- EXHIBIT - ARCH site plan - with additional parking (west side of building - trailer storage parking area)
- EXHIBIT - Photometric Lighting Plan
- EXHIBIT - Rand Rd. Traffic Impact Study
- EXHIBIT - LANDSCAPING PLANS
- EXHIBIT - Development Narrative
- RES - PF SUB
- EXHIBIT - Plat of Subdivision/Consolidation - MIssner Group Palatine
- ORD - REZdoc
- REZONING - LEGAL DESCRIPTION
- Plan Commission materials
- DRAFT June 21st Plan Commission minutes
- Public Notice

RESULT:	**MOTION CARRIED BY VOICE VOTE BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Doug Myslinski, District 3 Councilman
SECONDER:	Scott Lamerand, District 2 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

2240-2296 N. Rand Road

Attachment: Aerial Map (2022-60 : 2240-2296 N. Rand Road)

ORDINANCE NO. _____

AN ORDINANCE GRANTING FINAL PLANNED DEVELOPMENT APPROVAL FOR 2240-2296 N. RAND ROAD

WHEREAS, upon petition of owners of said property, a Public Hearing was held by the Plan Commission of the Village of Palatine on June 21, 2022 and in accordance with the Zoning Ordinance of the Village of Palatine, in such case made and provided, and said Plan Commission, having made its findings in a report to the Mayor and Village Council of the Village of Palatine regarding a request for a Final Planned Development to permit a warehouse/distribution/light manufacturing development on the following legally described property:

SEE ATTACHED LEGAL DESCRIPTION

Commonly known as 2240, 2242, 2250, 2260, 2266, and 2296 N. Rand Road

PIN: # 02-02-101-019-0000; 02-02-101-020-0000; 02-02-101-021-0000; 02-02-101-013-0000; 02-02-101-014-0000; 02-02-101-004-0000; and 02-02-101-005-0000

NOW, THEREFORE, BE IT ORDAINED, by the Mayor and Village Council of the Village of Palatine, Cook County, Illinois, acting in the exercise of their home rule power:

SECTION 1: That the Preliminary and Final Planned Development is hereby approved, to permit a warehouse/distribution/light manufacturing development is hereby granted, subject to the following conditions:

1. **The development shall substantially conform to the engineering plans by Spaceco., INC., dated March 22, 2022, as revised, the architectural plans by Ware Malcomb, date April 3, 2022, as revised, the KLOA Traffic Study, and the landscaping plans by Kathyrn Talty, dated January 28, 2022, except as such plans may be changed to conform to Village Codes and Ordinances.**

2. **Uses shall be governed by the B-5 Highway Business District use lists in the Village of Palatine Zoning Ordinance. In addition, the following uses shall also be permitted uses: Building and material sales; Cartage or express establishments; Contractor's shops and/or distributors; Warehousing and distribution centers; Light assembly; and related office uses. Any use of the property shall also be subject to the required performance standards in the**

Attachment: ORD - Preliminary and Final Planned Development (2022-60 : 2240-2296 N. Rand Road)

Village's Manufacturing District. Any signage shall comply with the regulations in the Village's Manufacturing District.

3. **As a component of the Final Planned Development, a Planned Development letter of credit shall be submitted in a manner acceptable to the Director of Planning and Zoning and Village Engineer.**

4. **The final engineering plans shall be revised in a manner acceptable to the Village Engineer.**

5. **The final landscape plans shall be subject to the review and approval of the Director of Planning and Zoning and shall include additional shrub plantings along the Rand Road frontage, adjacent to the parking lot.**

6. **The final photometric and lighting plan shall be revised in a manner acceptable to the Village Engineer. Light shields shall be required for any lights proximate to residential properties, at the determination of the Village Engineer. This may include a 25-foot mounting height for exterior lights, in order to reduce the glare, at the direction of the Village Engineer.**

7. **The final traffic directional signage plan shall be submitted in a manner acceptable to the Village Engineer.**

8. **Cross access easements, declarations, and a Reciprocal Easement Agreement for the entire property governing the maintenance of access points, stormwater areas and any other common areas shall be submitted in a manner acceptable to the Village Attorney and Village Engineer. This could include a cross access easement for the property directly north of the Subject Property, if that property were to redevelop in the future, and if requested by the Village of Palatine.**

9. **The final dumpster locations and required screening shall be submitted in compliance with Village Code. The screening shall be constructed of durable materials similar to those of the building and shall have solid (opaque) walls and doors. The final locations could also require the submission of a revised auto-turn, in a manner acceptable to the Fire Marshal.**

10. **As a condition of the Final Planned Development, and pursuant to the project narrative, the Petitioner shall submit the proposed business and operations' plans (identified tenants) for Staff review for compliance with the B-5 use lists and standards, in addition to the additional uses identified in Condition #2.**

11. **If, at the determination of the Village, the proposed tenant composition**

Attachment: ORD - Preliminary and Final Planned Development (2022-60 : 2240-2296 N. Rand Road)

(percentage of office/retail uses) increases or the Village of Palatine determines that there is a significant parking demand deficiency, based upon the required parking needs, the trailer parking directly east of the detention basin shall be converted to auto parking stalls, or a portion thereof, as noted on Ware Malcomb Concept Site Plan ("Scheme 9"), depicting up to 30 additional parking spaces.

SECTION 2: That a copy of the public notice, be attached hereto and form a part of this ordinance.

SECTION 3: This ordinance shall be in full force and effect upon passage and approval as provided by law.

PASSED: This ____day of _____, 2022

AYES:_____ NAYS:_____ ABSENT:_____ PASS:_____

APPROVED by me this _____day of _____, 2022

_____
Mayor of the Village of Palatine

ATTESTED and FILED in the office of the Village Clerk

this _____day of _____, 2022

_____
Village Clerk

Attachment: ORD - Preliminary and Final Planned Development (2022-60 : 2240-2296 N. Rand Road)

LEGAL DESCRIPTION – 2240 – 2266 N. Rand Road

LEGAL DESCRIPTION

PARCEL 1: (PERMANENT INDEX NUMBER 02-02-101-005-0000)
THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, SAID POINT OF INTERSECTION BEING 16.12 FEET SOUTH OF THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE SOUTHEAST ALONG THE CENTER LINE OF SAID RAND ROAD, 551.08 FEET TO THE POINT OF BEGINNING; THENCE SOUTHEAST ALONG THE CENTER LINE OF SAID RAND ROAD, 200.00 FEET; THENCE SOUTHWEST IN A STRAIGHT LINE 711.71 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, BEING 1,034.76 FEET SOUTH OF THE ABOVE DESCRIBED POINT OF INTERSECTION OF THE CENTER OF RAND ROAD AND THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, AFORESAID, 275.54 FEET; THENCE NORTHEAST IN A STRAIGHT LINE, 522.14 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.

PARCEL 2: (PERMANENT INDEX NUMBERS 02-02-101-013-0000; 02-02-101-014-0000) THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, SAID POINT OF INTERSECTION BEING 16.12 FEET SOUTH OF THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF SAID SECTION 2; THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF SAID RAND ROAD, 751.08 FEET TO A POINT OF BEGINNING; THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF RAND ROAD, 100.00 FEET; THENCE SOUTHWESTERLY ON A STRAIGHT LINE, 806.47 FEET TO A POINT IN THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2 THAT IS 1,172.53 FEET SOUTH OF THE ABOVE-DESCRIBED POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2; THENCE NORTH ALONG THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, 137.77 FEET; THENCE NORTHEASTERLY IN A STRAIGHT LINE, 711.71 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.

PARCEL 3: (PERMANENT INDEX NUMBER 02-02-101-021-0000)
THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:
COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, SAID POINT OF INTERSECTION BEING 16.12 FEET SOUTH OF THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF SAID RAND ROAD, 851.08 FEET TO A POINT OF BEGINNING; THENCE SOUTHWESTERLY IN A STRAIGHT LINE, 806.47 FEET TO A POINT IN THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, AFORESAID, SAID POINT BEING 1,172.53 FEET SOUTH OF THE ABOVE-DESCRIBED POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE SOUTH ALONG THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, 137.77 FEET TO THE SOUTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE NORTHEAST 902.21 FEET TO A POINT IN THE CENTER LINE OF RAND ROAD THAT IS 100.00 FEET SOUTHEAST OF THE POINT OF BEGINNING; THENCE NORTHWESTERLY ALONG THE CENTER LINE OF RAND ROAD, 100.00 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.

PARCEL 4: (PERMANENT INDEX NUMBER 02-02-101-019-0000)
THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:
COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, SAID POINT OF INTERSECTION BEING 16.12 FEET SOUTH OF THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF SAID RAND ROAD, 951.08 FEET TO A POINT OF BEGINNING; THENCE SOUTHWESTERLY ALONG A LINE EXTENDED TO THE SOUTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, A DISTANCE OF 135.00 FEET; THENCE SOUTHEASTERLY PARALLEL TO THE CENTER LINE OF RAND ROAD, 100.00 FEET; THENCE NORTHEASTERLY 135.00 FEET TO THE CENTER LINE OF RAND ROAD, SAID POINT BEING 100.00 FEET SOUTHEASTERLY OF THE POINT OF BEGINNING; THENCE NORTHWESTERLY 100.00 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.

PARCEL 5: (PERMANENT INDEX NUMBER 02-02-101-020-0000)
THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, SAID POINT OF INTERSECTION BEING 16.12 FEET SOUTH OF THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF SAID RAND ROAD, 951.08 FEET TO A POINT OF BEGINNING; THENCE SOUTHWESTERLY IN A STRAIGHT LINE 902.21 FEET TO THE SOUTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE EAST ALONG THE SOUTH LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, AFORESAID, 145.26 FEET TO A POINT THAT IS 1,097.34 FEET WEST OF THE INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE SOUTH LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE NORTHEASTERLY IN A STRAIGHT LINE, 795.89 FEET TO A POINT IN THE CENTER LINE OF RAND ROAD THAT IS 755.42 FEET NORTHWESTERLY OF THE LAST ABOVE-DESCRIBED INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE SOUTH LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE NORTHWESTERLY ALONG THE CENTER LINE OF RAND ROAD, 100.00 FEET TO THE POINT OF BEGINNING; (EXCEPT THEREFROM THAT PART DESCRIBED AS PARCEL 4 ABOVE), IN COOK COUNTY, ILLINOIS.

THE TITLE DOCUMENT REFERENCED HEREON IS PER CHICAGO TITLE INSURANCE COMPANY, TITLE NUMBER 21GNW158194LZ, DATED APRIL 1, 2021.

Attachment: Legal Description - PRE-FINAL PLANNED DEVELOPMENT (2022-60 : 2240-2296 N. Rand Road)

LEGAL DESCRIPTION – 2296 N. Rand Road

LEGAL DESCRIPTION

THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE NORTH LINE OF THE NORTHWEST 1/4 OF SAID SECTION 2, AND RUNNING THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF SAID RAND ROAD 453.69 FEET TO THE PLACE OF BEGINNING; THENCE CONTINUING SOUTHEASTERLY ALONG SAID CENTER LINE 100 FEET; THENCE SOUTHWESTERLY, 522.95 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION, SAID POINT BEING 773.79 FEET SOUTH OF THE NORTH LINE OF SAID 1/4 SECTION; THENCE NORTH ALONG THE WEST LINE OF THE NORTHEAST 1/4 OF SAID 1/4 SECTION, 137.77 FEET; THENCE NORTHEASTERLY 428.2 FEET TO THE PLACE OF BEGINNING, EXCEPT THAT PART DEDICATED FOR HIGHWAY PURPOSES, ALL IN COOK COUNTY, ILLINOIS

THE TITLE DESCRIPTION AND SCHEDULE B ITEMS HEREON ARE FROM CHICAGO TITLE INSURANCE COMPANY, COMMITMENT #21GSC278017LP, DATED JULY 7, 2021.

Attachment: Legal Description - PRE-FINAL PLANNED DEVELOPMENT (2022-60 : 2240-2296 N. Rand Road)

FINAL SITE IMPROVEMENT PLANS
for
2240-2296 RAND ROAD

VILLAGE OF PALATINE
COOK COUNTY, ILLINOIS
PROJECT NO: 11624

DEVELOPER

2234-2296 RAND RD TMG, LLC
c/o THE MISSNER GROUP
1700 WEST HIGGINS ROAD, SUITE 400
DES PLAINES, IL 60018
PH: (847) 947-5333

ARCHITECT

WARE MALCOMB
1315 22nd STREET, SUITE #410
OAK BROOK, IL 60523
PH: (630) 218-0063

CALL J.U.L.I.E. 1-800-892-0123
WITH THE FOLLOWING:

COUNTY: COOK COUNTY
CITY, TOWNSHIP: VILLAGE OF PALATINE, PALATINE
SEC. & ¼ SEC. NO.: NW 1/4 S2, T42N, R10E

48 HOURS BEFORE YOU DIG.
EXCLUDING SAT., SUN. & HOLIDAYS

BENCHMARK

ELEVATION:

DESCRIPTION: SEE SHEET ET FOR BENCHMARK INFORMATION

NOTE:

SPACECO, INC. IS TO BE NOTIFIED AT LEAST THREE (3) DAYS PRIOR TO STARTING CONSTRUCTION AND SHALL BE INCLUDED IN THE PRECONSTRUCTION MEETINGS

REVISIONS

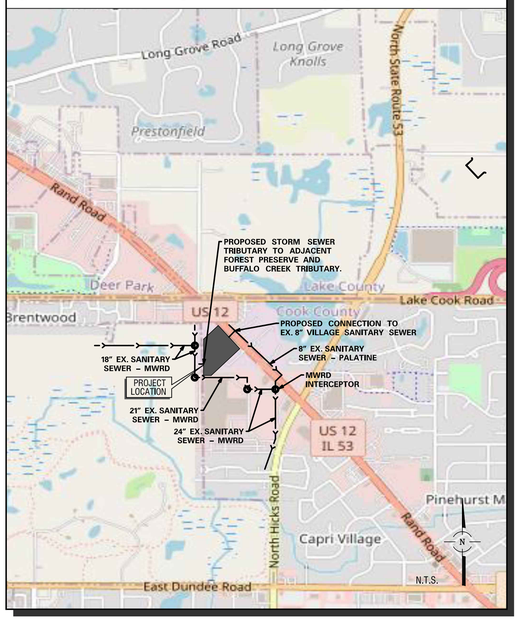
ORIGINAL PLAN DATE: MARCH 16, 2022

#	SHEET #	REMARKS	DATE
1	ALL	REVISIONS PER ARCHITECT	03/22/22
2	ALL	REVISIONS PER ARCHITECT/OWNER	04/11/22

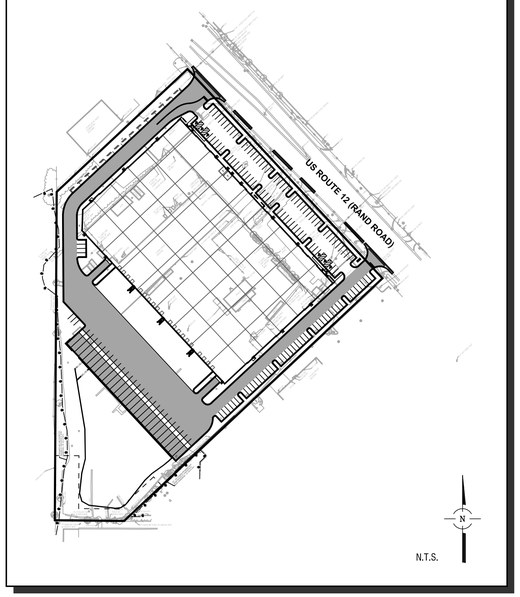
INDEX

SHEET #	SHEET I.D.	SHEET DESCRIPTION
1	C1	COVER SHEET
2	GN	TYPICAL SECTIONS & GENERAL NOTES
3	ET	EXISTING CONDITIONS PLAN
4	DEMO	DEMOLITION PLAN
5	GM	GEOMETRIC PLAN
6	GR	GRADING PLAN
7	UT	UTILITY PLAN
8	PP01	PLAN AND PROFILE - SANITARY SEWER SERVICE
9-11	SE1-SE3	SOIL EROSION AND SEDIMENT CONTROL SPECIFICATIONS AND DETAILS
12-13	SP1-2	SPECIFICATIONS
14-17	D1-D4	DETAILS
18	EXH-R	MWRD EXHIBIT R

SANITARY SEWER ROUTING MAP



KEY MAP



ENGINEER
BRETT M. DUFFY, P.E.
04/11/22
DATE

ILLINOIS REGISTRATION NO.: 062-053198
EXPIRATION DATE: 11/30/2023

PROFESSIONAL DESIGN FIRM NO.: 184-001157
EXPIRATION DATE: 04/30/2023

THESE PLANS OR ANY PART THEREOF SHALL BE CONSIDERED VOID WITHOUT THE SIGNATURE , SEAL, AND EXPIRATION DATE OF SEAL OF THE ENGINEER

LICENSED PROFESSIONAL ENGINEER — BRETT M. DUFFY — NO. 062-053198 — ILLINOIS

2240-2296 RAND ROAD
VILLAGE OF PALATINE
COOK COUNTY, ILLINOIS

9575 W. Higgins Road, Suite 700, Rosemont, Illinois 60018
Phone: (847) 696-4060 Fax: (847) 696-4065

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS

SPACECO INC.

FILENAME: 11624TITLE
DATE: 03/16/2022
JOB NO. 11624
SHEET C1
1 OF 18

Attachment: EXHIBIT - ENG PLANS (2022-60 : 2240-2296 N. Rand Road)

GENERAL NOTES

1. REFERENCED CODES

A. ALL PAVEMENT AND STORM SEWER CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (SSRBC), AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS; ADOPTED APRIL 1, 2016 BY ILLINOIS DEPARTMENT OF TRANSPORTATION AND ALL AMENDMENTS THERETO; AND IN ACCORDANCE WITH THE LATEST EDITION OF THE CODE OF THE MUNICIPALITY; EXCEPT AS MODIFIED HEREIN. IN CASE OF CONFLICT, MUNICIPAL CODE SHALL TAKE PRECEDENCE.

B. ALL SANITARY SEWER AND WATERMAIN CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS. PUBLISHED JANUARY 2014, AND IN ACCORDANCE WITH THE CODE OF THE MUNICIPALITY; EXCEPT AS MODIFIED HEREIN OR BY ANY PUBLIC AGENCY PERMITS ISSUED FOR THIS WORK. IN CASE OF CONFLICT, THE MORE RESTRICTIVE PROVISIONS SHALL APPLY.

C. ALL SIDEWALK AND PUBLIC AREAS MUST BE CONSTRUCTED IN ACCORDANCE WITH CURRENT ADA, ILLINOIS HANDICAP ACCESSIBILITY AND ANY APPLICABLE LOCAL ORDINANCES. WHEN CONFLICTS EXIST BETWEEN THE GOVERNING AGENCIES, THE MORE STRINGENT SHALL GOVERN.

D. THE CITED STANDARD SPECIFICATIONS, CODES AND PERMITS, WITH THESE CONSTRUCTION PLANS AND DETAILS, ARE ALL TO BE CONSIDERED PART OF THE CONTRACT. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE CONSIDERED A PART OF THIS CONTRACT.

2. UTILITY LOCATIONS

A. THE UTILITY COMPANIES HAVE BEEN CONTACTED IN REFERENCE TO UTILITIES THEY OWN AND OPERATE WITHIN THE LIMITS FOR THIS PROJECT. DATA FROM THESE AGENCIES HAS BEEN INCORPORATED INTO THE PLANS, IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM OR ESTABLISH THE EXISTENCE OF ALL UTILITY FACILITIES AND THEIR EXACT LOCATIONS, AND TO SAFELY SCHEDULE ALL UTILITY RELOCATIONS. FOR ADDITIONAL INFORMATION, THE AGENCIES LISTED ON THIS SHEET MAY BE CONTACTED.

B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. THE ENGINEER DOES NOT WARRANT THE LOCATION OF ANY EXISTING UTILITIES SHOWN ON THE PLAN. THE CONTRACTOR SHALL CALL J.U.L.I.E. AT 800-892-0123 AND THE MUNICIPALITY, FOR UTILITY LOCATIONS. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND THE MUNICIPALITY TWENTY-FOUR (24) HOURS PRIOR TO STARTING ANY CONSTRUCTION.

C. EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH LOCATIONS OF THE NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.

3. UTILITY COORDINATION

A. OWNER SHALL OBTAIN EASEMENTS AND PERMITS NECESSARY TO FACILITATE CONSTRUCTION OF THE PROPOSED UTILITIES. THE CONTRACTOR, HOWEVER, SHALL FURNISH ALL REQUIRED BONDS AND EVIDENCE OF INSURANCE NECESSARY TO SECURE THESE PERMITS.

B. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE NATURE AND STATUS OF ALL UTILITY RELOCATION WORK PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO ENSURE THAT CONSTRUCTION OPERATIONS DO NOT INTERFERE WITH UTILITY FACILITIES AND RELOCATION WORK. THE SCHEDULE SHOULD REFLECT CONSTRUCTION SEQUENCING WHICH COORDINATES WITH ALL UTILITY RELOCATION WORK. THE CONTRACTOR SHALL BE REQUIRED TO ADJUST THE ORDER OF ITS WORK FROM TIME TO TIME, TO COORDINATE SAME WITH UTILITY RELOCATION WORK, AND SHALL PREPARE REVISED SCHEDULE(S) IN COMPLIANCE THEREWITH AS DIRECTED BY THE OWNER.

C. THE OWNER AND THE ENGINEER SHALL BE NOTIFIED IN WRITING BY THE CONTRACTOR AT LEAST 48 HOURS PRIOR TO THE START OF ANY OPERATION REQUIRING COOPERATION WITH OTHERS. AT&T SHALL BE CONTACTED ONE MONTH PRIOR TO START OF CONSTRUCTION IN ITS UTILITY AREAS. ALL OTHER AGENCIES, UNLESS OTHERWISE NOTED, SHALL BE NOTIFIED IN WRITING BY THE CONTRACTOR TEN (10) DAYS PRIOR TO THE START OF ANY SUCH OPERATION.

4. NO PLAN SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY MARKED "FOR CONSTRUCTION". PRIOR TO COMMENCEMENT OF CONSTRUCTION THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THE WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IN ADDITION, THE CONTRACTOR MUST VERIFY THE ENGINEER'S LINE AND GRADE STAKES. IF THERE ARE ANY DISCREPANCIES WITH WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT SAME TO ENGINEER BEFORE DOING ANY WORK, OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTIONS ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.

5. ALL PROPOSED ELEVATIONS SHOWN ON THE PLANS ARE FINISHED SURFACE ELEVATIONS, UNLESS OTHERWISE SPECIFIED.

6. UPON AWARDING OF THE CONTRACT, AND WHEN REQUIRED BY THE MUNICIPALITY OR OWNER, THE CONTRACTOR SHALL FURNISH A LABOR, MATERIAL AND PERFORMANCE BOND IN THE AMOUNT REQUIRED GUARANTEEING COMPLETION OF THE WORK. THE UNDERWRITER SHALL BE ACCEPTABLE TO THE MUNICIPALITY OR OWNER, AS APPROPRIATE.

7. THE CONTRACTORS SHALL PLAN THEIR WORK BASED ON THEIR OWN BORINGS, EXPLORATIONS AND OBSERVATIONS TO DETERMINE SOIL CONDITIONS AT THE LOCATION OF THE PROPOSED WORK. HOWEVER, IF THE OWNER HAS A SOILS REPORT, THE RESULTS WILL BE AVAILABLE FROM THE OWNER UPON WRITTEN REQUEST.

8. CONTRACTOR SHALL VIDEO TAPE WORK AREA PRIOR TO CONSTRUCTION FOR THE PURPOSE OF DOCUMENTING EXISTING CONDITIONS.

9. COMMENCING CONSTRUCTION

A. THE CONTRACTOR SHALL NOTIFY THE OWNER AND/OR HIS REPRESENTATIVE AND THE AFFECTED GOVERNMENTAL AGENCIES IN WRITING AT LEAST THREE FULL WORKING DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL NOTIFY AS NECESSARY, ALL TESTING AGENCIES, EITHER MUNICIPALITY'S OR THE OWNER'S, SUFFICIENTLY IN ADVANCE OF CONSTRUCTION. ALL MATERIAL TESTING SHALL BE THE RESPONSIBILITY AND EXPENSE OF THE CONTRACTOR. THE TESTING AGENCY SHALL MEET THE APPROVAL OF THE OWNER.

B. FAILURE OF CONTRACTOR TO ALLOW PROPER NOTIFICATION TIME WHICH RESULTS IN TESTING COMPANIES TO BE UNABLE TO VISIT SITE AND PERFORM TESTING WILL CAUSE CONTRACTOR TO SUSPEND OPERATION (PERTAINING TO TESTING) UNTIL TESTING AGENCY CAN SCHEDULE TESTING OPERATIONS. COST OF SUSPENSION OF WORK TO BE BORNE BY CONTRACTOR.

10. ALL CONTRACTORS SHALL KEEP ACCESS AVAILABLE AT ALL TIMES FOR ALL TYPES OF TRAFFIC. AT NO TIME SHALL ACCESS BE DENIED TO ADJACENT PROPERTIES.

11. THE CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES UNTIL THEY ARE NO LONGER NEEDED. ANY STAKES DESTROYED OR DISTURBED BY THE CONTRACTOR PRIOR TO THEIR USE SHALL BE RESET BY THE DEVELOPER'S ENGINEER AT CONTRACTOR'S COST.

12. ANY EXISTING SIGNS, LIGHT STANDARDS AND UTILITY POLES WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND NOT NOTED FOR DISPOSAL SHALL BE REMOVED AND RESET BY THE CONTRACTOR AT HIS OWN EXPENSE AS SHOWN ON THE ENGINEERING PLANS OR AS DIRECTED BY THE DEVELOPER. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE TO THE SATISFACTION OF THE OWNER. ANY SIGNS NOT REQUIRED TO BE RESET, SHALL BE DELIVERED TO THE RESPECTIVE OWNERS.

13. REMOVAL OF SPECIFIED ITEMS, INCLUDING BUT NOT LIMITED TO, PAVEMENT, SIDEWALK, CURB, CURB AND GUTTER, CULVERTS, ETC, SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT HIS OWN EXPENSE. HE IS RESPONSIBLE FOR ANY PERMIT REQUIRED FOR SUCH DISPOSAL.

14. ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM OR SHALL BE RESTORED TO PROPER OPERATING CONDITION. A RECORD OF THE LOCATION OF ALL FIELD TILE OR DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE CONTRACTOR AND TURNED OVER TO THE ENGINEER, DEVELOPER OR MUNICIPAL ENGINEER UPON COMPLETION OF THE PROJECT. THE COST OF THIS WORK SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

15. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFETY ON THE JOB.

16. THE CONTRACTOR SHALL COLLECT AND REMOVE ALL CONSTRUCTION DEBRIS, EXCESS MATERIALS, TRASH, OIL AND GREASE RESIDUE, MACHINERY, TOOLS AND OTHER MISCELLANEOUS ITEMS WHICH WERE NOT PRESENT PRIOR TO PROJECT COMMENCEMENT AT NO ADDITIONAL EXPENSE TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY AND ALL PERMITS NECESSARY FOR THE HAULING AND DISPOSAL REQUIRED FOR CLEAN-UP AS DIRECTED BY THE ENGINEER OR OWNER. BURNING ON THE SITE IS NOT PERMITTED.

17. ALL EXISTING UTILITIES OR IMPROVEMENTS, INCLUDING WALKS, CURBS, PAVEMENT AND PARKWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE PROMPTLY RESTORED TO THEIR RESPECTIVE ORIGINAL CONDITION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNLESS SPECIFICALLY NOTED ON THE PLANS.

18. TREES NOT MARKED FOR REMOVAL SHALL BE CONSIDERED AS DESIGNATED TO BE SAVED AND SHALL BE PROTECTED UNDER THE PROVISIONS OF (SSRBC) ARTICLE 201.05.

19. LIMB PRUNING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE LANDSCAPE ARCHITECT MEETING THE OWNER'S APPROVAL AND SHALL BE UNDERTAKEN IN A TIMELY FASHION SO AS NOT TO INTERFERE WITH CONSTRUCTION.

20. ALL LIMBS, BRANCHES, AND OTHER DEBRIS RESULTING FROM THIS WORK SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT HIS OWN EXPENSE OFF-SITE.

21. ALL CUTS OVER 1" IN DIAMETER SHALL BE MADE FLUSH WITH THE NEXT LARGE BRANCH. WOUNDS OVER 1" IN DIAMETER SHALL BE PAINTED WITH AN APPROVED TREE PAINT.

22. GENERAL EXCAVATION/UNDERGROUND NOTES

A. SLOPE SIDES OF EXCAVATIONS TO COMPLY WITH CODES AND ORDINANCES HAVING JURISDICTION. SHORE AND BRACE WHERE SLOPING IS NOT POSSIBLE EITHER BECAUSE OF SPACE RESTRICTIONS OR STABILITY OF MATERIAL EXCAVATED. MAINTAIN SIDES AND SLOPES OF EXCAVATIONS IN A SAFE CONDITION UNTIL COMPLETION OF BACKFILLING.

B. PROVIDE MATERIALS FOR SHORING AND BRACING, SUCH AS SHEET PILING, UPRIGHTS, STRINGERS AND CROSS BRACES, IN GOOD SERVICEABLE CONDITION. PROVIDE MINIMUM REQUIREMENTS FOR TRENCH SHORING AND BRACING TO COMPLY WITH CODES AND AUTHORITIES HAVING JURISDICTION. MAINTAIN SHORING AND BRACING IN EXCAVATIONS REGARDLESS OF TIME PERIOD EXCAVATIONS WILL BE OPEN. CARRY DOWN SHORING AND BRACING AS EXCAVATION PROGRESSES IN ACCORDANCE WITH OSHA AND GOVERNING AUTHORITY.

C. PREVENT SURFACE WATER AND SUBSURFACE OR GROUNDWATER FROM FLOWING INTO EXCAVATIONS. REMOVE WATER TO PREVENT SOFTENING OF FOUNDATION BOTTOMS, UNDERCUTTING FOOTINGS, AND SOIL CHANGES DETRIMENTAL TO STABILITY OF SUBGRADES AND FOUNDATIONS. PROVIDE AND MAINTAIN PUMPS, SUMPS, SUCTION AND DISCHARGE LINES AND OTHER DEWATERING SYSTEM COMPONENTS NECESSARY TO CONVEY WATER AWAY FROM EXCAVATIONS. CONVEY WATER REMOVED FROM EXCAVATIONS AND RAINWATER TO COLLECTING OR RUN-OFF AREAS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION. PROVIDE AND MAINTAIN TEMPORARY DRAINAGE DITCHES AND OTHER DIVERSIONS OUTSIDE EXCAVATION LIMITS FOR EACH STRUCTURE. DO NOT USE TRENCH EXCAVATIONS AS TEMPORARY DRAINAGE DITCHES.

D. IMMEDIATELY REPORT CONDITIONS THAT MAY CAUSE UNSOUND BEARING TO THE OWNER/DEVELOPER BEFORE CONTINUING WORK.

23. FINAL ACCEPTANCE

A. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE GUARANTEED BY THE CONTRACTOR AND HIS SURETY FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF FINAL ACCEPTANCE OF THE PROJECT AND THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL DEFECTS IN MATERIALS AND WORKMANSHIP OF WHATEVER NATURE DURING THAT PERIOD. THIS GUARANTEE SHALL BE PROVIDED IN THE FORM OF MAINTENANCE BOND IN THE AMOUNT OF 10% OF THE COST OF IMPROVEMENTS.

B. BEFORE ACCEPTANCE BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED BY THE OWNER OR HIS REPRESENTATIVE. FINAL PAYMENT WILL BE MADE AFTER ALL THE CONTRACTOR'S WORK HAS BEEN APPROVED AND ACCEPTED.

C. NO UNDERGROUND WORK SHALL BE COVERED UNTIL IT HAS BEEN APPROVED BY THE MUNICIPALITY. APPROVAL TO PROCEED MUST BE OBTAINED FROM THE MUNICIPALITY PRIOR TO INSTALLING PAVEMENT BASE, BINDER, SURFACE, AND PRIOR TO PLACING ANY CONCRETE AFTER FORMS HAVE BEEN SET.

D. AT THE CLOSE OF EACH WORKING DAY AND AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS.

24. UNDERGROUND NOTES

A. UNDERGROUND WORK SHALL INCLUDE TRENCHING, INSTALLATION OF PIPE, CASTINGS, STRUCTURES, BACKFILLING OF TRENCHES AND COMPACTION AND TESTING AS SHOWN ON THE CONSTRUCTION PLANS. FITTINGS AND ACCESSORIES NECESSARY TO COMPLETE THE WORK MAY NOT BE SPECIFIED, BUT SHALL BE CONSIDERED AS INCIDENTAL TO THE COST OF THE CONTRACT.

B. WHERE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER, EXISTING DRAINAGE STRUCTURES AND SYSTEMS SHALL BE CLEANED OF DEBRIS AND PATCHED AS NECESSARY TO ASSURE INTEGRITY OF THE STRUCTURE. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STRUCTURES AND CONTRACT UNIT PRICE PER LINEAL FOOT FOR SYSTEMS WHICH SHALL BE PAYMENT IN FULL FOR CLEANING, PATCHING, REMOVAL AND DISPOSAL OF DEBRIS AND DIRT. DRAINAGE STRUCTURES AND SYSTEMS CONSTRUCTED AS PART OF THIS PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR AT HIS EXPENSE. NO PAYMENT WILL BE MADE FOR CLEANING STRUCTURES OR SYSTEMS CONSTRUCTED AS PART OF THIS PROJECT.

C. ANY DEWATERING OF SEWER AND WATER TRENCHES AS WELL AS TEMPORARY SHEETING OR BRACING THAT MAY BE REQUIRED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL NOT BE CONSIDERED EXTRA WORK UNLESS THERE IS A SPECIFIC LINE ITEM FOR DEWATERING. IN THE EVENT THAT SOFT MATERIAL WITH UNCONFINED COMPRESSIVE STRENGTH LESS THAN 0.5 TSF ARE ENCOUNTERED IN SEWER CONSTRUCTION, THE CONTRACTOR SHALL (UPON APPROVAL OF THE OWNER AND/OR ENGINEER) OVER-EXCAVATE TO A DEPTH OF ONE (1) FOOT BELOW THE BOTTOM OF THE PIPE AND BACKFILL WITH COMPACTED CRUSHED STONE, PROPERLY FORMED TO FIT THE BOTTOM OF THE PIPE.

D. TRENCH BACKFILL WILL BE REQUIRED FOR THE FULL TRENCH DEPTH WITHIN TWO (2) FEET OF PROPOSED OR EXISTING PAVEMENTS, UTILITIES, DRIVEWAYS, AND SIDEWALKS AND EXTENDING A DISTANCE EQUAL TO A 1:1 SLOPE FROM SUBGRADE ELEVATION TO TOP OF PIPE. THE TRENCH BACKFILL SHALL CONSIST OF GRANULAR MATERIAL MEETING IDOT CA-6 GRADATION. THE TRENCH BACKFILL SHALL BE COMPACTED IN ACCORDANCE WITH (SSRBC) SPECIFICATIONS. JETTING WITH WATER SHALL NOT BE PERMITTED. THE COST OF SUCH CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO THIS CONTRACT AND SHALL BE INCLUDED IN THE UNIT PRICE OF THE PIPE. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS ITEM.

E. THE CONTRACTOR SHALL INSTALL A 4" X 4" X 8' (NOMINAL) POST AT THE TERMINUS OF THE SANITARY, WATER AND STORM SERVICE, SANITARY AND STORM MANHOLES, CATCH BASINS, INLETS AND WATER VAULTS. THE POST SHALL EXTEND 4' ABOVE THE GROUND. THE TOP 12" OF SAID POST SHALL BE PAINTED AS FOLLOWS: SANITARY - RED, WATERMAIN - BLUE, STORM - GREEN.

F. AFTER THE STORM SEWER SYSTEM HAS BEEN CONSTRUCTED, THE CONTRACTOR SHALL PLACE EROSION CONTROL AT REAR YARD INLET LOCATIONS, AND AT OTHER LOCATIONS SELECTED BY THE ENGINEER, TO MINIMIZE THE AMOUNT OF SILTATION WHICH NORMALLY WOULD ENTER THE STORM SEWER SYSTEM.

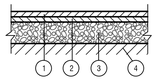
G. HYDRANTS SHALL NOT BE FLUSHED DIRECTLY ON THE ROAD SUBGRADES. WHENEVER POSSIBLE, HOSES SHALL BE USED TO DIRECT THE WATER INTO LOT AREAS OR THE STORM SEWER SYSTEM (IF AVAILABLE). DAMAGE TO THE ROAD SUBGRADE OR LOT GRADING DUE TO EXCESSIVE WATER SATURATION AND/OR EROSION FROM HYDRANT FLUSHING, OR FROM LEAKS IN THE WATER DISTRIBUTION SYSTEM, WILL BE REPAIRED BY THE CONTRACTOR AT HIS COST.

H. ALL TOP OF FRAMES FOR STORM AND SANITARY SEWERS AND VALVE VAULT COVERS ARE TO BE ADJUSTED TO MEET FINAL FINISH GRADE. THIS ADJUSTMENT IS TO BE MADE BY THE SEWER AND WATER CONTRACTOR AND THE COST IS TO BE CONSIDERED INCIDENTAL. THESE ADJUSTMENTS TO FINISHED GRADE WILL NOT ALLEVIATE THE CONTRACTOR FROM ANY ADDITIONAL ADJUSTMENTS AS REQUIRED BY THE MUNICIPALITY UPON FINAL INSPECTION OF THE PROJECT. (FINAL GRADES TO BE DETERMINED BY THE MUNICIPALITY AT THE TIME OF FINAL INSPECTION AND MAY VARY FROM PLAN GRADE.)

I. SLEEVES FOR UTILITY (COMED, TELEPHONE, ETC.) STREET CROSSING, SHALL BE INSTALLED WHERE DIRECTED BY THE OWNER. SLEEVES SHALL BE 6" PVC INSTALLED 36" BELOW THE TOP OF CURB AND EXTEND TWO FEET OUTSIDE THE CURB. TRENCH SHALL BE BACKFILLED WITH COMPACTED GRANULAR MATERIAL.

J. THE CONTRACTOR SHALL VERIFY THE SIZE AND INVERT ELEVATION OF ALL CONNECTIONS TO AVOID ANY CONFLICTS BEFORE STARTING WORK. NOTIFY OWNER OF ANY DISCREPANCIES.

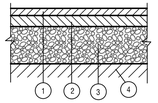
25. IT SHALL BE UNDERSTOOD THAT NEITHER THE MUNICIPALITY, ITS OFFICIALS, CONSULTANTS, NOR ITS EMPLOYEES ARE AGENTS OF OR REPRESENTATIVES OF THE OWNER. NONE-THE-LESS, THE MUNICIPALITY, ITS OFFICIALS AND EMPLOYEES ARE TO BE PROVIDED SAFE ACCESS TO ALL PHASES OF ALL WORK PERFORMED ON THE PROJECT SITE TO MONITOR THE QUALITY OF THE WORK AND ASSURE ITS CONFORMITY WITH THE PLANS AND SPECIFICATIONS. THERE SHALL BE NO PERSONAL LIABILITY UPON ANY OFFICIAL OR EMPLOYEE OF THE MUNICIPALITY ON ACCOUNT OF ACTIONS TAKEN OR NOT TAKEN IN THE COURSE OF THEIR WORK. THE CONTRACTOR MUST AT ALL TIMES MAINTAIN A SAFE ACCESS TO THE WORK FOR INSPECTORS, "SAFE": MEANING CONDITIONS COMPLYING WITH ALL PROVISIONS OF ALL APPLICABLE AND RECOGNIZED SAFETY STANDARDS, FEDERAL, STATE AND LOCAL. IF ACCESS IS NOT SAFE AND INSPECTIONS CANNOT BE MADE UNDER SAFE CONDITIONS, THE INSPECTOR CAN ORDER CESSATION OF THE WORK SO AFFECTED UNTIL SUCH TIME AS CONTRACTOR PROVIDES SAFE ACCESS.



TYPICAL ASPHALT PAVEMENT SECTION
(STANDARD DUTY - PASSENGER VEHICLE PARKING AREAS)
N.T.S.

1. 1.5" HMA SURFACE COURSE, MIX "C", N50
2. 2.25" HMA BINDER COURSE, IL 19.0, N50
3. 10" AGGREGATE BASE COURSE, TYPE B
4. COMPACTED AND STABLE SUBGRADE

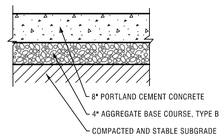
STRUCTURAL #:
1.5 X 0.40 = 0.60
2.25X 0.33 = 0.74
10.0 X 0.13 = 1.30
= 2.64



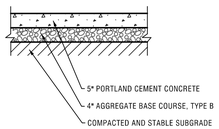
TYPICAL ASPHALT PAVEMENT SECTION
(HEAVY DUTY - TRUCK AREAS)
N.T.S.

1. 2.0" HMA SURFACE COURSE, MIX "C", N50
2. 4" HMA BINDER COURSE, IL 19.0, N50
3. 12" AGGREGATE BASE COURSE, TYPE B
4. COMPACTED AND STABLE SUBGRADE

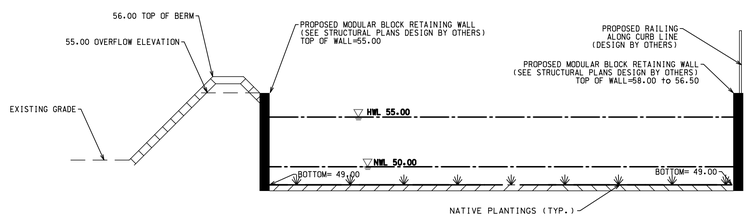
STRUCTURAL #:
2.0 X 0.40 = 0.80
4.0 X 0.33 = 1.32
12 X 0.13 = 1.56
= 3.68



TYPICAL CONCRETE PAVEMENT SECTION
LOADING DOCK
N.T.S.



TYPICAL SIDEWALK/PEDESTRIAN PATH SECTION
N.T.S.



NATIVE PLANTED BASIN
N.T.S.

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	DRAIN TILE	
	STORM SEWER	
	SANITARY SEWER	
	SANITARY TRUNK SEWER	
-W- 8" -	WATER MAIN (WITH SIZE)	8"
	PIPE TRENCH BACKFILL	
-G-	GAS MAIN	
-T-	TELEPHONE LINES	
-E-	ELECTRIC LINE	
-X-	FENCE	
	RIGHT-OF-WAY	
	EASEMENT	
	PROPERTY LINE	
	SETBACK LINE	
	CENTERLINE	
680	CONTOUR	680
	SANITARY MANHOLE	
	STORM MANHOLE	
	CATCH BASIN	
	INLET	
	FIRE HYDRANT	
	PRESSURE CONNECTION	
	PIPE REDUCER	
	VALVE AND VAULT, VALVE	
	FLARED END SECTION	
	STREET LIGHT	
	UTILITY POLE	
	CONTROL POINT	
	SIGN	
XXX.XX	SPOT ELEVATION	XXX.XX
	SOIL BORING	
	OVERLAND FLOW ROUTE	
	DRAINAGE SLOPE	OR
	GUARDRAIL	
	WATER'S EDGE	
	CONCRETE	
	REVERSE PITCH CURB	
	TREE, FIR TREE, BUSH, & PROPOSED TREE TO REMOVE	

ABBREVIATIONS

M = STORM MANHOLE	I = INVERT OR INLET	T/P = TOP OF PIPE
S = SANITARY MANHOLE	TF = TOP OF FOUNDATION	B/P = BOTTOM OF PIPE
CB = CATCH BASIN	GF = GARAGE FLOOR	WM = WATERMAIN
LP = LIGHT POLE	TC = TOP OF CURB	SAN = SANITARY SEWER
VV = VALVE VAULT	TD = TOP OF DEPRESSED CURB	STM = STORM SEWER
E = END SECTION	TW = TOP OF RETAINING WALL	LO = LOOK OUT
FH = FIRE HYDRANT	BW = BOTTOM OF RETAINING WALL	PLO = PARTIAL LOOK OUT
GR = GRADE RING (HYDRANT)	OP = OUTLET OF PIPE	

PERMITS

DESCRIPTION	LOG NO.	PERMIT NO.	DATE ISSUED
IDNR ECOCAT	2202531	2202531	08/13/2021
IDNR SHPO	007030422		
IEPA NPDES			
USACE			
IDOT			
IEPA DWPC (SANITARY)			
IEPA DPWS (WATER)			

BENCHMARK

SEE SHEET ET FOR BENCHMARK INFORMATION.

CONTACT INFORMATION

VILLAGE OF PALATINE
200 EAST WOOD STREET
PALATINE, IL 60067
(847) 358-7500

AT&T
688 INDUSTRIAL DRIVE
ELMHURST, IL 60126
(630) 600-6347

COMMONWEALTH EDISON
201 W. ARTHUR AVE.
MT. PROSPECT, IL 60056
(847) 870-2124

NICOR GAS
1011 WILEY ROAD
SCHAUMBURG, IL 60195
(847) 843-0627

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

TYPICAL SECTIONS & GENERAL NOTES

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 698-4060 Fax: (847) 698-4065

SPACECO INC.

FILENAME: 11624GN
DATE: 03/16/22
JOB NO. 11624
SHEET GN
2 OF 18

Attachment: EXHIBIT - ENG PLANS (2022-60 : 2240-2296 N. Rand Road)

SCALE 1" = 40'

0 40 80

LEGEND

- STORM SEWER
- SANITARY SEWER
- COMBINED SEWER
- WATER MAIN
- GAS MAIN
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND CATV LINE
- OVERHEAD WIRE(S) ON UTILITY POLES
- FIBER OPTIC LINE
- RAILROAD
- FENCE
- GUARDRAIL
- EDGE OF WATER
- WETLAND LIMITS
- SANITARY MANHOLE
- STORM MANHOLE
- CATCH BASIN
- INLET
- FLARED END SECTION
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- TELEPHONE UPRIGHT
- ELECTRIC UPRIGHT
- CABLE TV UPRIGHT
- FIRE HYDRANT
- VALVE AND VAULT
- WATER VALVE
- B BOX
- AUXILIARY VALVE
- WELL
- GAS VALVE
- HAND HOLE
- STREET LIGHT
- UTILITY POLE
- TRAFFIC SIGNAL
- TRAFFIC SIGNAL BOX
- SPRINKLER HEAD
- BOLLARD
- MAILBOX
- SIGN
- UNIDENTIFIED MANHOLE
- CONTOUR
- SPOT ELEVATION
- RIGHT-OF-WAY MONUMENT
- DISC
- IRON / STEEL ROD
- IRON PIPE
- CUT CROSS
- PK / MAG NAIL
- RAILROAD SPIKE
- SOIL BORING
- TREE WITH SIZE
- FIR TREE WITH SIZE
- BUSH
- ASPHALT
- CONCRETE
- GRAVEL
- BRICK PAVERS
- ADA DOME PAD

NOTE:

UNDERGROUND UTILITIES ARE SHOWN BY USING PHYSICAL EVIDENCE FOUND ON THE SURFACE AND/OR FROM UTILITY COMPANY FIELD STAKES AND, THEREFORE, THEIR LOCATIONS ARE APPROXIMATE AND SUSPECTED AND MAY NOT BE COMPLETELY ACCURATE. FOR MORE ACCURATE LOCATION, FIELD EXCAVATE.

PIPE FLOW DIRECTIONS, IF SHOWN, ARE BASED ON FIELD INVERT ELEVATIONS UNLESS EXISTING PLANS INDICATE OTHERWISE, IN WHICH CASE THE EXISTING PLAN FLOW DIRECTION IS SHOWN.

LAST DATE OF FIELD WORK: JANUARY 22, 2022

SOURCE BENCHMARK:
NGS BENCHMARK
DESIGNATION: COOSS 1B
PID: AJ2849
DESCRIPTION: PK NAILS SET IN WOOD PHYSICAL TIES COVERED BY 6" LOGO CAP; LOCATED IN THE SOUTHEAST CORNER OF THE INTERSECTION OF IL ROUTE 68 AND IL ROUTE 53, 29' SOUTH OF THE CENTER LINE OF EASTBOUND ROUTE 68, 180' NORTH NORTHEAST OF A 12" CEMENT CULVERT, 52' EAST OF A PK NAIL IN THE PAVEMENT LOCATED IN NORTHBOUND ROUTE 53, 40.2' NORTHEAST OF A PK NAIL IN A DECIDUOUS TREE, 29' WEST OF THE CONCRETE DITCH, 12' SOUTHEAST OF THE CONCRETE OVERPASS WALL, 11' SOUTH OF THE BACK OF CURB OF ROUTE 68, AND 2' NORTH OF AN ORANGE FIBERGLASS WITNESS POST.
ELEVATION = 738.25 NAVD 88

SITE BENCHMARK #1:
RAIL ROAD SPIKE IN THE SOUTHEAST FACE OF A UTILITY POLE ON THE WEST SIDE OF RAND ROAD AND IN FRONT OF BUILDING #2234.
ELEVATION = 758.43
MEASURED = 758.88 NAVD 88

SITE BENCHMARK #2:
SQUARE CUT INTO THE SOUTHEAST CORNER OF THE CONCRETE BASE OF A LIGHTING CONTROL BOX LOCATED ON THE EAST SIDE OF RAND ROAD AND ACROSS BUILDING #2296.
ELEVATION = 760.24
MEASURED = 760.38 NAVD 88

BOUNDARY PROVIDED BY OTHERS.

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

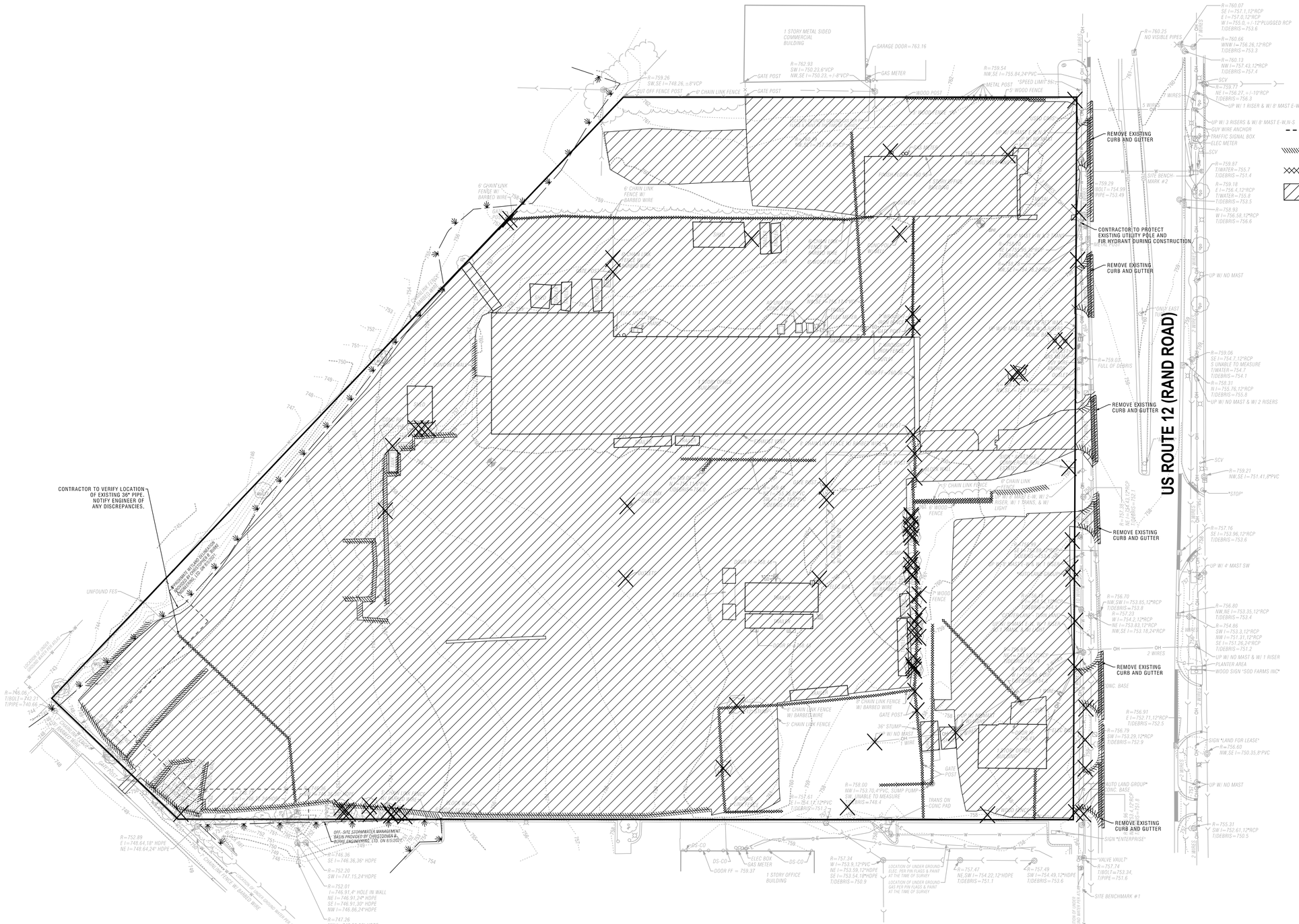
EXISTING CONDITIONS PLAN

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4060 Fax: (847) 696-4065
SPACECO INC.

FILENAME: 11624ET
DATE: 03/16/22
JOB NO. 11624
SHEET ET 3 OF 18

Attachment: EXHIBIT - ENG PLANS (2022-60 : 2240-2296 N. Rand Road)



SCALE 1" = 40'

0 40 80

LEGEND

- PAVEMENT SAWCUT (FULL DEPTH)
- CURB & GUTTER/CONCRETE WALL REMOVAL
- UNDERGROUND UTILITY/FENCE REMOVAL
- BUILDING/PAVEMENT REMOVAL
- SIGN/UTILITY STRUCTURE/TREE REMOVAL

NOTES:

1. ON-SITE TREES IN CONFLICT WITH PROPOSED IMPROVEMENTS SHALL BE REMOVED.
2. ALL EXISTING WET UTILITIES ARE TO BE FIELD VERIFIED AND ASSESSED PRIOR TO DEMOLITION. ENGINEER IS TO BE NOTIFIED OF ANY DISCREPANCIES.
3. THE REMOVAL PLAN IS TO BE USED AS A GUIDE ONLY. CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING DRY UTILITY SERVICES THAT NEED TO REMAIN ACTIVE PRIOR TO COMMENCING CONSTRUCTION. PRIOR TO DEMOLITION THE CONTRACTOR SHALL NOTIFY THE VILLAGE AND UTILITY COMPANIES IN ACCORDANCE WITH THEIR RESPECTIVE NOTIFICATION REQUIREMENTS
4. CONTRACTOR SHALL PROTECT ALL UTILITIES THAT ARE TO REMAIN BY COORDINATING WITH UTILITY PLAN
5. ALL EXISTING BUILDINGS AND ASSOCIATED STRUCTURES, UTILITIES, AND PAVEMENT IS TO BE DEMOLISHED
6. EXISTING RIGHT-OF-WAY DISTURBED BY CONSTRUCTION SHALL BE RESTORED WITH A MINIMUM OF 4" OF TOPSOIL AND SOD.

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

DEMOLITION PLAN

2240-2296 RAND ROAD

PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4060 Fax: (847) 696-4065

SPACECO INC.

FILENAME: 11624DEMO

DATE: 03/16/22

JOB NO. 11624

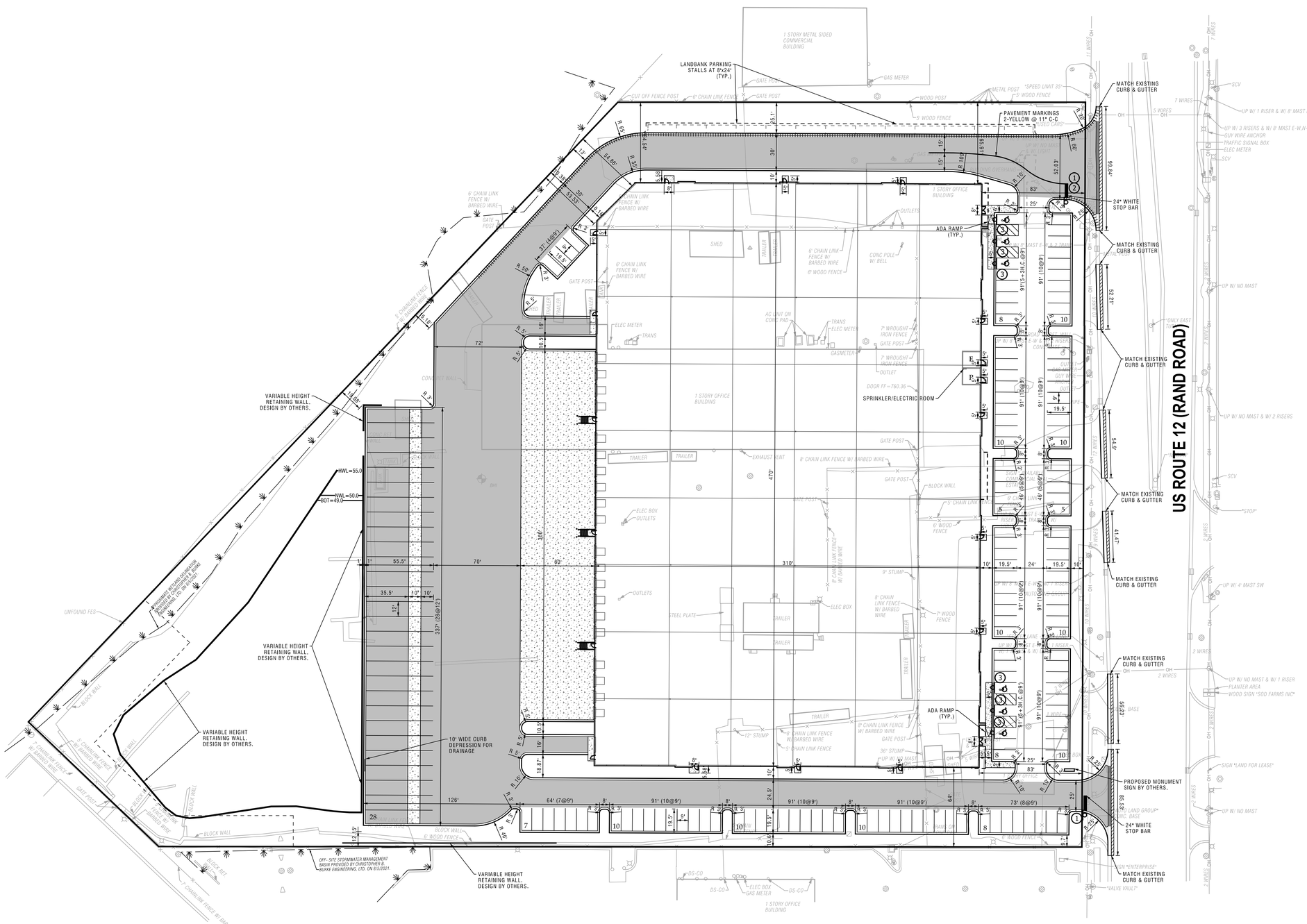
SHEET

DEMO

4 OF 18

Attachment: EXHIBIT - ENG PLANS (2022-60 : 2240-2296 N. Rand Road)

N:\Projects\11624\ENG\11624DEMO.dgn Default User=wbrennan



LEGEND

- STANDARD DUTY PAVEMENT
- HEAVY DUTY PAVEMENT
- CONCRETE PAVEMENT OR APRON
- CONCRETE SIDEWALK
- CONCRETE SIDEWALK HC RAMP (5' WIDE UNLESS NOTED)
- B-6.12 CURB & GUTTER (STANDARD PITCH)
- B-6.12 CURB & GUTTER (REVERSE PITCH)
- DEPRESSED CURB & GUTTER
- MEET EXISTING PAVEMENT ADN REPLACE ADJACENT SURFACE COURSE WITH LIKE MATERIALS (2' WIDE STRIP ADJACENT TO CURB & GUTTER REMOVAL)

NOTES:

1. ALL DIMENSIONS ARE TO THE BACK OF CURB UNLESS OTHERWISE NOTED.
2. ALL CURBS AND GUTTERS ARE REVERSED PITCH UNLESS OTHERWISE NOTED.
3. SEE SHEET GN1 FOR PAVEMENT SECTION DETAILS.
4. ALL PAVEMENT MARKINGS SHALL BE PAINT.
5. ALL ACCESSIBLE PARKING SPACE SIGNAGE SHALL CONFORM TO ILLINOIS ACCESSIBILITY CODE.
6. SEE ARCHITECTURAL DRAWINGS FOR DESIGN AND DETAILS OF THE BUILDINGS
7. BOLLARDS ARE TO BE PLACED AROUND FIRE HYDRANTS LOCATED IN TRUCK DOCKS

SIGN LEGEND:

1. STOP — R1-1, 30" x 30"
2. ONLY — R3-5R, 30" X 36"
3. RESERVED PARKING, $100 FINE, VAN ACCESSIBLE — R7-8

NOTE: 1 2 INDICATES SIGN 1 MOUNTED ABOVE SIGN 2

PARKING SUMMARY:

CAR PARKING STALLS (9' WIDE) = 135 + (6 ADA)
-FUTURE/LANDBANK PARKING STALLS = 13

TRAILER PARKING STALLS (12' WIDE) = 28

SHIPPING/RECEIVING TRUCK DOCKS = 20
DRIVE-IN DOORS = 2

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

GEOMETRIC PLAN

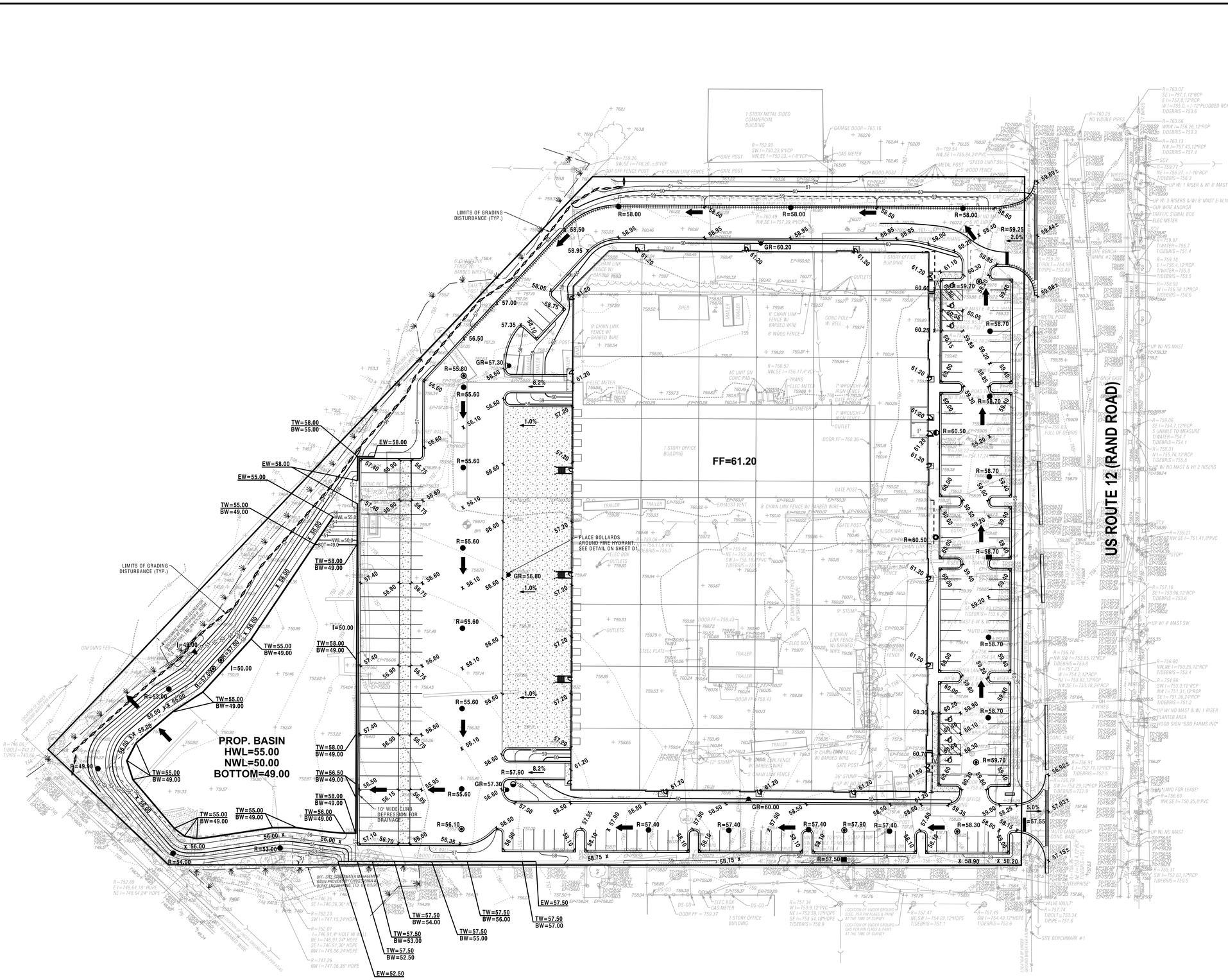
2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4060 Fax: (847) 696-4065
SPACECO INC.

FILENAME: 11624GM
DATE: 03/16/22
JOB NO. 11624
SHEET GM
5 OF 18

N:\Projects\11624\ENG\11624GM.dgn Default User=wbrennan

Attachment: EXHIBIT - ENG PLANS (2022-60 : 2240-2296 N. Rand Road)



NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

GRADING PLAN

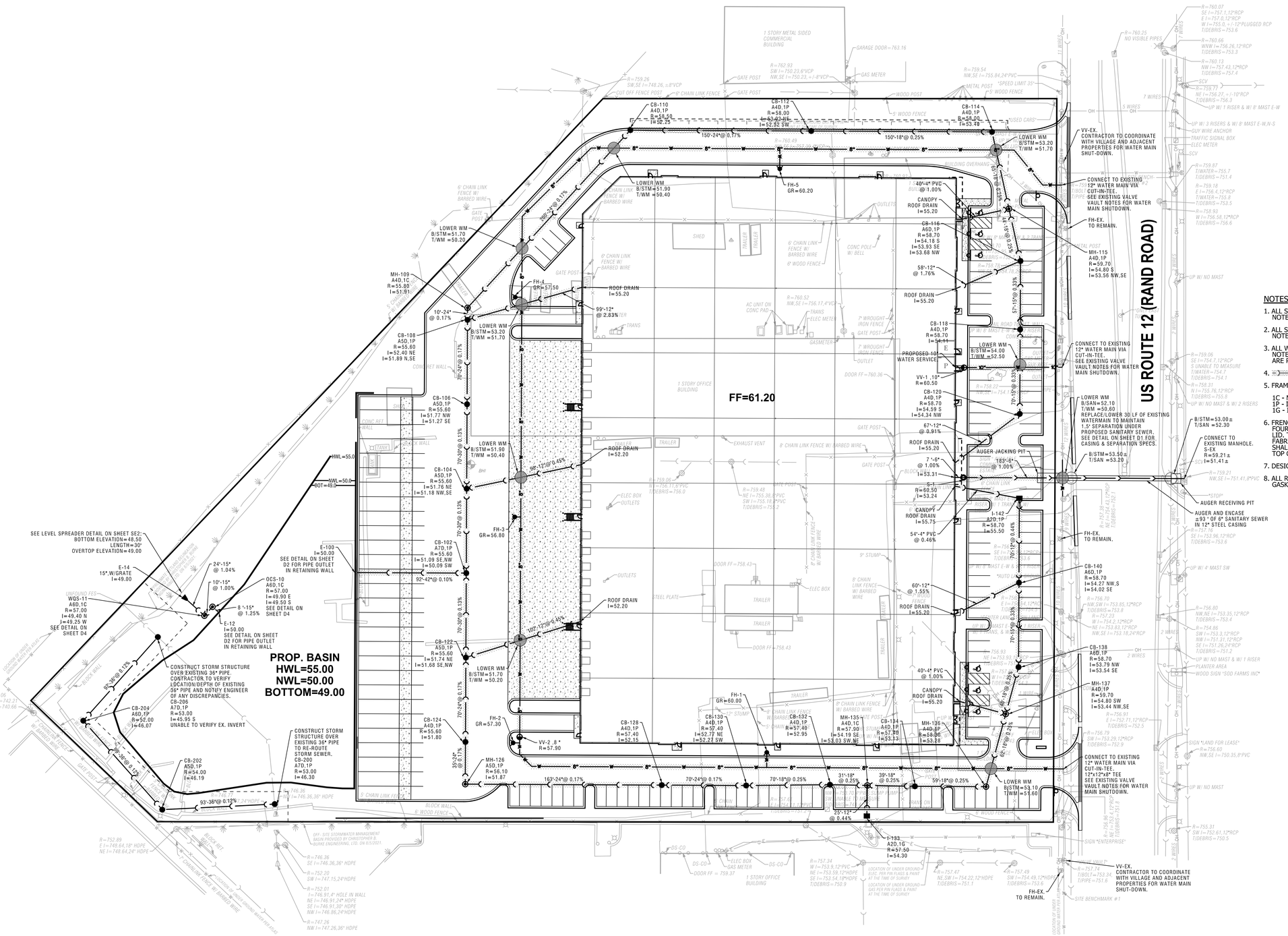
2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4060 Fax: (847) 696-4065
SPACECO INC.

FILENAME: 11624GR
DATE: 03/16/22
JOB NO. 11624
SHEET GR
6 OF 18

Attachment: EXHIBIT - ENG PLANS (2022-60 : 2240-2296 N. Rand Road)

N:\Projects\11624\ENG\11624GR.dgn Default User=wbrennan



STORM STRUCTURE LEGEND

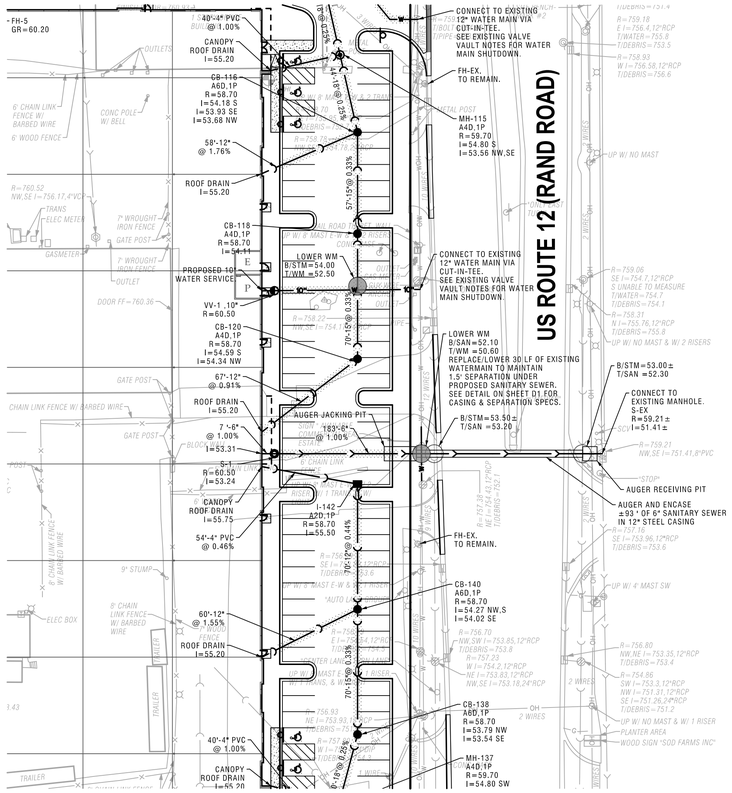
STRUCTURE ABBREVIATION
STRUCTURE NUMBER
M-100
A4D,1P
FRAME AND LID TYPE
DIAMETER & SIZE OF STRUCTURE
TYPE OF STRUCTURE

STORM STRUCTURE ABBREVIATIONS

I = INLET
CB = CATCH BASIN
M = MANHOLE
E = FLARED END SECTION

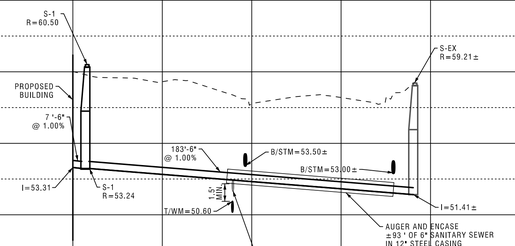
NOTES:

1. ALL STORM SEWERS SHALL BE RCP CL-IV UNLESS NOTED OTHERWISE.
2. ALL SANITARY SEWERS SHALL BE PVC SDR 26 UNLESS NOTED OTHERWISE.
3. ALL WATER MAINS SHALL BE D.I.P.-CLASS 52 UNLESS NOTED OTHERWISE. MEGALUGS AND THRUST BLOCKS ARE REQUIRED FOR ALL WATERMAIN FITTINGS.
4. ⟩⟩⟩



NOTES:

SEE SHEET UT FOR UTILITY INFORMATION.



NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

PLAN AND PROFILE - SANITARY SEWER SERVICE

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4060 Fax: (847) 696-4065
SPACECO INC.

FILENAME: 11624PP01

DATE: 03/16/22

JOB NO. 11624

SHEET
PP01
8 OF 18

N:\Projects\11624\ENG\11624PP01.dgn Default User=wbrennan

Attachment: EXHIBIT - ENG PLANS (2022-60 : 2240-2296 N. Rand Road)

This Soil Erosion & Sediment Control (SESC) Plan has been prepared to fulfill one of the requirements of the National Pollutant Discharge Elimination System (NPDES) General Permit No. ILR10____. The SESC Plan should be maintained on site as an integral component of the Storm Water Pollution Prevention Plan (SWPPP). The SWPPP, including the SESC Plan, should be amended whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the Waters of the State and which has not otherwise been addressed in the SWPPP. The SWPPP, shall also be amanded if it proves to be ineffective in eliminating or significantly minimizing pollutants, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with construction site activity. In addition, the SWPPP shall be amended to identify any new contractor and/or subcontractor that will implement a measure of the SWPPP.

1. SITE DESCRIPTION

A. The following is a description of the nature of the construction activity: Demolition of 3 vacant buildings and the construction of an industrial building with associated grading, utilities, and paving improvements.

B. The following is a description of the intended sequence of construction activities which will disturb soils for major portions of the construction site:

Describe proposed construction sequence, sample follows:

1) Install perimeter sediment control measures
  a) Selective vegetation removal for silt fence installation
  b) Silt fence installation
  c) Construction fencing around areas not to be disturbed
  d) Stabilized construction entrance
2) Clear and grub (as necessary)
3) Construct sediment trapping devices (sediment traps, sediment basins, etc.)
4) Construct detention facilities and outlet control structure with restrictor & temporary perforated riser
5) Strip topsoil, stockpile topsoil and grade site
6) Temporarily stabilize topsoil stockpiles (seed and silt fence around toe of slope)
7) Install storm sewer, sanitary sewer, watermain and associated inlet & outlet protection
8) Permanently stabilize detention basins with seed and erosion control blanket
9) Temporarily stabilize all areas including lots that have reached mass grade
10) Install roadways
11) Permanently stabilize all outlot areas
12) Install buildings and grade individual lots
13) Permanently stabilize lots
14) Remove all temporary soil erosion and sediment control measures after the site is stabilized with vegetation

C. The site has a total acreage of approximately 8.86 acres. Construction activity will disturb approximately 8.71 acres of the site.

D. 1) An estimated runoff coefficient of the site after construction activities are completed is 0.82.
  2) Existing data describing the soil or quality of any discharge from the site is included in the Geotechnical Investigation Report prepared by Pioneer Engineering & Environmental Services, LLC Project No. 21-0282-151 dated August 25, 2021.

E. Refer to Sheets GR & UT for a site plan indicating;
  1) drainage patterns;
  2) approximate slopes anticipated before and after major grading activities;
  3) locations where vehicles enter or exit the site and controls to minimize off-site sediment tracking;
  4) areas of soil disturbance;
  5) the location of major structural and nonstructural controls;
  6) the location of areas where stabilization practices are expected to occur;
  7) surface waters (including wetlands); and,
  8) locations where storm water is discharged to a surface water.

F. 1) The name of the receiving water(s) is(are): Buffalo Creek Tributary .
  2) The name of the ultimate receiving water is: Des Plaines River.
  3) The extent of wetland acreage at the site is 0.15 acres.

G. Potential sources of pollution associated with this construction activity may include:

- sediment from disturbed soils
- portable sanitary stations
- fuel tanks
- staging areas
- waste containers
- chemical storage areas
- oil or other petroleum products
- adhesives
- tar
- solvents
- detergents
- fertilizers
- raw materials (e.g., bagged portland cement)
- construction debris
- landscape waste
- concrete and concrete trucks
- litter

2. CONTROLS

This section of the SESC Plan addresses the various controls that should be Implemented for each of the major construction activities described in the *Site Description* section. For each measure identified in the SWPPP, the contractor(s) or subcontractor(s) that will implement the measure should be identified. All contractors and subcontractors that are identified should be required to sign a copy of the certification statement from Part IV.F. of the ILR10 Permit (in accordance with Part VI.G. - Signatory Requirements, of the ILR10 Permit), All signed certification statements should be maintained in the SWPPP.

A. Approved State or Local Plans

The management practices, controls and other provisions contained in the SWPPP should be at least as protective as the requirements contained in the Illinois Environmental Protection Agency's (IEPA) and the United States Department of Agriculture's Natural Resource Conservation Service Illinois Urban Manual, 2012. Requirements specified in sediment and erosion control site plans or site permits or storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of a Notice of Intent (NOI) to be authorized to discharge under the ILR10 permit, incorporated by reference and are enforceable under the ILR10 permit even if they are not specifically included in a SWPPP required under the ILR10 permit. This provision does not apply to provisions of master plans, comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit that is issued for the construction site.

The soil erosion and sediment control measures for this site should meet the requirements of the following agencies:

- Village of Palatine
- MWRD
- IEPA
- U.S. Army Corps of Engineers

B. Control Implementation Schedule

Best Management Practices will be implemented on an as-needed basis to protect water quality. Perimeter controls of the site should be installed prior to soil disturbance (excluding soil disturbance necessary to install the controls), including demolition activities. Perimeter controls, including the silt fence, should be actively maintained until final stabilization of those portions of the site upward of the perimeter control. Stabilized construction entrance(s) and sediment traps should be installed as described in the intended sequence of construction activities. The contractor is responsible for the adequate protection (including sediment control) of existing sewers and sewer structures during construction operations. As necessary, the appropriate sediment control measure should be installed prior to land disturbing activities.

Stabilization measures should be initiated where construction activities have temporarily or permanently ceased, In accordance with Local and State requirements, as described below. Once construction activity in an area has permanently ceased, that area should be permanently stabilized. Temporary perimeter controls should be removed after final stabilization of those portions of the site upward of the perimeter control.

C. Erosion and Sediment Controls

The appropriate soil erosion and sediment controls should be implemented on site and should be modified to reflect the current phase of construction. All temporary sediment and erosion control measures should be repaired or replaced as soon as practicable to maintain NPDES compliance. Permittee or an authorized agent is responsible for inspecting all sediment and erosion control measures at a minimum of every 7 calendar days and within 24 hours, or one working day, of the end of a 0.5-inch (or greater) rain event.

Unless otherwise indicated, all vegetative and structural erosion and sediment control practices should be installed to the Standard Practice. The contractor is responsible for the installation of any additional erosion and sediment control measures necessary to minimize erosion and sedimentation as determined by the Engineer or Primary Contact.

1) Stabilization Practices - Areas that will not be paved or covered with non-erosive material should be stabilized using procedures in substantial conformance with the Illinois Urban Manual. This SESC Plan includes site-specific soil erosion and sediment control measures. Additional erosion controls should be implemented as necessary, as determined by the Engineer or Primary Contact.

The following temporary and permanent stabilization practices, at a minimum, are proposed:

- permanent seeding
- temporary seeding
- erosion control blanket
- other measures

Site-specific scheduling of the implementation of these practices is included in the Soil Protection Chart.
A record of the dates when major grading activities occur, when construction activities cease on a portion of the site, and when stabilization measures are initiated should be included in the SWPPP.

Stabilization of disturbed areas must be initiated within 1 working day of permanent or temporary cessation of earth activities and shall be completed as soon as possible but not later than 14 days from the initialization of stabilization work in an area. Exceptions to these time frames are specified below.

  a. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.

  b. On areas where construction activity has temporarily ceased and will resume after 14 days, a temporary stabilization method can be used. Temporary stabilization techniques and materials shall conform to the SWPPP.

2) Structural Practices - Provided below is a description of structural practices that should be implemented, to the degree attainable to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Structural practices should be placed on upland soils to the degree practicable. The installation of the following devices may be subject to Section 404 of the Clean Water Act:

- stabilized construction entrance
- silt fence
- sediment traps (provide locations and dimensions in plan set)
- other measures

D. Storm Water Management

Provided below is a description of measures that will be installed during the construction process to control the pollutants in storm water discharges that will occur after the construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

1) The practices selected for implementation were determined on the basis of technical guidance contained in IEPA's Illinois Urban Manual, Federal, State, and/or Local Requirements. The storm water management measures include:

- detention basins (wet basins, dry basins, etc.)
- retention basins
- vegetated swales
- infiltration trenches
- other measures

2) Velocity dissipation devices, such as rip-rap aprons at flared end sections or level spreaders, shall be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a watercourse so that the natural, physical, and biological characteristics and functions are maintained and protected (e.g., maintenance of hydrologic conditions, such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

E. Waste Management

Solid waste materials including trash, construction debris, excess construction materials, machinery, tools and other items will be collected and disposed of off site by the contractor. The contractor is responsible to acquire the permit required for such disposal. Burning on site will not be permitted. No solid materials, including building materials, shall be discharged to Waters of the State, except as authorized by a Section 404 permit. All waste materials should be collected and stored in approved receptacles. No wastes should be placed in any location other than in the approved containers appropriate for the materials being discarded. There should be no liquid wastes deposited into dumpsters or other containers which may leak. Receptacles with deficiencies should be replaced as soon as possible and the appropriate clean-up procedure should take place, if necessary. Construction waste material is not to be buried on site. Waste disposal should comply with all Local, State, and Federal regulations.

On-site hazardous material storage should be minimized and stored in labeled, separate receptacles from non-hazardous waste. All hazardous waste should be disposed of in the manner specified by Local or State regulation or by the manufacturer.

F. Concrete Waste Management

Concrete waste or washout should not be allowed in the street or allowed to reach a storm water drainage system or watercourse. When practicable, a slip should be posted at each location to identify the washout. To the extent practicable, concrete washout areas should be located a reasonable distance from a storm water drainage inlet or watercourse, and should be located at least 10 feet behind the curb, if the washout area is adjacent to a paved road. A stabilized entrance that meets Illinois Urban Manual standards should be installed at each washout area.

The containment facilities should be of sufficient volume to completely contain all liquid and concrete waste materials including enough capacity for anticipated levels of rainwater. The dried concrete waste material should be picked up and disposed of properly when 66% capacity is reached. Hardened concrete can be properly recycled and used again on site (as approved by the Engineer) or hauled off site to an appropriate landfill.

G. Concrete Cutting

Concrete waste management should be implemented to contain and dispose of saw-cutting slurries. Concrete cutting should not take place during or immediately after a rainfall event. Waste generated from

concrete cutting should be cleaned-up and disposed into the concrete washout facility as described above.

H. Vehicle Storage and Maintenance

When not in use, construction vehicles should be stored in a designated area(s) outside of the regulatory floodplain, away from any natural or created watercourse, pond, drainage-way or storm drain. Controls should be installed to minimize the potential of runoff from the storage area(s) from reaching storm drains or water courses. Vehicle maintenance (including both routine maintenance as well as on-site repairs) should be made within a designated area(s) to prevent the migration of mechanical fluids (oil, antifreeze, etc.) into watercourses, wetlands or storm drains. Drip pans or absorbent pads should be used for all vehicle and equipment maintenance activities that involve grease, oil, solvents, or other vehicle fluids. Construction vehicles should be inspected frequently to identify any leaks; leaks should be repaired immediately or the vehicle should be removed from site. Dispose of all used oil, antifreeze, solvents and other vehicle-related chemicals in accordance with United States Environmental Protection Agency (USEPA) and IEPA regulations and per Material Safety Data Sheet (MSDS) and/or manufacturer Instructions. Contractors should immediately report spills to the Primary Contact.

I. Material Storage and Good Housekeeping

Materials and/or contaminants should be stored in a manner that minimizes the potential to discharge into storm drains or watercourses. An on-site area should be designated for material delivery and storage. All materials kept on site should be stored in their original containers with legible labels, and if possible, under a roof or other enclosure. Labels should be replaced if damaged or difficult to read. Bermed-off storage areas are an acceptable control measure to prevent contamination of storm water. MSDS should be available for referencing clean-up procedures. Any release of chemicals/contaminants should be immediately cleaned up and disposed of properly. Contractors should immediately report all spills to the Primary Contact, who should notify the appropriate agencies, if needed.

To reduce the risks associated with hazardous materials on site, hazardous products should be kept in original containers unless they are not re-sealable. The original labels and MSDS should be retained on site at all times. Hazardous materials and all other material on site should be stored in accordance with manufacturer or MSDS specifications. When disposing of hazardous materials, follow manufacturer or Local and State recommended methods.

The following good housekeeping practices should be followed on site during the construction project:

- An effort should be made to store only enough product required to do the job.

- All materials stored on site should be stored in a neat, orderly manner in their appropriate containers and adequately protected from the environment.

- Products should be kept in their original containers with the original manufacturer's label.

- Substances should not be mixed with one another unless recommended by the manufacturer.

- Operations should be observed as necessary to ensure proper use and disposal of materials on site.

- Whenever possible, all of a product should be used up before disposing of the container.

- Manufacturer's recommendations for proper use and disposal should be followed.

J. Management of Portable Sanitary Stations

To the extent practicable, portable sanitary stations should be located in an area that does not drain to any protected natural areas, Waters of the State, or storm water structures and should be anchored to the ground to prevent from tipping over. Portable sanitary stations located on impervious surfaces should be placed on top of a secondary containment device, or be surrounded by a control device (e.g., gravel-bag berm). The contractor should not create or allow unsanitary conditions. Sanitary waste should be disposed of in accordance with applicable State and/or Local regulations.

K. Spill Prevention and Clean-Up Procedures

Manufacturer's recommended methods for spill clean-up should be available and site personnel should be made aware of the procedures and the location of the information and clean-up supplies. Materials and equipment necessary for spill clean-up should be kept in the material storage area on site. Equipment and materials should Include, but are not limited to, brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust and plastic and/or metal trash containers specifically for this purpose. Discharges of a hazardous substance or oil caused by a spill (e.g., a spill of oil into a separate storm sewer or Waters of the State) are not authorized by the ILR10 permit. If a spill occurs, notify the Primary Contact immediately. The construction site should have the capacity to control, contain, and remove spills. If they occur. Spills should be cleaned up immediately (after discovery) in accordance with MSDS and should not be buried on site or washed into storm sewer drainage inlets, drainage-ways, or Waters of the State.

Spills in excess of Federal Reportable Quantities (as established under 40 CFR Parts 110, 117, or 302), should be reported to the National Response Center by calling (800) 424-8802. MSDS often Include Information on Federal Reportable Quantities for materials. Spills of toxic or hazardous materials should be reported to the appropriate State or Local government agency, as required. When cleaning up a spill, the area should be kept well ventilated and appropriate personal protective equipment should be used to minimize Injury from contact with a hazardous substance.

In addition to the good housekeeping and other management practices discussed in the previous sections of these Notes, the following minimum practices should be followed to reduce the risk of spills:

- On-site vehicles should be monitored for leaks and should receive regular preventative maintenance to reduce the chance of leakage.

- Petroleum products should be stored in tightly sealed and clearly labeled containers.

- Contractors should follow the manufacturer's recommendations for proper use, storage, and disposal of materials. Excess materials should be disposed of according to the manufacturer's Instructions or State and Local regulations, and should not be discharged to the storm sewer or waterbody.

L. De-Watering Operations

During de-watering/pumping operations, only uncontaminated water should be allowed to discharge to protected natural areas, Waters of the State, or to a storm sewer system (in accordance with Local permits). Inlet hoses should be placed in a stabilized sump pit or floated at the surface of the water in order to limit the amount of sediment Intake. Pumping operations may be discharged to a stabilized area that consists of an energy dissipating device (e.g., stone), sediment filter bag, or both. Adequate erosion controls should be used during de-watering operations as necessary. Stabilized conveyance channels should be installed to direct water to the desired location as applicable. Additional control measures may be installed at the outlet area at the discretion of the Primary Contact or Engineer.

M. Off-Site Vehicle Tracking

The site should have one or more stabilized construction entrances in conformance with the Plan details. Stabilized construction entrance(s) should be installed to help reduce vehicle tracking of sediments. Streets should be swept as needed to reduce excess sediment, dirt, or stone tracked from the site. Maintenance may include top dressing the stabilized entrance with additional stone and removing top layers of stone and sediment, as needed. Vehicles hauling erodible material to and from the construction site should be covered with a tarp.

N. Topsoil Stockpile Management

If topsoil is to be stockpiled at the site, select a location so that it will not erode, block drainage, or interfere with work on site. Topsoil stockpiles should not be located in the 100-year floodplain or designated buffer protecting Waters of the State. During construction of the project, soil stockpiles should be stabilized or protected with sediment trapping measures. Perimeter controls, such as silt fence, should be placed around the stockpile immediately. Stabilization of the stockpile should be completed if the stockpile is to remain undisturbed for longer than fourteen days.

O. Dust Control

Dust control should be Implemented on site as necessary. Repetitive treatment should be applied as needed to accomplish control when temporary dust control measures are used. A water truck should be present on site (or available) for sprinkling/irrigation to limit the amount of dust leaving the site. Watering should be applied daily (or more frequently) to be effective. Caution should be used not to overwater, as that may cause erosion.

If field observations indicate that additional protection from wind erosion (in addition to, or in place of watering) is necessary, alternative dust suppressant controls should be implemented at the discretion and approval of the Engineer and/or Primary Contact.

Street cleaning should also be used as necessary to control dust. Paved areas that have soil on them from the construction site should be cleaned as needed, utilizing a street sweeper or bucket-type endloader or scraper at the direction of the Engineer and/or Primary Contact.

3. MAINTENANCE

Maintenance of the controls Incorporated into this project should be performed as needed to assure their continued effectiveness. This includes prompt and effective repair and/or replacement of deficient control measures. The following is a description of procedures that should be used to maintain, In good and effective operating condition, erosion and sediment control measures and other protective measures Identified in the SESC Plan and Standard Specifications.

Dust control: When temporary dust control measures are used, repetitive treatment should be applied as needed to accomplish control.

Sediment filter bags: Sediment filter bags should be installed on pump outlet hoses that discharge off site or to sensitive on-site areas, and should be placed in an area that allows for the bag to be removed without producing a sediment discharge. The bags should be inspected frequently and repaired or replaced as needed.

Silt fence: Silt fences should be inspected regularly for undercutting where the fence meets the ground, overtopping, and tears along the length of the fence. Deficiencies should be repaired immediately. Remove accumulated sediments from the fence base when the sediment reaches one-half the fence height. During final stabilization, properly dispose of any sediment that has accumulated on the silt fence. Alternative sediment control measures should be considered for areas where silt fence continually fails.

Stabilized construction entrance: The stabilized construction entrances should be maintained to prevent tracking of sediment onto public streets. Maintenance includes top dressing with additional stone and removing top layers of stone and sediment. The sediment tracked onto the public right-of-way should be removed Immediately.

Temporary sediment traps: Temporary sediment traps should be Inspected after each period of significant rainfall. Remove sediment and restore the trap to its original dimensions when the sediment has accumulated to one-half the design depth of the permanent pool. Place the sediment that is removed in a designated disposal area. Check the structure for damage from erosion or piping. After all sediment-producing areas have been permanently stabilized, remove the structure and all unstable sediment. Grade the area to blend with the adjoining areas and stabilize properly.

4. INSPECTIONS

The Permittee (or their authorized representative) will be responsible for conducting site inspections in compliance with the ILR10 NPDES Permit. After each Inspection, a report should be prepared by the qualified personnel who performed the inspection. The inspection report should be maintained on site as part of the SWPPP.

Inspections should be conducted at least once every seven calendar days and within 24 hours or by the end of the following work day, of the end of a storm event that is 0.5 inches or greater, or equivalent snowfall.

Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly Inspections will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs.

Each inspection should include the following components:

A. Disturbed areas and areas used for the storage of materials that are exposed to precipitation should be inspected for evidence of, or the potential for, pollutants entering the drainage system. The erosion and sediment control measures identified in the SWPPP should be observed to ensure that they have been Installed and are operating correctly. Where discharge points are accessible, they should be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to the receiving waters. Locations where vehicles enter or exit the site should be Inspected for off-site sediment tracking. All pumping operations and other potential non-storm water discharge sources should also be inspected.

B. Based on the results of the Inspection, the description of potential pollutant sources Identified, and the pollution prevention measures described in the SWPPP should be revised, as appropriate, as soon as practicable after the inspection. The modifications, if any, shall provide for timely implementation of any changes to the SWPPP within 7 calendar days following the Inspection.

C. A report summarizing the scope of the Inspection, name(s) and qualifications of personnel making the Inspection, the date(s) of the Inspection, major observations relating to the implementation of the SWPPP, and actions taken in accordance with paragraph B, above should be made and retained as part of the SWPPP for at least three years from the date that permit coverage expires or is terminated. The report shall be signed in accordance with Part VI.G. (Signatory Requirements) of the ILR10 NPDES Permit.

D. The Permittee shall notify the appropriate agency field operations section office by e-mail at: epa.swsoncomp@illinois.gov , telephone or fax within 24 hours of any Incidence of noncompliance for any violation of the storm water pollution prevention plan observed during any Inspection conducted or for violation of any condition of this permit. The Permittee should complete and submit within 5 days an "Incidence of Non-Compliance" (ION) report for any violation of the SWPPP observed during an inspection conducted. Including those not required by the SWPPP. Submission should be on forms provided by IEPA and Include specific Information on the cause of non-compliance, actions which were taken to prevent any further causes of non-compliance, and a statement detailing any environmental Impact, which may have resulted from the non-compliance.

E. All reports of non-compliance shall be signed by a responsible authority as defined in Part VI.G. (Signatory Requirements) of the ILR10 NPDES Permit.

F. After the initial contact has been made within the appropriate agency field operations section office, all reports of non-compliance shall be mailed to IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

5. NON-STORM WATER DISCHARGES

Except for flows from fire fighting activities, possible sources of non-storm water that may be combined with storm water discharges associated with the proposed activity, are described below:

- Fire fighting activities
- Fire hydrant flushings
- Water used to wash vehicles where detergents are not used
- Water used to control dust
- Potable water sources including uncontaminated waterline flushings
- Landscape irrigation drainages
- Routine external building washdown which does not use detergents
- Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed) and where detergents have not been used.
- Uncontaminated air conditioning condensate
- Springs
- Irrigation ditches
- Uncontaminated ground water
- Foundation or footing drains where flows are not contaminated with process materials such as solvents

6. PROHIBITED NON-STORMWATER DISCHARGES

- Concrete and wastewater from washout of concrete (unless managed by an appropriate control)
- Drywall compound
- Wastewater from washout and cleanout of stucco, paint
- Form release oils
- Curing compounds and other construction materials
- Fuels, oils, or other pollutants used in vehicle or equipment operation and maintenance
- Soaps, solvents, or detergents
- Toxic or hazardous substances from a spill or other release
- Any other pollutant that could cause or tend to cause water pollution

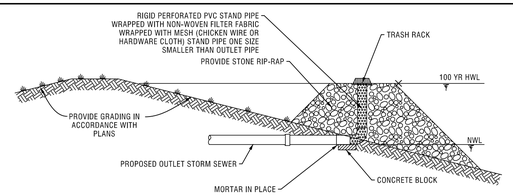
Pollution prevention measures should be implemented for non-storm water components of the discharge.

STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING			A			*	*					
DORMANT SEEDING	B										B	
TEMPORARY SEEDING			C				D					
SODDING			E**									
MULCHING	F											

A KENTUCKY BLUEGRASS 90 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 30 LBS/ACRE.
B KENTUCKY BLUEGRASS 135 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 45 LBS/ACRE + STRAW MULCH 2 TONS/ACRE.
C SPRING OATS 100 LBS/ACRE
D WHEAT OR CEREAL RYE 150 LBS/ACRE.
E SOD
F STRAW MULCH 2 TONS/ACRE.

* IRRIGATION NEEDED DURING JUNE AND JULY.
** IRRIGATION NEEDED FOR 2 TO 3 WEEKS AFTER APPLYING SOD.

SOIL PROTECTION CHART



PLAN CODE: (PR)

PERFORATED RISER DETAIL
NOT TO SCALE

1. THE PERFORATED RISER SHALL BE PROVIDED AS PART OF THE SEDIMENT AND EROSION CONTROL MEASURES DURING CONSTRUCTION AND IN CONJUCTION WITH THE CONSTRUCTION OF THE DETENTION BASIN.
2. WHEN THE DETENTION BASIN AND UPSTREAM TRIBUTARY DRAINAGE AREAS ARE REVEGETATED, AND WHEN DIRECTED BY THE ENGINEER, THE PERFORATED RISER SHALL BE REMOVED AND THE BASIN OUTFALL STRUCTURES SHALL BE CONSTRUCTED AND THE GRADING RESTORED IN ACCORDANCE WITH THE PLANS.

CONTRACTOR CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (ILR10) THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

PROJECT:_____

PERMIT #: ILR10_____

_____ DATE

_____ CONTRACTOR SIGNATURE

_____ TELEPHONE NUMBER

_____ PRINTED NAME & TITLE

_____ NAME OF CONTRACTING FIRM

_____ STREET ADDRESS

_____ CITY, STATE, ZIP CODE

TRADE/ RESPONSIBILITIES:_____

NOTE:
ALL CONTRACTORS PERFORMING WORK ON THIS SITE ARE REQUIRED TO SIGN A CONTRACTOR CERTIFICATION STATEMENT AS ILLUSTRATED ABOVE. THE SIGNED STATEMENTS WILL BE MAINTAINED ON THE SITE WITH THE SWPPP.

OWNER SWPPP CERTIFICATION

PROJECT:_____

PERMIT #: ILR10_____

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED, BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

_____ SIGNATURE OF OWNER

_____ DATE

_____ PRINTED NAME OF OWNER

NOTE:
THE CERTIFICATION ILLUSTRATED ABOVE SHALL BE SIGNED BY THE OWNER LISTED ON THE NOTICE OF INTENT IN ACCORDANCE WITH PART VI.G. OF THE ILR10 NPDES PERMIT. THE SIGNED STATEMENT SHALL BE MAINTAINED ON THE SITE WITH THE SWPPP.

OUTFALL NAME OR NUMBER	INLET PIPE SIZE d (IN)	VELOCITY (F/S)	LENGTH OF APRON L (FT)	RIPRAP GRADATION	WIDTH OF APRON U/S FACE 3d (FT)	WIDTH OF APRON D/S FACE 3d+L (FT)	DEPTH OF RIPRAP Y (IN)

NO.	DATE	REMARKS

NO.	DATE	REVISIONS PER ARCHITECT/OWNER
2	04/11/22	REVISIONS PER ARCHITECT
1	03/22/22	REMARKS

SOIL EROSION AND SEDIMENT CONTROL PLAN

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 698-4060 Fax: (847) 698-4065

SPACECO INC.

FILENAME:

DATE: 03/16/22

JOB NO. 11624

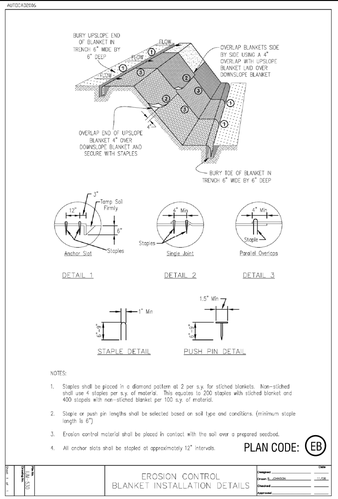
SHEET SE1
9 OF 18

Attachment: EXHIBIT - ENG PLANS (2022-60 : 2240-2296 N. Rand Road)

N:\Projects\11624\ENG\11624SE01.dgn Default User=wbrennan

Attachment: EXHIBIT - ENG PLANS (2022-60 : 2240-2296 N. Rand Road)

AM10CA20596



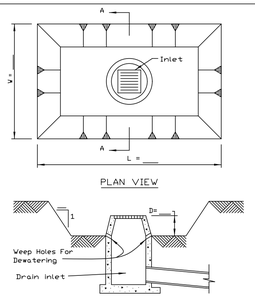
NOTES:

1. Staples shall be placed in a diamond pattern at 2 per s.y. for stitched blankets. Non-stitched shall use 4 staples per s.y. of material. This equates to 200 staples with stitched blanket and 400 staples with non-stitched blanket per 100 s.y. of material.
2. Staple or push pin lengths shall be selected based on soil type and conditions. (minimum staple length is 6")
3. Erosion control material shall be placed in contact with the soil over a prepared seedbed.
4. All anchor slots shall be stapled at approximately 12" intervals.

PLAN CODE: EB

EROSION CONTROL BLANKET INSTALLATION DETAILS

INLET PROTECTION - EXCAVATED DRAIN PLAN



NOTES:

1. Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
2. The sediment trap shall be removed and the area stabilized when the constructed drainage area has been properly stabilized.
3. All cut slopes shall be 2:1 or flatter.

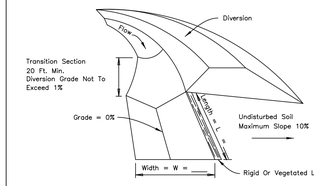
PLAN CODE: IP

REFERENCE Project ____ Designed ____ Date ____ Checked ____ Date ____ Approved ____ Date ____

NRCS Natural Resources Conservation Service

STANDARD DWG. NO. IL-555 SHEET 1 OF 1 DATE 3-11-93

LEVEL SPREADER



NOTES:

1. Ends of spreader shall be tied into higher ground to prevent flow around the level spreader.
2. See plans for L and W dimensions.

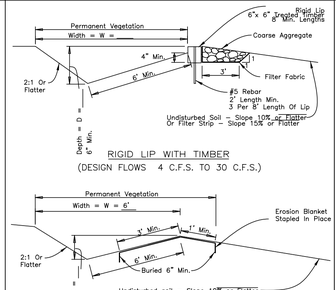
PLAN CODE: LS

REFERENCE Project ____ Designed ____ Date ____ Checked ____ Date ____ Approved ____ Date ____

NRCS Natural Resources Conservation Service

STANDARD DWG. NO. IL-570 SHEET 1 OF 2 DATE 1-29-99

LEVEL SPREADER



NOTES:

1. Coarse aggregate shall meet one of the following IDOT gradations: CA-1, or CA-3.
2. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, type ____, class ____.
3. See sheet entitled STABILIZATIONS IL-535 for filter strip requirements.
4. See sheet entitled EROSION BLANKET IL-530 for blanket material and installation requirements.
5. See plans for permanent seeding requirements.
6. See plans for D and W dimensions.

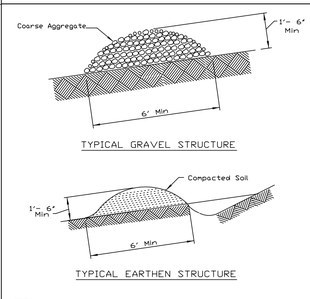
PLAN CODE: LS

REFERENCE Project ____ Designed ____ Date ____ Checked ____ Date ____ Approved ____ Date ____

NRCS Natural Resources Conservation Service

STANDARD DWG. NO. IL-570 SHEET 2 OF 2 DATE 1-29-99

RIGHT OF WAY DIVERSION PLAN



NOTES:

1. Install the diversion as soon as right-of-way has been cleared and graded.
2. Disc the base for the constructed ridge before placing fill.
3. Track the ridge to compact it to the design cross section.
4. Locate the outlet on an undisturbed area. Adjust field spacing of the diversion to use the most stable outlet areas. When natural areas are not deemed satisfactory, provide outlet protection.
5. Immediately seed and mulch the portions of the diversions not subject to construction traffic. Stabilize with gravel areas to be crossed by vehicles.
6. Coarse aggregate, if used, shall meet one of the following IDOT gradations: CA-1,CA-2 CA-3, OR CA-4.

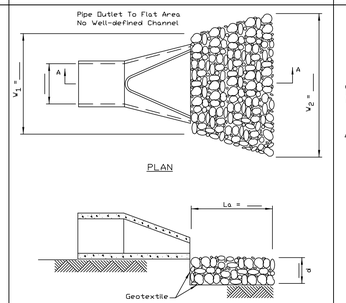
PLAN CODE: RD

REFERENCE Project ____ Designed ____ Date ____ Checked ____ Date ____ Approved ____ Date ____

NRCS Natural Resources Conservation Service

STANDARD DWG. NO. IL-600 SHEET 1 OF 1 DATE 3-3-95

PIPE OUTLET TO FLAT AREA



NOTES:

1. The filter fabric shall meet the requirements in material specifications 592 GEOTEXTILE Table 1 or 2, class I, II or III.
2. The rock riprap shall meet the IDOT requirements for the following gradation: RR ____, Quality ____.
3. The riprap shall be placed according to construction specification 61 LOOSE ROCK RIPRAP. The rock may be equipment placed.

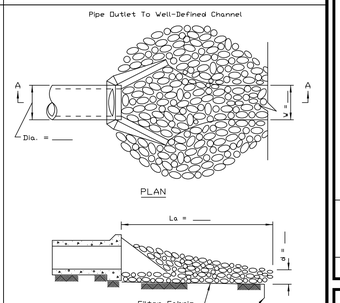
PLAN CODE: LA

REFERENCE Project ____ Designed ____ Date ____ Checked ____ Date ____ Approved ____ Date ____

NRCS Natural Resources Conservation Service

STANDARD DWG. NO. IL-610 SHEET 1 OF 1 DATE 9-15-93

PIPE OUTLET TO CHANNEL



PLAN CODE: LA

NOTES:

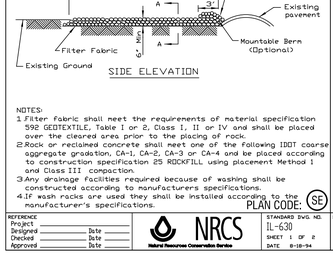
1. The filter fabric shall meet the requirements in material specification 592 GEOTEXTILE Table 1 or 2, Class I, II or III.
2. The rock riprap shall meet the IDOT requirements for the following gradation ____.
3. The riprap shall be placed according to construction specification 61 LOOSE ROCK RIPRAP. The rock may be equipment placed.

REFERENCE Project ____ Designed ____ Date ____ Checked ____ Date ____ Approved ____ Date ____

NRCS Natural Resources Conservation Service

STANDARD DWG. NO. IL-611 SHEET 1 OF 1 DATE 8-28-94

STABILIZED CONSTRUCTION ENTRANCE PLAN



NOTES:

1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table I or 2, Class I, II or IV and shall be placed over the cleared area prior to the placing of rock.
2. Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
3. Any drainage facilities required because of washing shall be constructed according to manufacturers specifications.
4. If wash racks are used they shall be installed according to the manufacturer's specifications.

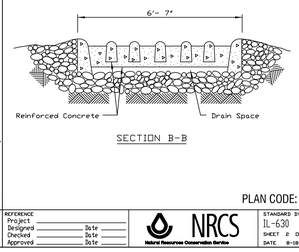
PLAN CODE: SE

REFERENCE Project ____ Designed ____ Date ____ Checked ____ Date ____ Approved ____ Date ____

NRCS Natural Resources Conservation Service

STANDARD DWG. NO. IL-630 SHEET 1 OF 2 DATE 8-18-94

STABILIZED CONSTRUCTION ENTRANCE PLAN



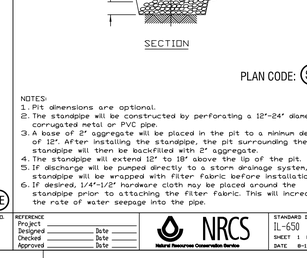
PLAN CODE: SE

REFERENCE Project ____ Designed ____ Date ____ Checked ____ Date ____ Approved ____ Date ____

NRCS Natural Resources Conservation Service

STANDARD DWG. NO. IL-630 SHEET 2 OF 2 DATE 8-18-94

SUMP PIT PLAN



NOTES:

1. Pit dimensions are optional.
2. The standpipe will be constructed by perforating a 12"-24" diameter corrugated metal or PVC pipe.
3. A base of 2" aggregate will be placed in the pit to a minimum depth of 12". After installing the standpipe, the pit surrounding the standpipe will then be backfilled with 2" aggregate.
4. The standpipe will extend 12" to 18" above the lip of the pit.
5. If discharge will be pumped directly to a storm drainage system, the standpipe will be wrapped with Filter Fabric before installation.
6. If desired, 1/4"-1/2" hardware cloth may be placed around the standpipe prior to attaching the Filter Fabric. This will increase the rate of water seepage into the pipe.

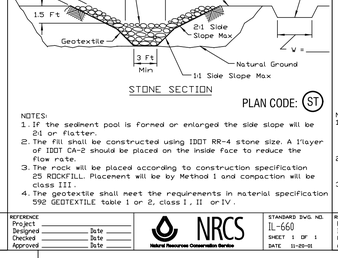
PLAN CODE: SP

REFERENCE Project ____ Designed ____ Date ____ Checked ____ Date ____ Approved ____ Date ____

NRCS Natural Resources Conservation Service

STANDARD DWG. NO. IL-650 SHEET 1 OF 1 DATE 8-18-94

TEMPORARY SEDIMENT TRAP



NOTES:

1. If the sediment pool is formed or enlarged the side slope will be 2:1 or flatter.
2. The fill shall be constructed using IDOT RR-4 stone size. A layer of IDOT CA-2 should be placed on the inside face to reduce the flow rate.
3. The rock will be placed according to construction specification 25 ROCKFILL. Placement will be by Method 1 and compaction will be class III.
4. The geotextile shall meet the requirements in material specification 592 GEOTEXTILE table 1 or 2, class I, II or IV.

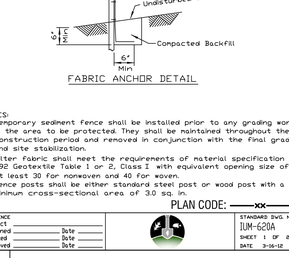
PLAN CODE: ST

REFERENCE Project ____ Designed ____ Date ____ Checked ____ Date ____ Approved ____ Date ____

NRCS Natural Resources Conservation Service

STANDARD DWG. NO. IL-660 SHEET 1 OF 1 DATE 11-05-01

SILT FENCE PLAN SPACECO, INC. PRIMARY DETAIL



NOTES:

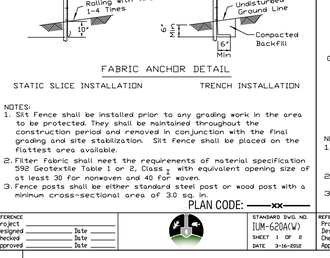
1. Temporary sediment fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
2. Filter fabric shall meet the requirements of material specification 592 Geotextile Table I or 2, Class I with equivalent opening size of at least 30 for nonwoven and 40 for woven.
3. Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 3.0 sq. in.

PLAN CODE: XX

REFERENCE Project ____ Designed ____ Date ____ Checked ____ Date ____ Approved ____ Date ____

STANDARD DWG. NO. IUM-620A SHEET 1 OF 2 DATE 3-16-12

SILT FENCE WITH WIRE SUPPORT PLAN SPACECO, INC. ALTERNATE DETAIL



NOTES:

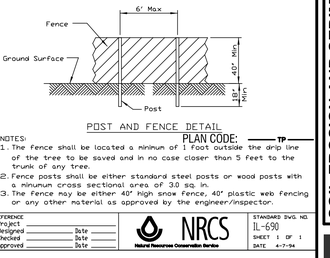
1. Silt Fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization. Silt fence shall be placed on the flattest area available.
2. Filter fabric shall meet the requirements of material specification 592 Geotextile Table I or 2, Class I with equivalent opening size of at least 30 for nonwoven and 40 for woven.
3. Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 3.0 sq. in.

PLAN CODE: XX

REFERENCE Project ____ Designed ____ Date ____ Checked ____ Date ____ Approved ____ Date ____

STANDARD DWG. NO. IUM-620A(W) SHEET 1 OF 2 DATE 3-16-2012

TREE PROTECTION - FENCING



PLAN CODE: TP

NOTES:

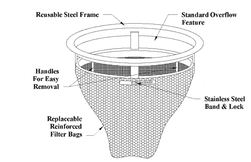
1. The fence shall be located a minimum of 1 Foot outside the drip line of the tree to be saved and in no case closer than 5 feet to the trunk of any tree.
2. Fence posts shall be either standard steel posts or wood posts with a minimum cross sectional area of 3.0 sq. in.
3. The fence may be either 40" high snow fence, 40" plastic web fencing or any other material as approved by the engineer/inspector.

REFERENCE Project ____ Designed ____ Date ____ Checked ____ Date ____ Approved ____ Date ____

NRCS Natural Resources Conservation Service

STANDARD DWG. NO. IL-690 SHEET 1 OF 1 DATE 4-7-94

Catch-All - is a manufactured inlet filtration device designed to significantly reduce the ingress of pollutants into stormwater systems, and therefore, improve water quality. Designs are available for a custom fit in virtually any drainage structure casting.



Catch-All HR is available to provide the added benefit of hydrocarbon removal.

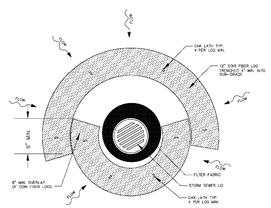
Design Benefits

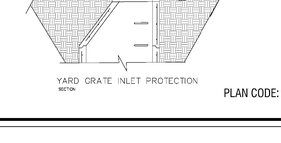
1. Pollution Prevention
   - Sediment Control
2. Pollution Removal
   - Hydrocarbons (Catch-All HR)
   - Total Suspended Sediment
   - Phosphorus*
   - Nitrogen*
   - Heavy Metals*
   - * *By virtue of sediment control*

Applications

1. Site Development & Highway Construction
   - Inlet Protection / Sediment Control
2. Permanent BMP
   - Maintenance Yards
   - Wash Bays
   - Parking Lots & Garages
   - Airports – Tarmac, Cab/Limo Stands, Rental Returns
   - Bank/Fast Food Drive-Ups
   - Reduce Maintenance of Underground Detention Systems
   - Reduce Maintenance of Underground Oil/Water Separators

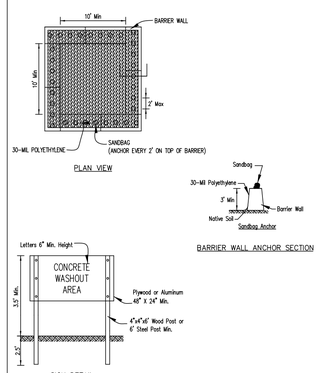
PLAN CODE: FF





PLAN CODE: FF

TEMPORARY CONCRETE WASHOUT FACILITY – BARRIER WALL

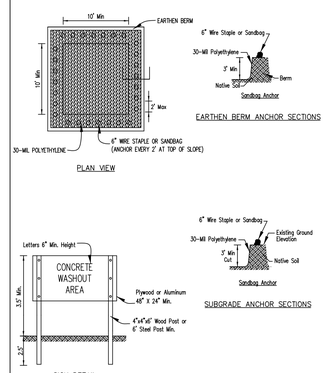


NOTES:

1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and/or slurry and returning the facilities to a functional condition.
2. Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.

PLAN CODE: CW

TEMPORARY CONCRETE WASHOUT FACILITY – EARTHEN TYPE

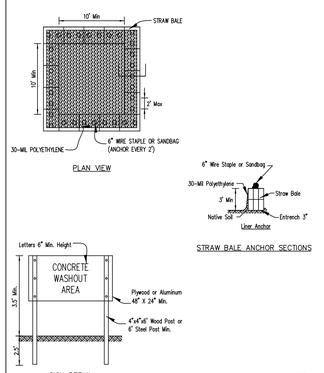


NOTES:

1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and/or slurry and returning the facilities to a functional condition.
2. Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.

PLAN CODE: CW

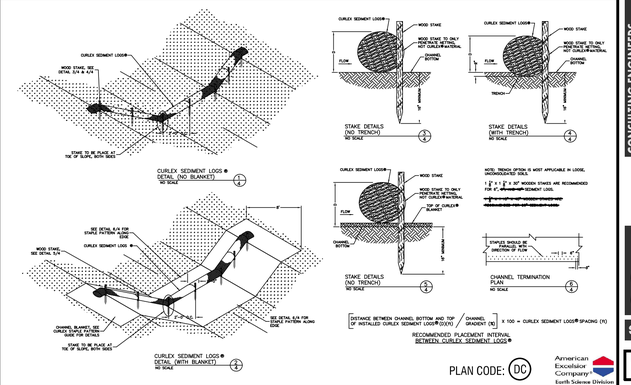
TEMPORARY CONCRETE WASHOUT FACILITY – STRAW BALE



NOTES:

1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and/or slurry and returning the facilities to a functional condition.
2. Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.
3. Each straw bale is to be staked in place using (2) 2"x2"x4' wooden stakes.

PLAN CODE: CW



PLAN CODE: DC

American Excelsior Company
Earth Science Division

DRAWN BY	CHECKED BY	APPROVED BY

AMERICAN EXCELSIOR COMPANY ARLINGTON, TEXAS

CURLEX SEDIMENT LOGS® DITCH/CHANNEL APPLICATION DETAIL

SCALE: NONE | PROJECT NO. | SHEET NO.

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT
NO.	DATE	REMARKS

SOIL EROSION AND SEDIMENT CONTROL PLAN

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4060 Fax: (847) 696-4065

SPACECO INC.

FILENAME: 11624SE2

DATE: 03/16/22

JOB NO. 11624

SHEET SE2

10 OF 18

N:\Projects\11624\ENG\11624SE02.dgn Default User=wbrennan

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

SOIL EROSION AND SEDIMENT CONTROL PLAN

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 698-4060 Fax: (847) 698-4065
SPACECO INC.

FILENAME: 11624SE3

DATE: 03/16/22

JOB NO. 11624

SHEET **SE3**
11 OF 18

N:\Projects\11624\ENG\11624SE03.dgn Default User=wbrennan

Attachment: EXHBIT - ENG PLANS (2022-60 : 2240-2296 N. Rand Road)

EARTHWORK NOTES

1. GENERAL

A. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE SOIL AND GROUNDWATER CONDITIONS AT THE SITE. THE CONTRACTOR SHALL OBTAIN AND READ THE GEOTECHNICAL REPORTS AVAILABLE FROM THE OWNER.

B. ANY QUANTITIES IN THE BID PROPOSAL ARE INTENDED AS A GUIDE FOR THE CONTRACTOR'S USE IN DETERMINING THE SCOPE OF THE COMPLETED PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALL MATERIAL QUANTITIES AND APPRAISE HIMSELF OF ALL SITE CONDITIONS. THE CONTRACT PRICE SUBMITTED BY THE CONTRACTOR SHALL BE CONSIDERED AS LUMP SUM FOR THE COMPLETE PROJECT. NO CLAIMS FOR EXTRA WORK WILL BE RECOGNIZED UNLESS ORDERED IN WRITING BY THE OWNER.

C. THE CONTRACTOR WILL NOTE THAT THE ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS ARE FINISHED GRADE ELEVATIONS AND THAT PAVEMENT THICKNESS, TOPSOIL, ETC. MUST BE SUBTRACTED TO DETERMINE SUBGRADE ELEVATIONS.

D. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION, AND PREVENT STORMWATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS. THE FAILURE TO PROVIDE PROPER DRAINAGE WILL NEGATE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION AND TRAFFIC.

E. PLANS FOR THE SITE DEWATERING, IF EMPLOYED, SHALL BE SUBMITTED TO AND APPROVED BY THE OWNER PRIOR TO IMPLEMENTATION. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR DEWATERING DURING CONSTRUCTION.

F. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE "SOIL EROSION AND SEDIMENTATION CONTROL MEASURES". THE INITIAL ESTABLISHMENT OF EROSION CONTROL PROCEDURES AND THE PLACEMENT OF SILT AND FILTER FENCING, ETC. TO PROTECT ADJACENT PROPERTY, WETLANDS, ETC. SHALL OCCUR BEFORE GRADING BEGINS. A MUNICIPAL EROSION CONTROL INSPECTION MAY BE REQUIRED BEFORE ANY EARTHWORK IS PERFORMED.

G. PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES, THE CONTRACTOR SHALL ERECT A "SNOW FENCE" AROUND ANY TREE DESIGNATED TO BE PRESERVED. SAID FENCE SHALL BE PLACED IN A CIRCLE CENTERED AROUND THE TREE, THE DIAMETER OF WHICH SHALL BE SUCH THAT THE ENTIRE DRIP ZONE (EXTENT OF FURTHEST EXTENDING BRANCHES) SHALL BE WITHIN THE FENCE LIMITS. THE EXISTING GRADE WITHIN THE FENCED AREA SHALL NOT BE DISTURBED.

H. EXCESS MATERIALS, IF NOT UTILIZED AS FILL, SHALL BE COMPLETELY REMOVED FROM THE CONSTRUCTION SITE AND DISPOSED OF OFF-SITE BY THE CONTRACTOR.

I. ALL EARTHWORK SHALL BE DONE UNDER THE SUPERVISION OF AN ILLINOIS LICENSED ENGINEER WHO SPECIALIZES IN THE GEOTECHNICAL FIELD (SOILS ENGINEER). THIS ENGINEER WILL BE RESPONSIBLE FOR ENSURING THAT ALL UNSUITABLE MATERIALS ARE REMOVED, ALL STRUCTURAL FILL MATERIALS ARE PROPERLY PLACED AND COMPACTED, ALL PAVEMENT SUBGRADES ARE PROPERLY PREPARED, PROOF ROLLING SUBGRADES AND BASE COURSES, AND ENSURING THAT ALL WATER RETAINING EMBANKMENTS ARE PROPERLY CONSTRUCTED. THE DEVELOPER PAYS FOR ALL GEOTECHNICAL SERVICES.

2. TOPSOIL EXCAVATION INCLUDES:

A. EXCAVATION OF TOPSOIL AND OTHER STRUCTURALLY UNSUITABLE MATERIALS WITHIN THOSE AREAS THAT WILL REQUIRE EARTH EXCAVATION OR COMPACTED EARTH FILL MATERIAL. EXISTING VEGETATION SHALL BE REMOVED PRIOR TO STRIPPING TOPSOIL OR FILLING AREAS.

B. PLACEMENT OF THE EXCAVATED MATERIAL IN OWNER DESIGNATED AREAS FOR FUTURE USE WITHIN AREAS TO BE LANDSCAPED, AND THOSE AREAS NOT REQUIRING STRUCTURAL FILL MATERIAL. PROVIDE NECESSARY EROSION CONTROL MEASURES FOR STOCKPILE.

C. TOPSOIL STOCKPILED FOR RESPREAD SHALL BE FREE OF CLAY AND SHALL NOT CONTAIN ANY OF THE TRANSITIONAL MATERIAL BETWEEN THE TOPSOIL AND CLAY. THE TRANSITIONAL MATERIAL SHALL BE USED IN NON-STRUCTURAL FILL AREAS OR DISPOSED OF OFF-SITE.

D. TOPSOIL RESPREAD SHALL INCLUDE HAULING AND SPEADING 6" OF TOPSOIL OVER AREAS TO BE LANDSCAPED WHERE SHOWN ON THE PLANS OR DIRECTED BY THE OWNER.

E. MODERATE COMPACTION IS REQUIRED IN NON-STRUCTURAL FILL AREAS.

3. EARTH EXCAVATION INCLUDES:

A. EXCAVATION OF CLAY AND OTHER MATERIALS WHICH ARE SUITABLE FOR USE AS STRUCTURAL FILL. THE EXCAVATION SHALL BE TO WITHIN A TOLERANCE OF 0.1 FEET OF THE PLAN SUBGRADE ELEVATIONS WHILE MAINTAINING PROPER DRAINAGE. THE TOLERANCE WITHIN PAVEMENT AREAS SHALL BE SUCH THAT THE EARTH MATERIALS SHALL "BALANCE" DURING THE FINE GRADING OPERATION.

B. PLACEMENT OF THE CLAY AND OTHER SUITABLE MATERIALS SHALL BE WITHIN THOSE AREAS REQUIRING STRUCTURAL FILL IN ORDER TO ACHIEVE THE PLAN SUBGRADE ELEVATIONS TO WITHIN A TOLERANCE OF 0.1 FEET. THE FILL MATERIAL SHALL BE PLACED IN LOOSE LIFTS THAT SHALL NOT EXCEED EIGHT (8) INCHES IN THICKNESS, AND THE WATER CONTENT SHALL BE ADJUSTED IN ORDER TO ACHIEVE REQUIRED COMPACTION.

STRUCTURAL FILL MATERIAL MAY BE PLACED WITHIN THOSE PORTIONS OF THE SITE NOT REQUIRING STRUCTURAL FILL, TO WITHIN SIX (6) INCHES OF THE PLAN FINISHED GRADE ELEVATION. IN AREAS REQUIRING STRUCTURAL FILL, HOWEVER, THIS MATERIAL SHALL NOT BE PLACED OVER TOPSOIL OR OTHER UNSUITABLE MATERIALS UNLESS SPECIFICALLY DIRECTED BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.

C. COMPACTION OF THE CLAY AND OTHER SUITABLE MATERIALS, SHALL BE TO AT LEAST 93% OF THE MODIFIED PROCTOR DRY DENSITY WITHIN PROPOSED PAVEMENT AREAS, SIDEWALK, ETC. COMPACTION SHALL BE AT LEAST 95% OF THE MODIFIED PROCTOR WITHIN PROPOSED BUILDING PAD AREAS.

D. EXCAVATION: QUANTITIES OF EARTH EXCAVATION INDICATED ELSEWHERE IN THIS CONTRACT HAVE BEEN COMPUTED BY THE END AREA METHOD AS PROVIDED FOR IN SECTION 202 OF THE STANDARD SPECIFICATIONS. EXCAVATED MATERIALS NOT NEEDED FOR THIS JOB SITE SHALL BE LEGALLY DISPOSED OF. PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE PER CUBIC YARD OF EARTH EXCAVATION.

4. UNSUITABLE MATERIAL

UNSUITABLE MATERIAL SHALL BE CONSIDERED AS MATERIAL WHICH IS NOT SUITABLE FOR THE SUPPORT OF PAVEMENT AND BUILDING CONSTRUCTION, AND IS ENCOUNTERED BELOW NORMAL TOPSOIL DEPTHS AND THE PROPOSED SUBGRADE ELEVATION. THE DECISION TO REMOVE SAID MATERIAL, AND TO WHAT EXTENT, SHALL BE MADE BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.

5. MISCELLANEOUS THE CONTRACTOR SHALL:

A. SPREAD AND COMPACT UNIFORMLY TO THE DEGREE SPECIFIED ALL EXCESS TRENCH SPOIL AFTER COMPLETION OF THE UNDERGROUND IMPROVEMENTS.

B. SCARIFY, DISC, AERATE, AND COMPACT, TO THE DEGREE SPECIFIED, THE UPPER TWELVE (12) INCHES OF THE SUITABLE SUBGRADE MATERIAL, IN ALL AREAS THAT MAY BE SOFT DUE TO EXCESS MOISTURE CONTENT. THIS APPLIES TO CUT AREAS AS WELL AS FILL AREAS.

C. PROVIDE WATER TO ADD TO DRY MATERIAL IN ORDER TO ADJUST THE MOISTURE CONTENT FOR THE PURPOSE OF ACHIEVING THE SPECIFIED COMPACTION.

D. BACKFILL THE CURB AND GUTTER AFTER ITS CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE MATERIAL. THE CURBS SHALL NOT BE BACKFILLED UNTIL THE CONCRETE HAS CURED FOR AT LEAST 7 DAYS.

E. TRENCH COMPACTION: ALL TRENCHES SHALL BE COMPACTED BY MECHANICAL TECHNIQUES APPROVED BY THE SOILS ENGINEER UNTIL PROPER COMPACTION IS ACHIEVED. THE REQUIREMENT FOR MECHANICAL COMPACTION MAY BE WAIVED IF, IN THE OPINION OF THE SOILS ENGINEER AND THE MUNICIPAL ENGINEER, THE BACKFILLED TRENCHES MEET THE DENSITY REQUIREMENTS. JETTING OF TRENCHES FOR COMPACTION WILL NOT BE ALLOWED.

6. TESTING AND FINAL ACCEPTANCE

A. THE CONTRACTOR SHALL PROVIDE AS A MINIMUM, A FULLY LOADED SIX-WHEEL TANDEM AXLE TRUCK FOR PROOF ROLLING THE PAVEMENT SUBGRADE PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND THE BASE MATERIAL. THIS SHALL BE WITNESSED BY MUNICIPAL ENGINEER AND THE OWNER. SEE PAVING SPECIFICATION.

B. ANY UNSUITABLE AREA ENCOUNTERED AS A RESULT OF PROOF ROLLING SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL, OR OTHERWISE CORRECTED, APPROVED BY THE SOILS CONSULTANT.

C. ANY TESTING THAT IS REQUIRED OF THIS CONSTRUCTION IS CONSIDERED INCIDENTAL TO THE COST OF CONSTRUCTION. NO SEPARATE PAYMENT WILL BE MADE.

SIGNING AND PAVEMENT MARKING

1. ALL SIGNING AND PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (SSRBC), MUNICIPAL CODE AND THESE PLANS.

2. CONTRACTOR SHALL ESTABLISH LOCATION OF ALL SIGNS AND MARKINGS FOR APPROVAL BY THE OWNER PRIOR TO INSTALLATION.

3. SIGNS: SIGNS SHALL BE CONSTRUCTED OF 0.080 INCH THICK FLAT ALUMINUM PANELS WITH REFLECTORIZED LEGEND ON THE FACE IN ACCORDANCE WITH (SSRBC) SECTION 720. LEGEND SHALL BE IN ACCORDANCE WITH MUTCD AND AS SHOWN ON THE PLANS.

4. POSTS: SIGN POSTS SHALL BE A HEAVY DUTY STEEL "U" SHAPED CHANNEL WEIGHING 3.0 POUNDS/FOOT SUCH AS A TYPE B METAL POST PER (SSRBC) SECTION 729 (OR: 2" PERFORATED STEEL TUBE PER (SSRBC) SECTION 728).

5. SIGNS AND POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE ABOVE (SSRBC) SECTIONS AND IDOT STANDARD 729001 EXCEPT AS MODIFIED BY THE PLANS.

6. PAVEMENT MARKINGS: ALL PAVEMENT MARKINGS IN THE ROADWAY LIMITS, SUCH AS STOP LINES, CENTERLINES, CROSSWALKS AND DIRECTIONAL ARROWS SHALL BE REFLECTORIZED THERMOPLASTIC PER (SSRBC) SECTION 780, EXCEPT AS MODIFIED BY THE PLANS. (NOTE TO ENGINEER: IDOT PREFERS REFLECTORIZED PAINT ON CONCRETE PAVEMENT - CHECK WITH AGENCY WHO WILL MAINTAIN ROAD.)

7. PAVEMENT MARKINGS ON BIKE PATHS, PARKING LOT STALLS, AND SIMILAR "LOW WEAR" APPLICATION, SHALL BE PAINT IN ACCORDANCE TO (SSRBC) SECTION 780, EXCEPT AS MODIFIED BY THE PLANS. REFLECTIVE BEADS ARE NOT REQUIRED.

8. COLOR, WIDTH, STYLE, AND SIZE OF ALL MARKINGS SHALL BE IN ACCORDANCE WITH (MUTCD) EXCEPT AS MODIFIED BY THE PLANS.

9. THERMOPLASTIC MARKINGS SHALL BE INSTALLED WHEN THE PAVEMENT TEMPERATURE IS 55° F AND RISING. PAINT MARKINGS MAY BE INSTALLED WHEN THE AIR TEMPERATURE IS 50° F AND RISING.

PAVING NOTES

1. GENERAL

A. PAVING WORK INCLUDES FINAL SUBGRADE SHAPING, PREPARATION AND COMPACTION; PLACEMENT OF SUB-BASE OR BASE COURSE MATERIALS; BITUMINOUS BINDER AND/OR SURFACE COURSES; FORMING, FINISHING AND CURING CONCRETE PAVEMENT, CURBS AND WALKS; AND FINAL CLEAN-UP AND ALL RELATED WORK.

B. COMPACTION REQUIREMENTS: [REFERENCE ASTM D-1557 (MODIFIED PROCTOR)] SUB-GRADE = 93%; SUB-BASE = 93%; AGGREGATE BASE COURSE = 95%; BITUMINOUS COURSES = REFER TO SSRBC ARTICLE 406.07. THE SOILS ENGINEER IS RESPONSIBLE FOR ENSURING THAT MATERIALS ARE PROPERLY PLACED AND COMPACTED.

C. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE PROPER BARRICADING, WARNING DEVICES AND THE SAFE MANAGEMENT OF TRAFFIC WITHIN THE AREA OF CONSTRUCTION. ALL SUCH DEVICES AND THEIR INSTALLATION SHALL CONFORM TO THE ILLINOIS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION AND IN ACCORDANCE WITH THE MUNICIPAL CODE.

2. SUB-GRADE PREPARATION

A. EARTHWORK FOR PROPOSED PAVEMENT SUBGRADE SHALL BE FINISHED TO WITHIN 0.1 FOOT, PLUS OR MINUS, OF PLAN ELEVATION. THE CONTRACTOR SHALL SATISFY HIMSELF THAT THE SUBGRADE HAS BEEN PROPERLY PREPARED AND THAT THE FINISH TOP SUBGRADE ELEVATION HAS BEEN GRADED WITHIN TOLERANCES ALLOWED IN THESE SPECIFICATIONS. UNLESS THE CONTRACTOR ADVISES THE OWNER AND ENGINEER IN WRITING PRIOR TO FINE GRADING FOR BASE COURSE CONSTRUCTION, IT IS UNDERSTOOD THAT HE HAS APPROVED AND ACCEPTS THE RESPONSIBILITY FOR THE SUBGRADE.

B. PRIOR TO THE PLACEMENT OF THE BASE COURSE, THE SUBGRADE MUST BE PROOF ROLLED AND INSPECTED FOR UNSUITABLE MATERIALS AND/OR EXCESSIVE MOVEMENT. THE SOILS ENGINEER SHALL CONDUCT AND THE VILLAGE SHALL WITNESS ALL PROOF ROLLS. IF UNSUITABLE SUBGRADE IS ENCOUNTERED, IT SHALL BE CORRECTED IN A MANNER APPROVED BY THE OWNER OR HIS REPRESENTATIVE. THIS MAY INCLUDE ONE OR MORE OF THE FOLLOWING METHODS:
1) SCARIFY DISC AND AERATE.
2) REMOVE AND REPLACE WITH STRUCTURAL CLAY FILL.
3) REMOVE AND REPLACE WITH GRANULAR MATERIAL.
4) USE OF GEOTEXTILE FABRIC.

MAXIMUM DEFLECTION ALLOWED IN ISOLATED AREAS MAY BE 1/4" TO 1/2" IF NO DEFLECTION OCCURS OVER THE MAJORITY OF THE AREA.

C. PRIOR TO THE CONSTRUCTION OF THE CURB AND GUTTER AND THE PLACEMENT OF THE BASE MATERIAL, THE PAVEMENT AREA SHALL BE FINE GRADED TO WITHIN 0.04 FEET (1/2") OF FINAL SUBGRADE ELEVATION, TO A POINT TWO (2) FEET BEYOND THE BACK OF CURB, SO AS TO ENSURE THE PROPER THICKNESS OF PAVEMENT COURSES. NO CLAIMS FOR EXCESS QUANTITY OF BASE MATERIALS DUE TO IMPROPER SUBGRADE PREPARATION WILL BE HONORED.

D. PRIOR TO PLACEMENT OF THE BASE COURSE, ALL SUBGRADES MUST BE APPROVED BY THE MUNICIPAL ENGINEER, SOILS ENGINEER AND/OR OWNER.

3. CONCRETE WORK

A. ALL EXTERIOR CONCRETE SHALL BE PORTLAND CEMENT CONCRETE CLASS SI OR PV PER (SSRBC) SECTION 1020.04 WITH AIR ENTRAINMENT OF NOT LESS THAN FIVE (5%) OR MORE THAN EIGHT (8%) PERCENT. CONCRETE SHALL BE A MINIMUM OF SIX (6) BAG MIX AND SHALL DEVELOP A MINIMUM OF 3,500 PSI COMPRESSIVE STRENGTH AT FOURTEEN (14) DAYS. ALL CONCRETE SHALL BE BROOM FINISHED PERPENDICULAR TO THE DIRECTION OF TRAVEL. THE ADDITION OF CALCIUM CHLORIDE AND THE SUBSTITUTION OF FLY ASH FOR PORTLAND CEMENT IS PROHIBITED. 1.50 lbs OF COLLATED, FILLIBRATED, POLYPROPYLENE OLEFIN FIBERS 0.50 TO 0.75 INCHES IN LENGTH SHALL BE ADDED TO EACH CUBIC YARD OF CONCRETE USED FOR SIDEWALKS. THE FIBERS SHALL BE AS MANUFACTURED UNDER THE NAME "FIBERMESH" OR EQUAL.

B. CONCRETE CURB AND/OR COMBINATION CURB AND GUTTER SHALL BE OF THE TYPE SHOWN ON THE PLANS. THE CONTRACTOR IS CAUTIONED TO REFER TO THE CONSTRUCTION STANDARDS AND THE PAVEMENT CROSS-SECTION TO DETERMINE THE GUTTER FLAG THICKNESS AND THE AGGREGATE BASE COURSE THICKNESS BENEATH THE CURB AND GUTTER. PREMOLDED FIBER EXPANSION JOINTS, WITH TWO 3/4" X 16" EPOXY COATED STEEL DOWEL BARS, SHALL BE INSTALLED AT SIXTY (60) FOOT INTERVALS AND AT ALL PC'S, PT'S AND CURB RETURNS. ALTERNATE ENDS OF THE DOWEL BARS SHALL BE GREASED AND FITTED WITH METAL EXPANSION TUBES. SAWED OR FORMED CONTRACTION JOINTS SHALL BE PROVIDED AT NO GREATER THAN FIFTEEN (15) FOOT INTERVALS BETWEEN EXPANSION JOINTS. NO HONEY-COMBING OF THE CURB AND GUTTER WILL BE ACCEPTED.

C. CURBS SHALL BE DEPRESSED AT LOCATIONS WHERE PUBLIC WALKS/PEDESTRIAN PATHS INTERSECT CURB LINES, AND OTHER LOCATIONS AS DIRECTED, FOR THE PURPOSE OF PROVIDING ACCESSIBILITY. (SEE CONSTRUCTION STANDARDS FOR DETAIL). BARRIER CURB SHALL ALSO BE DEPRESSED AT DRIVEWAY LOCATIONS.

D. THE CURBS SHALL BE BACKFILLED AFTER THEIR CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE. THE CONCRETE MUST CURE FOR AT LEAST SEVEN DAYS BEFORE THE CURBS ARE BACKFILLED.

E. CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS. PROVIDE SCORED JOINTS AT 5 FOOT INTERVALS AND 1/2 " PREMOLDED FIBER EXPANSION JOINTS AT 50 FOOT INTERVALS, AND ADJACENT TO CONCRETE CURBS, DRIVEWAYS, FOUNDATIONS, ETC.

F. CONCRETE DRIVEWAY APRONS SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS, PROVIDE 6" X 6" NO. 6 WELDED WIRE MESH IN DRIVEWAYS, PROVIDE 1/2 " PREMOLDED FIBER EXPANSION JOINT ADJACENT TO CURBS AND CONCRETE SIDEWALKS. PROVIDE SAWED OR FORMED CONTRACTION JOINT AT MID-POINT AND 15 FOOT MAXIMUM.

G. STANDARD REINFORCED CONCRETE PAVEMENT SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS. SAWED OR FORMED CONTRACTION EXPANSION JOINTS SHALL BE AS SHOWN ON THE PLANS.

H. CONCRETE CURING AND PROTECTION SHALL BE IN ACCORDANCE WITH (SSRBC) - METHOD I, II, OR III.

I. THE COST OF AGGREGATE BASE OR SUB-BASE UNDER CONCRETE WORK SHALL BE INCLUDED IN THE COST OF THE RESPECTIVE CONCRETE ITEM.

4. FLEXIBLE PAVEMENT

A. THE PAVEMENT MATERIALS FOR BITUMINOUS STREETS, PARKING LOTS, DRIVEWAYS, SIDEWALKS AND PATHS SHALL BE AS DETAILED ON THE PLANS. UNLESS OTHERWISE SHOWN ON THE PLANS, THE FLEXIBLE PAVEMENTS SHALL CONSIST OF AGGREGATE BASE COURSE, TYPE B; BITUMINOUS CONCRETE BINDER COURSE; AND BITUMINOUS CONCRETE SURFACE COURSE; OF THE THICKNESS AND MATERIALS SPECIFIED ON THE PLANS. THICKNESSES SPECIFIED SHALL BE CONSIDERED TO BE THE MINIMUM COMPACTED THICKNESS. THE PAVING IS TO BE DONE IN ACCORD WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS.

B. ALL TRAFFIC SHALL BE KEPT OFF THE COMPLETED AGGREGATE BASE UNTIL THE BINDER COURSE IS LAID. THE AGGREGATE BASE SHALL BE UNIFORMLY PRIME COATED AT A RATE OF 0.4 TO 0.5 GALLONS PER SQUARE YARD PRIOR TO PLACING THE BINDER COURSE. PRIME COAT MATERIALS SHALL BE BITUMINOUS M.C. - 30.

C. PRIOR TO PLACEMENT OF THE SURFACE COURSE, THE BINDER COURSE SHALL BE CLEANED, AND TACK COATED IF DUSTY OR DIRTY. ALL DAMAGED AREAS IN THE BINDER, BASE OR CURB SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER PRIOR TO LAYING THE SURFACE COURSE. THE CONTRACTOR SHALL PROVIDE WHATEVER EQUIPMENT AND MANPOWER NECESSARY, INCLUDING THE USE OF POWER BROOMS IF REQUIRED BY THE OWNER, TO PREPARE THE PAVEMENT FOR APPLICATION OF THE SURFACE COURSE. THE TACK COAT SHALL BE UNIFORMLY APPLIED TO THE BINDER COURSE AT A RATE OF 0.05 TO 0.10 GALLONS PER SQUARE YARD. TACK COAT SHALL BE AS SPECIFIED IN (SSRBC) SECTION 406.02.

D. SEAMS IN BASE, BINDER AND SURFACE COURSE SHALL BE STAGGERED A MINIMUM OF 6".

E. FOR NEW STREETS, THE CONTRACTOR SHALL PERMIT THE BITUMINOUS CONCRETE BINDER COURSE TO WEATHER ONE (1) WINTER SEASON PRIOR TO THE INSTALLATION OF THE BITUMINOUS CONCRETE SURFACE COURSE UNLESS OTHERWISE SPECIFIED BY THE MUNICIPAL ENGINEER OR OWNER.

5. TESTING AND FINAL ACCEPTANCE

A. THE CONTRACTOR SHALL FOLLOW THE QUALITY CONTROL TESTING PROGRAM FOR CONCRETE AND PAVEMENT MATERIALS ESTABLISHED BY THE OWNER AND/OR MUNICIPALITY. TESTING SHALL BE DONE IN ACCORD WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS AND THE TESTING REQUIREMENTS OF THE MUNICIPALITY.

B. WHEN REQUESTED BY THE OWNER, TEST RESULTS AND DOCUMENTATION FOR THE CONCRETE, BASE COURSE, BITUMINOUS CONCRETE BINDER, AND/OR SURFACE COURSE, SHALL BE SUBMITTED FOR VERIFICATION.

C. PRIOR TO PLACEMENT OF THE BITUMINOUS CONCRETE SURFACE COURSE, THE CONTRACTOR, WHEN REQUIRED BY THE OWNER OR MUNICIPALITY, SHALL OBTAIN SPECIMENS OF THE BINDER COURSE WITH A CORE DRILL WHERE DIRECTED, FOR THE PURPOSE OF THICKNESS VERIFICATION.

D. WHEN REQUIRED BY THE OWNER OR MUNICIPALITY, THE CONTRACTOR SHALL OBTAIN SPECIMENS OF THE FULL DEPTH BITUMINOUS CONCRETE PAVEMENT STRUCTURE WITH A CORE DRILL WHERE DIRECTED, IN ORDER TO CONFIRM THE PLAN THICKNESS. DEFICIENCIES IN THICKNESS SHALL BE ADJUSTED FOR BY THE METHOD DESCRIBED IN (SSRBC), ART. 407.10.

E. FINAL ACCEPTANCE OF THE TOTAL PAVEMENT INSTALLATION SHALL BE SUBJECT TO THE TESTING AND CHECKING REQUIREMENTS CITED ABOVE.

SANITARY SEWER NOTES

1. GENERAL

A. SANITARY SEWER PIPE SHALL BE PVC (POLYVINYL CHLORIDE) PLASTIC PIPE WITH A STANDARD DIMENSION RATIO (SDR) OF 26 CONFORMING TO ASTM D-3034 WITH PUSH-ON JOINTS CONFORMING TO ASTM D-3212 AND PVC (POLYVINYL CHLORIDE) PLASTIC PIPE WITH A STANDARD DIMENSION RATIO (SDR) OF 21 CONFORMING TO ASTM D-2241 WITH PUSH-ON JOINTS CONFORMING TO ASTM D-3139 AS SHOWN ON THE PLANS. PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE PER LINEAL FOOT OF SANITARY SEWER COMPLETE IN PLACE.

B. SANITARY SEWER PIPE 18" AND LARGER, WHERE NOTED ON THE PLANS, OR WHERE THE IEPA MINIMUM SEPARATION CANNOT BE MAINTAINED, SHALL BE ONE OF THE FOLLOWING:

PLAN CODE DESCRIPTION

DIP: DUCTILE IRON WATERMAIN QUALITY PIPE, CLASS 52, (ANSI A-21.51) WITH MECHANICAL OR O-RING GASKETED JOINTS (ANSI A-21.11).

PVC: PRESSURE RATED PVC PIPE MEETING ASTM D-2241 WITH ASTM D-3139 GASKETED JOINT, SDR 26

C. "BAND-SEAL" OR SIMILAR FLEXIBLE TYPE COUPLINGS SHALL BE USED WHEN CONNECTING SEWER PIPES OF DISSIMILAR MATERIALS. "BAND-SEAL", "FERNCO", AND "MISSION" TYPE COUPLINGS SHALL NOT BE USED ON ANY SEWER MAIN.

D. ALL SANITARY SEWERS ARE TO BE CONSTRUCTED USING A LASER INSTRUMENT TO MAINTAIN LINE AND GRADE.

E. ALL FLOOR DRAINS SHALL CONNECT TO THE SANITARY SEWER.

F. CONNECTIONS TO EXISTING SANITARY SEWER SYSTEM SHALL NOT BE DONE UNTIL AUTHORIZED BY THE MUNICIPALITY.

G. WATERMAINS SHALL BE SEPARATED FROM SANITARY SEWERS AND STORM SEWERS IN ACCORDANCE WITH IEPA REQUIREMENTS AS SPECIFIED IN "WATER MAIN" SECTION.

H. NO WATER LINE SHALL BE PLACED IN THE SAME TRENCH AS A SEWER LINE EXCEPT UNDER SPECIAL CIRCUMSTANCES AND THEN ONLY UNDER THE FOLLOWING RULES:

a) PERMISSION SHALL BE OBTAINED FROM THE MUNICIPAL ENGINEERING DEPARTMENT IN WRITING PRIOR TO BEGINNING CONSTRUCTION.
b) THE BOTTOM OF A WATER LINE SHALL BE INSTALLED ON A SHELF A MINIMUM OF 18" ABOVE THE TOP OF THE SEWER AND 18" HORIZONTALLY AWAY FROM THE EDGE OF THE SEWER.

2. BEDDING:

A. BEDDING SHALL CONSIST OF A MINIMUM OF FOUR (4") INCHES OF COMPACTED CRUSHED GRAVEL OR STONE, 1/4 " -3/4 " IN SIZE. THE SEWER SHALL HAVE MECHANICALLY TAMPED CRUSHED GRAVEL OR STONE COVER ABOVE THE TOP OF THE PIPE TO A MINIMUM OF TWELVE (12") INCHES FOR PVC PIPE AND TO THE SPRING LINE FOR DIP. THE BEDDING AND COVER MATERIAL SHALL BE ASTM D-2321 CLASS II FOR PVC PIPE AND ASTM D-448 SIZE 67 FOR DIP PIPE. THE COST OF THE BEDDING AND COVER SHALL BE MERGED WITH THE UNIT PRICE BID FOR THE SEWER.

B. ALL UNSUITABLE MATERIAL SHALL BE REMOVED BELOW THE PROPOSED SANITARY SEWER AND REPLACED WITH COMPACTED CA-6 CRUSHED GRAVEL OR STONE.

C. ALL TRENCHES BENEATH PROPOSED OR EXISTING UTILITIES, PAVEMENTS, ROADWAYS, SIDEWALKS, AND FOR A DISTANCE OF FIVE (5') FEET ON EITHER SIDE OF SAME, AND/OR WHERE SHOWN ON THE PLANS, SHALL BE BACKFILLED WITH SELECT GRANULAR BACKFILL (CA-6) AND THOROUGHLY MECHANICALLY COMPACTED IN 9" THICK (LOOSE MEASUREMENT) LAYERS. JETTING WITH WATER IS NOT PERMITTED. REFER TO THE TRENCH BACKFILL LIMITS DETAIL.

3. MANHOLES:

A. SANITARY SEWER MANHOLES SHALL BE 4'-0" I.D. PRECAST CONCRETE SECTIONS CONFORMING TO ASTM D-478 WITH PREFORMED BITUMINOUS OR "O" RING JOINTS, IN ACCORDANCE WITH MUNICIPAL REGULATIONS, AND HAVE AN ECCENTRIC CONE INSTALLED TO LINE UP WITH THE MANHOLE STEPS. ALL MANHOLE STEPS SHALL BE AT 16" O.C. SIMILAR TO NEENAH R-1980.

B. ALL PIPE CONNECTION OPENINGS SHALL BE PRECAST WITH RESILIENT RUBBER WATER TIGHT SLEEVES. THE BOTTOM OF MANHOLE SHALL HAVE A CONCRETE BENCH POURED TO FACILITATE SMOOTH FLOWS.

4. FRAMES AND LIDS:

A. ALL SANITARY SEWER MANHOLE FRAMES AND LIDS SHALL BE NEENAH R-1712 UNLESS OTHERWISE NOTED ON THE PLANS. THE LIDS SHALL HAVE RECESSED (CONCEALED) PICK HOLE AND BE SELF SEALING WITH AN "O" RING GASKET. THE LIDS SHALL HAVE THE WORDS "SANITARY" EMBOSSED ON THE SURFACE. THE JOINTS BETWEEN FRAME AND CONCRETE SECTION SHALL BE SEALED WITH A BUTYL ROPE.

B. A MAXIMUM OF EIGHT (8) INCHES OF CONCRETE ADJUSTING RINGS SHALL BE USED TO ADJUST FRAME ELEVATIONS. RINGS SHALL BE SEALED TOGETHER WITH BUTYL ROPE.

5. DROP MANHOLE ASSEMBLIES:

A. DROP MANHOLE ASSEMBLIES: DROP MANHOLE ASSEMBLIES SHALL BE PROVIDED AT THE JUNCTION OF SANITARY SEWERS WHERE THE DIFFERENCE IN INVERT GRADES EXCEEDS TWO FEET (2'), OR AS SHOWN ON THE PLANS. THE ENTIRE DROP ASSEMBLY SHALL BE CAST IN CONCRETE MONOLITHICALLY WITH THE MANHOLE BARREL SECTION.

6. CLEANING:

A. ALL MANHOLES AND PIPES SHALL BE THOROUGHLY CLEANED OF DIRT AND DEBRIS, AND ALL VISIBLE LEAKAGE ELIMINATED, BEFORE FINAL INSPECTION AND ACCEPTANCE.

7. TESTING:

A. DEFLECTION AND LEAKAGE TESTING WILL BE REQUIRED. THE PROCEDURE AND ALLOWABLE TESTING LIMITS SHALL BE AS SPECIFIED IN THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", OR MUNICIPAL CODES. IN THE EVENT OF A DISCREPANCY BETWEEN THE STANDARD SPECIFICATIONS AND THE MUNICIPAL CODE, THE MUNICIPAL CODE SHALL GOVERN. THE FULL LENGTH OF THE SANITARY SEWER IS REQUIRED TO BE BOTH AIR TESTED AND DEFLECTION TESTED.

B. TESTING THE ALIGNMENT/STRAIGHTNESS SHALL BE IN ACCORDANCE WITH MUNICIPAL CODE.

C. TESTING OF MANHOLES TO BE IN ACCORDANCE WITH ASTM C-969.

8. TELEVISING:

A. ALL SANITARY SEWERS SHALL BE TELEVISED AND A COPY OF THE TAPE /DVD AND A WRITTEN REPORT SHALL BE SUBMITTED AND REVIEWED BY THE OWNER OR MUNICIPALITY BEFORE FINAL ACCEPTANCE. THE REPORT SHALL INCLUDE STUB LOCATION AS WELL AS A DESCRIPTION OF ALL DEFECTS. WATER LEVEL, LEAKS AND LENGTHS, IDENTIFY MANHOLE TO MANHOLE BOTH VERBALLY AND ON-SCREEN USING MANHOLE NUMBERS FROM APPROVED PLANS. ORDER OF WRITTEN REPORT SHALL BE THE SAME AS THE VIDEO TAPES/DVDS.

9. TEST RESULTS:

A. IF THE SANITARY SEWER INSTALLATION FAILS TO MEET THE TEST REQUIREMENTS SPECIFIED, THE CONTRACTOR SHALL DETERMINE THE CAUSE

A. REFERENCED SPECIFICATIONS

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:
   * STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
   * STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION;
   * VILLAGE OF _____ MUNICIPAL CODE;
   * THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL;
   * IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

B. NOTIFICATIONS

1. THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055).

2. THE VILLAGE OF _____ ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.

3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

C. GENERAL NOTES

1. ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). CONVERSION FACTOR IS _____ FT.

2. MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.

3. THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.

4. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.

5. THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.

6. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

7. MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.

8. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.

9. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.

10. RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.

D. SANITARY SEWER

1. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.

2. A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.

3. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY OR MWRD.

4. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).

5. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.

6. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.

7. ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
VITRIFIED CLAY PIPE	ASTM C-700	ASTM C-425
REINFORCED CONCRETE SEWER PIPE	ASTM C-76	ASTM C-443
CAST IRON SOIL PIPE	ASTM A-74	ASTM C-564
DUCTILE IRON PIPE	ANSI A21.51	ANSI A21.11
POLYVINYL CHLORIDE (PVC) PIPE		
6-INCH TO 15-INCH DIAMETER SDR 26	ASTM D-3034	ASTM D-3212
18-INCH TO 27-INCH DIAMETER F/DY=46	ASTM F-679	ASTM D-3212
HIGH DENSITY POLYETHYLENE (HDPE)	ASTM D-3350 ASTM D-3035	ASTM D-3261,F-2620 (HEAT FUSION) ASTM D-3212,F-477 (GASKETED)
WATER MAIN QUALITY PVC		
4-INCH TO 36-INCH	ASTM D-2241	ASTM D-3139
4-INCH TO 12-INCH	AWWA C900	ASTM D-3139
14-INCH TO 48-INCH	AWWA C905	ASTM D-3139

THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE.

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
POLYPROPYLENE (PP) PIPE		
12-INCH TO 24-INCH DOUBLE WALL	ASTM F-2736	D-3212, F-477
30-INCH TO 60-INCH TRIPLE WALL	ASTM F-2764	D3212, F-477

8. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE ¼ " TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO ¼ THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.

9. NON-SHEAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS.

10. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICKHOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID.

11. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:
    a) A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SHEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUBWYE SADDLE OR HUB-TEE SADDLE.
    b) REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION.
    c) WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.

12. WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.

13. ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.

14. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE.

15. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRECAST "RUBBER BOOTS" THAT CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRECAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS.

16. ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG.

17. EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES ASSOCIATED WITH VOLUME CONTROL FACILITIES, DRAIN TILES/FIELD TILES/UNDERDRAINS/PERFORATED PIPES ARE NOT ALLOWED TO BE CONNECTED TO OR TRIBUTARY TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS IN COMBINED SEWER AREAS. CONSTRUCTION OF NEW FACILITIES OF THIS TYPE IS PROHIBITED; AND ALL EXISTING DRAIN TILES AND PERFORATED PIPES ENCOUNTERED WITHIN THE PROJECT AREA SHALL BE PLUGGED OR REMOVED, AND SHALL NOT BE CONNECTED TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS.

18. A BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

E. EROSION AND SEDIMENT CONTROL

1. THE CONTRACTOR SHALL INSTALL THE EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.

2. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE.

3. ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.

4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

5. INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:
   a) UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE.
   b) ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.

6. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE CO-PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.

7. A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.

8. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE.

9. MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION TO CONCRETE WASHOUT FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONSTRUCTION ACTIVITIES.

10. TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN. VOLUME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.

12. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.

13. ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT).

14. VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.

15. SOIL STOCKPILES SHALL, AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS.

16. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL BLANKET.

17. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.

18. THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COMBINED SEWER AREA FOR GREEN INFRASTRUCTURE PRACTICES.

19. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.

20. THE CONTRCTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMAINS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATERS SHALL NOT BE DISCHARGE TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.

21. ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.

22. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIODS OF CONSTRUCTION SHUTDOWN UNTIL PERMANENT STABILIZATION IS ACHIEVED.

23. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.

24. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, SITE INSPECTOR, OR MWRD.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TECHNICAL GUIDANCE MANUAL

07/12/2016

MWRD GENERAL NOTES

STD. DWG. NO.18

PAGE NO. 19

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

SPECIFICATIONS - 2

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700
Rosemont, Illinois 60018
Phone: (847) 696-4060 Fax: (847) 696-4065

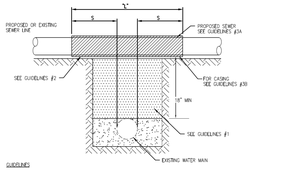
SPACECO INC.

FILENAME: 11624SPEC2
DATE: 03/16/22
JOB NO. 11624
SHEET SP2
13 OF 18

Attachment: EXHIBIT - ENG PLANS (2022-60 : 2240-2296 N. Rand Road)

N:\Projects\11624\ENG\11624SPEC02.dgn Default User=wbrennan

PROPOSED SEWER LINE WITH 18" MINIMUM VERTICAL SEPARATION ABOVE EXISTING WATER MAIN



GUIDELINES

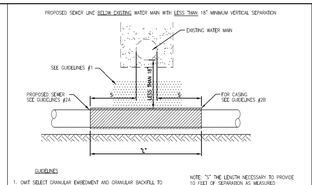
1. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF PROPOSED SEWER TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
2. OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF SEWER AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L" FILET.
3. A) CONSTRUCT "L" FEET OF PROPOSED SEWER OF WATER MAIN MATERIAL AND PRESSURE TEST, OR;

   B) USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED SEWER AND SEAL ENDS OF CASING.

NOTE: "S" THE LENGTH NECESSARY TO PROVIDE 10 FEET OF SEPARATION AS MEASURED PERPENDICULAR TO THE EXISTING WATER MAIN.

*BASED ON STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS.

PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH LESS THAN 18" MINIMUM VERTICAL SEPARATION



GUIDELINES

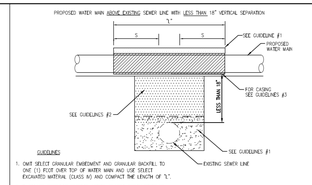
1. OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF SEWER AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L".
2. A) CONSTRUCT "L" FEET OF PROPOSED SEWER OF WATER MAIN MATERIAL AND PRESSURE TEST, OR;

   B) USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED SEWER AND SEAL ENDS OF CASING.
3. PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH

NOTE: "S" THE LENGTH NECESSARY TO PROVIDE 10 FEET OF SEPARATION AS MEASURED PERPENDICULAR TO THE EXISTING WATER MAIN.

*BASED ON STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS.

PROPOSED WATER MAIN ABOVE EXISTING SEWER LINE WITH LESS THAN 18" VERTICAL SEPARATION



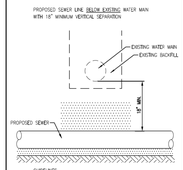
GUIDELINES

1. OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF WATER MAIN AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L".
2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
3. USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED WATER MAIN AND SEAL ENDS OF CASING.
4. POINT LOADS SHALL NOT BE ALLOWED BETWEEN WATER MAIN CASING AND SEWER

NOTE: "S" THE LENGTH NECESSARY TO PROVIDE 10 FEET OF SEPARATION AS MEASURED PERPENDICULAR TO THE EXISTING SEWER LINE.

*BASED ON STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS.

PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH 18" MINIMUM VERTICAL SEPARATION

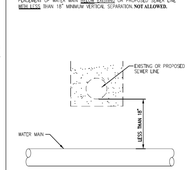


GUIDELINES

1. PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH.

*BASED ON STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS.

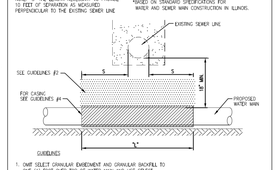
PLACEMENT OF WATER MAIN BELOW EXISTING OR PROPOSED SEWER LINE WITH LESS THAN 18" MINIMUM VERTICAL SEPARATION NOT ALLOWED.



NOT ALLOWED*
MUST MAINTAIN 18" VERTICAL SEPARATION

*BASED ON STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS.

PROPOSED WATER MAIN BELOW EXISTING SEWER LINE WITH 18" MINIMUM VERTICAL SEPARATION



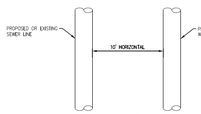
GUIDELINES

1. OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF WATER MAIN AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L".
2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
3. PROVIDE ADEQUATE SUPPORT FOR EXISTING SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT.
4. USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED WATER MAIN AND SEAL ENDS OF CASING.

NOTE: "S" THE LENGTH NECESSARY TO PROVIDE 10 FEET OF SEPARATION AS MEASURED PERPENDICULAR TO THE EXISTING SEWER LINE.

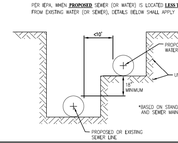
*BASED ON STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS.

PER IEPA, WHEN **PROPOSED** SEWER (OR WATER) IS LOCATED TO FEET OR MORE FROM EXISTING WATER (OR SEWER), NO SPECIAL CONSTRUCTION REQUIRED



PLAN VIEW

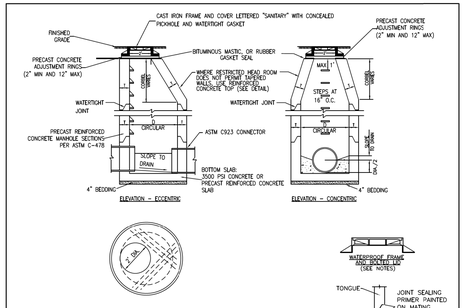
PER IEPA, WHEN **PROPOSED** SEWER (OR WATER) IS LOCATED **LESS THAN 9 FEET** FROM EXISTING WATER (OR SEWER), DETAILS BELOW SHALL APPLY



*BASED ON STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS.

NOT TO SCALE

TECHNICAL GUIDANCE MANUAL	7/1/15
WATER AND SEWER SEPARATION REQUIREMENTS (PER IEPA)	STD. DWG. NO. 41
	PAGE NO. 42



NOTES:

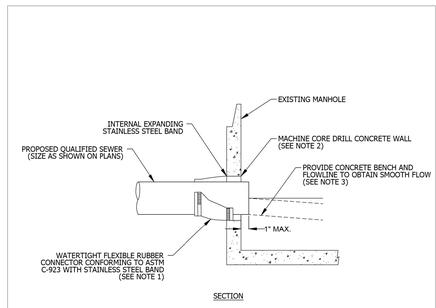
1. MANHOLES TO HAVE PRECAST "RUBBER BOOTS" CONFORMING TO ASTM C-923 AT ALL PIPE CONNECTIONS.
2. SANITARY MANHOLES SUBJECT TO SATURATION SOIL CONDITIONS OR SURFACE SUBMERGENCE SHALL BE EQUIPPED WITH CHIMNEY SEALS AND WATER TIGHT BOLTED DOWN MANHOLE COVERS.
3. MASTIC SEALANT OR RUBBER GASKET SEAL MUST BE APPLIED BETWEEN CONCRETE & FLANGE OF FRAME BEFORE LID BOLTS ARE TIGHTENED.
4. SAFETY LANDINGS REQUIRED FOR MANHOLES GREATER THAN 28 FEET DEPTH (RIM TO INVERT). MAXIMUM VERTICAL SPACING OF SAFETY LANDING IS 20 FEET.
5. FOR DROP CONNECTIONS, USE DROP CONNECTION MANHOLE DETAIL.
6. FOR ONLINE CONNECTIONS GREATER THAN 15 INCHES, USE DOGHOUSE MANHOLE DETAIL.

ALT MATERIALS FOR WALLS	D	T (MIN.)
PRECAST REINFORCED CONCRETE SECTION	4 FEET	4 IN
	5 FEET	5 IN
	6 FEET	6 IN
CAST-IN-PLACE CONCRETE	4 FEET	4 IN
	5 FEET	5 IN
	6 FEET	6 IN

WATER TIGHT JOINT DETAIL

NOT TO SCALE

TECHNICAL GUIDANCE MANUAL	7/1/15
TYPICAL SANITARY MANHOLE 'A' AND 'B' DETAIL	STD. DWG. NO.39
	PAGE NO. 40



SECTION

NOTES:

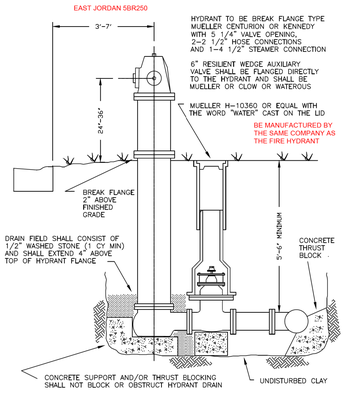
1. RESILIENT CONNECTOR COMPLYING WITH ASTM STANDARD C-923 (MOST RECENT EDITION) SHALL BE USED.
2. MACHINE CORE/DRILL CIRCULAR OPENING IN STRUCTURE WALL, OPENING DIAMETER TO FIT THE REQUIRED RESILIENT CONNECTOR PER MANUFACTURER'S RECOMMENDATION.
3. CUT, SHAPE, AND SLOPE NEW INVERT CHANNEL IN THE EXISTING CONCRETE BENCH FOR SMOOTH FLOW.
4. CLEAN EXISTING STRUCTURE AND SEWER PIPE OF ANY DIRT, CONCRETE, OR DEBRIS WHICH MAY ACCUMULATE DURING THE CONSTRUCTION PROCESS.
5. ANY DAMAGE TO THE EXISTING MANHOLE SHALL BE REPAIRED BY THE CONTRACTOR.
6. REINFORCED CONCRETE COLLAR MAY BE SUBSTITUTED FOR PIPE DIAMETERS LARGER THAN 36-INCHES.

NOT TO SCALE

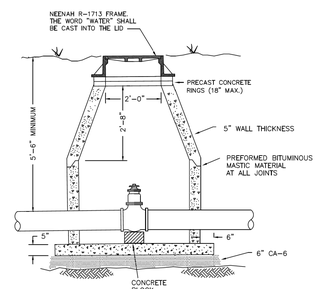
TECHNICAL GUIDANCE MANUAL	10/02/18
PIPE TO EXISTING MANHOLE CONNECTION DETAIL	STD. DWG. NO. 42
	PAGE NO. 43

FIRE HYDRANT

EAST JORDAN 5BR250

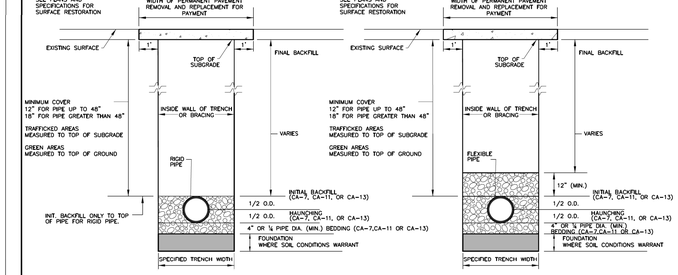


WATER VALVE VAULT



INSIDE DIAMETER SHALL BE 48" FOR WATER MAIN 6" THROUGH 10" AND 60" FOR WATER MAIN 12" AND OVER AND PRESSURE CONNECTIONS

VALVES SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO AWWA C509 AND SHALL BE MUELLER OR WATEROUS



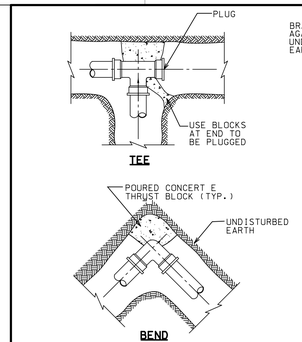
RIGID PIPE INSTALLATION DETAIL

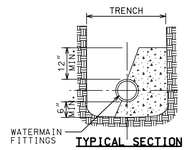
FLEXIBLE PIPE INSTALLATION DETAIL

NOTES:
1. FOR QUALIFIED SEWER CONSTRUCTION ONLY.
2. SHORING, OR EQUIVALENT PROTECTIVE SYSTEM, REQUIRED FOR TRENCHES OF 5' DEPTH OR GREATER, OR AS REQUIRED BY MUNICIPALITY.

NOT TO SCALE

TECHNICAL GUIDANCE MANUAL	7/1/15
RIGID AND FLEXIBLE PIPE INSTALLATION DETAIL	STD. DWG. NO. 34
	PAGE NO. 35



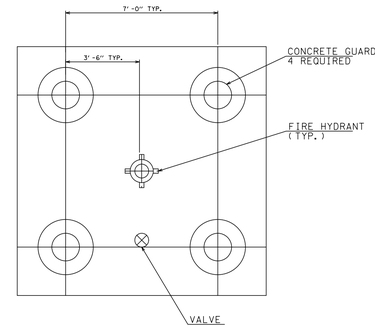


TYPICAL SECTION

THRUST BLOCKS

NOT TO SCALE

NOTES:
1. THRUST BLOCKS BE CLASS "C" CONCRETE.
2. THRUST BLOCKS SHALL BE POURED AGAINST FIRM, UNDISTURBED SOIL.
3. THRUST BLOCKS SHALL BE USED AT ALL BENDS 1/16" (22 1/2°) OR GREATER.
4. ALL WATER MAIN FITTINGS TO HAVE MECHANICAL JOINTS WITH RETAINER GLANDS.



FIRE HYDRANT LAYOUT IN PAVEMENT WITH GUARD POST

N.T.S.

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

DETAILS - 1

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 698-4060 Fax: (847) 698-4065

SPACECO INC.

FILENAME: 11624DET01

DATE: 03/16/22

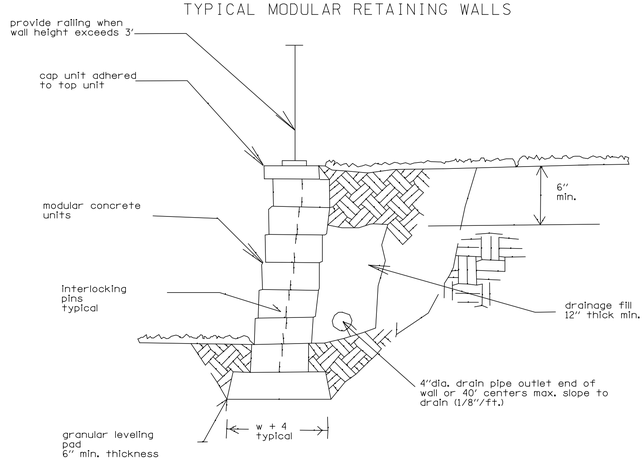
JOB NO. 11624

SHEET D1

14 OF 18

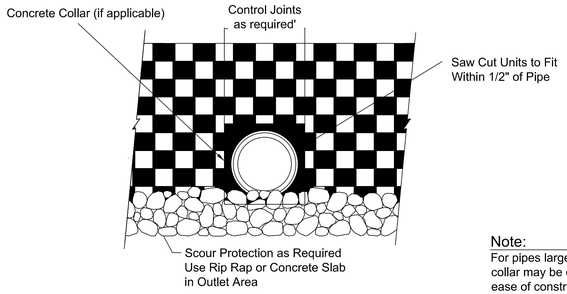
Attachment: EXHIBIT - ENG PLANS (2022-60 : 2240-2296 N. Rand Road)

TYPICAL MODULAR RETAINING WALLS



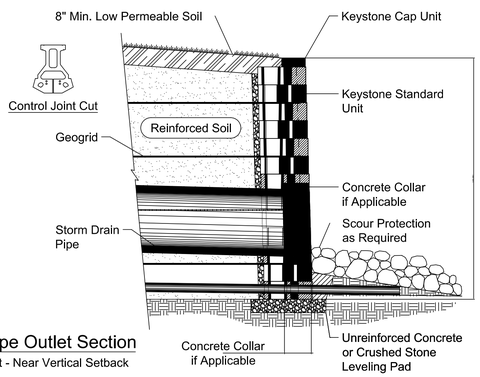
Notes:

1. All modular retaining walls are to be contructed per the manufacturers specifications.
2. The examples shown are to highlight typical components to be used in the design of walls. The contractor shall submit shop drawings of the proposed retaining walls for review and approval prior to installation.
3. Contractor shall submit structural calculations and plans prepared and sealed by a structural engineer for all retaining walls prior to construction.



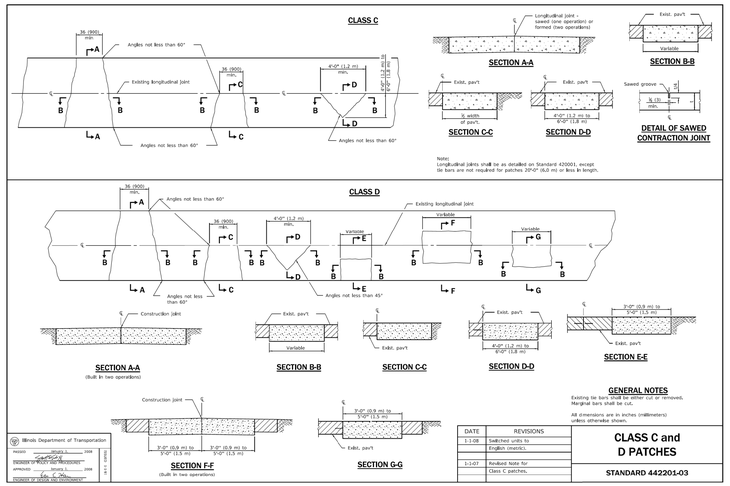
Note:
For pipes larger than 24", a concrete collar may be cast around pipe for ease of construction and appearance.

Typical Pipe Outlet Detail



Typical Pipe Outlet Section

Standard Unit - Near Vertical Setback



DATE	REVISIONS
1-1-08	Switched units to English (metric).
1-1-07	Revised Note for Class C patches.

CLASS C and D PATCHES

STANDARD 442201-03

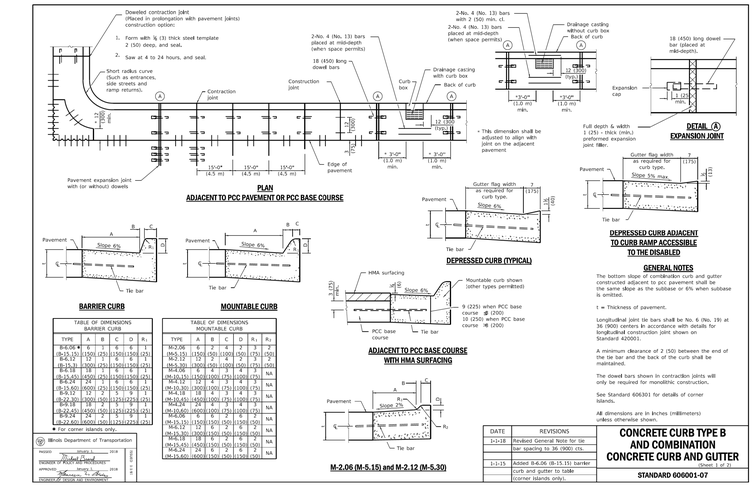


TABLE OF DIMENSIONS
BARRIER CURB

TYPE	A	B	C	D	R_1
B-6.04 ★	6	7	8	3	3
(B-15.15) 1500 (250)	15	13	8	3	3
B-6.12 ★	12	13	8	3	3
(B-15.30) 3000 (250)	15	13	8	3	3
(B-15.45) 4500 (250)	15	13	8	3	3
B-6.24	24	13	8	3	3
(B-15.60) 6000 (250)	15	13	8	3	3
B-6.36	36	13	8	3	3
(B-22.80) 8000 (250)	15	13	12	3	3

★ For corner islands only.

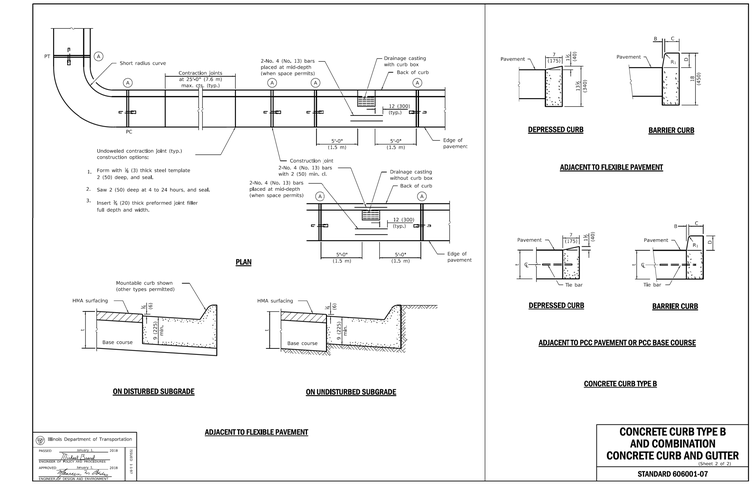
TABLE OF DIMENSIONS
MOUNTABLE CURB

TYPE	A	B	C	D	R_1	R_2
M-2.06 ★	6	7	8	3	3	3
(M-5.15) 1500 (250)	15	13	8	3	3	3
M-2.12 ★	12	13	8	3	3	3
(M-5.30) 3000 (250)	15	13	8	3	3	3
(M-5.45) 4500 (250)	15	13	8	3	3	3
M-6.24	24	13	8	3	3	3
(M-15.60) 6000 (250)	15	13	8	3	3	3
M-6.36	36	13	8	3	3	3
(M-22.80) 8000 (250)	15	13	12	3	3	3
M-6.48	48	13	8	3	3	3
(M-30.30) 12000 (250)	15	13	8	3	3	3
M-6.60	60	13	8	3	3	3
(M-37.50) 15000 (250)	15	13	8	3	3	3
M-6.72	72	13	8	3	3	3
(M-45.45) 18000 (250)	15	13	8	3	3	3
M-6.84	84	13	8	3	3	3
(M-52.65) 21000 (250)	15	13	8	3	3	3
M-6.96	96	13	8	3	3	3
(M-60.00) 24000 (250)	15	13	8	3	3	3
M-6.108	108	13	8	3	3	3
(M-67.50) 27000 (250)	15	13	8	3	3	3
M-6.120	120	13	8	3	3	3
(M-75.00) 30000 (250)	15	13	8	3	3	3

DATE	REVISIONS
1-1-18	Revised General Note for tie bar spacing to 36 (900) ctrs.
1-1-15	Added B-6.06 (B-15.15) barrier curb and gutter to table (corner islands only).

CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER

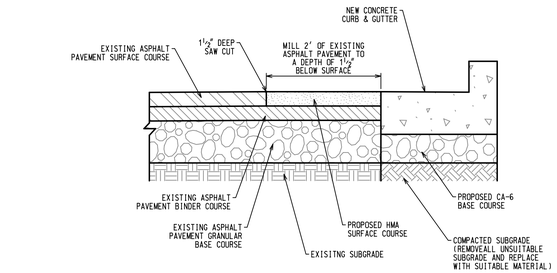
STANDARD 606001-07



CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER

(Sheet 2 of 2)

STANDARD 606001-07



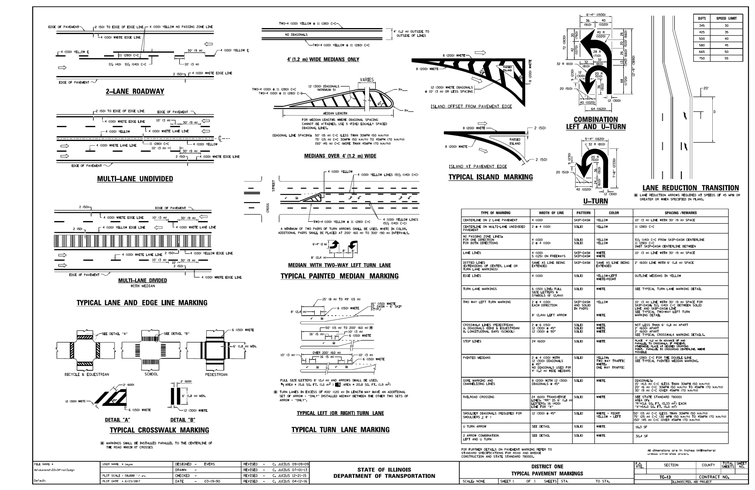
NOTES:

1. EXISTING PAVEMENT SECTION IS SHOWN FOR REFERENCE ONLY.
2. ALL ASPHALT PAVEMENT MILLINGS SHALL BE DISPOSED OF BY THE CONTRACTOR.
3. BITUMINOUS TACK COAT SHALL BE APPLIED AT A RATE OF 0.1 GALLONS PER SQUARE YARD TO BOTH EXISTING AND PROPOSED ASPHALT BINDER COURSE PRIOR TO NEW HMA SURFACE COURSE INSTALLATION.

PAVEMENT PATCHING

AT CURB & GUTTER REMOVAL

NOT TO SCALE



TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING - REMARKS
CENTERLINE ON 2 LANE PAVEMENT	6 (150)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED	6 (150)	SOLID	YELLOW	1 (25)
NO PASSING ZONE LINES ON 2 LANE PAVEMENT FOR BOTH DIRECTIONS	6 (150) 6 (150)	SOLID SOLID	YELLOW YELLOW	TO LEFT C/C FROM SKIP-DASH CENTERLINE SKIP-DASH CENTERLINE BETWEEN
LANE LINES	6 (150) 4 (100) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
EDGE LINES ON PAVEMENT WITH CURB AND GUTTER, LINE OF PAVEMENT WITHOUT CURB AND GUTTER	6 (150)	SOLID	WHITE	1' (300) LINE WITH 0' (0 m) SPACE
EDGE LINES	6 (150)	SOLID	YELLOW/LEFT EDGE MEDIAN	OUTLINE MEDIAN IN YELLOW
TURN LANE MARKING	6 (150) FOR TURN ARROW DETAIL, 8 (200) FOR WORD MARKING	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	6 (150) EACH DIRECTION 6" (150) LEFT ARROW	SKIP-DASH SKIP-DASH WHITE	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH, 20' (6 m) BETWEEN SKIP-DASH AND LEFT TURN ARROW, 50' (15 m)
CROSSWALK LINES (PEDESTRIAN & SCHOOL) AND STOPLINES & CROSSWALK (RAIL CROSSING)	2 @ 6 (150) 12 (300) X 40' (12 m) 12 (300) X 60'	SOLID SOLID SOLID	WHITE WHITE WHITE	6" (150) AND 6' (1.8 m) APART 12" (300) WIDE SEE TYPICAL CROSSWALK MARKING DETAILS
STOP LINES	24 (600)	SOLID	WHITE	24" (600) WIDE PLACE 4' (1.2 m) BACK OF NEAREST CROSSWALK LINE CENTER ON LANE OR APPROACH, WHERE NO CROSSWALK LINES
PAINTED MEDIANS	2 @ 6 (150) WITH 6 (150) BUFFER 6 (150) BETWEEN 2 @ 6 (150) ON RAIL ROADS	SOLID	YELLOW WHITE	DIAGONAL SEE TYPICAL PAINTED MEDIAN MARKING,
LANE ASSIGN. AND CHANGEABLE LANES	6 (150) WITH 12 (300) DIAGONALS @ 40'	SOLID	WHITE	DIAGONALS 12' (3.6 m) C/C BOTH TOWARD CENTER 12' (3.6 m) C/C OPPOSITE DIRECTION
HOLDING CROSSING	24 (600) THRESHOLD BAR AT 4' (1.2 m) AND 8' (2.4 m) FROM EDGE OF TRAVELED WAY	SOLID	WHITE	SEE CURVE STANDARD TABLES FOR 'L' AND 'W' 'L' MAY BE 4' (1.2 m) AT EACH APPROACH TO A CURVE
DIAGONAL DIVIDING MEDIANS PAINTED 2' 0"	12 (300) @ 40'	SOLID	WHITE, YELLOW - LEFT	30' (9 m) C/C WHEN TWO WAYS TO MATCH TO 45' (14 m) C/C WHEN ONE WAYS TO MATCH TO
2 TURN ARROW	SEE DETAIL	SOLID	WHITE	24.0' 0"
3 ARROW COMBINATION LEFT AND U-TURN	SEE DETAIL	SOLID	WHITE	24.0' 0"

FOR PLOTTING DETAILS ON PAVEMENT MARKING REFER TO STANDARD 780001 FOR 4 (100) AND 6 (150) LINES, STANDARD 782006 FOR 8 (200) AND WIDER LINES.

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = Name	DESIGNED - EVEN	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -
Default	PLOT DATE = 8/31/2007	DATE - 03-04-96	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

FILE NAME =	SECTION	COUNTY	TOTAL SHEET SHEETS	SHEET NO.
TC-13.2	CONTRACT NO.			
TYPE: NONE	SHEET 1 OF 1 SHEETS TC-13.2		BLOOMINGTON, ILLINOIS	

NO.	DATE	REVISIONS	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER	
1	03/22/22	REVISIONS PER ARCHITECT	

DETAILS - 2

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4060 Fax: (847) 696-4065
SPACECO INC.

FILENAME: 11624DET02

DATE: 03/16/22

JOB NO. 11624

SHEET **D2**
15 OF 18

Attachment: EXHIBIT - ENG PLANS (2022-60 : 2240-2296 N. Rand Road)

N:\Projects\11624\ENG\11624DET02.dgn Default User=wbrennan

SECTION PARALLEL TO PIPE
(Without conical top riser)

SECTION PERPENDICULAR TO PIPE
(With conical top riser)

BASE SLAB JOINT CONFIGURATIONS

FLAT SLAB TOP JOINT CONFIGURATIONS
(Shown at access hole)

GEOMETRIC LIMITS FOR PIPE PENETRATION HOLES

Note 1: A minimum of 9 (230) of monolithic reinforced concrete shall be maintained above pipe penetration holes > 24 (600).

Note 2: A minimum 12 (300) inside arc length of reinforced concrete shall be maintained between pipe penetration holes > 15 (380).

Note 3: A maximum of 60 percent of the inside perimeter of the reinforced concrete manhole walls may be removed.

Note 4: Horizontal joints that intersect pipe penetration holes > 15 (380) shall have one joint splice for every location around the perimeter of the joint where the inside arc length between pipe penetration holes is < 24 (600). See joint splice detail.

Note 5: The recommended pipe penetration hole is equal to the O.D. of the pipe plus 4 (100).

Note 6: Only pipe penetration holes ≤ 15 (380) are allowed in riser sections.

SHEAR KEY GEOMETRY
(Reinforcement not shown for clarity)

GENERAL NOTES

The manufacturer shall ensure that all precast manhole sections are additionally reinforced where required to resist damage from handling, shipping and installation stresses.

Lifting holes shall be located in the sections as per the manufacturer's recommendations.

See Standard 602701 for details of manhole steps.

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS
1-1-21	Revised Note 1 and lifting hole general note.
3-1-19	Moved wall reinforcement from inside face to middle.

PRECAST MANHOLE TYPE A
4' (1.22 m) DIAMETER
(Sheet 2 of 2)

STANDARD 602401-07

Illinois Department of Transportation
ENGINEER OF POLICY AND PROCEDURES
ENGINEER OF BUREAU OF ROADWAY STANDARDS

ELEVATION
(Standard Outlet)

ELEVATION
(Half Trap)

ALTERNATE BOTTOM SLAB

ALTERNATE MATERIALS FOR WALLS	D	C*	T (min.)
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
Precast Reinforced Concrete Section	4'-0" (1.2 m) 5'-0" (1.5 m)	30 (762) 36 (914)	4 (100) 5 (125)
Cast-in-place Concrete	4'-0" (1.2 m) 5'-0" (1.5 m)	36 (914) 36 (914)	5 (125) 6 (150)

* For precast reinforced concrete sections, dimension "C" may vary from the dimension given to plus 6 (150).

GENERAL NOTES

Bottom slabs shall be reinforced with a minimum of 0.05 sq. in./ft (420 sq. mm/m) in both directions with a maximum spacing of 12 (300).

Bottom slabs may be connected to the riser as determined by the fabricator; however, only a single row of reinforcement around the perimeter may be utilized.

See Standard 602001 for optional precast reinforced concrete flat slab top.

See Standard 602701 for details of steps.

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
3-1-21	Added "Outside" to half trap note, Detail redn. in slabs.
1-1-09	Revised general notes.
	Switched units to English (metric).

CATCH BASIN TYPE A

STANDARD 602001-02

Illinois Department of Transportation
ENGINEER OF POLICY AND PROCEDURES
ENGINEER OF BUREAU OF ROADWAY STANDARDS

PLAN

ELEVATION

ALTERNATE METHODS

ALTERNATE MATERIALS FOR WALLS	T
BRICK MASONRY	8 (200)
CAST-IN-PLACE CONCRETE	6 (150)
CONCRETE MASONRY UNIT	5 (125)
PRECAST REINFORCED CONCRETE SECTION	3 (75)

GENERAL NOTES

Bottom slabs shall be reinforced with a minimum of 0.24 sq. in./ft. (510 sq. mm/m) in both directions with a maximum spacing of 10 (250).

Bottom slabs may be connected to the riser as determined by the fabricator; however, only a single row of reinforcement around the perimeter may be utilized.

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-14	Increased height to 72 (1800) maximum.
1-1-13	Detailed rebars in slabs. Added max. limit to height. Added general notes.

INLET - TYPE A

STANDARD 602301-04

Illinois Department of Transportation
ENGINEER OF POLICY AND PROCEDURES
ENGINEER OF BUREAU OF ROADWAY STANDARDS

PLAN - FLAT SLAB TOP
(Showing layout of reinforcement bars and c bars)

JOINT SPLICE

CONNECTION ANGLE

TIE PLATE

FLAT SLAB TOP REINFORCEMENT

Location	WWR (each direction)		Rebar		
	A_s (min.)	Spacing (max.)	A_s (min.)	Spacing (max.)	Bar Size
Bottom Mat	** 0.82 sq. in./ft. (1312 sq. mm/m)	6 (150)	See plan view for rebar orientation and spacing and this table for bar size		#5 (#16)

** Only one layer of WWR permitted to avoid congestion.

WALL REINFORCEMENT

Location	Orientation	WWR or Rebar	
		A_s (min.)	Spacing (max.)
Riser	Circumferential	0.12 sq. in./ft. (254 sq. mm/m)	6 (150)
	Vertical	0.045 sq. in./ft. (95 sq. mm/m)	8 (200)
Barrel	Circumferential	0.12 sq. in./ft. (254 sq. mm/m)	6 (150)
	Vertical	0.16 sq. in./ft. (339 sq. mm/m)	4 (100)

BASE SLAB REINFORCEMENT

Location	Total Height	WWR or Rebar (each direction)
		A_s (min.)	Spacing (max.)
Top Mat	≤ 20 ft. (6.10 m)	0.24 sq. in./ft. (508 sq. mm/m)	10 (250)
	> 20 ft. (6.10 m)	0.24 sq. in./ft. (508 sq. mm/m)	10 (250)

PRECAST MANHOLE TYPE A
4' (1.22 m) DIAMETER
(Sheet 1 of 2)

STANDARD 602401-07

Illinois Department of Transportation
ENGINEER OF POLICY AND PROCEDURES
ENGINEER OF BUREAU OF ROADWAY STANDARDS

SECTION PARALLEL TO PIPE
(Without conical top riser)

SECTION PERPENDICULAR TO PIPE
(With conical top riser)

BASE SLAB JOINT CONFIGURATIONS

FLAT SLAB TOP JOINT CONFIGURATIONS
(Shown at access hole)

GEOMETRIC LIMITS FOR PIPE PENETRATION HOLES

Note 1: A minimum of 9 (230) of monolithic reinforced concrete shall be maintained above pipe penetration holes > 24 (600).

Note 2: A minimum 12 (300) inside arc length of reinforced concrete shall be maintained between pipe penetration holes > 15 (380).

Note 3: A maximum of 60 percent of the inside perimeter of the reinforced concrete manhole walls may be removed.

Note 4: Horizontal joints that intersect pipe penetration holes > 15 (380) shall have one joint splice for every location around the perimeter of the joint where the inside arc length between pipe penetration holes is < 24 (600). See joint splice detail.

Note 5: The recommended pipe penetration hole is equal to the O.D. of the pipe plus 4 (100).

Note 6: Only pipe penetration holes ≤ 15 (380) are allowed in riser sections.

SHEAR KEY GEOMETRY
(Reinforcement not shown for clarity)

GENERAL NOTES

The manufacturer shall ensure that all precast manhole sections are additionally reinforced where required to resist damage from handling, shipping and installation stresses.

Lifting holes shall be located in the sections as per the manufacturer's recommendations.

See Standard 602701 for details of manhole steps.

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS
1-1-21	Revised Note 1, Note 2 and lifting hole general note.
3-1-19	Moved wall reinforcement from inside face to middle.

PRECAST MANHOLE TYPE A
5' (1.52 m) DIAMETER
(Sheet 1 of 2)

STANDARD 602402-03

Illinois Department of Transportation
ENGINEER OF POLICY AND PROCEDURES
ENGINEER OF BUREAU OF ROADWAY STANDARDS

PLAN - FLAT SLAB TOP
(Showing layout of bottom reinforcement bars and c bars)

JOINT SPLICE

CONNECTION ANGLE

TIE PLATE

FLAT SLAB TOP REINFORCEMENT

Location	WWR (each direction)		Rebar (each direction except as noted)		
	A_s (min.)	Spacing (max.)	A_s (min.)	Spacing (max.)	Bar Size
Top Mat	0.51 sq. in./ft. (233 sq. mm/m)	18 (450)	0.51 sq. in./ft. (233 sq. mm/m)	18 (450)	#3 or #4 (#10) (#13)
Bottom Mat	** 0.40 sq. in./ft. (847 sq. mm/m)	6 (150)	See plan view for rebar orientation and spacing and this table for bar size		#5 (#16)

** Only one layer of WWR permitted to avoid congestion.

WALL REINFORCEMENT

Location	Orientation	WWR or Rebar	
		A_s (min.)	Spacing (max.)
Riser	Circumferential	0.15 sq. in./ft. (318 sq. mm/m)	6 (150)
	Vertical	0.045 sq. in./ft. (95 sq. mm/m)	8 (200)
Barrel	Circumferential	0.15 sq. in./ft. (318 sq. mm/m)	6 (150)
	Vertical	0.16 sq. in./ft. (339 sq. mm/m)	4 (100)

BASE SLAB REINFORCEMENT

Location	Total Height	WWR or Rebar (each direction)
		A_s (min.)	Spacing (max.)
Top Mat	≤ 20 ft. (6.10 m)	0.24 sq. in./ft. (508 sq. mm/m)	10 (250)
	> 20 ft. (6.10 m)	0.32 sq. in./ft. (593 sq. mm/m)	10 (200)
Bottom Mat	All	0.11 sq. in./ft. (233 sq. mm/m)	18 (450)

PRECAST MANHOLE TYPE A
5' (1.52 m) DIAMETER
(Sheet 2 of 2)

STANDARD 602402-03

Illinois Department of Transportation
ENGINEER OF POLICY AND PROCEDURES
ENGINEER OF BUREAU OF ROADWAY STANDARDS

SECTION PARALLEL TO PIPE
(Without conical top riser)

SECTION PERPENDICULAR TO PIPE
(With conical top riser)

BASE SLAB JOINT CONFIGURATIONS

FLAT SLAB TOP JOINT CONFIGURATIONS
(Shown at access hole)

GEOMETRIC LIMITS FOR PIPE PENETRATION HOLES

Note 1: A minimum of 9 (230) of monolithic reinforced concrete shall be maintained above pipe penetration holes > 32 (810).

Note 2: A minimum 12 (300) inside arc length of reinforced concrete shall be maintained between pipe penetration holes > 15 (380).

Note 3: A maximum of 60 percent of the inside perimeter of the reinforced concrete manhole walls may be removed.

Note 4: Horizontal joints that intersect pipe penetration holes > 15 (380) shall have one joint splice for every location around the perimeter of the joint where the inside arc length between pipe penetration holes is < 24 (600). See joint splice detail.

Note 5: The recommended pipe penetration hole is equal to the O.D. of the pipe plus 4 (100).

Note 6: Only pipe penetration holes ≤ 15 (380) are allowed in riser sections.

SHEAR KEY GEOMETRY
(Reinforcement not shown for clarity)

GENERAL NOTES

Pipe holes shall be formed to facilitate proper placement of hole reinforcement.

The manufacturer shall ensure that all precast manhole sections are additionally reinforced where required to resist damage from handling, shipping and installation stresses.

Lifting holes shall be located in the sections as per the manufacturer's recommendations.

See Standard 602701 for details of manhole steps.

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS
1-1-21	Revised Note 1 and lifting hole general note.
3-1-19	Moved wall reinforcement from inside face to middle.

PRECAST MANHOLE TYPE A
6' (1.83 m) DIAMETER
(Sheet 1 of 3)

STANDARD 602406-11

Illinois Department of Transportation
ENGINEER OF POLICY AND PROCEDURES
ENGINEER OF BUREAU OF ROADWAY STANDARDS

PLAN - FLAT SLAB TOP
(Showing layout of bottom reinforcement bars and c bars)

PLAN - FLAT SLAB TOP
(Showing layout of widest wire reinforcement and c bars)

* #5 (#16) bars for risers ≤ 10 ft. (3.05 m) tall or #6 (#19) bars for risers > 10 ft. (3.05 m) tall bottom, Bundle first bar with closest WWR bar to the opening and place second bar ≥3 (75) away.

PRECAST MANHOLE TYPE A
6' (1.83 m) DIAMETER
(Sheet 2 of 3)

STANDARD 602406-11

Illinois Department of Transportation
ENGINEER OF POLICY AND PROCEDURES
ENGINEER OF BUREAU OF ROADWAY STANDARDS

PLAN - FLAT SLAB TOP
(Showing layout of bottom reinforcement bars and c bars)

JOINT SPLICE

CONNECTION ANGLE

TIE PLATE

FLAT SLAB TOP REINFORCEMENT

Location	Riser Height (RH) Total Height (TH)	WWR or Rebar (each direction except as noted)			
		A_s (min.)	Spacing (max.)	A_s (min.)	Spacing (max.)
Top Mat	All	0.51 sq. in./ft. (233 sq. mm/m)	18 (450)	0.51 sq. in./ft. (233 sq. mm/m)	18 (450)	#3 or #4 (#10) (#13)
Bottom Mat	RH ≤ 10 ft. (3.05 m)	** 0.62 sq. in./ft. (1312 sq. mm/m)	6 (150)	See plan view for rebar orientation and spacing and this table for bar size		#5 (#16)
	RH > 10 ft. (3.05 m) or TH > 20 ft. (6.10 m)	** 0.88 sq. in./ft. (1863 sq. mm/m)	6 (150)			#6 (#19)

** Only one layer of WWR permitted to avoid congestion.

WALL REINFORCEMENT

Location	Orientation	WWR or Rebar	
		A_s (min.)	Spacing (max.)
4 ft. (1.22 m) Ø Riser	Circumferential	0.12 sq. in./ft. (254 sq. mm/m)	6 (150)
	Vertical	0.045 sq. in./ft. (95 sq. mm/m)	8 (200)
6 ft. (1.83 m) Ø Barrel	Circumferential	0.18 sq. in./ft. (381 sq. mm/m)	6 (150)
	Vertical	0.045 sq. in./ft. (95 sq. mm/m)	4 (100)

BASE SLAB REINFORCEMENT

Location	Riser Height (RH)/ Total Height (TH)	WWR or Rebar (each direction)	
		A_s (min.)	Spacing (max.)
Top Mat	RH ≤ 10 ft. (3.05 m) & TH ≤ 20 ft. (6.10 m)	0.20 sq. in./ft. (593 sq. mm/m)	6 (150)
	RH > 10 ft. (3.05 m) or TH > 20 ft. (6.10 m)	0.40 sq. in./ft. (847 sq. mm/m)	6 (150)
Bottom Mat	All	0.11 sq. in./ft. (233 sq. mm/m)	18 (450)

PRECAST MANHOLE TYPE A
6' (1.83 m) DIAMETER
(Sheet 3 of 3)

STANDARD 602406-11

Illinois Department of Transportation
ENGINEER OF POLICY AND PROCEDURES
ENGINEER OF BUREAU OF ROADWAY STANDARDS

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT
NO.	DATE	REMARKS

DETAILS - 3

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4060 Fax: (847) 696-4065

SPACECO INC.

FILENAME: 11624DET03

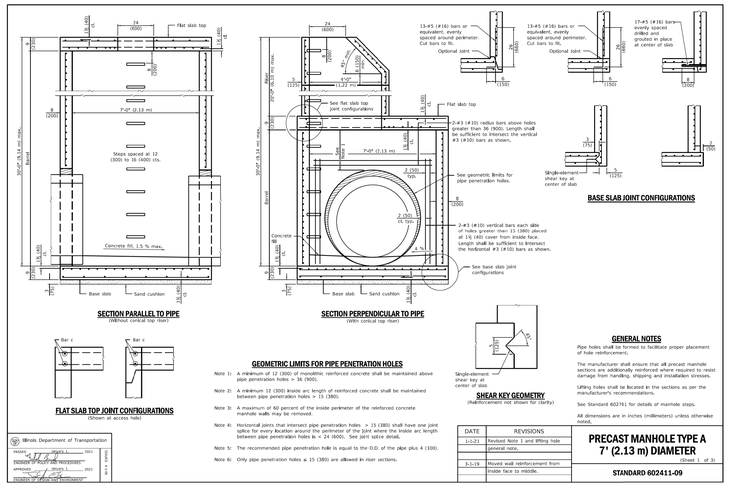
DATE: 03/16/22

JOB NO. 11624

SHEET **D3**
16 OF 18

Attachment: EXHIBIT - ENG PLANS (2022-60 : 2240-2296 N. Rand Road)

N:\Projects\11624\ENG\11624DET03.dgn Default User=wbrennan



SECTION PARALLEL TO PIPE
(Without conical top riser)

SECTION PERPENDICULAR TO PIPE
(With conical top riser)

BASE SLAB JOINT CONFIGURATIONS

FLAT SLAB TOP JOINT CONFIGURATIONS
(Shown at access hole)

GEOMETRIC LIMITS FOR PIPE PENETRATION HOLES

Note 1: A minimum of 12 (300) of monolithic reinforced concrete shall be maintained above pipe penetration holes > 36 (900).

Note 2: A minimum 12 (300) inside arc length of reinforced concrete shall be maintained between pipe penetration holes > 15 (380).

Note 3: A maximum of 60 percent of the inside perimeter of the reinforced concrete manhole walls may be removed.

Note 4: Horizontal joints that intersect pipe penetration holes > 15 (380) shall have one joint splice for every location around the perimeter of the joint where the inside arc length between pipe penetration holes is < 24 (600). See joint splice detail.

Note 5: The recommended pipe penetration hole is equal to the O.D. of the pipe plus 4 (100).

Note 6: Only pipe penetration holes ≤ 15 (380) are allowed in riser sections.

SHEAR KEY GEOMETRY
(Reinforcement not shown for clarity)

GENERAL NOTES

Pipe holes shall be formed to facilitate proper placement of hole reinforcement.

The manufacturer shall ensure that all precast manhole sections are additionally reinforced where required to resist damage from handling, shipping and installation stresses.

Lifting holes shall be located in the sections as per the manufacturer's recommendations.

See Standard 602791 for details of manhole steps.

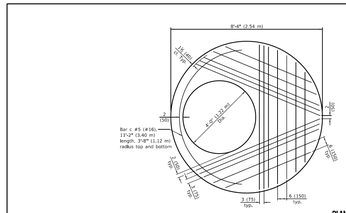
All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS
1-3-21	Revised Note 1 and lifting hole general note.
3-1-19	Moved wall reinforcement from inside face to middle.

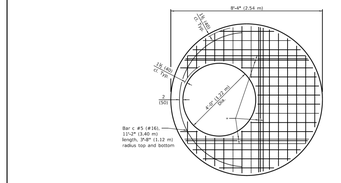
PRECAST MANHOLE TYPE A
7' (2.13 m) DIAMETER
(Sheet 1 of 3)

STANDARD 602411-09

Illinois Department of Transportation
PASSED 2021
ENGINEER OF BUREAU OF TRAFFIC
APPROVED 2021
BUREAU OF BRIDGES AND STRUCTURES



PLAN - FLAT SLAB TOP
(Showing layout of bottom reinforcement bars and c bars)



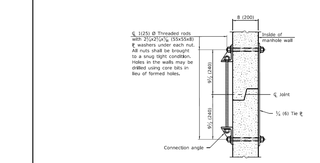
PLAN - FLAT SLAB TOP
(Showing layout of Welded Wire Reinforcement and c bars)
WWR not permitted for riser heights > 10" (0.05 m).

* #5 (#16) bars bottom. Bundle first bar with closest WWR bar to the opening and place second bar ±3 (75) away.

PRECAST MANHOLE TYPE A
7' (2.13 m) DIAMETER
(Sheet 2 of 3)

STANDARD 602411-09

Illinois Department of Transportation
PASSED 2021
ENGINEER OF BUREAU OF TRAFFIC
APPROVED 2021
BUREAU OF BRIDGES AND STRUCTURES



JOINT SPLICE

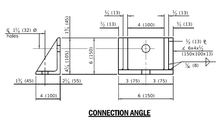
FLAT SLAB TOP REINFORCEMENT

Location	Riser Height (ht)	WWR (each direction)		Rebar (each direction except as noted)		
		A_s (min.)	Spacing (max.)	A_s (min.)	Spacing (max.)	Bar Size
Top Mat	All	0.11 sq. in./ft. (233 sq. mm/m)	18 (450)	0.11 sq. in./ft. (233 sq. mm/m)	18 (450)	#3 or #4 (#10 (#13))
Bottom Mat	RH ≤ 10 ft. (3.05 m)	** 0.62 sq. in./ft. (312 sq. mm/m)	6 (150)	See plan view for rebar orientation and spacing and this table for bar size		#5 (#16)
	RH > 10 ft. (3.05 m)	WWR not permitted				#7 (#22)

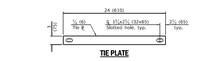
** Only one layer of WWR permitted to avoid congestion.

WALL REINFORCEMENT

Location	Orientation	WWR or Rebar	
		A_s (min.)	Spacing (max.)
4 ft. (1.22 m) Ø Riser	Circumferential	0.12 sq. in./ft. (254 sq. mm/m)	6 (150)
	Vertical	0.045 sq. in./ft. (95 sq. mm/m)	9 (200)
7 ft. (2.13 m) Ø Barrel	Circumferential	0.21 sq. in./ft. (445 sq. mm/m)	6 (150)
	Vertical	0.045 sq. in./ft. (95 sq. mm/m)	9 (200)



CONNECTION ANGLE



TIE PLATE

BASE SLAB REINFORCEMENT

Location	Riser Height (Hw) / Total Height (Th)	WWR or Rebar (each direction)	
		A_s (min.)	Spacing (max.)
Top Mat	RH ≤ 10 ft. (3.05 m) & Th ≤ 20 ft. (6.10 m)	0.32 sq. in./ft. (677 sq. mm/m)	6 (150)
	RH > 10 ft. (3.05 m) or Th > 20 ft. (6.10 m)	0.52 sq. in./ft. (1101 sq. mm/m)	6 (150)
Bottom Mat	All	0.11 sq. in./ft. (233 sq. mm/m)	18 (450)

PRECAST MANHOLE TYPE A
7' (2.13 m) DIAMETER
(Sheet 3 of 3)

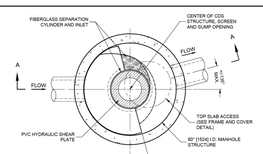
STANDARD 602411-09

Illinois Department of Transportation
PASSED 2021
ENGINEER OF BUREAU OF TRAFFIC
APPROVED 2021
BUREAU OF BRIDGES AND STRUCTURES

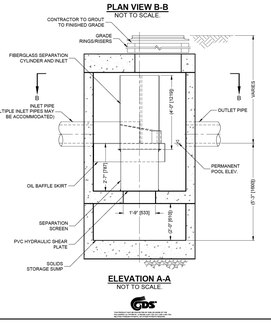
NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT
NO.	DATE	REMARKS

DETAILS - 4

2240-2296 RAND ROAD
PALATINE, ILLINOIS



PLAN VIEW B-B
NOT TO SCALE



ELEVATION A-A
NOT TO SCALE

FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE

CDS2020-5-C DESIGN NOTES

CDS2020-5-C STANDARD CONFIGURATION IS SHOWN.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	*
WATER QUALITY FLOW RATE (CFS OR L/s)	*
PEAK FLOW RATE (CFS OR L/s)	*
RETURN PERIOD OF PEAK FLOW (YRS)	*
SCREEN APERTURE (2400 OR 4700)	*

PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*

ANTI-FLOTATION BALLAST	WIDTH	HEIGHT

NOTES/SPECIAL REQUIREMENTS:

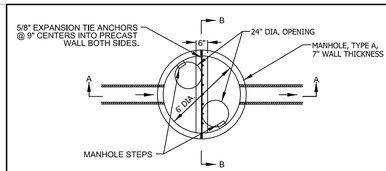
* PER ENGINEER OF RECORD

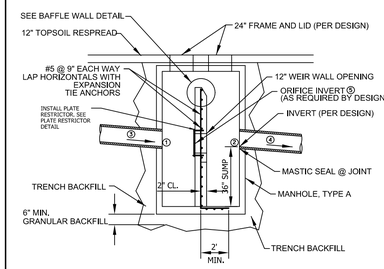
GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT, UNLESS OTHERWISE NOTED IN THE SITE SPECIFIC RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE DETERMINED BY THE ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO ASSURE JOINTS AND PENETRATIONS ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.contechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800.338.1122 513.645.7000 513.645.7993 FAX

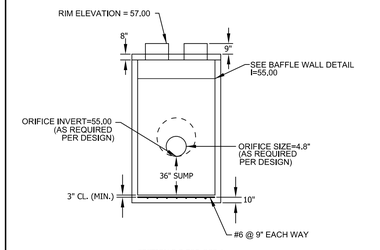
CDS2020-5-C
ONLINE CDS
STANDARD DETAIL





SECTION A-A FOR OCS-1

		OCS 1
UPSTREAM INVERT	①	49.90
DOWNSTREAM INVERT	②	49.50
UPSTREAM PIPE DIAMETER	③	15"
DOWNSTREAM PIPE DIAMETER	④	15"
ORIFICE INVERT	Ⓢ	50.00



SECTION B-B FOR OCS-1

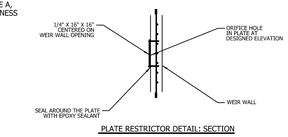


PLATE RESTRICTOR DETAIL: SECTION

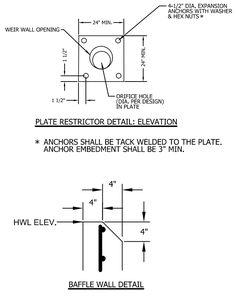


PLATE RESTRICTOR DETAIL: ELEVATION

* ANCHORS SHALL BE TACK WELDED TO THE PLATE. ANCHOR EMBEDMENT SHALL BE 3" MIN.

BAFFLE WALL DETAIL

NOTES:
1. WATERTIGHT CONNECTIONS REQUIRED BETWEEN STRUCTURE AND PIPES CONFORMING TO ASTM C-923
2. STRUCTURE AND BAFFLE WALL FABRICATED USING PORTLAND CEMENT CONCRETE.
3. RESTRICTORS LESS THAN 4" IN DIAMETER MUST USE CITY OF CHICAGO VORTEX RESTRICTOR (SEE DETAIL)
4. BAFFLE WALL PERMANENTLY INSTALLED AS PRECAST OR CAST IN PLACE, (STEEL PLATE ACCEPTABLE IF PERMANENT).
5. PIPE TO STRUCTURE CONNECTIONS SHALL BE ASTM C923 IN COMBINED SEWER AREAS.
6. THIS DETAIL WAS REVISED BY SPACECO
7. UNDERDRAINS SHALL CONNECT INTO OCS STRUCTURE UPSTREAM OF RESTRICTOR

NOT TO SCALE

	TECHNICAL GUIDANCE MANUAL	7/1/15
	TYPICAL OUTLET CONTROL STRUCTURE (WALL) DETAIL	STD. DWG. NO.25
		PAGE NO. 26

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4060 Fax: (847) 696-4065

SPACECO INC.

FILENAME: 11624DET04

DATE: 03/16/22

JOB NO. 11624

SHEET **D4**
17 OF 18

Attachment: EXHIBIT - ENG PLANS (2022-60 : 2240-2296 N. Rand Road)

© COMMUNITY/PROJECTS/CDS/CAD STANDARDS/STANDARD DETAILS/CDS-CAD-DRAWINGS/CDS2020-5-C.DWG 3/9/2021 1:43 PM JEFFKOCH

MAINTENANCE & MONITORING REQUIREMENTS:

TEMPORARY SOIL EROSION & SEDIMENT CONTROL

1. SOIL EROSION AND SEDIMENT CONTROL
THE CONTRACTOR WILL MAINTAIN ALL EROSION CONTROL MEASURES FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. EROSION CONTROL MEASURES FOR THE PROPOSED DEVELOPMENT ARE INCLUDED IN THE PLAN SET. AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR WILL COORDINATE THE TRANSFER OF MAINTENANCE RESPONSIBILITIES. MAINTENANCE ACTIVITIES WILL BE PERFORMED IN ACCORDANCE WITH THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, 1987.

EXCEPT AS PREVENTED BY INCLEMENT WEATHER CONDITIONS, ALL DISTURBED AREAS TO REMAIN ACTIVE FOR MORE THAN 14 DAYS WILL BE STABILIZED BY SEEDING, SODDING, MULCHING, COVERING, OR BY OTHER EQUIVALENT EROSION CONTROL MEASURES WITHIN SEVEN DAYS. PERMANENT SOIL STABILIZATION SHALL BE PROVIDED WITHIN SEVEN DAYS AFTER FINAL GRADING IS COMPLETED.

ALL TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES WILL BE REMOVED AND DISPOSED OF WITHIN THIRTY DAYS AFTER FINAL STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY PRACTICES ARE NO LONGER NEEDED.

PERMANENT

1. GENERAL
REGULAR INSPECTIONS AND ROUTINE MAINTENANCE OF GENERAL AREAS SHALL BE PERFORMED ON A MONTHLY OR AS-NEEDED BASIS. SPECIFIC ITEMS OF CONCERN INCLUDE:
____ LITTER AND DEBRIS SHALL BE CONTROLLED
____ LANDSCAPED AREAS SHALL BE MAINTAINED WITH REGULAR MOWING AND RESTORED WITH APPROPRIATE SEEDING/VEGETATION AS NECESSARY
____ ACCUMULATED SEDIMENT SHALL BE DISPOSED OF PROPERLY, ALONG WITH ANY WASTES GENERATED DURING MAINTENANCE OPERATIONS
____ RIPRAP AREAS SHALL BE REPAIRED WITH THE ADDITION OF NEW RIPRAP, AS NECESSARY, OF SIMILAR SIZE AND SHAPE
____ ROADS SHALL BE SWEPT, VACUUMED AND/OR WASHED ON A REGULAR BASIS

2. STORMWATER MANAGEMENT FACILITIES
ALL COMPONENT OF THE STORMWATER MANAGEMENT FACILITIES SHALL BE CHECKED MONTHLY BETWEEN MARCH AND NOVEMBER AND MAINTAINED AS NECESSARY TO ENSURE PROPER PERFORMANCE. IT IS CRITICAL THAT ALL INFLOWS AND OUTFLOW TO THE DETENTION FACILITY ARE CLEAN AND PERFORMING AS DESIGNED. IN ADDITION, THE DESIGN VOLUME OF THE DETENTION FACILITY SHALL ALSO BE MAINTAINED. INSPECTIONS FOR THE FOLLOWING SPECIFIC ITEMS SHOULD BE CONDUCTED MONTHLY BETWEEN MARCH AND NOVEMBER:

SIDE SLOPES/EMBANKMENT/EMERGENCY OVERFLOW STRUCTURE
____ INSPECT EMBANKMENT FOR SETTLEMENT AND EROSION
____ REMOVE WOODY GROWTH FROM THE EMBANKMENT
____ ANY BREAKS. HIRE REGISTERED PROFESSIONAL ENGINEER FOR DESIGN RESOLUTION
____ SEED AND SOD ANY ERODED AREAS
____ SIGNS OF PIPING (LEAKAGE). REPAIR
____ SIGNS OF SEEPAGE OR WET SPOTS ON THE DOWNSTREAM DACE OF A BERM, MAY REQUIRED TOE DRAINS OR CHIMNEY DRAINS TO SOLVE PROBLEMS
____ STABILIZE EMERGENCY OVERFLOW STRUCTURE IF EROSION OBSERVED
____ REMOVE OBSTRUCTION BLOCKING EMERGENCY OVERFLOW SPILLWAY

VEGETATED AREAS
____ REGULA MOWING TO CONTROL VEGETATION, NO CUTTING OF NATIVE VEGETATION
____ NEED FOR PLANTING, RESEEDING OR SODDING. SUPPLEMENT ALTERNATIVE NATIVE VEGETATION IF A SIGNIFICANT POTION HAS BOT ESTABLISHED (50% OF THE SURFACE AREA). RESEED WITH ALTERNATIVE GRASS SPECIES IF ORIGINAL GRASS COVER HAS NOT SUCCESSFULLY ESTABLISHED.
____ EVIDENCE OF GRAZING, MOTORBIKES OR OTHER VEHICLES. REPAIR
____ CHECK FOR INVASIVE VEGETATION, REMOVE WHERE POSSIBLE
____ ALL VEGETATION MUST BE MAINTAINED PER THE APPROVED PLANTING PLAN

OUTLET CONTROL STRUCTURE
____ INSPECT RESTRICTOR AND REMOVE DEBRIS IF CLOGGED OR DISCHARGE REDUCED
____ REMOVE ACCUMULATED SEDIMENT AT OUTLET
____ SCOUR AND EROSION AT OUTLET. REPAIR AND RESEED
____ ANY ICE DAMAGE TO OUTLET OF PIPE. REPAIR IF NECESSARY
____ CONDITION OF TRASH TRACKS. REMOVE DEBRIS
____ OUTLET CHANNEL CONDITIONS DOWNSTREAM

ACCESS FOR MAINTENANCE EQUIPMENT
____ REMOVE ANY OBSTRUCTIONS PLACED IN MAINTENANCE EASEMENTS

SAFETY FEATURES
____ ACCESS CONTROLS TO HAZARDOUS AREAS
____ FENCES
____ LOOSE OR DAMAGED POSTS
____ LOOSE OR BROKEN WIRES
____ ACCUMULATED DEBRIS IN FENCES
____ CONDITIONS OF GATES
____ SIGNS

DETENTION VOLUME
____ INSPECT ALL STORMWATER DETENTION FACILITIES TO ENSURE THAT THE CONSTRUCTED VOLUME FOR DETENTION IS MAINTAINED. NO SEDIMENT, TOPSOIL OR OTHER DUMPING INTO THE FACILITY SHALL BE ALLOWED. SPECIFIC LOCATIONS IN THE STORMWATER MANAGEMENT SYSTEM, DESIGNED TO ACCUMULATE SEDIMENT, SHALL BE DREDGED AS NECESSARY TO PREVENT SEDIMENT FROM REACHING THE INVERT OFF ANY GRAVITY OUTLET PIPE.

3. VOLUME CONTROL FACILITY
ROUTINE INSPECTIONS AND MAINTENANCE OF VOLUME CONTROL FACILITIES SHALL BE PERFORMED BY THE OWNER ON A YEARLY OR AS-NEEDED BASIS. SPECIFIC ITEMS OF CONCERN INCLUDE:

____FACILITY SHALL BE INSPECTED YEARLY USING THE MONITORING WELL TO VERIFY THE SYSTEM IS FUNCTIONING PROPERLY
____SURFACE OF PERMEABLE PAVEMENT SHALL BE CLEANED WITH A LOW-PRESSURE POWER WASHER
____ACCUMULATED SEDIMENT FROM SURFACE SHALL BE VACUMED OUT AND DISPOSED OF PROPERLY
____APPROPRIATE SIGNAGE SHALL BE REPAIRED IF DAMAGED OR ILLEGIBLE

4. STORMWATER COLLECTION SYSTEM
THE OWNER SHALL PERFORM MONTHLY INSPECTIONS OF ALL COMPONENTS OF THE STORMWATER COLLECTION SYSTEM. THE MONTHLY INSPECTIONS SHALL OCCUR BETWEEN MARCH AND NOVEMBER AND INCLUDE THE FOLLOWING SPECIFIC AREAS OF CONCERN:

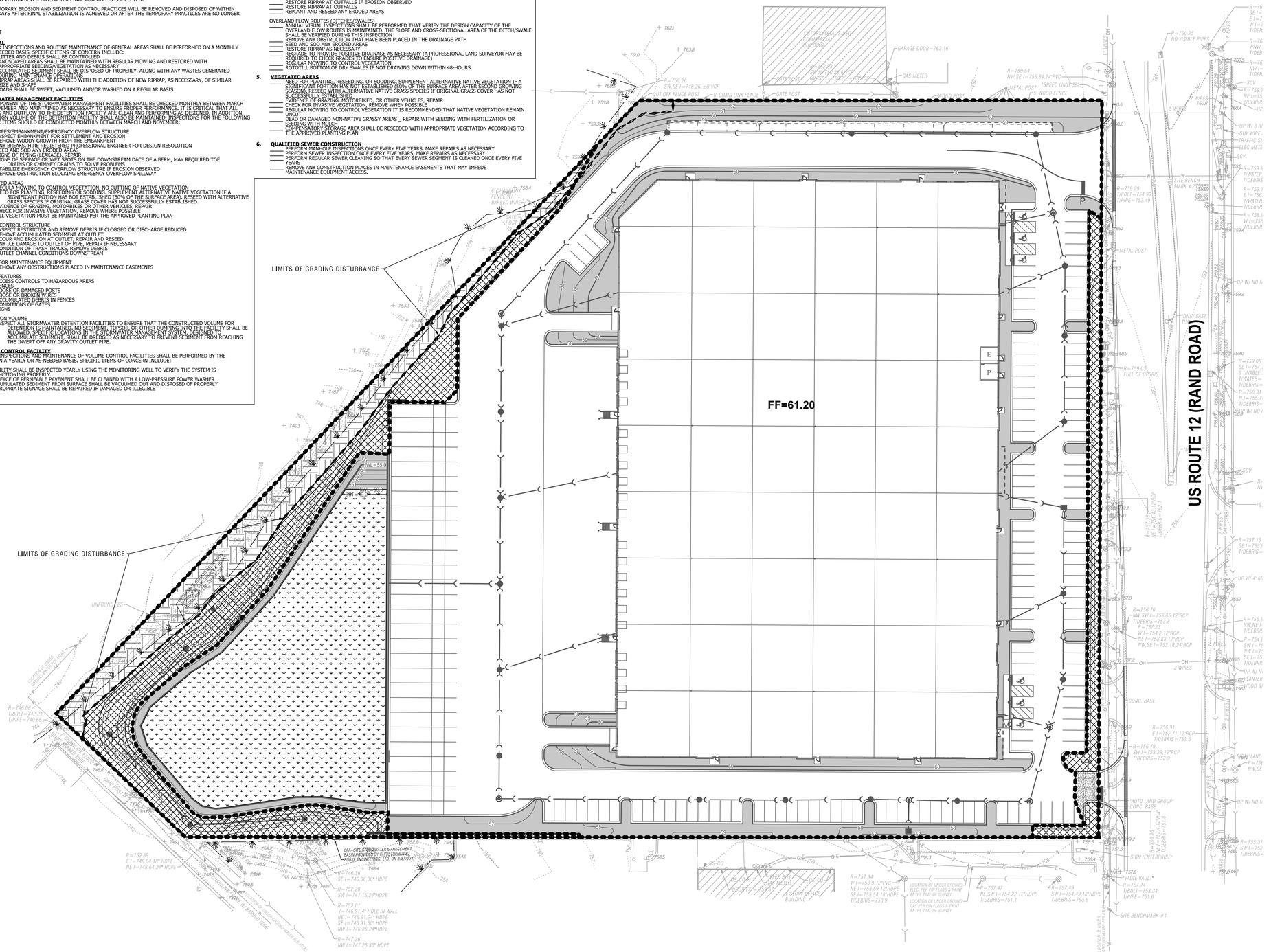
STORM INLETS/MANHOLES
____ REMOVE ACCUMULATED LEAVED AND OTHER DEBRIS FROM GRATES
____ RESET COVERS/LIDS ON AS-NEEDED BASIS
____ REMOVE ACCUMULATED SEDIMENT FROM BOTTOM OF MANHOLE WHEN 50% OF SUMP IS FILLED

STORM SEWERS/CULVERTS
____ VISUALLY INSPECT PIPES BY REMOVING MANHOLE LIDS, MAKE REPAIRS AS NECESSARY
____ STORM SEWERS AND CULVERTS SHALL BE CHECKED FOR SILTATION DEPOSITS AT INLETS, OUTLETS, AND WITHIN PIPES AND FLUSHED OUT AS NECESSARY
____ RESTORE RIPRAP AT OUTFALLS IF EROSION OBSERVED
____ RESTORE RIPRAP AT OUTFALLS
____ REPLANT AND RESEED ANY ERODED AREAS

OVERLAND FLOW ROUTES (DITCHES/SWALES)
____ ANNUAL VISUAL INSPECTIONS SHALL BE PERFORMED THAT VERIFY THE DESIGN CAPACITY OF THE OVERLAND FLOW ROUTES IS MAINTAINED. THE SLOPE AND CROSS-SECTIONAL AREA OF THE DITCH/SWALE SHALL BE VERIFIED DURING THIS INSPECTION
____ REMOVE ANY OBSTRUCTION THAT HAVE BEEN PLACED IN THE DRAINAGE PATH
____ SEED AND SOD ANY ERODED AREAS
____ RESTORE RIPRAP AS NECESSARY
____ REGRADE TO PROVIDE POSITIVE DRAINAGE AS NECESSARY (A PROFESSIONAL LAND SURVEYOR MAY BE REQUIRED TO CHECK GRADES TO ENSURE POSITIVE DRAINAGE)
____ REGULAR MOWING TO CONTROL VEGETATION
____ ROTOTILL BOTTOM OF DRY SWALES IF NOT DRAWING DOWN WITHIN 48-HOURS

5. VEGETATED AREAS
____ NEED FOR PLANTING, RESEEDING, OR SODDING. SUPPLEMENT ALTERNATIVE NATIVE VEGETATION IF A SIGNIFICANT PORTION HAS NOT ESTABLISHED (50% OF THE SURFACE AREA AFTER SECOND GROWING SEASON). RESEED WITH ALTERNATIVE NATIVE GRASS SPECIES IF ORIGINAL GRASS COVER HAS NOT SUCCESSFULLY ESTABLISHED
____ EVIDENCE OF GRAZING, MOTORBIKED, OR OTHER VEHICLES, REPAIR
____ CHECK FOR INVASIVE VEGETATION, REMOVE WHEN POSSIBLE
____ REGULAR MOWING TO CONTROL VEGETATION IT IS RECOMMENDED THAT NATIVE VEGETATION REMAIN UNCUT
____ DEAD OR DAMAGED NON-NATIVE GRASSY AREAS _ REPAIR WITH SEEDING WITH FERTILIZATION OR SEEDING WITH MULCH
____ COMPENSATORY STORAGE AREA SHALL BE RESEEDED WITH APPROPRIATE VEGETATION ACCORDING TO THE APPROVED PLANTING PLAN

6. QUALIFIED SEWER CONSTRUCTION
____ PERFORM MANHOLE INSPECTIONS ONCE EVERY FIVE YEARS, MAKE REPAIRS AS NECESSARY
____ PERFORM SEWER INSPECTION ONCE EVERY FIVE YEARS, MAKE REPAIRS AS NECESSARY
____ PERFORM REGULAR SEWER CLEANING SO THAT EVERY SEWER SEGMENT IS CLEANED ONCE EVERY FIVE YEARS
____ REMOVE ANY CONSTRUCTION PLACES IN MAINTENANCE EASEMENTS THAT MAY IMPEDE MAINTENANCE EQUIPMENT ACCESS.



LOT SUMMARY:

PROPERTY ADDRESS: 2240-2296 Rand Road, Palatine, IL 60074

PROPERTY INDEX NUMBERS: 02-02-101-004-0000; 02-02-101-005-0000; 02-02-101-013-0000; 02-02-101-014-0000; 02-02-101-019-0000; 02-02-101-020-0000; 02-02-101-021-0000

TOTAL PROPERTY OWNERSHIP = 8.86 AC

TOTAL DEVELOPMENT AREA = 8.60 AC

ON-SITE AREA TRIBUTARY TO STORMWATER BASIN = 8.06 AC

UNRESTRICTED ON-SITE AREA = 0.80 AC
(100-YR 24-HR EVENT SUBTRACTED FROM ALLOW RELEASE)

TIME OF CONCENTRATION CALCULATIONS:

USE 10-MIN FOR INDUSTRIAL

DETENTION & RETENTION SUMMARY:

BOTTOM VC BELOW NWL = 749.00

SHGWTE = 13.5' BELOW EXISTING FINISHED GRADE
ELEV. = ±737.5 to 743.5 IN BASIN AREA

DETENTION VOLUME PROVIDED = 3.69 AC-FT

DETENTION VOLUME REQUIRED = 3.34 AC-FT

RETENTION VOLUME PROVIDED = 0.73 AC-FT

RETENTION VOLUME REQUIRED = 0.54 AC-FT

CURVE NUMBER CALCULATIONS:

CN TRIBUTARY TO BASINS = 96.0

CN UNRESTRICTED = 71.0

CN ADJUSTED = 87.0

SYMBOL LEGEND

- PERVIOUS AREA
- IMPERVIOUS AREA
- NATIVE PLANTINGS - VOLUME CONTROL AREA
- UNRESTRICTED NATIVE PLANTINGS AREA TO BE SEEDED PER LANDSCAPE PLAN
- UNRESTRICTED IMPERVIOUS AREA
- UNDISTURBED AREA
- LIMITS OF GRADING DISTURBANCE

SUMMARY OF DEVELOPMENT AREA

IMPERVIOUS	6.50 AC
PERVIOUS	0.83 AC
NATIVE PLANTINGS - VOLUME CONTROL	0.73 AC
UNR. NATIVE PLANTINGS	0.53 AC
UNR. IMPERVIOUS	0.01 AC
UNDISTURBED AREA	0.26 AC
TOTAL	8.86 AC

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

MWRD EXHIBIT R

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4060 Fax: (847) 696-4065
SPACECO INC.

FILENAME: 11624MWRD
DATE: 03/16/22
JOB NO. 11624
SHEET EXH-R
18 OF 18

N:\Projects\11624\ENG\11624MWRD.dgn Default User=wbrennan

Attachment: EXHIBIT - ENG PLANS (2022-60 : 2240-2296 N. Rand Road)

Rendering of Elevation

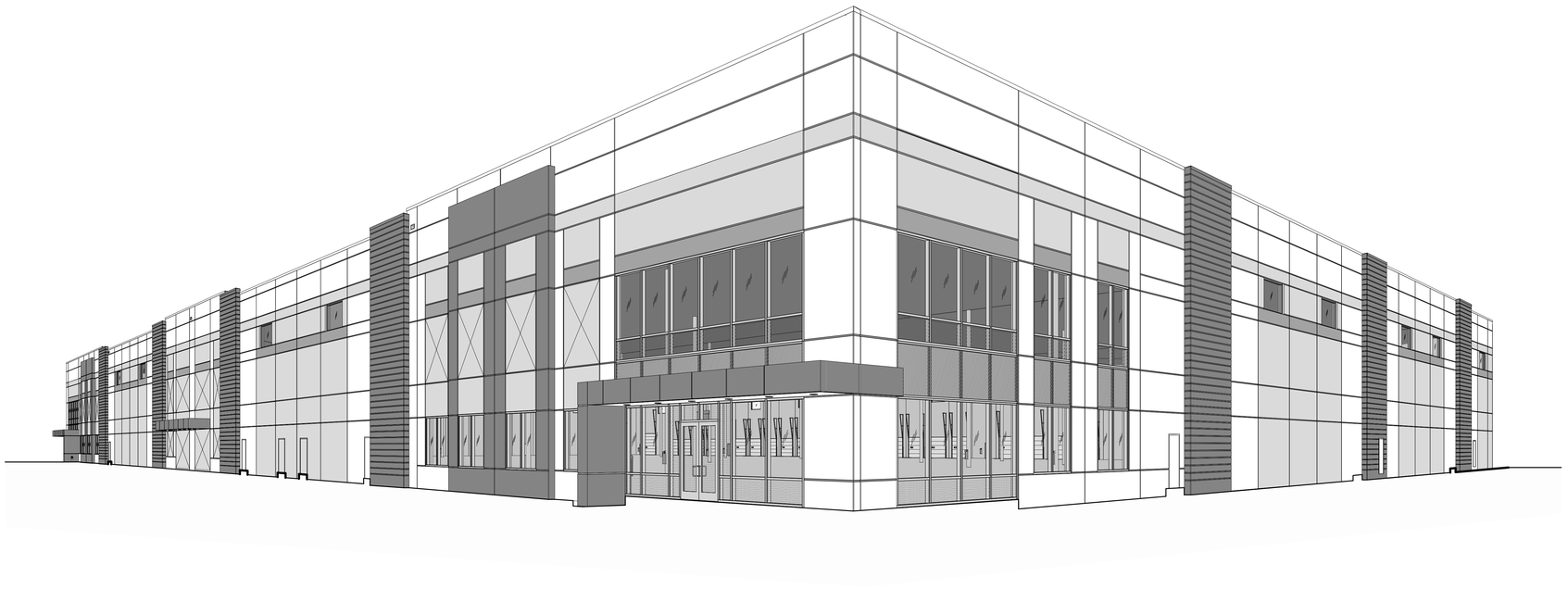
THE MISSNER GROU

Site Elevation

THE MISSNER GROUP

MISSNER GROUP - PALATINE

2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074



SHEET INDEX

TOTAL SHEETS: 33

ARCHITECTURAL

A0.1	TITLE SHEET
A0.1a	PROJECT DATA
A0.2	GENERAL NOTES
A0.3	ACCESSIBILITY DETAILS
A0.3a	ACCESSIBILITY DETAILS
A0.4a	SPECIFICATIONS
A0.4b	SPECIFICATIONS
A0.4c	SPECIFICATIONS
A0.4d	SPECIFICATIONS
A0.4e	SPECIFICATIONS
A0.4f	SPECIFICATIONS
A0.4g	SPECIFICATIONS
A0.4h	SPECIFICATIONS
A0.5	OCCUPANCY AND EGRESS PLAN
A1.1	SITE PLAN (FOR REFERENCE ONLY)
A2.0	OVERALL FLOOR PLAN
A2.1	PARTIAL FLOOR PLAN
A2.2	PARTIAL FLOOR PLAN
A3.1	ROOF PLAN
A4.1	EXTERIOR ELEVATIONS
A4.2	EXTERIOR ELEVATIONS
A5.0	BUILDING SECTIONS
A5.1	ENLARGED ELEVATION, PLAN AND WALL SECTIONS
A5.2	ENLARGED ELEVATION, PLAN AND WALL SECTIONS
A5.3	ENLARGED ELEVATION, PLAN AND WALL SECTIONS
A5.4	ENLARGED ELEVATION, PLAN AND WALL SECTIONS
A5.5	ENLARGED ELEVATION, PLAN AND WALL SECTIONS
A5.6	WALL SECTIONS
A5.7	WALL SECTIONS
A7.1	DOOR SCHEDULE
A8.1	DETAILS
A8.2	DETAILS
A8.3	DETAILS

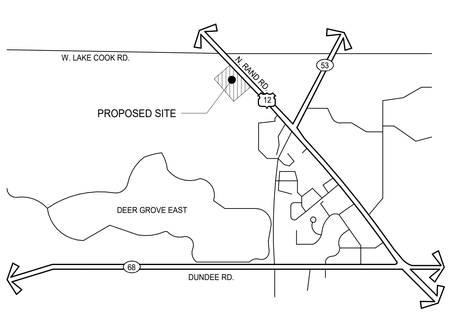
ARCHITECTURAL SHEET COUNT: 33

STRUCTURAL

S0.0	GENERAL NOTES
S0.1	SYMBOLS AND ABBREVIATIONS
S0.2	LOAD PLANS
S2.1	FOUNDATION PLAN
S2.2	ROOF FRAMING PLAN
S5.0	FOUNDATION DETAILS
S5.1	FOUNDATION DETAILS
S6.0	FRAMING DETAILS
S6.1	FRAMING DETAILS
S7.0	INTERIOR BUILDING ELEVATION AND JOIST DIAGRAMS

STRUCTURAL SHEET COUNT: 10

VICINITY MAP



OWNER/ GENERAL CONTRACTOR

THE MISSNER GROUP

THE MISSNER GROUP, LLC
1700 W. HIGGINS RD.
DES PLAINES, ILLINOIS 60018

PRIMARY CONTACT: BARRY MISSNER
PH: (847) 675-8877
EMAIL: bmissner@missnergroup.com

OWNER'S CONSULTANTS

CIVIL & LANDSCAPE ARCHITECT

SPACECO, INC.
9575W. HIGGINS ROAD, SUITE 700
ROSEMONT, ILLINOIS 60018

PRIMARY CONTACT: BRIAN RATAJCZAK
PH: (847) 696-4060
EMAIL: bratjczak@spacecoinc.com

ARCHITECT'S CONSULTANTS

STRUCTURAL ENGINEER

IMEG.
225 W. WASHINGTON STREET, SUITE 2700
CHICAGO, ILLINOIS 60606

PRIMARY CONTACT: SCOTT A. WIERCINSKI
PH: (630) 200-3960
EMAIL: scoot.a.wiercinski@imegcorp.com

ARCHITECT

WARE MALCOMB

1315 22ND St #410
OAK BROOK, IL 60523
P 630.218.0063

A.O.R: GRANT BRANDENBURG NCARB
PH: (630) 570-6765
EMAIL: gbrandenburg@waremalcomb.com
PRIMARY CONTACT: MAREK PULA
PH: (202) 908-6947 EXT. 1614
EMAIL: mpula@waremalcomb.com
ALTERNATE CONTACT: IGLIKA GEORGIEVA
PH: (630) 570-6767 EXT. 1624
EMAIL: igeorgieva@waremalcomb.com

DEFERRED SUBMITTALS

DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEERS OF RECORD WHO SHALL REVIEW AND PROVIDE NOTATION INDICATING DOCUMENTS HAVE BEEN REVIEWED AND FOUND TO BE IN GENERAL CONFORMANCE WITH THE BUILDING DESIGN. SUBMITTAL MATERIALS SHALL INCLUDE PLANS, DETAILS AND CALCULATIONS PREPARED AND SIGNED BY A STATE REGISTERED ENGINEER.
CONTRACTOR SHALL SUBMIT ARCHITECT AND ENGINEER REVIEWED SUBMITTAL MATERIALS TO THE BUILDING OFFICIAL FOR REVIEW AND PERMIT APPROVAL. DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED PRIOR TO OBTAINING THE BUILDING OFFICIAL'S APPROVAL OF THE SUBMITTAL.

1. MEP SYSTEMS
2. AUTOMATIC FIRE SPRINKLER SYSTEM.
3. FIRE ALARM SYSTEM.
4. STEEL JOISTS, TRUSSES AND GIRDERS CONFORMING TO SJI STANDARDS SPECIFICATIONS.
5. STEEL STAIRS, HANDRAILS AND GUARDS.
6. HIGH PILED STORAGE RACKING.
7. EXTERIOR BUILDING SIGNAGE AND SITE SIGNAGE.
8. ANCHORAGE DESIGN FOR ALL ELECTRICAL EQUIPMENT REQUIRED.
9. STOREFRONT AND CURTAIN WALL GLAZING SYSTEMS.
10. ROOF HATCH, RAILING AND GATE.
11. ROOF ACCESS LADDER/PLATFORM DESIGN AND SUPPORT.
12. LADDER SAFETY SYSTEM DESIGN AND SUPPORT.

WARE MALCOMB
ARCHITECTURE
PLANNING
INTERIORS
CIVIL ENGINEERING
BRANDING
BUILDING MEASUREMENT
1315 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184-004069

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

GRANT A BRANDENBURG 001-020842 LICENSED ARCHITECT STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP SINCE 1948

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

TITLE SHEET

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A0.1

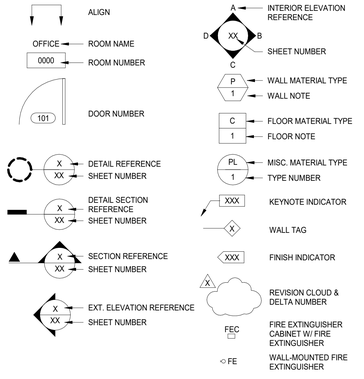
4/19/2022 8:50:06 AM 2022-04-08 PERMIT SET

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)

ABBREVIATIONS

∠.	ANGLE				
℄	CENTERLINE	G.B.	GRAB BAR	R.	RISER
#	POUND or NUMBER	G.C.	GENERAL CONTRACTOR	R.B.	RUBBER / RESILIENT BASE
&	AND	G.F.I.	GROUND FAULT INTERRUPT	R.C.P.	REFLECTED CEILING PLAN
(E)	EXISTING	GA.	GAUGE	R.D.	ROOF DRAIN
@	AT	GALV.	GALVANIZED	R.O.	ROUGH OPENING
~	DIAMETER or ROUND	GL.	GLASS	R.O.W.	RIGHT OF WAY
Ø	DIAMETER	GND.	GROUND	R.T.U.	ROOF TOP UNIT
		GR.	GRADE	R.W.L.	RAIN WATER LEADER
A.D.	AREA DRAIN	GYP.	GYPSUM	RAD.	RADIUS
ACOUS.	ACOUSTICAL			REF.	REFERENCE
ADJ.	ADJUST, ADJUSTABLE or ADJACENT	H.B.	HOSE BIBB	REFR.	REFRIGERATOR
		H.C.	HOLLOW CORE	REINF.	REINFORCE(D)
AGGR.	AGGREGATE	H.M.	HOLLOW METAL	REQ.	REQUIRED
AL.	ALUMINUM	H.P.	HIGH POINT	RESIL.	RESILIENT
APPROX.	APPROXIMATE(LY)	H.V.	HIGH VOLTAGE	RGTR.	REGISTER
ARCH.	ARCHITECTURAL	HDWD.	HARDWOOD	RM.	ROOM
ASB.	ASBESTOS	HDWE.	HARDWARE	RWD.	REDWOOD
ASPH.	ASPHALT	HORIZ.	HORIZONTAL		
		HR.	HOUR	S.	SOUTH
B.O.C.	BOTTOM OF CONCRETE	HT.	HEIGHT	S.A.F.	SELF-ADHERED FLASHING
B.O.M.	BOTTOM OF MULLION			S.C.	SOLID CORE
B.O.P.	BOTTOM OF PANEL	I.D.	INSIDE DIMENSION	S.C.D.	SEAT COVER DISPENSER
B.O.R.	BOTTOM OF REVEAL	I.H.P.	INTERMEDIATE HIGH POINT	S.D.	SOAP DISPENSER
BD.	BOARD	INSUL.	INSULATION or INSULATED	S.F.	SQUARE FOOT
BITUM.	BITUMINOUS	INT.	INTERIOR	S.I.	SQUARE INCH
BLDG.	BUILDING			S.N.D.	SANITARY NAPKIN DISPENSER
BLK.	BLOCK	J.B.	JUNCTION BOX		
BLKG.	BLOCKING	JAN.	JANITOR	S.N.R.	SANITARY NAPKIN RECEPTACLE
BM.	BEAM	JST.	JOIST		
BOT.	BOTTOM	JT.	JOINT	S.S.	STAINLESS STEEL
				S.SK.	SERVICE SINK
C.B.	CATCH BASIN	K.O.	KNOCK-OUT	S.T.C.	SOUND TRANSMISSION COEFFICIENT
C.G.	CORNER GUARD	K.P.	KICK PLATE		
C.I.	CAST IRON	K.W.H.	KILOWATT HOUR	SCHED.	SCHEDULE
C.O.	CASED OPENING	KIT.	KITCHEN	SCWD.	SOLID CORE WOOD
C.O.M.	CENTER OF MULLION			SECT.	SECTION
C.O.R.	CENTER OF REVEAL	L.P.	LOW POINT	SH.	SHELF
CAB.	CABINET	L.S.	LIMESTONE	SHR.	SHOWER
CEM.	CEMENT(ITIOUS)	L.V.	LOW VOLTAGE	SHT.	SHEET
CER.	CERAMIC	L.W.C.	LIGHT WEIGHT CONCRETE	SIM.	SIMILAR
CLG.	CEILING	LAB.	LABORATORY	SPEC.	SPECIFIED or SPECIFICATION
CLKG.	CAULKING	LAM.	LAMINATE(D)		
CLO.	CLOSET	LAV.	LAVATORY	SQ.	SQUARE
CLR.	CLEAR	LIN.	LINEAR	STA.	STATION
CNTR.	COUNTER	LIQ.	LIQUID	STD.	STANDARD
COL.	COLUMN	LKR.	LOCKER	STL.	STEEL
CONC.	CONCRETE	LT.	LIGHT	STOR.	STORAGE
CONN.	CONNECTION	LTL.	LINTEL	STRL.	STRUCTURE or STRUCTURAL
CONSTR.	CONSTRUCTION	LVR.	LOUVER		
CONT.	CONTINUOUS			SUPP.	SUPPLEMENT or SUPPLEMENTARY
CORR.	CORRIDOR	M.B.	MOP BASIN	SUSP.	SUSPENDED
CTR.	CENTER	M.C.	MEDICINE CABINET	SYMM.	SYMMETRICAL
CTSK.	COUNTER-SUNK	M.O.	MASONRY OPENING		
		MAINT.	MAINTENANCE	T&G	TONGUE AND GROOVE
D.F.	DRINKING FOUNTAIN	MAN.	MANUAL	T.	TREAD
D.O.	DOOR OPENING	MAS.	MASONRY	T.B.	TOWEL BAR
D.S.	DOWNSPOUT	MAX.	MAXIMUM	T.C.	TOP OF CURB
D.S.P.	DRY STANDPIPE	MECH.	MECHANICAL	T.D.	TRENCH DRAIN
DBL.	DOUBLE	MEMB.	MEMBRANE	T.O.C.	TOP OF CONCRETE
DEPT.	DEPARTMENT	MET.	METAL	T.O.M.	TOP OF MULLION
DET.	DETAIL	MEZZ.	MEZZANINE	T.O.P.	TOP OF PARAPET
DIA.	DIAMETER	MFR.	MANUFACTURER	T.O.R.	TOP OF REVEAL
DIM.	DIMENSION	MH.	MANHOLE	T.O.REC.	TOP OF DEEP RECESS
DISP.	DISPENSER	MIN.	MINIMUM	T.O.S.	TOP OF STEEL
DN.	DOWN	MIR.	MIRROR	T.O.W.	TOP OF WALL
DR.	DOOR	MISC.	MISCELLANEOUS	T.P.	TOP OF PAVEMENT
DWG.	DRAWING	MTD.	MOUNTED	T.P.D.	TOILET PAPER DISPENSER
DWR.	DRAWER	MUL.	MULLION	T.V.	TELEVISION
				TEL.	TELEPHONE
E.	EAST	N.	NORTH	TER.	TERRAZZO
E.J.	EXPANSION JOINT	N.I.C.	NOT IN CONTRACT	THK.	THICK
E.P.	ELECTRIC PANELBOARD	N.R.C.	NOISE REDUCTION COEFFICIENT	TOL.	TOLERANCE
E.W.C.	ELECTRIC WATER COOLER			TYP.	TYPICAL
EA.	EACH	N.T.S.	NOT TO SCALE		
EL.	ELEVATION	NO.	NUMBER	U.C.	UNDERCUT
ELEC.	ELECTRIC(AL)	NOM.	NOMINAL	U.H.	UNIT HEATER
ELEV.	ELEVATOR			U.L.	UNDERWRITERS' LABORATORIES
EMER.	EMERGENCY	O.A.	OVERALL		
ENCL.	ENCLOSED or ENCLOSURE	O.C.	ON CENTER	U.O.N.	UNLESS OTHERWISE NOTED
EQ.	EQUAL	O.D.	OUTSIDE DIAMETER	UNF.	UNFINISHED
EQPT.	EQUIPMENT	O.F.	OUTSIDE FACE	UR.	URINAL
EXP.	EXPANSION	O.H.	OVERHEAD or OPPOSITE HAND	V.C.T.	VINYL COMPOSITE TILE
EXPO.	EXPOSED	OBS.	OBSCURE	V.I.F.	VERIFY IN FIELD
EXST.	EXISTING	OFF.	OFFICE	V.P.	VISION PANEL
EXT.	EXTERIOR	OPNG.	OPENING	V.R.	VAPOR RETARDER
		OPP.	OPPOSITE	VAC.	VACUUM
F.A.	FIRE ALARM			VERT.	VERTICAL
F.A.R.	FLOOR AREA RATIO	P.C.	PRECAST	VEST.	VESTIBULE
F.B.	FLAT BAR	P.J.	PANEL JOINT	VIT.	VITREOUS
F.D.	FLOOR DRAIN	P.LAM.	PLASTIC LAMINATE		
F.E.	FIRE EXTINGUISHER	P.S.F.	POUNDS PER SQUARE FOOT	W.	WEST
F.E.C.	FIRE EXTINGUISHER CABINET			W.C.	WATER CLOSET
		P.T.D.	PAPER TOWEL DISPENSER	W.I.	WROUGHT IRON
F.H.C.	FIRE HOSE CABINET	P.T.R.	PAPER TOWER RECEPTACLE	W.P.	WORKING POINT
F.O.C.	FACE OF CONCRETE			W.S.	WEATHER STOP or STRIPPING
F.O.F.	FACE OF FINISH	PL.	PLATE		
F.O.M.	FACE OF MULLION	PLAS.	PLASTER	W.W.F.	WELDED WIRE FABRIC
F.O.SH.	FACE OF SHEATHING	PLYWD.	PLYWOOD	W/	WITH
F.P.	FIREPROOF	POL.	POLISH(ED)	W/O	WITHOUT
F.S.	FULL SIZE	PR.	PAIR	WD.	WOOD
FDN.	FOUNDATION	PT.	POINT	WPM	WATERPROOFING MEMBRANE
FIN.	FINISH(ED)				
FL.	FLOOR	Q.T.	QUARRY TILE	WRB	WEATHER / WATER RESISTIVE BARRIER
FLASH.	FLASHING	QUAL.	QUALITY		
FLUOR.	FLUORESCENT	QUAN.	QUANTITY	WSCT.	WAINSCOT
FT.	FOOT or FEET			WT.	WEIGHT
FTG.	FOOTING				
FURR.	FURRING				
FUT.	FUTURE				

SYMBOLS



PROJECT DATA

APPLICABLE CODES

CITY OF:	VILLAGE OF PALATINE, ILLINOIS
BUILDING:	2015 INTERNATIONAL BUILDING CODE W/ VILLAGE AMENDMENTS
STRUCTURE:	2015 INTERNATIONAL BUILDING CODE W/ VILLAGE AMENDMENTS
MECHANICAL:	2015 INTERNATIONAL MECHANICAL CODE
ELECTRICAL:	2017 NATIONAL ELECTRIC CODE
PLUMBING:	2014 ILINOIS PLUMBING CODE
ENERGY:	2018 INTERNATIONAL ENERGY CONSERVATION CODE W/ ILLINOIS AMENDMENTS
FIRE / LIFE SAFETY:	2015 INTERNATIONAL FIRE CODE W/ VILLAGE AMENDMENTS 2000 LIFE SAFETY CODE, NFPA 101
ACCESSIBILITY:	2018 STATE OF ILLINOIS ACCESSIBILITY CODE

CHAPTER 3 - USE & OCCUPANCY CLASSIFICATION

OCCUPANCY	SECTION	USE	PROPOSED AREA (SF)
S-1 / STORAGE	**(311)**	**WAREHOUSE**	SEE ALLOWABLE AREA BELOW

CHAPTER 5 - GENERAL BUILDING HEIGHTS AND AREAS

ALLOWABLE BUILDING HEIGHT:

MAIN OCCUPANCY	SPRINKLER CONDITION	(TABLE 504.3) ALLOWABLE BUILDING HEIGHT IN FEET	(TABLE 504.4) ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE	PROPOSED BUILDING HEIGHT IN FEET	PROPOSED NUMBER OF STORIES ABOVE GRADE PLANE
S-1	**S**	**75'-0"**	**3 STORY**	**43'-0"**	**1 STORY**

ALLOWABLE BUILDING AREA:

UNLIMITED AREA ALLOWED PER **507.4 & 507.2.1**

W/ AUTOMATIC SPRINKLER AND OPEN YARDS GREATER THAN 60 FEET ON ALL SIDES & 40 FEET W/ 3HR RATING

PROPOSED TOTAL BUILDING AREA ..... **145,408** S.F.

CHAPTER 6 - TYPES OF CONSTRUCTION

TYPE OF CONSTRUCTION (602) ..... **TYPE:** II-B

BUILDING ELEMENTS	**(TABLE 601)**
STRUCTURAL FRAME	**0** HR.
EXTERIOR BEARING WALLS	**0** HR.
INTERIOR BEARING WALLS	**0** HR.
EXTERIOR NON-BEARING WALLS	**SEE BELOW**
INTERIOR NON-BEARING WALLS	**0** HR.
FLOORS	**0** HR.
ROOF	**0** HR.
EXTERIOR WALLS BASED ON FIRE SEPARATION	**(TABLE 602)**
NORTH EXTERIOR WALL (X > 30')	**0** HR.
EAST EXTERIOR WALL (X > 30')	**0** HR.
SOUTH EXTERIOR WALL (X > 30')	**0** HR.
WEST EXTERIOR WALL (X > 30')	**0** HR.

CHAPTER 7 - FIRE AND SMOKE PROTECTION FEATURES

ALLOWABLE AREA OF OPENINGS (TABLE 705.8) (FULLY SPRINKLERED THROUGHOUT)

EXTERIOR WALLS		FIRE SEPARATION DISTANCE (FT)	ALLOWABLE AREA (%)	EXTERIOR WALL AREA (SF)	ACTUAL AREA OF PROTECTED OPENINGS (Ap)	ALLWBL AREA OF PROTECTED OPENINGS (ap)	ACTUAL AREA OF UNPROTCTD OPENINGS (Au)	ALLWBL AREA OF UNPROTCTD OPENINGS (Ia)	(Ap/ap)+(Au/au)
FLOOR 1	NORTH	≥ 30	UNLIMITED UNPROTECTED OPENINGS ARE PERMITTED						
	EAST								
	SOUTH								
	WEST								

CHAPTER 9 - FIRE PROTECTION SYSTEMS

(903.3.1.1) AUTOMATIC SPRINKLER SYSTEM WILL BE PROVIDED AND INSTALLED WITH ACCORDANCE WITH NFPA 13.

(903.4) AUTOMATIC SPRINKLER SYSTEM MONITORING AND ALARMS WILL BE PROVIDED.

E.S.F.R. (EARLY SUPPRESSION FAST-RESPONSE) AUTOMATIC FIRE PREVENTION SPRINKLER SYSTEM PROVIDED THROUGHOUT. SPRINKLER DESIGN AND CALCULATIONS TO BE SUBMITTED UNDER SEPARATE PERMIT.

(910.2) EXCEPTION 2: SMOKE AND HEAT VENTS NOT REQUIRED WHERE E.S.F.R. SPRINKLER SYSTEM IS PROVIDED

CHAPTER 10 - MEANS OF EGRESS (SEE OCCUPANCY AND EGRESS PLANS)

PROJECT DESCRIPTION

THE SCOPE OF THIS PROJECT IS A 145,408 SF SHELL WAREHOUSE SPACE. THE BUILDING CONSTRUCTION SHALL CONSIST OF INSULATED PRECAST CONCRETE PANELS, TRENCH FOOTINGS AT THE PERIMETER, SLAB ON GRADE, AND STEEL STRUCTURAL COLUMNS AND ROOF COMPONENTS.

WARE MALCOMB
ARCHITECTURE PLANNING INTERIORS
CIVIL ENGINEERING BRANDING BUILDING MEASUREMENT
1515 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184-004069

GRANT A BRANDENBURG 001-020842 REGISTERED ARCHITECT STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

PROJECT DATA

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A0.1a

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK.

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)
4/19/2022 8:50:09 AM 2022-04-08 PERMIT SET

ENVELOPE ASSEMBLY NOTES

1. **ROOF ASSEMBLY:**

1.1 **MAIN ROOF CONSTRUCTION:**
- 45 MIL BALLASTED EPDM USING ASTM #4 STONE AT 10 LBS/SF IN THE FIELD, 12 LBS/SF IN THE PERIMETER, AND 15 LBS/SF IN THE CORNERS W/ FLASHING AT ALL ROOF OPENINGS (15 YEAR MANUFACTURER WARRANTY)
- (2) LAYERS OF RIGID INSULATION (R-25)
- METAL DECK (REFER TO STRUCT.). ROOF DECK WILL BE PAINTED WITH A BOTTOM SIDE FACTORY APPLIED "WHITE" PRIMER.
- GRAY TUBE STEEL COLUMNS AND GRAY JOISTS/ GIRDERS. BUILDING COLUMNS ONE COLUMN FROM DOCK WALLS SHALL BE PAINTED TO A HEIGHT OF 10'-0" AFF IN SAFETY YELLOW.
- TWO LAYERS OF POLYISOCYANURATE INSULATION WITH STAGGERED SEAMS, TAPED AND SEALED.
- STAGGER JOINTS IN SUCCESSIVE LAYERS OF INSULATION A MINIMUM OF 18" APART
- THE ROOF SYSTEM SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.

1.2 **COVERED CANOPY ROOF CONSTRUCTION:**
- FULLY ADHERED 45 MIL REINFORCED EPDM ROOF MEMBRANE. INSTALL PER ROOFING MANUFACTURER'S SPECIFICATIONS
- TAPERED RIGID INSULATION
- 1 1/2" METAL DECK (REFER TO STRUCT).
- STRUCTURAL MEMBERS (REFER TO STRUCTURAL DRAWINGS FOR LAYOUT AND MEMBER SIZES)

2. **EXTERIOR WALL ASSEMBLIES:**

2.1 **PRE-CAST CONCRETE WALL PANELS**
- LOAD BEARING INSULATED PRE-CAST CONCRETE WALL PANELS - 10.5" THICK WITH REVEALS AND PAINTED FINISH, TYP. TOTAL R-VALUE OF PRECAST CONCRETE SANDWICH WALL ASSEMBLY PROVIDED SHALL BE NOT LESS THAN R-6. ALL PANELS' JOINTS WILL BE CAULKED ON BOTH THE INTERIOR AND EXTERIOR.
- STANDARD 14'-0" OR 15'-0" WIDE PANELS. PRE-CAST CONCRETE WALL PANELS SHALL RECEIVE A TINTED PRIMER COAT AND TWO (2) COATS OF TEXTURED PAINT.
- PAINT COLORS: (A) BASE COLOR: SW 7662 EVENING SHADOW; (B) SW 7656 PHINESTONE; (C) SW 6256 EVENING GRAY; (D) SW 6794 FLYAWAY.

2.2 PRE-FINISH ALUMINUM **METAL PANELS ASSEMBLY: CANOPY AND WALL DESIGN**
- METAL STUD FRAMING
- 1/2" PLYWOOD SHEATHING
- HIGH TEMPERATURE WEATHER RESISTANT BARRIER (WRB)
  PRE-FINISHED ALUMINUM METAL PANELS INSTALLED PER MANUFACTURER'S RECOMMENDATIONS

3. **EXTERIOR GLAZING ASSEMBLIES:**

3.1 **STOREFRONT/ WINDOWS/ CLERESTORY GLAZING SYSTEM:**
- 1" INSULATED GLAZING UNITS (THERMALLY BROKEN) HIGH PERFORMANCE GLASS
- STOREFRONT SYSTEM WINDOWS & CLERESTORY WINDOWS: CENTER GLAZED (IGU = 1/4" PPG SOLARGRAY EXTERIOR - BASE OF DESIGN))
- 1/2" AIR SPACE
- 1/4" SOLARBAN 100, CLEAR LOW-E (ON SURFACE 2) GLAZING UNIT
- CLEAR ANODIZED ALUMINUM FRAMES WITH A THERMO-BREAK DESIGN

ALL GLASS USED ON THE ENVELOPE OF THE BUILDING TO BE:
- SOLARBAN R100 (BASE OF DESIGN) OR APPROVED EQUAL
- PERFORMANCE CRITERIA:
  1. VLT (VISIBLE LIGHT TRANS.): 32%
  2. EXTERIOR REFLECTANCE: 15%
  3. U FACTOR (WINTER): 0.28
  4. U FACTOR (SUMMER): 0.26
  5. SHADING COEFICIENT: 0.27
  6. SHGC: 0.24
  7. RELATIVE HEAT GAIN: 58

GLASS WIND LOAD RESISTANCE CALCULATIONS ARE UNDER SEPARATE PERMIT

3.2 COLOR OF GLASS: (EXTERIOR GLAZING) — TINTED (COLOR TO BE SELECTED BY TENANT)

3.3 COLOR OF GLASS: (INTERIOR GLAZING) — CLEAR

3.4 SPANDREL GLASS: (IF ANY) — COLOR TO MATCH CLEAR ANODIZED STOREFRONT SYSTEM MULLIONS

3.4 CLEARSTORY WINDOWS: — FRAMING SHALL BE CLEAR ANODIZED ALUMINUM WITH TINTED GLASS (COLOR: GRAY)

4. **EXTERIOR SWINGING DOOR ASSEMBLIES:**

4.1 **SERVICE/ MAN DOORS:**
- 18GA GALVANIZED HOLLOW METAL FLUSH DOORS AND 16GA FULLY WELDED H.M. GALVANIZED DOOR FRAMES
- PAINTED, INSULATED HOLLOW METAL DOOR w/ COMMERCIAL GRADE HEAVY DUTY HARDWARE INCLUDING SCHLAGE MORTISE LOCKS, FALCON EXIT DEVICES AND LCN CLOSERS
- DOORS AND FRAMES ARE TO HAVE SHOP PRIMED PAINT APPLIED.
- COLOR: REFER TO BUILDING ELEVATIONS. COLOR TO MATCH COLOR OF ADJACENT EXTERIOR WALL
- UL RATED DOORS AS REQUIRED BY CODE (ALL DOORS REQUIRED BY CODE TO BE FIRE RATED SHALL HAVE LABELS DESIGNATING HOURLY RATINGS PER UNDERWRITER'S LABORATORY STANDARDS)

4.2 **STOREFRONT SYSTEM DOORS:**
- MEDIUM STILE ENTRY DOORS WITH 1" INSULATED W/ 1/4" GLAZING ASSEMBLY, CLOSERS, WEATHER-STRIPPING AND THRESHOLDS
- CLEAR ANODIZED ALUMINUM STOREFRONT DOOR w/ TEMPERED GLAZING

5. **EXTERIOR NON-SWINGING DOOR ASSEMBLIES:**

5.1 **SECTIONAL DOORS:**
- MANUALLY OPERATED SECTIONAL VERTICAL LIFT OVERHEAD DOCK DOORS WITH Z-GUARD TRACK PROTECTION
- STEEL SECTIONAL DOORS, INSULATED, MINIMUM U-VALUE OF 0.070 (R-14)
- ALL DOORS SHALL BE PROVIDED WITH ONE (1) VISION PANEL
- Z CHANNEL TRACK GUARDS TO BE INCLUDED FOR ALL OVERHEAD DOORS
- ALL DOORS TO HAVE SLIDE BOLT MECHANISMS AND HAVE A WHITE POLYESTER FINISH.
- OVERHEAD DOORS SHALL BE EQUIPPED WITH WEATHER STRIPPING, GALVANIZED FLUSH STEEL FACE, METAL TRACK AND HARDWARE

5.2 **DRIVE-IN-DOORS:**
- MOTOR (ELECTRIC) OPERATED SECTIONAL VERTICAL LIFT OVERHEAD D.I.D. DOORS
- STEEL SECTIONAL DOORS, INSULATED, MINIMUM U-VALUE OF 0.070 (R-14)
- ALL DOORS SHALL BE PROVIDED WITH ONE (1) VISION PANEL (1" INSULATED GLASS)
- Z CHANNEL TRACK GUARDS TO BE INCLUDED FOR ALL OVERHEAD DOORS
- ALL DOORS TO HAVE SLIDE BOLT MECHANISMS AND HAVE A WHITE POLYESTER FINISH.
- OVERHEAD DOORS SHALL BE EQUIPPED WITH WEATHER STRIPPING, VISION PANEL, GALVANIZED FLUSH STEEL FACE, METAL TRACK AND HARDWARE

6. **PERIMETER INSULATION:**
PROVIDE CONTINUOUS RIGID INSULATION AT PERIMETER OF FIRST STORY BUILDING SLAB. MINIMUM R-VALUE R=10. PROVIDE INSULATION TO A DEPTH OF 24" BELOW GRADE-LINE AT BUILDING FACE.

7. **FLOOR ASSEMBLY:**
7.1 SLAB-ON-GRADE:
- REFER TO STRUCTURAL FOR FLOOR ASSEMBLY
- 10 MIL VAPOR BARRIER INCLUDED AT FUTURE OFFICE AREAS
- WAREHOUSE FLOORS SHALL BE SEALED WITH 1 COAT OF ASHFORD SEALER OR EQUAL.

DOOR NOTES

1. VERIFY THAT ALL DOORS AND DOOR HARDWARE MEET THE REQUIREMENTS OF ALL GOVERNING CODES & STANDARDS. NOTIFY THE ARCHITECT IMMEDIATELY IN CASE OF DISCREPANCY.
2. FIELD MEASURE AS REQUIRED ALL DOORS AND/OR DOOR OPENINGS PRIOR TO FABRICATION.
3. PROVIDE SIGN IN CONTRASTING LETTERS OF 1 INCH OR MORE AT MAIN ENTRY STATING "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED" UNLESS LOCK UNLATCHES WITHOUT A KEY OR NEED OF SPECIAL KNOWLEDGE.
4. VERIFY THAT EXISTING DOORS (IF ANY) COMPLY WITH ACCESSIBILITY REQUIREMENTS.
5. FIRE RATED AND SMOKE AND DRAFT CONTROL DOORS SHALL COMPLY WITH REQUIREMENTS OF ALL GOVERNING CODES & STANDARDS AND SHALL BEAR A LABEL FROM A RECOGNIZED AGENCY SHOWING THE SPECIFIC RATINGS.
6. ALL SWINGING DOOR HANDLES TO BE LEVER-TYPE TO COMPLY WITH GOVERNING CODES & ACCESSIBILITY STANDARDS.
7. DOOR HANDLES OR PULLS AND ALL OTHER OPERABLE PARTS OF DOOR HARDWARE (SUCH AS DEADBOLTS, KEYHOLES... ETC.) ARE TO BE CENTERED BETWEEN 34" AND 44" ABOVE FINISH FLOOR. IF EXISTING BUILDING STANDARD EXISTS, MATCH BUILDING STANDARD AND CONFIRM COMPLIANCE WITH ACCESSIBILITY REQUIREMENTS.
8. SPECIAL LOCKING DEVICES SHALL BE OF AN APPROVED TYPE BY AUTHORITY HAVING JURISDICTION.
9. PROVIDE WEATHER SEALS ON ALL EXTERIOR DOORS TO RESTRICT INFILTRATION PER ANSI / IECC STANDARDS.
10. CONTRACTOR IS RESPONSIBLE TO COORDINATE & VERIFY ALL DOOR FRAME THROAT THICKNESSES FOR EACH LOCATION.
11. ALL DOOR FRAMES TO BE FACTORY FINISHED, U.O.N.
12. PROVIDE 6'x16 GA MIN FLAT METAL OR 2x6 BACKING (FRT AS REQUIRED) BEHIND ALL WALL MOUNTED DOOR STOPS. FLOOR MOUNTED DOOR STOP SHALL NOT BE PLACED IN A PATH OF EGRESS AS A TRIPPING HAZARD.
13. MAXIMUM UNDERCUT OF ALL NON-FIRE RATED DOORS SHALL NOT EXCEED 1/2" ABOVE FINISH FLOOR SURFACE.
14. CONTRACTOR SHALL REFINISH ANY BLEMISHED DOOR OR REPLACE SAID DOOR IF NOT ABLE TO REFINISH TO "AS NEW" CONDITION.
15. ALL DOORS TO BE OPERABLE FROM THE INSIDE WITHOUT A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT
16. ALL DOORS WITH ELECTRONIC SECURITY DOOR LOCKS MUST BE OPERABLE FOR EXITING PURPOSES UNDER ALL CONDITIONS. INCLUDING A POWER OUTAGE.
17. IF BUILDING STANDARDS ARE INCONSISTENT FOR DOORS, SIDELITES, HARDWARE, DOOR AND SIDELITE FRAMES OR OTHER STANDARD DETAILS, THEN CONTRACTOR MUST VERIFY WITH ARCHITECT AND OWNER PRIOR TO CONSTRUCTION.
18. WINDOWS AND DOORS SHALL MEET THE MAXIMUM AIR LEAKAGE REQUIREMENTS AS INDICATED IN IECC TABLE C402.5.2 (GC TO COORDINATE)
19. EXTERIOR WINDOWS AND DOORS SHALL BE LABELED AS CONFORMING TO AAMA/NWDA 101/I.S.2/NAFS; LABEL TO STATE NAME OF MANUFACTURER, THE APPROVED LABELING AGENCY AND THE PRODUCT DESIGNATION.

ROOF NOTES

1. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR SCHEMATIC LAYOUT OF ROOF LEVEL HVAC, PLUMBING AND ELECTRICAL EQUIPMENT, PIPE, CONDUIT, PLATFORMS, HOUSEKEEPING PADS, BASES, SHAFT OPENINGS, DECK PENETRATIONS, ETC.
2. CONTRACTOR SHALL VERIFY SIZE, LOCATIONS, AND INSTALLATIONS REQUIREMENTS OF ALL HVAC, PLUMBING AND ELECTRICAL EQUIPMENT WITH EQUIPMENT MANUFACTURERS AND SUBMIT A FINAL LAYOUT OF ALL EQUIPMENT FOR ARCHITECT APPROVAL.
3. THE TOP OF MECHANICAL AND PLUMBING EQUIPMENT PLATFORMS AND CURBS SHALL MEASURE A MINIMUM OF 8" ABOVE THE HIGHEST ADJACENT TOP OF ROOFING ELEVATION.
4. VENT OPENINGS THROUGH THE ROOF SHALL BE INSTALLED 10'-0" MINIMUM AWAY FROM AND TERMINATED 3'-0" MINIMUM ABOVE ANY FRESH AIR INTAKE.
5. SEE PLUMBING DRAWINGS FOR ROOF DRAIN AND SECONDARY DRAIN SIZES.
6. CRICKETS SHALL BE INSTALLED ON THE HIGH SIDE OF ANY OBSTRUCTION MORE THAN 47" WIDE AND ORIENTED PERPENDICULAR TO THE FLOW OF WATER TO THE DRAIN. SUCH OBSTRUCTIONS INCLUDE BUT ARE NOT LIMITED TO EQUIPMENT PADS, CURBS AND WALLS.
7. ROOFING ASSEMBLIES SHALL BE SELECTED AND INSTALLED AS REQUIRED TO RESIST MAXIMUM WIND SPEEDS AND UPLIFT FORCES DEFINED BY CODE AND LOCAL OR STATE LAW AS APPLIED TO THE ROOF'S GEOGRAPHIC LOCATION, HEIGHT AND EXPOSURE CLASS.
8. OVERFLOW SCUPPERS AND SECONDARY ROOF DRAINS SHALL BE DESIGNED PER APPLICABLE CODES WITH INLETS LOCATED 3" ABOVE THE LOW POINT OF THE SURROUNDING FINISHED ROOF SURFACE. COORDINATE W/ STRUCTURAL.
9. ORIENT SKYLIGHT/SMOKE HATCH (IF ANY) HINGE SIDE TOWARD THE PREVAILING WIND.
10. ALL ROOF SURFACES SHALL SLOPE A MINIMUM OF 1 /4 INCH PER FOOT IN ALL DIRECTIONS.
11. SEE STRUCTURAL DRAWINGS FOR ROOF FRAMING.
12. ALL ROOF SURFACES SHALL STOP AT A MINIMUM OF 1/4 INCH PER FOOT IN ALL DIRECTIONS. CRICKETS SHALL BE USED ON THE HIGH SIDE OF ALL EQUIPMENT PLATFORMS.
13. REFER TO STRUCTURAL DRAWINGS ROOF ELEVATIONS (BOTTOM OF DECK) FROM FINISHED FLOOR, DATUM ELEVATION 0'-0".
14. T.O.P = TOP OF PARAPET / PANEL.
15. ROOFING MATERIALS AND ASSEMBLY SHALL BE RATED UL CLASS "A" FIRE RETARDANT
16. PROVIDE MULTI-COMPONENT EXPANDING POLYURETHANE FOAM SEALANT AT BUILDING PERIMETER & ROOF PENETRATIONS (TYP.)

IL. ENERGY CONSERV. CODE

THE INTERNATIONAL ENERGY CONSERVATION CODE (IECC) HAS BEEN ADOPTED BY THE STATE OF ILLINOIS PER THE JOINT COMMITEE ON ADMINISTRATIVE RULES CODE: TITLE 71: CHAPTER 1: SUBCHAPTER d: PART 600.110 'ADOPTION AND MODIFICATION OFHE CODE', SUBSECTION 2) 'PRIVATELY FUNDED COMMERCIAL FACILITIES AND RESIDENTIAL BUILDINGS'

IN ACCORDANCE WITH IECC SECTION C401.2, 1. "APPLICATION", THE ENVELOPE OF THE SUBJECT
PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF ANSI/ ASHRAE / IESNA 90.1. THE COMPLIANCE PATH SHALL BE VIA APPLICATION OF THE ANSI / ASHRAE / IESNA 90.1 SECTION 5.2.1.b, "SUBSECTION 5.6, BUILDING ENVELOPE TRADE-OFF OPTION."

COMPLIANCE SHALL BE DEMONSTRATED BY SUBMITTAL OF "COMPLIANCE CERTIFICATES" GENERATED FOR THE SUBJECT PROJECT BY THE U.S. DEPARMENT OD ENERGY'S COMCHECK CODE COMPLIANCE TOOL. IN ACCORDANCE WITH THE STATE OF ILLINOIS JOINT COMMITTEE ON ADMINISTRATIVE RULES ADMINISTRATIVE CODE: TITLE 71: CHAPTER 1: SUBCHAPTER D: PART 600:

SECTION 600.330. 'COMPLIANCE'. SUBSECTION b) 2)

FIRE AUTHORITY NOTES

1. FINAL INSPECTION BY FIRE DEPARTMENT IS REQUIRED - SCHEDULE 2 DAYS IN ADVANCE. THE LOCAL AUTHORITY HAVING JURISTICTION IS REQUIRED FOR FINAL INSPECTIONS.
2. THE PROJECT ADDRESS SHALL BE PROVIDED FOR ALL NEW AND EXISTING BUILDINGS IN A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY PER LOCAL FIRE DEPARTMENT STANDARDS.
3. AN UNOBSTRUCTED ALL-WEATHER FIRE APPARATUS ACCESS ROAD SHALL BE IN PLACE PRIOR TO DELIVERY OF COMBUSTIBLE BUILDING MATERIALS TO THE SITE.
4. FIRE PREVENTION WATER SERVICE SHALL BE IN SERVICE PRIOR TO THE DELIVERY OF COMBUSTIBLE BUILDING MATERIALS TO THE SITE.
5. ACCESS GATES (IF ANY) SHALL BE APPROVED PRIOR TO INSTALLATION AND SHALL BE IN COMPLIANCE WITH LOCAL FIRE AUTHORITY.
6. PRIVATE FIRE HYDRANTS, SPRINKLER CONTROL AND POST INDICATOR VALVES , AND RISERS TO FIRE DEPARTMENT CONNECTIONS SHALL BE PAINTED "SAFETY RED" PER LOCAL FIRE AUTHORITY.
7. ALL FIRE HYDRANTS SHALL HAVE A "BLUE REFLECTIVE PAVEMENT MARKER" INDICATING ITS LOCATION ON THE STREET OR DRIVE PER LOCAL FIRE AUTHORITY STANDARDS. ON PRIVATE PROPERTY THESE MARKERS ARE TO BE MAINTAINED IN GOOD CONDITION BY THE PROPERTY OWNER. (REFER TO CIVIL)
8. PROVIDE OUTSIDE GAS SHUT-OFF VALVE. PROVIDE SIGN INDICATION MAIN GAS AND ELECTRICAL SHUT-OFF PER LOCAL FIRE DEPARTMENT.
9. FIRE SPRINKLER SYSTEM(S) SHALL MEET STATE & LOCAL FIRE CODES AND BE PROVIDED TO PROTECT ENTIRE BUILDING INCLUDING PROJECTIONS OVER 4'-0".
10. FIRE SPRINKLER SYSTEM(S) AND ALL CONTROL VALVES, INCLUDING EXTERIOR SHALL BE SUPERVISED BY A U.L LISTED CENTRAL ALARM STATION OR PER STATE & LOCAL FIRE CODES.
11. ALL VALVES CONTROLLING THE WATER SUPPLY FOR AUTOMATIC SPRINKLER SYSTEMS AND WATER-FLOW SWITCHES ON ALL SPRINKLER SYSTEMS SHALL BE ELECTRONICALLY MONITORED
12. WHERE THE NUMBER OF SPRINKLERS IS 100 OR MORE. ELECTRICAL SUBCONTRACTORS TO INSTALL WIRING FOR FIRE SPRINKLER, ALARM BELL AND TELEPHONE WARNING AS REQUIRED BY FIRE DEPARTMENT.
13. INSTALLATION OF FIRE ALARM SYSTEMS SHALL BE IN ACCORDANCE WITH STATE & LOCAL FIRE CODES.
14. COMPLETE PLANS AND SPECIFICATIONS FOR ALL FIXED FIRE PROTECTION EQUIPMENTS INCLUDING AUTOMATIC SPRINKLERS AND OTHER FIRE-PROTECTION SYSTEMS, SHALL BE SUBMITTED BY INSTALLING CONTRACTOR. SUCH PLANS SHALL BE APPROVED BY LOCAL FIRE AUTHORITY PRIOR TO INSTALLATION.
15. ALL REQUIRED FIRE DOORS SHALL BEAR A LABEL FROM A RECOGNIZED AGENCY SHOWING THE SPECIFIC RATING.
16. EXIT SIGNS AND ILLUMINATION SHALL CONFORM TO ALL APPLICABLE BUILDING AND FIRE CODES.
17. EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
18. PROVIDE OR MODIFY AS NEEDED SPRINKLER ALARM AND SMOKE DETECTION SYSTEM PER APPLICABLE CODES INCLUDING IF NECESSARY FIR HORNS, STROBE LIGHTS, CONTROL PANEL CONNECTIONS, SMOKE DETECTORS, AUDIO VISUAL ALARMS. SUBMIT SHOP DRAWINGS TO THE FIRE MARSHAL FOR APPROVAL
19. AT LEAST ONE (1) FIRE EXTINGUISHER WITH A MINIMUM RATING OF: 2-A:10B:C (FOR OFFICE); OR 10-A-80B:C (FOR WAREHOUSE); SHALL BE PROVIDED WITHIN 75'-0" MAXIMUM TRAVEL DISTANCE FOR EACH 3,000 SQUARE FEET OR PORTION THEREOF ON EACH FLOOR.
20. LOCATIONS AND CLASSIFICATIONS OF FIRE EXTINGUISHERS SHALL BE IN ACCORDANCE WITH STATE & LOCAL FIRE CODES AND PLACEMENT IS SUBJECT TO THE APPROVAL OF THE FIRE INSPECTOR. VERIFY QUANTITY & EXACT LOCATION FROM FIRE DEPARTMENT PRIOR TO ORDERING.
21. STORAGE, DISPENSING OR USE OF ANY FLAMMABLE AND COMBUSTIBLE LIQUIDS, FLAMMABLE AND COMPRESSED GASES, AND OTHER HAZARDOUS MATERIAL SHALL COMPLY WITH STATE & LOCAL FIRE CODES. THE STORAGE AND USE OF HAZARDOUS MATERIALS SHALL BE APPROVED BY THE FIRE AUTHORITY PRIOR TO ANY MATERIALS BEING STORED OR USED ON SITE. A SEPARATE PLAN SUBMITTAL IS REQUIRED PRIOR TO THE STORAGE AND USE OF HAZARDOUS MATERIALS.
22. BUILDING(S) NOT APPROVED FRO HIGH-PILED STOCK (MATERIALS IN CLOSELY PACKED PILES OR ON PALLETS, OR IN RACKS WHERE THE TOP OF STORAGE EXCEEDS 12'-0" IN HEIGHT, AND 6'-0" FOR GROUP "A" PLASTICS AND CERTAIN OTHER HIGH-HAZARD COMMODITIES). HIGH-PILED STORCK SHALL BE APPROVED BY THE FIRE AUTHORITY PRIOR TO MATERIALS BEING STORED ON SITE. A SEPARATE PLAN SUBMITTAL IS REQUIRED FOR HIGH-PILED STORAGE IN ACCORDANCE WITH STATE & LOCAL FIRE CODES.
23. A LETTER OF INTENDED USE MAY BE REQUIRED BY THE FIRE INSPECTOR.

SITE NOTES

1. REFER TO LANDSCAPE DRAWINGS FOR CONCRETE WALKS, PAVING, BERMS, LANDSCAPING AND IRRIGATION.
2. REFER TO CIVIL DRAWINGS FOR SITE GRADING, DRAINAGE, CATCH BASINS, PAVING DETAILS, SITE UTILITIES, CURB AND GUTTER SWALES, FIRE HYDRANT LOCATIONS AND HORIZONTAL CONTROL DIMENSIONS.
3. REFER TO CIVIL DRAWINGS FOR POINT OF CONNECTIONS TO OFF-SITE UTILITIES. CONTRACTOR TO VERIFY ACTUAL UTILITY LOCATIONS.
4. ALL DIMENSION ON SITE PLAN ARE TO BE FACE OF CONCRETE WALL. FACE OF CONCRETE CURB, PROPERTY LINE OR CENTERLINE OF PARKING STALL, UNLESS OTHERWISE NOTED.
5. FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH THE LOCAL FIRE DEPARTMENT STANDARDS.
6. ALL PARKING STALL STRIPING SHALL BE PER LOCAL JURISDICTION STANDARDS.
7. CONCRETE WALK SHALL RECEIVE EXPANSION JOINTS AT 50'-0" O.C MAX, AND CONTROL JOINTS AT 5'-0" O.C MAX, BETWEEN EXPANSION JOINTS, UNLESS NOTED OTHERWISE.

FLOOR PLAN NOTES

1. ALL EXITS SHALL HAVE EXIT SIGNS.
2. REFER TO PLUMBING, CIVIL AND SITE PLANS, FOR SIZE AND ROUTING OF ROOF DRAINAGE CONNECTION TO UNDERGROUND STORM DRAIN OR RUN TO DAYLIGHT AS SHOWN.
3. FLOORS SHALL BE SLOPED TO FLOOR DRAINS. COORDINATE WITH PLUMBING AND STRUCTURAL DRAWINGS. IN RATED FLOOR CONDITIONS, CONFIRM REMAINING FLOOR THICKNESS STILL CONFORMS TO MINIMUM RATING REQUIREMENT

GLAZING NOTES

1. EACH LIGHT SHALL BEAR THE MANUFACTURER'S LABEL DESIGNATING THE TYPE AND THICKNESS OF THE GLASS.
2. GLASS SHALL BE FIRMLY SUPPORTED ON ALL FOUR EDGES, U.O.N.
3. FIELD MEASURE ALL OPENINGS PRIOR TO FABRICATION.
4. FIXED OR OPERABLE GLAZING IN HAZARDOUS LOCATIONS AS DEFINED IN THE BUILDING CODE SHALL BE TEMPERED GLASS (SAFETY GLASS).
5. GLAZING IN SWINGING, SLIDING AND BIFOLD DOORS SHALL BE TEMPERED.
6. ALL GLAZING WITHIN A 24" ARC OF EITHER EDGE OF A DOOR AND WITHIN 60" OF THE FLOOR SHALL BE TEMPERED.
7. GLAZING IN WINDOWS: ALL GLAZING THAT MEETS ALL OF THE FOLLOWING CONDITIONS SHALL BE TEMPERED:
   A. THE EXPOSED AREA OF AN INDIVIDUAL PANE IS GREATER THAN 9 SF.
   B. THE BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR.
   C. THE TOP EDGE IS GREATER THAN 36" ABOVE THE FLOOR.
   D. WALKING SURFACE IS WITHIN 36".
8. ALL GLASS SHALL COMPLY WITH THE REQUIREMENTS OF THE STATE AND LOCAL CODES AND THE U.S. PRODUCT SAFETY COMMISSIONS: SAFETY STANDARDS FOR ARCHITECTURAL GLAZING MATERIALS.
9. WHERE JOINTS ARE REQUIRED IN MULTIPLE LITES, CLEAR SILICONE IS TO BE PROVIDED, U.O.N.
10. WINDOWS AND DOORS SHALL MEET THE MAXIMUM AIR LEAKAGE REQUIREMENTS AS INDICATED IN IECC TABLE C402.5.2 (GC TO COORDINATE)
11. EXTERIOR WINDOWS AND DOOR SHALL BE LABELED AS CONFORMING TO AAMA/NWDA 101/I.S.2 OR 101/I.S.2/NAFS; LABEL TO STATE NAME OF MANUFACTURER, THE APPROVED LABELING AGENCY AND THE PRODUCT DESIGNATION.

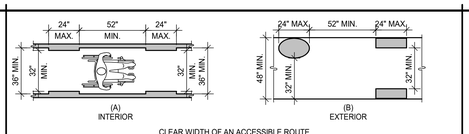
TABLE 2406.I
MINIMUM CATEGORY CLASSIFICATION OF GLAZING

EXPOSED SURFACE AREA OF ONE SIDE OF ONE LITE	GLAZING IN SINGLE COMBINATION DOORS (Category class)	GLAZING IN DOORS (Category class)	GLAZED PANELS REGULATED BY ITEM 1 OF SECTION 2406.3 (Category class)	GLAZED PANELS REGULATED BY ITEM 4 OF SECTION 2406.3 (Category class)	DOORS AND ENCLOSURES REGULATED BY ITEM 5 OF SECTION 2406.3 (Category class)	SLIDING GLASS DOORS FATIO TYPE (Category class)
9 square feet or less	I	I	No requirement	I	II	II
More than 9 square feet	II	II	II	II	II	II

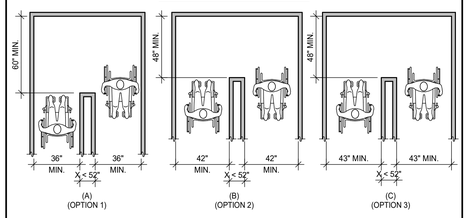
GENERAL PROJECT NOTES

GENERAL NOTES

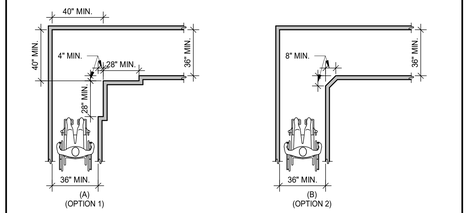
1. ALL WORK SHALL BE PERFORMED SO AS TO COMPLY WITH ALL LEGAL, INDUSTRY AND PROJECT-SPECIFIC REQUIREMENTS AND STANDARDS INCLUDING WITHOUT LIMITATION OF THE FOLLOWING:
   A. ALL APPLICABLE BUILDING CODES
   B. ALL APPLICABLE SPECIALTY CODES INCLUDING THE MOST CURRENT ISSUES AND SUPPLEMENTS
   C. THE PROJECT MANUAL AND ASSOCIATED SPECIFICATIONS WHEN PROVIDED
   D. THE MANUFACTURER'S REQUIREMENTS OR RECOMMENDATIONS
   E. ALL APPLICABLE LANDLORD BUILDING STANDARDS
2. IN USING THESE PLANS FOR BIDDING OR CONSTRUCTION PURPOSES, ALL CONTRACTORS ARE REQUIRED TO REVIEW AND TREAT THEM AS A WHOLE IN ORDER TO IDENTIFY ALL REQUIREMENTS THAT DIRECTLY OR INDIRECTLY AFFECT THEIR PORTION OF THE WORK, EVEN REQUIREMENTS LOCATED IN SECTIONS DESIGNATED AS APPLICABLE TO OTHER TRADES OR IN DOCUMENTS PROVIDED BY OTHER MEMBERS OF THE PROJECT DESIGN TEAM. UNLESS EXPRESSLY PROVIDED OTHERWISE, THE INTENT IS TO INCLUDE ALL LABOR, MATERIALS, PRODUCTS AND SERVICES NECESSARY OR APPROPRIATE FOR THE COMPLETED PROJECT AS CALLED FOR OR REASONABLY IMPLIED FROM THE PLANS AND SPECIFICATIONS PROVIDED BY THE PROJECT'S DESIGN TEAM. IN CASE OF CONFLICTS OR OMISSIONS, THE AFFECTED CONTRACTOR IS REQUIRED TO EITHER OBTAIN DIRECTION FROM AN APPROPRIATE REPRESENTATIVE OF THE OWNER, OR OTHERWISE TO APPLY THE MORE STRINGENT OR COSTLY STANDARD.
3. IN INTERPRETING THESE PLANS, THE FOLLOWING GENERAL RULES APPLY:
   A. WRITTEN DIMENSIONS SHALL GOVERN. DO NOT SCALE THE DRAWINGS. LARGE SCALE DRAWINGS AND DETAILS TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS
   B. SPECIFIC NOTES AND DETAILS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS
   C. WHERE CONSTRUCTION DETAILS ARE NOT SHOWN OR NOTED FOR ANY PART OF THE WORK, THE DETAILS SHALL BE THE SAME AS FOR OTHER SIMILAR WORK IN THE SAME BUILDING.
   D. WORK SHOWN AS "NIC" IS FOR REFERENCE ONLY AND THE RESPONSIBILITY OF THE CONTRACTOR ONLY TO THE EXTENT THAT THIS WORK MAY REQUIRE SOME REASONABLE PROTECTION OR COORDINATION EFFORTS.
4. THESE PLANS AND SPECIFICATIONS ARE INTENDED TO REPRESENT ONLY THE FINISHED CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION AND DEMOLITION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES INCLUDING ANY AND ALL SAFETY PRECAUTIONS AND PROGRAMS, AND SHALL INDEMNIFY TO THE FULLEST EXTENT ALLOWED BY LAW THE OWNER AND THE PROJECT DESIGN TEAM FROM AND AGAINST ANY AND ALL RELATED CLAIMS AND LIABILITY.
5. THESE PLANS AND SPECIFICATIONS ARE INTENDED TO SET FORTH THE REQUIREMENTS FOR CONSTRUCTION IN ONLY AN INDUSTRY-STANDARD LEVEL OF QUALITY AND DETAIL, AND THEY ARE INTENDED TO BE SUPPLEMENTED BY APPROPRIATE REQUESTS FOR INFORMATION (RFIs). ERRORS AND OMISSIONS ARE TO BE EXPECTED AND ANTICIPATED, AND ALL CONTRACTORS ARE REQUIRED TO CAREFULLY REVIEW THESE PLANS FOR ERRORS AND OMISSIONS AND TO BRING THESE ERRORS AND OMISSIONS TO THE ATTENTION OF AN APPROPRIATE OWNER REPRESENTATIVE IN A TIMELY MANNER; AND ANY CONTRACTOR WHO FAILS TO DO SO BEFORE BIDDING OR OTHERWISE PROCEEDING ASSUMES THE RISK OF ANY CONSEQUENCES.
6. DIMENSIONS SCALED FROM DRAWINGS SHALL BE CONSIDERED APPROXIMATE. CONTRACTORS THAT FAIL TO FIELD MEASURE AND VERIFY DISTANCES, CLEARANCE AND FIT ARE PROCEEDING AT THEIR OWN RISK.
7. EXCEPT WHERE DIMENSIONED, PLANS ARE TO BE CONSIDERED DIAGRAMMATIC IN NATURE AND INTENDED ONLY TO DEMONSTRATE THE RELATIONSHIP AMONG COMPONENT PARTS, AND NOT TO DEPICT SPECIFIC LOCATIONS.
8. DESIGN/BUILD CONTRACTOR SUBMITTALS WILL BE REVIEWED BY THE PROJECT DESIGN TEAM, IF AT ALL, ONLY FOR CONFORMANCE WITH THE AESTHETIC ASPECTS AND MAJOR SPACE LIMITATIONS OF THE PROJECT; AND EACH DESIGN/BUILD CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING:
   A. PREPARING ALL THE ENGINEERING AND OTHER DRAWINGS AND SPECIFICATIONS FOR THE COMPONENTS OF ITS DESIGN/BUILD UNDERTAKING.
   B. COMPLYING WITH THE PROJECT'S REQUIREMENTS AND SPACE LIMITATIONS.
   C. COORDINATION AND INTERFACING WITH OTHER TRADES AND CONSULTANTS.
   D. OBTAINING ANY REQUIRED OR APPROPRIATE APPROVALS FROM AUTHORITIES HAVING JURISDICTION OVER THE PROJECT.
   E. HAVING THEIR DESIGN CONSULTANTS SERVE AS THE PROFESSIONAL OF RECORD FOR THE PORTIONS OF WORK WHICH THEY DESIGN.
9. AS MAY BE REQUIRED BY THE AUTHORITIES HAVING JURISDICTION. AT THE CONCLUSION OF CONSTRUCTION EACH PRIME CONTRACTOR SHALL PROVIDE WRITTEN CERTIFICATION THAT THEIR PORTION OF THE WORK HAS BEEN PERFORMED IN COMPLIANCE WITH THE BUILDING PERMIT APPROVED PLANS AND SPECIFICATIONS.
10. VERSIONS OF THESE PLANS PROVIDED IN ANY ELECTRONIC FORM ARE SUBJECT TO THE SAME PROVISIONS AS PAPER PLANS PREPARED BY OR ON BEH



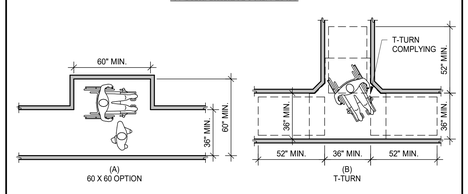
CLEAR WIDTH OF AN ACCESSIBLE ROUTE



CLEAR WIDTH AT 180-DEGREE TURN



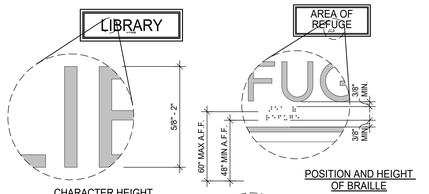
CLEAR WIDTH AT 90-DEGREE TURN

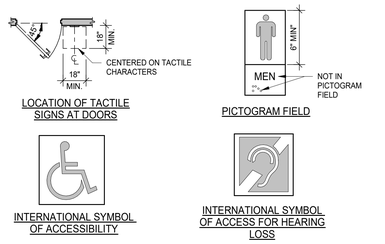


PASSING SPACE

CLEAR WIDTH

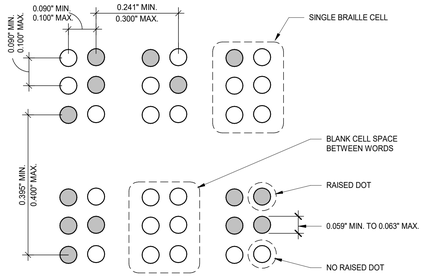
SCALE: 1/4" = 1'-0" 18





SIGNS

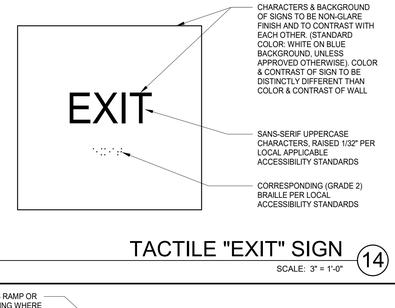
SCALE: 1/4" = 1'-0" 12



DOT HEIGHT 0.025" MIN. TO 0.037" MAX.
MEASURED CENTER TO CENTER.

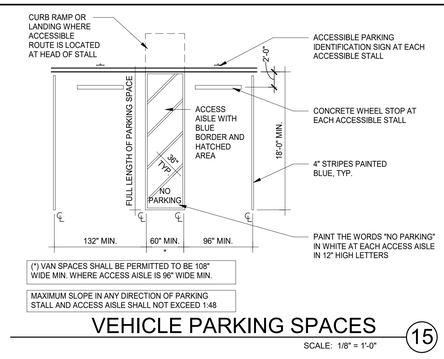
BRAILLE MEASUREMENT

SCALE: 3/8" = 1'-0" 13



TACTILE "EXIT" SIGN

SCALE: 3" = 1'-0" 14

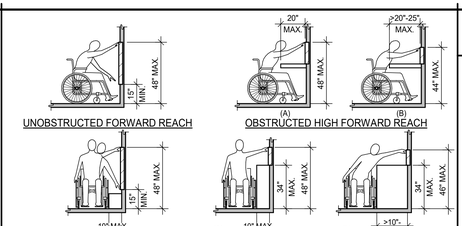


(*) VAN SPACES SHALL BE PERMITTED TO BE 108" WIDE MIN. WHERE ACCESS AISLE IS 96" WIDE MIN.

MAXIMUM SLOPE IN ANY DIRECTION OF PARKING STALL AND ACCESS AISLE SHALL NOT EXCEED 1:48

VEHICLE PARKING SPACES

SCALE: 1/8" = 1'-0" 15



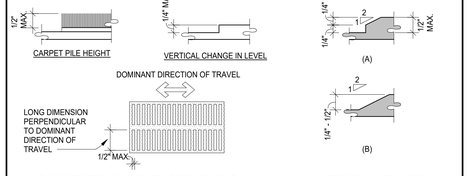
MAXIMUM REACH DEPTH	0.5" (13 mm)	2" (51 mm)	5" (125 mm)	6" (150 mm)	9 (230 mm)	11" (280 mm)
MAXIMUM REACH HEIGHT	48" (1220 mm)	48" (1170 mm)	42" (1065 mm)	40" (1015 mm)	36" (915 mm)	34" (865 mm)

REACH RANGES

SCALE: 1/4" = 1'-0" 6

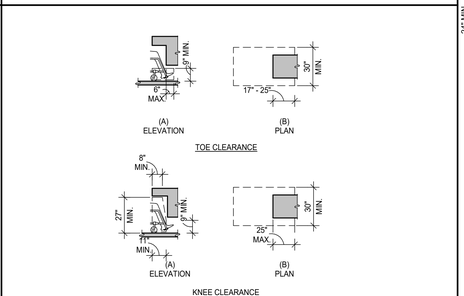
NOTES:

1. FLOOR AND GROUND SURFACES SHALL BE STABLE, FIRM AND SLIP RESISTANT.
2. CARPET OR CARPET TILE SHALL BE SECURELY ATTACHED AND SHALL HAVE A FIRM CUSHION, PAD OR BACKING OR NO CUSHION OR PAD. CARPET OR CARPET TILE SHALL HAVE A LEVEL LOOP, TEXTURED LOOP, LEVEL CUT PILE, LEVEL CUT/UNCUT PILE TEXTURE. PILE HEIGHT SHALL COMPLY WITH CARPET PILE HEIGHT FIGURE BELOW. EXPOSED EDGES OF CARPET SHALL BE FASTENED TO FLOOR SURFACES AND SHALL HAVE TRIM ON THE ENTIRE LENGTH OF THE EXPOSED EDGE. CARPET EDGE SHALL COMPLY WITH CHANGE IN LEVEL FIGURES BELOW.



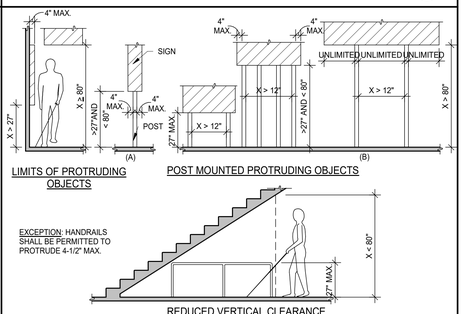
FLOOR OR GROUND SURFACES & CHANGES IN LEVEL

SCALE: 1/2" = 1'-0" 7



KNEE AND TOE CLEARANCE

SCALE: 1/4" = 1'-0" 8



PROTRUDING OBJECTS

SCALE: 1/4" = 1'-0" 9

PARKING SPACES PER 2010 ADA

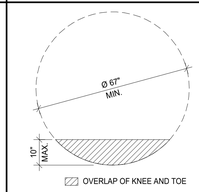
TOTAL NUMBER OF PARKING SPACES PROVIDED IN PARKING FACILITY	MINIMUM NUMBER OF REQUIRED ACCESSIBLE PARKING SPACES
1 TO 25	1
26 TO 50	2
51 TO 75	3
76 TO 100	4
101 TO 150	5
151 TO 200	6
201 TO 300	7
301 TO 400	8
401 TO 500	9
501 TO 1000	2 PERCENT OF TOTAL
1001 AND OVER	20, PLUS 1 FOR EACH 100, OR FRACTION THEREOF, OVER 1000

PARKING SPACES

SCALE: 12" = 1'-0" 10

ACCESSIBILITY NOTES

1. "THE ACCESSIBILITY GUIDELINES AND CODES" MENTIONED BELOW REFER TO ALL APPLICABLE LOCAL/STATE BUILDING CODES REFERENCED ON THE PROJECT DATA SHEET OF THIS SET IN ADDITION TO THE FEDERAL REQUIREMENTS OF THE ADA (THE AMERICANS WITH DISABILITIES ACT).
2. DETAILS ON THIS SHEET ARE FOR REFERENCE ONLY. REFER TO THE ACCESSIBILITY GUIDELINES AND CODES FOR ALL ACCESSIBILITY REQUIREMENTS.
3. THE GENERAL CONTRACTOR SHALL BECOME FAMILIAR WITH THE ACCESSIBILITY GUIDELINES AND CODES.
4. ANY DISCREPANCY CONTAINED HEREIN DOES NOT RELIEVE THE GENERAL CONTRACTOR OR OWNER FROM COMPLYING WITH THE ACCESSIBILITY GUIDELINES AND CODES.

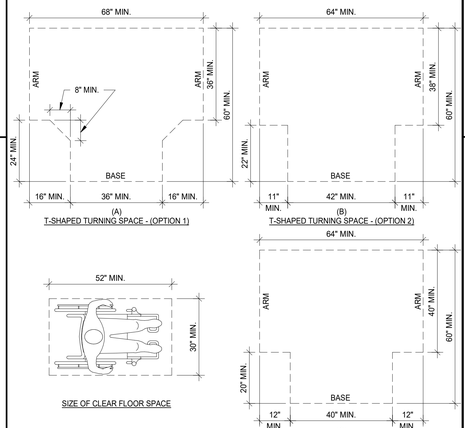


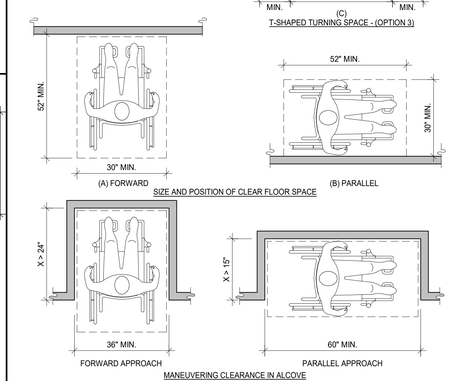
CIRCULAR TURNING SPACE SIZE AND OVERLAP

THE TURNING SPACE SHALL BE A CIRCULAR SPACE WITH 67-INCH MINIMUM DIAMETER.

OVERLAP
TURNING SPACES SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE. WHERE THE TURNING SPACE INCLUDES KNEE AND TOE CLEARANCES UNDER AN OBSTRUCTION, THE OVERLAP SHALL COMPLY WITH ALL OF THE FOLLOWING:

1. THE DEPTH OF THE OVERLAP SHALL NOT BE MORE THAN 10 INCHES.
2. THE DEPTH SHALL NOT EXCEED THE DEPTH OF THE KNEE AND TOE CLEARANCES PROVIDED.
3. THE OVERLAP SHALL BE PERMITTED ONLY WITHIN THE TURNING CIRCLE ARE SHOWN SHADED IN FIGURE





CLEAR FLOOR OR GROUND SPACE

SCALE: 1/2" = 1'-0" 4

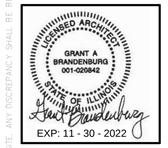
HEIGHT TO FINISH FLOOR FROM BASELINE OF CHARACTER	HORIZONTAL VIEWING DISTANCE	MINIMUM CHARACTER HEIGHT
40 INCHES TO LESS THAN OR EQUAL TO 70 INCHES	LESS THAN 72 INCHES	5/8 INCH
	72 INCHES AND GREATER	5/8 INCH, PLUS 1/8 INCH PER FOOT OF VIEWING DISTANCE ABOVE 72 INCHES
GREATER THAN 70 INCHES TO LESS THAN OR EQUAL TO 120 INCHES	LESS THAN 180 INCHES	2 INCHES
	180 INCHES AND GREATER	2 INCHES, PLUS 1/8 INCH PER FOOT OF VIEWING DISTANCE ABOVE 180 INCHES
GREATER THAN 120 INCHES	LESS THAN 21 FEET	3 INCHES
	21 FEET AND GREATER	3 INCHES, PLUS 1/8 INCH PER FOOT OF VIEWING DISTANCE ABOVE 21 FEET

1. THE VERTICAL HEIGHT IS MEASURED FROM THE FLOOR OF THE VIEWING POSITION TO THE BASELINE OF THE HIGHEST LINE OF CHARACTERS.

VISUAL CHARACTER HEIGHT

SCALE: 12" = 1'-0" 5

State of Illinois Design Firm Registration No. 184-004069
WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING BRANDING
INTERIORS BUILDING MEASUREMENT
1315 22nd St #410
Oak Brook, IL 60523
P 630.218.0063



THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

ACCESSIBILITY DETAILS

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

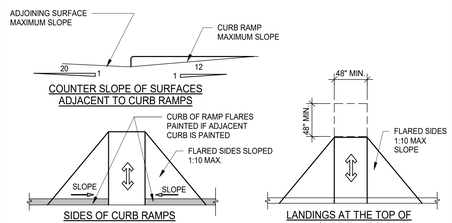
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A0.3

4/19/2022 8:50:14 AM 2022-04-08 PERMIT SET

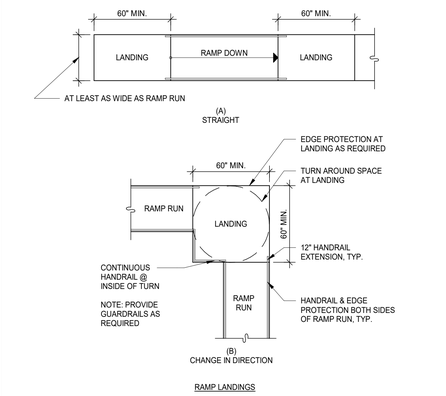
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)



CURB RAMPS 12

SCALE: 1/4" = 1'-0"



RAMPS 14

SCALE: 1/4" = 1'-0"

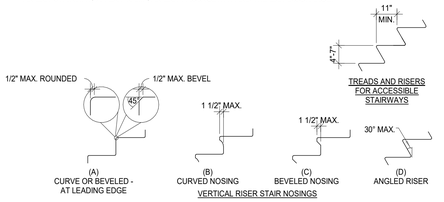
NOTES:
STAIRS
1. OPEN RISERS ARE NOT PERMITTED.
2. TREAD SURFACES SHALL COMPLY WITH (FLOOR OR GROUND SURFACES & CHANGES IN LEVEL) DETAIL, AND SHALL A SLOPE NOT STEEPER THAN 1:48.

HANDRAILS
3. HANDRAIL GRIPPING SURFACES SHALL BE CONTINUOUS ALONG THEIR LENGTH AND SHALL NOT BE OBSTRUCTED ALONG THEIR TOPS OR SIDES. THE BOTTOM OF THE HANDRAIL GRIPPING SURFACES SHALL NOT BE OBSTRUCTED FOR MORE THAN 20 PERCENT OF THEIR LENGTH. WHERE PROVIDED, HORIZONTAL PROJECTIONS SHALL OCCUR 1-1/2" MINIMUM BELOW THE BOTTOM OF THE HANDRAIL GRIPPING SURFACE.
4. HANDRAIL GRIPPING SURFACES WITH CIRCULAR CROSS SECTIONS SHALL HAVE AN OUTSIDE DIAMETER OF 1-1/4" (32 MM) MINIMUM AND 2" MAXIMUM.
5. HANDRAIL GRIPPING SURFACES AND ANY SURFACES ADJACENT TO THEM SHALL BE FREE OF SHARP OR ABRASIVE ELEMENTS AND SHALL HAVE ROUNDED EDGES.
6. HANDRAILS SHALL NOT ROTATE WITHIN THEIR FITTINGS.

NOSINGS
7. NOSING WITHIN A STAIRWAY SHALL BE UNIFORM.
8. IF ROUNDED, THE RADIUS OF CURVATURE AT THE LEADING EDGE OF THE TREAD SHALL BE 1/2 INCH (13mm) MAXIMUM.
9. IF BEVELED, THE BEVEL AT THE LEADING EDGE SHALL SLOPE AT 45-DEGREES TO THE PLANE OF THE TOP SURFACE OF THE TREAD AND LANDING AND EXTEND FOR A HORIZONTAL DISTANCE OF 1/2 INCH (13 MM) MAXIMUM.
10. NOSINGS THAT PROJECT BEYOND RISERS SHALL HAVE THE UNDERSIDE OF THE LEADING EDGE CURVED OR BEVELED.
11. RISERS SHALL BE PERMITTED TO SLOPE UNDER THE TREAD AT AN ANGLE OF 30-DEGREES MAXIMUM FROM VERTICAL.
12. THE PERMITTED PROJECTION OF THE NOSING SHALL BE 1 1/2 INCHES (38 MM) MAXIMUM OVER THE TREAD OR FLOOR BELOW.

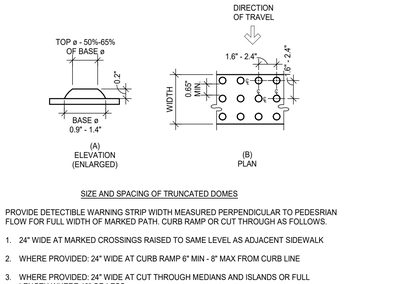
VISUAL CONTRAST
13. VISUAL CONTRAST SHALL COMPLY WITH EITHER 1 OR 2:
    1. THE LEADING 1 TO 2 INCHES (25 TO 51MM) OF EVERY TREAD AND LANDING, MEASURED HORIZONTALLY FROM THE LEADING EDGE OF THE NOSING, SHALL CONSIST OF A SOLID COLOR HAVING VISUAL CONTRAST OF DARK-ON-LIGHT OR LIGHT-ON-DARK FROM THE REMAINDER OF THE TREAD. THE CONTRASTING MARKING SHALL BE DURABLE AND SHALL EXTEND FROM ONE SIDE OF EACH TREAD TO THE OTHER SIDE OF EACH TREAD.
    2. DURABLE DISTINCTIVE WARNING MARKINGS REQUIRED BY THE ADOPTED BUILDING CODE OR ANSI SAFETY STANDARD.

TACTILE SIGNAGE AT EXITS
14. A SIGN STATING EXIT IN RAISED CHARACTERS AND BRAILLE SHALL BE PROVIDED ADJACENT TO EACH DOOR TO AND AREA OF REFUGE PROVIDING DIRECT ACCESS TO A STAIRWAY, AN EXTERIOR AREA FOR ASSISTED RESCUE, AN EXIT STAIRWAY, AN EXIT RAMP, AN EXIT PASSAGEWAY AND THE EXIT DISCHARGE.



STAIRWAYS AND HANDRAILS 9

SCALE: 1/2" = 1'-0"



SIZE AND SPACING OF TRUNCATED DOMES

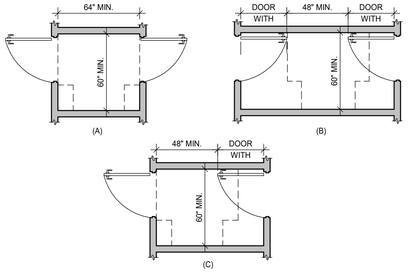
PROVIDE DETECTIBLE WARNING STRIP WIDTH MEASURED PERPENDICULAR TO PEDESRIAN FLOW FOR FULL WIDTH OF MARKED PATH. CURB RAMP OR CUT THROUGH AS FOLLOWS.

1. 24" WIDE AT MARKED CROSSINGS RAISED TO SAME LEVEL AS ADJACENT SIDEWALK
2. WHERE PROVIDED: 24" WIDE AT CURB RAMP 6" MIN - 8" MAX FROM CURB LINE
3. WHERE PROVIDED: 24" WIDE AT CUT THROUGH MEDIANS AND ISLANDS OR FULL LENGTH WHERE 48" OR LESS

DETECTABLE WARNINGS 10

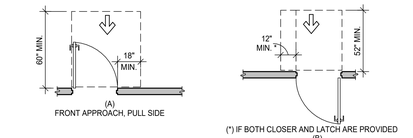
SCALE: 3" = 1'-0"

NOTES:
1. FLOOR OR GROUND SURFACE WITHIN REQUIRED MANEUVERING CLEARANCES AND LANDINGS ON BOTH SIDES OF DOORS SHALL COMPLY WITH [FLOOR OR GROUND SURFACES & CHANGES IN LEVEL] DETAIL AND SHALL HAVE A SLOPE NOT STEEPER THAN 1:48 IN ANY DIRECTION. VERTICAL CHANGES IN LEVEL ARE NOT PERMITTED.
2. THRESHOLDS, WHERE PROVIDED AT DOORWAYS, SHALL BE 1/2" MAX HIGH WITH A BEVELED PROFILE THAT COMPLIES WITH [FLOOR OR GROUND SURFACES & CHANGES IN LEVEL] DETAIL.
3. HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERABLE PARTS ON DOORS AND GATES SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST TO OPERATE.
4. HARDWARE OPERATION BY A FORWARD, PUSHING OR PULLING MOTION: 15 POUNDS (66.7N) MAXIMUM.
5. HARDWARE OPERATION BY A ROTATIONAL MOTION:28 INCH-POUNDS (315N-CM) MAXIMUM.
6. OPERABLE PARTS OF DOOR HARDWARE SHALL BE 34" MIN. AND 48" MAX. ABOVE THE FINISH FLOOR OR GROUND.
7. WHERE SLIDING DOORS ARE IN THE FULLY OPEN POSITION, OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES
8. DOOR AND GATE CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90-DEGREES THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12-DEGREES FROM THE LATCH IS 5 SECONDS MIN.
9. DOOR AND GATE SPRING HINGES SHALL BE ADJUSTED SO THAT FROM THE OPEN POSITION OF 70-DEGREES THE DOOR OR GATE SHALL MOVE TO THE CLOSED POSITION IN 1.5 SECONDS MIN.
10. THE FORCE REQUIRED TO PUSH OR PULL A DOOR OR GATE OPEN SHALL BE AS FOLLOWS:
    10.1 INTERIOR HINGED DOORS AND GATES: 5 LBS (22.5 N) MAX.
    10.2 SLIDING OR FOLDING DOORS: 5 LBS (22.5 N) MAX.
    EXCEPTION: THE FORCE REQUIRED TO RETRACT LATCH BOLTS OR DISENGAGE OTHER DEVICES THAT HOLD THE DOOR OR GATE IN A CLOSED POSITION SHALL NOT APPLY TO PANIC HARDWARE, DELAYED EGRESS DEVICES OR FIRE-RATED HARDWARE.
    10.3 REQUIRED FIRE DOORS: THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY, NOT TO EXCEED 15 LBS (66.7N).
    10.4 EXTERIOR HINGED DOORS: 5 LBS (22.5 N) MAX.
11. SWINGING DOOR AND GATE SURFACES WITHIN 10" OF THE FINISH FLOOR OR GROUND MEASURED VERTICALLY SHALL HAVE A SMOOTH SURFACE ON THE PUSH SIDE EXTENDING THE FULL WIDTH OF THE DOOR OR GATE. PARTS CREATING HORIZONTAL OR VERTICAL JOINTS IN THESE SURFACE SHALL BE WITHIN 1/16" OF THE SAME PLANE AS THE OTHER AND BE FREE OF SHARP OR ABRASIVE EDGES. CAVITIES CREATED BY ADDED KICK PLATES SHALL BE CAPPED.
12. WHERE AUTOMATIC AND POWER-ASSISTED DOORS AND GATES WITHOUT STANDBY POWER ARE PART OF A MEANS OF EGRESS THE CLEAR WIDTH OF BREAK OUT OPENINGS AT SWINGING OR SLIDING DOORS AND GATES SHALL BE 32" MIN. WHEN OPERATED IN EMERGENCY MODE.

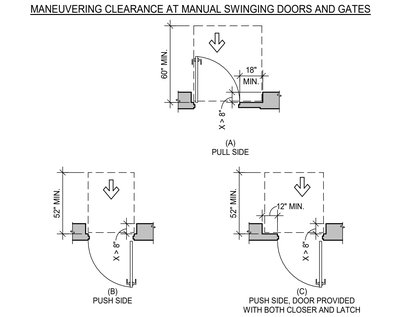


DOORS OR GATES IN SERIES

CLEAR WIDTH OF DOORWAYS



MANEUVERING CLEARANCE AT MANUAL SWINGING DOORS AND GATES



MANEUVERING CLEARANCE AT RECESSED DOORS AND GATES

DOORS, DOORWAYS & GATES 5

SCALE: 1/4" = 1'-0"

WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING INTERIOR DESIGN
INTERIORS BUILDING MEASUREMENT
1315 22nd St #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184.004069

REGISTERED ARCHITECT
GRANT A BRANDENBURG
001-020842
STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

ACCESSIBILITY DETAILS

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A0.3a

4/19/2022 8:50:16 AM 2022-04-08 PERMIT SET

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)

00 31 32 - GEOTECHNICAL DATA

1.1 INVESTIGATION

A. AN INVESTIGATION OF SUBSURFACE SOIL CONDITIONS AT THE BUILDING SITE WAS AUTHORIZED BY THE OWNER. A COPY IS ATTACHED AS AN APPENDIX TO THESE SPECIFICATIONS.
B. THE GEOTECHNICAL INVESTIGATION REPORT IS FOR INFORMATION ONLY, AND IS NOT A WARRANTY OF SUBSURFACE CONDITIONS.
C. THE REPORT IS MADE AVAILABLE FOR INFORMATION ONLY, AND IS NOT A CONTRACT DOCUMENT.
D. THE INFORMATION CONTAINED IN THE REPORT REPRESENTS SOIL DESIGN CRITERIA, RECOMMENDATIONS, AND GUIDELINES THAT WERE UTILIZED AS THE BASIS OF DESIGN FOR THE ENGINEERING OF THE EARTHWORK OPERATIONS, PAVING DESIGN, AND FOUNDATION DESIGN INDICATED IN THE CONTRACT DOCUMENTS. NO CHANGES IN THIS DESIGN CRITERIA WILL BE CONSIDERED OR PERMITTED.

1.2 RESPONSIBILITY

A. BIDDERS ARE EXPECTED TO EXAMINE THE SITE AND SUBSURFACE INVESTIGATION REPORTS AND THEN DECIDE FOR THEMSELVES THE CHARACTER OF THE MATERIALS TO BE ENCOUNTERED.
B. THE ARCHITECT AND OWNER ASSUME NO RESPONSIBILITY FOR VARIATIONS IN SUBSOIL CONDITIONS, QUALITY, OR STABILITY, OR FOR THE PRESENCE, LEVEL, AND EXTENT OF UNDERGROUND WATER.
C. THE ARCHITECT AND OWNER ASSUME NO RESPONSIBILITY FOR BIDDER'S INTERPRETATION OF DATA CONTAINED IN THE REPORT.

00 70 00 - GENERAL CONDITIONS

1.1 GENERAL CONDITIONS

A. THE "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION", AIA DOCUMENT A201, SIXTEENTH EDITION, 2007, ARTICLES 1 THROUGH 15 INCLUSIVE, IS A PART OF THIS CONTRACT, AND IS AVAILABLE FOR REVIEW FROM THE ARCHITECT. THE GENERAL CONDITIONS AND MODIFICATIONS LISTED HEREINAFTER SHALL APPLY TO ALL VARIOUS SUBCONTRACTS AND SUB-SUBCONTRACTORS.
B. REFER TO DOCUMENT 008000 FOR SUPPLEMENTARY CONDITIONS.

01 31 00 - PROJECT MANAGEMENT AND COORDINATION

1.1 COORDINATION

A. COORDINATION: COORDINATE CONSTRUCTION OPERATIONS INCLUDED IN DIFFERENT SECTIONS OF THE SPECIFICATIONS TO ENSURE EFFICIENT AND ORDERLY INSTALLATION OF EACH PART OF THE WORK. COORDINATE CONSTRUCTION OPERATIONS, INCLUDED IN DIFFERENT SECTIONS, THAT DEPEND ON EACH OTHER FOR PROPER INSTALLATION, CONNECTION, AND OPERATION.
   1. SCHEDULE CONSTRUCTION OPERATIONS IN SEQUENCE REQUIRED TO OBTAIN THE BEST RESULTS WHERE INSTALLATION OF ONE PART OF THE WORK DEPENDS ON INSTALLATION OF OTHER COMPONENTS, BEFORE OR AFTER ITS OWN INSTALLATION.
   2. COORDINATE INSTALLATION OF DIFFERENT COMPONENTS TO ENSURE MAXIMUM PERFORMANCE AND ACCESSIBILITY FOR REQUIRED MAINTENANCE, SERVICE, AND REPAIR.
   3. MAKE ADEQUATE PROVISIONS TO ACCOMMODATE ITEMS SCHEDULED FOR LATER INSTALLATION.

1.2 REQUESTS FOR INTERPRETATION (RFI)

A. GENERAL: IMMEDIATELY ON DISCOVERY OF THE NEED FOR INTERPRETATION, CLARIFICATION, OR ADDITIONAL INFORMATION OF THE CONTRACT DOCUMENTS, CONTRACTOR SHALL PREPARE AND SUBMIT AN RFI. SEND RFIS DIRECTLY TO ARCHITECT VIA EMAIL OR POSTED TO PROJECT COLLABORATION SITE (IF ONE IS BEING UTILIZED). OWNER WILL TRANSMIT TO APPROPRIATE REVIEWER(S).
   1. ARCHITECT WILL RETURN RFIS SUBMITTED TO ARCHITECT BY OTHER ENTITIES CONTROLLED BY CONTRACTOR WITH NO RESPONSE.
   2. COORDINATE AND SUBMIT RFIS IN A PROMPT MANNER SO AS TO AVOID DELAYS IN CONTRACTOR'S WORK OR WORK OF INSTALLERS (I.E., SPECIALTY CONTRACTORS OR SUBCONTRACTORS).

1.3 PROJECT MEETINGS

A. GENERAL: SCHEDULE AND CONDUCT MEETINGS AND CONFERENCES AT PROJECT SITE, UNLESS OTHERWISE INDICATED.
   1. ATTENDEES: INFORM PARTICIPANTS AND OTHERS INVOLVED, AND INDIVIDUALS WHOSE PRESENCE IS REQUIRED, OF DATE AND TIME OF EACH MEETING. NOTIFY OWNER AND ARCHITECT OF SCHEDULED MEETING DATES AND TIMES.
   2. AGENDA: PREPARE THE MEETING AGENDA. DISTRIBUTE THE AGENDA TO ALL INVITED ATTENDEES.
   3. MINUTES: ENTITY RESPONSIBLE FOR CONDUCTING MEETING WILL RECORD SIGNIFICANT DISCUSSIONS AND AGREEMENTS ACHIEVED. DISTRIBUTE THE MEETING MINUTES TO EVERYONE CONCERNED, INCLUDING OWNER AND ARCHITECT, WITHIN THREE DAYS OF THE MEETING.
B. PRE-CONSTRUCTION CONFERENCE: SCHEDULE AND CONDUCT A PRE-CONSTRUCTION CONFERENCE BEFORE STARTING CONSTRUCTION, AT A TIME CONVENIENT TO OWNER AND ARCHITECT, BUT NO LATER THAN 15 DAYS AFTER EXECUTION OF THE AGREEMENT.
   1. CONDUCT THE CONFERENCE TO REVIEW RESPONSIBILITIES AND PERSONNEL ASSIGNMENTS.
   2. ATTENDEES: AUTHORIZED REPRESENTATIVES OF OWNER, OWNER'S COMMISSIONING AUTHORITY, CONSTRUCTION MANAGER, ARCHITECT, AND THEIR CONSULTANTS; CONTRACTOR AND ITS SUPERINTENDENT; MAJOR SUBCONTRACTORS; SUPPLIERS; AND OTHER CONCERNED PARTIES SHALL ATTEND THE CONFERENCE. PARTICIPANTS AT THE CONFERENCE SHALL BE FAMILIAR WITH PROJECT AND AUTHORIZED TO CONCLUDE MATTERS RELATING TO THE WORK.
   3. MINUTES: ENTITY RESPONSIBLE FOR CONDUCTING MEETING WILL RECORD AND DISTRIBUTE MEETING MINUTES.
C. PRE-INSTALLATION CONFERENCES: CONDUCT A PRE-INSTALLATION CONFERENCE AT PROJECT SITE BEFORE EACH CONSTRUCTION ACTIVITY THAT REQUIRES COORDINATION WITH OTHER CONSTRUCTION.
   1. ATTENDEES: INSTALLER AND REPRESENTATIVES OF MANUFACTURERS AND FABRICATORS INVOLVED IN OR AFFECTED BY THE INSTALLATION AND ITS COORDINATION OR INTEGRATION WITH OTHER MATERIALS AND INSTALLATIONS THAT HAVE PRECEDED OR WILL FOLLOW, SHALL ATTEND THE MEETING. ADVISE ARCHITECT OF SCHEDULED MEETING DATES.
   2. RECORD SIGNIFICANT CONFERENCE DISCUSSIONS, AGREEMENTS, AND DISAGREEMENTS, INCLUDING REQUIRED CORRECTIVE MEASURES AND ACTIONS.
   3. REPORTING: DISTRIBUTE MINUTES OF THE MEETING TO EACH PARTY PRESENT AND TO OTHER PARTIES REQUIRING INFORMATION.
   4. DO NOT PROCEED WITH INSTALLATION IF THE CONFERENCE CANNOT BE SUCCESSFULLY CONCLUDED. INITIATE WHATEVER ACTIONS ARE NECESSARY TO RESOLVE IMPEDIMENTS TO PERFORMANCE OF THE WORK AND RECONVENE THE CONFERENCE AT EARLIEST FEASIBLE DATE.
D. PROGRESS MEETINGS: CONDUCT PROGRESS MEETINGS AT AGREED UPON INTERVALS.
   1. COORDINATE DATES OF MEETINGS WITH PREPARATION OF PAYMENT REQUESTS.
   2. ATTENDEES: IN ADDITION TO REPRESENTATIVES OF OWNER, OWNER'S COMMISSIONING AUTHORITY , CONSTRUCTION MANAGER, AND ARCHITECT, EACH CONTRACTOR, AND OTHER ENTITY CONCERNED WITH CURRENT PROGRESS OR INVOLVED IN PLANNING, COORDINATION, OR PERFORMANCE OF FUTURE ACTIVITIES SHALL BE REPRESENTED AT THESE MEETINGS. ALL PARTICIPANTS AT THE MEETING SHALL BE FAMILIAR WITH PROJECT AND AUTHORIZED TO CONCLUDE MATTERS RELATING TO THE WORK.
   3. MINUTES: ENTITY RESPONSIBLE FOR CONDUCTING THE MEETING WILL RECORD AND DISTRIBUTE THE MEETING MINUTES TO EACH PARTY PRESENT AND TO PARTIES REQUIRING INFORMATION.
      a. SCHEDULE UPDATING: REVISE CONTRACTOR'S CONSTRUCTION SCHEDULE AFTER EACH PROGRESS MEETING WHERE REVISIONS TO THE SCHEDULE HAVE BEEN MADE OR RECOGNIZED. ISSUE REVISED SCHEDULE CONCURRENTLY WITH THE REPORT OF EACH MEETING.
E. COORDINATION MEETINGS: CONDUCT PROJECT COORDINATION MEETINGS AT REGULAR INTERVALS. PROJECT COORDINATION MEETINGS ARE IN ADDITION TO SPECIFIC MEETINGS HELD FOR OTHER PURPOSES, SUCH AS PROGRESS MEETINGS AND PRE-INSTALLATION CONFERENCES.
   1. ATTENDEES: IN ADDITION TO REPRESENTATIVES OF OWNER AND ARCHITECT, EACH CONTRACTOR, SUBCONTRACTOR, SUPPLIER, AND OTHER ENTITY CONCERNED WITH CURRENT PROGRESS OR INVOLVED IN PLANNING, COORDINATION, OR PERFORMANCE OF FUTURE ACTIVITIES SHALL BE REPRESENTED AT THESE MEETINGS. ALL PARTICIPANTS AT THE MEETINGS SHALL BE FAMILIAR WITH PROJECT AND AUTHORIZED TO CONCLUDE MATTERS RELATING TO THE WORK.
   2. REPORTING: RECORD MEETING RESULTS AND DISTRIBUTE COPIES TO EVERYONE IN ATTENDANCE AND TO OTHERS AFFECTED BY DECISIONS OR ACTIONS RESULTING FROM EACH MEETING.

01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION

1.1 INFORMATIONAL SUBMITTALS

A. FORMAT FOR SUBMITTALS: ELECTRONICALLY SUBMIT REQUIRED SUBMITTAL DOCUMENTS IN PORTABLE DOCUMENT FORMAT (I.E., PDFS)
B. CONTRACTOR'S CONSTRUCTION SCHEDULE: INITIAL SCHEDULE, OF SIZE REQUIRED TO DISPLAY ENTIRE SCHEDULE FOR ENTIRE CONSTRUCTION PERIOD.

1.2 COORDINATION

A. COORDINATE PREPARATION AND PROCESSING OF SCHEDULES AND REPORTS WITH PERFORMANCE OF CONSTRUCTION ACTIVITIES AND WITH SCHEDULING AND REPORTING OF SEPARATE CONTRACTORS.

1.3 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

A. TIME FRAME: EXTEND SCHEDULE FROM DATE ESTABLISHED FOR COMMENCEMENT OF THE WORK TO DATE OF SUBSTANTIAL COMPLETION.
   1. CONTRACT COMPLETION DATE SHALL NOT BE CHANGED BY SUBMISSION OF A SCHEDULE THAT SHOWS AN EARLY COMPLETION DATE, UNLESS SPECIFICALLY AUTHORIZED BY CHANGE ORDER.
B. ACTIVITIES: TREAT EACH STORY OR SEPARATE AREA AS A SEPARATE NUMBERED ACTIVITY FOR EACH PRINCIPAL ELEMENT OF THE WORK.
C. MILESTONES: INCLUDE MILESTONES INDICATED IN THE CONTRACT DOCUMENTS IN SCHEDULE, INCLUDING, BUT NOT LIMITED TO, THE NOTICE TO PROCEED, SUBSTANTIAL COMPLETION, AND FINAL COMPLETION.
D. COMPUTER SCHEDULING SOFTWARE: PREPARE SCHEDULES USING CURRENT VERSION OF A PROGRAM THAT HAS BEEN DEVELOPED SPECIFICALLY TO MANAGE CONSTRUCTION SCHEDULES.

1.4 CONTRACTOR'S CONSTRUCTION SCHEDULE

A. A. FORMAT:
   1. SUBMIT A HORIZONTAL BAR CHART WITH SEPARATE LINE FOR EACH MAJOR SECTION OF WORK IDENTIFYING FIRST WORK DAY OF EACH WEEK.
   2. SEQUENCE OF LISTINGS: THE CHRONOLOGICAL ORDER OF THE START OF EACH ITEM OF WORK.
   3. SCALE AND SPACING: TO PROVIDE SPACE FOR NOTATIONS AND REVISIONS.
   4. SHEET SIZE: MINIMUM 11 BY 17 INCHES.
B. CONTENT:
   1. SHOW COMPLETE SEQUENCE OF CONSTRUCTION BY ACTIVITY, WITH DATES FOR BEGINNING AND COMPLETION OF EACH ELEMENT OF CONSTRUCTION.
   2. IDENTIFY EACH ITEM BY MAJOR SPECIFICATION SECTION NUMBER.
   3. INDICATE THE EARLY AND LATE START, EARLY AND LATE FINISH, FLOAT DATES, AND DURATION.
   4. IDENTIFY WORK OF SEPARATE STAGES OR SEPARATE FLOORS OR BUILDINGS, AND OTHER LOGICALLY GROUPED ACTIVITIES.
   5. PROVIDE SUB_ SCHEDULES TO DEFINE CRITICAL PORTIONS OF ENTIRE SCHEDULE.

01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION (CONT)

   6. SHOW ACCUMULATED PERCENTAGE OF COMPLETION OF EACH ITEM, AND TOTAL PERCENTAGE OF WORK COMPLETED, AS OF THE FIRST DAY OF EACH MONTH.
   7. INDICATE SUBMITTAL DATES REQUIRED FOR SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND PRODUCT DELIVERY DATES, INCLUDING THOSE FURNISHED BY OWNER.
   8. SHOW DELIVERY DATES FOR OWNER FURNISHED PRODUCTS.
   9. COORDINATE CONTENT SCHEDULE OF VALUES SPECIFIED IN SECTION 01290.
C. REVISIONS TO SCHEDULES:
   1. INDICATE PROGRESS OF EACH ACTIVITY TO DATE OF SUBMITTAL, AND PROJECTED COMPLETION DATE OF EACH ACTIVITY.
   2. IDENTIFY ACTIVITIES MODIFIED SINCE PREVIOUS SUBMITTAL, MAJOR CHANGES IN SCOPE, AND OTHER IDENTIFICATION OF CHANGES.
   3. PROVIDE NARRATIVE REPORT TO DEFINE PROBLEM AREAS, ANTICIPATED DELAYS, AND IMPACT ON SCHEDULE. REPORT CORRECTIVE ACTION TAKEN, OR PROPOSED, AND ITS EFFECT.
   4. UPDATE REGULARLY.

01 33 00 - SUBMITTAL PROCEDURES

1.1 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

A. COORDINATION: COORDINATE PREPARATION AND PROCESSING OF SUBMITTALS WITH PERFORMANCE OF CONSTRUCTION ACTIVITIES.
   1. COORDINATE EACH SUBMITTAL WITH FABRICATION, PURCHASING, TESTING, DELIVERY, OTHER SUBMITTALS, AND RELATED ACTIVITIES THAT REQUIRE SEQUENTIAL ACTIVITY.
   2. SUBMIT ALL SUBMITTAL ITEMS REQUIRED FOR EACH SPECIFICATION SECTION CONCURRENTLY UNLESS PARTIAL SUBMITTALS FOR PORTIONS OF THE WORK ARE APPROVED BY ARCHITECT.
   3. COORDINATE TRANSMITTAL OF DIFFERENT TYPES OF SUBMITTALS FOR RELATED PARTS OF THE WORK SO PROCESSING WILL NOT BE DELAYED BECAUSE OF NEED TO REVIEW SUBMITTALS CONCURRENTLY FOR COORDINATION.
   4. ARCHITECT RESERVES THE RIGHT TO WITHHOLD ACTION ON A SUBMITTAL REQUIRING COORDINATION WITH OTHER SUBMITTALS UNTIL RELATED SUBMITTALS ARE RECEIVED.
B. IDENTIFICATION AND INFORMATION: IDENTIFY AND INCORPORATE INFORMATION IN EACH ELECTRONIC SUBMITTAL FILE AS FOLLOWS:
   1. ASSEMBLE COMPLETE SUBMITTAL PACKAGE INTO A SINGLE INDEXED FILE WITH LINKS ENABLING NAVIGATION TO EACH ITEM.
   2. NAME FILE WITH SUBMITTAL NUMBER OR OTHER UNIQUE IDENTIFIER, INCLUDING REVISION IDENTIFIER.
      a. FOR TYPICAL PROJECTS THAT DO NOT REQUIRE SEPARATE SUBMITTALS FOR DIFFERENT BUILDINGS OR SUB THE SUBMITTAL FILE NAME SHALL USE SPECIFICATION SECTION NUMBER FOLLOWED BY A DASH AND THEN A SEQUENTIAL NUMBER. RESUBMITTALS SHALL INCLUDE A NUMERICAL SUFFIX AFTER ANOTHER DASH. INCLUDE BRIEF DESCRIPTION OF SUBMITTAL AFTER SEQUENTIAL NUMBER OR RESUBMITTAL SUFFIX. (E.G., 061000-001-0 ROUGH CARPENTRY).
      b. FOR COMPLEX PROJECTS THAT REQUIRE PROJECT IDENTIFIER FOR SEPARATE BUILDINGS WITHIN A PROJECT OR REQUIRE INDIVIDUAL SUBMITTALS TO BE SUBMITTED BY MULTIPLE SUBCONTRACTORS, THE SUBMITTAL FILE NAME SHALL FOLLOW THE FOLLOWING SPECIFICATION SECTION NUMBER FOLLOWED BY A DECIMAL POINT AND THEN A SEQUENTIAL NUMBER. PROVIDE MEANS FOR INSERTION TO PERMANENTLY RECORD CONTRACTOR'S REVIEW AND APPROVAL MARKINGS AND ACTION TAKEN BY ARCHITECT.
C. OPTIONS: IDENTIFY OPTIONS REQUIRING SELECTION BY THE ARCHITECT.
D. DEVIATIONS: IDENTIFY DEVIATIONS FROM THE CONTRACT DOCUMENTS ON SUBMITTALS.
E. DISTRIBUTION: FURNISH COPIES OF FINAL SUBMITTALS TO MANUFACTURERS, SUBCONTRACTORS, SUPPLIERS, FABRICATORS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHERS AS NECESSARY FOR PERFORMANCE OF CONSTRUCTION ACTIVITIES. SHOW DISTRIBUTION ON TRANSMITTAL FORMS.
F. USE FOR CONSTRUCTION: USE ONLY FINAL SUBMITTALS THAT ARE MARKED WITH "REVIEWED", "FURNISH AS CORRECTED" NOTATION FROM ARCHITECTS ACTION STAMP, OR WITH APPROVAL NOTATION FROM ALTERNATE REVIEWER.

1.2 SUBMITTAL PROCEDURES

A. GENERAL SUBMITTAL PROCEDURE REQUIREMENTS: PREPARE AND SUBMIT SUBMITTALS REQUIRED BY INDIVIDUAL SPECIFICATION SECTIONS. TYPES OF SUBMITTALS ARE INDICATED IN INDIVIDUAL SPECIFICATION SECTIONS.
   1. EMAIL OR UPLOAD ELECTRONIC SUBMITTALS AS PDF ELECTRONIC FILES DIRECTLY TO ARCHITECT.
      a. ARCHITECT WILL RETURN ANNOTATED FILE. ANNOTATE AND RETAIN ONE COPY OF FILE AS AN ELECTRONIC PROJECT RECORD DOCUMENT FILE.
   2. ACTION SUBMITTALS: FOR LARGE FORMAT DRAWINGS AND SUBMITTALS (LARGER THAN 11 X 17), SUBMIT PDF FILE PLUS 2 HARD COPIES. FOR SMALLER FORMAT DRAWINGS AND SUBMITTALS (11X17 OR LESS), PROVIDE ONLY PDF FILE. ARCHITECT WILL RETURN ONLY THE MARKED-UP PDF.
B. PRODUCT DATA: COLLECT INFORMATION INTO A SINGLE SUBMITTAL FOR EACH ELEMENT OF CONSTRUCTION AND TYPE OF PRODUCT OR EQUIPMENT.
   1. IF INFORMATION MUST BE SPECIALLY PREPARED FOR SUBMITTAL BECAUSE STANDARD PUBLISHED DATA ARE NOT SUITABLE FOR USE, SUBMIT AS SHOP DRAWINGS, NOT AS PRODUCT DATA.
   2. MARK EACH COPY OF EACH SUBMITTAL TO SHOW WHICH PRODUCTS AND OPTIONS ARE APPLICABLE.
   3. SUBMIT PRODUCT DATA IN THE FOLLOWING FORMATS:
      a. PDF ELECTRONIC FILE.
C. SHOP DRAWINGS: PREPARE PROJECT-SPECIFIC INFORMATION, DRAWN ACCURATELY TO SCALE. DO NOT BASE SHOP DRAWINGS ON REPRODUCTIONS OF THE CONTRACT DOCUMENTS OR STANDARD PRINTED DATA
   1. PREPARATION: FULLY ILLUSTRATE REQUIREMENTS IN THE CONTRACT DOCUMENTS.
   2. SHEET SIZE: FOR LARGE FORMAT DRAWINGS AND SUBMITTALS (LARGER THAN 11 X 17), SUBMIT SHOP DRAWINGS ON SHEETS AT LEAST 8-1/2 BY 11 INCHES BUT NO LARGER THAN 30 BY 42 INCHES SUBMIT SHOP DRAWINGS IN THE FOLLOWING FORMAT:
      a. FOR LARGE FORMAT DRAWINGS AND SUBMITTALS (LARGER THAN 11 X 17), SUBMIT PDF FILE PLUS 2 HARD COPIES. FOR SMALLER FORMAT DRAWINGS AND SUBMITTALS (11X17 OR LESS), PROVIDE ONLY PDF FILE. ARCHITECT WILL RETURN ONLY THE MARKED-UP PDF.
D. SAMPLES: SUBMIT SAMPLES FOR REVIEW OF KIND, COLOR, PATTERN, AND TEXTURE FOR A CHECK OF THESE CHARACTERISTICS WITH OTHER ELEMENTS AND FOR A COMPARISON OF THESE CHARACTERISTICS BETWEEN SUBMITTAL AND ACTUAL COMPONENT AS DELIVERED AND INSTALLED.
   1. TRANSMIT SAMPLES THAT CONTAIN MULTIPLE, RELATED COMPONENTS SUCH AS ACCESSORIES TOGETHER IN ONE SUBMITTAL PACKAGE.
F. MANUFACTURER CERTIFICATES: SUBMIT WRITTEN STATEMENTS ON MANUFACTURER'S LETTERHEAD CERTIFYING THAT MANUFACTURER COMPLIES WITH REQUIREMENTS IN THE CONTRACT DOCUMENTS. INCLUDE EVIDENCE OF MANUFACTURING EXPERIENCE WHERE REQUIRED.
G. PRODUCT CERTIFICATES: SUBMIT WRITTEN STATEMENTS ON MANUFACTURER'S LETTERHEAD CERTIFYING THAT PRODUCT COMPLIES WITH REQUIREMENTS IN THE CONTRACT DOCUMENTS.
H. MATERIAL CERTIFICATES: SUBMIT WRITTEN STATEMENTS ON MANUFACTURER'S LETTERHEAD CERTIFYING THAT MATERIAL COMPLIES WITH REQUIREMENTS IN THE CONTRACT DOCUMENTS.

1.3 CONTRACTOR'S REVIEW

A. ACTION AND INFORMATIONAL SUBMITTALS: REVIEW EACH SUBMITTAL AND CHECK FOR COORDINATION WITH OTHER WORK OF THE CONTRACT AND FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS. NOTE CORRECTIONS AND FIELD DIMENSIONS. MARK WITH APPROVAL STAMP BEFORE SUBMITTING TO ARCHITECT.
B. PROJECT CLOSEOUT AND MAINTENANCE/MATERIAL SUBMITTALS: REFER TO REQUIREMENTS IN DIVISION 01 SECTION "CLOSEOUT PROCEDURES"
C. APPROVAL STAMP: STAMP EACH SUBMITTAL WITH A UNIFORM, APPROVAL STAMP. INCLUDE PROJECT NAME AND LOCATION, SUBMITTAL NUMBER, SPECIFICATION SECTION TITLE AND NUMBER, NAME OF REVIEWER, DATE OF CONTRACTOR'S APPROVAL, AND STATEMENT CERTIFYING THAT SUBMITTAL HAS BEEN REVIEWED, CHECKED, AND APPROVED FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS.

1.4 ARCHITECT'S ACTION

A. GENERAL: ARCHITECT WILL NOT REVIEW SUBMITTALS THAT DO NOT BEAR CONTRACTOR'S APPROVAL STAMP AND WILL RETURN THEM WITHOUT ACTION.
B. ACTION SUBMITTALS: ARCHITECT WILL REVIEW EACH SUBMITTAL, MAKE MARKS TO INDICATE CORRECTIONS OR MODIFICATIONS REQUIRED, AND RETURN IT. ARCHITECT WILL STAMP EACH SUBMITTAL WITH AN ACTION STAMP AND WILL MARK STAMP APPROPRIATELY TO INDICATE ACTION, AS FOLLOWS:
   1. NO EXCEPTIONS TAKEN
   2. MAKE CORRECTIONS NOTED
   3. FOR REVIEW ONLY
   4. REVISE AND RESUBMIT
   5. REJECTED
   6. SUBMIT SPECIFIED ITEM.
C. INFORMATIONAL SUBMITTALS: ARCHITECT WILL REVIEW EACH SUBMITTAL AND WILL NOT RETURN IT, OR WILL RETURN IT IF IT DOES NOT COMPLY WITH REQUIREMENTS. ARCHITECT WILL FORWARD EACH SUBMITTAL TO APPROPRIATE PARTY.
D. PARTIAL SUBMITTALS PREPARED FOR A PORTION OF THE WORK WILL BE REVIEWED WHEN USE OF PARTIAL SUBMITTALS HAS RECEIVED PRIOR APPROVAL FROM ARCHITECT.
E. INCOMPLETE SUBMITTALS ARE NOT ACCEPTABLE, WILL BE CONSIDERED NON-RESPONSIVE, AND WILL BE RETURNED WITHOUT REVIEW.
F. SUBMITTALS NOT REQUIRED BY THE CONTRACT DOCUMENTS MAY NOT BE REVIEWED AND MAY BE DISCARDED.

01 40 00 - QUALITY REQUIREMENTS

1.1 CONFLICTING REQUIREMENTS

A. REFERENCED STANDARDS: IF COMPLIANCE WITH TWO OR MORE STANDARDS IS SPECIFIED AND THE STANDARDS ESTABLISH DIFFERENT OR CONFLICTING REQUIREMENTS FOR MINIMUM QUANTITIES OR QUALITY LEVELS, COMPLY WITH THE MOST STRINGENT REQUIREMENT. REFER CONFLICTING REQUIREMENTS THAT ARE DIFFERENT, BUT APPARENTLY EQUAL, TO ARCHITECT FOR A DECISION BEFORE PROCEEDING.
B. MINIMUM QUANTITY OR QUALITY LEVELS: THE QUANTITY OR QUALITY LEVEL SHOWN OR SPECIFIED SHALL BE THE MINIMUM PROVIDED OR PERFORMED. THE ACTUAL INSTALLATION MAY COMPLY EXACTLY WITH THE MINIMUM QUANTITY OR QUALITY SPECIFIED, OR IT MAY EXCEED THE MINIMUM WITHIN REASONABLE LIMITS. TO COMPLY WITH THESE REQUIREMENTS, INDICATED NUMERIC VALUES ARE MINIMUM OR MAXIMUM, AS APPROPRIATE, FOR THE CONTEXT OF REQUIREMENTS. REFER UNCERTAINTIES TO ARCHITECT FOR A DECISION BEFORE PROCEEDING.

1.2 QUALITY ASSURANCE

A. GENERAL: QUALIFICATIONS PARAGRAPHS IN THIS ARTICLE ESTABLISH THE MINIMUM QUALIFICATION LEVELS REQUIRED. INDIVIDUAL SPECIFICATION SECTIONS SPECIFY ADDITIONAL REQUIREMENTS.
B. MANUFACTURER QUALIFICATIONS: A FIRM EXPERIENCED IN MANUFACTURING PRODUCTS OR SYSTEMS SIMILAR TO THOSE INDICATED FOR THIS PROJECT AND WITH A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE, AS WELL AS SUFFICIENT PRODUCTION CAPACITY TO PRODUCE REQUIRED UNITS.
C. FABRICATOR QUALIFICATIONS: A FIRM EXPERIENCED IN PRODUCING PRODUCTS SIMILAR TO THOSE INDICATED FOR THIS PROJECT AND WITH A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE, AS WELL AS SUFFICIENT PRODUCTION CAPACITY TO PRODUCE REQUIRED UNITS.
D. INSTALLER QUALIFICATIONS: A FIRM OR INDIVIDUAL EXPERIENCED IN INSTALLING, ERECTING, OR ASSEMBLING WORK SIMILAR IN MATERIAL, DESIGN, AND EXTENT TO THAT INDICATED FOR THIS PROJECT, WHOSE WORK HAS RESULTED IN CONSTRUCTION WITH A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE.
E. TESTING AGENCY QUALIFICATIONS: AN NRTL, AN NVLAP, OR AN INDEPENDENT AGENCY WITH THE EXPERIENCE AND CAPABILITY TO CONDUCT TESTING AND INSPECTING INDICATED, AS DOCUMENTED ACCORDING TO ASTM E 329, AND WITH ADDITIONAL QUALIFICATIONS SPECIFIED IN INDIVIDUAL SECTIONS; AND WHERE REQUIRED BY AUTHORITIES HAVING JURISDICTION, THAT IS ACCEPTABLE TO AUTHORITIES.

01 40 00 - QUALITY REQUIREMENTS (CONT)

F. MANUFACTURER'S TECHNICAL REPRESENTATIVE QUALIFICATIONS: AN AUTHORIZED REPRESENTATIVE OF MANUFACTURER WHO IS TRAINED AND APPROVED BY MANUFACTURER TO OBSERVE AND INSPECT INSTALLATION OF MANUFACTURER'S PRODUCTS THAT ARE SIMILAR IN MATERIAL, DESIGN, AND EXTENT TO THOSE INDICATED FOR THIS PROJECT.
G. FACTORY-AUTHORIZED SERVICE REPRESENTATIVE QUALIFICATIONS: AN AUTHORIZED REPRESENTATIVE OF MANUFACTURER WHO IS TRAINED AND APPROVED BY MANUFACTURER TO INSPECT INSTALLATION OF MANUFACTURER'S PRODUCTS THAT ARE SIMILAR IN MATERIAL, DESIGN, AND EXTENT TO THOSE INDICATED FOR THIS PROJECT.
H. MOCKUPS: BEFORE INSTALLING PORTIONS OF THE WORK REQUIRING MOCKUPS, BUILD MOCKUPS FOR EACH FORM OF CONSTRUCTION AND FINISH INDICATED IN THE TECHNICAL SPECIFICATIONS.
   1. BUILD MOCKUPS IN LOCATION AND OF SIZE INDICATED, OR AS DIRECTED BY ARCHITECT.
   2. DEMONSTRATE THE PROPOSED RANGE OF AESTHETIC EFFECTS AND WORKMANSHIP.
   3. OBTAIN ARCHITECT'S APPROVAL OF MOCKUPS BEFORE STARTING WORK, FABRICATION, OR CONSTRUCTION.
   4. MAINTAIN MOCKUPS DURING CONSTRUCTION IN AN UNDISTURBED CONDITION AS A STANDARD FOR JUDGING THE COMPLETED WORK.
   5. DEMOLISH AND REMOVE MOCKUPS WHEN DIRECTED, UNLESS OTHERWISE INDICATED.

1.3 QUALITY CONTROL

A. CONTRACTOR RESPONSIBILITIES: TESTS AND INSPECTIONS NOT EXPLICITLY ASSIGNED TO OWNER ARE CONTRACTOR'S RESPONSIBILITY. PERFORM ADDITIONAL QUALITY-CONTROL ACTIVITIES REQUIRED TO VERIFY THAT THE WORK COMPLIES WITH REQUIREMENTS, WHETHER SPECIFIED OR NOT.
   1. UNLESS OTHERWISE INDICATED, PROVIDE QUALITY-CONTROL SERVICES SPECIFIED AND THOSE REQUIRED BY AUTHORITIES HAVING JURISDICTION. PERFORM QUALITY-CONTROL SERVICES REQUIRED OF CONTRACTOR BY AUTHORITIES HAVING JURISDICTION, WHETHER SPECIFIED OR NOT.
   2. WHERE SERVICES ARE INDICATED AS CONTRACTOR'S RESPONSIBILITY, ENGAGE A QUALIFIED TESTING AGENCY TO PERFORM THESE QUALITY-CONTROL SERVICES.
      a. CONTRACTOR SHALL NOT EMPLOY SAME ENTITY ENGAGED BY OWNER, UNLESS AGREED TO IN WRITING BY OWNER.
   3. NOTIFY TESTING AGENCIES AT LEAST 24 HOURS IN ADVANCE OF TIME WHEN WORK THAT REQUIRES TESTING OR INSPECTING WILL BE PERFORMED.
   4. WHERE QUALITY-CONTROL SERVICES ARE INDICATED AS CONTRACTOR'S RESPONSIBILITY, SUBMIT A CERTIFIED WRITTEN REPORT, IN DUPLICATE, OF EACH QUALITY-CONTROL SERVICE.
   5. TESTING AND INSPECTING REQUESTED BY CONTRACTOR AND NOT REQUIRED BY THE CONTRACT DOCUMENTS ARE CONTRACTOR'S RESPONSIBILITY.
   6. SUBMIT ADDITIONAL COPIES OF EACH WRITTEN REPORT DIRECTLY TO AUTHORITIES HAVING JURISDICTION, WHEN THEY SO DIRECT.
B. MANUFACTURER'S FIELD SERVICES: WHERE INDICATED, ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO INSPECT FIELD-ASSEMBLED COMPONENTS AND EQUIPMENT INSTALLATION, INCLUDING SERVICE CONNECTIONS. REPORT RESULTS IN WRITING AS SPECIFIED IN DIVISION 01 SECTION "SUBMITTAL PROCEDURES."
C. MANUFACTURER'S TECHNICAL SERVICES: WHERE INDICATED, ENGAGE A MANUFACTURER'S TECHNICAL REPRESENTATIVE TO OBSERVE AND INSPECT THE WORK. MANUFACTURER'S TECHNICAL REPRESENTATIVE'S SERVICES INCLUDE PREINSTALLATION CONFERENCES, EXAMINATION OF SUBSTRATES AND CONDITIONS, VERIFICATION OF MATERIALS, OBSERVATION OF INSTALLER ACTIVITIES, INSPECTION OF COMPLETED PORTIONS OF THE WORK, AND SUBMITTAL OF WRITTEN REPORTS.
D. TESTING AGENCY DUTIES: COOPERATE WITH ARCHITECT AND CONTRACTOR IN PERFORMANCE OF DUTIES. PROVIDE QUALIFIED PERSONNEL TO PERFORM REQUIRED TESTS AND INSPECTIONS.
   1. NOTIFY ARCHITECT AND CONTRACTOR PROMPTLY OF IRREGULARITIES OR DEFICIENCIES OBSERVED IN THE WORK DURING PERFORMANCE OF ITS SERVICES.
   2. DETERMINE THE LOCATION FROM WHICH TEST SAMPLES WILL BE TAKEN AND IN WHICH IN-SITU TESTS ARE CONDUCTED.
   3. CONDUCT AND INTERPRET TESTS AND INSPECTIONS AND STATE IN EACH REPORT WHETHER TESTED AND INSPECTED WORK COMPLIES WITH OR

01 70 00 - EXECUTION AND CLOSEOUT REQUIREMENTS (CONT.)

1.13 FINAL CLEANING

A. EXECUTE FINAL CLEANING PRIOR TO FINAL PROJECT ASSESSMENT.
   1. CLEAN AREAS TO BE OCCUPIED BY OWNER PRIOR TO FINAL COMPLETION BEFORE OWNER OCCUPANCY.
B. USE CLEANING MATERIALS THAT ARE NONHAZARDOUS.
C. CLEAN INTERIOR AND EXTERIOR GLASS, SURFACES EXPOSED TO VIEW; REMOVE TEMPORARY LABELS, STAINS AND FOREIGN SUBSTANCES, POLISH TRANSPARENT AND GLOSSY SURFACES, VACUUM CARPETED AND SOFT SURFACES.
D. REMOVE ALL LABELS THAT ARE NOT PERMANENT. DO NOT PAINT OR OTHERWISE COVER FIRE TEST LABELS OR NAMEPLATES ON MECHANICAL AND ELECTRICAL EQUIPMENT.
E. CLEAN EQUIPMENT AND FIXTURES TO A SANITARY CONDITION WITH CLEANING MATERIALS APPROPRIATE TO THE SURFACE AND MATERIAL BEING CLEANED.
F. CLEAN FILTERS OF OPERATING EQUIPMENT.
G. CLEAN DEBRIS FROM ROOFS, GUTTERS, DOWNSPOUTS, AND DRAINAGE SYSTEMS.
H. CLEAN SITE; SWEEP PAVED AREAS, RAKE CLEAN LANDSCAPED SURFACES.
I. REMOVE WASTE, SURPLUS MATERIALS, TRASH/RUBBISH, AND CONSTRUCTION FACILITIES FROM THE SITE; DISPOSE OF IN LEGAL MANNER; DO NOT BURN OR BURY.

1.14 CLOSEOUT PROCEDURES

A. MAKE SUBMITTALS THAT ARE REQUIRED BY GOVERNING OR OTHER AUTHORITIES.
   1. PROVIDE COPIES TO ARCHITECT.
B. ACCOMPANY PROJECT COORDINATOR ON PRELIMINARY INSPECTION TO DETERMINE ITEMS TO BE LISTED FOR COMPLETION OR CORRECTION IN CONTRACTOR'S NOTICE OF SUBSTANTIAL COMPLETION.
C. NOTIFY ARCHITECT WHEN WORK IS CONSIDERED READY FOR SUBSTANTIAL COMPLETION.
D. SUBMIT WRITTEN CERTIFICATION THAT CONTRACT DOCUMENTS HAVE BEEN REVIEWED, WORK HAS BEEN INSPECTED, AND THAT WORK IS COMPLETE IN ACCORDANCE WITH CONTRACT DOCUMENTS AND READY FOR ARCHITECT'S REVIEW.
E. CORRECT ITEMS OF WORK LISTED IN EXECUTED CERTIFICATES OF SUBSTANTIAL COMPLETION AND COMPLY WITH REQUIREMENTS FOR ACCESS TO OWNER-OCCUPIED AREAS.
F. NOTIFY ARCHITECT WHEN WORK IS CONSIDERED FINALLY COMPLETE.
G. COMPLETE ITEMS OF WORK DETERMINED BY ARCHITECT'S FINAL INSPECTION.

1.15 MAINTENANCE

A. PROVIDE SERVICE AND MAINTENANCE OF COMPONENTS INDICATED IN SPECIFICATION SECTIONS.
B. MAINTENANCE PERIOD: AS INDICATED IN SPECIFICATION SECTIONS OR, IF NOT INDICATED, NOT LESS THAN ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION OR THE LENGTH OF THE SPECIFIED WARRANTY, WHICHEVER IS LONGEST.
C. EXAMINE SYSTEM COMPONENTS AT A FREQUENCY CONSISTENT WITH RELIABLE OPERATION. CLEAN, ADJUST, AND LUBRICATE AS REQUIRED.
D. INCLUDE SYSTEMATIC EXAMINATION, ADJUSTMENT, AND LUBRICATION OF COMPONENTS. REPAIR OR REPLACE PARTS WHENEVER REQUIRED. USE PARTS PRODUCED BY THE MANUFACTURER OF THE ORIGINAL COMPONENT.
E. MAINTENANCE SERVICE SHALL NOT BE ASSIGNED OR TRANSFERRED TO ANY AGENT OR SUBCONTRACTOR WITHOUT PRIOR WRITTEN CONSENT OF THE OWNER.

05 40 00 - COLD-FORMED METAL FRAMING

1.1 SUBMITTALS

A. PRODUCT DATA: PROVIDE DATA ON STANDARD FRAMING MEMBERS; DESCRIBE MATERIALS AND FINISH, PRODUCT CRITERIA, AND LIMITATIONS.
B. SHOP DRAWINGS: INDICATE COMPONENT DETAILS, FRAMED OPENINGS, BEARING, ANCHORAGE, LOADING, WELDS, AND TYPE AND LOCATION OF FASTENERS, AND ACCESSORIES OR ITEMS REQUIRED OF RELATED WORK.
   1. INDICATE STUD AND CEILING JOIST LAYOUT.
   2. DESCRIBE METHOD FOR SECURING STUDS TO TRACKS AND FOR BOLTED FRAMING CONNECTIONS.
   3. PROVIDE DESIGN ENGINEER'S STAMP ON SHOP DRAWINGS.

1.2 QUALITY ASSURANCE

A. DESIGNER QUALIFICATIONS: DESIGN FRAMING SYSTEM UNDER DIRECT SUPERVISION OF A PROFESSIONAL STRUCTURAL ENGINEER EXPERIENCED IN DESIGN OF THIS WORK AND LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED.

1.3 MANUFACTURERS

A. METAL FRAMING, CONNECTORS, AND ACCESSORIES:
   1. CLARKWESTERN DIETRICH BUILDING SYSTEMS LLC: WWW.CLARKDIETRICH.COM.
   2. MARINO: WWW.MARINOWARE.COM.
   3. HI STEEL NETWORK, INC: WWW.STEELNETWORK.COM.

1.4 FRAMING SYSTEM

A. PROVIDE PRIMARY AND SECONDARY FRAMING MEMBERS, BRIDGING, BRACING, PLATES, GUSSETS, CLIPS, FITTINGS, REINFORCEMENT, AND FASTENINGS AS REQUIRED TO PROVIDE A COMPLETE FRAMING SYSTEM.
B. DESIGN CRITERIA: PROVIDE COMPLETED FRAMING SYSTEM HAVING THE FOLLOWING CHARACTERISTICS:
   1. DESIGN: CALCULATE STRUCTURAL CHARACTERISTICS OF COLD-FORMED STEEL FRAMING MEMBERS ACCORDING TO NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS.
   2. STRUCTURAL PERFORMANCE: DESIGN, ENGINEER, FABRICATE, AND ERECT TO WITHSTAND SPECIFIED DESIGN LOADS FOR PROJECT CONDITIONS WITH REQUIRED CRITERIA.
   3. DESIGN LOADS: IN ACCORDANCE WITH APPLICABLE CODES.
   4. LIVE LOAD DEFLECTION MEETING THE FOLLOWING UNLESS OTHERWISE INDICATED:
      a. EXTERIOR WALLS: MAXIMUM HORIZONTAL DEFLECTION UNDER WIND LOAD OF L/600 OF SPAN FOR MASONRY, AND L/240 OF SPAN FOR METAL WALL PANELS AND EIFS.
   5. ABLE TO TOLERATE MOVEMENT OF COMPONENTS WITHOUT DAMAGE, FAILURE OF JOINT SEALS, UNDUE STRESS ON FASTENERS, OR OTHER DETRIMENTAL EFFECTS WHEN SUBJECT TO SEASONAL OR CYCLIC DAY/NIGHT TEMPERATURE RANGES.
   6. ABLE TO ACCOMMODATE CONSTRUCTION TOLERANCES, DEFLECTION OF BUILDING STRUCTURAL MEMBERS, AND CLEARANCES OF INTENDED OPENINGS.

1.5 FRAMING MATERIALS

A. STUDS AND TRACK: ASTM C955; STUDS FORMED TO CHANNEL, "C", OR "SIGMA" SHAPE WITH PUNCHED WEB; U-SHAPED TRACK IN MATCHING NOMINAL WIDTH AND COMPATIBLE HEIGHT.
   1. GAGE AND DEPTH: AS REQUIRED TO MEET SPECIFIED PERFORMANCE LEVELS, BUT NOT LESS THAN 16 GAGE AT 16 INCHES ON CENTER.
   2. GALVANIZED IN ACCORDANCE WITH ASTM A653 G90 COATING.
   3. PROVIDE COMPONENTS FABRICATED FROM ASTM A1008/A1008M, DESIGNATION SS STEEL.
B. CANOPY FRAMING
   1. MANUFACTURER'S STANDARD C-SHAPED STEEL SECTIONS, OF WEB DEPTHS INDICATED, UNPUNCHED, WITH STIFFENED FLANGES, AND AS FOLLOWS:
      a. MINIMUM BASE-METAL THICKNESS: AS REQUIRED BY DESIGN.
      b. FLANGE WIDTH: 1-5/8 INCHES, MINIMUM.
      c. SECTION PROPERTIES: AS REQUIRED BY DESIGN.
   2. BUILT-UP MEMBERS: BUILT-UP MEMBERS OF MANUFACTURER'S STANDARD C-SHAPED STEEL SECTION, WITH STIFFENED FLANGES, NESTED INTO A U-SHAPED STEEL SECTION JOIST TRACK, WITH UNSTIFFENED FLANGES; UNPUNCHED; OF WEB DEPTHS INDICATED; AND AS FOLLOWS:
      a. MINIMUM BASE-METAL THICKNESS: AS REQUIRED BY DESIGN.
      b. FLANGE WIDTH: 1-5/8 INCHES, MINIMUM.
C. FRAMING CONNECTORS: FACTORY-MADE FORMED STEEL SHEET, ASTM A653 SS GRADE 50, WITH G60 HOT DIPPED GALVANIZED COATING AND FACTORY PUNCHED HOLES.
   1. STRUCTURAL PERFORMANCE: MAINTAIN LOAD AND MOVEMENT CAPACITY REQUIRED BY APPLICABLE CODE, WHEN EVALUATED IN ACCORDANCE WITH AISI NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS; MINIMUM 16 GAGE, 0.06 INCH THICKNESS.
   2. MOVEMENT CONNECTIONS: PROVIDE MECHANICAL ANCHORAGE DEVICES THAT ACCOMMODATE MOVEMENT USING SLOTTED HOLES, SCREWS AND ANTI-FRICTION BUSHINGS, WHILE MAINTAINING STRUCTURAL PERFORMANCE OF FRAMING. PROVIDE MOVEMENT CONNECTIONS WHERE INDICATED ON DRAWINGS.
      a. WHERE CONTINUOUS STUDS BYPASS ELEVATED FLOOR SLAB, CONNECT STUD TO SLAB IN MANNER ALLOWING VERTICAL AND HORIZONTAL MOVEMENT OF SLAB WITHOUT AFFECTING STUDS; ALLOW FOR MINIMUM MOVEMENT OF 1/2 INCH.
      b. WHERE TOP OF STUD WALL TERMINATES BELOW STRUCTURAL FLOOR OR ROOF, CONNECT STUDS TO STRUCTURE IN MANNER ALLOWING VERTICAL AND HORIZONTAL MOVEMENT OF SLAB WITHOUT AFFECTING STUDS; ALLOW FOR MINIMUM MOVEMENT OF 1/2 INCH.
      c. PROVIDE TOP TRACK PREASSEMBLED WITH CONNECTION DEVICES SPACED TO FIT STUD SPACING INDICATED ON DRAWINGS; MINIMUM TRACK LENGTH OF 12 FEET.
   3. PROVIDE NON-MOVEMENT CONNECTIONS FOR TIE-DOWN TO FOUNDATION, FLOOR-TO-FLOOR TIE-DOWN, ROOF-TO-WALL TIE-DOWN, JOIST HANGERS, GUSSET PLATES, AND STIFFENERS.

1.6 ACCESSORIES

A. BRACING, FURRING, BRIDGING: FORMED SHEET STEEL, THICKNESS DETERMINED FOR CONDITIONS ENCOUNTERED; FINISH TO MATCH FRAMING COMPONENTS.
B. SHOP AND TOUCH-UP PRIMER: SSPC-PAINT 15, COMPLYING WITH VOC LIMITATIONS OF AUTHORITIES HAVING JURISDICTION.
C. TOUCH-UP PRIMER FOR GALVANIZED SURFACES: SSPC-PAINT 20, TYPE I - INORGANIC, COMPLYING WITH VOC LIMITATIONS OF AUTHORITIES HAVING JURISDICTION.

1.7 FASTENERS

A. SELF-DRILLING, SELF-TAPPING SCREWS, BOLTS, NUTS AND WASHERS: HOT DIP GALVANIZED PER ASTM A153/A153M.
B. ANCHORAGE DEVICES: POWDER ACTUATED.
C. ANCHORAGE DEVICES: POWER ACTUATED.
D. WELDING: IN CONFORMANCE WITH AWS D1.1.

1.8 EXAMINATION

A. VERIFY THAT SUBSTRATE SURFACES ARE READY TO RECEIVE WORK.
B. VERIFY FIELD MEASUREMENTS AND ADJUST INSTALLATION AS REQUIRED.

05 40 00 - COLD-FORMED METAL FRAMING (CONT)

1.9 INSTALLATION OF STUDS

A. INSTALL COMPONENTS IN ACCORDANCE WITH MANUFACTURERS' INSTRUCTIONS AND ASTM C1007 REQUIREMENTS.
B. ALIGN FLOOR AND CEILING TRACKS; LOCATE TO WALL LAYOUT. SECURE IN PLACE WITH FASTENERS AT MAXIMUM 24 INCHES ON CENTER. COORDINATE INSTALLATION OF SEALANT WITH FLOOR AND CEILING TRACKS.
C. PLACE STUDS AT 16 INCHES ON CENTER; NOT MORE THAN 2 INCHES FROM ABUTTING WALLS AND AT EACH SIDE OF OPENINGS. CONNECT STUDS TO TRACKS USING CLIP AND TIE METHOD.
D. CONSTRUCT CORNERS USING MINIMUM OF THREE STUDS. INSTALL DOUBLE STUDS AT WALL OPENINGS, DOOR AND WINDOW JAMBS.
E. INSTALL LOAD BEARING STUDS FULL LENGTH IN ONE PIECE. SPLICING OF STUDS IS NOT PERMITTED.
F. INSTALL LOAD BEARING STUDS, BRACE, AND REINFORCE TO DEVELOP FULL STRENGTH AND ACHIEVE DESIGN REQUIREMENTS.
G. COORDINATE PLACEMENT OF INSULATION IN MULTIPLE STUD SPACES MADE INACCESSIBLE AFTER ERECTION.
H. INSTALL INTERMEDIATE STUDS ABOVE AND BELOW OPENINGS TO ALIGN WITH WALL STUD SPACING. PROVIDE DEFLECTION ALLOWANCE IN STUD TRACK, DIRECTLY BELOW HORIZONTAL BUILDING FRAMING AT NON-LOAD BEARING FRAMING.
I. ATTACH CROSS STUDS TO STUDS FOR ATTACHMENT OF FIXTURES ANCHORED TO WALLS.
K. INSTALL FRAMING BETWEEN STUDS FOR ATTACHMENT OF MECHANICAL AND ELECTRICAL ITEMS, AND TO PREVENT STUD ROTATION.
L. TOUCH-UP FIELD WELDS AND DAMAGED GALVANIZED SURFACES WITH PRIMER.

1.9 TOLERANCES

A. MAXIMUM VARIATION FROM TRUE POSITION: 1/4 INCH.
B. MAXIMUM VARIATION OF ANY MEMBER FROM PLANE: 1/4 INCH.

05 50 00 - METAL FABRICATIONS

1.1 SUBMITTALS

A. SHOP DRAWINGS: SHOW FABRICATION AND INSTALLATION DETAILS FOR METAL FABRICATIONS.
   1. INCLUDE PLANS, ELEVATIONS, SECTIONS, AND DETAILS OF METAL FABRICATIONS AND THEIR CONNECTIONS. SHOW ANCHORAGE AND ACCESSORY ITEMS.

B. DELEGATED-DESIGN SUBMITTAL: PROVIDE DESIGN CALCULATIONS FOR LADDERS AND PLATFORMS, INCLUDING ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.

1.2 PROJECT CONDITIONS

A. FIELD MEASUREMENTS: VERIFY ACTUAL LOCATIONS OF WALLS AND OTHER CONSTRUCTION CONTIGUOUS WITH METAL FABRICATIONS BY FIELD MEASUREMENTS BEFORE FABRICATION.

1.3 COORDINATION

A. COORDINATE SELECTION OF SHOP PRIMERS WITH TOPCOATS TO BE APPLIED OVER THEM. COMPLY WITH PAINT AND COATING MANUFACTURERS' WRITTEN RECOMMENDATIONS TO ENSURE THAT SHOP PRIMERS AND TOPCOATS ARE COMPATIBLE WITH ONE ANOTHER.
B. COORDINATE INSTALLATION OF ANCHORAGES. FURNISH SETTING DRAWINGS, TEMPLATES, AND DIRECTIONS FOR INSTALLING ANCHORAGES, INCLUDING SLEEVES, CONCRETE INSERTS, ANCHOR BOLTS, AND ITEMS WITH INTEGRAL ANCHORS, THAT ARE TO BE EMBEDDED IN CONCRETE OR MASONRY. DELIVER SUCH ITEMS TO PROJECT SITE IN TIME FOR INSTALLATION.

1.4 METALS, GENERAL

A. METAL SURFACES, GENERAL: PROVIDE MATERIALS WITH SMOOTH, FLAT SURFACES UNLESS OTHERWISE INDICATED. FOR METAL FABRICATIONS EXPOSED TO VIEW IN THE COMPLETED WORK, PROVIDE MATERIALS WITHOUT SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, OR BLEMISHES.

1.5 FERROUS METALS

A. STEEL PLATES, SHAPES, AND BARS: ASTM A 36.
B. STEEL PIPE: ASTM A 53/A 53M, STANDARD WEIGHT (SCHEDULE 40) UNLESS OTHERWISE INDICATED.

1.6 FASTENERS

A. GENERAL: UNLESS OTHERWISE INDICATED, PROVIDE TYPE 304 STAINLESS-STEEL FASTENERS FOR EXTERIOR USE AND ZINC-PLATED FASTENERS WITH COATING COMPLYING WITH ASTM B 633 OR ASTM F 1941 CLASS FE/ZN 5, AT EXTERIOR WALLS. SELECT FASTENERS FOR TYPE, GRADE, AND CLASS REQUIRED.

1.7 MISCELLANEOUS MATERIALS

A. WELDING RODS AND BARE ELECTRODES: SELECT ACCORDING TO AWS SPECIFICATIONS FOR METAL ALLOY WELDED.
B. UNIVERSAL SHOP PRIMER: FAST-CURING, LEAD- AND CHROMATE-FREE, UNIVERSAL MODIFIED-ALKYD PRIMER COMPLYING WITH MPI#79 AND COMPATIBLE WITH TOPCOAT.

1.8 FABRICATION, GENERAL

A. SHOP ASSEMBLY: PREASSEMBLE ITEMS IN THE SHOP TO GREATEST EXTENT POSSIBLE. DISASSEMBLE UNITS ONLY AS NECESSARY FOR SHIPPING AND HANDLING LIMITATIONS. USE CONNECTIONS THAT MAINTAIN STRUCTURAL VALUE OF JOINED PIECES. CLEARLY MARK UNITS FOR REASSEMBLY AND COORDINATED INSTALLATION.
B. CUT, DRILL, AND PUNCH METALS CLEANLY AND ACCURATELY. REMOVE BURRS AND EASE EDGES TO A RADIUS OF APPROXIMATELY 1/32 INCH (1 MM) UNLESS OTHERWISE INDICATED. REMOVE SHARP OR ROUGH AREAS ON EXPOSED SURFACES.
C. FORM BENT-METAL CORNERS TO SMALLEST RADIUS POSSIBLE WITHOUT CAUSING GRAIN SEPARATION OR OTHERWISE IMPAIRING WORK.
D. FORM EXPOSED WORK WITH ACCURATE ANGLES AND SURFACES AND STRAIGHT EDGES.
E. WELD CORNERS AND SEAMS CONTINUOUSLY TO COMPLY WITH THE FOLLOWING:
   1. USE MATERIALS AND METHODS THAT MINIMIZE DISTORTION AND DEVELOP STRENGTH AND CORROSION RESISTANCE OF BASE METALS.
   2. OBTAIN FUSION WITHOUT UNDERCUT OR OVERLAP.
   3. REMOVE WELDING FLUX IMMEDIATELY.
   4. AT EXPOSED CONNECTIONS, FINISH EXPOSED WELDS AND SURFACES SMOOTH AND BLENDED SO NO ROUGHNESS SHOWS AFTER FINISHING AND CONTOUR OF WELDED SURFACE MATCHES THAT OF ADJACENT SURFACE.
F. FORM EXPOSED CONNECTIONS WITH HAIRLINE JOINTS, FLUSH AND SMOOTH, USING CONCEALED FASTENERS OR WELDS WHERE POSSIBLE. WHERE EXPOSED FASTENERS ARE REQUIRED, USE PHILLIPS FLAT-HEAD (COUNTERSUNK) FASTENERS UNLESS OTHERWISE INDICATED. LOCATE JOINTS WHERE LEAST CONSPICUOUS.
G. FABRICATE SEAMS AND OTHER CONNECTIONS THAT WILL BE EXPOSED TO WEATHER IN A MANNER TO EXCLUDE WATER. PROVIDE WEEP HOLES WHERE WATER MAY ACCUMULATE.
H. CUT, REINFORCE, DRILL, AND TAP METAL FABRICATIONS AS INDICATED TO RECEIVE FINISH HARDWARE, SCREWS, AND SIMILAR ITEMS.
I. PROVIDE FOR ANCHORAGE OF TYPE INDICATED; COORDINATE WITH SUPPORTING STRUCTURE. SPACE ANCHORING DEVICES TO SECURE METAL FABRICATIONS RIGIDLY IN PLACE AND TO SUPPORT INDICATED LOADS.
   1. WHERE UNITS ARE INDICATED TO BE CAST INTO CONCRETE OR BUILT INTO MASONRY, EQUIP WITH INTEGRALLY WELDED STEEL STRAP ANCHORS, 1/8 BY 1-1/2 INCHES, WITH A MINIMUM 6-INCH EMBEDMENT AND 2-INCH HOOK, NOT LESS THAN 8 INCHES FROM ENDS AND CORNERS OF UNITS AND 24 INCHES O.C., UNLESS OTHERWISE INDICATED.

1.9 MISCELLANEOUS FRAMING AND SUPPORTS

A. GENERAL: PROVIDE STEEL FRAMING AND SUPPORTS NOT SPECIFIED IN OTHER SECTIONS AS NEEDED TO COMPLETE THE WORK.
B. FABRICATE UNITS FROM STEEL SHAPES, PLATES, AND BARS OF WELDED CONSTRUCTION UNLESS OTHERWISE INDICATED. FABRICATE TO SIZES, SHAPES, AND PROFILES INDICATED AND AS NECESSARY TO RECEIVE ADJACENT CONSTRUCTION.
   1. FABRICATE UNITS FROM SLOTTED CHANNEL FRAMING WHERE INDICATED.
C. FABRICATE SUPPORTS FOR OPERABLE PARTITIONS FROM CONTINUOUS STEEL BEAMS OF SIZES [INDICATED] [RECOMMENDED BY PARTITION MANUFACTURER] WITH ATTACHED BEARING PLATES, ANCHORS, AND BRACES AS [INDICATED] [RECOMMENDED BY PARTITION MANUFACTURER]. DRILL OR PUNCH BOTTOM FLANGES OF BEAMS TO RECEIVE PARTITION TRACK HANGER RODS; LOCATE HOLES WHERE INDICATED ON OPERABLE PARTITION SHOP DRAWINGS.

1.10 STEEL AND IRON FINISHES

A. SHOP PRIME IRON AND STEEL ITEMS NOT INDICATED TO BE GALVANIZED UNLESS THEY ARE TO BE EMBEDDED IN CONCRETE, SPRAYED-ON FIREPROOFING, OR MASONRY, OR UNLESS OTHERWISE INDICATED.
   1. SHOP PRIME WITH UNIVERSAL SHOP PRIMER UNLESS ZINC-RICH PRIMER IS INDICATED.

1.11 INSTALLATION, GENERAL

A. CUTTING, FITTING, AND PLACEMENT: PERFORM CUTTING, DRILLING, AND FITTING REQUIRED FOR INSTALLING METAL FABRICATIONS. SET METAL FABRICATIONS ACCURATELY IN LOCATION, ALIGNMENT, AND ELEVATION; WITH EDGES AND SURFACES LEVEL, PLUMB, TRUE, AND FREE OF RACK; AND MEASURED FROM ESTABLISHED LINES AND LEVELS.
B. FIT EXPOSED CONNECTIONS ACCURATELY TOGETHER TO FORM HAIRLINE JOINTS. WELD CONNECTIONS THAT ARE NOT TO BE LEFT AS EXPOSED JOINTS BUT CANNOT BE SHOP WELDED BECAUSE OF SHIPPING SIZE LIMITATIONS. DO NOT WELD, CUT, OR ABRADE SURFACES OF EXTERIOR UNITS THAT HAVE BEEN HOT-DIP GALVANIZED AFTER FABRICATION AND ARE FOR BOLTED OR SCREWED FIELD CONNECTIONS.
C. FIELD WELDING: COMPLY WITH THE FOLLOWING REQUIREMENTS:
   1. USE MATERIALS AND METHODS THAT MINIMIZE DISTORTION AND DEVELOP STRENGTH AND CORROSION RESISTANCE OF BASE METALS.
   2. OBTAIN FUSION WITHOUT UNDERCUT OR OVERLAP.
   3. REMOVE WELDING FLUX IMMEDIATELY.
   4. AT EXPOSED CONNECTIONS, FINISH EXPOSED WELDS AND SURFACES SMOOTH AND BLENDED SO NO ROUGHNESS SHOWS AFTER FINISHING AND CONTOUR OF WELDED SURFACE MATCHES THAT OF ADJACENT SURFACE.
D. FASTENING TO IN-PLACE CONSTRUCTION: PROVIDE ANCHORAGE DEVICES AND FASTENERS WHERE METAL FABRICATIONS ARE REQUIRED TO BE FASTENED TO IN-PLACE CONSTRUCTION. PROVIDE THREADED FASTENERS FOR USE WITH CONCRETE AND MASONRY INSERTS, TOGGLE BOLTS, THROUGH BOLTS, LAG SCREWS, WOOD SCREWS, AND OTHER CONNECTORS.
E. PROVIDE TEMPORARY BRACING OR ANCHORS IN FORMWORK FOR ITEMS THAT ARE TO BE BUILT INTO CONCRETE, MASONRY, OR SIMILAR CONSTRUCTION.
F. CORROSION PROTECTION: COAT CONCEALED SURFACES OF ALUMINUM THAT WILL COME INTO CONTACT WITH GROUT, CONCRETE, MASONRY, WOOD, OR DISSIMILAR METALS WITH THE FOLLOWING:
   1. CAST ALUMINUM: HEAVY COAT OF BITUMINOUS PAINT.
   2. EXTRUDED ALUMINUM: TWO COATS OF CLEAR LACQUER.

05 50 00 - METAL FABRICATIONS (CONT)

1.12 INSTALLING MISCELLANEOUS FRAMING AND SUPPORTS

A. GENERAL: INSTALL FRAMING AND SUPPORTS TO COMPLY WITH REQUIREMENTS OF ITEMS BEING SUPPORTED, INCLUDING MANUFACTURERS' WRITTEN INSTRUCTIONS AND REQUIREMENTS INDICATED ON SHOP DRAWINGS.
B. ANCHOR SUPPORTS FOR OPERABLE PARTITIONS SECURELY TO AND RIGIDLY BRACE FROM BUILDING STRUCTURE.

1.13 ADJUSTING AND CLEANING

A. TOUCHUP PAINTING: IMMEDIATELY AFTER ERECTION, CLEAN FIELD WELDS, BOLTED CONNECTIONS, AND ABRADED AREAS. PAINT UNCOATED AND ABRADED AREAS WITH THE SAME MATERIAL AS USED FOR SHOP PAINTING TO COMPLY WITH SSPC-PA 1 FOR TOUCHING UP SHOP-PAINTED SURFACES.
   1. APPLY BY BRUSH OR SPRAY TO PROVIDE A MINIMUM 2.0-MIL DRY FILM THICKNESS.
B. TOUCHUP PAINTING: CLEANING AND TOUCHUP PAINTING OF FIELD WELDS, BOLTED CONNECTIONS, AND ABRADED AREAS OF SHOP PAINT ARE SPECIFIED IN DIVISION 09 PAINTING SECTIONS.
C. GALVANIZED SURFACES: CLEAN FIELD WELDS, BOLTED CONNECTIONS, AND ABRADED AREAS AND REPAIR GALVANIZING TO COMPLY WITH ASTM A 780.

05 51 16 - METAL FLOOR PLATE STAIRS

1.1 SUMMARY

A. SECTION INCLUDES INDUSTRIAL-TYPE, STRAIGHT-RUN STAIRS WITH STEEL FLOOR PLATE TREADS AND RAILINGS ATTACHED TO METAL FLOOR PLATE STAIRS.

1.2 ACTION SUBMITTALS

A. PRODUCT DATA: FOR METAL FLOOR PLATE STAIRS.
B. SHOP DRAWINGS: INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK.
C. DELEGATED-DESIGN SUBMITTAL: PROVIDE DESIGN CALCULATIONS FOR STAIRS AND PLATFORMS, INCLUDING ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.

1.3 PERFORMANCE REQUIREMENTS

A. DELEGATED DESIGN: ENGAGE A QUALIFIED PROFESSIONAL ENGINEER, REGISTERED BY THE STATE IN WHICH THE PROJECT IS BEING CONSTRUCTED TO DESIGN STAIRS.
B. STRUCTURAL PERFORMANCE OF STAIRS: METAL STAIRS SHALL WITHSTAND THE EFFECTS OF GRAVITY LOADS AND THE FOLLOWING LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED:
   1. UNIFORM LOAD: 100 LBF/SQ. FT.
   2. CONCENTRATED LOAD: 300 LBF APPLIED ON AN AREA OF 4 SQ. IN.
   3. UNIFORM AND CONCENTRATED LOADS NEED NOT BE ASSUMED TO ACT CONCURRENTLY.
   4. STAIR FRAMING: CAPABLE OF WITHSTANDING STRESSES RESULTING FROM RAILING LOADS IN ADDITION TO LOADS SPECIFIED ABOVE.
C. SEISMIC PERFORMANCE OF STAIRS: METAL STAIRS SHALL WITHSTAND THE EFFECTS OF EARTHQUAKE MOTIONS DETERMINED ACCORDING TO ASCE/SEI 7.
   1. COMPONENT IMPORTANCE FACTOR: 1.5.

1.4 METALS

A. METAL SURFACES, GENERAL: PROVIDE MATERIALS WITH SMOOTH, FLAT SURFACES UNLESS OTHERWISE INDICATED. FOR COMPONENTS EXPOSED TO VIEW IN THE COMPLETED WORK, PROVIDE MATERIALS WITHOUT SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, OR BLEMISHES.
B. STEEL PLATES, SHAPES, AND BARS: ASTM A 36/A 36M.
C. ROLLED-STEEL FLOOR PLATE: ASTM A 786/A 786M, ROLLED FROM PLATE COMPLYING WITH ASTM A 36/A 36M OR ASTM A 283/A 283M, GRADE C OR D.

1.5 FASTENERS

A. PROVIDE ZINC-PLATED FASTENERS WITH COATING COMPLYING WITH ASTM B 633 OR ASTM F 1941, CLASS FE/ZN 12 FOR EXTERIOR USE, AND CLASS FE/ZN 5 WHERE BUILT INTO EXTERIOR WALLS. SELECT FASTENERS FOR TYPE, GRADE, AND CLASS REQUIRED.

1.6 MISCELLANEOUS MATERIALS

A. UNIVERSAL SHOP PRIMER: FAST-CURING, LEAD- AND CHROMATE-FREE, UNIVERSAL MODIFIED-ALKYD PRIMER COMPLYING WITH MPI#79 AND COMPATIBLE WITH TOPCOAT.
B. GALVANIZING REPAIR PAINT: HIGH-ZINC-DUST-CONTENT PAINT COMPLYING WITH SSPC-PAINT 20 AND COMPATIBLE WITH PAINTS SPECIFIED TO BE USED OVER IT.

1.7 FABRICATION, GENERAL

A. PROVIDE COMPLETE STAIR ASSEMBLIES, INCLUDING METAL FRAMING, HANGERS, CLIPS, BRACKETS, BEARING PLATES, AND OTHER COMPONENTS NECESSARY TO SUPPORT AND ANCHOR STAIRS AND PLATFORMS ON SUPPORTING STRUCTURE.
   1. JOIN COMPONENTS BY WELDING UNLESS OTHERWISE INDICATED.
   2. USE CONNECTIONS THAT MAINTAIN STRUCTURAL VALUE OF JOINED PIECES.
   3. FABRICATE TREADS AND PLATFORMS OF EXTERIOR STAIRS SO FINISHED WALKING SURFACES SLOPE TO DRAIN.
B. WELD CONNECTIONS TO COMPLY WITH THE FOLLOWING:
   1. USE MATERIALS AND METHODS THAT MINIMIZE DISTORTION AND DEVELOP STRENGTH AND CORROSION RESISTANCE OF BASE METALS.
   2. OBTAIN FUSION WITHOUT UNDERCUT OR OVERLAP.
   3. REMOVE WELDING FLUX IMMEDIATELY.
   4. WELD EXPOSED CORNERS AND SEAMS CONTINUOUSLY UNLESS OTHERWISE INDICATED.
   5. AT EXPOSED CONNECTIONS, FINISH EXPOSED WELDS TO COMPLY WITH NOMMA'S "VOLUNTARY JOINT FINISH STANDARDS" FOR TYPE 4 WELDS: GOOD QUALITY, UNIFORM UNDRESSED WELD WITH MINIMAL SPLATTER.
C. FABRICATE JOINTS THAT WILL BE EXPOSED TO WEATHER IN A MANNER TO EXCLUDE WATER. PROVIDE WEEP HOLES WHERE WATER MAY ACCUMULATE.

1.8 STEEL-FRAMED STAIRS

A. NAAMM STAIR STANDARD: COMPLY WITH "RECOMMENDED VOLUNTARY MINIMUM STANDARDS FOR FIXED METAL STAIRS" IN NAAMM AMP 510, "METAL STAIRS MANUAL," INDUSTRIAL CLASS, UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED.
B. STAIR FRAMING:
   1. FABRICATE STRINGERS OF STEEL PLATES OR CHANNELS
      a. PROVIDE CLOSURES FOR EXPOSED ENDS OF CHANNEL STRINGERS.
   2. CONSTRUCT PLATFORMS OF STEEL PLATE OR CHANNEL HEADERS AND MISCELLANEOUS FRAMING MEMBERS AS NEEDED TO COMPLY WITH PERFORMANCE REQUIREMENTS.
   3. WELD OR BOLT STRINGERS TO HEADERS; WELD OR BOLT FRAMING MEMBERS TO STRINGERS AND HEADERS.
C. METAL FLOOR PLATE STAIRS: FORM TREADS AND PLATFORMS TO CONFIGURATIONS SHOWN FROM ABRASIVE-SURFACE FLOOR PLATE OF THICKNESS NEEDED TO COMPLY WITH PERFORMANCE REQUIREMENTS, BUT NOT LESS THAN 1/4 INCH.

1.9 STAIR RAILINGS

A. COMPLY WITH APPLICABLE REQUIREMENTS IN SECTION 055213 "PIPE AND TUBE RAILINGS."
   1. RAILS MAY BE BENT AT CORNERS, RAIL RETURNS, AND WALL RETURNS, INSTEAD OF USING PREFABRICATED FITTINGS.
   2. CONNECT POSTS TO STAIR FRAMING BY DIRECT WELDING UNLESS OTHERWISE INDICATED.

1.10 FINISHES

A. FINISH METAL STAIRS AFTER ASSEMBLY.
B. GALVANIZING: HOT-DIP GALVANIZE ITEMS AS INDICATED TO COMPLY WITH ASTM A 153/A 153M FOR STEEL AND IRON HARDWARE AND WITH ASTM A 123/A 123M FOR OTHER STEEL AND IRON PRODUCTS.
C. PREPARATION FOR SHOP PRIMING: PREPARE UNCOATED FERROUS-METAL SURFACES TO COMPLY WITH SSPC-SP 6/NACE NO. 3, "COMMERCIAL BLAST CLEANING" AND SSPC-SP 3, "POWER TOOL CLEANING".
D. APPLY SHOP PRIMER TO UNCOATED SURFACES OF METAL STAIR COMPONENTS, EXCEPT THOSE WITH GALVANIZED FINISHES AND THOSE TO BE EMBEDDED IN CONCRETE OR MASONRY UNLESS OTHERWISE INDICATED. COMPLY WITH SSPC-PA 1, "PAINT APPLICATION SPECIFICATION NO. 1: SHOP

06 10 00 - ROUGH CARPENTRY - NON STRUCTURAL

1.1 GENERAL REQUIREMENTS

A. DIMENSION LUMBER: COMPLY WITH PS 20 AND REQUIREMENTS OF SPECIFIED GRADING AGENCIES.
   1. IF NO SPECIES IS SPECIFIED, PROVIDE ANY SPECIES GRADED BY THE AGENCY SPECIFIED; IF NO GRADING AGENCY IS SPECIFIED, PROVIDE LUMBER GRADED BY ANY GRADING AGENCY MEETING THE SPECIFIED REQUIREMENTS.
   2. GRADING AGENCY: ANY GRADING AGENCY WHOSE RULES ARE APPROVED BY THE BOARD OF REVIEW, AMERICAN LUMBER STANDARD COMMITTEE (WWW.ALSC.ORG) AND WHO PROVIDES GRADING SERVICE FOR THE SPECIES AND GRADE SPECIFIED; PROVIDE LUMBER STAMPED WITH GRADE MARK UNLESS OTHERWISE INDICATED.

1.2 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

A. SIZES: NOMINAL SIZES AS INDICATED ON DRAWINGS, S4S.
B. MOISTURE CONTENT: S-DRY OR MC19.
C. MISCELLANEOUS FRAMING, BLOCKING, NAILERS, GROUNDS, AND FURRING:
   1. LUMBER: S4S, NO. 2 OR STANDARD GRADE.
   2. BOARDS: STANDARD OR NO. 3.

1.3 CONSTRUCTION PANELS

A. COMMUNICATIONS AND ELECTRICAL ROOM MOUNTING BOARDS: PS 1 A-D-EXT PLYWOOD, 3/4 INCH THICK. PROVIDE FR (FIRE RETARDANT) TREATED MATERIAL WHERE REQUIRED BY CODE.

1.4 ACCESSORIES

A. A. FASTENERS AND ANCHORS:
   1. METAL AND FINISH: HOT-DIPPED GALVANIZED STEEL PER ASTM A 153/A 153M FOR HIGH HUMIDITY AND PRESERVATIVE-TREATED WOOD LOCATIONS, UNFINISHED STEEL ELSEWHERE.
   2. ANCHORS: TOGGLE BOLT TYPE FOR ANCHORAGE TO HOLLOW MASONRY.

1.5 FACTORY WOOD TREATMENT

A. TREATED LUMBER AND PLYWOOD: COMPLY WITH REQUIREMENTS OF AWPA U1 - USE CATEGORY SYSTEM FOR WOOD TREATMENTS DETERMINED BY USE CATEGORIES, EXPECTED SERVICE CONDITIONS, AND SPECIFIC APPLICATIONS.
   1. FIRE-RETARDANT TREATED WOOD: MARK EACH PIECE OF WOOD WITH PRODUCER'S STAMP INDICATING COMPLIANCE WITH SPECIFIED REQUIREMENTS.
   2. PRESERVATIVE-TREATED WOOD: PROVIDE LUMBER AND PLYWOOD MARKED OR STAMPED BY AN ALSC-ACCREDITED TESTING AGENCY, CERTIFYING LEVEL AND TYPE OF TREATMENT IN ACCORDANCE WITH AWPA STANDARDS.
B. PRESERVATIVE TREATMENT:
   1. MANUFACTURERS:
      a. ARCH WOOD PROTECTION, INC.: WWW.WOLMANIZEDWOOD.COM.
      b. VIANCE, LLC: WWW.TREATEDWOOD.COM.
      c. OSMOSE, INC.: WWW.OSMOSE.COM.
   2. PRESERVATIVE PRESSURE TREATMENT OF LUMBER ABOVE GRADE: AWPA U1, USE CATEGORY UC3B, COMMODITY SPECIFICATION A USING WATERBORNE PRESERVATIVE TO 0.25 LB/CU FT RETENTION.
      a. KILN DRY LUMBER AFTER TREATMENT TO MAXIMUM MOISTURE CONTENT OF 19 PERCENT.
      b. TREAT LUMBER IN CONTACT WITH ROOFING, FLASHING, OR WATERPROOFING.
      c. TREAT LUMBER IN CONTACT WITH MASONRY OR CONCRETE.
      d. TREAT LUMBER IN OTHER LOCATIONS AS INDICATED.

1.6 PREPARATION

A. WHERE WOOD FRAMING BEARS ON CEMENTITIOUS FOUNDATIONS, INSTALL FULL WIDTH SILL FLASHING CONTINUOUS OVER TOP OF FOUNDATION, LAP ENDS OF FLASHING MINIMUM OF 4 INCHES AND SEAL.
B. COORDINATE INSTALLATION OF ROUGH CARPENTRY MEMBERS SPECIFIED IN OTHER SECTIONS.

1.7 INSTALLATION - GENERAL

A. SELECT MATERIAL SIZES TO MINIMIZE WASTE.
B. REUSE SCRAP TO THE GREATEST EXTENT POSSIBLE; CLEARLY SEPARATE SCRAP FOR USE ON SITE AS ACCESSORY COMPONENTS, INCLUDING: SHIMS, BRACING, AND BLOCKING.
C. WHERE TREATED WOOD IS USED ON INTERIOR, PROVIDE TEMPORARY VENTILATION DURING AND IMMEDIATELY AFTER INSTALLATION SUFFICIENT TO REMOVE INDOOR AIR CONTAMINANTS.

1.8 BLOCKING, NAILERS, AND SUPPORTS

A. PROVIDE FRAMING AND BLOCKING MEMBERS AS INDICATED OR AS REQUIRED TO SUPPORT FINISHES, FIXTURES, SPECIALTY ITEMS, AND TRIM.
B. IN METAL STUD WALLS, PROVIDE CONTINUOUS BLOCKING AROUND DOOR AND WINDOW OPENINGS FOR ANCHORAGE OF FRAMES, SECURELY ATTACHED TO STUD FRAMING.
C. IN WALLS, PROVIDE BLOCKING ATTACHED TO STUDS AS BACKING AND SUPPORT FOR WALL-MOUNTED ITEMS, UNLESS ITEM CAN BE SECURELY FASTENED TO TWO OR MORE STUDS OR OTHER METHOD OF SUPPORT IS EXPLICITLY INDICATED.
D. WHERE CEILING-MOUNTING IS INDICATED, PROVIDE BLOCKING AND SUPPLEMENTARY SUPPORTS ABOVE CEILING, UNLESS OTHER METHOD OF SUPPORT IS EXPLICITLY INDICATED.

1.9 INSTALLATION OF CONSTRUCTION PANELS

A. PLYWOOD WALL SHEATHING
   1. INSTALL WITH LONG EDGE PERPENDICULAR TO FRAMING.
   2. ALLOW 1/8 INCH OPEN SPACE BETWEEN PANEL ENDS AND EDGES FOR EXPANSION AND CONTRACTION.
   3. PLACE ENDS OVER FRAMING MEMBERS. INSTALL OVER TWO OR MORE SPANS WITH END JOINTS STAGGERED AND FACE GRAIN PERPENDICULAR TO SUPPORTS.
   4. SECURE WITH GALVANIZED NAILS TO EACH SUPPORT SPACING FASTENERS AT 12 INCH O.C. FOR INTERMEDIATE SUPPORTS AND 6 INCH O.C. FOR ENDS SUPPORTS (OR AT SPACING AS OTHERWISE INDICATED ON STRUCTURAL DRAWINGS), USING 8D RING SHANK NAILS. STAPLES WILL BE ALLOWED AS A SUBSTITUTION IF ALLOWED BY GOVERNING CODES, ARCHITECT, AND OWNER.
   5. USE EDGE CLIPS AT ALL UNSUPPORTED EDGES AT ROOF SHEATHING, SPACED AT 12" MAXIMUM ON CENTER.
B. COMMUNICATIONS AND ELECTRICAL ROOM MOUNTING BOARDS: SECURE WITH SCREWS TO STUDS WITH EDGES OVER FIRM BEARING; SPACE FASTENERS AT MAXIMUM 24 INCHES ON CENTER ON ALL EDGES AND INTO STUDS IN FIELD OF BOARD.

1.10 TOLERANCES

A. FRAMING MEMBERS: 1/4 INCH FROM TRUE POSITION, MAXIMUM.
B. VARIATION FROM PLANE: 1/4 INCH IN 10 FEET MAXIMUM, AND 1/4 INCH IN 30 FEET MAXIMUM.

06 16 00 - SHEATHING

1.1 WALL SHEATHING

A. GLASS-MAT GYPSUM WALL SHEATHING: ASTM C 1177.
   1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
      a. CERTAINTEED CORPORATION; GLASROC.
      b. G-P GYPSUM CORPORATION; DENS-GLASS GOLD.
      c. EMPLE-INLAND INC.; GREENGLASS
      d. UNITED STATES GYPSUM CO.; SECUROCK.
   2. TYPE AND THICKNESS: TYPE X, 5/8 INCH THICK.
   3. SIZE: 48 BY 108 INCHES.

1.2 GYPSUM SHEATHING INSTALLATION

A. A. COMPLY WITH GA-253 AND WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
   1. FASTEN GYPSUM SHEATHING TO COLD-FORMED METAL FRAMING WITH SCREWS.
   2. INSTALL BOARDS WITH A 3/8-INCH GAP WHERE NON-LOAD-BEARING CONSTRUCTION ABUTS STRUCTURAL ELEMENTS.
   3. INSTALL BOARDS WITH A 1/4-INCH GAP WHERE THEY ABUT MASONRY OR SIMILAR MATERIALS THAT MIGHT RETAIN MOISTURE, TO PREVENT WICKING.
B. APPLY FASTENERS SO HEADS BEAR TIGHTLY AGAINST FACE OF SHEATHING, BUT DO NOT CUT INTO FACING.
C. VERTICAL INSTALLATION: INSTALL BOARD VERTICAL EDGES CENTERED OVER STUDS. ABUT ENDS AND EDGES OF EACH BOARD WITH THOSE OF ADJACENT BOARDS. ATTACH BOARDS AT PERIMETER AND WITHIN FIELD OF BOARD TO EACH STUD.
D. SPACE FASTENERS APPROXIMATELY 8 INCHES O.C. AND SET BACK A MINIMUM OF 3/8 INCH (FROM EDGES AND ENDS OF BOARDS.

07 21 00 - INSULATION

1.1 GENERAL

A. SUBSTITUTIONS: SEE SECTION 016000 - PRODUCT REQUIREMENTS.

1.2 APPLICATIONS

A. INSULATION OVER METAL STUD FRAMED WALLS, CONTINUOUS: POLYISOCYANURATE BOARD.
B. INSULATION IN METAL STUD FRAMED WALLS: BATT INSULATION SEPARATING CONDITIONED FROM NON-CONDITIONED AREAS AND FOR ACOUSTICAL PURPOSES AROUND RESTROOMS.
C. AIR BARRIER JOINT FILLER: SINGLE- AND MULTI-COMPONENT EXPANDING POLYURETHANE FOAM SEALANT
D. SLAB-EDGE PERIMETER INSULATION: EXTRUDED POLYSTYRENE BOARD INSULATION

1.3 POLYISOCYANURATE BOARD

A. POLYISOCYANURATE BOARD INSULATION: RIGID CELLULAR FOAM, COMPLYING WITH ASTM C1289, TYPE II, CLASS 1, FOIL-FACED AS INDICATED ON PROJECT DRAWINGS; GRADE 1.

1.4 FIBERGLASS BATT INSULATION

A. GLASS FIBER BATT INSULATION: FLEXIBLE PREFORMED BATT OR BLANKET, COMPLYING WITH ASTM C665; FRICTION FIT.
   1. FLAME SPREAD INDEX: 25 OR LESS, WHEN TESTED IN ACCORDANCE WITH ASTM E84.
   2. SMOKE DEVELOPED INDEX: 450 OR LESS, WHEN TESTED IN ACCORDANCE WITH ASTM E84.
   3. COMBUSTIBILITY: NON-COMBUSTIBLE, WHEN TESTED IN ACCORDANCE WITH ASTM E13 , EXCEPT FOR FACING, IF ANY.
   4. FORMALDEHYDE CONTENT: ZERO.
   5. THERMAL RESISTANCE: AS INDICATED ON DRAWINGS.
   6. FACING: UNFACED (TYPICAL
   7. MANUFACTURERS:
      a. CERTAINTEED CORPORATION: WWW.CERTAINTEED.COM.
      b. JOHNS MANVILLE CORPORATION: WWW.JM.COM.
      c. KNAUF INSULATION GMBH: WWW.KNAUFINSULATION.US
      d. OWENS CORNING CORP: WWW.OWENSCORNING.COM.

1.5 EXPANDING POLYURETHANE FOAM SEALANT

A. EXPANDING SINGLE-COMPONENT OR MULTI-COMPONENT MOISTURE-CURED POLYURETHANE FOAM WITH A (H) CFC-FREE PROPELLANT .
   1. EXPANDS TO THREE TIMES VOLUME (MIN) AT POINT OF APPLICATION
   2. THERMAL INSULATION: R-5 (MIN), AT 2" THICKNESS
   3. MANUFACTURER: SUBJECT TO COMPLIANCE WITH PROJECT REQUIREMENTS,
      a. GEOCEL
      b. DOW CHEMICAL 157860 TRIPLE EXPANDING FOAM
      c. HANDI-FOAM MULTIPURPOSE INSULATING SPRAY FOAM SEALANT
      d. OR EQUAL

07 21 00 - INSULATION (CONT)

1.6 EXTRUDED POLYSTYRENE BOARD

A. EXTRUDED-POLYSTYRENE BOARD INSULATION: ASTM C 578, OF TYPE AND MINIMUM COMPRESSIVE STRENGTH INDICATED BELOW, WITH MAXIMUM FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES OF 75 AND 450, RESPECTIVELY, PER ASTM E 84.
   1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
      a. DIVERSIFOAM PRODUCTS.
      b. DOW CHEMICAL COMPANY.
      c. OWENS CORNING
      d. PACTIV BUILDING PRODUCTS
   2. TYPE VI, 40 PSI. (BENEATH SLAB ON GRADE AND BACK SIDE OF FOUNDATION WALLS)
B. ADHESIVE FOR BONDING INSULATION: PRODUCT WITH DEMONSTRATED CAPABILITY TO BOND INSULATION SECURELY TO SUBSTRATES WITHOUT DAMAGING INSULATION AND SUBSTRATES.

1.7 EXAMINATION

A. VERIFY THAT SUBSTRATE, ADJACENT MATERIALS, AND INSULATION MATERIALS ARE DRY AND THAT SUBSTRATES ARE READY TO RECEIVE INSULATION AND ADHESIVE.
B. VERIFY SUBSTRATE SURFACES ARE FLAT, FREE OF HONEYCOMB, FINS, IRREGULARITIES, OR MATERIALS OR SUBSTANCES THAT MAY IMPEDE ADHESIVE BOND.

1.8 BATT INSTALLATION

A. INSTALL INSULATION AND VAPOR RETARDER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS
B. INSTALL IN EXTERIOR WALL, FLOOR AND ROOF SPACES WITHOUT GAPS OR VOIDS. DO NOT COMPRESS INSULATION.
C. TRIM INSULATION NEATLY TO FIT SPACES. INSULATE MISCELLANEOUS GAPS AND VOIDS.
D. FIT INSULATION TIGHTLY IN CAVITIES AND TIGHTLY TO EXTERIOR SIDE OF MECHANICAL AND ELECTRICAL SERVICES WITHIN THE PLANE OF THE INSULATION.
E. PLACE INSULATION AGAINST BAFFLES. DO NOT IMPEDE NATURAL ATTIC VENTILATION TO SOFFIT.
F. COORDINATE WORK OF THIS SECTION WITH CONSTRUCTION OF AIR BARRIER SEAL SPECIFIED IN SECTION 072500.

1.9 PROTECTION

A. DO NOT PERMIT INSTALLED INSULATION TO BE WET OR DAMAGED PRIOR TO ITS CONCEALMENT.

07 25 00 - WEATHER BARRIERS - SHEET

1.1 SUBMITTALS

A. PRODUCT DATA: PROVIDE DATA ON MATERIAL CHARACTERISTICS.
B. MANUFACTURER'S INSTALLATION INSTRUCTIONS: INDICATE PREPARATION.

1.2 FIELD CONDITIONS

A. MAINTAIN TEMPERATURE AND HUMIDITY RECOMMENDED BY THE MATERIALS MANUFACTURERS BEFORE, DURING AND AFTER INSTALLATION.

1.3 WARRANTY

A. PROVIDE MANUFACTURER'S STANDARD 10 YEAR WATER-TIGHTNESS WARRANTY COVERING MATERIAL AND INSTALLATION.

1.4 WATER RESISTIVE BARRIER

A. A. AIR BARRIER SHEET, MECHANICALLY FASTENED:
   1. AIR PENETRATION: 0.001 CFM/FT2 AT 75 PA, WHEN TESTED IN ACCORDANCE WITH ASTM E2178. TYPE I PER ASTM E1677. ≤0.04 CFM/FT2 AT 75 PA, WHEN TESTED IN ACCORDANCE WITH ASTM E2357.
   2. WATER VAPOR TRANSMISSION: 28 PERMS, WHEN TESTED IN ACCORDANCE WITH ASTM E96, METHOD B.
   3. WATER PENETRATION RESISTANCE: MINIMUM 280 CM WHEN TESTED IN ACCORDANCE WITH AATCC TEST METHOD 127.
   4. BASIS WEIGHT: MINIMUM 2.7 OZ/YD2, WHEN TESTED IN ACCORDANCE WITH TAPPI TEST METHOD T-410.
B. AIR RESISTANCE: AIR INFILTRATION AT >1500 SECONDS, WHEN TESTED IN ACCORDANCE WITH TAPPI TEST METHOD T-460.
   1. TENSILE STRENGTH: MINIMUM 38/35 LBS/IN., WHEN TESTED IN ACCORDANCE WITH ASTM D882, METHOD A.
   2. TEAR RESISTANCE: 12/10 LBS., WHEN TESTED IN ACCORDANCE WITH ASTM D1117.
   3. SURFACE BURNING CHARACTERISTICS: CLASS A, WHEN TESTED IN ACCORDANCE WITH ASTM E84. FLAME SPREAD: 10, SMOKE DEVELOPED: 10.
   4. MANUFACTURERS:
      a. DUPONT TYVEK; WWW.DUPONT.COM.
      b. PACTIV CORPORATION; GREENGUARD.PACTIV.COM.
      c. VAPROSHIELD, LLC; WWW.VAPROSHIELD.COM.
   5. ACCEPTABLE PRODUCTS:
      a. BEHIND MASONRY VENEER:
         1. TYVEK COMMERICAL WRAP, BY E.I. DUPONT.
      b. SELF-ADHERING FLEXIBLE FLASHING TAPE, DUPONT™ FLEXWRAP™. AND SELF ADHERING STRAIGHT FLASHING TAPE, DUPONT™ STRAIGHTFLASH ™.

1.5 SEALANTS

A. SILICONE SEALANT: TYPE S-GP AS SPECIFIED IN SECTION 079005.

1.6 ACCESSORIES

A. SELF-ADHESIVE SHEET FLASHING: ASTM D 1970.
B. THINNERS AND CLEANERS: AS RECOMMENDED BY MATERIAL MANUFACTURER.
C. ATTACHMENT DEVICES: GALVANIZED STEEL NAILS WITH WEATHER RESISTANT PLASTIC CAPS.

1.7 EXAMINATION

A. VERIFY THAT SURFACES AND CONDITIONS ARE READY TO ACCEPT THE WORK OF THIS SECTION.

1.8 PREPARATION

A. REMOVE PROJECTIONS, PROTRUDING FASTENERS, AND LOOSE OR FOREIGN MATTER THAT MIGHT INTERFERE WITH PROPER INSTALLATION.

1.9 INSTALLATION

A. INSTALL MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
B. WATER-RESISTIVE/AIR BARRIERS: INSTALL CONTINUOUS BARRIER OVER SURFACES INDICATED, WITH SHEETS LAPPED TO SHED WATER BUT WITH SEAMS NOT SEALED.
C. MECHANICALLY FASTENED SHEETS - ON EXTERIOR:
   1. INSTALL SHEETS SHINGLE-FASHION TO SHED WATER, WITH SEAMS GENERALLY HORIZONTAL.
   2. OVERLAP SEAMS AS RECOMMENDED BY MANUFACTURER BUT AT LEAST 6 INCHES.
   3. OVERLAP AT OUTSIDE AND INSIDE CORNERS AS RECOMMENDED BY MANUFACTURER BUT AT LEAST 12 INCHES.
   4. ATTACH TO FRAMED CONSTRUCTION WITH FASTENERS EXTENDING THROUGH SHEATHING INTO FRAMING. SPACE FASTENERS AT 12 TO 18 INCHES ON CENTER ALONG EACH FRAMING MEMBER SUPPORTING SHEATHING.
   5. FOR APPLICATIONS SPECIFIED TO BE AIR-TIGHT, SEAL SEAMS, LAPS, PENETRATIONS, TEARS, AND CUTS WITH SELF-ADHESIVE TAPE; USE ONLY LARGE-HEADED, GASKETED FASTENERS RECOMMENDED BY THE MANUFACTURER
   6. INSTALL AIR BARRIER UNDER JAMB FLASHINGS.
   7. INSTALL HEAD FLASHINGS UNDER WEATHER BARRIER.
   8. AT OPENINGS TO BE FILLED WITH FRAMES HAVING NAILING FLANGES, WRAP EXCESS SHEET INTO OPENING; AT HEAD, SEAL SHEET OVER FLANGE AND FLASHING.
D. OPENINGS AND PENETRATIONS IN EXTERIOR WEATHER BARRIERS:
   1. INSTALL SELF-ADHESIVE FLASHING OVER SILLS, COVERING ENTIRE SILL FRAME MEMBER, EXTENDING AT LEAST 5 INCHES ONTO WEATHER BARRIER AND AT LEAST 6 INCHES UP JAMBS; MECHANICALLY FASTEN STRETCHED EDGES.
   2. AT OPENINGS TO BE FILLED WITH FRAMES HAVING NAILING FLANGES, SEAL HEAD AND JAMB FLANGES USING A CONTINUOUS BEAD OF SEALANT COMPRESSED BY FLANGE AND COVER FLANGES WITH SELF-ADHESIVE FLASHING AT LEAST 4 INCHES WIDE; DO NOT SEAL SILL FLANGE.
   3. AT OPENINGS TO BE FILLED WITH NON-FLANGED FRAMES, SEAL WEATHER BARRIER TO ALL SIDES OF OPENING FRAMING, USING SELF-ADHESIVE FLASHING AT LEAST 9 INCHES WIDE, COVERING ENTIRE DEPTH OF FRAMING.
   4. AT HEAD OF OPENINGS, INSTALL SELF-ADHESIVE FLASHING UNDER WEATHER BARRIER EXTENDING AT LEAST 2 INCHES BEYOND FACE OF JAMBS; SEAL WEATHER BARRIER TO FLASHING.
   5. AT INTERIOR FACE OF OPENINGS, SEAL GAP BETWEEN WINDOW/DOOR FRAME AND ROUGH FRAMING, USING JOINT SEALANT OVER BACKER ROD.
   6. SERVICE AND OTHER PENETRATIONS: FORM SELF-ADHESIVE FLASHING AROUND PENETRATING ITEM AND SEAL TO WEATHER BARRIER SURFACE.

1.10 FIELD QUALITY CONTROL

A. DO NOT COVER INSTALLED WEATHER BARRIERS UNTIL REQUIRED INSPECTIONS HAVE BEEN COMPLETED.
B. OBTAIN APPROVAL OF INSTALLATION PROCEDURES BY THE WEATHER BARRIER MANUFACTURER BASED ON A MOCK-UP INSTALLED IN PLACE, PRIOR TO PROCEEDING WITH REMAINDER OF INSTALLATION.
C. PROVIDE INSPECTIONS AS REQUIRED BY WEATHER BARRIER MANUFACTURER AS REQUIRED TO SECURE WARRANTY INDICATED.

1.11 PROTECTION

A. DO NOT LEAVE MATERIALS EXPOSED TO WEATHER LONGER THAN RECOMMENDED BY MANUFACTURER.

07 26 00 - UNDER SLAB VAPOR BARRIER

1.1 PROJECT CONDITIONS

A. CLOSE AREAS TO TRAFFIC DURING APPLICATION AND FOR TIME PERIOD AFTER APPLICATION RECOMMENDED IN WRITING BY MANUFACTURER.

1.2 COORDINATION

A. COORDINATE PLACEMENT OF SHEET VAPOR BARRIER WITH DIVISION 03 SECTIONS.

1.3 MATERIALS

A. SHEET VAPOR BARRIER:
   1. TYPE: 15 MIL POLYOLEFIN FILM MEETING REQUIREMENTS OF ASTM E 1745, CLASS A.
   2. WATER VAPOR TRANSMITTANCE (AFTER MANDATORY CONDITION PER ASTM E154 SECTIONS 8,11,12,13): MAXIMUM PERM RATING OF 0.01 AS TESTED IN ACCORDANCE WITH ASTM E 1745 SECTION 7.
   3. STRENGTH: ASTM E 1745: CLASS A.

07 26 00 - UNDER SLAB VAPOR BARRIER (CONT)

B. ACCEPTABLE PRODUCTS:
   1. 1. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
      a. STEGO WRAP VAPOR BARRIER BY STEGO INDUSTRIES, LLC, 15 MILS.
      b. ZERO-PERM VAPOR BARRIER BY ALUMISEAL.
      c. PERMINATOR, BY W. R. MEADOWS.
      d. XTREME BY TEX-TRUDE
C. ACCESSORIES:
   1. BONDING AGENT: MANUFACTURER'S APPROVED OR RECOMMENDED VAPOR BARRIER BONDING AGENT.
   2. SEALING AND SEAMING TAPE: HIGH DENSITY POLYETHYLENE TAPE A MINIMUM OF 4 INCHES IN WIDTH, COMPATIBLE WITH VAPOR BARRIER MEMBRANE, AND MANUFACTURED BY OR RECOMMENDED BY VAPOR BARRIER MEMBRANE MANUFACTURER. TAPE FOR JOINTS SHALL HAVE AT LEAST THE SAME PERMEABILITY RATING AS THE VAPOR BARRIER SPECIFIED.
   3. VAPOR PROOFING MASTIC: MANUFACTURER'S APPROVED OR RECOMMENDED VAPOR PROOFING MASTIC WITH THE SAME PERMEABILITY RATING AS THE VAPOR BARRIER SPECIFIED.
   4. PIPE BOOT: CONSTRUCT PIPE BOOTS FROM VAPOR BARRIER MATERIAL AND PRESSURE SENSITIVE TAPE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

1.4 INSTALLATION

A. A. VAPOR BARRIER;
   1. PLACE, PROTECT, AND REPAIR VAPOR BARRIER SHEETS ACCORDING TO ASTM E 1643 AND MANUFACTURER'S WRITTEN INSTRUCTIONS.
   2. UNROLL VAPOR BARRIER WITH THE LONGEST DIMENSION PARALLEL WITH THE DIRECTION OF THE CONCRETE POUR.
   3. INSTALL VAPOR BARRIER WITHOUT TEARS, VOIDS, AND HOLES. LAP ENDS AND EDGES AS RECOMMENDED BY MANUFACTURER, BUT NOT LESS THAN 6 INCHES OVER ADJACENT SHEETS. SEAL LAPS WITH TAPE.
   4. TURN UP SHEETS AT PERIMETER, AT FOOTINGS AND VERTICAL WALLS, AND AGAINST PENETRATIONS, AND SEAL JOINTS WITH TAPE.
   5. SEAL JOINTS, TEARS, HOLES, PERIMETER, AND PENETRATIONS THROUGH VAPOR WITH TAPE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
   6. POINT EXPOSED EDGES WITH POINTING MASTIC TO PREVENT WATER FROM TRAVELING UNDER MEMBRANE.
   7. ADHERE MEMBRANE TO VERTICAL SURFACES WITH ADHESIVE.

07 42 13 - METAL COMPOSITE MATERIAL WALL PANELS

1.1 SUMMARY

A. SECTION INCLUDES METAL COMPOSITE MATERIAL WALL PANELS.

1.2 PREINSTALLATION MEETINGS

A. PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE.

1.3 ACTION SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT.
B. SHOP DRAWINGS: INCLUDE FABRICATION AND INSTALLATION LAYOUTS OF METAL COMPOSITE MATERIAL PANELS; DETAILS OF EDGE CONDITIONS, JOINTS, PANEL PROFILES, CORNERS, ANCHORAGES, ATTACHMENT ASSEMBLY, TRIM, FLASHINGS, CLOSURES, AND ACCESSORIES; AND SPECIAL DETAILS.
C. SAMPLES: FOR EACH TYPE OF METAL COMPOSITE MATERIAL PANEL INDICATED.

1.4 INFORMATIONAL SUBMITTALS

A. PRODUCT TEST REPORTS.
B. WARRANTIES: SAMPLES OF SPECIAL WARRANTIES.

1.5 CLOSEOUT SUBMITTALS

A. MAINTENANCE DATA.

1.6 QUALITY ASSURANCE

A. INSTALLER QUALIFICATIONS: AN ENTITY THAT EMPLOYS INSTALLERS AND SUPERVISORS WHO ARE TRAINED AND APPROVED BY MANUFACTURER.

1.7 WARRANTY

A. SPECIAL WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR OR REPLACE COMPONENTS OF METAL COMPOSITE MATERIAL PANEL SYSTEMS THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD.
   1. WARRANTY PERIOD: TWO YEARS FROM DATE OF SUBSTANTIAL COMPLETION.
B. SPECIAL WARRANTY ON PANEL FINISHES: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR FINISH OR REPLACE METAL COMPOSITE MATERIAL PANELS THAT SHOW EVIDENCE OF DETERIORATION OF FACTORY-APPLIED FINISHES WITHIN SPECIFIED WARRANTY PERIOD.
   1. FINISH WARRANTY PERIOD: 20 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

1.8 PERFORMANCE REQUIREMENTS

A. STRUCTURAL PERFORMANCE: PROVIDE METAL COMPOSITE MATERIAL PANEL SYSTEMS CAPABLE OF WITHSTANDING THE EFFECTS OF THE FOLLOWING LOADS, BASED ON TESTING ACCORDING TO ASTM E 330:
   1. WIND LOADS: AS INDICATED ON DRAWINGS.
   2. OTHER DESIGN LOADS: AS INDICATED ON DRAWINGS.
   3. DEFLECTION LIMITS: FOR WIND LOADS, NO GREATER THAN 1/240 OF THE SPAN.
B. AIR INFILTRATION: AIR LEAKAGE OF NOT MORE THAN 0.06 CFM/SQ. FT. WHEN TESTED ACCORDING TO ASTM E 283 AT THE FOLLOWING TEST-PRESSURE DIFFERENCE:
   1. TEST-PRESSURE DIFFERENCE: 6.24 LBF/SQ. FT.
C. WATER PENETRATION UNDER STATIC PRESSURE: NO WATER PENETRATION WHEN TESTED ACCORDING TO ASTM E 331 AT THE FOLLOWING TEST-PRESSURE DIFFERENCE:
   1. TEST-PRESSURE DIFFERENCE: 6.24 LBF/SQ. FT.
D. THERMAL MOVEMENTS: ALLOW FOR THERMAL MOVEMENTS FROM AMBIENT AND SURFACE TEMPERATURE CHANGES BY PREVENTING BUCKLING, OPENING OF JOINTS, OVERSTRESSING OF COMPONENTS, FAILURE OF JOINT SEALANTS, FAILURE OF CONNECTIONS, AND OTHER DETRIMENTAL EFFECTS. BASE CALCULATIONS ON SURFACE TEMPERATURES OF MATERIALS DUE TO BOTH SOLAR HEAT GAIN AND NIGHTTIME-SKY HEAT LOSS.
   1. TEMPERATURE CHANGE (RANGE): 120 DEG F, AMBIENT; 180 DEG F, MATERIAL SURFACES.
E. FIRE-RESISTANCE RATINGS: COMPLY WITH ASTM E 119; TESTING BY A QUALIFIED TESTING AGENCY. IDENTIFY PRODUCTS WITH APPROPRIATE MARKINGS OF APPLICABLE TESTING AGENCY.
   1. INDICATE DESIGN DESIGNATIONS FROM UL'S "FIRE RESISTANCE DIRECTORY" OR FROM THE LISTINGS OF ANOTHER QUALIFIED TESTING AGENCY.
F. FIRE PROPAGATION CHARACTERISTICS: METAL COMPOSITE MATERIAL WALL PANEL SYSTEM PASSES NFPA 285 TESTING.

1.9 METAL COMPOSITE MATERIAL WALL PANELS

A. METAL COMPOSITE MATERIAL WALL PANEL SYSTEMS: PROVIDE FACTORY-FORMED AND -ASSEMBLED, METAL COMPOSITE MATERIAL WALL PANELS FABRICATED FROM TWO METAL FACINGS THAT ARE BONDED TO A SOLID, EXTRUDED THERMOPLASTIC CORE; FORMED INTO PROFILE FOR INSTALLATION METHOD INDICATED. INCLUDE ATTACHMENT ASSEMBLIES COMPONENTS, PANEL STIFFENERS, AND ACCESSORIES REQUIRED FOR WEATHERTIGHT SYSTEM.
B. ALUMINUM-FACED COMPOSITE WALL PANELS: FORMED WITH 0.020-INCH- THICK, COIL-COATED ALUMINUM SHEET FACINGS.
   1. PANEL THICKNESS: 4mm (NOMINAL), OR AS REQUIRED BY DESIGN CRITERIA OR AS INDICATED ON DRAWINGS.
   2. CORE: STANDARD, EXCEPT WHERE FIRE-RETARDANT IS INDICATED ON DRAWINGS OR REQUIRED BY BUILDING CODE.
   3. EXTERIOR FINISH: THREE-COAT FLUOROPOLYMER.
      a. COLOR: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.
C. ATTACHMENT ASSEMBLY COMPONENTS: FORMED FROM EXTRUDED ALUMINUM.
D. ATTACHMENT ASSEMBLY: MANUFACTURER'S STANDARD.

1.10 MISCELLANEOUS MATERIALS

A. MISCELLANEOUS METAL SUBFRAMING AND FURRING: ASTM C 645, COLD-FORMED, METALLIC-COATED STEEL SHEET ASTM A 653/A 653M, G90 COATING DESIGNATION OR ASTM A 792/A 792M, CLASS AZ50 ALUMINUM-ZINC-ALLOY COATING DESIGNATION UNLESS OTHERWISE INDICATED. PROVIDE MANUFACTURER'S STANDARD SECTIONS AS REQUIRED FOR SUPPORT AND ALIGNMENT OF METAL COMPOSITE MATERIAL PANEL SYSTEM.
B. PANEL ACCESSORIES: PROVIDE COMPONENTS REQUIRED FOR A COMPLETE, WEATHERTIGHT PANEL SYSTEM INCLUDING TRIM, COPINGS, FASCIAE, MULLIONS, SILLS, CORNER UNITS, CLIPS, FLASHINGS, SEALANTS, GASKETS, FILLERS, CLOSURE STRIPS, AND SIMILAR ITEMS. MATCH MATERIAL AND FINISH OF METAL COMPOSITE MATERIAL PANELS UNLESS OTHERWISE INDICATED.
C. FLASHING AND TRIM: PROVIDE FLASHING AND TRIM FORMED FROM SAME MATERIAL AS METAL COMPOSITE MATERIAL PANELS AS REQUIRED TO SEAL AGAINST WEATHER AND TO PROVIDE FINISHED APPEARANCE. LOCATIONS INCLUDE, BUT ARE NOT LIMITED TO, BASES, DRIPS, SILLS, JAMBS, CORNERS, ENDWALLS, FRAMED OPENINGS, RAKES, FASCIAE, PARAPET CAPS, SOFFITS, REVEALS, AND FILLERS. FINISH FLASHING AND TRIM WITH SAME FINISH SYSTEM AS ADJACENT METAL COMPOSITE MATERIAL PANELS.
D. PANEL FASTENERS: SELF-TAPPING SCREWS DESIGNED TO WITHSTAND DESIGN LOADS. PROVIDE EXPOSED FASTENERS WITH HEADS MATCHING COLOR OF METAL COMPOSITE MATERIAL PANELS BY MEANS OF PLASTIC CAPS OR FACTORY-APPLIED COATING. PROVIDE EPDM OR PVC SEALING WASHERS FOR EXPOSED FASTENERS.
E. PANEL SEALANTS: ASTM C 920; AS RECOMMENDED IN WRITING BY METAL COMPOSITE MATERIAL PANEL MANUFACTURER. PROVIDE SEALANT TYPES RECOMMENDED BY MANUFACTURER THAT ARE COMPATIBLE WITH PANEL MATERIALS, ARE NONSTAINING, AND DO NOT DAMAGE PANEL FINISH.

1.11 FABRICATION

A. GENERAL: FABRICATE AND

07 42 13 - METAL COMPOSITE MATERIAL WALL PANELS (CONT)

1.14 METAL COMPOSITE MATERIAL PANEL INSTALLATION

A. ATTACHMENT ASSEMBLY, GENERAL: INSTALL ATTACHMENT ASSEMBLY REQUIRED TO SUPPORT METAL COMPOSITE MATERIAL WALL PANELS AND TO PROVIDE A COMPLETE WEATHERTIGHT WALL SYSTEM, INCLUDING SUBGIRTS, PERIMETER EXTRUSIONS, TRACKS, DRAINAGE CHANNELS, PANEL CLIPS, AND ANCHOR CHANNELS.
   1. INCLUDE ATTACHMENT TO SUPPORTS, PANEL-TO-PANEL JOINERY, PANEL-TO-DISSIMILAR-MATERIAL JOINERY, AND PANEL-SYSTEM JOINT SEALS.
B. INSTALLATION: ATTACH METAL COMPOSITE MATERIAL WALL PANELS TO SUPPORTS AT LOCATIONS, SPACINGS, AND WITH FASTENERS RECOMMENDED BY MANUFACTURER TO ACHIEVE PERFORMANCE REQUIREMENTS SPECIFIED.
   1. WET SEAL SYSTEMS: SEAL HORIZONTAL AND VERTICAL JOINTS BETWEEN ADJACENT METAL COMPOSITE MATERIAL WALL PANELS WITH SEALANT BACKING AND SEALANT. INSTALL SEALANT BACKING AND SEALANT.
   2. DRY SEAL SYSTEMS: SEAL HORIZONTAL AND VERTICAL JOINTS BETWEEN ADJACENT METAL COMPOSITE MATERIALWALL PANELS WITH MANUFACTURER'S STANDARD GASKET SYSTEM.
   3. RAINSCREEN SYSTEMS: DO NOT APPLY SEALANTS TO JOINTS UNLESS OTHERWISE INDICATED.
C. ACCESSORY INSTALLATION: INSTALL ACCESSORIES WITH POSITIVE ANCHORAGE TO BUILDING AND WEATHERTIGHT MOUNTING, AND PROVIDE FOR THERMAL EXPANSION. COORDINATE INSTALLATION WITH FLASHINGS AND OTHER COMPONENTS.
D. FLASHING AND TRIM: COMPLY WITH PERFORMANCE REQUIREMENTS, MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, AND SMACNA'S "ARCHITECTURAL SHEET METAL MANUAL." PROVIDE CONCEALED FASTENERS WHERE POSSIBLE, AND SET UNITS TRUE TO LINE AND LEVEL AS INDICATED. INSTALL WORK WITH LAPS, JOINTS, AND SEAMS THAT ARE PERMANENTLY WATERTIGHT.

1.15 CLEANING

A. REMOVE TEMPORARY PROTECTIVE COVERINGS AND STRIPPABLE FILMS, IF ANY, AS METAL COMPOSITE MATERIAL PANELS ARE INSTALLED, UNLESS OTHERWISE INDICATED IN MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. ON COMPLETION OF METAL COMPOSITE MATERIAL PANEL INSTALLATION, CLEAN FINISHED SURFACES AS RECOMMENDED BY METAL COMPOSITE MATERIAL PANEL MANUFACTURER. MAINTAIN IN A CLEAN CONDITION DURING CONSTRUCTION.

07 53 00 - SINGLE-PLY MEMBRANE ROOFING

1.1 SUBMITTALS

A. PRODUCT DATA: PROVIDE DATA INDICATING MEMBRANE MATERIALS, FLASHING MATERIALS, INSULATION, SURFACING, AND FASTENERS.
B. SPECIMEN WARRANTY: FOR APPROVAL.
C. SHOP DRAWINGS: INDICATE JOINT OR TERMINATION DETAIL CONDITIONS, CONDITIONS OF INTERFACE WITH OTHER MATERIALS, AND PAVER LAYOUT.
D. MANUFACTURER'S FIELD REPORTS: INDICATE PROCEDURES FOLLOWED, AMBIENT TEMPERATURES, HUMIDITY, WIND VELOCITY DURING APPLICATION, AND SUPPLEMENTARY INSTRUCTIONS GIVEN.
E. WARRANTY: SUBMIT MANUFACTURER WARRANTY AND ENSURE FORMS HAVE BEEN COMPLETED IN OWNER'S NAME AND REGISTERED WITH MANUFACTURER.

1.2 WARRANTY

A. MATERIAL WARRANTY: PROVIDE MEMBRANE MANUFACTURER'S WARRANTY AGREEING TO REPLACE MATERIAL THAT SHOWS MANUFACTURING DEFECTS WITHIN 5 YEARS AFTER INSTALLATION.
B. SYSTEM WARRANTY: PROVIDE MANUFACTURER'S SYSTEM WARRANTY AGREEING TO REPAIR OR REPLACE ROOFING THAT LEAKS OR IS DAMAGED DUE TO WIND OR OTHER NATURAL CAUSES.
   1. WARRANTY TERM: 15 YEARS.
   2. FOR REPAIR AND REPLACEMENT INCLUDE COSTS OF BOTH MATERIAL AND LABOR IN WARRANTY.

1.3 ROOFING MEMBRANE AND ASSOCIATED MATERIALS

A. MEMBRANE:
   1. MATERIAL AS INDICATED:
      a. ETHYLENE PROPYLENE DIENE TERPOLYMER (EPDM)
   2. THICKNESS: 60 MIL NOMINAL, UNLESS OTHERWISE NOTED
   3. REINFORCING: INTERNAL FABRIC AS INDICATED.
   4. SHEET WIDTH: FACTORY FABRICATED INTO LO-SLOPE SHEETS POSSIBLE.
B. SEAMING MATERIALS: AS RECOMMENDED BY MEMBRANE MANUFACTURER.
C. FLEXIBLE FLASHING MATERIAL: SAME MATERIAL AS MEMBRANE.

1.4 MANUFACTURERS

A. ETHYLENE PROPYLENE DIENE TERPOLYMER (EPDM):
   1. CARLISLE SYNTEC INCORPORATED
   2. FIRESTONE BUILDING PRODUCTS CO
   3. GAF MATERIALS CORPORATION
   4. GENFLEX ROOFING SYSTEMS
   5. JOHNS MANVILLE
B. INSULATION:
   1. ATLAS ROOFING CORPORATION
   2. CARLISLE SYNTEC INCORPORATED
   3. GAF MATERIALS CORPORATION
   4. OWENS CORNING CORP
   5. SUBSTITUTIONS: SEE SECTION 016000 - PRODUCT REQUIREMENTS.

1.5 ROOF ASSEMBLY

A. ETHYLENE PROPYLENE DIENE TERPOLYMER (EPDM): ONE PLY MEMBRANE, BALLASTED, OVER INSULATION
   1. ROOFING ASSEMBLY REQUIREMENTS
      a. COMPLYING WITH ASTM D 4637, TYPE II
      b. EXPOSED FACE COLOR: BLACK, UNLESS OTHERWISE NOTED
      c. INSULATION THERMAL VALUE (R), MINIMUM: REFER TO DRAWINGS.
B. INSULATION
   1. ACCEPTABLE INSULATION TYPES - CONSTANT THICKNESS APPLICATION:
      a. POLYISOCYANURATE BOARD.
   2. ACCEPTABLE INSULATION TYPES - TAPERED APPLICATION:
      a. TAPERED POLYISOCYANURATE BOARD.

1.6 INSULATION

A. POLYISOCYANURATE BOARD INSULATION: RIGID CELLULAR FOAM, COMPLYING WITH ASTM C1289, TYPE II, CLASS 1, CELLULOSE FELT OR GLASS FIBER MAT BOTH FACES; GRADE 1 AND WITH THE FOLLOWING CHARACTERISTICS:
   1. COMPRESSIVE STRENGTH: 16 PSI
   2. BOARD SIZE: 48 X 96 INCH.
   3. BOARD THICKNESS: TOTAL IN TWO LAYERS AS REQUIRED TO ACHIEVE INDICATED R-VALUE..
   4. TAPERED BOARD: SLOPE AS INDICATED; FABRICATE OF FEWEST LAYERS POSSIBLE.

1.7 ACCESSORIES

A. INSULATION COVER BOARD: ASTM C 1177/C 1177M, GLASS-MAT, WATER-RESISTANT GYPSUM SUBSTRATE, 1/2 INCH THICK, FACTORY PRIMED.
   1. PRODUCTS:
      a. GEORGIA-PACIFIC DENSDECK PRIME; WWW.GP.COM/BUILD.
B. STACK BOOTS: PREFABRICATED FLEXIBLE BOOT AND COLLAR FOR PIPE STACKS THROUGH MEMBRANE; SAME MATERIAL AS MEMBRANE.
C. SHEATHING ADHESIVE: NON-COMBUSTIBLE TYPE, FOR ADHERING GYPSUM SHEATHING TO METAL DECK.
D. SHEATHING JOINT TAPE: MANUFACTURER'S STANDARD WIDTH, SELF ADHERING.
E. INSULATION JOINT TAPE: GLASS FIBER REINFORCED TYPE AS RECOMMENDED BY INSULATION MANUFACTURER, COMPATIBLE WITH ROOFING MATERIALS; 6 INCHES WIDE; SELF ADHERING.
F. INSULATION FASTENERS: APPROPRIATE FOR PURPOSE INTENDED AND APPROVED BY ROOFING MANUFACTURER.
G. MEMBRANE ADHESIVE: AS RECOMMENDED BY MEMBRANE MANUFACTURER.
H. INSULATION ADHESIVE: AS RECOMMENDED BY INSULATION MANUFACTURER
I. STRIP REGLET DEVICES: GALVANIZED STEEL, MAXIMUM POSSIBLE LENGTHS PER LOCATION, WITH ATTACHMENT FLANGES.
J. SEALANTS: AS RECOMMENDED BY MEMBRANE MANUFACTURER.
K. WALKWAY PADS: SUITABLE FOR MAINTENANCE TRAFFIC, CONTRASTING COLOR OR OTHERWISE VISUALLY DISTINCTIVE FROM ROOF MEMBRANE.
   1. COMPOSITION: TYPE AS RECOMMENDED BY MEMBRANE MANUFACTURER; SIZE AS INDICATED.
   2. SURFACE COLOR: WHITE OR YELLOW.

1.8 INSTALLATION - GENERAL

A. PERFORM WORK IN ACCORDANCE WITH NRCA ROOFING AND WATERPROOFING MANUAL AND MANUFACTURER'S INSTRUCTIONS
B. DO NOT APPLY ROOFING MEMBRANE DURING UNSUITABLE WEATHER.
C. DO NOT APPLY ROOFING MEMBRANE WHEN AMBIENT TEMPERATURE IS OUTSIDE THE TEMPERATURE RANGE RECOMMENDED BY MANUFACTURER.
D. DO NOT APPLY ROOFING MEMBRANE TO DAMP OR FROZEN DECK SURFACE OR WHEN PRECIPITATION IS EXPECTED OR OCCURRING.
E. DO NOT EXPOSE MATERIALS VULNERABLE TO WATER OR SUN DAMAGE IN QUANTITIES GREATER THAN CAN BE WEATHERPROOFED THE SAME DAY.
F. COORDINATE THE WORK WITH INSTALLATION OF ASSOCIATED COUNTERFLASHINGS INSTALLED BY OTHER SECTIONS AS THE WORK OF THIS SECTION PROCEEDS.

1.9 EXAMINATION

A. VERIFY THAT SURFACES AND SITE CONDITIONS ARE READY TO RECEIVE WORK.
B. VERIFY DECK IS SUPPORTED AND SECURE.
C. VERIFY DECK IS CLEAN AND SMOOTH, FLAT, FREE OF DEPRESSIONS, WAVES, OR PROJECTIONS, PROPERLY SLOPED AND SUITABLE FOR INSTALLATION OF ROOF SYSTEM.
D. VERIFY DECK SURFACES ARE DRY AND FREE OF SNOW OR ICE.

1.10 METAL DECK PREPARATION

A. INSTALL DECK SHEATHING ON METAL DECK:
   1. LAY WITH LONG SIDE AT RIGHT ANGLE TO FLUTES; STAGGER END JOINTS; PROVIDE SUPPORT AT ENDS.
   2. CUT SHEATHING CLEANLY AND ACCURATELY AT ROOF BREAKS AND PROTRUSIONS TO PROVIDE SMOOTH SURFACE.
   3. TAPE JOINTS.

07 53 00 - SINGLE-PLY MEMBRANE ROOFING (CONT.)

1.11 INSULATION - UNDER MEMBRANE

A. AT MECHANICALLY FASTENED AND ADHERED INSULATION: INSTALL EACH LAYER OF INSULATION TO DECK USING MECHANICAL FASTENERS OR ADHESIVE SPECIFICALLY DESIGNED, SIZED, AND FORMULATED FOR FASTENING SPECIFIED BOARD-TYPE ROOF INSULATION TO DECK TYPE.
   1. FASTEN FIRST LAYER OF INSULATION ACCORDING TO REQUIREMENTS IN FM GLOBAL'S "ROOFNAV" FOR SPECIFIED WINDSTORM RESISTANCE CLASSIFICATION.
   2. SET EACH SUBSEQUENT LAYER OF INSULATION IN RIBBONS OF BEAD-APPLIED INSULATION ADHESIVE, FIRMLY PRESSING AND MAINTAINING INSULATION IN PLACE.
B. WHEN ROOF ASSEMBLY INCLUDES COVER BOARDS, INSTALL COVER BOARDS OVER INSULATION WITH LONG JOINTS IN CONTINUOUS STRAIGHT LINES WITH END JOINTS STAGGERED BETWEEN ROWS. OFFSET JOINTS OF INSULATION BELOW A MINIMUM OF 6 INCHES IN EACH DIRECTION. LOOSELY BUTT COVER BOARDS TOGETHER AND FASTEN TO ROOF DECK.
   1. FASTEN COVER BOARDS ACCORDING TO REQUIREMENTS IN FM GLOBAL'S "ROOFNAV" FOR SPECIFIED WINDSTORM RESISTANCE CLASSIFICATION.
C. LAY SUBSEQUENT LAYERS OF INSULATION WITH JOINTS STAGGERED AS INDICATED FROM JOINTS OF PRECEDING LAYER.
D. PLACE TAPERED INSULATION TO THE REQUIRED SLOPE PATTERN IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
E. ON METAL DECK, PLACE BOARDS PARALLEL TO FLUTES WITH INSULATION BOARD EDGES BEARING ON DECK FLUTES.
F. LAY BOARDS WITH EDGES IN MODERATE CONTACT WITHOUT FORCING. CUT INSULATION TO FIT NEATLY TO PERIMETER BLOCKING AND AROUND PENETRATIONS THROUGH ROOF.
G. TAPE JOINTS OF INSULATION IN ACCORDANCE WITH ROOFING AND INSULATION MANUFACTURERS' INSTRUCTIONS.
H. AT ROOF DRAINS, USE FACTORY-TAPERED BOARDS TO SLOPE DOWN TO ROOF DRAINS OVER A DISTANCE OF 18 INCHES.
I. DO NOT APPLY MORE INSULATION THAN CAN BE COVERED WITH MEMBRANE IN SAME DAY.

1.12 MEMBRANE ROOFING INSTALLATION

A. MECHANICALLY FASTEN OR APPLY MEMBRANE ROOFING IN ACCORDANCE WITH CONTRACT DOCUMENT " ROOF ASSEMBLY" DESCRIPTION OVER AREA TO RECEIVE ROOFING AND INSTALL ACCORDING TO ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.
   1. FOR IN-SEAM ATTACHMENT, INSTALL MEMBRANES ROOFING WITH LONG DIMENSION PERPENDICULAR TO STEEL ROOF DECK FLUTES.
B. START INSTALLATION OF MEMBRANE ROOFING IN PRESENCE OF ROOFING SYSTEM MANUFACTURER'S TECHNICAL PERSONNEL.
C. ACCURATELY ALIGN MEMBRANE ROOFING AND MAINTAIN UNIFORM SIDE AND END LAPS OF MINIMUM DIMENSIONS REQUIRED BY MANUFACTURER. STAGGER END LAPS.
D. MECHANICALLY FASTEN OR ADHERE MEMBRANE ROOFING SECURELY AT TERMINATIONS AND PENETRATIONS.
E. APPLY MEMBRANE ROOFING WITH SIDE LAPS SHINGLED WITH SLOPE OF ROOF DECK WHERE POSSIBLE.
F. IN-SEAM ATTACHMENT AT TPO MEMBRANES: SECURE ONE EDGE OF TPO SHEET USING FASTENING PLATES OR METAL BATTENS CENTERED WITHIN SEAM, AND MECHANICALLY FASTEN TPO SHEET TO ROOF DECK.
G. SEAMS: CLEAN SEAM AREAS, OVERLAP MEMBRANE ROOFING, AND HOT-AIR WELD SIDE AND END LAPS OF MEMBRANE ROOFING AND SHEET FLASHINGS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS TO ENSURE A WATERTIGHT SEAM INSTALLATION.
   1. TEST LAP EDGES WITH PROBE TO VERIFY SEAM WELD CONTINUITY. APPLY LAP SEALANT TO SEAL CUT EDGES OF SHEET MEMBRANE.
   2. VERIFY FIELD STRENGTH OF SEAMS A MINIMUM OF TWICE DAILY AND REPAIR SEAM SAMPLE AREAS.
   3. REPAIR TEARS, VOIDS, AND LAPPED SEAMS IN ROOFING THAT DOES NOT COMPLY WITH REQUIREMENTS.
H. SPREAD SEALANT BED OVER DECK DRAIN FLANGE AT ROOF DRAINS AND SECURELY SEAL MEMBRANE ROOFING IN PLACE WITH CLAMPING RING.
I. INSTALL MEMBRANE ROOFING AND AUXILIARY MATERIALS TO TIE IN TO EXISTING ROOFING TO MAINTAIN WEATHERTIGHTNESS OF TRANSITION.
J. SPREAD SEALANT BED OVER DECK-DRAIN FLANGE AT ROOF DRAINS, AND SECURELY SEAL ROOFING IN PLACE WITH CLAMPING RING.
K. MECHANICALLY FASTEN OR ADHERE PERIMETER OF ROOFING ACCORDING TO REQUIREMENTS IN SPRI RP-4.
L. INSTALL WALKWAY PADS. SPACE PAD JOINTS TO PERMIT DRAINAGE.

1.13 BALLASTING

A. WHERE CONTRACT DOCUMENT "ROOF ASSEMBLY" DESCRIPTION INCLUDES ROCK OR STONE BALLAST, CONTRACTOR SHALL TAKE CARE TO PREVENT MEMBRANE DAMAGE, CRUSHING OF INSULATION, AND OVERLOADING OF THE BUILDING STRUCTURE DURING THE BALLASTING OPERATION.
B. ROOFING TO BE SPOT BALLASTED AT THE END OF EACH WORKING DAY.
C. SEAMS ARE NOT TO BE COVERED DURING SPOT BALLASTING
D. AFTER EACH AREA OF WORK IS COMPLETED AND ALL SEAMS ARE CHECKED, CONTACT OWNER'S REPRESENTATIVE AND MEMBRANE MANUFACTURER FOR INSPECTION.
E. WHEN THE MEMBRANE IS APPROVED IN WRITING BY THE OWNER'S REPRESENTATIVE, MEMBRANE MANUFACTURER, AND CONTRACTOR, AND FOLLOWING COMPLETION OF ANY REQUIRED CORRECTIVE WORK, PROMPTLY APPLY A UNIFORM LAYER OF STONE BALLAST. BALLAST RATE SHALL BE AS INDICATED IN THE STRUCTURAL CONTRACT DOCUMENTS, OR AS REQUIRED FOR SPECIFIED ROOF FM GLOBAL RATING.
F. CONTRACTOR SHALL SUPPLY ADDITIONAL BALLAST AS REQUIRED TO MEET SPECIFIED BALLAST RATES.
G. BALLAST SHALL BE UNIFORMLY INSTALLED UP AGAINST ALL PENETRATIONS AND WALKWAY PAVER, IF USED.
H. CONTRACTOR SHALL PREVENT BALLAST FROM ENTERING DRAIN LINES.

1.14 FIELD QUALITY CONTROL

A. REQUIRE SITE ATTENDANCE OF ROOFING AND INSULATION MATERIAL MANUFACTURERS DAILY DURING INSTALLATION OF THE WORK.

1.15 CLEANING

A. REMOVE ADHESIVE MARKINGS FROM FINISHED SURFACES.
B. IN AREAS WHERE FINISHED SURFACES ARE SOILED BY WORK OF THIS SECTION, CONSULT MANUFACTURER OF SURFACES FOR CLEANING ADVICE AND CONFORM TO THEIR DOCUMENTED INSTRUCTIONS.
C. REPAIR OR REPLACE DEFACED OR DAMAGED FINISHES CAUSED BY WORK OF THIS SECTION.

1.15 PROTECTION

A. PROTECT INSTALLED ROOFING AND FLASHINGS FROM CONSTRUCTION OPERATIONS.
B. WHERE TRAFFIC MUST CONTINUE OVER FINISHED ROOF MEMBRANE, PROTECT SURFACES USING DURABLE MATERIALS.

07 62 00 - SHEET METAL FLASHING AND TRIM

1.1 SUBMITTALS

A. SHOP DRAWINGS: INDICATE MATERIAL PROFILE, JOINTING PATTERN, JOINTING DETAILS, FASTENING METHODS, FLASHINGS, TERMINATIONS, AND INSTALLATION DETAILS.
B. CERTIFICATES: PROVIDE ES-1 CERTIFICATION DOCUMENTATION FROM ANSI/SPRI FOR ALL ROOF EDGE PRODUCTS PROVIDED.

1.2 QUALITY ASSURANCE

A. PERFORM WORK IN ACCORDANCE WITH SMACNA ARCHITECTURAL SHEET METAL MANUAL REQUIREMENTS AND STANDARD DETAILS, EXCEPT AS OTHERWISE INDICATED.
B. FABRICATOR AND INSTALLER QUALIFICATIONS: COMPANY SPECIALIZING IN SHEET METAL WORK WITH THREE YEARS OF DOCUMENTED EXPERIENCE.
C. PROVIDE PRODUCTS THAT HAVE BEEN TESTED TO RESIST WIND UPLIFT AS REQUIRED BY ANSI/SPRI ES-1.

1.3 DELIVERY, STORAGE, AND HANDLING

A. TACK MATERIAL TO PREVENT TWISTING, BENDING, AND ABRASION, AND TO PROVIDE VENTILATION. SLOPE METAL SHEETS TO ENSURE DRAINAGE.
B. PREVENT CONTACT WITH MATERIALS THAT COULD CAUSE DISCOLORATION OR STAINING.

1.4 WARRANTY

A. PROVIDE TWO YEAR WATER TIGHTNESS WARRANTY AGAINST LEAKS THROUGH SHEET METAL FLASHING AND AT TERMINATIONS.

1.5 SHEET MATERIALS

A. PRE-FINISHED GALVANIZED STEEL: ASTM A653/A653M, WITH G90/Z275 ZINC COATING; MINIMUM 0.02 INCH THICK BASE METAL, SHOP PRE-COATED WITH PVDF COATING.
B. PRE-FINISHED ALUMINUM SHEET; MINIMUM 0.040 INCH THICK BASE METAL, SHOP PRE-COATED WITH PVDF COATING.
C. PVDF (POLYVINYLIDENE FLUORIDE) COATING: SUPERIOR PERFORMANCE ORGANIC FINISH, AAMA 2605; MULTIPLE COAT, THERMALLY CURED FLUOROPOLYMER FINISH SYSTEM.

1.6 ACCESSORIES

A. FASTENERS: GALVANIZED STEEL, WITH SOFT NEOPRENE WASHERS. NO EXPOSED FASTENERS SHALL BE PERMITTED.
B. UNDERLAYMENT: ASTM D226, ORGANIC ROOFING FELT, TYPE I ("NO. 15").
C. PRIMER: ZINC CHROMATE TYPE.
D. PROTECTIVE BACKING PAINT: ZINC MOLYBDATE ALKYD.
E. SEALANT: TYPE S-GP SPECIFIED IN SECTION 079005.
F. PLASTIC CEMENT: ASTM D4586, TYPE I.
G. REGLETS: SURFACE MOUNTED TYPE, GALVANIZED STEEL.

1.7 FABRICATION

A. FORM SECTIONS TRUE TO SHAPE, ACCURATE IN SIZE, SQUARE, AND FREE FROM DISTORTION OR DEFECTS.
B. FORM PIECES IN LONGEST POSSIBLE LENGTHS.
C. HEM EXPOSED EDGES ON UNDERSIDE 1/2 INCH ; MITER AND SEAM CORNERS.
D. FORM MATERIAL WITH FLAT LOCK SEAMS, EXCEPT WHERE OTHERWISE INDICATED. AT MOVING JOINTS, USE SEALED LAPPED, BAYONET-TYPE OR INTERLOCKING HOOKED SEAMS.
E. FABRICATE CORNERS FROM ONE PIECE WITH MINIMUM 18 INCH LONG LEGS; SEAM FOR RIGIDITY, SEAL WITH SEALANT.
F. FABRICATE VERTICAL FACES WITH BOTTOM EDGE FORMED OUTWARD 1/4 INCH AND HEMMED TO FORM DRIP.
G. FABRICATE FLASHINGS TO ALLOW TOE TO EXTEND 2 INCHES OVER ROOFING GRAVEL. RETURN AND BRAKE EDGES.

1.8 EXAMINATION

A. VERIFY ROOF OPENINGS, CURBS, PIPES, SLEEVES, DUCTS, AND VENTS THROUGH ROOF ARE SOLIDLY SET, REGLETS IN PLACE, AND NAILING STRIPS LOCATED.
B. VERIFY ROOFING TERMINATION AND BASE FLASHINGS ARE IN PLACE, SEALED, AND SECURE.

07 62 00 - SHEET METAL FLASHING AND TRIM (CONT)

1.9 PREPARATION

A. INSTALL STARTER AND EDGE STRIPS, AND CLEATS BEFORE STARTING INSTALLATION.
B. INSTALL SURFACE MOUNTED REGLETS TRUE TO LINES AND LEVELS. SEAL TOP OF REGLETS WITH SEALANT
C. BACK PAINT CONCEALED METAL SURFACES WITH PROTECTIVE BACKING PAINT TO A MINIMUM DRY FILM THICKNESS OF 15 MIL.

1.10 INSTALLATION

A. CONFORM TO DRAWING DETAILS.
B. SECURE FLASHINGS IN PLACE USING CONCEALED FASTENERS. USE EXPOSED FASTENERS ONLY WHERE PERMITTED.
C. APPLY PLASTIC CEMENT COMPOUND BETWEEN METAL FLASHINGS AND FELT FLASHINGS.
D. FIT FLASHINGS TIGHT IN PLACE. MAKE CORNERS SQUARE. SURFACES TRUE AND STRAIGHT IN PLANES, AND LINES ACCURATE TO PROFILES.
E. SEAL METAL JOINTS WATERTIGHT.

1.11 FIELD QUALITY CONTROL

A. SEE SECTION 014000 - QUALITY REQUIREMENTS, FOR FIELD INSPECTION REQUIREMENTS.
B. INSPECTION WILL INVOLVE SURVEILLANCE OF WORK DURING INSTALLATION TO ASCERTAIN COMPLIANCE WITH SPECIFIED REQUIREMENTS.

1.12 SCHEDULE OF PRODUCTS USED

A. FLASHING AND COUNTER FLASHING: FABRICATE AS INDICATED ON DRAWINGS AND IN ACCORDANCE WITH SMACNA ARCHITECTURAL SHEET METAL MANUAL, CHAPTER 4.
B. COPING: AS INDICATED ON DRAWINGS AND IN ACCORDANCE WITH SMACNA FIGURE 3-4A.
C. THROUGH WALL SCUPPER: AS INDICATED ON DRAWINGS AND IN ACCORDANCE WITH SMACNA 1-26.
D. CONDUCTOR HEAD: AS INDICATED ON DRAWINGS AND IN ACCORDANCE WITH SMACNA 1_25F.
E. DOWNSPOUTS: AS INDICATED ON DRAWINGS AND IN ACCORDANCE WITH SMACNA FIGURE 1-32B.
   1. HANGERS: SMACNA FIGURE 1-35B.
F. SPLASH PAN: SMACNA FIGURE 1-36 WITH CORRUGATIONS TO BREAK WATER FLOW.

07 62 10 - FLEXIBLE FLASHING

1.1 SUMMARY

A. A. SECTION INCLUDES:
   1. FORMED PRODUCTS: CONCEALED FLASHING WITHIN WALL ASSEMBLIES WHERE INDICATED OR OTHERWISE WHERE REQUIRED TO PROTECT AND SHED INCIDENTAL WATER TO THE EXTERIOR.

1.2 PERFORMANCE REQUIREMENTS

A. GENERAL: FLASHING AND TRIM ASSEMBLIES AS INDICATED SHALL WITHSTAND STRUCTURAL MOVEMENT, THERMALLY INDUCED MOVEMENT, AND EXPOSURE TO WEATHER WITHOUT FAILURE DUE TO DEFECTIVE MANUFACTURE, FABRICATION, INSTALLATION, OR OTHER DEFECTS IN CONSTRUCTION. COMPLETED SHEET METAL FLASHING AND TRIM SHALL NOT RATTLE, LEAK, OR LOOSEN, AND SHALL REMAIN WATERTIGHT.
B. THERMAL MOVEMENTS: PROVIDE SHEET METAL FLASHING AND TRIM THAT ALLOWS FOR THERMAL MOVEMENTS FROM AMBIENT AND SURFACE TEMPERATURE CHANGES.
   1. TEMPERATURE CHANGE (RANGE): 120 DEG F, AMBIENT; 180 DEG F, MATERIAL SURFACES.

1.3 SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED. INCLUDE CONSTRUCTION DETAILS, MATERIAL DESCRIPTIONS, DIMENSIONS OF INDIVIDUAL COMPONENTS AND PROFILES, AND FINISHES FOR EACH MANUFACTURED PRODUCT AND ACCESSORY.
B. SHOP DRAWINGS: SHOW FABRICATION AND INSTALLATION LAYOUTS OF SHEET METAL FLASHING AND TRIM, INCLUDING PLANS, ELEVATIONS, EXPANSION-JOINT LOCATIONS, AND KEYED DETAILS. DISTINGUISH BETWEEN SHOP- AND FIELD-ASSEMBLED WORK.

1.4 DELIVERY, STORAGE, AND HANDLING

A. DO NOT STORE FLASHING MATERIALS IN CONTACT WITH OTHER MATERIALS THAT MIGHT CAUSE STAINING, DENTING, OR OTHER SURFACE DAMAGE. STORE FLASHING MATERIALS AWAY FROM UNCURED CONCRETE AND MASONRY.
B. PROTECT STRIPPABLE PROTECTIVE COVERING ON SHEET METAL FLASHING AND TRIM FROM EXPOSURE TO SUNLIGHT AND HIGH HUMIDITY, EXCEPT TO THE EXTENT NECESSARY FOR THE PERIOD OF SHEET METAL FLASHING AND TRIM INSTALLATION.

1.5 FLEXIBLE FLASHING

A. SELF-ADHESIVE FLEXIBLE FLASHING PRODUCT CONSISTING OF A PLIABLE, ADHESIVE RUBBERIZED-ASPHALT COMPOUND, BONDED TO A HIGH-DENSITY, CROSS-LAMINATED POLYETHYLENE FILM TO PRODUCE AN OVERALL THICKNESS OF NOT LESS THAN 40 MILS.
   1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
      a. ADVANSHIELD; BUILDING PRODUCTS INC.; STRIP-N-FLASH
      b. CARLISLE COATINGS & WATERPROOFING; CCW-705 AIR & VAPOR BARRIER STRIPS.
      c. GRACE CONSTRUCTION PRODUCTS; PERM-A-BARRIER DETAIL MEMBRANE.
      d. HENRY; BLUESKIN SA

1.6 HIGH TEMPERATURE FLASHING

A. SELF-ADHERING, HIGH-TEMPERATURE SHEET: MINIMUM 30 TO 40 MILS THICK, CONSISTING OF SLIP-RESISTING POLYETHYLENE-FILM TOP SURFACE LAMINATED TO LAYER OF BUTYL OR SBS-MODIFIED ASPHALT ADHESIVE, WITH RELEASE-PAPER BACKING; COLD APPLIED. PROVIDE PRIMER WHEN RECOMMENDED BY MANUFACTURER.
   1. THERMAL STABILITY: ASTM D 1970; STABLE AFTER TESTING AT 240 DEG F.
   2. LOW-TEMPERATURE FLEXIBILITY: ASTM D 1970; PASSES AFTER TESTING AT MINUS 20 DEG F.
   3. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
      a. CARLISLE COATINGS & WATERPROOFING INC.; CCW WIP 300HT.
      b. GRACE CONSTRUCTION PRODUCTS, A UNIT OF W. R. GRACE & CO.; ULTRA.
      c. HENRY COMPANY; BLUESKIN PE200 HT.
      d. OWENS CORNING; WEATHERLOCK METAL HIGH TEMPERATURE UNDERLAYMENT.

1.7 MISCELLANEOUS MATERIALS

A. GENERAL: PROVIDE MATERIALS AND TYPES OF FASTENERS, SEPARATORS, SEALANTS, AND OTHER MISCELLANEOUS ITEMS AS REQUIRED FOR COMPLETE METAL FLASHING INSTALLATION AND RECOMMENDED BY MANUFACTURER OF PRIMARY SHEET METAL OR MANUFACTURED ITEM UNLESS OTHERWISE INDICATED.
B. ELASTOMERIC SEALANT: ASTM C 920, ELASTOMERIC SILICONE POLYMER SEALANT; LOW MODULUS; OF TYPE, GRADE, CLASS, AND USE CLASSIFICATIONS REQUIRED TO SEAL JOINTS IN SHEET METAL FLASHING AND TRIM AND REMAIN WATERTIGHT.

1.8 EXAMINATION

A. A. EXAMINE SUBSTRATES, AREAS, AND CONDITIONS, WITH INSTALLER PRESENT, TO VERIFY ACTUAL LOCATIONS, DIMENSIONS AND OTHER CONDITIONS AFFECTING PERFORMANCE OF THE WORK.
   1. VERIFY COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES OF SUBSTRATES.
   2. VERIFY THAT SUBSTRATE IS SOUND, DRY, SMOOTH, CLEAN, SLOPED FOR DRAINAGE, AND SECURELY ANCHORED.
B. FOR THE RECORD, PREPARE WRITTEN REPORT, ENDORSED BY INSTALLER, LISTING CONDITIONS DETRIMENTAL TO PERFORMANCE OF THE WORK.
C. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

1.9 FLASHING INSTALLATION

A. GENERAL: INSTALL AS INDICATED ON DRAWINGS AND PER MANUFACTURER'S RECOMMENDATIONS.
B. SELF-ADHERING SHEET FLASHING: INSTALL SELF-ADHERING SHEET FLASHING, WRINKLE FREE. APPLY PRIMER IF REQUIRED BY FLASHING MANUFACTURER. COMPLY WITH TEMPERATURE RESTRICTIONS OF FLASHING MANUFACTURER FOR INSTALLATION. APPLY IN SHINGLE FASHION TO SHED WATER, WITH END LAPS OF NOT LESS THAN 6 INCHES STAGGERED 24 INCHES BETWEEN COURSES. OVERLAP SIDE EDGES NOT LESS THAN 3-1/2 INCHES. ROLL LAPS WITH ROLLER. COVER FLASHING WITH SUBSEQUENT CONSTRUCTION WITHIN 14 DAYS.
C. C. LOCATION:
   1. FLEXIBLE FLASHING: AS INDICATED ON DRAWINGS, OR AT ALL EXTERIOR WINDOWS, DOORS OR OTHER PENETRATIONS WHERE HIGH TEMPERATURE FLASHING IS NOT REQUIRED.
   2. HIGH TEMPERATURE FLASHING: AS INDICATED ON DRAWINGS, OR AT ALL LOCATIONS WHERE FLASHING WILL BE IN CONTACT WITH METAL COPING OR METAL PANELS WHERE HIGH TEMPERATURES EXIST.

07 71 29 - MANUFACTURED ROOF EXPANSION JOINTS

1.1 SUMMARY

A. SECTION INCLUDES:
   1. FLANGED BELLOWS-TYPE ROOF EXPANSION JOINTS.
   2. ALUMINUM ROOF EXPANSION JOINTS.

1.2 PREINSTALLATION MEETINGS

A. PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE.

1.3 ACTION SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT.
B. SHOP DRAWINGS: FOR ROOF EXPANSION JOINTS.
C. SAMPLES: FOR EACH EXPOSED PRODUCT AND FOR EACH COLOR SPECIFIED.

1.4 INFORMATIONAL SUBMITTALS

A. QUALIFICATION DATA.
B. PRODUCT TEST REPORTS.
C. SAMPLE WARRANTY.

1.5 QUALITY ASSURANCE

A. INSTALLER QUALIFICATIONS: INSTALLER OF ROOFING MEMBRANE.

1.6 WARRANTY

A. SPECIAL WARRANTY: MANUFACTURER AND INSTALLER AGREE TO REPAIR OR REPLACE ROOF EXPANSION JOINTS AND COMPONENTS THAT LEAK, DETERIORATE BEYOND NORMAL WEATHERING, OR OTH

07 84 13 - PENETRATION FIRESTOPPING (CONT)

1.3 MANUFACTURERS

A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
1. GRACE CONSTRUCTION PRODUCTS.
2. HILTI, INC.
3. NELSON FIRESTOP PRODUCTS.
4. RECTORSEAL CORPORATION.
5. SPECIFIED TECHNOLOGIES INC.
6. 3M FIRE PROTECTION PRODUCTS.

1.4 PENETRATION FIRESTOPPING

A. PROVIDE PENETRATION FIRESTOPPING THAT IS PRODUCED AND INSTALLED TO RESIST SPREAD OF FIRE ACCORDING TO REQUIREMENTS INDICATED, RESIST PASSAGE OF SMOKE AND OTHER GASES, AND MAINTAIN ORIGINAL FIRE-RESISTANCE RATING OF CONSTRUCTION PENETRATED. PENETRATION FIRESTOPPING SYSTEMS SHALL BE COMPATIBLE WITH ONE ANOTHER, WITH THE SUBSTRATES FORMING OPENINGS, AND WITH PENETRATING ITEMS IF ANY.
B. PENETRATIONS IN FIRE-RESISTANCE-RATED WALLS: PROVIDE PENETRATION FIRESTOPPING WITH RATINGS DETERMINED PER ASTM E 814 OR UL 1479, BASED ON TESTING AT A POSITIVE PRESSURE DIFFERENTIAL OF 0.01-INCH WG.
1. FIRE-RESISTANCE-RATED WALLS INCLUDE FIRE WALLS SMOKE-BARRIER WALLS AND FIRE PARTITIONS.
2. F-RATING: NOT LESS THAN THE FIRE-RESISTANCE RATING OF CONSTRUCTIONS PENETRATED.
C. PENETRATIONS IN HORIZONTAL ASSEMBLIES: PROVIDE PENETRATION FIRESTOPPING WITH RATINGS DETERMINED PER ASTM E 814 OR UL 1479, BASED ON TESTING AT A POSITIVE PRESSURE DIFFERENTIAL OF 0.01-INCH WG.
1. HORIZONTAL ASSEMBLIES INCLUDE FLOORS FLOOR/CEILING ASSEMBLIES AND CEILING MEMBRANES OF ROOF/CEILING ASSEMBLIES.
2. F-RATING: AT LEAST 1 HOUR, BUT NOT LESS THAN THE FIRE-RESISTANCE RATING OF CONSTRUCTIONS PENETRATED.
3. T-RATING: AT LEAST 1 HOUR, BUT NOT LESS THAN THE FIRE-RESISTANCE RATING OF CONSTRUCTIONS PENETRATED EXCEPT FOR FLOOR PENETRATIONS WITHIN THE CAVITY OF A WALL.
D. PENETRATIONS IN SMOKE BARRIERS: PROVIDE PENETRATION FIRESTOPPING WITH RATINGS DETERMINED PER UL 1479.
1. L-RATING: NOT EXCEEDING 5.0 CFM/SQ. FT. OF PENETRATION OPENING AT 0.30-INCH WG AT BOTH AMBIENT AND ELEVATED TEMPERATURES.
E. EXPOSED PENETRATION FIRESTOPPING: PROVIDE PRODUCTS WITH FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES OF LESS THAN 25 AND 450, RESPECTIVELY, AS DETERMINED PER ASTM E 84.
F. VOC CONTENT: PROVIDE PENETRATION FIRESTOPPING THAT COMPLIES WITH THE FOLLOWING LIMITS FOR VOC CONTENT WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24):
1. ARCHITECTURAL SEALANTS: 250 G/L.
2. SEALANT PRIMERS FOR NONPOROUS SUBSTRATES: 250 G/L.
3. SEALANT PRIMERS FOR POROUS SUBSTRATES: 775 G/L.
G. ACCESSORIES: PROVIDE COMPONENTS FOR EACH PENETRATION FIRESTOPPING SYSTEM THAT ARE NEEDED TO INSTALL FILL MATERIALS AND TO MAINTAIN RATINGS REQUIRED. USE ONLY THOSE COMPONENTS SPECIFIED BY PENETRATION FIRESTOPPING MANUFACTURER AND APPROVED BY QUALIFIED TESTING AND INSPECTING AGENCY FOR FIRESTOPPING INDICATED.

1.5 MIXING

A. FOR THOSE PRODUCTS REQUIRING MIXING BEFORE APPLICATION, COMPLY WITH PENETRATION FIRESTOPPING MANUFACTURER'S WRITTEN INSTRUCTIONS FOR ACCURATE PROPORTIONING OF MATERIALS, WATER (IF REQUIRED), TYPE OF MIXING EQUIPMENT, SELECTION OF MIXER SPEEDS,

1.6 EXAMINATION

A. EXAMINE SUBSTRATES AND CONDITIONS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR OPENING CONFIGURATIONS, PENETRATING ITEMS, SUBSTRATES, AND OTHER CONDITIONS AFFECTING PERFORMANCE OF THE WORK.
B. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

1.7 PREPARATION

A. SURFACE CLEANING: CLEAN OUT OPENINGS IMMEDIATELY BEFORE INSTALLING PENETRATION FIRESTOPPING TO COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND WITH THE FOLLOWING REQUIREMENTS:
1. REMOVE FROM SURFACES OF OPENING SUBSTRATES AND FROM PENETRATING ITEMS FOREIGN MATERIALS THAT COULD INTERFERE WITH ADHESION OF PENETRATION FIRESTOPPING.
2. CLEAN OPENING SUBSTRATES AND PENETRATING ITEMS TO PRODUCE CLEAN, SOUND SURFACES CAPABLE OF DEVELOPING OPTIMUM BOND WITH PENETRATION FIRESTOPPING. REMOVE LOOSE PARTICLES REMAINING FROM CLEANING OPERATION.
B. PRIMING: PRIME SUBSTRATES WHERE RECOMMENDED IN WRITING BY MANUFACTURER USING THAT MANUFACTURER'S RECOMMENDED PRODUCTS AND METHODS. CONFINE PRIMERS TO AREAS OF BOND; DO NOT ALLOW SPILLAGE AND MIGRATION ONTO EXPOSED SURFACES.

1.8 INSTALLATION

A. GENERAL: INSTALL PENETRATION FIRESTOPPING TO COMPLY WITH MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND PUBLISHED DRAWINGS FOR PRODUCTS AND APPLICATIONS INDICATED.
B. INSTALL FORMING MATERIALS AND OTHER ACCESSORIES OF TYPES REQUIRED TO SUPPORT FILL MATERIALS DURING THEIR APPLICATION AND IN THE POSITION NEEDED TO PRODUCE CROSS-SECTIONAL SHAPES AND DEPTHS REQUIRED TO ACHIEVE FIRE RATINGS INDICATED.
1. AFTER INSTALLING FILL MATERIALS AND ALLOWING THEM TO FULLY CURE, REMOVE COMBUSTIBLE FORMING MATERIALS AND OTHER ACCESSORIES NOT INDICATED AS PERMANENT COMPONENTS OF FIRESTOPPING.

1.9 PENETRATION FIRESTOPPING SCHEDULE

A. WHERE UL-CLASSIFIED SYSTEMS ARE INDICATED, THEY REFER TO SYSTEM NUMBERS IN UL'S "FIRE RESISTANCE DIRECTORY" UNDER PRODUCT CATEGORY XHEZ.
B. WHERE INTERTEK ETL SEMKO-LISTED SYSTEMS ARE INDICATED, THEY REFER TO DESIGN NUMBERS IN INTERTEK ETL SEMKO'S "DIRECTORY OF LISTED BUILDING PRODUCTS" UNDER "FIRESTOP SYSTEMS."
C. WHERE FM GLOBAL-APPROVED SYSTEMS ARE INDICATED, THEY REFER TO DESIGN NUMBERS LISTED IN FM GLOBAL'S "BUILDING MATERIALS APPROVAL GUIDE" UNDER "WALL AND FLOOR PENETRATION FIRE STOPS."
D. FIRESTOP SYSTEMS WITH NO PENETRATING ITEMS (FS-1): COMPLY WITH THE FOLLOWING:
1. PIPES, PLASTIC OR METAL, CONDUIT IN VERTICAL RUNS, INSTALLED THROUGH CAST-IN-PLACE FIRESTOP DEVICES.
a. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH FA 1000 SERIES SYSTEMS EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING:
b. FA1016, FA1017, FA2053, FA2054 BY HILTI.
c. CP 680 CAST-IN FIRESTOP DEVICE BY HILTI.
d. CP653 SPEED SLEEVE BY HILTI.
E. FIRESTOP SYSTEMS WITH NO PENETRATING ITEMS (FS-2): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ 0000 SERIES SYSTEMS EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ0055, CAJ0070 BY HILTI OR CAJ0012, CAJ0102 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR MORE OF THE FOLLOWING:
a. LATEX SEALANT.
b. SILICONE SEALANT.
c. ACRYLIC SEALANT.
d. INTUMESCENT PUTTY.
e. MORTAR.
f. PREFORMED INTUMESCENT BLOCKS.
g. PILLOWS/BAGS
F. FIRESTOP SYSTEMS FOR METALLIC PIPES, CONDUIT, OR TUBING (FS-3): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ, WL, OR FC 1000 SERIES SYSTEMS, EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ1184, CAJ1291, CAJ1277, CAJ1382, CAJ1388, WL1054, WL1249, FC1009 BY HILTI OR CAJ1403, CAJ1235, CAJ1406, WL1152, WL1207, FC1020 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR MORE OF THE FOLLOWING:
a. LATEX SEALANT.
b. SILICONE SEALANT.
c. ACRYLIC SEALANT.
d. INTUMESCENT PUTTY.
e. MORTAR.
f. POLYURETHANE FIRESTOP FOAM.
G. FIRESTOP SYSTEMS FOR NONMETALLIC PIPE, CONDUIT, OR TUBING (FS-4): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ, FA, OR WL 2000 SERIES SYSTEMS, EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ2109, FA2053, WL2078, WL2128 BY HILTI OR CAJ2212, CAJ2171, CAJ2210, WL2167, WL2185, WL2170, WL2259 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR MORE OF THE FOLLOWING:
a. INTUMESCENT SEALANT.
b. INTUMESCENT PUTTY.
c. INTUMESCENT WRAP STRIPS.
d. FIRESTOP DEVICE.
e. FIRESTOP SLEEVE DEVICE.
f. LATEX SEALANT.
H. FIRESTOP SYSTEMS FOR ELECTRICAL CABLES (FS-5): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ, FC, OR WL 3000 SERIES SYSTEMS, EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ3095, FC3012, WL3065, WL3112 BY HILTI OR CAJ3185, CAJ3199, CAJ3234, FC3018, FC3060, WL3179 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR MORE OF THE FOLLOWING:
a. INTUMESCENT SEALANT.
b. LATEX SEALANT
c. PILLOWS/BAGS
d. INTUMESCENT PUTTY.
e. SILICONE FOAM.
I. FIRESTOP SYSTEMS FOR CABLE TRAYS (FS-6): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ OR WL 4000 SERIES SYSTEMS EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ4035, CAJ4054, WL4011, WL4034 BY HILTI OR CAJ4035, CBJ4023, WL4025, WL4039 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR MORE OF THE FOLLOWING:
a. INTUMESCENT SEALANT.
b. INTUMESCENT PUTTY.
c. SILICONE FOAM.
d. PILLOWS/BAGS.
e. OAM BLOCKS.
f. FIRESTOP MORTAR.
g. POLYURETHANE FIRESTOP FOAM.

07 84 13 - PENETRATION FIRESTOPPING (CONT)

J. FIRESTOP SYSTEMS FOR INSULATED PIPES (FS-7): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ OR WL 5000 SERIES SYSTEMS, EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ5091, WL5029 BY HILTI OR CAJ5222, WL5171 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR MORE OF THE FOLLOWING:
a. INTUMESCENT SEALANT.
b. SILICONE FOAM.
c. INTUMESCENT WRAP STRIPS.
d. PRE-FORMED INTUMESCENT BLOCKS.
e. LATEX SEALANT.
K. FIRESTOP SYSTEMS FOR MISCELLANEOUS ELECTRICAL PENETRANTS (FS-8): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ 6000 SERIES SYSTEMS EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ6006, CAJ 6017 BY HILTI OR CAJ6012, CAJ6013, CAJ6027 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR MORE OF THE FOLLOWING:
a. INTUMESCENT SEALANT.
b. LATEX SEALANT.
c. INTUMESCENT PUTTY.
d. MORTAR.
L. FIRESTOP SYSTEMS FOR MISCELLANEOUS MECHANICAL PENETRATIONS (FS-9): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ 7000 SERIES SYSTEMS EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ7051, CAJ7046, CAJ7040, CAJ7021 BY HILTI OR CAJ7067, CAJ7075, CAJ7082 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR BOTH OF THE FOLLOWING:
a. INTUMESCENT SEALANT.
b. LATEX SEALANT.
c. MORTAR.
d. ACRYLIC SEALANT.
e. SILICONE SEALANT.
M. FIRESTOP SYSTEMS FOR GROUPINGS OF PENETRATIONS (FS-10): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ OR WL 8000 SERIES SYSTEMS, EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ8056, CAJ8096, WJ8007, WL8014, WL8019 BY HILTI OR CAJ8042, CAJ8101, CAJ8133, WL8007 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR MORE OF THE FOLLOWING:
a. LATEX SEALANT.
b. MORTAR.
c. INTUMESCENT WRAP STRIPS.
d. FIRESTOP DEVICE.
e. INTUMESCENT COMPOSITE SHEET.
f. PRE-FORMED INTUMESCENT BLOCKS.

07 92 00 - JOINT SEALANTS

1.1 WARRANTY

A. SPECIAL MANUFACTURER'S WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH JOINT-SEALANT MANUFACTURER AGREES TO FURNISH JOINT SEALANTS TO REPAIR OR REPLACE THOSE THAT DO NOT COMPLY WITH PERFORMANCE AND OTHER REQUIREMENTS SPECIFIED IN THIS SECTION WITHIN SPECIFIED WARRANTY PERIOD.
1. WARRANTY PERIOD: 20 YEARS FROM DATE OF SUBSTANTIAL COMPLETION FOR SILICONE SEALANTS.

1.2 MATERIALS, GENERAL

A. COMPATIBILITY: PROVIDE JOINT SEALANTS, BACKINGS, AND OTHER RELATED MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH JOINT SUBSTRATES UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY JOINT-SEALANT MANUFACTURER, BASED ON TESTING AND FIELD EXPERIENCE.
B. LIQUID-APPLIED JOINT SEALANTS: COMPLY WITH ASTM C 920 AND OTHER REQUIREMENTS INDICATED FOR EACH LIQUID-APPLIED JOINT SEALANT SPECIFIED, INCLUDING THOSE REFERENCING ASTM C 920 CLASSIFICATIONS FOR TYPE, GRADE, CLASS, AND USES RELATED TO EXPOSURE AND JOINT SUBSTRATES.
1. SUITABILITY FOR IMMERSION IN LIQUIDS. WHERE SEALANTS ARE INDICATED FOR USE I FOR JOINTS THAT WILL BE CONTINUOUSLY IMMERSED IN LIQUIDS, PROVIDE PRODUCTS THAT HAVE UNDERGONE TESTING ACCORDING TO ASTM C 1247. LIQUID USED FOR TESTING SEALANTS IS DEIONIZED WATER, UNLESS OTHERWISE INDICATED.
C. COLORS OF EXPOSED JOINT SEALANTS: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.

1.3 SILICONE JOINT SEALANTS

A. MILDEW-RESISTANT, SINGLE-COMPONENT, ACID-CURING SILICONE JOINT SEALANT (S-S-): ASTM C 920, TYPE S, GRADE NS, CLASS 25, FOR USE NT.
1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
a. BASF BUILDING SYSTEMS; OMNIPLUS.
b. DOW CORNING CORPORATION; 786 MILDEW RESISTANT.
c. GE ADVANCED MATERIALS - SILICONES; SANITARY SCS1700.
d. TREMCO INCORPORATED; TREMSIL 200 SANITARY.

1.4 URETHANE JOINT SEALANTS

A. MULTICOMPONENT, SELF-LEVELLING, TRAFFIC-GRADE, URETHANE JOINT SEALANT (U-TB): ASTM C 920, TYPE M, GRADE SL, CLASS 50, FOR USE T.
1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
a. POLYMERIC SYSTEMS, INC.; PSI-270.
b. TREMCO INCORPORATED; DYMERIC 240 FC.
c. PECORA; DYNATREAD.
d. BASF BUILDING SYSTEMS; MASTERSEAL SL-2

1.5 LATEX JOINT SEALANTS

A. LATEX JOINT SEALANT (AL): ACRYLIC LATEX OR SILICONIZED ACRYLIC LATEX, ASTM C 834, TYPE OP, GRADE NF.
1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
a. BASF BUILDING SYSTEMS; SONOLASTIC.
b. BOSTIK, INC.; CHEM-CALK 600.
c. MAY NATIONAL ASSOCIATES, INC.
d. PECORA CORPORATION; AC-20+.
e. TREMCO INCORPORATED; TREMFLEX 834.

1.6 ACOUSTICAL JOINT SEALANTS (AC)

A. ACOUSTICAL JOINT SEALANT: MANUFACTURER'S STANDARD NON-SAG, PAINTABLE, NON-STAINING LATEX SEALANT COMPLYING WITH ASTM C 834. PRODUCT EFFECTIVELY REDUCES AIRBORNE SOUND TRANSMISSION THROUGH PERIMETER JOINTS AND OPENINGS IN BUILDING CONSTRUCTION AS DEMONSTRATED BY TESTING REPRESENTATIVE ASSEMBLIES ACCORDING TO ASTM E 90.
1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
a. PECORA CORPORATION; AC-20 FTR
b. USG CORPORATION; SHEETROCK ACOUSTICAL SEALANT.

1.7 MISCELLANEOUS MATERIALS

A. PRIMER: MATERIAL RECOMMENDED BY JOINT-SEALANT MANUFACTURER WHERE REQUIRED FOR ADHESION OF SEALANT TO JOINT SUBSTRATES INDICATED, AS DETERMINED FROM PRECONSTRUCTION JOINT-SEALANT-SUBSTRATE TESTS AND FIELD TESTS.
B. CLEANERS FOR NONPOROUS SURFACES: CHEMICAL CLEANERS ACCEPTABLE TO MANUFACTURERS OF SEALANTS AND SEALANT BACKING MATERIALS, FREE OF OILY RESIDUES OR OTHER SUBSTANCES CAPABLE OF STAINING OR HARMING JOINT SUBSTRATES AND ADJACENT NONPOROUS SURFACES IN ANY WAY, AND FORMULATED TO PROMOTE OPTIMUM ADHESION OF SEALANTS TO JOINT SUBSTRATES.
C. MASKING TAPE: NONSTAINING, NONABSORBENT MATERIAL COMPATIBLE WITH JOINT SEALANTS AND SURFACES ADJACENT TO JOINTS.

1.8 PREPARATION

A. SURFACE CLEANING OF JOINTS: CLEAN OUT JOINTS IMMEDIATELY BEFORE INSTALLING JOINT SEALANTS TO COMPLY WITH JOINT-SEALANT MANUFACTURER'S WRITTEN INSTRUCTIONS AND THE FOLLOWING REQUIREMENTS:
1. REMOVE ALL FOREIGN MATERIAL FROM JOINT SUBSTRATES THAT COULD INTERFERE WITH ADHESION OF JOINT SEALANT, INCLUDING DUST, PAINTS (EXCEPT FOR PERMANENT, PROTECTIVE COATINGS TESTED AND APPROVED FOR SEALANT ADHESION AND COMPATIBILITY BY SEALANT MANUFACTURER), OLD JOINT SEALANTS, AND SURFACE DIRT.
2. CLEAN NONPOROUS JOINT SUBSTRATE SURFACES WITH CHEMICAL CLEANERS OR OTHER MEANS THAT DO NOT STAIN, HARM SUBSTRATES, OR LEAVE RESIDUES CAPABLE OF INTERFERING WITH ADHESION OF JOINT SEALANTS. NONPOROUS JOINT SUBSTRATES INCLUDE THE FOLLOWING:
a. METAL.
b. GLASS.
c. PORCELAIN ENAMEL.
d. GLAZED SURFACES OF CERAMIC TILE.
B. JOINT PRIMING: PRIME JOINT SUBSTRATES WHERE RECOMMENDED BY JOINT-SEALANT MANUFACTURER OR AS INDICATED BY PRECONSTRUCTION JOINT-SEALANT-SUBSTRATE TESTS OR PRIOR EXPERIENCE. APPLY PRIMER TO COMPLY WITH JOINT-SEALANT MANUFACTURER'S WRITTEN INSTRUCTIONS. CONFINE PRIMERS TO AREAS OF JOINT-SEALANT BOND; DO NOT ALLOW SPILLAGE OR MIGRATION ONTO ADJOINING SURFACES.
C. MASKING TAPE: USE MASKING TAPE WHERE REQUIRED TO PREVENT CONTACT OF SEALANT OR PRIMER WITH ADJOINING SURFACES THAT OTHERWISE WOULD BE PERMANENTLY STAINED OR DAMAGED BY SUCH CONTACT OR BY CLEANING METHODS REQUIRED TO REMOVE SEALANT SMEARS. REMOVE TAPE IMMEDIATELY AFTER TOOLING WITHOUT DISTURBING JOINT SEAL.

1.9 INSTALLATION OF JOINT SEALANTS

A. GENERAL: COMPLY WITH JOINT-SEALANT MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS FOR PRODUCTS AND APPLICATIONS INDICATED, UNLESS MORE STRINGENT REQUIREMENTS APPLY.
B. SEALANT INSTALLATION STANDARD: COMPLY WITH RECOMMENDATIONS IN ASTM C 1193 FOR USE OF JOINT SEALANTS AS APPLICABLE TO MATERIALS, APPLICATIONS, AND CONDITIONS INDICATED.
C. INSTALL SEALANT BACKINGS OF KIND INDICATED TO SUPPORT SEALANTS DURING APPLICATION AND AT POSITION REQUIRED TO PRODUCE CROSS-SECTIONAL SHAPES AND DEPTHS OF INSTALLED SEALANTS RELATIVE TO JOINT WIDTHS THAT ALLOW OPTIMUM SEALANT MOVEMENT CAPABILITY.
1. DO NOT LEAVE GAPS BETWEEN ENDS OF SEALANT BACKINGS.
2. DO NOT STRETCH, TWIST, PUNCTURE, OR TEAR SEALANT BACKINGS.
3. REMOVE ABSORBENT SEALANT BACKINGS THAT HAVE BECOME WET BEFORE SEALANT APPLICATION AND REPLACE THEM WITH DRY MATERIALS.
D. INSTALL SEALANTS USING PROVEN TECHNIQUES THAT COMPLY WITH THE FOLLOWING AND AT THE SAME TIME BACKINGS ARE INSTALLED:
1. PLACE SEALANTS SO THEY DIRECTLY CONTACT AND FULLY WET JOINT SUBSTRATES.
2. PRODUCE UNIFORM, CROSS-SECTIONAL SHAPES AND DEPTHS RELATIVE TO JOINT WIDTHS THAT ALLOW OPTIMUM SEALANT MOVEMENT CAPABILITY.
E. TOOLING OF NONSAG SEALANTS: IMMEDIATELY AFTER SEALANT APPLICATION AND BEFORE SKINNING OR CURING BEGINS, TOOL SEALANTS ACCORDING TO REQUIREMENTS SPECIFIED IN SUBPARAGRAPHS BELOW TO FORM SMOOTH, UNIFORM BEADS OF CONFIGURATION INDICATED; TO ELIMINATE AIR POCKETS; AND TO ENSURE CONTACT AND ADHESION OF SEALANT WITH SIDES OF JOINT.
1. REMOVE EXCESS SEALANT FROM SURFACES ADJACENT TO JOINTS.
2. USE TOOLING AGENTS THAT ARE APPROVED IN WRITING BY SEALANT MANUFACTURER AND THAT DO NOT DISCOLOR SEALANTS OR ADJACENT SURFACES.
3. PROVIDE CONCAVE JOINT PROFILE PER FIGURE 8A IN ASTM C 1193, UNLESS OTHERWISE INDICATED.
4. PROVIDE FLUSH JOINT PROFILE WHERE INDICATED PER FIGURE 8B IN ASTM C 1193.

07 92 00 - JOINT SEALANTS (CONT)

F. ACOUSTICAL SEALANT INSTALLATION: AT SOUND-RATED ASSEMBLIES AND ELSEWHERE AS INDICATED, SEAL CONSTRUCTION AT PERIMETERS, BEHIND CONTROL JOINTS, AND AT OPENINGS AND PENETRATIONS WITH A CONTINUOUS BEAD OF ACOUSTICAL SEALANT. INSTALL ACOUSTICAL SEALANT AT BOTH FACES OF PARTITIONS AT PERIMETERS AND THROUGH PENETRATIONS. COMPLY WITH ASTM C 919 AND WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS.

1.10 JOINT-SEALANT SCHEDULE

A. SEALANT SCHEDULE (SEE SEALANT ABBREVIATIONS ABOVE FOR CORRESPONDING PRODUCT):
1. INTERIOR JOINTS:
a. WALL AND CEILING JOINTS SUBJECT TO MOVEMENT: DESIGNATION U-MC.
b. WALL AND CEILING JOINTS NOT SUBJECT TO MOVEMENT: DESIGNATION AL.
c. INTERIOR SIDE OF EXTERIOR OPENINGS: U-MC.
d. FLOOR JOINTS: DESIGNATION U-TB.
e. WALL AND CEILING JOINTS BETWEEN FRAMES AND THEIR ROUGH OPENING: DESIGNATION AL.
f. WALL AND CEILING JOINTS BETWEEN FRAMES AND ADJOINING SURFACES: DESIGNATION AL.
g. INTERIOR SANITARY JOINTS: JOINTS BETWEEN PLUMBING FIXTURES AND ADJOINING FLOOR, WALL, AND CEILING SURFACES; JOINTS BETWEEN SHOWER DOOR ENCLOSURE COMPONENTS AND ADJACENT FINISH SURFACES; JOINTS IN DIETARY AND FOOD PREPARATION AREAS, KITCHENS, FOOD STORAGE AREAS, AND AREAS SUBJECT TO FREQUENT WET CLEANING, INCLUDING JOINTS BETWEEN WALLS AND FLOORS, JOINTS BETWEEN BACK SPLASHES AND WALL SUBSTRATES: DESIGNATION S-S.
2. EXTERIOR LOCATIONS:
a. WALL JOINTS:
3. BORDERED ON BOTH SIDES BY POROUS BUILDING MATERIAL (CONCRETE, STONE, MASONRY, CEMENT PLASTER): DESIGNATION S-GP.
4. BORDERED ON BOTH SIDES BY NON-POROUS BUILDING MATERIAL (COATED AND UNCOATED METALS, ANODIZED ALUMINUM, PORCELAIN TILE, AND GLASS): DESIGNATION S-GP.
5. BORDERED ON ONE SIDE BY POROUS BUILDING MATERIAL (CONCRETE, STONE, MASONRY) AND OTHER SIDE BY NON-POROUS BUILDING MATERIAL (COATED AND UNCOATED METALS, ANODIZED ALUMINUM, PORCELAIN TILE, AND GLASS): DESIGNATION S-GP.
a. PERIMETER OF PENETRATIONS THROUGH WALLS: DESIGNATION S-GP
b. EXPANSION JOINTS IN CEILINGS, SOFFITS, AND OVERHEAD SURFACES: DESIGNATION S-GP
c. CONTROL JOINTS AND PERIMETER OF PENETRATIONS IN CEILINGS, SOFFITS, AND OVERHEAD SURFACES: DESIGNATION S-GP
d. WALL AND CEILING JOINTS BETWEEN FRAMES AND THEIR ROUGH OPENING: DESIGNATION S-GP.
e. WALL AND CEILING JOINTS BETWEEN FRAMES AND ADJOINING SURFACES: DESIGNATION S-GP.
f. JOINTS AND PERIMETER OF PENETRATIONS IN HORIZONTAL PEDESTRIAN AND VEHICLE TRAFFIC SURFACES: DESIGNATION U-TB.

07 95 13.13 - INTERIOR EXPANSION JOINT COVER ASSEMBLIES

1.1 SUMMARY

A. SECTION INCLUDES INTERIOR EXPANSION JOINT COVER ASSEMBLIES.

1.2 ACTION SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT.
B. SHOP DRAWINGS: FOR EACH EXPANSION JOINT COVER ASSEMBLY.
1. INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, SPLICES, BLOCK-OUT REQUIREMENT, ATTACHMENTS TO OTHER WORK, AND LINE DIAGRAMS AND A TABULAR SCHEDULE OF EXPANSION JOINT COVER ASSEMBLIES.
C. SAMPLES: FOR EACH EXPANSION JOINT COVER ASSEMBLY AND FOR EACH COLOR AND TEXTURE SPECIFIED.

1.3 ASSEMBLY DESCRIPTION

A. FURNISH UNITS IN LONGEST PRACTICABLE LENGTHS TO MINIMIZE FIELD SPLICING.
B. INCLUDE FACTORY-FABRICATED CLOSURE MATERIALS AND TRANSITION PIECES, T-JOINTS, CORNERS, CURBS, CROSS-CONNECTIONS, AND OTHER ACCESSORIES AS REQUIRED TO PROVIDE CONTINUOUS EXPANSION JOINT COVER ASSEMBLIES.

1.4 PERFORMANCE REQUIREMENTS

A. SEISMIC PERFORMANCE: EXPANSION JOINT COVER ASSEMBLIES SHALL WITHSTAND THE EFFECTS OF EARTHQUAKE MOTIONS DETERMINED ACCORDING TO ASCE/SEI 7.
B. FIRE-RESISTANCE RATINGS: PROVIDE EXPANSION JOINT COVER ASSEMBLIES WITH FIRE BARRIERS IDENTICAL TO THOSE OF SYSTEMS TESTED FOR FIRE RESISTANCE ACCORDING TO UL 2079 OR ASTM E 1966 BY A QUALIFIED TESTING AGENCY.
1. HOSE STREAM TEST: WALL-TO-WALL AND WALL-TO-CEILING ASSEMBLIES SHALL BE SUBJECTED TO HOSE STREAM TESTING.
C. C. EXPANSION JOINT DESIGN CRITERIA:
1. TYPE OF MOVEMENT: THERMAL.
a. NOMINAL JOINT WIDTH: AS INDICATED IN DRAWINGS.
b. MINIMUM JOINT WIDTH: AS INDICATED IN DRAWINGS.
c. MAXIMUM JOINT WIDTH: AS INDICATED IN DRAWINGS.
2. 2. TYPE OF MOVEMENT: SEISMIC.
a. JOINT MOVEMENT: AS INDICATED IN DRAWINGS.

1.5 FLOOR EXPANSION JOINT COVERS

A. METAL-PLATE FLOOR JOINT COVER: METAL COVER PLATE FIXED ON ONE SIDE OF JOINT GAP AND FREE TO SLIDE ON OTHER.
1. APPLICATION: FLOOR-TO-FLOOR AND FLOOR-TO-WALL AS INDICATED IN DRAWINGS.
2. INSTALLATION: SURFACE MOUNTED.
3. LOAD CAPACITY:
a. UNIFORM LOAD: 50 LB/SQ. FT. INSERT LOAD.
b. CONCENTRATED LOAD: 300 LB INSERT LOAD.
c. MAXIMUM DEFLECTION: 0.0625 INCH.
4. FIRE-RESISTANCE RATING: NOT LESS THAN THAT INDICATED ON DRAWINGS.
5. COVER-PLATE DESIGN: PLAIN.
6. EXPOSED METAL:
a. ALUMINUM: CLEAR ANODIC, CLASS I.
B. CENTER-PLATE FLOOR JOINT COVER: ASSEMBLY CONSISTING OF CENTER PLATE THAT SLIDES OVER METAL FRAMES FIXED TO SIDES OF JOINT GAPS.
1. APPLICATION: FLOOR TO FLOOR AND FLOOR TO WALL.
2. INSTALLATION: SURFACE MOUNTED, RECESSED, AND NO BUMP AS INDICATED IN DRAWINGS.
3. LOAD CAPACITY:
a. UNIFORM LOAD: 50 LB/SQ. FT.
b. CONCENTRATED LOAD: 300 LB.
c. MAXIMUM DEFLECTION: 0.0625 INCH.
4. FIRE-RESISTANCE RATING: NOT LESS THAN THAT INDICATED ON DRAWINGS.
5. COVER-PLATE DESIGN: PLAIN.
6. EXPOSED METAL:
a. ALUMINUM: CLEAR ANODIC, CLASS I.
C. GLIDE-PLATE FLOOR JOINT COVER: ASSEMBLY CONSISTING OF CENTER PLATE THAT SLIDES IN AND OUT OF SLOTS IN METAL FRAMES FIXED TO SIDES OF JOINT GAP.
1. APPLICATION: FLOOR TO FLOOR AND FLOOR TO WALL AS INDICATED IN DRAWINGS.
2. INSTALLATION: RECESSED.
3. LOAD CAPACITY:
a. UNIFORM LOAD: 50 LB/SQ. FT.
b. CONCENTRATED LOAD: 300 LB.
c. MAXIMUM DEFLECTION: 0.0625 INCH.
4. FIRE-RESISTANCE RATING: NOT LESS THAN THAT INDICATED ON DRAWINGS.
5. EXPOSED METAL:
a. ALUMINUM: CLEAR ANODIC, CLASS I.
D. ELASTOMERIC-SEAL FLOOR JOINT COVER: ASSEMBLY CONSISTING OF ELASTOMERIC SEAL ANCHORED TO FRAMES FIXED TO SIDES OF JOINT GAP.
1. APPLICATION: FLOOR TO FLOOR AND FLOOR TO WALL AS INDICATED IN DRAWINGS.
2. INSTALLATION: SURFACE MOUNTED AND RECESSED AS INDICATED IN DRAW

08 11 13 - HOLLOW METAL DOORS AND FRAMES (CONT)

1.8 INSTALLATION

A. INSTALL IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFIED DOOR GRADE STANDARD AND NAAMM HMMA 840.
B. IN ADDITION, INSTALL FIRE RATED UNITS IN ACCORDANCE WITH NFPA 80.
C. COORDINATE FRAME ANCHOR PLACEMENT WITH WALL CONSTRUCTION.
D. COORDINATE INSTALLATION OF HARDWARE.
E. COORDINATE INSTALLATION OF GLAZING.
F. COORDINATE INSTALLATION OF ELECTRICAL CONNECTIONS TO ELECTRICAL HARDWARE ITEMS.

1.9 TOLERANCES

A. CLEARANCES BETWEEN DOOR AND FRAME: AS SPECIFIED IN ANSI A250.8.
B. MAXIMUM DIAGONAL DISTORTION: 1/16 IN MEASURED WITH STRAIGHT EDGE, CORNER TO CORNER.

1.10 ADJUSTING

A. ADJUST FOR SMOOTH AND BALANCED DOOR MOVEMENT.

08 36 11 - SECTIONAL DOORS

1.1 PERFORMANCE REQUIREMENTS

A. GENERAL PERFORMANCE: SECTIONAL DOORS SHALL MEET PERFORMANCE REQUIREMENTS SPECIFIED WITHOUT FAILURE DUE TO DEFECTIVE MANUFACTURE, FABRICATION, INSTALLATION, OR OTHER DEFECTS IN CONSTRUCTION AND WITHOUT REQUIRING TEMPORARY INSTALLATION OF REINFORCING COMPONENTS.
B. STRUCTURAL PERFORMANCE: EXTERIOR SECTIONAL DOORS SHALL WITHSTAND THE EFFECTS OF GRAVITY LOADS, AND THE FOLLOWING LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED ACCORDING TO ASCE/SEI 7.
   1. DESIGN WIND LOADS: AS INDICATED ON STRUCTURAL DRAWINGS OR AS OTHERWISE DETERMINED USING DESIGN WIND LOADS APPLICABLE TO PROJECT FROM BASIC WIND SPEED INDICATED IN MILES PER HOUR, ACCORDING TO ASCE 7, SECTION 6.5, "METHOD 2-ANALYTICAL PROCEDURE".
   2. DEFLECTION LIMITS: DESIGN SECTIONAL DOORS TO WITHSTAND DESIGN WIND LOADS WITHOUT EVIDENCING PERMANENT DEFORMATION OR DISENGAGEMENT OF DOOR COMPONENTS. DEFLECTION OF DOOR IN HORIZONTAL POSITION (OPEN) SHALL NOT EXCEED 1/120 OF THE DOOR WIDTH.

1.2 SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE AND SIZE OF SECTIONAL DOOR AND ACCESSORY. INCLUDE THE FOLLOWING:
B. CONSTRUCTION DETAILS, MATERIAL DESCRIPTIONS, DIMENSIONS OF INDIVIDUAL COMPONENTS, PROFILE DOOR SECTIONS, AND FINISHES.
C. RATED CAPACITIES, OPERATING CHARACTERISTICS, ELECTRICAL CHARACTERISTICS, AND FURNISHED ACCESSORIES.

1.3 DOOR SECTIONS

A. EXTERIOR SECTION FACES AND FRAMES: FABRICATE FROM ZINC-COATED (GALVANIZED), COLD-ROLLED, COMMERCIAL STEEL (CS) SHEET, COMPLYING WITH ASTM A 653, WITH INDICATED ZINC COATING AND THICKNESS.
B. SECTION ENDS AND INTERMEDIATE STILES: ENCLOSE OPEN ENDS OF SECTIONS WITH CHANNEL END STILES FORMED FROM GALVANIZED-STEEL SHEET NOT LESS THAN 0.064-INCH- (1.63-MM-) NOMINAL COATED THICKNESS AND WELDED TO DOOR SECTION. PROVIDE INTERMEDIATE STILES FORMED FROM NOT LESS THAN 0.064-INCH- (1.63-MM-) THICK GALVANIZED-STEEL SHEET, CUT TO DOOR SECTION PROFILE, AND WELDED IN PLACE. SPACE STILES NOT MORE THAN 48 INCHES (1219 MM) APART.
C. REINFORCE BOTTOM SECTION WITH A CONTINUOUS CHANNEL OR ANGLE CONFORMING TO BOTTOM-SECTION PROFILE[AND ALLOWING INSTALLATION OF ASTRAGAL].
D. REINFORCE SECTIONS WITH CONTINUOUS HORIZONTAL AND DIAGONAL REINFORCEMENT, AS REQUIRED TO STIFFEN DOOR AND FOR WIND LOADING. PROVIDE GALVANIZED-STEEL BARS, STRUTS, TRUSSES, OR STRIP STEEL, FORMED TO DEPTH AND BOLTED OR WELDED IN PLACE. ENSURE THAT REINFORCEMENT DOES NOT OBSTRUCT VISION LITES.
E. PROVIDE REINFORCEMENT FOR HARDWARE ATTACHMENT.

1.4 TRACKS, SUPPORTS, AND ACCESSORIES

A. TRACKS: MANUFACTURER'S STANDARD, GALVANIZED-STEEL TRACK SYSTEM OF CONFIGURATION INDICATED, SIZED FOR DOOR SIZE AND WEIGHT, DESIGNED FOR LIFT TYPE INDICATED AND CLEARANCES SHOWN ON DRAWINGS, AND COMPLYING WITH ASTM A 653 FOR MINIMUM G60 (Z180) ZINC COATING. PROVIDE COMPLETE TRACK ASSEMBLY INCLUDING BRACKETS, BRACING, AND REINFORCEMENT FOR RIGID SUPPORT OF BALL-BEARING ROLLER GUIDES FOR REQUIRED DOOR TYPE AND SIZE. SLOT VERTICAL SECTIONS OF TRACK SPACED 2 INCHES (51 MM) APART FOR DOOR-DROP SAFETY DEVICE. SLOPE TRACKS AT PROPER ANGLE FROM VERTICAL OR DESIGN TRACKS TO ENSURE TIGHT CLOSURE AT JAMBS WHEN DOOR UNIT IS CLOSED.
B. TRACK REINFORCEMENT AND SUPPORTS: GALVANIZED-STEEL TRACK REINFORCEMENT AND SUPPORT MEMBERS, COMPLYING WITH ASTM A 36 AND ASTM A 123. SECURE, REINFORCE, AND SUPPORT TRACKS AS REQUIRED FOR DOOR SIZE AND WEIGHT TO PROVIDE STRENGTH AND RIGIDITY WITHOUT SAG, SWAY, AND VIBRATION DURING OPENING AND CLOSING OF DOORS.
C. HORIZONTAL TRACK ASSEMBLY: TRACK WITH CONTINUOUS REINFORCING ANGLE ATTACHED TO TRACK AND SUPPORTED AT POINTS FROM CURVE IN TRACK TO END OF TRACK BY LATERALLY BRACED ATTACHMENTS TO OVERHEAD STRUCTURAL MEMBERS.
D. WEATHERSEALS: REPLACEABLE, ADJUSTABLE, CONTINUOUS, COMPRESSIBLE WEATHER-STRIPPING GASKETS OF FLEXIBLE VINYL, RUBBER, OR NEOPRENE FITTED TO BOTTOM AND TOP OF SECTIONAL DOOR UNLESS OTHERWISE INDICATED.
E. WINDOWS: MANUFACTURER'S STANDARD INSULATED UNITS OF TYPE AND SIZE INDICATED AND IN ARRANGEMENT SHOWN. SET GLAZING IN VINYL, RUBBER, OR NEOPRENE GLAZING CHANNEL FOR METAL-FRAMED DOORS AND ELASTIC GLAZING COMPOUND FOR WOOD DOORS, AS REQUIRED. PROVIDE REMOVABLE STOPS OF SAME MATERIAL AS DOOR-SECTION FRAMES.

08 36 11 - SECTIONAL DOORS (CONT)

1.5 HARDWARE

A. GENERAL: PROVIDE HEAVY-DUTY, CORROSION-RESISTANT HARDWARE, WITH HOT-DIP GALVANIZED, STAINLESS-STEEL, OR OTHER CORROSION-RESISTANT FASTENERS, TO SUIT DOOR TYPE.
B. HINGES: HEAVY-DUTY, GALVANIZED-STEEL HINGES OF NOT LESS THAN 0.079-INCH- (2.01-MM-) NOMINAL COATED THICKNESS AT EACH END STILE AND AT EACH INTERMEDIATE STILE, ACCORDING TO MANUFACTURER'S WRITTEN RECOMMENDATIONS FOR DOOR SIZE. ATTACH HINGES TO DOOR SECTIONS THROUGH STILES AND RAILS WITH BOLTS AND LOCK NUTS OR LOCK WASHERS AND NUTS. USE RIVETS OR SELF-TAPPING FASTENERS WHERE ACCESS TO NUTS IS NOT POSSIBLE. PROVIDE DOUBLE-END HINGES WHERE REQUIRED, FOR DOORS OVER 16 FEET (4.88 M) WIDE UNLESS OTHERWISE RECOMMENDED BY DOOR MANUFACTURER.
C. ROLLERS: HEAVY-DUTY ROLLERS WITH STEEL BALL-BEARINGS IN CASE-HARDENED STEEL RACES, MOUNTED WITH VARYING PROJECTIONS TO SUIT SLOPE OF TRACK. EXTEND ROLLER SHAFT THROUGH BOTH HINGES WHERE DOUBLE HINGES ARE REQUIRED. PROVIDE 3-INCH- (76-MM-) DIAMETER ROLLER TIRES FOR 3-INCH- (76-MM-) WIDE TRACK AND 2-INCH- (51-MM-) DIAMETER ROLLER TIRES FOR 2-INCH- (51-MM-) WIDE TRACK.
D. PUSH/PULL HANDLES: FOR PUSH-UP OR EMERGENCY-OPERATED DOORS, PROVIDE GALVANIZED-STEEL LIFTING HANDLES ON EACH SIDE OF DOOR.

1.6 LOCKING DEVICES

A. SLIDE BOLT: FABRICATE WITH SIDE-LOCKING BOLTS TO ENGAGE THROUGH SLOTS IN TRACKS FOR LOCKING BY PADLOCK, LOCATED ON SINGLE-JAMB SIDE, OPERABLE FROM INSIDE ONLY.
B. SAFETY INTERLOCK SWITCH: EQUIP POWER-OPERATED DOORS WITH SAFETY INTERLOCK SWITCH TO DISENGAGE POWER SUPPLY WHEN DOOR IS LOCKED.

1.7 COUNTERBALANCE MECHANISM

A. TORSION SPRING: COUNTERBALANCE MECHANISM CONSISTING OF ADJUSTABLE-TENSION TORSION SPRINGS FABRICATED FROM STEEL-SPRING WIRE COMPLYING WITH ASTM A 229, MOUNTED ON TORSION SHAFT MADE OF STEEL TUBE OR SOLID STEEL. PROVIDE SPRINGS DESIGNED FOR NUMBER OF OPERATION CYCLES INDICATED.
B. CABLE DRUMS AND SHAFT FOR DOORS: CAST-ALUMINUM OR GRAY-IRON CASTING CABLE DRUMS MOUNTED ON TORSION SHAFT AND GROOVED TO RECEIVE DOOR-LIFTING CABLES AS DOOR IS RAISED. MOUNT COUNTERBALANCE MECHANISM WITH MANUFACTURER'S STANDARD BALL-BEARING BRACKETS AT EACH END OF TORSION SHAFT. PROVIDE ONE ADDITIONAL MIDPOINT BRACKET FOR SHAFTS UP TO 16 FEET LONG AND TWO ADDITIONAL BRACKETS AT ONE-THIRD POINTS TO SUPPORT SHAFTS MORE THAN 16 FEET LONG UNLESS CLOSER SPACING IS RECOMMENDED BY DOOR MANUFACTURER.
C. CABLES: GALVANIZED-STEEL LIFTING CABLES WITH CABLE SAFETY FACTOR OF AT LEAST 5 TO 1.
D. BRACKET: PROVIDE ANCHOR SUPPORT BRACKET AS REQUIRED TO CONNECT STATIONARY END OF SPRING TO THE WALL AND TO LEVEL THE SHAFT AND PREVENT SAG.
E. PROVIDE A SPRING BUMPER AT EACH HORIZONTAL TRACK TO CUSHION DOOR AT END OF OPENING OPERATION.

1.8 DOOR ASSEMBLY

A. SECTIONAL DOOR: SECTIONAL DOOR FORMED WITH HINGED SECTIONS.
   1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
      a. CLOPAY BUILDING PRODUCTS; A GRIFFON COMPANY.
      b. OVERHEAD DOOR CORPORATION.
      c. REPUBLIC DOORS.
      d. HAAS.
      e. RAYNOR.
B. OPERATION CYCLES: NOT LESS THAN 20,000.
C. TRACK CONFIGURATION: HIGH LIFT.
D. WEATHERSEALS: FITTED TO BOTTOM AND TOP AND AROUND ENTIRE PERIMETER OF DOOR.
E. ROLLER-TIRE MATERIAL: MANUFACTURER'S STANDARD.
F. LOCKING DEVICE ASSEMBLY: SINGLE-JAMB SIDE LOCKING BARS, OPERABLE FROM INSIDE WITH THUMBTURN.
G. COUNTERBALANCE TYPE: TORSION SPRING.
H. DOOR FINISH: AS SELECTED BY ARCHITECT.
I. PROVIDE DOORS WITH EXHAUST PORT HOLES WHERE REQUIRED FOR EXHAUSTING VEHICLES.

1.9 GENERAL FINISH REQUIREMENTS

A. DOOR FRAME FINISH: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL AVAILABLE RANGE.

1.10 INSTALLATION

A. INSTALL SECTIONAL DOORS AND OPERATING EQUIPMENT COMPLETE WITH NECESSARY HARDWARE, ANCHORS, INSERTS, HANGERS, AND EQUIPMENT SUPPORTS; ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AND AS SPECIFIED.
B. TRACKS:
   1. FASTEN VERTICAL TRACK ASSEMBLY TO OPENING JAMBS AND FRAMING, SPACED NOT MORE THAN 24 INCHES APART.
   2. HANG HORIZONTAL TRACK ASSEMBLY FROM STRUCTURAL OVERHEAD FRAMING WITH ANGLES OR CHANNEL HANGERS ATTACHED TO FRAMING BY WELDING OR BOLTING, OR BOTH. PROVIDE SWAY BRACING, DIAGONAL BRACING, AND REINFORCEMENT AS REQUIRED FOR RIGID INSTALLATION OF TRACK AND DOOR-OPERATING EQUIPMENT.
   3. REPAIR GALVANIZED COATING ON TRACKS ACCORDING TO ASTM A 780.
C. ACCESSIBILITY: INSTALL SECTIONAL DOORS, SWITCHES, AND CONTROLS ALONG ACCESSIBLE ROUTES IN COMPLIANCE WITH REGULATORY REQUIREMENTS FOR ACCESSIBILITY.

1.11 ADJUSTING

A. ADJUST HARDWARE AND MOVING PARTS TO FUNCTION SMOOTHLY SO THAT DOORS OPERATE EASILY, FREE OF WARP, TWIST, OR DISTORTION.
B. LUBRICATE BEARINGS AND SLIDING PARTS AS RECOMMENDED BY MANUFACTURER.
C. ADJUST DOORS AND SEALS TO PROVIDE WEATHERTIGHT FIT AROUND ENTIRE PERIMETER.
D. ALIGN AND ADJUST MOTORS, PULLEYS, BELTS, SPROCKETS, CHAINS, AND CONTROLS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

08 43 13 - ALUMINUM-FRAMED STOREFRONTS

1.1 SUBMITTALS

A. PRODUCT DATA: PROVIDE COMPONENT DIMENSIONS, DESCRIBE COMPONENTS WITHIN ASSEMBLY, ANCHORAGE AND FASTENERS, GLASS AND INFILL, DOOR HARDWARE, INTERNAL DRAINAGE DETAILS.
B. SHOP DRAWINGS: PROVIDE ENGINEERED, SEALED SHOP DRAWINGS INDICATING SYSTEM DIMENSIONS, FRAMED OPENING REQUIREMENTS AND TOLERANCES, AFFECTED RELATED WORK, EXPANSION AND CONTRACTION JOINT LOCATION AND DETAILS, AND FIELD WELDING REQUIRED.

1.2 MANUFACTURERS

A. A. ACCEPTABLE MANUFACTURERS:
   1. YKK AP AMERICA INC : WWW.YKKAP.COM.
   2. KAWNEER NORTH AMERICA : WWW.KAWNEER.COM.
   3. UNITED STATES ALUMINUM CORP : WWW.USALUM.COM.
   4. OLDCASTLE BUILDING ENVELOPE PRODUCTS : WWW.OLDCASTLEBE.COM
   5. ARCADI: WWW.ARCADIA.COM
   6. OTHERS APPROVED AS EQUAL

1.3 STOREFRONT

A. ALUMINUM-FRAMED STOREFRONT: FACTORY FABRICATED, FACTORY FINISHED ALUMINUM FRAMING MEMBERS WITH INFILL, AND RELATED FLASHINGS, ANCHORAGE AND ATTACHMENT DEVICES.
   1. GLAZING RABBET: FOR 1 INCH INSULATING GLAZING.
   2. GLAZING POSITION: CENTER-SET.
   3. VERTICAL MULLION DIMENSIONS: 2 INCHES WIDE BY 4-1/2 INCHES DEEP.
   4. WATER LEAKAGE TEST PRESSURE DIFFERENTIAL: 2.86 LBF/SQ FT.
   5. AIR INFILTRATION TEST PRESSURE DIFFERENTIAL: 1.57 PSF.
   6. CONDENSATION RESISTANCE FACTOR: 40 MINIMUM.
B. PERFORMANCE REQUIREMENTS:
   1. DESIGN AND SIZE COMPONENTS TO WITHSTAND THE SPECIFIED LOAD REQUIREMENTS WITHOUT DAMAGE OR PERMANENT SET, WHEN TESTED IN ACCORDANCE WITH ASTM E330, USING LOADS 1.5 TIMES THE DESIGN WIND LOADS AND 10 SECOND DURATION OF MAXIMUM LOAD.
      a. MEMBER DEFLECTION: LIMIT MEMBER DEFLECTION TO FLEXURE LIMIT OF GLASS IN ANY DIRECTION, WITH FULL RECOVERY OF GLAZING MATERIALS.
   2. MOVEMENT: ACCOMMODATE MOVEMENT BETWEEN STOREFRONT AND PERIMETER FRAMING AND DEFLECTION OF LINTEL, WITHOUT DAMAGE TO COMPONENTS OR DETERIORATION OF SEALS.
   3. SYSTEM INTERNAL DRAINAGE: DRAIN TO THE EXTERIOR BY MEANS OF A WEEP DRAINAGE NETWORK ANY WATER ENTERING JOINTS, CONDENSATION OCCURRING IN GLAZING CHANNEL, AND MIGRATING MOISTURE OCCURRING WITHIN SYSTEM.
   4. EXPANSION/CONTRACTION: PROVIDE FOR EXPANSION AND CONTRACTION WITHIN SYSTEM COMPONENTS CAUSED BY CYCLING TEMPERATURE RANGE OF 170 DEGREES F OVER A 12 HOUR PERIOD WITHOUT CAUSING DETRIMENTAL EFFECT TO SYSTEM COMPONENTS, ANCHORAGES, AND OTHER BUILDING ELEMENTS.

08 43 13 - ALUMINUM-FRAMED STOREFRONTS (CONT.)

1.4 COMPONENTS

A. ALUMINUM FRAMING MEMBERS: TUBULAR ALUMINUM SECTIONS, THERMALLY BROKEN WITH INTERIOR SECTION INSULATED FROM EXTERIOR, DRAINAGE HOLES AND INTERNAL WEEP DRAINAGE SYSTEM.
   1. STRUCTURALLY REINFORCED MEMBERS: EXTRUDED ALUMINUM WITH INTERNAL REINFORCEMENT OF STRUCTURAL STEEL MEMBER.
   3. SUBSILLS: PROVIDE MANUFACTURER'S STANDARD SUBSILLS FOR ALL STOREFRONT FRAMING.
B. DOORS: GLAZED ALUMINUM, HEAVY DUTY (1/8 INCH WALL THICKNESS; WITH FULLY WELDED INTERNAL JOINTS).
   1. THICKNESS: 1-3/4 INCHES.
   2. TOP RAIL: 4 INCHES WIDE.
   3. VERTICAL STILES: 4-1/2 INCHES WIDE.
   4. BOTTOM RAIL: 10 INCHES WIDE.
   5. GLAZING STOPS: SQUARE.
   6. FINISH: SAME AS STOREFRONT.

1.5 MATERIALS

A. EXTRUDED ALUMINUM: ASTM B221 (ASTM B221M).
B. FASTENERS: STAINLESS STEEL.
C. CONCEALED FLASHINGS: 0.018 INCH THICK GALVANIZED STEEL.
D. PERIMETER SEALANT: TYPE S-GP SPECIFIED IN SECTION 07 9005.
E. GLASS: AS SPECIFIED IN SECTION 088000.
F. GLAZING GASKETS: TYPE TO SUIT APPLICATION TO ACHIEVE WEATHER, MOISTURE, AND AIR INFILTRATION REQUIREMENTS.
G. GLAZING ACCESSORIES: AS SPECIFIED IN SECTION 088000.

1.6 FINISHES

A. REFER TO FINISH LEGEND IN DRAWINGS.

1.7 HARDWARE

A. DOOR HARDWARE: REFER TO DRAWINGS.
B. WEATHERSTRIPPING: WOOL PILE, CONTINUOUS AND REPLACEABLE; PROVIDE ON ALL DOORS.
C. SILL SWEEP STRIPS: RESILIENT SEAL TYPE, RETRACTING, OR NEOPRENE; PROVIDE ON ALL DOORS.

1.8 FABRICATION

A. FABRICATE COMPONENTS WITH MINIMUM CLEARANCES AND SHIM SPACING AROUND PERIMETER OF ASSEMBLY, YET ENABLING INSTALLATION AND DYNAMIC MOVEMENT OF PERIMETER SEAL.
B. ACCURATELY FIT AND SECURE JOINTS AND CORNERS. MAKE JOINTS FLUSH, HAIRLINE, AND WEATHERPROOF.
C. PREPARE COMPONENTS TO RECEIVE ANCHOR DEVICES. FABRICATE ANCHORS.
D. COAT CONCEALED METAL SURFACES THAT WILL BE IN CONTACT WITH CEMENTITIOUS MATERIALS OR DISSIMILAR METALS WITH BITUMINOUS PAINT.
E. ARRANGE FASTENERS AND ATTACHMENTS TO CONCEAL FROM VIEW.
F. REINFORCE COMPONENTS INTERNALLY FOR DOOR HARDWARE.
G. REINFORCE FRAMING MEMBERS FOR IMPOSED LOADS.
H. FINISHING: APPLY FACTORY FINISH TO ALL SURFACES THAT WILL BE EXPOSED IN COMPLETED ASSEMBLIES.
   1. TOUCH-UP SURFACES CUT DURING FABRICATION SO THAT NO NATURAL ALUMINUM IS VISIBLE IN COMPLETED ASSEMBLIES, INCLUDING JOINT EDGES.

1.9 INSTALLATION

A. INSTALL WALL SYSTEM IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
B. ATTACH TO STRUCTURE TO PERMIT SUFFICIENT ADJUSTMENT TO ACCOMMODATE CONSTRUCTION TOLERANCES AND OTHER IRREGULARITIES.
C. PROVIDE ALIGNMENT ATTACHMENTS AND SHIMS TO PERMANENTLY FASTEN SYSTEM TO BUILDING STRUCTURE.
D. ALIGN ASSEMBLY PLUMB AND LEVEL, FREE OF WARP OR TWIST. MAINTAIN ASSEMBLY DIMENSIONAL TOLERANCES, ALIGNING WITH ADJACENT WORK.
E. PROVIDE THERMAL ISOLATION WHERE COMPONENTS PENETRATE OR DISRUPT BUILDING INSULATION.
F. INSTALL SILL FLASHINGS. TURN UP ENDS AND EDGES; SEAL TO ADJACENT WORK TO FORM WATERTIGHT DAM.
G. WHERE FASTENERS PENETRATE SILL FLASHINGS, MAKE WATERTIGHT BY SEATING AND SEALING FASTENER HEADS TO SILL FLASHING.
H. COORDINATE ATTACHMENT AND SEAL OF PERIMETER AIR AND VAPOR BARRIER MATERIALS.
I. FILL SHIM SPACES WITH LOW RISE URETHANE FOAM SEALANT AT PERIMETER OF ASSEMBLY TO MAINTAIN CONTINUITY OF THERMAL BARRIER.
J. SET THRESHOLDS IN BED OF MASTIC AND SECURE.
K. INSTALL HARDWARE USING TEMPLATES PROVIDED.
L. INSTALL GLASS AND INFILL PANELS IN ACCORDANCE WITH SECTION 088000, USING GLAZING METHOD REQUIRED TO ACHIEVE PERFORMANCE CRITERIA.
M. TOUCH-UP MINOR DAMAGE TO FACTORY APPLIED FINISH; REPLACE COMPONENTS THAT CANNOT BE SATISFACTORILY REPAIRED.

1.10 TOLERANCES

A. MAXIMUM VARIATION FROM PLUMB: 0.06 INCHES EVERY 3 FT NON-CUMULATIVE OR 1/16 INCHES PER 10 FT, WHICHEVER IS LESS.
B. MAXIMUM MISALIGNMENT OF TWO ADJOINING MEMBERS ABUTTING IN PLANE: 1/32 INCH.

1.11 ADJUSTING

A. ADJUST OPERATING HARDWARE AND SASH FOR SMOOTH OPERATION.

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING INTERIORS BUILDING MEASUREMENT
1515 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184-004069

GRANT A BRANDENBURG 001-020842 REGISTERED ARCHITECT STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

SPECIFICATIONS

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A0.4f

4/19/2022 8:50:26 AM 2022-04-08 PERMIT SET

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)

08 71 00 - DOOR HARDWARE

1.1 QUALITY ASSURANCE

A. DOOR HARDWARE INSTALLER QUALIFICATIONS: AN EXPERIENCED AND FACTORY TRAINED INSTALLER WHO HAS COMPLETED BOTH STANDARD AND ELECTRIFIED BUILDERS HARDWARE AND INTEGRATED ACCESS CONTROL INSTALLATIONS SIMILAR IN MATERIAL DESIGN, AND EXTENT TO THAT INDICATED FOR THIS PROJECT AND WHOSE WORK HAS RESULTED IN CONSTRUCTION WITH A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE.
B. DOOR HARDWARE SUPPLIER QUALIFICATIONS: DOOR HARDWARE SUPPLIER WITH WAREHOUSING FACILITIES IN PROJECT'S VICINITY WHICH IS NOT MORE THAN A HALF-DAY OF TRAVEL FROM THE JOBSITE AND WHO EMPLOYS A QUALIFIED ARCHITECTURAL HARDWARE CONSULTANT OR EQUIVALENT EXPERIENCE AVAILABLE DURING THE COURSE OF THE WORK TO CONSULT WITH CONTRACTOR, ARCHITECT, AND OWNER ABOUT DOOR HARDWARE AND KEYING. SUPPLIER RECOGNIZED BY MANUFACTURERS TO BE A DIRECT FACTORY-AUTHORIZED DISTRIBUTOR OF THE SPECIFIED HARDWARE PRODUCTS. SUPPLIER IS REQUIRED TO BE AVAILABLE FOR ONSITE MEETINGS WITH TWO DAYS NOTICE REGARDING ISSUES THAT ARISE WITH OPENING FUNCTIONS, INSTALLATION, KEYING, ON-SITE WAREHOUSING, TROUBLE SHOOTING OF PRODUCTS, AND FINAL PUNCH-OUT RELATED ISSUES.
C. REGULATORY REQUIREMENTS: COMPLY WITH PROVISIONS OF THE FOLLOWING:
   1. WHERE INDICATED TO COMPLY WITH ACCESSIBILITY REQUIREMENTS, COMPLY WITH "AMERICANS WITH DISABILITIES ACT (ADA); ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG)," ANSI A117.1.
   2. NFPA 101: COMPLY WITH THE FOLLOWING FOR MEANS OF EGRESS DOOR.
   3. APPLICABLE BUILDING CODE, AS INDICATED ON DRAWINGS.
D. FIRE-RATED DOOR ASSEMBLIES: FURNISH DOOR HARDWARE FOR ASSEMBLIES COMPLYING WITH NFPA 80 THAT ARE LISTED AND LABELED BY A TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, FOR FIRE RATINGS INDICATED, BASED ON TESTING ACCORDING TO NFPA 252 (NEUTRAL PRESSURE AT 40" ABOVE SILL) OR UL-10C.
   1. TEST PRESSURE: POSITIVE PRESSURE LABELING.

1.2 DELIVERY, STORAGE, AND HANDLING

A. TAG EACH ITEM OR PACKAGE SEPARATELY WITH IDENTIFICATION RELATED TO THE FINAL DOOR HARDWARE SCHEDULE, AND INCLUDE KEYING INSTALLATION INSTRUCTIONS WITH EACH ITEM OR PACKAGE.
B. DELIVER PERMANENT KEYS, CYLINDERS, CORES, ACCESS CONTROL CREDENTIALS, ELECTRONIC KEY SOFTWARE WITH LOADED BITTING AND KEY RECORDS PER CYLINDER, AND RELATED ACCESSORIES DIRECTLY TO OWNER VIA REGISTERED MAIL OR OVERNIGHT PACKAGE SERVICE. INSTRUCT OWNER'S PERSONNEL TO DELIVERY TO THE OWNER SHALL BE ESTABLISHED AT THE "KEYING CONFERENCE". HARDWARE SUPPLIER MUST BE A REGIONAL SUPPLIER TO ADDRESS OWNER QUESTIONS AND CONCERNS RELATING TO KEYING ISSUES THAT ARISE AS PROJECT CLOSE-OUT.

1.3 COORDINATION

A. TEMPLATES: DOOR HARDWARE SUPPLIER TO FURNISH AND DISTRIBUTE TO THE PARTIES INVOLVED FOR TEMPLATING FOR DOORS, FRAMES, AND OTHER WORK SPECIFIED TO BE FACTORY PREPARED FOR INSTALLING STANDARD, ELECTRIFIED AND ACCESS CONTROL DOOR HARDWARE. CHECK SHOP DRAWINGS OF OTHER WORK TO CONFIRM THAT ADEQUATE PROVISIONS ARE MADE FOR LOCATING AND INSTALLING HARDWARE TO COMPLY WITH INDICATED REQUIREMENTS.

1.4 SCHEDULED DOOR HARDWARE

A. GENERAL: FURNISH DOOR HARDWARE FOR EACH DOOR TO COMPLY WITH REQUIREMENTS IN THIS SECTION AND THE DOOR HARDWARE SCHEDULE ON THE DRAWINGS.
   1. DOOR HARDWARE SETS: FURNISH QUANTITY, ITEM, SIZE, FINISH OR COLOR INDICATED FOR NAMED PRODUCTS LISTED IN HARDWARE SETS.
   2. SEQUENCE OF OPERATION: FURNISH ELECTRIFIED AND ACCESS CONTROL HARDWARE FUNCTION, SEQUENCE OF OPERATION, AND INTERFACE WITH OTHER BUILDING CONTROL SYSTEMS INDICATED.
B. DESIGNATIONS: REQUIREMENTS FOR DESIGN, GRADE, FUNCTION, FINISH, SIZE, AND OTHER DISTINCTIVE QUALITIES OF EACH TYPE OF DOOR HARDWARE ARE INDICATED IN THE DOOR HARDWARE SCHEDULE ON DRAWINGS

08 80 00 - GLAZING

1.1 PERFORMANCE REQUIREMENTS

A. GENERAL: INSTALLED GLAZING SYSTEMS SHALL WITHSTAND NORMAL THERMAL MOVEMENT AND WIND LOADS WITHOUT FAILURE, INCLUDING LOSS OR GLASS BREAKAGE ATTRIBUTABLE TO THE FOLLOWING: DEFECTIVE MANUFACTURE, FABRICATION, OR INSTALLATION; FAILURE OF SEALANTS OR GASKETS TO REMAIN WATERTIGHT AND AIRTIGHT; DETERIORATION OF GLAZING MATERIALS; OR OTHER DEFECTS IN CONSTRUCTION.

1.2 SUBMITTALS

A. PRODUCT DATA: FOR EACH GLASS PRODUCT AND GLAZING MATERIAL INDICATED.

1.3 QUALITY ASSURANCE

A. MANUFACTURER QUALIFICATIONS FOR INSULATING-GLASS UNITS WITH SPUTTER-COATED, LOW-E COATINGS: A QUALIFIED INSULATING-GLASS MANUFACTURER WHO IS APPROVED AND CERTIFIED BY COATED-GLASS MANUFACTURER.
B. SAFETY GLAZING LABELING: WHERE SAFETY GLAZING LABELING IS INDICATED, PERMANENTLY MARK GLAZING WITH CERTIFICATION LABEL OF THE SGCC OR ANOTHER CERTIFICATION AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION. LABEL SHALL INDICATE MANUFACTURER'S NAME, TYPE OF GLASS, THICKNESS, AND SAFETY GLAZING STANDARD WITH WHICH GLASS COMPLIES.

1.4 DELIVERY, STORAGE, AND HANDLING

A. PROTECT GLAZING MATERIALS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. PREVENT DAMAGE TO GLASS AND GLAZING MATERIALS FROM CONDENSATION, TEMPERATURE CHANGES, DIRECT EXPOSURE TO SUN, OR OTHER CAUSES.
B. COMPLY WITH INSULATING-GLASS MANUFACTURER'S WRITTEN RECOMMENDATIONS FOR VENTING AND SEALING UNITS TO AVOID HERMETIC SEAL RUPTURES DUE TO ALTITUDE CHANGE.

1.5 WARRANTY

A. MANUFACTURER'S SPECIAL WARRANTY FOR COATED-GLASS PRODUCTS: MANUFACTURER'S STANDARD FORM IN WHICH COATED-GLASS MANUFACTURER AGREES TO REPLACE COATED-GLASS UNITS THAT DETERIORATE WITHIN SPECIFIED WARRANTY PERIOD. DETERIORATION OF COATED GLASS IS DEFINED AS DEFECTS DEVELOPED FROM NORMAL USE THAT ARE NOT ATTRIBUTED TO GLASS BREAKAGE OR TO MAINTAINING AND CLEANING COATED GLASS CONTRARY TO MANUFACTURER'S WRITTEN INSTRUCTIONS. DEFECTS INCLUDE PEELING, CRACKING, AND OTHER INDICATIONS OF DETERIORATION IN COATING.

08 80 00 - GLAZING (CONT)

   1. WARRANTY PERIOD: 10 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.
B. MANUFACTURER'S SPECIAL WARRANTY ON LAMINATED GLASS: MANUFACTURER'S STANDARD FORM IN WHICH LAMINATED-GLASS MANUFACTURER AGREES TO REPLACE LAMINATED-GLASS UNITS THAT DETERIORATE WITHIN SPECIFIED WARRANTY PERIOD. DETERIORATION OF LAMINATED GLASS IS DEFINED AS DEFECTS DEVELOPED FROM NORMAL USE THAT ARE NOT ATTRIBUTED TO GLASS BREAKAGE OR TO MAINTAINING AND CLEANING LAMINATED GLASS CONTRARY TO MANUFACTURER'S WRITTEN INSTRUCTIONS. DEFECTS INCLUDE EDGE SEPARATION, DELAMINATION MATERIALLY OBSTRUCTING VISION THROUGH GLASS, AND BLEMISHES EXCEEDING THOSE ALLOWED BY REFERENCED LAMINATED-GLASS STANDARD.
   1. WARRANTY PERIOD: 10 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

1.6 GLASS PRODUCTS, GENERAL

A. THICKNESS: WHERE GLASS THICKNESS IS INDICATED, IT IS A MINIMUM. PROVIDE GLASS LITES IN THICKNESSES AS NEEDED TO COMPLY WITH REQUIREMENTS INDICATED.
   1. MINIMUM GLASS THICKNESS FOR EXTERIOR LITES: NOT LESS THAN 6.0 MM.
B. STRENGTH: WHERE FLOAT GLASS IS INDICATED, PROVIDE ANNEALED FLOAT GLASS, KIND HS HEAT-TREATED FLOAT GLASS, OR KIND FT HEAT-TREATED FLOAT GLASS AS NEEDED TO COMPLY WITH "PERFORMANCE REQUIREMENTS" ARTICLE. WHERE HEAT-STRENGTHENED GLASS IS INDICATED, PROVIDE KIND HS HEAT-TREATED FLOAT GLASS OR KIND FT HEAT-TREATED FLOAT GLASS AS NEEDED TO COMPLY WITH "PERFORMANCE REQUIREMENTS" ARTICLE. WHERE FULLY TEMPERED GLASS IS INDICATED, PROVIDE KIND FT HEAT-TREATED FLOAT GLASS.

1.7 GLASS PRODUCTS

A. FLOAT GLASS: ASTM C 1036, TYPE I, QUALITY-Q3, CLASS I (CLEAR) UNLESS OTHERWISE INDICATED.
B. HEAT-TREATED FLOAT GLASS: ASTM C 1048; TYPE I; QUALITY-Q3; CLASS I (CLEAR) UNLESS OTHERWISE INDICATED; OF KIND AND CONDITION INDICATED.
   1. FABRICATION PROCESS: BY HORIZONTAL (ROLLER-HEARTH) PROCESS WITH ROLL-WAVE DISTORTION PARALLEL TO BOTTOM EDGE OF GLASS AS INSTALLED UNLESS OTHERWISE INDICATED.
   2. FOR UNCOATED GLASS, COMPLY WITH REQUIREMENTS FOR CONDITION A.
   3. FOR COATED VISION GLASS, COMPLY WITH REQUIREMENTS FOR CONDITION C (OTHER COATED GLASS).

1.8 GLAZING GASKETS

A. DENSE COMPRESSION GASKETS: MOLDED OR EXTRUDED GASKETS OF PROFILE AND HARDNESS REQUIRED TO MAINTAIN WATERTIGHT SEAL, MADE FROM ONE OF THE FOLLOWING:
   1. NEOPRENE COMPLYING WITH ASTM C 864.
   2. EPDM COMPLYING WITH ASTM C 864.
   3. SILICONE COMPLYING WITH ASTM C 1115.
   4. THERMOPLASTIC POLYOLEFIN RUBBER COMPLYING WITH ASTM C 1115.

1.9 GLAZING SEALANTS

A. A. GENERAL:
   1. COMPATIBILITY: PROVIDE GLAZING SEALANTS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH OTHER MATERIALS THEY WILL CONTACT, INCLUDING GLASS PRODUCTS, SEALS OF INSULATING-GLASS UNITS, AND GLAZING CHANNEL SUBSTRATES, UNDER CONDITIONS OF EXPOSURE AND APPLICATION, AS DEMONSTRATED BY SEALANT MANUFACTURER BASED ON TESTING AND FIELD EXPERIENCE.
   2. SUITABILITY: COMPLY WITH SEALANT AND GLASS MANUFACTURERS' WRITTEN INSTRUCTIONS FOR SELECTING GLAZING SEALANTS SUITABLE FOR APPLICATIONS INDICATED AND FOR CONDITIONS EXISTING AT TIME OF INSTALLATION.
   3. VOC CONTENT: FOR SEALANTS USED INSIDE OF THE WEATHERPROOFING SYSTEM, NOT MORE THAN 250 G/L WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D.
B. GLAZING SEALANT: NEUTRAL-CURING SILICONE GLAZING SEALANT COMPLYING WITH ASTM C 920, TYPE S, GRADE NS, CLASS 50, USE NT.
   1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
      a. DOW CORNING CORPORATION; 795.
      b. GE ADVANCED MATERIALS - SILICONES; SILGLAZE II SCS2800.
      c. PECORA CORPORATION; 864.
      d. TREMCO INCORPORATED; SPECTREM 2.

1.10 GLAZING TAPES

A. BACK-BEDDING MASTIC GLAZING TAPES: PREFORMED, BUTYL-BASED, 100 PERCENT SOLIDS ELASTOMERIC TAPE; NON-STAINING AND NON-MIGRATING IN CONTACT WITH NONPOROUS SURFACES; WITH OR WITHOUT SPACER ROD AS RECOMMENDED IN WRITING BY TAPE AND GLASS MANUFACTURERS FOR APPLICATION INDICATED; AND COMPLYING WITH ASTM C 1281 AND AAMA 800 FOR PRODUCTS INDICATED BELOW:
   1. AAMA 804.3 TAPE, WHERE INDICATED.
   2. AAMA 806.3 TAPE, FOR GLAZING APPLICATIONS IN WHICH TAPE IS SUBJECT TO CONTINUOUS PRESSURE.
   3. AAMA 807.3 TAPE, FOR GLAZING APPLICATIONS IN WHICH TAPE IS NOT SUBJECT TO CONTINUOUS PRESSURE.

1.11 MISCELLANEOUS GLAZING MATERIALS

A. GENERAL: PROVIDE PRODUCTS OF MATERIAL, SIZE, AND SHAPE COMPLYING WITH REFERENCED GLAZING STANDARD, REQUIREMENTS OF MANUFACTURERS OF GLASS AND OTHER GLAZING MATERIALS FOR APPLICATION INDICATED, AND WITH A PROVEN RECORD OF COMPATIBILITY WITH SURFACES CONTACTED IN INSTALLATION.
B. CLEANERS, PRIMERS, AND SEALERS: TYPES RECOMMENDED BY SEALANT OR GASKET MANUFACTURER.
C. SETTING BLOCKS: ELASTOMERIC MATERIAL WITH A SHORE, TYPE A DUROMETER HARDNESS OF 85, PLUS OR MINUS 5.
D. SPACERS: ELASTOMERIC BLOCKS OR CONTINUOUS EXTRUSIONS OF HARDNESS REQUIRED BY GLASS MANUFACTURER TO MAINTAIN GLASS LITES IN PLACE FOR INSTALLATION INDICATED.
E. EDGE BLOCKS: ELASTOMERIC MATERIAL OF HARDNESS NEEDED TO LIMIT GLASS LATERAL MOVEMENT (SIDE WALKING).
F. CYLINDRICAL GLAZING SEALANT BACKING: ASTM C 1330, TYPE O (OPEN-CELL MATERIAL), OF SIZE AND DENSITY TO CONTROL GLAZING SEALANT DEPTH AND OTHERWISE PRODUCE OPTIMUM GLAZING SEALANT PERFORMANCE.
G. PERIMETER INSULATION FOR FIRE-RESISTIVE GLAZING: PRODUCT THAT IS APPROVED BY TESTING AGENCY THAT LISTED AND LABELED FIRE-RESISTANT GLAZING PRODUCT WITH WHICH IT IS USED FOR APPLICATION AND FIRE-PROTECTION RATING INDICATED.

1.12 FABRICATION OF GLAZING UNITS

A. FABRICATE GLAZING UNITS IN SIZES REQUIRED TO FIT OPENINGS INDICATED FOR PROJECT, WITH EDGE AND FACE CLEARANCES, EDGE AND SURFACE CONDITIONS, AND BITE COMPLYING WITH WRITTEN INSTRUCTIONS OF PRODUCT MANUFACTURER AND REFERENCED GLAZING PUBLICATIONS, TO COMPLY WITH SYSTEM PERFORMANCE REQUIREMENTS.
B. CLEAN-CUT OR FLAT-GRIND VERTICAL EDGES OF BUTT-GLAZED MONOLITHIC LITES TO PRODUCE SQUARE EDGES WITH SLIGHT CHAMFERS AT JUNCTIONS OF EDGES AND FACES.
C. GRIND SMOOTH AND POLISH EXPOSED GLASS EDGES AND CORNERS.

1.13 GLASS SCHEDULE

A. REFER TO ENVELOPE ASSEMBLY INFORMATION ON DRAWINGS FOR GLAZING TYPES
B. PROVIDE SAFETY GLAZING LABELING WHERE APPROPRIATE.

1.14 GLAZING, GENERAL

A. COMPLY WITH COMBINED WRITTEN INSTRUCTIONS OF MANUFACTURERS OF GLASS, SEALANTS, GASKETS, AND OTHER GLAZING MATERIALS, UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED, INCLUDING THOSE IN REFERENCED GLAZING PUBLICATIONS.
B. ADJUST GLAZING CHANNEL DIMENSIONS AS REQUIRED BY PROJECT CONDITIONS DURING INSTALLATION TO PROVIDE NECESSARY BITE ON GLASS, MINIMUM EDGE AND FACE CLEARANCES, AND ADEQUATE SEALANT THICKNESSES, WITH REASONABLE TOLERANCES.
C. PROTECT GLASS EDGES FROM DAMAGE DURING HANDLING AND INSTALLATION. REMOVE DAMAGED GLASS FROM PROJECT SITE AND LEGALLY DISPOSE OF OFF PROJECT SITE. DAMAGED GLASS IS GLASS WITH EDGE DAMAGE OR OTHER IMPERFECTIONS THAT, WHEN INSTALLED, COULD WEAKEN GLASS AND IMPAIR PERFORMANCE AND APPEARANCE.
D. APPLY PRIMERS TO JOINT SURFACES WHERE REQUIRED FOR ADHESION OF SEALANTS, AS DETERMINED BY PRECONSTRUCTION TESTING.
E. INSTALL SETTING BLOCKS IN SILL RABBETS, SIZED AND LOCATED TO COMPLY WITH REFERENCED GLAZING PUBLICATIONS, UNLESS OTHERWISE REQUIRED BY GLASS MANUFACTURER. SET BLOCKS IN THIN COURSE OF COMPATIBLE SEALANT SUITABLE FOR HEEL BEAD.
F. DO NOT EXCEED EDGE PRESSURES STIPULATED BY GLASS MANUFACTURERS FOR INSTALLING GLASS LITES.
G. PROVIDE SPACERS FOR GLASS LITES WHERE LENGTH PLUS WIDTH IS LARGER THAN 50 INCHES (1270 MM).
   1. LOCATE SPACERS DIRECTLY OPPOSITE EACH OTHER ON BOTH INSIDE AND OUTSIDE FACES OF GLASS. INSTALL CORRECT SIZE AND SPACING TO PRESERVE REQUIRED FACE CLEARANCES, UNLESS GASKETS AND GLAZING TAPES ARE USED THAT HAVE DEMONSTRATED ABILITY TO MAINTAIN REQUIRED FACE CLEARANCES AND TO COMPLY WITH SYSTEM PERFORMANCE REQUIREMENTS.
   2. PROVIDE 1/8-INCH MINIMUM BITE OF SPACERS ON GLASS AND USE THICKNESS EQUAL TO SEALANT WIDTH. WITH GLAZING TAPE, USE THICKNESS SLIGHTLY LESS THAN FINAL COMPRESSED THICKNESS OF TAPE.
H. PROVIDE EDGE BLOCKING WHERE INDICATED OR NEEDED TO PREVENT GLASS LITES FROM MOVING SIDEWAYS IN GLAZING CHANNEL, AS RECOMMENDED IN WRITING BY GLASS MANUFACTURER AND ACCORDING TO REQUIREMENTS IN REFERENCED GLAZING PUBLICATIONS.
I. SET GLASS LITES IN EACH SERIES WITH UNIFORM PATTERN, DRAW, BOW, AND SIMILAR CHARACTERISTICS.
J. SET GLASS LITES WITH PROPER ORIENTATION SO THAT COATINGS FACE EXTERIOR OR INTERIOR AS SPECIFIED.
K. WHERE WEDGE-SHAPED GASKETS ARE DRIVEN INTO ONE SIDE OF CHANNEL TO PRESSURIZE SEALANT OR GASKET ON OPPOSITE SIDE, PROVIDE ADEQUATE ANCHORAGE SO GASKET CANNOT WALK OUT WHEN INSTALLATION IS SUBJECTED TO MOVEMENT.

08 80 00 - GLAZING (CONT)

L. SQUARE CUT WEDGE-SHAPED GASKETS AT CORNERS AND INSTALL GASKETS IN A MANNER RECOMMENDED BY GASKET MANUFACTURER TO PREVENT CORNERS FROM PULLING AWAY; SEAL CORNER JOINTS AND BUTT JOINTS WITH SEALANT RECOMMENDED BY GASKET MANUFACTURER.

1.15 TAPE GLAZING

A. POSITION TAPES ON FIXED STOPS SO THAT, WHEN COMPRESSED BY GLASS, THEIR EXPOSED EDGES ARE FLUSH WITH OR BELOW (NOT PROUD OF) SIGHTLINES ABOVE SIGHTLINE OF STOPS.
B. INSTALL TAPES CONTINUOUSLY, BUT NOT NECESSARILY IN ONE CONTINUOUS LENGTH. DO NOT STRETCH TAPES TO MAKE THEM FIT OPENING.
C. COVER VERTICAL GLAZING JOINTS BY APPLYING TAPES TO HEADS AND SILLS FIRST AND THEN TO JAMBS. COVER HORIZONTAL FRAMING JOINTS BY APPLYING TAPES TO JAMBS AND THEN TO HEADS AND SILLS.
D. PLACE JOINTS IN TAPES AT CORNERS OF OPENING WITH ADJOINING LENGTHS BUTTED TOGETHER, NOT LAPPED. SEAL JOINTS IN TAPES WITH COMPATIBLE SEALANT APPROVED BY TAPE MANUFACTURER.
E. DO NOT REMOVE RELEASE PAPER FROM TAPE UNTIL RIGHT BEFORE EACH GLAZING UNIT IS INSTALLED.
F. APPLY HEEL BEAD OF ELASTOMERIC SEALANT.
G. CENTER GLASS LITES IN OPENINGS ON SETTING BLOCKS AND PRESS FIRMLY AGAINST TAPE BY INSERTING DENSE COMPRESSION GASKETS FORMED AND INSTALLED TO LOCK IN PLACE AGAINST FACES OF REMOVABLE STOPS. START GASKET APPLICATIONS AT CORNERS AND WORK TOWARD CENTERS OF OPENINGS.
H. APPLY CAP BEAD OF ELASTOMERIC SEALANT OVER EXPOSED EDGE OF TAPE.

1.16 GASKET GLAZING (DRY)

A. CUT COMPRESSION GASKETS TO LENGTHS RECOMMENDED BY GASKET MANUFACTURER TO FIT OPENINGS EXACTLY, WITH ALLOWANCE FOR STRETCH DURING INSTALLATION.
B. INSERT SOFT COMPRESSION GASKET BETWEEN GLASS AND FRAME OR FIXED STOP SO IT IS SECURELY IN PLACE WITH JOINTS MITER CUT AND BONDED TOGETHER AT CORNERS.
C. INSTALLATION WITH DRIVE-IN WEDGE GASKETS: CENTER GLASS LITES IN OPENINGS ON SETTING BLOCKS AND PRESS FIRMLY AGAINST SOFT COMPRESSION GASKET BY INSERTING DENSE COMPRESSION GASKETS FORMED AND INSTALLED TO LOCK IN PLACE AGAINST FACES OF REMOVABLE STOPS. START GASKET APPLICATIONS AT CORNERS AND WORK TOWARD CENTERS OF OPENINGS. COMPRESS GASKETS TO PRODUCE A WEATHERTIGHT SEAL WITHOUT DEVELOPING BENDING STRESSES IN GLASS. SEAL GASKET JOINTS WITH SEALANT RECOMMENDED BY GASKET MANUFACTURER.
D. INSTALLATION WITH PRESSURE-GLAZING STOPS: CENTER GLASS LITES IN OPENINGS ON SETTING BLOCKS AND PRESS FIRMLY AGAINST SOFT COMPRESSION GASKET. INSTALL DENSE COMPRESSION GASKETS AND PRESSURE-GLAZING STOPS, APPLYING PRESSURE UNIFORMLY TO COMPRESSION GASKETS. COMPRESS GASKETS TO PRODUCE A WEATHERTIGHT SEAL WITHOUT DEVELOPING BENDING STRESSES IN GLASS. SEAL GASKET JOINTS WITH SEALANT RECOMMENDED BY GASKET MANUFACTURER.
E. INSTALL GASKETS SO THEY PROTRUDE PAST FACE OF GLAZING STOPS.

08 91 19 - FIXED LOUVERS

1.1 ACTION SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT.
   1. LOUVERS SHALL BEAR AMCA SEAL, INCLUDE PRINTED CATALOG PAGES SHOWING SPECIFIED MODELS WITH APPROPRIATE AMCA CERTIFIED RATINGS SEALS.
B. SHOP DRAWINGS: FOR LOUVERS AND ACCESSORIES. INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK. SHOW FRAME PROFILES AND BLADE PROFILES, ANGLES, AND SPACING.
C. SAMPLES: FOR EACH TYPE OF METAL FINISH REQUIRED.
D. DELEGATED-DESIGN SUBMITTAL: FOR LOUVERS INDICATED TO COMPLY WITH STRUCTURAL AND SEISMIC PERFORMANCE REQUIREMENTS, INCLUDING ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.

1.2 INFORMATIONAL SUBMITTALS

A. PRODUCT TEST REPORTS: BASED ON TESTS PERFORMED ACCORDING TO AMCA 500-L.
B. WINDBORNE-DEBRIS-IMPACT-RESISTANCE TEST REPORTS.

1.3 PERFORMANCE REQUIREMENTS

A. DELEGATED DESIGN: DESIGN LOUVERS, INCLUDING COMPREHENSIVE ENGINEERING ANALYSIS BY A QUALIFIED PROFESSIONAL ENGINEER, USING STRUCTURAL AND SEISMIC PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA INDICATED.
B. STRUCTURAL PERFORMANCE: LOUVERS SHALL WITHSTAND THE EFFECTS OF GRAVITY LOADS AND THE FOLLOWING LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED WITHOUT PERMANENT DEFORMATION OF LOUVER COMPONENTS, NOISE OR METAL FATIGUE CAUSED BY LOUVER-BLADE RATTLE OR FLUTTER, OR PERMANENT DAMAGE TO FASTENERS AND ANCHORS. WIND PRESSURES SHALL BE CONSIDERED TO ACT NORMAL TO THE FACE OF THE BUILDING.
   1. WIND LOADS: DETERMINE LOADS BASED ON PRESSURES AS INDICATED ON DRAWINGS.
   2. WIND LOADS: DETERMINE LOADS BASED ON A UNIFORM PRESSURE OF 20 LBF/SQ. FT., ACTING INWARD OR OUTWARD.
C. WINDBORNE-DEBRIS-IMPACT RESISTANCE: LOUVERS LOCATED WITHIN 30 FEET OF GRADE SHALL PASS BASIC-PROTECTION, LARGE-MISSILE TESTING REQUIREMENTS IN ASTM E 1996 FOR WIND ZONE 3 WHEN TESTED ACCORDING TO ASTM E 1886. TEST SPECIMENS SHALL BE NO SMALLER IN WIDTH AND LENGTH THAN LOUVERS INDICATED FOR USE ON PROJECT.
D. SEISMIC PERFORMANCE: LOUVERS, INCLUDING ATTACHMENTS TO OTHER CONSTRUCTION, SHALL WITHSTAND THE EFFECTS OF EARTHQUAKE MOTIONS DETERMINED ACCORDING TOASCE/SEI 7.
   1. DESIGN EARTHQUAKE SPECTRAL RESPONSE ACCELERATION, SHORT PERIOD (SDS) FOR PROJECT IS INDICATED IN DRAWINGS.
   2. COMPONENT IMPORTANCE FACTOR: AS INDICATED IN DRAWINGS].
E. LOUVER PERFORMANCE RATINGS: PROVIDE LOUVERS COMPLYING WITH REQUIREMENTS SPECIFIED, AS DEMONSTRATED BY TESTING MANUFACTURER'S STOCK UNITS IDENTICAL TO THOSE PROVIDED, EXCEPT FOR LENGTH AND WIDTH ACCORDING TO AMCA 500-L.

1.4 FIXED, EXTRUDED-ALUMINUM LOUVERS

A. A. HORIZONTAL, NONDRAINABLE-BLADE LOUVER:
   1. LOUVER DEPTH: AS INDICATED IN DRAWINGS.
   2. BLADE PROFILE: PLAIN BLADE WITHOUT CENTER BAFFLE.
   3. FRAME AND BLADE NOMINAL THICKNESS: NOT LESS THAN 0.060 INCH FOR BLADES AND 0.080 INCH FOR FRAMES.
   4. MULLION TYPE: EXPOSED.
   5. LOUVER PERFORMANCE RATINGS:
      a. FREE AREA: NOT LESS THAN 7.5 SQ. FT.FOR 48-INCH- WIDE BY 48-INCH- HIGH LOUVER.
      b. POINT OF BEGINNING WATER PENETRATION: NOT LESS THAN 700 FPM.
      c. AIR PERFORMANCE: NOT MORE THAN 0.10-INCH WG STATIC PRESSURE DROP AT 650-FPM FREE-AREA INTAKEVELOCITY.
B. B. HORIZONTAL, DRAINABLE-BLADE LOUVER:
   1. LOUVER DEPTH: AS INDICATED IN DRAWINGS.
   2. FRAME AND BLADE NOMINAL THICKNESS: NOT LESS THAN 0.060 INCH FOR BLADES AND 0.080 INCH FOR FRAMES.
   3. MULLION TYPE: EXPOSED.
   4. LOUVER PERFORMANCE RATINGS:
      a. FREE AREA: NOT LESS THAN 7.0 SQ. FT. FOR 48-INCH- WIDE BY 48-INCH- HIGH LOUVER.
      b. POINT OF BEGINNING WATER PENETRATION: NOT LESS THAN 900 FPM.
      c. AIR PERFORMANCE: NOT MORE THAN 0.10-INCH WG STATIC PRESSURE DROP AT 700-FPM FREE-AREA INTAKE VELOCITY.
   5. AMCA SEAL: MARK UNITS WITH AMCA CERTIFIED RATINGS SEAL.
C. HORIZONTAL, WIND-DRIVEN-RAIN-RESISTANT LOUVER:
   1. LOUVER DEPTH: AS INDICATED IN DRAWINGS.
   2. FRAME AND BLADE NOMINAL THICKNESS: NOT LESS THAN 0.060 INCH FOR BLADES AND 0.080 INCH FOR FRAMES.
   3. LOUVER PERFORMANCE RATINGS:
      a. FREE AREA: NOT LESS THAN 5.0 SQ. FT. FOR 48-INCH- WIDE BY 48-INCH- HIGH LOUVER.
      b. AIR PERFORMANCE: NOT MORE THAN 0.10-INCH WG STATIC PRESSURE DROP AT 600-FPM FREE-AREA INTAKE VELOCITY.
      c. WIND-DRIVEN RAIN PERFORMANCE: NOT LESS THAN 80 PERCENT EFFECTIVENESS WHEN SUBJECTED TO A RAINFALL RATE OF 3 INCHES PER HOUR AND A WIND SPEED OF 29 MPH PER HOUR AND A WIND SPEED OF 50 MPH] AT A CORE-AREA INTAKE VELOCITY OF 300 FPM.
   4. AMCA SEAL: MARK UNITS WITH AMCA CERTIFIED RATINGS SEAL.
D. VERTICAL, WIND-DRIVEN-RAIN-RESISTANT LOUVER:
   1. LOUVER DEPTH: AS INDICATED IN DRAWINGS.
   2. FRAME AND BLADE NOMINAL THICKNESS: NOT LESS THAN 0.060 INCH FOR BLADES AND 0.080 INCH FOR FRAMES.
   3. LOUVER PERFORMANCE RATINGS:
      a. FREE AREA: NOT LESS THAN 5.0 SQ. FT. FOR 48-INCH- WIDE BY 48-INCH- HIGH LOUVER.
      b. AIR PERFORMANCE: NOT MORE THAN 0.10-INCH WG STATIC PRESSURE DROP AT 600-FPM FREE-AREA INTAKE VELOCITY.
      c. WIND-DRIVEN RAIN PERFORMANCE: NOT LESS THAN 99 PERCENT EFFECTIVENESS WHEN SUBJECTED TO A RAINFALL RATE OF 3 INCHES PER HOUR AND A WIND SPEED OF 29 MPH AT A CORE-AREA INTAKE VELOCITY OF 300 FPM.
   4. AMCA SEAL: MARK UNITS WITH AMCA CERTIFIED RATINGS SEAL.

1.5 FIXED, FORMED-METAL LOUVERS

A. HORIZONTAL, NONDRAINABLE-BLADE LOUVER:
   1. LOUVER DEPTH: AS INDICATED IN DRAWINGS.
   2. BLADE PROFILE: PLAIN BLADE WITHOUT CENTER BAFFLE.
   3. FRAME AND BLADE MATERIAL AND NOMINAL THICKNESS: GALVANIZED-STEEL SHEET, NOT LESS THAN 0.052 INCH FOR FRAMES AND 0.040 INCH FOR BLADES.
   4. MULLION TYPE: EXPOSED.
   5. LOUVER PERFORMANCE RATINGS:
      a. FREE AREA: NOT LESS THAN 6.5 SQ. FT. FOR 48-INCH- WIDE BY 48-INCH- HIGH LOUVER.
      b. POINT OF BEGINNING WATER PENETRATION: NOT LESS THAN 550 FPM.
      c. AIR PERFORMANCE: NOT MORE THAN 0.10-INCH WG STATIC PRESSURE DROP AT 550-FPM FREE-AREA INTAKE VELOCITY.
B. B. HORIZONTAL, DRAINABLE-BLADE LOUVER:
   1. LOUVER DEPTH: AS INDICATED IN DRAWINGS.
   2. FRAME AND BLADE MATERIAL AND NOMINAL THICKNESS: GALVANIZED-STEEL SHEET, NOT LESS THAN 0.052 INCH FOR FRAMES AND 0.040 INCH FOR BLADES.
   3. MULLION TYPE: EXPOSED.

08 91 19 - FIXED LOUVERS (CONT.)

   4. LOUVER PERFORMANCE RATINGS:
      a. FREE AREA: NOT LESS THAN 7.0 SQ. FT. FOR 48-INCH- WIDE BY 48-INCH- HIGH LOUVER.
      b. POINT OF BEGINNING WATER PENETRATION: NOT LESS THAN 800 FPM.
      c. AIR PERFORMANCE: NOT MORE THAN 0.10-INCH WG STATIC PRESSURE DROP AT 700-FPM FREE-AREA INTAKE VELOCITY.
   5. AMCA SEAL: MARK UNITS WITH AMCA CERTIFIED RATINGS SEAL.

1.6 LOUVER SCREENS

A. GENERAL: PROVIDE SCREEN AT EACH EXTERIOR LOUVER.
   1. SCREEN LOCATION FOR FIXED LOUVERS: INTERIOR FACE.
   2. SCREENING TYPE: BIRD SCREENING.
B. LOUVER SCREEN FRAMES: SAME TYPE AND FORM OF METAL AS INDICATED FOR LOUVER TO WHICH SCREENS ARE ATTACHED

09 29 00 - GYPSUM BOARD (CONT)

1.10 APPLYING AND FINISHING PANELS, GENERAL

A. COMPLY WITH ASTM C840, GA-216-2007
B. INSTALL CEILING PANELS ACROSS FRAMING TO MINIMIZE THE NUMBER OF ABUTTING END JOINTS AND TO AVOID ABUTTING END JOINTS IN CENTRAL AREA OF EACH CEILING. STAGGER ABUTTING END JOINTS OF ADJACENT PANELS NOT LESS THAN ONE FRAMING MEMBER.
C. INSTALL PANELS WITH FACE SIDE OUT. BUTT PANELS TOGETHER FOR A LIGHT CONTACT AT EDGES AND ENDS WITH NOT MORE THAN 1/16 INCH (1.5 MM) OF OPEN SPACE BETWEEN PANELS. DO NOT FORCE INTO PLACE.
D. LOCATE EDGE AND END JOINTS OVER SUPPORTS, EXCEPT IN CEILING APPLICATIONS WHERE INTERMEDIATE SUPPORTS OR GYPSUM BOARD BACK-BLOCKING IS PROVIDED BEHIND END JOINTS. DO NOT PLACE TAPERED EDGES AGAINST CUT EDGES OR ENDS. STAGGER VERTICAL JOINTS ON OPPOSITE SIDES OF PARTITIONS. DO NOT MAKE JOINTS OTHER THAN CONTROL JOINTS AT CORNERS OF FRAMED OPENINGS.
E. FORM CONTROL AND EXPANSION JOINTS WITH SPACE BETWEEN EDGES OF ADJOINING GYPSUM PANELS.
F. COVER BOTH FACES OF SUPPORT FRAMING WITH GYPSUM PANELS IN CONCEALED SPACES (ABOVE CEILINGS, ETC., EXCEPT IN CHASES BRACED INTERNALLY.
   1. FIT GYPSUM PANELS AROUND DUCTS, PIPES, AND CONDUITS.
   2. WHERE PARTITIONS INTERSECT STRUCTURAL MEMBERS PROJECTING BELOW UNDERSIDE OF FLOOR/ROOF SLABS AND DECKS, CUT GYPSUM PANELS TO FIT PROFILE FORMED BY STRUCTURAL MEMBERS; ALLOW 1/4- TO 3/8-INCH-WIDE JOINTS TO INSTALL SEALANT.
G. ISOLATE PERIMETER OF GYPSUM BOARD APPLIED TO NON-LOAD-BEARING PARTITIONS AT STRUCTURAL ABUTMENTS, EXCEPT FLOORS. PROVIDE 1/4 TO 1/2-INCH- WIDE SPACES AT THESE LOCATIONS AND TRIM EDGES WITH EDGE TRIM WHERE EDGES OF PANELS ARE EXPOSED. SEAL JOINTS BETWEEN EDGES AND ABUTTING STRUCTURAL SURFACES WITH ACOUSTICAL SEALANT.
H. INSTALL SOUND ATTENUATION BLANKETS BEFORE INSTALLING GYPSUM PANELS UNLESS BLANKETS ARE READILY INSTALLED AFTER PANELS HAVE BEEN INSTALLED ON ONE SIDE.
I. CEILING WITH PERIMETER RELIEF: CONTROL JOINTS IN INTERIOR CEILINGS WITH PERIMETER RELIEF SHALL BE INSTALLED SO THAT LINEAR DIMENSIONS BETWEEN CONTROL JOINTS DO NOT EXCEED 50 FT OR 2500 SQ. FT
J. CEILING, WITHOUT PERIMETER RELIEF: CONTROL JOINTS IN INTERIOR CEILINGS WITHOUT PERIMETER RELIEF SHALL BE INSTALLED SO THAT LINEAR DIMENSIONS BETWEEN CONTROL JOINTS DO NOT EXCEED 30 FT
K. AT ACOUSTICAL OR FIR RATED WALLS: WHERE A CONTROL JOINT OCCURS IN AN ACOUSTICAL OR FIRE RATED SYSTEM, BLOCKING SHALL BE PROVIDED BEHIND THE CONTROL JOINT BY USING A BACKING MATERIAL SUCH AS 5/8 IN. TYPE X GYPSUM PANEL PRODUCTS, MINERAL FIBER, OR OTHER TESTED EQUIVALENT
L. INTERIOR TRIM: INSTALL IN THE FOLLOWING LOCATIONS:
   1. CORNERBEAD: USE AT OUTSIDE CORNERS.
   2. LC-BEAD: USE AT EXPOSED PANEL EDGES.
   3. L-BEAD: USE WHERE INDICATED.

1.14 FINISHING GYPSUM BOARD

A. PREFILL OPEN JOINTS, ROUNDED OR BEVELED EDGES, AND DAMAGED SURFACE AREAS.
B. APPLY JOINT TAPE OVER GYPSUM BOARD JOINTS, EXCEPT FOR TRIM PRODUCTS SPECIFICALLY INDICATED AS NOT INTENDED TO RECEIVE TAPE.
C. GYPSUM BOARD FINISH LEVELS: FINISH PANELS TO LEVELS INDICATED BELOW AND ACCORDING TO ASTM C 840:
   1. LEVEL 1: CEILING PLENUM AREAS, CONCEALED AREAS, AND WHERE INDICATED.
   2. LEVEL 2: WAREHOUSE STORAGE AREAS.
   3. LEVEL 3: BENEATH WALL COVERING.
   4. LEVEL 4: AT PANEL SURFACES THAT WILL BE EXPOSED TO VIEW UNLESS OTHERWISE INDICATED.

1.11 APPLYING INTERIOR GYPSUM BOARD

A. INSTALL INTERIOR GYPSUM BOARD IN THE FOLLOWING LOCATIONS (UNLESS NOTED OTHERWISE):
   1. TYPE X: VERTICAL SURFACES UNLESS OTHERWISE INDICATED.
   2. MOISTURE- AND MOLD-RESISTANT TYPE: AT DAMP LOCATIONS WHERE TILE BACKER BOARD IS NOT USED.
B. SINGLE-LAYER APPLICATION:
   1. ON CEILINGS, APPLY GYPSUM PANELS BEFORE WALL/PARTITION BOARD APPLICATION TO GREATEST EXTENT POSSIBLE AND AT RIGHT ANGLES TO FRAMING UNLESS OTHERWISE INDICATED.
   2. ON PARTITIONS/WALLS, APPLY GYPSUM PANELS VERTICALLY (PARALLEL TO FRAMING) UNLESS OTHERWISE INDICATED OR REQUIRED BY FIRE-RESISTANCE-RATED ASSEMBLY, AND MINIMIZE END JOINTS.
      a. STAGGER ABUTTING END JOINTS NOT LESS THAN ONE FRAMING MEMBER IN ALTERNATE COURSES OF PANELS.
   3. ON Z-FURRING MEMBERS, APPLY GYPSUM PANELS VERTICALLY (PARALLEL TO FRAMING) WITH NO END JOINTS. LOCATE EDGE JOINTS OVER FURRING MEMBERS.
   4. FASTENING METHODS: APPLY GYPSUM PANELS TO SUPPORTS WITH STEEL DRILL SCREWS.
C. MULTILAYER APPLICATION:
   1. ON CEILINGS, APPLY GYPSUM BOARD INDICATED FOR BASE LAYERS BEFORE APPLYING BASE LAYERS ON WALLS/PARTITIONS; APPLY FACE LAYERS IN SAME SEQUENCE. APPLY BASE LAYERS AT RIGHT ANGLES TO FRAMING MEMBERS AND OFFSET FACE-LAYER JOINTS ONE FRAMING MEMBER, 16 INCHES MINIMUM, FROM PARALLEL BASE-LAYER JOINTS, UNLESS OTHERWISE INDICATED OR REQUIRED BY FIRE-RESISTANCE-RATED ASSEMBLY.
   2. ON PARTITIONS/WALLS, APPLY GYPSUM BOARD INDICATED FOR BASE LAYERS AND FACE LAYERS VERTICALLY (PARALLEL TO FRAMING) WITH JOINTS OF BASE LAYERS LOCATED OVER STUD OR FURRING MEMBER AND FACE-LAYER JOINTS OFFSET AT LEAST ONE STUD OR FURRING MEMBER WITH BASE-LAYER JOINTS, UNLESS OTHERWISE INDICATED OR REQUIRED BY FIRE-RESISTANCE-RATED ASSEMBLY. STAGGER JOINTS ON OPPOSITE SIDES OF PARTITIONS.
   3. ON Z-FURRING MEMBERS, APPLY BASE LAYER VERTICALLY (PARALLEL TO FRAMING) AND FACE LAYER EITHER VERTICALLY (PARALLEL TO FRAMING) OR HORIZONTALLY (PERPENDICULAR TO FRAMING) WITH VERTICAL JOINTS OFFSET AT LEAST ONE FURRING MEMBER. LOCATE EDGE JOINTS OF BASE LAYER OVER FURRING MEMBERS.
   4. FASTENING METHODS: FASTEN BASE LAYERS AND FACE LAYERS SEPARATELY TO SUPPORTS WITH SCREWS.

1.12 INSTALLING TRIM ACCESSORIES

A. CONTROL JOINTS: INSTALL CONTROL JOINTS AT LOCATIONS INDICATED ON DRAWINGS, AND ACCORDING TO ASTM C 840 AND IN SPECIFIC LOCATIONS APPROVED BY ARCHITECT FOR VISUAL EFFECT, AND AS FOLLOWS:
B. WALL: CONTROL JOINTS SHALL BE INSTALLED WHERE A WALL OR PARTITION RUNS IN AN UNINTERRUPTED STRAIGHT PLANE EXCEEDING 30 LINEAR FEET, OR 900 FT2

09 61 16 - CONCRETE FLOOR SEALING

1.1 SUBMITTALS

A. PRODUCT DATA: SUBMIT MANUFACTURER'S TECHNICAL LITERATURE, INCLUDING CHEMICAL PROPERTIES AND PERCENTAGE OF SOLIDS, FOR EACH PRODUCT.

1.2 ENVIRONMENTAL REQUIREMENTS

A. DO NOT APPLY MATERIALS WHEN AMBIENT OR SUBSTRATE SURFACE TEMPERATURES ARE BELOW 40 DEGREES F OR HIGHER THAN 100 DEGREES F.
B. DO NOT APPLY DURING INCLEMENT WEATHER OR WHEN FORECASTED CONDITIONS WILL NOT PERMIT COMPLIANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS.
C. PROVIDE MECHANICAL VENTILATION DURING AND AFTER APPLICATION TO DISSIPATE FUMES IF NATURAL VENTILATION IS INSUFFICIENT.

1.3 MATERIALS

A. LIQUID MEMBRANE-FORMING SEALER (FOR USE ON CONCRETE FLOOR SLABS INTENDED TO BE LEFT EXPOSED):
   1. ACCEPTABLE PRODUCTS:
      a. DAYTON SUPERIOR CORPORATION; ULTRA SEAL EF.

1.4 PREPARATION

A. REMOVE LOOSE PARTICLES, FOREIGN MATTER, AND OIL BY METHOD WHICH WILL NOT AFFECT SEALER APPLICATION.
B. PREPARE SURFACES IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS.
C. PROVIDE PROTECTION AS NECESSARY TO PROTECT ADJACENT MATERIALS AND SURFACES FROM DIRT, DUST, SPILLAGE, OVERSPRAY AND OTHER SURFACE OR PHYSICAL DAMAGE.

1.5 APPLICATION

A. GENERAL:
   1. PROVIDE FINISHES TO MATCH APPROVED SAMPLES AT LOCATIONS INDICATED.
   2. APPLY MATERIALS IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS.
B. LIQUID MEMBRANE-FORMING SEALER:
   1. APPLY SEALER USING LOW PRESSURE AIRLESS SPRAYER IN SINGLE COAT AT 250 FT/GAL (6.0-7.0 WFT) COVERAGE UNLESS GREATER AMOUNT IS RECOMMENDED BY MANUFACTURER TO OBTAIN PENETRATION AND FULL COVERAGE.
   2. DO NOT ALLOW FLOODING OR PUDDLING OF MATERIAL ON SURFACE.
   3. DO NOT DILUTE OR ALTER MATERIAL AS PACKAGED.
   4. LOCATIONS: AS INDICATED ON PLANS AND ON ALL EXPOSED CONCRETE FLOORING INSIDE OF BUILDING.

09 91 00 - PAINTING

1.1 QUALITY ASSURANCE

A. PRODUCT MANUFACTURER: COMPANY SPECIALIZING IN MANUFACTURING QUALITY PAINT AND FINISH PRODUCTS WITH 3 YEARS EXPERIENCE.
B. APPLICATOR: COMPANY SPECIALIZING IN COMMERCIAL PAINTING AND FINISHING WITH 2 YEARS EXPERIENCE.
C. PRODUCT LABELS: INCLUDE MANUFACTURER'S NAME, TYPE OF PAINT, STOCK NUMBER, COLOR AND LABEL ANALYSIS ON LABEL OF CONTAINERS.

1.2 SUBMITTALS

A. PROVIDE PRODUCT DATA DESCRIBING PHYSICAL PERFORMANCE CRITERIA AND COMPOSITION ON ALL FINISHING PRODUCTS.
B. SUBMIT 2 SAMPLES, 12 BY 12 INCHES IN SIZE ILLUSTRATING RANGE OF COLORS AND TEXTURES SELECTED FOR EACH SURFACE FINISHING PRODUCT SCHEDULED.

09 91 00 - PAINTING (CONT)

1.3 FIELD SAMPLES

A. PROVIDE FIELD SAMPLE PANEL, 96 INCHES LONG BY 96 INCHES WIDE, ILLUSTRATING EACH COATING COLOR, TEXTURE, AND FINISH INTENDED FOR USE.
B. LOCATE WHERE DIRECTED.
C. ACCEPTED SAMPLE MAY REMAIN AS PART OF THE WORK.

1.4 DELIVERY, STORAGE, AND HANDLING

A. DELIVER PRODUCTS TO SITE IN SEALED AND LABELED CONTAINERS; INSPECT TO VERIFY ACCEPTANCE.
B. CONTAINER LABELING TO INCLUDE MANUFACTURER'S NAME, TYPE OF PAINT, BRAND NAME, BRAND CODE, COVERAGE, SURFACE PREPARATION, DRYING TIME, CLEANUP, COLOR DESIGNATION, AND INSTRUCTIONS FOR MIXING AND REDUCING.
C. STORE PAINT MATERIALS AT MINIMUM AMBIENT TEMPERATURE OF 45 DEGREES F AND A MAXIMUM OF 90 DEGREES F, IN WELL VENTILATED AREA, UNLESS REQUIRED OTHERWISE BY MANUFACTURER'S INSTRUCTIONS.
D. TAKE PRECAUTIONARY MEASURES TO PREVENT FIRE HAZARDS AND SPONTANEOUS COMBUSTION.

1.5 ENVIRONMENTAL REQUIREMENTS

A. DO NOT APPLY MATERIALS WHEN SURFACE AND AMBIENT TEMPERATURES ARE OUTSIDE THE RANGES REQUIRED BY PAINT MANUFACTURER.
B. PROVIDE CONTINUOUS VENTILATION AND HEATING FACILITIES TO MAINTAIN SURFACE AND AMBIENT TEMPERATURES ABOVE 45 DEGREES F FOR 24 HOURS BEFORE, DURING, AND 48 HOURS AFTER APPLICATION OF FINISHES, UNLESS REQUIRED OTHERWISE BY MANUFACTURER'S INSTRUCTIONS.
C. DO NOT APPLY EXTERIOR COATINGS DURING RAIN OR SNOW, OR WHEN RELATIVE HUMIDITY IS ABOVE 75 PERCENT, UNLESS REQUIRED OTHERWISE BY MANUFACTURER'S INSTRUCTIONS.
D. MINIMUM APPLICATION TEMPERATURES FOR LATEX PAINTS: 45 DEGREES F FOR INTERIORS; 50 DEGREES F FOR EXTERIOR; UNLESS REQUIRED OTHERWISE BY MANUFACTURER'S INSTRUCTIONS.
E. PROVIDE LIGHTING LEVEL OF 80 FT CANDLES MEASURED MID_HEIGHT AT SUBSTRATE SURFACE.

1.6 EXTRA STOCK

A. PROVIDE A 1 GALLON CONTAINER OF EACH COLOR TO OWNER.
B. LABEL EACH CONTAINER WITH COLOR, COLOR NUMBER, TEXTURE, AND ROOM LOCATIONS, IN ADDITION TO THE MANUFACTURER'S LABEL.

1.7 SCAFFOLDS AND PROTECTION

A. PROVIDE ADEQUATE SAFE LADDERS, SCAFFOLDS, AND STAGES NECESSARY TO COMPLETE WORK.
B. PROTECT COMPLETED FINISH AND PAINT WORK, AND PROTECT ADJACENT FINISH SURFACES FROM PAINT SPLATTER, SPILLS AND STAINS. USE ADEQUATE DROP CLOTHS AND MASKING PROCEDURES DURING PROGRESS OF WORK.

1.8 PRECAUTIONS

A. DO NOT STORE PAINTS, OILS, THINNERS AND OTHER FLAMMABLE ITEMS INSIDE THE BUILDING AND SHALL BE STORED IN APPROVED CONTAINERS WHEN NOT IN ACTUAL USE DURING THE PAINTING JOB. THE FIRE HAZARD SHALL BE KEPT AT A MINIMUM.
B. PRECAUTION SHALL BE TAKEN TO PROTECT THE PUBLIC AND CONSTRUCTION WORKERS DURING THE PROGRESS OF THE WORK.
C. FURNISH A TEMPORARY FIRE EXTINGUISHER OF SUITABLE CHEMICALS AND CAPACITY, LOCATED NEAR FLAMMABLE MATERIALS.

1.9 MANUFACTURERS

A. ACCEPTABLE MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS INDICATED, PROVIDE PRODUCTS OF ONE OF THE FOLLOWING:
   1. SHERWIN_WILLIAMS.
   2. P.P.G. INDUSTRIES.
   3. BENJAMIN MOORE.
   4. KELLEY MOORE.
   5. GLIDDEN PROFESSIONAL.
B. MATERIALS SELECTED FOR COATING SYSTEMS FOR EACH TYPE SURFACE SHALL BE PRODUCT OF A SINGLE MANUFACTURER UNLESS OTHERWISE SPECIFIED. SECONDARY PRODUCTS SUCH AS LINSEED OIL, TURPENTINE AND SHELLACS SHALL BE FIRST QUALITY PRODUCTS OF A REPUTABLE MANUFACTURER.
C. PRODUCTS SPECIFIED IN SCHEDULE ARE THOSE OF GLIDDEN PROFESSIONAL AS A STANDARD OF QUALITY UNLESS OTHERWISE NOTED.

1.10 MATERIALS

A. COATINGS: READY MIXED. PROCESS PIGMENTS TO A SOFT PASTE CONSISTENCY, CAPABLE OF BEING READILY AND UNIFORMLY DISPERSED TO A HOMOGENEOUS COATING WITH GOOD FLOW AND BRUSHING PROPERTIES; CAPABLE OF DRYING OR CURING FREE OF STREAKS OR SAGS.
B. ACCESSORY MATERIALS: LINSEED OIL, SHELLAC, TURPENTINE, PAINT THINNERS AND OTHER MATERIALS NOT SPECIFICALLY INDICATED BUT REQUIRED TO ACHIEVE THE FINISHES SPECIFIED, OF COMMERCIAL QUALITY.
C. PATCHING MATERIALS: LATEX FILLER.

1.11 FINISHES

A. COLOR AND SHEEN: REFER TO FINISH LEGEND ON DRAWINGS.

1.12 INTERIOR PAINT SCHEDULE

A. DRYWALL (GYPSUM):
   1. ACRYLIC LATEX: GLIDDEN: 1 COAT GLIDDEN PROFESSIONAL PVA WALL 1030 PRIMER, 2 COATS GLIDDEN PROFESSIONAL ULTRA-HIDE 250
B. GALVANIZED METAL:
   1. ACRYLIC LATEX: GLIDDEN: 1 COAT DEVOE COATINGS DEVFLEX DIRECT-TO-METAL 4020 PRIMER; SEMI-GLOSS: 2 COATS GLIDDEN PROFESSIONAL ULTRA-HIDE 250 1406 TOPCOAT.
C. SHOP PRIMED FERROUS METAL:
   1. ACRYLIC LATEX: GLIDDEN: 1 COAT DEVOE COATINGS DEVFLEX DIRECT-TO-METAL 4020 PRIMER, 2 COATS GLIDDEN PROFESSIONAL ULTRA-HIDE 250.

1.13 EXTERIOR PAINT SCHEDULE

A. SHOP PRIMED METAL DOORS, TRIM, PANELS AND MISCELLANEOUS SURFACES:
   1. HIGH PERFORMANCE COATING, WATER-BASED ACRYLIC:
      a. GLIDDEN: SEMI-GLOSS: 2 TOPCOATS DEVOE COATINGS DEVFLEX HIGH PERFORMANCE WB ACRYLIC 4216 OVER PREPARED SUBSTRATE.

1.14 EXAMINATION

A. VERIFY THAT SURFACES AND SUBSTRATE CONDITIONS ARE READY TO RECEIVE WORK AS INSTRUCTED BY THE PRODUCT MANUFACTURER.
B. EXAMINE SURFACES SCHEDULED TO BE FINISHED PRIOR TO COMMENCEMENT OF WORK. REPORT TO ARCHITECT ANY CONDITION THAT MAY POTENTIALLY AFFECT PROPER APPLICATION.
C. MEASURE MOISTURE CONTENT OF SURFACES USING AN ELECTRONIC MOISTURE METER. DO NOT APPLY FINISHES UNLESS MOISTURE CONTENT OF SURFACES ARE BELOW THE FOLLOWING MAXIMUMS
   1. GYPSUM WALLBOARD: 12 PERCENT.
D. TEST SHOP APPLIED PRIMERS FOR COMPATIBILITY WITH SUBSEQUENT COVER MATERIALS.
E. BEGINNING OF INSTALLATION MEANS ACCEPTANCE OF EXISTING SURFACES AND SUBSTRATE.

1.15 PREPARATION

A. REMOVE ELECTRICAL PLATES, HARDWARE, LIGHT FIXTURE TRIM, AND FITTINGS PRIOR TO PREPARING SURFACES OR FINISHING.
B. CORRECT MINOR DEFECTS AND CLEAN SURFACES WHICH AFFECT WORK OF THIS SECTION. REMOVE EXISTING COATINGS WHICH EXHIBIT LOOSE SURFACE DEFECTS.
C. IMPERVIOUS SURFACES: REMOVE MILDEW BY SCRUBBING WITH SOLUTION OF TRI_SODIUM PHOSPHATE AND BLEACH. RINSE WITH CLEAN WATER AND ALLOW SURFACE TO DRY.
D. GYPSUM BOARD SURFACES: LATEX FILL MINOR DEFECTS. SPOT PRIME DEFECTS AFTER REPAIR.
E. GALVANIZED SURFACES: REMOVE SURFACE CONTAMINATION AND OILS AND WASH WITH SOLVENT. APPLY COAT OF ETCHING PRIMER.
F. UNCOATED STEEL AND IRON SURFACES: REMOVE GREASE, SCALE, DIRT, AND RUST.
G. WHERE HEAVY COATINGS OF SCALE ARE EVIDENT, REMOVE BY WIRE BRUSHING OR SANDBLASTING; CLEAN BY WASHING WITH SOLVENT. APPLY A TREATMENT OF PHOSPHORIC ACID SOLUTION, ENSURING WELD JOINTS, BOLTS, AND NUTS ARE SIMILARLY CLEANED. SPOT PRIME PAINT AFTER REPAIRS.
H. SHOP PRIMED STEEL SURFACES: SAND AND SCRAPE TO REMOVE LOOSE PRIMER AND RUST. FEATHER EDGES TO MAKE TOUCH_UP PATCHES INCONSPICUOUS. CLEAN SURFACES WITH SOLVENT. PRIME BARE STEEL SURFACES.
I. SHOP FINISHED ITEMS: FINISH IN ACCORDANCE WITH AWI STANDARDS AND GUIDE LINES.
J. WOOD AND METAL DOORS SCHEDULED FOR PAINTING: SEAL TOP AND BOTTOM EDGES WITH PRIMER.

1.16 SURFACE PREPARATION OF PREVIOUSLY COATED SURFACES

A. GENERAL:
   1. REMOVE CRACKED AND DETERIORATED SEALANTS AND CALKING.
   2. REMOVE CHALK DEPOSITS AND LOOSE, BLISTERED, PEELING, SCALING, OR CRAZED FINISH TO BARE BASE MATERIAL OR SOUND SUBSTRATE BY SCRAPING AND SANDING.
   3. WASH SURFACES WITH SOLUTION OF TSP TO REMOVE WAX, OIL, GREASE, AND OTHER FOREIGN MATERIAL; RINSE, AND ALLOW TO DRY. EXERCISE CAUTION THAT TSP SOLUTION DOES NOT SOFTEN EXISTING COATING.
   4. ABRADE GLOSSY SURFACES BY SANDING OR WIPING WITH LIQUID DE-GLOSSER.
   5. REMOVE MILDEW AS SPECIFIED ABOVE.
   6. TEST COMPATIBILITY OF EXISTING COATINGS BY APPLYING NEW COATING TO SMALL, INCONSPICUOUS AREA. IF NEW COATINGS LIFT OR BLISTER EXISTING COATINGS, REQUEST RECOMMENDATION FROM ARCHITECT.
   7. APPLY SPECIFIED PRIMER TO SURFACES SCHEDULED TO RECEIVE COATINGS.
B. GYPSUM WALLBOARD:
   1. FILL CRACKS AND VOIDS WITH SPACKLING COMPOUND.
   2. APPLY PRIMER OVER BARE SURFACES AND NEWLY APPLIED TEXTURE COATINGS.
C. METAL:
   1. REMOVE RUST FROM SURFACES TO BARE METAL IN ACCORDANCE WITH SP3 "POWER TOOL CLEANING".
   2. EXERCISE CARE NOT TO REMOVE GALVANIZING.
   3. COMPLETE PREPARATION AS SPECIFIED FOR NEW WORK.

1.17 PROTECTION

A. PROTECT ELEMENTS SURROUNDING THE WORK OF THIS SECTION FROM DAMAGE OR DISFIGURATION.
B. REPAIR DAMAGE TO OTHER SURFACES CAUSED BY WORK OF THIS SECTION.
C. FURNISH DROP CLOTHS, SHIELDS, AND PROTECTIVE METHODS TO PREVENT SPRAY OR DROPPINGS FROM DISFIGURING OTHER SURFACES.
D. REMOVE EMPTY PAINT CONTAINERS FROM SITE.

09 91 00 - PAINTING (CONT.)

1.18 APPLICATION

A. THE INTENT OF THESE SPECIFICATIONS IS TO PRODUCE THE HIGHEST QUALITY APPEARANCE OF PAINT AND FINISH SURFACES. EMPLOY SKILLED MECHANICS ONLY. THE PROPER PREPARATION OF ALL SURFACES WILL BE STRICTLY ENFORCED AND WHEREVER FINISHED SURFACES SHOW ANY DEFECTS DUE TO IMPROPER PREPARATION, WORKMANSHIP, ETC., THE DEFECTS SHALL BE REMOVED AND THE WORK REFINISHED AT THE EXPENSE OF THE CONTRACTOR.
B. APPLY PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. FINAL FINISH COATS SHALL HAVE VISUAL EVIDENCE OF SOLID HIDING AND UNIFORM APPEARANCE, AND SHALL BE FREE AND SMOOTH OF BRUSH MARKS, STREAKS, SAGS, RUNS, LAPS, OR SKIPPED AREAS.
C. DO NOT APPLY FINISHES TO SURFACES THAT ARE NOT DRY.
D. APPLY EACH COAT TO UNIFORM FINISH AND THICKNESS.
E. APPLY EACH COAT OF PAINT SLIGHTLY DARKER THAN PRECEDING COAT UNLESS OTHERWISE APPROVED.
F. SAND LIGHTLY BETWEEN COATS ON WOOD AND METAL ITEMS TO ACHIEVE REQUIRED FINISH.
G. ALLOW APPLIED COAT TO DRY BEFORE NEXT COAT IS APPLIED.
H. EDGES OF PAINT ADJOINING OTHER MATERIALS OR COLORS SHALL BE SHARP AND CLEAN WITH NO OVERLAPPING.

1.19 CLEANING/TOUCH_UP

A. AS WORK PROCEEDS, PROMPTLY REMOVE PAINT WHERE SPILLED, SPLASHED, OR SPATTERED.
B. DURING PROGRESS OF WORK MAINTAIN PREMISES FREE OF UNNECESSARY ACCUMULATION OF TOOLS, EQUIPMENT, SURPLUS MATERIALS, AND DEBRIS.
C. COLLECT COTTON WASTE, CLOTHS, AND MATERIAL WHICH MAY CONSTITUTE A FIRE HAZARD, PLACE IN CLOSED METAL CONTAINERS AND REMOVE DAILY FROM SITE.
D. SPOT PAINTING WILL BE ALLOWED TO CORRECT SOILED OR DAMAGED PAINT SURFACES ONLY WHEN TOUCH_UP SPOT WILL BLEND INTO SURROUNDING FINISH AND IS INVISIBLE TO NORMAL VIEWING (AS DETERMINED BY THE ARCHITECT). OTHERWISE, RE_COAT ENTIRE SECTION TO CORNERS OR VISIBLE STOPPING POINT.
E. PRODUCTS LISTED IN FOLLOWING SCHEDULE AND/OR SUBSTITUTES PROPOSED FOR USE BY CONTRACTOR MUST BE FORMULATED TO MEET ALL APPLICABLE ORDINANCES AND REGULATIONS REGARDING MAXIMUM V.O.C. CONTENT. UTILIZE PRODUCTS WHICH HAVE BEEN SPECIALLY FORMULATED TO NEED SUCH REQUIREMENTS.

09-900 - PAINTING: NEED A PERFORMANCE SPEC

PRECAST: (2 COAT) ACRYLIC, (1 COAT) PRIMER, (1 COAT) TOP APPROPRIATE FOR PRECAST

BC STEEL: INDUSTRIAL ENAMEL. MISC METALS, FERROUS METAL PRODUCTS

09 96 63 - TEXTURED PLASTIC/ ACRYLIC COATING

1.1 SECTION INCLUDES

A. ACRYLIC BASED TEXTURED COATING ON ALL EXPOSED PORTIONS OF EXTERIOR EXPOSED CONCRETE WALL PANELS.

2.1 ACCEPTABLE MANUFACTURERS

A. ULTRACRETE BY SHERWIN WILLIAMS
B. SUBSTITUTIONS: SUBMIT IN ACCORDANCE WITH SECTION 012500

2.2 PRODUCTS

A. COMPOSITION AND MATERIALS: DECORATIVE, ACRYLIC BASED COATING, PRE-MIXED
B. THICKNESS: APPLY AT THE RATE AND IN THE NUMBER OF COATS AS RECOMMENDED BY MANUFACTURER FOR FULL AND COMPLETE COVERAGE, BUT NOT LESS THAN 15 MIL DFT
C. FINISH TEXTURE: MEDIUM TEXTURE, OR AS OTHERWISE SELECTED BY ARCHITECT
D. COLOR: REFER TO FINISH LEGEND
E. PRIMER: TYPE AS RECOMMENDED BY MANUFACTURER FOR SUBSTRATE ENCOUNTERED.

10 44 00 - FIRE PROTECTION SPECIALTIES

1.1 SUBMITTALS

A. PRODUCT DATA: PROVIDE EXTINGUISHER OPERATIONAL FEATURES AND ANCHORAGE DETAILS.

1.2 MANUFACTURERS

A. FIRE EXTINGUISHERS:
   1. ANSUL, INC.: WWW.ANSUL.COM.
   2. JL INDUSTRIES, INC: WWW.JLINDUSTRIES.COM.
   3. PYRO-CHEM: WWW.PYROCHEM.COM.
B. FIRE EXTINGUISHER CABINETS AND ACCESSORIES:
   1. JL INDUSTRIES, INC.: WWW.JLINDUSTRIES.COM.
   2. LARSEN'S MANUFACTURING CO.: WWW.LARSENSMFG.COM.
   3. POTTER-ROEMER: WWW.POTTERROEMER.COM.

1.3 FIRE EXTINGUISHERS

A. FIRE EXTINGUISHERS - GENERAL: COMPLY WITH PRODUCT REQUIREMENTS OF NFPA 10 AND APPLICABLE CODES, WHICHEVER IS MORE STRINGENT.
   1. PROVIDE EXTINGUISHERS LABELED BY UL FOR THE PURPOSE SPECIFIED AND INDICATED.
   2. PROVIDE UNIT TYPES AS INDICATED.

1.4 FIRE EXTINGUISHER CABINETS

A. METAL: FORMED PREFINISHED SHEET STEEL, 0.036 INCH THICK.
B. CABINET CONFIGURATION: SEMI-RECESSED TYPE.
   1. SIZED TO ACCOMMODATE ACCESSORIES.
   2. TRIM: RETURNED TO WALL SURFACE, WITH 2-1/2 INCH PROJECTION.
C. DOOR: 0.036 INCH THICK, REINFORCED FOR FLATNESS AND RIGIDITY; LATCH. HINGE DOORS FOR 180 DEGREE OPENING WITH TWO BUTT HINGE. PROVIDE NYLON CATCH.
D. DOOR GLAZING: GLASS, CLEAR, 1/8 INCH THICK FLOAT. SET IN RESILIENT CHANNEL GASKET GLAZING.
E. CABINET MOUNTING HARDWARE: APPROPRIATE TO CABINET. PRE-DRILL FOR ANCHORS.
F. WELD, FILL, AND GRIND COMPONENTS SMOOTH.
G. FINISH OF CABINET EXTERIOR TRIM AND DOOR: BAKED ENAMEL, COLOR AS SELECTED.
H. FINISH OF CABINET INTERIOR: WHITE ENAMEL.

1.5 INSTALLATION

A. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
B. INSTALL CABINETS PLUMB AND LEVEL IN WALL OPENINGS, FROM FINISHED FLOOR TO HEIGHT AS NEEDED TO MEET ACCESSIBILITY REQUIREMENTS.
C. SECURE RIGIDLY IN PLACE.
D. PLACE EXTINGUISHERS AND ACCESSORIES IN CABINETS.

10 99 00 - MISCELLANEOUS SPECIALTIES

1.1 SUBMITTALS

A. PRODUCT DATA: INCLUDING ALL PERTINENT PERFORMANCE CHARACTERISTICS AND CRITERIA.

1.2 PRODUCTS

A. FIRE CONTROL KEY BOX: PROVIDE RECESSED FIRE DEPARTMENT KEY CONTROL BOX, EQUAL TO MODEL 3200 BY KNOX BOX.
   1. PROVIDE KNOX LOCKS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

11 13 00 - LOADING DOCK EQUIPMENT

1.1 THIS SECTION INCLUDES THE FOLLOWING: DOCK BUMPERS; DOCK LEVELERS; DOCK SEALS

1.2 SUBMITTALS

A. PRODUCT DATA: INCLUDE CONSTRUCTION DETAILS, RATED CAPACITIES, OPERATING CHARACTERISTICS, DIMENSIONS OF INDIVIDUAL COMPONENTS AND PROFILES AND FINISHES.
B. MAINTENANCE DATA

1.2 PRODUCTS

A. DOCK BUMPERS

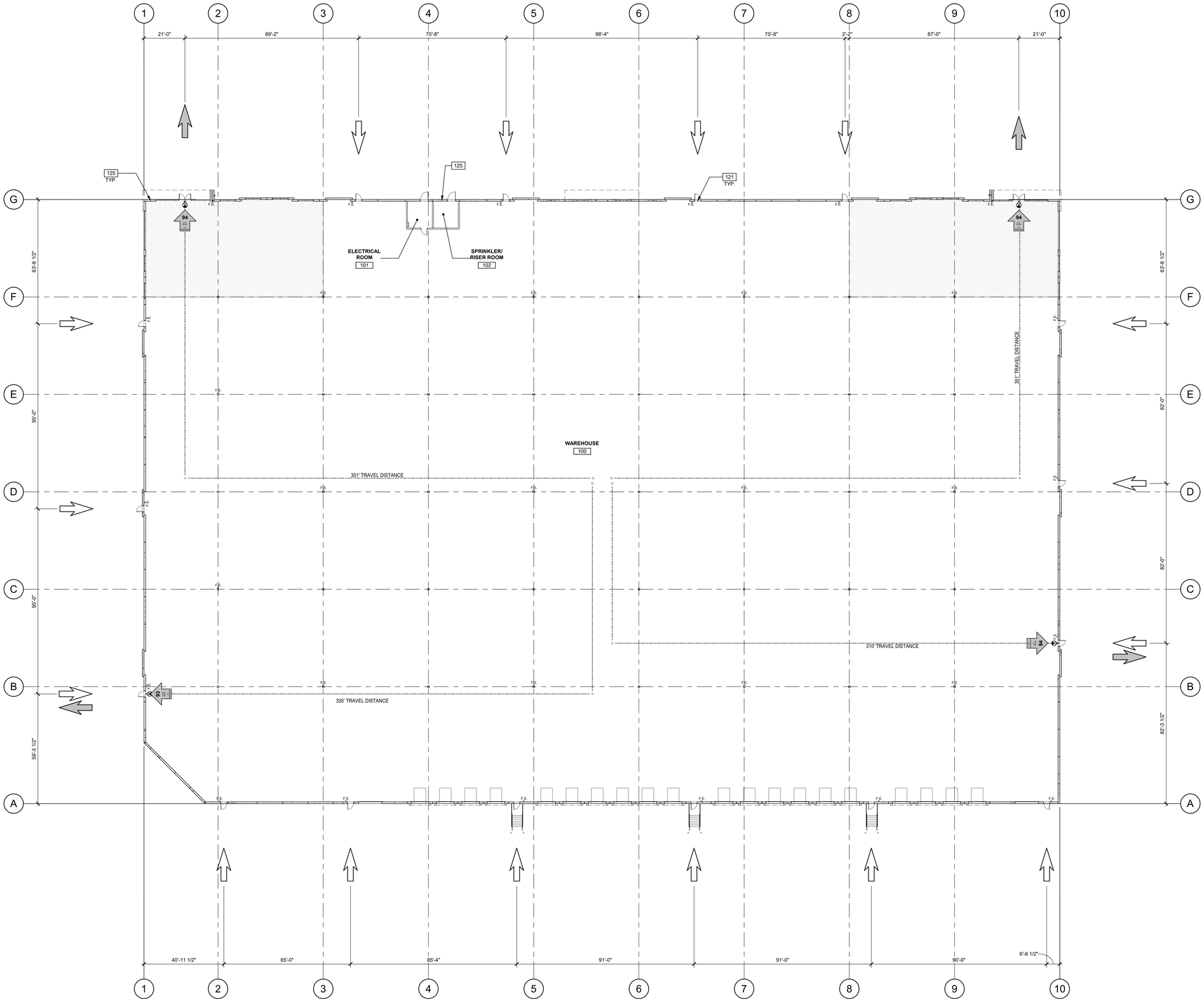
1. MANUFACTURERS
   - DURABLE CORPORATION
   - KELLEY COMPANY
   - PAWLING CORPORATION
   - PIONEER LOADING DOCK EQUIPMENT
   - RITE-HITE CORPORATION
   - SERCO
2. LAMINATED TREAD BUMPERS: FABRICATED FROM MULTIPLE, UNIFORMLY THICK PLIES CUT FROM FABRIC-REINFORCED RUBBER TIRES. LAMINATE PLIES UNDER PRESSURE ON NOT LESS THAN 2 3/4-INCH DIAMETER, STEEL SUPPORTING RODS THAT ARE WELDED AT ONE END TO 1/4-INCH THICK, STRUCTURAL STEEL END ANGLE AND SECURED WITH A NUT AND ANGLE AT THE OTHER END. FABRICATE ANGLES WITH PRE-DRILLED ANCHOR HOLES AND SIZED TO PROVIDE NOT LESS THAN 1 INCH OF TREAD PILES EXTENDING BEYOND THE FACE OF CLOSURE ANGLES

B. RECESSED DOCK LEVELERS

1. RECESSED, HINGED-LIP-TYPE DOCK LEVELERS DESIGNED FOR PERMANENT INSTALLATION IN CONCRETE PITS PREFORMED IN THE EDGE OF LOADING PLATFORM; OF TYPE, FUNCTION, OPERATION, CAPACITY, SIZE AND CONSTRUCTION INDICATED; AND COMPLETE WITH CONTROLS, SAFETY DEVICES, AND ACCESSORIES REQUIRED.
2. MANUFACTURERS
   - BLUE GIANT EQUIPMENT CORPORATION
   - KELLEY COMPANY
   - MCGUIRE W. B. CO.
   - PIONEER LOADING DOCK EQUIPMENT
   - RITE HITE CORPORATION
   - SERCO
3. QUALITY STANDARD: MH-30.1, "SAFETY, PERFORMANCE AND TESTING OF DOCK LEVELING DEVICES"
4. RATED CAPACITY: CAPABLE OF SUPPORTING TOTAL GROSS LOAD OF 35,000 LB AND RATED CAPACITY OR DYNAMIC RATING (REFER TO DRAWINGS FOR LOCATIONS) WITHOUT PERMANENT DEFLECTION OR DISTORTION, AS DETERMINED BY ACTUAL TESTS ACCORDING TO MH-30.1.

C. FOAM-PAD DOCK SEALS

1. DOCK SEALS CONSISTING OF FABRIC-COVERED FOAM PADS DESIGNED TO COMPRESS T



1"=20'
0 10' 20' 40' 100'

OCCUPANCY AND EGRESS PLAN

SCALE: 1" = 20'-0"

GENERAL NOTES

SEE SHEET A0.2 FOR ADDITIONAL GENERAL NOTES

1. SEE SHEETS A0.1 AND/OR A0.2 FOR ADDITIONAL GENERAL NOTES.
2. POSTED SIGNS IN AN ASSEMBLY OCCUPANCY SHALL BE OF AN APPROVED LEGIBLE PERMANENT DESIGN AND SHALL BE MAINTAINED BY THE OWNER OR AUTHORIZED AGENCY.
3. ILLUMINATION SHALL BE PROVIDED BY THE MEANS OF EGRESS IN ACCORDANCE WITH SECTION 1008.2 UNDER EMERGENCY POWER, MEANS OF EGRESS ILLMINATION SHALL COMPLY WITH SECTION 1008.3.
4. PROVIDE BATTERY BACKUP ILLUMINATED EXTERIOR AREA OF ASSISTED RESCUE SIGN AND TACTILE SIGN IN COMPLIANCE WITH ICC A117.1 AT ALL EXIT DOORS WITH ASSOCIATED EXTERIOR AREA FOR ASSISTED RESCUE.
5. PROVIDE ONE FIRE EXTINGUISHER (WITH MINIMUM RATING OF 10A:80B:C FOR EVERY 3,000 SQ. FT.) AND LOCATE SO NO TRAVEL DISTANCE TO A FIRE EXTINGUISHER EXCEEDS 75 FEET. MOUNT TOP OF THE FIRE EXTINGUISHER NOT TO EXCEED 48" AFF.
6. COLUMN MOUNTED FIRE EXTINGUISHER (CLASS A), 10-A-80B:C, NOMINTAL CAPACITY WITH BRACKET.
7. PROVIDE WALL-HUNG FIRE EXTINGUISHERS (UL-RATED 10-A-80B:C, 10LB.) IN THE WAREHOUSE AS REQUIRED BY CODE AND PER FIRE MARSHALL FINAL INSPECTION. 75'-0" MAXIMUM DISTANCE PER 906.3.
8. AREA OF RESCUE ASSISTANCE AT DEDICATED EGRESS DOORS; TYP.
9. PROVIDE KNOX BOX AT FRONT ENTRANCE AND AT FACE ROOM DOOR. LOCATION TO BE VERIFIED WITH A.H.J.

KEYNOTES: -

SEE SHEET A0.2 FOR GENERAL NOTES

ALL REQUIRED EXITS TO RECEIVE WALL-MOUNTED TACTILE EXIT SIGN WITH THE WORD "EXIT" — 14 / A0.3

ALL EXTERIOR WALLS SEPARATING THE EXTERIOR AREA OF ASSISTED RESCUE FROM INTERIOR ARE TO HAVE A MIN. FIRE-RESISTANCE RATING OF 1 HOUR — 14 / A0.3

121 COORDINTAE WITH ELEC. DRAWINGS FOR PLACEMENT OF EXIT SIGNS. PROVIDE WALL-MOUNTED TACTILE SIGN WITH THE WORDS "AREA OF REFUGE" IN FRONT OF EXITS WITH AN AREA OF REFUGE.

125 PROVIDE KNOX BOX AT FRONT ENTRANCE AND AT FACP ROOM DOOR. LOCATION TO BE VERIFIED WITH A.H.J.

LEGEND

- PROPOSED FUTURE OFFICE AREA (N.I.C.)
- REQUIRED EXIT AND FIRE DEPARTMENT ACCESS.
- FIRE DEPARTMENT ACCESS.
- MAXIMUM TRAVEL DISTANCE.
- F.E. — FIRE EXTINGUISHER
- WALL-MOUNTED ILLUMINATED EMERGENCY EXIT SIGN ABOVE DOOR WITH BATTERY POWERED BACK-UP. SHADED QUADRANT INDICATES FACE OF LETTERING.

ADDITIONAL DIRECTIONAL EXIT SIGNS MAY BE REQUIRED PRIOR TO FINAL INSPECTION AND SUBJECT TO BUILDING INSPECTOR.

EGRESS ANALYSIS

FUNCTION SPACE AND OCCUPANCY	(N GROSS AREA (SF)	(F) AREA PER OCC. FACTOR 1004.1	(OL) = N/F OCCUPANT LOAD	NUMBER OF EXITS REQ'D	EXITS AND OTHER DOORS (HORIZONTAL) WIDTH REQ'D 1005.3.2	NUMBER OF 32" CLR. EXITS PROVIDED (PER PLAN)	NUMBER OF 44" CLR. EXITS PROVIDED (PER PLAN)	NUMBER OF 64" CLR. EXITS PROVIDED (PER PLAN)	TOTAL DOOR WIDTH PROVIDED
WAREHOUSE S-1	145,408	500	291	2	291*.15 / 43.65"	2	-	2	192"

MAX. TRAVEL DISTANCE TO EXITS

MAXIMUM TRAVEL DISTANCE TO EXITS (1017.2 SPRINKLERED BUILDING)

S-1/STORAGE (MODERATE-HAZARD WAREHOUSE)..... 400 FEET MAX.

3206.6.1.1 NUMBER OF DOORS REQUIRED NOT LESS THAN ONE ACCESS DOOR SHALL BE PROVIDED IN EACH 100 LINEAR FEET (30 480 MM), OR FRACTION THEREOF, OF THE EXTERIOR WALLS THAT FACE REQUIRED FIRE APPARATUS ACCESS ROADS. THE REQUIRED ACCESS DOORS SHALL BE DISTRIBUTED SUCH THAT THE LINEAL DISTANCE BETWEEN ADJACENT ACCESS DOORS DOES NOT EXCEED 100 FEET (30 480 MM).

1009.7.2 SEPARATION
EXTERIOR WALLS SEPARATING THE EXTERIOR AREA OF ASSISTED RESCUE FROM THE INTERIOR OF THE BUILDING SHALL HAVE A MINIMUM FIRE-RESISTANCE RATING OF 1 HOUR, RATED FOR EXPOSURE TO FIRE FROM THE INSIDE. THE FIRE-RESISTANCE-RATED EXTERIOR WALL CONSTRUCTION SHALL EXTEND HORIZONTALLY NOT LESS THAN 10 FEET (3048 MM) BEYOND THE LANDING ON EITHER SIDE OF THE LANDING OR EQUIVALENT FIRE-RESISTANCE-RATED CONSTRUCTION IS PERMITTED TO EXTEND OUT PERPENDICULAR TO THE EXTERIOR WALL NOT LESS THAN 4 FEET (1220 MM) ON THE SIDE OF THE LANDING. THE FIRE-RESISTANCE-RATED CONSTRUCTION SHALL EXTEND VERTICALLY FROM THE GROUND TO A POINT NOT LESS THAN 10 FEET (3048 MM) ABOVE THE FLOOR LEVEL OF THE AREA FOR ASSISTED RESCUE OR TO THE ROOF LINE, WHICHEVER IS LOWER. OPENINGS WITHIN SUCH FIRE-RESISTANCE-RATED EXTERIOR WALLS SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 716.

WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING INTERIORS BUILDING MEASUREMENT
1315 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184-004069

GRANT A BRANDENBURG
LICENSED ARCHITECT
001-020842
STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

OCCUPANCY AND EGRESS PLAN

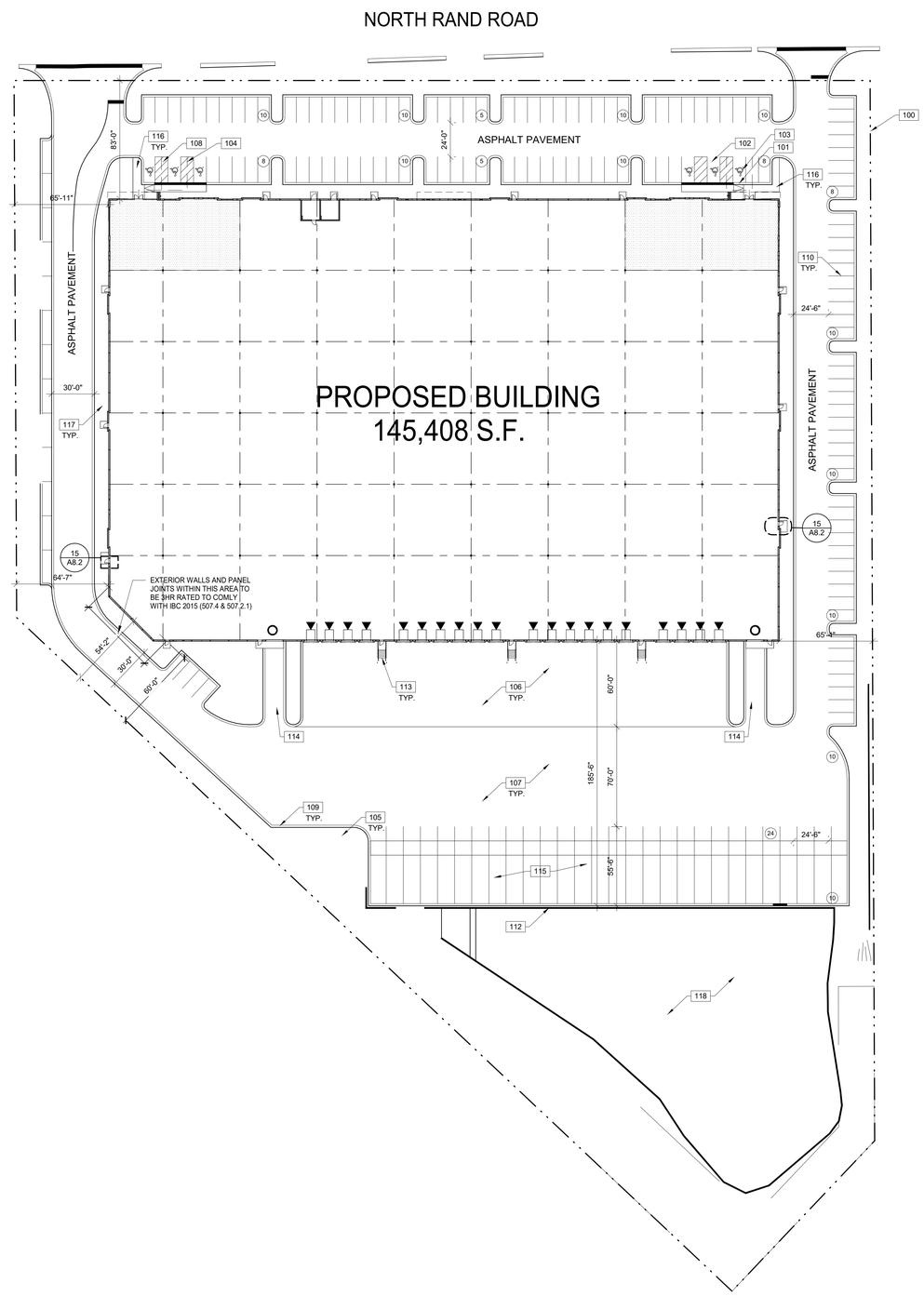
DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A0.5

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

4/19/2022 8:33:3 AM 2022-04-08 PERMIT SET
Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)



1"=40'

0 20' 40' 80' 200'

SITE PLAN (FOR REFERENCE ONLY)

SCALE: 1" = 40'-0"

PROJECT NORTH / TRUE NORTH

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

100. PROPERTY LINE.
101. ACCESSIBLE ENTRY SIGNAGE.
102. ACCESSIBLE PARKING STALL WITH SIGNAGE.
103. VAN ACCESSIBLE PARKING STALL WITH SIGNAGE.
104. ACCESSIBLE PATH OF TRAVEL, 1:20 MAX. SLOPE, 2% MAX. CROSS S
105. LANDSCAPE AND IRRIGATION AREA. REFER TO CIVIL/ LANDSCAPE D
106. CONCRETE PAVEMENT.
107. ASPHALT PAVEMENT.
108. ACCESSIBLE LOADING ZONE.
109. 6" CONCRETE CURB.
110. PAINTED PARKING STRIPING PER CITY STANDARDS.
111. ACCESS RAMP FOR D.I.D. DOOR
112. CONCRETE RETAINING WALL.

LEGEND

- ACCESSIBLE PATH OF TRAVEL, 1:20 MAX. SLOPE, 2% MAX. CROSS SLOPE.
- PROPERTY LINE.
- T — TRANSFORMER WITH CONCRETE PAD. (PROVIDE PROTECTION BOLLARDS PER LOCAL UTILITY OR PUBLIC WORK STANDARDS) (REFER TO ELEC FOR TRANSFORMER LOCATION)
- (1) — PARKING STALL COUNT TOTAL
- DOCK HIGH TRUCK DOOR
- GRADE LEVEL TRUCK DOOR

WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING BRANDING
INTERIORS BUILDING MEASUREMENT
1315 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184-004069

LICENSED ARCHITECT
GRANT A BRANDENBURG
001-020842
STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

SITE PLAN (FOR REFERENCE ONLY)

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

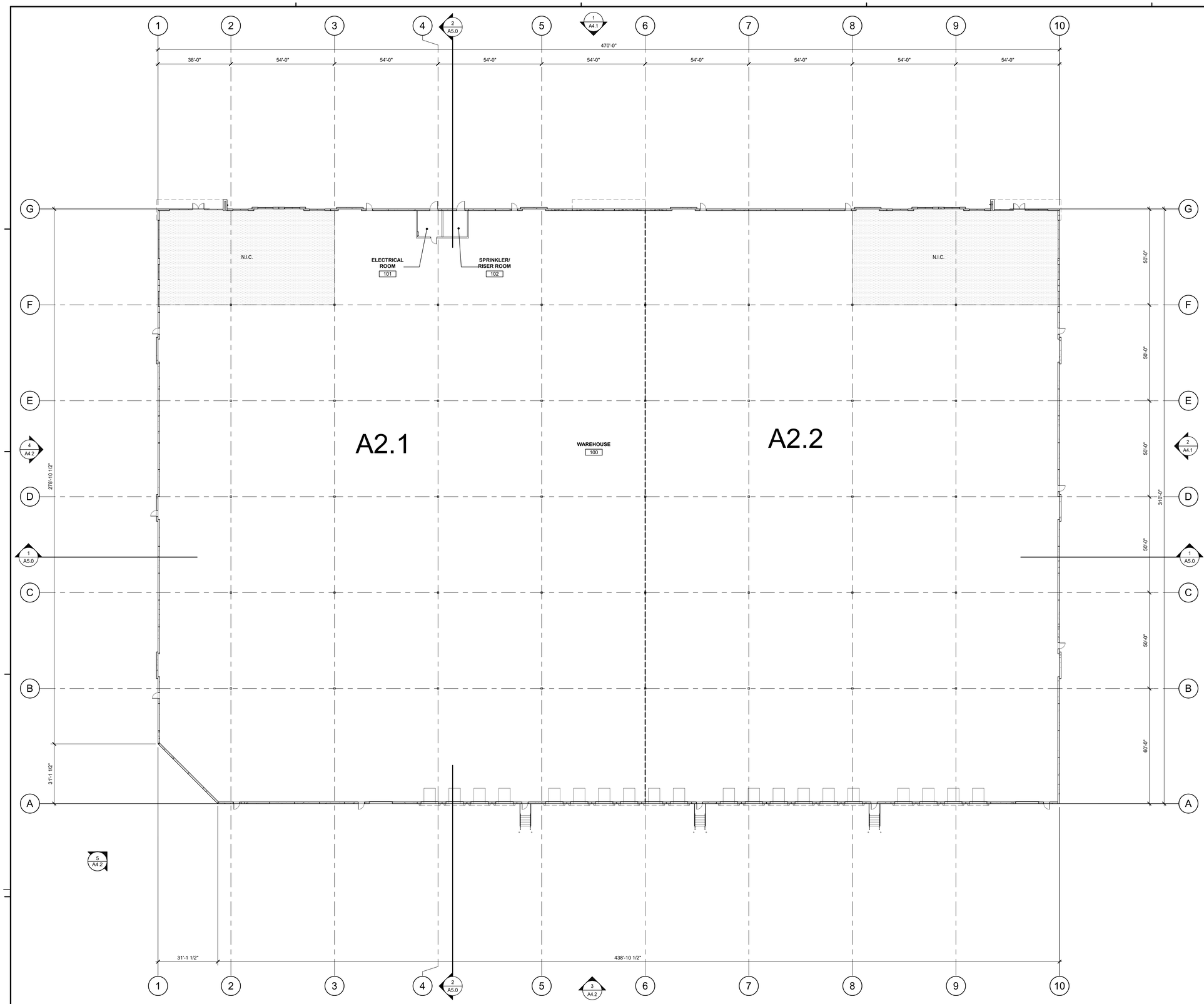
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A1.1

2022-04-08 PERMIT SET
4/19/2022 8:30:35 AM

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK.

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)



LEGEND

PROPOSED FUTURE OFFICE AREA (N.I.C.)

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

1"=20'
0 10' 20' 40' 100'

OVERALL FLOOR PLAN

SCALE: 1" = 20'-0"

WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING BRANDING
INTERIORS BUILDING MEASUREMENT
1315 22nd St #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184-004069

GRANT A BRANDENBURG 001-020842 LICENSED ARCHITECT STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

OVERALL FLOOR PLAN

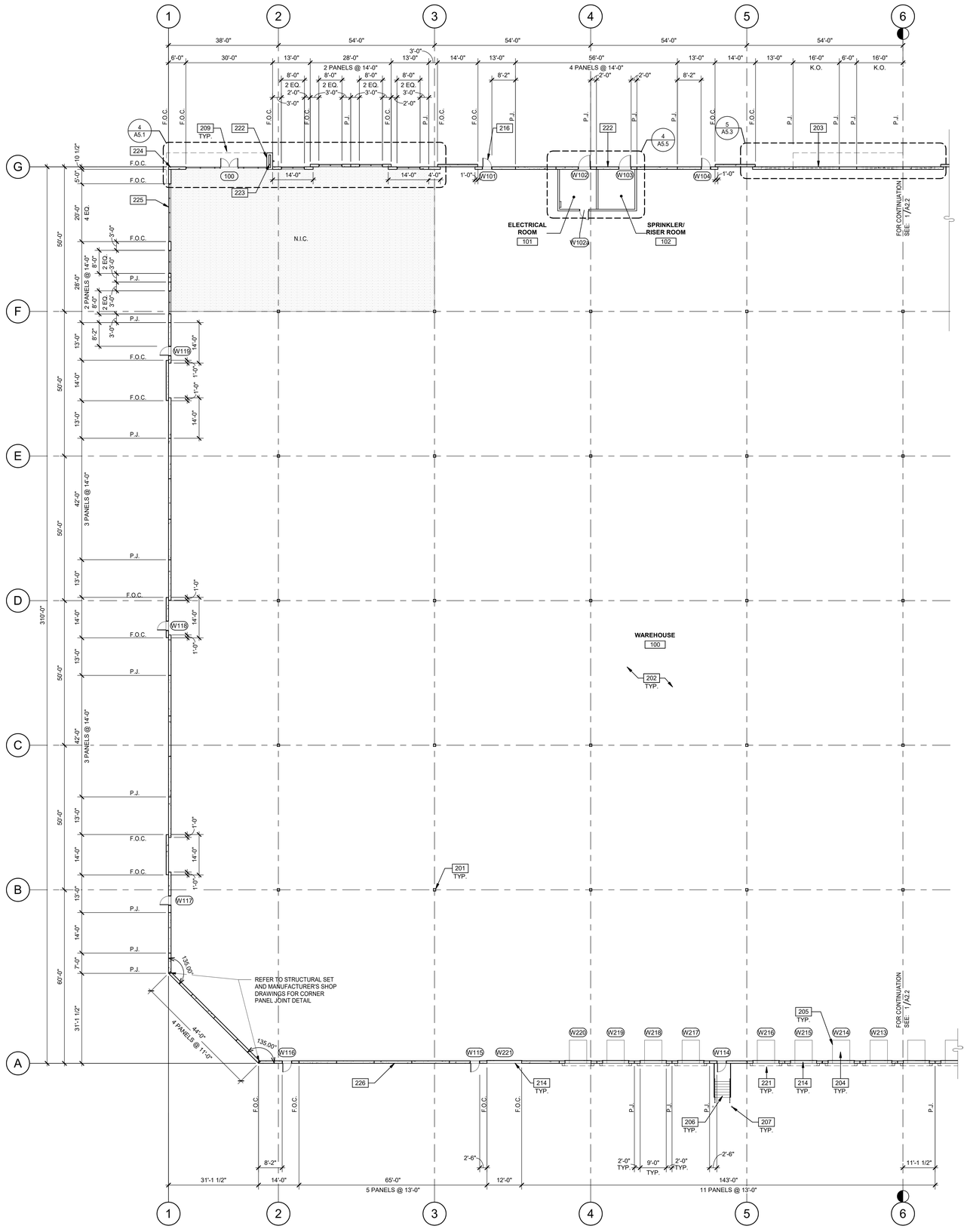
DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A2.0

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)
4/19/2022 8:50:38 AM 2022-04-08 PERMIT SET



1/16"=1'-0"

0 8' 16' 32' 64'

PARTIAL FLOOR PLAN

SCALE: 1/16" = 1'-0"

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

201 STRUCTURAL STEEL COLUMN. REFER TO STUCTURAL.

202 CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.

203 KNOCK-OUT PANEL FOR FUTURE WINDOWS OR DOORS.

204 6'X 8' MECHANICAL DOCK LEVELER. 35,000 LBS DYNAMIC CAPACITY, MANUALLY OPERATED (SPRING ASSISTED), REFER TO A0.2 ENVELOPE ASSEMBLY NOTES.

205 DOCK PIT, DOCK SEAL, LEVELER AND DOCK BUMPERS, TYP. U.N.O. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.

206 EXTERIOR STEEL STAIR, ALL COMPONENTS GALVANIZED.

207 STEEL BOLLARD, CONCRETE-FILLED PAINTED SAFETY YELLOW.

209 OUTLINE OF CANOPY ABOVE.

214 HIGH LIFT OVERHEAD SECTIONAL DOOR. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.

216 SERVICE/MAN DOORS, COLOR: TO MATCH ADJACENT CONCRETE PANEL COLOR.

221 DOCK SEAL

222 PROVIDE KNOX BOX AT FRONT ENTRANCE AND AT THE FACP ROOM DOOR. LOCATION TO BE VERIFIED WITH A.H.J.

223 ENTRY PORTAL - PRE-FINISH ACM PANEL RAINSCREEN SYSTEM. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.

224 WRAP REVEALS AT EXPOSED PANEL ENDS - TYP.

225 ALUMINUM STOREFRONT SYSTEM WITH 1" INSULATED GLASS. REFER TO A0.2, ENVELOPE. ASSEMBLY NOTES FOR GLAZOMG SPECIFICATION.

226 PRECAST CONCRETE WALLS, PAINTED.

LEGEND

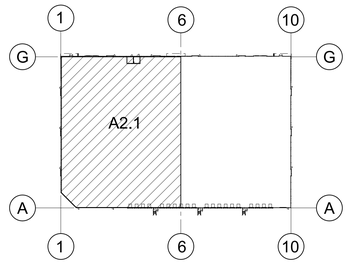
PROPOSED FUTURE OFFICE AREA (N.I.C.)

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

KEY PLAN



N

NOT TO SCALE

WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING ENVIRONMENTAL
INTERIORS BUILDING MEASUREMENT
1315 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184-004069

GRANT A BRANDENBURG
LICENSED ARCHITECT
001-020842
STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

PARTIAL FLOOR PLAN

DATE	REMARKS
2022-04-08	PERMIT SET

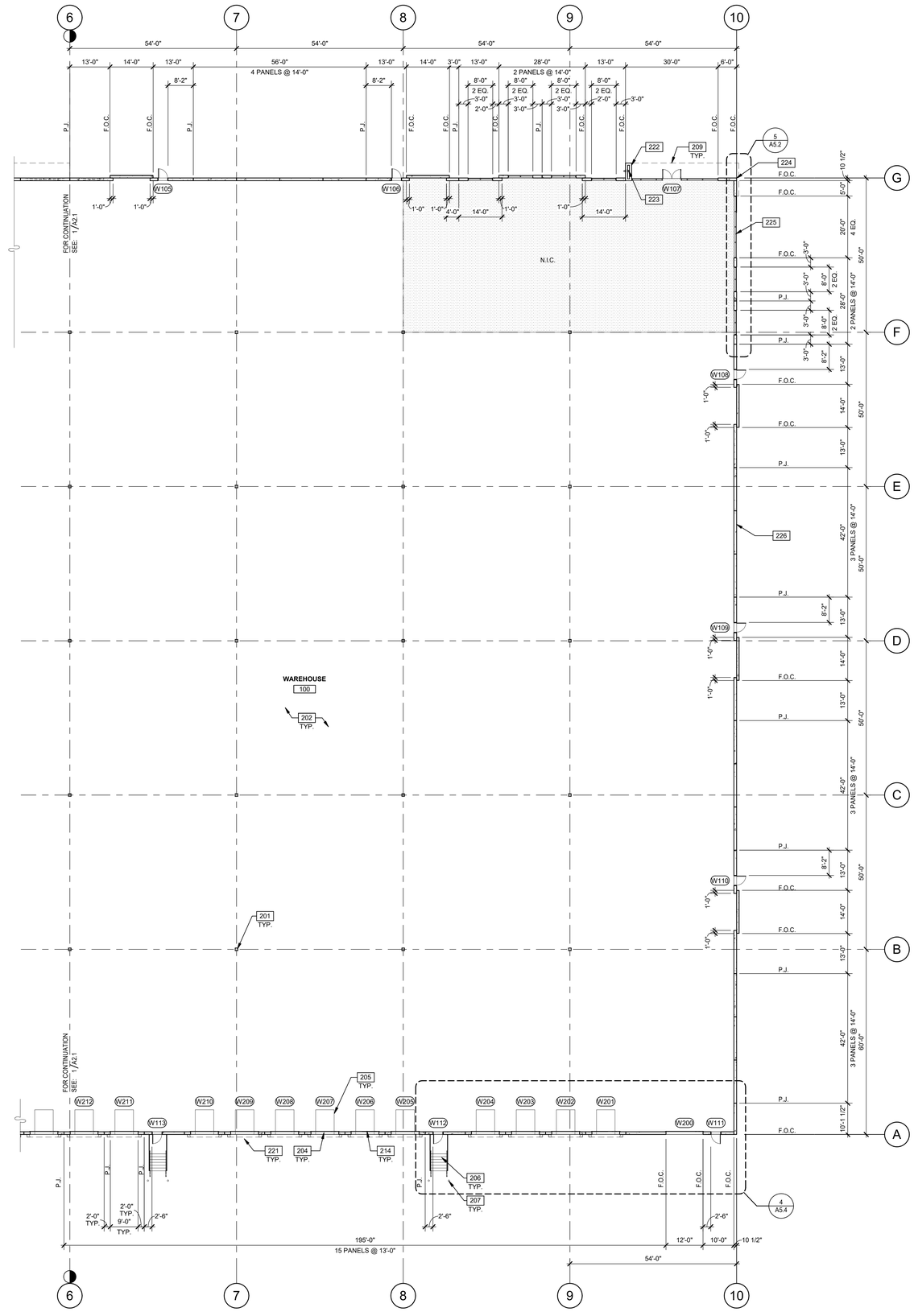
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A2.1

4/19/2022 8:50:41 AM 2022-04-08 PERMIT SET

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)



PARTIAL FLOOR PLAN

SCALE: 1/16" = 1'-0"

1/16"=1'-0"
0 8' 16' 32' 64'

N

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

201 STRUCTURAL STEEL COLUMN. REFER TO STUCTURAL.
202 CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.
204 6'X 8' MECHANICAL DOCK LEVELER. 35,000 LBS DYNAMIC CAPACITY, MANUALLY OPERATED (SPRING ASSISTED), REFER TO A0.2 ENVELOPE ASSEMBLY NOTES.
205 DOCK PIT, DOCK SEAL, LEVELER AND DOCK BUMPERS, TYP. U.N.O. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
206 EXTERIOR STEEL STAIR, ALL COMPONENTS GALVANIZED.
207 STEEL BOLLARD, CONCRETE-FILLED PAINTED SAFETY YELLOW.
209 OUTLINE OF CANOPY ABOVE.
214 HIGH LIFT OVERHEAD SECTIONAL DOOR, REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
221 DOCK SEAL
222 PROVIDE KNOX BOX AT FRONT ENTRANCE AND AT THE FACP ROOM DOOR. LOCATION TO BE VERIFIED WITH A.H.J.
223 ENTRY PORTAL - PRE-FINISH ACM PANEL RAINSCREEN SYSTEM. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
224 WRAP REVEALS AT EXPOSED PANEL ENDS - TYP.
225 ALUMINUM STOREFRONT SYSTEM WITH 1" INSULATED GLASS. REFER TO A0.2, ENVELOPE. ASSEMBLY NOTES FOR GLAZOMG SPECIFICATION.
226 PRECAST CONCRETE WALLS, PAINTED.

LEGEND

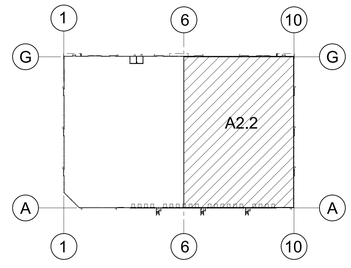
PROPOSED FUTURE OFFICE AREA (N.I.C.)

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

KEY PLAN



NOT TO SCALE

WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING BRANDING
INTERIORS BUILDING MEASUREMENT
1315 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184-004069

LICENSED ARCHITECT
GRANT A BRANDENBURG
001-020842
STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

PARTIAL FLOOR PLAN

DATE	REMARKS
2022-04-08	PERMIT SET

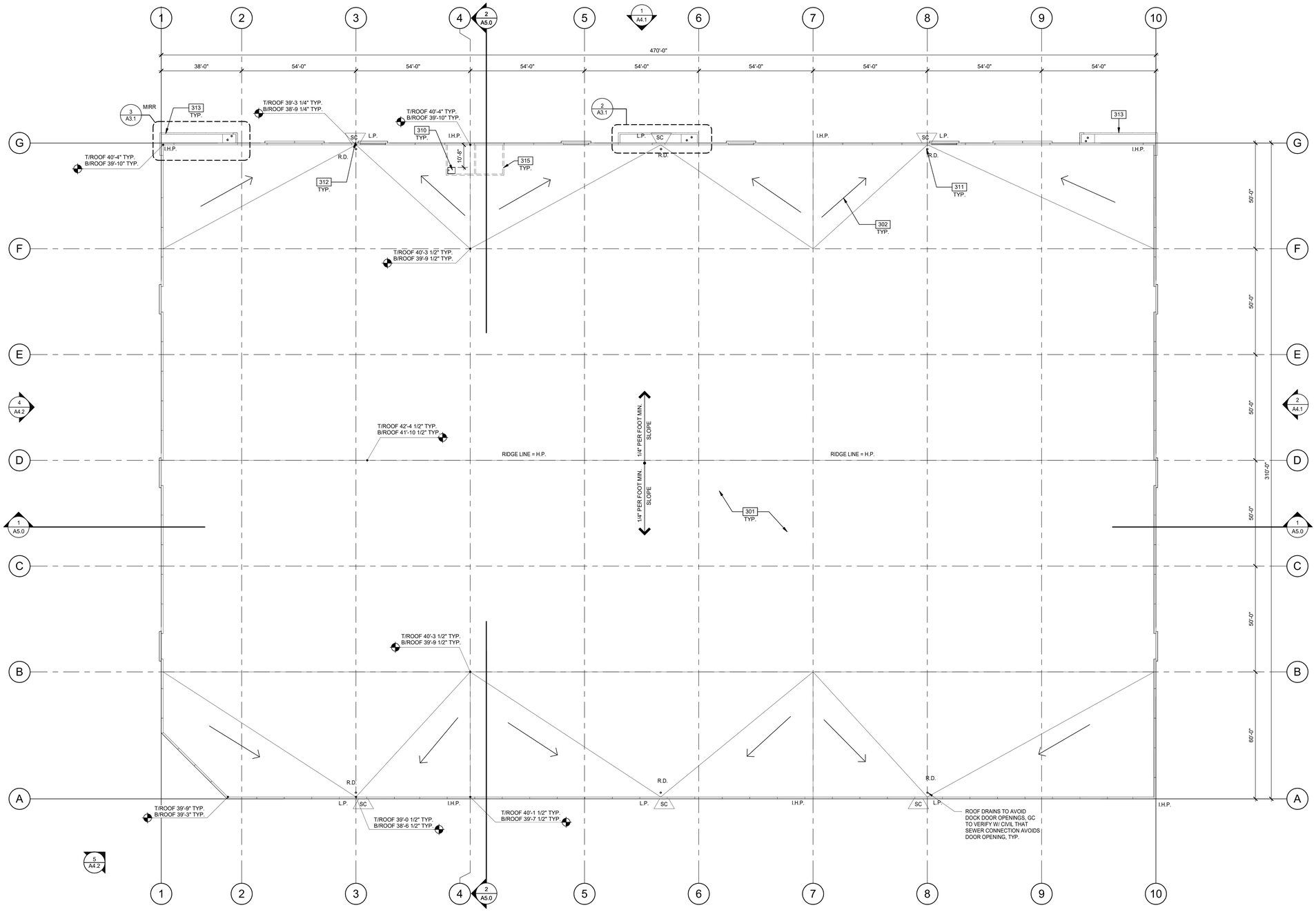
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A2.2

4/19/2022 8:50:43 AM 2022-04-08 PERMIT SET

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)



ROOF PLAN

SCALE: 1" = 20'-0"

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

301	ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
302	FLOW LINE TO DRAIN.
310	2'-6" x 3'-0" ROOF HATCH. VERIFY ROOF JOIST LOCATIONS WITH STRUCTURAL DRAWINGS. HATCH TO BE MINIMUM OF 10' FROM ROOF EDGE.
311	PRIMARY DRAIN TIED TO STORM DRAIN WITH OVERFLOW SCUPPERS
312	PRIMARY AND SECONDARY INTERNAL ROOF DRAIN AND OVERFLOW SCUPPERS TO BE SIZED PER APPLICABLE PLUMBING CODE.
313	PRE-FINISHED METAL CANOPY.
315	LINE OF WALL BELOW.
401	PRECAST CONCRETE WALL, PAINTED.
402	PRE-FINISHED ALUMINUM COMPOSITE METAL PANEL OVER METAL STUD FRAMING REFER A0.2, ENVELOPE ASSEMBLY NOTES. COLOR TO MATCH SW 6256 EVENING GRAY.

ABBREVIATIONS

H.P.	=	TOP OF ROOFING - HIGH POINT
I.H.P.	=	TOP OF ROOFING - INTERMEDIATE HIGH POINT
L.P.	=	TOP OF ROOFING - LOW POINT
R.D.	=	ROOF DRAIN
SC	=	SCUPPER

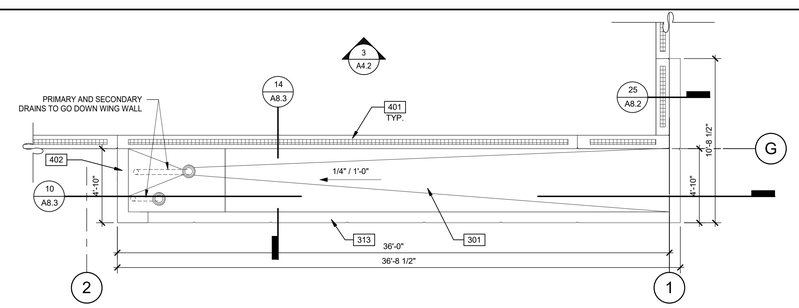
*ALL SPOT ELEVATIONS ARE TO TOP OF ROOF MEMBRANE, REFER TO THE STRUCTURAL PLAN FOR B.O.D. (BOTTOM OF DECK) ELEVATIONS.
ASSUMED ROOF THICKNESS = +/-5.5" (1 1/2" METAL DECK + 4" RIGID INSULATION (R-25))

1. REFER TO DETAILS ON SHEET A8.3 FOR TYPICAL ROOF PENETRATION FLASHING DETAILS
2. REFER TO DETAILS ON SHEET A8.3 ROOF, MECHANICAL EQUIPMENT CURB AND CRICKET DETAILS.

PER PALATINE CODE OF ORDINANCES SEC. 6-42.2 Screening:

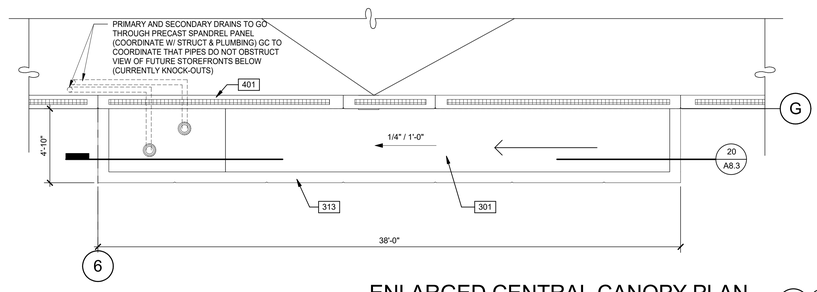
ROOF-TOP EQUIPMENT SCREENING TO BE PROVIDED FOR VISIBLE ROOF-TOP EQUIPMENT PENDING SUBMISSION OF MEP EQUIPMENT LOCATION

NEW CONSTRUCTION. ALL MECHANICAL EQUIPMENT AND OTHER SIMILAR DEVICES LOCATED ON ANY ROOF SHALL BE VISUALLY AND ACOUSTICALLY SCREENED ON ALL SIDES. DESIGN AND DETAIL OF SUCH SCREENING ON ALL ELEVATIONS SHALL BE COORDINATED WITH REGARD TO COLOR, TYPES OF MATERIALS, NUMBER OF MATERIALS, ARCHITECTURAL FORM, AND DETAILING TO ACHIEVE HARMONY AND CONTINUITY OF DESIGN WITH THE MAJOR PORTIONS OF THE BUILDING.



ENLARGED CANOPY PLAN, MIR.

SCALE: 1/4" = 1'-0"



ENLARGED CENTRAL CANOPY PLAN

SCALE: 1/4" = 1'-0"

WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING INTERIORS BUILDING MEASUREMENT
1315 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184-004089

GRANT A BRANDENBURG 001-020842 REGISTERED ARCHITECT STATE OF ILLINOIS

EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

ROOF PLAN

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

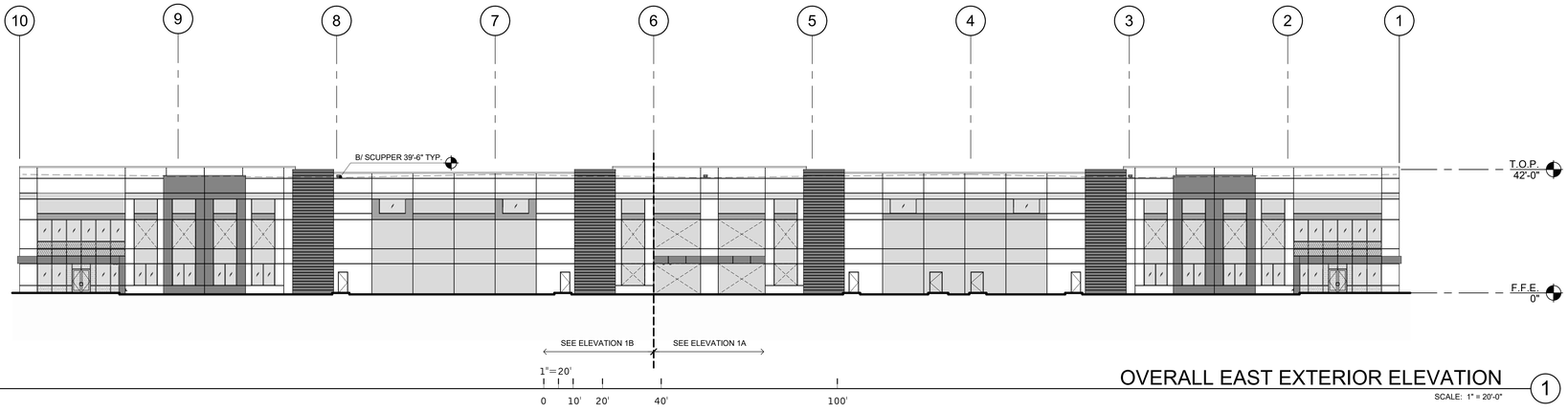
SHEET
A3.1

4/19/2022 8:50:47 AM 2022-04-08 PERMIT SET

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

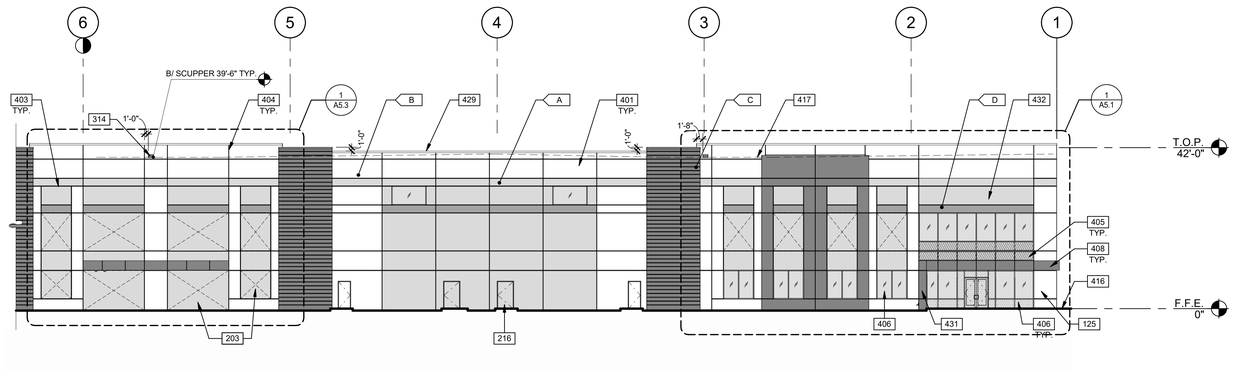
Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)

CAUTION: IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PR



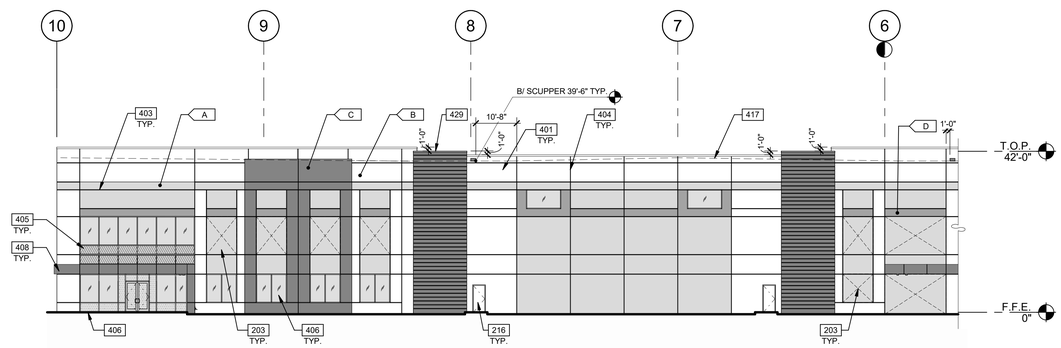
OVERALL EAST EXTERIOR ELEVATION 1

SCALE: 1" = 20'-0"



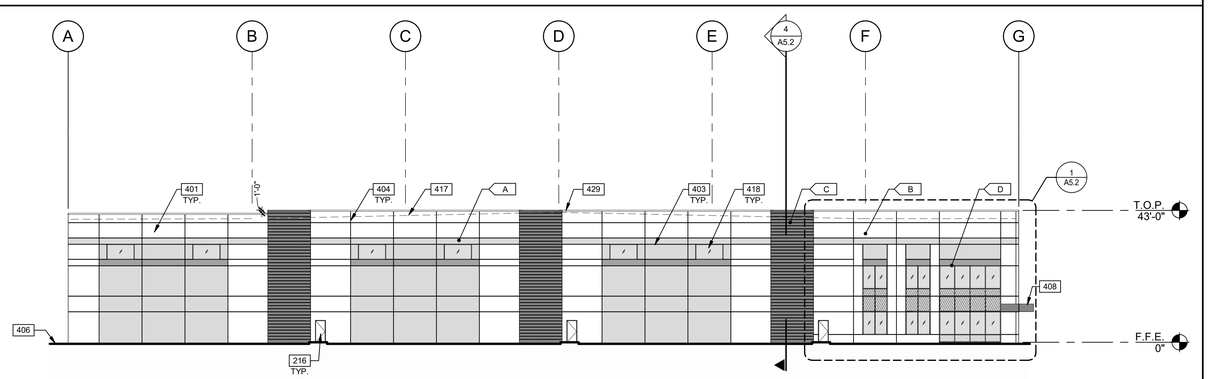
PARTIAL EAST EXTERIOR ELEVATION 1A

SCALE: 1/16" = 1'-0"



PARTIAL EAST EXTERIOR ELEVATION 1B

SCALE: 1/16" = 1'-0"



SOUTH EXTERIOR ELEVATION 2

SCALE: 1" = 20'-0"

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

125	PROVIDE KNOX BOX AT FRONT ENTRANCE AND AT FACP ROOM DOOR. LOCATION TO BE VERIFIED WITH A.H.J.
203	KNOCK-OUT PANEL FOR FUTURE WINDOWS OR DOORS.
216	SERVICE/MAN DOORS, COLOR: TO MATCH ADJACENT CONCRETE PANEL COLOR.
314	OVERFLOW SCUPPER TO BE SIZED PER APPLICABLE PLUMBING CODE. REFER TO PLUMBING DRAWINGS.
401	PRECAST CONCRETE WALL, PAINTED.
403	2" REVEAL.
404	CONCRETE WALL JOINT.
405	ALUMINUM STOREFRONT SYSTEM - SPANDREL PANEL. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
406	ALUMINUM WINDOW SYSTEM WITH 1" INSULATED GLASS REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
408	METAL CANOPY, PAINTED REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
416	FINISH GRADE VARIES, REFER TO CIVIL.
417	LINE OF ROOF BEYOND.
418	CLERESTORY WINDOW 1" INSULATED GLAZING. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
429	CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.
431	PROVIDE INSULATION IN THE ENTRY PORTAL - PRE-FINISH ACM PANEL RAINSCREEN SYSTEM WALL FRAMING AND AROUND THE CANOPY STORM SEWER DRAIN/ VERTICAL/ HORIZONTAL LEADER.
432	CONCRETE SPANDREL PANEL.

LEGEND

GLASS:

VISION GLASS

SPANDREL GLASS

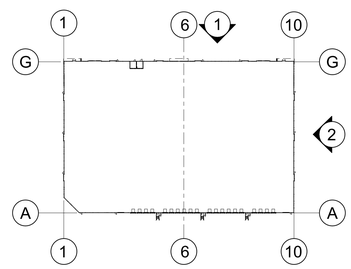
TEMPERED GLASS

COLORS:

PROVIDE 6'-0" WIDE PAINT COLOR MOCK-UP FULL HEIGHT OF BUILDING FOR OWNER/ARCHITECT REVIEW. GC TO PROVIDE ARCHITECT DRAW DOWNS OF EACH PAINT COLOR.

- A — BASE COLOR: SHERWIN-WILLIAMS "SW 7662 - EVENING SHADOW"
- B — SHERWIN-WILLIAMS "7656 - PHINESTONE"
- C — SHERWIN-WILLIAMS " 6256 - EVENING GRAY"
- D — SHERWIN-WILLIAMS "6794 - FLYWAY"

KEY PLAN



WARE MALCOMB
ARCHITECTURE
PLANNING
INTERIORS
CIVIL ENGINEERING
BRANDING
BUILDING MEASUREMENT
1315 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184.004069

THE MISSNER GROUP

MISSNER GROUP - PALATINE

2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

EXTERIOR ELEVATIONS

DATE	REMARKS
2022-04-08	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

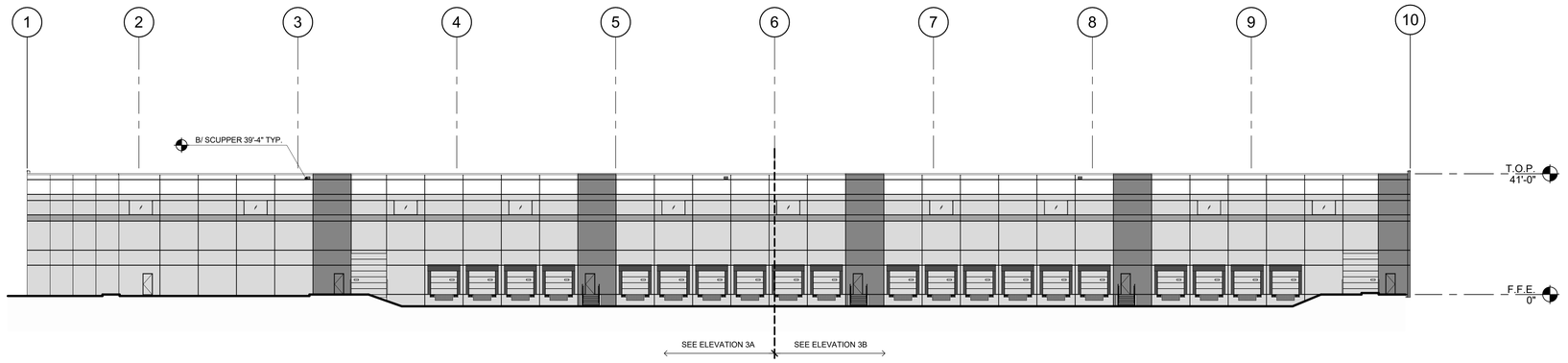
SHEET

A4.1

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)

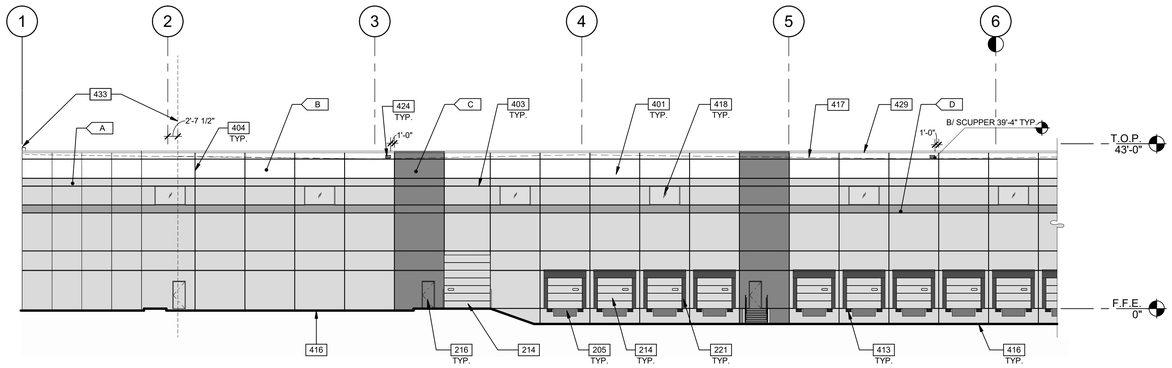
4/19/2022 8:50:51 AM 2022-04-08 PERMIT SET



1"=20'
0 10' 20' 40' 100'

OVERALL WEST EXTERIOR ELEVATION 3

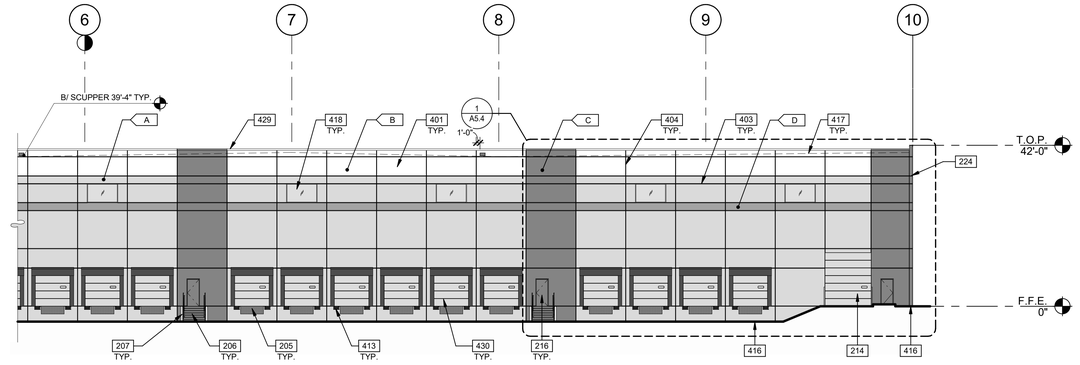
SCALE: 1" = 20'-0"



1/16"=1'-0"
0 8' 16' 32' 64'

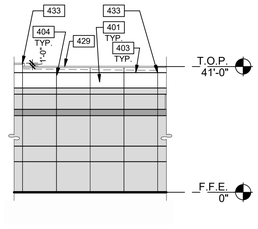
PARTIAL WEST EXTERIOR ELEVATION 3A

SCALE: 1/16" = 1'-0"



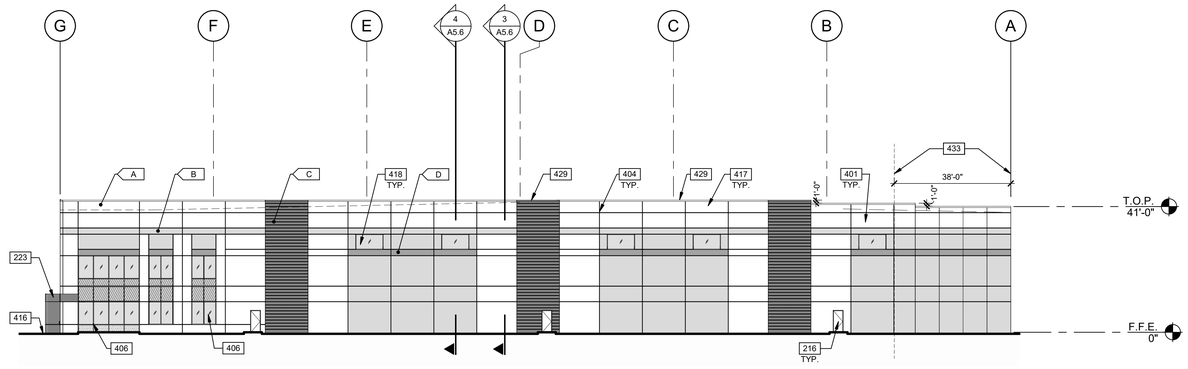
PARTIAL WEST EXTERIOR ELEVATION 3B

SCALE: 1/16" = 1'-0"



SOUTHWEST EXTERIOR ELEVATION 5

SCALE: 1" = 20'-0"



NORTH EXTERIOR ELEVATION 4

SCALE: 1" = 20'-0"

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

205	DOCK PIT, DOCK SEAL, LEVELER AND DOCK BUMPERS, TYP. U.N.O. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
206	EXTERIOR STEEL STAIR, ALL COMPONENTS GALVANIZED.
207	STEEL BOLLARD, CONCRETE-FILLED PAINTED SAFETY YELLOW.
214	HIGH LIFT OVERHEAD SECTIONAL DOOR, REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
216	SERVICE/MAN DOORS, COLOR: TO MATCH ADJACENT CONCRETE PANEL COLOR.
221	DOCK SEAL
223	ENTRY PORTAL - PRE-FINISH ACM PANEL RAINSCREEN SYSTEM. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
224	WRAP REVEALS AT EXPOSED PANEL ENDS - TYP.
401	PRECAST CONCRETE WALL, PAINTED.
403	2" REVEAL.
404	CONCRETE WALL JOINT.
406	ALUMINUM WINDOW SYSTEM WITH 1" INSULATED GLASS REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
413	DOCK BUMPER.
416	FINISH GRADE VARIES, REFER TO CIVIL.
417	LINE OF ROOF BEYOND.
418	CLERESTORY WINDOW 1" INSULATED GLAZING. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
424	OVERFLOW SCUPPER OPENING TO BE SIZED PER APPLICABLE PLUMBING CODE.REFER TO PUMBING DRAWINGS.
429	CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.
430	OVERHEAD DOOR
433	EXTERIOR WALLS AND PANEL JOINTS WITHIN THIS AREA TO BE 3HR RATED TO COMPLY WITH IBC 2015 (507.4 & 507.2.1)

LEGEND

GLASS:

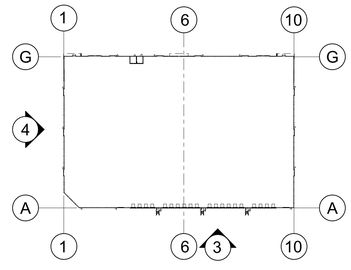
- VISION GLASS
- SPANDREL GLASS
- TEMPERED GLASS

COLORS:

PROVIDE 6'-0" WIDE PAINT COLOR MOCK-UP FULL HEIGHT OF BUILDING FOR OWNER/ARCHITECT REVIEW. GC TO PROVIDE ARCHITECT DRAW DOWNS OF EACH PAINT COLOR.

- A — BASE COLOR: SHERWIN-WILLIAMS "SW 7662 - EVENING SHADOW"
- B — SHERWIN-WILLIAMS "7656 - PHINESTONE"
- C — SHERWIN-WILLIAMS " 6256 - EVENING GRAY"
- D — SHERWIN-WILLIAMS "6794 - FLYWAY"

KEY PLAN



N
NOT TO SCALE

WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING INTERIORS BUILDING MEASUREMENT
1315 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184-004069

GRANT A BRANDENBURG
001-020842
LICENSED ARCHITECT
STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

EXTERIOR ELEVATIONS

DATE	REMARKS
2022-04-08	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

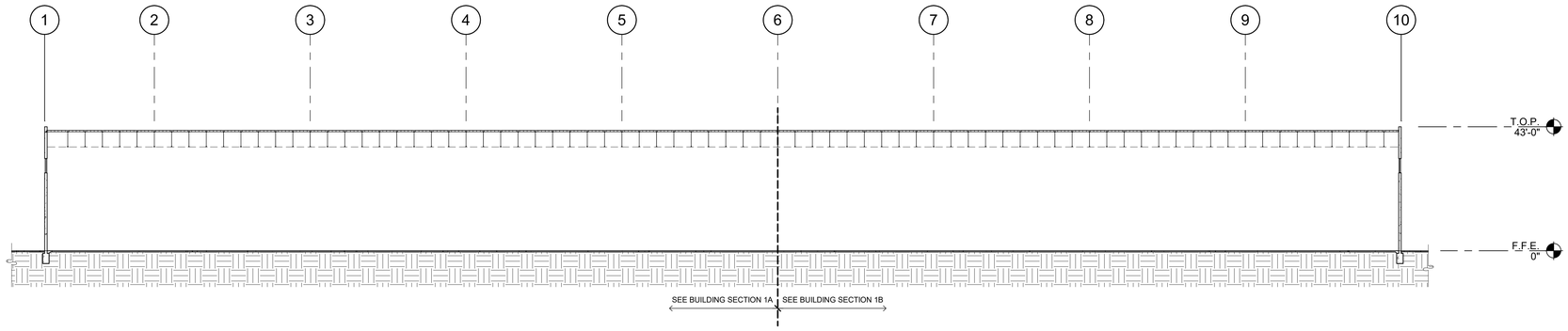
SHEET
A4.2

4/19/2022 8:50:58 AM 2022-04-08 PERMIT SET

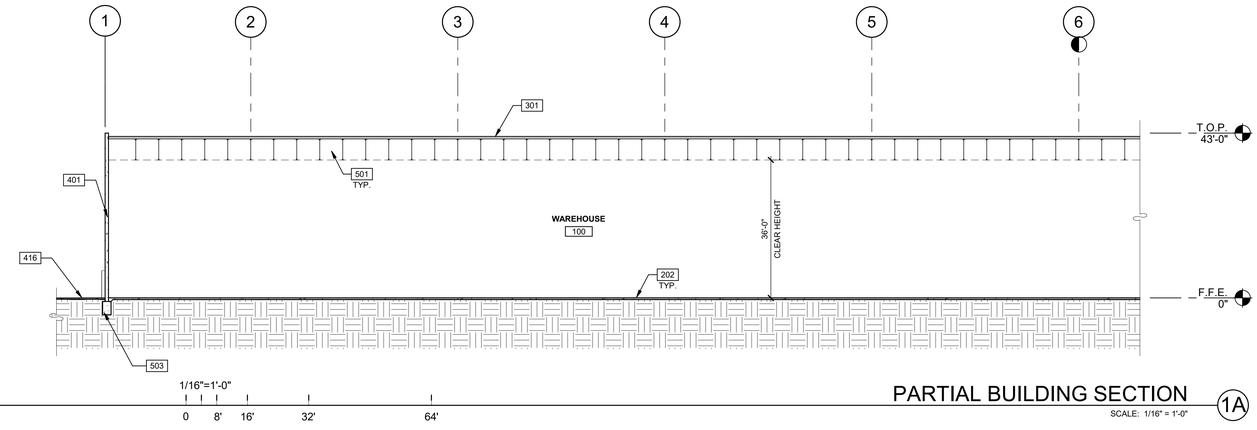
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)

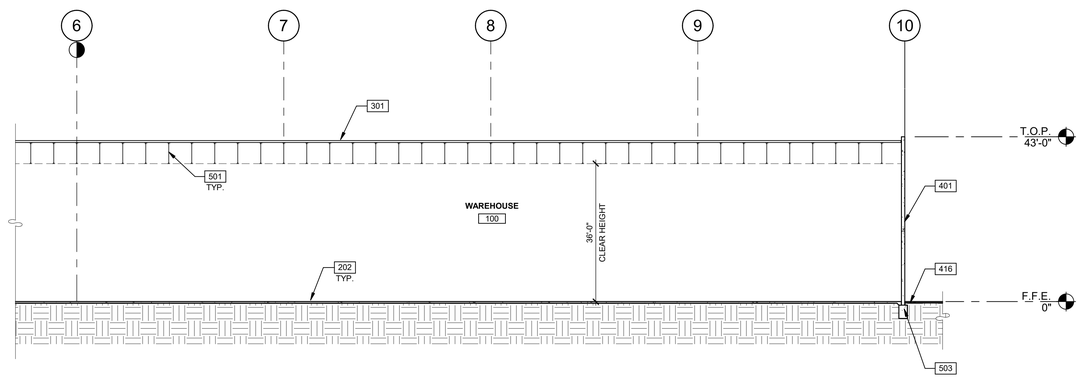
CAUTION: IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PR 7.C.1.A.f



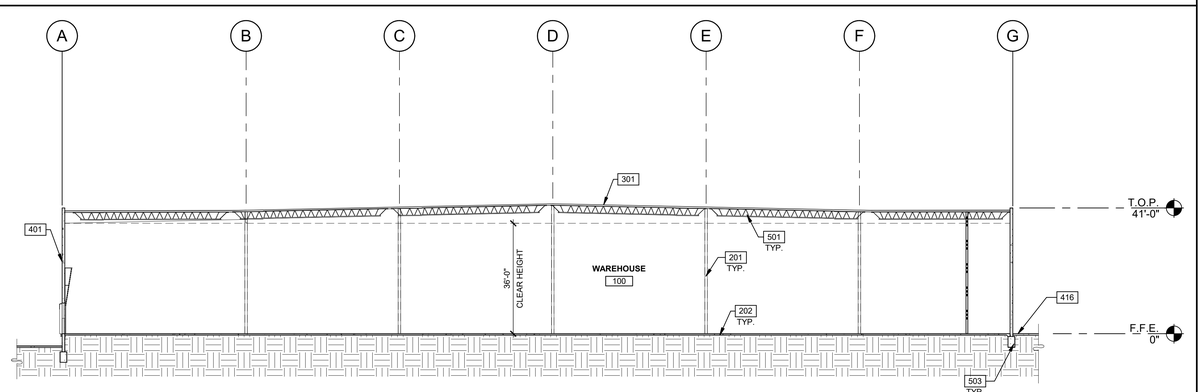
OVERALL BUILDING SECTION 1
SCALE: 1" = 20'-0"



PARTIAL BUILDING SECTION 1A
SCALE: 1/16" = 1'-0"



PARTIAL BUILDING SECTION 1B
SCALE: 1/16" = 1'-0"



BUILDING SECTION 2
SCALE: 1" = 20'-0"

KEYNOTES:

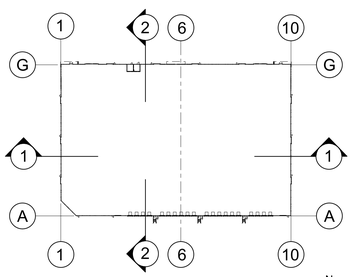
SEE SHEET A0.2 FOR GENERAL NOTES

201	STRUCTURAL STEEL COLUMN. REFER TO STUCTURAL.
202	CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.
301	ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
401	PRECAST CONCRETE WALL, PAINTED.
416	FINISH GRADE VARIES, REFER TO CIVIL.
501	STRUCTURAL STEEL JOIST, REFER TO STRUCTURAL.
503	CONCRETE FOOTING, REFER TO STRUCTURAL.

WALL LEGEND

- CONCRETE WALL
- COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

KEY PLAN



WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING BRANDING
INTERIORS BUILDING MEASUREMENT
1315 22nd St #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184-004069

GRANT A BRANDENBURG 001-020842 LICENSED ARCHITECT STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

BUILDING SECTIONS

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

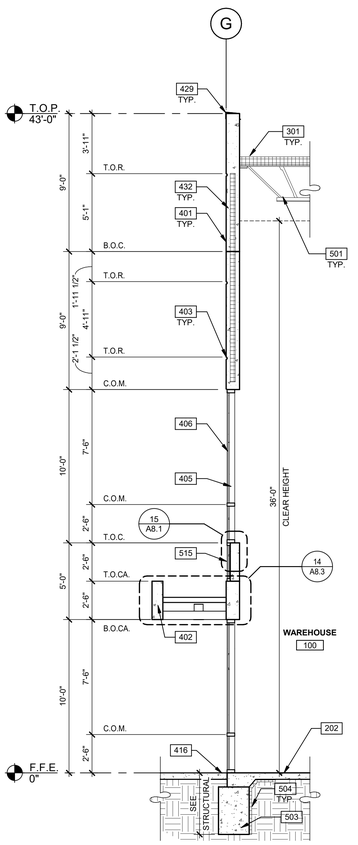
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A5.0

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

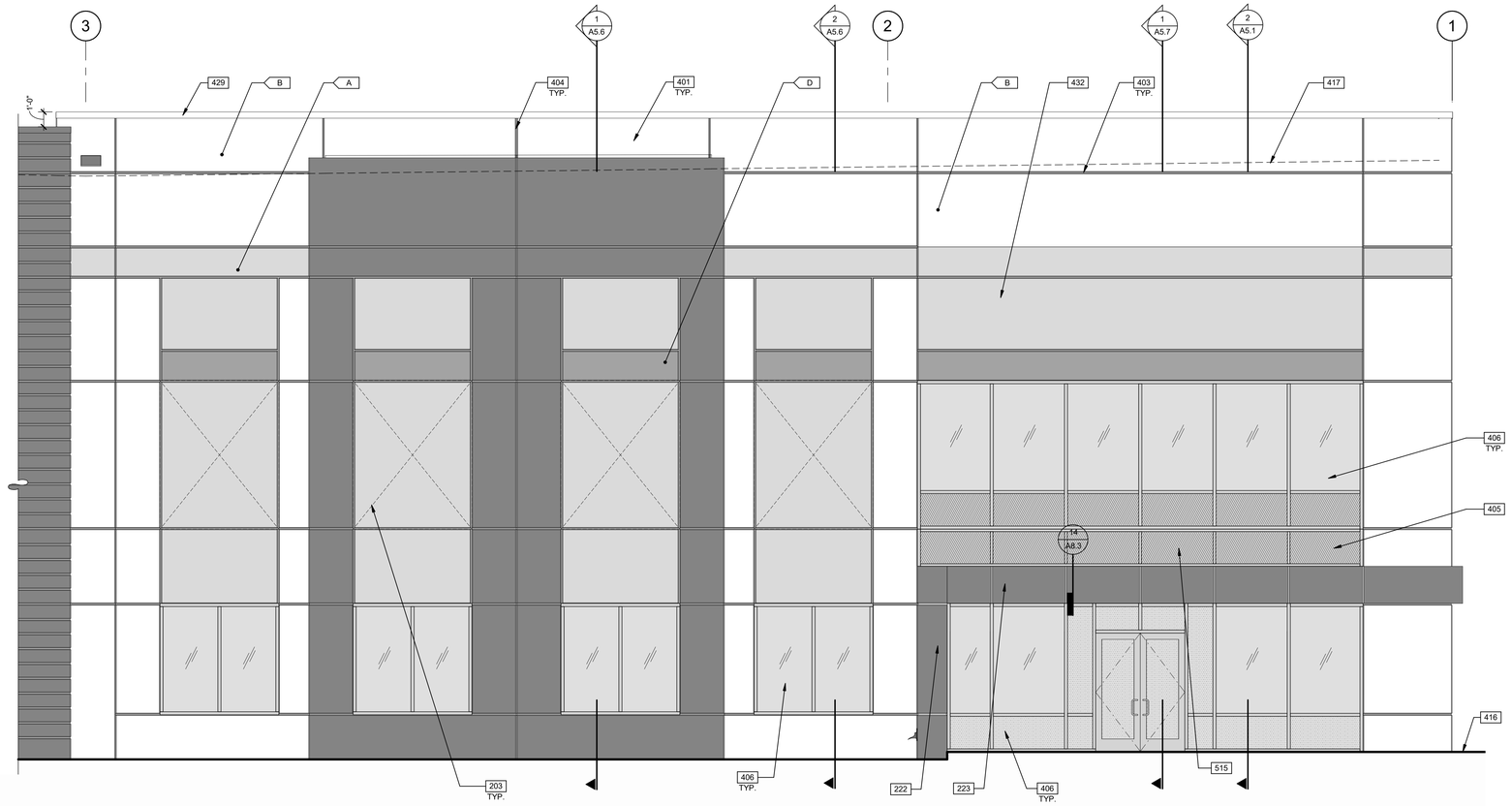
Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)

4/19/2022 8:51:00 AM 2022-04-08 PERMIT SET



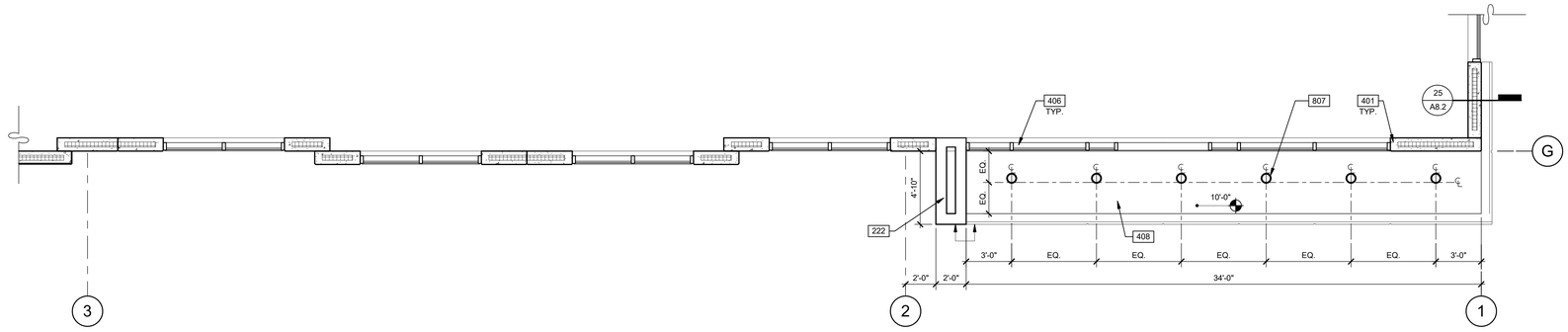
WALL SECTION 2

SCALE: 1/4" = 1'-0"



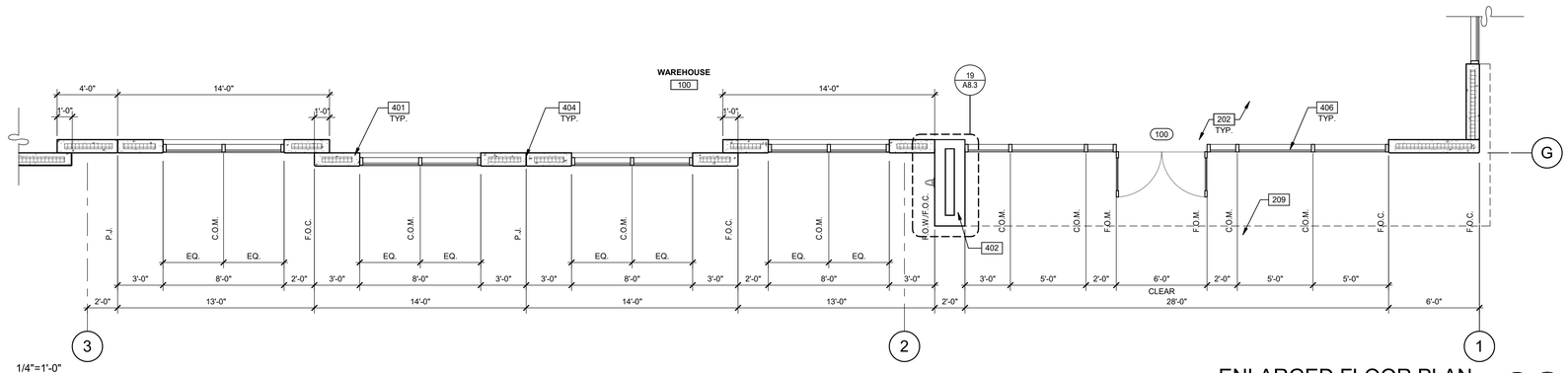
ENLARGED EXTERIOR ELEVATION 1

SCALE: 1/4" = 1'-0"



ENLARGED ENTRY SOFFIT PLAN 3

SCALE: 1/4" = 1'-0"



ENLARGED FLOOR PLAN 4

SCALE: 1/4" = 1'-0"

1/4"=1'-0"
0 2' 4' 8' 16'

N

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

202 CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.
203 KNOCK-OUT PANEL FOR FUTURE WINDOWS OR DOORS.
209 OUTLINE OF CANOPY ABOVE.
222 PROVIDE KNOX BOX AT FRONT ENTRANCE AND AT THE FACP ROOM DOOR. LOCATION TO BE VERIFIED WITH A.H.J.
223 ENTRY PORTAL - PRE-FINISH ACM PANEL RAINSCREEN SYSTEM. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
301 ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
401 PRECAST CONCRETE WALL, PAINTED.
402 PRE-FINISHED ALUMINUM COMPOSITE METAL PANEL OVER METAL STUD FRAMING REFER A0.2, ENVELOPE ASSEMBLY NOTES. COLOR TO MATCH SW 6256 EVENING GRAY.
403 2" REVEAL.
404 CONCRETE WALL JOINT.
405 ALUMINUM STOREFRONT SYSTEM - SPANDREL PANEL. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
406 ALUMINUM WINDOW SYSTEM WITH 1" INSULATED GLASS REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
408 METAL CANOPY, PAINTED REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
416 FINISH GRADE VARIES, REFER TO CIVIL.
417 LINE OF ROOF BEYOND.
429 CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.
432 CONCRETE SPANDREL PANEL.
501 STRUCTURAL STEEL JOIST, REFER TO STRUCTURAL.
503 CONCRETE FOOTING, REFER TO STRUCTURAL.
504 PROVIDE RIGID INSULATION AT FOOTINGS AND WALL PANELS BELOW SLAB.
515 2 1/2" WIDE STOREFRONT SYSTEM INSTALLED IN FRONT OF THE CONCERETE SPANDREL PANEL.
807 CAN LIGHTS

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

LEGEND

GLASS:

VISION GLASS

SPANDREL GLASS

TEMPERED GLASS

CEILING:

RECESSED 6" OR 8" LED DOWNLIGHT.

COLORS:

PROVIDE 6'-0" WIDE PAINT COLOR MOCK-UP FULL HEIGHT OF BUILDING FOR OWNER/ARCHITECT REVIEW. GC TO PROVIDE ARCHITECT DRAW DOWNS OF EACH PAINT COLOR.

A BASE COLOR: SHERWIN-WILLIAMS "SW 7662 - EVENING SHADOW"
B SHERWIN-WILLIAMS "7656 - PHINESTONE"
C SHERWIN-WILLIAMS " 6256 - EVENING GRAY"
D SHERWIN-WILLIAMS "6794 - FLYWAY"

WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING INTERIORS BUILDING MEASUREMENT
1315 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184-004069

GRANT A BRANDENBURG
LICENSED ARCHITECT
001-020842
STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

ENLARGED ELEVATION, PLAN AND WALL SECTIONS

REMARKS	DATE
PROGRESS PACKAGE	2022-03-04
PERMIT SET	2022-04-08

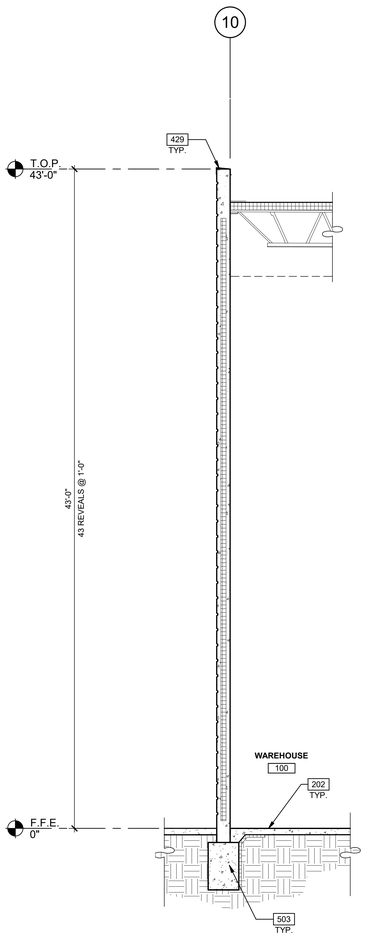
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A5.1

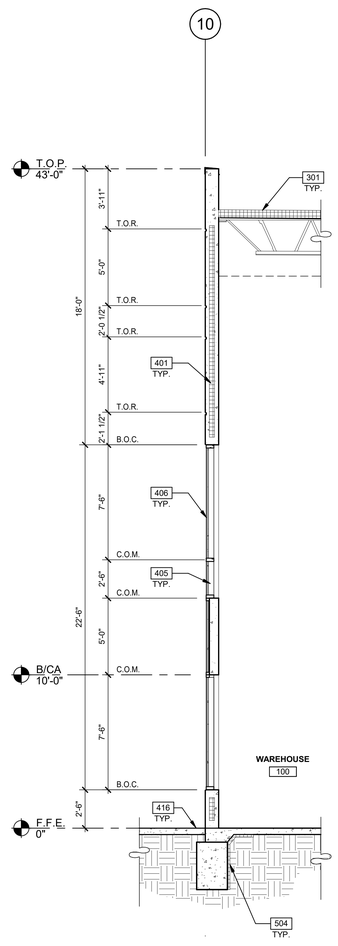
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)

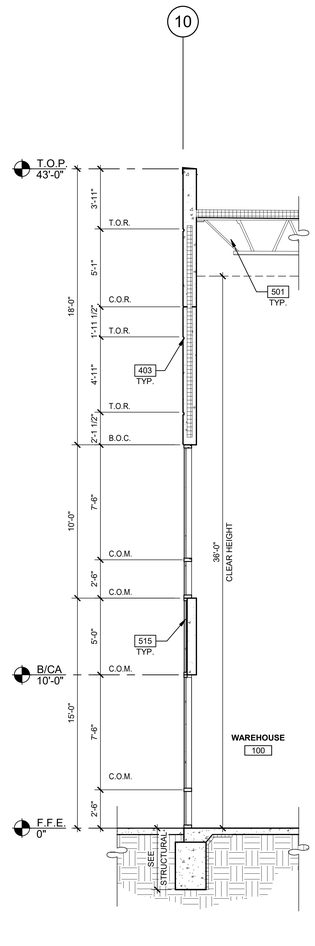
4/19/2022 8:51:05 AM 2022-04-08 PERMIT SET



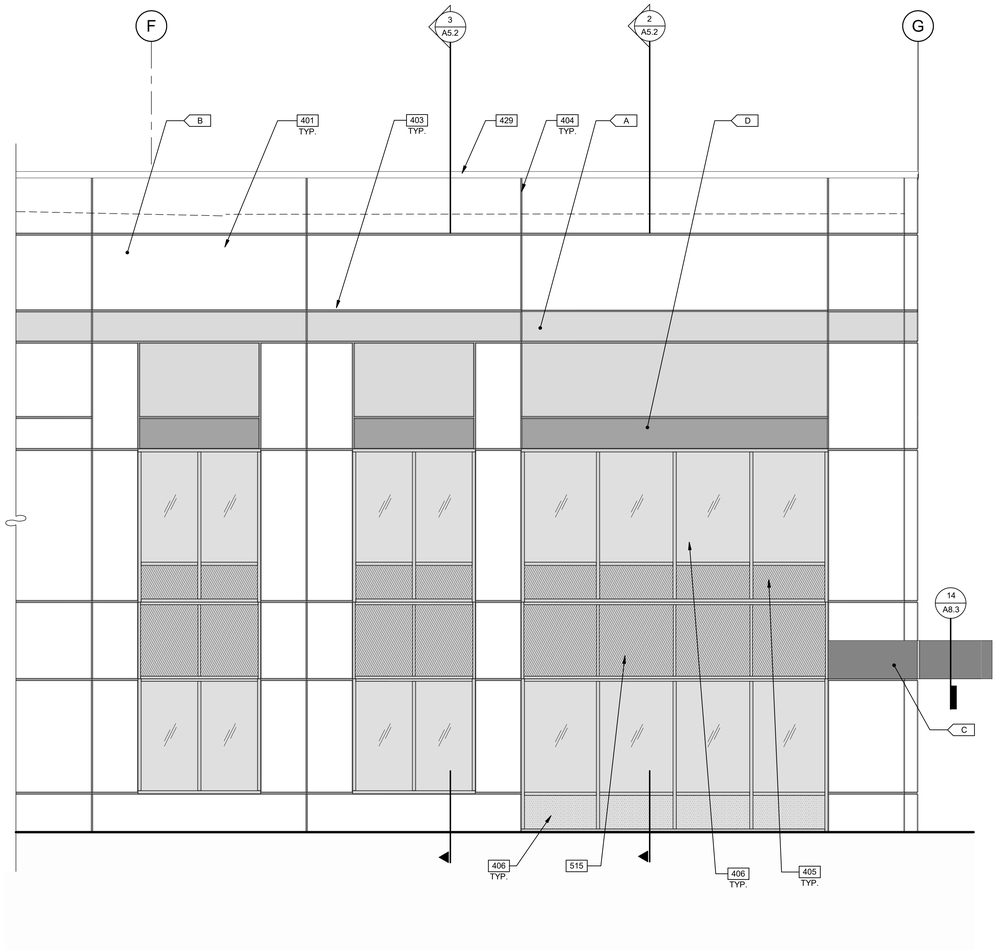
WALL SECTION 4
SCALE: 1/4" = 1'-0"



WALL SECTION 3
SCALE: 1/4" = 1'-0"



WALL SECTION 2
SCALE: 1/4" = 1'-0"



ENLARGED EXTERIOR ELEVATION 1
SCALE: 1/4" = 1'-0"

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

202 CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.
301 ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
401 PRECAST CONCRETE WALL, PAINTED.
403 2" REVEAL.
404 CONCRETE WALL JOINT.
405 ALUMINUM STOREFRONT SYSTEM - SPANDREL PANEL. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
406 ALUMINUM WINDOW SYSTEM WITH 1" INSULATED GLASS REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
416 FINISH GRADE VARIES, REFER TO CIVIL.
429 CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.
501 STRUCTURAL STEEL JOIST, REFER TO STRUCTURAL.
503 CONCRETE FOOTING, REFER TO STRUCTURAL.
504 PROVIDE RIGID INSULATION AT FOOTINGS AND WALL PANELS BELOW SLAB.
515 2 1/2" WIDE STOREFRONT SYSTEM INSTALLED IN FRONT OF THE CONCRETE SPANDREL PANEL.

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

LEGEND

GLASS:

VISION GLASS

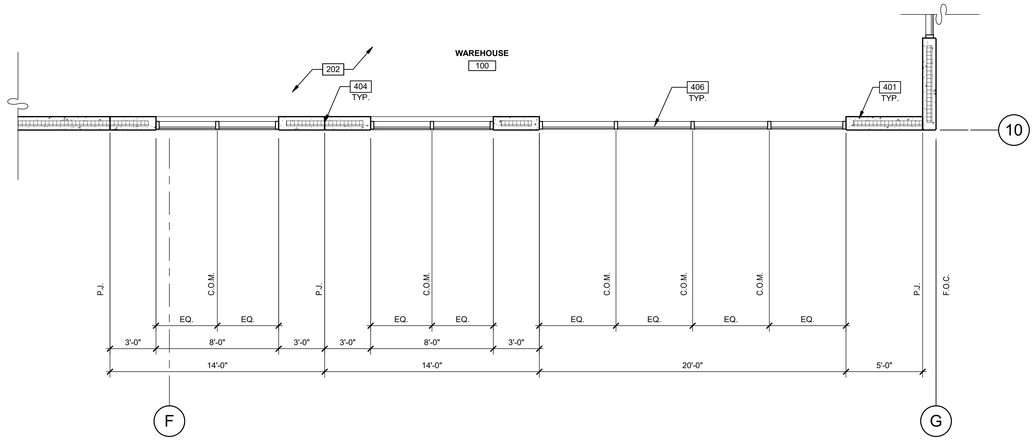
SPANDREL GLASS

TEMPERED GLASS

COLORS:

PROVIDE 6'-0" WIDE PAINT COLOR MOCK-UP FULL HEIGHT OF BUILDING FOR OWNER/ARCHITECT REVIEW. GC TO PROVIDE ARCHITECT DRAW DOWNS OF EACH PAINT COLOR.

A BASE COLOR: SHERWIN-WILLIAMS "SW 7662 - EVENING SHADOW"
B SHERWIN-WILLIAMS "7656 - PHINESTONE"
C SHERWIN-WILLIAMS " 6256 - EVENING GRAY"
D SHERWIN-WILLIAMS "6794 - FLYWAY"



1/4"=1'-0"
0 2' 4' 8' 16'

ENLARGED FLOOR PLAN 5
SCALE: 1/4" = 1'-0"

N

State of Illinois Design Firm Registration No. 184-004069
WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING INTERIORS BRANDING BUILDING MEASUREMENT
1515 22nd St #410
Oak Brook, IL 60523
P 630.218.0063

LICENSED ARCHITECT
GRANT A BRANDENBURG
001-020842
STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP -
PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

ENLARGED ELEVATION, PLAN AND WALL SECTIONS

DATE	REMARKS
2022-04-08	PERMIT SET

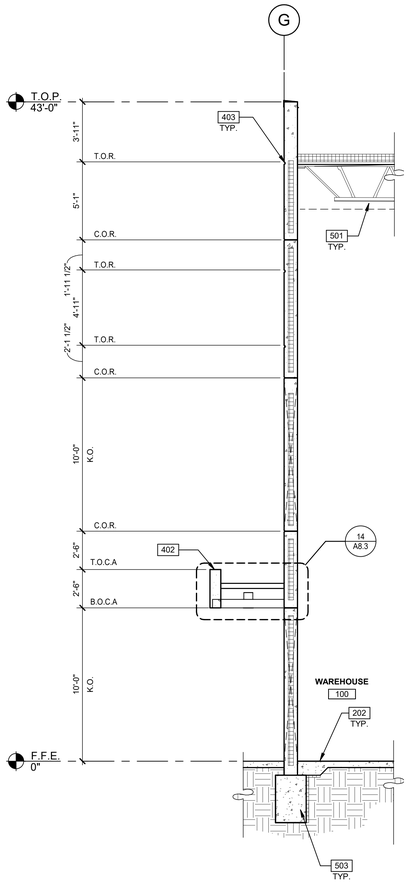
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A5.2

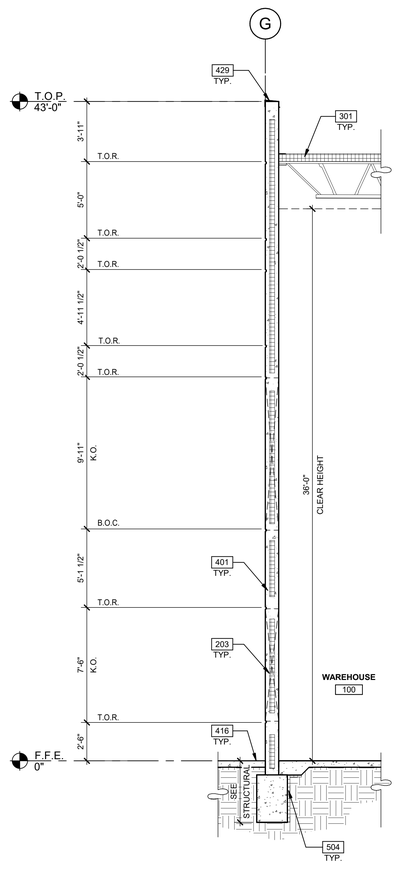
4/19/2022 8:51:08 AM 2022-04-08 PERMIT SET

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

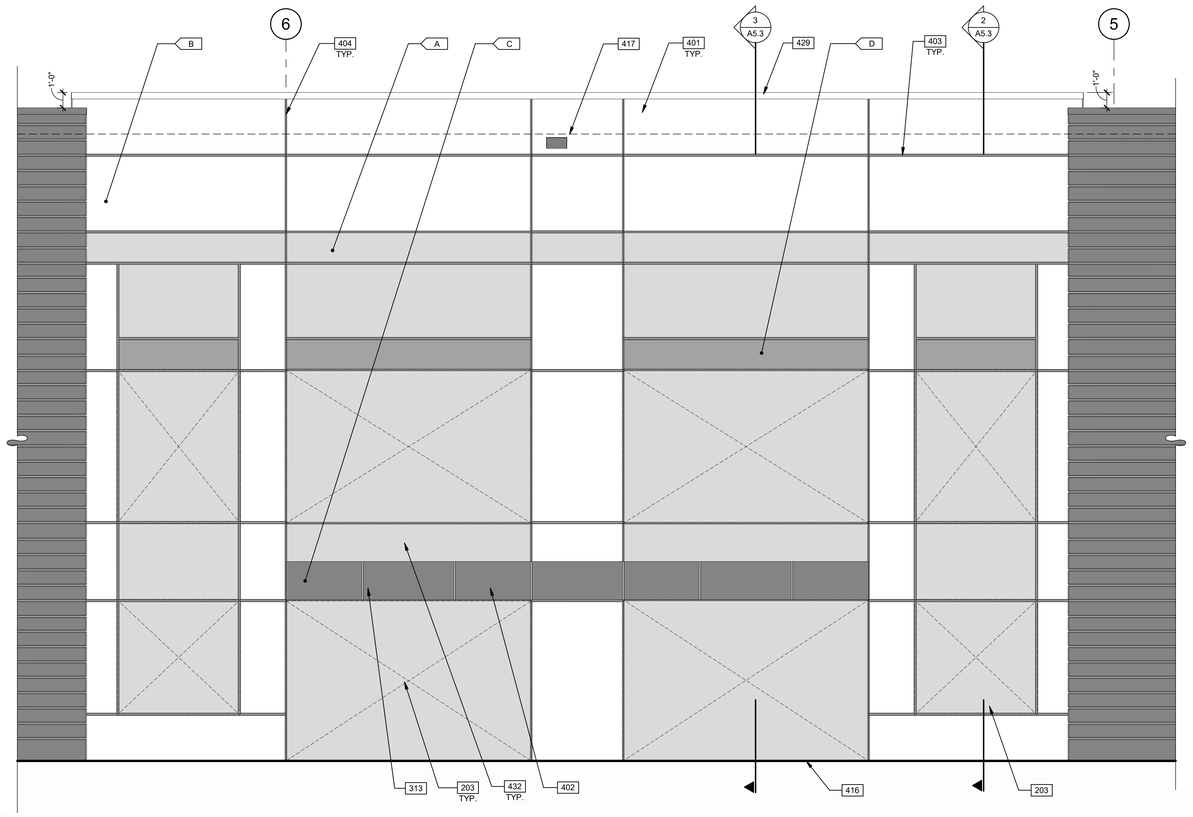
Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)



WALL SECTION 3
SCALE: 1/4" = 1'-0"



WALL SECTION 2
SCALE: 1/4" = 1'-0"



ENLARGED EXTERIOR ELEVATION 1
SCALE: 1/4" = 1'-0"

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

202	CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.
203	KNOCK-OUT PANEL FOR FUTURE WINDOWS OR DOORS.
209	OUTLINE OF CANOPY ABOVE.
301	ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
313	PRE-FINISHED METAL CANOPY.
401	PRECAST CONCRETE WALL, PAINTED.
402	PRE-FINISHED ALUMINUM COMPOSITE METAL PANEL OVER METAL STUD FRAMING REFER A0.2, ENVELOPE ASSEMBLY NOTES. COLOR TO MATCH SW 6256 EVENING GRAY.
403	2" REVEAL.
404	CONCRETE WALL JOINT.
416	FINISH GRADE VARIES, REFER TO CIVIL.
417	LINE OF ROOF BEYOND.
429	CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.
432	CONCRETE SPANDREL PANEL.
501	STRUCTURAL STEEL JOIST, REFER TO STRUCTURAL.
503	CONCRETE FOOTING, REFER TO STRUCTURAL.
504	PROVIDE RIGID INSULATION AT FOOTINGS AND WALL PANELS BELOW SLAB.
806	CEILING
807	CAN LIGHTS

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

LEGEND

COLORS:

PROVIDE 6'-0" WIDE PAINT COLOR MOCK-UP FULL HEIGHT OF BUILDING FOR OWNER/ARCHITECT REVIEW. GC TO PROVIDE ARCHITECT DRAW DOWNS OF EACH PAINT COLOR.

A	BASE COLOR: SHERWIN-WILLIAMS "SW 7662 - EVENING SHADOW"
B	SHERWIN-WILLIAMS "7656 - PHINESTONE"
C	SHERWIN-WILLIAMS " 6256 - EVENING GRAY"
D	SHERWIN-WILLIAMS "6794 - FLYWAY"

LEGEND

GLASS:

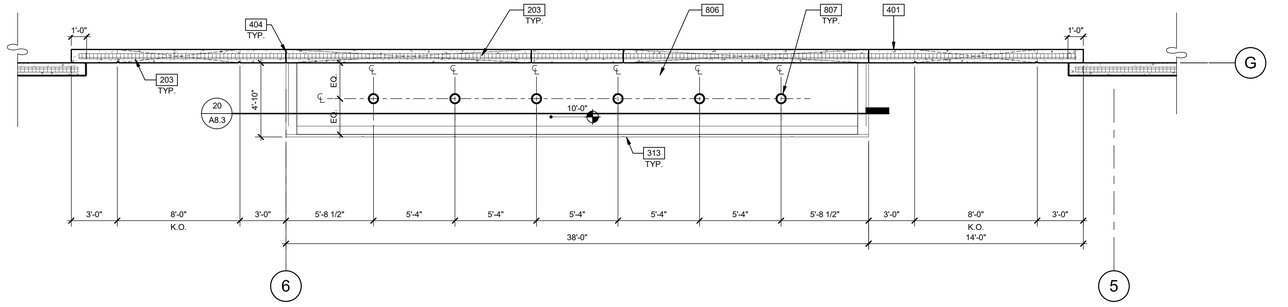
VISION GLASS

SPANDREL GLASS

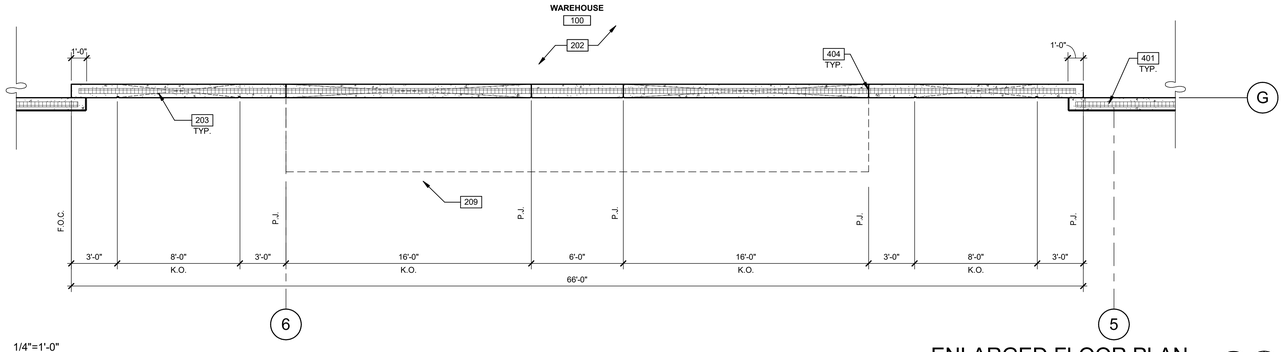
TEMPERED GLASS

CEILING:

RECESSED 6" OR 8" LED DOWNLIGHT.



ENLARGED ENTRY SOFFIT PLAN 4
SCALE: 1/4" = 1'-0"



1/4"=1'-0"
0 2' 4' 8' 16'

ENLARGED FLOOR PLAN 5
SCALE: 1/4" = 1'-0"

State of Illinois Design Firm Registration No. 184-004069
WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING STRUCTURAL
INTERIORS BUILDING MEASUREMENT
1315 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063

GRANT A BRANDENBURG
001-020842
LICENSED ARCHITECT
STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP -
PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

ENLARGED ELEVATION, PLAN AND WALL SECTIONS

REMARKS	DATE
PROGRESS PACKAGE	2022-03-04
PERMIT SET	2022-04-08

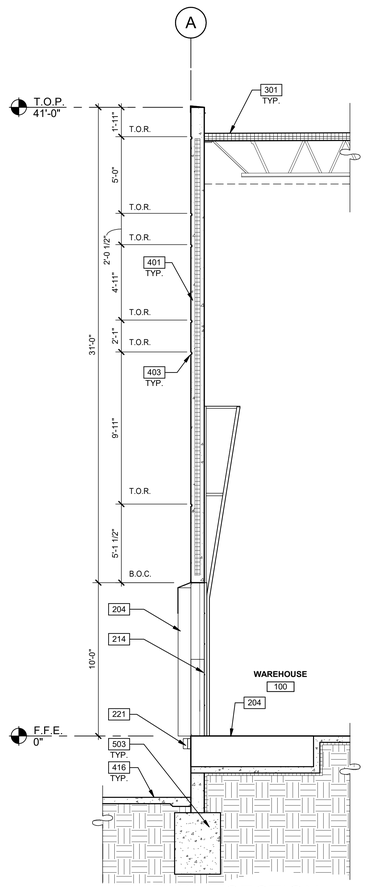
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A5.3

PERMIT SET 2022-04-08 8:51:12 AM 4/19/2022

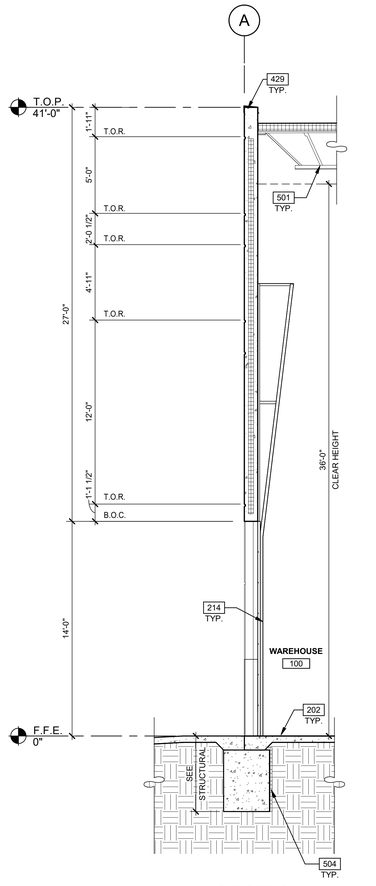
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)



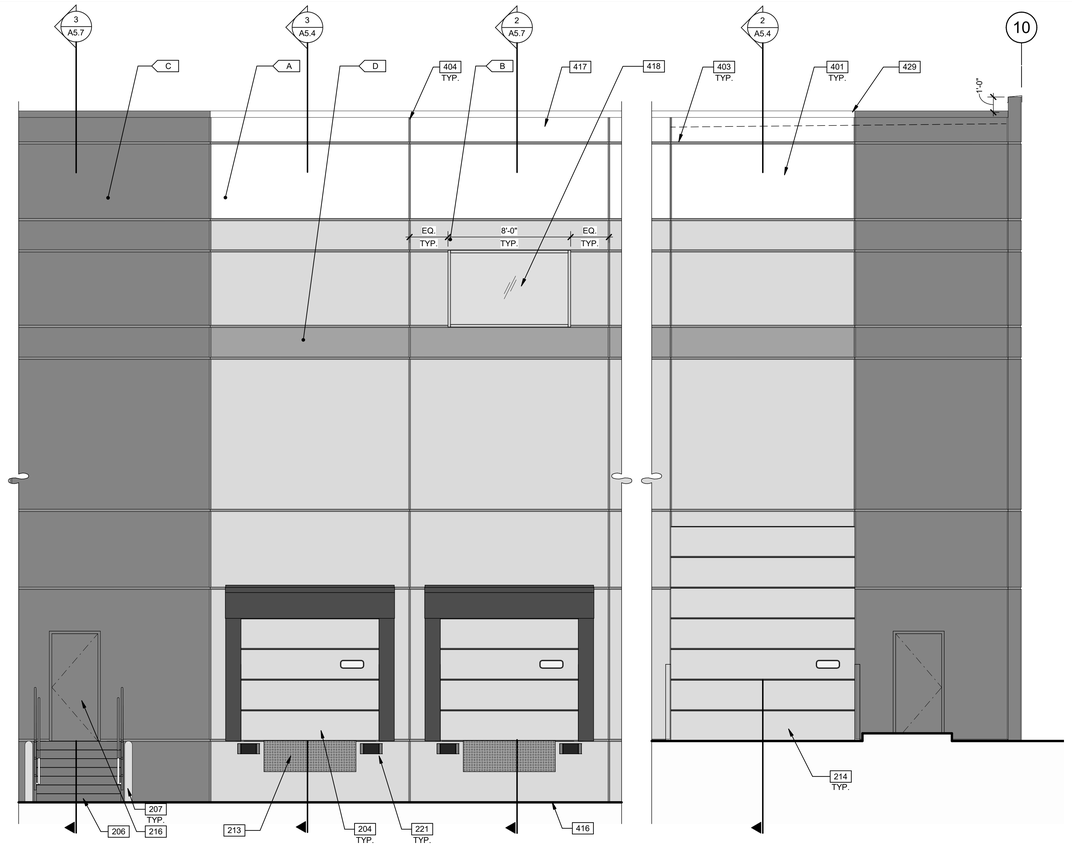
WALL SECTION 3

SCALE: 1/4" = 1'-0"



WALL SECTION 2

SCALE: 1/4" = 1'-0"



ENLARGED EXTERIOR ELEVATION 1

SCALE: 1/4" = 1'-0"

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

202 CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.

204 6'X 8' MECHANICAL DOCK LEVELER. 35,000 LBS DYNAMIC CAPACITY, MANUALLY OPERATED (SPRING ASSISTED), REFER TO A0.2 ENVELOPE ASSEMBLY NOTES.

205 DOCK PIT, DOCK SEAL, LEVELER AND DOCK BUMPERS, TYP. U.N.O. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.

206 EXTERIOR STEEL STAIR, ALL COMPONENTS GALVANIZED.

207 STEEL BOLLARD, CONCRETE-FILLED PAINTED SAFETY YELLOW.

213 42"H. CONTINUOUS METAL GUARDRAIL, PAINTED.

214 HIGH LIFT OVERHEAD SECTIONAL DOOR, REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.

216 SERVICE/MAN DOORS, COLOR: TO MATCH ADJACENT CONCRETE PANEL COLOR.

221 DOCK SEAL

301 ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.

401 PRECAST CONCRETE WALL, PAINTED.

403 2" REVEAL.

404 CONCRETE WALL JOINT.

416 FINISH GRADE VARIES, REFER TO CIVIL.

417 LINE OF ROOF BEYOND.

418 CLERESTORY WINDOW 1" INSULATED GLAZING. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.

429 CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.

501 STRUCTURAL STEEL JOIST, REFER TO STRUCTURAL.

503 CONCRETE FOOTING, REFER TO STRUCTURAL.

504 PROVIDE RIGID INSULATION AT FOOTINGS AND WALL PANELS BELOW SLAB.

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

LEGEND

GLASS:

VISION GLASS

COLORS:

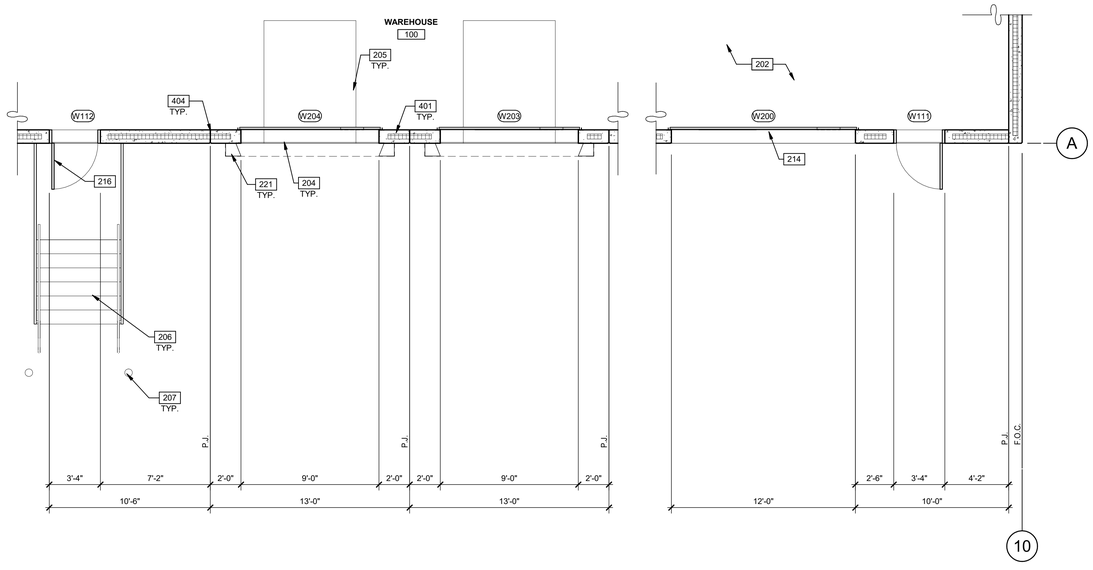
PROVIDE 6'-0" WIDE PAINT COLOR MOCK-UP FULL HEIGHT OF BUILDING FOR OWNER/ARCHITECT REVIEW. GC TO PROVIDE ARCHITECT DRAW DOWNS OF EACH PAINT COLOR.

A BASE COLOR: SHERWIN-WILLIAMS "SW 7662 - EVENING SHADOW"

B SHERWIN-WILLIAMS "7656 - PHINESTONE"

C SHERWIN-WILLIAMS " 6256 - EVENING GRAY"

D SHERWIN-WILLIAMS "6794 - FLYWAY"



1/4"=1'-0"

0 2' 4' 8' 16'

ENLARGED FLOOR PLAN 4

SCALE: 1/4" = 1'-0"

N

State of Illinois Design Firm Registration No. 184-004069
WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING INTERIORS BUILDING MEASUREMENT
1315 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063

LICENSED ARCHITECT
GRANT A BRANDENBURG
001-020842
STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE

2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

ENLARGED ELEVATION, PLAN AND WALL SECTIONS

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

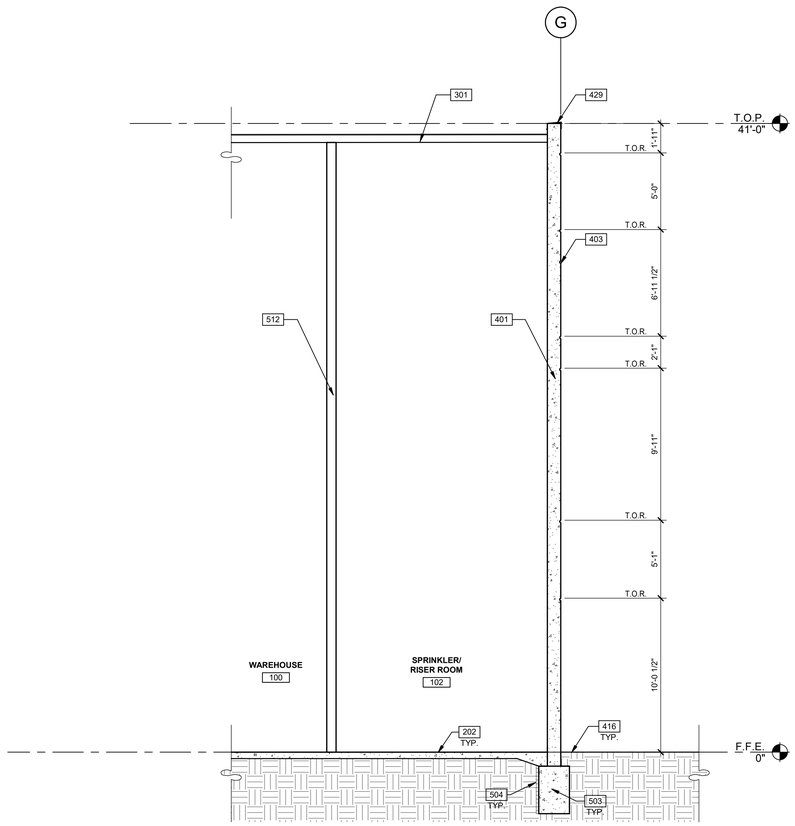
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET

A5.4

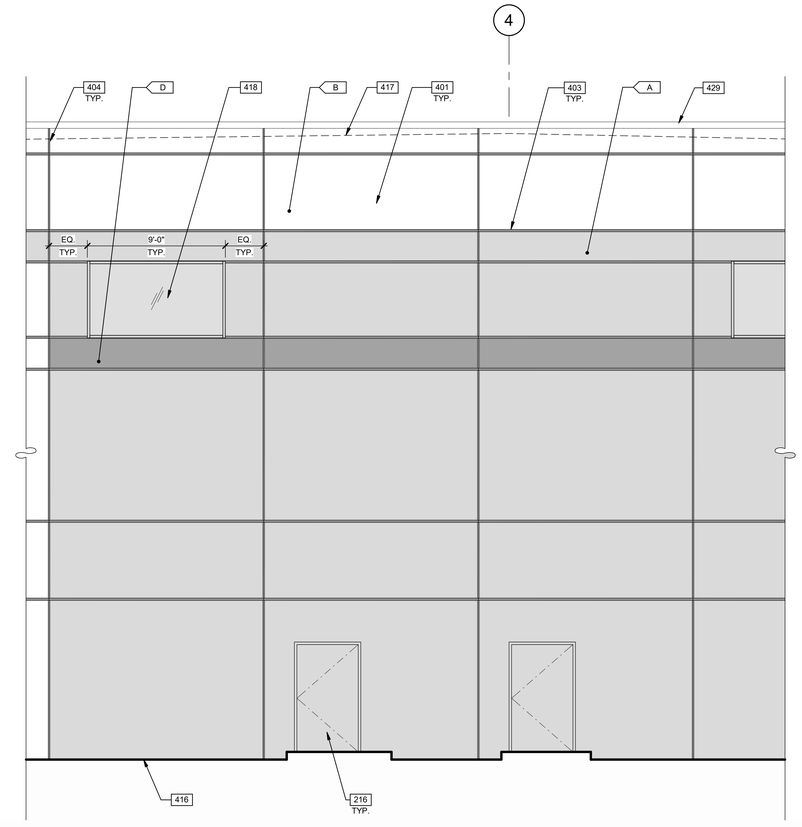
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)
4/19/2022 8:51:16 AM 2022-04-08 PERMIT SET



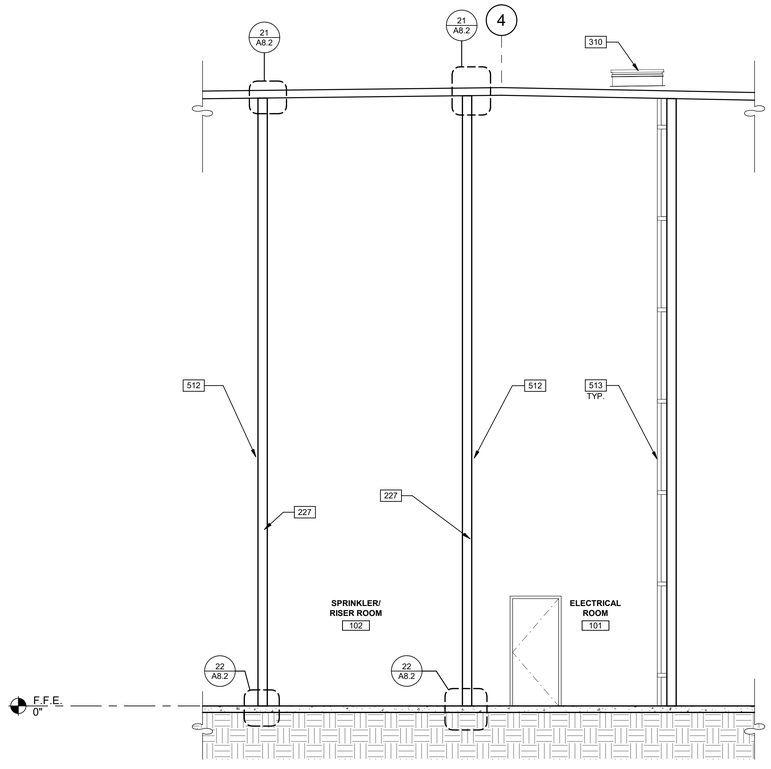
ENLARGED BUILDING SECTION 2

SCALE: 1/4" = 1'-0"



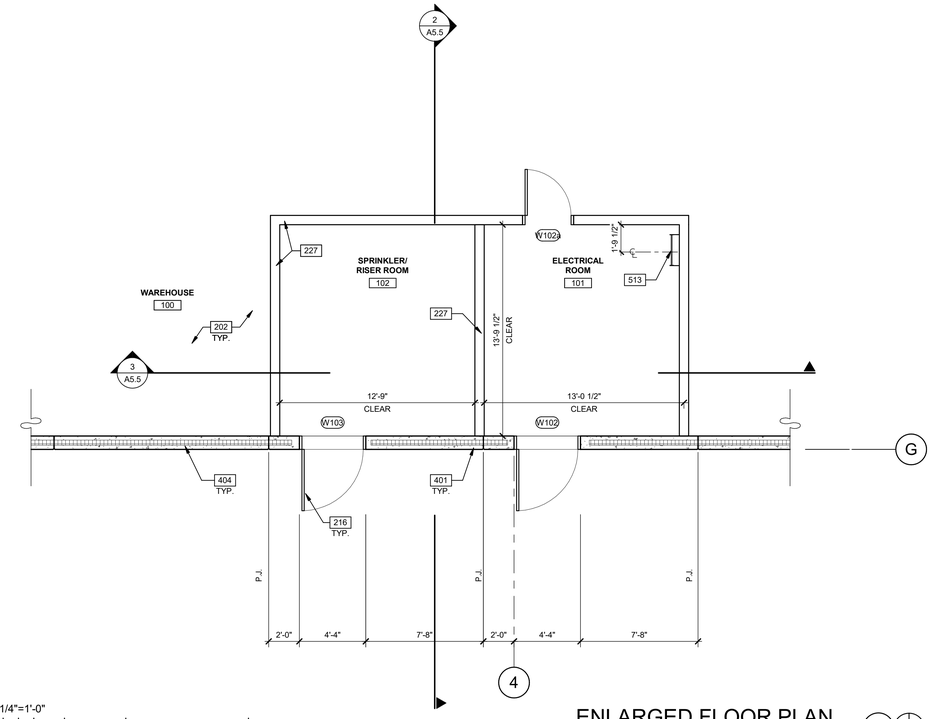
ENLARGED EXTERIOR ELEVATION 1

SCALE: 1/4" = 1'-0"



ENLARGED BUILDING SECTION 3

SCALE: 1/4" = 1'-0"



ENLARGED FLOOR PLAN 4

SCALE: 1/4" = 1'-0"

1/4"=1'-0"
0 2' 4' 8' 16'

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

202 CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.
216 SERVICE/MAN DOORS, COLOR: TO MATCH ADJACENT CONCRETE PANEL COLOR.
227 SPRINKLER ROOM INTERIOR WALL TO BE 1HR RATED.
301 ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
310 2'-6" x 3'-0" ROOF HATCH. VERIFY ROOF JOIST LOCATIONS WITH STRUCTURAL DRAWINGS. HATCH TO BE MINIMUM OF 10' FROM ROOF EDGE.
401 PRECAST CONCRETE WALL, PAINTED.
403 2" REVEAL.
404 CONCRETE WALL JOINT.
416 FINISH GRADE VARIES, REFER TO CIVIL.
417 LINE OF ROOF BEYOND.
418 CLERESTORY WINDOW 1" INSULATED GLAZING. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
429 CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.
503 CONCRETE FOOTING, REFER TO STRUCTURAL.
504 PROVIDE RIGID INSULATION AT FOOTINGS AND WALL PANELS BELOW SLAB.
512 INTERIOR RATED WALL PARTITION.
513 ROOF ACCESS LADDER . COORDINATE LOCATION WITH STRUCTURAL ROOF FRAME DRAWINGS.

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

LEGEND

GLASS:

VISION GLASS

COLORS:

PROVIDE 6'-0" WIDE PAINT COLOR MOCK-UP FULL HEIGHT OF BUILDING FOR OWNER/ARCHITECT REVIEW. GC TO PROVIDE ARCHITECT DRAW DOWNS OF EACH PAINT COLOR.

A BASE COLOR: SHERWIN-WILLIAMS "SW 7662 - EVENING SHADOW"
B SHERWIN-WILLIAMS "7656 - PHINESTONE"
C SHERWIN-WILLIAMS " 6256 - EVENING GRAY"
D SHERWIN-WILLIAMS "6794 - FLYWAY"

WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING INTERIORS BUILDING MEASUREMENT
1315 22nd St #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184-004089

LICENSED ARCHITECT
GRANT A BRANDENBURG
001-020842
STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

ENLARGED ELEVATION, PLAN AND WALL SECTIONS

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

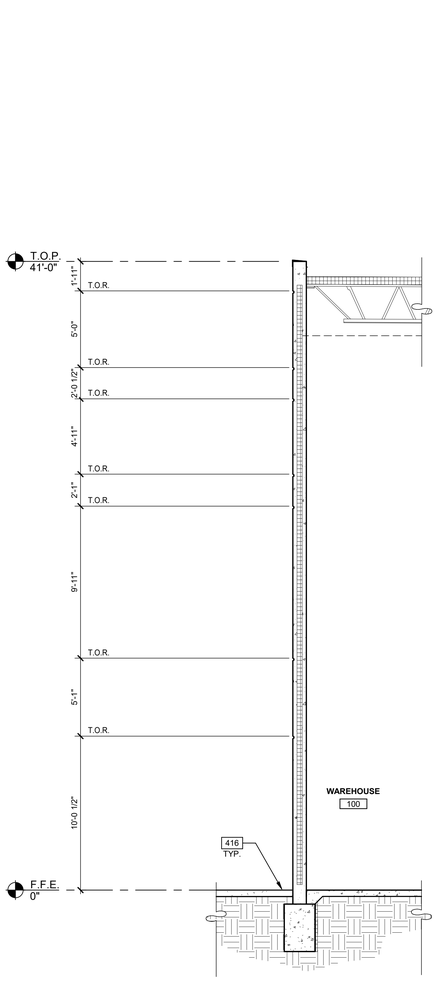
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A5.5

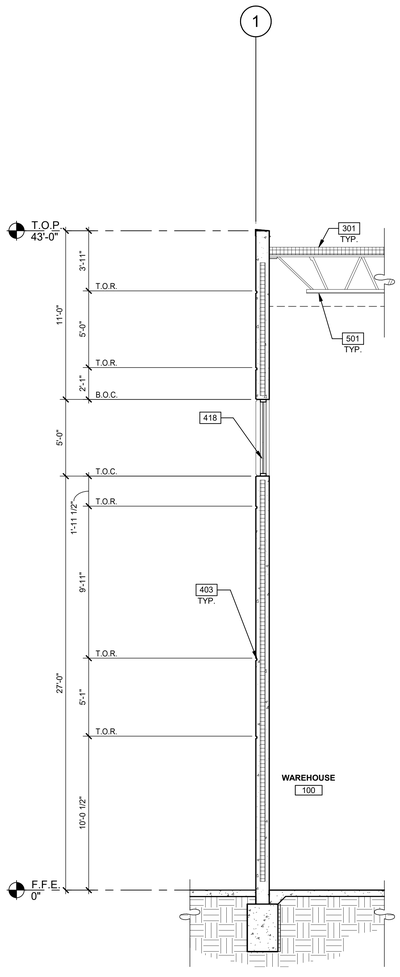
4/19/2022 8:51:20 AM 2022-04-08 PERMIT SET

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK.

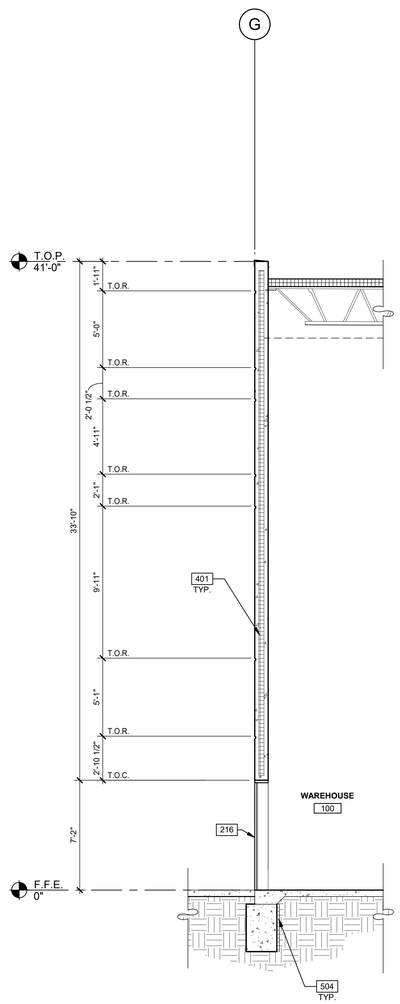
Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)



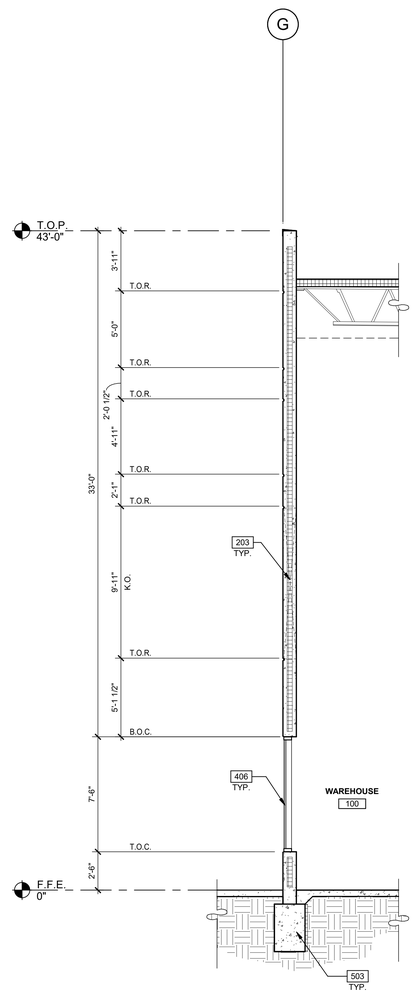
WALL SECTION 5
SCALE: 1/4" = 1'-0"



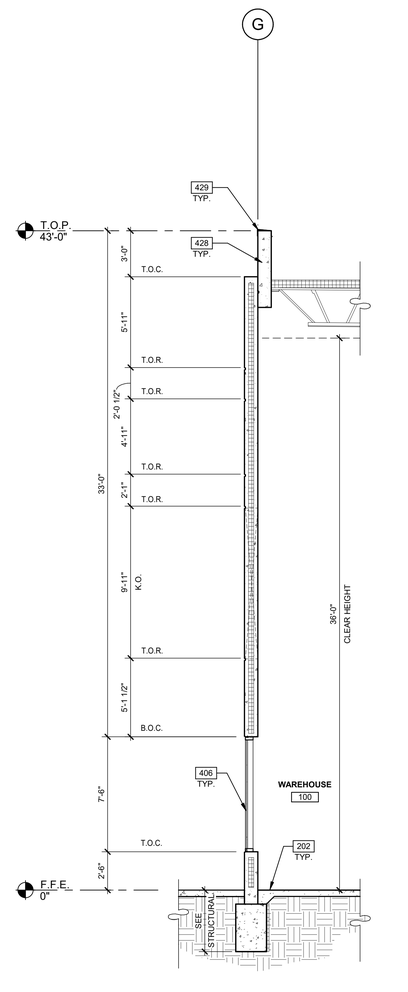
WALL SECTION 4
SCALE: 1/4" = 1'-0"



WALL SECTION 3
SCALE: 1/4" = 1'-0"



WALL SECTION 2
SCALE: 1/4" = 1'-0"



WALL SECTION 1
SCALE: 1/4" = 1'-0"

1/4"=1'-0"
0 2' 4' 8' 16'

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION.
SEE NOTES ON PLAN FOR FIRE RATING

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

202 CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.
203 KNOCK-OUT PANEL FOR FUTURE WINDOWS OR DOORS.
216 SERVICE/MAN DOORS, COLOR: TO MATCH ADJACENT CONCRETE PANEL COLOR.
301 ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
401 PRECAST CONCRETE WALL, PAINTED.
403 2" REVEAL.
406 ALUMINUM WINDOW SYSTEM WITH 1" INSULATED GLASS REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
416 FINISH GRADE VARIES, REFER TO CIVIL.
418 CLERESTORY WINDOW 1" INSULATED GLAZING. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
428 PRECAST CONRETE SPANDREL PANEL, PAINTED
429 CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.
501 STRUCTURAL STEEL JOIST, REFER TO STRUCTURAL.
503 CONCRETE FOOTING, REFER TO STRUCTURAL.
504 PROVIDE RIGID INSULATION AT FOOTINGS AND WALL PANELS BELOW SLAB.

State of Illinois Design Firm Registration No. 184-004069
WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING LANDSCAPE
INTERIORS BUILDING MEASUREMENT
1515 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063

LICENSED ARCHITECT
GRANT A BRANDSBURG
001-020842
STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

WALL SECTIONS

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

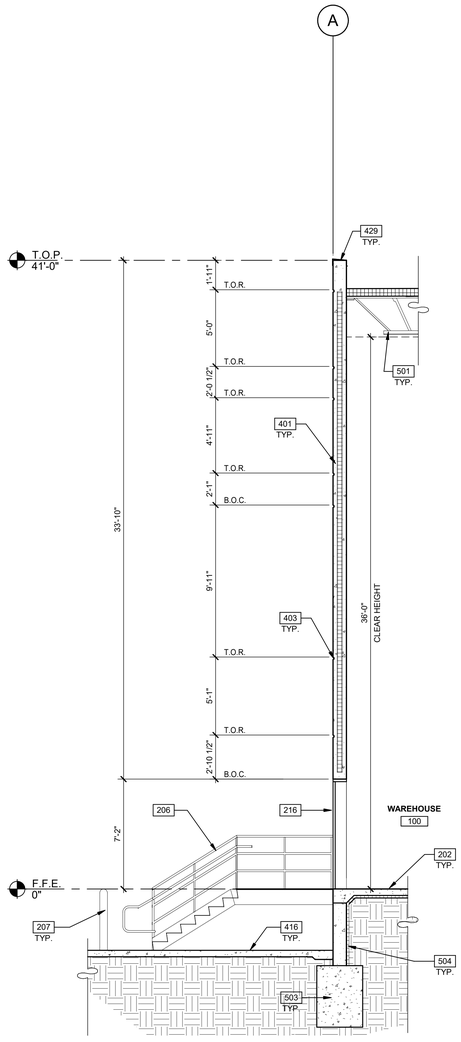
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A5.6

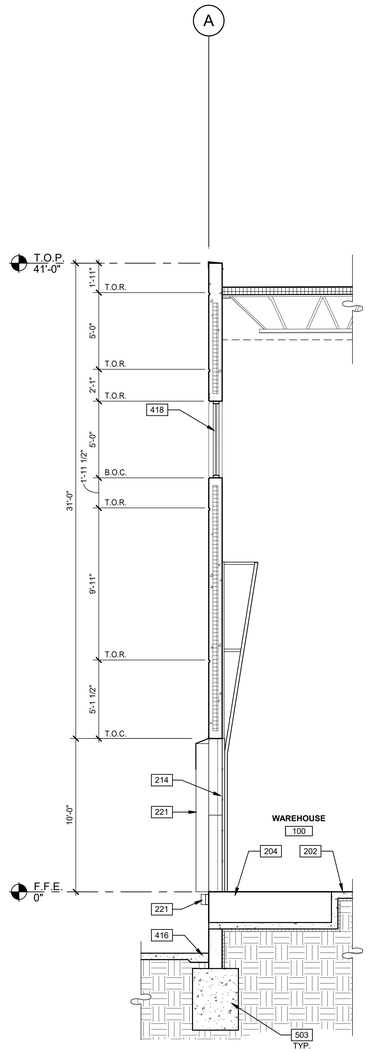
2022-04-08 PERMIT SET
4/19/2022 8:51:23 AM

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

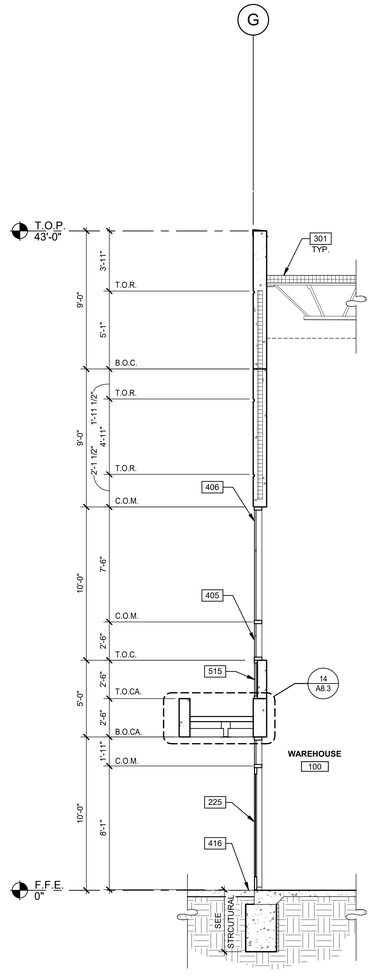
Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)



WALL SECTION 3
SCALE: 1/4" = 1'-0"



WALL SECTION 2
SCALE: 1/4" = 1'-0"



WALL SECTION 1
1/4"=1'-0"
0 2' 4' 8' 16'
SCALE: 1/4" = 1'-0"

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

202 CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.
204 6'X 8' MECHANICAL DOCK LEVELER. 35,000 LBS DYNAMIC CAPACITY, MANUALLY OPERATED (SPRING ASSISTED), REFER TO A0.2 ENVELOPE ASSEMBLY NOTES.
206 EXTERIOR STEEL STAIR, ALL COMPONENTS GALVANIZED.
207 STEEL BOLLARD, CONCRETE-FILLED PAINTED SAFETY YELLOW.
214 HIGH LIFT OVERHEAD SECTIONAL DOOR, REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
216 SERVICE/MAN DOORS, COLOR: TO MATCH ADJACENT CONCRETE PANEL COLOR.
221 DOCK SEAL
225 ALUMINUM STOREFRONT SYSTEM WITH 1" INSULATED GLASS, REFER TO A0.2, ENVELOPE, ASSEMBLY NOTES FOR GLAZOMG SPECIFICATION.
301 ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
401 PRECAST CONCRETE WALL, PAINTED.
403 2" REVEAL.
405 ALUMINUM STOREFRONT SYSTEM - SPANDREL PANEL. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
406 ALUMINUM WINDOW SYSTEM WITH 1" INSULATED GLASS REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
416 FINISH GRADE VARIES, REFER TO CIVIL.
418 CLERESTORY WINDOW 1" INSULATED GLAZING. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
429 CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.
501 STRUCTURAL STEEL JOIST, REFER TO STRUCTURAL.
503 CONCRETE FOOTING, REFER TO STRUCTURAL.
504 PROVIDE RIGID INSULATION AT FOOTINGS AND WALL PANELS BELOW SLAB.
515 2 1/2" WIDE STOREFRONT SYSTEM INSTALLED IN FRONT OF THE CONCERETE SPANDREL PANEL.

WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING BRANDING
INTERIORS BUILDING MEASUREMENT
1515 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184-004069

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

WALL SECTIONS

DATE	REMARKS
2022-04-08	PERMIT SET

PA/PM:	Approver
DRAWN BY.:	Author
JOB NO.:	CHI21-0193-00

SHEET
A5.7

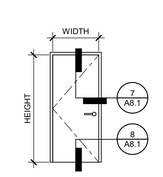
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)
4/19/2022 8:51:26 AM 2022-04-08 PERMIT SET

DOOR SCHEDULE

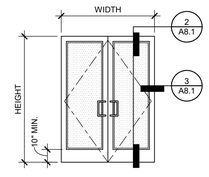
DOOR NO.	ROOM NAME	DOOR TYPE	DOOR WIDTH	DOOR HEIGHT	DOOR THICK	DOOR MATERIAL	DOOR FINISH	FRAME MATERIAL	FRAME FINISH	FIRE RATING	HDWARE NO.	COMMENTS
100	WAREHOUSE	SF2	6'-0"	8'-0"	1 3/4"	ALUMINUM STOREFRONT	CLEAR ANODIZED	ALUMINUM STOREFRONT	CLEAR ANODIZED		2.1	
W101	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W102	ELECTRICAL ROOM	F1	4'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1B	
W102a	ELECTRICAL ROOM	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		3.1	
W103	SPRINKLER/ RISER ROOM	F1	4'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W104	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W105	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W106	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W107	WAREHOUSE	SF2	6'-0"	8'-0"	1 3/4"	ALUMINUM STOREFRONT	CLEAR ANODIZED	ALUMINUM STOREFRONT	CLEAR ANODIZED		2.1	
W108	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W109	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W110	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED	45min	1.1	
W111	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W112	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W113	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W114	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W115	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W116	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED	90min	1.1	
W117	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED	45min	1.1	
W118	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W119	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W200	WAREHOUSE	SD2	12'-0"	14'-0"	2"	STEEL	PAINT				4.1	
W201	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W202	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W203	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W204	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W205	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W206	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W207	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W208	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W209	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W210	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W211	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W212	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W213	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W214	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W215	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W216	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W217	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W218	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W219	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W220	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W221	WAREHOUSE	SD2	12'-0"	14'-0"	2"	STEEL	PAINT				4.1	

DOOR TYPES



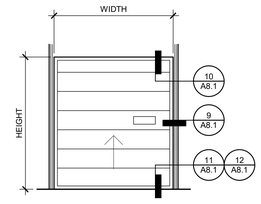
F1

SOLID FLUSH



SF2

DOUBLE STOREFRONT



SD

SECTIONAL DOOR

DOOR HARDWARE

SINGLE EXTERIOR DOOR
1.1

3EA HINGES (4EA IF DOOR IS 4X7)
1EA CYLINDRICAL LEVER LOCK (GC TO VERIFY LOCK FUNCTION W/ OWNER
1EA FSIC INTERCHANGEABLE CORE
1EA DOOR CLOSER
1EA INTERIOR KICK PLATE
1EA THRESHOLD
1EA WEATHERSTRIP
1EA DOOR SWEEP
1EA RAIN GUARD

SEE DOOR SCHEDULE FOR REQUIRED FIRE RATING

SINGLE EXTERIOR DOOR - ELECTRICAL ROOM
1.1B

4EA HINGE
1EA EXIT DEVICE
1EA EXTERIOR TRIM WITH LEVER
1EA FSIC INTERCHANGEABLE CORE
1EA RIM CYLINDER
1EA DOOR CLOSER
1EA INTERIOR KICK PLATE
1EA THRESHOLD
1EA WEATHERSTRIP
1EA DOOR SWEEP
1EA RAIN GUARD

STOREFRONT DOUBLE DOORS
2.1

2EA PIVOT SET
4EA PIVOT
1EA 2PT DEADLOCK
1EA INDICATOR LEVER SET
1EA RIM CYLINDER
1EA FSIC INTERCHANGEABLE CORE
1EA DOOR CLOSER
1EA PUSH / PULL BAR
1EA THRESHOLD
1EA DOOR SWEEP

SINGLE INTERIOR DOOR - ELECTRICAL ROOM
3.1

3EA HINGE
1EA EXIT DEVICE
1EA EXTERIOR TRIM WITH LEVER
1EA FSIC INTERCHANGEABLE CORE
1EA RIM CYLINDER
1EA DOOR CLOSER
2EA KICK PLATE
1EA HEAVY DUTY DOORSTOP

SECTIONAL OVERHEAD DOOR
4.1

1 SLIDE BOLT - - - -
1 PAD LOCK - - - -

GC TO VERIFY ALL NECESSARY HARDWARE WITH OVERHEAD DOOR MANUFACTURER

GENERAL NOTES

SEE SHEET A0.2 FOR GENERAL DOOR NOTES

1. REFER TO THE PARTITION PLAN AND SPECIFICATIONS (IF PROVIDED) FOR ADDITIONAL DOOR INFORMATION.
2. HOLLOW METAL DOORS TO BE PAINTED SAME COLOR AS THE ADJACENT WALL; FINISH TO BE SEMI-GLOSS. SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
3. PROVIDE RATED WIRE GLASS IN RATED ASSEMBLIES, U.O.N.
4. FIELD VERIFY OPENING WIDTH AND HEIGHT FOR ALL NEW DOORS IN EXISTING OPENINGS.
5. ALL HOLLOW METAL FRAMES TO BE WELDED TYPE, U.O.N.
6. RATED DOORS SHALL HAVE AUTOMATIC CLOSERS AND COMPLY WITH REQUIREMENTS OF ALL GOVERNING CODES & STANDARDS.

WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING INTERIORS BUILDING MEASUREMENT
1315 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184-004089

LICENSED ARCHITECT
GRANT A BRANDENBURG
001-020842
STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

DOOR SCHEDULE

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

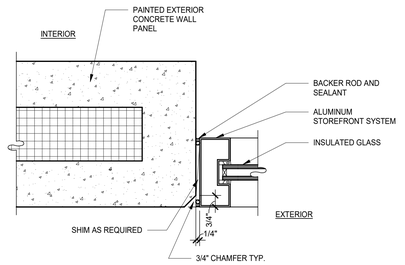
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A7.1

4/19/2022 8:51:29 AM 2022-04-08 PERMIT SET

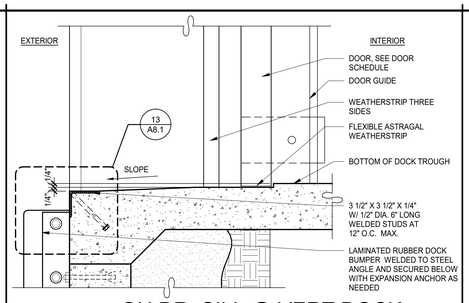
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)



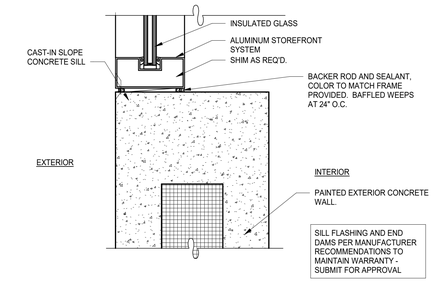
WINDOWS JAMB @ CON. WALL 16

SCALE: 3" = 1'-0"



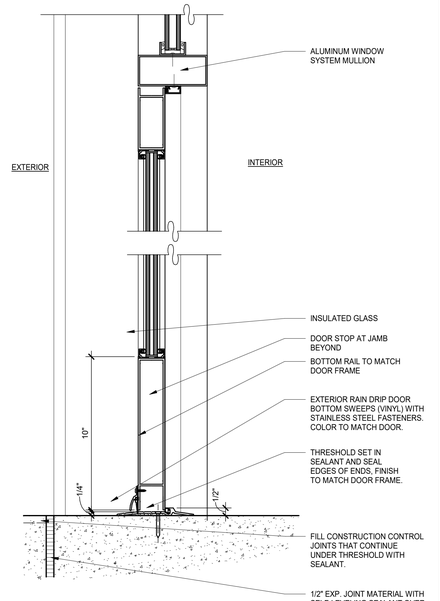
OH DR. SILL @ VERT DOCK TROUGH 11

SCALE: 3" = 1'-0"



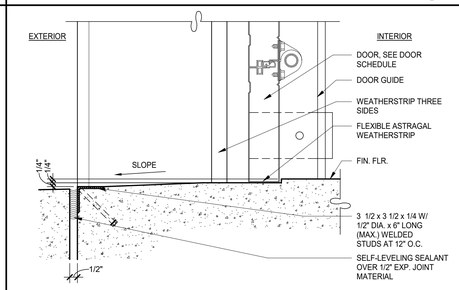
WINDOW SILL 6

SCALE: 3" = 1'-0"



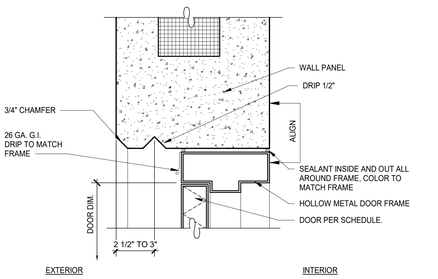
STOREFRONT DOOR 2

SCALE: 3" = 1'-0"



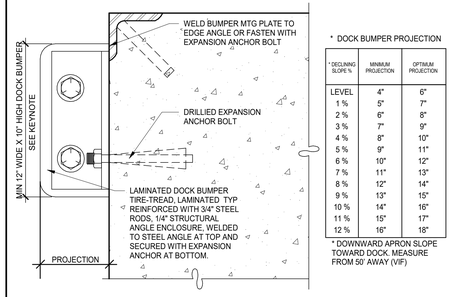
OH DOOR SILL AT GRADE 12

SCALE: 3" = 1'-0"



HOLLOW METAL DOOR HEAD 7

SCALE: 3" = 1'-0"



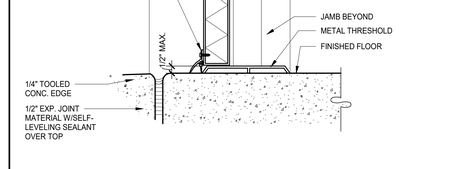
* DOCK BUMPER PROJECTION

* DECLINING SLOPE %	MINIMUM PROJECTION	OPTIMUM PROJECTION
LEVEL	4"	6"
1 %	5"	7"
2 %	6"	8"
3 %	7"	9"
4 %	8"	10"
5 %	9"	11"
6 %	10"	12"
7 %	11"	13"
8 %	12"	14"
9 %	13"	15"
10 %	14"	16"
11 %	15"	17"
12 %	16"	18"

* DOWNWARD APRON SLOPE TOWARD DOCK. MEASURE FROM 50' AWAY (VIF)

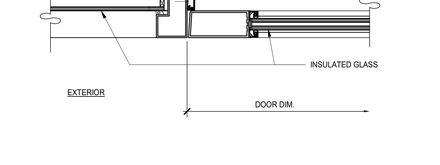
DOCK BUMPER 13

SCALE: 3" = 1'-0"



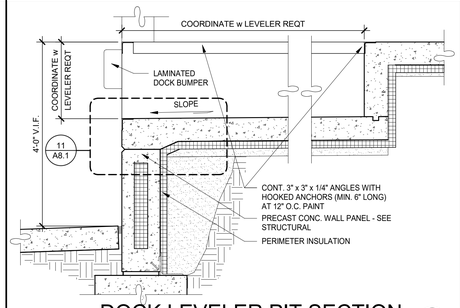
HOLLOW METAL DOOR SILL 8

SCALE: 3" = 1'-0"



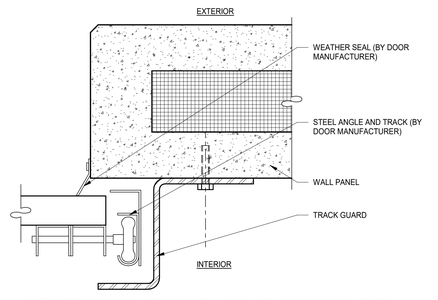
STOREFRONT JAMB 3

SCALE: 3" = 1'-0"



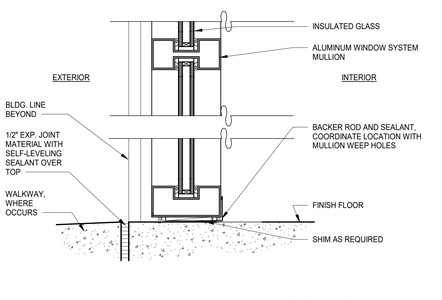
DOCK LEVELER PIT SECTION 14

SCALE: 3/4" = 1'-0"



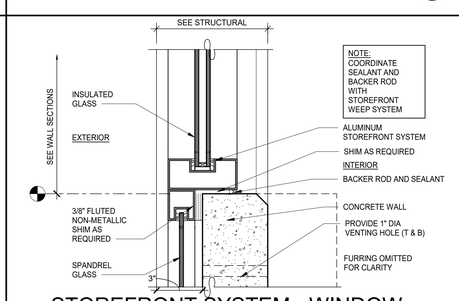
SECTIONAL DOOR JAMB W/ GUARD 9

SCALE: 3" = 1'-0"



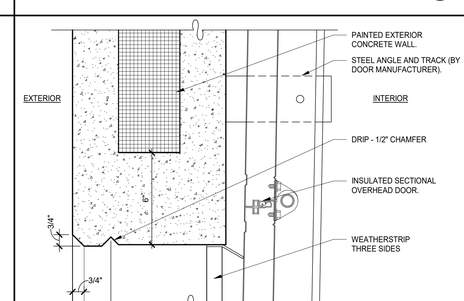
WINDOW SILL 4

SCALE: 3" = 1'-0"



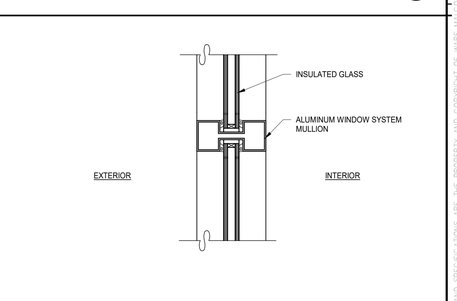
STOREFRONT SYSTEM - WINDOW SILL 15

SCALE: 3" = 1'-0"



SECTIONAL DOOR HEAD 10

SCALE: 3" = 1'-0"



TYP. VERT./HORIZ. MULLION 5

SCALE: 3" = 1'-0"

WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING LANDSCAPE
INTERIORS BUILDING MEASUREMENT
1315 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063
State of Illinois Design Firm Registration No. 184-004069

GRANT A BRANDENBURG 001-020842 LICENSED ARCHITECT STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

DETAILS

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

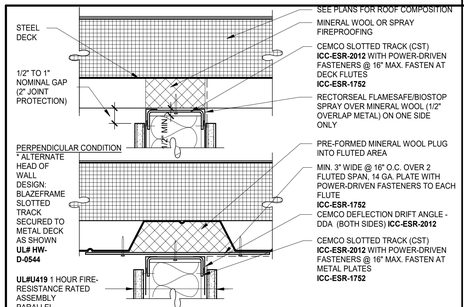
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A8.1

4/19/2022 8:51:32 AM 2022-04-08 PERMIT SET

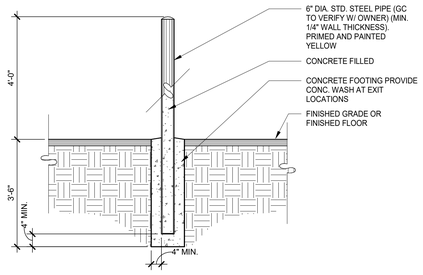
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)



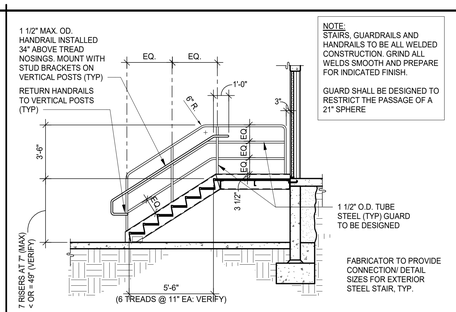
UL U419 1-HOUR WALL

SCALE: 3" = 1'-0" 21



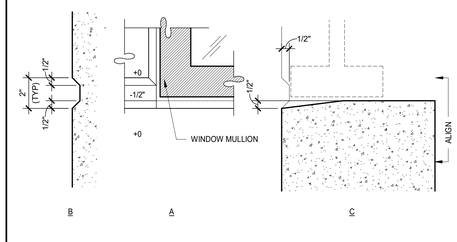
BOLLARD

SCALE: 1/2" = 1'-0" 16



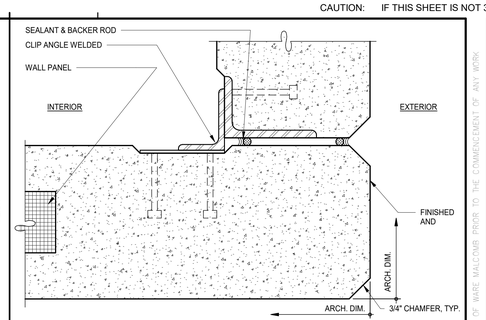
STEEL STAIR SECTION

SCALE: 1/4" = 1'-0" 11



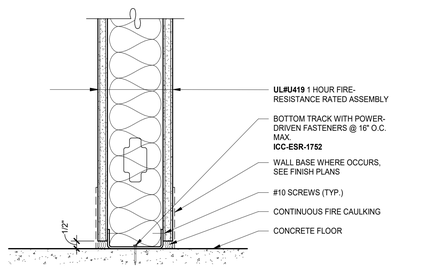
REVEAL AT WINDOW MULLION

SCALE: 3" = 1'-0" 6



CORNER JOINT

SCALE: 3" = 1'-0" 1



UL #BW-S-0001
1 HOUR WALL BASE

1 HOUR FIRE-RESISTANCE RATED WALL SCALE: 3" = 1'-0" 22

MEMBER DEPTH:
(EXAMPLE: 6" = 600 X 1/100 INCHES)
ALL MEMEBER DEPTHS ARE TAKEN IN 1/100 INCHES. FOR ALL "T" SECTIONS MEMBER DEPTH IS THE INSIDE DIMENSION.

600 S 162 54

FLANGE WIDTH:
(EXAMPLE: 1 5/8" = 1.625" ~ 162 X 1/100 INCHES)
ALL FLANGE WIDTHS ARE TAKEN IN 1/100 INCHES.

STYLE:
(EXAMPLE: STUD OR JOIST SECTION = S)
THE FOUR ALPHA CHARACTERS UTILIZED BY THE DESIGNATOR SYSTEM ARE:
S = STUD OR JOIST, T = TRACK, U = CHANNEL, F = FURRING

MATERIAL THICKNESS:
(EXAMPLE: 0.054 IN. = 54 MILS; 1 MIL =1/1000 IN.)
MATERIAL THICKNESS IN MILS. MINIMUM BASE METAL THICKNESS REPRESENTS 95% OF THE DESIGN THICKNESS.

INTERIOR NON-STRUCTURAL NON-COMPOSITE:

USE FOR FURRING PURPOSES ONLY, U.O.N.

(S) STUD MEMBER	SPACING (IN.) O.C.	5 PSF L/240
250S125-18	12"	10'-6"
250S125-18	16"	9'-7"
250S125-18	24"	8'-3"
250S125-33	12"	13'-2"
250S125-33	16"	12'-0"
250S125-33	24"	10'-6"
250S125-43	12"	14'-4"
250S125-43	16"	13'-0"
250S125-43	24"	11'-5"
362S125-18	12"	14'-0"
362S125-18	16"	12'-2"
362S125-18	24"	9'-11" ●
362S125-33	12"	17'-7"
362S125-33	16"	16'-0"
362S125-33	24"	14'-0"
362S125-43	12"	19'-2"
362S125-43	16"	17'-5"
362S125-43	24"	15'-3"
362S125-54 (50 KSI)	12"	20'-6"
362S125-54 (50 KSI)	16"	18'-7"
362S125-54 (50 KSI)	24"	16'-3"
362S125-68 (50 KSI)	12"	21'-11"
362S125-68 (50 KSI)	16"	19'-11"
362S125-68 (50 KSI)	24"	17'-5"
400S125-18 X	12"	14'-9" ●
400S125-18 X	16"	12'-10" ●
400S125-18 X	24"	10'-5" ●
400S125-33	12"	19'-0"
400S125-33	16"	17'-3"
400S125-33	24"	15'-1"

(S) STUD MEMBER	SPACING (IN.) O.C.	5 PSF L/240
400S125-43	12"	20'-9"
400S125-43	16"	18'-10"
400S125-43	24"	16'-5"
400S125-54 (50 KSI)	12"	22'-2"
400S125-54 (50 KSI)	16"	20'-2"
400S125-54 (50 KSI)	24"	17'-7"
400S125-68 (50 KSI)	12"	23'-8"
400S125-68 (50 KSI)	16"	21'-6"
400S125-68 (50 KSI)	24"	18'-10"
600S125-27 X	12"	24'-4" ●
600S125-27 X	16"	21'-6" ●
600S125-27 X	24"	17'-7" ●
600S125-33	12"	26'-2"
600S125-33	16"	23'-9"
600S125-33	24"	20'-6"
600S125-43	12"	28'-9"
600S125-43	16"	26'-1"
600S125-43	24"	22'-10"
600S125-54 (50 KSI)	12"	30'-9"
600S125-54 (50 KSI)	16"	27'-11"
600S125-54 (50 KSI)	24"	24'-5"
600S125-68 (50 KSI)	12"	33'-0"
600S125-68 (50 KSI)	16"	30'-0"
600S125-68 (50 KSI)	24"	26'-2"
800S125-43	12"	36'-1"
800S125-43	16"	32'-9"
800S125-43	24"	28'-8"
800S125-54 (50 KSI)	12"	38'-9"
800S125-54 (50 KSI)	16"	35'-2"
800S125-54 (50 KSI)	24"	30'-9"
800S125-68 (50 KSI)	12"	41'-11"
800S125-68 (50 KSI)	16"	38'-1"
800S125-68 (50 KSI)	24"	33'-4"

● INDICATES THAT WEB STIFFENERS ARE REQUIRED AT ENDS

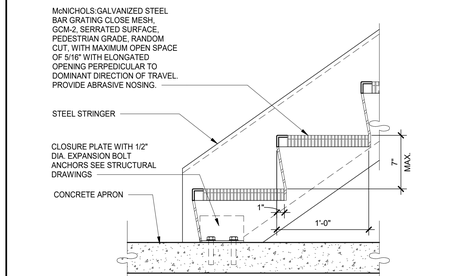
● INDICATES THAT WEB STIFFENERS ARE REQUIRED AT ALL SUPPORT POINTS AND CONCENTRATED LOADS

X INDICATES THAT 1 WEB STIFFENER IS REQUIRED AT CONCENTRATED LOADS

NOTE: ALL STUD INFORMATION IS BASED ON: STEEL STUD MANUFACTURERS ASSOCIATION (SSMA) ICC ESR-3064P

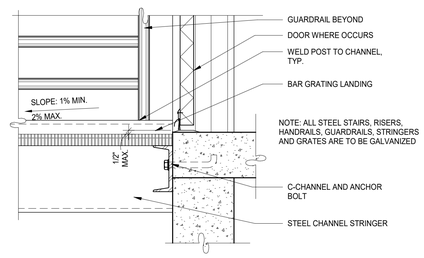
LIMITING WALL HEIGHT TABLE-L/240

SCALE: 1/2" = 1'-0" 18



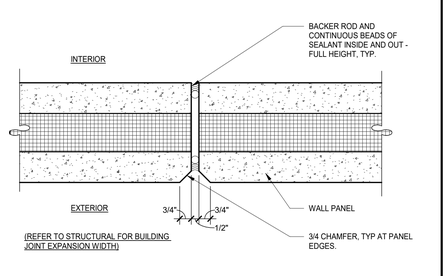
STEEL STAIR @ BOTTOM

SCALE: 1 1/2" = 1'-0" 12



STEEL STAIR LANDING

SCALE: 1 1/2" = 1'-0" 7

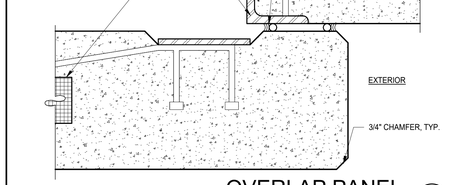


PANEL JOINT (TYP.)

SCALE: 3" = 1'-0" 2

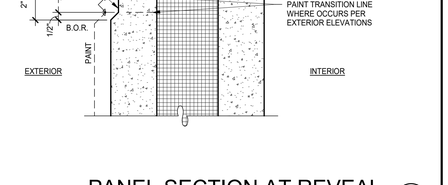
STEEL PIPE HANDRAIL

SCALE: 1" = 1'-0" 13



OVERLAP PANEL

SCALE: 3" = 1'-0" 8



PANEL SECTION AT REVEAL

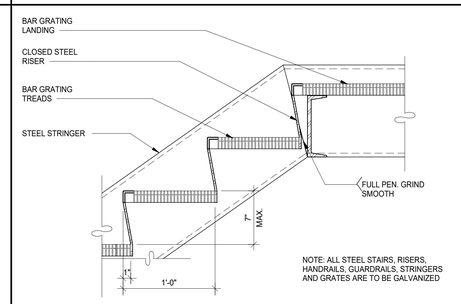
SCALE: 3" = 1'-0" 3

WALL TYPE NOTES:

1. INTERIOR GYP. BD. WALLS SHALL CONFORM TO **ICC-ESR-1338**
2. SEE LIMITING WALL HEIGHT TABLE FOR METAL STUD GAUGE AND SPACING BASED ON WALL HEIGHTS AND STUD SIZES AS NOTED ON EACH WALL TYPE.
3. MAX. STUD SPACING SHALL BE 24".
4. MINIMUM FASTENER SIZE SHALL BE #6 - 1-1/4" SCREWS.
5. MAXIMUM FASTENER SPACING SHALL BE 12" FIELD AND 8" AT EDGES.
6. ALL WALL STUDS TO BE 3-5/8", U.O.N.
7. ALL RESTROOM WALL STUDS TO BE 6" AND FULLY INSULATED, U.O.N.

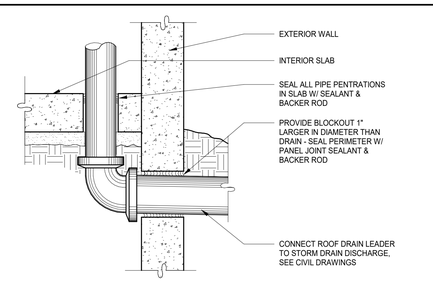
WALL TYPE NOTES

SCALE: 1/2" = 1'-0" 19



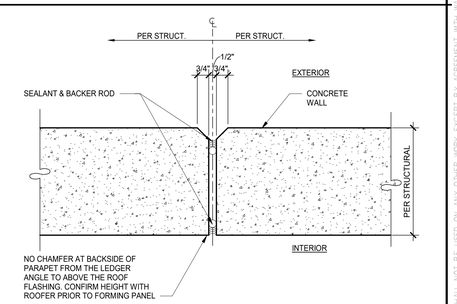
STEEL STAIR TREADS

SCALE: 1 1/2" = 1'-0" 14



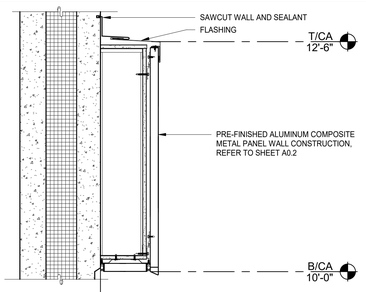
ROOF DRAIN EXITING

SCALE: 1 1/2" = 1'-0" 9



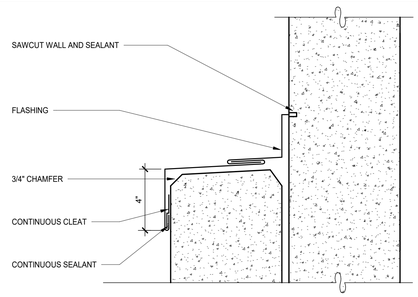
PANEL JOINT ABOVE ROOF LINE

SCALE: 3" = 1'-0" 4



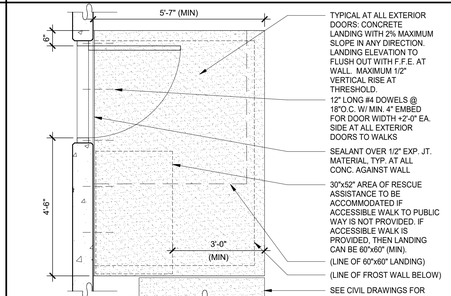
CANOPY WALL SECTION, MIR.

SCALE: 1 1/2" = 1'-0" 25



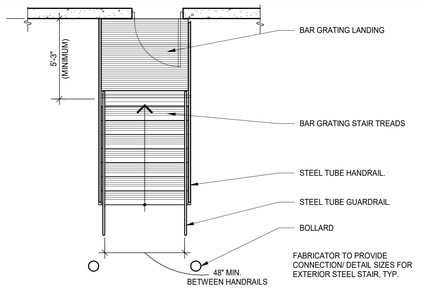
WALL FLASHING

SCALE: 3" = 1'-0" 20



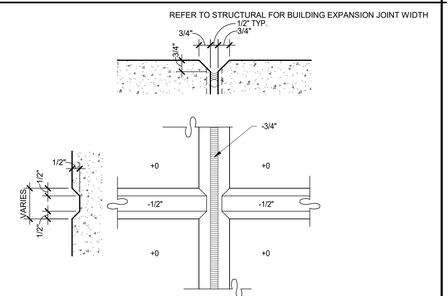
CONCRETE LANDING

SCALE: 1/2" = 1'-0" 15



EXTERIOR STEEL STAIR PLAN

SCALE: 1/4" = 1'-0" 10



REVEAL AT PANEL JOINT

SCALE: 3" = 1'-0" 5

THE MISSNER GROUP EST. 1948

GRANT A BRANDENBURG 001-020842 STATE OF ILLINOIS REGISTERED ARCHITECT EXP: 11 - 30 - 2022

State of Illinois Design Firm Registration No. 184-004069

WARE MALCOMB

ARCHITECTURE CIVIL ENGINEERING
PLANNING LANDSCAPE ARCHITECTURE
INTERIORS BUILDING MEASUREMENT

1315 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

MISSNER GROUP - PALATINE

2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

DETAILS

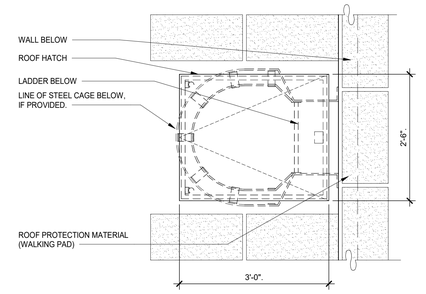
DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A8.2

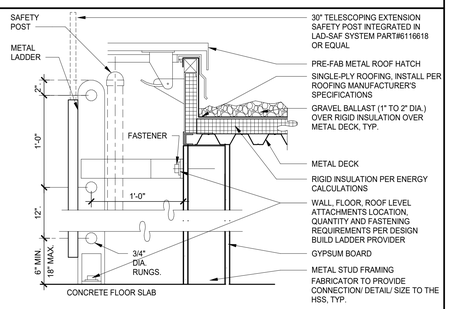
4/19/2022 8:51:37 AM 2022-04-08 PERMIT SET

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)



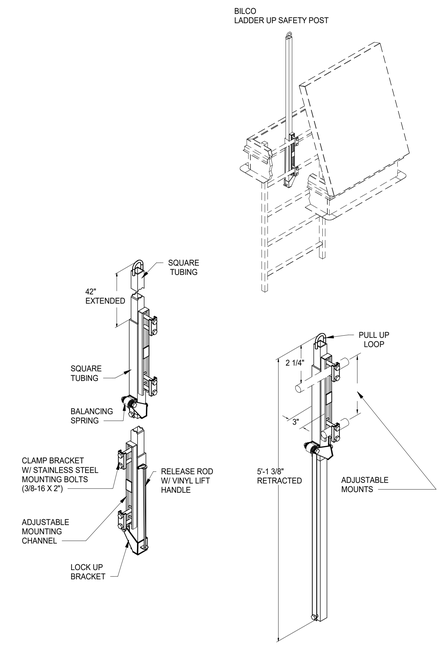
ROOF HATCH PLAN 21

SCALE: 3/4" = 1'-0"



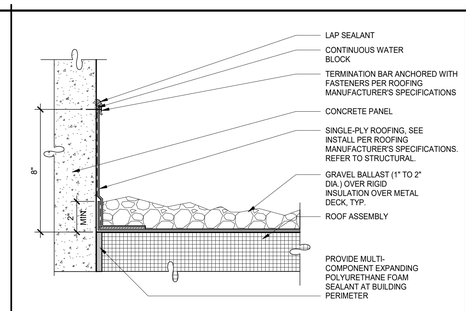
ROOF HATCH & LADDER 22

SCALE: 1 1/2" = 1'-0"



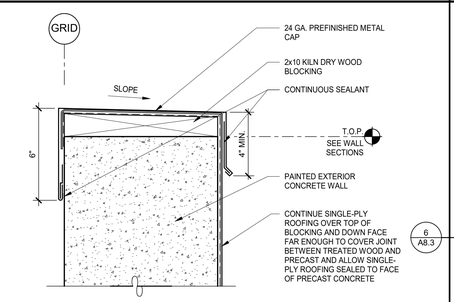
SAFETY POST 17

SCALE: 1" = 1'-0"



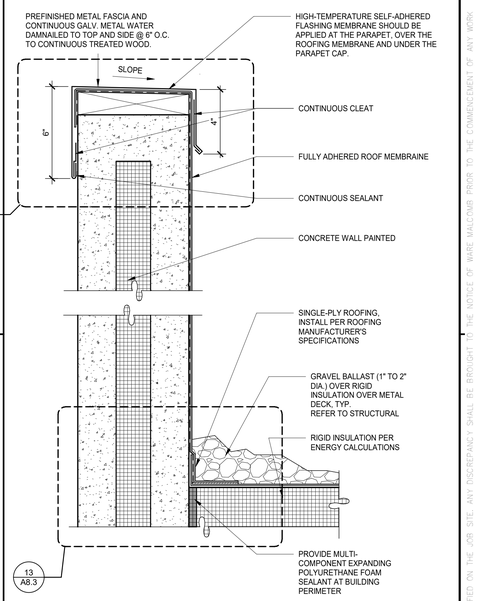
ROOF FLASHING 11

SCALE: 3" = 1'-0"



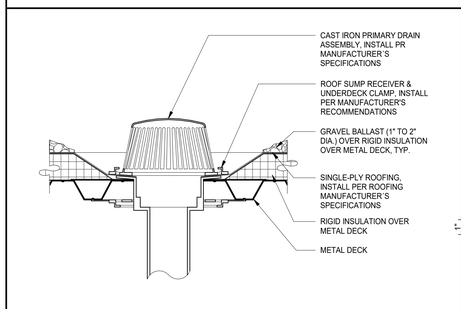
PARAPET, TYP. 6

SCALE: 3" = 1'-0"



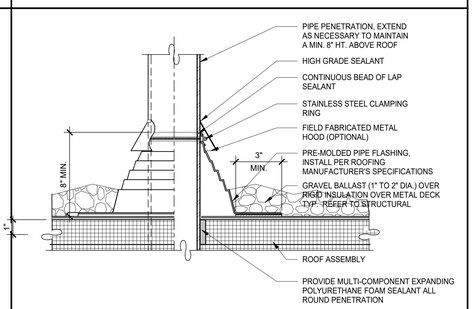
SINGLE-PLY ROOFING @ PARAPET 2

SCALE: 3" = 1'-0"



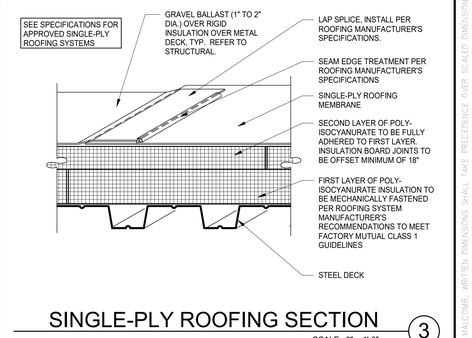
DRAIN 12

SCALE: 1 1/2" = 1'-0"



ROOF PENETRATION FLASHING 7

SCALE: 3" = 1'-0"



SINGLE-PLY ROOFING SECTION 3

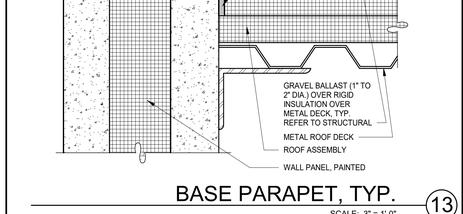
SCALE: 3" = 1'-0"

ROOF HATCH & LADDER 24

SCALE: 1 1/2" = 1'-0"

WING WALL PLAN SECTION, SIM. 19

SCALE: 1 1/2" = 1'-0"

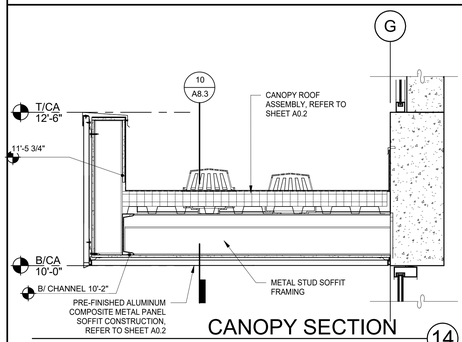


BASE PARAPET, TYP. 13

SCALE: 3" = 1'-0"

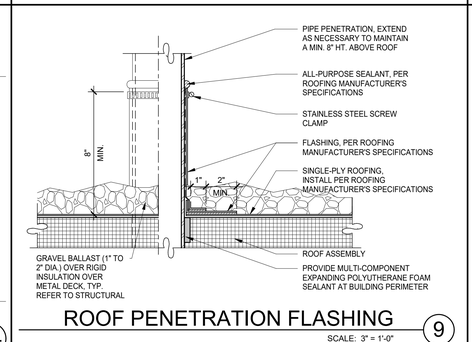
ROOFING @ PREFABRICATED CURB 8

SCALE: 3" = 1'-0"



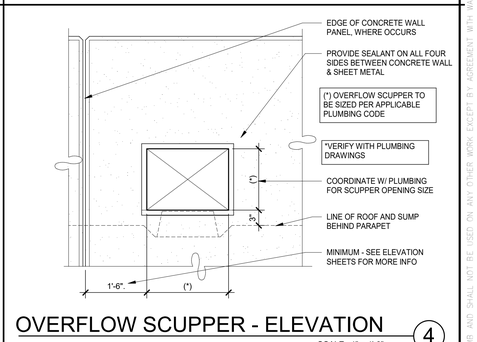
CANOPY SECTION 14

SCALE: 1" = 1'-0"



ROOF PENETRATION FLASHING 9

SCALE: 3" = 1'-0"



OVERFLOW SCUPPER - ELEVATION 4

SCALE: 1" = 1'-0"

CENTRAL CANOPY SECTION 20

SCALE: 1" = 1'-0"

CANOPY SECTION, MIR. 10

SCALE: 1" = 1'-0"

OVERFLOW SCUPPER - DETAIL 5

SCALE: 3" = 1'-0"

WARE MALCOMB
1315 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063
ARCHITECTURE CIVIL ENGINEERING
PLANNING INTERIORS BUILDING MEASUREMENT
State of Illinois Design Firm Registration No. 184-004089

GRANT A BRANDENBURG 001-020842 STATE OF ILLINOIS REGISTERED ARCHITECT
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

DETAILS

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

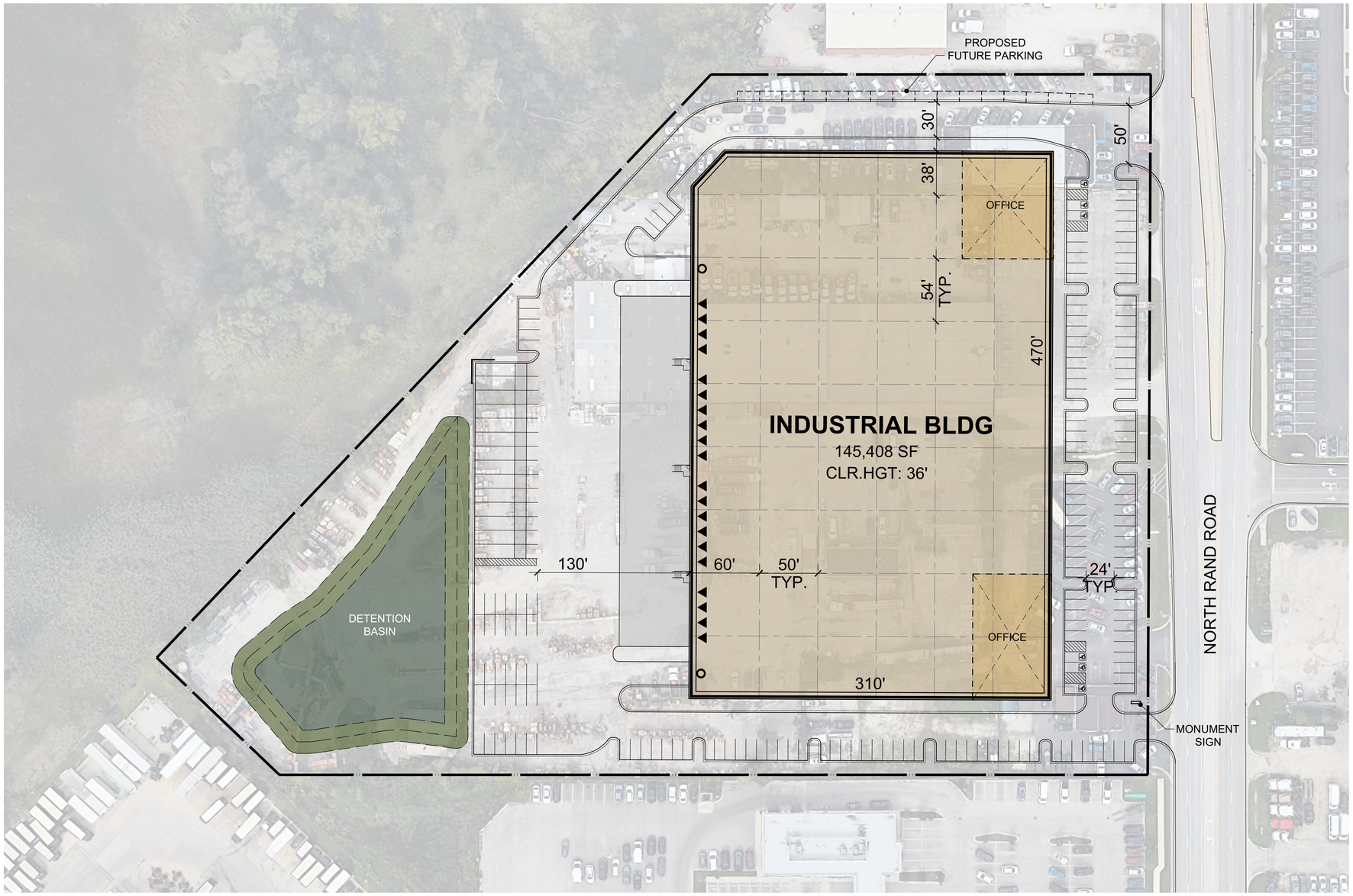
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	CHI21-0193-00

SHEET
A8.3

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK

Attachment: EXHIBIT - ARCH - Permit Set (2022-60 : 2240-2296 N. Rand Road)

4/19/2022 8:51:42 AM 2022-04-08 PERMIT SET



PROJECT DATA:

SITE AREA:		
GROSS:		8.86 AC
		385,828 SF
DETENTION:	@ 9%	34,746 SF
NET:		8.06 AC
		351,082 SF
BUILDING FOOTPRINT:		145,408 SF
BUILDING USE:		
WAREHOUSE		130,867 SF
OFFICE	@ 10%	14,541 SF
COVERAGE:		
GROSS:		38%
NET:		41%
PARKING REQUIRED:		
WAREHOUSE	1/1000 SF	131 STALLS
OFFICE	1/300 SF	48 STALLS
TOTAL		179 STALLS
PARKING PROVIDED:		
AUTO:		169 STALLS
		@1.16/1000 SF
REQ. ACCESSIBLE		*6 STALLS*
TRAILER:		14 STALLS
FUTURE PARKING PROPOSED:		
AUTO:		16 STALLS
TRUCK DOCKS:		
▲ DOCK-HIGH DOORS		20

DEVELOPMENT STANDARDS:

ZONING:	M
MAX. F.A.R.:	0.70
MAX. COVERAGE:	TBD [1]
MAX. HEIGHT:	60 FT
BUILDING SETBACKS:	
FRONT:	30 FT
SIDE:	15 FT
REAR:	15 FT
LANDSCAPE SETBACKS:	
FRONT:	5 FT
SIDE:	2 FT
REAR:	2 FT
LANDSCAPE REQ.:	[2]
OFF-STREET PARKING:	
STANDARD:	9X19
COMPACT:	8X16
DRIVE AISLE:	25 FT
FIRE LANE:	TBD [1]
REQ. PARKING RATIO BY USE:	
WAREHOUSE:	1/1000 SF
OFFICE:	1/300 SF

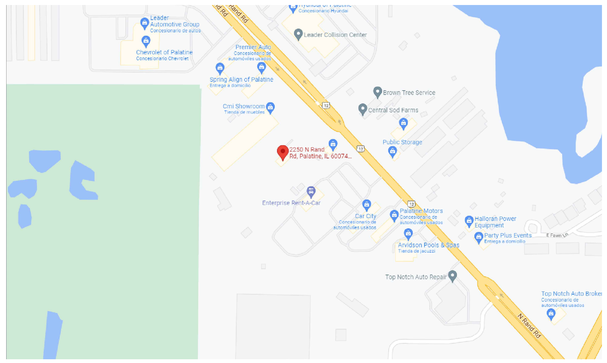
NOTES:
1 To be confirmed by city.
2 1 tree for every 10 parking stalls.

A PORTION OF THE ZONING INFORMATION IS UNKNOWN AT THIS TIME AND REQUIREMENTS MAY DIFFER THAN WHAT IS SHOWN IN THE SITE PLAN.

This conceptual design is based upon a preliminary review of entitlement requirements and on unverified and possibly incomplete site and/or building information, and is intended merely to assist in exploring how the project might be developed.

Stormwater Management Design:
AVERAGE REGIONAL REQUIRED PROVIDED

Boundary Source:
CIVIL CAD FILE



1" = 40'
0 20 40 80 200
NORTH

THE MISSNER GROUP
EST. 1945

scheme: 09

Conceptual Site Plan

2250 North Rand Road
Palatine, IL 60074

WARE MALCOMB

CHI21-0193-00
06.02.2022

SHEET
1

Attachment: EXHIBIT - ARCH site plan - with additional parking (west side of building - trailer storage parking area) (2022-26) : 2240-2256 N. Rand Road)

Luminaire Schedule				
Symbol	Qty	LLF	Description	Type
	2	0.950	DSX0 LED P3 40K T3S MVOLT	P1
	6	0.950	WDGE4 LED P3 70CRI R3 40K	W1
	10	0.950	WDGE4 LED P3 70CRI RFT 40K	W2

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Site	Illuminance	Fc	0.97	8.0	0.0	N.A.	N.A.

**This document contains confidential and proprietary information of KSA Lighting & Controls. This document may only be used by or for the benefit of KSA Lighting & Controls representatives and customers. This lighting layout is not a professional engineering drawing and is provided for informational purposes only, without warranty as to accuracy, completeness, reliability or otherwise. KSA Lighting & Controls is not responsible for specifying the light fixtures or illumination requirements for any specific project, nor is it responsible for meeting municipal or building code requirements. It is the obligation of the end-user to consult with a professional engineering advisor to determine whether this lighting layout meets the applicable project requirements for lighting system performance, safety, suitability and effectiveness for use in a particular application. Field verification is recommended when calculations are based on end-user or customer-provided information. End-user environment and application (including, but not limited to, voltage variation and dirt accumulation) can cause actual field performance to differ from the calculated photometric performance represented in this lighting layout. In no event will KSA Lighting & Controls be responsible for any loss resulting from any use of this drawing.

Notes :
1. Calculation Work Plane : Ground Level
2. Fixture Mounting Height : 25'
3. Calculation Point Spacing : 10' x10'

LIGHTING & CONTROLS

KSA

2234 Rand Rd

Drawn By: Scott Shellberg
Date:3/1/2022
Notes :

Attachment: EXHIBIT - Photometric Lighting Plan (2022-60 : 2240-2296 N. Rand Road)

Traffic Impact Study
Proposed Industrial Development
Palatine, Illinois

Prepared For:

THE MISSNER GROUP
EST. 1945

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

April 7, 2022

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

1. Introduction

This report summarizes the methodologies, results, and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for a proposed industrial development to be located in Palatine, Illinois. The site, which currently contains Premier Auto, Contractors Material, Inc., and Auto Land Group is located on the west side of Rand Road (U.S. Route 12) approximately 600 feet south of its intersection with Lake Cook Road. As proposed, the site will be developed with an approximately 145,408 square-foot light industrial building with 148 parking spaces. Access to the development will be provided via a full movement access drive and a right-in/right-out access drive on Rand Road.

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed development will have on traffic conditions in the area, and determine if any roadway or access improvements are necessary to accommodate traffic generated by the proposed development.

Figure 1 shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site.

The sections of this report present the following:

- Existing roadway conditions
- A description of the proposed development
- Directional distribution of the development traffic
- Vehicle trip generation for the development
- Future traffic conditions including access to the development
- Traffic analyses for the weekday morning and weekday evening peak hours
- Recommendations with respect to adequacy of the site access and adjacent roadway system
- Evaluation of the proposed parking supply

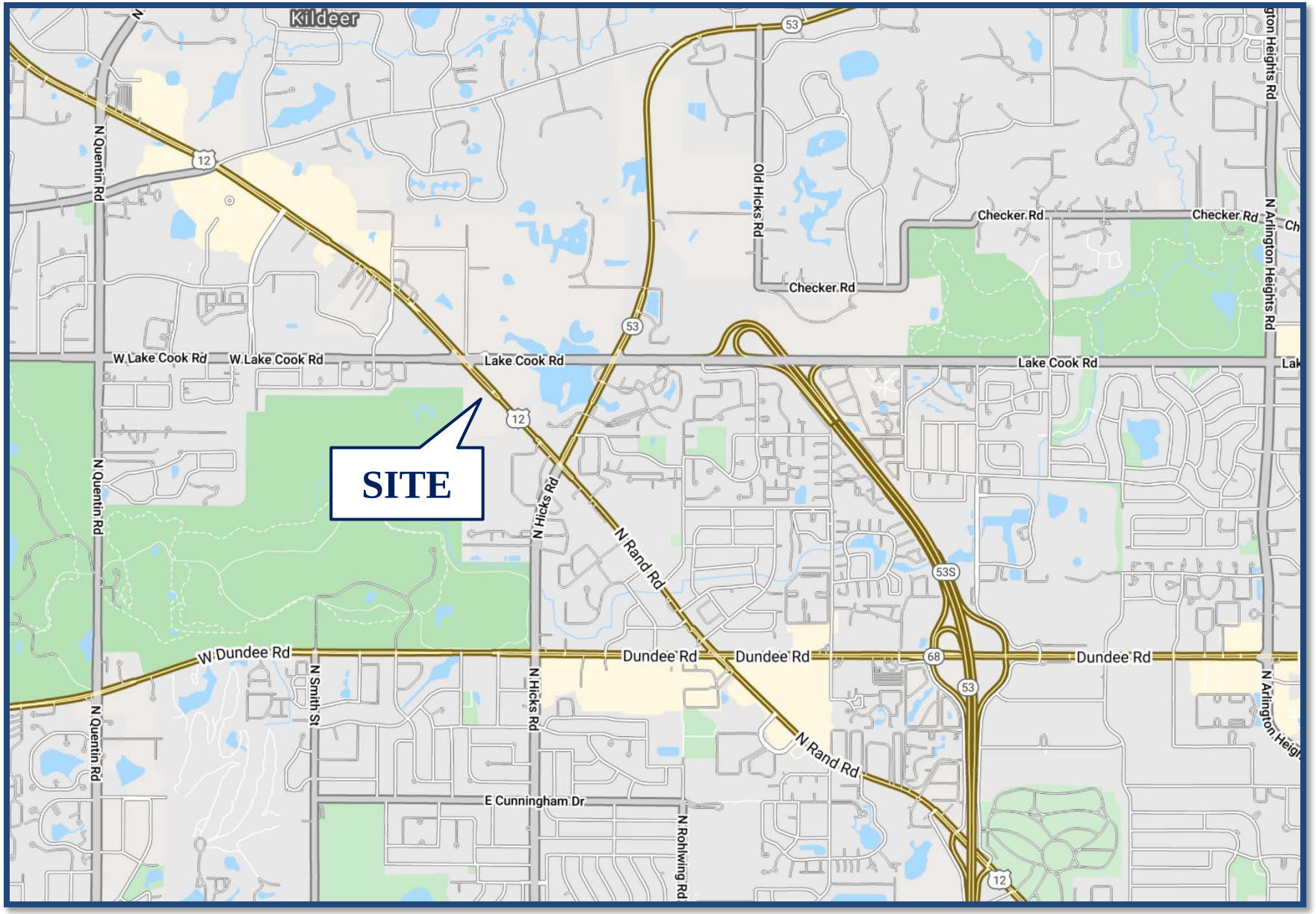
Traffic capacity analyses were conducted for the weekday morning and evening peak hours for the following conditions:

1. Existing Conditions – Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.

2. No-Build Conditions – Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes increased by an ambient area growth factor not attributable to any particular development.

3. Projected Conditions – Analyzes the capacity of the future roadway system using the projected traffic volumes that include the existing traffic volumes, ambient area growth not attributable to any particular development, and the increase in traffic estimated to be generated by the proposed development.

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)



Site Location
Proposed Industrial Development
Palatine, Illinois

Figure 1

KLOA

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Aerial View of Site **Figure 2**

Proposed Industrial Development
Palatine, Illinois

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

2. Existing Conditions

Existing transportation conditions in the vicinity of the site were documented based on field visits conducted by KLOA, Inc. in order to obtain a database for projecting future conditions. The following provides a description of the geographical location of the site, physical characteristics of the area roadway system including lane usage and traffic control devices, and existing peak hour traffic volumes.

Site Location

The site, which currently contains Premier Auto, Contractors Material, Inc., and Auto Land Group, is bounded by Spring Align to the northwest, Rand Road to the northeast, Enterprise to the southeast, Deer Grove Forest Preserve to the west, and UPS to the south. Land uses in the site are a mixture of commercial, residential, and industrial and include Chevrolet of Palatine and Avers Auto Sales to the north, Car City and Palatine Motors to the south, and Hyundai of Palatine, Central Sod Farms, International Auto Brokers, and Public Storage on the northeast side of Rand Road.

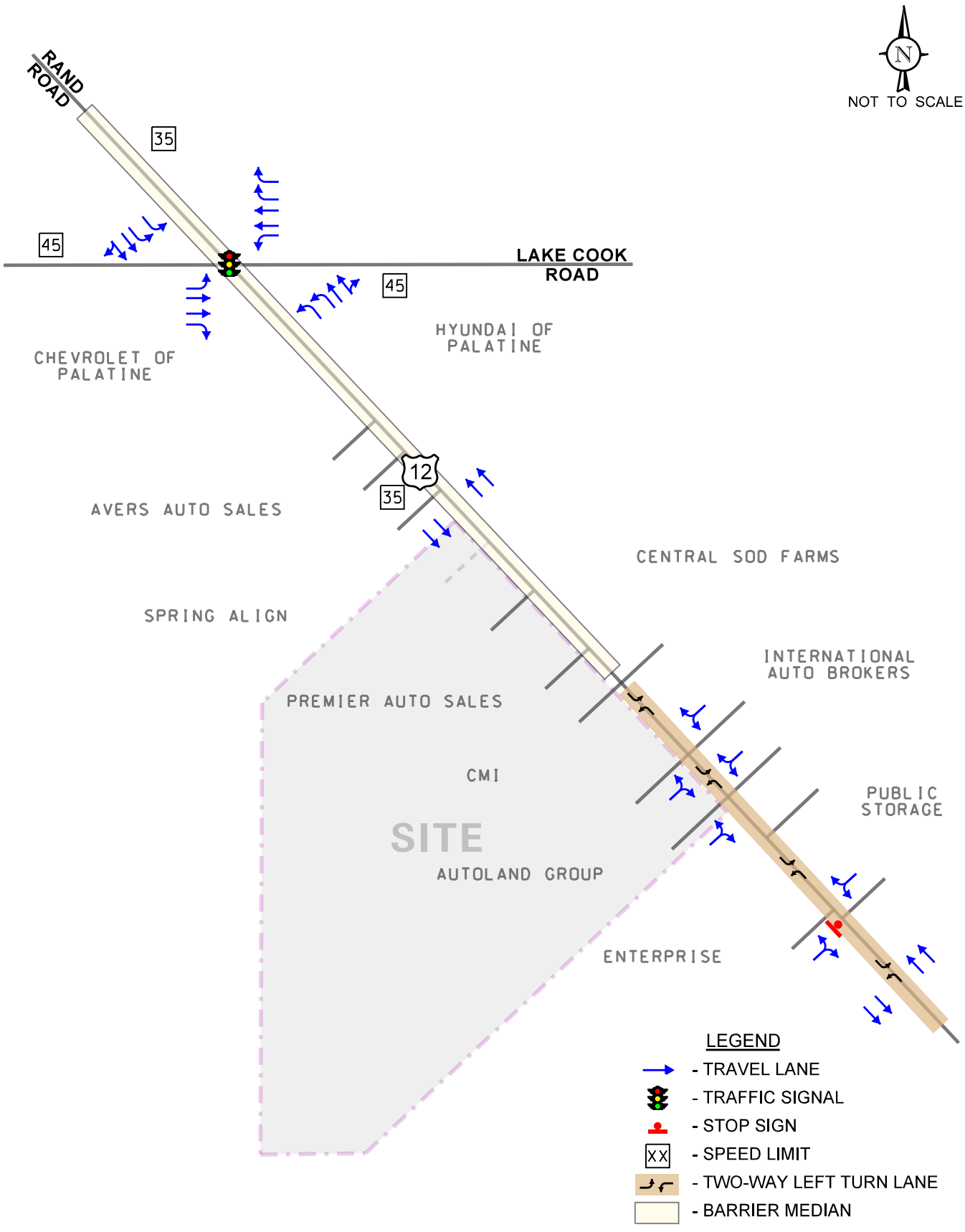
Existing Roadway System Characteristics

The characteristics of the existing roadways near the development are described below and illustrated in **Figure 3**.

Rand Road (U.S. Route 12) is a northwest-southeast, principal arterial roadway that provides two lanes in each direction generally divided by a two-way left-turn lane. At its signalized intersection with Lake Cook Road, Rand Road provides dual left-turn lanes, a through lane, and a shared through/right-turn lane on both approaches. At its unsignalized intersections with the access drives south of Lake Cook Road Rand Road provides two lanes in each direction. For approximately 700 feet south of Lake Cook Road, Rand Road is divided by a barrier median. South of the barrier median, Rand Road is divided by a two-way left-turn lane. This turn lane serves numerous access drives including the Auto Land Group, Central Sod Farm, International Auto Brokers, Enterprise, and Public Storage access drives that are analyzed in this study. Rand Road is under the jurisdiction of the Illinois Department of Transportation (IDOT), is designated as a Strategic Regional Arterial (SRA) route, has a posted speed limit of 35 miles per hour, and carries an annual average daily traffic (AADT) volume of 49,700 vehicles northwest of Lake Cook Road and 14,900 vehicles southeast of Lake Cook Road (IDOT 2019).

Lake Cook Road is an east-west, principal arterial roadway that provides two lanes in each direction. At its signalized intersection with Rand Road, Lake Cook Road provides an exclusive left-turn lane, two through lanes, and an exclusive right-turn lane on the eastbound approach and an exclusive left-turn lane, two through lanes, and dual right-turn lanes on the westbound approach. Lake Cook Road is under the jurisdiction of the Cook County Division of Highways and Transportation (CCDTH), has a posted speed limit of 45 miles per hour, and carries AADT volume of 19,700 vehicles west of Rand Road and 43,600 vehicles east of Rand Road (IDOT 2018). East of Rand Road, Lake Cook Road is designated as an SRA route.

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)



Industrial Development
Palatine, Illinois

Existing Roadway Characteristics

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 21-242 Figure: 3

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Existing Traffic Volumes

In order to determine current traffic conditions within the study area, KLOA, Inc. conducted peak period traffic counts utilizing Miovision Scout Collection Units at the following intersections:

- Rand Road with Lake Cook Road
- Rand Road with the north Auto Land Group access drive and the Central Sod Farms access drive
- Rand Road with the south Auto Land Group Access Drive and the north International Auto Brokers access drive
- Rand Road with the Enterprise access drive and the Public Storage access drive

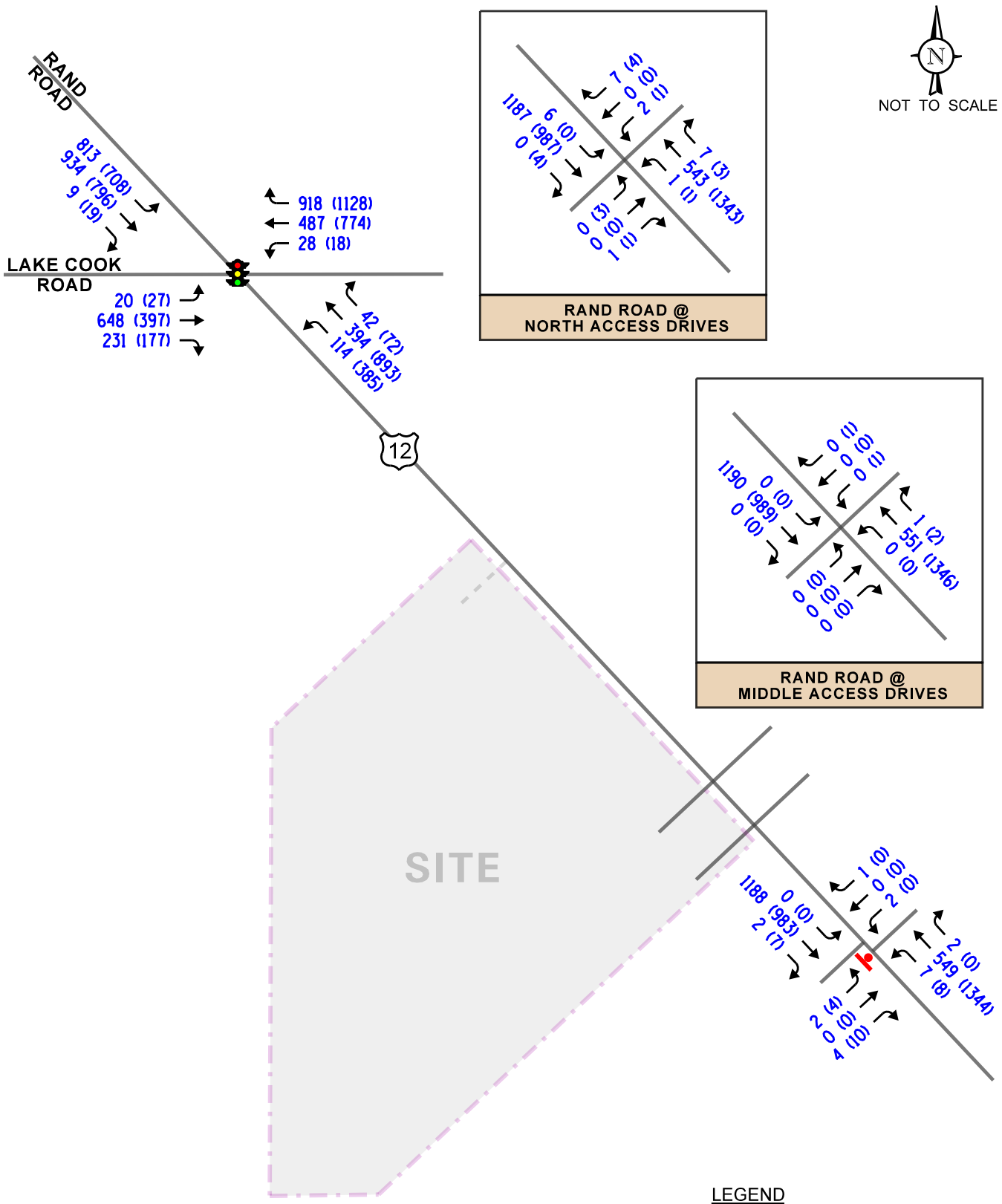
The traffic counts were conducted on Wednesday, September 22, 2021 during the weekday morning (6:30 A.M. to 9:00 A.M.) and weekday evening (4:00 P.M. to 6:30 P.M.) peak periods. The results of the traffic counts show that the peak hours of traffic generally occur between 7:15 A.M. and 8:15 A.M. during the weekday morning peak period and between 4:30 P.M. and 5:30 P.M. during the weekday evening peak period. Copies of the traffic count summary sheets are included in the Appendix. The existing traffic volumes, inclusive of heavy vehicles, are illustrated in **Figure 4**. The existing heavy vehicle traffic volumes are illustrated in **Figure 5.**

Crash Analysis

KLOA, Inc. obtained crash data for the most recent available past five years (2016 to 2020) at the intersections of Rand Road with Lake Cook Road and along Rand Road at its intersections with the access drives analyzed in the study. A review of the crash data revealed no fatalities were reported at any of the study area intersections during the review period. A summary of the crash data for the intersections is shown in **Tables 1** and **2.** [1]

[1] IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s). Additionally, for coding years 2015 to present, the Bureau of Data Collection uses the exact latitude/longitude supplied by the investigating law enforcement agency to locate crashes. Therefore, location data may vary in previous years since data prior to 2015 was physically located by bureau personnel.

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)



LEGEND

00 - AM PEAK HOUR (7:15-8:15 AM)

(00) - PM PEAK HOUR (4:30-5:30 PM)

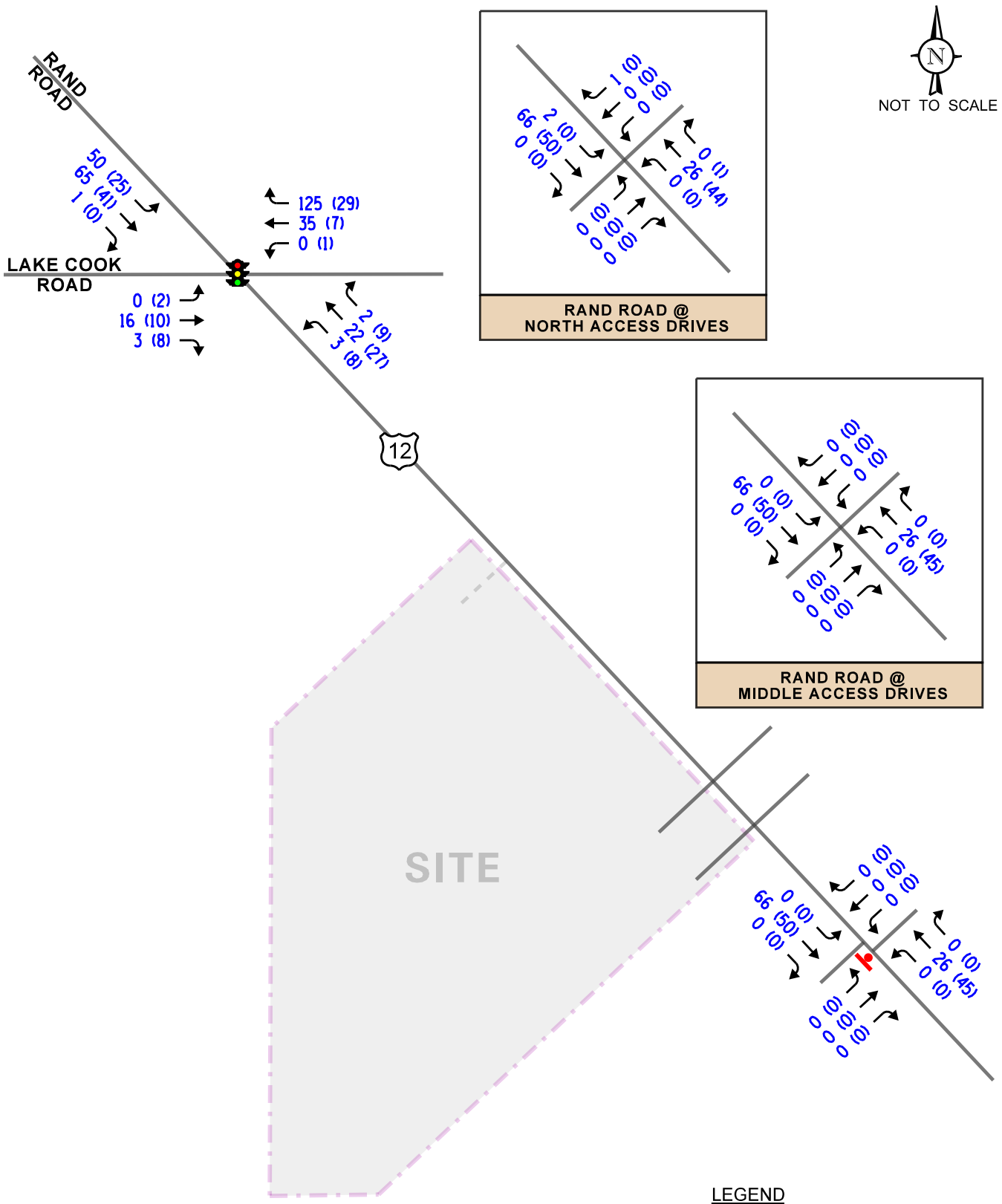
Industrial Development
Palatine, Illinois

Existing Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 21-242 Figure: 4

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)



LEGEND

00 - AM PEAK HOUR (7:15-8:15 AM)

(00) - PM PEAK HOUR (4:30-5:30 PM)

Industrial Development
Palatine, Illinois

Existing Truck Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 21-242 Figure: 5

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Table 1
RAND ROAD WITH LAKE COOK ROAD - CRASH SUMMARY

	Type of Accident Frequency						
Year	**Angle**	**Object**	**Rear End**	**Sideswipe**	**Turning**	**Other**	**Total**
2016	3	0	33	3	8	2	49
2017	1	0	24	4	8	0	37
2018	1	1	21	4	8	0	35
2019	1	0	27	8	11	1	48
2020	1	1	18	1	8	0	29
Total	**7**	**2**	**123**	**20**	**43**	**3**	**198**
Average/Year	**1.4**	**<1.0**	**24.6**	**4.0**	**8.6**	**<2.0**	**39.6**

Table 2
RAND ROAD WITH ACCESS DRIVES - CRASH SUMMARY

	Type of Accident Frequency						
Year	**Angle**	**Object**	**Rear End**	**Sideswipe**	**Turning**	**Other**	**Total**
2016	0	0	2	0	1	0	3
2017	0	0	0	1	1	0	2
2018	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0
Total	**0**	**0**	**2**	**1**	**2**	**0**	**5**
Average/Year	**--**	**--**	**<1.0**	**<1.0**	**<1.0**	**0**	**1.0**

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

3. Traffic Characteristics of the Proposed Development

In order to properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed development, including the directional distribution and volumes of traffic that it will generate.

Proposed Site and Development Plan

As proposed, the site will be developed with an approximately 145,408 square-foot industrial building. The development will provide 45 parking spaces for employees on the southeast side of the site, 86 spaces on the northeast side of the building, and 17 spaces on the northwest side of the building for a total of 148 employee parking spaces. 28 trailer storage spaces will be provided on the southwest side of the site. Access to the development is proposed to be provided as follows:

- A full movement access drive on the southwest side of Rand Road located approximately 1,045 feet southeast of Lake Cook Road that will serve the employee parking lots. This access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control. This access drive will replace an existing access drive at this location. Inbound left-turn movements at this access drive can be accommodated within the existing two-way left-turn lane on Rand Road.

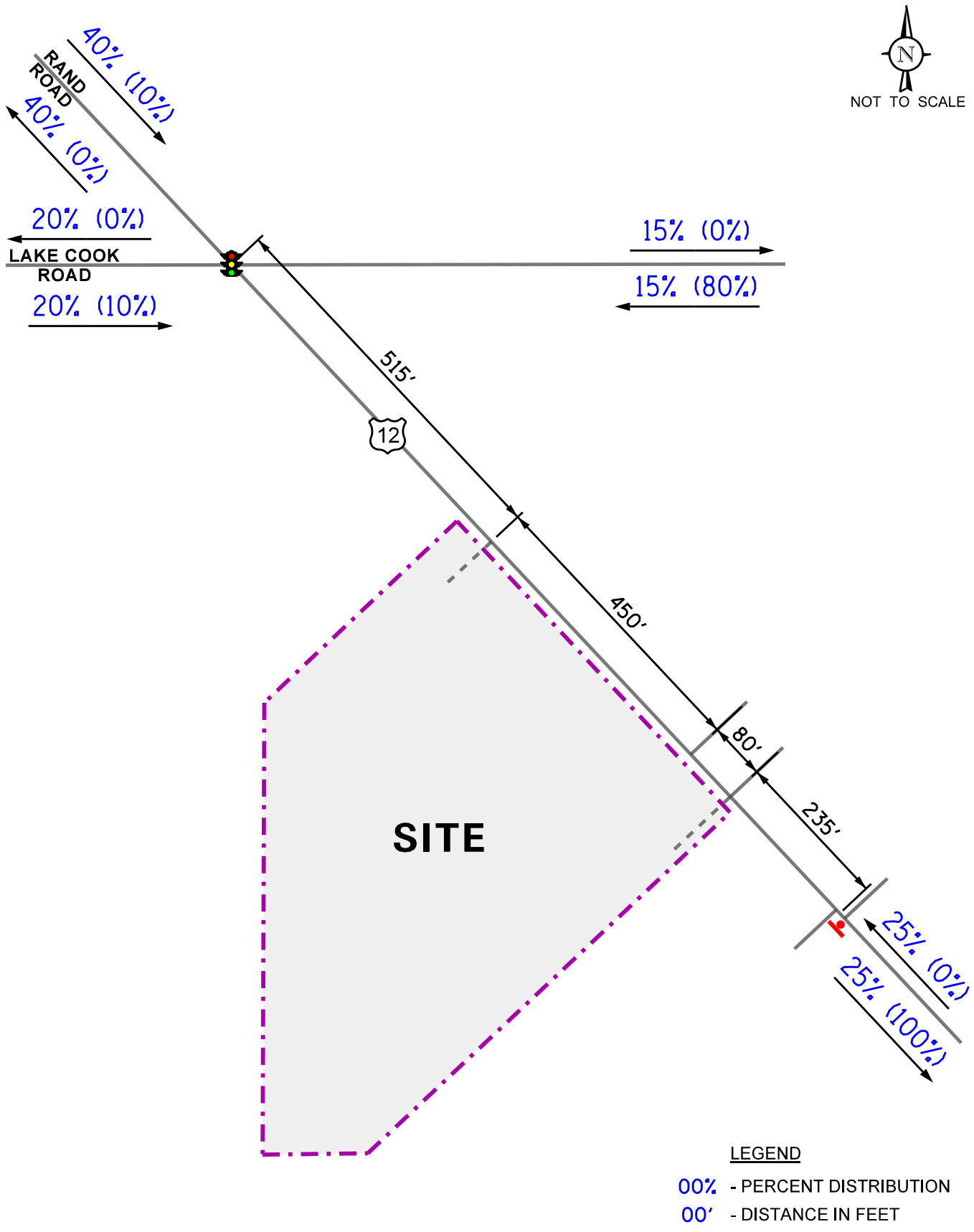
- A right-in/right-out access drive on the southwest side of Rand Road located approximately 515 feet south of Lake Cook Road that will serve the employee parking lots and truck loading bays. This access drive will provide one inbound lane and one outbound lane restricted to right-turn movements only via the barrier median on Rand Road. Outbound movements will be under stop sign control. This access drive will replace an existing access drive at this location.

It should be noted that the proposed development will replace six existing access drives along the site frontage of which two are full movement access drives. This reduction in conflict points will improve safety and traffic flow on Rand Road. This is especially true given the proximity of the development to the signalized intersection of Rand Road with Lake Cook Road and the proximity of the other numerous existing access drives on Rand Road. A copy of the preliminary site plan is included in the appendix.

Directional Distribution

The directions from which employees and truck traffic will approach and depart the site were estimated based on existing travel patterns, as determined from the traffic counts. It is important to note that access to Illinois Route 53 will primarily be provided via the Dundee Road and Rand Road interchanges south of the site. Given the restricted nature of the access drive serving the truck loading bays, all truck traffic will approach the site from the north on Rand Road and exit the site to the south on Rand Road. **Figure 6** illustrates the directional distribution of the site-generated traffic. Figure 6 also shows the distance, in feet, between the existing and proposed access intersections.

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)



Industrial Development
Palatine, Illinois

Estimated Directional Distribution

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 21-242 Figure: 6

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Development-Generated Traffic Volumes

The number of trips estimated to be generated by the proposed development was based on trip generation rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 11th Edition. The "General Light Industrial" (Land-Use Code 110) rate was used for the development. **Table 3** summarizes the trips projected to be generated by the development during the peak hours and on a daily basis. **Tables 4** summarizes the truck trips projected to be generated by the development throughout the day. Copies of the ITE trip generation sheets are included in the Appendix.

Table 3
ESTIMATED PEAK HOUR AND DAILY TRIP GENERATION

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Daily Trips	
		In	Out	Total	In	Out	Total	In	Out
110	**General Light Industrial (145,408 s.f.)[1]**	**90**	**13**	**103**	**13**	**81**	**94**	**299**	**299**
	Truck Trips[2]	3	3	6	1	1	2	18	18
	Passenger Vehicle Trips[3]	87	10	97	12	80	92	281	281

1 - Based on the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 11th Edition
2 – Daily rate based on ITE Manual.
3 – Equal to total trips less truck trips.

Table 4
ESTIMATED 24-HOUR TRUCK TRIP GENERATION

Hour	Volume of Site Generated Truck Traffic General Light Industrial (ITE Land-Use Code 110) – 145,260 s.f.					
	Weekday AM			Weekday PM		
	In	Out	Total	In	Out	Total
12:00	0	0	**0**	1	1	**2**
1:00	0	0	**0**	2	2	**4**
2:00	0	0	**0**	2	2	**4**
3:00	0	0	**0**	2	2	**4**
4:00	0	0	**0**	1	1	**2**
5:00	0	0	**0**	0	0	**0**
6:00	0	0	**0**	0	0	**0**
7:00	2	1	**3**	0	0	**0**
8:00	2	2	**4**	0	0	**0**
9:00	3	3	**6**	0	0	**0**
10:00	2	3	**5**	0	0	**0**
11:00	1	1	**2**	0	0	**0**

Based on daily truck trips (Table A) and ITE's Hourly Distribution of Entering and Exiting Truck Trips tables.

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

4. Projected Traffic Conditions

The total projected traffic volumes include the existing traffic volumes, increase in background traffic due to ambient growth, and the traffic estimated to be generated by the proposed subject development.

Development Traffic Assignment

The estimated weekday morning and evening traffic volumes that will be generated by the proposed development were assigned to the roadway system in accordance with the previously described directional distribution (Figure 6). The new passenger traffic assignment for the development is illustrated in **Figure 7** and the new truck traffic assignment is illustrated in **Figure 8.**

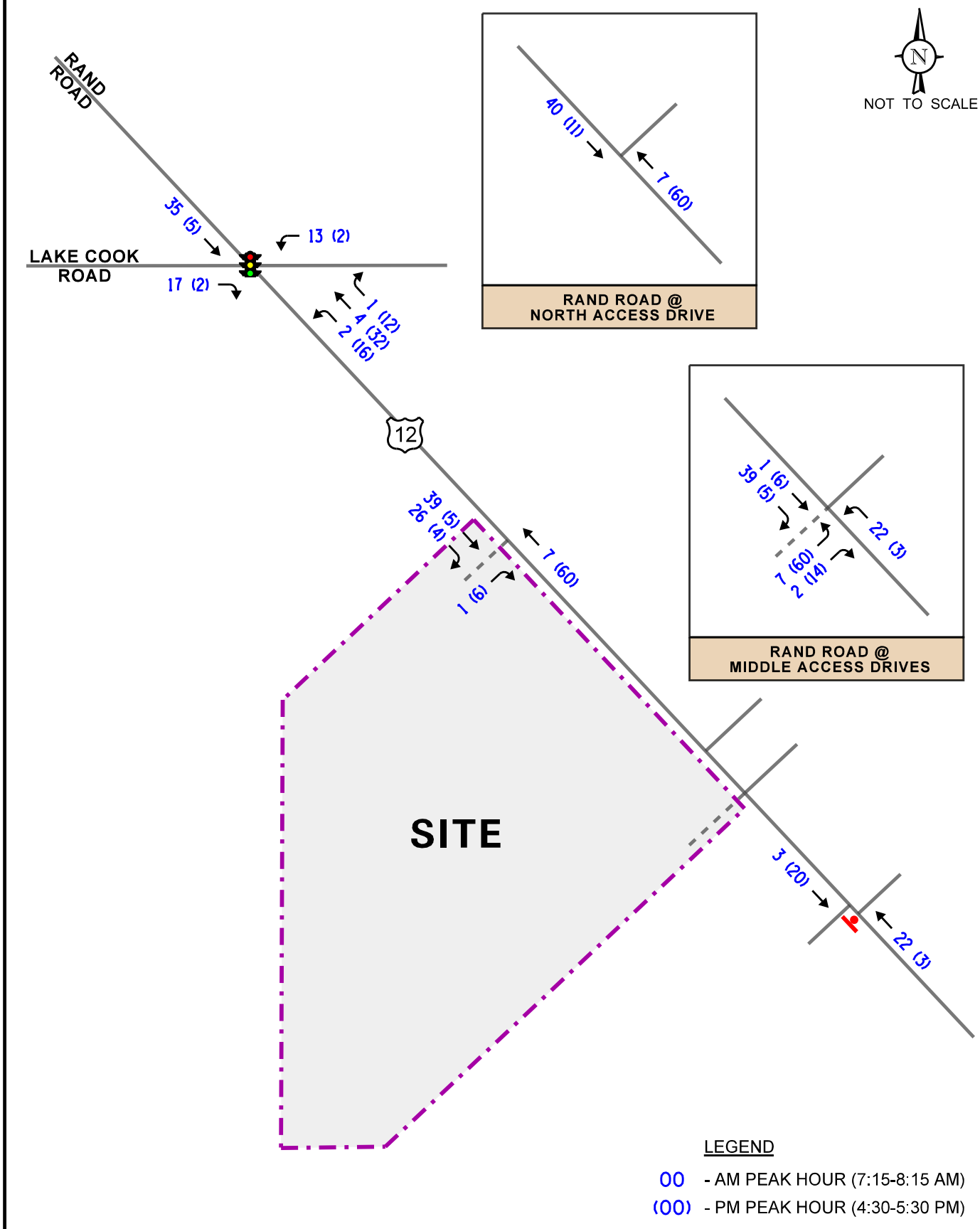
Background (No-Build) Traffic Conditions

The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any planned development). Based on AADT projections provided by the Chicago Metropolitan Agency for Planning (CMAP), the existing traffic volumes were increased by an annually compounded growth rate of 0.4 percent per year for seven years (buildout year plus five years) for a total of 2.8 percent. The projected Year 2028 no-build traffic volumes, which include the projected existing traffic volumes increased by the regional growth factor, are illustrated in **Figure 9**.

Total Projected Traffic Volumes

The development-generated traffic (Figures 7 and 8) was added to the Year 2028 no-build traffic volumes to determine the projected Year 2028 total projected traffic volumes, as shown in **Figure 10**.

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)



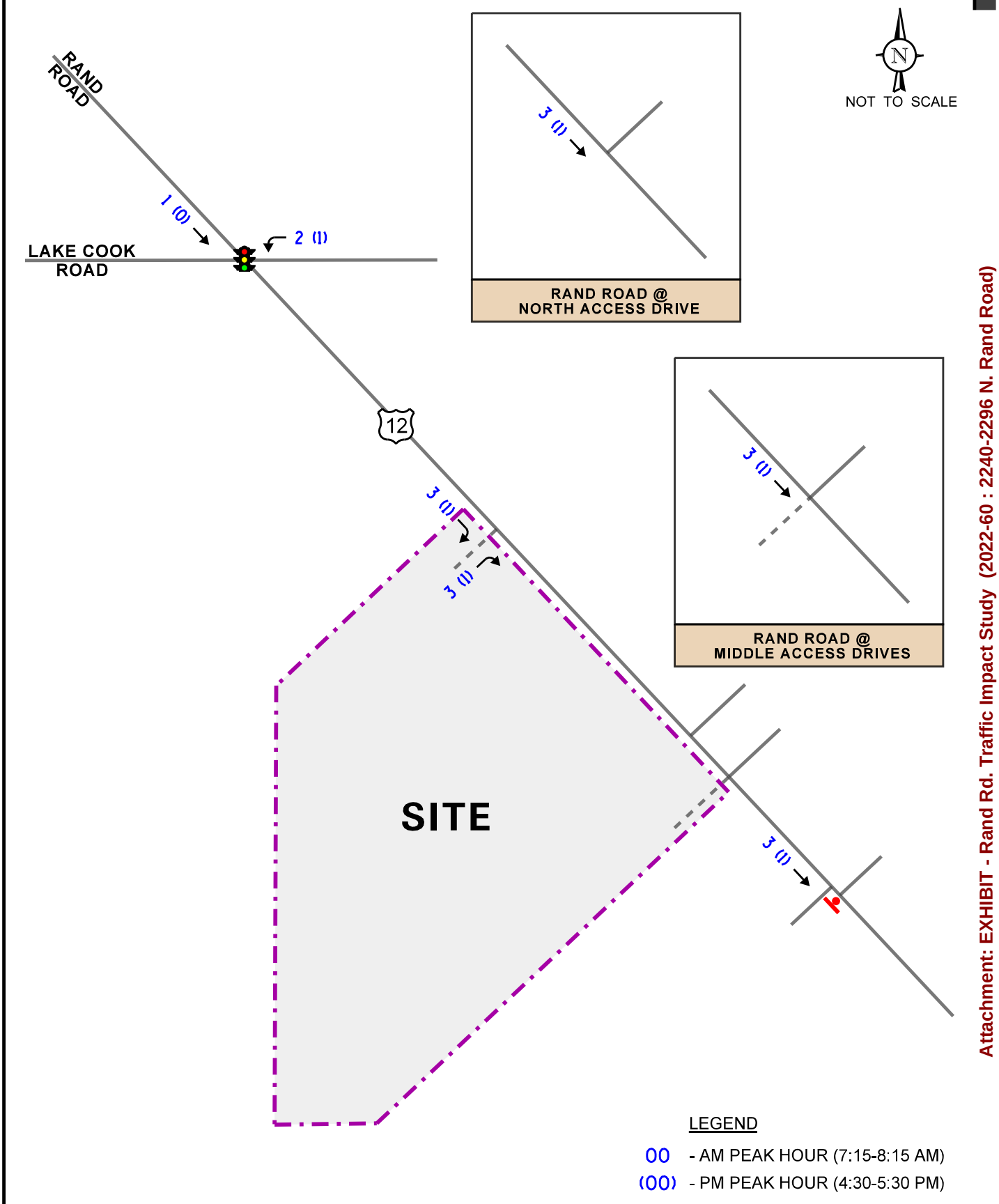
Industrial Development
Palatine, Illinois

Estimated Site-Generated
Passenger Vehicle Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 21-242 Figure: 7

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)



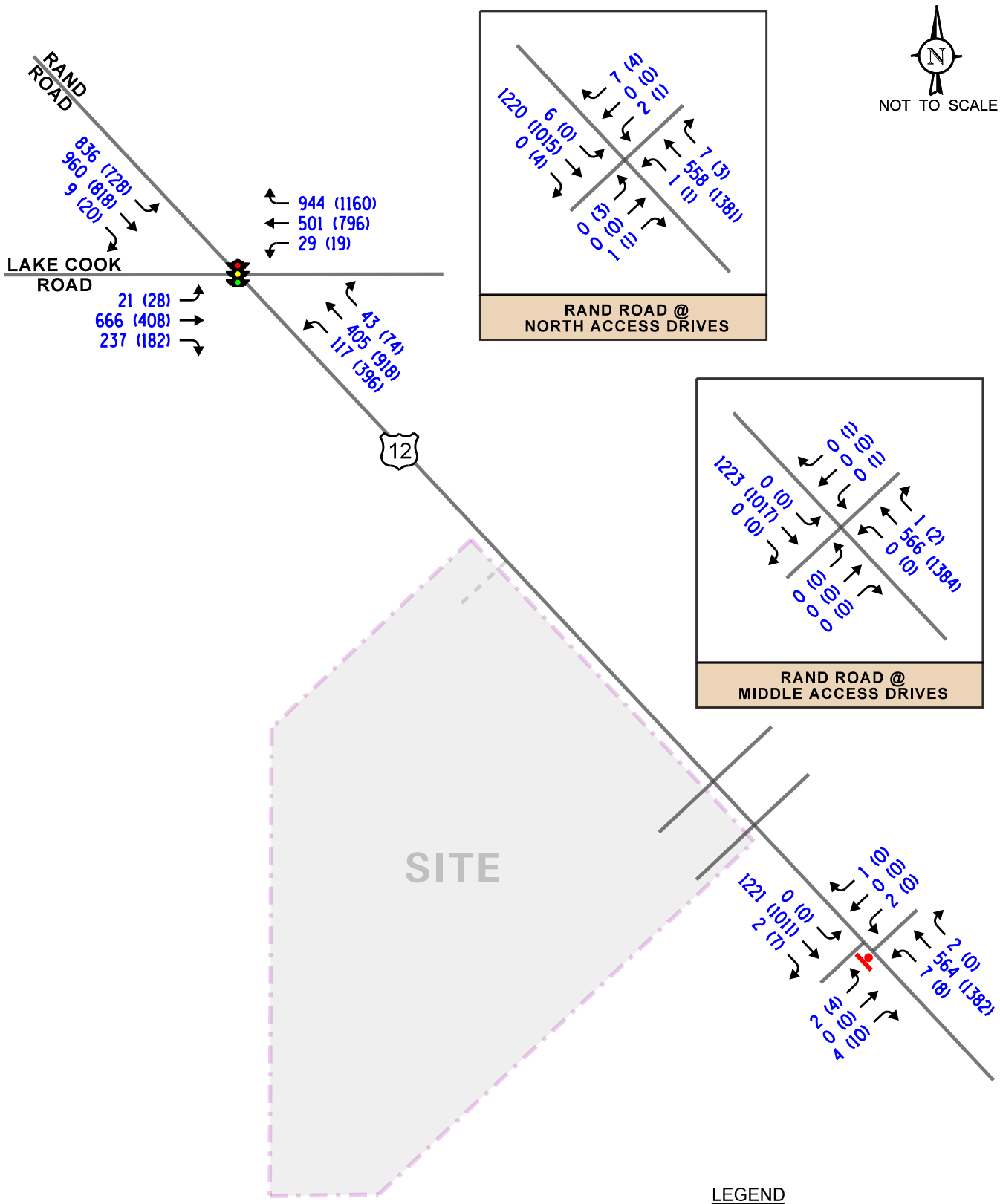
Industrial Development
Palatine, Illinois

Estimated Site-Generated
Truck Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 21-242 Figure: 8

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)



LEGEND

00 - AM PEAK HOUR (7:15-8:15 AM)

(00) - PM PEAK HOUR (4:30-5:30 PM)

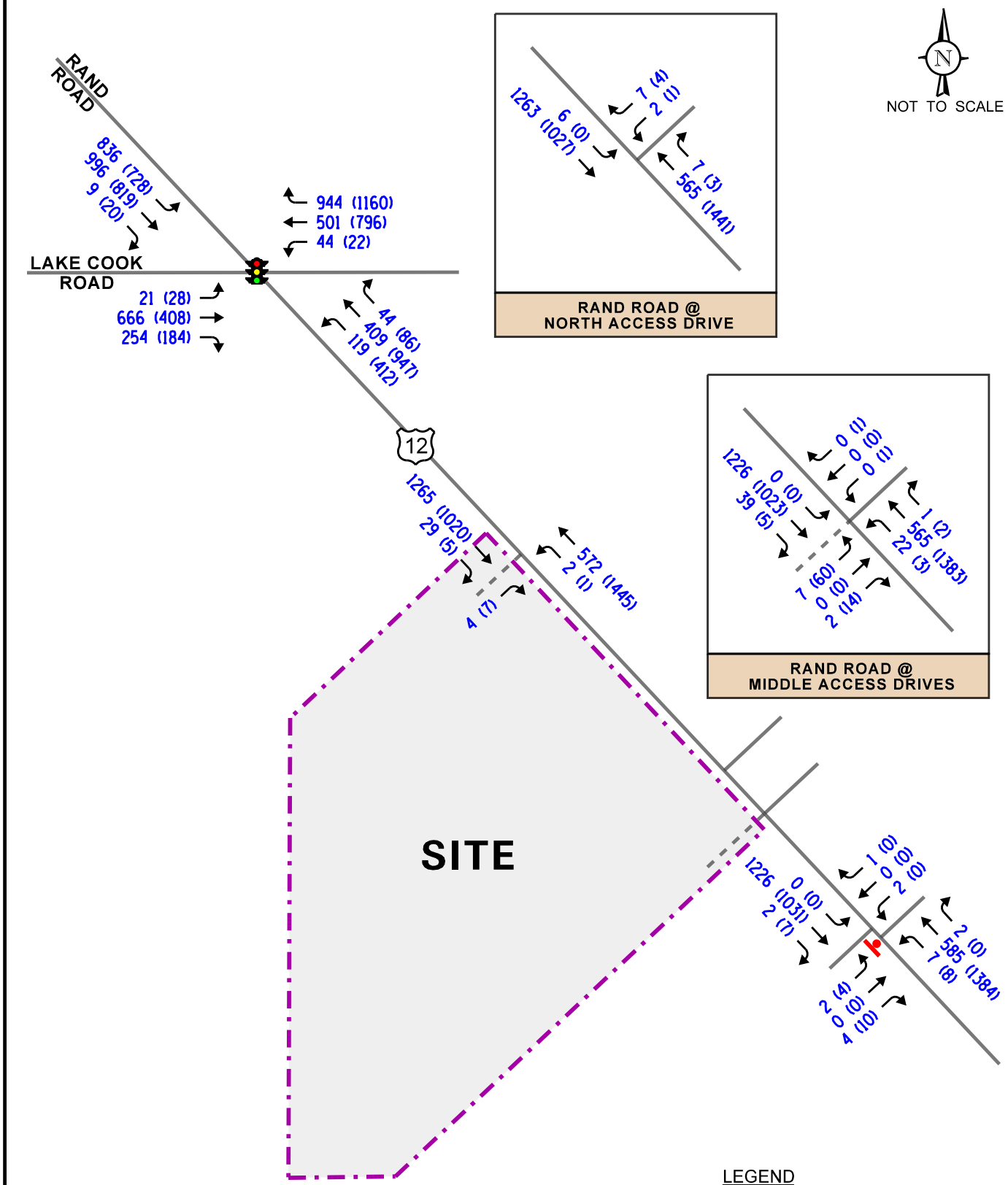
Industrial Development
Palatine, Illinois

Year 2027 No-Build Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 21-242 Figure: 9

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)



LEGEND

00 - AM PEAK HOUR (7:15-8:15 AM)

(00) - PM PEAK HOUR (4:30-5:30 PM)

Industrial Development
Palatine, Illinois

Year 2027 Total Projected Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 21-242 Figure: 10

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday morning and evening peak hours. The analysis includes conducting capacity analyses to determine how well the roadway system and access drives are projected to operate and whether any roadway improvements or modifications are required.

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning and evening peak hours for the existing, Year 2028 no-build, and Year 2028 total projected traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM)*, 6th Edition and analyzed using Synchro/SimTraffic 11 software. The analysis for the traffic-signal controlled intersections were accomplished using actual cycle lengths and phasings to determine the average overall vehicle delay and levels of service.

The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections and unsignalized intersections are included in the Appendix of this report.

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the existing, Year 2028 no-build, and Year 2028 total projected conditions are presented in **Tables 5** through **8**. A discussion of each intersection follows. Summary sheets for the capacity analyses are included in the Appendix.

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Table 5
CAPACITY ANALYSIS RESULTS – SIGNALIZED - RAND ROAD WITH LAKE COOK ROAD

	Peak Hour	Eastbound (Lake Cook Road)			Westbound (Lake Cook Road)			Northwest-bound (Rand Road)			Southeast-bound (Rand Road)			Overall
		L	T	R	L	T	R	L	T	R	L	T	R	
Existing Conditions	Weekday Morning Peak Hour	C 30.5	D 51.7	D 36.5	C 32.0	D 47.7	B 17.8	E 79.6	D 53.3		D 52.7	C 27.9		D 39.8
		D – 47.3			C – 28.2			E – 58.8			D – 39.4			
	Weekday Evening Peak Hour	D 37.5	D 47.5	C 29.9	C 34.2	E 59.0	C 33.3	F 95.0	D 51.7		E 74.6	C 30.9		D 50.7
		D – 41.8			D – 43.7			E – 64.1			D – 51.2			
Year 2028 No-Build Conditions	Weekday Morning Peak Hour	C 30.4	D 51.4	D 36.4	C 32.0	D 47.4	B 17.2	F 81.1	D 55.1		D 52.4	C 28.6		D 39.9
		D – 47.1			C – 27.8			E – 60.5			D – 39.7			
	Weekday Evening Peak Hour	D 37.9	D 47.3	C 29.7	C 34.2	E 59.5	C 33.8	F 95.9	D 54.7		E 76.8	C 31.7		D 51.8
		D – 41.7			D – 44.1			E – 66.4			D – 52.7			
Year 2028 Total Projected Conditions	Weekday Morning Peak Hour	C 29.7	D 52.2	D 37.8	C 31.9	D 45.6	B 15.9	F 81.9	E 57.5		D 52.4	C 30.7		D 40.2
		D – 47.8			C – 26.4			E – 62.6			D – 40.6			
	Weekday Evening Peak Hour	D 37.8	D 47.5	C 29.8	C 34.5	E 59.5	C 34.0	F 103.1	E 57.8		E 75.3	C 31.7		D 53.0
		D – 41.8			D – 44.3			E – 70.7			D – 52.0			

Letter denotes Level of Service L – Left-Turns R – Right-Turns
Delay is measured in seconds. T – Through

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Table 6
CAPACITY ANALYSIS RESULTS – UNSIGNALIZED INTERSECTIONS
EXISTING TRAFFIC CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Rand Road with the North Auto Land Group Access Drive and the Central Sod Farms Access Drive				
• Northeast-bound Approach (ALG)	B	13.4	C	23.2
• Southwest-bound Approach (CSF)	B	12.3	C	18.6
• Northwest-bound Left Turn (Rand Road)	B	11.5	B	10.2
• Southeast-bound left Turn (Rand Road)	A	9.5	--	--
Rand Road with the South Auto Land Group Access Drive and the North International Auto Brokers Access Drive				
• Northeast-bound Approach (ALG)	--	--	--	--
• Southwest-bound Approach (IAB)	--	--	C	24.7
• Northwest-bound Left Turn (Rand Road)	--	--	--	--
• Southeast-bound left Turn (Rand Road)	--	--	--	--
Rand Road with the Enterprise Access Drive and the Public Storage Access Drive				
• Northeast-bound Approach (Enterprise)	C	18.9	C	16.5
• Southwest-bound Approach (PS)	C	15.9	--	--
• Northwest-bound Left Turn (Rand Road)	B	11.6	B	10.2
• Southeast-bound left Turn (Rand Road)	--	--	--	--

LOS = Level of Service
Delay is measured in seconds.

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Table 7
CAPACITY ANALYSIS RESULTS – UNSIGNALIZED INTERSECTIONS
YEAR 2028 NO-BUILD TRAFFIC CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Rand Road with the North Auto Land Group Access Drive and the Central Sod Farms Access Drive				
• Northeast-bound Approach (ALG)	B	13.7	C	24.0
• Southwest-bound Approach (CSF)	B	12.5	C	19.2
• Northwest-bound Left Turn (Rand Road)	B	11.7	B	10.4
• Southeast-bound left Turn (Rand Road)	A	9.6	--	--
Rand Road with the South Auto Land Group Access Drive and the North International Auto Brokers Access Drive				
• Northeast-bound Approach (ALG)	--	--	--	--
• Southwest-bound Approach (IAB)	--	--	D	25.8
• Northwest-bound Left Turn (Rand Road)	--	--	--	--
• Southeast-bound left Turn (Rand Road)	--	--	--	--
Rand Road with the Enterprise Access Drive and the Public Storage Access Drive				
• Northeast-bound Approach (Enterprise)	C	19.5	C	17.0
• Southwest-bound Approach (PS)	C	16.2	--	--
• Northwest-bound Left Turn (Rand Road)	B	11.8	B	10.4
• Southeast-bound left Turn (Rand Road)	--	--	--	--

LOS = Level of Service
Delay is measured in seconds.

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Table 8
CAPACITY ANALYSIS RESULTS – UNSIGNALIZED INTERSECTIONS
YEAR 2028 TOTAL PROJECTED TRAFFIC CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Rand Road with the Central Sod Farms Access Drive				
• Southwest-bound Approach (CSF)	B	12.1	C	18.4
• Southeast-bound left Turn (Rand Road)	A	9.6	--	--
Rand Road with the Proposed South Access Drive and the North International Auto Brokers Access Drive				
• Northeast-bound Approach (Site)	D	28.8	E	38.1
• Southwest-bound Approach (IAB)	--	--	D	26.1
• Northwest-bound Left Turn (Rand Road)	B	12.3	B	10.4
• Southeast-bound left Turn (Rand Road)	--	--	--	--
Rand Road with the Enterprise Access Drive and the Public Storage Access Drive				
• Northeast-bound Approach (Enterprise)	C	19.5	C	17.2
• Southwest-bound Approach (PS)	C	16.5	--	--
• Northwest-bound Left Turn (Rand Road)	B	11.8	B	10.5
• Southeast-bound left Turn (Rand Road)	--	--	--	--
Rand Road with the Proposed North Site Access Drive				
• Northeast-bound Approach (Site)	C	19.1	B	13.0

LOS = Level of Service
Delay is measured in seconds.

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Discussion and Recommendations

The following summarizes how the intersections are projected to operate and identifies any roadway and traffic control improvements necessary to accommodate the development-generated traffic.

Rand Road with Lake Cook Road

The results of the capacity analysis indicate that overall, this intersection currently operates at Level of Service (LOS) D during the weekday morning and weekday evening peak hours. Further, all approaches operate at LOS E or better during both peak hours. Under Year 2028 no-build traffic conditions, this intersection is projected to continue to operate at LOS D during the weekday morning and weekday evening peak hours with increases in delay of approximately one second or less.

Under Year 2028 total projected traffic conditions, this intersection is projected to continue to operate at LOS D during the weekday morning peak and weekday evening peak hours with increases in delay of less than one second over no-build conditions. Further, all approaches are projected to continue to operate at the same LOS during both peak hours. Overall, the proposed development will increase the volume of traffic at this intersection by less than two percent and the traffic estimated to be generated by the proposed development will have a limited impact on the operations of this intersection.

Rand Road with the North Auto Land Group Access Drive and the Central Sod Farms Access Drive

The results of the capacity analyses indicate that the critical movements at this intersection currently operate at LOS B or better during the weekday morning peak hour and LOS C or better during the weekday evening peak hour. Assuming the projected Year 2028 no-build traffic volumes, the critical movements are projected to continue to operate at same LOS during both peak hours.

Under Year 2028 total projected conditions, the North Auto Land Group access drive will be removed. The remaining critical movements are projected to continue to operate at the same LOS during both peak hours. As such the intersection has sufficient reserve capacity to accommodate the development-generated traffic.

Rand Road with the South Auto Land Group Access Drive/Proposed Site Access Drive and the North International Auto Brokers Access Drive

The results of the capacity analyses indicate that the critical movements at this intersection currently operate at LOS C or better during the weekday morning and weekday evening peak hours Assuming the projected Year 2028 no-build traffic volumes, the critical movements are projected to operate at LOS D or better.

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

As proposed, the south Auto Land Group access drive will be replaced with the proposed South Site Access Drive. The proposed access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control. Left-turn movements from Rand Road will continue to be accommodated by the existing two-way left-turn lane on Rand Road.

Under Year 2028 total projected traffic conditions, outbound movements from the site access drive are projected to operate at LOS D during the weekday morning peak hour and LOS E during the weekday evening peak hour with a volume-to-capacity ratio of less than one and 95th percentile queues of one to two vehicles. Further, northwest-bound left-turn movements into the site are projected to operate at LOS B during the weekday morning and weekday evening peak hour with 95th percentile queues of one to two vehicles, which can be accommodated within the existing two-way left-turn lane. Turing movements in and out of the existing International Auto Brokers access drive are projected to continue to operate at the same LOS during both peak hours.

When the projected traffic volumes are compared to the turn lane warrant guidelines published in Chapter 36 of the IDOT *Bureau of Design and Environment* (BDE) Manual, an exclusive right-turn lane serving the proposed access drive will not be warranted during either peak hour. As such, this access drive will be adequate in accommodating the traffic estimated to be generated by the proposed development and will ensure efficient and flexible access is provided.

Rand Road with the Enterprise Access Drive and the Public Storage Access Drive

The results of the capacity analyses show that the critical movements at this intersection currently operate at LOS C or better during the weekday morning and weekday evening peak hours. Assuming the projected Year 2028 no-build and total projected conditions, all critical movements are projected to continue to operate at the same LOS during both peak hours. As such the intersection has sufficient reserve capacity to accommodate the development-generated traffic.

Rand Road with the West Site Access Drive

As proposed, a right-in/right-out access drive will be provided on the southwest side of Rand Road located approximately 515 feet south of Lake Cook Road. This access drive will provide one inbound lane and one outbound lane restricted to right-turn movements only via the barrier median on Rand Road. Outbound movements will be under stop sign control. This access drive will replace an existing access drive at this location.

Under Year 2028 total projected traffic conditions, outbound right-turn movements are projected to operate at LOS C during the weekday morning peak hour and LOS B during the weekday evening peak hour with a volume-to-capacity ratio of less than one and 95th percentile queues of one to two vehicles. When the projected traffic volumes are compared to the turn lane warrant guidelines published in Chapter 36 of the IDOT *Bureau of Design and Environment* (BDE) Manual, an exclusive right-turn lane serving the proposed access drive will not be warranted during either peak hour. As such, this access drive will be adequate in accommodating the traffic estimated to be generated by the proposed development and will ensure efficient and flexible access is provided.

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Parking Evaluation

As previously mentioned, the proposed development will provide 148 parking spaces.

Village of Palatine Requirements

The Village of Palatine Code of Ordinances requires a parking ratio of one space per 1,000 square feet of gross floor area in manufacturing and warehousing uses plus one space per 300 square feet of gross floor area in office uses. Based on the village ordinance the development should provide parking as follows:

- 131 parking spaces for 130,867 square feet of Light Industrial Space
- 48 parking spaces for 14,541 square feet of Office Space

Based on the above, the proposed development should provide 179 parking spaces resulting in a deficit of 31 spaces.

ITE Parking Generation Manual

In reviewing the survey data published in the Institute of Transportation Engineers' (ITE) 5th Edition of the *Parking Generation Manual*, the following average peak parking demand was determined based on Land Use Code 110 (General Light Industrial):

- 95 parking spaces for 145,408 square feet of Light Industrial Space (ratio of 0.65 spaces per 1,000 square feet)

Based on the above, the proposed development should provide a total of 95 parking spaces to accommodate the peak parking demand, which results in a surplus of 53 parking spaces. To provide a conservative analysis, the development was also evaluated accounting for the office space independently. The following average peak park demand was determined based on Land Use Codes 110 (General Light Industrial) and 710 (General Office Building):

- 85 parking spaces for 130,867 square feet of Light Industrial Space (ratio of 0.65 spaces per 1,000 square feet)
- 35 parking spaces for 14,541 square feet of Office Space (ratio of 2.39 spaces per 1,000 square feet)

Based on the above, the proposed development should provide a total of 120 parking spaces to accommodate the peak parking demand, which results in a surplus of 28 parking spaces. It should be noted that Land-Use Code 110 (General Light Industrial) has a higher average peak parking demand than Land-Use Code 150 (Warehouse)

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

6. Conclusion

Based on the preceding analyses and recommendations, the following conclusions have been made:

- The roadway system has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed development.
- With the proposed redevelopment of the site, the number of access points along the site frontage will be reduced from six to two.
- The proposed access system on Rand Road will be adequate in accommodating the development-generated traffic and will ensure that efficient and flexible access is provided.
- Northwest-bound traffic on Rand Road entering the proposed development will be accommodated by the existing two-way left-turn lane.
- A southeast-bound right-turn lane will not be warranted on Rand Road at either of the site access drives.
- The proposed parking supply of 148 parking spaces will be adequate in accommodating the projected peak parking demand of the proposed development.

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Appendix

Traffic Count Summary Sheets
Preliminary Site Plan
ITE Trip Generation Worksheets
CMAP 2050 Projections Letter
Level of Service Criteria
Capacity Analysis Summary Sheets
Turn Lane Warrants

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Traffic Count Summary Sheets

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Rand Road with Lake Cook Road
Site Code:
Start Date: 09/22/2021

Turning Movement Data

Start Time	Lake Cook Road Eastbound						Lake Cook Road Westbound						Rand Road Northbound					Rand Road Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
6:30 AM	0	3	148	36	0	187	0	5	81	198	0	284	0	18	80	0	98	0	313	210	1	0	524	1093
6:45 AM	0	6	136	46	0	188	0	9	98	242	0	349	0	11	99	0	110	0	264	219	2	0	485	1132
Hourly Total	0	9	284	82	0	375	0	14	179	440	0	633	0	29	179	0	208	0	577	429	3	0	1009	2225
7:00 AM	0	8	157	50	0	215	0	7	73	211	0	291	0	28	95	0	123	0	263	228	3	0	494	1123
7:15 AM	0	9	179	53	0	241	0	4	127	226	0	357	0	19	86	0	105	0	218	236	1	0	455	1158
7:30 AM	0	5	169	55	0	229	0	7	112	228	0	347	0	32	96	0	128	0	215	249	1	0	465	1169
7:45 AM	0	3	157	50	0	210	2	6	122	230	0	360	0	33	89	0	122	0	199	219	2	0	420	1112
Hourly Total	0	25	662	208	0	895	2	24	434	895	0	1355	0	112	366	0	478	0	895	932	7	0	1834	4562
8:00 AM	0	3	143	73	0	219	0	9	126	234	0	369	0	30	123	0	153	0	181	202	5	0	388	1129
8:15 AM	0	2	116	55	0	173	0	10	118	222	0	350	0	33	82	0	115	0	173	169	5	0	347	985
8:30 AM	0	2	106	44	0	152	0	7	144	201	0	352	0	29	89	0	118	0	172	187	5	0	364	986
8:45 AM	0	4	116	52	0	172	0	7	105	228	0	340	1	49	141	0	191	0	211	188	5	0	404	1107
Hourly Total	0	11	481	224	0	716	0	33	493	885	0	1411	1	141	435	0	577	0	737	746	20	0	1503	4207
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	8	111	58	0	177	0	3	176	305	0	484	0	58	193	0	251	0	193	222	6	0	421	1333
4:15 PM	0	7	98	46	0	151	0	12	182	292	0	486	0	62	189	0	251	0	166	196	5	1	367	1255
4:30 PM	0	7	102	49	0	158	0	5	189	274	0	468	0	90	235	0	325	0	172	204	7	0	383	1334
4:45 PM	0	7	72	48	0	127	0	3	210	293	0	506	0	105	207	0	312	0	176	186	5	0	367	1312
Hourly Total	0	29	383	201	0	613	0	23	757	1164	0	1944	0	315	824	0	1139	0	707	808	23	1	1538	5234
5:00 PM	0	6	104	38	1	148	0	6	209	275	3	490	0	101	219	0	320	0	189	210	2	1	401	1359
5:15 PM	0	7	119	42	0	168	0	4	166	286	0	456	0	89	232	0	321	0	171	182	5	0	358	1303
5:30 PM	0	13	91	40	0	144	0	3	188	278	0	469	1	87	209	0	297	0	182	172	6	0	360	1270
5:45 PM	1	4	86	53	0	144	0	6	194	300	1	500	0	46	244	0	290	0	168	174	5	0	347	1281
Hourly Total	1	30	400	173	1	604	0	19	757	1139	4	1915	1	323	904	0	1228	0	710	738	18	1	1466	5213
6:00 PM	0	5	89	45	0	139	0	6	171	298	0	475	2	48	164	0	214	0	165	168	12	0	345	1173
6:15 PM	0	7	72	39	0	118	0	10	127	284	0	421	0	32	167	0	199	0	172	169	4	0	345	1083
Grand Total	1	116	2371	972	1	3460	2	129	2918	5105	4	8154	4	1000	3039	0	4043	0	3963	3990	87	2	8040	23697
Approach %	0.0	3.4	68.5	28.1	-	-	0.0	1.6	35.8	62.6	-	-	0.1	24.7	75.2	-	-	0.0	49.3	49.6	1.1	-	-	-
Total %	0.0	0.5	10.0	4.1	-	14.6	0.0	0.5	12.3	21.5	-	34.4	0.0	4.2	12.8	-	17.1	0.0	16.7	16.8	0.4	-	33.9	-
Lights	1	112	2320	923	-	3356	2	123	2836	4749	-	7710	4	960	2904	-	3868	0	3752	3748	77	-	7577	22511
% Lights	100.0	96.6	97.8	95.0	-	97.0	100.0	95.3	97.2	93.0	-	94.6	100.0	96.0	95.6	-	95.7	-	94.7	93.9	88.5	-	94.2	95.0
Buses	0	0	4	5	-	9	0	0	9	7	-	16	0	5	1	-	6	0	8	2	0	-	10	41
% Buses	0.0	0.0	0.2	0.5	-	0.3	0.0	0.0	0.3	0.1	-	0.2	0.0	0.5	0.0	-	0.1	-	0.2	0.1	0.0	-	0.1	0.2
Single-Unit Trucks	0	3	28	38	-	69	0	3	47	147	-	197	0	32	86	-	118	0	80	137	5	-	222	606
% Single-Unit Trucks	0.0	2.6	1.2	3.9	-	2.0	0.0	2.3	1.6	2.9	-	2.4	0.0	3.2	2.8	-	2.9	-	2.0	3.4	5.7	-	2.8	2.6

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Articulated Trucks	0	1	19	6	-	26	0	3	26	201	-	230	0	3	48	-	51	0	123	103	5	-	231	538
% Articulated Trucks	0.0	0.9	0.8	0.6	-	0.8	0.0	2.3	0.9	3.9	-	2.8	0.0	0.3	1.6	-	1.3	-	3.1	2.6	5.7	-	2.9	2.3
Bicycles on Road	0	0	0	0	-	0	0	0	0	1	-	1	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	0	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Rand Road with Lake Cook Road
Site Code:
Start Date: 09/22/2021

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Lake Cook Road Eastbound						Lake Cook Road Westbound						Rand Road Northbound					Rand Road Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:15 AM	0	9	179	53	0	241	0	4	127	226	0	357	0	19	86	0	105	0	218	236	1	0	455	1158
7:30 AM	0	5	169	55	0	229	0	7	112	228	0	347	0	32	96	0	128	0	215	249	1	0	465	1169
7:45 AM	0	3	157	50	0	210	2	6	122	230	0	360	0	33	89	0	122	0	199	219	2	0	420	1112
8:00 AM	0	3	143	73	0	219	0	9	126	234	0	369	0	30	123	0	153	0	181	202	5	0	388	1129
Total	0	20	648	231	0	899	2	26	487	918	0	1433	0	114	394	0	508	0	813	906	9	0	1728	4568
Approach %	0.0	2.2	72.1	25.7	-	-	0.1	1.8	34.0	64.1	-	-	0.0	22.4	77.6	-	-	0.0	47.0	52.4	0.5	-	-	-
Total %	0.0	0.4	14.2	5.1	-	19.7	0.0	0.6	10.7	20.1	-	31.4	0.0	2.5	8.6	-	11.1	0.0	17.8	19.8	0.2	-	37.8	-
PHF	0.000	0.556	0.905	0.791	-	0.933	0.250	0.722	0.959	0.981	-	0.971	0.000	0.864	0.801	-	0.830	0.000	0.932	0.910	0.450	-	0.929	0.977
Lights	0	20	632	228	-	880	2	26	452	793	-	1273	0	111	372	-	483	0	763	841	8	-	1612	4248
% Lights	-	100.0	97.5	98.7	-	97.9	100.0	100.0	92.8	86.4	-	88.8	-	97.4	94.4	-	95.1	-	93.8	92.8	88.9	-	93.3	93.0
Buses	0	0	3	1	-	4	0	0	3	0	-	3	0	1	0	-	1	0	4	0	0	-	4	12
% Buses	-	0.0	0.5	0.4	-	0.4	0.0	0.0	0.6	0.0	-	0.2	-	0.9	0.0	-	0.2	-	0.5	0.0	0.0	-	0.2	0.3
Single-Unit Trucks	0	0	5	2	-	7	0	0	19	55	-	74	0	2	14	-	16	0	17	33	1	-	51	148
% Single-Unit Trucks	-	0.0	0.8	0.9	-	0.8	0.0	0.0	3.9	6.0	-	5.2	-	1.8	3.6	-	3.1	-	2.1	3.6	11.1	-	3.0	3.2
Articulated Trucks	0	0	8	0	-	8	0	0	13	70	-	83	0	0	8	-	8	0	29	32	0	-	61	160
% Articulated Trucks	-	0.0	1.2	0.0	-	0.9	0.0	0.0	2.7	7.6	-	5.8	-	0.0	2.0	-	1.6	-	3.6	3.5	0.0	-	3.5	3.5
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Rand Road with Lake Cook Road
Site Code:
Start Date: 09/22/2021

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Lake Cook Road Eastbound						Lake Cook Road Westbound						Rand Road Northbound					Rand Road Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:30 PM	0	7	102	49	0	158	0	5	189	274	0	468	0	90	235	0	325	0	172	204	7	0	383	1334
4:45 PM	0	7	72	48	0	127	0	3	210	293	0	506	0	105	207	0	312	0	176	186	5	0	367	1312
5:00 PM	0	6	104	38	1	148	0	6	209	275	3	490	0	101	219	0	320	0	189	210	2	1	401	1359
5:15 PM	0	7	119	42	0	168	0	4	166	286	0	456	0	89	232	0	321	0	171	182	5	0	358	1303
Total	0	27	397	177	1	601	0	18	774	1128	3	1920	0	385	893	0	1278	0	708	782	19	1	1509	5308
Approach %	0.0	4.5	66.1	29.5	-	-	0.0	0.9	40.3	58.8	-	-	0.0	30.1	69.9	-	-	0.0	46.9	51.8	1.3	-	-	-
Total %	0.0	0.5	7.5	3.3	-	11.3	0.0	0.3	14.6	21.3	-	36.2	0.0	7.3	16.8	-	24.1	0.0	13.3	14.7	0.4	-	28.4	-
PHF	0.000	0.964	0.834	0.903	-	0.894	0.000	0.750	0.921	0.962	-	0.949	0.000	0.917	0.950	-	0.983	0.000	0.937	0.931	0.679	-	0.941	0.976
Lights	0	25	387	169	-	581	0	17	767	1099	-	1883	0	377	866	-	1243	0	683	741	19	-	1443	5150
% Lights	-	92.6	97.5	95.5	-	96.7	-	94.4	99.1	97.4	-	98.1	-	97.9	97.0	-	97.3	-	96.5	94.8	100.0	-	95.6	97.0
Buses	0	0	0	0	-	0	0	0	0	2	-	2	0	1	0	-	1	0	0	0	0	-	0	3
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.2	-	0.1	-	0.3	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	0.1
Single-Unit Trucks	0	1	6	7	-	14	0	1	6	11	-	18	0	6	12	-	18	0	10	31	0	-	41	91
% Single-Unit Trucks	-	3.7	1.5	4.0	-	2.3	-	5.6	0.8	1.0	-	0.9	-	1.6	1.3	-	1.4	-	1.4	4.0	0.0	-	2.7	1.7
Articulated Trucks	0	1	4	1	-	6	0	0	1	16	-	17	0	1	15	-	16	0	15	10	0	-	25	64
% Articulated Trucks	-	3.7	1.0	0.6	-	1.0	-	0.0	0.1	1.4	-	0.9	-	0.3	1.7	-	1.3	-	2.1	1.3	0.0	-	1.7	1.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Rand Road with South Access Drives
Site Code:
Start Date: 09/22/2021

Turning Movement Data

Start Time	Enterprise Access Drive Eastbound						Public Storage Access Westbound						Rand Road Northbound						Rand Road Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
6:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	101	0	0	101	0	0	231	0	0	231	332
6:45 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	1	118	2	0	121	0	0	277	0	0	277	399
Hourly Total	0	0	0	1	1	1	0	0	0	0	0	0	0	1	219	2	0	222	0	0	508	0	0	508	731
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	116	0	0	116	0	0	279	3	0	282	399
7:15 AM	0	0	0	0	0	0	0	1	0	1	0	2	0	0	118	1	0	119	0	0	281	1	0	282	403
7:30 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	133	0	0	133	0	0	330	0	0	330	465
7:45 AM	0	1	0	1	0	2	0	0	0	0	0	0	0	6	146	0	0	152	0	0	283	0	0	283	437
Hourly Total	0	1	0	3	0	4	0	1	0	2	0	3	0	6	513	1	0	520	0	0	1173	4	0	1177	1704
8:00 AM	0	1	0	1	0	2	0	1	0	0	0	1	0	1	152	1	0	154	0	0	291	1	0	292	449
8:15 AM	0	1	0	1	1	2	0	0	0	0	0	0	0	0	128	1	0	129	0	0	250	2	0	252	383
8:30 AM	0	1	0	1	0	2	0	1	0	0	0	1	0	1	130	1	0	132	0	0	233	1	0	234	369
8:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	3	201	0	0	204	0	1	243	1	0	245	450
Hourly Total	0	4	0	3	1	7	0	2	0	0	0	2	0	5	611	3	0	619	0	1	1017	5	0	1023	1651
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	263	1	0	264	0	1	252	1	0	254	519
4:15 PM	0	2	0	0	0	2	0	1	0	0	0	1	0	2	260	0	0	262	0	0	293	1	0	294	559
4:30 PM	0	1	0	2	0	3	0	0	0	0	0	0	0	2	323	0	0	325	0	0	264	2	0	266	594
4:45 PM	0	1	0	2	0	3	0	0	0	0	0	0	0	3	343	0	0	346	0	0	238	2	0	240	589
Hourly Total	0	4	0	4	0	8	0	1	0	1	0	2	0	7	1189	1	0	1197	0	1	1047	6	0	1054	2261
5:00 PM	0	1	0	2	0	3	0	0	0	0	0	0	0	1	345	0	0	346	0	0	249	2	0	251	600
5:15 PM	0	1	0	4	1	5	0	0	0	0	0	0	0	2	333	0	0	335	0	0	232	1	0	233	573
5:30 PM	0	0	0	3	0	3	0	0	0	0	0	0	0	1	303	1	0	305	0	0	234	1	0	235	543
5:45 PM	0	2	0	2	0	4	0	0	0	1	0	1	0	0	303	1	0	304	0	0	217	1	0	218	527
Hourly Total	0	4	0	11	1	15	0	0	0	1	0	1	0	4	1284	2	0	1290	0	0	932	5	0	937	2243
6:00 PM	0	2	0	2	1	4	0	2	0	0	0	2	0	1	223	1	0	225	0	2	222	2	0	226	457
6:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	1	213	1	0	215	0	0	244	0	0	244	461
Grand Total	0	15	0	24	4	39	0	6	0	6	0	12	0	25	4252	11	0	4288	0	4	5143	22	0	5169	9508
Approach %	0.0	38.5	0.0	61.5	-	-	0.0	50.0	0.0	50.0	-	-	0.0	0.6	99.2	0.3	-	-	0.0	0.1	99.5	0.4	-	-	-
Total %	0.0	0.2	0.0	0.3	-	0.4	0.0	0.1	0.0	0.1	-	0.1	0.0	0.3	44.7	0.1	-	45.1	0.0	0.0	54.1	0.2	-	54.4	-
Lights	0	15	0	23	-	38	0	6	0	6	-	12	0	25	4061	10	-	4096	0	4	4844	22	-	4870	9016
% Lights	-	100.0	-	95.8	-	97.4	-	100.0	-	100.0	-	100.0	-	100.0	95.5	90.9	-	95.5	-	100.0	94.2	100.0	-	94.2	94.8
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	4	0	-	4	0	0	7	0	-	7	11
% Buses	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.1	0.0	-	0.1	-	0.0	0.1	0.0	-	0.1	0.1
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	123	1	-	124	0	0	203	0	-	203	327
% Single-Unit Trucks	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	2.9	9.1	-	2.9	-	0.0	3.9	0.0	-	3.9	3.4

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Articulated Trucks	0	0	0	1	-	1	0	0	0	0	-	0	0	0	63	0	-	63	0	0	88	0	-	88	152
% Articulated Trucks	-	0.0	-	4.2	-	2.6	-	0.0	-	0.0	-	0.0	-	0.0	1.5	0.0	-	1.5	-	0.0	1.7	0.0	-	1.7	1.6
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	1	0	-	1	2
% Bicycles on Road	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Rand Road with South Access Drives
Site Code:
Start Date: 09/22/2021

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Enterprise Access Drive Eastbound						Public Storage Access Westbound						Rand Road Northbound						Rand Road Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:15 AM	0	0	0	0	0	0	0	1	0	1	0	2	0	0	118	1	0	119	0	0	281	1	0	282	403
7:30 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	133	0	0	133	0	0	330	0	0	330	465
7:45 AM	0	1	0	1	0	2	0	0	0	0	0	0	0	6	146	0	0	152	0	0	283	0	0	283	437
8:00 AM	0	1	0	1	0	2	0	1	0	0	0	1	0	1	152	1	0	154	0	0	291	1	0	292	449
Total	0	2	0	4	0	6	0	2	0	1	0	3	0	7	549	2	0	558	0	0	1185	2	0	1187	1754
Approach %	0.0	33.3	0.0	66.7	-	-	0.0	66.7	0.0	33.3	-	-	0.0	1.3	98.4	0.4	-	-	0.0	0.0	99.8	0.2	-	-	-
Total %	0.0	0.1	0.0	0.2	-	0.3	0.0	0.1	0.0	0.1	-	0.2	0.0	0.4	31.3	0.1	-	31.8	0.0	0.0	67.6	0.1	-	67.7	-
PHF	0.000	0.500	0.000	0.500	-	0.750	0.000	0.500	0.000	0.250	-	0.375	0.000	0.292	0.903	0.500	-	0.906	0.000	0.000	0.898	0.500	-	0.899	0.943
Lights	0	2	0	4	-	6	0	2	0	1	-	3	0	7	524	2	-	533	0	0	1134	2	-	1136	1678
% Lights	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	95.4	100.0	-	95.5	-	-	95.7	100.0	-	95.7	95.7
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	1	0	-	1	2
% Buses	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.2	0.0	-	0.2	-	-	0.1	0.0	-	0.1	0.1
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	14	0	-	14	0	0	25	0	-	25	39
% Single-Unit Trucks	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	2.6	0.0	-	2.5	-	-	2.1	0.0	-	2.1	2.2
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	10	0	-	10	0	0	25	0	-	25	35
% Articulated Trucks	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	1.8	0.0	-	1.8	-	-	2.1	0.0	-	2.1	2.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Rand Road with South Access Drives
Site Code:
Start Date: 09/22/2021

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Enterprise Access Drive Eastbound						Public Storage Access Westbound						Rand Road Northbound						Rand Road Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:30 PM	0	1	0	2	0	3	0	0	0	0	0	0	0	2	323	0	0	325	0	0	264	2	0	266	594
4:45 PM	0	1	0	2	0	3	0	0	0	0	0	0	0	3	343	0	0	346	0	0	238	2	0	240	589
5:00 PM	0	1	0	2	0	3	0	0	0	0	0	0	0	1	345	0	0	346	0	0	249	2	0	251	600
5:15 PM	0	1	0	4	1	5	0	0	0	0	0	0	0	2	333	0	0	335	0	0	232	1	0	233	573
Total	0	4	0	10	1	14	0	0	0	0	0	0	0	8	1344	0	0	1352	0	0	983	7	0	990	2356
Approach %	0.0	28.6	0.0	71.4	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.6	99.4	0.0	-	-	0.0	0.0	99.3	0.7	-	-	-
Total %	0.0	0.2	0.0	0.4	-	0.6	0.0	0.0	0.0	0.0	-	0.0	0.0	0.3	57.0	0.0	-	57.4	0.0	0.0	41.7	0.3	-	42.0	-
PHF	0.000	1.000	0.000	0.625	-	0.700	0.000	0.000	0.000	0.000	-	0.000	0.000	0.667	0.974	0.000	-	0.977	0.000	0.000	0.931	0.875	-	0.930	0.982
Lights	0	4	0	10	-	14	0	0	0	0	-	0	0	8	1299	0	-	1307	0	0	938	7	-	945	2266
% Lights	-	100.0	-	100.0	-	100.0	-	-	-	-	-	-	-	100.0	96.7	-	-	96.7	-	-	95.4	100.0	-	95.5	96.2
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	1
% Buses	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	-	0.0	0.1	-	-	0.1	-	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	21	0	-	21	0	0	34	0	-	34	55
% Single-Unit Trucks	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	-	0.0	1.6	-	-	1.6	-	-	3.5	0.0	-	3.4	2.3
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	23	0	-	23	0	0	10	0	-	10	33
% Articulated Trucks	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	-	0.0	1.7	-	-	1.7	-	-	1.0	0.0	-	1.0	1.4
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	1
% Bicycles on Road	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	-	0.0	0.0	-	-	0.0	-	-	0.1	0.0	-	0.1	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Study Name Rand Road with North Access Drives
Start Date Wednesday, September 22, 2021 6:30 AM
End Date Wednesday, September 22, 2021 6:30 PM
Site Code

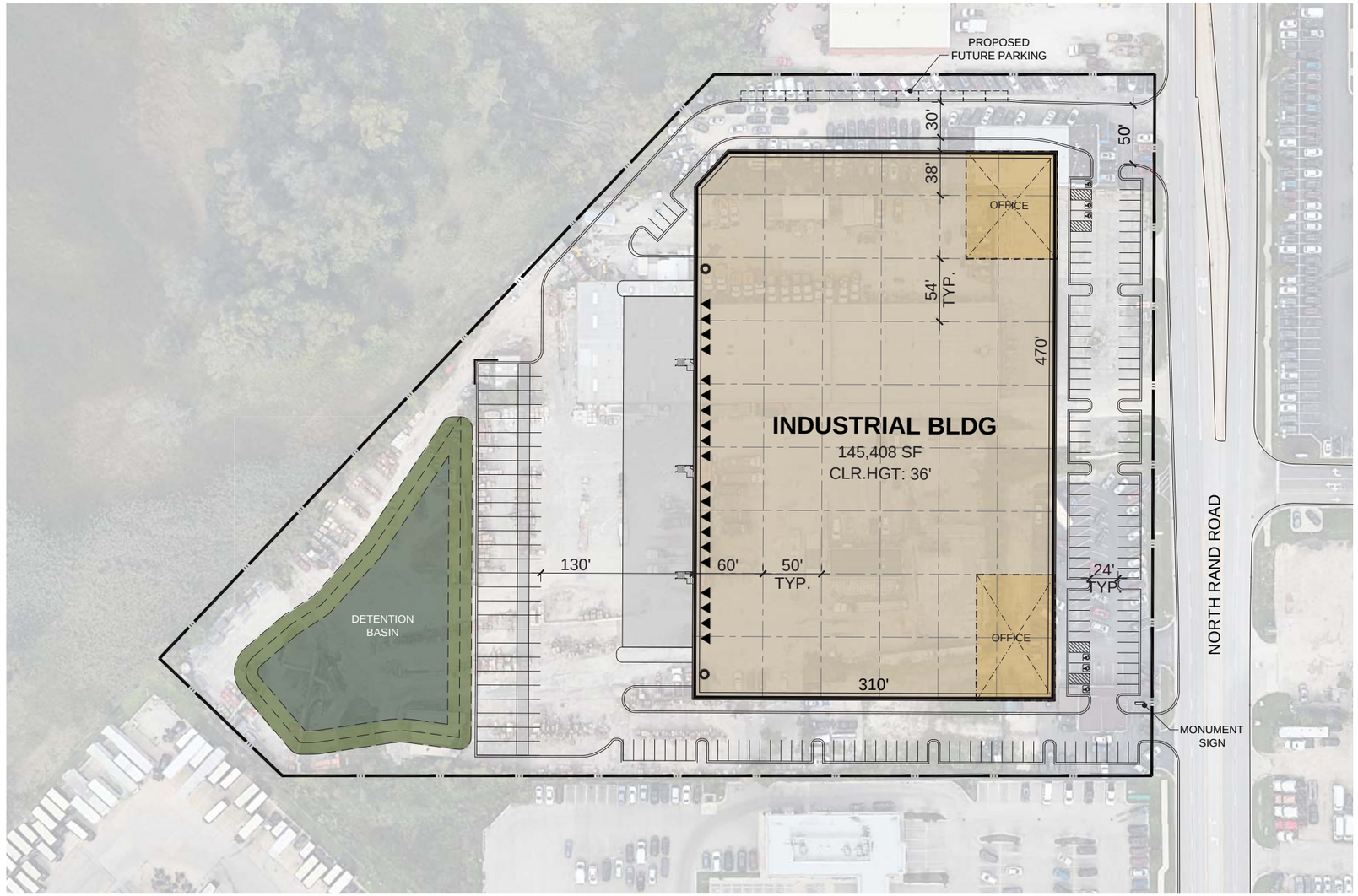
Report Summary

		Westbound								Northbound								Southbound								Southeastbound								Northeastbound								Southwestbound								Crosswalk	
Time Period	Class.	U	L	BL	BR	R	HR	I	O	U	HL	BL	T	BR	R	I	O	U	HL	L	T	BR	HR	I	O	U	HL	L	BL	BR	R	I	O	U	L	BL	T	BR	HR	I	O	U	HL	BL	T	R	HR	I	O	Total		destria	Total
Peak 1	Lights	0	0	0	0	0	0	0	1	0	0	1	516	7	1	525	1130	0	4	0	1127	0	0	1131	522	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	2	0	0	6	8	11	1665	E	0	0
Specified Period	%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	95%	100%	100%	95%	95%	0%	67%	0%	95%	0%	0%	95%	95%	0%	0%	0%	0%	100%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	86%	89%	85%	95%		0%	
7:15 AM - 8:15 AM	Buses	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	S	0	0
One Hour Peak	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
7:15 AM - 8:15 AM	ngle-Unit Truc	0	0	0	0	0	0	0	0	0	0	0	15	0	0	15	26	0	2	0	26	0	0	28	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	44	N	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	3%	2%	0%	33%	0%	2%	0%	0%	2%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%	11%	15%	3%		0%	
	ticulated Truc	0	0	0	0	0	0	0	0	0	0	0	10	0	0	10	26	0	0	0	26	0	0	26	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	NW	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	2%	0%	0%	0%	2%	0%	0%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%		0%	
	icycles on Roa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SW	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
	Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**542**	**7**	**1**	**551**	**1184**	**0**	**6**	**0**	**1181**	**0**	**0**	**1187**	**549**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**7**	**9**	**13**	**1748**	NE	0	0
	PHF	0	0	0	0	0	0	0	0.25	0	0	0.25	0.92	0.58	0.25	0.91	0.91	0	0.75	0	0.91	0	0	0.91	0.92	0	0	0	0	0.25	0	0.25	0.25	0	0	0	0	0	0	0	0	0	0.25	0	0	0.88	0.75	0.65	0.94		0%	
	Approach %							0%	0%							32%	68%							68%	31%							0%	0%							0%	0%							1%	1%			**0**	**0**
Peak 2	Lights	0	1	0	0	1	0	2	2	0	0	1	1302	2	2	1307	936	0	0	0	933	0	4	937	1310	0	3	0	0	1	0	4	5	0	0	0	0	0	0	0	0	0	1	0	0	4	5	2	2255	E	0	0
Specified Period	%	0%	100%	0%	0%	100%	0%	100%	100%	0%	0%	100%	97%	67%	100%	97%	95%	0%	0%	0%	95%	0%	100%	95%	97%	0%	100%	0%	0%	100%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	100%	67%	96%		0%	
4:30 PM - 5:30 PM	Buses	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	S	0	0
One Hour Peak	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
4:30 PM - 5:30 PM	ngle-Unit Truc	0	0	0	0	0	0	0	0	0	0	0	14	1	0	15	33	0	0	0	33	0	0	33	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	48	N	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	33%	0%	1%	3%	0%	0%	0%	3%	0%	0%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	2%		0%	
	ticulated Truc	0	0	0	0	0	0	0	0	0	0	0	24	0	0	24	11	0	0	0	11	0	0	11	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	NW	12	12
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	1%	0%	0%	0%	1%	0%	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%		100%	
	icycles on Roa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	SW	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
	Total	**0**	**1**	**0**	**0**	**1**	**0**	**2**	**2**	**0**	**0**	**1**	**1341**	**3**	**2**	**1347**	**981**	**0**	**0**	**0**	**978**	**0**	**4**	**982**	**1349**	**0**	**3**	**0**	**0**	**1**	**0**	**4**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**	**5**	**3**	**2340**	NE	0	0
	PHF	0	0.25	0	0	0.25	0	0.5	0.5	0	0	0.25	0.97	0.38	0.5	0.98	0.95	0	0	0	0.94	0	0.5	0.94	0.96	0	0.38	0	0	0.25	0	0.33	0.62	0	0	0	0	0	0	0	0	0	0.25	0	0	0.25	0.25	0.38	0.97		0%	
	Approach %							0%	0%							58%	42%							42%	58%							0%	0%							0%	0%							0%	0%			**12**	**12**

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Preliminary Site Plan

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)



PROJECT DATA:		
SITE AREA:		
GROSS:		8.86 AC
		385,828 SF
DETENTION:	@ 9%	34,746 SF
NET:		8.06 AC
		351,082 SF
BUILDING FOOTPRINT:		145,408 SF
BUILDING USE:		
WAREHOUSE		130,867 SF
OFFICE	@ 10%	14,541 SF
COVERAGE:		
GROSS:		38%
NET:		41%
PARKING REQUIRED:		
WAREHOUSE	1/1000 SF	131 STALLS
OFFICE	1/300 SF	48 STALLS
TOTAL		179 STALLS
PARKING PROVIDED:		
AUTO:		135 STALLS
		@0.93/1000 SF
REQ. ACCESSIBLE		*5 STALLS*
TRAILER:		28 STALLS
FUTURE PARKING PROPOSED:		
AUTO:		13 STALLS
TRUCK DOCKS:		
▲ DOCK-HIGH DOORS		20

DEVELOPMENT STANDARDS:	
ZONING:	M
MAX. F.A.R.:	0.70
MAX. COVERAGE:	TBD [1]
MAX. HEIGHT:	60 FT
BUILDING SETBACKS:	
FRONT:	30 FT
SIDE:	15 FT
REAR:	15 FT
LANDSCAPE SETBACKS:	
FRONT:	5 FT
SIDE:	2 FT
REAR:	2 FT
LANDSCAPE REQ.:	[2]
OFF-STREET PARKING:	
STANDARD:	9X19
COMPACT:	8X16
DRIVE AISLE:	25 FT
FIRE LANE:	TBD [1]
REQ. PARKING RATIO BY USE:	
WAREHOUSE:	1/1000 SF
OFFICE:	1/300 SF

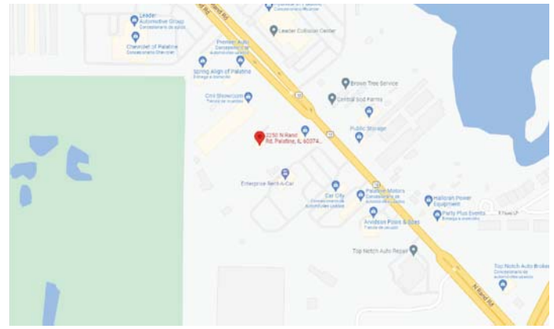
NOTES:
1. To be confirmed by city.
2. 1 tree for every 10 parking stalls.

A PORTION OF THE ZONING INFORMATION IS UNKNOWN AT THIS TIME AND REQUIREMENTS MAY DIFFER THAN WHAT IS SHOWN IN THE SITE PLAN.

This conceptual design is based upon a preliminary review of entitlement requirements and on unverified and possibly incomplete site and/or building information, and is intended merely to assist in exploring how the project might be developed.

Stormwater Management Design:
AVERAGE REGIONAL REQUIRED PROVIDED

Boundary Source:
CIVIL CAD FILE



1" = 40'
0 20 40 80 200
NORTH

THE MISSNER GROUP EST. 1945

scheme: 05

Conceptual Site Plan

2250 North Rand Road
Palatine, IL 60074

WARE MALCOMB

CHI21-0193-00
04.04.2022

SHEET
1

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

ITE Trip Generation Worksheets

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

General Light Industrial
(110)

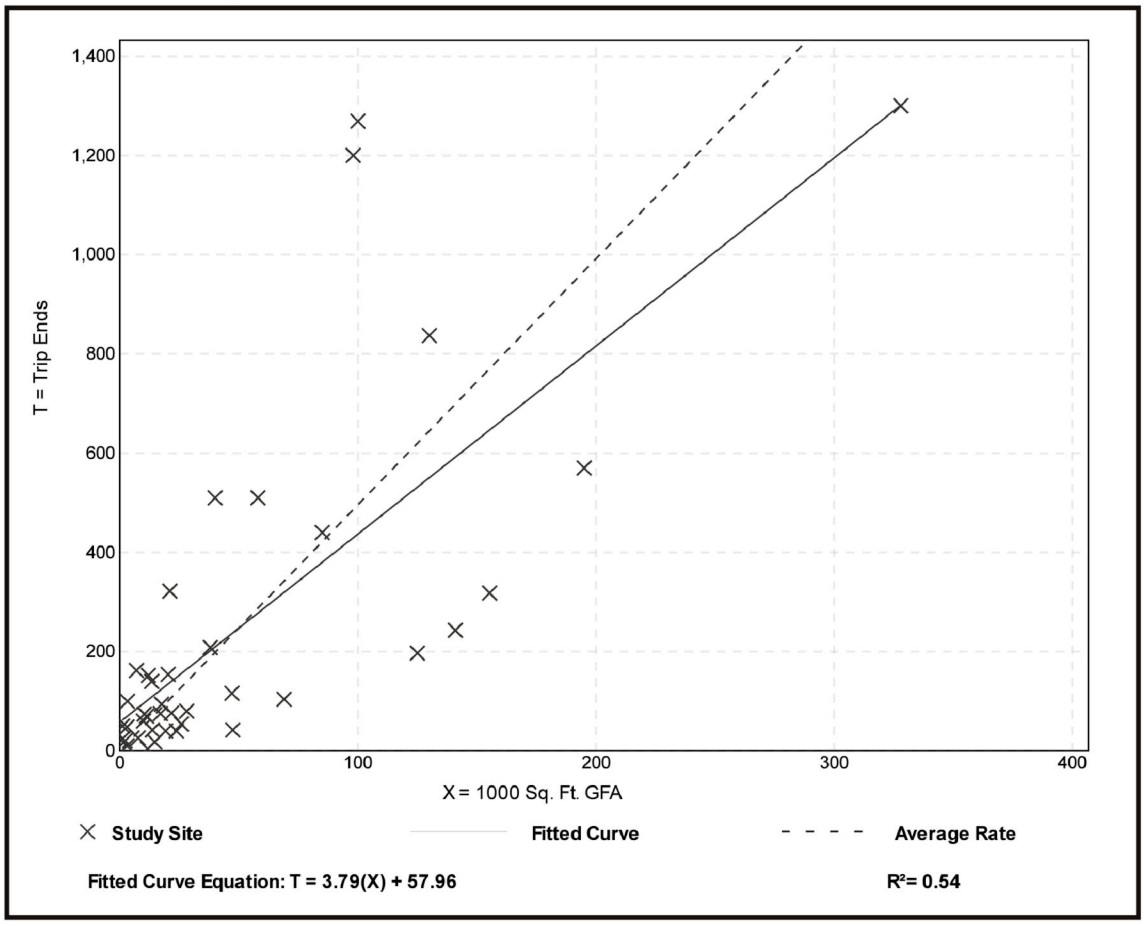
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 40
1000 Sq. Ft. GFA: 49
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
4.96	0.34 - 43.86	4.20

Data Plot and Equation



Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

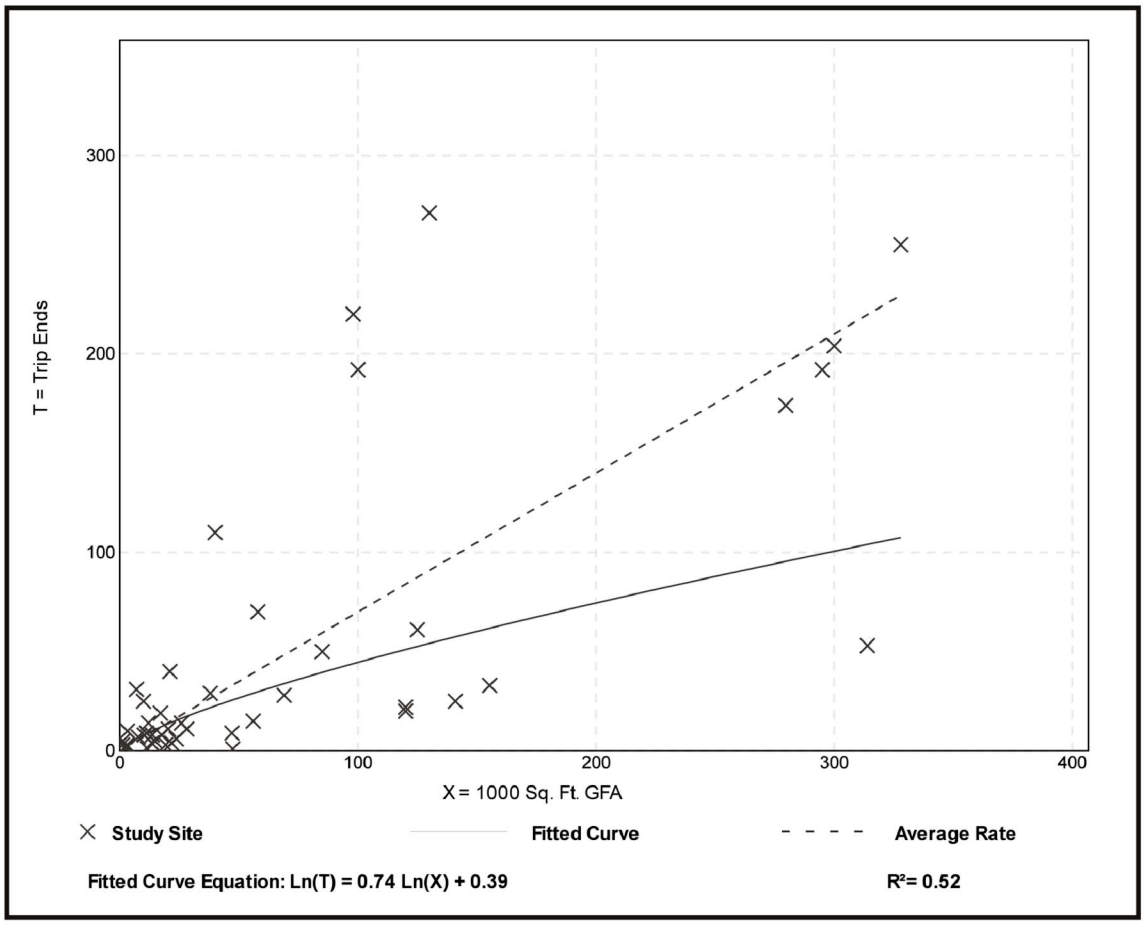
General Light Industrial
(110)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 45
1000 Sq. Ft. GFA: 73
Directional Distribution: 88% entering, 12% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.70	0.02 - 4.46	0.65

Data Plot and Equation



Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

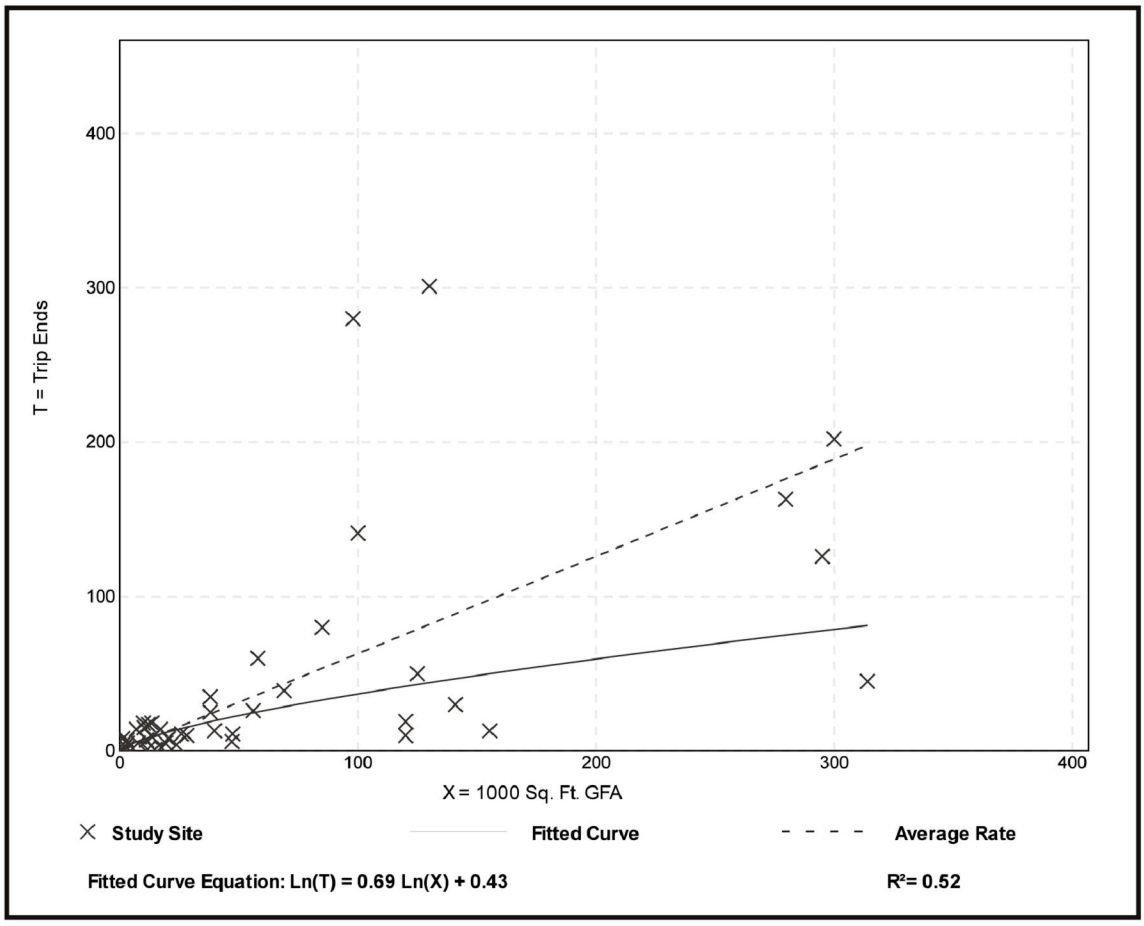
General Light Industrial
(110)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 44
1000 Sq. Ft. GFA: 67
Directional Distribution: 13% entering, 87% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.63	0.07 - 7.02	0.68

Data Plot and Equation



Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

General Light Industrial
(110)

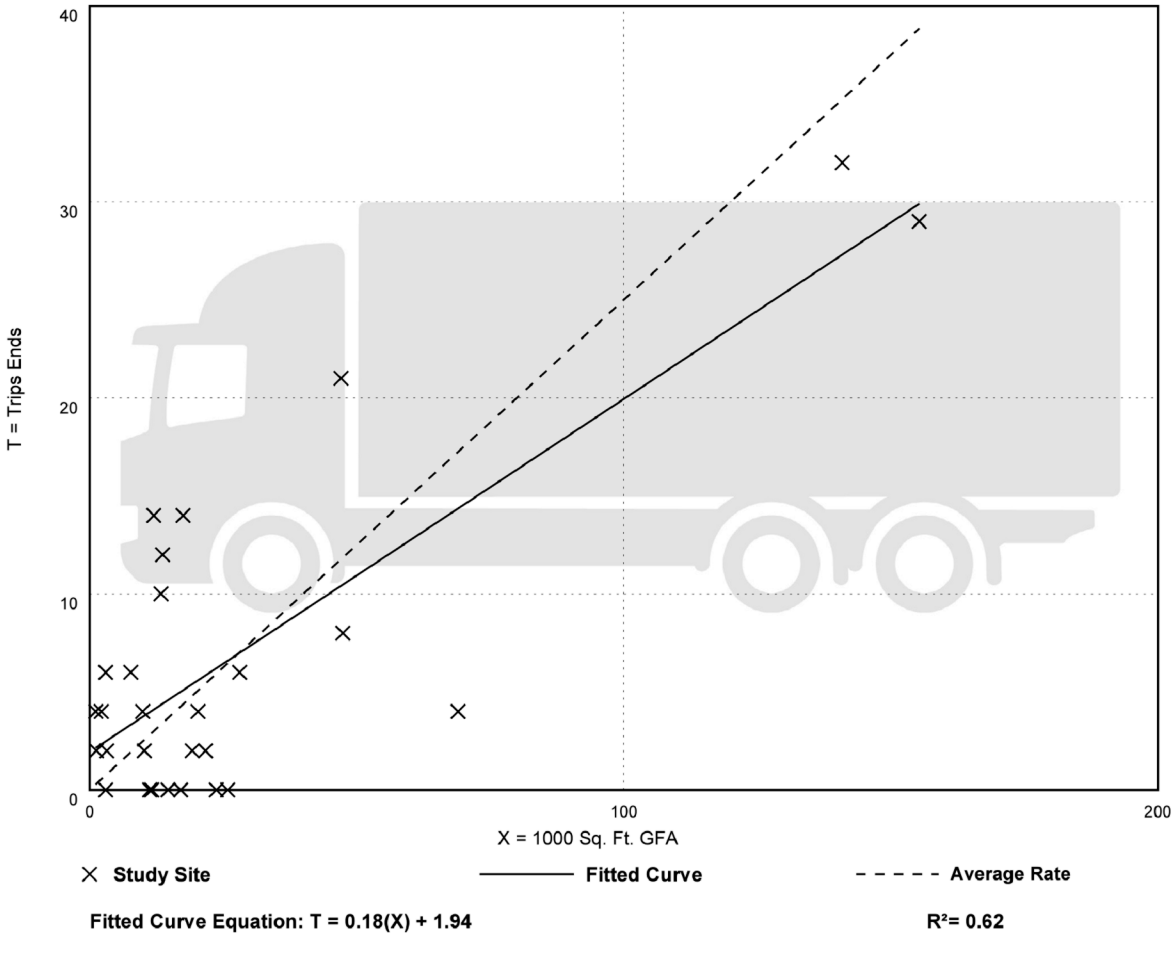
Truck Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 28
Avg. 1000 Sq. Ft. GFA: 27
Directional Distribution: 50% entering, 50% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.25	0.00 - 3.51	0.31

Data Plot and Equation



Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

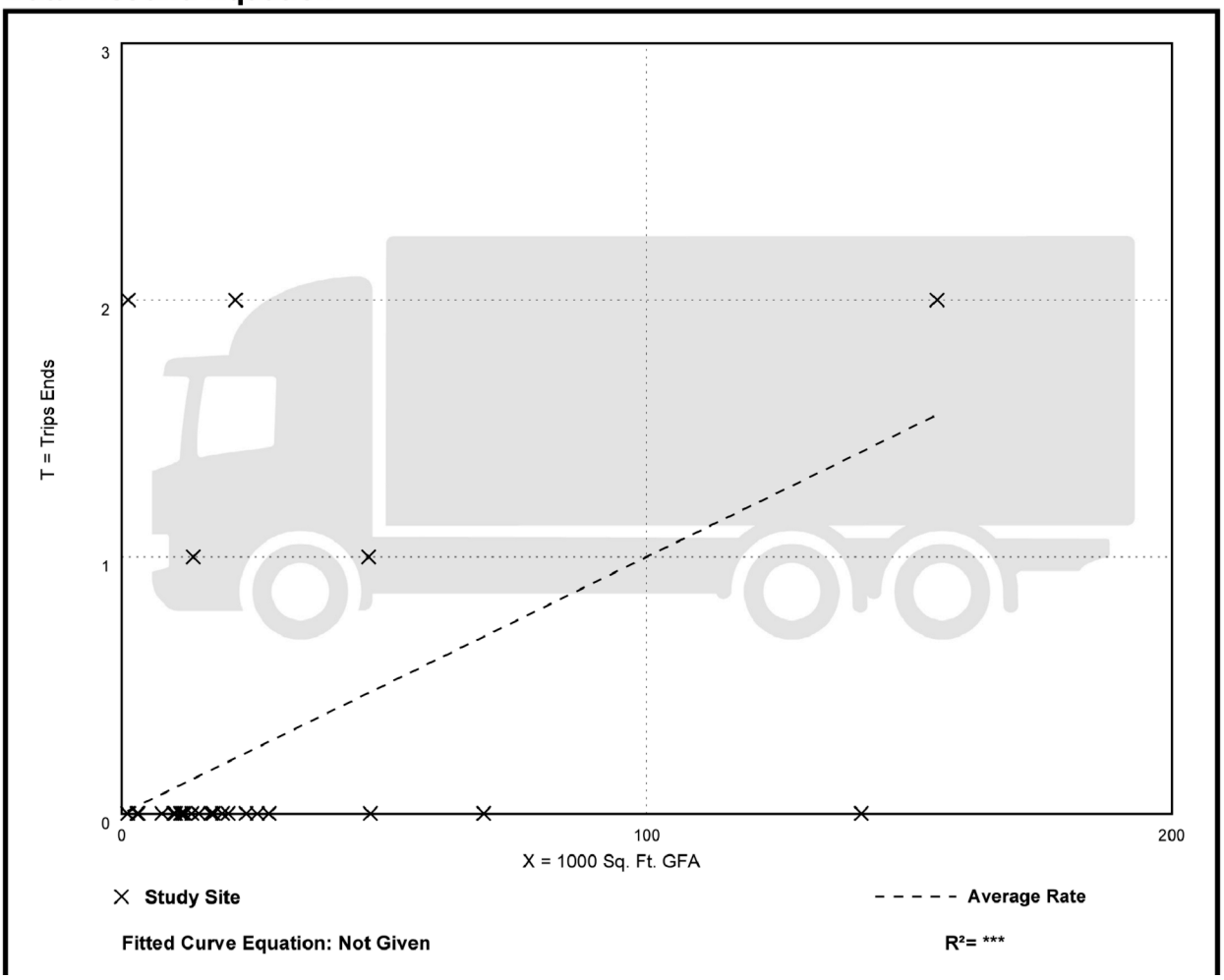
General Light Industrial
(110)

Truck Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 27
Avg. 1000 Sq. Ft. GFA: 28
Directional Distribution: 63% entering, 37% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.01	0.00 - 1.59	0.07

Data Plot and Equation



Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

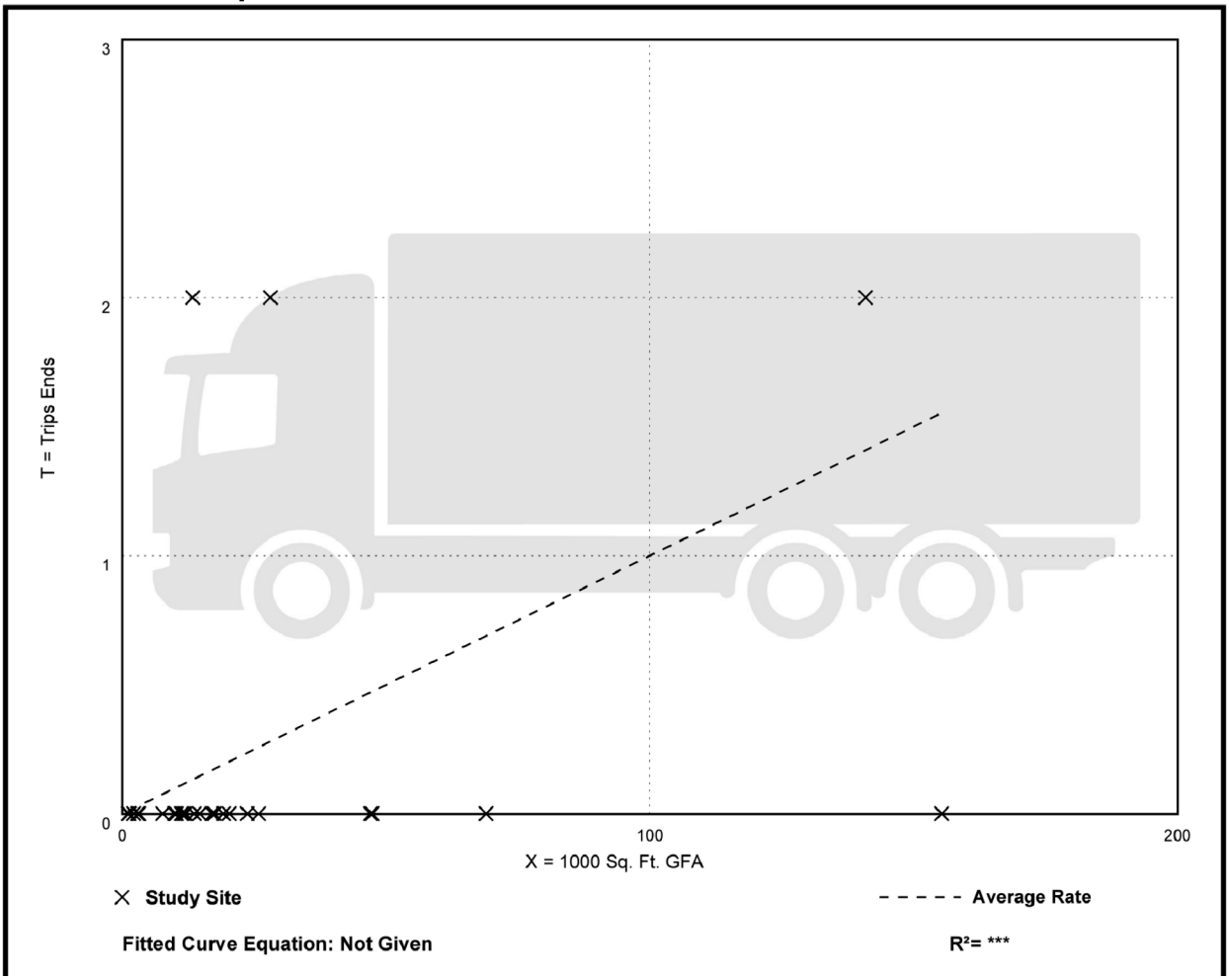
General Light Industrial
(110)

Truck Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 27
Avg. 1000 Sq. Ft. GFA: 27
Directional Distribution: 50% entering, 50% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.01	0.00 - 0.15	0.02

Data Plot and Equation



Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

CMAP 2050 Projections Letter

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Chicago Metropolitan Agency for Planning

433 West Van Buren Street
Suite 450
Chicago, IL 60607

312-454-0400
cmap.illinois.gov

September 29, 2021

Andrew Bowen
Traffic Engineer
Kenig, Lindgren, O'Hara and Aboona, Inc.
9575 West Higgins Road
Suite 400
Rosemont, IL 60018

Subject: ***Rand Road (US 12) @ Lake Cook Road***
IDOT

Dear Mr. Bowen:

In response to a request made on your behalf and dated September 28, 2021, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
Rand Rd north of Lake Cook Rd	49,600	50,400
Rand Rd south of Lake Cook Rd	14,900	17,700
Lake Cook Rd west of Rand Rd	19,700	25,400
Lake Cook Rd east of Rand Rd	43,600	46,300

Traffic projections are developed using existing ADT data provided in the request letter and the results from the June 2021 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Rios (IDOT)
2021_CY_TrafficForecast\Palatine\ck-119-21\ck-119-21.docx

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Level of Service Criteria

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

LEVEL OF SERVICE CRITERIA

Signalized Intersections		
Level of Service	Interpretation	Average Control Delay (seconds per vehicle)
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Good progression, with more vehicles stopping than for Level of Service A.	>10 - 20
C	Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 - 35
D	The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable.	>35 - 55
E	Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent.	>55 - 80
F	The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	>80.0

Unsignalized Intersections	
Level of Service	Average Total Delay (SEC/VEH)
A	0 - 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Source: *Highway Capacity Manual*, 2010.

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Capacity Analysis Summary Sheets

Existing Weekday Morning Peak Hour Conditions

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

10/07/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	20	648	231	28	487	918	813	934	9	114	394	42
Future Volume (vph)	20	648	231	28	487	918	813	934	9	114	394	42
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		505	140		505	670		0	215		0
Storage Lanes	1		1	1		2	2		0	2		0
Taper Length (ft)	140			90			290			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.88	0.97	0.95	0.95	0.97	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850		0.999			0.986	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3725	1599	1805	3551	2493	3303	3369	0	3400	3361	0
Flt Permitted	0.330			0.199			0.950			0.950		
Satd. Flow (perm)	627	3725	1599	378	3551	2493	3303	3369	0	3400	3361	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		2957			2627			1774			763	
Travel Time (s)		44.8			39.8			34.6			14.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	1%	0%	7%	14%	6%	7%	11%	3%	6%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	661	236	29	497	937	830	962	0	116	445	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8	1	1	6		5	2	
Permitted Phases	4		4	8		8						
Detector Phase	7	4	5	3	8	1	1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	21.0	7.5	6.5	21.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	13.5	48.0	13.5	13.5	48.0	58.5	58.5	75.0		13.5	30.0	
Total Split (%)	9.0%	32.0%	9.0%	9.0%	32.0%	39.0%	39.0%	50.0%		9.0%	20.0%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.0	0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	4.5	3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	47.4	40.6	55.6	48.1	40.9	94.4	47.5	77.1		9.1	38.7	
Actuated g/C Ratio	0.32	0.27	0.37	0.32	0.27	0.63	0.32	0.51		0.06	0.26	

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

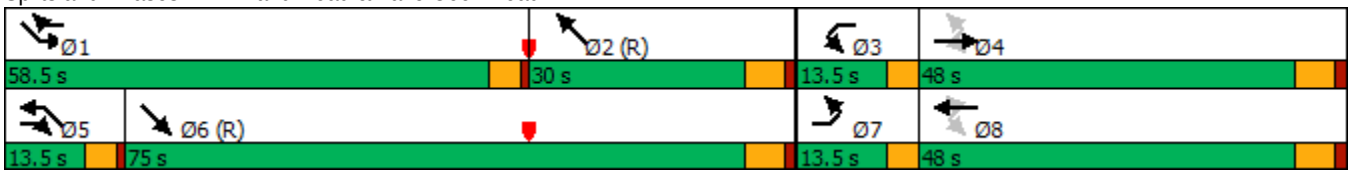
10/07/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio	0.08	0.66	0.40	0.15	0.51	0.60	0.79	0.56		0.57	0.51	
Control Delay	30.5	51.7	36.5	32.0	47.7	17.8	52.7	27.9		79.6	53.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	30.5	51.7	36.5	32.0	47.7	17.8	52.7	27.9		79.6	53.3	
LOS	C	D	D	C	D	B	D	C		E	D	
Approach Delay		47.3			28.2			39.4			58.8	
Approach LOS		D			C			D			E	
Queue Length 50th (ft)	12	296	162	18	212	273	379	366		57	210	
Queue Length 95th (ft)	31	364	242	40	268	294	433	442		93	#304	
Internal Link Dist (ft)		2877			2547			1694			683	
Turn Bay Length (ft)	190		505	140		505	670			215		
Base Capacity (vph)	283	1065	596	219	1024	1677	1189	1731		212	866	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.07	0.62	0.40	0.13	0.49	0.56	0.70	0.56		0.55	0.51	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 145.5 (97%), Referenced to phase 2:NWT and 6:SET, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 39.8 Intersection LOS: D
Intersection Capacity Utilization 72.7% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Rand Road & Lake Cook Road



Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
2: North ALG Access Drive/Central Sod Farms Access Drive & Rand Road 10/07/2021

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	6	1187	0	1	543	7	0	0	1	2	0	7
Future Vol, veh/h	6	1187	0	1	543	7	0	0	1	2	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	33	6	0	0	5	0	0	0	0	0	0	14
Mvmt Flow	6	1263	0	1	578	7	0	0	1	2	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	585	0	0	1263	0	0	1566	1862	632	1228	1859	293
Stage 1	-	-	-	-	-	-	1275	1275	-	584	584	-
Stage 2	-	-	-	-	-	-	291	587	-	644	1275	-
Critical Hdwy	4.76	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	7.18
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.53	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.44
Pot Cap-1 Maneuver	801	-	-	557	-	-	77	74	428	136	74	669
Stage 1	-	-	-	-	-	-	180	240	-	470	501	-
Stage 2	-	-	-	-	-	-	698	500	-	433	240	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	801	-	-	557	-	-	76	73	428	135	73	669
Mov Cap-2 Maneuver	-	-	-	-	-	-	150	175	-	265	175	-
Stage 1	-	-	-	-	-	-	179	238	-	467	500	-
Stage 2	-	-	-	-	-	-	689	499	-	429	238	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	13.4	12.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	428	557	-	-	801	-	-	500
HCM Lane V/C Ratio	0.002	0.002	-	-	0.008	-	-	0.019
HCM Control Delay (s)	13.4	11.5	-	-	9.5	-	-	12.3
HCM Lane LOS	B	B	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
3: South ALG Access Drive/North IAB Access Drive & Rand Road 10/07/2021

Intersection	
Int Delay, s/veh	0

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1190	0	0	551	1	0	0	0	0	0	0
Future Vol, veh/h	0	1190	0	0	551	1	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	6	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	1266	0	0	586	1	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	587	0	0	1266	0	0	1559	1853	633	1220	1853	294
Stage 1	-	-	-	-	-	-	1266	1266	-	587	587	-
Stage 2	-	-	-	-	-	-	293	587	-	633	1266	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	998	-	-	556	-	-	78	75	427	138	75	708
Stage 1	-	-	-	-	-	-	182	242	-	468	500	-
Stage 2	-	-	-	-	-	-	696	500	-	439	242	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	998	-	-	556	-	-	78	75	427	138	75	708
Mov Cap-2 Maneuver	-	-	-	-	-	-	152	178	-	270	178	-
Stage 1	-	-	-	-	-	-	182	242	-	468	500	-
Stage 2	-	-	-	-	-	-	696	500	-	439	242	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	0	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	-	556	-	-	998	-	- -
HCM Lane V/C Ratio	-	-	-	-	-	-	- -
HCM Control Delay (s)	0	0	-	-	0	-	- 0
HCM Lane LOS	A	A	-	-	A	-	- A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	- -

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
4: Enterprise Access Drive/Public Storage Access Drive & Rand Road 10/07/2021

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1188	2	7	549	2	2	0	4	2	0	1
Future Vol, veh/h	0	1188	2	7	549	2	2	0	4	2	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	6	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	1264	2	7	584	2	2	0	4	2	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	586	0	0	1266	0	0	1571	1865	633	1231	1865	293
Stage 1	-	-	-	-	-	-	1265	1265	-	599	599	-
Stage 2	-	-	-	-	-	-	306	600	-	632	1266	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	999	-	-	556	-	-	76	74	427	136	74	709
Stage 1	-	-	-	-	-	-	182	243	-	460	494	-
Stage 2	-	-	-	-	-	-	684	493	-	440	242	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	999	-	-	556	-	-	75	73	427	133	73	709
Mov Cap-2 Maneuver	-	-	-	-	-	-	151	177	-	263	173	-
Stage 1	-	-	-	-	-	-	182	243	-	460	488	-
Stage 2	-	-	-	-	-	-	674	487	-	436	242	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0.1	18.9	15.9
HCM LOS			C	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	265	556	-	-	999	-	-	333
HCM Lane V/C Ratio	0.024	0.013	-	-	-	-	-	0.01
HCM Control Delay (s)	18.9	11.6	-	-	0	-	-	15.9
HCM Lane LOS	C	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Capacity Analysis Summary Sheets

Existing Weekday Evening Peak Hour Conditions

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

10/07/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	27	397	177	18	774	1128	708	796	19	385	893	72
Future Volume (vph)	27	397	177	18	774	1128	708	796	19	385	893	72
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		505	140		505	670		0	215		0
Storage Lanes	1		1	1		2	2		0	2		0
Taper Length (ft)	140			90			290			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.88	0.97	0.95	0.95	0.97	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850		0.997			0.989	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1687	3689	1538	1703	3762	2760	3367	3432	0	3433	3442	0
Flt Permitted	0.109			0.406			0.950			0.950		
Satd. Flow (perm)	194	3689	1538	728	3762	2760	3367	3432	0	3433	3442	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		2957			2627			1774			763	
Travel Time (s)		44.8			39.8			34.6			14.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	3%	5%	6%	1%	3%	4%	5%	0%	2%	3%	13%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	28	405	181	18	790	1151	722	831	0	393	984	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8	1	1	6		5	2	
Permitted Phases	4		4	8		8						
Detector Phase	7	4	5	3	8	1	1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	21.0	7.5	6.5	21.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	13.5	40.5	22.5	13.5	40.5	39.0	39.0	73.5		22.5	57.0	
Total Split (%)	9.0%	27.0%	15.0%	9.0%	27.0%	26.0%	26.0%	49.0%		15.0%	38.0%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.0	0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	4.5	3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	47.4	40.0	64.3	46.3	39.4	80.2	34.8	68.7		18.4	52.3	
Actuated g/C Ratio	0.32	0.27	0.43	0.31	0.26	0.53	0.23	0.46		0.12	0.35	

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

10/07/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio	0.21	0.41	0.27	0.07	0.80	0.78	0.92	0.53		0.94	0.82	
Control Delay	37.5	47.5	29.9	34.2	59.0	33.3	74.6	30.9		95.0	51.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	37.5	47.5	29.9	34.2	59.0	33.3	74.6	30.9		95.0	51.7	
LOS	D	D	C	C	E	C	E	C		F	D	
Approach Delay		41.8			43.7			51.2			64.1	
Approach LOS		D			D			D			E	
Queue Length 50th (ft)	19	176	117	12	390	517	360	306		200	468	
Queue Length 95th (ft)	43	233	182	31	#504	644	#478	371		#305	559	
Internal Link Dist (ft)		2877			2547			1694			683	
Turn Bay Length (ft)	190		505	140		505	670			215		
Base Capacity (vph)	162	982	659	297	988	1475	781	1571		420	1199	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.17	0.41	0.27	0.06	0.80	0.78	0.92	0.53		0.94	0.82	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 79.5 (53%), Referenced to phase 2:NWT and 6:SET, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.94
Intersection Signal Delay: 50.7 Intersection LOS: D
Intersection Capacity Utilization 83.4% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Rand Road & Lake Cook Road

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
2: North ALG Access Drive/Central Sod Farms Access Drive & Rand Road 10/07/2021

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	987	4	1	1343	3	3	0	1	1	0	4
Future Vol, veh/h	0	987	4	1	1343	3	3	0	1	1	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	5	0	0	3	33	0	0	0	0	0	0
Mvmt Flow	0	1018	4	1	1385	3	3	0	1	1	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1388	0	0	1022	0	0	1715	2410	511	1898	2411	694
Stage 1	-	-	-	-	-	-	1020	1020	-	1389	1389	-
Stage 2	-	-	-	-	-	-	695	1390	-	509	1022	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	500	-	-	687	-	-	59	33	513	43	33	390
Stage 1	-	-	-	-	-	-	257	317	-	153	212	-
Stage 2	-	-	-	-	-	-	403	211	-	520	316	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	500	-	-	687	-	-	58	33	513	43	33	390
Mov Cap-2 Maneuver	-	-	-	-	-	-	168	130	-	121	130	-
Stage 1	-	-	-	-	-	-	257	317	-	153	212	-
Stage 2	-	-	-	-	-	-	398	211	-	519	316	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	23.2	18.6
HCM LOS			C	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	202	687	-	-	500	-	-	270
HCM Lane V/C Ratio	0.02	0.002	-	-	-	-	-	0.019
HCM Control Delay (s)	23.2	10.2	-	-	0	-	-	18.6
HCM Lane LOS	C	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
3: South ALG Access Drive/North IAB Access Drive & Rand Road 10/07/2021

Intersection	
Int Delay, s/veh	0

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	989	0	0	1346	2	0	0	0	1	0	1
Future Vol, veh/h	0	989	0	0	1346	2	0	0	0	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	5	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	1020	0	0	1388	2	0	0	0	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1390	0	0	1020	0	0	1714	2410	510	1899	2409	695
Stage 1	-	-	-	-	-	-	1020	1020	-	1389	1389	-
Stage 2	-	-	-	-	-	-	694	1390	-	510	1020	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	499	-	-	688	-	-	59	33	514	43	33	389
Stage 1	-	-	-	-	-	-	257	317	-	153	212	-
Stage 2	-	-	-	-	-	-	404	211	-	519	317	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	499	-	-	688	-	-	59	33	514	43	33	389
Mov Cap-2 Maneuver	-	-	-	-	-	-	169	130	-	121	130	-
Stage 1	-	-	-	-	-	-	257	317	-	153	212	-
Stage 2	-	-	-	-	-	-	403	211	-	519	317	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	0	24.7
HCM LOS			A	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	-	688	-	-	499	-	-	185
HCM Lane V/C Ratio	-	-	-	-	-	-	-	0.011
HCM Control Delay (s)	0	0	-	-	0	-	-	24.7
HCM Lane LOS	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
4: Enterprise Access Drive/Public Storage Access Drive & Rand Road 10/07/2021

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	983	7	8	1344	0	4	0	10	0	0	0
Future Vol, veh/h	0	983	7	8	1344	0	4	0	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	5	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	1003	7	8	1371	0	4	0	10	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1371	0	0	1010	0	0	1709	2394	505	1889	2397	686
Stage 1	-	-	-	-	-	-	1007	1007	-	1387	1387	-
Stage 2	-	-	-	-	-	-	702	1387	-	502	1010	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	507	-	-	694	-	-	60	34	518	44	34	395
Stage 1	-	-	-	-	-	-	262	321	-	153	212	-
Stage 2	-	-	-	-	-	-	400	212	-	525	320	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	507	-	-	694	-	-	59	34	518	43	34	395
Mov Cap-2 Maneuver	-	-	-	-	-	-	169	130	-	120	129	-
Stage 1	-	-	-	-	-	-	262	321	-	153	209	-
Stage 2	-	-	-	-	-	-	395	209	-	515	320	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0.1	16.5	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	326	694	-	-	507	-	-	-
HCM Lane V/C Ratio	0.044	0.012	-	-	-	-	-	-
HCM Control Delay (s)	16.5	10.2	-	-	0	-	-	0
HCM Lane LOS	C	B	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Capacity Analysis Summary Sheets

2027 No Build Weekday Morning Peak Hour Conditions

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

03/15/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	21	666	237	29	501	944	836	960	9	117	405	43
Future Volume (vph)	21	666	237	29	501	944	836	960	9	117	405	43
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		505	140		505	670		0	215		0
Storage Lanes	1		1	1		2	2		0	2		0
Taper Length (ft)	140			90			290			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.88	0.97	0.95	0.95	0.97	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850		0.999			0.986	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3725	1599	1805	3551	2493	3303	3369	0	3400	3361	0
Flt Permitted	0.321			0.192			0.950			0.950		
Satd. Flow (perm)	610	3725	1599	365	3551	2493	3303	3369	0	3400	3361	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		2957			2627			1774			763	
Travel Time (s)		44.8			39.8			34.6			14.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	1%	0%	7%	14%	6%	7%	11%	3%	6%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	680	242	30	511	963	853	989	0	119	457	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8	1	1	6		5	2	
Permitted Phases	4		4	8		8						
Detector Phase	7	4	5	3	8	1	1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	21.0	7.5	6.5	21.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	13.5	48.0	13.5	13.5	48.0	58.5	58.5	75.0		13.5	30.0	
Total Split (%)	9.0%	32.0%	9.0%	9.0%	32.0%	39.0%	39.0%	50.0%		9.0%	20.0%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.0	0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	4.5	3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	48.1	41.3	56.2	48.8	41.6	96.0	48.4	76.5		8.9	37.1	
Actuated g/C Ratio	0.32	0.28	0.37	0.33	0.28	0.64	0.32	0.51		0.06	0.25	

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

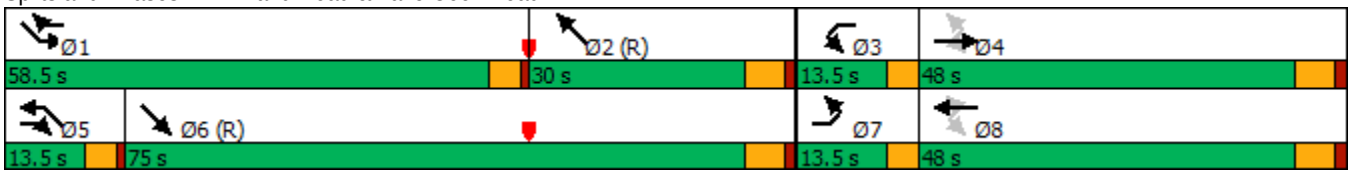
03/15/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio	0.08	0.66	0.40	0.16	0.52	0.60	0.80	0.58		0.59	0.55	
Control Delay	30.4	51.4	36.4	32.0	47.4	17.2	52.4	28.6		81.1	55.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	30.4	51.4	36.4	32.0	47.4	17.2	52.4	28.6		81.1	55.1	
LOS	C	D	D	C	D	B	D	C		F	E	
Approach Delay		47.1			27.7			39.7			60.5	
Approach LOS		D			C			D			E	
Queue Length 50th (ft)	13	302	166	18	215	270	389	383		59	222	
Queue Length 95th (ft)	32	376	248	42	276	307	448	458		95	#317	
Internal Link Dist (ft)		2877			2547			1694			683	
Turn Bay Length (ft)	190		505	140		505	670			215		
Base Capacity (vph)	282	1073	601	217	1030	1688	1189	1718		208	830	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.07	0.63	0.40	0.14	0.50	0.57	0.72	0.58		0.57	0.55	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 145.5 (97%), Referenced to phase 2:NWT and 6:SET, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 39.9 Intersection LOS: D
Intersection Capacity Utilization 74.3% ICU Level of Service D
Analysis Period (min) 15
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Rand Road & Lake Cook Road



Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
2: North ALG Access Drive/Central Sod Farms Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	6	1220	0	1	558	7	0	0	1	2	0	7
Future Vol, veh/h	6	1220	0	1	558	7	0	0	1	2	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	33	6	0	0	5	0	0	0	0	0	0	14
Mvmt Flow	6	1298	0	1	594	7	0	0	1	2	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	601	0	0	1298	0	0	1609	1913	649	1261	1910	301
Stage 1	-	-	-	-	-	-	1310	1310	-	600	600	-
Stage 2	-	-	-	-	-	-	299	603	-	661	1310	-
Critical Hdwy	4.76	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	7.18
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.53	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.44
Pot Cap-1 Maneuver	788	-	-	540	-	-	71	69	417	129	69	661
Stage 1	-	-	-	-	-	-	171	231	-	459	493	-
Stage 2	-	-	-	-	-	-	691	492	-	423	231	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	788	-	-	540	-	-	70	68	417	128	68	661
Mov Cap-2 Maneuver	-	-	-	-	-	-	142	168	-	257	168	-
Stage 1	-	-	-	-	-	-	170	229	-	455	492	-
Stage 2	-	-	-	-	-	-	682	491	-	419	229	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	13.7	12.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	417	540	-	-	788	-	-	490
HCM Lane V/C Ratio	0.003	0.002	-	-	0.008	-	-	0.02
HCM Control Delay (s)	13.7	11.7	-	-	9.6	-	-	12.5
HCM Lane LOS	B	B	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
3: South ALG Access Drive/North IAB Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1223	0	0	566	1	0	0	0	0	0	0
Future Vol, veh/h	0	1223	0	0	566	1	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	6	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	1301	0	0	602	1	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	603	0	0	1301	0	0	1602	1904	651	1254	1904	302
Stage 1	-	-	-	-	-	-	1301	1301	-	603	603	-
Stage 2	-	-	-	-	-	-	301	603	-	651	1301	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	984	-	-	539	-	-	72	70	416	131	70	700
Stage 1	-	-	-	-	-	-	173	233	-	458	492	-
Stage 2	-	-	-	-	-	-	689	492	-	429	233	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	984	-	-	539	-	-	72	70	416	131	70	700
Mov Cap-2 Maneuver	-	-	-	-	-	-	145	171	-	262	171	-
Stage 1	-	-	-	-	-	-	173	233	-	458	492	-
Stage 2	-	-	-	-	-	-	689	492	-	429	233	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	0	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	-	539	-	-	984	-	- -
HCM Lane V/C Ratio	-	-	-	-	-	-	- -
HCM Control Delay (s)	0	0	-	-	0	-	- 0
HCM Lane LOS	A	A	-	-	A	-	- A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	- -

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
4: Enterprise Access Drive/Public Storage Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1221	2	7	564	2	2	0	4	2	0	1
Future Vol, veh/h	0	1221	2	7	564	2	2	0	4	2	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	6	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	1299	2	7	600	2	2	0	4	2	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	602	0	0	1301	0	0	1614	1916	651	1265	1916	301
Stage 1	-	-	-	-	-	-	1300	1300	-	615	615	-
Stage 2	-	-	-	-	-	-	314	616	-	650	1301	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	985	-	-	539	-	-	71	68	416	128	68	701
Stage 1	-	-	-	-	-	-	173	233	-	450	485	-
Stage 2	-	-	-	-	-	-	677	485	-	429	233	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	985	-	-	539	-	-	70	67	416	125	67	701
Mov Cap-2 Maneuver	-	-	-	-	-	-	144	169	-	255	166	-
Stage 1	-	-	-	-	-	-	173	233	-	450	479	-
Stage 2	-	-	-	-	-	-	667	479	-	425	233	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0.1	19.5	16.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	255	539	-	-	985	-	-	324
HCM Lane V/C Ratio	0.025	0.014	-	-	-	-	-	0.01
HCM Control Delay (s)	19.5	11.8	-	-	0	-	-	16.2
HCM Lane LOS	C	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Capacity Analysis Summary Sheets

2027 No Build Weekday Evening Peak Hour Conditions

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

03/15/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	28	408	182	19	796	1160	728	818	20	396	918	74
Future Volume (vph)	28	408	182	19	796	1160	728	818	20	396	918	74
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		505	140		505	670		0	215		0
Storage Lanes	1		1	1		2	2		0	2		0
Taper Length (ft)	140			90			290			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.88	0.97	0.95	0.95	0.97	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850		0.996			0.989	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1687	3725	1553	1703	3762	2760	3367	3428	0	3433	3441	0
Flt Permitted	0.099			0.399			0.950			0.950		
Satd. Flow (perm)	176	3725	1553	715	3762	2760	3367	3428	0	3433	3441	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		2957			2627			1774			763	
Travel Time (s)		44.8			39.8			34.6			14.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	2%	4%	6%	1%	3%	4%	5%	0%	2%	3%	13%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	29	416	186	19	812	1184	743	855	0	404	1013	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8	1	1	6		5	2	
Permitted Phases	4		4	8		8						
Detector Phase	7	4	5	3	8	1	1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	21.0	7.5	6.5	21.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	13.5	40.5	22.5	13.5	40.5	39.0	39.0	73.5		22.5	57.0	
Total Split (%)	9.0%	27.0%	15.0%	9.0%	27.0%	26.0%	26.0%	49.0%		15.0%	38.0%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.0	0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	4.5	3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	47.9	40.4	65.2	46.7	39.8	81.0	35.2	67.8		18.7	51.4	
Actuated g/C Ratio	0.32	0.27	0.43	0.31	0.27	0.54	0.23	0.45		0.12	0.34	

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

03/15/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio	0.22	0.41	0.28	0.07	0.81	0.79	0.94	0.55		0.94	0.86	
Control Delay	37.9	47.3	29.7	34.2	59.5	33.8	76.8	31.7		95.9	54.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	37.9	47.3	29.7	34.2	59.5	33.8	76.8	31.7		95.9	54.7	
LOS	D	D	C	C	E	C	E	C		F	D	
Approach Delay		41.7			44.1			52.7			66.4	
Approach LOS		D			D			D			E	
Queue Length 50th (ft)	19	181	120	12	404	543	373	318		206	488	
Queue Length 95th (ft)	44	238	187	33	#530	677	#501	384		#317	581	
Internal Link Dist (ft)		2877			2547			1694			683	
Turn Bay Length (ft)	190		505	140		505	670			215		
Base Capacity (vph)	157	1003	674	296	999	1490	789	1550		428	1178	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.18	0.41	0.28	0.06	0.81	0.79	0.94	0.55		0.94	0.86	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 79.5 (53%), Referenced to phase 2:NWT and 6:SET, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.94
Intersection Signal Delay: 51.8 Intersection LOS: D
Intersection Capacity Utilization 85.5% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Rand Road & Lake Cook Road

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
2: North ALG Access Drive/Central Sod Farms Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1015	4	1	1381	3	3	0	1	1	0	4
Future Vol, veh/h	0	1015	4	1	1381	3	3	0	1	1	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	5	0	0	3	33	0	0	0	0	0	0
Mvmt Flow	0	1046	4	1	1424	3	3	0	1	1	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1427	0	0	1050	0	0	1762	2477	525	1951	2478	714
Stage 1	-	-	-	-	-	-	1048	1048	-	1428	1428	-
Stage 2	-	-	-	-	-	-	714	1429	-	523	1050	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	483	-	-	671	-	-	55	30	502	39	30	378
Stage 1	-	-	-	-	-	-	247	307	-	144	203	-
Stage 2	-	-	-	-	-	-	393	202	-	510	307	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	483	-	-	671	-	-	54	30	502	39	30	378
Mov Cap-2 Maneuver	-	-	-	-	-	-	161	124	-	114	124	-
Stage 1	-	-	-	-	-	-	247	307	-	144	203	-
Stage 2	-	-	-	-	-	-	388	202	-	509	307	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	24	19.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	194	671	-	-	483	-	-	258
HCM Lane V/C Ratio	0.021	0.002	-	-	-	-	-	0.02
HCM Control Delay (s)	24	10.4	-	-	0	-	-	19.2
HCM Lane LOS	C	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
3: South ALG Access Drive/North IAB Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1017	0	0	1384	2	0	0	0	1	0	1
Future Vol, veh/h	0	1017	0	0	1384	2	0	0	0	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	5	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	1048	0	0	1427	2	0	0	0	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1429	0	0	1048	0	0	1762	2477	524	1952	2476	715
Stage 1	-	-	-	-	-	-	1048	1048	-	1428	1428	-
Stage 2	-	-	-	-	-	-	714	1429	-	524	1048	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	482	-	-	672	-	-	55	30	503	39	30	378
Stage 1	-	-	-	-	-	-	247	307	-	144	203	-
Stage 2	-	-	-	-	-	-	393	202	-	510	307	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	482	-	-	672	-	-	55	30	503	39	30	378
Mov Cap-2 Maneuver	-	-	-	-	-	-	162	124	-	114	125	-
Stage 1	-	-	-	-	-	-	247	307	-	144	203	-
Stage 2	-	-	-	-	-	-	392	202	-	510	307	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	0	25.8
HCM LOS			A	D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	-	672	-	-	482	-	-	175
HCM Lane V/C Ratio	-	-	-	-	-	-	-	0.012
HCM Control Delay (s)	0	0	-	-	0	-	-	25.8
HCM Lane LOS	A	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
4: Enterprise Access Drive/Public Storage Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1011	7	8	1382	0	4	0	10	0	0	0
Future Vol, veh/h	0	1011	7	8	1382	0	4	0	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	5	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	1032	7	8	1410	0	4	0	10	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1410	0	0	1039	0	0	1757	2462	520	1942	2465	705
Stage 1	-	-	-	-	-	-	1036	1036	-	1426	1426	-
Stage 2	-	-	-	-	-	-	721	1426	-	516	1039	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	490	-	-	677	-	-	55	31	506	40	31	383
Stage 1	-	-	-	-	-	-	251	311	-	145	203	-
Stage 2	-	-	-	-	-	-	389	203	-	515	310	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	490	-	-	677	-	-	55	31	506	39	31	383
Mov Cap-2 Maneuver	-	-	-	-	-	-	162	125	-	114	124	-
Stage 1	-	-	-	-	-	-	251	311	-	145	201	-
Stage 2	-	-	-	-	-	-	384	201	-	505	310	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0.1	17	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	315	677	-	-	490	-	- -
HCM Lane V/C Ratio	0.045	0.012	-	-	-	-	- -
HCM Control Delay (s)	17	10.4	-	-	0	-	- 0
HCM Lane LOS	C	B	-	-	A	-	- A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	- -

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Capacity Analysis Summary Sheets

2027 Projected Weekday Morning Peak Hour Conditions

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

03/15/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	21	666	254	44	501	944	836	996	9	119	409	44
Future Volume (vph)	21	666	254	44	501	944	836	996	9	119	409	44
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		505	140		505	670		0	215		0
Storage Lanes	1		1	1		2	2		0	2		0
Taper Length (ft)	140			90			290			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.88	0.97	0.95	0.95	0.97	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850		0.999			0.985	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3725	1599	1719	3551	2493	3303	3369	0	3400	3358	0
Flt Permitted	0.349			0.184			0.950			0.950		
Satd. Flow (perm)	663	3725	1599	333	3551	2493	3303	3369	0	3400	3358	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		2957			2627			1774			531	
Travel Time (s)		44.8			39.8			34.6			10.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	1%	5%	7%	14%	6%	7%	11%	3%	6%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	680	259	45	511	963	853	1025	0	121	462	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8	1	1	6		5	2	
Permitted Phases	4		4	8		8						
Detector Phase	7	4	5	3	8	1	1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	21.0	7.5	6.5	21.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	13.5	48.0	13.5	13.5	48.0	58.5	58.5	75.0		13.5	30.0	
Total Split (%)	9.0%	32.0%	9.0%	9.0%	32.0%	39.0%	39.0%	50.0%		9.0%	20.0%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.0	0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	4.5	3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	48.8	40.7	55.6	51.7	43.8	98.2	48.4	74.4		8.8	34.8	
Actuated g/C Ratio	0.33	0.27	0.37	0.34	0.29	0.65	0.32	0.50		0.06	0.23	

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

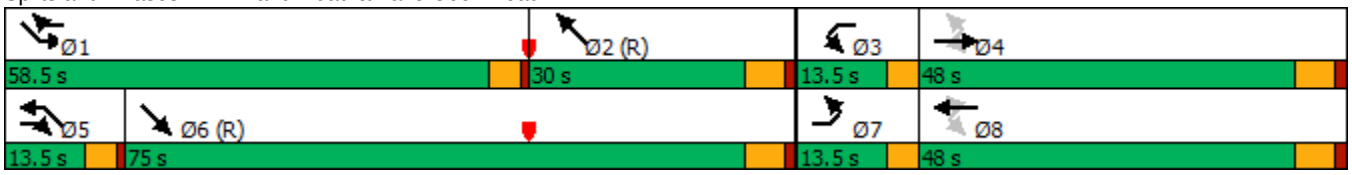
03/15/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio	0.08	0.67	0.44	0.24	0.49	0.59	0.80	0.61		0.60	0.59	
Control Delay	29.7	52.2	37.8	32.9	45.6	15.9	52.4	30.7		81.9	57.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	29.7	52.2	37.8	32.9	45.6	15.9	52.4	30.7		81.9	57.5	
LOS	C	D	D	C	D	B	D	C		F	E	
Approach Delay		47.8			26.4			40.6			62.6	
Approach LOS		D			C			D			E	
Queue Length 50th (ft)	13	303	182	28	214	267	389	404		60	225	
Queue Length 95th (ft)	32	380	271	56	276	307	448	482		96	#323	
Internal Link Dist (ft)		2877			2547			1694			451	
Turn Bay Length (ft)	190		505	140		505	670			215		
Base Capacity (vph)	302	1059	595	208	1073	1725	1189	1670		206	779	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.07	0.64	0.44	0.22	0.48	0.56	0.72	0.61		0.59	0.59	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 145.5 (97%), Referenced to phase 2:NWT and 6:SET, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 40.2 Intersection LOS: D
Intersection Capacity Utilization 74.5% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Rand Road & Lake Cook Road



Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
2: Rand Road & Central Sod Farms Access Drive

03/15/2022

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	6	1263	565	7	2	7
Future Vol, veh/h	6	1263	565	7	2	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	25	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	33	6	5	0	0	14
Mvmt Flow	6	1344	601	7	2	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	608	0	-	0	1289	304
Stage 1	-	-	-	-	605	-
Stage 2	-	-	-	-	684	-
Critical Hdwy	4.76	-	-	-	6.8	7.18
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.53	-	-	-	3.5	3.44
Pot Cap-1 Maneuver	783	-	-	-	158	658
Stage 1	-	-	-	-	513	-
Stage 2	-	-	-	-	468	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	783	-	-	-	157	658
Mov Cap-2 Maneuver	-	-	-	-	294	-
Stage 1	-	-	-	-	509	-
Stage 2	-	-	-	-	468	-

Approach	SE	NW	SW
HCM Control Delay, s	0	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	783	-	516
HCM Lane V/C Ratio	-	-	0.008	-	0.019
HCM Control Delay (s)	-	-	9.6	-	12.1
HCM Lane LOS	-	-	A	-	B
HCM 95th %tile Q(veh)	-	-	0	-	0.1

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
3: South Site Access Drive/North IAB Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1226	39	22	565	1	7	0	2	0	0	0
Future Vol, veh/h	0	1226	39	22	565	1	7	0	2	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	6	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	1304	41	23	601	1	7	0	2	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	602	0	0	1345	0	0	1672	1973	673	1300	1993	301
Stage 1	-	-	-	-	-	-	1325	1325	-	648	648	-
Stage 2	-	-	-	-	-	-	347	648	-	652	1345	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	985	-	-	519	-	-	64	63	402	121	61	701
Stage 1	-	-	-	-	-	-	167	227	-	430	469	-
Stage 2	-	-	-	-	-	-	648	469	-	428	222	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	985	-	-	519	-	-	62	60	402	116	58	701
Mov Cap-2 Maneuver	-	-	-	-	-	-	137	161	-	243	147	-
Stage 1	-	-	-	-	-	-	167	227	-	430	448	-
Stage 2	-	-	-	-	-	-	619	448	-	426	222	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0.5	28.8	0
HCM LOS			D	A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	161	519	-	-	985	-	-	-
HCM Lane V/C Ratio	0.059	0.045	-	-	-	-	-	-
HCM Control Delay (s)	28.8	12.3	-	-	0	-	-	0
HCM Lane LOS	D	B	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	-

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
4: Enterprise Access Drive/Public Storage Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1226	2	7	585	2	2	0	4	2	0	1
Future Vol, veh/h	0	1226	2	7	585	2	2	0	4	2	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	6	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	1304	2	7	622	2	2	0	4	2	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	624	0	0	1306	0	0	1630	1943	653	1289	1943	312
Stage 1	-	-	-	-	-	-	1305	1305	-	637	637	-
Stage 2	-	-	-	-	-	-	325	638	-	652	1306	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	967	-	-	537	-	-	69	66	415	123	66	690
Stage 1	-	-	-	-	-	-	172	232	-	437	475	-
Stage 2	-	-	-	-	-	-	667	474	-	428	232	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	967	-	-	537	-	-	68	65	415	121	65	690
Mov Cap-2 Maneuver	-	-	-	-	-	-	143	167	-	250	164	-
Stage 1	-	-	-	-	-	-	172	232	-	437	469	-
Stage 2	-	-	-	-	-	-	657	468	-	424	232	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0.1	19.5	16.5
HCM LOS			C	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	254	537	-	-	967	-	-	317
HCM Lane V/C Ratio	0.025	0.014	-	-	-	-	-	0.01
HCM Control Delay (s)	19.5	11.8	-	-	0	-	-	16.5
HCM Lane LOS	C	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
5: North Site Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	1265	29	0	572	0	4
Future Vol, veh/h	1265	29	0	572	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	6	10	0	5	0	75
Mvmt Flow	1332	31	0	602	0	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	682
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	8.4
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.05
Pot Cap-1 Maneuver	-	-	0	-	0	259
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	259
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0	19.1
HCM LOS			C

Minor Lane/Major Mvmt	NELn1	NWT	SET	SER
Capacity (veh/h)	259	-	-	-
HCM Lane V/C Ratio	0.016	-	-	-
HCM Control Delay (s)	19.1	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Capacity Analysis Summary Sheets

2027 Projected Weekday Evening Peak Hour Conditions

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

03/15/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	28	408	184	22	796	1160	728	819	20	412	947	86
Future Volume (vph)	28	408	184	22	796	1160	728	819	20	412	947	86
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		505	140		505	670		0	215		0
Storage Lanes	1		1	1		2	2		0	2		0
Taper Length (ft)	140			90			290			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.88	0.97	0.95	0.95	0.97	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850		0.996			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1687	3725	1553	1656	3762	2760	3433	3485	0	3367	3407	0
Flt Permitted	0.100			0.396			0.950			0.950		
Satd. Flow (perm)	178	3725	1553	690	3762	2760	3433	3485	0	3367	3407	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		2957			2627			1774			531	
Travel Time (s)		44.8			39.8			34.6			10.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	2%	4%	9%	1%	3%	2%	3%	10%	4%	5%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	29	416	188	22	812	1184	743	856	0	420	1054	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8	1	1	6		5	2	
Permitted Phases	4		4	8		8						
Detector Phase	7	4	5	3	8	1	1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	21.0	7.5	6.5	21.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	13.5	40.5	22.5	13.5	40.5	39.0	39.0	73.5		22.5	57.0	
Total Split (%)	9.0%	27.0%	15.0%	9.0%	27.0%	26.0%	26.0%	49.0%		15.0%	38.0%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.0	0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	4.5	3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	47.7	40.2	65.3	46.9	39.8	80.7	34.9	67.5		19.1	51.7	
Actuated g/C Ratio	0.32	0.27	0.44	0.31	0.27	0.54	0.23	0.45		0.13	0.34	

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

03/15/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio	0.22	0.42	0.28	0.08	0.81	0.80	0.93	0.55		0.98	0.90	
Control Delay	37.8	47.5	29.8	34.5	59.5	34.0	75.3	31.7		103.1	57.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	37.8	47.5	29.8	34.5	59.5	34.0	75.3	31.7		103.1	57.8	
LOS	D	D	C	C	E	C	E	C		F	E	
Approach Delay		41.8			44.3			52.0			70.7	
Approach LOS		D			D			D			E	
Queue Length 50th (ft)	19	182	122	14	404	543	372	317		~227	518	
Queue Length 95th (ft)	44	240	189	36	#530	677	#493	382		#339	#645	
Internal Link Dist (ft)		2877			2547			1694			451	
Turn Bay Length (ft)	190		505	140		505	670			215		
Base Capacity (vph)	158	999	676	286	999	1484	797	1568		428	1174	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.18	0.42	0.28	0.08	0.81	0.80	0.93	0.55		0.98	0.90	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 79.5 (53%), Referenced to phase 2:NWT and 6:SET, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 53.0 Intersection LOS: D
Intersection Capacity Utilization 86.7% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Rand Road & Lake Cook Road

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
2: Rand Road & Central Sod Farms Access Drive

03/15/2022

Intersection	
Int Delay, s/veh	0

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	0	1027	1441	3	1	4
Future Vol, veh/h	0	1027	1441	3	1	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	25	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	5	3	33	0	0
Mvmt Flow	0	1059	1486	3	1	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1489	0	-	0	2018	745
Stage 1	-	-	-	-	1488	-
Stage 2	-	-	-	-	530	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	457	-	-	-	52	361
Stage 1	-	-	-	-	177	-
Stage 2	-	-	-	-	560	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	457	-	-	-	52	361
Mov Cap-2 Maneuver	-	-	-	-	139	-
Stage 1	-	-	-	-	177	-
Stage 2	-	-	-	-	560	-

Approach	SE	NW	SW
HCM Control Delay, s	0	0	18.4
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	457	-	274
HCM Lane V/C Ratio	-	-	-	-	0.019
HCM Control Delay (s)	-	-	0	-	18.4
HCM Lane LOS	-	-	A	-	C
HCM 95th %tile Q(veh)	-	-	0	-	0.1

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
3: South Site Access Drive/North IAB Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	1.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1023	5	3	1383	2	60	0	14	1	0	1
Future Vol, veh/h	0	1023	5	3	1383	2	60	0	14	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	5	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	1055	5	3	1426	2	62	0	14	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1428	0	0	1060	0	0	1777	2492	530	1961	2493	714
Stage 1	-	-	-	-	-	-	1058	1058	-	1433	1433	-
Stage 2	-	-	-	-	-	-	719	1434	-	528	1060	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	482	-	-	665	-	-	~ 53	30	499	39	30	378
Stage 1	-	-	-	-	-	-	244	304	-	143	201	-
Stage 2	-	-	-	-	-	-	390	201	-	507	303	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	482	-	-	665	-	-	~ 53	30	499	38	30	378
Mov Cap-2 Maneuver	-	-	-	-	-	-	159	123	-	112	123	-
Stage 1	-	-	-	-	-	-	244	304	-	143	200	-
Stage 2	-	-	-	-	-	-	387	200	-	492	303	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	38.1	26.1
HCM LOS			E	D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	183	665	-	-	482	-	-	173
HCM Lane V/C Ratio	0.417	0.005	-	-	-	-	-	0.012
HCM Control Delay (s)	38.1	10.4	-	-	0	-	-	26.1
HCM Lane LOS	E	B	-	-	A	-	-	D
HCM 95th %tile Q(veh)	1.9	0	-	-	0	-	-	0

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
4: Enterprise Access Drive/Public Storage Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1031	7	8	1384	0	4	0	10	0	0	0
Future Vol, veh/h	0	1031	7	8	1384	0	4	0	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	5	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	1052	7	8	1412	0	4	0	10	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1412	0	0	1059	0	0	1778	2484	530	1954	2487	706
Stage 1	-	-	-	-	-	-	1056	1056	-	1428	1428	-
Stage 2	-	-	-	-	-	-	722	1428	-	526	1059	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	489	-	-	665	-	-	53	30	499	39	30	383
Stage 1	-	-	-	-	-	-	244	305	-	144	203	-
Stage 2	-	-	-	-	-	-	389	203	-	508	304	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	489	-	-	665	-	-	53	30	499	38	30	383
Mov Cap-2 Maneuver	-	-	-	-	-	-	159	124	-	113	122	-
Stage 1	-	-	-	-	-	-	244	305	-	144	201	-
Stage 2	-	-	-	-	-	-	384	201	-	498	304	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0.1	17.2	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	310	665	-	-	489	-	- -
HCM Lane V/C Ratio	0.046	0.012	-	-	-	-	- -
HCM Control Delay (s)	17.2	10.5	-	-	0	-	- 0
HCM Lane LOS	C	B	-	-	A	-	- A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	- -

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
5: North Site Access Drive & Rand Road

03/15/2022

Intersection	
Int Delay, s/veh	0

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	1020	5	0	1445	0	7
Future Vol, veh/h	1020	5	0	1445	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	20	0	3	0	14
Mvmt Flow	1074	5	0	1521	0	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	540
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.18
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.44
Pot Cap-1 Maneuver	-	-	0	-	0	456
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	456
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0	13
HCM LOS			B

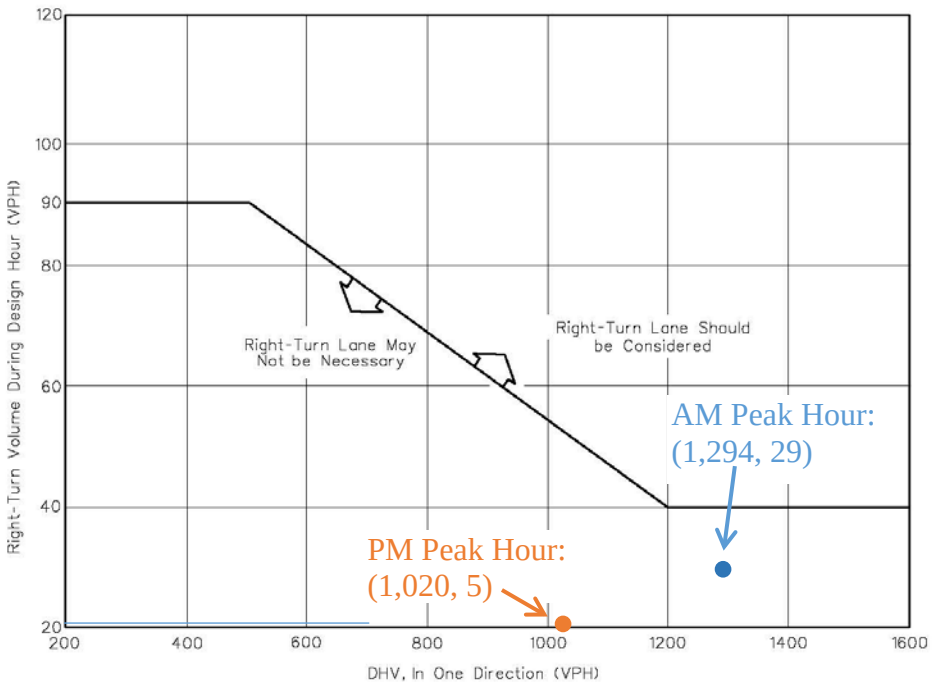
Minor Lane/Major Mvmt	NELn1	NWT	SET	SER
Capacity (veh/h)	456	-	-	-
HCM Lane V/C Ratio	0.016	-	-	-
HCM Control Delay (s)	13	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Turn Lane Warrants

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Rand Road with the Proposed North Access Drive Right Turn Lane Guidelines



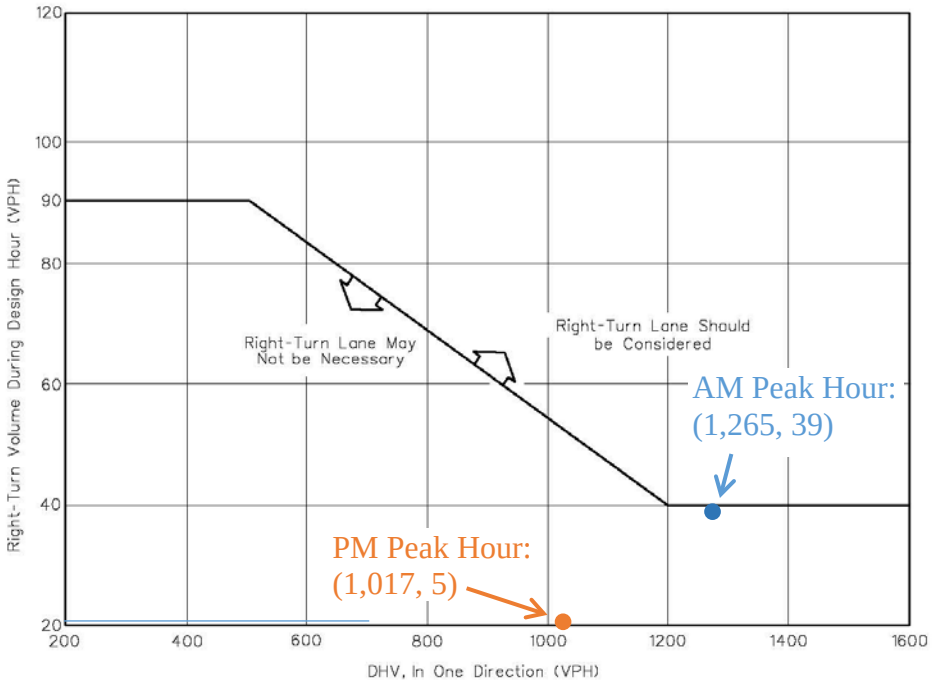
Note: For speeds less than 50 mph (80 km/hr), see Section 36-3.01(a).

GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTION ON FOUR-LANE HIGHWAYS (Design Speed of 50 mph (80 km/hr) or Greater)

Figure 36-3.B

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

Rand Road with the Proposed South Access Drive
Right Turn Lane Guidelines



Note: For speeds less than 50 mph (80 km/hr), see Section 36-3.01(a).

GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTION ON FOUR-LANE HIGHWAYS (Design Speed of 50 mph (80 km/hr) or Greater)

Figure 36-3.B

Attachment: EXHIBIT - Rand Rd. Traffic Impact Study (2022-60 : 2240-2296 N. Rand Road)

PLANT KEY

SHADE TREE

ORNAMENTAL TREE

EVERGREEN TREE

SEED MIX & GROUND TREATMENT KEY

BASE OF DETENTION AREAS BELOW THE NWL

Areas below NWL to be planted with emergent plugs. See sheet L2.1 for schedule.

DETENTION AREAS BETWEEN THE NWL & HWL

Area of detention between the NWL & HWL to be seeded with "Swale Seed Mix" as supplied by Cardno Native Plant Nursery. See sheet L2.1 for preferred installation method.

OPEN AREAS - NO MOW

All open areas, not including detention, to be planted with low profile prairie grass mix as specified on planting schedule. See sheet L2.1 for preferred installation method.

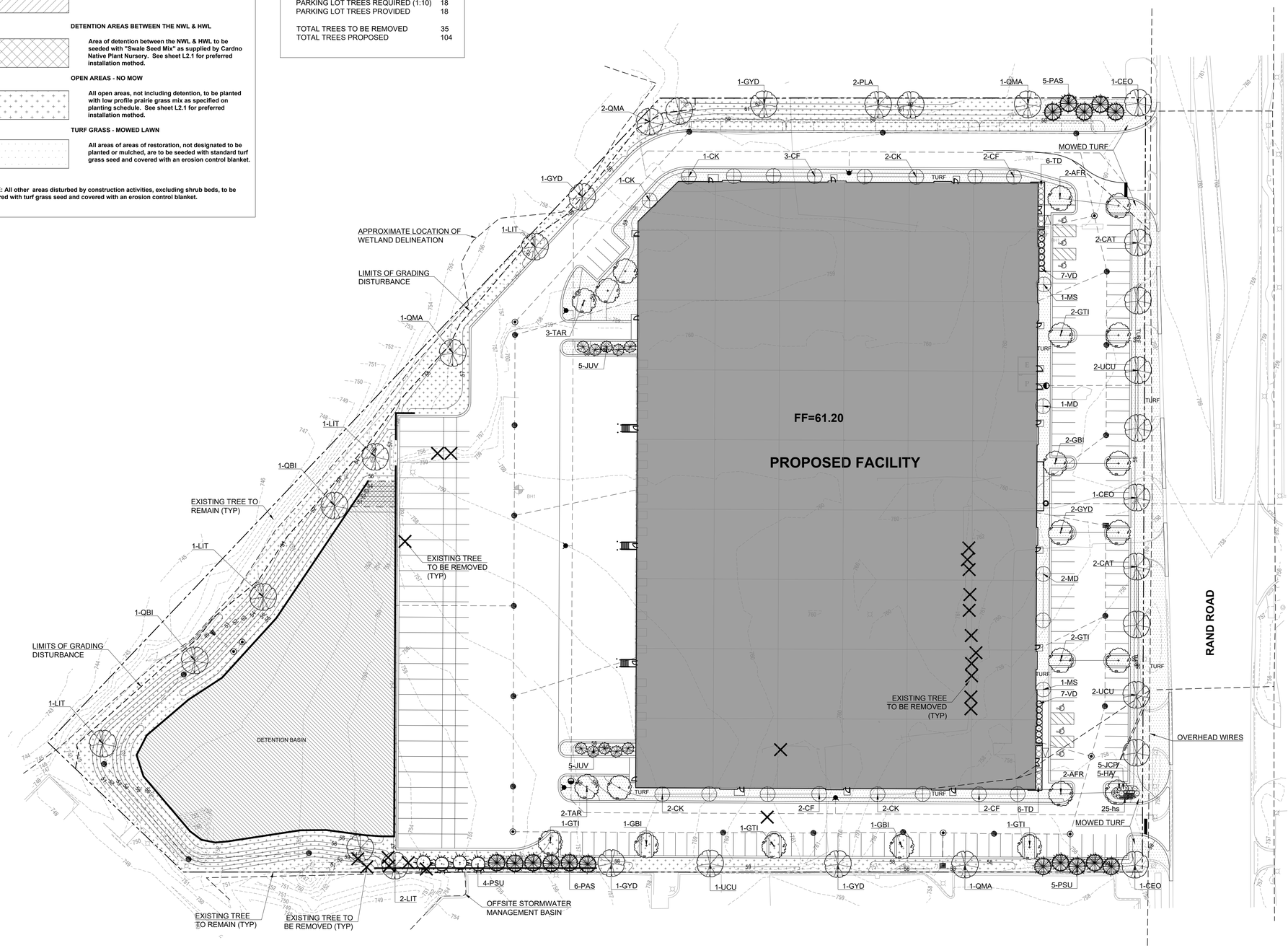
TURF GRASS - MOWED LAWN

All areas of areas of restoration, not designated to be planted or mulched, are to be seeded with standard turf grass seed and covered with an erosion control blanket.

NOTE: All other areas disturbed by construction activities, excluding shrub beds, to be restored with turf grass seed and covered with an erosion control blanket.

LANDSCAPE REQUIREMENT SUMMARY

PARKING SUMMARY	
PASSENGER PARKING	148
TRAILER STALLS	24
TOTAL PARKING SPACES	172
PARKING LOT TREES REQUIRED (1:10)	18
PARKING LOT TREES PROVIDED	18
TOTAL TREES TO BE REMOVED	35
TOTAL TREES PROPOSED	104



OVERALL LANDSCAPE PLAN

SCALE: 1" = 40'-0"

0 20' 40' 80'

Kathryn Talty
landscape architecture
Winnetka, Illinois 60093
847.612.5154
www.kmtaltydesign.com

REGISTERED LANDSCAPE ARCHITECT 1534 STATE OF ILLINOIS KATHRYN MAXWELL TALTY 157-001176

no.	revision description	initial	date
	ISSUED FOR REVIEW	KMT	03-29-22
	PER SITE PLAN ADJUSTMENTS	KMT	04-12-22

PROPOSED DEVELOPMENT
2234-2240 RAND ROAD
PALATINE, IL

LANDSCAPE PLAN
LANDSCAPE REQUIREMENTS

date 01-28-22 | drawn DW | checked KMT

job no. 22030

sheet no. L 1.1

Attachment: EXHIBIT - LANDSCAPING PLANS (2022-60 : 2240-2296 N. Rand Road)

Master Plant List

Symbol	Quantity	Botanical Name	Common Name	Size	Origin	Notes
		Shade Trees				
AFR	4	ACER X FREEMANII 'AUTUMN BLAZE'	AUTUMN BLAZE FREEMAN MAPLE	3" BB		MOIST
CAT	4	CATALPA SPECIOSA	NORTHERN CATALPA	3" BB	NATIVE	
CEO	3	CELTUS OCCIDENTALIS	HACKBERRY	3" BB		URBAN, MOIST
GBI	4	GINKGO BILOBA	GINKGO	3" BB		URBAN, MALE SPEC. O
GTI	7	GLEDITSIA TRIACANTHOS F. INERMIS	THORNLESS HONEYLOCUST	3" BB		URBAN, MOIST
GYD	6	GYMNOCLADUS DIOICUS	KENTUCKY COFFEETREE	3" BB	NATIVE	MOIST
LIT	5	LIRODENDRON TULIPIFERA	TULIP TREE	3" BB	NATIVE	MOIST
PLA	2	PLATANUS x ACERIFOLIA 'MORTON CIRCLE'	EXCLAMATION LONDON PLANETREE	3" BB		URBAN, MOIST
QBI	3	QUERCUS BICOLOR	SWAMP WHITE OAK	3" BB	NATIVE	
QMA	5	QUERCUS MACROCARPA	BUR OAK	3" BB	NATIVE	URBAN
TAR	5	TILIA AMERICANA 'REDMOND'	REDMOND AMERICAN LINDEN	3" BB	NATIVE	URBAN, MOIST
UCU	5	ULMUS CULTIVAR 'ACCOLADE' 'TRIUMPH'	ACCOLADE ELM	3" BB		URBAN
		Evergreen Trees				
JUV	10	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	8' BB	NATIVE	
PAS	11	PICEA AIBES	NORWAY SPRUCE	8' BB		
PSU	9	PSEUDOSTUGA MENZIESII	DOUGLAS FIR	8' BB		
		Ornamental Trees				
CF	9	CORNUS FLORIDA	FLOWERING DOGWOOD	6' BB		
CK	8	CORNUS KOUSA	KOUSA DOGWOOD	6' BB		
MD	3	MALUS 'DONALD WYMAN'	CRABAPPLE	6' BB		25', GREEN, LT PINK
MS	2	MALUS SARGENT	SARGENT CRABAPPLE	6' BB		8', GREEN, PINK
		Evergreen Shrubs				
JCP	5	JUNIPERUS CHINENSIS 'PFITZER COMPACT'	COMPACT PFITZER JUNIPER	5 GAL		
TD	12	TAXUS x MEDIA 'DENSII'	DENSE YEW	24" BB		
		Deciduous Shrubs				
HA	5	HYDRANGEA ARBORESCENS	ANNABELLE HYDRANGEA	5 GAL	NATIVE	
VD	14	VIBURNUM DENTATUM 'CHICAGO LUSTRE'	CHICAGO LUSTRE ARROWWOOD VIBURNUM	48" BB	NATIVE	
		Perennials				
hs	25	HEMEROCALLIS 'STELLA D'ORO'	SELLA D'ORO DAYLILY	1 GAL		18" YELLOW

GENERAL CONSTRUCTION NOTES

1. REQUIRED LANDSCAPE MATERIAL SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS AND BE STAKED, WRAPPED, WATERED AND MULCHED PER ORDINANCE.
2. BEFORE ANY EXCAVATION ON THE SITE, CALL TO LOCATE ANY EXISTING UTILITIES ON THE SITE. THE CONTRACTOR SHALL FAMILIARIZE HIM/HERSELF WITH THE LOCATIONS OF ALL BURIED UTILITIES IN THE AREAS OF WORK BEFORE STARTING OPERATIONS. THE CONTRACTOR SHALL BE LIABLE FOR THE COST OF REPAIRING OR REPLACING ANY BURIED CONDUITS, CABLES OR PIPING DAMAGED DURING THE INSTALLATION OF THIS WORK.
3. FOUR FOOT HIGH FENCING OR OTHER RIGID MATERIAL IS TO BE ERECTED AROUND THE DRIP-LINE OF ALL TREES TO BE SAVED.
4. PLANT QUANTITIES ON PLANT LIST INTENDED TO BE A GUIDE. ALL QUANTITIES SHALL BE CHECKED AND VERIFIED ON PLANTING PLAN. ANY DISCREPANCIES SHALL BE DISCUSSED WITH THE LANDSCAPE ARCHITECT.
5. ANY DEVIATIONS FROM OR MODIFICATIONS TO THIS PLAN SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
6. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT UPON DELIVERY OF PLANT MATERIAL TO THE SITE. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL THAT DOESN'T MEET STANDARDS OR SPECIFICATIONS OF THE PROJECT.
7. ALL PLANT MATERIAL TO BE INSTALLED PER THE PLANTING DETAILS PROVIDED ON THIS PLAN SET.
8. ALL BED EDGES TO BE WELL SHAPED, SPADE CUT, WITH LINES AND CURVES AS SHOWN ON THIS PLAN SET.
9. ALL PLANTING BEDS TO BE PREPARED WITH PLANTING MIX: 50% TOPSOIL, 50% SOIL AMENDMENTS (3 PARTS PEATMOSS, 1 PART COMPOST, 1 PART SAND)
10. ALL PARKING LOT ISLANDS SHALL BE BACKFILLED WITH THE FOLLOWING: 2' OF BLENDED GARDEN SOIL MIX (60% TOPSOIL, 30% COMPOST, 10% SAND) OR 6" OF *ONE STEP* BY MIDWEST TRADING, TOP DRESSED AND TILLED INTO 18" OF TOPSOIL.
11. ALL SPECIFIED LANDSCAPE MATERIAL INDICATED ON THE CONSTRUCTION DOCUMENTS WILL BE REQUIRED TO BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT AND MUST BE REPLACED SHOULD IT DIE OR BECOME DAMAGED.
12. ALL PLANT MATERIAL SHALL HAVE A ONE YEAR GUARANTEE FROM SUBSTANTIAL COMPLETION AS DETERMINED BY THE LANDSCAPE ARCHITECT, AND SHALL BE REPLACED SHOULD IT DIE WITHIN THAT PERIOD.
13. PROTECT STRUCTURES, SIDEWALKS, PAVEMENTS AND UTILITIES TO REMAIN FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUTS AND OTHER HAZARDS CAUSED BY SITE IMPROVEMENT OPERATIONS.
14. ALL LAWN AREAS TO BE SEEDED WITH STANDARD TURF GRASS SEED AND COVERED WITH EROSION CONTROL BLANKET. UNLESS OTHERWISE SPECIFIED ON THE PLAN.
15. CAREFULLY MAINTAIN PRESENT GRADE AT BASE OF ALL EXISTING TREES TO REMAIN. PREVENT ANY DISTURBANCE OF EXISTING TREES INCLUDING ROOT ZONES. USE TREE PROTECTION BARRICADES WHERE INDICATED. PROTECT EXISTING TREES TO REMAIN AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, BRUISING OF BARK OR SMOTHERING OF TREES. DRIVING, PARKING, DUMPING, STOCKPILING AND/OR STORAGE OF VEHICLES, EQUIPMENT, SUPPLIES, MATERIALS OR DEBRIS ON TOP THE ROOT ZONES AND/OR WITHIN THE DRIPLINE OF EXISTING TREES OR OTHER PLANT MATERIAL TO REMAIN IS STRICTLY PROHIBITED.
16. THE CONTRACTOR AT ALL TIMES SHALL KEEP THE PREMISES ON WHICH WORK IS BEING DONE, CLEAR OF RUBBISH AND DEBRIS. ALL PAVEMENT AND DEBRIS REMOVED FROM THE SITE SHALL BE DISPOSED OF LEGALLY.
17. ALL WORK AND OPERATIONS SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES.

Low-Profile Prairie Seed Mix

Botanical Name	Common Name	PLS Ounces/Acre
Permanent Grasses:		
Bouteloua curtipendula	Side-Oats Grama	16.00
Carex spp	Prairie Sedge Species	4.00
Elymus canadensis	Canada Wild Rye	32.00
Koeleria macrantha	June Grass	1.00
Panicum virgatum	Switch Grass	1.00
Schizachyrium scoparium	Little Bluestem	36.00
	Total	**90.00**
Temporary Cover:		
Avena sativa	Common Oat	512.00
	Total	**512.00**
Forbs:		
Amorpha canescens	Lead Plant	0.50
Asclepias syriaca	Common Milkweed	2.00
Asclepias tuberosa	Butterfly Weed	2.00
Baptisia alba	White Wild Indigo	2.00
Chamaecrista fasciculata	Partridge Pea	10.00
Coreopsis lanceolata	Sand Coreopsis	5.00
Coreopsis palmata	Prairie Coreopsis	1.00
Dalea candida	White Prairie Clover	1.50
Dalea purpurea	Purple Prairie Clover	1.50
Desmanthus illinoensis	Illinois Sensitive Plant	3.00
Echinacea purpurea	Broad-Leaved Purple Coneflower	8.00
Eryngium yuccifolium	Rattlesnake Master	2.00
Lespedeza capitata	Round-Headed Bush Clover	2.00
Liatris aspera	Rough Blazing Star	0.50
Lupinus perennis v. occidentalis	Wild Lupine	4.00
Monarda fistulosa	Wild Bergamot	0.50
Oligoneuron rigidum	Stiff Goldenrod	1.00
Parthenium integrifolium	Wild Quinine	1.00
Penstemon digitalis	Foxglove Beard Tongue	0.50
Penstemon hirsutus	Hairy Beard Tongue	1.00
Ratibida pinnata	Yellow Coneflower	4.00
Rudbeckia hirta	Black-Eyed Susan	5.00
Rudbeckia subtomentosa	Sweet Black-Eyed Susan	1.00
Silphium terebinthinaceum	Prairie Dock	1.00
Solidago speciosa	Showy Goldenrod	0.50
Symphyotrichum ericoides	Heath Aster	0.25
Symphyotrichum laeve	Smooth Blue Aster	1.00
Symphyotrichum novae-angliae	New England Aster	0.50
Tradescantia ohiensis	Common Spiderwort	1.00
Verbena stricta	Hoary Vervain	1.00
Vernonia gigantea	Smooth Tall Ironweed	1.50
Veronicastrum virginicum	Culver's Root	0.25
	Total	**66.00**

Mix Statistics

Native Component	PLS lbs./Acre	PLS Seeds/Acre	PLS Seeds/Sq. Ft.	% of Native Mix
Forbs	4.13	1,731,814	39.76	66.02%
Grasses	5.63	891,416	20.46	33.98%
Total Natives	9.75	2,623,230	60.22	100.00%
Cover	32.00	576,000	13.22	
Totals	41.75	3,199,230	73.44	

Swale Seed Mix

Botanical Name	Common Name	PLS Ounces/Acre
Permanent Grasses/Sedges:		
Andropogon gerardii	Big Bluestem	4.00
Carex cristatella	Crested Oval Sedge	0.50
Carex lurida	Bottlebrush Sedge	3.00
Carex spp.	Prairie Sedge Species	8.00
Carex vulpinoidea	Brown Fox Sedge	3.00
Elymus canadensis	Canada Wild Rye	16.00
Elymus virginicus	Virginia Wild Rye	16.00
Juncus canadensis	Canadian Rush	1.00
Panicum virgatum	Switch Grass	3.00
Scirpus atrovirens	Dark Green Rush	2.00
Scirpus cyperinus	Wool Grass	0.50
Spartina pectinata	Prairie Cord Grass	3.00
	Total	**60.00**
Temporary Cover:		
Avena sativa	Common Oat	512.00
	Total	**512.00**
Forbs:		
Alisma subcordatum	Common Water Plantain	1.00
Asclepias incarnata	Swamp Milkweed	2.00
Coreopsis tripteris	Tall Coreopsis	1.00
Euthamia graminifolia	Common Grass-Leaved Goldenrod	0.50
Eutrochium maculatum	Spotted Joe-Pye Weed	1.00
Iris virginica v. shrevei	Blue Flag	4.00
Liatris spicata	Marsh Blazing Star	1.00
Lycopus americanus	Common Water Horehound	0.50
Mimulus ringens	Monkey Flower	0.50
Penthorum sedoides	Ditch Stonecrop	1.00
Pycnanthemum virginianum	Common Mountain Mint	0.50
Rudbeckia triloba	Brown-Eyed Susan	1.00
Senna hebecarpa	Wild Senna	1.00
Silphium terebinthinaceum	Prairie Dock	1.00
Symphyotrichum novae-angliae	New England Aster	0.50
Verbena hastata	Blue Vervain	1.50
Zizia aurea	Golden Alexanders	2.00
	Total	**20.00**

Mix Statistics

Native Component	PLS lbs./Acre	PLS Seeds/Acre	PLS Seeds/Sq. Ft.	% of Native Mix
Forbs	1.25	1,181,855	27.13	31.09%
Grasses	3.75	2,619,949	60.15	68.91%
Total Natives	5.00	3,801,804	87.28	100.00%
Cover	32.00	576,000	13.22	
Totals	37.00	4,377,804	100.50	

Emergent Plugs

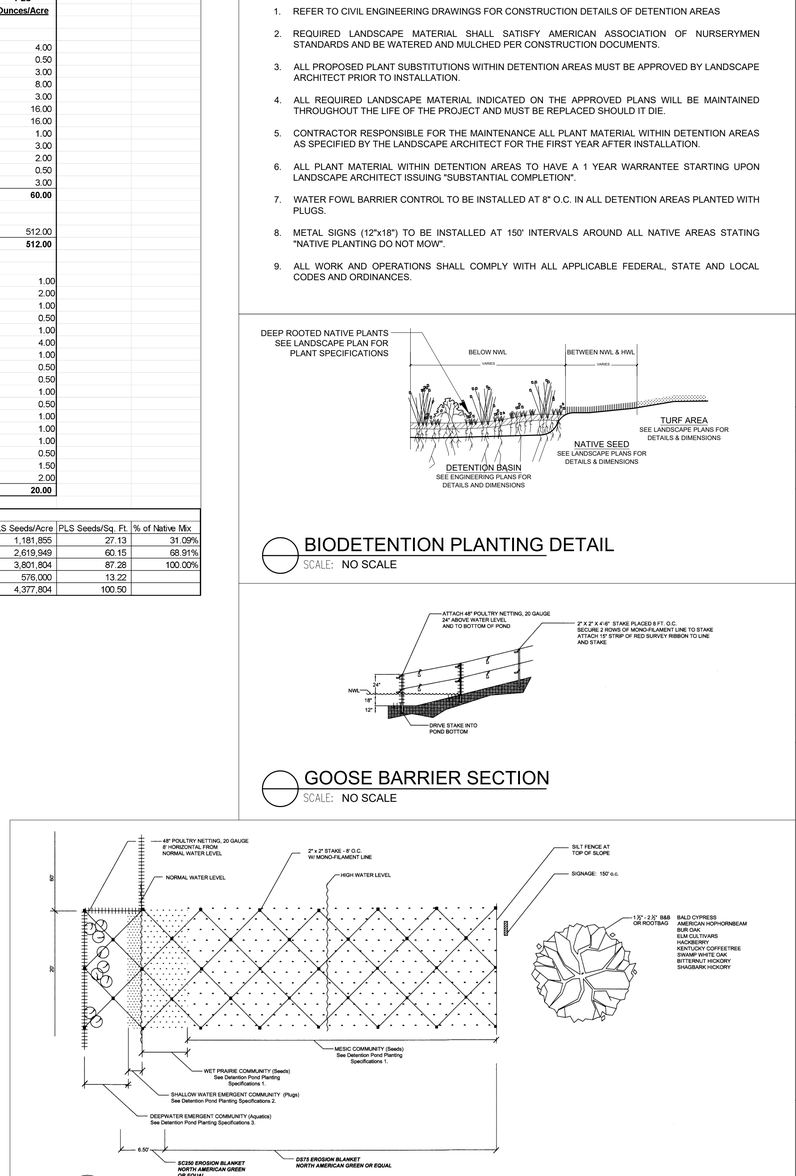
Symbol	Quantity	Botanical Name	Common Name	Size	Mean height	Notes
	8	ASCLEPIAS INCARNATA	SWAMP MILKWEED	3" PLUG	4'	36" O.C. - FORB
	8	BOLTONIA ASTEROIDES	FALSE ASTER	3" PLUG	3'	36" O.C. - FORB
	8	CAREX STRICTA	COMMON TUSSOCK SEDGE	3" PLUG	3'	36" O.C. - GSR
	8	CAREX VULPINOIDEA	FOX SEDGE	3" PLUG	3'	36" O.C. - GSR
	4	CHELONE GLABRA	WHITE TURTLEHEAD	3" PLUG	5'	48" O.C. - FORB
	4	HIBISCUS LAEVIS	ROSEMALLOW	3" PLUG	5'	48" O.C. - FORB
	4	IRIS VERSICOLOR	BLUE FLAG IRIS	3" PLUG	3'	48" O.C. - FORB
	8	LIATRIS PYCNOSTACHYA	PRAIRIE BLAZING STAR	3" PLUG	4'	36" O.C. - FORB
	8	LOBELIA CARDINALIS	CARDINAL FLOWER	3" PLUG	4'	36" O.C. - FORB
	4	SCHOENOPLECTUS ACUTUS	HARD-STEMMED BULRUSH	3" PLUG	6'	48" O.C. - GSR
	8	SOLIDAGO OHIOENSIS	OHIO GOLDENROD	3" PLUG	3'	36" O.C. - FORB
	8	SPARGANIUM EURYCARPUM	GREAT BUR REED	3" PLUG	4'	36" O.C. - FORB
	4	SPARTINA PECTINATA	PRAIRIE CORDGRASS	3" PLUG	7'	48" O.C. - GSR
	4	VERBENA HASTATA	BLUE VERVAIN	3" PLUG	5'	48" O.C. - FORB
Notes:		Plant quantities are estimated based on spacing recommended. Quantity reflects 1,000 SF				
		Plugs to be planted in groupings of "like species"				
		Final layout to be approved by Landscape Architect				

PLANTING NOTES FOR DETENTION AREAS

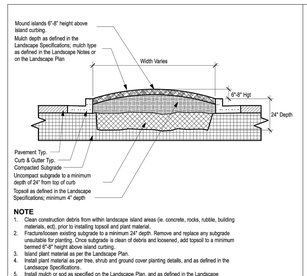
1. REFER TO CIVIL ENGINEERING DRAWINGS FOR CONSTRUCTION DETAILS OF DETENTION AREAS
2. REQUIRED LANDSCAPE MATERIAL SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS AND BE WATERED AND MULCHED PER CONSTRUCTION DOCUMENTS.
3. ALL PROPOSED PLANT SUBSTITUTIONS WITHIN DETENTION AREAS MUST BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
4. ALL REQUIRED LANDSCAPE MATERIAL INDICATED ON THE APPROVED PLANS WILL BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT AND MUST BE REPLACED SHOULD IT DIE.
5. CONTRACTOR RESPONSIBLE FOR THE MAINTENANCE ALL PLANT MATERIAL WITHIN DETENTION AREAS AS SPECIFIED BY THE LANDSCAPE ARCHITECT FOR THE FIRST YEAR AFTER INSTALLATION.
6. ALL PLANT MATERIAL WITHIN DETENTION AREAS TO HAVE A 1 YEAR WARRANTEE STARTING UPON LANDSCAPE ARCHITECT ISSUING "SUBSTANTIAL COMPLETION".
7. WATER FOWL BARRIER CONTROL TO BE INSTALLED AT 8" O.C. IN ALL DETENTION AREAS PLANTED WITH PLUGS.
8. METAL SIGNS (12"x18") TO BE INSTALLED AT 150' INTERVALS AROUND ALL NATIVE AREAS STATING "NATIVE PLANTING DO NOT MOW".
9. ALL WORK AND OPERATIONS SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES.

BIODETENTION PLANTING DETAIL
SCALE: NO SCALE

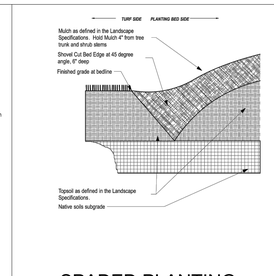
GOOSE BARRIER SECTION
SCALE: NO SCALE



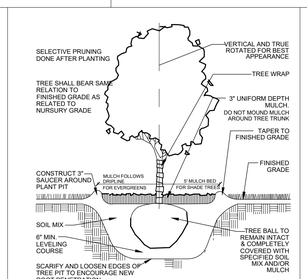
GOOSE BARRIER PLAN
SCALE: NO SCALE



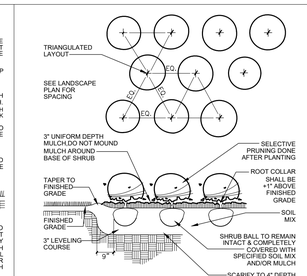
PARKING LOT ISLAND
SCALE:



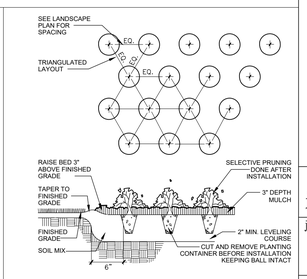
SPADED PLANTING BED EDGE
SCALE:



1 L1 TREE PLANTING DETAIL
SCALE:



2 L1 SHRUB PLANTING DETAIL
SCALE:



3 L1 GROUNDCOVER DETAIL
SCALE:

© 2005 K M Talty DESIGN

Kathryn Talty
landscape architecture
Winnetka, Illinois 60093
847.612.5154
www.kmtaltydesign.com

no.	revision description	initial	date
1	ISSUED FOR REVIEW	KMT	03-29-22
2	PER SITE PLAN ADJUSTMENTS	KMT	04-12-22

PROPOSED DEVELOPMENT
2234-2240 RAND ROAD
PALATINE, IL

LANDSCAPE NOTES
MASTER PLANT LIST
PLANTING SPECIFICATIONS
DETAILS

date 01.28.22 | drawn KMT | checked KMT

job no. 22030

sheet no. L 2.1

Attachment: EXHIBIT - LANDSCAPING PLANS (2022-60 : 2240-2296 N. Rand Road)

NATIVE PLANT & SEED INSTALLATION MANAGEMENT AND MONITORING PLAN

All native planting and seeding installation, management and monitoring to be conducted by a qualified, experienced contractor specializing in restoring and managing natural landscapes in the Midwest.

PLANT MATERIAL INSTALLATION – NATIVE SEEDING

Prepare area for seeding - prepare the soil and create optimal plant conditions, before disturbing any ground:

- Check for any buried utilities
- Clear area of debris that would interfere with planting
- Mow any excess existing vegetation growth
- Apply broad-spectrum or targeted herbicide, depending on species present
- De-compact any areas of special concern
  - Lightly de-compact tilled or loose soil with a roller, cultipacker, or similar equipment. If using a no-till seed drill, tilling can usually be omitted.
  - If ground is wet, tilling should not occur until the soil dries enough to break apart when tilled.

Follow the appropriate timing:

- The optimal time to install seed is from the fall (November 1) to late spring (June 15).
- Wetlands should be seeded in the winter while the site is frozen and equipment can more easily access the site.

Method for seeding and erosion control:

- Broadcasting:
  - For small (typically two acres or less) or irregularly shaped areas, seed can be planted by hand broadcasting. To aid seed distribution, combine the seed mix with filler materials, such as dry sawdust, sand, or vermiculite.
  - Using a hand-crank or tow-behind broadcaster, start with half of the seed and try to cover the entire area with that amount of seed. Take the remaining half of the seed, go to the opposite end of the site and cover it again. After broadcasting is complete, it is important to use a cultipacker or roller over the area to make good seed-to-soil contact. Do not cover seed more than 1/4-inch deep.
- No-Till Drill:
  - For larger areas and sites with existing vegetation, use a no-till seed drill, which does not require the soil to be tilled before planting, resulting in minimal soil disturbance. No-till drills plant seed in rows by opening slits in the soil, into which seed is deposited. If using a no-till drill, follow the specific manufacturer's recommendations. Because the diversity of seed sizes makes drill calibration a challenge, perform a few test areas first to help prevent running out of seed.
- Erosion control method:
  - Install biodegradable erosion control blanket (NAG S75 or equal) until seed has germinated.

PLANT MATERIAL MANAGEMENT – NATIVE SEEDING

To help ensure success, projects need a maintenance and monitoring plan that is flexible and supports site development goals. While native plants tend to germinate and develop at a slower rate than ornamental perennials or turf grass, regular maintenance during the establishment period greatly improves project success. Regular maintenance and monitoring controls invasive species, ensures optimal moisture levels are present, and identifies other necessary management actions.

- Native areas need between 3 to 5 years to establish.
- Preferred planting late fall (any time after November 1; if the soil surface is dry and cold enough to prevent germination and seed can be worked into soil.
- Let seed germinate and grow for one full season. **Do not** apply herbicides for weed control within the first growing season. If large weeds are unsightly, clip off; **do not pull** weeds to keep growth down. **Do not** allow seed heads to form.
- Mow first time when established in first season to 4"- 6" high, to scatter seed heads. If clumping occurs lightly rake to disburse seed.
- Mow 2-3 additional times to maintain 6-8 inches in height.
- Some perennial seeds may not germinate until the following year.
- If fall planting is not possible, spring seeding can be done (weather permitting) as early as January - preferably before April 15.
- Second season mow 3-4 times to maintain 8-10 inches in height.
- At the end of the third season a controlled burn program to be performed.
- 4 (four) annual weed control events (selective herbicide and mechanical) to be performed starting in the second season.

MINIMUM PERFORMANCE STANDARDS AND MONITORING ACTIVITIES

Performance standards are established for all proposed projects involving naturalized areas so that the relative success of creation and enhancement efforts may be evaluated. If the performance standards are not achieved by the end of the three-year management and monitoring program, the owner is responsible for correction of any deficiencies through further management activities, which may include replanting or reseeding.

- Native areas are to be monitored for a minimum of 3 (three) years from date of installation.
- Within 3 months of seed installation, at least 90% of the seeded areas (mesic prairie and broad-spectrum seed mix), as measured by aerial coverage, shall be vegetated. A minimum 90% vegetative coverage shall be maintained throughout, and at the end of, the three-year period for these areas.
  - This standard does not apply to the emergent zones.
- The naturalized areas shall not contain any rills greater than 4 inches wide and 4 inches deep throughout, and at the end, of the three-year period.
- At the end of the second growing season, 30% seed mix presence for the mesic and broad-spectrum seed mixes shall be achieved. At the end of the third growing season, 50% seed mix presence for the mesic and broad-spectrum seed mixes shall be achieved.
  - Seed mix presence shall be evaluated separately for these two mixes.
- No area over the entire native planted site greater than 1 square meter will be devoid of vegetation (as measured by aerial coverage/ocular estimation), unless specified on approved plans.
  - This annual performance standard does not apply to emergent and aquatic communities.
- The native planted areas will meet the following annual standards for the presence of native, non-invasive perennial species (as measured by aerial coverage/ocular estimation): Year 1 – 15%, Year 2 – 50%, Year 3 – 75%
  - This standard to be measured separately for each seed mix zone.
- At the end of the third growing season, none of the three most dominant species within the planted areas will be invasive or non-native species as inspected annually. The project manager will determine the appropriate target invasive or non-native species. They will typically include, but are not limited to, the following: Ragweed (Ambrosia spp.), Cattail (Typha spp.), Reed Canary Grass (Phalaris arundinacea), Purple Loosestrife (Lythrum salicaria), Common Reed (Phragmites australis), Canadian Thistle (Cirsium arvense), Sandbar Willow (Salix interior), Kentucky Blue Grass (Poa pratensis), Yellow Sweet-Clover (Melilotus officinalis), Teasel (Dipsacus spp.), Japanese-Knotweed (Reynoutria japonica), and Asian Bittersweet (Celastrus orbiculatus), Buckthorn (Rhamnus spp.).
  - This standard to be measured separately for each seed mix zone.
- Emergents: At the end of the third growing season, 50% vegetative coverage shall be achieved (as measured by aerial coverage/ocular estimation).
- Emergents: Relative coverage of cattails (as measured by aerial coverage/ocular estimation) shall be less than 5% throughout, and at the end of, the three year monitoring period.
- Plugs: 90% of the plants will be alive, in healthy condition, and representative of the individual species at the end of each growing season. Replanting will take place until this standard is achieved.
- Woody plants: 90% of the planted trees and shrubs will be alive, in healthy condition, and representative of the individual species at the end of each growing season.
- Relative coverage (determined by ocular estimation) of invasive species (i.e., common reed, reed canary grass, purple loosestrife, etc.) in aggregate shall be less than 5% throughout, and at the end of, the three-year period.
  - This standard shall be evaluated separately for each seed and plant mix zone (i.e., mesic prairie, broad spectrum seed mix, emergent).
- Native Mean C value > 3.0 and Native FQI value > 20.0 for all native plant communities.
  - This standard shall be evaluated separately for each seed and plant mix zone (i.e., mesic prairie, broad spectrum seed mix, emergent).
- Soil erosion and sediment control measures shall be regularly maintained.

LANDSCAPE MAINTENANCE SPECIFICATIONS

STANDARDS
All landscape maintenance services shall be performed by trained personnel using current, acceptable horticultural practices.

All work shall be performed in a manner that maintains the original intent of the landscape design.

All chemical applications shall be performed in accordance with current county, state and federal laws, using EPA registered materials and methods of application. These applications shall be performed under the supervision of a Licensed Certified applicator.

APPROVALS
Any work performed in addition to that which is outlined in the contract shall only be done upon written approval by the Owner's Representative.

All seasonal color selections shall be approved by the Owner's Representative prior to ordering and installation.

SOIL TESTING
The maintenance contractor shall perform soil tests as needed to identify imbalances or deficiencies causing plant material decline. The owner shall be notified of the recommendation for approval, and the necessary corrections made at an additional cost to the owner.

Acceptable Soil Test Results:

	Landscape Trees & Shrubs	Turf
pH Range	5.0-7.0	6.0-7.0
Organic Matter	>1.5%	>2.5%
Magnesium (Mg)	100+lbs./acre	100+lbs./acre
Phosphorus (P2O5)	150+lbs./acre	150+lbs./acre
Potassium (K2O)	120+lbs./acre	120+lbs./acre
Soluble salts	Not to exceed 900ppm/1.9 mmhos/cm in soil; not to exceed 1400 ppm/2.5 mmhos/cm in high organic mix	Not to exceed 750ppm/0.75 mmhos/cm in soil; not to exceed 2000 ppm/2.0 mmhos/cm in high organic mix

For unusual soil conditions, the following optional tests are recommended with levels not to exceed:

Boron	3 pounds per acre
Manganese	50 pounds per acre
Potassium (K2O)	450 pounds per acre
Sodium	20 pounds per acre

WORKMANSHIP
During landscape maintenance operations, all areas shall be kept neat and clean. Precautions shall be taken to avoid damage to existing structures. All work shall be performed in a safe manner to the operators, the occupants and any pedestrians.

Upon completion of maintenance operations, all debris and waste material shall be cleaned up and removed from the site, unless provisions have been granted by the owner to use on-site trash receptacles.

Any damage to the landscape, the structure, or the irrigation system caused by the maintenance contractor, shall be repaired by the maintenance contractor without charge to the owner.

TURF

GENERAL CLEAN UP
Prior to mowing, all trash, sticks, and other unwanted debris shall be removed from lawns, plant beds, and paved areas.

MOWING
Turf grasses, including blue grass, tall fescue, perennial ryegrass, etc., shall be maintained at a height of 2" to 3" in spring and fall. From June through September, mowing height shall be maintained at no less than 3".

The mowing operation includes trimming around all obstacles, raking excessive grass clippings and removing debris from walks, curbs, and parking areas. Caution: Mechanical weeders should NOT be used around trees because of potential damage to the bark.

EDGING
Edging of all sidewalks, curbs and other paved areas shall be performed once every other mowing. Debris from the edging operations shall be removed and the areas swept clean. Caution shall be used to avoid flying debris.

FERTILIZING
Seasonally stepped fertilizer shall be applied in areas based on the existing turf species.

LAWN WEED CONTROL: HERBICIDES
Selection and proper use of herbicides shall be the landscape contractor's responsibility. All chemical applications shall be performed under the supervision of a Licensed Certified Applicator. **Read the label prior to applying any chemical.**

INSECT & DISEASE CONTROL FOR TURF
The contractor shall be responsible for monitoring the site conditions on each visit to determine if any insect pest or disease problems exist. The contractor shall identify the insect pest or disease, as well as the host plant, and then consult the most current edition of the Cooperative Extension Service's "Commercial Insecticide Recommendation for Turf" for control. The licensed applicator shall be familiar with the label provided for the selected product prior to application.

Inspection and treatment to control insect pests shall be included in the contract price.

TREES, SHRUBS, & GROUND COVER

PRUNING
All ornamental trees, shrubs and ground cover shall be pruned when appropriate to remove dead or damaged branches, develop the natural shapes. Do not shear trees or shrubs. If previous maintenance practice has been to shear and ball, then a natural shape will be restored gradually.

Pruning Guidelines:

1. Prune plants that flower before the end of June (spring blooming) immediately after flowering. Flower buds develop during the previous growing season. Fall, winter or spring pruning would reduce the spring flowering display.
2. Prune plants that flower in July – September (summer or autumn blooming) in winter or spring before new growth begins, since these plants develop flowers on new growth.
3. Delay pruning plants grown for ornamental fruits, such as Cotoneasters and Viburnums.
4. Hollies and other evergreens may be pruned during winter in order to use their branches for seasonal decoration. However, severe pruning of evergreens should be done in early spring only.
5. Broadleaf evergreen shrubs shall be hand-pruned to maintain their natural appearance after the new growth hardens off.
6. Hedges or shrubs that require shearing to maintain a formal appearance shall be pruned as required. Dead wood shall be removed from sheared plants before the first shearing of the season.
7. Conifers shall be pruned, if required, according to their genus.
   A. Yews, Junipers, Hemlocks and Arborvitae may be pruned after new growth has hardened off in late summer. If severe pruning is necessary, it must be done in early spring.
   B. Firs and spruces may be lightly pruned in late summer, fall, or winter after completing growth. Leave side buds. Never cut central leader.
   C. Pines may be lightly pruned in early June by reducing candles.
8. Groundcover shall be edged and pruned as needed to contain it within its borders.
9. Thinning: Remove branches and water sprouts by cutting them back to their point of origin on parent stems. This method results in a more open plant, without stimulating excessive growth. Thinning is used on Crab Apples, Lilacs, Viburnums, etc.
10. Renewal pruning: Remove oldest branches of shrub at ground, leaving the younger, more vigorous branches. Also remove weak stems. On overgrown plants, this method may be best done over a three-year period. Renewal pruning may be used on Forsythia, Hydrangea, Spiraea, etc.

Plants overhanging passageways and parking areas and damaged plants shall be pruned as needed.

Shade trees that cannot be adequately pruned from the ground shall not be included in the Maintenance Contract. A certified arborist under a separate contract shall perform this type of work.

SPRING CLEANUP
Plant beds shall receive a general cleanup before fertilizing and mulching. Cleanup includes removing debris and trash from beds and cutting back herbaceous perennials left standing through winter, e.g. ornamental grasses, Sedum Autumn Joy.

FERTILIZING
For trees, the rate of fertilization depends on the tree species, tree vigor, area available for fertilization, and growth stage of the tree. Mature specimens benefit from fertilization every 3 to 4 years; younger trees shall be fertilized more often during rapid growth stages.

The current recommendation is based on the rate of 1000 square feet of area under the tree to be fertilized. For deciduous trees, 2 to 6 pounds of Nitrogen per 1000 square feet; for narrow-leaf evergreens, 1 to 4 pounds of Nitrogen per 1000 square feet; for broadleaf evergreens, 1 to 3 pounds of Nitrogen per 1000 square feet.

Shrubs and groundcover shall be top-dressed with compost 1" deep or fertilized once in March with 10-6-4 analysis fertilizer at the rate of 3 pounds per 100 square feet of bed area.
Ericaceous material shall be fertilized with an ericaceous fertilizer at the manufacturer's recommendation rate. If plants are growing poorly, a soil sample should be taken.

MULCHING
Annually, all tree and shrub beds will be prepared and mulched, to a minimum depth of 3" with quality mulch to match existing. Bed preparation shall include removing all weeds, cleaning up said bed, edging and cultivating decayed mulch into the soil. Debris from edging is to be removed from beds where applicable. If deemed necessary, a pre-emergent herbicide may be applied to the soil to inhibit the growth of future weeds.

Organically maintained gardens shall not receive any pre-emergent herbicides. Mulch in excess of 4" will be removed from the bed areas. SPECIAL CARE shall be taken in the mulching operation not to over-mulch or cover the base of trees and shrubs. This can be detrimental to the health of the plants.

WEEDING
All beds shall be weeded on a continuous basis throughout the growing season to maintain a neat appearance at all times.

Pre-emergent (soil-applied) and post-emergent (foliar-applied) herbicides shall be used where and when applicable and in accordance with the product's label.

INSECT & DISEASE CONTROL: TREES, SHRUBS & GROUNDCOVER

The maintenance contractor shall be responsible for monitoring the landscape site on a regular basis. The monitoring frequency shall be monthly except for growing season, which will be every other week. Trained personnel shall monitor for plant damaging insect activity, plant pathogenic diseases and potential cultural problems in the landscape. The pest or cultural problem will be identified under the supervision of the contractor.

For plant damaging insects and mites identified in the landscape, the contractor shall consult and follow the recommendations of the most current edition of the state Cooperative Service publication on insect control on landscape plant material.

Plant pathogenic disease problems identified by the contractor that can be resolved by pruning or physical removal of damaged plant parts will be performed as part of the contract. For an additional charge, plant pathogenic diseases that can be resolved through properly timed applications of fungicides shall be made when the owner authorizes it.

If the contractor notes an especially insect-or disease-prone plant species in the landscape, he/she will suggest replacement with a more pest-resistant cultivar or species that is consistent with the intent of the landscape design.

NOTE: For identification of plant-damaging insects and mites, a reference textbook that can be used is *Insects that feed on Trees and Shrubs* by Johnson and Lyon, Comstock Publishing Associates. For plan pathogenic diseases, two references are suggested: *Scouting and Controlling Woody Ornamental Diseases in Landscapes and Nurseries*, authorized by Gary Moorman, published by Penn State College of Agricultural Sciences, and *Diseases of Trees and Shrubs* by Sinclair and Lyon, published by Comstock Publishing Press.

TRASH REMOVAL
The maintenance contractor shall remove trash from all shrub and groundcover beds with each visit.

LEAF REMOVAL
All fallen leaves shall be removed from the site in November and once in December. If requested by the owner, the maintenance contractor, at an additional cost to the owner shall perform supplemental leaf removals.

WINTER CLEAN-UP
The project shall receive a general clean-up once during each of the winter months, i.e., January, February, and March.

Clean-up includes:

- Cleaning curbs and parking areas
- Removing all trash and unwanted debris
- Turning mulch where necessary
- Inspection of grounds

SEASONAL COLOR: PERENNIALS, ANNUALS, AND BULBS

The installation of perennials, annuals, and bulbs, unless specified herein, shall be reviewed with the owner, and, if accepted, installed and billed to the owner.

SEASONAL COLOR MAINTENANCE

Perennialization of Bulbs:

1. After flowering, cut off spent flower heads.
2. Allow leaves of daffodils and hyacinths to remain for six weeks after flowers have faded. Cut off at base.
3. Allow leaves of other bulbs to yellow naturally and then cut off at base.
4. Apply fertilizer after flowering in spring, possibly again in fall. Apply 10-10-10 at the rate of 2 pounds per 1000 square feet or top-dress with compost 1" deep. Fall fertilization with a bulb fertilizer or mulching with 1" of compost is optional.

Flower Rotation:

1. Bulbs: Remove the entire plant and bulb after flowers have faded or at the direction of the owner and install new plants if included in contract.
2. Summer Annuals or Fall Plants:
   a. Dead heading: Pinch and remove dead flowers on annuals as necessary.
   b. Fertilizing Summer Annuals: Fertilize using one or two methods: Apply a slow-release fertilizer in May following manufacturer's recommendations. A booster such as 10-10-10 may be necessary in late summer. Or, apply liquid fertilizations of 20-20-20 water-soluble fertilizers, not to exceed 2 pounds of 20-20-20 per 100 gallons of water, monthly; or mulch with compost 1" deep.
   c. Removal: If fall plants are to be installed, summer annuals shall be left in the ground until the first killing frost and then removed, unless otherwise directed by the owner.

Perennials:

1. After initial installation, if a time-released fertilizer has been incorporated during plant installation, no more fertilizer need be applied the first growing season.
2. The following year:
   a. Fertilize perennials with a slow-release fertilizer or any 50% organic fertilizer, or mulch perennials with compost 1" deep.
   b. Cut all deciduous perennials flush to the ground by March 1, if this was not done the previous fall, to allow new growth to develop freely.
   c. Mulch the perennial bed once in early spring at 1"-2" depth. If soil is bared in late fall, re-mulch lightly after ground is frozen to protect perennials.
   d. Inspect for insect or disease problems on perennials. Monitor and control slugs on hostas and ligularias. Powdery mildew on phlox, monardas, and asters can be prevented with properly timed fungicides or use of disease-resistant varieties.
   e. Weed perennial bed as specified in "WEEDING" above.
   f. Prune branching species to increase density. Cut only the flowering stems after blooming. Do not remove the foliage.
3. The following fall cut back deteriorating plant parts unless instructed to retain for winter interest, e.g. Sedum Autumn Joy and ornamental grasses.
4. Long-term Care:
   a. Divide plants that overcrowd the space provided. Divide according to the species. Some need frequent dividing, e.g. asters and yarrow every two years; other rarely, if ever, e.g. peonies, hostas, and astilbe.
   b. For detailed information regarding the care of specific perennials, refer to *All About Perennials* by Ortho; *Perennials: How to Select, Grow and Enjoy* by Pamela Harper and Frederick McGouty, Hp Books Publisher; *Herbaceous Perennial Plants: A Treatise on their Identification, Culture and Garden Attributes* by Allan Armitage, Stipes Pub LLC.

SUMMARY OF MAINTENANCE

LAWN MAINTENANCE

1. Soil analysis performed annually to determine pH. If pH does not fall within specified range, adjust according to soil test recommendations.
2. Maintain proper fertility and pH levels of the soil to provide an environment conducive to turf vitality for turf grasses.
3. Mow turf on a regular basis and as season and weather dictates. Remove no more than the top 1/3 of leaf blade. Clippings on paved and bed areas will be removed.
4. Aerate warm season turf areas to maintain high standards of turf appearance.
5. Apply pre-emergent to turf in two applications in early February and early April to extend barrier.
6. Apply post emergent as needed to control weeds.
7. Mechanically edge curbs and walks.
8. Apply non-selective herbicide, to mulched bed areas and pavement and remove excess runners to maintain clean defined beds.

TREE, GROUNDCOVER AND SHRUB BED MAINTENANCE

1. Prune shrubs, trees and groundcover to encourage healthy growth and create a natural appearance.
2. Mulch to be applied in February/March with a half rate in late summer to top dress.
3. Apply pre-emergent herbicides in February and April.
4. Manual weed control to maintain clean bed appearance.
5. Apply fungicides and insecticides as needed to control insects and disease.
6. Ornamental shrubs, trees and groundcovers to be fertilized three (3) times per year with a balanced material (January/February, April/May, and October/November)
7. Edge all mulched beds.
8. Remove all litter and debris.

GENERAL MAINTENANCE

1. Remove all man-made debris, blow edges.
2. Inspect grounds on a monthly basis and schedule inspection with Unit Operator.

Kathryn Talty
landscape architecture
Winnetka, Illinois 60093
847.612.5154
www.kmtaltydesign.com

no.	revision description	initial	date
1	ISSUED FOR REVIEW	KMT	03-29-22
2	PER SITE PLAN ADJUSTMENTS	KMT	04-12-22

PROPOSED DEVELOPMENT
2234-2240 RAND ROAD
PALATINE, IL

LANDSCAPE INSTALLATION AND MONITORING SPECIFICATIONS

date 01.28.22 | drawn DJW | checked

job no. 22030

sheet no. L 2.2

Attachment: EXHIBIT - LANDSCAPING PLANS (2022-60 : 2240-2296 N. Rand Road)

THE MISSNER GROUP

Ben Vyverberg
Village of Palatine | Department of Planning and Zoning

Development Narrative

Some examples of tenants that we would lease the building to that we have seen in the marketplace and at our other developments are:

- Food user – for warehousing, distribution, freezer/cooler storage
- HVAC, Electrical, plumbing contractors or distributors – they would use this space for office & warehousing or distribution
- Car Part warehousing
- Furniture companies – light assembly or distribution
- Coffee supplies distributor
- Light Assembly – sowing operations

All these uses will have an office component.

The reasoning behind the parking variance request is:

- Our traffic study prepared by KLOA confirms the provided parking on-site is ample for the proposed development.
- Our development experience shows that many companies are operating with less employees, and therefore the proposed parking is adequate.
- We are aggressive in proposing a 10% office ratio. Typically, in this type of building that is between 5% and 7%. We were aggressive in the office ratio so we would not have to come back and amend the PUD, as we feel we will have more than adequate parking.

Attachment: EXHIBIT - Development Narrative (2022-60 : 2240-2296 N. Rand Road)

RESOLUTION NO. _____

A RESOLUTION GRANTING FINAL SUBDIVISION APPROVAL FOR THE PROPERTY AT 2240 - 2296 N. RAND ROAD

WHEREAS, the Palatine Subdivision Ordinance provides qualifications governing final approval of a Subdivision Plat in Article IV PRELIMINARY AND FINAL PLAT; and

WHEREAS, The Missner Group Consolidation Subdivision at 2240-2296 N. Rand Road has complied with all the provisions of the Subdivision Ordinance, including a public review before the Plan Commission of the Village of Palatine at the March 15, 2022 meeting.

NOW THEREFORE, BE IT RESOLVED by the Mayor and the Village Council of the Village of Palatine, that the Mayor and the Village Clerk be and are hereby directed and authorized to execute a Preliminary and Final Plat of Subdivision at 2240-2296 N. Rand Road, pursuant to the Palatine Subdivision Ordinance Article IV, Sec. 4.01 (c) (2) (a) and subject to the following condition(s):

1. **The Final Engineering plans shall substantially conform to the engineering plans by Spaceco., INC., dated March 22, 2022, except as such plans shall be changed to conform with Village Codes and Ordinances and in a manner acceptable to the Village Engineer.**
2. **The Final Engineering Plans shall be revised in a manner acceptable to the Village Engineer.**
3. **The Final Plat of Subdivision shall be revised in a manner acceptable to the Village Engineer and submitted on a Mylar, with all required signatures.**
4. **Recording fees in an amount of $600 shall be submitted.**
5. **The Final Plan Review fees in the amount of 1.5% of total project improvement costs shall be submitted in a manner acceptable to the Village Engineer.**
6. **A Public Improvement Letter of Credit shall be submitted to ensure the completion of all public improvements, as defined within the Village Code, for an amount of 115% of the approved EEOC, along with a cash bond of 10% for the required one-year maintenance period in a manner acceptable to the**

Attachment: RES - PF SUB (2022-60 : 2240-2296 N. Rand Road)

Village Engineer.

7. **The EEOPC shall be revised in a manner acceptable to the Village Engineer.**
8. **The Petitioners shall submit a Subdivision Improvement Agreement in a manner acceptable to the Village Attorney.**
9. **The cross-access easement, declarations, and reciprocal easement agreement regarding the maintenance of the access points, storm water areas, or any other required common areas shall be submitted in a manner acceptable to the Village Attorney and Village Engineer.**
10. **All extra-agency permits (e.g. IDOT, MWRD, etc.) shall be submitted in a manner acceptable to the Village Engineer.**

DATED: This _____day of _____, 2022

AYES:_____ NAYS:_____ ABSENT:_____ PASS:_____

APPROVED by me this _____day of _____, 2022

_____
Mayor of the Village of Palatine

ATTESTED and FILED in the office of the Village Clerk
this _____ day of _____, 2022

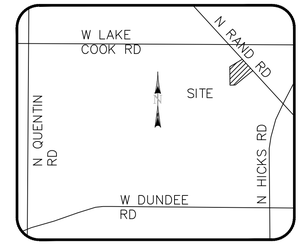
_____
Village Clerk

Attachment: RES - PF SUB (2022-60 : 2240-2296 N. Rand Road)

MISSNER - PALATINE CONSOLIDATION

PART OF THE NORTHEAST QUARTER (NE1/4) OF THE
NORTHWEST QUARTER (NW1/4) OF SECTION 2, TOWNSHIP 42
NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN,
COOK COUNTY, ILLINOIS

VICINITY MAP



OWNER'S CERTIFICATE

STATE OF }
COUNTY OF } S.S.

THIS IS TO CERTIFY THAT _____ ARE THE PROPERTY OWNERS OF THE PROPERTY DESCRIBED HEREON AND THAT THEY HAVE CAUSED THE SAID PROPERTY TO BE SURVEYED AND CONSOLIDATED AS SHOWN HEREON, FOR THE USES AND PURPOSES THEREIN SET FORTH, AND DO HEREBY ACKNOWLEDGE AND ADOPT THE SAME UNDER THE TITLE HEREON INDICATED.
DATED THIS _____ DAY OF _____, A.D., 2____

_____
OWNER

_____
TITLE

NOTARY'S CERTIFICATE

STATE OF }
COUNTY OF } S.S.

I, _____ A NOTARY PUBLIC IN AND FOR SAID COUNTY IN THE STATE AFORESAID, DO HEREBY CERTIFY THAT _____ ARE PERSONALLY KNOWN TO ME TO BE THE SAME PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT AS SUCH OWNERS, APPEARED BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGED THAT THEY SIGNED AND DELIVERED SAID INSTRUMENT OF THEIR OWN FREE AND VOLUNTARY ACT AND AS THE FREE AND VOLUNTARY ACT FOR THE USES AND PURPOSES THEREIN SET FORTH.
GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS _____ DAY OF _____, A.D., 2____.

_____
NOTARY PUBLIC

_____
MY COMMISSION EXPIRES

PLAN COMMISSION

APPROVED BY THE PLAN COMMISSION OF THE VILLAGE OF PALATINE, COOK COUNTY, ILLINOIS, THISDAY OF _____, 2____.

SIGNED: _____
CHAIRMAN

ATTEST: _____
SECRETARY

VILLAGE COUNCIL

Approved by the Village Council of the Village of Palatine, Cook County, Illinois, this _____ day of _____, 2____.

Signed: _____
Mayor

Attest: _____
Village Clerk

I.D.O.T. CERTIFICATE

THIS PLAT HAS BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION WITH RESPECT TO THE ROADWAY ACCESS PURSUANT TO SECTION 2 OF "AN ACT TO REVISE THE LAW IN RELATION TO PLATS" AS AMENDED. A PLAN THAT MEETS THE REQUIREMENTS CONTAINED IN DEPARTMENT'S "POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS" WILL BE REQUIRED BY THE DEPARTMENT.

_____
DISTRICT ENGINEER

SURVEYORS NOTES

1. NO NEW EASEMENTS OR SET BACKS ARE TO BE CRATED OR GRANTED WITHIN THIS DOCUMENT.

VILLAGE ENGINEER

STATE OF }
COUNTY OF } S.S.

THIS PLAT HAS BEEN CHECKED FOR CONFORMANCE TO THE VILLAGE OF PALATINE STANDARDS AND
REQUIREMENTS, AND WORKING DRAWINGS AND SPECIFICATIONS FOR IMPROVEMENTS HAVE BEEN PREPARED IN CONFORMANCE WITH THE VILLAGE STANDARDS AND REQUIREMENTS, AND ENGINEERING FEES DUE TO THE VILLAGE OF PALATINE HAS BEEN PAID.

DATED THIS _____ DAY OF _____, A.D., 2____.

SIGNED: _____
VILLAGE ENGINEER

VILLAGE COLLECTOR

I DO HEREBY CERTIFY THAT THERE ARE NO DEFERRED SPECIAL ASSESSMENTS OR UNPAID CURRENT
ASSESSMENTS DUE AGAINST THE LAND INCLUDED IN THE ABOVE PLAT.

DATED THIS _____ DAY OF _____, A.D., 2____.

BY: _____

SURFACE WATER DRAINAGE CERTIFICATE

STATE OF }
COUNTY OF } S.S.

WE HEREBY CERTIFY TO THE BEST OF OUR KNOWLEDGE AND BELIEF THAT ADEQUATE PROVISIONS HAVE BEEN MADE FOR THE DIVERSION AND DETENTION OF SURFACE WATERS INTO PUBLIC AREAS OR DRAINS WITHIN THE RIGHTS OF THE SUBDIVIDER AND THAT SUCH SURFACE WATERS WILL NOT BE DEPOSITED ON ADJACENT LAND OWNERS PROPERTY IN SUCH CONCENTRATION AS MAY CAUSE DAMAGE BY EROSION OR SEDIMENTATION TO SUCH PROPERTY BECAUSE OF CONSTRUCTION OF THE SUBDIVISION.

BY: _____ DATED: _____
OWNER

BY: _____ DATED: _____
ILLINOIS PROFESSIONAL ENGINEER

VILLAGE ATTORNEY

APPROVED BY THE VILLAGE ATTORNEY OF THE VILLAGE OF PALATINE, COOK COUNTY, ILLINOIS.

Dated this _____ day of _____, A.D., 2____.

By: _____
VILLAGE ATTORNEY

VILLAGE BLOCK

APPROVED BY THE VILLAGE PRESIDENT AND THE VILLAGE CLERK OF THE VILLAGE OF PALATINE, COOK COUNTY, ILLINOIS AT A MEETING HELD this _____ day of _____, A.D., 2____.

By: _____
VILLAGE PRESIDENT

By: _____
VILLAGE CLERK

BUILDING INSPECTOR

APPROVED BY THE BUILDING INSPECTOR OF THE VILLAGE OF PALATINE, COOK COUNTY, ILLINOIS AT A MEETING HELD this _____ day of _____, A.D., 2____.

By: _____
BUILDING INSPECTOR

COUNTY CLERKS CERTIFICATE

STATE OF ILLINOIS }
COUNTY OF COOK } S.S.

I,_____ COUNTY CLERK OF COOK COUNT, ILLINOIS, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT GENERAL TAXES, NO UNPAID FORFEITED TAXES, AND NO REDEEMABLE TAX SALES AGAINST ANY OF THE LAND INCLUDED IN THE PLAT. I FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEESIN CONNECTIONWITH THE PLAT.

GIVEN UDER MY HAND AND SEAL OF THE COUNTY DATED THIS _____ DAY OF _____, A.D., 2____.

_____
COUNTY CLERK

COUNTY RECORDER CERTIFICATE

STATE OF ILLINOIS }
COUNTY OF COOK } S.S.

THIS PLAT WAS FILED FOR RECORD IN THE RECORDER'S OFFICE OF COOK COUNTY, ILLINOIS, ON THIS _____ DAY OF _____, A.D., 2____ AT _____ O'CLOCK. AS DOCUMENT NUMBER _____.

_____
COUNTY RECORDER

LEGAL DESCRIPTION

THAT PART OF THE NORTHEAST QUARTER (NE1/4) OF THE NORTHWEST QUARTER (NW1/4) OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID NORTHEAST QUARTER OF THE NORTHWEST QUARTER;
THENCE ALONG THE WEST LINE OF SAID NORTHEAST QUARTER OF THE NORTHWEST QUARTER, N00°20'12"E, A DISTANCE OF 688.67 FEET;
THENCE DEPARTING SAID WEST LINE, N46°46'44"E, A DISTANCE OF 376.51 FEET TO THE SOUTHWESTERLY RIGHT OF WAY OF NORTH RAND ROAD;
THENCE ALONG SAID SOUTHWESTERLY RIGHT OF WAY, S42°50'27"E, A DISTANCE OF 599.98 FEET;
THENCE DEPARTING SAID RIGHT OF WAY, S46°46'45"W, A DISTANCE OF 743.21 FEET TO THE SOUTH LINE OF THE AFORESAID NORTHEAST QUARTER OF THE NORTHWEST QUARTER;
THENCE ALONG SAID SOUTH LINE N89°28'05"W, A DISTANCE OF 145.26 FEET TO THE POINT OF BEGINNING.
CONTAINING 385,827 SQUARE FEET, OR 8.86 ACRES OF LAND, MORE OR LESS.

BASIS OF BEARINGS

BEING THE WEST LINE OF NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN ON AN ASSUMED BEARING N00°20'12"E.

SURVEYOR CERTIFICATION

I, JAMES A. FATANINI, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, CERTIFY THAT THE INFORMATION SHOWN HEREON WAS COMPILED USING DATA FROM AN ACTUAL FIELD SURVEY MADE UNDER MY DIRECT SUPERVISION AND THAT THE FIELD SURVEY AND THE COMPILATION OF INFORMATION SHOWN HEREIN WERE CONDUCTED IN ACCORDANCE WITH THE ILLINOIS MINIMUM STANDARDS OF PRACTICE.

I, FURTHER CERTIFY THAT THIS LAND IS WITHIN THE CORPORATE LIMITS OF A MUNICIPALITY WHICH HAS AUTHORIZED A COMPREHENSIVE PLAN AND IS EXERCISING THE SPECIAL POWERS AUTHORIZED BY DIVISION 12 OF ARTICLE 11 OF THE ILLINOIS MUNICIPAL CODE, AS NOW OR HEREAFTER AMENDED.

I, FURTHER CERTIFY THAT THE ANNEXED PLAT IS A CORRECT REPRESENTATION OF SAID SURVEY AND SUBDIVISION. ALL DISTANCES ARE SHOWN IN FEET AND DECIMALS THEREOF. 5/8" REBAR AND YELLOW PLASTIC CAPS STAMPED "XCEL" WILL BE SET AT EACH OF THE CORNERS.

I, FURTHER CERTIFY THAT THE ABOVE DESCRIBED AREA FALLS WITHIN FLOOD ZONE X, AREA OF MINIMAL FLOODING, PER FLOOD INSURANCE RATE MAP COMMUNITY AND PANEL NUMBER 17031C0043J, WITH AN EFFECTIVE DATE OF AUGUST 19, 2008.

PRELIMINARY

JAMES A. FAETANINI
LICENSE NUMBER 035-003494
MY LICENSE RENEWAL DATE IS NOVEMBER 30, 2022
SHEETS COVERED BY THIS SEAL 8-1

MISSNER - PALATINE CONSOLIDATION

REVISIONS		
REV.	DATE	DESCRIPTION

8300 42ND STREET WEST
ROCK ISLAND, IL 61201
(O) 309-787-9988
(F) 309-756-5540
(E) XCEL@XCELCONSTULTANTSINC.COM

XCEL Consultants

PREPARED FOR:

MISSNER REALITY
1700 W HIGGINS RD,
SUITE 400
DES PLAINES, IL 60018

SITE ADDRESS:

2296 N RAND RD &
2234-2240 N RAND RD,
PALATINE, IL 60074

CHK BY:	APV BY:
BCH	JAF

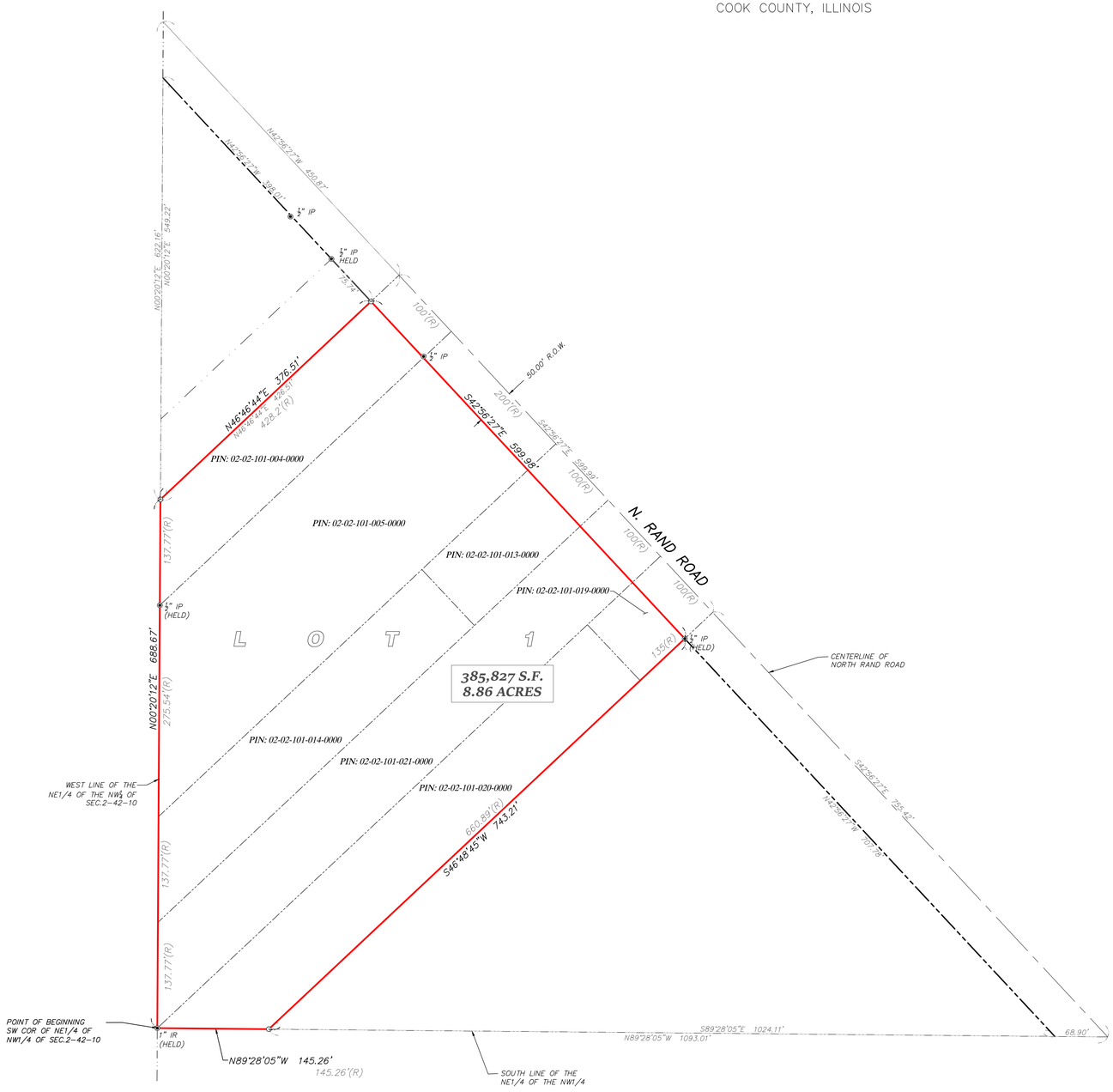
XCEL JOB NUMBER:
213402

DRAWING NUMBER:
1 OF 2

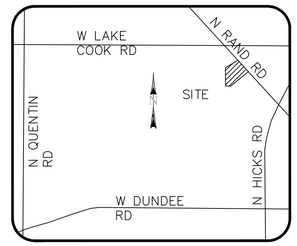
Attachment: EXHIBIT - Plat of Subdivision/Consolidation - Missner Group Palatine (2022-60 : 2240-2296 N. Rand Road)

MISSNER - PALATINE CONSOLIDATION

PART OF THE NORTHEAST QUARTER (NE1/4) OF THE
NORTHWEST QUARTER (NW1/4) OF SECTION 2, TOWNSHIP 42
NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN,
COOK COUNTY, ILLINOIS



VICINITY MAP



LEGEND

	CENTERLINE
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	INTERNAL PROPERTY LINE
	RIGHT OF WAY LINE
	SURVEY TIE LINE
◉	FOUND MONUMENT (AS NOTED)
○	SET 5/8" XCEL CAPPED IR
IR	IRON ROD
IP	IRON PIPE
POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
(M&R)	RECORD & MEASURED
S.F.	SQUARE FEET
BC	BACK OF CURB

MISSNER - PALATINE CONSOLIDATION

REVISIONS

REV.	DATE	DESCRIPTION

8300 42ND STREET WEST
ROCK ISLAND, IL 61201
(O) 309-787-9988
(F) 309-756-5540
(E) XCEL@XCELCONSTULTANTSINC.COM

XCEL Consultants

PREPARED FOR:
MISSNER REALITY
1700 W HIGGINS RD,
SUITE 400
DES PLAINES, IL 60018

SITE ADDRESS:
2296 N RAND RD &
2234-2240 N RAND RD,
PALATINE, IL 60074

CHK BY:	APV BY:
BCH	JAF

XCEL JOB NUMBER:
213402

DRAWING NUMBER:
2 OF 2

Attachment: EXHIBIT - Plat of Subdivision/Consolidation - Missner Group Palatine (2022-60 : 2240-2296 N. Rand Road)

ORDINANCE NO. _____

AN ORDINANCE REZONING CERTAIN PROPERTIES FROM B-5 HIGHWAY BUSINESS DISTRICT TO PLANNED DEVELOPMENT FOR THE PROPERTIES AT 2240-2296 N. RAND ROAD

WHEREAS, pursuant to a public hearing held on June 21, 2022 before the Plan Commission of the Village of Palatine, in accordance with the applicable provision of the Village Code, and they have reported their findings on a proposal for rezoning the following legally described property from "B-5 Highway Business District" to Planned Development.

SEE ATACHED LEGAL DESCRIPTION

Commonly known as 2240-2296 N. Rand Road

PIN: # 02-02-101-019-0000; 02-02-101-020-0000; 02-02-101-021-0000; 02-02-101-013-0000; 02-02-101-014-0000; 02-02-101-004-0000; and 02-02-101-005-0000

NOW, THEREFORE, BE IT ORDAINED, by the Mayor and Village Council of the Village of Palatine, Cook County, Illinois, acting in the exercise of its home rule power:

SECTION 1: That the Zoning Ordinance of the Village of Palatine, as amended, is hereby further amended by classifying the property described above as Planned Development.

SECTION 2: That the Zoning Map of the Village of Palatine is hereby amended to reflect this change.

Attachment: ORD - REZdoc (2022-60 : 2240-2296 N. Rand Road)

SECTION 3: **That this ordinance shall be in full force and effect upon passage and approval as provided by law.**

PASSED: This ____day of _____, 2022

AYES: ____ NAYS:____ ABSENT:____ PASS:____

APPROVED by me this ____day of _____, 2022

_____
Mayor of the Village of Palatine

ATTESTED and FILED in the office of the Village Clerk this

____ day of _____, 2022

_____
Village Clerk

Attachment: ORD - REZdoc (2022-60 : 2240-2296 N. Rand Road)

LEGAL DESCRIPTION – 2240 – 2266 N. Rand Road

LEGAL DESCRIPTION

PARCEL 1: (PERMANENT INDEX NUMBER 02-02-101-005-0000)
THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, SAID POINT OF INTERSECTION BEING 16.12 FEET SOUTH OF THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE SOUTHEAST ALONG THE CENTER LINE OF SAID RAND ROAD, 551.08 FEET TO THE POINT OF BEGINNING; THENCE SOUTHEAST ALONG THE CENTER LINE OF SAID RAND ROAD, 200.00 FEET; THENCE SOUTHWEST IN A STRAIGHT LINE 711.71 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, BEING 1,034.76 FEET SOUTH OF THE ABOVE DESCRIBED POINT OF INTERSECTION OF THE CENTER OF RAND ROAD AND THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, AFORESAID, 275.54 FEET; THENCE NORTHEAST IN A STRAIGHT LINE, 522.14 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.

PARCEL 2: (PERMANENT INDEX NUMBERS 02-02-101-013-0000; 02-02-101-014-0000) THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, SAID POINT OF INTERSECTION BEING 16.12 FEET SOUTH OF THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF SAID SECTION 2; THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF SAID RAND ROAD, 751.08 FEET TO A POINT OF BEGINNING; THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF RAND ROAD, 100.00 FEET; THENCE SOUTHWESTERLY ON A STRAIGHT LINE, 806.47 FEET TO A POINT IN THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2 THAT IS 1,172.53 FEET SOUTH OF THE ABOVE-DESCRIBED POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2; THENCE NORTH ALONG THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, 137.77 FEET; THENCE NORTHEASTERLY IN A STRAIGHT LINE, 711.71 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.

PARCEL 3: (PERMANENT INDEX NUMBER 02-02-101-021-0000)
THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:
COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, SAID POINT OF INTERSECTION BEING 16.12 FEET SOUTH OF THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF SAID RAND ROAD, 851.08 FEET TO A POINT OF BEGINNING; THENCE SOUTHWESTERLY IN A STRAIGHT LINE, 806.47 FEET TO A POINT IN THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, AFORESAID, SAID POINT BEING 1,172.53 FEET SOUTH OF THE ABOVE-DESCRIBED POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE SOUTH ALONG THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, 137.77 FEET TO THE SOUTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE NORTHEAST 902.21 FEET TO A POINT IN THE CENTER LINE OF RAND ROAD THAT IS 100.00 FEET SOUTHEAST OF THE POINT OF BEGINNING; THENCE NORTHWESTERLY ALONG THE CENTER LINE OF RAND ROAD, 100.00 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.

PARCEL 4: (PERMANENT INDEX NUMBER 02-02-101-019-0000)
THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:
COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, SAID POINT OF INTERSECTION BEING 16.12 FEET SOUTH OF THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF SAID RAND ROAD, 951.08 FEET TO A POINT OF BEGINNING; THENCE SOUTHWESTERLY ALONG A LINE EXTENDED TO THE SOUTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, A DISTANCE OF 135.00 FEET; THENCE SOUTHEASTERLY PARALLEL TO THE CENTER LINE OF RAND ROAD, 100.00 FEET; THENCE NORTHEASTERLY 135.00 FEET TO THE CENTER LINE OF RAND ROAD, SAID POINT BEING 100.00 FEET SOUTHEASTERLY OF THE POINT OF BEGINNING; THENCE NORTHWESTERLY 100.00 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.

PARCEL 5: (PERMANENT INDEX NUMBER 02-02-101-020-0000)
THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, SAID POINT OF INTERSECTION BEING 16.12 FEET SOUTH OF THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF SAID RAND ROAD, 951.08 FEET TO A POINT OF BEGINNING; THENCE SOUTHWESTERLY IN A STRAIGHT LINE 902.21 FEET TO THE SOUTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE EAST ALONG THE SOUTH LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, AFORESAID, 145.26 FEET TO A POINT THAT IS 1,097.34 FEET WEST OF THE INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE SOUTH LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE NORTHEASTERLY IN A STRAIGHT LINE, 795.89 FEET TO A POINT IN THE CENTER LINE OF RAND ROAD THAT IS 755.42 FEET NORTHWESTERLY OF THE LAST ABOVE-DESCRIBED INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE SOUTH LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE NORTHWESTERLY ALONG THE CENTER LINE OF RAND ROAD, 100.00 FEET TO THE POINT OF BEGINNING; (EXCEPT THEREFROM THAT PART DESCRIBED AS PARCEL 4 ABOVE), IN COOK COUNTY, ILLINOIS.

THE TITLE DOCUMENT REFERENCED HEREON IS PER CHICAGO TITLE INSURANCE COMPANY, TITLE NUMBER 21GNW158194LZ, DATED APRIL 1, 2021.

Attachment: REZONING - LEGAL DESCRIPTION (2022-60 : 2240-2296 N. Rand Road)

LEGAL DESCRIPTION – 2296 N. Rand Road

LEGAL DESCRIPTION

THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE NORTH LINE OF THE NORTHWEST 1/4 OF SAID SECTION 2, AND RUNNING THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF SAID RAND ROAD 453.69 FEET TO THE PLACE OF BEGINNING; THENCE CONTINUING SOUTHEASTERLY ALONG SAID CENTER LINE 100 FEET; THENCE SOUTHWESTERLY, 522.95 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION, SAID POINT BEING 773.79 FEET SOUTH OF THE NORTH LINE OF SAID 1/4 SECTION; THENCE NORTH ALONG THE WEST LINE OF THE NORTHEAST 1/4 OF SAID 1/4 SECTION, 137.77 FEET; THENCE NORTHEASTERLY 428.2 FEET TO THE PLACE OF BEGINNING, EXCEPT THAT PART DEDICATED FOR HIGHWAY PURPOSES, ALL IN COOK COUNTY, ILLINOIS

THE TITLE DESCRIPTION AND SCHEDULE B ITEMS HEREON ARE FROM CHICAGO TITLE INSURANCE COMPANY, COMMITMENT #21GSC278017LP, DATED JULY 7, 2021.

Attachment: REZONING - LEGAL DESCRIPTION (2022-60 : 2240-2296 N. Rand Road)

VILLAGE OF PALATINE

VILLAGE OF PALATINE
Plan Commission

SCHEDULED 06/21/22 07:00 PM

CASE STAFF STATEMENT (ID # 7665)

2240-2296 N. Rand Road

CASE NUMBER: 22-24

PETITIONER: TMG Acquisition Disposition 1, LLC/The Missner Group (www.missnergroup.com)

LOCATION: 2240 - 2296 N. Rand Road

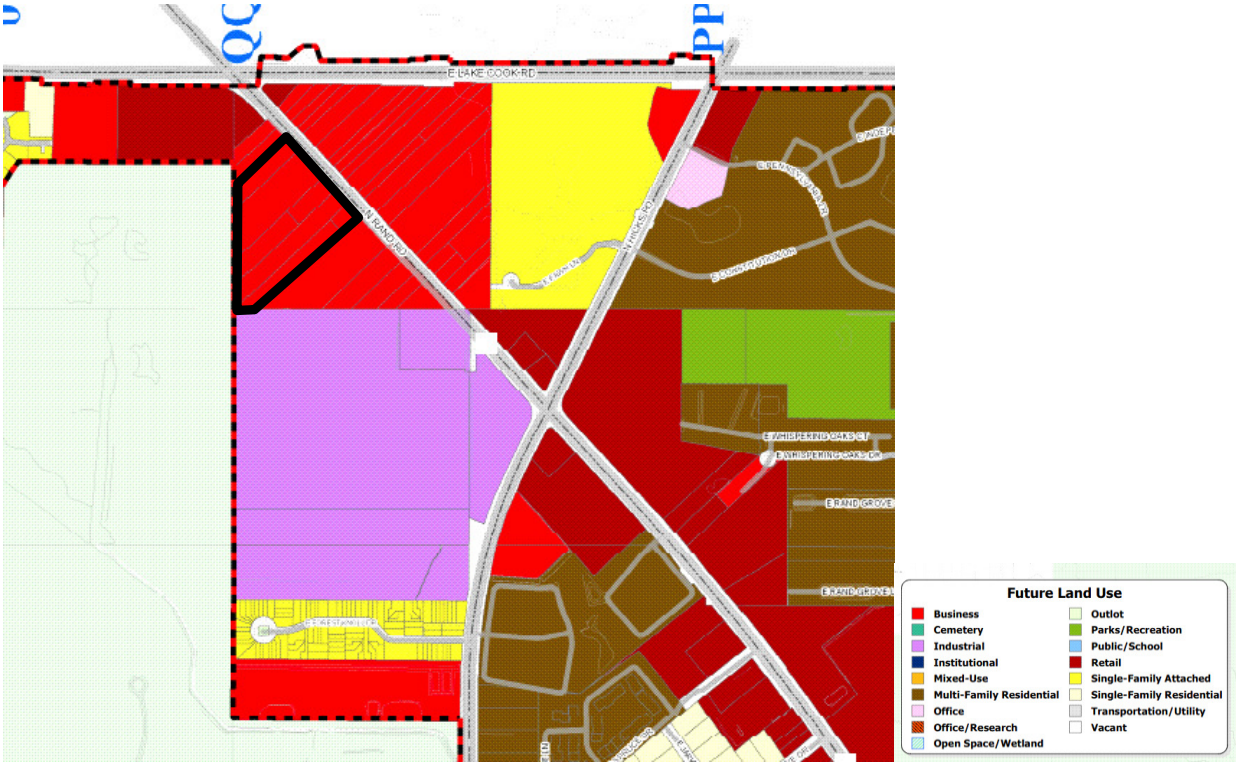
PROPOSAL: The Missner Group intends to purchase and redevelop 7 parcels, totaling 8.86 acres. The property would be speculatively developed in an approximately 145,400 square foot warehouse, distribution, contractor distribution, or light manufacturing, with associated office uses.

ZONING AND LAND USE: B-5 District - used auto dealerships (Premier Auto and Auto Land) and construction materials (CMI, Inc.).
SURROUNDING CONDITIONS:

North:	B-5 Highway (Route 12) Business District - Spring Align
South:	B-5 Highway (Route 12) Business District - Enterprise Rental & Car Sales
East:	B-5 Highway (U.S. Route 12) Business District; Planned Development (Hyundai); and R-1 single-family residential (non-conforming through annexation in 2007).
West:	Unincorporated Cook County - Deer Grove Forest Preserve

COMPREHENSIVE PLAN:
The Comprehensive Plan indicates a continued business uses for the Subject Property.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



BACKGROUND:

The Petitioner plans to consolidate the existing 7 parcels into one consolidated lot and develop a new warehouse/distribution or light manufacturing use, with associated office uses. Therefore, the Petitioner is requesting the following:

1. **Preliminary and Final Planned Development**
2. **Preliminary and Final Plat of Subdivision to permit a 4-lot single-family residential development**
3. **Rezoning from B-5 to Planned Development**

ANALYSIS:

The Petitioners are proposing to acquire the existing property in order to consolidate the existing 7 parcels into a cohesive 145,400 square foot building with warehouse, distribution, light manufacturing, and accessory office uses,The building will likely be multi-tenant and also provide 28 trailer parking spaces on the west side of the building,

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

adjacent to a portion of the Cook County Forest Preserve.

Engineering:

- All of the existing utilities are proximate and available to the Subject Property along Rand Road. The property grades northwest to southeast, with the proposed detention basin located in the southwest corner of the site. The watermain connection is made through the existing in the Rand Road right-of-way and looped throughout the site.
- The necessary sanitary connection and extension occurs through Rand Road to the east side of the street. The storm sewer is extended through the site with connections to the roof drains on the west side of the building and eventually reaching the detention basin.
- Pursuant to the Village Engineer's review, a new sidewalk would be required along Rand Road.

Architecture:

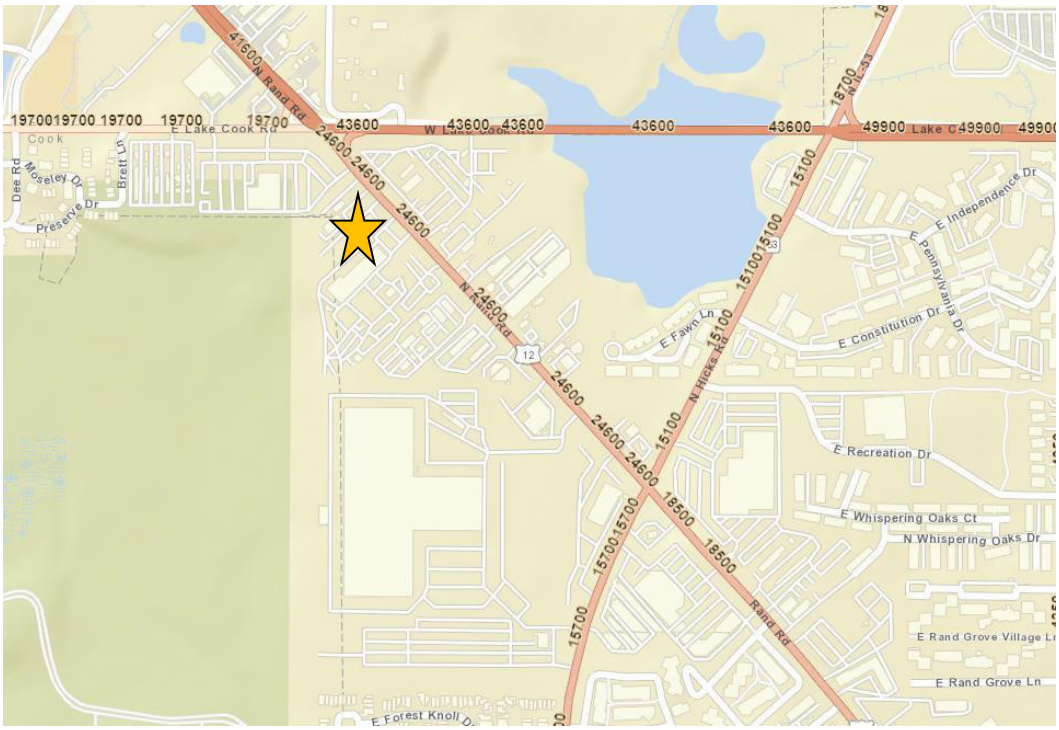
- The proposed 145,400 square foot building would be constructed of pre-cast concrete panels, with metal coping panels and a combination of vision, spandrel, and tempered glass. The architecture is similar to the other approved Class A industrial buildings in the Village (Midwest Industrial Funds (former Weber property) and the LPC development on Algonquin Road).
- The building height measures 42 feet to the top of the parapet wall and the proposed floorplan is open to allow for flexibility during the tenant development process. For planning purposes the building's initial design anticipates 10% of the building llotted to office uses, with the remaining 90% to be utilized for warehouse/distribution/light manufacturing purposes.
- The building is set back 100 feet from the Rand Road property line, with approximately 64-foot setbacks on the northern and southern side of the property. The rear yard setback ranges from 55 feet at the closed point to approximately 370 and 450 feet adjacent to the detention basin. The varying setbacks result from the angle of the west property line along the Deer Grove Forest preserve property.
- All of the setbacks comply with both the existing B-5 and Manufacturing District requirements. The building height also complies with both of these zoning district

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

limitations, which allow up to a 45-foot or 60-foot maximum building height.

Traffic Analysis:

- The Subject Property has direct access to Rand Road (U.S. Route 12-IDOT jurisdiction) and lies approximately 600 feet south of the intersection with Lake Cook Road. Per the submitted Traffic Impact Study (TIS), Rand Road is a Strategic Regional Arterial Route, with a posted speed limit of 35 miles per hour, providing two lanes in each direction, divided by a two-way left turn lane. The annual average daily traffic (AADT) is 49,700 vehicles, northwest of the Lake Cook Road intersection. Beginning at the intersection of Rand and Lake Cook Roads, for a distance of 700 feet, a barrier median divides Rand Road.



- Lake Cook Road is an east/west principal arterial roadway providing two-lanes in either direction. Lake Cook Road is under the jurisdiction of the Cook County Highway Department and has a posted speed limit of 45 miles per hour. The AADT is 19,700 vehicles west of Rand Road and 43,600 vehicles east of Rand Road. Lake Cook Road is also a SRA designated route. The Village Engineer

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

has reviewed and accepted the Traffic Study.

- The traffic study identifies 7:15 AM to 8:15 AM as the peak weekday morning traffic times, with 4:30 PM to 5:30 PM, as the peak evening times.
- The proposed development will have two access points into the site, replacing the existing six ingress/egress curb cuts onto Rand Road. The traffic study notes that the elimination of the existing access points will improve safety and traffic flow on Rand Road. The northern access point will be a right-in right-out, with the southerly access point being a full access point allowing one inbound lane and one outbound lane under stop sign control.
- The RI/RO will allow access to both the 30-foot truck access to the loading bays on the rear of the building and the employee parking lots within the site. The full access point provides truck/vehicle access leaving the site and heading north.
- The anticipated truck traffic directional distributions were based upon existing travel patterns determined from the traffic counts. The TIS notes all truck traffic will approach the site from the north on Rand Road and to the south on Rand Road, as Route 53 access will occur through the Dundee and Rand Road interchange south of the site.
- The TIS estimated the proposed development related traffic based upon the Institute of Transportation Engineer's Trip Generation Manual (11th edition), as follow:

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

ESTIMATED PEAK HOUR AND DAILY TRIP GENERATION

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour In	Out	Total	Weekday Evening Peak Hour In	Out	Total	Daily Trips In	Out
110	**General Light Industrial (145,408 s.f.)[1]**	**90**	**13**	**103**	**13**	**81**	**94**	**299**	**299**
	Truck Trips[2]	3	3	6	1	1	2	18	18
	Passenger Vehicle Trips[3]	87	10	97	12	80	92	281	281

1 - Based on the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 11th Edition
2 – Daily rate based on ITE Manual.
3 – Equal to total trips less truck trips.

Table 4
ESTIMATED 24-HOUR TRUCK TRIP GENERATION

Hour	Volume of Site Generated Truck Traffic General Light Industrial (ITE Land-Use Code 110) – 145,260 s.f. Weekday AM In	Out	Total	Weekday PM In	Out	Total
12:00	0	0	**0**	1	1	**2**
1:00	0	0	**0**	2	2	**4**
2:00	0	0	**0**	2	2	**4**
3:00	0	0	**0**	2	2	**4**
4:00	0	0	**0**	1	1	**2**
5:00	0	0	**0**	0	0	**0**
6:00	0	0	**0**	0	0	**0**
7:00	2	1	**3**	0	0	**0**
8:00	2	2	**4**	0	0	**0**
9:00	3	3	**6**	0	0	**0**
10:00	2	3	**5**	0	0	**0**
11:00	1	1	**2**	0	0	**0**

Based on daily truck trips (Table A) and ITE's Hourly Distribution of Entering and Exiting Truck Trips tables.

- The use category analyzed was General Light Industrial, based upon the proposed building design and anticipated tenancy. The TIS concludes that there is sufficient reserve capacity within the existing roadway system to accommodate the projected traffic development. The proposed two access system is sufficient to accommodate the development related traffic.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Parking:

- The proposed site plan includes 156 parking spaces (including 16 future parking spaces on the north side of the building). The site plan anticipates 10% of the building could be occupied with office uses, with the remaining 90% utilized for warehouse/distribution. The following table summarizes the potentially required and provided parking for the site:

	Required parking	**Provided parking**	**Additional parking provided, if required by the Village**
Office – 10% **(14,540)**	**1/300 square feet** **48 spaces**		
Warehouse- 90% **(130,867)**	**1/1,000 square feet** **131 spaces**		
Total parking spaces	**179 spaces**	**140 spaces, included; 16 future parking spaces on the north side of the building=156 parking spaces.**	**30 parking spaces, within the trailer parking stall area on the west side of the building = 186 parking spaces total.**

- The Traffic Impact Study identifies a minimum of 120 parking spaces for a light industrial building of this size.
- In the justification for the parking provided, the developer notes the Traffic Impact Study, the proposed percentage of office uses for the building, which may end up being lower than the actual use of the property, and their experience with the parking needs for developments of this type.
- Through the Planned Development review, Staff directed the Petitioner to identify additional parking spaces to be added within the truck loading docks to confirm where additional parking could be added. While Staff is comfortable with the

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

provided parking plan, Staff is also recommending a condition to implement additional parking if the tenant composition or demand increases, at the direction of the Village.

RECOMMENDATION:

The Subject Property was annexed into the Village in 2007 from unincorporated Cook County. The proposed redevelopment will continue the redevelopment patterns along Rand Road and the contemplated warehouse/distribution/light industrial uses is not inconsistent with the surrounding developments. With the existing roadway systems along Rand and Lake Cook Roads, the proposed development has the necessary capacity to operate. Therefore, Staff recommends approval of the Preliminary and Final Planned Development, Preliminary and Final Plat of Subdivision, and Rezoning to Planned Development, subject to the following conditions:

Preliminary and Final Planned Development:

1. **The development shall substantially conform to the engineering plans by Spaceco., INC., dated March 22, 2022, as revised, the architectural plans by Ware Malcomb, date April 3, 2022, as revised, the KLOA Traffic Study, and the landscaping plans by Kathyrn Talty, dated January 28, 2022, except as such plans may be changed to conform to Village Codes and Ordinances.**

2. **Uses and signage shall be governed by the Manufacturing District use lists in the Village of Palatine Zoning Ordinance (note - this includes all of the required performance standards). Sign plans shall follow the Manufacturing district sign regulations.**

3. **As a component of the Final Planned Development, a Planned Development letter of credit shall be submitted in a manner acceptable to the Director of Planning and Zoning and Village Engineer.**
4. **The final engineering plans shall be revised in a manner acceptable to the Village Engineer.**

5. **The final landscape plans shall be subject to the review and approval of the Director of Planning and Zoning and shall include addition shrub plantings along the Rand Road frontage, adjacent to the parking lot.**

6. **The final photometric and lighting plan shall be revised in a manner acceptable to the Village Engineer. Light shields shall be required for any lights proximate to residential properties, at the determination of the Village Engineer. This may include a 25-foot mounting height for exterior**

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

lights, in order to reduce the glare, at the direction of the Village Engineer.

7. **The final traffic directional signage plan shall be submitted in a manner acceptable to the Village Engineer.**

8. **Cross access easements, declarations and a Reciprocal Easement Agreement for the entire property governing the maintenance of access points, stormwater areas and any other common areas shall be submitted in a manner acceptable to the Village Attorney and Village Engineer. This could include a cross access easement for the property directly north of the Subject Property, if that property were to redevelop in the future, if requested by the Village of Palatine.**

9. **The final dumpster locations and required screening materials shall be submitted in compliance with Village Code. The screening shall be constructed of durable materials similar to those of the building and shall have solid (opaque) walls and doors. The final locations could also require the submission of a revised auto-turn, in a manner acceptable to the Director of Fire Prevention.**

10. **As a condition of the Final Planned Development and pursuant to the project narrative, the Petitioner shall submit the proposed business and operations' plans (identified tenants) for Staff review for compliance with the manufacturing use list and standards.**

10. **If, at the determination of the Village, the proposed tenant composition (% of office uses) increases or the Village of Palatine determines that there is a significant parking demand deficiency, based upon the required parking needs, the trailer parking directly east of the detention basin shall be converted to auto parking stalls, or a portion thereof, as noted on Ware Malcomb Concept Site Plan ("Scheme 9"), depicting up to 30 additional parking spaces.**

Preliminary and Final Plat of Subdivision:

1. **The Final Engineering plans shall substantially conform to the engineering plans by Spaceco., INC., dated March 22, 2022, except as such plans shall be changed to conform with Village Codes and Ordinances and in a manner acceptable to the Village Engineer.**

2. **The Final Engineering Plans shall be revised in a manner acceptable to the**

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Village Engineer.

3. **The Final Plat of Subdivision shall be revised in a manner acceptable to the Village Engineer and submitted on a Mylar, with all required signatures.**
4. **Recording fees in an amount of $600 shall be submitted.**
5. **The Final Plan Review fees in the amount of 1.5% of total project improvement costs shall be submitted in a manner acceptable to the Village Engineer.**
6. **A Public Improvement Letter of Credit shall be submitted to ensure the completion of all public improvements, as defined within the Village Code, for an amount of 115% of the approved EEOC, along with a cash bond of 10% for the required one-year maintenance period in a manner acceptable to the Village Engineer.**
6. **The EEOPC shall be revised in a manner acceptable to the Village Engineer.**
7. **The Petitioners shall submit a Subdivision Improvement Agreement in a manner acceptable to the Village Attorney.**
8. **The cross-access easement, declarations, and reciprocal easement agreement regarding the maintenance of the access points, storm water areas, or any other required common areas shall be submitted in a manner acceptable to the Village Attorney and Village Engineer.**
9. **All extra-agency permits (e.g. IDOT, MWRD, etc.) shall be submitted in a manner acceptable to the Village Engineer.**

ATTACHMENTS:

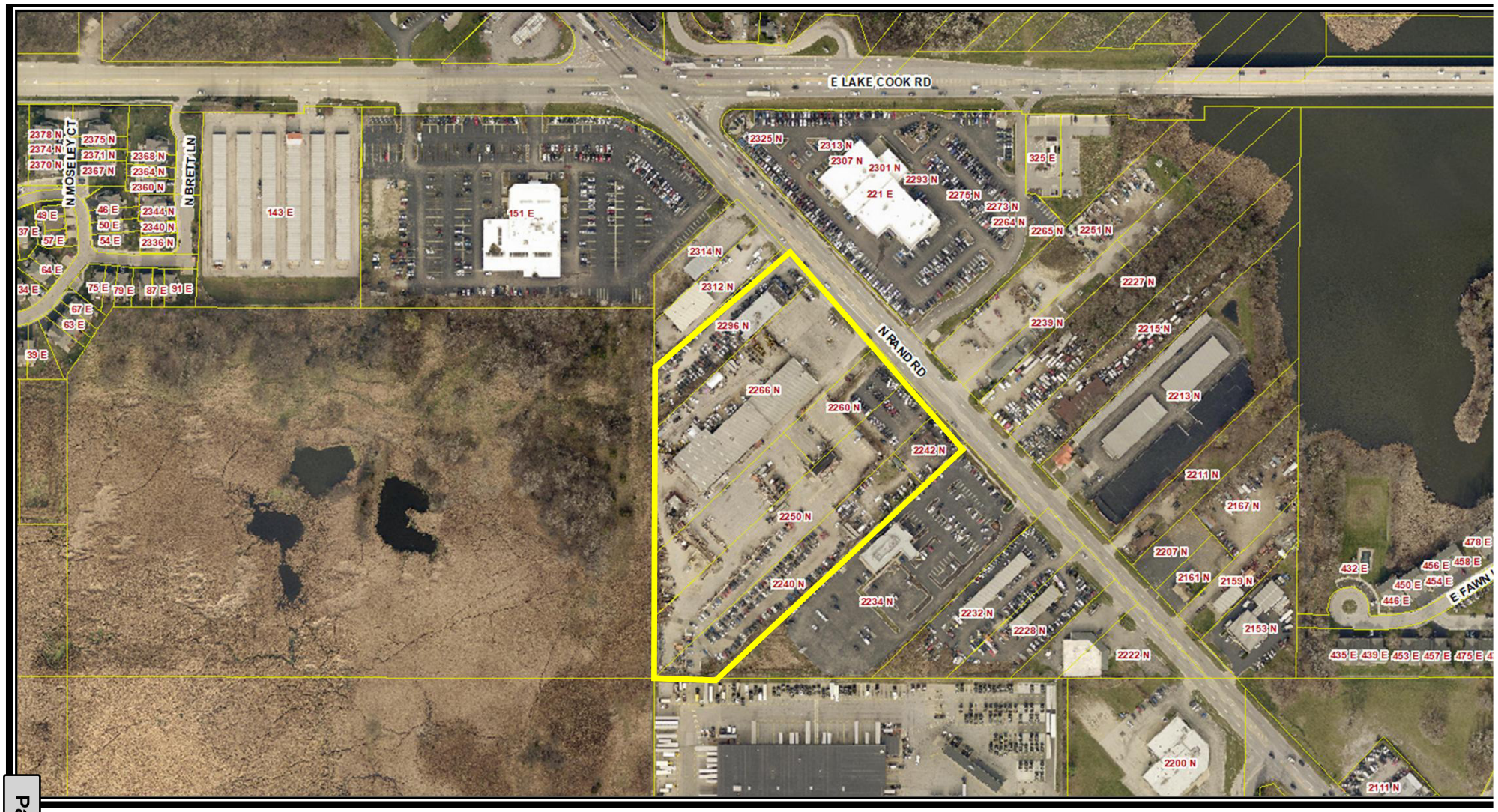
- Aerial Map
- Missner Group - ENG Plans
- Missner Group - ARCH Plans
- 0615222 - MIssner Group Palatine - PLAT of Subdivision
- Missner Group - 2240-2296 N. Rand Road - Landscaping Plan
- Site Plan
- ARCH site plan - additional parking exhibit
- KLOA Rand Rd. Traffic Study
- Photometric Lighting Plan

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

- PFPD application
- Rezoning application
- PF Subdivision application
- ALTA survey - 2234-2240 Rand Road
- 2296 N. Rand Road - ALTA survey
- Public Notice

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

2240-2296 N. Rand Road



Attachment: Aerial Map (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

FINAL SITE IMPROVEMENT PLANS
for
2240-2296 RAND ROAD

VILLAGE OF PALATINE
COOK COUNTY, ILLINOIS
PROJECT NO: 11624

DEVELOPER
2234-2296 RAND RD TMG, LLC
c/o THE MISSNER GROUP
1700 WEST HIGGINS ROAD, SUITE 400
DES PLAINES, IL 60018
PH: (847) 947-5333

ARCHITECT
WARE MALCOMB
1315 22nd STREET, SUITE #410
OAK BROOK, IL 60523
PH: (630) 218-0063

CALL J.U.L.I.E. 1-800-892-0123
WITH THE FOLLOWING:
COUNTY: COOK COUNTY
CITY, TOWNSHIP: VILLAGE OF PALATINE, PALATINE
SEC. & ¼ SEC. NO.: NW 1/4 S2, T42N, R10E
48 HOURS BEFORE YOU DIG.
EXCLUDING SAT., SUN. & HOLIDAYS

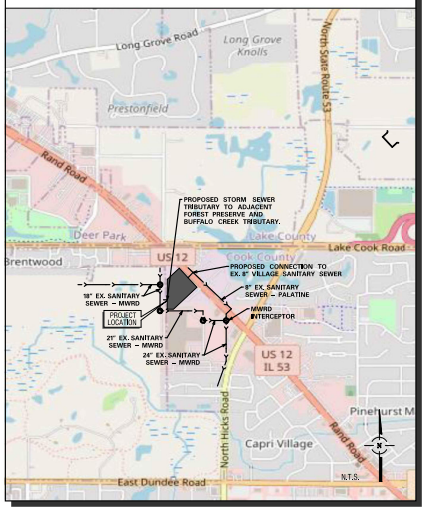
BENCHMARK
ELEVATION:
DESCRIPTION: SEE SHEET ET FOR BENCHMARK INFORMATION

NOTE:
SPACECO, INC. IS TO BE NOTIFIED AT LEAST THREE (3) DAYS PRIOR TO STARTING CONSTRUCTION AND SHALL BE INCLUDED IN THE PRECONSTRUCTION MEETINGS

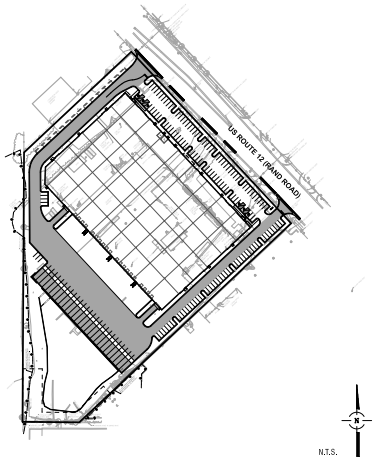
INDEX

SHEET #	SHEET I.D.	SHEET DESCRIPTION
1	C1	COVER SHEET
2	GN	TYPICAL SECTIONS & GENERAL NOTES
3	ET	EXISTING CONDITIONS PLAN
4	DEMO	DEMOLITION PLAN
5	GM	GEOMETRIC PLAN
6	GR	GRADING PLAN
7	UT	UTILITY PLAN
8	PP01	PLAN AND PROFILE - SANITARY SEWER SERVICE
9-11	SE1-SE3	SOIL EROSION AND SEDIMENT CONTROL SPECIFICATIONS AND DETAILS
12-13	SP1-2	SPECIFICATIONS
14-17	D1-D4	DETAILS
18	EXH-R	MWRD EXHIBIT R

SANITARY SEWER ROUTING MAP



KEY MAP



REVISIONS

ORIGINAL PLAN DATE: MARCH 16, 2022

#	SHEET #	REMARKS	DATE
1	ALL	REVISIONS PER ARCHITECT	03/22/22
2	ALL	REVISIONS PER ARCHITECT/OWNER	04/11/22

ENGINEER
BRETT M. DUFFY, P.E.
ILLINOIS REGISTRATION NO.: 062-053198
EXPIRATION DATE: 11/30/2023
PROFESSIONAL DESIGN FIRM NO.: 184-001157
EXPIRATION DATE: 04/30/2023
04/11/22
DATE
THESE PLANS OR ANY PART THEREOF SHALL BE CONSIDERED VOID WITHOUT THE SIGNATURE, SEAL, AND EXPIRATION DATE OF SEAL OF THE ENGINEER

LICENSED PROFESSIONAL ENGINEER
BRETT M. DUFFY
NO. 062-053198
ILLINOIS

2240-2296 RAND ROAD
VILLAGE OF PALATINE
COOK COUNTY, ILLINOIS

9575 W. Higgins Road, Suite 700, Rosemont, Illinois 60018
Phone: (847) 696-4060 Fax: (847) 696-4065

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS

SPACECO INC.

FILENAME: 11624TITLE
DATE: 03/16/2022
JOB NO. 11624
SHEET C1
1 OF

Attachment: Missner Group - ENG Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

GENERAL NOTES

1. REFERENCED CODES

A. ALL PAVEMENT AND STORM SEWER CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (SSRBC), AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED APRIL 1, 2016 BY ILLINOIS DEPARTMENT OF TRANSPORTATION AND ALL AMENDMENTS THERETO AND IN ACCORDANCE WITH THE LATEST EDITION OF THE CODE OF THE MUNICIPALITY EXCEPT AS MODIFIED HEREIN, IN CASE OF CONFLICT, MUNICIPAL CODE SHALL TAKE PRECEDENCE.

B. ALL SANITARY SEWER AND WATERMAIN CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, PUBLISHED JANUARY 2014, AND IN ACCORDANCE WITH THE CODE OF THE MUNICIPALITY EXCEPT AS MODIFIED HEREIN OR BY ANY PUBLIC AGENCY PERMITS ISSUED FOR THIS WORK. IN CASE OF CONFLICT, THE MORE RESTRICTIVE PROVISIONS SHALL APPLY.

C. ALL SIDEWALK AND PUBLIC AREAS MUST BE CONSTRUCTED IN ACCORDANCE WITH CURRENT ADA, ILLINOIS HANDICAP ACCESSIBILITY AND ANY APPLICABLE LOCAL ORDINANCES. WHEN CONFLICTS EXIST BETWEEN THE GOVERNING AGENCIES, THE MORE STRINGENT SHALL GOVERN.

D. THE CITED STANDARD SPECIFICATIONS, CODES AND PERMITS, WITH THESE CONSTRUCTION PLANS AND DETAILS, ARE ALL TO BE CONSIDERED PART OF THE CONTRACT. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE CONSIDERED A PART OF THIS CONTRACT.

2. UTILITY LOCATIONS

A. THE UTILITY COMPANIES HAVE BEEN CONTACTED IN REFERENCE TO UTILITIES THEY OWN AND OPERATE WITHIN THE LIMITS FOR THIS PROJECT. DATA FROM THESE AGENCIES HAS BEEN INCORPORATED INTO THE PLANS, IF IS, HOWEVER, THE CONTRACTORS RESPONSIBILITY TO CONFIRM OR ESTABLISH THE EXISTENCE OF ALL UTILITY FACILITIES AND THEIR EXACT LOCATIONS, AND TO SAFELY SCHEDULE ALL UTILITY RELOCATIONS. FOR ADDITIONAL INFORMATION, THE AGENCIES LISTED ON THIS SHEET MAY BE CONTACTED.

B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. THE ENGINEER DOES NOT WARRANT THE LOCATION OF ANY EXISTING UTILITIES SHOWN ON THE PLAN. THE CONTRACTOR SHALL CALL J.U.L.I.E. AT 800-892-0123 AND THE MUNICIPALITY, FOR UTILITY LOCATIONS. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND THE MUNICIPALITY TWENTY-FOUR (24) HOURS PRIOR TO STARTING ANY CONSTRUCTION.

C. EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH LOCATIONS OF THE NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.

3. UTILITY COORDINATION

A. OWNER SHALL OBTAIN EASEMENTS AND PERMITS NECESSARY TO FACILITATE CONSTRUCTION OF THE PROPOSED UTILITIES. THE CONTRACTOR, HOWEVER, SHALL FURNISH ALL REQUIRED BONDS AND EVIDENCE OF INSURANCE NECESSARY TO SECURE THESE PERMITS.

B. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE NATURE AND STATUS OF ALL UTILITY RELOCATION WORK PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO ENSURE THAT CONSTRUCTION OPERATIONS DO NOT INTERFERE WITH UTILITY FACILITIES AND RELOCATION WORK. THE SCHEDULE SHOULD REFLECT CONSTRUCTION SEQUENCING WHICH COORDINATES WITH ALL UTILITY RELOCATION WORK. THE CONTRACTOR SHALL BE REQUIRED TO ADJUST THE ORDER OF ITS WORK FROM TIME TO TIME, TO COORDINATE SAME WITH UTILITY RELOCATION WORK, AND SHALL PREPARE REVISED SCHEDULE(S) IN COMPLIANCE THEREWITH AS DIRECTED BY THE OWNER.

C. THE OWNER AND THE ENGINEER SHALL BE NOTIFIED IN WRITING BY THE CONTRACTOR AT LEAST 48 HOURS PRIOR TO THE START OF ANY OPERATION REQUIRING COOPERATION WITH OTHERS. AT&T SHALL BE CONTACTED ONE MONTH PRIOR TO START OF CONSTRUCTION IN ITS UTILITY AREAS. ALL OTHER AGENCIES, UNLESS OTHERWISE NOTED, SHALL BE NOTIFIED IN WRITING BY THE CONTRACTOR TEN (10) DAYS PRIOR TO THE START OF ANY SUCH OPERATION.

4. NO PLAN SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY MARKED "FOR CONSTRUCTION". PRIOR TO COMMENCEMENT OF CONSTRUCTION THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THE WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IN ADDITION, THE CONTRACTOR MUST VERIFY THE ENGINEER'S LINE AND GRADE STAKES. IF THERE ARE ANY DISCREPANCIES WITH WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT SAME TO ENGINEER BEFORE DOING ANY WORK, OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTIONS ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.

5. ALL PROPOSED ELEVATIONS SHOWN ON THE PLANS ARE FINISHED SURFACE ELEVATIONS, UNLESS OTHERWISE SPECIFIED.

6. UPON AWARDING OF THE CONTRACT, AND WHEN REQUIRED BY THE MUNICIPALITY OR OWNER, THE CONTRACTOR SHALL FURNISH A LABOR, MATERIAL AND PERFORMANCE BOND IN THE AMOUNT REQUIRED GUARANTEEING COMPLETION OF THE WORK. THE UNDERWRITER SHALL BE ACCEPTABLE TO THE MUNICIPALITY OR OWNER, AS APPROPRIATE.

7. THE CONTRACTORS SHALL PLAN THEIR WORK BASED ON THEIR OWN BORINGS, EXPLORATIONS AND OBSERVATIONS TO DETERMINE SOIL CONDITIONS AT THE LOCATION OF THE PROPOSED WORK, HOWEVER, IF THE OWNER HAS A SOILS REPORT, THE RESULTS WILL BE AVAILABLE FROM THE OWNER UPON WRITTEN REQUEST.

8. CONTRACTOR SHALL VIDEO TAPE WORK AREA PRIOR TO CONSTRUCTION FOR THE PURPOSE OF DOCUMENTING EXISTING CONDITIONS.

9. COMMENCING CONSTRUCTION

A. THE CONTRACTOR SHALL NOTIFY THE OWNER AND/OR HIS REPRESENTATIVE AND THE AFFECTED GOVERNMENTAL AGENCIES IN WRITING AT LEAST THREE FULL WORKING DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL NOTIFY AS NECESSARY, ALL TESTING AGENCIES, OTHER MUNICIPALITIES OR THE OWNERS, SUFFICIENTLY IN ADVANCE OF CONSTRUCTION, ALL MATERIAL TESTING SHALL BE THE RESPONSIBILITY AND EXPENSE OF THE CONTRACTOR. THE TESTING AGENCY SHALL MEET THE APPROVAL OF THE OWNER.

B. FAILURE OF CONTRACTOR TO ALLOW PROPER NOTIFICATION TIME WHICH RESULTS IN TESTING COMPANIES TO BE UNABLE TO VISIT SITE AND PERFORM TESTING WILL CAUSE CONTRACTOR TO SUSPEND OPERATION UNTIL TESTING UNITS, TESTING AGENCY CAN SCHEDULE TESTING OPERATIONS. COST OF SUSPENSION OF WORK TO BE BORNE BY CONTRACTOR.

10. ALL CONTRACTORS SHALL KEEP ACCESS AVAILABLE AT ALL TIMES FOR ALL TYPES OF TRAFFIC. AT NO TIME SHALL ACCESS BE DENIED TO ADJACENT PROPERTIES.

11. THE CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES UNTIL THEY ARE NO LONGER NEEDED. ANY STAKES DESTROYED OR DISTURBED BY THE CONTRACTOR PRIOR TO THEIR USE SHALL BE RESET BY THE DEVELOPER'S ENGINEER AT CONTRACTOR'S COST.

12. ANY EXISTING SIGNS, LIGHT STANDARDS AND UTILITY POLES WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND NOT NOTED FOR DISPOSAL SHALL BE REMOVED AND RESET BY THE CONTRACTOR AT HIS OWN EXPENSE AS SHOWN ON THE ENGINEERING PLANS OR AS DIRECTED BY THE DEVELOPER. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE TO THE SATISFACTION OF THE OWNER. ANY SIGNS NOT REQUIRED TO BE RESET, SHALL BE DELIVERED TO THE RESPECTIVE OWNERS.

13. REMOVAL OF SPECIFIED ITEMS, INCLUDING BUT NOT LIMITED TO, PAVEMENT, SIDEWALK, CURB, CURB AND GUTTER, CULVERTS, ETC. SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT HIS OWN EXPENSE. HE IS RESPONSIBLE FOR ANY PERMIT REQUIRED FOR SUCH DISPOSAL.

14. ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM OR SHALL BE RESTORED TO PROPER OPERATING CONDITION. A RECORD OF THE LOCATION OF ALL FIELD TILE OR DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE CONTRACTOR AND TURNED OVER TO THE ENGINEER, DEVELOPER OR MUNICIPAL ENGINEER UPON COMPLETION OF THE PROJECT. THE COST OF THIS WORK SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

15. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFETY ON THE JOB.

16. THE CONTRACTOR SHALL COLLECT AND REMOVE ALL CONSTRUCTION DEBRIS, EXCESS MATERIALS, TRASH, OIL AND GREASE RESIDUE, MACHINERY, TOOLS AND OTHER MISCELLANEOUS ITEMS WHICH WERE NOT PRESENT PRIOR TO PROJECT COMMENCEMENT AT NO ADDITIONAL EXPENSE TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY AND ALL PERMITS NECESSARY FOR THE HAULING AND DISPOSAL REQUIRED FOR CLEAN-UP AS DIRECTED BY THE ENGINEER OR OWNER. BURNING ON THE SITE IS NOT PERMITTED.

17. ALL EXISTING UTILITIES OR IMPROVEMENTS, INCLUDING WALKS, CURBS, PAVEMENT AND PARKWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE PROMPTLY RESTORED TO THEIR RESPECTIVE ORIGINAL CONDITION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNLESS SPECIFICALLY NOTED ON THE PLANS.

18. TREES NOT MARKED FOR REMOVAL SHALL BE CONSIDERED AS DESIGNATED TO BE SAVED AND SHALL BE PROTECTED UNDER THE PROVISIONS OF (SSRBC) ARTICLE 201.05.

19. LIMB PRUNING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE LANDSCAPE ARCHITECT MEETING THE OWNER'S APPROVAL AND SHALL BE UNDERTAKEN IN A TIMELY FASHION SO AS NOT TO INTERFERE WITH CONSTRUCTION.

20. ALL LIMBS, BRANCHES, AND OTHER DEBRIS RESULTING FROM THIS WORK SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT HIS OWN EXPENSE OFF-SITE.

21. ALL CUTS OVER 1" IN DIAMETER SHALL BE MADE FLUSH WITH THE NEXT LARGE BRANCH. WOUNDS OVER 1" IN DIAMETER SHALL BE PAINTED WITH AN APPROVED TREE PAINT.

22. GENERAL EXCAVATION/UNDERGROUND NOTES

A. SLOPE SIDES OF EXCAVATIONS TO COMPLY WITH CODES AND ORDINANCES HAVING JURISDICTION. SHORE AND BRACE WHERE SLOPING IS NOT POSSIBLE EITHER BECAUSE OF SPACE RESTRICTIONS OR STABILITY OF MATERIAL EXCAVATED. MAINTAIN SIDES AND SLOPES OF EXCAVATIONS IN A SAFE CONDITION UNTIL COMPLETION OF BACKFILLING.

B. PROVIDE MATERIALS FOR SHORING AND BRACING, SUCH AS SHEET PILING, UPRIGHTS, STRINGERS AND CROSS BRACES, IN GOOD SERVICEABLE CONDITION. PROVIDE MINIMUM REQUIREMENTS FOR TRENCH SHORING AND BRACING TO COMPLY WITH CODES AND AUTHORITIES HAVING JURISDICTION. MAINTAIN SHORING AND BRACING IN EXCAVATIONS REGARDLESS OF TIME PERIOD EXCAVATIONS WILL BE OPEN. CARRY DOWN SHORING AND BRACING AS EXCAVATION PROGRESSES IN ACCORDANCE WITH OSHA AND GOVERNING AUTHORITY.

C. PREVENT SURFACE WATER AND SUBSURFACE OR GROUNDWATER FROM FLOWING INTO EXCAVATIONS. REMOVE WATER TO PREVENT SOFTENING OF FOUNDATION BOTTOMS, UNDERCUTTING FOOTINGS, AND SOIL CHANGES DETRIMENTAL TO STABILITY OF SUBGRADES AND FOUNDATIONS. PROVIDE AND MAINTAIN PUMPS, SUMPS, SUCTION AND DISCHARGE LINES AND OTHER DEWATERING SYSTEM COMPONENTS NECESSARY TO CONVEY WATER AWAY FROM EXCAVATIONS. CONVEY WATER REMOVED FROM EXCAVATIONS AND RAINWATER TO COLLECTING OR RUN-OFF AREAS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION. PROVIDE AND MAINTAIN TEMPORARY DRAINAGE DITCHES AND OTHER DIVERSIONS OUTSIDE EXCAVATION LIMITS FOR EACH STRUCTURE. DO NOT USE TRENCH EXCAVATIONS AS TEMPORARY DRAINAGE DITCHES.

D. IMMEDIATELY REPORT CONDITIONS THAT MAY CAUSE UNSOUND BEARING TO THE OWNER/DEVELOPER BEFORE CONTINUING WORK.

23. FINAL ACCEPTANCE

A. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE GUARANTEED BY THE CONTRACTOR AND HIS SURETY FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF FINAL ACCEPTANCE OF THE PROJECT AND THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL DEFECTS IN MATERIALS AND WORKMANSHIP OF WHATEVER NATURE DURING THAT PERIOD. THIS GUARANTEE SHALL BE PROVIDED IN THE FORM OF MAINTENANCE BOND IN THE AMOUNT OF 10% OF THE COST OF IMPROVEMENTS.

B. BEFORE ACCEPTANCE BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED BY THE OWNER OR HIS REPRESENTATIVE. FINAL PAYMENT WILL BE MADE AFTER ALL THE CONTRACTOR'S WORK HAS BEEN APPROVED AND ACCEPTED.

C. NO UNDERGROUND WORK SHALL BE COVERED UNTIL IT HAS BEEN APPROVED BY THE MUNICIPALITY. APPROVAL TO PROCEED MUST BE OBTAINED FROM THE MUNICIPALITY PRIOR TO INSTALLING PAVEMENT BASE, BINDER, SURFACE, AND PRIOR TO PLACING ANY CONCRETE AFTER FORMS HAVE BEEN SET.

D. AT THE CLOSE OF EACH WORKING DAY AND AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS.

24. UNDERGROUND NOTES

A. UNDERGROUND WORK SHALL INCLUDE TRENCHING, INSTALLATION OF PIPE, CASTINGS, STRUCTURES, BACKFILLING OF TRENCHES AND COMPACTION AND TESTING AS SHOWN ON THE CONSTRUCTION PLANS. FITTINGS AND ACCESSORIES NECESSARY TO COMPLETE THE WORK MAY NOT BE SPECIFIED, BUT SHALL BE CONSIDERED AS INCIDENTAL TO THE COST OF THE CONTRACT.

B. WHERE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER, EXISTING DRAINAGE STRUCTURES AND SYSTEMS SHALL BE CLEANED OF DEBRIS AND PATCHED AS NECESSARY TO ASSURE INTEGRITY OF THE STRUCTURE. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STRUCTURES AND CONTRACT UNIT PRICE PER LINEAL FOOT FOR SYSTEMS WHICH SHALL BE PAYMENT IN FULL FOR CLEANING, PATCHING, REMOVAL AND DISPOSAL OF DEBRIS AND DIRT. DRAINAGE STRUCTURES AND SYSTEMS CONSTRUCTED AS PART OF THIS PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR AT HIS EXPENSE. NO PAYMENT WILL BE MADE FOR CLEANING STRUCTURES OR SYSTEMS CONSTRUCTED AS PART OF THIS PROJECT.

C. ANY DEWATERING OF SEWER AND WATER TRENCHES AS WELL AS TEMPORARY SHEETING OR BRACING THAT MAY BE REQUIRED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL NOT BE CONSIDERED EXTRA WORK UNLESS THERE IS A SPECIFIC LINE ITEM FOR DEWATERING. IN THE EVENT THAT SOFT MATERIALS WITH UNCONFINED COMPRESSIVE STRENGTH LESS THAN 0.5 TSF ARE ENCOUNTERED IN SEWER CONSTRUCTION, THE CONTRACTOR SHALL (UPON APPROVAL OF THE OWNER AND/OR ENGINEER) OVER-EXCAVATE TO A DEPTH OF ONE (1) FOOT BELOW THE BOTTOM OF THE PIPE AND BACKFILL WITH COMPACTED CRUSHED STONE, PROPERLY FORMED TO FIT THE BOTTOM OF THE PIPE.

D. TRENCH BACKFILL WILL BE REQUIRED FOR THE FULL TRENCH DEPTH WITHIN TWO (2) FEET OF PROPOSED OR EXISTING PAVEMENTS, UTILITIES, DRIVEWAYS, AND SIDEWALKS AND EXTENDING A DISTANCE EQUAL TO A 1:1 SLOPE FROM SUBGRADE ELEVATION TO TOP OF PIPE. THE TRENCH BACKFILL SHALL CONSIST OF GRANULAR MATERIAL MEETING IDOT CA-6 GRADATION. THE TRENCH BACKFILL SHALL BE COMPACTED IN ACCORDANCE WITH (SSRBC) SPECIFICATIONS. JETTING WITH WATER SHALL NOT BE PERMITTED. THE COST OF SUCH CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO THIS CONTRACT AND SHALL BE INCLUDED IN THE UNIT PRICE OF THE PIPE. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS ITEM.

E. THE CONTRACTOR SHALL INSTALL A 4"X 4" X 8' (NOMINAL) POST AT THE TERMINUS OF THE SANITARY, WATER AND STORM SERVICE, SANITARY AND STORM MANHOLES, CATCH BASINS, INLETS AND WATER VAULTS. THE POST SHALL EXTEND 4' ABOVE THE GROUND. THE TOP 12" OF SAID POST SHALL BE PAINTED AS FOLLOWS: SANITARY - RED. WATERMAIN - BLUE. STORM - GREEN.

F. AFTER THE STORM SEWER SYSTEM HAS BEEN CONSTRUCTED, THE CONTRACTOR SHALL PLACE EROSION CONTROL AT REAR YARD INLET LOCATIONS, AND AT OTHER LOCATIONS SELECTED BY THE ENGINEER, TO MINIMIZE THE AMOUNT OF SILTATION WHICH NORMALLY WOULD ENTER THE STORM SEWER SYSTEM.

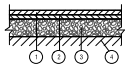
G. HYDRANTS SHALL NOT BE FLUSHED DIRECTLY ON THE ROAD SUBGRADES. WHENEVER POSSIBLE, HOSES SHALL BE USED TO DIRECT THE WATER INTO LOT AREAS OR THE STORM SEWER SYSTEM (IF AVAILABLE). DAMAGE TO THE ROAD SUBGRADE OR LOT GRADING DUE TO EXCESSIVE WATER SATURATION AND/OR EROSION FROM HYDRANT FLUSHING, OR FROM LEAKS IN THE WATER DISTRIBUTION SYSTEM, WILL BE REPAIRED BY THE CONTRACTOR AT HIS COST.

H. ALL TOP OF FRAMES FOR STORM AND SANITARY SEWERS AND VALVE VAULT COVERS ARE TO BE ADJUSTED TO MEET FINAL FINISH GRADE. THIS ADJUSTMENT IS TO BE MADE BY THE SEWER AND WATER CONTRACTOR AND THE COST IS TO BE CONSIDERED INCIDENTAL. THESE ADJUSTMENTS TO FINISHED GRADE WILL NOT ALLEVIATE THE CONTRACTOR FROM ANY ADDITIONAL ADJUSTMENTS AS REQUIRED BY THE MUNICIPALITY UPON FINAL INSPECTION OF THE PROJECT. (FINAL GRADES TO BE DETERMINED BY THE MUNICIPALITY AT THE TIME OF FINAL INSPECTION AND MAY VARY FROM PLAN GRADE.)

I. SLEEVES FOR UTILITY (COMED, TELEPHONE, ETC.) STREET CROSSING, SHALL BE INSTALLED WHERE DIRECTED BY THE OWNER. SLEEVES SHALL BE 4" PVC INSTALLED 30" BELOW THE TOP OF CURB AND EXTEND TWO FEET OUTSIDE THE CURB. TRENCH SHALL BE BACKFILLED WITH COMPACTED GRANULAR MATERIAL.

J. THE CONTRACTOR SHALL VERIFY THE SIZE AND INVERT ELEVATION OF ALL CONNECTIONS TO AVOID ANY CONFLICTS BEFORE STARTING WORK. NOTIFY OWNER OF ANY DISCREPANCIES.

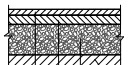
25. IT SHALL BE UNDERSTOOD THAT NEITHER THE MUNICIPALITY, ITS OFFICIALS, CONSULTANTS, NOR ITS EMPLOYEES ARE AGENTS OF OR REPRESENTATIVES OF THE OWNER, NONE-THE-LESS, THE MUNICIPALITY, ITS OFFICIALS AND EMPLOYEES ARE TO BE PROVIDED SAFE ACCESS TO ALL PHASES OF ALL WORK PERFORMED ON THE PROJECT SITE TO MONITOR THE QUALITY OF THE WORK AND ASSURE ITS CONFORMITY WITH THE PLANS AND SPECIFICATIONS. THERE SHALL BE NO PERSONAL LIABILITY UPON ANY OFFICIAL OR EMPLOYEE OF THE MUNICIPALITY ON ACCOUNT OF ACTIONS TAKEN OR NOT TAKEN IN THE COURSE OF THEIR WORK. THE CONTRACTOR MUST AT ALL TIMES MAINTAIN A SAFE ACCESS TO THE WORK FOR INSPECTORS, "SAFE", MEANING CONDITIONS COMPLYING WITH ALL PROVISIONS OF ALL APPLICABLE AND RECOGNIZED SAFETY STANDARDS, FEDERAL, STATE AND LOCAL. IF ACCESS IS NOT SAFE AND INSPECTIONS CANNOT BE MADE UNDER SAFE CONDITIONS, THE INSPECTOR CAN ORDER CESSATION OF THE WORK SO AFFECTED UNTIL SUCH TIME AS CONTRACTOR PROVIDES SAFE ACCESS.



TYPICAL ASPHALT PAVEMENT SECTION
(STANDARD DUTY - PASSENGER VEHICLE PARKING AREAS)
N.T.S.

1. 1.5" HMA SURFACE COURSE, MIX "C", N50
2. 2.25" HMA BINDER COURSE, IL 19.0, N50
3. 10" AGGREGATE BASE COURSE, TYPE B
4. COMPACTED AND STABLE SUBGRADE

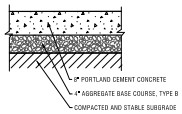
STRUCTURAL #:
1.5 X 0.40 = 0.60
2.25X 0.33 = 0.74
10.0 X 0.13 = 1.30
= 2.64



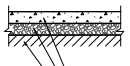
TYPICAL ASPHALT PAVEMENT SECTION
(HEAVY DUTY - TRUCK AREAS)
N.T.S.

1. 2.0" HMA SURFACE COURSE, MIX "C", N50
2. 4" HMA BINDER COURSE, IL 19.0, N50
3. 12" AGGREGATE BASE COURSE, TYPE B
4. COMPACTED AND STABLE SUBGRADE

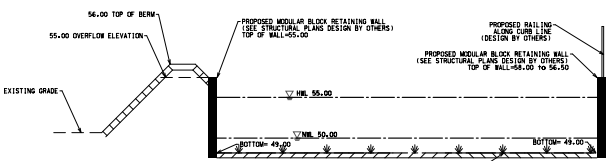
STRUCTURAL #:
2.0 X 0.40 = 0.80
4.0 X 0.33 = 1.32
6.0 X 0.13 = 1.56
= 3.68



TYPICAL CONCRETE PAVEMENT SECTION
LOADING DOCK
N.T.S.



TYPICAL SIDEWALK/PEDESTRIAN PATH SECTION
N.T.S.



NATIVE PLANTED BASIN
N.T.S.

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	DRAIN TILE	
	STORM SEWER	
	SANITARY SEWER	
	SANITARY TRUNK SEWER	
8"	WATER MAIN (WITH SIZE)	8"
	PIPE TRENCH BACKFILL	
G	GAS MAIN	G
T	TELEPHONE LINES	T
E	ELECTRIC LINE	E
	FENCE	
	RIGHT-OF-WAY	
	EASEMENT	
	PROPERTY LINE	
	SETBACK LINE	
	CENTERLINE	
680	CONTOUR	680
	SANITARY MANHOLE	
	STORM MANHOLE	
	CATCH BASIN	
	INLET	
	FIRE HYDRANT	
	PRESSURE CONNECTION	
	PIPE REDUCER	
	VALVE AND VAULT, VALVE	
	FLARED END SECTION	
	STREET LIGHT	
	UTILITY POLE	
	CONTROL POINT	
	SIGN	
XXXXX	SPOT ELEVATION	XXX+.XX
	SOIL BORING	
	OVERLAND FLOW ROUTE	
	DRAINAGE SLOPE	OR
	GUARDRAIL	
	WATER'S EDGE	
	CONCRETE	
	REVERSE PITCH CURB	
	TREE, FOR TREE, BUSH, & PROPOSED TREE TO REMOVE	

ABBREVIATIONS

M = STORM MANHOLE	I = INVERT OR INLET	T/P = TOP OF PIPE
S = SANITARY MANHOLE	TF = TOP OF FOUNDATION	B/P = BOTTOM OF PIPE
CB = CATCH BASIN	GF = GARAGE FLOOR	WM = WATERMAIN
LP = LIGHT POLE	TC = TOP OF CURB	SAN = SANITARY SEWER
VV = VALVE VAULT	TD = TOP OF DEPRESSED CURB	STM = STORM SEWER
E = END SECTION	TW = TOP OF RETAINING WALL	LO = LOOK OUT
FH = FIRE HYDRANT	BW = BOTTOM OF RETAINING WALL	PLO = PARTIAL LOOK OUT
GR = GRADE RING (HYDRANT)	OP = OUTLET OF PIPE	

PERMITS

DESCRIPTION	LOG NO.	PERMIT NO.	DATE ISSUED
IDNR ECOCAT	2202531	2202531	08/13/2021
IDNR SHPO	0070304222		
IEPA NPDES			
USACE			
IDOT			
IEPA DWPC (SANITARY)			
IEPA DPWS (WATER)			

BENCHMARK

SEE SHEET ET FOR BENCHMARK INFORMATION.

CONTACT INFORMATION

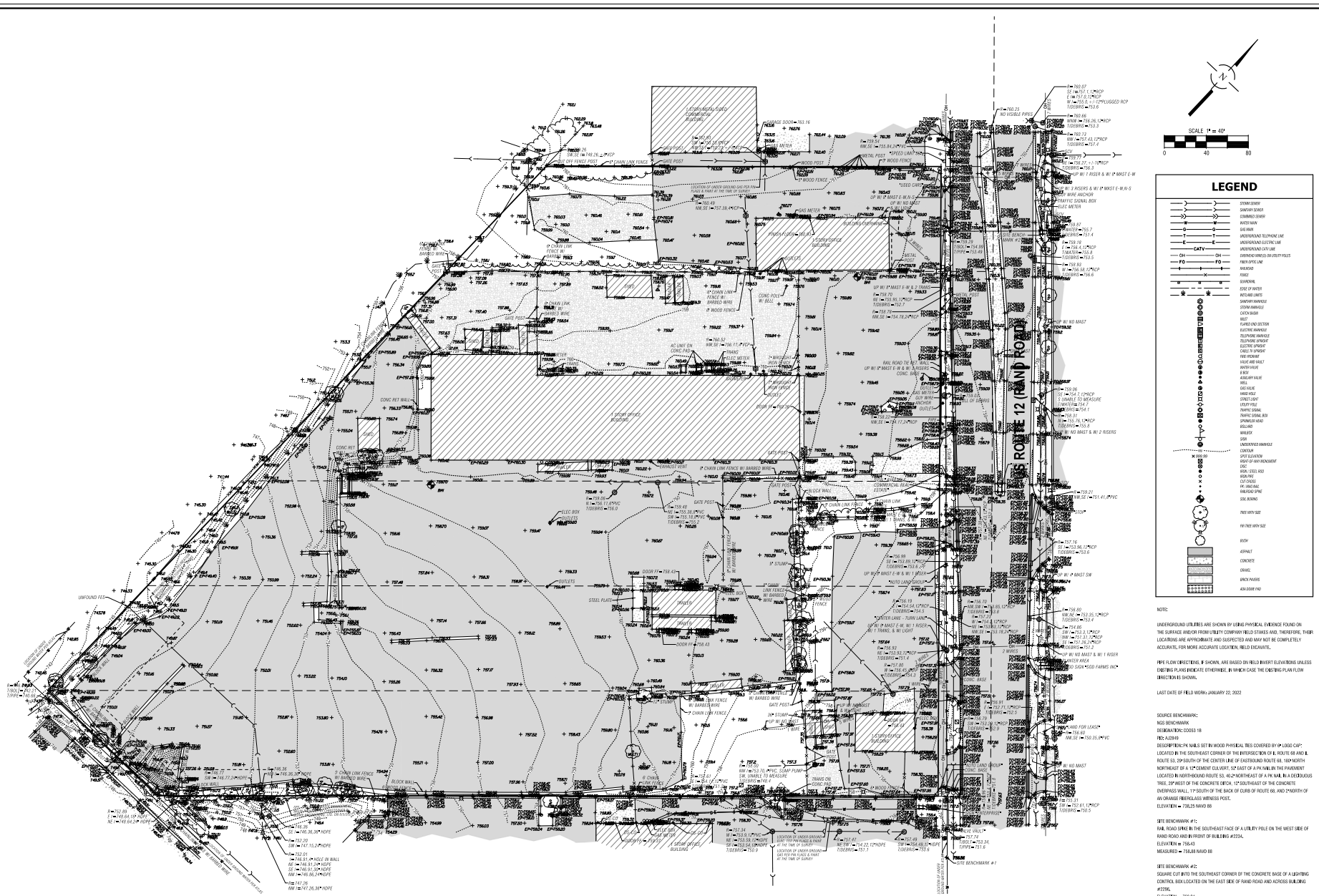
VILLAGE OF PALATINE
200 EAST WOOD STREET
PALATINE, IL 60057
(847) 358-7500

AT&T
688 INDUSTRIAL DRIVE
ELMHURST, IL 60126
(630) 600-6347

COMMONWEALTH EDISON
201 W. ARTHUR AVE.
MT. PROSPECT, IL 60056
(847) 870-7124

MCOR GAS
1011 WILEY ROAD
SCHAUMBURG, IL 60195
(847) 843-0627

NO.	DATE	REMARKS



NOTE:

UNDERGROUND UTILITIES ARE SHOWN BY USING PHYSICAL EVIDENCE FOUND ON THE SURFACE AND/OR FROM UTILITY COMPANY FIELD STAKES AND, THEREFORE, THEIR LOCATIONS ARE APPROXIMATE AND SUSPECTED AND MAY NOT BE COMPLETELY ACCURATE. FOR MORE ACCURATE LOCATION, FIELD EXCAVATE.

PIPE FLOW DIRECTIONS, IF SHOWN, ARE BASED ON FIELD INVERT ELEVATIONS UNLESS EXISTING PLANS INDICATE OTHERWISE, IN WHICH CASE THE EXISTING PLAN FLOW DIRECTION IS SHOWN.

LAST DATE OF FIELD WORK: JANUARY 22, 2022

SOURCE BENCHMARK:
NGS BENCHMARK
DESIGNATION: DOSS 18
PID: AJ2849
DESCRIPTION: PK NAILS SET IN WOOD PHYSICAL TIES COVERED BY 6" LOGO CAP" LOCATED IN THE SOUTHEAST CORNER OF THE INTERSECTION OF IL ROUTE 68 AND IL ROUTE 53, 29' SOUTH OF THE CENTER LINE OF EASTBOUND ROUTE 68, 183' NORTH NORTHEAST OF A 12" CEMENT CULVERT, 52' EAST OF A PK NAIL IN THE PAVEMENT LOCATED IN NORTHBOUND ROUTE 53, 40.2' NORTHEAST OF A PK NAIL IN A DECIDUOUS TREE, 29' WEST OF THE CONCRETE DITCH, 12' SOUTHEAST OF THE CONCRETE OVERPASS WALL, 11' SOUTH OF THE BACK OF CURB OF ROUTE 68, AND 2' NORTH OF AN ORANGE FIBERGLASS WITNESS POST.
ELEVATION = 736.25 NAVD 88

SITE BENCHMARK #1:
RAIL ROAD SPIKE IN THE SOUTHEAST FACE OF A UTILITY POLE ON THE WEST SIDE OF RAND ROAD AND IN FRONT OF BUILDING #2354.
ELEVATION = 758.43
MEASURED = 758.88 NAVD 88

SITE BENCHMARK #2:
SQUARE CUT INTO THE SOUTHEAST CORNER OF THE CONCRETE BASE OF A LIGHTING CONTROL BOX LOCATED ON THE EAST SIDE OF RAND ROAD AND ACROSS BUILDING #2296.
ELEVATION = 760.24
MEASURED = 760.38 NAVD 88

BOUNDARY PROVIDED BY OTHERS.

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

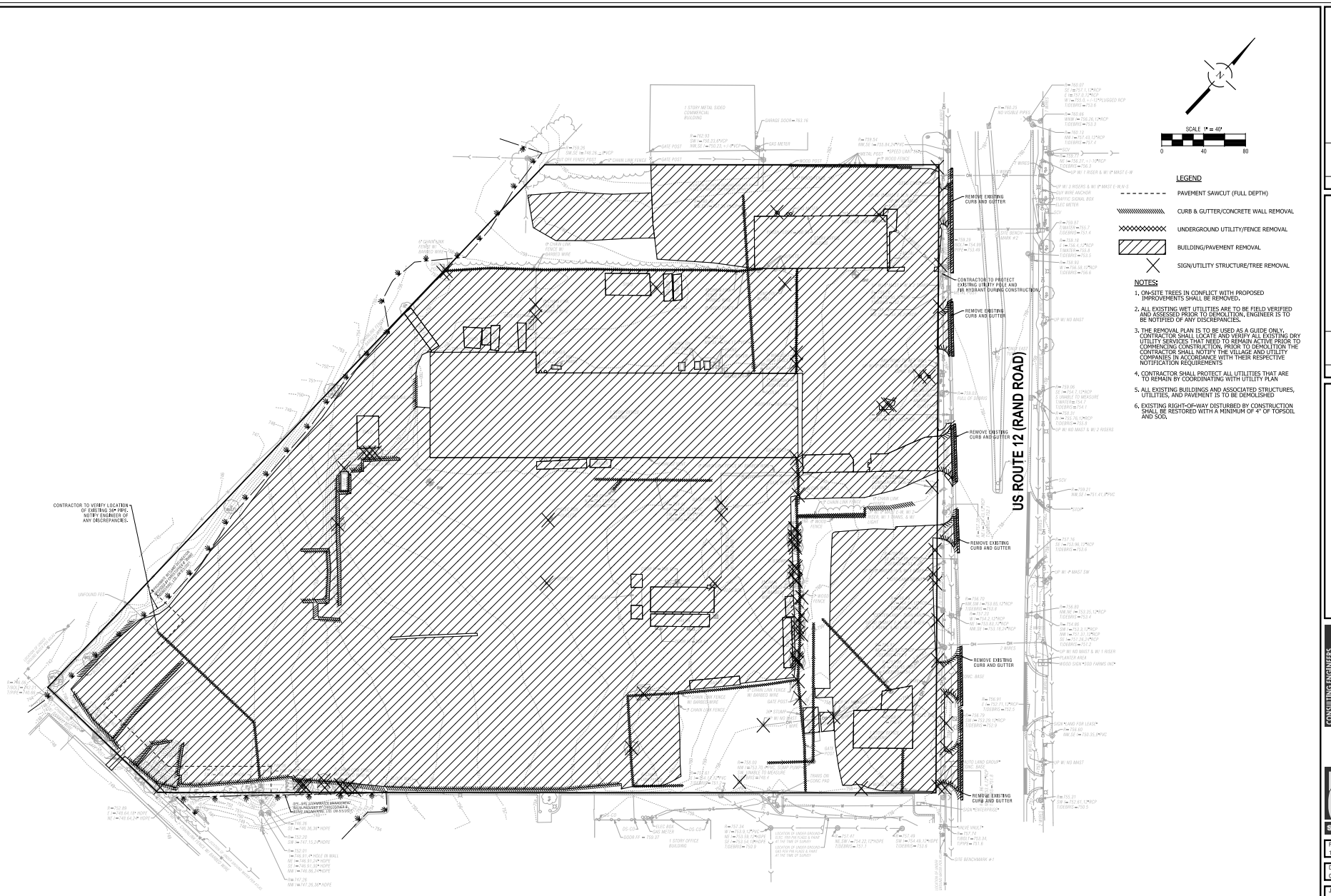
EXISTING CONDITIONS PLAN

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4400 Fax: (847) 696-4965
SPACECO INC.

FILENAME: 11624ET
DATE: 03/16/22
JOB NO. 11624
SHEET ET 3 OF

Attachment: Missner Group - ENG Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)



NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT
NO.	DATE	REMARKS

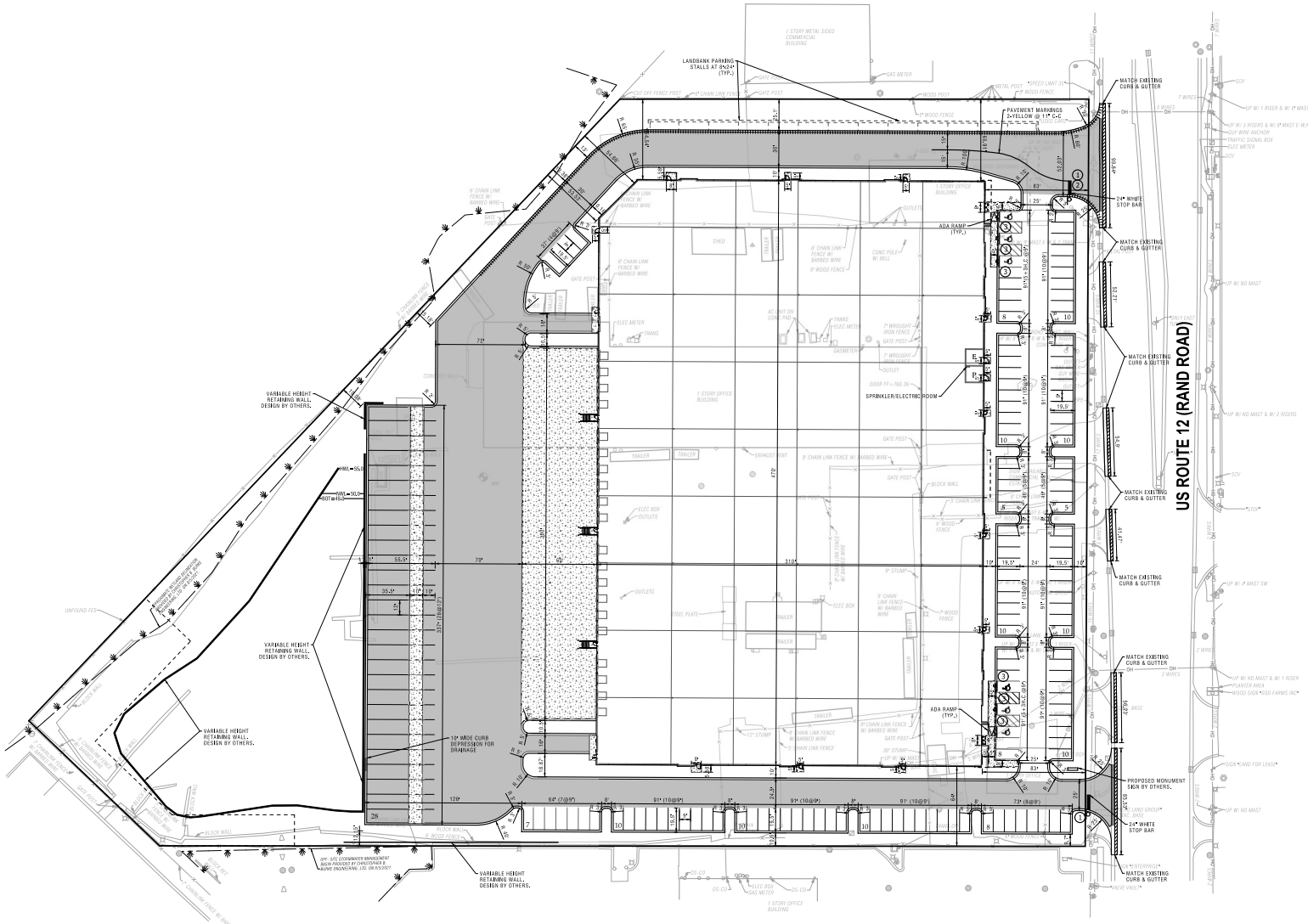
DEMOLITION PLAN

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4400 Fax: (847) 696-4065
SPACECO INC.

FILENAME: 11624DEMO
DATE: 03/16/22
JOB NO. 11624
SHEET DEMO
4 OF

Attachment: Misener Group - ENG Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)



LEGEND

- STANDARD DUTY PAVEMENT
- HEAVY DUTY PAVEMENT
- CONCRETE PAVEMENT OR APRON
- CONCRETE SIDEWALK
- CONCRETE SIDEWALK HC RAMP (5' WIDE UNLESS NOTED)
- B-6.12 CURB & GUTTER (STANDARD PITCH)
- B-6.12 CURB & GUTTER (REVERSE PITCH)
- DEPRESSED CURB & GUTTER
- MEET EXISTING PAVEMENT ADN REPLACE ADJACENT SURFACE COURSE WITH LIKE MATERIALS (2' WIDE STRIP ADJACENT TO CURB & GUTTER REMOVAL)

NOTES:

1. ALL DIMENSIONS ARE TO THE BACK OF CURB UNLESS OTHERWISE NOTED.
2. ALL CURBS AND GUTTERS ARE REVERSED PITCH UNLESS OTHERWISE NOTED.
3. SEE SHEET GN1 FOR PAVEMENT SECTION DETAILS.
4. ALL PAVEMENT MARKINGS SHALL BE PAINT.
5. ALL ACCESSIBLE PARKING SPACE SIGNAGE SHALL CONFORM TO ILLINOIS ACCESSIBILITY CODE.
6. SEE ARCHITECTURAL DRAWINGS FOR DESIGN AND DETAILS OF THE BUILDINGS
7. BOLLARDS ARE TO BE PLACED AROUND FIRE HYDRANTS LOCATED IN TRUCK DOCKS

SIGN LEGEND:

1. STOP R1-1 30" x 30"
2. ONLY R3-5R 30" X 36"
3. RESERVED PARKING R7-8 (VAN ACCESSIBLE)

NOTE: ⑧ INDICATES SIGN ① MOUNTED ABOVE SIGN ②

PARKING SUMMARY:

CAR PARKING STALLS (9' WIDE)	= 135 + (6 ADA)
-FUTURE/LANDBANK PARKING STALLS	= 13
TRAILER PARKING STALLS (12' WIDE)	= 28
SHIPPING/RECEIVING TRUCK DOCKS	= 20
DRIVE-IN DOORS	= 2

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

GEOMETRIC PLAN

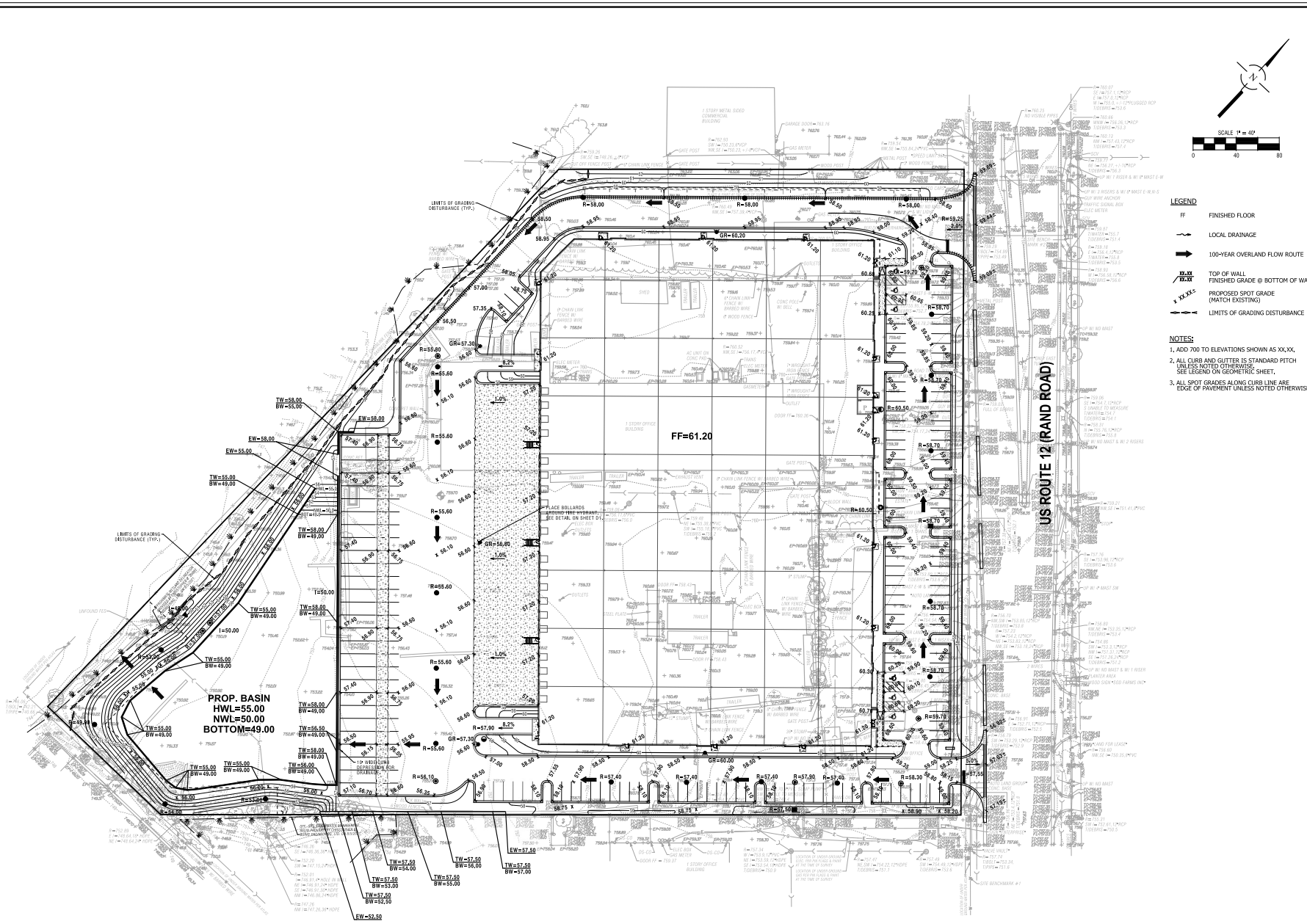
2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700
Rosemont, Illinois 60018
Phone: (847) 696-4400 Fax: (847) 696-4065
SPACECO INC.

FILENAME: 11624GM
DATE: 03/16/22
JOB NO. 11624
SHEET GM
5 OF

Attachment: Missner Group - ENG Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

GRADING PLAN

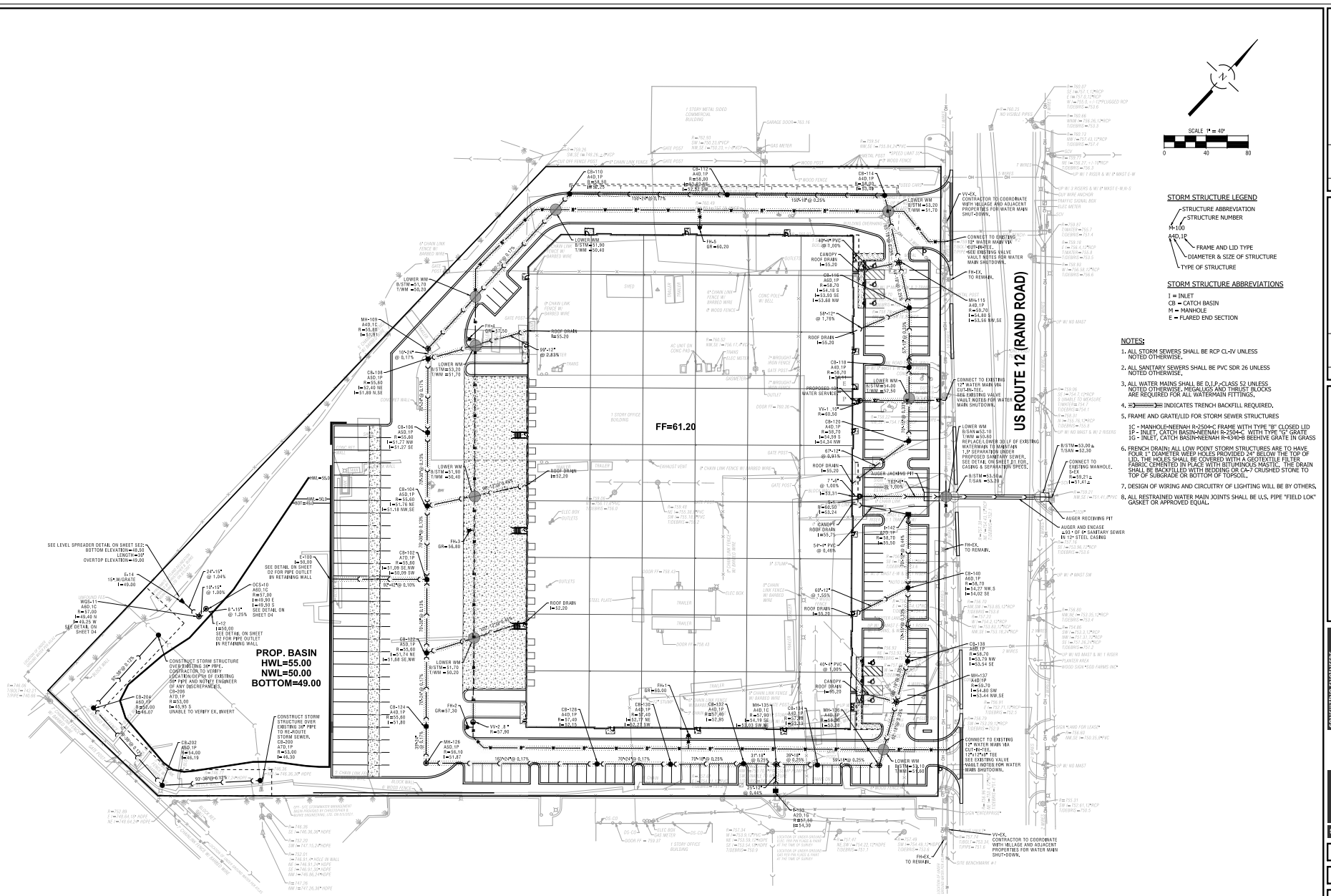
2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4400 Fax: (847) 696-4065
SPACECO INC.

FILENAME: 11624GR
DATE: 03/16/22
JOB NO. 11624
SHEET GR
6 OF

Attachment: Missner Group - ENG Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT
NO.	DATE	REMARKS

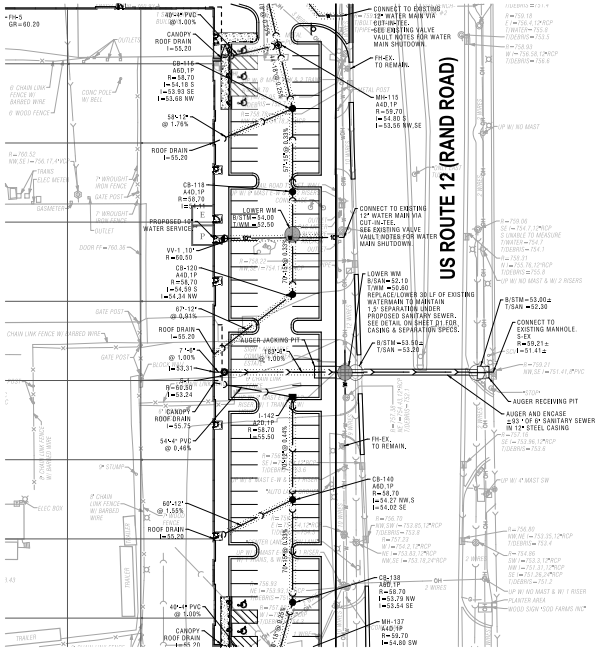
UTILITY PLAN

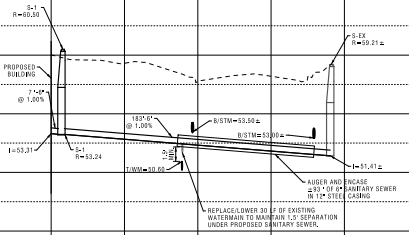
2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4400 Fax: (847) 696-4065
SPACECO INC.

FILENAME: 11624UT
DATE: 03/16/22
JOB NO. 11624
SHEET UT
7 OF

Attachment: Missner Group - ENG Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)





NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

PLAN AND PROFILE - SANITARY SEWER SERVICE

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4900 Fax: (847) 696-4965
SPACECO INC.

FILENAME: 11624PP01
DATE: 03/16/22
JOB NO. 11624
SHEET PP01
8 OF

Attachment: Missner Group - ENG Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

This Soil Erosion & Sediment Control (SESC) Plan has been prepared to fulfill one of the requirements of the National Pollutant Discharge Elimination System (NPDES) General Permit No. ILR10. The SESC Plan should be maintained on site as an integral component of the Storm Water Pollution Prevention Plan (SWPPP). The SWPPP, including the SESC Plan, should be amended whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the Waters of the State and which has not otherwise been addressed in the SWPPP. The SWPPP, shall also be amended if it proves to be ineffective in eliminating or significantly minimizing pollutants, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with construction site activity. In addition, the SWPPP shall be amended to identify any new contractor and/or subcontractor that will implement a measure of the SWPPP.

1. SITE DESCRIPTION

A. The following is a description of the nature of the construction activity: Demolition of 3 existing buildings and the construction of an industrial building with associated grading, utilities, and paving improvements.

B. The following is a description of the intended sequence of construction activities which will disturb soils for major portions of the construction site:

Describe proposed construction sequence, sample follows:

1) Install perimeter sediment control measures
   a) Selective vegetation removal for silt fence installation
   b) Silt fence installation
   c) Construction fencing around areas not to be disturbed
   d) Stabilized construction entrance
2) Clear and grub (as necessary)
3) Construct sediment trapping devices (sediment traps, sediment basins, etc.)
4) Construct detention facilities and outlet control structure with restrictor & temporary perforated riser
5) Strip topsoil, stockpile topsoil and grade site
6) Temporarily stabilize topsoil stockpiles (seed and silt fence around toe of slope)
7) Install storm sewer, sanitary sewer, watermain and associated Inlet & outlet protection
8) Permanently stabilize detention basins with seed and erosion control blanket
9) Temporarily stabilize all areas including lots that have reached mass grade
10) Install roadways
11) Permanently stabilize all outlet areas
12) Erect buildings and grade individual lots
13) Permanently stabilize lots
14) Remove all temporary soil erosion and sediment control measures after the site is stabilized with vegetation

C. The site has a total acreage of approximately 4.94 acres. Construction activity will disturb approximately 2.71 acres of the site.

D, 1) An estimated runoff coefficient of the site after construction activities are completed is 0.82.
   2) Existing data describing the soil or quality of any discharge from the site is included in the Geotechnical Investigation Report prepared by Pioneer Engineering & Environmental Services, LLC (Project No. P-22-0292-CS1, dated August 29, 2022).

E. Refer to Sheets GR & UT for a site plan indicating:
   1) drainage patterns;
   2) approximate slopes anticipated before and after major grading activities;
   3) locations where vehicles enter or exit the site and controls to minimize off-site sediment tracking;
   4) areas of soil disturbance;
   5) the location of major structural and nonstructural controls;
   6) the location of areas where stabilization practices are expected to occur;
   7) surface waters (including wetlands); and,
   8) locations where storm water is discharged to a surface water.

F, 1) The name of the receiving water(s) is/are: Buffalo Creek Tributary.
   2) The name of the ultimate receiving water is: Des Plaines River.
   3) The extent of wetland acreage at the site is: 0.15 acres.

G. Potential sources of pollution associated with this construction activity may include:

- fuel tanks
- hydraulic systems
- vehicle storage areas
- storage areas for petroleum products
- asphalt
- cement
- solvents
- detergents
- sanitary wastes
- raw materials (e.g., bagged portland cement)
- construction debris
- landscape waste
- concrete and concrete trucks
- litter

2. CONTROLS

This section of the SESC Plan addresses the various controls that should be implemented for each of the major construction activities described in the "Site Description" section. For each measure identified in the SWPPP, the contractor(s) or subcontractor(s) that will implement the measure should be identified. All contractors and subcontractors that are identified should be required to sign a copy of the certification statement from Part IX.C. of the ILR10 Permit (in accordance with Part IX.B. - Signatory Requirements, of the ILR10 Permit). All signed certification statements should be maintained in the SWPPP.

A. Approved State or Local Plans

The management practices, controls and other provisions contained in the SWPPP should be at least as protective as the requirements contained in the Illinois Environmental Protection Agency's (IEPA) and the United States Department of Agriculture's Natural Resource Conservation Service's Illinois Urban Manual. 2012. Requirements specified in sediment and erosion control site plans or site permits or storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of a Notice of Intent (NOI) to be authorized to discharge under the ILR10 permit, incorporated by reference and are enforceable under the ILR10 permit even if they are not specifically included in a SWPPP required under the ILR10 permit. This provision does not apply to provisions of master plans, comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit that is issued for the construction site.

The soil erosion and sediment control measures for this site should meet the requirements of the following agencies:

- Village of Palatine
- MWRD
- IEPA
- U.S. Army Corps of Engineers

B. Control Implementation Schedule

Best Management Practices will be implemented on an as-needed basis to protect water quality. Perimeter controls of the site should be installed prior to soil disturbance (excluding soil disturbance necessary to install the controls), including demolition activities. Perimeter controls, including the silt fence, should be actively maintained until final stabilization of those portions of the site upward of the perimeter control. Stabilized construction entrance(s) and sediment traps should be installed as described in the intended sequence of construction activities. The contractor is responsible for the adequate protection (including sediment control) of adjoining sewers and sewer structures during construction operations. As necessary, the appropriate sediment control measure should be installed prior to land disturbing activities.

Stabilization measures should be initiated where construction activities have temporarily or permanently ceased, in accordance with Local and State requirements, as described below. Once construction activity in an area has permanently ceased, that area should be permanently stabilized. Temporary perimeter controls should be removed after final stabilization of those portions of the site upward of the perimeter control.

C. Erosion and Sediment Controls

The appropriate soil erosion and sediment controls should be implemented on site and should be modified to reflect the current phase of construction. All temporary sediment and erosion control measures should be repaired or replaced as soon as practicable to maintain NPDES compliance. Permittee or an authorized agent is responsible for inspecting all sediment and erosion control measures at a minimum of every 7 calendar days and within 24 hours, or one working day, of the end of a 0.5-inch (or greater) rain event.

Unless otherwise indicated, all vegetative and structural erosion and sediment control practices should be installed to the Standard Practice. The contractor is responsible for the installation of any additional erosion and sediment control measures necessary to minimize erosion and sedimentation as determined by the Engineer or Primary Contact.

1) Stabilization Practices - Areas that will not be paved or covered with non-erosive material should be stabilized using procedures in substantial conformance with the Illinois Urban Manual. This SESC Plan includes site-specific soil erosion and sediment control measures. Additional erosion controls should be implemented as necessary, as determined by the Engineer or Primary Contact.

The following temporary and permanent stabilization practices, at a minimum, are proposed:

- permanent seeding
- temporary seeding
- erosion control blanket
- other measures

Site-specific scheduling of the implementation of these practices is included in the Soil Protection Chart. A record of the dates when major grading activities occur, when construction activities cease on a portion of the site, and when stabilization measures are initiated should be included in the SWPPP.

Stabilization of disturbed areas must be initiated within 1 working day of permanent or temporary cessation of earth activities and shall be completed as soon as possible but not later than 14 days from the initiation of stabilization work in an area. Exceptions to these time frames are specified below.

   a. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.

   b. On areas where construction activity has temporarily ceased and will resume after 14 days, a temporary stabilization method can be used. Temporary stabilization techniques and materials shall conform to the SWPPP.

2) Structural Practices - Provided below is a description of structural practices that should be implemented, to the degree attainable to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Structural practices should be placed on upland soils to the degree practicable. The installation of the following devices may be subject to Section 404 of the Clean Water Act:

- shaft and construction entrance
- silt fence
- sediment traps (provide locations and dimensions in plan set)
- other measures

D. Storm Water Management

Provided below is a description of measures that will be installed during the construction process to control the pollutants in storm water discharges that will occur after the construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

1) The practices selected for implementation were determined on the basis of technical guidance contained in IEPA/Illinois Urban Manual, Federal, State, and/or Local Requirements. The storm water management measures include:

- detention basins (wet basins, dry basins, etc.)
- retention basins
- vegetated swales
- infiltration trenches
- other measures

2) Velocity dissipation devices, such as rip-rap aprons at flared end sections or level spreaders, shall be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a watercourse so that the natural, physical, and biological characteristics and functions are maintained and protected (e.g., maintenance of hydrologic conditions, such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

E. Waste Management

Solid waste materials including trash, construction debris, excess construction materials, machinery, tools and other items will be collected and disposed of off-site by the contractor. The contractor is responsible to acquire the permit required for such disposal. Burning on site will not be permitted. No solid materials, including building materials, shall be discharged to Waters of the State, except as authorized by a Section 404 permit. All waste materials should be collected and stored in approved receptacles. No wastes should be placed in any location other than in the approved containers appropriate for the materials being discarded. There should be no liquid wastes deposited into dumpsters or other containers which may leak. Receptacles with deficiencies should be replaced as soon as possible and the appropriate clean-up procedure should take place, if necessary. Construction waste materials not to be buried on site. Waste disposal should comply with all Local, State, and Federal regulations.

On-site hazardous material storage should be minimized and stored in labeled, separate receptacles from non-hazardous waste. All hazardous waste should be disposed of in the manner specified by Local or State regulation or by the manufacturer.

F. Concrete Waste Management

Concrete waste or washout should not be allowed to the street or allowed to reach a storm water drainage system or watercourse. When practicable, a sign should be posted at each location to identify the washout. To the extent practicable, concrete washout areas should be located a reasonable distance from a storm water drainage inlet or watercourse, and should be located at least 10 feet behind the curb, if the washout area is adjacent to a paved road. A stabilized entrance that meets Illinois Urban Manual standards should be installed at each washout area.

The containment facilities should be of sufficient volume to completely contain all liquid and concrete waste materials including enough capacity for anticipated levels of rainwater. The dried concrete waste material should be picked up and disposed of properly when 66% capacity is reached. Hardened concrete can be properly recycled and used again on site (as approved by the Engineer) or hauled off site to an appropriate landfill.

G. Concrete Curing

Concrete waste management should be implemented to contain and dispose of saw-cutting slurries. Concrete cutting should not take place during or immediately after a rainfall event. Waste generated from

concrete cutting should be cleaned-up and disposed into the concrete washout facility as described above.

H. Vehicle Storage and Maintenance

When not in use, construction vehicles should be stored in a designated area(s) outside of the regulatory floodplain, away from any natural or created watercourse, pond, drainage-way or storm drain. Controls should be installed to minimize the potential of runoff from the storage area(s) from reaching storm drains or water courses. Vehicle maintenance (including both routine maintenance as well as on-the-road repairs) should be made within a designated area(s) to prevent the migration of mechanical fluids (oil, antifreeze, etc.) into watercourses, wetlands or storm drains. Drip pans or absorbent pads should be used for all vehicle and equipment maintenance activities that involve grease, oil, solvents, or other vehicle fluids. Construction vehicles should be inspected frequently to identify any leaks should be repaired immediately or the vehicle should be removed from site. Disposal of all used oil, antifreeze, solvents and other vehicle-related chemicals in accordance with United States Environmental Protection Agency (USEPA) and IEPA regulations and per Material Safety Data Sheet (MSDS) and/or manufacturer instructions. Contractors should immediately report spills to the Primary Contact.

I. Material Storage and Good Housekeeping

Materials and/or contaminants should be stored in a manner that minimizes the potential to discharge into storm drains or watercourses. An on-site area should be designated for material delivery and storage. All materials kept on site should be stored in their original containers with legible labels, and if possible, under a roof or other enclosure. Labels should be replaced if damaged or difficult to read. Berms or off-storage areas are an acceptable control measure to prevent contamination of storm water. MSDS should be available for referencing clean-up procedures. Any release of chemicals/contaminants should be immediately cleaned up and disposed of properly. Contractors should immediately report all spills to the Primary Contact, who should notify the appropriate agencies, if needed.

To reduce the risks associated with hazardous materials on site, hazardous products should be kept in original containers unless they are not re-sealable. The original labels and MSDS should be retained on site at all times. Hazardous materials and all other material on site should be stored in accordance with manufacturer or MSDS specifications. When discarding of hazardous materials, follow manufacturer or Local and State recommended methods.

The following good housekeeping practices should be followed on site during the construction project:

- An effort should be made to store only enough product required to do the job.
- All materials stored on site should be stored in a neat, orderly manner in their appropriate containers and adequately protected from the environment.
- Products should be kept in their original containers with the original manufacturer's label.
- Substances should not be mixed with one another unless recommended by the manufacturer.
- Operations should be observed as necessary to ensure proper use and disposal of materials on site.
- Whenever possible, all of a product should be used up before disposing of the container.
- Manufacturer's recommendations for proper use and disposal should be followed.

J. Management of Portable Sanitary Stations

To the extent practicable, portable sanitary stations should be located in an area that does not drain to any protected natural areas, Waters of the State, or storm water structures and should be anchored to the ground to prevent from flowing over. Portable sanitary stations located on impervious surfaces should be placed on top of a secondary containment device, or be surrounded by a control device (e.g., gravel-bag berm). The contractor should not create or allow unsanitary conditions. Sanitary waste should be disposed of in accordance with applicable State and/or Local regulations.

K. Spill Prevention and Clean-Up Procedures

Manufacturer's recommended methods for spill clean-up should be available and site personnel should be made aware of the procedures and the location of the information and clean-up supplies. Materials and equipment necessary for spill clean-up should be kept in the material storage area on site. Equipment and materials should include, but are not limited to, brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust and plastic and/or metal trash containers specifically for this purpose. Discharges of a hazardous substance or oil caused by a spill (e.g., a spill of 10 litres or more to a separate storm sewer or Waters of the State) are not authorized by the ILR10 permit. If a spill occurs, notify the Primary Contact immediately. The construction site should have the capacity to control, contain, and remove spills if they occur. Spills should be cleaned up immediately (after discovery) in accordance with MSDS and should not be buried on site or washed into storm sewer drainage inlets, drainage-ways, or Waters of the State.

Spills in excess of Federal Reportable Quantities (as established under 40 CFR Parts 110, 117, or 302), should be reported to the National Response Center by calling (800) 424-8802. MSDS often include information on Federal Reportable Quantities for materials. Spills of toxic or hazardous materials should be reported to appropriate State or Local government agency, as required. When cleaning up a spill, the area should be kept well ventilated and appropriate personal protective equipment should be used to minimize injury from contact with a hazardous substance.

In addition to the good housekeeping and other management practices discussed in the previous sections of these Notes, the following minimum practices should be followed to reduce the risk of spills:

- On-site vehicles should be monitored for leaks and should receive regular preventative maintenance to reduce the chance of leakage.
- Petroleum products should be stored in tightly sealed and clearly labeled containers.
- Contractors should follow the manufacturer's recommendations for proper use, storage, and disposal of materials. Excess materials should be disposed of according to the manufacturer's instructions or State and Local regulations, and should not be discharged to the storm sewer or waterbody.

L. De-Watering Operations

During de-watering/pumping operations, only uncontaminated water should be allowed to discharge to protected natural areas, Waters of the State, or to a storm sewer system (in accordance with Local permits). Inlet hoses should be placed in a stabilized sump pit or located at the surface of the water in order to limit the amount of sediment intake. Pumping operations may be discharged to a stabilized area that consists of an energy dissipating device (e.g., stone), sediment filter bag, or both. Adequate erosion controls should be used during de-watering operations as necessary. Stabilized conveyance channels should be installed to direct water to the desired location as applicable. Additional control measures may be installed at the outlet area at the discretion of the Primary Contact or Engineer.

M. Off-Site Vehicle Tracking

The site should have one or more stabilized construction entrances in conformance with the Plan details. Stabilized construction entrance(s) should be located to help reduce vehicle tracking of sediments. Streets should be swept as needed to reduce excess sediment, dirt, or stone tracked from the site. Maintenance may include top dressing the stabilized entrance with additional stone and removing top layers of stone and sediment, as needed. Vehicles hauling erodible material to and from the construction site should be covered with a tarp.

N. Topsoil Stockpile Management

If topsoil is to be stockpiled at the site, select a location so that it will not erode, block drainage, or interfere with work on site. Topsoil stockpiles should not be located in the 100-year floodplain or designated buffer protecting Waters of the State. During construction of the project, soil stockpiles should be stabilized or protected with sediment trapping measures. Perimeter controls, such as silt fence, should be placed around the stockpile immediately. Stabilization of the stockpile should be completed if the stockpile is to remain undisturbed for longer than fourteen days.

O. Dust Control

Dust control should be implemented on site as necessary. Repetitive treatment should be applied as needed to accomplish control when temporary dust control measures are used. A water truck should be present on site (or available) for sprinkling/irrigation to limit the amount of dust leaving the site. Watering should be applied daily (or more frequently) to be effective. Caution should be used not to overwater, as that may cause erosion.

If field observations indicate that additional protection from wind erosion (in addition to, or in place of watering) is necessary, alternative dust suppressant controls should be implemented at the discretion and approval of the Engineer and/or Primary Contact.

Street cleaning should also be used as necessary to control dust. Paved areas that have soil on them from the construction site should be cleaned as needed, utilizing a street sweeper or bucket-type endloader or scraper at the direction of the Engineer and/or Primary Contact.

3. MAINTENANCE

Maintenance of the controls incorporated into this project should be performed as needed to assure their continued effectiveness. This includes prompt and effective repair and/or replacement of deficient control measures. The following is a description of procedures that should be used to maintain, in good and effective operating condition, erosion and sediment control measures and other protective measures identified in the SESC Plan and Standard Specifications.

Dust control: When temporary dust control measures are used, repetitive treatment should be applied as needed to accomplish control.

Sediment filter bags: Sediment filter bags should be installed on pump outlet hoses that discharge off site or to sensitive on-site areas, and should be placed in an area that allows for the bag to be removed without producing a sediment discharge. The bags should be inspected frequently and repaired or replaced as needed.

Silt fence: Silt fences should be inspected regularly for undercutting where the fence meets the ground, overtopping, and tears along the length of the fence. Deficiencies should be repaired immediately. Barrier sediment accumulations from the fence base when the sediment reaches one-half the fence height. During final stabilization, properly dispose of any sediment that has accumulated on the silt fence. Alternative sediment control measures should be considered for areas where silt fence continually fails.

Stabilized construction entrance: The stabilized construction entrances should be maintained to prevent tracking of sediment onto public streets. Maintenance includes top dressing with additional stone and removing top layers of stone and sediment. The sediment tracked onto the public right-of-way should be removed immediately.

Temporary sediment traps: Temporary sediment traps should be inspected after each period of significant rainfall. Remove sediment and restore the trap to its original dimensions when the sediment has accumulated to one-half the design depth of the permanent pool. Place the sediment that is removed in a designated disposal area. Check the structure for damage from erosion or piping. After all sediment-producing areas have been permanently stabilized, remove the structure and all unstable sediment. Grade the area to blend with the adjoining areas and stabilize properly.

4. INSPECTIONS

The Permittee (or their authorized representative) will be responsible for conducting site inspections in compliance with the ILR10 NPDES Permit. After each inspection, a report should be prepared by the qualified personnel who performed the inspection. The inspection report should be maintained on site as part of the SWPPP.

Inspections should be conducted at least once every seven calendar days and within 24 hours or by the end of the following work day, of the end of a storm event that is 0.5 inches or greater, or equivalent snowfall.

Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly inspections will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs.

Each inspection should include the following components:

A. Disturbed areas and areas used for the storage of materials that are exposed to precipitation should be inspected for evidence of, or the potential for, pollutants entering the drainage system. The erosion and sediment control measures identified in the SWPPP should be observed to ensure that they have been installed and are operating correctly. Where discharge points are accessible, they should be inspected to determine whether erosion control measures are effective in preventing significant impacts to the receiving waters. Locations where vehicles enter or exit the site should be inspected for off-site sediment tracking. All running operations and other potential non-storm water discharge sources should also be inspected.

B. Based on the results of the inspection, the description of potential pollutant sources identified, and the pollution prevention measures described in the SWPPP should be revised, as appropriate, as soon as practicable after the inspection. The modifications, if any, shall provide for timely implementation of any changes to the SWPPP within 7 calendar days following the inspection.

C. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the SWPPP, and actions taken in accordance with paragraph B, above should be made and retained as part of the SWPPP for at least three years from the date that permit coverage expires or is terminated. The report shall be signed in accordance with Part VI.G. (Signatory Requirements) of the ILR10 NPDES Permit.

D. The Permittee shall notify the appropriate agency field operations section office by e-mail at epa.swnoncompli@illinois.gov, telephone or fax within 24 hours of any incidences of noncompliance for any violation of the ILR10 SWPPP or pollution prevention plan observed during any inspection conducted or for violation of any condition of this permit. The Permittee should complete and submit within 5 days an "Incidence of Non-Compliance" (ION) report for any violation of the SWPPP observed during an inspection conducted, including those not required by the SWPPP. Submission should be on forms provided by IEPA and include specific information on the cause of non-compliance, actions which were taken to prevent any further causes of non-compliance, and a statement detailing any environmental impact which may have resulted from the non-compliance.

E. All reports of non-compliance shall be signed by a responsible authority as defined in Part VI.G. (Signatory Requirements), of the ILR10 NPDES Permit.

F. After the initial contact has been made within the appropriate agency field operations section office, all reports of non-compliance shall be mailed to IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

5. NON-STORM WATER DISCHARGES

Except for flows from fire fighting activities, possible sources of non-storm water that may be combined with storm water discharges associated with the proposed activity, are described below:

- Fire fighting activities
- Fire hydrant flushings
- Water used to wash vehicles where detergents are not used
- Water used to control dust
- Potable water sources including uncontaminated waterline flushings
- Landscape irrigation drainages
- Routine external building washdown which does not use detergents
- Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed) and where detergents have not been used,
- Uncontaminated air conditioning condensate
- Springs
- Irrigation ditches
- Uncontaminated ground water
- Foundation or footing drains where flows are not contaminated with process materials such as solvents

6. PROHIBITED NON-STORMWATER DISCHARGES

- Concrete and wastewater from washout of concrete (unless managed by an appropriate control)
- Drywall compound
- Wastewater from washout and cleanout of stucco, paint
- Form release oils
- Curing compounds and other construction materials
- Fuels, oils, or other pollutants used in vehicle or equipment operation and maintenance
- Soaps, solvents, or detergents
- Toxic or hazardous substances from a spill or other release
- Any other pollutant that could cause or tend to cause water pollution

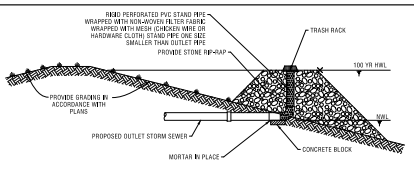
Pollution prevention measures should be implemented for non-storm water components of the discharge.

STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING			A									
DORMANT SEEDING	B										B	
TEMPORARY SEEDING			C				D					
SODDING			E**									
MULCHING	F											

A KENTUCKY BLUEGRASS 90 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 30 LBS/ACRE.
B KENTUCKY BLUEGRASS 135 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 45 LBS/ACRE + STRAW MULCH 2 TONS/ACRE.
C SPRING OATS 100 LBS/ACRE
D WHEAT OR CEREAL RYE 150 LBS/ACRE.
E SOD
F STRAW MULCH 2 TONS/ACRE.

* IRRIGATION NEEDED DURING JUNE AND JULY.
** IRRIGATION NEEDED FOR 2 TO 3 WEEKS AFTER APPLYING SOD.

SOIL PROTECTION CHART



PERFORATED RISER DETAIL
NOT TO SCALE

PLAN CODE: (PR)

1. THE PERFORATED RISER SHALL BE PROVIDED AS PART OF THE SEDIMENT AND EROSION CONTROL MEASURES DURING CONSTRUCTION AND IN CONJUCTION WITH THE CONSTRUCTION OF THE DETENTION BASIN.
2. WHEN THE DETENTION BASIN AND UPSTREAM TRIBUTARY DRAINAGE AREAS ARE REVEGETATED, AND WHEN DIRECTED BY THE ENGINEER, THE PERFORATED RISER SHALL BE REMOVED AND THE BASIN OUTFALL STRUCTURES SHALL BE CONSTRUCTED AND THE GRADING RESTORED IN ACCORDANCE WITH THE PLANS.

CONTRACTOR CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (ILR10) THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

PROJECT: _____

PERMIT #: ILR10_____

_____ DATE

CONTRACTOR SIGNATURE

_____ TELEPHONE NUMBER

PRINTED NAME & TITLE

_____

NAME OF CONTRACTING FIRM

_____

STREET ADDRESS

_____

CITY, STATE, ZIP CODE

TRADE/ RESPONSIBILITIES:_____

_____

_____

_____

NOTE:
ALL CONTRACTORS PERFORMING WORK ON THIS SITE ARE REQUIRED TO SIGN A CONTRACTOR CERTIFICATION STATEMENT AS ILLUSTRATED ABOVE. THE SIGNED STATEMENTS WILL BE MAINTAINED ON THE SITE WITH THE SWPPP.

OWNER SWPPP CERTIFICATION

PROJECT: _____

PERMIT #: ILR10_____

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

_____

SIGNATURE OF OWNER _____ DATE

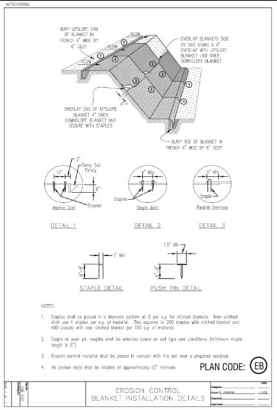
_____

PRINTED NAME OF OWNER

NOTE:
THE CERTIFICATION ILLUSTRATED ABOVE SHALL BE SIGNED BY THE OWNER LISTED ON THE NOTICE OF INTENT IN ACCORDANCE WITH PART VI.G. OF THE ILR10 NPDES PERMIT. THE SIGNED STATEMENT SHALL BE MAINTAINED ON THE SITE WITH THE SWPPP.

OUTFALL NAME OR NUMBER	INLET PIPE SIZE d (IN)	VELOCITY (V/S)	LENGTH OF APRON L (FT)	RIPRAP GRADATION	WIDTH OF APRON U/S FACE 3d (FT)	WIDTH OF APRON D/S FACE 3d+L (FT)	DEPTH OF RIPRAP Y (IN)

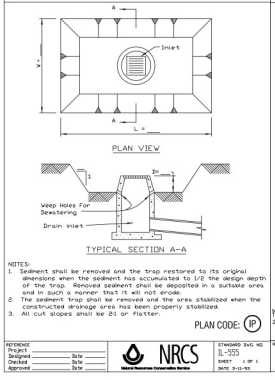
NO.	DATE	REMARKS



EROSION CONTROL BLANKET INSTALLATION DETAILS

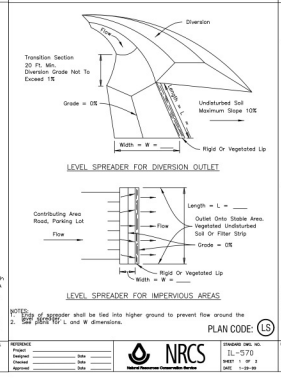
PLAN CODE: EB

INLET PROTECTION - EXCAVATED DRAIN PLAN



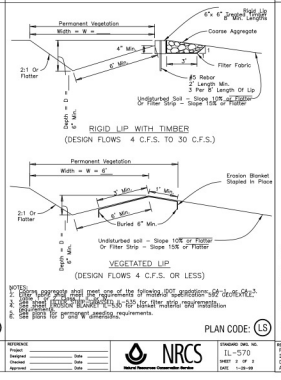
PLAN CODE: IP

LEVEL SPREADER



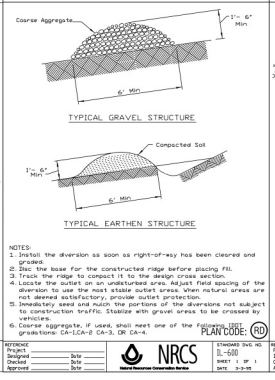
PLAN CODE: LS

LEVEL SPREADER



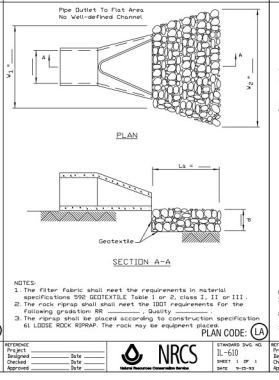
PLAN CODE: LS

RIGHT OF WAY DIVERSION PLAN



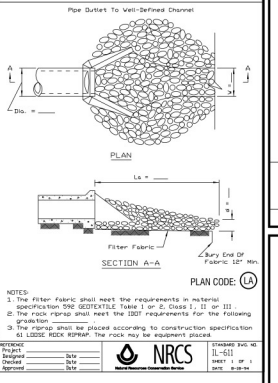
PLAN CODE: RD

PIPE OUTLET TO FLAT AREA



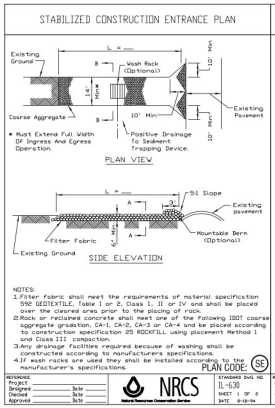
PLAN CODE: LA

PIPE OUTLET TO CHANNEL



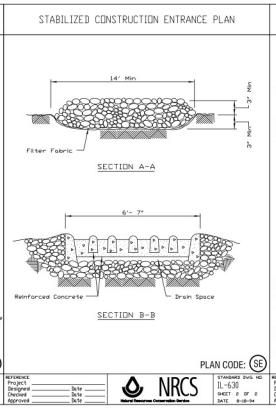
PLAN CODE: LA

STABILIZED CONSTRUCTION ENTRANCE PLAN



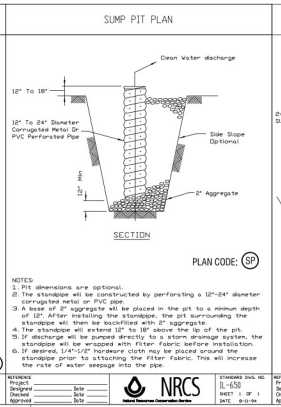
PLAN CODE: SE

STABILIZED CONSTRUCTION ENTRANCE PLAN



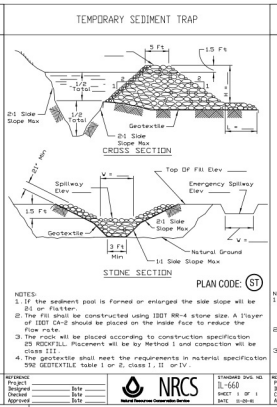
PLAN CODE: SE

SUMP PIT PLAN



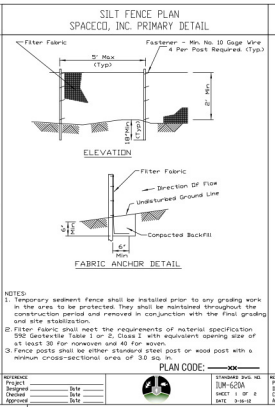
PLAN CODE: SP

TEMPORARY SEDIMENT TRAP



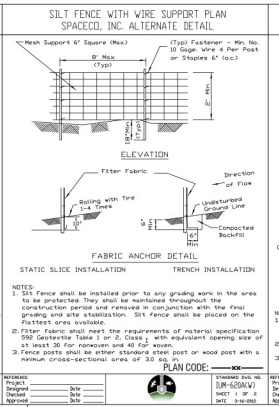
PLAN CODE: ST

SILT FENCE PLAN SPACECO, INC. PRIMARY DETAIL



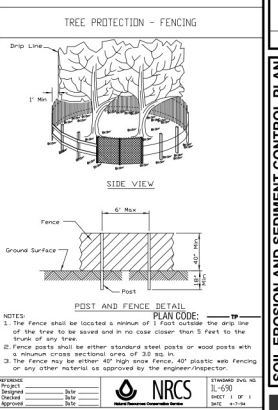
PLAN CODE: XX

SILT FENCE WITH WIRE SUPPORT PLAN SPACECO, INC. ALTERNATE DETAIL



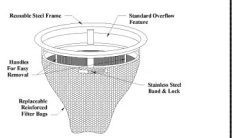
PLAN CODE: XX

TREE PROTECTION - FENCING



PLAN CODE: TP

Catch-All • is a manufactured inlet filtration device designed to significantly reduce the ingress of pollutants into stormwater systems, and therefore, improve water quality. Designs are available for a custom fit in virtually any drainage structure casting.

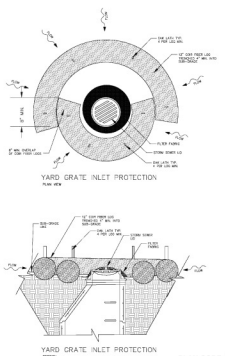


Catch-All HR is available to provide the added benefit of hydrocarbon removal.

Design Benefits
1. Pollution Prevention
   - Sediment Control
2. Pollution Removal
   - Hydrocarbons (Catch-All HR)
   - Total Suspended Sediment
   - Phosphorus*
   - Nitrogen*
   - Heavy Metals*
   By virtue of sediment control

Applications
1. Site Development & Highway Construction
   - Inlet Protection / Sediment Control
2. Permanent BMP
   - Maintenance Yards
   - Wash Bays
   - Parking Lots & Garages
   - Airports – Tarmac, Cab/Limo Stands, Rental Returns
   - Bank/Fast Food Drive-Ups
   - Reduce Maintenance of Underground Detention Systems
   - Reduce Maintenance of Underground Oil/Water Separators

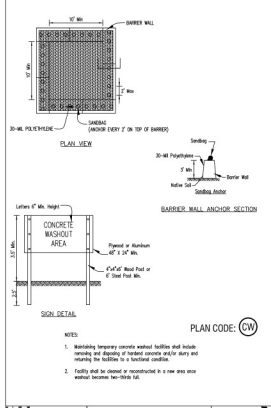
PLAN CODE: FF



YARD GRATE INLET PROTECTION

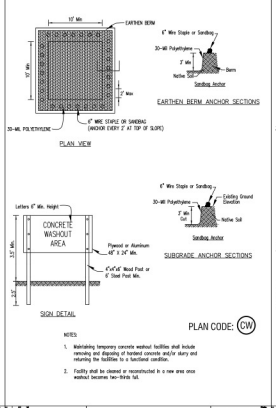
PLAN CODE: FF

TEMPORARY CONCRETE WASHOUT FACILITY – BARRIER WALL



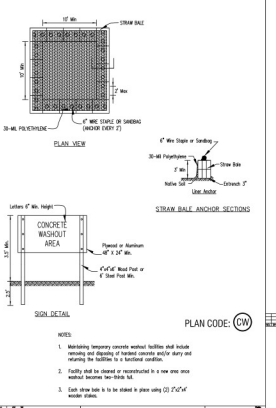
PLAN CODE: CW

TEMPORARY CONCRETE WASHOUT FACILITY – EARTHEN TYPE

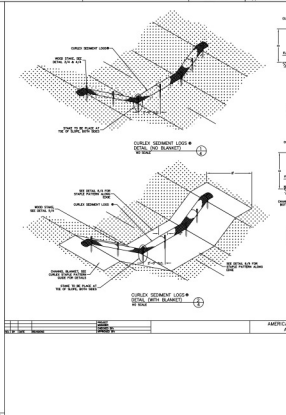


PLAN CODE: CW

TEMPORARY CONCRETE WASHOUT FACILITY – STRAW BALE



PLAN CODE: CW



PLAN CODE: OC

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

SOIL EROSION AND SEDIMENT CONTROL PLAN

2240-2296 RAND ROAD
PALATINE, ILLINOIS

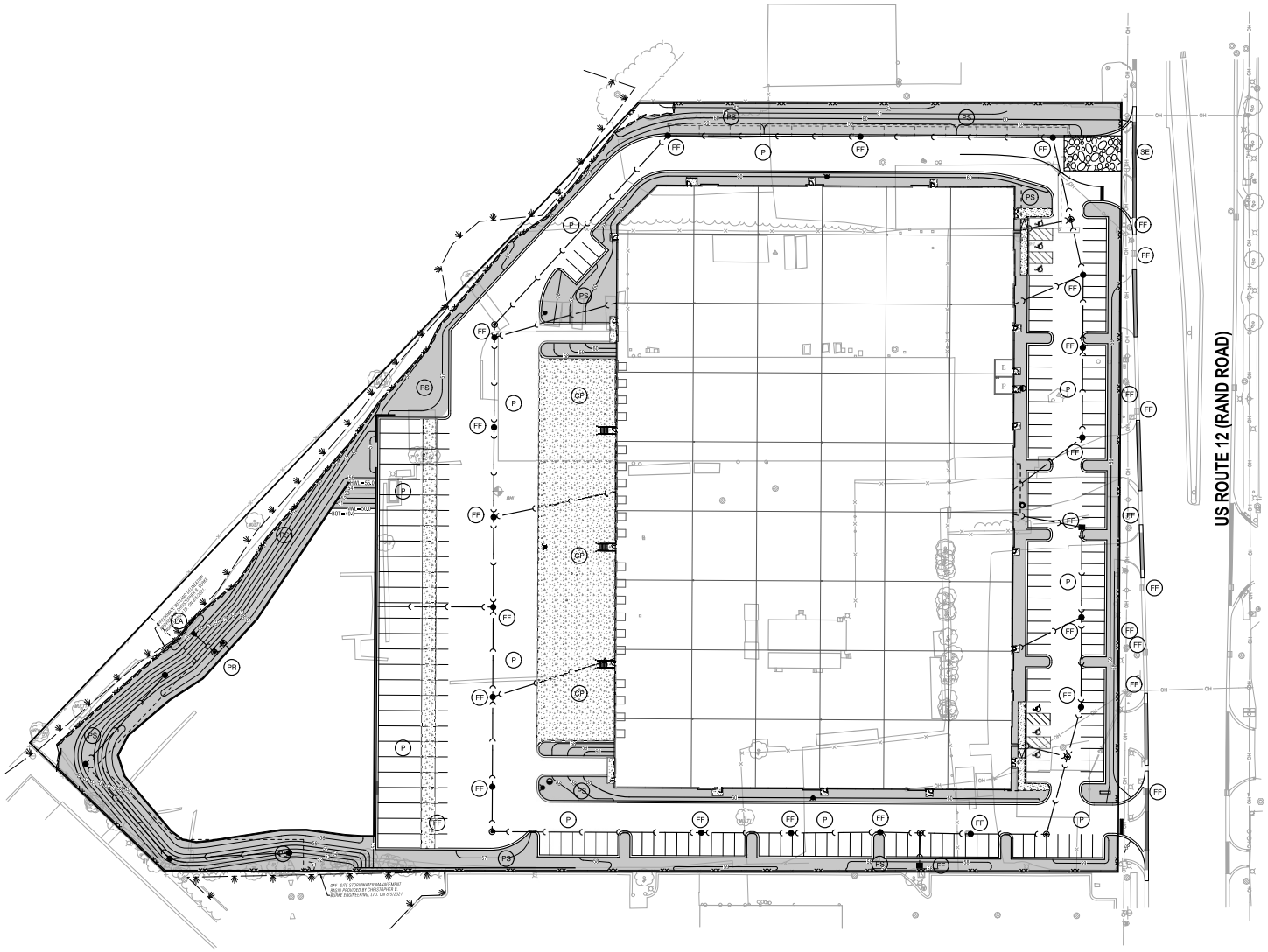
CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4400 Fax: (847) 696-4965

SPACECO INC.

FILENAME: 11624SE2
DATE: 03/16/22
JOB NO. 11624
SHEET SE2
10 OF

Attachment: Missner Group – ENG Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



SCALE 1" = 40'
0 40 80

SYMBOL LEGEND

- SE — STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- FF — FABRIC FILTER
- P — PAVING
- PS — PERMANENT SEEDING
- LA — LINED APRON
- CP — CONCRETE PAVEMENT
- PR — PERFORATED RISER
- NORTH AMERICAN GREEN S-75 EROSION CONTROL BLANKET

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT
NO.	DATE	REMARKS

SOIL EROSION AND SEDIMENT CONTROL PLAN

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700
Rosemont, Illinois 60018
Phone: (847) 696-4400 Fax: (847) 696-4065
SPACECO INC.

FILENAME: 11624SE3
DATE: 03/16/22
JOB NO. 11624
SHEET SE3
11 OF

Attachment: Missner Group - ENG Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

EARTHWORK NOTES

1. GENERAL

A. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE SOIL AND GROUNDWATER CONDITIONS AT THE SITE. THE CONTRACTOR SHALL OBTAIN AND READ THE GEOTECHNICAL REPORTS AVAILABLE FROM THE OWNER.

B. ANY QUANTITIES IN THE BID PROPOSAL ARE INTENDED AS A GUIDE FOR THE CONTRACTOR'S USE IN DETERMINING THE SCOPE OF THE COMPLETED PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALL MATERIAL QUANTITIES AND APPARAE HIMSELF OF ALL SITE CONDITIONS. THE CONTRACT PRICE SUBMITTED BY THE CONTRACTOR SHALL BE CONSIDERED AS LUMP SUM FOR THE COMPLETE PROJECT. NO CLAIMS FOR EXTRA WORK WILL BE RECOGNIZED UNLESS ORDERED IN WRITING BY THE OWNER.

C. THE CONTRACTOR WILL NOTE THAT THE ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS ARE FINISHED GRADE ELEVATIONS AND THAT PAVEMENT THICKNESS, TOPSOIL, ETC. MUST BE SUBTRACTED TO DETERMINE SUBGRADE ELEVATIONS.

D. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION, AND PREVENT STORMWATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS. THE FAILURE TO PROVIDE PROPER DRAINAGE WILL NEGATE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION AND TRAFFIC.

E. PLANS FOR THE SITE DEWATERING, IF EMPLOYED, SHALL BE SUBMITTED TO AND APPROVED BY THE OWNER PRIOR TO IMPLEMENTATION. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR DEWATERING DURING CONSTRUCTION.

F. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE "SOIL EROSION AND SEDIMENTATION CONTROL MEASURES". THE INITIAL ESTABLISHMENT OF EROSION CONTROL PROCEDURES AND THE PLACEMENT OF SILT AND FILTER FENCING, ETC. TO PROTECT ADJACENT PROPERTY, WETLANDS, ETC. SHALL OCCUR BEFORE GROUND BEGINS. A MUNICIPAL EROSION CONTROL INSPECTION MAY BE REQUIRED BEFORE ANY EARTHWORK IS PERFORMED.

G. PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES, THE CONTRACTOR SHALL ERECT A "SNOW FENCE" AROUND ANY TREE DESIGNATED TO BE PRESERVED. SAID FENCE SHALL BE PLACED IN A CIRCLE CENTERED AROUND THE TREE, THE DIAMETER OF WHICH SHALL BE SUCH THAT THE ENTIRE DRIP ZONE (EXTENT OF FURTHEST EXTENDING BRANCHES) SHALL BE WITHIN THE FENCE LIMITS. THE EXISTING GRADE WITHIN THE FENCED AREA SHALL NOT BE DISTURBED.

H. EXCESS MATERIALS, IF NOT UTILIZED AS FILL, SHALL BE COMPLETELY REMOVED FROM THE CONSTRUCTION SITE AND DISPOSED OF OFF-SITE BY THE CONTRACTOR.

I. ALL EARTHWORK SHALL BE DONE UNDER THE SUPERVISION OF AN ILLINOIS LICENSED ENGINEER WHO SPECIALIZES IN THE GEOTECHNICAL FIELD (SOILS ENGINEER). THE ENGINEER WILL BE RESPONSIBLE FOR ENSURING THAT ALL UNSUITABLE MATERIALS ARE REMOVED, ALL STRUCTURAL FILL MATERIALS ARE PROPERLY PLACED AND COMPACTED, ALL PAVEMENT SUBGRADES ARE PROPERLY PREPARED, PROOF ROLLING SUBGRADES AND BASE COURSES, AND ENSURING THAT ALL WATER RETAINING EMBANKMENTS ARE PROPERLY CONSTRUCTED. THE DEVELOPER PAYS FOR ALL GEOTECHNICAL SERVICES.

2. TOPSOIL EXCAVATION INCLUDES:

A. EXCAVATION OF TOPSOIL AND OTHER STRUCTURALLY UNSUITABLE MATERIALS WITHIN THOSE AREAS THAT WILL REQUIRE EARTH EXCAVATION OR COMPACTED EARTH FILL MATERIAL. EXISTING VEGETATION SHALL BE REMOVED PRIOR TO STRIPPING TOPSOIL OR FILLING AREAS.

B. PLACEMENT OF THE EXCAVATED MATERIAL IN OWNER DESIGNATED AREAS FOR FUTURE USE WITHIN AREAS TO BE LANDSCAPED, AND THOSE AREAS NOT REQUIRING STRUCTURAL FILL MATERIAL. PROVIDE NECESSARY EROSION CONTROL MEASURES OR STOCKPILE.

C. TOPSOIL STOCKPILED FOR RESPREAD SHALL BE FREE OF CLAY AND SHALL NOT CONTAIN ANY OF THE TRANSITIONAL MATERIAL BETWEEN THE TOPSOIL AND CLAY. THE TRANSITIONAL MATERIAL SHALL BE USED IN NON-STRUCTURAL FILL AREAS OR DISPOSED OF OFF-SITE.

D. TOPSOIL RESPREAD SHALL INCLUDE HAULING AND SPREADING 6" OF TOPSOIL OVER AREAS TO BE LANDSCAPED WHERE SHOWN ON THE PLANS OR DIRECTED BY THE OWNER.

E. MODERATE COMPACTION IS REQUIRED IN NON-STRUCTURAL FILL AREAS.

3. EARTH EXCAVATION INCLUDES:

A. EXCAVATION OF CLAY AND OTHER MATERIALS WHICH ARE SUITABLE FOR USE AS STRUCTURAL FILL. THE EXCAVATION SHALL BE TO WITHIN A TOLERANCE OF 0.1 FEET OF THE PLAN SUBGRADE ELEVATIONS WHILE MAINTAINING PROPER DRAINAGE. THE TOLERANCE WITHIN PAVEMENT AREAS SHALL BE SUCH THAT THE EARTH MATERIALS SHALL "BALANCE" DURING THE FINE GRADING OPERATION.

B. PLACEMENT OF THE CLAY AND OTHER SUITABLE MATERIALS SHALL BE WITHIN THOSE AREAS REQUIRING STRUCTURAL FILL IN ORDER TO ACHIEVE THE PLAN SUBGRADE ELEVATIONS TO WITHIN A TOLERANCE OF 0.1 FEET. THE FILL MATERIAL SHALL BE PLACED IN LOOSE LIFTS THAT SHALL NOT EXCEED EIGHT (8) INCHES IN THICKNESS, AND THE WATER CONTENT SHALL BE ADJUSTED IN ORDER TO ACHIEVE REQUIRED COMPACTION.

STRUCTURAL FILL MATERIAL MAY BE PLACED WITHIN THOSE PORTIONS OF THE SITE NOT REQUIRING STRUCTURAL FILL, TO WITHIN SIX (6) INCHES OF THE PLAN FINISHED GRADE ELEVATION. IN AREAS REQUIRING STRUCTURAL FILL, HOWEVER, THIS MATERIAL SHALL NOT BE PLACED OVER TOPSOIL OR OTHER UNSUITABLE MATERIALS UNLESS SPECIFICALLY DIRECTED BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.

C. COMPACTION OF THE CLAY AND OTHER SUITABLE MATERIALS, SHALL BE TO AT LEAST 93% OF THE MODIFIED PROCTOR DRY DENSITY WITHIN PROPOSED PAVEMENT AREAS, SIDEWALK, ETC. COMPACTION SHALL BE AT LEAST 95% OF THE MODIFIED PROCTOR WITHIN PROPOSED BUILDING PAD AREAS.

D. EXCAVATION: QUANTITIES OF EARTH EXCAVATION INDICATED ELSEWHERE IN THIS CONTRACT HAVE BEEN COMPUTED BY THE END AREA METHOD AS PROVIDED FOR IN SECTION 202 OF THE STANDARD SPECIFICATIONS. EXCAVATED MATERIALS NOT NEEDED FOR THE JOB SITE SHALL BE LEGALLY DISPOSED OF, PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE PER CUBIC YARD OF EARTH EXCAVATION.

4. UNSUITABLE MATERIAL

UNSUITABLE MATERIAL SHALL BE CONSIDERED AS MATERIAL WHICH IS NOT SUITABLE FOR THE SUPPORT OF PAVEMENT AND BUILDING CONSTRUCTION, AND IS ENCOUNTERED BELOW NORMAL TOPSOIL DEPTHS AND THE PROPOSED SUBGRADE ELEVATION. THE DECISION TO REMOVE SAID MATERIAL, AND TO WHAT EXTENT, SHALL BE MADE BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.

5. MISCELLANEOUS THE CONTRACTOR SHALL:

A. SPREAD AND COMPACT UNIFORMLY TO THE DEGREE SPECIFIED ALL EXCESS TRENCH SPOIL AFTER COMPLETION OF THE UNDERGROUND IMPROVEMENTS,

B. SCARIFY, DISC, AERATE, AND COMPACT, TO THE DEGREE SPECIFIED, THE UPPER TWELVE (12) INCHES OF THE SUITABLE SUBGRADE MATERIAL IN ALL AREAS THAT MAY BE SOFT DUE TO EXCESS MOISTURE CONTENT. THIS APPLIES TO CUT AREAS AS WELL AS FILL AREAS.

C. PROVIDE WATER TO ADD TO DRY MATERIAL IN ORDER TO ADJUST THE MOISTURE CONTENT FOR THE PURPOSE OF ACHIEVING THE SPECIFIED COMPACTION.

D. BACKFILL THE CURB AND GUTTER AFTER ITS CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE MATERIAL. THE CURBS SHALL NOT BE BACKFILLED UNTIL THE CONCRETE HAS CURED FOR AT LEAST 7 DAYS.

E. TRENCH COMPACTION: ALL TRENCHES SHALL BE COMPACTED BY MECHANICAL TECHNIQUES APPROVED BY THE SOILS ENGINEER UNTIL PROPER COMPACTION IS ACHIEVED. THE REQUIREMENT FOR MECHANICAL COMPACTION MAY BE WAIVED IF, IN THE OPINION OF THE SOILS ENGINEER AND THE MUNICIPAL ENGINEER, THE BACKFILLED TRENCHES MEET THE DENSITY REQUIREMENTS. JETTING OF TRENCHES FOR COMPACTION WILL NOT BE ALLOWED.

6. TESTING AND FINAL ACCEPTANCE

A. THE CONTRACTOR SHALL PROVIDE AS A MINIMUM, A FULLY LOADED SIX-WHEEL TANDEM AXLE TRUCK FOR PROOF ROLLING THE PAVEMENT SUBGRADE PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND THE BASE MATERIAL. THIS SHALL BE WITNESSED BY MUNICIPAL ENGINEER AND THE OWNER. SEE PAVING SPECIFICATION.

B. ANY UNSUITABLE AREA ENCOUNTERED AS A RESULT OF PROOF ROLLING SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL, OR OTHERWISE CORRECTED, APPROVED BY THE SOILS CONSULTANT.

C. ANY TESTING THAT IS REQUIRED OF THIS CONSTRUCTION IS CONSIDERED INCIDENTAL TO THE COST OF CONSTRUCTION. NO SEPARATE PAYMENT WILL BE MADE.

SIGNING AND PAVEMENT MARKING

1. ALL SIGNING AND PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (SSRBC), MUNICIPAL CODE AND THESE PLANS.

2. CONTRACTOR SHALL ESTABLISH LOCATION OF ALL SIGNS AND MARKINGS FOR APPROVAL BY THE OWNER PRIOR TO INSTALLATION.

3. SIGNS: SIGNS SHALL BE CONSTRUCTED OF 0.080 INCH THICK FLAT ALUMINUM PANELS WITH REFLECTORIZED LEGEND ON THE FACE IN ACCORDANCE WITH (SSRBC) SECTION 720. LEGEND SHALL BE IN ACCORDANCE WITH MUTCD AND AS SHOWN ON THE PLANS.

4. POSTS: SIGN POSTS SHALL BE A HEAVY DUTY STEEL "U" SHAPED CHANNEL WEIGHING 3.0 POUNDS/FOOT SUCH AS A TYPE B METAL POST PER (SSRBC) SECTION 729 (OR; 2" PERFORATED STEEL TUBE PER (SSRBC) SECTION 728).

5. SIGNS AND POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE ABOVE (SSRBC) SECTIONS AND IDOT STANDARD 729001 EXCEPT AS MODIFIED BY THE PLANS.

6. PAVEMENT MARKINGS: ALL PAVEMENT MARKINGS IN THE ROADWAY LIMITS, SUCH AS STOP LINES, CENTERLINES, CROSSWALKS AND DIRECTIONAL ARROWS SHALL BE REFLECTORIZED THERMOPLASTIC PER (SSRBC) SECTION 780, EXCEPT AS MODIFIED BY THE PLANS. (NOTE TO ENGINEER: IDOT PREFERS REFLECTORIZED PAINT ON CONCRETE PAVEMENT - CHECK WITH AGENCY WHO WILL MAINTAIN ROAD.)

7. PAVEMENT MARKINGS ON BIKE PATHS: PARKING LOT STALLS, AND SIMILAR "LOW WEAR" APPLICATION, SHALL BE PAINT IN ACCORDANCE TO (SSRBC) SECTION 780, EXCEPT AS MODIFIED BY THE PLANS. REFLECTIVE BEADS ARE NOT REQUIRED.

8. COLOR, WIDTH, STYLE, AND SIZE OF ALL MARKINGS SHALL BE IN ACCORDANCE WITH (MUTCD) EXCEPT AS MODIFIED BY THE PLANS.

9. THERMOPLASTIC MARKINGS SHALL BE INSTALLED WHEN THE PAVEMENT TEMPERATURE IS 55° F AND RISING. PAINT MARKINGS MAY BE INSTALLED WHEN THE AIR TEMPERATURE IS 55° F AND RISING.

PAVING NOTES

1. GENERAL

A. PAVING WORK INCLUDES FINAL SUBGRADE SHAPING, PREPARATION AND COMPACTION; PLACEMENT OF SUB-BASE OR BASE COURSE MATERIALS; BITUMINOUS BINDER AND/OR SURFACE COURSES; FORMING, FINISHING AND CURING CONCRETE PAVEMENT, CURBS AND WALKS; AND FINAL CLEAN-UP AND ALL RELATED WORK.

B. COMPACTION REQUIREMENTS: (REFERENCE ASTM D-1557 (MODIFIED PROCTOR) SUB-GRADE = 93%; SUB-BASE = 93%; AGGREGATE BASE COURSE = 95%; BITUMINOUS COURSES = REFER TO SSRBC ARTICLE 406.07. THE SOILS ENGINEER IS RESPONSIBLE FOR ENSURING THAT MATERIALS ARE PROPERLY PLACED AND COMPACTED.

C. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE PROPER BARRICADING, WARNING DEVICES AND THE SAFE MANAGEMENT OF TRAFFIC WITHIN THE AREA OF CONSTRUCTION. ALL SUCH DEVICES AND THEIR INSTALLATION SHALL CONFORM TO THE ILLINOIS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION AND IN ACCORDANCE WITH THE MUNICIPAL CODE.

2. SUB-GRADE PREPARATION

A. EARTHWORK FOR PROPOSED PAVEMENT SUBGRADE SHALL BE FINISHED TO WITHIN 0.1 FOOT, PLUS OR MINUS, OF PLAN ELEVATION. THE CONTRACTOR SHALL SATISFY HIMSELF THAT THE SUBGRADE HAS BEEN PROPERLY PREPARED AND THAT THE FINISH TOP SUBGRADE ELEVATION HAS BEEN GRADED WITHIN TOLERANCES ALLOWED BY THESE SPECIFICATIONS. UNLESS THE CONTRACTOR ADVISES THE OWNER AND ENGINEER IN WRITING PRIOR TO FINE GRADING FOR BASE COURSE CONSTRUCTION, IT IS UNDERSTOOD THAT HE HAS APPROVED AND ACCEPTS THE RESPONSIBILITY FOR THE SUBGRADE.

B. PRIOR TO THE PLACEMENT OF THE BASE COURSE, THE SUBGRADE MUST BE PROOF ROLLED AND INSPECTED FOR UNSUITABLE MATERIALS AND/OR EXCESSIVE MOVEMENT. THE SOILS ENGINEER SHALL CONDUCT AND THE VILLAGE SHALL WITNESS ALL PROOF ROLLS. IF UNSUITABLE SUBGRADE IS ENCOUNTERED IT SHALL BE CORRECTED IN A MANNER APPROVED BY THE OWNER OR HIS REPRESENTATIVE. THIS MAY INCLUDE ONE OR MORE OF THE FOLLOWING METHODS:
1) SCARIFY, DISC AND AERATE;
2) REMOVE AND REPLACE WITH STRUCTURAL CLAY FILL;
3) REMOVE AND RESPREAD WITH GRANULAR MATERIAL.
4) USE OF GEOTEXTILE FABRIC.

MAXIMUM DEFLECTION ALLOWED IN ISOLATED AREAS MAY BE 1/4" TO 1/2" IF NO DEFLECTION OCCURS OVER THE MAJORITY OF THE AREA.

C. PRIOR TO THE CONSTRUCTION OF THE CURB AND GUTTER AND THE PLACEMENT OF THE BASE MATERIAL, THE SUBGRADE SHALL BE FINE GRADED TO WITHIN 0.04 FEET (1/2") OF FINAL SUBGRADE ELEVATION, TO A POINT TWO (2) FEET BEYOND THE BACK OF CURB, SO AS TO ENSURE THE PROPER THICKNESS OF PAVEMENT COURSES. NO CLAIMS FOR EXCESS QUANTITY OF BASE MATERIALS DUE TO IMPROPER SUBGRADE PREPARATION WILL BE HONORED.

D. PRIOR TO PLACEMENT OF THE BASE COURSE, ALL SUBGRADES MUST BE APPROVED BY THE MUNICIPAL ENGINEER, SOILS ENGINEER AND/OR OWNER.

3. CONCRETE WORK

A. ALL EXTERIOR CONCRETE SHALL BE PORTLAND CEMENT CONCRETE CLASS SI OR PV PER (SSRBC) SECTION 1020.04 WITH AIR ENTRAINMENT OF NOT LESS THAN FIVE (5%) OR MORE THAN EIGHT (8%) PERCENT. CONCRETE SHALL BE A MINIMUM OF 564 LBS/CUBIC YARD MIXTURE AND SHALL DEVELOP A MINIMUM OF 3,500 PSI COMPRESSIVE STRENGTH AT FOURTEEN (14) DAYS. ALL CONCRETE SHALL BE BROOM FINISHED PERPENDICULAR TO THE DIRECTION OF TRAVEL. THE ADDITION OF CALCIUM CHLORIDE AND THE SUBSTITUTION OF FLY ASH FOR PORTLAND CEMENT IS PROHIBITED. 1.25 LBS OF COLLATED, FIBRATED, POLYPROPYLENE OLEFIN FIBERS (.05 TO 0.75 INCHES IN LENGTH SHALL BE ADDED TO EACH CUBIC YARD OF CONCRETE FOR SIDEWALKS. THE FIBERS SHALL BE AS MANUFACTURED UNDER THE NAME "FIBERMESH" OR EQUAL.

B. CONCRETE CURB AND/OR COMBINATION CURB AND GUTTER SHALL BE OF THE TYPE SHOWN ON THE PLANS. THE CONTRACTOR IS CAUTIONED TO REFER TO THE CONSTRUCTION STANDARDS AND THE PAVEMENT CROSS-SECTION TO DETERMINE THE GUTTER FLAG THICKNESS AND THE AGGREGATE BASE COURSE THICKNESS BENEATH THE CURB AND GUTTER. PREMOLDED FIBER EXPANSION JOINTS, WITH TWO 3/4" X 18" EPOXY COATED DOWEL BARS, SHALL BE INSTALLED AT SIXTY (60) FOOT INTERVALS AND AT ALL PC'S, PT'S AND CURB RETURNS. ALTERNATE ENDS OF THE DOWEL BARS SHALL BE GREASED AND FITTED WITH METAL EXPANSION TUBES. SAWED OR FORMED CONTRACTION JOINTS SHALL BE PROVIDED AT NO GREATER THAN FIFTEEN (15) FOOT INTERVALS BETWEEN EXPANSION JOINTS. NO HONEY-COMBING OF THE CURB AND GUTTER WILL BE ACCEPTED.

C. CURBS SHALL BE DEPRESSED AT LOCATIONS WHERE PUBLIC WALKS/PEDESTRIAN PATHS INTERSECT CURB LINES, AND OTHER LOCATIONS AS DIRECTED, FOR THE PURPOSE OF PROVIDING ACCESSIBILITY. (SEE CONSTRUCTION STANDARDS FOR DETAILS). BARRIER CURB SHALL ALSO BE DEPRESSED AT DRIVEWAY LOCATIONS.

D. THE CURBS SHALL BE BACKFILLED AFTER THEIR CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE. THE CONCRETE MUST CURE FOR AT LEAST SEVEN DAYS BEFORE THE CURBS ARE BACKFILLED.

E. CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS. PROVIDE SCORED JOINTS AT 5 FOOT INTERVALS AND 1/2" PREMOLDED FIBER EXPANSION JOINTS AT 50 FOOT INTERVALS, AND ADJACENT TO CONCRETE CURBS, DRIVEWAYS, FOUNDATIONS, ETC.

F. CONCRETE DRIVEWAY APRONS SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS. PROVIDE 6" X 6" NO. 6 WELDED WIRE MESH IN DRIVEWAYS. PROVIDE 1/2" PREMOLDED FIBER EXPANSION JOINT ADJACENT TO CURBS AND CONCRETE SIDEWALKS. PROVIDE SAWED OR FORMED CONTRACTION JOINT AT MID-POINT AND 15 FOOT MAXIMUM.

G. STANDARD REINFORCED CONCRETE PAVEMENT SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS. SAWED OR FORMED CONTRACTION EXPANSION JOINTS SHALL BE AS SHOWN ON THE PLANS,

H. CONCRETE CURING AND PROTECTION SHALL BE IN ACCORDANCE WITH (SSRBC) - METHOD I, II, OR III.

I. THE COST OF AGGREGATE BASE OR SUB-BASE UNDER CONCRETE WORK SHALL BE INCLUDED IN THE COST OF THE RESPECTIVE CONCRETE ITEM.

4. FLEXIBLE PAVEMENT

A. THE PAVEMENT MATERIALS FOR BITUMINOUS STREETS, PARKING LOTS, DRIVEWAYS, SIDEWALKS AND PATHS SHALL BE AS DETAILED ON THE PLANS, UNLESS OTHERWISE SHOWN ON THE PLANS, THE FLEXIBLE PAVEMENTS SHALL CONSIST OF AGGREGATE BASE COURSE, TYPE B- BITUMINOUS CONCRETE BINDER COURSE; AND BITUMINOUS CONCRETE SURFACE COURSE OF THE THICKNESS AND MATERIALS SPECIFIED ON THE PLANS. THICKNESSES SPECIFIED SHALL BE CONSIDERED TO BE THE MINIMUM COMPACTED THICKNESS. THE PAVING IS TO BE DONE IN ACCORD WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS.

B. ALL TRAFFIC SHALL BE KEPT OFF THE COMPLETED AGGREGATE BASE UNTIL THE BINDER COURSE IS LAID. THE AGGREGATE BASE SHALL BE UNIFORMLY PRIME COATED AT A RATE OF 0.4 TO 0.5 GALLONS PER SQUARE YARD PRIOR TO PLACING THE BINDER COURSE. PRIME COAT MATERIALS SHALL BE BITUMINOUS MC-30.

C. PRIOR TO PLACEMENT OF THE SURFACE COURSE, THE BINDER COURSE SHALL BE CLEANED, AND TACK COATED IF DUSTY OR DIRTY. ALL DAMAGED AREAS IN THE BINDER, BASE OR CURB SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER PRIOR TO LAYING THE SURFACE COURSE. THE CONTRACTOR SHALL PROVIDE WHATEVER EQUIPMENT AND MANPOWER NECESSARY, INCLUDING THE USE OF POWER BROOMS IF REQUIRED BY THE OWNER, TO PREPARE THE PAVEMENT FOR APPLICATION OF THE SURFACE COURSE. THE TACK COAT SHALL BE UNIFORMLY APPLIED TO THE BINDER COURSE AT A RATE OF 0.25 TO 0.75 GALLONS PER SQUARE YARD. TACK COAT SHALL BE AS SPECIFIED IN (SSRBC) SECTION 406.02.

D. SEAMS IN BASE, BINDER AND SURFACE COURSE SHALL BE STAGGERED A MINIMUM OF 6'.

E. FOR NEW STREETS, THE CONTRACTOR SHALL PERMIT THE BITUMINOUS CONCRETE BINDER COURSE TO WEATHER FOR ONE (1) WINTER SEASON PRIOR TO THE INSTALLATION OF THE BITUMINOUS CONCRETE SURFACE COURSE UNLESS OTHERWISE SPECIFIED BY THE MUNICIPAL ENGINEER OR OWNER.

5. TESTING AND FINAL ACCEPTANCE

A. THE CONTRACTOR SHALL FOLLOW THE QUALITY CONTROL TESTING PROGRAM FOR CONCRETE AND PAVEMENT MATERIALS ESTABLISHED BY THE OWNER AND/OR MUNICIPALITY. TESTING SHALL BE DONE IN ACCORD WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS AND THE TESTING REQUIREMENTS OF THE MUNICIPALITY.

B. WHEN REQUESTED BY THE OWNER, TEST RESULTS AND DOCUMENTATION FOR THE CONCRETE, BASE COURSE, BITUMINOUS CONCRETE BINDER, AND/OR SURFACE COURSE, SHALL BE SUBMITTED FOR VERIFICATION.

C. PRIOR TO PLACEMENT OF THE BITUMINOUS CONCRETE SURFACE COURSE, THE CONTRACTOR, WHEN REQUIRED BY THE OWNER OR MUNICIPALITY, SHALL OBTAIN SPECIMENS OF THE BINDER COURSE WITH A CORE DRILL WHERE DIRECTED, FOR THE PURPOSE OF THICKNESS VERIFICATION.

D. WHEN REQUIRED BY THE OWNER OR MUNICIPALITY, THE CONTRACTOR SHALL OBTAIN SPECIMENS OF THE FULL DEPTH BITUMINOUS CONCRETE PAVEMENT STRUCTURE WITH A CORE DRILL WHERE DIRECTED, IN ORDER TO CONFIRM THE PLAN THICKNESS. DEFICIENCIES IN THICKNESS SHALL BE ADJUSTED FOR BY THE METHOD DESCRIBED IN (SSRBC), ART. 407.10.

E. FINAL ACCEPTANCE OF THE TOTAL PAVEMENT INSTALLATION SHALL BE SUBJECT TO THE TESTING AND CHECKING REQUIREMENTS CITED ABOVE.

SANITARY SEWER NOTES

1. GENERAL

A. SANITARY SEWER PIPE SHALL BE PVC (POLYVINYL CHLORIDE) PLASTIC PIPE WITH A STANDARD DIMENSION RATIO (SDR) OF 26 CONFORMING TO ASTM D-3034 WITH PUSH-ON JOINTS CONFORMING TO ASTM D-3212 AND PVC (POLYVINYL CHLORIDE) PLASTIC PIPE WITH A STANDARD DIMENSION RATIO (SDR) OF 21 CONFORMING TO ASTM D-2241 WITH PUSH-ON JOINTS CONFORMING TO ASTM D-3139 AS SHOWN ON THE PLANS. PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE PER LINEAL FOOT OF SANITARY SEWER COMPLETE IN PLACE.

B. SANITARY SEWER PIPE 18" AND LARGER, WHERE NOTED ON THE PLANS, OR WHERE THE IEPA MINIMUM SEPARATION CANNOT BE MAINTAINED, SHALL BE ONE OF THE FOLLOWING:

PLAN CODE DESCRIPTION

DIP: DUCTILE IRON WATERMAIN QUALITY PIPE, CLASS 52, (ANSI A-21.51) WITH MECHANICAL OR O-RING GASKETED JOINTS (ANSI A-21.11).

PVC: PRESSURE RATED PVC PIPE MEETING ASTM D-2241 WITH ASTM D-3139 GASKETED JOINT, SDR 26

C. "BAND-SEAL" OR SIMILAR FLEXIBLE TYPE COUPLINGS SHALL BE USED WHEN CONNECTING SEWER PIPES OF DISSIMILAR MATERIALS. "BAND-SEAL", "FERNCO", AND "MISSION" TYPE COUPLINGS SHALL NOT BE USED ON ANY SEWER MAIN.

D. ALL SANITARY SEWERS ARE TO BE CONSTRUCTED USING A LASER INSTRUMENT TO MAINTAIN LINE AND GRADE.

E. ALL FLOOR DRAINS SHALL CONNECT TO THE SANITARY SEWER.

F. CONNECTIONS TO EXISTING SANITARY SEWER SYSTEM SHALL NOT BE DONE UNTIL AUTHORIZED BY THE MUNICIPALITY.

G. WATERMAINS SHALL BE SEPARATED FROM SANITARY SEWERS AND STORM SEWERS IN ACCORDANCE WITH IEPA REQUIREMENTS AS SPECIFIED IN "WATER MAIN" SECTION.

H. NO WATER LINE SHALL BE PLACED IN THE SAME TRENCH AS A SEWER LINE EXCEPT UNDER SPECIAL CIRCUMSTANCES AND THEN ONLY UNDER THE FOLLOWING RULES:

a) PERMISSION SHALL BE OBTAINED FROM THE MUNICIPAL ENGINEERING DEPARTMENT IN WRITING PRIOR TO BEGINNING CONSTRUCTION.
b) THE BOTTOM OF A WATER LINE SHALL BE INSTALLED ON A SHELF A MINIMUM OF 18" ABOVE THE TOP OF THE SEWER AND 18" HORIZONTALLY AWAY FROM THE EDGE OF THE SEWER.

2. BEDDING:

A. BEDDING SHALL CONSIST OF A MINIMUM OF FOUR (4") INCHES OF COMPACTED CRUSHED GRAVEL OR STONE, 1/4" - 3/4" IN SIZE. THE SEWER SHALL HAVE MECHANICALLY TAMPED CRUSHED GRAVEL OR STONE COVER ABOVE THE TOP OF THE PIPE TO A MINIMUM OF TWELVE (12") INCHES FOR PVC PIPE AND TO THE SPRING LINE FOR DIP. THE BEDDING AND COVER MATERIAL SHALL BE ASTM D-2321 CLASS II FOR PVC PIPE AND ASTM D-448 SIZE 67 FOR DIP PIPE. THE COST OF THE BEDDING AND COVER SHALL BE MERGED WITH THE UNIT PRICE BID FOR THE SEWER.

B. ALL UNSUITABLE MATERIAL SHALL BE REMOVED BELOW THE PROPOSED SANITARY SEWER AND REPLACED WITH COMPACTED CA-6 CRUSHED GRAVEL OR STONE.

C. ALL TRENCHES BENEATH PROPOSED OR EXISTING UTILITIES, PAVEMENTS, ROADWAYS, SIDEWALKS, AND FOR A DISTANCE OF FIVE (5') FEET ON EITHER SIDE OF SAME, AND/OR WHERE SHOWN ON THE PLANS, SHALL BE BACKFILLED WITH SELECT GRANULAR BACKFILL (CA-6) AND THOROUGHLY MECHANICALLY COMPACTED IN 8" THICK (LOOSE MEASUREMENT) LAYERS. JETTING WITH WATER IS NOT PERMITTED. REFER TO THE TRENCH BACKFILL LIMITS DETAIL.

3. MANHOLES:

A. SANITARY SEWER MANHOLES SHALL BE 4'-0" I.D. PRECAST CONCRETE SECTIONS CONFORMING TO ASTM D-4-78 WITH PREFORMED BITUMINOUS OR "O" RING JOINTS, IN ACCORDANCE WITH MUNICIPAL REGULATIONS, AND HAVE AN ECCENTRIC CONE INSTALLED TO LINE UP WITH THE MANHOLE STEPS. ALL MANHOLE STEPS SHALL BE AT 16" O.C. SIMILAR TO NEENAH R-1980.

B. ALL PIPE CONNECTION OPENINGS SHALL BE PRECAST WITH RESILIENT RUBBER WATER TIGHT SLEEVES. THE BOTTOM OF MANHOLE SHALL HAVE A CONCRETE BENCH POURED TO FACILITATE SMOOTH FLOWS.

4. FRAMES AND LIDS:

A. ALL SANITARY SEWER MANHOLE FRAMES AND LIDS SHALL BE NEENAH R-1712 UNLESS OTHERWISE NOTED ON THE PLANS. THE LIDS SHALL HAVE RECESSED (CONCEALED) PICK HOLE AND BE SELF SEALING WITH AN "O" RING GASKET. THE LIDS SHALL HAVE THE WORDS "SANITARY" EMBOSSED ON THE SURFACE. THE JOINTS BETWEEN FRAME AND CONCRETE SECTION SHALL BE SEALED WITH A BUTYL ROPE.

B. A MAXIMUM OF EIGHT (8) INCHES OF CONCRETE ADJUSTING RINGS SHALL BE USED TO ADJUST FRAME ELEVATIONS. RINGS SHALL BE SEALED TOGETHER WITH BUTYL ROPE.

5. DROP MANHOLE ASSEMBLIES:

A. DROP MANHOLE ASSEMBLIES DROP MANHOLE ASSEMBLIES SHALL BE PROVIDED AT THE JUNCTION OF SANITARY SEWERS WHERE THE DIFFERENCE IN INVERT GRADES EXCEEDS TWO FEET (2'), OR AS SHOWN ON THE PLANS. THE ENTIRE DROP ASSEMBLY SHALL BE CAST IN CONCRETE MONOLITHICALLY WITH THE MANHOLE BARREL SECTION.

6. CLEANING:

A. ALL MANHOLES AND PIPES SHALL BE THOROUGHLY CLEANED OF DIRT AND DEBRIS, AND ALL VISIBLE LEAKAGE ELIMINATED, BEFORE FINAL INSPECTION AND ACCEPTANCE.

7. TESTING:

A. DEFLECTION AND LEAKAGE TESTING WILL BE REQUIRED. THE PROCEDURE AND ALLOWABLE TESTING LIMITS SHALL BE AS SPECIFIED IN THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", OR MUNICIPAL CODES. IN THE EVENT OF A DISCREPANCY BETWEEN THE STANDARD SPECIFICATIONS AND THE MUNICIPAL CODE, THE MUNICIPAL CODE SHALL GOVERN. THE FULL LENGTH OF THE SANITARY SEWER IS REQUIRED TO BE BOTH AIR TESTED AND DEFLECTION TESTED.

B. TESTING THE ALIGNMENT/STRAIGHTNESS SHALL BE IN ACCORDANCE WITH MUNICIPAL CODE.

C. TESTING OF MANHOLES TO BE IN ACCORDANCE WITH ASTM C-969.

8. TELEVISING:

A. ALL SANITARY SEWERS SHALL BE TELEVISED AND A COPY OF THE TAPE (DVD AND A WRITTEN REPORT SHALL BE SUBMITTED AND REVIEWED BY THE OWNER OR MUNICIPALITY BEFORE FINAL ACCEPTANCE. THE REPORT SHALL INCLUDE STUB LOCATION AS WELL AS A DESCRIPTION OF ALL DEFECTS, WATER LEVEL, LEAKS AND LENGTHS. IDENTIFY MANHOLES BY MANHOLE NUMBER VERBALLY AND ON-SCREEN USING MANHOLE NUMBERS FROM APPROVED PLANS. ORDER OF WRITTEN REPORT SHALL BE THE SAME AS THE VIDEO TAPES/DVDS.

9. TEST RESULTS:

A. IF THE SANITARY SEWER INSTALLATION FAILS TO MEET THE TEST REQUIREMENTS SPECIFIED, THE CONTRACTOR SHALL DETERMINE THE CAUSE O

A. REFERENCED SPECIFICATIONS

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:
   * STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
   * STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION;
   * VILLAGE OF _____ MUNICIPAL CODE;
   * THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL;
   * IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

B. NOTIFICATIONS

1. THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055).
2. THE VILLAGE OF _____ ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.
3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

C. GENERAL NOTES

1. ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). CONVERSION FACTOR IS _____ FT.
2. MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.
3. THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.
4. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.
5. THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.
6. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
7. MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.
8. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.
9. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.
10. RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.

D. SANITARY SEWER

1. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.
2. A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.
3. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY OR MWRD.
4. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).
5. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.
6. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
7. ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
VITRIFIED CLAY PIPE	ASTM C-700	ASTM C-425
REINFORCED CONCRETE SEWER PIPE	ASTM C-76	ASTM C-443
CAST IRON SOIL PIPE	ASTM A-74	ASTM C-564
DUCTILE IRON PIPE	ANSI A21.51	ANSI A21.11
POLYVINYL CHLORIDE (PVC) PIPE		
6-INCH TO 15-INCH DIAMETER SDR 26	ASTM D-3034	ASTM D-3212
18-INCH TO 27-INCH DIAMETER F/DY=46	ASTM F-679	ASTM D-3212
HIGH DENSITY POLYETHYLENE (HDPE)	ASTM D-3350 ASTM D-3035	ASTM D-3261,F-2620 (HEAT FUSION) ASTM D-3212,F-477 (GASKETED)
WATER MAIN QUALITY PVC		
4-INCH TO 36-INCH	ASTM D-2241	ASTM D-3139
4-INCH TO 12-INCH	AWWA C900	ASTM D-3139
14-INCH TO 48-INCH	AWWA C905	ASTM D-3139

THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE.

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
POLYPROPYLENE (PP) PIPE		
12-INCH TO 24-INCH DOUBLE WALL	ASTM F-2736	D-3212, F-477
30-INCH TO 60-INCH TRIPLE WALL	ASTM F-2764	D3212, F-477

8. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE ¼ " TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO ¼ THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.
9. NON-SHEAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS.
10. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICKHOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID.
11. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:
    a) A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SHEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUBWYE SADDLE OR HUB-TEE SADDLE.
    b) REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION.
    c) WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.
12. WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.
13. ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.
14. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE CAST REINFORCED CONCRETE.
15. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRECAST "RUBBER BOOTS" THAT CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRECAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS.
16. ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG.
17. EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES ASSOCIATED WITH VOLUME CONTROL FACILITIES, DRAIN TILES/FIELD TILES/UNDERDRAINS/PERFORATED PIPES ARE NOT ALLOWED TO BE CONNECTED TO OR TRIBUTARY TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS IN COMBINED SEWER AREAS. CONSTRUCTION OF NEW FACILITIES OF THIS TYPE IS PROHIBITED; AND ALL EXISTING DRAIN TILES AND PERFORATED PIPES ENCOUNTERED WITHIN THE PROJECT AREA SHALL BE PLUGGED OR REMOVED, AND SHALL NOT BE CONNECTED TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS.
18. A BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

E. EROSION AND SEDIMENT CONTROL

1. THE CONTRACTOR SHALL INSTALL THE EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
2. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE.
3. ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.
4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
5. INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:
   a) UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE.
   b) ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.
6. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE CO-PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
7. A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
8. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE.
9. MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION TO CONCRETE WASHOUT FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONSTRUCTION ACTIVITIES.
10. TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN. VOLUME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.
12. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.
13. ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SIL" FENCE (OR EQUIVALENT).
14. VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
15. SOIL STOCKPILES SHALL, AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS.
16. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL BLANKET.
17. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.
18. THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COMBINED SEWER AREA FOR GREEN INFRASTRUCTURE PRACTICES.
19. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.
20. THE CONTRCTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMAINS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATERS SHALL NOT BE DISCHARGE TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.
21. ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.
22. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIODS OF CONSTRUCTION SHUTDOWN UNTIL PERMANENT STABILIZATION IS ACHIEVED.
23. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.
24. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, SITE INSPECTOR, OR MWRD.

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

SPECIFICATIONS - 2

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700
Rosemont, Illinois 60018
Phone: (847) 696-4400 Fax: (847) 696-4065
SPACECO INC.

FILENAME: 11624SPEC2
DATE: 03/16/22
JOB NO. 11624
SHEET SP2
13 OF

TECHNICAL GUIDANCE MANUAL

MWRD GENERAL NOTES

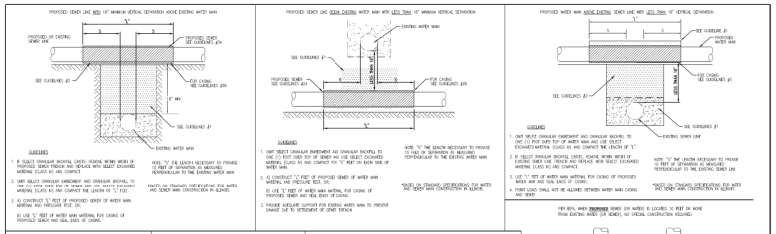
07/12/2016

STD. DWG. NO.18

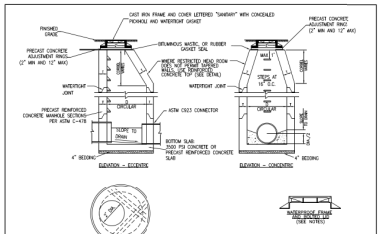
PAGE NO. 19

Attachment: Missner Group - ENG Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

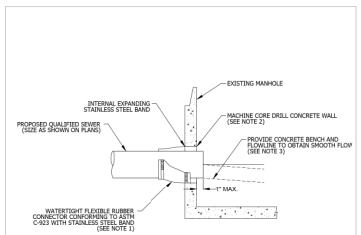
Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



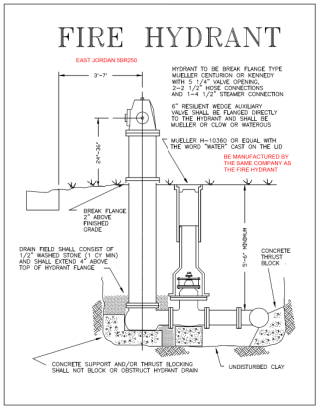
TECHNICAL GUIDANCE MANUAL
WATER AND SEWER SEPARATION REQUIREMENTS (PER IEPA)
7/1/15
STD. DWG. NO. 41
PAGE NO. 42



TECHNICAL GUIDANCE MANUAL
TYPICAL SANITARY MANHOLE "A" AND "B" DETAIL
7/1/15
STD. DWG. NO. 39
PAGE NO. 40



TECHNICAL GUIDANCE MANUAL
PIPE TO EXISTING MANHOLE CONNECTION DETAIL
10/02/18
STD. DWG. NO. 42
PAGE NO. 43



FIRE HYDRANT

EAST JORDAN 5BR250

HYDRANT TO BE BREAK FLANGE TYPE MUELLER CENTURION OR KENNEDY WITH 5 1/4" VALVE OPENING, 2-2 1/2" HOSE CONNECTIONS AND 1-4 1/2" STEAMER CONNECTION

6" RESILIENT WEDGE AUXILIARY VALVE SHALL BE FLANGED DIRECTLY TO THE HYDRANT AND SHALL BE MUELLER OR CLOW OR WATEROUS

MUELLER H-10360 OR EQUAL WITH THE WORD "WATER" CAST ON THE LID

BE MANUFACTURED BY THE SAME COMPANY AS THE FIRE HYDRANT

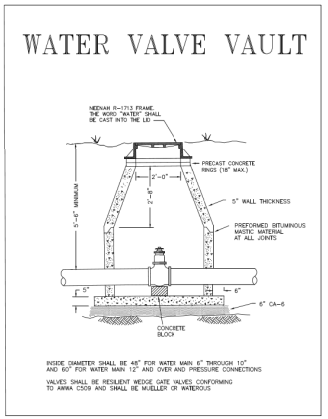
BREAK FLANGE 2" ABOVE FINISHED GRADE

DRAIN FIELD SHALL CONSIST OF 1/2" WASHED STONE (1 CY MIN) AND SHALL EXTEND 4" ABOVE TOP OF HYDRANT FLANGE

CONCRETE THRUST BLOCK

CONCRETE SUPPORT AND/OR THRUST BLOCKING SHALL NOT BLOCK OR OBSTRUCT HYDRANT DRAIN

UNDISTURBED CLAY



WATER VALVE VAULT

NEENAH R-1713 FRAME. THE WORD "WATER" SHALL BE CAST INTO THE LID

PRECAST CONCRETE RINGS (18" MAX.)

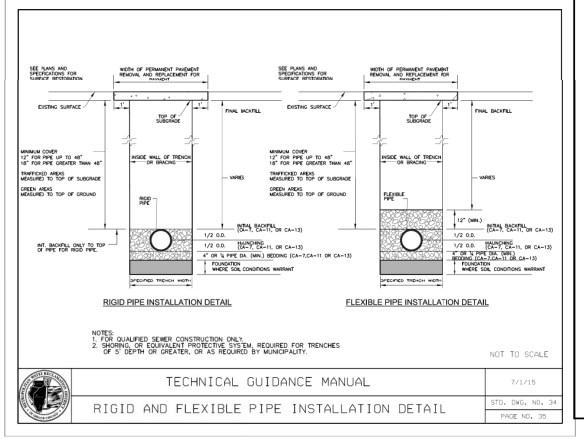
5" WALL THICKNESS

PREFORMED BITUMINOUS MASTIC MATERIAL AT ALL JOINTS

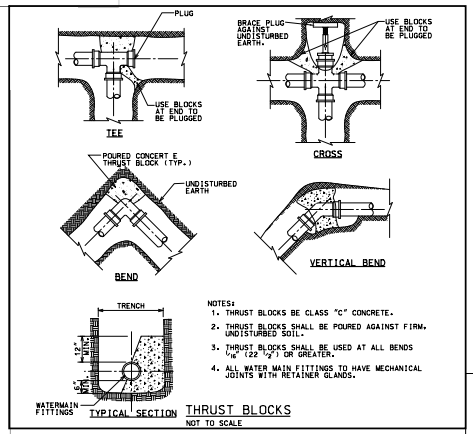
CONCRETE BLOCK

INSIDE DIAMETER SHALL BE 48" FOR WATER MAIN 6" THROUGH 12" AND 60" FOR WATER MAIN 12" AND OVER AND PRESSURE CONNECTIONS

VALVES SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO AWWA C509 AND SHALL BE MUELLER OR WATEROUS

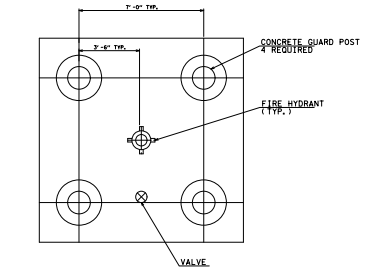


TECHNICAL GUIDANCE MANUAL
RIGID AND FLEXIBLE PIPE INSTALLATION DETAIL
7/1/15
STD. DWG. NO. 34
PAGE NO. 35



THRUST BLOCKS
NOT TO SCALE

NOTES:
1. THRUST BLOCKS BE CLASS "C" CONCRETE.
2. THRUST BLOCKS SHALL BE POURED AGAINST FIRM, UNDISTURBED SOIL.
3. THRUST BLOCKS SHALL BE USED AT ALL BENDS 11½° (.22 "p") OR GREATER.
4. ALL WATER MAIN FITTINGS TO HAVE MECHANICAL JOINTS WITH RETAINER GLANDS.



FIRE HYDRANT LAYOUT IN PAVEMENT WITH GUARD POST
N.T.S.

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

DETAILS - 1

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4400 Fax: (847) 696-4965

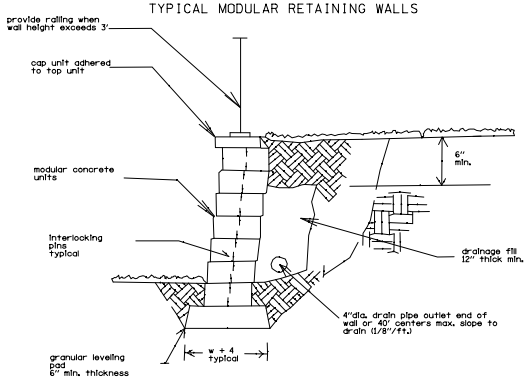
SPACECO INC.

FILENAME: 11624DET01
DATE: 03/16/22
JOB NO. 11624
SHEET D1
14 OF

Attachment: Missner Group - ENG Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

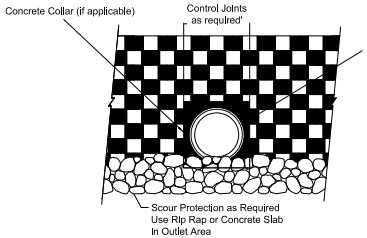
Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

TYPICAL MODULAR RETAINING WALLS



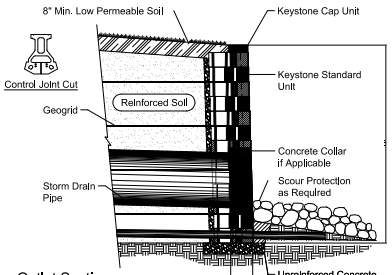
Notes:

1. All modular retaining walls are to be contructed per the manufacturers specifications.
2. The examples shown are to highlight typical components to be used in the design of walls. The contractor shall submit shop drawings of the proposed retaining walls for review and approval prior to installation.
3. Contractor shall submit structural calculations and plans prepared and sealed by a structural engineer for all retaining walls prior to construction.

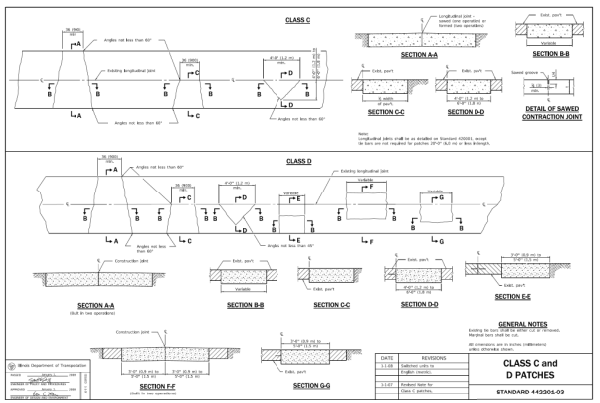


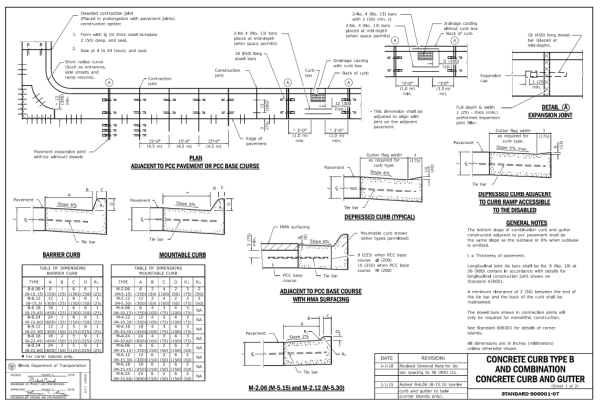
Note:
For pipes larger than 24", a concrete collar may be cast around pipe for ease of construction and appearance.

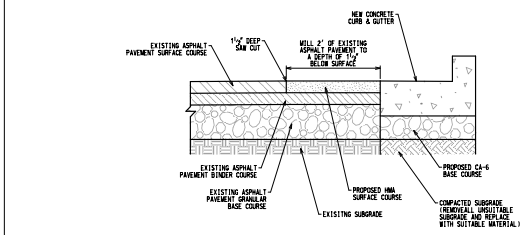
Typical Pipe Outlet Detail



Typical Pipe Outlet Section
Standard Unit - Near Vertical Setback
Concrete Collar If Applicable

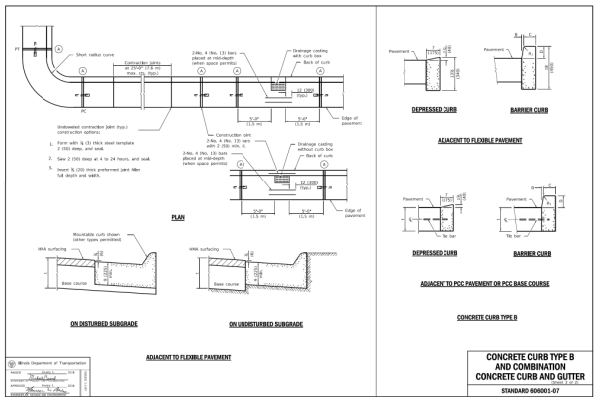


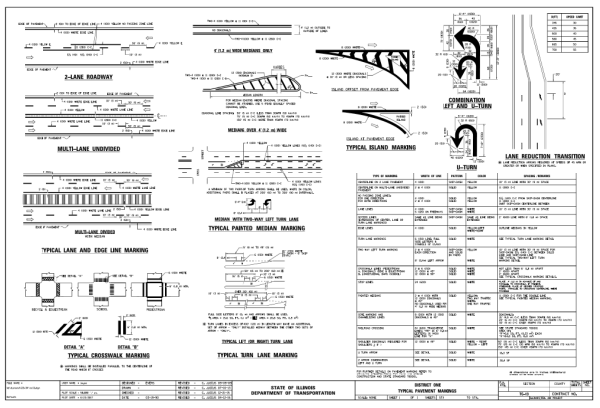




NOTES:
1. EXISTING PAVEMENT SECTION IS SHOWN FOR REFERENCE ONLY.
2. ALL ASPHALT PAVEMENT MILLINGS SHALL BE DISPOSED OF BY THE CONTRACTOR.
3. BITUMINOUS TACK COAT SHALL BE APPLIED AT A RATE OF 0.1 GALLONS PER SQUARE YARD TO BOTH EXISTING AND PROPOSED ASPHALT BINDER COURSE PRIOR TO NEW HMA SURFACE COURSE INSTALLATION.

PAVEMENT PATCHING
AT CURB & GUTTER REMOVAL
NOT TO SCALE





NO.	DATE	REMARKS

NO.	DATE	REVISIONS PER ARCHITECT/OWNER
2	04/17/22	REVISIONS PER ARCHITECT
1	03/22/22	REMARKS

DETAILS - 2

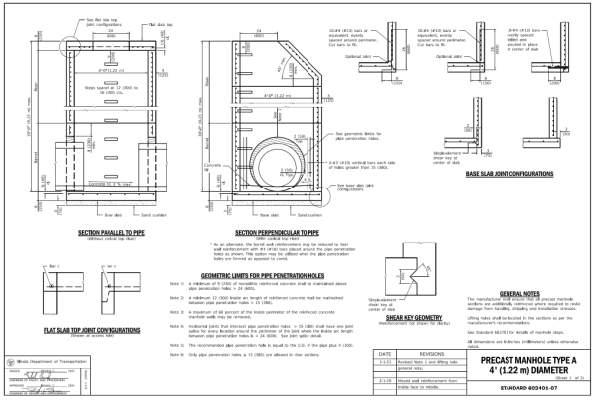
2240-2296 RAND ROAD
PALATINE, ILLINOIS

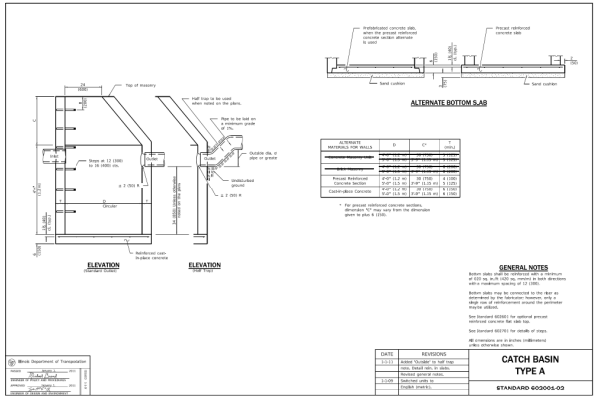
CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4400 Fax: (847) 696-4965
SPACECO INC.

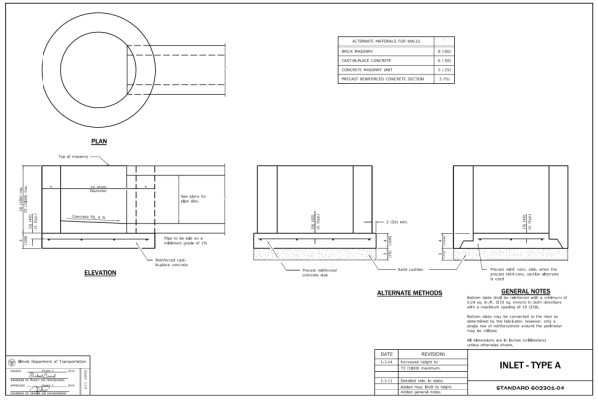
FILENAME: 11624DET02
DATE: 03/16/22
JOB NO. 11624
SHEET D2
15 OF

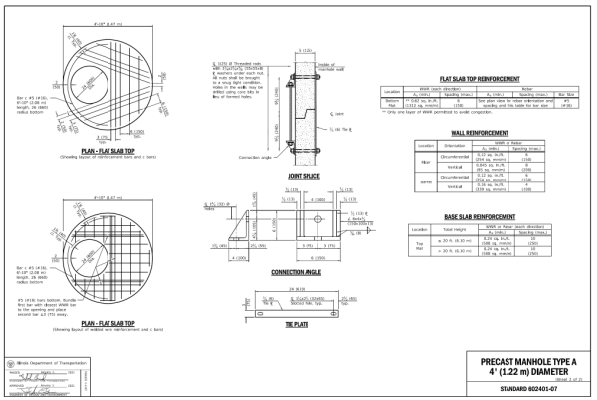
Attachment: Missner Group - ENG Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

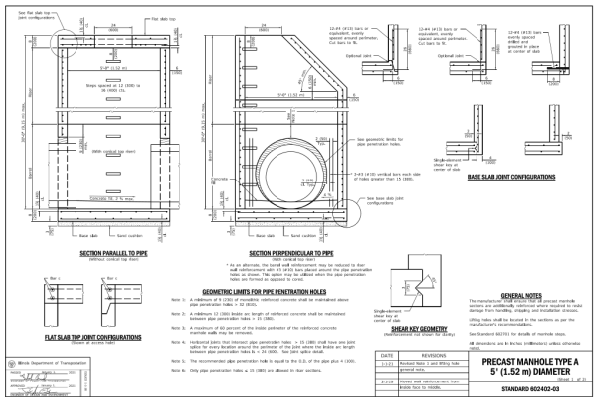
\11624\ENG\11624DET02.dgn Default User=vbrenan

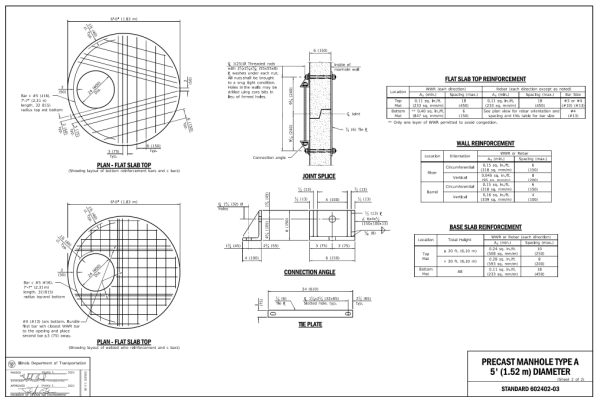


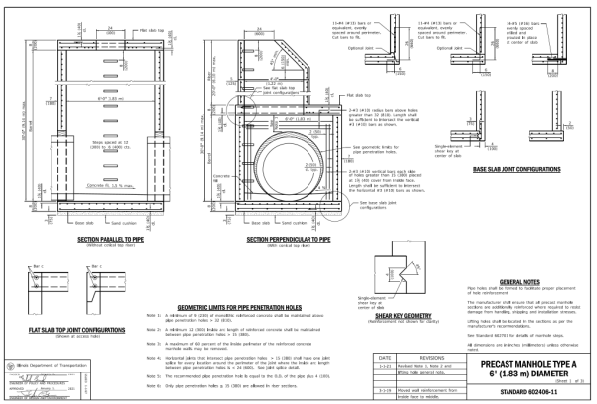


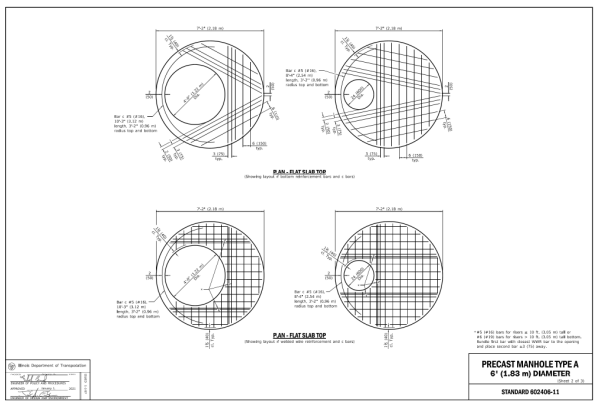


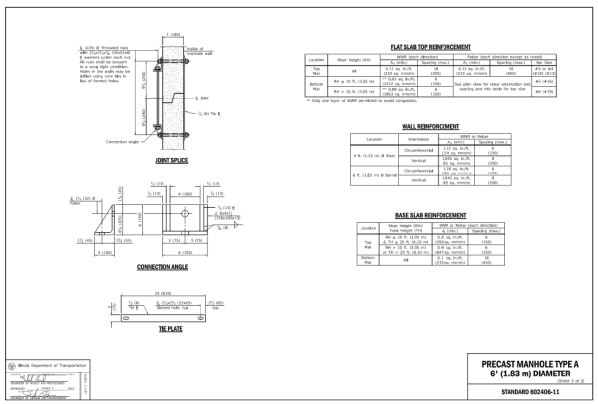












CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS

9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4400 Fax: (847) 696-4965

SPACECO INC.

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT
NO.	DATE	REMARKS

DETAILS - 3

2240-2296 RAND ROAD
PALATINE, ILLINOIS

FILENAME:
11624DET03

DATE:
03/16/22

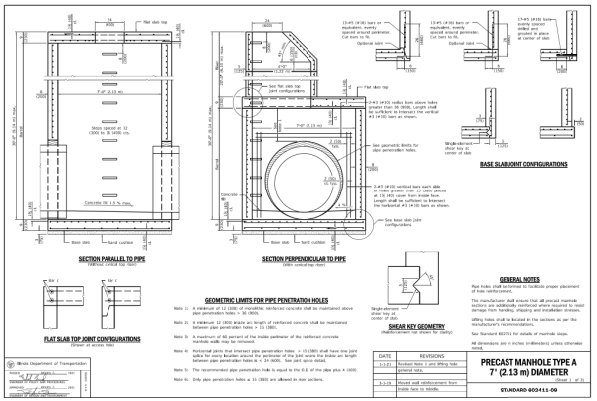
JOB NO.
11624

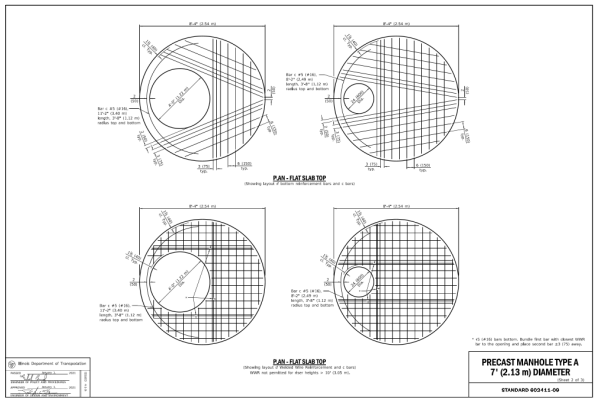
SHEET
D3
16 OF

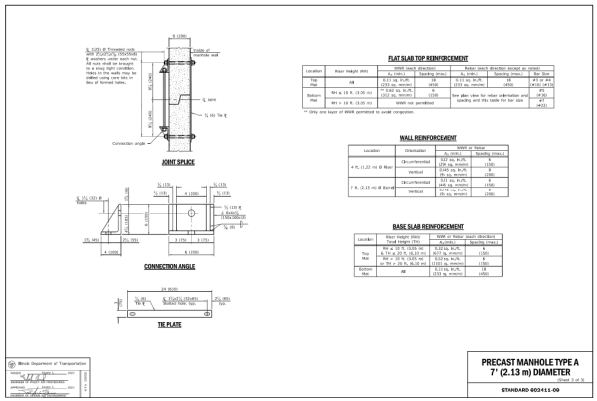
7.C.1.A.p

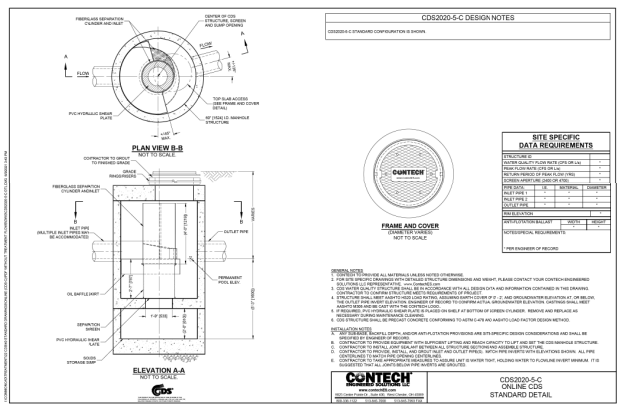
Packet Pg. 339

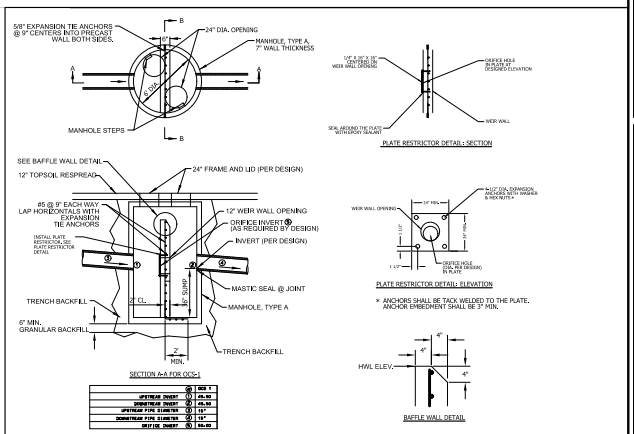
Attachment: Missner Group - ENG Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)











NOTES:
1. WATERTIGHT CONNECTIONS REQUIRED BETWEEN STRUCTURE AND PIPES CONFORMING TO ASTM C-923
2. STRUCTURE AND BAFFLE WALL FABRICATED USING PORTLAND CEMENT CONCRETE.
3. RESTRICTORS LESS THAN 4" IN DIAMETER MUST USE CITY OF CHICAGO VORTEX RESTRICTOR (SEE DETAIL)
4. BAFFLE WALL PERMANENTLY INSTALLED AS PRECAST OR CAST IN PLACE, (STEEL PLATE ACCEPTABLE IF PERMANENT).
5. PIPE TO STRUCTURE CONNECTIONS SHALL BE ASTM C923 IN COMBINED SEWER AREAS.
6. THIS DETAIL WAS REVISED BY SPACECO
7. UNDERDRAINS SHALL CONNECT INTO OCS STRUCTURE UPSTREAM OF RESTRICTOR

NOT TO SCALE

TECHNICAL GUIDANCE MANUAL	7/1/15
TYPICAL OUTLET CONTROL STRUCTURE (WALL) DETAIL	STD. DWG. NO.25 PAGE NO. 26

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

DETAILS - 4

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4400 Fax: (847) 696-4965

SPACECO INC.

FILENAME: 11624DET04
DATE: 03/16/22
JOB NO. 11624
SHEET D4
17 OF

MAINTENANCE & MONITORING REQUIREMENTS:

TEMPORARY SOIL EROSION & SEDIMENT CONTROL

1. **SOIL EROSION AND SEDIMENT CONTROL**
   THE CONTRACTOR SHALL IMPLEMENT EROSION CONTROL MEASURES FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. EROSION CONTROL MEASURES FOR THE PROPOSED DEVELOPMENT ARE INCLUDED IN THE PLAN SET. AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR WILL COORDINATE THE TRANSFER OF MAINTENANCE RESPONSIBILITIES. MAINTENANCE ACTIVITIES WILL BE PERFORMED IN ACCORDANCE WITH THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, 1987.

   EXCEPT AS PREVENTED BY INCLEMENT WEATHER CONDITIONS, ALL DISTURBED AREAS TO REMAIN ACTIVE FOR MORE THAN 14 DAYS WILL BE STABILIZED BY SEEDING, SODDING, MULCHING, COVERING, OR BY OTHER EQUIVALENT EROSION CONTROL MEASURES WITHIN SEVEN DAYS. PERMANENT SOIL STABILIZATION SHALL BE PROVIDED WITHIN SEVEN DAYS AFTER FINAL GRADING IS COMPLETED.

   ALL TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES WILL BE REMOVED AND DISPOSED OF WITHIN THIRTY DAYS AFTER FINAL STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY PRACTICES ARE NO LONGER NEEDED.

PERMANENT

1. **GENERAL**
   - ANNUAL INSPECTIONS AND ROUTINE MAINTENANCE OF GENERAL AREAS SHALL BE PERFORMED ON A MONTHLY OR AS-NEEDED BASIS. SPECIFIC ITEMS OF CONCERN INCLUDE:
     - LITTER AND DEBRIS SHALL BE CONTROLLED
     - LANDSCAPED AREAS SHALL BE MAINTAINED WITH REGULAR MOWING AND RESTORED WITH APPROPRIATE SEEDING/VEGETATION AS NECESSARY
     - FALLEN LEAVES AND CLIPPINGS SHALL BE DISPOSED OF PROPERLY, ALONG WITH ANY WASTES GENERATED DURING MAINTENANCE OPERATIONS
     - RIPRAP AREAS SHALL BE REPAIRED WITH THE ADDITION OF NEW RIPRAP, AS NECESSARY, OF SIMILAR SIZE AND SHAPE
     - ROADS SHALL BE SWEPT, VACUUMED AND/OR WASHED ON A REGULAR BASIS

2. **STORMWATER MANAGEMENT FACILITIES**
   ALL COMPONENT OF THE STORMWATER MANAGEMENT FACILITIES SHALL BE CHECKED MONTHLY BETWEEN MARCH AND NOVEMBER AND MAINTAINED AS NECESSARY TO ENSURE PROPER PERFORMANCE. IT IS CRITICAL THAT ALL INFLOWS AND OUTFLOW TO THE DETENTION FACILITY ARE CLEAN AND PERFORMING AS DESIGNED. IN ADDITION, THE OWNER SHALL ENSURE THAT ANNUAL AND AS-NEEDED ROUTINE MAINTENANCE INSPECTIONS FOR THE FOLLOWING SPECIFIC ITEMS SHOULD BE CONDUCTED MONTHLY BETWEEN MARCH AND NOVEMBER:

   SIDE SLOPES/EMBANKMENT/EMERGENCY OVERFLOW STRUCTURE
   - INSPECT EMBANKMENT FOR SETTLEMENT AND EROSION
   - REPAIR ANY SETTLEMENT OR EROSION IMMEDIATELY
   - ANY BREAKS, HIRE REGISTERED PROFESSIONAL ENGINEER FOR DESIGN RESOLUTION
   - SEED AND SOD ANY ERODED AREAS
   - SIGNS OF PIPING (LEAKAGE) REPAIR
   - SIGNS OF SEEPAGE OR WET SPOTS ON THE DOWNSTREAM FACE OF A BERM, MAY REQUIRED TOE
   - REMOVE ANY TREES OR WOODY VEGETATION GROWING
   - STABILIZE EMERGENCY OVERFLOW STRUCTURE IF EROSION OBSERVED
   - REMOVE OBSTRUCTION BLOCKING EMERGENCY OVERFLOW SPILLWAY

   VEGETATED AREAS
   - MOWING/MOWING TO CONTROL VEGETATION, NO CUTTING OF NATIVE VEGETATION
   - NEED FOR PLANTING, RESEEDING OR SODDING, SUPPLEMENT ALTERNATIVE NATIVE VEGETATION IF A SIGNIFICANT PORTION HAS NOT ESTABLISHED (50% OF THE SURFACE AREA), RESEED WITH ALTERNATIVE GRASS SPECIES IF ORIGINAL GRASS COVER HAS NOT SUCCESSFULLY ESTABLISHED.
   - EVIDENCE OF GRADING, MOTORBIKES OR OTHER VEHICLES, REPAIR
   - SIGNS OF EROSION, REGRADE AND REVEGETATE AS NECESSARY
   - ALL VEGETATION MUST BE MAINTAINED PER THE APPROVED PLANTING PLAN

   OUTLET CONTROL STRUCTURE
   - INSPECT OUTLET STRUCTURE FOR REMOVE DEBRIS IF CLOGGED OR DISCHARGE REDUCED
   - REMOVE ACCUMULATED SEDIMENT AT OUTLET
   - SCOUR AND EROSION AT OUTLET, REPAIR AND RESEED
   - ANY ICE DAMAGE TO OUTLET OF PIPE, REPAIR IF NECESSARY
   - CONDITION OF TRASH TRACKS, REMOVE DEBRIS
   - OUTLET CHANNEL CONDITIONS DOWNSTREAM

   ACCESS FOR MAINTENANCE EQUIPMENT
   - REMOVE ANY OBSTRUCTIONS PLACED IN MAINTENANCE EASEMENTS

   SAFETY FEATURES
   - TRAFFIC CONTROLS TO HAZARDOUS AREAS
   - FENCES
   - LOOSE OR DAMAGED POSTS
   - LOOSE OR BROKEN WIRES
   - ACCUMULATED DEBRIS IN FENCES
   - CONDITIONS OF GATES
   - SIGNS

   DETENTION VOLUME
   - INSPECT ALL STORMWATER DETENTION FACILITIES TO ENSURE THAT THE CONSTRUCTED VOLUME FOR DETENTION IS MAINTAINED. NO SEDIMENT, TOPSOIL OR OTHER DUMPING INTO THE FACILITY SHALL BE ALLOWED. SPECIFIC LOCATIONS IN THE STORMWATER MANAGEMENT SYSTEM DESIGNED TO ACCUMULATE SEDIMENT, SHALL BE DREDGED AS NECESSARY TO PREVENT SEDIMENT FROM REACHING THE INVERT OFF ANY GRAVITY OUTLET PIPE.

3. **VOLUME CONTROL FACILITY**
   ROUTINE INSPECTIONS AND MAINTENANCE OF VOLUME CONTROL FACILITIES SHALL BE PERFORMED BY THE OWNER ON A YEARLY OR AS-NEEDED BASIS. SPECIFIC ITEMS OF CONCERN INCLUDE:
   - FACILITY SHALL BE INSPECTED YEARLY USING THE MONITORING WELL TO VERIFY THE SYSTEM IS DRAINING PROPERLY
   - SURFACE OF PERMEABLE PAVEMENT SHALL BE CLEANED WITH A LOW-PRESSURE POWER WASHER
   - ACCUMULATED SEDIMENT FROM SURFACE SHALL BE VACUUMED OUT AND DISPOSED OF PROPERLY
   - APPROPRIATE SIGNAGE SHALL BE REPAIRED IF DAMAGED OR ILLEGIBLE

4. **STORMWATER COLLECTION SYSTEM**
   THE OWNER SHALL PERFORM MONTHLY INSPECTIONS OF ALL COMPONENTS OF THE STORMWATER COLLECTION SYSTEM. THE MONTHLY INSPECTIONS SHALL OCCUR BETWEEN MARCH AND NOVEMBER AND INCLUDE THE FOLLOWING SPECIFIC AREAS OF CONCERN:

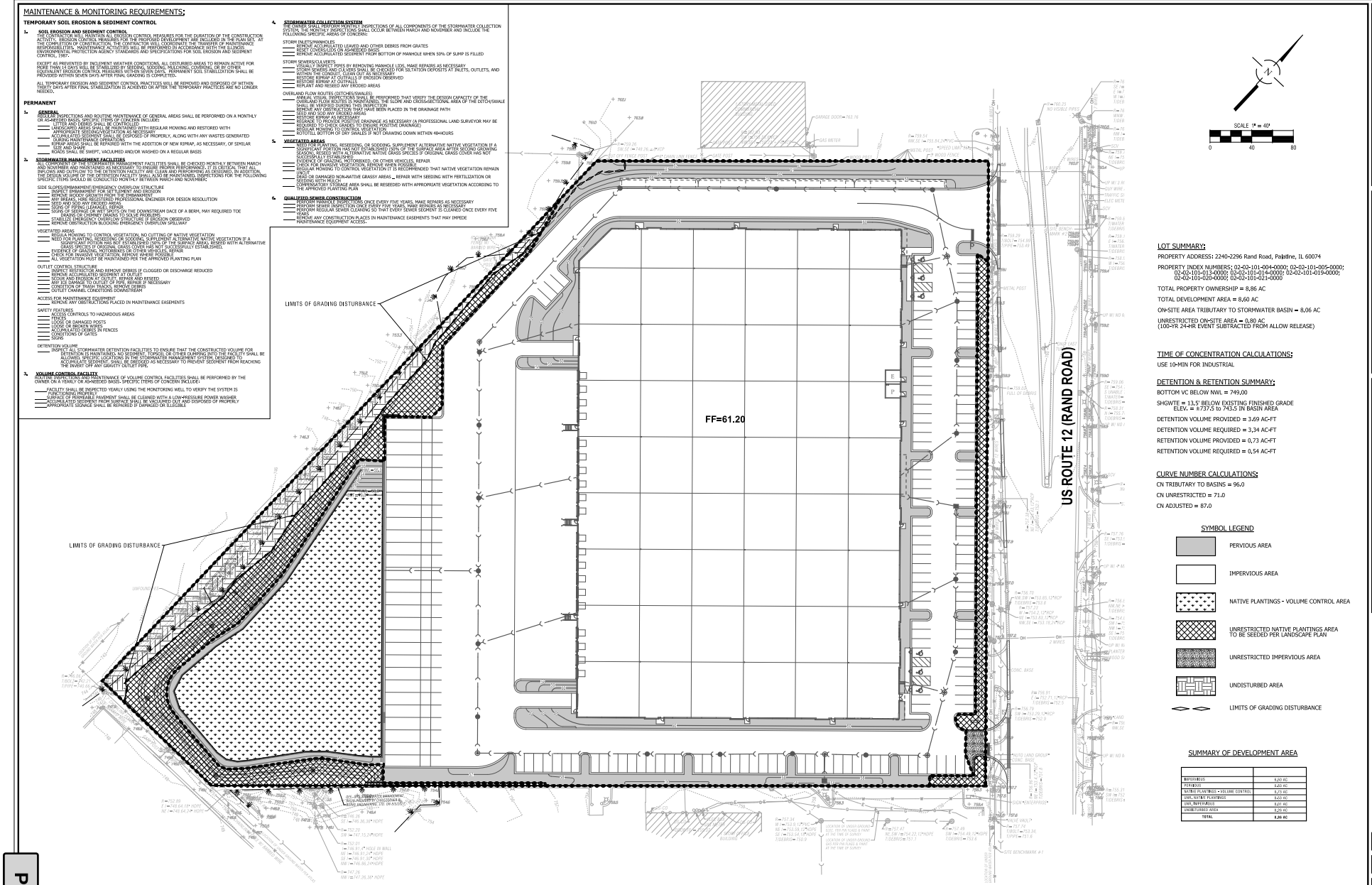
   STORM INTO STRUCTURES
   - REMOVE ACCUMULATED LEAVES AND OTHER DEBRIS FROM GRATES
   - REPAIR OVERSHOOTS ON AS-NEEDED BASIS
   - REMOVE ACCUMULATED SEDIMENT FROM BOTTOM OF MANHOLE WHEN 50% OF SUMP IS FILLED

   STORM SEWERS/OUTLARTS
   - INSPECT STORM SEWER PIPES BY REMOVING MANHOLE LIDS, MAKE REPAIRS AS NECESSARY
   - STORM SEWERS AND CULVERS SHALL BE CHECKED FOR SILTATION DEPOSITS AT INLETS, OUTLETS, AND WITHIN THE CONDUIT. CLEAN OUT AS NECESSARY
   - RESTORE RIPRAP AT OUTFALLS IF EROSION OBSERVED
   - RESTORE RIPRAP AT OUTFALLS
   - REPLANT AND RESEED ANY ERODED AREAS

   OVERLAND FLOW ROUTES (DITCHES/SWALES)
   - ANNUAL VISUAL INSPECTIONS SHALL BE PERFORMED THAT VERIFY THE DESIGN CAPACITY OF THE OVERLAND FLOW ROUTES IS MAINTAINED. THE SLOPE AND CROSS-SECTIONAL AREA OF THE DITCH/SWALE SHALL BE MAINTAINED TO THE DESIGN SPECIFICATIONS
   - REMOVE ANY OBSTRUCTION THAT HAVE BEEN PLACED IN THE DRAINAGE PATH
   - SEED AND SOD ANY ERODED AREAS
   - RESTORE RIPRAP AS NECESSARY
   - REGRADE TO PROVIDE POSITIVE DRAINAGE AS NECESSARY (A PROFESSIONAL LAND SURVEYOR MAY BE REQUIRED TO PROVIDE POSITIVE DRAINAGE)
   - REGULAR MOWING TO CONTROL VEGETATION
   - ROTOTILL BOTTOM OF DRY SWALES IF NOT DRAWING DOWN WITHIN 48HOURS

5. **VEGETATED AREAS**
   - NEED FOR PLANTING, RESEEDING, OR SODDING. SUPPLEMENT ALTERNATIVE NATIVE VEGETATION IF A SIGNIFICANT PORTION HAS NOT ESTABLISHED (50% OF THE SURFACE AREA AFTER SECOND GROWING SEASON), RESEED WITH ALTERNATIVE NATIVE GRASS SPECIES IF ORIGINAL GRASS COVER HAS NOT SUCCESSFULLY ESTABLISHED
   - EVIDENCE OF GRADING, MOTORBIKES, OR OTHER VEHICLES, REPAIR
   - SIGNS OF EROSION, REGRADE AND REVEGETATE AS NECESSARY
   - REGULAR MOWING TO CONTROL VEGETATION IT IS RECOMMENDED THAT NATIVE VEGETATION REMAIN UNCUT
   - DEAD OR DAMAGED NON-NATIVE GRASSY AREAS – REPAIR WITH SEEDING WITH FERTILIZATION OR SODDING WITH KBG'S
   - DETENTION/STORAGE AREA SHALL BE RESEEDED WITH APPROPRIATE VEGETATION ACCORDING TO THE APPROVED PLANTING PLAN

6. **QUALIFIED SEWER CONSTRUCTION**
   - PERFORM MANHOLE INSPECTIONS ONCE EVERY FIVE YEARS, MAKE REPAIRS AS NECESSARY
   - PERFORM SEWER CLEANING AND CCTV INSPECTIONS ONCE EVERY SEVEN YEARS, REMEMBER TO
   - PERFORM REGULAR SEWER CLEANING SO THAT EVERY SEWER SEGMENT IS CLEANED ONCE EVERY FIVE YEARS
   - REMOVE ANY CONSTRUCTION PLACES IN MAINTENANCE EASEMENTS THAT MAY IMPEDE MAINTENANCE EQUIPMENT ACCESS.



LOT SUMMARY:

PROPERTY ADDRESS: 2240-2296 Rand Road, Palatine, IL 60074

PROPERTY INDEX NUMBERS: 02-02-101-004-0000; 02-02-101-005-0000; 02-02-101-013-0000; 02-02-101-014-0000; 02-02-101-019-0000; 02-02-101-020-0000; 02-02-101-021-0000

TOTAL PROPERTY OWNERSHIP = 8,86 AC

TOTAL DEVELOPMENT AREA = 8,60 AC

ON-SITE AREA TRIBUTARY TO STORMWATER BASIN = 8,06 AC

UNRESTRICTED ON-SITE AREA = 0,80 AC
(100-YR 24-HR EVENT SUBTRACTED FROM ALLOW RELEASE)

TIME OF CONCENTRATION CALCULATIONS:

USE 10-MIN FOR INDUSTRIAL

DETENTION & RETENTION SUMMARY:

BOTTOM VC BELOW NWL = 749,00

SHGWTE = 13,5' BELOW EXISTING FINISHED GRADE ELEV. = ±737.5 to 743.5 IN BASIN AREA

DETENTION VOLUME PROVIDED = 3,69 AC-FT

DETENTION VOLUME REQUIRED = 3,34 AC-FT

RETENTION VOLUME PROVIDED = 0,73 AC-FT

RETENTION VOLUME REQUIRED = 0,54 AC-FT

CURVE NUMBER CALCULATIONS:

CN TRIBUTARY TO BASINS = 96.0

CN UNRESTRICTED = 71.0

CN ADJUSTED = 87.0

SYMBOL LEGEND

- PERVIOUS AREA
- IMPERVIOUS AREA
- NATIVE PLANTINGS - VOLUME CONTROL AREA
- UNRESTRICTED NATIVE PLANTINGS AREA TO BE SEEDED PER LANDSCAPE PLAN
- UNRESTRICTED IMPERVIOUS AREA
- UNDISTURBED AREA
- LIMITS OF GRADING DISTURBANCE

SUMMARY OF DEVELOPMENT AREA

IMPERVIOUS	3,20 AC
PERVIOUS	3,40 AC
NATIVE PLANTINGS - VOLUME CONTROL	0,73 AC
UNR. NATIVE PLANTINGS	0,20 AC
UNR. IMPERVIOUS	0,21 AC
UNDISTURBED AREA	0,26 AC
TOTAL	8,86 AC

NO.	DATE	REMARKS

NO.	DATE	REMARKS
2	04/11/22	REVISIONS PER ARCHITECT/OWNER
1	03/22/22	REVISIONS PER ARCHITECT

MWRD EXHIBIT R

2240-2296 RAND ROAD
PALATINE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700
Rosemont, Illinois 60018
Phone: (847) 696-4400 Fax: (847) 696-4065

SPACECO INC.

FILENAME: 11624MWRD

DATE: 03/16/22

JOB NO. 11624

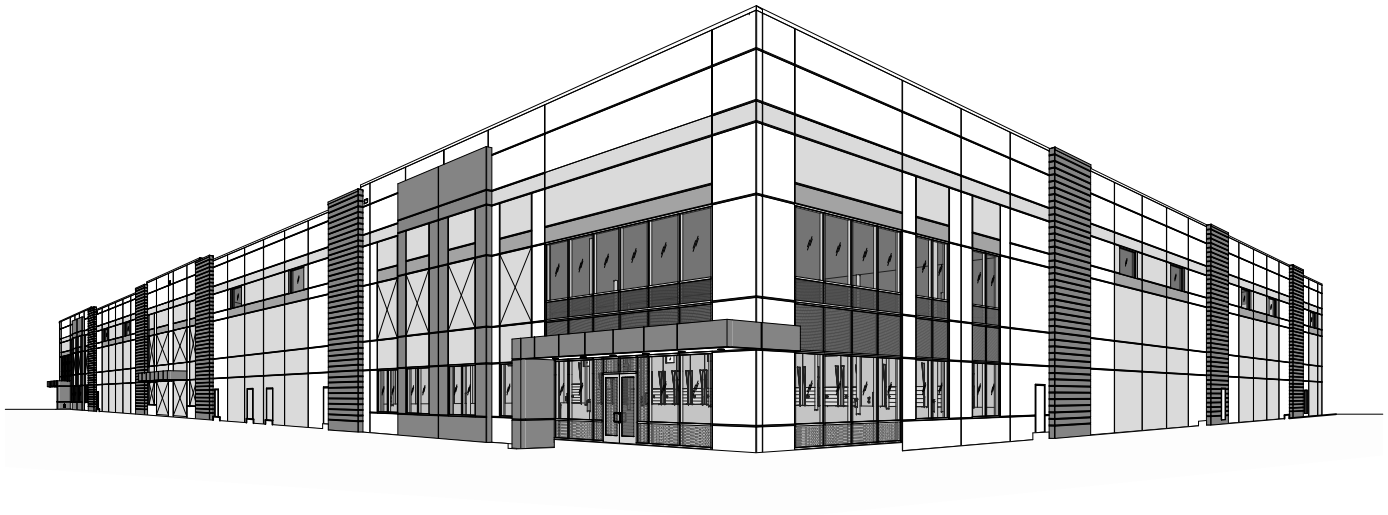
SHEET EXH-R 18 OF

Attachment: Missner Group - ENG Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

MISSNER GROUP - PALATINE

2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074



SHEET INDEX

TOTAL SHEETS: 33

ARCHITECTURAL

A0.1	TITLE SHEET
A0.1a	PROJECT DATA
A0.2	GENERAL NOTES
A0.3	ACCESSIBILITY DETAILS
A0.3a	ACCESSIBILITY DETAILS
A0.4a	SPECIFICATIONS
A0.4b	SPECIFICATIONS
A0.4c	SPECIFICATIONS
A0.4d	SPECIFICATIONS
A0.4e	SPECIFICATIONS
A0.4f	SPECIFICATIONS
A0.4g	SPECIFICATIONS
A0.4h	SPECIFICATIONS
A0.5	OCCUPANCY AND EGRESS PLAN
A1.1	SITE PLAN (FOR REFERENCE ONLY)
A2.0	OVERALL FLOOR PLAN
A2.1	PARTIAL FLOOR PLAN
A2.2	PARTIAL FLOOR PLAN
A3.1	ROOF PLAN
A4.1	EXTERIOR ELEVATIONS
A4.2	EXTERIOR ELEVATIONS
A5.0	BUILDING SECTIONS
A5.1	ENLARGED ELEVATION, PLAN AND WALL SECTIONS
A5.2	ENLARGED ELEVATION, PLAN AND WALL SECTIONS
A5.3	ENLARGED ELEVATION, PLAN AND WALL SECTIONS
A5.4	ENLARGED ELEVATION, PLAN AND WALL SECTIONS
A5.5	ENLARGED ELEVATION, PLAN AND WALL SECTIONS
A5.6	WALL SECTIONS
A5.7	WALL SECTIONS
A7.1	DOOR SCHEDULE
A8.1	DETAILS
A8.2	DETAILS
A8.3	DETAILS

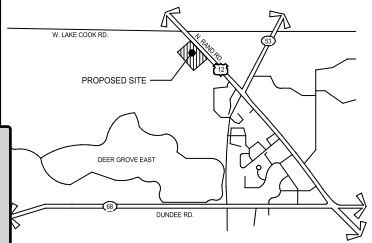
ARCHITECTURAL SHEET COUNT: 33

STRUCTURAL

S0.0	GENERAL NOTES
S0.1	SYMBOLS AND ABBREVIATIONS
S0.2	LOAD PLANS
S2.1	FOUNDATION PLAN
S2.2	ROOF FRAMING PLAN
S5.0	FOUNDATION DETAILS
S5.1	FOUNDATION DETAILS
S6.0	FRAMING DETAILS
S6.1	FRAMING DETAILS
S7.0	INTERIOR BUILDING ELEVATION AND JOIST DIAGRAMS

STRUCTURAL SHEET COUNT: 10

VICINITY MAP



OWNER/ GENERAL CONTRACTOR

THE MISSNER GROUP
THE MISSNER GROUP, LLC
1700 W. HIGGINS RD.
DES PLAINES, ILLINOIS 60018

PRIMARY CONTACT: BARRY MISSNER
PH: (847) 675-8877
EMAIL: bmissner@missnergroup.com

OWNER'S CONSULTANTS

CIVIL & LANDSCAPE ARCHITECT
SPACECO, INC.
9575W. HIGGINS ROAD, SUITE 700
ROSEMONT, ILLINOIS 60018

PRIMARY CONTACT: BRIAN RATAJCZAK
PH: (847) 696-4060
EMAIL: bratjczak@spacecoinc.com

ARCHITECT'S CONSULTANTS

STRUCTURAL ENGINEER
IMEG.
225 W. WASHINGTON STREET, SUITE 2700
CHICAGO, ILLINOIS 60606

PRIMARY CONTACT: SCOTT A. WIERCINSKI
PH: (630) 200-3960
EMAIL: scoot.a.wiercinski@imegcorp.com

ARCHITECT

WARE MALCOMB
1315 22ND St #410
OAK BROOK, IL 60523
P. 630.218.0063

A.O.R.: GRANT BRANDENBURG NCARB
PH: (630) 570-6765
EMAIL: gbrandenburg@waremalcomb.com
PRIMARY CONTACT: MAREK PULA
PH: (202) 908-6947 EXT. 1614
EMAIL: mpula@waremalcomb.com
ALTERNATE CONTACT: ELIKA GEORGIEVA
PH: (630) 570-6767 EXT. 1624
EMAIL: egeorgieva@waremalcomb.com

DEFERRED SUBMITTALS

DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEERS OF RECORD WHO SHALL REVIEW AND PROVIDE NOTATION INDICATING DOCUMENTS HAVE BEEN REVIEWED AND FOUND TO BE IN GENERAL CONFORMANCE WITH THE BUILDING DESIGN. SUBMITTAL MATERIALS SHALL INCLUDE PLANS, DETAILS AND CALCULATIONS PREPARED AND SIGNED BY A STATE REGISTERED ENGINEER.
CONTRACTOR SHALL SUBMIT ARCHITECT AND ENGINEER REVIEWED SUBMITTAL MATERIALS TO THE BUILDING OFFICIAL FOR REVIEW AND PERMIT APPROVAL. DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED PRIOR TO OBTAINING THE BUILDING OFFICIAL'S APPROVAL OF THE SUBMITTAL.

1. MEP SYSTEMS
2. AUTOMATIC FIRE SPRINKLER SYSTEM.
3. FIRE ALARM SYSTEM.
4. STEEL JOISTS, TRUSSES AND GIRDERS CONFORMING TO SJI STANDARDS SPECIFICATIONS.
5. STEEL STAIRS, HANDRAILS AND GUARDS.
6. HIGH PILED STORAGE RACKING.
7. EXTERIOR BUILDING SIGNAGE AND SITE SIGNAGE.
8. ANCHORAGE DESIGN FOR ALL ELECTRICAL EQUIPMENT REQUIRED.
9. STOREFRONT AND CURTAIN WALL GLAZING SYSTEMS.
10. ROOF HATCH, RAILING AND GATE.
11. ROOF ACCESS LADDER/PLATFORM DESIGN AND SUPPORT.
12. LADDER SAFETY SYSTEM DESIGN AND SUPPORT.

State of Illinois Design Firm Registration No. 184.006269
WARE MALCOMB
ARCHITECTURE / INTERIORS
CIVIL ENGINEERING / PLANNING
BUILDING MEASUREMENT
1315 22nd St #410
Oakbrook, IL 60523
P 630.218.0063

GRANT A BRANDENBURG 001-020942 REGISTERED ARCHITECT STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

TITLE SHEET

REMARKS	DATE
PROGRESS PACKAGE	2022-04-04
PERMIT SET	2022-04-08

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	

SHEET NO.: A0

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

4/18/2022 8:53:06 AM 2022-04-08 PERMIT SET

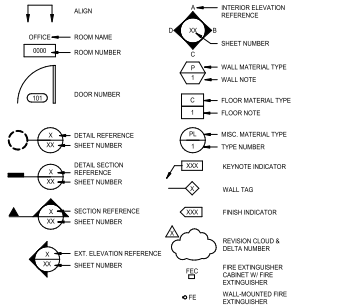
Packet Pg. 342

7.C.1.A.d

ABBREVIATIONS

∠	ANGLE				
℄	CENTERLINE	G.B.	GRAB BAR	R.	RISER
#	POUND or NUMBER	G.C.	GENERAL CONTRACTOR	R.B.	RUBBER / RESILIENT BASE
&	AND	G.F.I.	GROUND FAULT INTERRUPT	R.C.P.	REFLECTED CEILING PLAN
(E)	EXISTING	GA.	GAUGE	R.D.	ROOF DRAIN
@	AT	GALV.	GALVANIZED	R.O.	ROUGH OPENING
"	DIAMETER or ROUND	GL.	GLASS	R.O.W.	RIGHT OF WAY
∅	DIAMETER	GND.	GROUND	R.T.U.	ROOF TOP UNIT
		GR.	GRADE	R.W.L.	RAIN WATER LEADER
A.D.	AREA DRAIN	GYP.	GYPSUM	RAD.	RADIUS
ACOUS.	ACOUSTICAL			REF.	REFERENCE
ADJ.	ADJUST, ADJUSTABLE or ADJACENT	H.B.	HOSE BIBB	REFR.	REFRIGERATOR
		H.C.	HOLLOW CORE	REINF.	REINFORCE(D)
AGGR.	AGGREGATE	H.M.	HOLLOW METAL	REQ.	REQUIRED
AL.	ALUMINUM	H.P.	HIGH POINT	RESIL.	RESILIENT
APPROX.	APPROX(IMATE(LY)	H.V.	HIGH VOLTAGE	RGTR.	REGISTER
ARCH.	ARCHITECTURAL	HDWD.	HARDWOOD	RM.	ROOM
ASB.	ASBESTOS	HDWE.	HARDWARE	RWD.	REDWOOD
ASPH.	ASPHALT	HORIZ.	HORIZONTAL		
		HR.	HOUR	S.	SOUTH
B.O.C.	BOTTOM OF CONCRETE	HT.	HEIGHT	S.A.F.	SELF-ADHERED FLASHING
B.O.M.	BOTTOM OF MULLION			S.C.	SOLID CORE
B.O.P.	BOTTOM OF PANEL	I.D.	INSIDE DIMENSION	S.C.D.	SEAT COVER DISPENSER
B.O.R.	BOTTOM OF REVEAL	I.H.P.	INTERMEDIATE HIGH POINT	S.D.	SOAP DISPENSER
BD.	BOARD	INSUL.	INSULATION or INSULATED	S.F.	SQUARE FOOT
BITUM.	BITUMINOUS	INT.	INTERIOR	S.I.	SQUARE INCH
BLDG.	BUILDING			S.N.D.	SANITARY NAPKIN DISPENSER
BLK.	BLOCK	J.B.	JUNCTION BOX		
BLKG.	BLOCKING	JAN.	JANITOR	S.N.R.	SANITARY NAPKIN RECEPTACLE
BM.	BEAM	JST.	JOIST		
BOT.	BOTTOM	JT.	JOINT	S.S.	STAINLESS STEEL
				S.SK.	SERVICE SINK
C.B.	CATCH BASIN	K.O.	KNOCK-OUT	S.T.C.	SOUND TRANSMISSION COEFFICIENT
C.G.	CORNER GUARD	K.P.	KICK PLATE		
C.I.	CAST IRON	K.W.H.	KILOWATT HOUR	SCHED.	SCHEDULE
C.O.	CASED OPENING	KIT.	KITCHEN	SOLID.	SOLID CORE WOOD
C.O.M.	CENTER OF MULLION			SECT.	SECTION
C.O.R.	CENTER OF REVEAL	L.P.	LOW POINT	SH.	SHELF
CAB.	CABINET	L.S.	LIMESTONE	SHR.	SHOWER
CEM.	CEMENT(ITIOUS)	L.V.	LOW VOLTAGE	SHT.	SHEET
CER.	CERAMIC	L.W.C.	LIGHT WEIGHT CONCRETE	SIM.	SIMILAR
CLG.	CEILING	LAB.	LABORATORY	SPEC.	SPECIFIED or SPECIFICATION
CLKG.	CAULKING	LAM.	LAMINATE(D)		
CLO.	CLOSET	LAV.	LAVATORY	SQ.	SQUARE
CLR.	CLEAR	LIN.	LINEAR	STA.	STATION
CNTR.	COUNTER	LIQ.	LIQUID	STD.	STANDARD
COL.	COLUMN	LKR.	LOCKER	STL.	STEEL
CONC.	CONCRETE	LT.	LIGHT	STOR.	STORAGE
CONN.	CONNECTION	LTL.	LINTEL	STRL.	STRUCTURE or STRUCTURAL
CONSTR.	CONSTRUCTION	LVR.	LOUVER		
CONT.	CONTINUOUS			SUPP.	SUPPLEMENT or SUPPLEMENTARY
CORR.	CORRIDOR	M.B.	MOP BASIN	SUSP.	SUSPENDED
CTR.	CENTER	M.C.	MEDICINE CABINET	SYMM.	SYMMETRICAL
CTSK.	COUNTER-SUNK	M.O.	MASONRY OPENING		
		MAINT.	MAINTENANCE	T&G	TONGUE AND GROOVE
D.F.	DRINKING FOUNTAIN	MAN.	MANUAL	T.	TREAD
D.O.	DOOR OPENING	MAS.	MASONRY	T.B.	TOWEL BAR
D.S.	DOWNSPOUT	MAX.	MAXIMUM	T.C.	TOP OF CURB
D.S.P.	DRY STANDPIPE	MECH.	MECHANICAL	T.D.	TRENCH DRAIN
DBL.	DOUBLE	MEMB.	MEMBRANE	T.O.C.	TOP OF CONCRETE
DEPT.	DEPARTMENT	MET.	METAL	T.O.M.	TOP OF MULLION
DET.	DETAIL	MEZZ.	MEZZANINE	T.O.P.	TOP OF PARAPET
DIA.	DIAMETER	MFR.	MANUFACTURER	T.O.R.	TOP OF REVEAL
DIM.	DIMENSION	MH.	MANHOLE	T.O.REC.	TOP OF DEEP RECESS
DISP.	DISPENSER	MIN.	MINIMUM	T.O.S.	TOP OF STEEL
DN.	DOWN	MIR.	MIRROR	T.O.W.	TOP OF WALL
DR.	DOOR	MISC.	MISCELLANEOUS	T.P.	TOP OF PAVEMENT
DWG.	DRAWING	MTD.	MOUNTED	T.P.D.	TOILET PAPER DISPENSER
DWR.	DRAWER	MUL.	MULLION	T.V.	TELEVISION
				TEL.	TELEPHONE
E.	EAST	N.	NORTH	TER.	TERRAZZO
E.J.	EXPANSION JOINT	N.I.C.	NOT IN CONTRACT	THK.	THICK
E.P.	ELECTRIC PANELBOARD	N.R.C.	NOISE REDUCTION COEFFICIENT	TOL.	TOLERANCE
E.W.C.	ELECTRIC WATER COOLER			TYP.	TYPICAL
EA.	EACH	N.T.S.	NOT TO SCALE		
EL.	ELEVATION	NO.	NUMBER	U.C.	UNDERCUT
ELEC.	ELECTRIC(AL)	NOM.	NOMINAL	U.H.	UNIT HEATER
ELEV.	ELEVATOR			U.L.	UNDERWRITERS' LABORATORIES
EMER.	EMERGENCY	O.A.	OVERALL		
ENCL.	ENCLOSED or ENCLOSURE	O.C.	ON CENTER	U.O.N.	UNLESS OTHERWISE NOTED
EQ.	EQUAL	O.D.	OUTSIDE DIAMETER	UNF.	UNFINISHED
EQPT.	EQUIPMENT	O.F.	OUTSIDE FACE	UR.	URINAL
EXP.	EXPANSION	O.H.	OVERHEAD or OPPOSITE HAND	V.C.T.	VINYL COMPOSITE TILE
EXPO.	EXPOSED	OBS.	OBSCURE	V.I.F.	VERIFY IN FIELD
EXST.	EXISTING	OFF.	OFFICE	V.P.	VISION PANEL
EXT.	EXTERIOR	OPNG.	OPENING	V.R.	VAPOR RETARDER
		OPP.	OPPOSITE	VAC.	VACUUM
F.A.	FIRE ALARM			VERT.	VERTICAL
F.A.R.	FLOOR AREA RATIO	P.C.	PRECAST	VEST.	VESTIBULE
F.B.	FLAT BAR	P.J.	PANEL JOINT	VIT.	VITREOUS
F.D.	FLOOR DRAIN	P.LAM.	PLASTIC LAMINATE		
F.E.	FIRE EXTINGUISHER	P.S.F.	POUNDS PER SQUARE FOOT	W.	WEST
F.E.C.	FIRE EXTINGUISHER CABINET			W.C.	WATER CLOSET
F.H.C.	FIRE HOSE CABINET	P.T.D.	PAPER TOWEL DISPENSER	W.I.	WROUGHT IRON
F.O.C.	FACE OF CONCRETE	P.T.R.	PAPER TOWER RECEPTACLE	W.P.	WORKING POINT
F.O.F.	FACE OF FINISH			W.S.	WEATHER STOP or STRIPPING
F.O.M.	FACE OF MULLION	PL.	PLATE		
F.O.SH.	FACE OF SHEATHING	PLAS.	PLASTER	W.W.F.	WELDED WIRE FABRIC
F.P.	FIREPROOF	PLYWD.	PLYWOOD	WI	WITH
F.S.	FULL SIZE	POL.	POLISHED)	WO	WITHOUT
FDN.	FOUNDATION	PR.	PAIR	WD.	WOOD
FIN.	FINISHED)	PT.	POINT	WPM	WATERPROOFING MEMBRANE
FL.	FLOOR			WRB	WEATHER / WATER RESISTIVE BARRIER
FLASH.	FLASHING	Q.T.	QUARRY TILE		
FLUOR.	FLUORESCENT	QUAL.	QUALITY	WSCT.	WAINSCOT
FT.	FOOT or FEET	QUAN.	QUANTITY	WT.	WEIGHT
FTG.	FOOTING				
FURR.	FURRING				
FUT.	FUTURE				

SYMBOLS



PROJECT DATA

APPLICABLE CODES

CITY OF:	VILLAGE OF PALATINE, ILLINOIS
BUILDING:	2015 INTERNATIONAL BUILDING CODE W/ VILLAGE AMENDMENTS
STRUCTURE:	2015 INTERNATIONAL BUILDING CODE W/ VILLAGE AMENDMENTS
MECHANICAL:	2015 INTERNATIONAL MECHANICAL CODE
ELECTRICAL:	2017 NATIONAL ELECTRIC CODE
PLUMBING:	2014 ILLINOIS PLUMBING CODE
ENERGY:	2018 INTERNATIONAL ENERGY CONSERVATION CODE W/ ILLINOIS AMENDMENTS
FIRE / LIFE SAFETY:	2015 INTERNATIONAL FIRE CODE W/ VILLAGE AMENDMENTS 2000 LIFE SAFETY CODE, NFPA 101
ACCESSIBILITY:	2018 STATE OF ILLINOIS ACCESSIBILITY CODE

CHAPTER 3 - USE & OCCUPANCY CLASSIFICATION

OCCUPANCY	SECTION	USE	PROPOSED AREA (SF)
S-1 / STORAGE	**(311)**	**WAREHOUSE**	SEE ALLOWABLE AREA BELOW

CHAPTER 5 - GENERAL BUILDING HEIGHTS AND AREAS

ALLOWABLE BUILDING HEIGHT:

MAIN OCCUPANCY	SPRINKLER CONDITION	(TABLE 504.3) ALLOWABLE BUILDING HEIGHT IN FEET	(TABLE 504.4) ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE	PROPOSED BUILDING HEIGHT IN FEET	PROPOSED NUMBER OF STORIES ABOVE GRADE PLANE
S-1	**S**	**75'-0"**	**3 STORY**	**43'-0"**	**1 STORY**

ALLOWABLE BUILDING AREA:

UNLIMITED AREA ALLOWED PER	**507.4 & 507.2.1**
W/ AUTOMATIC SPRINKLER AND OPEN YARDS GREATER THAN 60 FEET ON ALL SIDES & 40 FEET W/ 3HR RATING	

PROPOSED TOTAL BUILDING AREA ..... **145,408** S.F.

CHAPTER 6 - TYPES OF CONSTRUCTION

TYPE OF CONSTRUCTION (602) ..... **TYPE:** I-B

BUILDING ELEMENTS	(TABLE 601)
STRUCTURAL FRAME	0 HR.
EXTERIOR BEARING WALLS	0 HR.
INTERIOR BEARING WALLS	0 HR.
EXTERIOR NON-BEARING WALLS	**SEE BELOW**
INTERIOR NON-BEARING WALLS	0 HR.
FLOORS	0 HR.
ROOF	0 HR.

EXTERIOR WALLS BASED ON FIRE SEPARATION ..... **(TABLE 602)**

NORTH EXTERIOR WALL (X > 30')	0 HR.
EAST EXTERIOR WALL (X > 30')	0 HR.
SOUTH EXTERIOR WALL (X > 30')	0 HR.
WEST EXTERIOR WALL (X > 30')	0 HR.

CHAPTER 7 - FIRE AND SMOKE PROTECTION FEATURES

ALLOWABLE AREA OF OPENINGS (TABLE 705.8) (FULLY SPRINKLERED THROUGHOUT)

EXTERIOR WALLS	FIRE SEPARATION (FT)	ALLOWABLE AREA (%)	EXTERIOR WALL AREA (SF)	ACTUAL AREA OF PROTECTED OPENINGS	ACTUAL AREA OF UNPROTECTED OPENINGS	ALLWBL. AREA (IF UNPROTECTED)	(Actual/Allw)
FLOOR 1 NORTH	≥ 30	UNLIMITED UNPROTECTED OPENINGS ARE PERMITTED					
FLOOR 1 EAST							
FLOOR 1 SOUTH							
FLOOR 1 WEST							

CHAPTER 9 - FIRE PROTECTION SYSTEMS

(903.3.1.1) AUTOMATIC SPRINKLER SYSTEM WILL BE PROVIDED AND INSTALLED WITH ACCORDANCE WITH NFPA 13.

(903.4) AUTOMATIC SPRINKLER SYSTEM MONITORING AND ALARMS WILL BE PROVIDED.

E.S.F.R. (EARLY SUPPRESSION FAST-RESPONSE) AUTOMATIC FIRE PREVENTION SPRINKLER SYSTEM PROVIDED THROUGHOUT. SPRINKLER DESIGN AND CALCULATIONS TO BE SUBMITTED UNDER SEPARATE PERMIT.

(910.2) EXCEPTION 2: SMOKE AND HEAT VENTS NOT REQUIRED WHERE E.S.F.R. SPRINKLER SYSTEM IS PROVIDED

CHAPTER 10 - MEANS OF EGRESS (SEE OCCUPANCY AND EGRESS PLANS)

PROJECT DESCRIPTION

THE SCOPE OF THIS PROJECT IS A 145,408 SF SHELL WAREHOUSE SPACE. THE BUILDING CONSTRUCTION SHALL CONSIST OF INSULATED PRECAST CONCRETE PANELS, TRENCH FOOTINGS AT THE PERIMETER, SLAB ON GRADE, AND STEEL STRUCTURAL COLUMNS AND ROOF COMPONENTS.

State of Illinois Design Firm Registration No. 184.006269
WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING LANDSCAPE
INTERIORS BUILDING MEASUREMENT
1333 22nd St. #410
Downers Grove, IL 60515
P 630.218.0063

GRANT A. BRANDENBURG 001-020842 STATE OF ILLINOIS REGISTERED ARCHITECT
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

PROJECT DATA

REMARKS	DATE
PROGRESS PACKAGE	2022-04-04
PERMIT SET	2022-04-06

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	C

SHEET SIZE: A0

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

CAUTION: IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PR 3.2.c

ENVELOPE ASSEMBLY NOTES

1. **ROOF ASSEMBLY:**

1.1 **MAIN ROOF CONSTRUCTION:**
- 45 MIL BALLASTED EPDM USING ASTM #4 STONE AT 10 LBS/SF IN THE FIELD, 12 LBS/SF IN THE PERIMETER, AND 15 LBS/SF IN THE CORNERS W/ FLASHING AT ALL ROOF OPENINGS (15 YEAR MANUFACTURER WARRANTY)
- (2) LAYERS OF RIGID INSULATION (R-25)
- METAL DECK (REFER TO STRUCT.). ROOF DECK WILL BE PAINTED WITH A BOTTOM SIDE FACTORY APPLIED "WHITE" PRIMER.
- GRAY TUBE STEEL COLUMNS AND GRAY JOISTS/ GIRDERS. BUILDING COLUMNS ONE COLUMN FROM DOCK WALLS SHALL BE PAINTED TO A HEIGHT OF 10'-0" AFF IN SAFETY YELLOW
- TWO LAYERS OF POLYISOCYANURATE INSULATION WITH STAGGERED SEAMS, TAPED AND SEALED
- STAGGER JOINTS IN SUCCESSIVE LAYERS OF INSULATION A MINIMUM OF 18" APART
- THE ROOF SYSTEM SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.

1.2 **COVERED CANOPY ROOF CONSTRUCTION:**
- FULLY ADHERED 45 MIL REINFORCED EPDM ROOF MEMBRANE. INSTALL PER ROOFING MANUFACTURER'S SPECIFICATIONS
- TAPERED RIGID INSULATION
- 1 1/2" METAL DECK (REFER TO STRUCT).
- STRUCTURAL MEMBERS (REFER TO STRUCTURAL DRAWINGS FOR LAYOUT AND MEMBER SIZES)

2. **EXTERIOR WALL ASSEMBLIES:**

2.1 **PRE-CAST CONCRETE WALL PANELS**
- LOAD BEARING INSULATED PRE-CAST CONCRETE WALL PANELS - 10.5" THICK WITH REVEALS AND PAINTED FINISH, TYP. TOTAL R-VALUE OF PRECAST CONCRETE SANDWICH WALL ASSEMBLY PROVIDED SHALL BE NOT LESS THAN R-6. ALL PANELS' JOINTS WILL BE CAULKED ON BOTH THE INTERIOR AND EXTERIOR.
- STANDARD 14'-0" OR 12'-0" WIDE PANELS. PRE-CAST CONCRETE WALL PANELS SHALL RECEIVE A TINTED PRIMER COAT AND TWO (2) COATS OF TEXTURED PAINT.
- PAINT COLORS: (A) BASE COLOR: SW 7662 EVENING SHADOW; (B) SW 7658 PHINESTONE; (C) SW 6256 EVENING GRAY; (D) SW 6794 FLYAWAY.

2.2 PRE-FINISH ALUMINUM **METAL PANELS ASSEMBLY: CANOPY AND WALL DESIGN**
- METAL STUD FRAMING
- 1/2" PLYWOOD SHEATHING
- HIGH TEMPERATURE WEATHER RESISTANT BARRIER (WRB) PRE-FINISHED ALUMINUM METAL PANELS INSTALLED PER MANUFACTURER'S RECOMMENDATIONS

3. **EXTERIOR GLAZING ASSEMBLIES:**

3.1 **STOREFRONT/ WINDOWS/ CLERESTORY GLAZING SYSTEM:**
- 1" INSULATED GLAZING UNITS (THERMALLY BROKEN) HIGH PERFORMANCE GLASS
- STOREFRONT SYSTEM/ WINDOWS & CLERESTORY WINDOWS: CENTER GLAZED (GU) = 1/4" PPG SOLARGRAY EXTERIOR - BASE OF DESIGN))
- 1/2" AIR SPACE
- 1/4" SOLARBAN 100, CLEAR LOW-E (ON SURFACE 2) GLAZING UNIT
- CLEAR ANODIZED ALUMINUM FRAMES WITH A THERMO-BREAK DESIGN

ALL GLASS USED ON THE ENVELOPE OF THE BUILDING TO BE:
- SOLARBAN R100 (BASE OF DESIGN OR APPROVED EQUAL
- PERFORMANCE CRITERIA:
  1. VLT (VISIBLE LIGHT TRANS.): 32%
  2. EXTERIOR REFLECTANCE: 15%
  3. U FACTOR (WINTER): 0.28
  4. U FACTOR (SUMMER): 0.26
  5. SHADING COEFFICIENT: 0.27
  6. SHGC: 0.24
  7. RELATIVE HEAT GAIN: 98

GLASS WIND LOAD RESISTANCE CALCULATIONS ARE UNDER SEPARATE PERMIT

3.2 COLOR OF GLASS: TINTED (COLOR TO BE SELECTED BY TENANT) (EXTERIOR GLAZING)

3.3 COLOR OF GLASS: CLEAR (INTERIOR GLAZING)

3.4 SPANDREL GLASS: COLOR TO MATCH CLEAR ANODIZED STOREFRONT SYSTEM (IF ANY) MULLIONS

3.4 CLEARSTORY WINDOWS: FRAMING SHALL BE CLEAR ANODIZED ALUMINUM WITH TINTED GLASS (COLOR: GRAY)

4. **EXTERIOR SWINGING DOOR ASSEMBLIES:**

4.1 **SERVICE/ MAN DOORS:**
- 16GA GALVANIZED HOLLOW METAL FLUSH DOORS AND 16GA FULLY WELDED H.M. GALVANIZED DOOR FRAMES
- PAINTED, INSULATED HOLLOW METAL DOOR w/ COMMERCIAL GRADE HEAVY DUTY HARDWARE INCLUDING SCHLAGE MORTISE LOCKS, FALCON EXIT DEVICES AND LCN CLOSERS.
- DOORS AND FRAMES ARE TO HAVE SHOP PRIMED PAINT APPLIED.
- COLOR: REFER TO BUILDING ELEVATIONS. COLOR TO MATCH COLOR OF ADJACENT EXTERIOR WALL.
- UL RATED DOORS AS REQUIRED BY CODE (ALL DOORS REQUIRED BY CODE TO BE FIRE RATED SHALL HAVE LABELS DESIGNATING HOURLY RATINGS PER UNDERWRITER'S LABORATORY STANDARDS)

4.2 **STOREFRONT SYSTEM DOORS:**
- MEDIUM STILE ENTRY DOORS WITH 1". INSULATED W/ 1/4" GLAZING ASSEMBLY, CLOSERS, WEATHER-STRIPPING AND THRESHOLDS
- CLEAR ANODIZED ALUMINUM STOREFRONT DOOR w/ TEMPERED GLAZING

5. **EXTERIOR NON-SWINGING DOOR ASSEMBLIES:**

5.1 **SECTIONAL DOORS:**
- MANUALLY OPERATED SECTIONAL VERTICAL LIFT OVERHEAD DOCK DOORS WITH Z-GUARD TRACK PROTECTION
- STEEL SECTIONAL DOORS, INSULATED, MINIMUM U-VALUE OF 0.070 (R-14)
- ALL DOORS SHALL BE PROVIDED WITH ONE (1) VISION PANEL
- Z CHANNEL TRACK GUARDS TO BE INCLUDED FOR ALL OVERHEAD DOORS
- ALL DOORS TO HAVE SLIDE BOLT MECHANISMS AND HAVE A WHITE POLYESTER FINISH.
- OVERHEAD DOORS SHALL BE EQUIPPED WITH WEATHER STRIPPING, GALVANIZED FLUSH STEEL FACE, METAL TRACK AND HARDWARE

5.2 **DRIVE-IN-DOORS:**
- MOTOR (ELECTRIC) OPERATED SECTIONAL VERTICAL LIFT OVERHEAD D.I.D. DOORS
- STEEL SECTIONAL DOORS, INSULATED, MINIMUM U-VALUE OF 0.070 (R-14)
- ALL DOORS SHALL BE PROVIDED WITH ONE (1) VISION PANEL (1" INSULATED GLASS)
- Z CHANNEL TRACK GUARDS TO BE INCLUDED FOR ALL OVERHEAD DOORS
- ALL DOORS TO HAVE SLIDE BOLT MECHANISMS AND HAVE A WHITE POLYESTER FINISH.
- OVERHEAD DOORS SHALL BE EQUIPPED WITH WEATHER STRIPPING, VISION PANEL, GALVANIZED FLUSH STEEL FACE, METAL TRACK AND HARDWARE

6. **PERIMETER INSULATION:**
PROVIDE CONTINUOUS RIGID INSULATION AT PERIMETER OF FIRST STORY BUILDING SLAB, MINIMUM R-VALUE R-10. PROVIDE INSULATION TO A DEPTH OF 24" BELOW GRADE-LINE AT BUILDING FACE.

7. **FLOOR ASSEMBLY:**
7.1 **SLAB-ON-GRADE:**
- REFER TO STRUCTURAL FOR FLOOR ASSEMBLY
- 10 MIL VAPOR BARRIER INCLUDED AT FUTURE OFFICE AREAS
- WAREHOUSE FLOORS SHALL BE SEALED WITH 1 COAT OF ASHFORD SEALER OR EQUAL.

DOOR NOTES

1. VERIFY THAT ALL DOORS AND DOOR HARDWARE MEET THE REQUIREMENTS OF ALL GOVERNING CODES & STANDARDS. NOTIFY THE ARCHITECT IMMEDIATELY IN CASE OF DISCREPANCY.
2. FIELD MEASURE AS REQUIRED ALL DOORS AND/OR DOOR OPENINGS PRIOR TO FABRICATION.
3. PROVIDE SIGN IN CONTRASTING LETTERS OF 1 INCH OR MORE AT MAIN ENTRY STATING "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED" UNLESS LOCK UNLATCHES WITHOUT A KEY OR NEED OF SPECIAL KNOWLEDGE.
4. VERIFY THAT EXISTING DOORS (IF ANY) COMPLY WITH ACCESSIBILITY REQUIREMENTS.
5. FIRE RATED AND SMOKE AND DRAFT CONTROL DOORS SHALL COMPLY WITH REQUIREMENTS OF ALL GOVERNING CODES & STANDARDS AND SHALL BEAR A LABEL FROM A RECOGNIZED AGENCY SHOWING THE SPECIFIC RATINGS.
6. ALL SWINGING DOOR HANDLES TO BE LEVER-TYPE TO COMPLY WITH GOVERNING CODES & ACCESSIBILITY STANDARDS.
7. DOOR HANDLES OR PULLS AND ALL OTHER OPERABLE PARTS OF DOOR HARDWARE (SUCH AS DEADBOLTS, KEYHOLES, ETC.) ARE TO BE CENTERED BETWEEN 34" AND 44" ABOVE FINISH FLOOR. IF EXISTING BUILDING STANDARD EXISTS, MATCH BUILDING STANDARD AND CONFIRM COMPLIANCE WITH ACCESSIBILITY REQUIREMENTS.
8. SPECIAL LOCKING DEVICES SHALL BE OF AN APPROVED TYPE BY AUTHORITY HAVING JURISDICTION.
9. PROVIDE WEATHER SEALS ON ALL EXTERIOR DOORS TO RESTRICT INFILTRATION PER ANSI / IECC STANDARDS.
10. CONTRACTOR IS RESPONSIBLE TO COORDINATE & VERIFY ALL DOOR FRAME THROAT THICKNESSES FOR EACH LOCATION.
11. ALL DOOR FRAMES TO BE FACTORY FINISHED, U.O.N.
12. PROVIDE 6"x16 GA MIN FLAT METAL OR 2x6 BACKING (FRT AS REQUIRED) BEHIND ALL WALL MOUNTED DOOR STOPS. FLOOR MOUNTED DOOR STOP SHALL NOT BE PLACED IN A PATH OF EGRESS AS A TRIPPING HAZARD.
13. MAXIMUM UNDERCUT OF ALL NON-FIRE RATED DOORS SHALL NOT EXCEED 1/2" ABOVE FINISH FLOOR SURFACE.
14. CONTRACTOR SHALL REFINISH ANY BLEMISHED DOOR OR REPLACE SAID DOOR IF NOT ABLE TO REFINISH TO "AS NEW" CONDITION.
15. ALL DOORS TO BE OPERABLE FROM THE INSIDE WITHOUT A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT
16. ALL DOORS WITH ELECTRONIC SECURITY DOOR LOCKS MUST BE OPERABLE FOR EXITING PURPOSES UNDER ALL CONDITIONS - INCLUDING A POWER OUTAGE.
17. IF BUILDING STANDARDS ARE INCONSISTENT FOR DOORS, SIDELITES, HARDWARE, DOOR AND SIDELITE FRAMES OR OTHER STANDARD DETAILS, THEN CONTRACTOR MUST VERIFY WITH ARCHITECT AND OWNER PRIOR TO CONSTRUCTION.
18. WINDOWS AND DOORS SHALL MEET THE MAXIMUM AIR LEAKAGE REQUIREMENTS AS INDICATED IN IECC TABLE C402.5.2 (IGC TO COORDINATE)
19. EXTERIOR WINDOWS AND DOORS SHALL BE LABELED AS CONFORMING TO AAMA/NWDA 101/I.S.2/NAFS. LABEL TO STATE NAME OF MANUFACTURER, THE APPROVED LABELING AGENCY AND THE PRODUCT DESIGNATION.

ROOF NOTES

1. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR SCHEMATIC LAYOUT OF ROOF LEVEL HVAC, PLUMBING AND ELECTRICAL EQUIPMENT, PIPE, CONDUIT, PLATFORMS, HOUSEKEEPING PADS, BASES, SHAFT OPENINGS, DECK PENETRATIONS, ETC.
2. CONTRACTOR SHALL VERIFY SIZE, LOCATIONS, AND INSTALLATIONS REQUIREMENTS OF ALL HVAC, PLUMBING AND ELECTRICAL EQUIPMENT WITH EQUIPMENT MANUFACTURERS AND SUBMIT A FINAL LAYOUT OF ALL EQUIPMENT FOR ARCHITECT APPROVAL.
3. THE TOP OF MECHANICAL AND PLUMBING EQUIPMENT PLATFORMS AND CURBS SHALL MEASURE A MINIMUM OF 8" ABOVE THE HIGHEST ADJACENT TOP OF ROOFING ELEVATION.
4. VENT OPENINGS THROUGH THE ROOF SHALL BE INSTALLED AT 10'-0" MINIMUM AWAY FROM AND TERMINATED 3'-0" MINIMUM ABOVE ANY FRESH AIR INTAKE.
5. SEE PLUMBING DRAWINGS FOR ROOF DRAIN AND SECONDARY DRAIN SIZES.
6. CRICKETS SHALL BE INSTALLED ON THE HIGH SIDE OF ANY OBSTRUCTION MORE THAN 47" WIDE AND ORIENTED PERPENDICULAR TO THE FLOW OF WATER TO THE DRAIN. SUCH OBSTRUCTIONS INCLUDE BUT ARE NOT LIMITED TO EQUIPMENT PADS, CURBS AND WALLS.
7. ROOFING ASSEMBLIES SHALL BE SELECTED AND INSTALLED AS REQUIRED TO RESIST MAXIMUM WIND SPEEDS AND UPLIFT FORCES DEFINED BY CODE AND LOCAL OR STATE LAW AS APPLIED TO THE ROOF'S GEOGRAPHIC LOCATION, HEIGHT AND EXPOSURE CLASS.
8. OVERFLOW SCUPPERS AND SECONDARY ROOF DRAINS SHALL BE DESIGNED PER APPLICABLE CODES WITH INLETS LOCATED 3" ABOVE THE LOW POINT OF THE SURROUNDING FINISHED ROOF SURFACE. COORDINATE W/ STRUCTURAL.
9. ORIENT SKYLIGHT/SMOKE HATCH (IF ANY) HINGE SIDE TOWARD THE PREVAILING WIND.
10. ALL ROOF SURFACES SHALL SLOPE A MINIMUM OF 1/4 INCH PER FOOT IN ALL DIRECTIONS.
11. SEE STRUCTURAL DRAWINGS FOR ROOF FRAMING.
12. ALL ROOF SURFACES SHALL STOP AT A MINIMUM OF 1/4 INCH PER FOOT IN ALL DIRECTIONS. CRICKETS SHALL BE USED ON THE HIGH SIDE OF ALL EQUIPMENT PLATFORMS.
13. REFER TO STRUCTURAL DRAWINGS ROOF ELEVATIONS (BOTTOM OF DECK) FROM FINISHED FLOOR, DATUM ELEVATION 0'-0".
14. T.O.P = TOP OF PARAPET / PANEL.
15. ROOFING MATERIALS AND ASSEMBLY SHALL BE RATED UL CLASS "A" FIRE RETARDANT
16. PROVIDE MULTI-COMPONENT EXPANDING POLYURETHANE FOAM SEALANT AT BUILDING PERIMETER & ROOF PENETRATIONS (TYP.)

IL. ENERGY CONSERV. CODE

THE INTERNATIONAL ENERGY CONSERVATION CODE (IECC) HAS BEEN ADOPTED BY THE STATE OF ILLINOIS PER THE JOINT COMMITEE ON ADMINISTRATIVE RULES CODE: TITLE 71: CHAPTER 1: SUBCHAPTER d: PART 600.110 'ADOPTION AND MODIFICATION OFHE CODE; SUBSECTION 2) "PRIVATELY FUNDED COMMERCIAL FACILITIES AND RESIDENTIAL BUILDINGS"

IN ACCORDANCE WITH IECC SECTION C401.2, 1. "APPLICATION", THE ENVELOPE OF THE SUBJECT PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF ANSI/ ASHRAE / IESNA 90.1. THE COMPLIANCE PATH SHALL BE VIA APPLICATION OF THE ANSI / ASHRAE / IESNA 90.1 SECTION 5.2.1.b, "SUBSECTION 5.6, BUILDING ENVELOPE TRADE-OFF .OPTION."

COMPLIANCE SHALL BE DEMONSTRATED BY SUBMITTAL OF "COMPLIANCE .CERTIFICATES" GENERATED FOR THE SUBJECT PROJECT BY THE U.S. DEPARMENT OD .ENERGY'S COMCHECK CODE COMPLIANCE TOOL. IN ACCORDANCE WITH THE STATE OF ILLINOIS JOINT COMMITEE ON ADMINISTRATIVE RULES ADMINISTRATIVE CODE: TITLE 71: CHAPTER 1: SUBCHAPTER D: PART 600:

SECTION 600.330. 'COMPLIANCE'. SUBSECTION b) 2)

FIRE AUTHORITY NOTES

1. FINAL INSPECTION BY FIRE DEPARTMENT IS REQUIRED - SCHEDULE 2 DAYS IN ADVANCE. THE LOCAL AUTHORITY HAVING JURISDICTION IS REQUIRED FOR FINAL INSPECTIONS.
2. THE PROJECT ADDRESS SHALL BE PROVIDED FOR ALL NEW AND EXISTING BUILDINGS IN A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY PER LOCAL FIRE DEPARTMENT STANDARDS.
3. AN UNOBSTRUCTED ALL-WEATHER FIRE APPARATUS ACCESS ROAD SHALL BE IN PLACE PRIOR TO DELIVERY OF COMBUSTIBLE BUILDING MATERIALS TO THE SITE.
4. FIRE PREVENTION WATER SERVICE SHALL BE IN SERVICE PRIOR TO THE DELIVERY OF COMBUSTIBLE BUILDING MATERIALS TO THE SITE.
5. ACCESS GATES, IF ANY) SHALL BE APPROVED PRIOR TO INSTALLATION AND SHALL BE IN COMPLIANCE WITH LOCAL FIRE AUTHORITY.
6. PRIVATE FIRE HYDRANTS, SPRINKLER CONTROL AND POST INDICATOR VALVES , AND RISERS TO FIRE DEPARTMENT CONNECTIONS SHALL BE PAINTED "SAFETY RED" PER LOCAL FIRE AUTHORITY.
7. ALL FIRE HYDRANTS SHALL HAVE A "BLUE REFLECTIVE PAVEMENT MARKER" INDICATING ITS LOCATION ON THE STREET OR DRIVE PER LOCAL FIRE AUTHORITY STANDARDS. ON PRIVATE PROPERTY THESE MARKERS ARE TO BE MAINTAINED IN GOOD CONDITION BY THE PROPERTY OWNER. (REFER TO CIVIL)
8. PROVIDE OUTSIDE GAS SHUT-OFF VALVE. PROVIDE SIGN INDICATION MAIN GAS AND ELECTRICAL SHUT-OFF PER LOCAL FIRE DEPARTMENT.
9. FIRE SPRINKLER SYSTEM(S) SHALL MEET STATE & LOCAL FIRE CODES AND BE PROVIDED TO PROTECT ENTIRE BUILDING INCLUDING PROJECTIONS OVER 4'-0".
10. FIRE SPRINKLER SYSTEM(S) AND ALL CONTROL VALVES, INCLUDING EXTERIOR SHALL BE SUPERVISED BY A.U.L. LISTED CENTRAL ALARM STATION OR PER STATE & LOCAL FIRE CODES.
11. ALL VALVES CONTROLLING THE WATER SUPPLY FOR AUTOMATIC SPRINKLER SYSTEMS AND WATER FLOW SWITCHES ON ALL SPRINKLER SYSTEMS SHALL BE ELECTRONICALLY MONITORED
12. WHERE THE NUMBER OF SPRINKLERS IS 100 OR MORE , ELECTRICAL SUBCONTRACTORS TO INSTALL WIRING FOR FIRE SPRINKLER, ALARM BELL AND TELEPHONE WARNING AS REQUIRED BY FIRE DEPARTMENT.
13. INSTALLATION OF FIRE ALARM SYSTEMS SHALL BE IN ACCORDANCE WITH STATE & LOCAL FIRE CODES.
14. COMPLETE PLANS AND SPECIFICATIONS FOR ALL FIXED FIRE PROTECTION EQUIPMENTS INCLUDING AUTOMATIC SPRINKLERS AND OTHER FIRE-PROTECTION SYSTEMS, SHALL BE SUBMITTED BY INSTALLING CONTRACTOR. SUCH PLANS SHALL BE APPROVED BY LOCAL FIRE AUTHORITY PRIOR TO INSTALLATION.
15. ALL RECQUIRED FIRE DOORS SHALL BEAR A LABEL FROM A RECOGNIZED AGENCY SHOWING THE SPECIFIC RATING.
16. EXIT SIGNS AND ILLUMINATION SHALL CONFORM TO ALL APPLICABLE BUILDING AND FIRE CODES.
17. EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
18. PROVIDE OR MODIFY AS NEEDED SPRINKLER ALARM AND SMOKE DETECTION SYSTEM PER APPLICABLE CODES INCLUDING IF NECESSARY FR HORNS, STROBE LIGHTS, CONTROL PANEL CONNECTIONS, SMOKE DETECTORS, AUDIO VISUAL ALARMS. SUBMIT SHOP DRAWINGS TO FIRE MARSHAL FOR APPROVAL.
19. AT LEAST ONE (1) FIRE EXTINGUISHER WITH A MINIMUM RATING OF: 2-A-10B:C (FOR OFFICE), OR 10-A-80B:C (FOR WAREHOUSE), SHALL BE PROVIDED WITHIN 75'-0" MAXIMUM TRAVEL DISTANCE FOR EACH 3,000 SQUARE FEET OR PORTION THEREOF ON EACH FLOOR.
20. LOCATIONS AND CLASSIFICATIONS OF FIRE EXTINGUISHERS SHALL BE IN ACCORDANCE WITH STATE & LOCAL FIRE CODES AND PLACEMENT IS SUBJECT TO THE APPROVAL OF THE FIRE INSPECTOR. VERIFY QUANTITY & EXACT LOCATION FROM FIRE DEPARTMENT PRIOR TO ORDERING.
21. STORAGE, DISPENSING OR USE OF ANY FLAMMABLE AND COMBUSTIBLE LIQUIDS, FLAMMABLE AND COMPRESSED GASES, AND OTHER HAZARDOUS MATERIAL SHALL COMPLY WITH STATE & LOCAL FIRE CODES. THE STORAGE AND USE OF HAZARDOUS MATERIALS SHALL BE APPROVED BY THE FIRE AUTHORITY PRIOR TO ANY MATERIALS BEING STORED OR USED ON SITE. A SEPARATE PLAN SUBMITTAL IS REQUIRED PRIOR TO THE STORAGE AND USE OF HAZARDOUS MATERIALS.
22. BUILDING(S) NOT APPROVED FRO HIGH-PILED STOCK (MATERIALS IN CLOSELY PACKED PILES OR ON PALLETS, OR IN RACKS WHERE THE TOP OF STORAGE EXCEEDS 12'-0" IN HEIGHT, AND 6'-0" FOR GROUP "A" PLASTICS AND CERTAIN OTHER HIGH-HAZARD COMMODITIES). HIGH-PILED STOCK SHALL BE APPROVED BY THE FIRE AUTHORITY PRIOR TO MATERIALS BEING STORED ON SITE. A SEPARATE PLAN SUBMITTAL IS REQUIRED FOR HIGH-PILED STORAGE IN ACCORDANCE WITH STATE & LOCAL FIRE CODES.
23. A LETTER OF INTENDED USE MAY BE REQUIRED BY THE FIRE INSPECTOR.

SITE NOTES

1. REFER TO LANDSCAPE DRAWINGS FOR CONCRETE WALKS, PAVING, BERMS, LANDSCAPING AND IRRIGATION.
2. REFER TO CIVIL DRAWINGS FOR SITE GRADING, DRAINAGE, CATCH BASINS, PAVING DETAILS, SITE UTILITIES, CURB AND GUTTER SWALES, FIRE HYDRANT LOCATIONS AND HORIZONTAL CONTROL DIMENSIONS.
3. REFER TO CIVIL DRAWINGS FOR POINT OF CONNECTIONS TO OFF-SITE UTILITIES. CONTRACTOR TO VERIFY ACTUAL UTILITY LOCATIONS.
4. ALL DIMENSION ON SITE PLAN ARE TO BE FACE OF CONCRETE WALL, FACE OF CONCRETE CURB, PROPERTY LINE OR CENTERLINE OF PARKING STALL, UNLESS OTHERWISE NOTED.
5. FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH THE LOCAL FIRE DEPARTMENT STANDARDS.
6. ALL PARKING STALL STRIPING SHALL BE PER LOCAL JURISDICTION STANDARDS.
7. CONCRETE WALK SHALL RECEIVE EXPANSION JOINTS AT 50'-0" O.C MAX. AND CONTROL JOINTS AT 5'-0" O.C MAX. BETWEEN EXPANSION JOINTS, UNLESS NOTED OTHERWISE.

FLOOR PLAN NOTES

1. ALL EXITS SHALL HAVE EXIT SIGNS.
2. REFER TO PLUMBING, CIVIL AND SITE PLANS, FOR SIZE AND ROUTING OF ROOF DRAINAGE CONNECTIONS TO UNDERGROUND STORM DRAIN OR RUN TO DAYLIGHT AS SHOWN.
3. FLOORS SHALL BE SLOPED TO FLOOR DRAINS. COORDINATE WITH PLUMBING AND STRUCTURAL DRAWINGS. IN RATED FLOOR CONDITIONS, CONFIRM REMAINING FLOOR THICKNESS STILL CONFORMS TO MINIMUM RATING REQUIREMENT

GLAZING NOTES

1. EACH LIGHT SHALL BEAR THE MANUFACTURER'S LABEL DESIGNATING THE TYPE AND THICKNESS OF THE GLASS.
2. GLASS SHALL BE FIRMLY SUPPORTED ON ALL FOUR EDGES, U.O.N.
3. FIELD MEASURE ALL OPENINGS PRIOR TO FABRICATION.
4. FIXED OR OPERABLE GLAZING IN HAZARDOUS LOCATIONS AS DEFINED IN THE BUILDING CODE SHALL BE TEMPERED GLASS (SAFETY GLASS).
5. GLAZING IN SWINGING, SLIDING AND BIFOLD DOORS SHALL BE TEMPERED.
6. ALL GLAZING WITHIN A 24" ARC OF EITHER EDGE OF A DOOR AND WITHIN 60" OF THE FLOOR SHALL BE TEMPERED.
7. GLAZING IN WINDOWS: ALL GLAZING THAT MEETS ALL OF THE FOLLOWING CONDITIONS SHALL BE TEMPERED:
   A. THE EXPOSED AREA OF AN INDIVIDUAL PANE IS GREATER THAN 9 SF.
   B. THE BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR.
   C. THE TOP EDGE IS GREATER THAN 36" ABOVE THE FLOOR.
   D. WALKING SURFACE IS WITHIN 36".
8. ALL GLASS SHALL COMPLY WITH THE REQUIREMENTS OF THE STATE AND LOCAL CODES AND THE U.S. PRODUCT SAFETY COMMISSIONS: SAFETY STANDARDS FOR ARCHITECTURAL GLAZING MATERIALS.
9. WHERE JOINTS ARE REQUIRED IN MULTIPLE LITES, CLEAR SILICONE IS TO BE PROVIDED, U.O.N.
10. WINDOWS AND DOORS SHALL MEET THE MAXIMUM AIR LEAKAGE REQUIREMENTS AS INDICATED IN IECC TABLE C402.5.2 (IGC TO COORDINATE)
11. EXTERIOR WINDOWS AND DOOR SHALL BE LABELED AS CONFORMING TO AAMA/NWDA 101/I.S.2 OR 101/I.S.2/NAFS. LABEL TO STATE NAME OF MANUFACTURER, THE APPROVED LABELING AGENCY AND THE PRODUCT DESIGNATION.

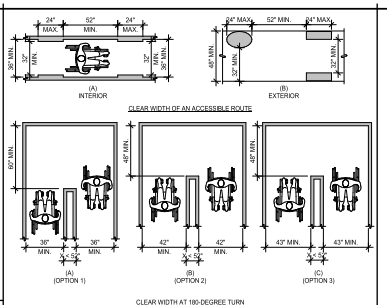
TABLE 2406.1
MINIMUM CATEGORY CLASSIFICATION OF GLAZING

EXPOSED SURFACE AREA OF ONE SIDE OF ONE LITE	GLAZING IN FIXED AND OPERABLE COMBINATION DOORS (Category class)	GLAZING IN DOORS (Category class)	GLAZED PANELS REGULATED BY ITEM 7 OF SECTION 2406.3 (Category class)	GLAZED PANELS REGULATED BY ITEM 8 OF SECTION 2406.3 (Category class)	DOORS AND ENCLOSURES REGULATED BY ITEM 9 OF SECTION 2406.3 (Category class)	SLIDING GLASS DOORS PATIO TYPE (Category class)
9 square feet or less	II	II	No requirement	II	II	II
More than 9 square feet	II	II	II	II	II	II

GENERAL PROJECT NOTES

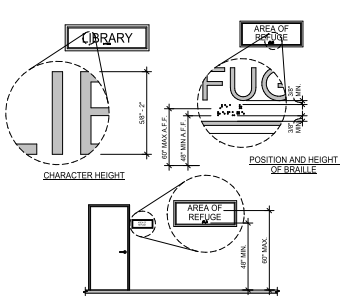
GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED SO AS TO COMPLY WITH ALL LEGAL, INDUSTRY AND PROJECT-SPECIFIC REQUIREMENTS AND STANDARDS INCLUDING WITHOUT LIMITATION OF THE FOLLOWING:
   A. ALL APPLICABLE BUILDING CODES
   B. ALL APPLICABLE SPECIALTY CODES INCLUDING THE MOST CURRENT ISSUES AND SUPPLEMENTS
   C. THE PROJECT MANUAL AND ASSOCIATED SPECIFICATIONS WHEN PROVIDED
   D. THE MANUFACTURER'S REQUIREMENTS OR RECOMMENDATIONS
   E. ALL APPLICABLE LANDLORD BUILDING STANDARDS
2. IN USING THESE PLANS FOR BIDDING OR CONSTRUCTION PURPOSES, ALL CONTRACTORS ARE REQUIRED TO REVIEW AND TREAT THEM AS A WHOLE IN ORDER TO IDENTIFY ALL REQUIREMENTS THAT DIRECTLY OR INDIRECTLY AFFECT THEIR PORTION OF THE WORK, EVEN REQUIREMENTS LOCATED IN SECTIONS DESIGNATED AS APPLICABLE TO OTHER TRADES OR IN DOCUMENTS PROVIDED BY OTHER MEMBERS OF THE PROJECT DESIGN TEAM. UNLESS EXPRESSLY PROVIDED OTHERWISE, THE INTENT IS TO INCLUDE ALL LABOR, MATERIALS, PRODUCTS AND SERVICES NECESSARY OR APPROPRIATE FOR THE COMPLETED PROJECT AS CALLED FOR OR REASONABLY IMPLIED FROM THE PLANS AND SPECIFICATIONS PROVIDED BY THE PROJECT'S DESIGN TEAM. IN CASE OF CONFLICTS OR OMISSIONS, THE AFFECTED CONTRACTOR IS REQUIRED TO EITHER OBTAIN DIRECTION FROM AN APPROPRIATE REPRESENTATIVE OF THE OWNER, OR OTHERWISE TO APPLY THE MORE STRINGENT OR COSTLY STANDARD.
3. IN INTERPRETING THESE PLANS, THE FOLLOWING GENERAL RULES APPLY:
   A. WRITTEN DIMENSIONS SHALL GOVERN. DO NOT SCALE THE DRAWINGS. LARGE SCALE DRAWINGS AND DETAILS TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS
   B. SPECIFIC NOTES AND DETAILS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS
   C. WHERE CONSTRUCTION DETAILS ARE NOT SHOWN OR NOTED FOR ANY PART OF THE WORK, THE DETAILS SHALL BE THE SAME AS FOR OTHER SIMILAR WORK IN THE SAME BUILDING.
   D. WORK SHOWN AS "NIC" IS FOR REFERENCE ONLY AND THE RESPONSIBILITY OF THE CONTRACTOR ONLY TO THE EXTENT THAT THIS WORK MAY REQUIRE SOME REASONABLE PROTECTION OR COORDINATION EFFORTS.
4. THESE PLANS AND SPECIFICATIONS ARE INTENDED TO REPRESENT ONLY THE FINISHED CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION AND DEMOLITION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES INCLUDING ANY AND ALL SAFETY PRECAUTIONS AND PROGRAMS AND SHALL INDEMNIFY TO THE FULLEST EXTENT ALLOWED BY LAW THE OWNER AND THE PROJECT DESIGN TEAM FROM AND AGAINST ANY AND ALL RELATED CLAIMS AND LIABILITY.
5. THESE PLANS AND SPECIFICATIONS ARE INTENDED TO SET FORTH THE REQUIREMENTS FOR CONSTRUCTION IN ONLY AN INDUSTRY-STANDARD LEVEL OF QUALITY AND DETAIL, AND THEY ARE INTENDED TO BE SUPPLEMENTED BY APPROPRIATE REQUESTS FOR INFORMATION (RFIs). ERRORS AND OMISSIONS ARE TO BE EXPECTED AND ANTICIPATED, AND ALL CONTRACTORS ARE REQUIRED TO CAREFULLY REVIEW THESE PLANS FOR ERRORS AND OMISSIONS AND TO BRING THESE ERRORS AND OMISSIONS TO THE TIMELY ATTENTION OF AN APPROPRIATE OWNER REPRESENTATIVE IN A TIMELY MANNER, AND ANY CONTRACTOR WHO FAILS TO DO SO BEFORE BIDDING OR OTHERWISE PROCEEDING ASSUMES THE RISK OF ANY CONSEQUENCES.
6. DIMENSIONS SCALED FROM DRAWINGS SHALL BE CONSIDERED APPROXIMATE. CONTRACTORS THAT FAIL TO FIELD MEASURE AND VERIFY DISTANCES, CLEARANCE AND FIT ARE PROCEEDING AT THEIR OWN RISK.
7. EXCEPT WHERE DIMENSIONED, PLANS ARE TO BE CONSIDERED DIAGRAMMATIC IN NATURE AND INTENDED ONLY TO DEMONSTRATE THE RELATIONSHIP AMONG COMPONENT PARTS, AND NOT TO DEPICT SPECIFIC LOCATIONS.
8. DESIGN/BUILD CONTRACTOR SUBMITTALS WILL BE REVIEWED BY THE PROJECT DESIGN TEAM, IF AT ALL, ONLY FOR CONFORMANCE WITH THE AESTHETIC ASPECTS AND MAJOR SPACE LIMITATIONS OF THE PROJECT, AND EACH DESIGN/BUILD CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING:
   A. PREPARING ALL THE ENGINEERING AND OTHER DRAWINGS AND SPECIFICATIONS FOR THE COMPONENTS OF ITS DESIGN/BUILD UNDERTAKING.
   B. COMPLYING WITH THE PROJECT'S REQUIREMENTS AND SPACE LIMITATIONS.
   C. COORDINATION AND INTERFACING WITH OTHER TRADES AND CONSULTANTS.
   D. OBTAINING ANY REQUIRED OR APPROPRIATE APPROVALS FROM AUTHORITIES HAVING JURISDICTION OVER THE PROJECT.
   E. HAVING THEIR DESIGN CONSULTANTS SERVE AS THE PROFESSIONAL OF RECORD FOR THE PORTIONS OF WORK WHICH THEY DESIGN.
9. AS MAY BE REQUIRED BY THE AUTHORITIES HAVING JURISDICTION, AT THE CONCLUSION OF CONSTRUCTION EACH PRIME CONTRACTOR SHALL PROVIDE WRITTEN CERTIFICATION THAT THEIR PORTION OF THE WORK HAS BEEN PERFORMED IN COMPLIANCE WITH THE BUILDING PERMIT APPROVED PLANS AND SPECIFICATIONS.
10. VERSIONS OF THESE PLANS PROVIDED IN ANY ELECTRONIC FORM ARE SUBJECT TO THE SAME PROVISION AS THE OTHER INSTRUMENTS OF SERVICE PREPARED



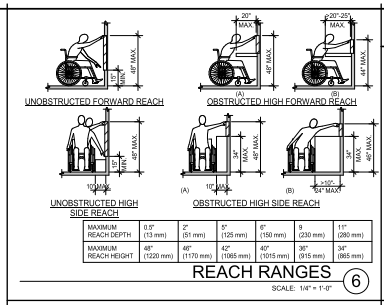
CLEAR WIDTH 18

SCALE: 1/4" = 1'-0"



SIGNS 12

SCALE: 1/4" = 1'-0"



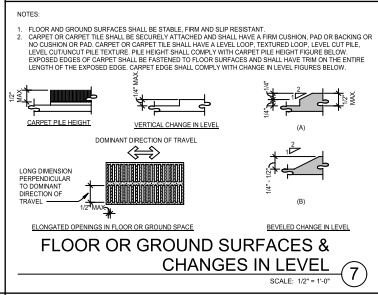
MAXIMUM REACH DEPTH	0.5" (13 mm)	2" (51 mm)	5" (125 mm)	6" (150 mm)	9 (230 mm)	11" (280 mm)
MAXIMUM REACH HEIGHT	48" (1220 mm)	46" (1170 mm)	42" (1065 mm)	40" (1015 mm)	36" (915 mm)	34" (865 mm)

REACH RANGES 6

SCALE: 1/4" = 1'-0"

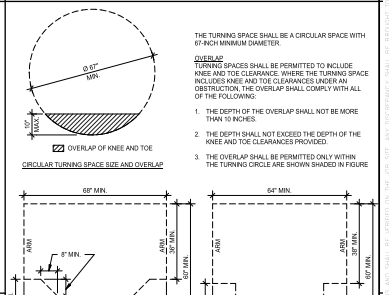
ACCESSIBILITY NOTES

1. "THE ACCESSIBILITY GUIDELINES AND CODES" MENTIONED BELOW REFER TO ALL APPLICABLE LOCAL/STATE BUILDING CODES REFERENCED ON THE PROJECT DATA SHEET OF THIS SET IN ADDITION TO THE FEDERAL REQUIREMENTS OF THE ADA (THE AMERICANS WITH DISABILITIES ACT).
2. DETAILS ON THIS SHEET ARE FOR REFERENCE ONLY. REFER TO THE ACCESSIBILITY GUIDELINES AND CODES FOR ALL ACCESSIBILITY REQUIREMENTS.
3. THE GENERAL CONTRACTOR SHALL BECOME FAMILIAR WITH THE ACCESSIBILITY GUIDELINES AND CODES.
4. ANY DISCREPANCY CONTAINED HEREIN DOES NOT RELIEVE THE GENERAL CONTRACTOR OR OWNER FROM COMPLYING WITH THE ACCESSIBILITY GUIDELINES AND CODES.



FLOOR OR GROUND SURFACES & CHANGES IN LEVEL 7

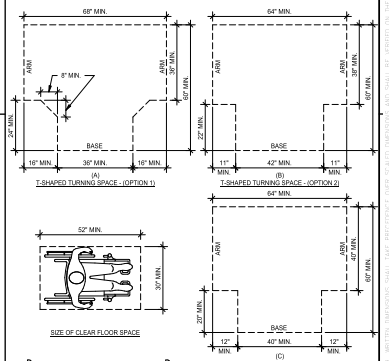
SCALE: 1/2" = 1'-0"

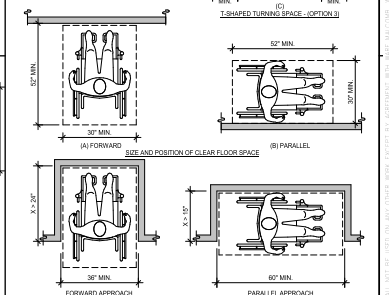


THE TURNING SPACE SHALL BE A CIRCULAR SPACE WITH 67-INCH MINIMUM DIAMETER.

OVERLAP
TURNING SPACES SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE. WHERE THE TURNING SPACE INCLUDES KNEE AND TOE CLEARANCES UNDER AN OBSTRUCTION, THE OVERLAP SHALL COMPLY WITH ALL OF THE FOLLOWING:

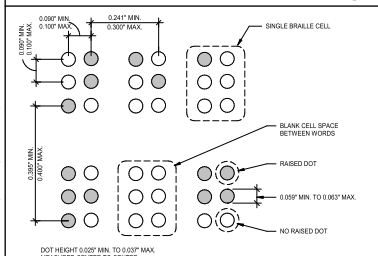
1. THE DEPTH OF THE OVERLAP SHALL NOT BE MORE THAN 10 INCHES.
2. THE DEPTH SHALL NOT EXCEED THE DEPTH OF THE KNEE AND TOE CLEARANCES PROVIDED.
3. THE OVERLAP SHALL BE PERMITTED ONLY WITHIN THE TURNING CIRCLE ARE SHOWN SHADED IN FIGURE





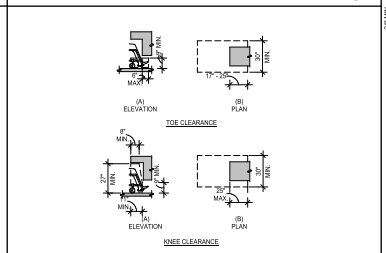
CLEAR FLOOR OR GROUND SPACE 4

SCALE: 1/2" = 1'-0"



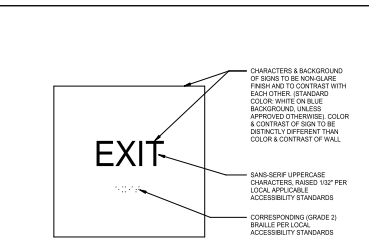
BRAILLE MEASUREMENT 13

SCALE: 3/8" = 1'-0"



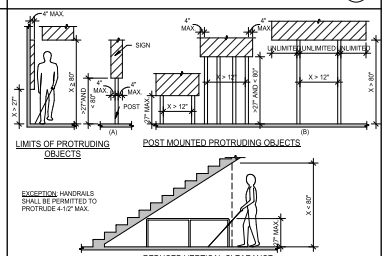
KNEE AND TOE CLEARANCE 8

SCALE: 1/4" = 1'-0"



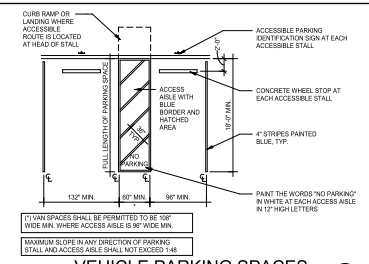
TACTILE "EXIT" SIGN 14

SCALE: 3" = 1'-0"



PROTRUDING OBJECTS 9

SCALE: 1/4" = 1'-0"



VEHICLE PARKING SPACES 15

SCALE: 1/8" = 1'-0"

PARKING SPACES PER 2010 ADA

TOTAL NUMBER OF PARKING SPACES PROVIDED IN PARKING FACILITY	MINIMUM NUMBER OF REQUIRED ACCESSIBLE PARKING SPACES
1 TO 25	1
26 TO 50	2
51 TO 75	3
76 TO 100	4
101 TO 150	5
151 TO 200	6
201 TO 300	7
301 TO 400	8
401 TO 500	9
501 TO 1000	2 PERCENT OF TOTAL
1001 AND OVER	20, PLUS 1 FOR EACH 100, OR FRACTION THEREOF, OVER 1000

PARKING SPACES 10

SCALE: 1/2" = 1'-0"

HEIGHT TO FINISH FLOOR FROM BASELINE OF CHARACTER	HORIZONTAL VIEWING DISTANCE	MINIMUM CHARACTER HEIGHT
40 INCHES TO LESS THAN OR EQUAL TO 70 INCHES	LESS THAN 72 INCHES	5/8 INCH
	72 INCHES AND GREATER	5/8 INCH, PLUS 1/8 INCH PER FOOT OF VIEWING DISTANCE ABOVE 72 INCHES
GREATER THAN 70 INCHES TO LESS THAN OR EQUAL TO 120 INCHES	LESS THAN 180 INCHES	2 INCHES
	180 INCHES AND GREATER	2 INCHES, PLUS 1/8 INCH PER FOOT OF VIEWING DISTANCE ABOVE 180 INCHES
GREATER THAN 120 INCHES	LESS THAN 21 FEET	3 INCHES
	21 FEET AND GREATER	3 INCHES, PLUS 1/8 INCH PER FOOT OF VIEWING DISTANCE ABOVE 21 FEET

1. THE VERTICAL HEIGHT IS MEASURED FROM THE FLOOR OF THE VIEWING POSITION TO THE BASELINE OF THE HIGHEST LINE OF CHARACTERS.

VISUAL CHARACTER HEIGHT 5

SCALE: 12" = 1'-0"

State of Illinois Design Firm Registration No. 184-006269
WARE MALCOMB
ARCHITECTURE PLANNING INTERIORS
CIVIL ENGINEERING PLANNING BUILDING MEASUREMENT
1313 22nd St. #410 Downers Grove, IL 60515 P 630.218.0063

GRANT A. BRANDENBURG 001-020842 STATE OF ILLINOIS PROFESSIONAL ENGINEER
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

ACCESSIBILITY DETAILS

DATE	REMARKS
2022-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	C

SHEET NO.: A0

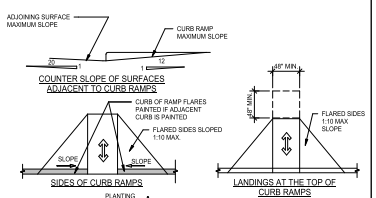
4/19/2022 8:53:14 AM 2022-04-08 PERMIT SET

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Packet Pg. 345

7.C.1.A.p

Pg. 70



CURB RAMPS 12

SCALE: 1/4" = 1'-0"

RAMPS 14

SCALE: 1/4" = 1'-0"

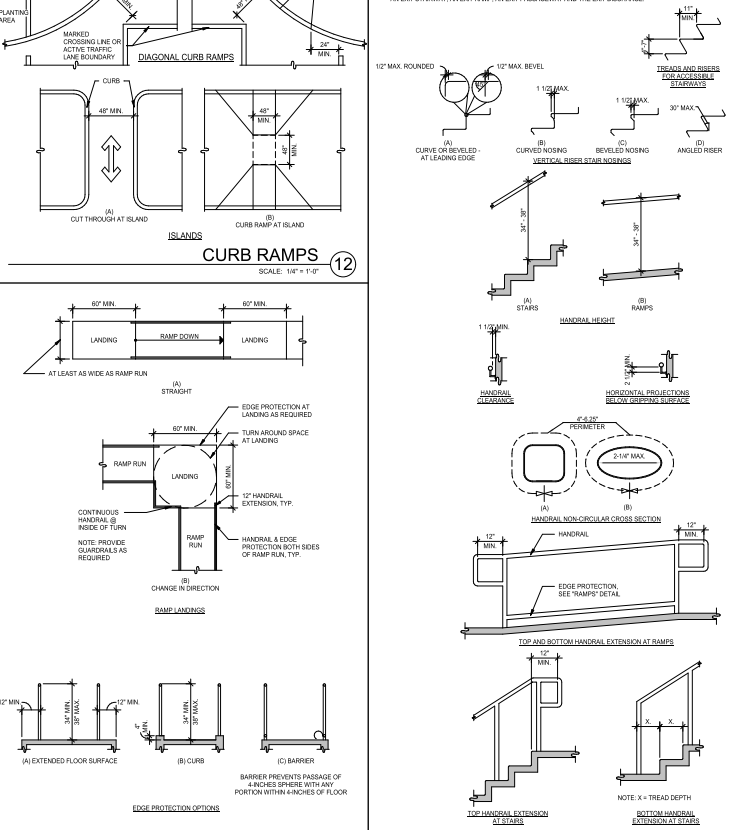
NOTES:
STAIRS
1. OPEN RISERS ARE NOT PERMITTED.
2. TREAD SURFACES SHALL COMPLY WITH (FLOOR OR GROUND SURFACES & CHANGES IN LEVEL) DETAIL AND SHALL HAVE A SLOPE NOT STEEPER THAN 1:48.

HANDRAILS
3. HANDRAIL GRIPPING SURFACES SHALL BE CONTINUOUS ALONG THEIR LENGTH AND SHALL NOT BE OBSTRUCTED ALONG THEIR TOPS OR SIDES. THE BOTTOM OF THE HANDRAIL GRIPPING SURFACES SHALL NOT BE OBSTRUCTED FOR MORE THAN 20 PERCENT OF THEIR LENGTH. WHERE PROVIDED, HORIZONTAL PROJECTIONS SHALL OCCUR 1-1/2" MINIMUM BELOW THE BOTTOM OF THE HANDRAIL GRIPPING SURFACE.
4. HANDRAIL GRIPPING SURFACES WITH CIRCULAR CROSS SECTIONS SHALL HAVE AN OUTSIDE DIAMETER OF 1-1/4" (32 MM) MINIMUM AND 2" MAXIMUM.
5. HANDRAIL GRIPPING SURFACES AND ANY SURFACES ADJACENT TO THEM SHALL BE FREE OF SHARP OR ABRASIVE ELEMENTS AND SHALL HAVE ROUNDED EDGES.
6. HANDRAILS SHALL NOT ROTATE WITHIN THEIR FITTINGS.

NOSINGS
7. NOSING WITHIN A STAIRWAY SHALL BE UNIFORM.
8. IF ROUNDED, THE RADIUS OF CURVATURE AT THE LEADING EDGE OF THE TREAD SHALL BE 1/2 INCH (13mm) MAXIMUM.
9. IF BEVELED, THE BEVEL AT THE LEADING EDGE SHALL SLOPE AT 45-DEGREES TO THE PLANE OF THE TOP SURFACE OF THE TREAD AND LANDING AND EXTEND FOR A HORIZONTAL DISTANCE OF 1/2 INCH (13 MM) MAXIMUM.
10. NOSINGS THAT PROJECT BEYOND RISERS SHALL HAVE THE UNDERSIDE OF THE LEADING EDGE CURVED OR BEVELED.
11. RISERS SHALL BE PERMITTED TO SLOPE UNDER THE TREAD AT AN ANGLE OF 30-DEGREES MAXIMUM FROM VERTICAL.
12. THE PERMITTED PROJECTION OF THE NOSING SHALL BE 1 1/2 INCHES (38 MM) MAXIMUM OVER THE TREAD OR FLOOR BELOW.

VISUAL CONTRAST
13. VISUAL CONTRAST SHALL COMPLY WITH EITHER 1 OR 2.
    1. THE LEADING 1 TO 2 INCHES (25 TO 51MM) OF EVERY TREAD AND LANDING, MEASURED HORIZONTALLY FROM THE LEADING EDGE OF THE NOSING, SHALL CONSIST OF A SOLID COLOR HAVING VISUAL CONTRAST OF DARK-ON-LIGHT OR LIGHT-ON-DARK FROM THE REMAINDER OF THE TREAD. THE CONTRASTING MARKING SHALL BE DURABLE AND SHALL EXTEND FROM ONE SIDE OF EACH TREAD TO THE OTHER SIDE OF EACH TREAD.
    2. DURABLE DISTINCTIVE WARNING MARKINGS REQUIRED BY THE ADOPTED BUILDING CODE OR ANSI SAFETY STANDARD.

TACTILE SIGNAGE AT EXITS
14. A SIGN STATING EXIT IN RAISED CHARACTERS AND BRAILLE SHALL BE PROVIDED ADJACENT TO EACH DOOR TO AND AREA OF REFUGE PROVIDING DIRECT ACCESS TO A STAIRWAY. AN EXTERIOR AREA FOR ASSISTED RESCUE, AN EXIT STAIRWAY, AN EXIT RAMP, AN EXIT PASSAGEWAY AND THE EXIT DISCHARGE.



STAIRWAYS AND HANDRAILS 9

SCALE: 1/2" = 1'-0"

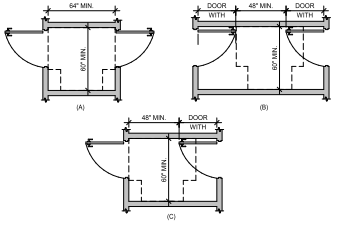
PROVIDE DETECTIBLE WARNING STRIP WIDTH MEASURED PERPENDICULAR TO PEDESRIAN FLOW FOR FULL WIDTH OF MARKED PATH. CURB RAMP OR CUT THROUGH AS FOLLOWS.

1. 24" WIDE AT MARKED CROSSINGS RAISED TO SAME LEVEL AS ADJACENT SIDEWALK
2. WHERE PROVIDED: 24" WIDE AT CURB RAMP 6" MIN - 8" MAX FROM CURB LINE
3. WHERE PROVIDED: 24" WIDE AT CUT THROUGH MEDIANS AND ISLANDS OR FULL LENGTH WHERE 48" OR LESS

DETECTABLE WARNINGS 10

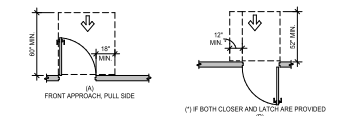
SCALE: 3" = 1'-0"

NOTES:
1. FLOOR OR GROUND SURFACE WITHIN REQUIRED MANEUVERING CLEARANCES AND LANDINGS ON BOTH SIDES OF DOORS SHALL COMPLY WITH (FLOOR OR GROUND SURFACES & CHANGES IN LEVEL) DETAIL AND SHALL HAVE A SLOPE NOT STEEPER THAN 1:48 IN ANY DIRECTION. VERTICAL CHANGES IN LEVEL ARE NOT PERMITTED.
2. THRESHOLDS, WHERE PROVIDED AT DOORWAYS, SHALL BE 1/2" MAX HIGH WITH A BEVELED PROFILE THAT COMPLIES WITH (FLOOR OR GROUND SURFACES & CHANGES IN LEVEL) DETAIL.
3. HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERABLE PARTS ON DOORS AND GATES SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST TO OPERATE.
4. HARDWARE OPERATION BY A FORWARD, PUSHING OR PULLING MOTION: 15 POUNDS (66.7N) MAXIMUM.
5. HARDWARE OPERATION BY A ROTATIONAL MOTION:28 INCH-POUNDS (315N-CM) MAXIMUM.
6. OPERABLE PARTS OF DOOR HARDWARE SHALL BE 34" MIN. AND 48" MAX. ABOVE THE FINISH FLOOR OR GROUND.
7. WHERE SLIDING DOORS ARE IN THE FULLY OPEN POSITION, OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES.
8. DOOR AND GATE CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90-DEGREES THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12-DEGREES FROM THE LATCH IS 5 SECONDS MIN.
9. DOOR AND GATE SPRING HINGES SHALL BE ADJUSTED SO THAT FROM THE OPEN POSITION OF 70-DEGREES THE DOOR OR GATE SHALL MOVE TO THE CLOSED POSITION IN 1.5 SECONDS MIN.
10. THE FORCE REQUIRED TO PUSH OR PULL A DOOR OR GATE OPEN SHALL BE AS FOLLOWS:
    10.1 INTERIOR HINGED DOORS AND GATES: 5 LBS (22.5 N) MAX.
    10.2 SLIDING OR FOLDING DOORS: 5 LBS (22.5 N) MAX.
    EXCEPTION: THE FORCE REQUIRED TO RETRACT LATCH BOLTS OR DISENGAGE OTHER DEVICES THAT HOLD THE DOOR OR GATE IN A CLOSED POSITION SHALL NOT APPLY TO PANIC HARDWARE, DELAYED EGRESS DEVICES OR FIRE-RATED HARDWARE.
    10.3 REQUIRED FIRE DOORS: THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY, NOT TO EXCEED 15 LBS (66.7N).
    10.4 EXTERIOR HINGED DOORS: 5 LBS (22.5 N) MAX.
11. SWINGING DOOR AND GATE SURFACES WITHIN 10" OF THE FINISH FLOOR OR GROUND MEASURED VERTICALLY SHALL HAVE A SMOOTH SURFACE ON THE PUSH SIDE EXTENDING THE FULL WIDTH OF THE DOOR OR GATE. PARTS CREATING HORIZONTAL OR VERTICAL JOINTS IN THESE SURFACE SHALL BE WITHIN 1/16" OF THE SAME PLANE AS THE OTHER AND BE FREE OF SHARP OR ABRASIVE EDGES. CAVITIES CREATED BY ADDED KICK PLATES SHALL BE CAPPED.
12. WHERE AUTOMATIC AND POWER-ASSISTED DOORS AND GATES WITHOUT STANDBY POWER ARE PART OF A MEANS OF EGRESS THE CLEAR WIDTH OF BREAK OUT OPENINGS AT SWINGING OR SLIDING DOORS AND GATES SHALL BE 32" MIN. WHEN OPERATED IN EMERGENCY MODE.

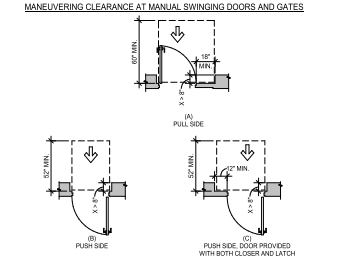


DOORS OR GATES IN SERIES

CLEAR WIDTH OF DOORWAYS



MANEUVERING CLEARANCE AT MANUAL SWINGING DOORS AND GATES



MANEUVERING CLEARANCE AT RECESSED DOORS AND GATES

DOORS, DOORWAYS & GATES 5

SCALE: 1/4" = 1'-0"

State of Illinois Design Firm Registration No. 184.006269
WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING INTERIORS BUILDING MEASUREMENT
1333 22nd St. #410
Downers Grove, IL 60515
P 630.218.0063

GRANT A. BRANDENBURG 001-020842 STATE OF ILLINOIS PROFESSIONAL ENGINEER
EXP: 11 - 30 - 2022

THE MIDWEST GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

ACCESSIBILITY DETAILS

DATE	REMARKS
2022-04-04	PROGRESS PACKAGE
2022-04-06	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	C

SHEET NO.: A0

4/19/2022 8:53:16 AM 2022-04-06 PERMIT SET

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Packet Pg. 346

7.C.1.A.p

Pg. 71

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

00 31 32 - GEOTECHNICAL DATA

1.1 INVESTIGATION

A. AN INVESTIGATION OF SUBSURFACE SOIL CONDITIONS AT THE BUILDING SITE WAS AUTHORIZED BY THE OWNER. A COPY IS ATTACHED AS AN APPENDIX TO THESE SPECIFICATIONS.
B. THE GEOTECHNICAL INVESTIGATION REPORT IS FOR INFORMATION ONLY, AND IS NOT A WARRANTY OF SUBSURFACE CONDITIONS.
C. THE REPORT IS MADE AVAILABLE FOR INFORMATION ONLY, AND IS NOT A CONTRACT DOCUMENT.
D. THE INFORMATION CONTAINED IN THE REPORT REPRESENTS DESIGN CRITERIA, RECOMMENDATIONS, AND GUIDELINES THAT WERE UTILIZED AS THE BASIS OF DESIGN FOR THE ENGINEERING OF THE EARTHWORK OPERATIONS, PAVING DESIGN, AND FOUNDATION DESIGN INDICATED IN THE CONTRACT DOCUMENTS. NO CHANGES IN THIS DESIGN CRITERIA WILL BE CONSIDERED OR PERMITTED.

1.2 RESPONSIBILITY

A. BIDDERS ARE EXPECTED TO EXAMINE THE SITE AND SUBSURFACE INVESTIGATION REPORTS AND THEN DECIDE FOR THEMSELVES THE CHARACTER OF THE MATERIALS TO BE ENCOUNTERED.
B. THE ARCHITECT AND OWNER ASSUME NO RESPONSIBILITY FOR VARIATIONS IN SUBSOIL CONDITIONS, QUALITY, OR STABILITY, OR FOR THE PRESENCE, LEVEL, AND EXTENT OF UNDERGROUND WATER.
C. THE ARCHITECT AND OWNER ASSUME NO RESPONSIBILITY FOR BIDDER'S INTERPRETATION OF DATA CONTAINED IN THE REPORT.

00 70 00 - GENERAL CONDITIONS

1.1 GENERAL CONDITIONS

A. THE "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION", AIA DOCUMENT A201, SIXTEENTH EDITION, 2007, ARTICLES 1 THROUGH 15 INCLUSIVE, IS A PART OF THIS CONTRACT, AND IS AVAILABLE FOR REVIEW FROM THE ARCHITECT. THE GENERAL CONDITIONS AND ALL MODIFICATIONS LISTED HEREINAFTER SHALL APPLY TO ALL VARIOUS SUBCONTRACTS AND SUB-SUBCONTRACTORS.
B. REFER TO DOCUMENT 008000 FOR SUPPLEMENTARY CONDITIONS.

01 31 00 - PROJECT MANAGEMENT AND COORDINATION

1.1 COORDINATION

A. COORDINATION: COORDINATE OPERATIONS OPERATIONS INCLUDED IN DIFFERENT SECTIONS OF THE SPECIFICATIONS TO ENSURE EFFICIENT AND ORDERLY INSTALLATION OF EACH PART OF THE WORK. COORDINATE CONSTRUCTION OPERATIONS, INCLUDED IN DIFFERENT SECTIONS, THAT DEPEND ON EACH OTHER FOR PROPER INSTALLATION, CONNECTION, AND OPERATION.
1. SCHEDULE CONSTRUCTION OPERATIONS IN SEQUENCE REQUIRED TO OBTAIN THE BEST RESULTS WHERE INSTALLATION OF ONE PART OF THE WORK DEPENDS ON INSTALLATION OF OTHER COMPONENTS, BEFORE OR AFTER ITS OWN INSTALLATION.
2. COORDINATE INSTALLATION OF DIFFERENT COMPONENTS TO ENSURE MAXIMUM PERFORMANCE AND ACCESSIBILITY FOR REQUIRED MAINTENANCE, SERVICE, AND REPAIR.
3. MAKE ADEQUATE PROVISIONS TO ACCOMMODATE ITEMS SCHEDULED FOR LATER INSTALLATION.

1.2 REQUESTS FOR INTERPRETATION (RFI)

A. GENERAL: IMMEDIATELY ON DISCOVERY OF THE NEED FOR INTERPRETATION, CLARIFICATION, OR ADDITIONAL INFORMATION OF THE CONTRACT DOCUMENTS, CONTRACTOR SHALL PREPARE AND SUBMIT AN RFI SEND RFIS DIRECTLY TO ARCHITECT VIA EMAIL OR POSTED TO PROJECT COLLABORATION SITE (IF ONE IS BEING UTILIZED). OWNER WILL TRANSMIT TO APPROPRIATE REVIEWER(S).
1. ARCHITECT WILL RETURN RFIS SUBMITTED TO ARCHITECT BY OTHER ENTITIES CONTROLLED BY CONTRACTOR WITH NO RESPONSE.
2. COORDINATE AND SUBMIT RFIS IN A PROMPT MANNER SO AS TO AVOID DELAYS IN CONTRACTOR'S WORK OR WORK OF INSTALLERS (I.E., SPECIALTY CONTRACTORS OR SUBCONTRACTORS).

1.3 PROJECT MEETINGS

A. GENERAL: SCHEDULE AND CONDUCT MEETINGS AND CONFERENCES AT PROJECT SITE, UNLESS OTHERWISE INDICATED.
1. ATTENDEES: INFORM PARTICIPANTS AND OTHERS INVOLVED, AND INDIVIDUALS WHOSE PRESENCE IS REQUIRED, OF DATE AND TIME OF EACH MEETING. NOTIFY OWNER AND ARCHITECT OF SCHEDULED MEETING DATES AND TIMES.
2. AGENDA: PREPARE THE MEETING AGENDA. DISTRIBUTE THE AGENDA TO ALL INVITED ATTENDEES.
3. MINUTES: ENTITY RESPONSIBLE FOR CONDUCTING MEETING WILL RECORD SIGNIFICANT DISCUSSIONS AND AGREEMENTS ACHIEVED. DISTRIBUTE THE MEETING MINUTES TO EVERYONE CONCERNED, INCLUDING OWNER AND ARCHITECT, WITHIN THREE DAYS OF THE MEETING.

B. PRE-CONSTRUCTION CONFERENCE: SCHEDULE AND CONDUCT A PRE-CONSTRUCTION CONFERENCE BEFORE STARTING CONSTRUCTION, AT A TIME CONVENIENT TO OWNER AND ARCHITECT, BUT NO LATER THAN 15 DAYS AFTER EXECUTION OF THE AGREEMENT.
1. CONDUCT THE CONFERENCE TO REVIEW RESPONSIBILITIES AND PERSONNEL ASSIGNMENTS.
2. ATTENDEES: AUTHORIZED REPRESENTATIVES OF OWNER, OWNER'S COMMISSIONING AUTHORITY, CONSTRUCTION MANAGER, ARCHITECT, AND THEIR CONSULTANTS; CONTRACTOR AND ITS SUPERINTENDENT; MAJOR SUBCONTRACTORS; SUPPLIERS; AND OTHER CONCERNED PARTIES SHALL ATTEND THE CONFERENCE. PARTICIPANTS AT THE CONFERENCE SHALL BE FAMILIAR WITH PROJECT AND AUTHORIZED TO CONCLUDE MATTERS RELATING TO THE WORK.
3. MINUTES: ENTITY RESPONSIBLE FOR CONDUCTING MEETING WILL RECORD AND DISTRIBUTE MEETING MINUTES.
4. DO NOT PROCEED WITH INSTALLATION IF THE CONFERENCE CANNOT BE SUCCESSFULLY CONCLUDED. INITIATE WHATEVER ACTIONS ARE NECESSARY TO RESOLVE IMPEDIMENTS TO PERFORMANCE OF THE WORK AND RECONVENE THE CONFERENCE AT EARLIEST FEASIBLE DATE.

D. PROGRESS MEETINGS: CONDUCT PROGRESS MEETINGS AT AGREED UPON INTERVALS.
1. COORDINATE DATES OF MEETINGS WITH PREPARATION OF PAYMENT REQUESTS.
2. ATTENDEES: IN ADDITION TO REPRESENTATIVES OF OWNER, OWNER'S COMMISSIONING AUTHORITY, CONSTRUCTION MANAGER, AND ARCHITECT, EACH CONTRACTOR, AND OTHER ENTITY CONCERNED WITH CURRENT PROGRESS OR INVOLVED IN PLANNING, COORDINATION, OR PERFORMANCE OF FUTURE ACTIVITIES SHALL BE REPRESENTED AT THESE MEETINGS. ALL PARTICIPANTS AT THE MEETING SHALL BE FAMILIAR WITH PROJECT AND AUTHORIZED TO CONCLUDE MATTERS RELATING TO THE WORK.
3. MINUTES: ENTITY RESPONSIBLE FOR CONDUCTING THE MEETING WILL RECORD AND DISTRIBUTE THE MEETING MINUTES TO EACH PARTY PRESENT AND TO PARTIES REQUIRING INFORMATION.
   a. SCHEDULE UPDATING: REVISE CONTRACTOR'S CONSTRUCTION SCHEDULE AFTER EACH PROGRESS MEETING WHERE REVISIONS TO THE SCHEDULE HAVE BEEN MADE OR RECOGNIZED. ISSUE REVISED SCHEDULE CONCURRENTLY WITH THE REPORT OF EACH MEETING.

E. COORDINATION MEETINGS: CONDUCT PROJECT COORDINATION MEETINGS AT REGULAR INTERVALS. PROJECT COORDINATION MEETINGS ARE IN ADDITION TO SPECIFIC MEETINGS HELD FOR OTHER PURPOSES, SUCH AS PROGRESS MEETINGS AND PRE-INSTALLATION CONFERENCES.
1. ATTENDEES: IN ADDITION TO REPRESENTATIVES OF OWNER AND ARCHITECT, EACH CONTRACTOR, SUBCONTRACTOR, SUPPLIER, AND OTHER ENTITY CONCERNED WITH CURRENT PROGRESS OR INVOLVED IN PLANNING, COORDINATION, OR PERFORMANCE OF FUTURE ACTIVITIES SHALL BE REPRESENTED AT THESE MEETINGS. ALL PARTICIPANTS AT THE MEETINGS SHALL BE FAMILIAR WITH PROJECT AND AUTHORIZED TO CONCLUDE MATTERS RELATING TO THE WORK.
2. REPORTING: RECORD MEETING RESULTS AND DISTRIBUTE COPIES TO EVERYONE IN ATTENDANCE AND TO OTHERS AFFECTED BY DECISIONS OR ACTIONS RESULTING FROM EACH MEETING.

01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION

1.1 INFORMATIONAL SUBMITTALS

A. FORMAT FOR SUBMITTALS: ELECTRONICALLY SUBMIT REQUIRED SUBMITTAL DOCUMENTS IN PORTABLE DOCUMENT FORMAT (I.E., PDFS).
B. CONTRACTOR'S CONSTRUCTION SCHEDULE: INITIAL SCHEDULE, OF SIZE REQUIRED TO DISPLAY ENTIRE SCHEDULE FOR ENTIRE CONSTRUCTION PERIOD.

1.2 COORDINATION

A. COORDINATE PREPARATION AND PROCESSING OF SCHEDULES AND REPORTS WITH PERFORMANCE OF CONSTRUCTION ACTIVITIES AND WITH SCHEDULING AND REPORTING OF SEPARATE CONTRACTORS.

1.3 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

A. TIME FRAME: EXTEND SCHEDULE FROM DATE ESTABLISHED FOR COMMENCEMENT OF THE WORK TO DATE OF SUBSTANTIAL COMPLETION.
1. CONTRACT COMPLETION DATE SHALL NOT BE CHANGED BY SUBMISSION OF A SCHEDULE THAT SHOWS AN EARLY COMPLETION DATE, UNLESS SPECIFICALLY AUTHORIZED BY CHANGE ORDER.

B. ACTIVITIES: TREAT EACH STORY OR SEPARATE AREA AS A SEPARATE NUMBERED ACTIVITY FOR EACH PRINCIPAL ELEMENT OF THE WORK.
C. MILESTONES: INCLUDE MILESTONES INDICATED IN THE CONTRACT DOCUMENTS IN SCHEDULE, INCLUDING, BUT NOT LIMITED TO, THE NOTICE TO PROCEED, SUBSTANTIAL COMPLETION, AND FINAL COMPLETION.
D. COMPUTER SCHEDULING SOFTWARE: PREPARE SCHEDULES USING CURRENT VERSION OF A PROGRAM THAT HAS BEEN DEVELOPED SPECIFICALLY TO MANAGE CONSTRUCTION SCHEDULES.

1.4 CONTRACTOR'S CONSTRUCTION SCHEDULE

A. A. FORMAT:
1. SUBMIT A HORIZONTAL BAR CHART WITH SEPARATE LINE FOR EACH MAJOR SECTION OF WORK IDENTIFYING FIRST WORK DAY OF EACH WEEK.
2. SEQUENCE OF LISTINGS: THE CHRONOLOGICAL ORDER OF THE START OF EACH ITEM OF WORK.
3. SCALE AND SPACING: TO PROVIDE SPACE FOR NOTATIONS AND REVISIONS.
4. SHEET SIZE: MINIMUM 11 BY 17 INCHES.

B. CONTENT:
1. SHOW COMPLETE SEQUENCE OF CONSTRUCTION BY ACTIVITY, WITH DATES FOR BEGINNING AND COMPLETION OF EACH ELEMENT OF CONSTRUCTION.
2. IDENTIFY EACH ITEM BY MAJOR SPECIFICATION SECTION NUMBER.
3. INDICATE THE EARLY AND LATE START, EARLY AND LATE FINISH, FLOAT DATES, AND DURATION.
4. IDENTIFY WORK OF SEPARATE STAGES OR SEPARATE FLOORS OR BUILDINGS, AND OTHER LOGICALLY GROUPED ACTIVITIES.
5. PROVIDE SUB_SCHEDULES TO DEFINE CRITICAL PORTIONS OF ENTIRE SCHEDULE.

01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION (CONT)

6. SHOW ACCUMULATED PERCENTAGE OF COMPLETION OF EACH ITEM, AND TOTAL PERCENTAGE OF WORK COMPLETED, AS OF THE FIRST DAY OF EACH MONTH.
7. INDICATE SUBMITTAL DATES REQUIRED FOR SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND PRODUCT DELIVERY DATES, INCLUDING THOSE FURNISHED BY OWNER.
8. SHOW DELIVERY DATES FOR OWNER-FURNISHED PRODUCTS.
9. COORDINATE CONTENT SCHEDULE OF VALUES SPECIFIED IN SECTION 01290.

C. REVISIONS TO SCHEDULES:
1. INDICATE PROGRESS OF EACH ACTIVITY TO DATE OF SUBMITTAL, AND PROJECTED COMPLETION DATE OF EACH ACTIVITY.
2. IDENTIFY ACTIVITIES MODIFIED SINCE PREVIOUS SUBMITTAL, MAJOR CHANGES IN SCOPE, AND OTHER IDENTIFIABLE CHANGES.
3. PROVIDE NARRATIVE REPORT TO DEFINE PROBLEM AREAS, ANTICIPATED DELAYS, AND IMPACT ON SCHEDULE. REPORT CORRECTIVE ACTION TAKEN, OR PROPOSED, AND ITS EFFECT.
4. UPDATE REGULARLY.

01 33 00 - SUBMITTAL PROCEDURES

1.1 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

A. COORDINATION: COORDINATE PREPARATION AND PROCESSING OF SUBMITTALS WITH PERFORMANCE OF CONSTRUCTION ACTIVITIES.
1. COORDINATE EACH SUBMITTAL WITH FABRICATION, PURCHASING, TESTING, DELIVERY, OTHER SUBMITTALS, AND RELATED ACTIVITIES THAT REQUIRE SEQUENTIAL ACTIVITY.
2. SUBMIT ALL SUBMITTAL ITEMS REQUIRED FOR EACH SPECIFICATION SECTION CONCURRENTLY UNLESS PARTIAL SUBMITTALS FOR PORTIONS OF THE WORK ARE APPROVED BY ARCHITECT.
3. COORDINATE TRANSMITTAL OF DIFFERENT TYPES OF SUBMITTALS FOR RELATED PARTS OF THE WORK SO PROCESSING WILL NOT BE DELAYED BECAUSE OF NEED TO REVIEW SUBMITTALS CONCURRENTLY FOR COORDINATION.
4. ARCHITECT RESERVES THE RIGHT TO WITHHOLD ACTION ON A SUBMITTAL REQUIRING COORDINATION WITH OTHER SUBMITTALS UNTIL RELATED SUBMITTALS ARE RECEIVED.

B. IDENTIFICATION AND INFORMATION: IDENTIFY AND INCORPORATE INFORMATION IN EACH ELECTRONIC SUBMITTAL FILE AS FOLLOWS:
1. ASSEMBLE COMPLETE SUBMITTAL PACKAGE INTO A SINGLE INDEXED FILE WITH LINKS ENABLING NAVIGATION TO EACH ITEM.
2. NAME FILE WITH SUBMITTAL NUMBER OR OTHER UNIQUE IDENTIFIER, INCLUDING REVISION IDENTIFIER.
   a. FOR TYPICAL PROJECTS THAT DO NOT REQUIRE SEPARATE SUBMITTALS FOR DIFFERENT BUILDINGS OR SUB THE SUBMITTAL FILE NAME SHALL USE SPECIFICATION SECTION NUMBER FOLLOWED BY A DASH AND THEN A SEQUENTIAL NUMBER. RESUBMITTALS SHALL INCLUDE A NUMERICAL SUFFIX AFTER ANOTHER DASH. INCLUDE REVISION IDENTIFIER. SUBMITTAL AFTER SEQUENTIAL NUMBER OR RESUBMITTAL SUFFIX. (E.G., 061000-001-0 ROUGH CARPENTRY).
   b. FOR COMPLEX PROJECTS THAT REQUIRE PROJECT IDENTIFIER FOR SEPARATE BUILDINGS WITHIN A PROJECT OR REQUIRE INDIVIDUAL SUBMITTALS TO BE SUBMITTED BY MULTIPLE SUBCONTRACTORS, THE SUBMITTAL FILE NAME SHALL FOLLOW THE FOLLOWING. SPECIFICATION SECTION NUMBER FOLLOWED BY A DASH AND THEN A SEQUENTIAL NUMBER FOR EACH SPECIFICATION SECTION NUMBER. PROVIDE FOR INSERTION TO PERMANENTLY RECORD CONTRACTOR'S REVIEW AND APPROVAL MARKINGS AND ACTION TAKEN BY ARCHITECT.

C. OPTIONS: IDENTIFY OPTIONS REQUIRING SELECTION BY THE ARCHITECT.
D. DEVIATIONS: IDENTIFY DEVIATIONS FROM THE CONTRACT DOCUMENTS ON SUBMITTALS.
E. DISTRIBUTION: FURNISH COPIES OF APPROVED SUBMITTALS TO MANUFACTURERS, SUBCONTRACTORS, SUPPLIERS, FABRICATORS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHERS AS NECESSARY FOR PERFORMANCE OF CONSTRUCTION ACTIVITIES. SHOW DISTRIBUTION ON TRANSMITTAL FORMS.
F. USE FOR CONSTRUCTION: USE ONLY FINAL SUBMITTALS THAT ARE MARKED WITH "REVIEWED", "FURNISH AS CORRECTED" NOTATION FROM ARCHITECT'S ACTION STAMP, OR WITH APPROVAL NOTATION FROM ALTERNATE REVIEWER.

1.2 SUBMITTAL PROCEDURES

A. GENERAL SUBMITTAL PROCEDURE REQUIREMENTS: PREPARE AND SUBMIT SUBMITTALS REQUIRED BY INDIVIDUAL SPECIFICATION SECTIONS. TYPES OF SUBMITTALS ARE INDICATED IN INDIVIDUAL SPECIFICATION SECTIONS.
1. EMAIL ONE ELECTRONIC COPY OF SUBMITTAL PACKAGE DIRECTLY TO ARCHITECT.
   a. ARCHITECT WILL RETURN ANNOTATED FILE. ANNOTATE AND RETAIN ONE COPY OF FILE AS AN ELECTRONIC DOCUMENT FILE.
2. ACTION SUBMITTALS: FOR LARGE FORMAT DRAWINGS AND SUBMITTALS (LARGER THAN 11 X 17), SUBMIT PDF FILE PLUS 2 HARD COPIES. FOR SMALLER FORMAT DRAWINGS AND SUBMITTALS (11X17 OR LESS), PROVIDE ONLY PDF FILE. ARCHITECT WILL RETURN ONLY THE MARKED-UP PDF.

B. PRODUCT DATA: COLLECT INFORMATION INTO A SINGLE SUBMITTAL FOR EACH ELEMENT OF CONSTRUCTION AND TYPE OF PRODUCT OR EQUIPMENT.
1. IF INFORMATION MUST BE SPECIALLY PREPARED FOR SUBMITTAL BECAUSE STANDARD PUBLISHED DATA ARE NOT SUITABLE FOR USE, PREPARE DATA USING SHOP DRAWING FORMAT AS PRODUCT DATA.
2. MARK EACH COPY OF EACH SUBMITTAL TO SHOW WHICH PRODUCTS AND OPTIONS ARE APPLICABLE.
3. INCLUDE THE FOLLOWING INFORMATION, AS APPLICABLE:
   a. PDF ELECTRONIC FILE.

C. SHOP DRAWINGS: PREPARE PROJECT-SPECIFIC INFORMATION, DRAWN ACCURATELY TO SCALE. DO NOT BASE SHOP DRAWINGS ON REPRODUCTIONS OF THE CONTRACT DOCUMENTS OR STANDARD PRINTED DATA
1. PREPARATION: FULLY LIST REQUIREMENTS IN THE CONTRACT DOCUMENTS.
2. SHEET SIZE: EXCEPT FOR TEMPLATES, PATTERNS, AND SIMILAR FULL-SIZE DRAWINGS, SUBMIT SHOP DRAWINGS ON SHEETS AT LEAST 8-1/2 BY 11 INCHES BUT NO LARGER THAN 30 BY 42 INCHES SUBMIT SHOP DRAWINGS IN THE FOLLOWING FORMATS:
   a. FOR LARGE FORMAT DRAWINGS AND SUBMITTALS (LARGER THAN 11 X 17), SUBMIT PDF FILE PLUS 2 HARD COPIES. FOR SMALLER FORMAT DRAWINGS AND SUBMITTALS (11X17 OR LESS), PROVIDE ONLY PDF FILE. ARCHITECT WILL RETURN ONLY THE MARKED-UP PDF.

D. SAMPLES: SUBMIT SAMPLES FOR REVIEW OF KIND, COLOR, PATTERN, AND TEXTURE FOR A CHECK OF THESE CHARACTERISTICS WITH OTHER ELEMENTS AND FOR A COMPARISON OF THESE CHARACTERISTICS BETWEEN SUBMITTAL AND ACTUAL COMPONENT AS DELIVERED AND INSTALLED.
E. TRANSMIT SAMPLES THAT CONTAIN MULTIPLE, RELATED COMPONENTS SUCH AS ACCESSORIES TOGETHER IN ONE SUBMITTAL PACKAGE.
F. MANUFACTURER CERTIFICATES: SUBMIT WRITTEN STATEMENTS ON MANUFACTURER'S LETTERHEAD CERTIFYING THAT MANUFACTURER COMPLIES WITH REQUIREMENTS IN THE CONTRACT DOCUMENTS. INCLUDE EVIDENCE OF MANUFACTURING EXPERIENCE WHERE REQUIRED.
G. PRODUCT CERTIFICATES: SUBMIT WRITTEN STATEMENTS ON MANUFACTURER'S LETTERHEAD CERTIFYING THAT PRODUCT COMPLIES WITH REQUIREMENTS IN THE CONTRACT DOCUMENTS.
H. MATERIAL CERTIFICATES: SUBMIT WRITTEN STATEMENTS ON MANUFACTURER'S LETTERHEAD CERTIFYING THAT MATERIAL COMPLIES WITH REQUIREMENTS IN THE CONTRACT DOCUMENTS.

1.3 CONTRACTOR'S REVIEW

A. ACTION AND INFORMATIONAL SUBMITTALS: REVIEW EACH SUBMITTAL AND CHECK FOR COORDINATION WITH OTHER WORK OF THE CONTRACT AND FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS. NOTE CORRECTIONS AND FIELD DIMENSIONS. MARK WITH APPROVAL STAMP BEFORE SUBMITTING.
B. PROJECT CLOSEOUT AND MAINTENANCE/MATERIAL SUBMITTALS: REFER TO REQUIREMENTS IN DIVISION 01 SECTION "CLOSEOUT PROCEDURES".
C. APPROVAL SUBMITTALS: PLACE A CONFORMANCE SUBMITTAL WITH A UNIFORM, APPROVAL STAMP. INCLUDE PROJECT NAME AND LOCATION, SUBMITTAL NUMBER, SPECIFICATION SECTION TITLE AND NUMBER, NAME OF REVIEWER, DATE OF CONTRACTOR'S APPROVAL, AND STATEMENT CERTIFYING THAT SUBMITTAL HAS BEEN REVIEWED, CHECKED, AND APPROVED FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS.

1.4 ARCHITECT'S ACTION

A. GENERAL: ARCHITECT WILL NOT REVIEW SUBMITTALS THAT DO NOT BEAR CONTRACTOR'S APPROVAL STAMP AND WILL RETURN THEM WITHOUT ACTION.
B. ACTION SUBMITTALS: ARCHITECT WILL REVIEW EACH SUBMITTAL. MAKE MARKS TO INDICATE CORRECTIONS OR MODIFICATIONS REQUIRED, AND RETURN IT. ARCHITECT WILL STAMP EACH SUBMITTAL WITH AN ACTION STAMP AND WILL MARK STAMP APPROPRIATELY TO INDICATE ACTION, AS FOLLOWS:
1. NO EXCEPTIONS TAKEN
2. MAKE CORRECTIONS NOTED
3. FOR REVIEW ONLY
4. REVISE AND RESUBMIT
5. REJECTED
6. SUBMIT SPECIFIED ITEM.

C. INFORMATIONAL SUBMITTALS: ARCHITECT WILL REVIEW EACH SUBMITTAL AND WILL NOT RETURN IT, OR WILL RETURN IT IF IT DOES NOT COMPLY WITH REQUIREMENTS. ARCHITECT WILL FORWARD EACH SUBMITTAL TO APPROPRIATE PARTY.
D. PARTIAL SUBMITTALS PREPARED FOR A PORTION OF THE WORK WILL BE REVIEWED WHEN USE OF PARTIAL SUBMITTALS HAS RECEIVED PRIOR APPROVAL FROM ARCHITECT.
E. INCOMPLETE SUBMITTALS ARE NOT ACCEPTABLE, WILL BE CONSIDERED NON-RESPONSIVE, AND WILL BE RETURNED WITHOUT REVIEW.
F. SUBMITTALS NOT REQUIRED BY THE CONTRACT DOCUMENTS MAY NOT BE REVIEWED AND MAY BE DISCARDED.

01 40 00 - QUALITY REQUIREMENTS

1.1 CONFLICTING REQUIREMENTS

A. REFERENCED STANDARDS: IF COMPLIANCE WITH TWO OR MORE STANDARDS IS SPECIFIED AND THE STANDARDS ESTABLISH DIFFERENT OR CONFLICTING REQUIREMENTS FOR MINIMUM QUANTITIES OR QUALITY LEVELS, COMPLY WITH THE MOST STRINGENT REQUIREMENT. REFER CONFLICTING REQUIREMENTS THAT ARE DIFFERENT, BUT NOT CONFLICTING, TO ARCHITECT FOR CLARIFICATION BEFORE PROCEEDING.
B. MINIMUM QUANTITY OR QUALITY LEVELS: THE QUANTITY OR QUALITY LEVEL SHOWN OR SPECIFIED SHALL BE THE MINIMUM PROVIDED OR PERFORMED. THE ACTUAL INSTALLATION MAY COMPLY EXACTLY WITH THE MINIMUM QUANTITY OR QUALITY SPECIFIED, OR IT MAY EXCEED THE MINIMUM WITHIN REASONABLE LIMITS. TO COMPLY WITH THESE DETERMINATIONS, MAY INCREASE QUANTITY OR QUALITY LEVEL AS ARE MINIMUM OR MAXIMUM, AS APPROPRIATE, FOR THE CONTEXT OF REQUIREMENTS. REFER UNCERTAINTIES TO ARCHITECT FOR A DECISION BEFORE PROCEEDING.

1.2 QUALITY ASSURANCE

A. GENERAL: QUALIFICATIONS PARAGRAPHS IN THIS ARTICLE ESTABLISH THE MINIMUM QUALIFICATION LEVELS REQUIRED; INDIVIDUAL SPECIFICATION SECTIONS SPECIFY ADDITIONAL REQUIREMENTS.
B. MANUFACTURER QUALIFICATIONS: A FIRM EXPERIENCED IN MANUFACTURING PRODUCTS OR SYSTEMS SIMILAR TO THOSE INDICATED FOR THIS PROJECT AND WITH A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE, AS WELL AS SUFFICIENT PRODUCTION CAPACITY TO PRODUCE REQUIRED UNITS.
C. FABRICATOR QUALIFICATIONS: A FIRM EXPERIENCED IN PRODUCING PRODUCTS SIMILAR TO THOSE INDICATED FOR THIS PROJECT AND WITH A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE, AS WELL AS SUFFICIENT PRODUCTION CAPACITY TO PRODUCE REQUIRED UNITS.
D. INSTALLER QUALIFICATIONS: A FIRM OR INDIVIDUAL EXPERIENCED IN INSTALLING, ERECTING, OR ASSEMBLING WORK SIMILAR IN MATERIAL, DESIGN, AND EXTENT TO THAT INDICATED FOR THIS PROJECT, WHOSE WORK HAS RESULTED IN CONSTRUCTION WITH A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE.
E. TESTING AGENCY QUALIFICATIONS: AN NRTL, AN NVLAP, OR AN INDEPENDENT AGENCY WITH THE EXPERIENCE AND CAPABILITY TO CONDUCT TESTING AND INSPECTING INDICATED AS DOCUMENTED ACCORDING TO ASTM E 329, AND WITH ADDITIONAL QUALIFICATIONS SPECIFIED IN INDIVIDUAL SECTIONS; AND WHERE REQUIRED BY AUTHORITIES HAVING JURISDICTION, THAT IS ACCEPTABLE TO AUTHORITIES.

01 40 00 - QUALITY REQUIREMENTS (CONT)

F. MANUFACTURER'S TECHNICAL REPRESENTATIVE QUALIFICATIONS: AN AUTHORIZED REPRESENTATIVE OF MANUFACTURER WHO IS TRAINED AND APPROVED BY MANUFACTURER TO OBSERVE AND INSPECT INSTALLATION OF MANUFACTURER'S PRODUCTS THAT ARE SIMILAR IN MATERIAL, DESIGN, AND EXTENT TO THOSE INDICATED FOR THIS PROJECT.
G. FACTORY-AUTHORIZED SERVICE REPRESENTATIVE QUALIFICATIONS: AN AUTHORIZED REPRESENTATIVE OF MANUFACTURER WHO IS TRAINED AND APPROVED BY MANUFACTURER TO INSPECT INSTALLATION OF MANUFACTURER'S PRODUCTS THAT ARE SIMILAR IN MATERIAL, DESIGN, AND EXTENT TO THOSE INDICATED FOR THIS PROJECT.
H. MOCKUPS: BEFORE INSTALLING PORTIONS OF THE WORK REQUIRING MOCKUPS, BUILD MOCKUPS FOR EACH FORM OF CONSTRUCTION AND FINISH INDICATED IN THE TECHNICAL SPECIFICATIONS.
1. BUILD MOCKUPS IN LOCATION AND OF SIZE INDICATED OR, IF NOT INDICATED, AS DIRECTED BY ARCHITECT.
2. DEMONSTRATE THE PROPOSED RANGE OF AESTHETIC EFFECTS AND WORKMANSHIP.
3. OBTAIN ARCHITECT'S APPROVAL OF MOCKUPS BEFORE STARTING WORK, FABRICATION, OR CONSTRUCTION.
4. MAINTAIN MOCKUPS DURING CONSTRUCTION IN UNDISTURBED CONDITION AS A STANDARD FOR JUDGING THE COMPLETED WORK.
5. DEMOLISH AND REMOVE MOCKUPS WHEN DIRECTED, UNLESS OTHERWISE INDICATED.

1.3 QUALITY CONTROL

A. CONTRACTOR RESPONSIBILITIES: TESTS AND INSPECTIONS NOT EXPLICITLY ASSIGNED TO OWNER ARE CONTRACTOR'S RESPONSIBILITY. PERFORM ADDITIONAL QUALITY-CONTROL ACTIVITIES REQUIRED TO VERIFY THAT THE WORK COMPLIES WITH REQUIREMENTS, WHETHER SPECIFIED OR NOT.
1. UNLESS OTHERWISE INDICATED, PROVIDE QUALITY-CONTROL SERVICES SPECIFIED AND THOSE REQUIRED BY AUTHORITIES HAVING JURISDICTION. PERFORM QUALITY-CONTROL SERVICES REQUIRED OF CONTRACTOR BY AUTHORITIES HAVING JURISDICTION, WHETHER SPECIFIED OR NOT.
2. WHERE SERVICES ARE INDICATED AS CONTRACTOR'S RESPONSIBILITY, ENGAGE A QUALIFIED TESTING AGENCY TO PERFORM THESE QUALITY-CONTROL SERVICES.
   a. CONTRACTOR SHALL NOT EMPLOY SAME ENTITY ENGAGED BY OWNER, UNLESS AGREED TO IN WRITING BY OWNER.
3. NOTIFY TESTING AGENCIES AT LEAST 24 HOURS IN ADVANCE OF TIME WHEN WORK THAT REQUIRES TESTING OR INSPECTING WILL BE PERFORMED.
4. WHERE QUALITY-CONTROL SERVICES ARE INDICATED AS CONTRACTOR'S RESPONSIBILITY, SUBMIT A CERTIFIED WRITTEN REPORT, IN DUPLICATE, OF EACH QUALITY-CONTROL SERVICE.
5. TESTING AND INSPECTING REQUESTED BY CONTRACTOR AND NOT REQUIRED BY THE CONTRACT DOCUMENTS ARE CONTRACTOR'S RESPONSIBILITY.
6. SUBMIT ADDITIONAL COPIES OF EACH WRITTEN REPORT DIRECTLY TO AUTHORITIES HAVING JURISDICTION, WHEN THEY SO DIRECT.

B. MANUFACTURER'S FIELD SERVICES: WHERE INDICATED, ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO INSPECT FIELD-ASSEMBLED COMPONENTS AND EQUIPMENT INSTALLATION, INCLUDING SERVICE CONNECTIONS. REPORT RESULTS IN WRITING AS SPECIFIED IN DIVISION 01 SECTION "SUBMITTAL PROCEDURES."
C. MANUFACTURER'S TECHNICAL SERVICES: WHERE INDICATED, ENGAGE A MANUFACTURER'S TECHNICAL REPRESENTATIVE TO OBSERVE AND INSPECT THE WORK. MANUFACTURER'S TECHNICAL REPRESENTATIVE'S SERVICES INCLUDE PARTICIPATION IN PRE-INSTALLATION CONFERENCES, EXAMINATION OF SUBSTRATES AND CONDITIONS, VERIFICATION OF MATERIALS, OBSERVATION OF INSTALLER ACTIVITIES, INSPECTION OF COMPLETED PORTIONS OF THE WORK, AND SUBMITTAL OF WRITTEN REPORTS.
D. TESTING AGENCY RESPONSIBILITIES: COOPERATE WITH ARCHITECT AND CONTRACTOR IN PERFORMANCE OF DUTIES. PROVIDE QUALIFIED PERSONNEL TO PERFORM REQUIRED TESTS AND INSPECTIONS.
1. NOTIFY ARCHITECT AND CONTRACTOR PROMPTLY OF IRREGULARITIES OR DEFICIENCIES OBSERVED IN THE WORK DURING PERFORMANCE OF ITS SERVICES.
2. DETERMINE THE LOCATIONS FROM WHICH TEST SAMPLES WILL BE TAKEN AND IN WHICH IN-SITU TESTS ARE CONDUCTED.
3. CONDUCT AND INTERPRET TESTS AND INSPECTIONS AND STATE IN EACH REPORT WHETHER TESTED AND INSPECTED WORK COMPLIES WITH OR DEVIATES FROM REQUIREMENTS.
4. SUBMIT A CERTIFIED WRITTEN REPORT, IN DUPLICATE, OF EACH TEST, INSPECTION, AND SIMILAR QUALITY-CONTROL SERVICE THROUGH CONTRACTOR.
5. DO NOT RELEASE, REVOKE, ALTER, OR INCREASE THE CONTRACT DOCUMENT REQUIREMENTS OR APPROVE OR ACCEPT ANY PORTION OF THE WORK.
6. DO NOT PERFORM ANY DUTIES OF CONTRACTOR.

E. COORDINATION: COORDINATE SEQUENCE OF ACTIVITIES TO ACCOMMODATE REQUIRED QUALITY-ASSURANCE AND -CONTROL SERVICES WITH A MINIMUM OF DELAY AND TO AVOID NECESSITY OF REMOVING AND REPLACING CONSTRUCTION TO ACCOMMODATE TESTING AND INSPECTING.
1. SCHEDULE TIMES FOR TESTS, INSPECTIONS, OBTAINING SAMPLES, AND SIMILAR ACTIVITIES.

1.4 REPAIR AND PROTECTION

A. GENERAL: ON COMPLETION

01 70 00 - EXECUTION AND CLOSEOUT REQUIREMENTS (CONT.)

1.13 FINAL CLEANING

A. EXECUTE FINAL CLEANING PRIOR TO FINAL PROJECT ASSESSMENT.
1. CLEAN AREAS TO BE OCCUPIED BY OWNER PRIOR TO FINAL COMPLETION BEFORE OWNER OCCUPANCY.
B. USE CLEANING MATERIALS THAT ARE NONHAZARDOUS.
C. CLEAN INTERIOR AND EXTERIOR GLASS, SURFACES EXPOSED TO VIEW; REMOVE TEMPORARY LABELS, STAINS AND FOREIGN SUBSTANCES, POLISH TRANSPARENT AND GLOSSY SURFACES, VACUUM CARPETED AND SOFT SURFACES.
D. REMOVE ALL LABELS THAT ARE NOT PERMANENT. DO NOT PAINT OR OTHERWISE COVER FIRE TEST LABELS OR NAMEPLATES ON MECHANICAL AND ELECTRICAL EQUIPMENT.
E. CLEAN EQUIPMENT AND FIXTURES TO A SANITARY CONDITION WITH CLEANING MATERIALS APPROPRIATE TO THE SURFACE AND MATERIAL BEING CLEANED.
F. CLEAN FILTERS OF OPERATING EQUIPMENT.
G. CLEAN DEBRIS FROM ROOFS, GUTTERS, DOWNSPOUTS, AND DRAINAGE SYSTEMS.
H. CLEAN SITE; SWEEP PAVED AREAS, RAKE CLEAN LANDSCAPED SURFACES.
I. REMOVE WASTE, SURPLUS MATERIALS, TRASH,RUBBISH, AND CONSTRUCTION FACILITIES FROM THE SITE; DISPOSE OF IN LEGAL MANNER; DO NOT BURN OR BURY.

1.14 CLOSEOUT PROCEDURES

A. MAKE SUBMITTALS THAT ARE REQUIRED BY GOVERNING OR OTHER AUTHORITIES.
1. PROVIDE COPIES TO ARCHITECT.
B. ACCOMPANY PROJECT COORDINATOR ON PRELIMINARY INSPECTION TO DETERMINE ITEMS TO BE LISTED FOR COMPLETION OR CORRECTION IN CONTRACTOR'S NOTICE OF SUBSTANTIAL COMPLETION.
C. NOTIFY ARCHITECT WHEN WORK IS CONSIDERED READY FOR SUBSTANTIAL COMPLETION.
D. SUBMIT WRITTEN CERTIFICATION THAT CONTRACT DOCUMENTS HAVE BEEN REVIEWED; WORK HAS BEEN INSPECTED; AND THAT WORK IS COMPLETE IN ACCORDANCE WITH CONTRACT DOCUMENTS AND READY FOR ARCHITECT'S REVIEW.
E. CORRECT ITEMS OF WORK LISTED IN EXECUTED CERTIFICATES OF SUBSTANTIAL COMPLETION AND COMPLY WITH REQUIREMENTS FOR ACCESS TO OWNER-OCCUPIED AREAS.
F. NOTIFY ARCHITECT WHEN WORK IS CONSIDERED FINALLY COMPLETE.
G. COMPLETE ITEMS OF WORK DETERMINED BY ARCHITECT'S FINAL INSPECTION.

1.15 MAINTENANCE

A. PROVIDE SERVICE AND MAINTENANCE OF COMPONENTS INDICATED IN SPECIFICATION SECTIONS.
B. MAINTENANCE PERIOD: AS INDICATED IN SPECIFICATION SECTIONS OR, IF NOT INDICATED, NOT LESS THAN ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION OR THE LENGTH OF THE SPECIFIED WARRANTY, WHICHEVER IS LONGEST.
C. EXAMINE SYSTEM COMPONENTS AT A FREQUENCY CONSISTENT WITH RELIABLE OPERATION. CLEAN, ADJUST, AND LUBRICATE AS REQUIRED.
D. INCLUDE SYSTEMATIC EXAMINATION, ADJUSTMENT, AND LUBRICATION OF COMPONENTS. REPAIR OR REPLACE PARTS WHENEVER REQUIRED. USE PARTS PRODUCED BY THE MANUFACTURER OF THE ORIGINAL COMPONENT.
E. MAINTENANCE SERVICE SHALL NOT BE ASSIGNED OR TRANSFERRED TO ANY AGENT OR SUBCONTRACTOR WITHOUT PRIOR WRITTEN CONSENT OF THE OWNER.

05 40 00 - COLD-FORMED METAL FRAMING

1.1 SUBMITTALS

A. PRODUCT DATA: PROVIDE DATA ON STANDARD FRAMING MEMBERS; DESCRIBE MATERIALS AND FINISH, PRODUCT CRITERIA, AND LIMITATIONS.
B. SHOP DRAWINGS: INDICATE COMPONENT DETAILS, FRAMED OPENINGS, BEARING, ANCHORAGE, LOADING, WELDS, AND TYPE AND LOCATION OF FASTENERS, AND ACCESSORIES OR ITEMS REQUIRED OF RELATED WORK.
1. INDICATE STUD AND CLEAT SIZES.
2. DESCRIBE METHOD FOR SECURING STUDS TO TRACKS AND FOR BOLTED FRAMING CONNECTIONS.
3. PROVIDE DESIGN ENGINEER'S STAMP ON SHOP DRAWINGS.

1.2 QUALITY ASSURANCE

A. DESIGNER QUALIFICATIONS: DESIGN FRAMING SYSTEM UNDER DIRECT SUPERVISION OF A PROFESSIONAL STRUCTURAL ENGINEER EXPERIENCED IN DESIGN OF THIS WORK AND LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED.

1.3 MANUFACTURERS

A. METAL FRAMING, CONNECTORS, AND ACCESSORIES:
1. CLARKDIETRICH CORPORATION; (800) 543-7140 TOLL FREE; U.S.A. WWW.CLARKDIETRICH.COM.
2. MARINO: WWW.MARINOWARE.COM.
3. HI STEEL NETWORK, INC: WWW.STEELNETWORK.COM.

1.4 FRAMING SYSTEM

A. PROVIDE PRIMARY AND SECONDARY FRAMING MEMBERS, BRIDGING, BRACING, PLATES, GUSSETS, CLIPS, FITTINGS, REINFORCEMENT, AND FASTENINGS AS REQUIRED TO PROVIDE A COMPLETE FRAMING SYSTEM.
B. DESIGN CRITERIA: PROVIDE COMPLETED FRAMING SYSTEM HAVING THE FOLLOWING CHARACTERISTICS:
1. DESIGN CALCULATE STRUCTURAL CHARACTERISTICS OF COLD-FORMED STEEL FRAMING MEMBERS ACCORDING TO AISI NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS.
2. STRUCTURAL PERFORMANCE: DESIGN, ENGINEER, FABRICATE, AND ERECT TO WITHSTAND SPECIFIED DESIGN LOADS FOR PROJECT CONDITIONS WITHIN REQUIRED LIMITS.
3. DESIGN LOADS: IN ACCORDANCE WITH APPLICABLE CODES.
4. LIVE LOAD DEFLECTION LIMITING: UNLESS OTHERWISE INDICATED:
a. EXTERIOR WALLS: MAXIMUM HORIZONTAL DEFLECTION UNDER WIND LOAD OF L/600 OF SPAN FOR MASONRY, AND L/240 OF SPAN FOR MATERIAL WALL PANELS AND EIFS.
5. ABLE TO TOLERATE MOVEMENT OF COMPONENTS WITHOUT DAMAGE, FAILURE OF JOINT SEALS, UNDUE STRESS ON FASTENERS, OR OTHER DETRIMENTAL EFFECTS WHEN SUBJECT TO SEASONAL OR CYCLIC DAY/NIGHT TEMPERATURE RANGES.
6. ABLE TO ACCOMMODATE CONSTRUCTION TOLERANCES, DEFLECTION OF BUILDING STRUCTURAL MEMBERS, AND CLEARANCES OF INTENDED OPENINGS.

1.5 FRAMING MATERIALS

A. STUDS AND TRACK: ASTM C955; STUDS FORMED TO CHANNEL "C", OR "SIGMA" SHAPE WITH PUNCHED WEB; U-SHAPED TRACK IN MATCHING NOMINAL WIDTH AND COMPATIBLE HEIGHT.
1. WIDE AND DEPTH: AS REQUIRED TO MEET SPECIFIED PERFORMANCE LEVELS, BUT NOT LESS THAN 16 GAGE AT 16 INCHES ON CENTER.
2. GALVANIZED IN ACCORDANCE WITH ASTM A653 G90 COATING.
3. PROVIDE COMPONENTS FABRICATED FROM ASTM A1008/A1008M, DESIGNATION SS STEEL.

B. CANOPY FRAMING
1. MANUFACTURER'S STANDARD C-SHAPED STEEL SECTIONS, OF WEB DEPTHS INDICATED, UNPUNCHED, WITH STIFFENED FLANGES, AND AS FOLLOWS:
a. MINIMUM BASE-METAL THICKNESS: AS REQUIRED BY DESIGN.
b. FLANGE WIDTH: 1-5/8 INCHES, MINIMUM.
c. SECTION PROPERTIES: AS REQUIRED BY DESIGN.
2. BUILT-UP MEMBERS: BUILT-UP MEMBERS OF MANUFACTURER'S STANDARD C-SHAPED STEEL SECTION, WITH STIFFENED FLANGES, NESTED INTO A U-SHAPED STEEL SECTION JOIST TRACK, WITH UNSTIFFENED FLANGES; UNPUNCHED; OF WEB DEPTHS INDICATED; AND AS FOLLOWS:
a. MINIMUM BASE-METAL THICKNESS: AS REQUIRED BY DESIGN.
b. FLANGE WIDTH: 1-5/8 INCHES, MINIMUM.

C. FRAMING CONNECTORS: FACTORY-MADE FORMED STEEL SHEET, ASTM A653 SS GRADE 50, WITH G60 HOT DIPPED GALVANIZED COATING AND PUNCHED HOLES.
1. STRUCTURAL PERFORMANCE: MAINTAIN LOAD AND MOVEMENT CAPACITY REQUIRED BY APPLICABLE CODE, WHEN EVALUATED IN ACCORDANCE WITH AISI NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS; MINIMUM 16 GAGE, 0.06 INCH THICKNESS.
2. MOVEMENT CONNECTIONS: PROVIDE MECHANICAL ANCHORAGE DEVICES THAT ACCOMMODATE MOVEMENT USING SLOTTED HOLES, SCREWS AND ANTI-FRICTION BUSHINGS, WHILE MAINTAINING STRUCTURAL PERFORMANCE OF FRAMING. PROVIDE MOVEMENT CONNECTIONS WHERE INDICATED ON DRAWINGS.
a. WHERE CONTINUOUS STUDS BYPASS ELEVATED FLOOR SLAB, CONNECT STUD TO SLAB IN MANNER ALLOWING VERTICAL AND HORIZONTAL MOVEMENT OF SLAB WITHOUT AFFECTING STUDS; ALLOW FOR MINIMUM MOVEMENT OF 1/2 INCH.
b. WHERE TOP OF STUD WALL TERMINATES BELOW STRUCTURAL FLOOR OR ROOF, CONNECT STUDS TO STRUCTURE IN MANNER ALLOWING VERTICAL AND HORIZONTAL MOVEMENT OF SLAB WITHOUT AFFECTING STUDS; ALLOW FOR MINIMUM MOVEMENT OF 1/2 INCH.
c. PROVIDE TOP TRACK PREASSEMBLED WITH CONNECTION DEVICES SPACED TO FIT STUD SPACING INDICATED ON DRAWINGS; MINIMUM TRACK LENGTH OF 12 FEET.
3. PROVIDE NON-MOVEMENT CONNECTIONS FOR TIE-DOWN TO FOUNDATION, FLOOR-TO-FLOOR TIE-DOWN, ROOF-TO-WALL TIE-DOWN, JOIST HANGERS, GUSSET PLATES, AND STIFFENERS.

1.6 ACCESSORIES

A. BRACING, FURRING, BRIDGING: FORMED SHEET STEEL, THICKNESS DETERMINED FOR CONDITIONS ENCOUNTERED; FINISH TO MATCH FRAMING COMPONENTS.
B. SHOP AND TOUCH-UP PRIMER: SSPC-PAINT 15, COMPLYING WITH VOC LIMITATIONS OF AUTHORITIES HAVING JURISDICTION.
C. TOUCH-UP PRIMER FOR GALVANIZED SURFACES: SSPC-PAINT 20, TYPE I - INORGANIC, COMPLYING WITH VOC LIMITATIONS OF AUTHORITIES HAVING JURISDICTION.

1.7 FASTENERS

A. SELF-DRILLING, SELF-TAPPING SCREWS, BOLTS, NUTS AND WASHERS: HOT DIP GALVANIZED PER ASTM A153/A153M.
B. ANCHORAGE DEVICES: POWDER ACTUATED.
C. ANCHORAGE DEVICES: POWER ACTUATED.
D. WELDING: IN CONFORMANCE WITH AWS D1.1.

1.8 EXAMINATION

A. VERIFY THAT SUBSTRATE SURFACES ARE READY TO RECEIVE WORK.
B. VERIFY FIELD MEASUREMENTS AND ADJUST INSTALLATION AS REQUIRED.

05 40 00 - COLD-FORMED METAL FRAMING (CONT.)

1.9 INSTALLATION OF STUDS

A. INSTALL COMPONENTS IN ACCORDANCE WITH MANUFACTURERS' INSTRUCTIONS AND ASTM C1007 REQUIREMENTS.
B. ALIGN FLOOR AND CEILING TRACKS; LOCATE TO WALL LAYOUT. SECURE IN PLACE WITH FASTENERS AT MAXIMUM 24 INCHES ON CENTER. COORDINATE INSTALLATION OF SEALANT WITH FLOOR AND CEILING TRACKS.
C. PLACE STUDS AT 16 INCHES ON CENTER; NOT MORE THAN 2 INCHES FROM ABUTTING WALLS AND AT EACH SIDE OF OPENINGS. CONNECT STUDS TO TRACKS USING CLIP AND TIE METHOD.
D. CONSTRUCT CORNERS USING MINIMUM OF THREE STUDS. INSTALL DOUBLE STUDS AT WALL OPENINGS, DOOR AND WINDOW JAMBS.
E. INSTALL LOAD BEARING STUDS FULL LENGTH IN ONE PIECE. SPLICING OF STUDS IS NOT PERMITTED.
F. INSTALL LOAD BEARING STUDS, BRACE, AND REINFORCE TO DEVELOP FULL STRENGTH AND ACHIEVE DESIGN REQUIREMENTS.
G. COORDINATE PLACEMENT OF INSULATION IN MULTIPLE STUD SPACES MADE INACCESSIBLE AFTER ERECTION.
H. INSTALL INTERMEDIATE STUDS ABOVE AND BELOW OPENINGS TO ALIGN WITH WALL STUD SPACING.
I. PROVIDE DEFLECTION ALLOWANCE IN STUD TRACK, DIRECTLY BELOW HORIZONTAL BUILDING FRAMING AT NON-LOAD BEARING FRAMING.
J. ATTACH CROSS STUDS TO STUDS FOR ATTACHMENT OF FIXTURES ANCHORED TO WALLS.
K. INSTALL FRAMING BETWEEN STUDS FOR ATTACHMENT OF MECHANICAL AND ELECTRICAL ITEMS, AND TO PREVENT STUD ROTATION.
L. TOUCH-UP FIELD WELDS AND DAMAGED GALVANIZED SURFACES WITH PRIMER.

1.9 TOLERANCES

A. MAXIMUM VARIATION FROM TRUE POSITION: 1/4 INCH.
B. MAXIMUM VARIATION OF ANY MEMBER FROM PLANE: 1/4 INCH.

05 50 00 - METAL FABRICATIONS

1.1 SUBMITTALS

A. SHOP DRAWINGS: SHOW FABRICATION AND INSTALLATION DETAILS FOR METAL FABRICATIONS.
1. INCLUDE PLANS, ELEVATIONS, SECTIONS, AND DETAILS OF METAL FABRICATIONS AND THEIR CONNECTIONS. SHOW ANCHORAGE AND ACCESSORY ITEMS.

B. DELEGATED-DESIGN SUBMITTAL: PROVIDE DESIGN CALCULATIONS FOR LADDERS AND PLATFORMS, INCLUDING ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.

1.2 PROJECT CONDITIONS

A. FIELD MEASUREMENTS: VERIFY ACTUAL LOCATIONS OF WALLS AND OTHER CONSTRUCTION CONTIGUOUS WITH METAL FABRICATIONS BY FIELD MEASUREMENTS BEFORE FABRICATION.

1.3 COORDINATION

A. COORDINATE SELECTION OF SHOP PRIMERS WITH TOPCOATS TO BE APPLIED OVER THEM. COMPLY WITH PAINT AND COATING MANUFACTURERS' WRITTEN RECOMMENDATIONS TO ENSURE THAT SHOP PRIMERS AND TOPCOATS ARE COMPATIBLE WITH ONE ANOTHER.
B. COORDINATE INSTALLATION OF ANCHORAGES. FURNISH SETTING DRAWINGS, TEMPLATES, AND DIRECTIONS FOR INSTALLING ANCHORAGES, INCLUDING SLEEVES, CONCRETE INSERTS, ANCHOR BOLTS, AND ITEMS WITH INTEGRAL ANCHORS, THAT ARE TO BE EMBEDDED IN CONCRETE OR MASONRY. DELIVER SUCH ITEMS TO PROJECT SITE IN TIME FOR INSTALLATION.

1.4 METALS, GENERAL

A. METAL SURFACES, GENERAL: PROVIDE MATERIALS WITH SMOOTH, FLAT SURFACES UNLESS OTHERWISE INDICATED. FOR METAL SURFACES EXPOSED TO VIEW IN THE COMPLETED WORK, PROVIDE MATERIALS WITHOUT SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, OR BLEMISHES.

1.5 FERROUS METALS

A. STEEL PLATES, SHAPES, AND BARS: ASTM A 36.
B. STEEL PIPE: ASTM A 53/A 53M, STANDARD WEIGHT (SCHEDULE 40) UNLESS OTHERWISE INDICATED.

1.6 FASTENERS

A. GENERAL: UNLESS OTHERWISE INDICATED, PROVIDE TYPE 304 STAINLESS-STEEL FASTENERS FOR EXTERIOR USE AND ZINC-PLATED FASTENERS WITH ASTM B 633 CLASS FE/ZN 5 FOR INTERIOR USE.
B. WELDING FASTENERS: AWS D1.1/D1.1M, TYPE S, FOR STUDS AND THROUGH FASTENERS.

1.7 MISCELLANEOUS MATERIALS

A. WELDING RODS AND BARE ELECTRODES: SELECT ACCORDING TO AWS SPECIFICATIONS FOR METAL ALLOY WELDED.
B. UNIVERSAL SHOP PRIMER: FAST-CURING, LEAD- AND CHROMATE-FREE, UNIVERSAL MODIFIED-ALKYD PRIMER COMPLYING WITH MPI#79 AND COMPATIBLE WITH TOPCOAT.

1.8 FABRICATION, GENERAL

A. SHOP ASSEMBLY: PREASSEMBLE ITEMS IN THE SHOP TO GREATEST EXTENT POSSIBLE. DISASSEMBLE UNITS ONLY AS NECESSARY FOR SHIPPING AND HANDLING LIMITATIONS. USE CONNECTIONS THAT MAINTAIN STRUCTURAL VALUE OF JOINED PIECES. CLEARLY MARK UNITS FOR REASSEMBLY AND COORDINATED INSTALLATION.
B. CUT, DRILL, AND PUNCH METALS CLEANLY AND ACCURATELY. REMOVE BURRS AND EASE EDGES TO A RADIUS OF APPROXIMATELY 1/32 INCH (1 MM) UNLESS OTHERWISE INDICATED. REMOVE SHARP OR ROUGH AREAS ON EXPOSED SURFACES.
C. FORM BENT-METAL CORNERS TO SMALLEST RADIUS POSSIBLE WITHOUT CAUSING GRAIN SEPARATION OR OTHERWISE IMPAIRING WORK.
D. FORM EXPOSED WORK WITH ACCURATE ANGLES AND SURFACES AND STRAIGHT EDGES.
E. WELD CORNERS AND SEAMS CONTINUOUSLY TO COMPLY WITH THE FOLLOWING:
1. USE MATERIALS AND METHODS THAT MINIMIZE DISTORTION AND DEVELOP STRENGTH AND CORROSION RESISTANCE OF BASE METALS.
2. OBTAIN FUSION WITHOUT UNDERCUT OR OVERLAP.
3. REMOVE WELDING FLUX IMMEDIATELY.
4. AT EXPOSED CONNECTIONS, FINISH EXPOSED WELDS AND SURFACES SMOOTH AND BLENDED SO NO ROUGHNESS SHOWS AFTER FINISHING AND CONTOUR OF WELDED SURFACE MATCHES THAT OF ADJACENT SURFACE.
F. FORM EXPOSED CONNECTIONS WITH HAIRLINE JOINTS, FLUSH AND SMOOTH. USING CONCEALED FASTENERS OR WELDS WHERE POSSIBLE. USE EXPOSED FASTENERS ARE REQUIRED. USE PHILLIPS FLAT-HEAD (COUNTERSUNK) FASTENERS UNLESS OTHERWISE INDICATED. LOCATE JOINTS WHERE LEAST CONSPICUOUS.
G. FABRICATE SEAMS AND OTHER CONNECTIONS THAT WILL BE EXPOSED TO WEATHER IN A MANNER TO EXCLUDE WATER. PROVIDE WEEP HOLES WHERE WATER MAY ACCUMULATE.
H. CUT, REINFORCE, DRILL, AND TAP METAL FABRICATIONS AS INDICATED TO RECEIVE FINISH HARDWARE, SCREWS, AND SIMILAR ITEMS.
I. PROVIDE FOR ANCHORAGE OF TYPE INDICATED; COORDINATE WITH SUPPORTING STRUCTURE. SPACE ANCHORING DEVICES TO SECURELY ANCHOR ASSEMBLIES AND TRANSFER LOADS TO SUPPORTING STRUCTURE.
1. WHERE UNITS ARE INDICATED TO BE CAST INTO CONCRETE OR BUILT INTO MASONRY, EQUIP WITH INTEGRALLY WELDED STEEL STRAP ANCHORS, NOT LESS THAN 1/4 INCH THICK, WITH A MINIMUM 6-INCH EMBEDMENT AND 2-INCH HOOK, NOT LESS THAN 8 INCHES FROM ENDS AND CORNERS OF UNITS AND 24 INCHES O.C., UNLESS OTHERWISE INDICATED.

1.9 MISCELLANEOUS FRAMING AND SUPPORTS

A. GENERAL: PROVIDE STEEL FRAMING AND SUPPORTS NOT SPECIFIED IN OTHER SECTIONS AS NEEDED TO COMPLETE THE WORK.
B. FABRICATE UNITS FROM STEEL SHAPES, PLATES, AND BARS OF WELDED CONSTRUCTION UNLESS OTHERWISE INDICATED. FABRICATE TO SIZES, SHAPES, AND PROFILES INDICATED AND AS NECESSARY TO RECEIVE ADJACENT CONSTRUCTION.
1. FABRICATE UNITS FROM SLOTTED CHANNEL FRAMING WHERE INDICATED.
C. FABRICATE SUPPORTS FOR OPERABLE PARTITIONS FROM CONTINUOUS STEEL BEAMS OF SIZES [INDICATED] [RECOMMENDED BY PARTITION MANUFACTURER] WITH STEEL BEARING PLATES, ANCHORS, AND BRACES AS [INDICATED] [RECOMMENDED BY PARTITION MANUFACTURER]. DRILL OR PUNCH BOTTOM FLANGES OF BEAMS TO RECEIVE PARTITION TRACK HANGER RODS; LOCATE HOLES WHERE INDICATED ON OPERABLE PARTITION SHOP DRAWINGS.

1.10 STEEL AND IRON FINISHES

A. SHOP PRIME IRON AND STEEL ITEMS NOT INDICATED TO BE GALVANIZED UNLESS THEY ARE TO BE EMBEDDED IN CONCRETE, SPRAYED-ON FIREPROOFING, OR MASONRY, OR UNLESS OTHERWISE INDICATED.
1. SHOP PRIME WITH UNIVERSAL SHOP PRIMER UNLESS ZINC-RICH PRIMER IS INDICATED.

1.11 INSTALLATION, GENERAL

A. CUTTING, FITTING, AND PLACEMENT: PERFORM CUTTING, DRILLING, AND FITTING REQUIRED FOR INSTALLING METAL FABRICATIONS. SET METAL FABRICATIONS ACCURATELY IN LOCATION, ALIGNMENT, AND ELEVATION; WITH EDGES AND SURFACES LEVEL, PLUMB, TRUE, AND FREE OF RACK; AND MEASURED FROM ESTABLISHED LINES AND LEVELS.
B. FIT EXPOSED CONNECTIONS ACCURATELY TOGETHER TO FORM HAIRLINE JOINTS. WELD CONNECTIONS THAT ARE NOT TO BE LEFT AS EXPOSED JOINTS BUT CANNOT BE SHOP WELDED BECAUSE OF SHIPPING SIZE LIMITATIONS. DO NOT WELD, CUT, OR ABRADE SURFACES OF EXTERIOR UNITS THAT HAVE BEEN HOT-DIP GALVANIZED AFTER FABRICATION AND ARE FOR BOLTED OR BRAZED FIELD CONNECTIONS.
C. FIELD WELDING: COMPLY WITH THE FOLLOWING REQUIREMENTS:
1. USE MATERIALS AND METHODS THAT MINIMIZE DISTORTION AND DEVELOP STRENGTH AND CORROSION RESISTANCE OF BASE METALS.
2. OBTAIN FUSION WITHOUT UNDERCUT OR OVERLAP.
3. REMOVE WELDING FLUX IMMEDIATELY.
4. AT EXPOSED CONNECTIONS, FINISH EXPOSED WELDS AND SURFACES SMOOTH AND BLENDED SO NO ROUGHNESS SHOWS AFTER FINISHING AND CONTOUR OF WELDED SURFACE MATCHES THAT OF ADJACENT SURFACE.
D. FASTENING TO IN-PLACE CONSTRUCTION: PROVIDE ANCHORAGE DEVICES AND FASTENERS WHERE METAL FABRICATIONS ARE REQUIRED TO BE FASTENED TO IN-PLACE CONSTRUCTION. PROVIDE THREADED FASTENERS FOR USE WITH CONCRETE AND MASONRY INSERTS, TOGGLE BOLTS, THROUGH BOLTS, LAG SCREWS, WOOD SCREWS, AND OTHER CONNECTORS.
E. PROVIDE TEMPORARY BRACING OR ANCHORS IN FORMWORK FOR ITEMS THAT ARE TO BE BUILT INTO CONCRETE, MASONRY, OR SIMILAR CONSTRUCTION.
F. CORROSION PROTECTION: COAT CONCEALED SURFACES OF ALUMINUM THAT WILL COME INTO CONTACT WITH GROUT, CONCRETE, MASONRY, WOOD, OR DISSIMILAR METALS WITH THE FOLLOWING:
1. CAST ALUMINUM: HEAVY COAT OF BITUMINOUS PAINT.
2. EXTRUDED ALUMINUM: TWO COATS OF CLEAR LACQUER.

05 51 19 - METAL STAIRS (CONT.)

B. STRUCTURAL PERFORMANCE OF STAIRS: METAL STAIRS SHALL WITHSTAND THE EFFECTS OF GRAVITY LOADS AND THE FOLLOWING LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED:
C. UNIFORM LOAD: 100 LBF/SQ. FT.
D. CONCENTRATED LOAD: 300 LBF APPLIED ON AN AREA OF 4 SQ. IN.
E. UNIFORM AND CONCENTRATED LOADS NEED NOT BE ASSUMED TO ACT CONCURRENTLY.
F. STAIR FRAMING: CAPABLE OF WITHSTANDING STRESSES RESULTING FROM RAILING LOADS IN ADDITION TO LOADS SPECIFIED ABOVE.
G. SEISMIC PERFORMANCE OF STAIRS: METAL STAIRS SHALL WITHSTAND THE EFFECTS OF EARTHQUAKE MOTIONS DETERMINED ACCORDING TO ASCE/SEI 7.
H. COMPONENT IMPORTANCE FACTOR: 1.5.

1.4 METALS

A. METAL SURFACES, GENERAL: PROVIDE MATERIALS WITH SMOOTH, FLAT SURFACES UNLESS OTHERWISE INDICATED. FOR COMPONENTS EXPOSED TO VIEW IN THE COMPLETED WORK, PROVIDE MATERIALS WITHOUT SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, OR BLEMISHES.

1.5 FASTENERS

A. PROVIDE ZINC-PLATED FASTENERS WITH COATING COMPLYING WITH ASTM B 633 OR ASTM F 1941, CLASS FE/ZN 12 FOR EXTERIOR USE, AND CLASS FE/ZN 5 WHERE BUILT INTO EXTERIOR WALLS. SELECT FASTENERS FOR TYPE, GRADE, AND CLASS REQUIRED.

1.6 MISCELLANEOUS MATERIALS

A. UNIVERSAL SHOP PRIMER: FAST-CURING, LEAD- AND CHROMATE-FREE, UNIVERSAL MODIFIED-ALKYD PRIMER COMPLYING WITH MPI#79 AND COMPATIBLE WITH TOPCOAT.
B. GALVANIZING REPAIR PAINT: HIGH-ZINC-DUST-CONTENT PAINT COMPLYING WITH SSPC-PAINT 20 AND COMPATIBLE WITH PAINTS SPECIFIED TO BE USED OVER IT.

1.7 FABRICATION, GENERAL

A. PROVIDE COMPLETE STAIR ASSEMBLIES, INCLUDING METAL FRAMING, HANGERS, CLIPS, BRACKETS, BEARING PLATES, AND OTHER COMPONENTS NECESSARY TO SUPPORT AND ANCHOR STAIRS AND PLATFORMS ON SUPPORTING STRUCTURE.
1. JOIN COMPONENTS BY WELDING UNLESS OTHERWISE INDICATED.
2. USE CONNECTIONS THAT MAINTAIN STRUCTURAL VALUE OF JOINED PIECES.
3. FABRICATE TREADS AND PLATFORMS OF EXTERIOR STAIRS SO FINISHED WALKING SURFACES SLOPE TO DRAIN.

B. WELD CONNECTIONS TO COMPLY WITH THE FOLLOWING:
1. USE MATERIALS AND METHODS THAT MINIMIZE DISTORTION AND DEVELOP STRENGTH AND CORROSION RESISTANCE OF BASE METALS.
2. OBTAIN FUSION WITHOUT UNDERCUT OR OVERLAP.
3. REMOVE WELDING FLUX IMMEDIATELY.
4. WELD EXPOSED CORNERS AND SEAMS CONTINUOUSLY, UNLESS OTHERWISE INDICATED.
5. AT EXPOSED CONNECTIONS, FINISH EXPOSED WELDS AND SURFACES SMOOTH AND BLENDED SO NO ROUGHNESS SHOWS AFTER FINISHING AND CONTOUR OF WELDED SURFACE MATCHES THAT OF ADJACENT SURFACE.

C. FABRICATE JOINTS THAT WILL BE EXPOSED TO WEATHER IN A MANNER TO EXCLUDE WATER. PROVIDE WEEP HOLES WHERE WATER MAY ACCUMULATE.

1.8 STEEL-FRAMED STAIRS

A. NAAMM STAIR STANDARD: COMPLY WITH "RECOMMENDED VOLUNTARY MINIMUM STANDARDS FOR FIXED METAL STAIRS" IN NAAMM AMP 510, "METAL STAIRS MANUAL," INDUSTRIAL CLASS, UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED.
B. STAIR FRAMING:
1. FABRICATE STRINGERS OF STEEL PLATES OR CHANNELS.
a. PROVIDE CLOSURES FOR EXPOSED ENDS OF CHANNEL STRINGERS.
2. CONSTRUCT PLATFORMS OF STEEL PLATE OR CHANNEL HEADERS AND MISCELLANEOUS FRAMING MEMBERS AS NEEDED TO COMPLY WITH PERFORMANCE REQUIREMENTS.
3. WELD OR BOLT STRINGERS TO HEADERS; WELD OR BOLT FRAMING MEMBERS TO STRINGERS AND HEADERS.

C. METAL PAN-GRATING STAIRS: FORM TREADS AND PLATFORMS TO CONFIGURATIONS SHOWN FROM METAL BAR GRATING; FABRICATE TO COMPLY WITH NAAMM MBG 531, "METAL BAR GRATING MANUAL":
1. WELD EXPOSED CORNERS AND SEAMS CONTINUOUSLY UNLESS OTHERWISE INDICATED.
2. AT EXPOSED CONNECTIONS, FINISH EXPOSED WELDS TO COMPLY WITH NOMMA'S "VOLUNTARY JOINT FINISH STANDARDS" FOR TYPE 1 WELDS: GOOD QUALITY, UNIFORM UNDRESSED WELD WITH MINIMAL SPLATTER.
3. FABRICATE JOINTS THAT ARE EXPOSED TO WEATHER IN A MANNER TO EXCLUDE WATER. PROVIDE WEEP HOLES WHERE WATER MAY ACCUMULATE.

1.9 STAIR RAILINGS

A. COMPLY WITH APPLICABLE REQUIREMENTS IN SECTION 055213 "PIPE AND TUBE RAILINGS".
B. RAILS MAY BE BENT AT CORNERS, RAIL RETURNS, AND WALL RETURNS, INSTEAD OF USING PREFABRICATED FITTINGS.
C. CONNECT POSTS TO STAIR FRAMING BY DIRECT WELDING UNLESS OTHERWISE INDICATED.

1.10 FINISHES

A. FINISH METAL STAIRS AFTER ASSEMBLY.
B. GALVANIZING: HOT-DIP GALVANIZE ITEMS AS INDICATED TO COMPLY WITH ASTM A 153/A 153M FOR STEEL AND IRON HARDWARE AND WITH ASTM A 123/A 123M FOR OTHER STEEL AND IRON PRODUCTS.
C. PREPARATION FOR SHOP PRIMING: PREPARE UNCOATED FERROUS-METAL SURFACES TO COMPLY WITH SSPC-SP 6/NACE NO. 3, "COMMERCIAL BLAST CLEANING" AND SSPC-SP 3, "POWER TOOL CLEANING."
D. APPLY SHOP PRIMER TO UNCOATED SURFACES OF METAL STAIR COMPONENTS, EXCEPT THOSE WITH GALVANIZED FINISHES AND THOSE TO BE EMBEDDED IN CONCRETE OR MASONRY UNLESS OTHERWISE INDICATED. COMPLY WITH SSPC-PA 1, "PAINT APPLICATION SPECIFICATION NO. 1: SHOP, FIELD, AND MAINTENANCE PAINTING OF STEEL," FOR SHOP PAINTING.

1.11 INSTALLATION

A. CUTTING, FITTING, AND PLACEMENT: PERFORM CUTTING, DRILLING, AND FITTING REQUIRED FOR INSTALLING METAL STAIRS. SET UNITS ACCURATELY IN LOCATION, ALIGNMENT, AND ELEVATION, MEASURED FROM ESTABLISHED LINES AND LEVELS AND FREE OF RACK.
B. FIELD WELDING: COMPLY WITH REQUIREMENTS FOR WELDING IN "FABRICATION, GENERAL" ARTICLE.

1.12 ADJUSTING AND CLEANING

A. TOUCH-UP PAINTING: IMMEDIATELY AFTER ERECTION, CLEAN FIELD WELDS, BOLTED CONNECTIONS, AND ABRADED AREAS OF SHOP PAINT, AND PAINT EXPOSED AREAS WITH SAME MATERIAL AS USED FOR SHOP PAINTING TO COMPLY WITH SSPC-PA 1 FOR TOUCHING UP SHOP-PAINTED SURFACES.
B. GALVANIZED SURFACES: CLEAN FIELD WELDS, BOLTED CONNECTIONS, AND ABRADED AREAS AND REPAIR GALVANIZING TO COMPLY WITH ASTM A 780/A 780M.

05 51 19 - METAL STAIRS

1.1 SUMMARY

A. SECTION INCLUDES INDUSTRIAL-TYPE, STRAIGHT-RUN STAIRS WITH STEEL-GRATING TREADS AND PERFORATED METAL PLATFORMS.

1.2 ACTION SUBMITTALS

A. PRODUCT DATA: FOR METAL GRATING STAIRS.
B. SHOP DRAWINGS: INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS
C. DELEGATED-DESIGN SUBMITTAL: DESIGN CALCULATIONS FOR STAIRS AND PLATFORMS, INCLUDING ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.

1.3 PERFORMANCE REQUIREMENTS

A. DELEGATED DESIGN: ENGAGE A QUALIFIED PROFESSIONAL ENGINEER, REGISTERED BY STATE IN WHICH PROJECT IS BEING CONSTRUCTED TO DESIGN STAIRS.
B. STRUCTURAL PERFORMANCE OF STAIRS: METAL STAIRS SHALL WITHSTAND THE EFFECTS OF GRAVITY LOADS AND THE FOLLOWING LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED:
1. UNIFORM LOAD: 100 LBF/SQ. FT.
2. CONCEN

CAUTION: IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PR 3.2.c

06 10 00 - ROUGH CARPENTRY - NON STRUCTURAL

1.1 GENERAL REQUIREMENTS

A. DIMENSION LUMBER: COMPLY WITH PS 20 AND REQUIREMENTS OF SPECIFIED GRADING AGENCIES.
1. IF NO SPECIES IS SPECIFIED, PROVIDE ANY SPECIES GRADED BY THE AGENCY SPECIFIED; IF NO GRADING AGENCY IS SPECIFIED, PROVIDE LUMBER GRADED BY ANY GRADING AGENCY MEETING THE SPECIFIED REQUIREMENTS.
2. GRADING AGENCY: ANY GRADING AGENCY WHOSE RULES ARE APPROVED BY THE BOARD OF REVIEW, AMERICAN LUMBER STANDARD COMMITTEE (WWW.ALSC.ORG) AND WHO PROVIDES GRADING SERVICE FOR THE SPECIES AND GRADE SPECIFIED; PROVIDE LUMBER STAMPED WITH GRADE MARK UNLESS OTHERWISE INDICATED.

1.2 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

A. SIZES: NOMINAL SIZES AS INDICATED ON DRAWINGS, S4S.
B. MOISTURE CONTENT: S-DRY OR MC19.
C. MISCELLANEOUS FRAMING, BLOCKING, NAILERS, GROUNDS, AND FURRING:
1. LUMBER: S4S, NO. 2 OR STANDARD GRADE.
2. BOARDS: STANDARD OR NO. 3.

1.3 CONSTRUCTION PANELS

A. COMMUNICATIONS AND ELECTRICAL ROOM MOUNTING BOARDS: PS 1 A-D-EXT PLYWOOD, 3/4 INCH THICK. PROVIDE FR (FIRE RETARDANT) TREATED MATERIAL WHERE REQUIRED BY CODE.

1.4 ACCESSORIES

A. A. FASTENERS AND ANCHORS:
1. METAL AND FINISH: HOT-DIPPED GALVANIZED STEEL PER ASTM A 153/A 153M FOR HIGH HUMIDITY AND PRESERVATIVE-TREATED WOOD LOCATIONS, UNFINISHED STEEL ELSEWHERE.
2. ANCHORS: TOGGLE BOLT TYPE FOR ANCHORAGE TO HOLLOW MASONRY.

1.5 FACTORY WOOD TREATMENT

A. TREATED LUMBER AND PLYWOOD: COMPLY WITH REQUIREMENTS OF AWPA U1 - USE CATEGORY SYSTEM FOR WOOD TREATMENTS DETERMINED BY USE CATEGORIES, EXPECTED SERVICE CONDITIONS, AND SPECIFIC APPLICATIONS.
1. FIRE-RETARDANT TREATED WOOD: MARK EACH PIECE OF WOOD WITH PRODUCER'S STAMP INDICATING COMPLIANCE WITH SPECIFIED REQUIREMENTS.
2. PRESERVATIVE-TREATED WOOD: PROVIDE LUMBER AND PLYWOOD MARKED OR STAMPED BY AN ALSC-ACCREDITED TESTING AGENCY, CERTIFYING LEVEL AND TYPE OF TREATMENT IN ACCORDANCE WITH AWPA STANDARDS.
B. PRESERVATIVE TREATMENT:
1. MANUFACTURERS:
a. ARCH WOOD PROTECTION, INC.: WWW.WOLMANIZEDWOOD.COM.
b. VIANCE, LLC: WWW.TREATEDWOOD.COM.
c. OSMOSE, INC.: WWW.OSMOSE.COM.
2. PRESERVATIVE PRESSURE TREATMENT OF LUMBER ABOVE GRADE: AWPA U1, USE CATEGORY UC3B, COMMODITY SPECIFICATION A USING WATERBORNE PRESERVATIVE TO 0.25 LB/CU FT RETENTION.
a. KILN DRY LUMBER AFTER TREATMENT TO MAXIMUM MOISTURE CONTENT OF 19 PERCENT.
b. TREAT LUMBER IN CONTACT WITH ROOFING, FLASHING, OR WATERPROOFING.
c. TREAT LUMBER IN CONTACT WITH MASONRY OR CONCRETE.
d. TREAT LUMBER IN OTHER LOCATIONS AS INDICATED.

1.6 PREPARATION

A. WHERE WOOD FRAMING BEARS ON CEMENTITIOUS FOUNDATIONS, INSTALL FULL WIDTH SILL FLASHING CONTINUOUS OVER TOP OF FOUNDATION, LAP ENDS OF FLASHING MINIMUM OF 4 INCHES AND SEAL.
B. COORDINATE INSTALLATION OF ROUGH CARPENTRY MEMBERS SPECIFIED IN OTHER SECTIONS.

1.7 INSTALLATION - GENERAL

A. SELECT MATERIAL SIZES TO MINIMIZE WASTE.
B. REUSE SCRAP TO THE GREATEST EXTENT POSSIBLE; CLEARLY SEPARATE SCRAP FOR USE ON SITE AS ACCESSORY COMPONENTS, INCLUDING: SHIMS, BRACING, AND BLOCKING.
C. WHERE TREATED WOOD IS USED ON INTERIOR, PROVIDE TEMPORARY VENTILATION DURING AND IMMEDIATELY AFTER INSTALLATION SUFFICIENT TO REMOVE INDOOR AIR CONTAMINANTS.

1.8 BLOCKING, NAILERS, AND SUPPORTS

A. PROVIDE FRAMING AND BLOCKING MEMBERS AS INDICATED OR AS REQUIRED TO SUPPORT FINISHES, FIXTURES, SPECIALTY ITEMS, AND TRIM.
B. IN METAL STUD WALLS, PROVIDE CONTINUOUS BLOCKING AROUND DOOR AND WINDOW OPENINGS FOR ANCHORAGE OF FRAMES, SECURELY ATTACHED TO STUD FRAMING.
C. IN WALLS, PROVIDE BLOCKING ATTACHED TO STUDS AS BACKING AND SUPPORT FOR WALL-MOUNTED ITEMS, UNLESS ITEM CAN BE SECURELY FASTENED TO TWO OR MORE STUDS OR OTHER METHOD OF SUPPORT IS EXPLICITLY INDICATED.
D. WHERE CEILING-MOUNTING IS INDICATED, PROVIDE BLOCKING AND SUPPLEMENTARY SUPPORTS ABOVE CEILING, UNLESS OTHER METHOD OF SUPPORT IS EXPLICITLY INDICATED.

1.9 INSTALLATION OF CONSTRUCTION PANELS

A. PLYWOOD WALL SHEATHING
1. INSTALL WITH LONG EDGE PERPENDICULAR TO FRAMING.
2. ALLOW 1/8 INCH OPEN SPACE BETWEEN PANEL ENDS AND EDGES FOR EXPANSION AND CONTRACTION.
3. PLACE ENDS OVER FRAMING MEMBERS. INSTALL OVER TWO OR MORE SPANS WITH END JOINTS STAGGERED AND FACE GRAIN PERPENDICULAR TO SUPPORTS.
4. SECURE WITH GALVANIZED NAILS TO EACH SUPPORT SPACING FASTENERS AT 12 INCH O.C. FOR INTERMEDIATE SUPPORTS AND 6 INCH O.C. FOR ENDS SUPPORTS (OR AT SPACING AS OTHERWISE INDICATED ON STRUCTURAL DRAWINGS), USING 8D RING SHANK NAILS. STAPLES WILL BE ALLOWED AS A SUBSTITUTION IF ALLOWED BY GOVERNING CODES, ARCHITECT, AND OWNER.
5. USE EDGE CLIPS AT ALL UNSUPPORTED EDGES AT ROOF SHEATHING, SPACED AT 12" MAXIMUM ON CENTER.
B. COMMUNICATIONS AND ELECTRICAL ROOM MOUNTING BOARDS: SECURE WITH SCREWS TO STUDS WITH EDGES OVER FIRM BEARING; SPACE FASTENERS AT MAXIMUM 24 INCHES ON CENTER ON ALL EDGES AND INTO STUDS IN FIELD OF BOARD.

1.10 TOLERANCES

A. FRAMING MEMBERS: 1/4 INCH FROM TRUE POSITION, MAXIMUM.
B. VARIATION FROM PLANE: 1/4 INCH IN 10 FEET MAXIMUM, AND 1/4 INCH IN 30 FEET MAXIMUM.

06 16 00 - SHEATHING

1.1 WALL SHEATHING

A. GLASS-MAT GYPSUM WALL SHEATHING: ASTM C 1177.
1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
a. CERTAINTEED CORPORATION; GLASROC.
b. G-P GYPSUM CORPORATION; DENS-GLASS GOLD.
c. EMPLEINLAND INC.; GREENGLASS
d. UNITED STATES GYPSUM CO.; SECUROCK.
2. TYPE AND THICKNESS: TYPE X, 5/8 INCH THICK.
3. SIZE: 48 BY 108 INCHES.

1.2 GYPSUM SHEATHING INSTALLATION

A. A. COMPLY WITH GA-253 AND WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
1. FASTEN GYPSUM SHEATHING TO COLD-FORMED METAL FRAMING WITH SCREWS.
2. INSTALL BOARDS WITH A 3/8-INCH GAP WHERE NON-LOAD-BEARING CONSTRUCTION ABUTS STRUCTURAL ELEMENTS.
3. INSTALL BOARDS WITH A 1/4-INCH GAP WHERE THEY ABUT MASONRY OR SIMILAR MATERIALS THAT MIGHT RETAIN MOISTURE, TO PREVENT WICKING.
B. APPLY FASTENERS SO HEADS BEAR TIGHTLY AGAINST FACE OF SHEATHING, BUT DO NOT CUT INTO FACING.
C. VERTICAL INSTALLATION: INSTALL BOARD VERTICAL EDGES CENTERED OVER STUDS. ABUT ENDS AND EDGES OF EACH BOARD WITH THOSE OF ADJACENT BOARDS. ATTACH BOARDS AT PERIMETER AND WITHIN FIELD OF BOARD TO EACH STUD.
D. SPACE FASTENERS APPROXIMATELY 8 INCHES O.C. AND SET BACK A MINIMUM OF 3/8 INCH (FROM EDGES AND ENDS OF BOARDS.

07 21 00 - INSULATION

1.1 GENERAL

A. SUBSTITUTIONS: SEE SECTION 016000 - PRODUCT REQUIREMENTS.

1.2 APPLICATIONS

A. INSULATION OVER METAL STUD FRAMED WALLS, CONTINUOUS: POLYISOCYANURATE BOARD.
B. INSULATION IN METAL STUD FRAMED WALLS: BATT INSULATION SEPARATING CONDITIONED FROM NON-CONDITIONED AREAS AND FOR ACOUSTICAL PURPOSES AROUND RESTROOMS.
C. AIR BARRIER JOINT FILLER: SINGLE- AND MULTI-COMPONENT EXPANDING POLYURETHANE FOAM SEALANT
D. SLAB-EDGE PERIMETER INSULATION: EXTRUDED POLYSTYRENE BOARD INSULATION

1.3 POLYISOCYANURATE BOARD

A. POLYISOCYANURATE BOARD INSULATION: RIGID CELLULAR FOAM, COMPLYING WITH ASTM C1289, TYPE II, CLASS 1, FOIL-FACED AS INDICATED ON PROJECT DRAWINGS; GRADE 1.

1.4 FIBERGLASS BATT INSULATION

A. GLASS FIBER BATT INSULATION: FLEXIBLE PREFORMED BATT OR BLANKET, COMPLYING WITH ASTM C665; FRICTION FIT.
1. FLAME SPREAD INDEX: 25 OR LESS, WHEN TESTED IN ACCORDANCE WITH ASTM E84.
2. SMOKE DEVELOPED INDEX: 450 OR LESS, WHEN TESTED IN ACCORDANCE WITH ASTM E84.
3. COMBUSTIBILITY: NON-COMBUSTIBLE, WHEN TESTED IN ACCORDANCE WITH ASTM E13 , EXCEPT FOR FACING, IF ANY.
4. FORMALDEHYDE CONTENT: ZERO.
5. THERMAL RESISTANCE: AS INDICATED ON DRAWINGS.
6. FACING: UNFACED (TYPICAL.
7. MANUFACTURERS:
a. CERTAINTEED CORPORATION: WWW.CERTAINTEED.COM.
b. JOHNS MANVILLE CORPORATION: WWW.JM.COM.
c. KNAUF INSULATION GMBH: WWW.KNAUFINSULATION.US
d. OWENS CORNING CORP: WWW.OWENSCORNING.COM

5 EXPANDING POLYURETHANE FOAM SEALANT

EXPANDING SINGLE-COMPONENT OR MULTI-COMPONENT MOISTURE-CURED POLYURETHANE FOAM WITH A (H) CFC-FREE PROPELLANT
1. EXPANDS TO THREE TIMES VOLUME (MIN) AT POINT OF APPLICATION
2. THERMAL INSULATION: R-0 (MIN), AT 2" THICKNESS
3. MANUFACTURER: SUBJECT TO COMPLIANCE WITH PROJECT REQUIREMENTS,
a. GECOS;
b. DOW CHEMICAL, 157660 TRIPLE EXPANDING FOAM
c. HANDI-FOAM MULTIPURPOSE INSULATING SPRAY FOAM SEALANT
d. OR EQUAL

07 21 00 - INSULATION (CONT)

1.6 EXTRUDED POLYSTYRENE BOARD

A. EXTRUDED-POLYSTYRENE BOARD INSULATION: ASTM C 578, OF TYPE AND MINIMUM COMPRESSIVE STRENGTH INDICATED BELOW, WITH MAXIMUM FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES OF 75 AND 450, RESPECTIVELY; PER ASTM E 84.
1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
a. DIVERSIFOAM PRODUCTS.
b. DOW CHEMICAL COMPANY.
c. OWENS CORNING
d. PACTIV BUILDING PRODUCTS
2. TYPE VI, 40 PSI. (BENEATH SLAB ON GRADE AND BACK SIDE OF FOUNDATION WALLS)
B. ADHESIVE FOR BONDING INSULATION: PRODUCT WITH DEMONSTRATED CAPABILITY TO BOND INSULATION SECURELY TO SUBSTRATES WITHOUT DAMAGING INSULATION AND SUBSTRATES.

1.7 EXAMINATION

A. VERIFY THAT SUBSTRATE, ADJACENT MATERIALS, AND INSULATION MATERIALS ARE DRY AND THAT SUBSTRATES ARE READY TO RECEIVE INSULATION AND ADHESIVE.
B. VERIFY SUBSTRATE SURFACES ARE FLAT, FREE OF HONEYCOMB, FINS, IRREGULARITIES, OR MATERIALS OR SUBSTANCES THAT MAY IMPEDE ADHESIVE BOND.

1.8 BATT INSTALLATION

A. INSTALL INSULATION AND VAPOR RETARDER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS
B. INSTALL IN EXTERIOR WALL, FLOOR AND ROOF SPACES WITHOUT GAPS OR VOIDS. DO NOT COMPRESS INSULATION.
C. TRIM INSULATION NEATLY TO FIT SPACES . INSULATE MISCELLANEOUS GAPS AND VOIDS.
D. FIT INSULATION TIGHTLY IN CAVITIES AND TIGHTLY TO EXTERIOR SIDE OF MECHANICAL AND ELECTRICAL SERVICES WITHIN THE PLANE OF THE INSULATION.
E. PLACE INSULATION AGAINST BAFFLES. DO NOT IMPEDE NATURAL ATTIC VENTILATION TO SOFFIT.
F. COORDINATE WORK OF THIS SECTION WITH CONSTRUCTION OF AIR BARRIER SEAL SPECIFIED IN SECTION 072500.

1.9 PROTECTION

A. DO NOT PERMIT INSTALLED INSULATION TO BE WET OR DAMAGED PRIOR TO ITS CONCEALMENT.

07 25 00 - WEATHER BARRIERS - SHEET

1.1 SUBMITTALS

A. PRODUCT DATA: PROVIDE DATA ON MATERIAL CHARACTERISTICS.
B. MANUFACTURER'S INSTALLATION INSTRUCTIONS: INDICATE PREPARATION.

1.2 FIELD CONDITIONS

A. MAINTAIN TEMPERATURE AND HUMIDITY RECOMMENDED BY THE MATERIALS MANUFACTURERS BEFORE, DURING AND AFTER INSTALLATION.

1.3 WARRANTY

A. PROVIDE MANUFACTURER'S STANDARD 10 YEAR WATER-TIGHTNESS WARRANTY COVERING MATERIAL AND INSTALLATION.

1.4 WATER RESISTIVE BARRIER

A. A. AIR BARRIER SHEET, MECHANICALLY FASTENED:
1. AIR PENETRATION: 0.001 CFM/FT2 AT 75 PA, WHEN TESTED IN ACCORDANCE WITH ASTM E2178. TYPE I PER ASTM E1677 , ≤0.04 CFM/FT2 AT 75 PA, WHEN TESTED IN ACCORDANCE WITH ASTM E2357
2. WATER VAPOR TRANSMISSION: 28 PERMS, WHEN TESTED IN ACCORDANCE WITH ASTM E96, METHOD B.
3. WATER PENETRATION RESISTANCE: MINIMUM 280 CM WHEN TESTED IN ACCORDANCE WITH AATCC TEST METHOD 127.
4. BASIS WEIGHT: MINIMUM 2.7 OZ/YD2, WHEN TESTED IN ACCORDANCE WITH TAPPI TEST METHOD T-410.
B. AIR RESISTANCE: AIR INFILTRATION AT >1500 SECONDS, WHEN TESTED IN ACCORDANCE WITH TAPPI TEST METHOD T-460.
1. TENSILE STRENGTH: MINIMUM 38/35 LBS/IN., WHEN TESTED IN ACCORDANCE WITH ASTM D882, METHOD A.
2. TEAR RESISTANCE: 12/10 LBS., WHEN TESTED IN ACCORDANCE WITH ASTM D1117.
3. SURFACE BURNING CHARACTERISTICS: CLASS A, WHEN TESTED IN ACCORDANCE WITH ASTM E84. FLAME SPREAD: 10, SMOKE DEVELOPED: 10.
4. MANUFACTURERS:
a. DUPONT TYVEK; WWW.DUPONT.COM.
b. PACTIV CORPORATION; GREENGUARD.PACTIV.COM.
c. VAPROSHIELD, LLC; WWW.VAPROSHIELD.COM.
5. ACCEPTABLE PRODUCTS:
a. BIRKMORY MASONRY VENEER:
1. TYVEK COMMERICAL WRAP, BY E.I. DUPONT.
b. SELF-ADHERING FLEXIBLE FLASHING TAPE, DUPONT™ FLEXWRAP™, AND SELF ADHERING STRAIGHT FLASHING TAPE, DUPONT™ STRAIGHTFLASH ™.

1.5 SEALANTS

A. SILICONE SEALANT: TYPE S-GP AS SPECIFIED IN SECTION 079005.

1.6 ACCESSORIES

A. SELF-ADHESIVE SHEET FLASHING: ASTM D 1970.
B. THINNERS AND CLEANERS: AS RECOMMENDED BY MATERIAL MANUFACTURER.
C. ATTACHMENT DEVICES: GALVANIZED STEEL NAILS WITH WEATHER RESISTANT PLASTIC CAPS.

1.7 EXAMINATION

A. VERIFY THAT SURFACES AND CONDITIONS ARE READY TO ACCEPT THE WORK OF THIS SECTION.

1.8 PREPARATION

A. REMOVE PROJECTIONS, PROTRUDING FASTENERS, AND LOOSE OR FOREIGN MATTER THAT MIGHT INTERFERE WITH PROPER INSTALLATION.

1.9 INSTALLATION

A. INSTALL MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
B. WATER-RESISTIVE/AIR BARRIERS: INSTALL CONTINUOUS BARRIER OVER SURFACES INDICATED, WITH SHEETS LAPPED TO SHED WATER AND WITH SEAMS NOT SEALED.
C. MECHANICALLY FASTENED SHEETS - ON EXTERIOR:
1. INSTALL SHEETS SHINGLE-FASHION TO SHED WATER, WITH SEAMS GENERALLY HORIZONTAL.
2. OVERLAP SEAMS AS RECOMMENDED BY MANUFACTURER BUT AT LEAST 6 INCHES.
3. OVERLAP AT OUTSIDE AND INSIDE CORNERS AS RECOMMENDED BY MANUFACTURER BUT AT LEAST 12 INCHES.
4. ATTACH TO FRAMED CONSTRUCTION WITH FASTENERS EXTENDING THROUGH SHEATHING INTO FRAMING. SPACE FASTENERS AT 12 TO 18 INCHES ON CENTER ALONG EACH FRAMING MEMBER SUPPORTING SHEATHING. FOR APPLICATIONS SPECIFIED TO BE AIR-TIGHT, SEAL SEAMS, LAPS, PENETRATIONS, TEARS, AND CUTS WITH SELF-ADHESIVE TAPE; USE ONLY LARGE-HEADED, GASKETED FASTENERS RECOMMENDED BY THE MANUFACTURER.
5. FOR APPLICATIONS SPECIFIED TO BE AIR-TIGHT, SEAL SEAMS, LAPS, PENETRATIONS, TEARS, AND CUTS WITH SELF-ADHESIVE TAPE; USE ONLY LARGE-HEADED, GASKETED FASTENERS RECOMMENDED BY THE MANUFACTURER.
6. INSTALL AIR BARRIER UNDER JAMB FLASHINGS.
7. INSTALL HEAD FLASHINGS UNDER WEATHER BARRIER.
8. AT OPENINGS TO BE FILLED WITH FRAMES HAVING NAILING FLANGES, WRAP EXCESS SHEET INTO OPENING; AT HEAD, SEAL SHEET OVER FLANGE AND FLASHING.
D. OPENINGS AND PENETRATIONS IN EXTERIOR WEATHER BARRIERS:
1. INSTALL SELF-ADHESIVE FLASHING OVER SILLS, COVERING ENTIRE SILL FRAME MEMBER, EXTENDING AT LEAST 5 INCHES ONTO WEATHER BARRIER AND AT LEAST 6 INCHES UP JAMBS; MECHANICALLY FASTEN STRETCHED EDGES
2. AT OPENINGS TO BE FILLED WITH FRAMES HAVING NAILING FLANGES, SEAL HEAD AND JAMB FLANGES USING A CONTINUOUS BEAD OF SEALANT COMPRESSED BY FLANGE AND COVER FLANGES WITH SELF-ADHESIVE FLASHING. USE FLASHING WIDE ENOUGH TO COVER FLANGE.
3. AT OPENINGS TO BE FILLED WITH NON-FLANGED FRAMES, SEAL WEATHER BARRIER TO ALL SIDES OF OPENING FRAMING, USING SELF-ADHESIVE FLASHING AT LEAST 9 INCHES WIDE, COVERING ENTIRE DEPTH OF FRAMING.
4. AT HEAD OF OPENINGS, INSTALL SELF-ADHESIVE FLASHING UNDER WEATHER BARRIER EXTENDING AT LEAST 2 INCHES BEYOND FACE OF JAMBS; SEAL WEATHER BARRIER TO FLASHING.
5. AT SILL OF OPENINGS, SEAL GAP BETWEEN WINDOW/DOOR FRAME AND ROUGH FRAMING, USING JOINT SEALANT OVER BACKER ROD.
6. SERVICE AND PENETRATIONS: FORM SELF-ADHESIVE FLASHING AROUND PENETRATING ITEM AND SEAL TO WEATHER BARRIER SURFACE.

1.10 FIELD QUALITY CONTROL

A. DO NOT COVER INSTALLED WEATHER BARRIERS UNTIL REQUIRED INSPECTIONS HAVE BEEN COMPLETED.
B. OBTAIN APPROVAL OF INSTALLATION PROCEDURES BY THE WEATHER BARRIER MANUFACTURER BASED ON A MOCK-UP INSTALLED IN PLACE, PRIOR TO PROCEEDING WITH REMAINDER OF INSTALLATION.
C. PROVIDE INSPECTIONS AS REQUIRED BY WEATHER BARRIER MANUFACTURER AS REQUIRED TO SECURE WARRANTY INDICATED.

1.11 PROTECTION

A. DO NOT LEAVE MATERIALS EXPOSED TO WEATHER LONGER THAN RECOMMENDED BY MANUFACTURER.

07 26 00 - UNDER SLAB VAPOR BARRIER

1.1 PROJECT CONDITIONS

A. CLOSE AREAS TO TRAFFIC DURING APPLICATION AND FOR TIME PERIOD AFTER APPLICATION RECOMMENDED IN WRITING BY MANUFACTURER.

1.2 COORDINATION

A. COORDINATE PLACEMENT OF SHEET VAPOR BARRIER WITH DIVISION 03 SECTIONS.

1.3 MATERIALS

A. SHEET VAPOR BARRIER:
1. TYPE: 15 MIL POLYOLEFIN FILM MEETING REQUIREMENTS OF ASTM E 1745, CLASS A.
2. WATER VAPOR TRANSMITTANCE (AFTER MANDATORY CONDITION PER ASTM E154 SECTIONS 8,11,12,13): MAXIMUM PERM RATING OF 0.01 AS TESTED IN ACCORDANCE WITH ASTM E 1745 SECTION 7.
3. STRENGTH: ASTM E 1745 CLASS A.

07 26 00 - UNDER SLAB VAPOR BARRIER (CONT)

B. ACCEPTABLE PRODUCTS:
1. 1. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
a. STEGO WRAP VAPOR BARRIER BY STEGO INDUSTRIES, LLC, 15 MILS.
b. ZERO-PERM VAPOR BARRIER BY ALUMISEAL.
c. PERMINATOR BY W.R. MEADOWS.
d. XTREME BY TEX-TRUDE
C. ACCESSORIES:
1. BONDING AGENT: MANUFACTURER'S APPROVED OR RECOMMENDED VAPOR BARRIER BONDING AGENT.
2. SEALING AND SEAMING TAPE: HIGH DENSITY POLYETHYLENE TAPE A MINIMUM OF 4 INCHES IN WIDTH COMPATIBLE WITH VAPOR BARRIER MEMBRANE, AND MANUFACTURED BY OR RECOMMENDED BY VAPOR BARRIER MEMBRANE MANUFACTURER. TAPE FOR JOINTS SHALL HAVE AT LEAST THE SAME PERMEABILITY RATING AS THE VAPOR BARRIER SPECIFIED.
3. VAPOR PROOFING MASTIC: MANUFACTURER'S APPROVED OR RECOMMENDED VAPOR PROOFING MASTIC WITH THE SAME PERMEABILITY RATING AS THE VAPOR BARRIER SPECIFIED.
4. PIPE BOOT: CONSTRUCT PIPE BOOTS FROM VAPOR BARRIER MATERIAL AND PRESSURE SENSITIVE TAPE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

1.4 INSTALLATION

A. A. VAPOR BARRIER:
1. PLACE, PROTECT, AND REPAIR VAPOR BARRIER SHEETS ACCORDING TO ASTM E 1643 AND MANUFACTURER'S WRITTEN INSTRUCTIONS.
2. UNROLL VAPOR BARRIER WITH THE LONGEST DIMENSION PARALLEL WITH THE DIRECTION OF THE CONCRETE POUR.
3. INSTALL VAPOR BARRIER WITHOUT TEARS, VOIDS, AND HOLES. LAP ENDS AND EDGES AS RECOMMENDED BY MANUFACTURER, BUT NOT LESS THAN 6 INCHES OVER ADJACENT SHEETS. SEAL LAPS WITH TAPE.
4. TURN UP SHEETS AT PERIMETER, AT FOOTINGS AND VERTICAL WALLS, AND AGAINST PENETRATIONS, AND SEAL JOINTS WITH TAPE.
5. SEAL JOINTS, TEARS, HOLES, PERIMETER, AND PENETRATIONS THROUGH VAPOR WITH TAPE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
6. POINT EXPOSED EDGES WITH POINTING MASTIC TO PREVENT WATER FROM TRAVELING UNDER MEMBRANE.
7. ADHERE MEMBRANE TO VERTICAL SURFACES WITH ADHESIVE.

07 42 13 - METAL COMPOSITE MATERIAL WALL PANELS

1.1 SUMMARY

A. SECTION INCLUDES METAL COMPOSITE MATERIAL WALL PANELS.

1.2 PREINSTALLATION MEETINGS

A. PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE.

1.3 ACTION SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT.
B. SHOP DRAWINGS: INCLUDE FABRICATION AND INSTALLATION LAYOUTS OF METAL COMPOSITE MATERIAL PANELS; DETAILS OF EDGE CONDITIONS, JOINTS, PANEL PROFILES, CORNERS, ANCHORAGES, ATTACHMENT ASSEMBLY, TRIM, FLASHINGS, CLOSURES AND ACCESSORIES; AND SPECIAL DETAILS.
C. SAMPLES: FOR EACH TYPE OF METAL COMPOSITE MATERIAL PANEL INDICATED.

1.4 INFORMATIONAL SUBMITTALS

A. PRODUCT TEST REPORTS.
B. WARRANTIES: SAMPLES OF SPECIAL WARRANTIES.

1.5 CLOSEOUT SUBMITTALS

A. MAINTENANCE DATA.

1.6 QUALITY ASSURANCE

A. INSTALLER QUALIFICATIONS: AN ENTITY THAT EMPLOYS INSTALLERS AND SUPERVISORS WHO ARE TRAINED AND APPROVED BY MANUFACTURER.

1.7 WARRANTY

A. SPECIAL WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR OR REPLACE COMPONENTS OF METAL COMPOSITE MATERIAL PANEL SYSTEMS THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD.
1. WARRANTY PERIOD: TWO YEARS FROM DATE OF SUBSTANTIAL COMPLETION.
B. SPECIAL WARRANTY ON PANEL FINISHES: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR FINISH OR REPLACE METAL COMPOSITE MATERIAL PANELS THAT SHOW EVIDENCE OF DETERIORATION OF FACTORY-APPLIED FINISHES WITHIN SPECIFIED WARRANTY PERIOD.
1. FINISH WARRANTY PERIOD: 20 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

1.8 PERFORMANCE REQUIREMENTS

A. STRUCTURAL PERFORMANCE: PROVIDE METAL COMPOSITE MATERIAL PANEL SYSTEMS CAPABLE OF WITHSTANDING THE EFFECTS OF THE FOLLOWING LOADS, BASED ON TESTING ACCORDING TO ASTM E 330:
1. WIND LOADS: AS INDICATED ON DRAWINGS.
2. OTHER DESIGN LOADS: AS INDICATED ON DRAWINGS.
3. DEFLECTION LIMITS: FOR WIND LOADS, NO GREATER THAN 1/240 OF THE SPAN.
B. AIR INFILTRATION: AIR LEAKAGE OF NOT MORE THAN 0.06 CFM/SQ. FT. WHEN TESTED ACCORDING TO ASTM E 283 AT THE FOLLOWING TEST-PRESSURE DIFFERENCE:
1. TEST-PRESSURE DIFFERENCE: 6.24 LBF/SQ. FT.
C. WATER PENETRATION UNDER STATIC PRESSURE: NO WATER PENETRATION WHEN TESTED ACCORDING TO ASTM E 331 AT THE FOLLOWING TEST-PRESSURE DIFFERENCE:
1. TEST-PRESSURE DIFFERENCE: 6.24 LBF/SQ. FT.
D. THERMAL MOVEMENTS: ALLOW FOR THERMAL MOVEMENTS FROM AMBIENT AND SURFACE TEMPERATURE CHANGES BY PREVENTING BUCKLING, OPENING OF JOINTS, OVERSTRESSING OF COMPONENTS, FAILURE OF JOINT SEALANTS, FAILURE OF CONNECTIONS, AND OTHER DETRIMENTAL EFFECTS. BASE CALCULATIONS ON SURFACE TEMPERATURES OF MATERIALS DUE TO BOTH SOLAR HEAT GAIN AND NIGHTTIME-SKY HEAT LOSS.
1. TEMPERATURE CHANGE (RANGE): 120 DEG F, AMBIENT; 180 DEG F, MATERIAL SURFACES.
E. FIRE-RESISTANCE RATINGS: COMPLY WITH ASTM E 119. TESTING BY A QUALIFIED TESTING AGENCY. IDENTIFY PRODUCTS WITH APPROPRIATE MARKINGS OF APPLICABLE TESTING AGENCY.
1. INDICATE DESIGN DESIGNATIONS FROM UL'S "FIRE RESISTANCE DIRECTORY" OR FROM THE LISTINGS OF ANOTHER QUALIFIED TESTING AGENCY.
F. FIRE PROPAGATION CHARACTERISTICS: METAL COMPOSITE MATERIAL WALL PANEL SYSTEM PASSES NFPA 285 TESTING.

1.9 METAL COMPOSITE MATERIAL WALL PANELS

A. METAL COMPOSITE MATERIAL WALL PANEL SYSTEMS: PROVIDE FACTORY-FORMED AND ASSEMBLED, METAL COMPOSITE MATERIAL WALL PANELS FABRICATED FROM TWO METAL FACINGS THAT ARE BONDED TO A SOLID, EXTRUDED THERMOPLASTIC CORE; FORMED INTO PROFILE FOR INSTALLATION METHOD INDICATED. INCLUDE ATTACHMENT ASSEMBLIES COMPONENTS, PANEL STIFFENERS, AND ACCESSORIES REQUIRED FOR WEATHERTIGHT SYSTEM.
B. ALUMINUM-FACED COMPOSITE WALL PANELS: FORMED WITH 0.020-INCH- THICK, COIL-COATED ALUMINUM SHEET FACINGS.
1. PANEL THICKNESS: 4mm (NOMINAL), OR AS REQUIRED BY DESIGN CRITERIA OR AS INDICATED ON DRAWINGS.
2. CORE: STANDARD, EXCEPT WHERE FIRE-RETARDANT IS INDICATED ON DRAWINGS OR REQUIRED BY BUILDING CODE.
3. EXTERIOR FINISH: THREE-COAT FLUOROPOLYMER.
a. COLOR: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.
C. ATTACHMENT ASSEMBLY COMPONENTS: FORMED FROM EXTRUDED ALUMINUM.
D. ATTACHMENT ASSEMBLY: MANUFACTURER'S STANDARD.

1.10 MISCELLANEOUS MATERIALS

A. MISCELLANEOUS METAL SUBFRAMING AND FURRING: ASTM C 645, COLD-FORMED, METALLIC-COATED STEEL SHEET ASTM A 653/A 653M, G90 COATING DESIGNATION OR ASTM A 792/A 792M, CLASS AZ50 ALUMINUM-ZINC-ALLOY COATING DESIGNATION UNLESS OTHERWISE INDICATED. PROVIDE MANUFACTURER'S STANDARD SECTIONS AS REQUIRED FOR SUPPORT AND ALIGNMENT OF METAL COMPOSITE MATERIAL PANEL SYSTEM.
B. PANEL ACCESSORIES: PROVIDE COMPONENTS REQUIRED FOR A COMPLETE, WEATHERTIGHT PANEL SYSTEM INCLUDING TRIM, COPINGS, FASCIAE, MULLIONS, SILLS, CORNER UNITS, CLIPS, FLASHINGS, SEALANTS, GASKETS, FILLERS, CLOSURE STRIPS, AND SIMILAR ITEMS. MATCH MATERIAL AND FINISH OF METAL COMPOSITE MATERIAL PANELS UNLESS OTHERWISE INDICATED.
C. FLASHING AND TRIM: PROVIDE FLASHING AND TRIM FORMED FROM SAME MATERIAL AS METAL COMPOSITE MATERIAL PANELS AS REQUIRED TO SEAL AGAINST WEATHER AND TO PROVIDE FINISHED APPEARANCE. LOCATIONS INCLUDE, BUT ARE NOT LIMITED TO, BASES, DRIPS, SILLS, JAMBS, CORNERS, ENDWALLS, FRAMED OPENINGS, RAKES, FASCIAE, PARAPET CAPS, SOFFITS, REVEALS, AND FILLERS. FINISH FLASHING AND TRIM WITH SAME FINISH SYSTEM AS ADJACENT METAL COMPOSITE MATERIAL PANELS.
D. PANEL FASTENERS: SELF-TAPPING SCREWS DESIGNED TO WITHSTAND DESIGN LOADS. PROVIDE EXPOSED FASTENERS WITH HEADS MATCHING COLOR OF METAL COMPOSITE MATERIAL PANELS BY MEANS OF PLASTIC CAPS OR FACTORY-APPLIED COATING. PROVIDE EPDM OR PVC SEALING WASHERS FOR EXPOSED FASTENERS.
E. PANEL SEALANTS: ASTM C 920, AS RECOMMENDED IN WRITING BY METAL COMPOSITE MATERIAL PANEL MANUFACTURER. PROVIDE SEALANT TYPES RECOMMENDED BY MANUFACTURER THAT ARE COMPATIBLE WITH PANEL MATERIALS, ARE NONSTAINING, AND DO NOT DAMAGE PANEL FINISH.

1.11 FABRICATION

A. GENERAL: FABRICATE AND FINISH METAL COMPOSITE MATERIAL PANELS

CAUTION: IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PR 3.2.c

07 42 13 - METAL COMPOSITE MATERIAL WALL PANELS (CONT)

1.14 METAL COMPOSITE MATERIAL PANEL INSTALLATION

A. ATTACHMENT ASSEMBLY, GENERAL: INSTALL ATTACHMENT ASSEMBLY REQUIRED TO SUPPORT METAL COMPOSITE MATERIAL WALL PANELS AND TO PROVIDE A COMPLETE WEATHERTIGHT WALL SYSTEM, INCLUDING SUBGIRTS, PERIMETER EXTRUSIONS, TRACKS, DRAINAGE CHANNELS, PANEL CLIPS, AND ANCHOR CHANNELS.
1. INCLUDE ATTACHMENT TO SUPPORTS, PANEL-TO-PANEL JOINERY, PANEL-TO-DISSIMILAR-MATERIAL JOINERY, AND PANEL-SYSTEM JOINT SEALS.
B. INSTALLATION: ATTACH METAL COMPOSITE MATERIAL WALL PANELS TO SUPPORTS AT LOCATIONS, SPACINGS, AND WITH FASTENERS RECOMMENDED BY MANUFACTURER TO ACHIEVE PERFORMANCE REQUIREMENTS SPECIFIED.
1. WET-SEAL SYSTEMS: SEAL HORIZONTAL AND VERTICAL JOINTS BETWEEN ADJACENT METAL COMPOSITE MATERIAL WALL PANELS WITH SEALANT BACKING AND SEALANT. INSTALL SEALANT BACKING AND SEALANT.
2. DRY SEAL SYSTEMS: SEAL HORIZONTAL AND VERTICAL JOINTS BETWEEN ADJACENT METAL COMPOSITE MATERIALWALL PANELS WITH MANUFACTURER'S STANDARD GASKET SYSTEM.
3. RAINSCREEN SYSTEMS: DO NOT APPLY SEALANTS TO JOINTS UNLESS OTHERWISE INDICATED.
C. ACCESSORY INSTALLATION: INSTALL ACCESSORIES WITH POSITIVE ANCHORAGE TO BUILDING AND WEATHERTIGHT MOUNTING, AND PROVIDE FOR THERMAL EXPANSION. COORDINATE INSTALLATION WITH FLASHINGS AND OTHER COMPONENTS.
D. FLASHING AND TRIM: COMPLY WITH PERFORMANCE REQUIREMENTS, MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, AND SMACNA'S "ARCHITECTURAL SHEET METAL MANUAL." PROVIDE CONCEALED FASTENERS WHERE POSSIBLE, AND SET UNITS TRUE TO LINE AND LEVEL AS INDICATED. INSTALL WORK WITH LAPS, JOINTS, AND SEAMS THAT ARE PERMANENTLY WATERTIGHT.

1.15 CLEANING

A. REMOVE TEMPORARY PROTECTIVE COVERINGS AND STRIPPABLE FILMS, IF ANY, AS METAL COMPOSITE MATERIAL PANELS ARE INSTALLED, UNLESS OTHERWISE INDICATED IN MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. ON COMPLETION OF METAL COMPOSITE MATERIAL PANEL INSTALLATION, CLEAN FINISHED SURFACES AS RECOMMENDED BY METAL COMPOSITE MATERIAL PANEL MANUFACTURER. MAINTAIN IN A CLEAN CONDITION DURING CONSTRUCTION.

07 53 00 - SINGLE-PLY MEMBRANE ROOFING

1.1 SUBMITTALS

A. PRODUCT DATA: PROVIDE DATA INDICATING MEMBRANE MATERIALS, FLASHING MATERIALS, INSULATION, SURFACING, AND FASTENERS.
B. SPECIMEN WARRANTY: FOR APPROVAL.
C. SHOP DRAWINGS: INDICATE JOINT OR TERMINATION DETAIL CONDITIONS, CONDITIONS OF INTERFACE WITH OTHER MATERIALS, AND PAVER LAYOUT.
D. MANUFACTURER'S FIELD REPORTS: INDICATE PROCEDURES FOLLOWED, AMBIENT TEMPERATURES, HUMIDITY, WIND VELOCITY DURING APPLICATION, AND SUPPLEMENTARY INSTRUCTIONS GIVEN.
E. WARRANTY: SUBMIT MANUFACTURER WARRANTY AND ENSURE FORMS HAVE BEEN COMPLETED IN OWNER'S NAME AND REGISTERED WITH MANUFACTURER.

1.2 WARRANTY

A. MATERIAL WARRANTY: PROVIDE MEMBRANE MANUFACTURER'S WARRANTY AGREEING TO REPLACE MATERIAL THAT SHOWS MANUFACTURING DEFECTS WITHIN 5 YEARS AFTER INSTALLATION.
B. SYSTEM WARRANTY: PROVIDE MANUFACTURER'S SYSTEM WARRANTY AGREEING TO REPAIR OR REPLACE ROOFING THAT LEAKS OR IS DAMAGED DUE TO WIND OR OTHER NATURAL CAUSES.
1. WARRANTY TERM: 15 YEARS.
2. FOR REPAIR AND REPLACEMENT INCLUDE COSTS OF BOTH MATERIAL AND LABOR IN WARRANTY.

1.3 ROOFING MEMBRANE AND ASSOCIATED MATERIALS

A. MEMBRANE:
1. MATERIAL AS INDICATED:
a. ETHYLENE PROPYLENE DIENE TERPOLYMER (EPDM)
2. THICKNESS: 60 MIL NOMINAL, UNLESS OTHERWISE NOTED
3. REINFORCING: INTERNAL FABRIC AS INDICATED.
4. SHEET WIDTH: FACTORY-FABRICATED INTO LARGEST SHEETS POSSIBLE.
B. SEAMING MATERIALS: AS RECOMMENDED BY MEMBRANE MANUFACTURER.
C. FLEXIBLE FLASHING MATERIAL: SAME MATERIAL AS MEMBRANE.

1.4 MANUFACTURERS

A. ETHYLENE PROPYLENE DIENE TERPOLYMER (EPDM):
1. CARLISLE SYNTEC INCORPORATED
2. FIRESTONE BUILDING PRODUCTS CO
3. GAF MATERIALS CORPORATION
4. GENFLEX ROOFING SYSTEMS
5. JOHNS MANVILLE.
B. INSULATION:
1. ATLAS ROOFING CORPORATION
2. CARLISLE SYNTEC INCORPORATED
3. GAF MATERIALS CORPORATION
4. OWENS CORNING COPP
5. SUBSTITUTIONS: SEE SECTION 016000 - PRODUCT REQUIREMENTS.

1.5 ROOF ASSEMBLY

A. ETHYLENE PROPYLENE DIENE TERPOLYMER (EPDM): ONE PLY MEMBRANE, BALLASTED, OVER INSULATION
1. ROOFING ASSEMBLY REQUIREMENTS:
a. COMPLYING WITH ASTM D 4637, TYPE II
b. EXPOSED FACE COLOR: BLACK, UNLESS OTHERWISE NOTED
c. INSULATION THERMAL VALUE (R), MINIMUM: REFER TO DRAWINGS.
B. INSULATION
1. ACCEPTABLE INSULATION TYPES - CONSTANT THICKNESS APPLICATION:
a. POLYISOCYANURATE BOARD.
2. ACCEPTABLE INSULATION TYPES - TAPERED APPLICATION:
a. TAPERED POLYISOCYANURATE BOARD.

1.6 INSULATION

A. POLYISOCYANURATE BOARD INSULATION: RIGID CELLULAR FOAM, COMPLYING WITH ASTM C1289, TYPE II, CLASS 1, CELLULOSE FELT OR GLASS FIBER MAT BOTH FACES; GRADE 1 AND WITH THE FOLLOWING CHARACTERISTICS:
1. COMPRESSIVE STRENGTH: 16 PSI
2. BOARD SIZE: 48 X 96 INCH.
3. BOARD THICKNESS: TOTAL IN TWO LAYERS AS REQUIRED TO ACHIEVE INDICATED R-VALUE..
4. TAPERED BOARD: SLOPE AS INDICATED; FABRICATE OF FEWEST LAYERS POSSIBLE.

1.7 ACCESSORIES

A. INSULATION COVER BOARD: ASTM C 1177/C 1177M, GLASS-MAT, WATER-RESISTANT GYPSUM SUBSTRATE, 1/2 INCH THICK, FACTORY PRIMED.
1. PRODUCTS:
a. GEORGIA-PACIFIC DENSDECK PRIME: WWW.GP.COM/BUILD.
B. STACK BOOTS: PREFABRICATED FLEXIBLE BOOT AND COLLAR FOR PIPE STACKS THROUGH MEMBRANE, SAME MATERIAL AS MEMBRANE.
C. SHEATHING ADHESIVE: NON-COMBUSTIBLE TYPE, FOR ADHERING GYPSUM SHEATHING TO METAL DECK.
D. SHEATHING JOINT TAPE: MANUFACTURER'S STANDARD WIDTH, SELF ADHERING.
E. INSULATION JOINT TAPE: GLASS-FIBER REINFORCED TYPE AS RECOMMENDED BY INSULATION MANUFACTURER, COMPATIBLE WITH ROOFING MATERIALS 6 INCHES WIDE; SELF ADHERING.
F. INSULATION FASTENERS: APPROPRIATE FOR PURPOSE INTENDED AND APPROVED BY ROOFING MANUFACTURER.
G. MEMBRANE ADHESIVE: AS RECOMMENDED BY MEMBRANE MANUFACTURER.
H. INSULATION ADHESIVE: AS RECOMMENDED BY INSULATION MANUFACTURER
STRIP REGLET DEVICES: GALVANIZED STEEL, MAXIMUM POSSIBLE LENGTHS PER LOCATION, WITH ATTACHMENT FLANGES.
J. SEALANTS: AS RECOMMENDED BY MEMBRANE MANUFACTURER.
K. WALKWAY PADS: SUITABLE FOR MAINTENANCE TRAFFIC, CONTRASTING COLOR OR OTHERWISE VISUALLY DISTINCTIVE FROM ROOF MEMBRANE.
1. COMPOSITION: TYPE AS RECOMMENDED BY MEMBRANE MANUFACTURER; SIZE AS INDICATED.
2. SURFACE COLOR: WHITE OR YELLOW.

1.8 INSTALLATION - GENERAL

A. PERFORM WORK IN ACCORDANCE WITH NRCA ROOFING AND WATERPROOFING MANUAL AND MANUFACTURER'S INSTRUCTIONS
B. DO NOT APPLY ROOFING MEMBRANE DURING UNSUITABLE WEATHER.
C. DO NOT APPLY ROOFING MEMBRANE WHEN AMBIENT TEMPERATURE IS OUTSIDE THE TEMPERATURE RANGE RECOMMENDED BY MANUFACTURER.
D. DO NOT APPLY ROOFING MEMBRANE TO DAMP OR FROZEN DECK SURFACE OR WHEN PRECIPITATION IS EXPECTED OR OCCURRING.
E. DO NOT EXPOSE MATERIALS VULNERABLE TO WATER OR SUN DAMAGE IN QUANTITIES GREATER THAN CAN BE WEATHERPROOFED THE SAME DAY.
F. COORDINATE THE WORK WITH INSTALLATION OF ASSOCIATED COUNTERFLASHINGS INSTALLED BY OTHER SECTIONS AS THE WORK OF THIS SECTION PROCEEDS.

1.9 EXAMINATION

A. VERIFY THAT SURFACES AND SITE CONDITIONS ARE READY TO RECEIVE WORK.
B. VERIFY DECK IS SUPPORTED AND SECURE.
C. VERIFY DECK IS CLEAN AND SMOOTH, FLAT, FREE OF DEPRESSIONS, WAVES, OR PROJECTIONS, PROPERLY SLOPED AND SUITABLE FOR INSTALLATION OF ROOF SYSTEM.
D. VERIFY DECK SURFACES ARE DRY AND FREE OF SNOW OR ICE.

1.10 METAL DECK PREPARATION

A. INSTALL DECK SHEATHING ON METAL DECK:
1. LAY WITH LONG SIDE AT RIGHT ANGLE TO FLUTES; STAGGER END JOINTS; PROVIDE SUPPORT AT ENDS.
2. CUT SHEATHING CLEANLY AND ACCURATELY AT ROOF BREAKS AND PROTRUSIONS TO PROVIDE SMOOTH SURFACE.
3. TAPE JOINTS.

07 53 00 - SINGLE-PLY MEMBRANE ROOFING (CONT.)

1.11 INSULATION - UNDER MEMBRANE

A. AT MECHANICALLY FASTENED AND ADHERED INSULATION: INSTALL EACH LAYER OF INSULATION TO DECK USING MECHANICAL FASTENERS/RS OR ADHESIVE SPECIFICALLY DESIGNED, SIZED, AND FORMULATED FOR FASTENING SPECIFIED BOARD-TYPE ROOF INSULATION TO DECK TYPE.
1. FASTEN FIRST LAYER OF INSULATION ACCORDING TO REQUIREMENTS IN FM GLOBAL'S "ROOFNAV" FOR SPECIFIED WINDSTORM RESISTANCE CLASSIFICATION.
2. SET EACH SUBSEQUENT LAYER OF INSULATION IN RIBBONS OF BEAD-APPLIED INSULATION ADHESIVE, FIRMLY PRESSED AND MAINTAINING INSULATION IN PLACE.
B. WHEN ROOF ASSEMBLY INCLUDES COVER-BOARDS, INSTALL COVER BOARDS OVER INSULATION WITH LONG JOINTS IN CONTINUOUS STRAIGHT LINES WITH END JOINTS STAGGERED BETWEEN ROWS. OFFSET JOINTS OF INSULATION BELOW A MINIMUM OF 6 INCHES IN EACH DIRECTION. LOOSELY BUTT COVER BOARDS TOGETHER AND FASTEN TO ROOF DECK.
1. FASTEN COVER BOARDS ACCORDING TO REQUIREMENTS IN FM GLOBAL'S "ROOFNAV" FOR SPECIFIED WINDSTORM RESISTANCE CLASSIFICATION.
C. LAY SUBSEQUENT LAYERS OF INSULATION WITH JOINTS STAGGERED AS INDICATED FROM JOINTS OF PRECEDING LAYER.
D. PLACE TAPERED INSULATION TO THE REQUIRED SLOPE PATTERN IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
E. ON METAL DECK, PLACE BOARDS PARALLEL TO FLUTES WITH INSULATION BOARD EDGES BEARING ON DECK FLUTES.
F. LAY BOARDS WITH EDGES IN MODERATE CONTACT WITHOUT FORCING. CUT INSULATION TO FIT NEATLY TO PERIMETER BLOCKING AND AROUND PENETRATIONS THROUGH ROOF.
G. TAPE JOINTS OF INSULATION IN ACCORDANCE WITH ROOFING AND INSULATION MANUFACTURERS' INSTRUCTIONS.
H. AT ROOF DRAINS, USE FACTORY-TAPERED BOARDS TO SLOPE DOWN TO ROOF DRAINS OVER A DISTANCE OF 18 INCHES.
I. DO NOT APPLY MORE INSULATION THAN CAN BE COVERED WITH MEMBRANE IN SAME DAY.

1.12 MEMBRANE ROOFING INSTALLATION

A. MECHANICALLY FASTEN OR APPLY MEMBRANE ROOFING IN ACCORDANCE WITH CONTRACT DOCUMENT " ROOF ASSEMBLY" DESCRIPTION OVER AREA TO RECEIVE ROOFING AND INSTALL ACCORDING TO ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.
1. FOR IN-SPLICE ATTACHMENT, INSTALL MEMBRANES ROOFING WITH LONG DIMENSION PERPENDICULAR TO STEEL ROOF DECK FLUTES.
B. START INSTALLATION OF MEMBRANE ROOFING IN PRESENCE OF ROOFING SYSTEM MANUFACTURER'S TECHNICAL PERSONNEL.
C. ACCURATELY ALIGN MEMBRANE ROOFING AND MAINTAIN UNIFORM SIDE AND END LAPS OF MINIMUM DIMENSIONS REQUIRED BY MANUFACTURER. STAGGER END LAPS.
D. MECHANICALLY FASTEN OR ADHERE MEMBRANE ROOFING SECURELY AT TERMINATIONS AND PENETRATIONS.
E. APPLY MEMBRANE ROOFING WITH SIDE LAPS SHINGLED WITH SLOPE OF ROOF DECK WHERE POSSIBLE.
F. IN-SEAM ATTACHMENT AT TPO MEMBRANES: SECURE ONE EDGE OF TPO SHEET USING FASTENING PLATES OR METAL BATTENS CENTERED WITHIN SEAM, AND MECHANICALLY FASTEN TPO SHEET TO ROOF DECK.
G. SEAMS: CLEAN SEAM AREAS, OVERLAP MEMBRANE ROOFING, AND HOT-AIR WELD SIDE AND END LAPS OF MEMBRANE ROOFING AND SHEET FLASHINGS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS TO ENSURE A WEATHERTIGHT SEAM INSTALLATION.
1. TEST LAP EDGES WITH PROBE TO VERIFY SEAM WELD CONTINUITY. APPLY LAP SEALANT TO SEAL CUT EDGES OF SHEET MEMBRANE.
2. VERIFY FIELD STRENGTH OF SEAMS A MINIMUM OF TWICE DAILY AND REPAIR SEAM SAMPLE AREAS.
3. REPAIR TEARS, VOIDS, AND LAPPED SEAMS IN ROOFING THAT DOES NOT COMPLY WITH REQUIREMENTS.
H. SPREAD SEALANT BED OVER DECK DRAIN FLANGE AT ROOF DRAINS AND SECURELY SEAL MEMBRANE ROOFING IN PLACE WITH CLAMPING RING.
I. INSTALL MEMBRANE ROOFING AND AUXILIARY MATERIALS TO TIE IN TO EXISTING ROOFING TO MAINTAIN WEATHERTIGHTNESS OF TRANSITION.
J. SPREAD SEALANT BED OVER DECK DRAIN FLANGE AT ROOF DRAINS, AND SECURELY SEAL ROOFING IN PLACE WITH CLAMPING RING.
K. MECHANICALLY FASTEN OR ADHERE PERIMETER OF ROOFING ACCORDING TO REQUIREMENTS IN SPRI RP-4.
L. INSTALL WALKWAY PADS. SPACE PAD JOINTS TO PERMIT DRAINAGE.

1.13 BALLASTING

A. WHERE CONTRACT DOCUMENT 'ROOF ASSEMBLY' DESCRIPTION INCLUDES ROCK OR STONE BALLAST, CONTRACTOR SHALL TAKE CARE TO PREVENT MEMBRANE DAMAGE, CRUSHING OF INSULATION, AND OVERLOADING OF THE BUILDING STRUCTURE DURING THE BALLASTING OPERATION.
B. ROOFING TO BE SPOT BALLASTED AT THE END OF EACH WORKING DAY.
C. SEAMS ARE NOT TO BE COVERED BEFORE FINAL INSPECTION.
D. AFTER EACH AREA OF WORK IS COMPLETED AND ALL SEAMS ARE CHECKED, CONTRACT OWNER'S REPRESENTATIVE AND MEMBRANE MANUFACTURER FOR INSPECTION.
E. WHEN THE MEMBRANE IS APPROVED IN WRITING BY THE OWNER'S REPRESENTATIVE, MEMBRANE MANUFACTURER, AND CONTRACTOR, AND FOLLOWING COMPLETION OF ANY REQUIRED CORRECTIVE WORK, PROMPTLY APPLY A UNIFORM LAYER OF STONE BALLAST. BALLAST RATE SHALL BE AS INDICATED IN THE STRUCTURAL CONTRACT DOCUMENTS OR AS REQUIRED FOR SPECIFIED ROOF PER GLOBAL RATING.
F. CONTRACTOR SHALL SUPPLY ADDITIONAL BALLAST AS REQUIRED TO MEET SPECIFIED BALLAST RATES.
G. BALLAST SHALL BE PROTECTIVELY INSTALLED UP AGAINST ALL PENETRATIONS AND WALKWAY PAVER, IF USED.
H. CONTRACTOR SHALL PREVENT BALLAST FROM ENTERING DRAIN LINES.

1.14 FIELD QUALITY CONTROL

A. REQUIRE SITE ATTENDANCE OF ROOFING AND INSULATION MATERIAL MANUFACTURERS DAILY DURING INSTALLATION OF THE WORK.

1.15 CLEANING

A. REMOVE ADHESIVE MARKINGS FROM FINISHED SURFACES.
B. IN AREAS WHERE FINISHED SURFACES ARE SOILED BY WORK OF THIS SECTION, CONSULT MANUFACTURER OF SURFACES FOR CLEANING ADVICE AND CONFORM TO THEIR DOCUMENTED INSTRUCTIONS.
C. REPAIR OR REPLACE DEFACED OR DAMAGED FINISHES CAUSED BY WORK OF THIS SECTION.

1.15 PROTECTION

A. PROTECT INSTALLED ROOFING AND FLASHINGS FROM CONSTRUCTION OPERATIONS.
B. WHERE TRAFFIC MUST CONTINUE OVER FINISHED ROOF MEMBRANE, PROTECT SURFACES USING DURABLE MATERIALS.

07 62 00 - SHEET METAL FLASHING AND TRIM

1.1 SUBMITTALS

A. SHOP DRAWINGS: INDICATE MATERIAL PROFILE, JOINTING PATTERN, JOINTING DETAILS, FASTENING METHODS, FLASHINGS, TERMINATIONS, AND INSTALLATION DETAILS.
B. CERTIFICATES: PROVIDE ES-1 CERTIFICATION DOCUMENTATION FROM ANSI/SPRI FOR ALL ROOF EDGE PRODUCTS PROVIDED.

1.2 QUALITY ASSURANCE

A. PERFORM WORK IN ACCORDANCE WITH SMACNA ARCHITECTURAL SHEET METAL MANUAL REQUIREMENTS AND STANDARD DETAILS, EXCEPT AS OTHERWISE INDICATED.
B. FABRICATOR AND INSTALLER QUALIFICATIONS: COMPANY SPECIALIZING IN SHEET METAL WORK WITH THREE YEARS OF DOCUMENTED EXPERIENCE.
C. PROVIDE PRODUCTS THAT HAVE BEEN TESTED TO RESIST WIND UPLIFT AS REQUIRED BY ANSI/SPRI ES-1.

1.3 DELIVERY, STORAGE, AND HANDLING

A. TACK MATERIAL TO PREVENT TWISTING, BENDING, AND ABRASION, AND TO PROVIDE VENTILATION. SLOPE METAL SHEETS TO ENSURE DRAINAGE.
B. PREVENT CONTACT WITH MATERIALS THAT COULD CAUSE DISCOLORATION OR STAINING.

1.4 WARRANTY

A. PROVIDE TWO YEAR WATER TIGHTNESS WARRANTY AGAINST LEAKS THROUGH SHEET METAL FLASHING AND AT TERMINATIONS.

1.5 SHEET MATERIALS

A. PRE-FINISHED GALVANIZED STEEL: ASTM A653/A653M, WITH G90/Z275 ZINC COATING; MINIMUM 0.02 INCH THICK BASE METAL; SHOP PRE-COATED WITH PVDF COATING.
B. PRE-FINISHED ALUMINUM SHEET: MINIMUM 0.040 INCH THICK BASE METAL; SHOP PRE-COATED WITH PVDF COATING.
C. PVDF (POLYVINYLIDENE FLUORIDE) COATING: SUPERIOR PERFORMANCE ORGANIC FINISH, AAMA 2605; MULTIPLE COAT, THERMALLY CURED FLUOROPOLYMER FINISH SYSTEM.

1.6 ACCESSORIES

A. FASTENERS: GALVANIZED STEEL, WITH SOFT NEOPRENE WASHERS. NO EXPOSED FASTENERS SHALL BE PERMITTED.
B. UNDERLAYMENT: ASTM D226, ORGANIC ROOFING FELT, TYPE I ("NO. 15").
C. PRIMER: ZINC CHROMATE TYPE.
D. PROTECTIVE BACKING PAINT: ZINC MOLYBDATE ALKYD.
E. SEALANT: TYPE S-SP SPECIFIED IN SECTION 079005.
F. PLASTIC CEMENT: ASTM D4586, TYPE I.
G. REGLETS: SURFACE MOUNTED TYPE, GALVANIZED STEEL.

1.7 FABRICATION

A. FORM SECTIONS TRUE TO SHAPE, ACCURATE IN SIZE, SQUARE, AND FREE FROM DISTORTION OR DEFECTS.
B. FORM PIECES IN LONGEST POSSIBLE LENGTHS.
C. HEM EXPOSED EDGES ON UNDERSIDE 1/2 INCH; MITER AND SEAM CORNERS.
D. FORM SHEETS FLAT, LOCK SEAMS, EXCEPT WHERE OTHERWISE INDICATED. AT MOVING JOINTS, USE SEALED LAPPED, BAYONET-TYPE OR INTERLOCKING HOOKED SEAMS.
E. FABRICATE CORNERS FROM ONE PIECE WITH MINIMUM 18 INCH LONG LEGS; SEAM FOR RIGIDITY, SEAL WITH SEALANT.
F. FABRICATE VERTICAL FACES WITH BOTTOM EDGE FORMED OUTWARD 1/4 INCH AND HEMMED TO FORM DRIP.
G. FABRICATE FLASHINGS TO ALLOW TOE TO EXTEND 2 INCHES OVER ROOFING GRAVEL. RETURN AND BRAKE EDGES.

1.8 EXAMINATION

A. VERIFY ROOF OPENINGS, CURBS, PIPES, SLEEVES, DUCTS, AND VENTS THROUGH ROOF ARE SOLIDLY SET, REGLETS IN PLACE, AND NAILING STRIPS LOCATED.
B. VERIFY ROOFING TERMINATION AND BASE FLASHINGS ARE IN PLACE, SEALED, AND SECURE.

07 62 00 - SHEET METAL FLASHING AND TRIM (CONT)

1.9 PREPARATION

A. INSTALL STARTER AND EDGE STRIPS, AND CLEATS BEFORE STARTING INSTALLATION.
B. INSTALL SURFACE MOUNTED REGLETS TRUE TO LINES AND LEVELS. SEAL TOP OF REGLETS WITH SEALANT
C. BACK PAINT CONCEALED METAL SURFACES WITH PROTECTIVE BACKING PAINT TO A MINIMUM DRY FILM THICKNESS OF 15 MIL.

1.10 INSTALLATION

A. CONFORM TO DRAWING DETAILS.
B. SECURE FLASHINGS IN PLACE USING CONCEALED FASTENERS. USE EXPOSED FASTENERS ONLY WHERE PERMITTED.
C. APPLY PLASTIC CEMENT COMPOUND BETWEEN METAL FLASHINGS AND FELT FLASHINGS.
D. FIT FLASHINGS TIGHT IN PLACE. MAKE CORNERS SQUARE, SURFACES TRUE AND STRAIGHT IN PLANES, AND LINES ACCURATE TO PROFILES.
E. SEAL METAL JOINTS WATERTIGHT.

1.11 FIELD QUALITY CONTROL

A. SEE SECTION 014000 - QUALITY REQUIREMENTS, FOR FIELD INSPECTION REQUIREMENTS.
B. INSPECTION WILL INVOLVE SURVEILLANCE OF WORK DURING INSTALLATION TO ASCERTAIN COMPLIANCE WITH SPECIFIED REQUIREMENTS.

1.12 SCHEDULE OF PRODUCTS USED

A. FLASHING AND COUNTER FLASHING: FABRICATE AS INDICATED ON DRAWINGS AND IN ACCORDANCE WITH SMACNA ARCHITECTURAL SHEET METAL MANUAL, CHAPTER 4.
B. COPING: AS INDICATED ON DRAWINGS AND IN ACCORDANCE WITH SMACNA FIGURE 3-4A.
C. THROUGH WALL SCUPPER: AS INDICATED ON DRAWINGS AND IN ACCORDANCE WITH SMACNA 1-26.
D. CONDUCTOR HEAD: AS INDICATED ON DRAWINGS AND IN ACCORDANCE WITH SMACNA 1_25F.
E. DOWNSPOUT: AS INDICATED ON DRAWINGS AND IN ACCORDANCE WITH SMACNA FIGURE 1-32B.
1. HANGERS: SMACNA FIGURE 1-35B.
F. SPLASH PAN: SMACNA FIGURE 1-36 WITH CORRUGATIONS TO BREAK WATER FLOW.

07 62 10 - FLEXIBLE FLASHING

1.1 SUMMARY

A. A. SECTION INCLUDES:
1. FORMED PRODUCTS: CONCEALED FLASHING WITHIN WALL ASSEMBLIES WHERE INDICATED OR OTHERWISE WHERE REQUIRED TO PROTECT AND SHED INCIDENTAL WATER TO THE EXTERIOR.

1.2 PERFORMANCE REQUIREMENTS

A. GENERAL: FLASHING AND TRIM ASSEMBLIES AS INDICATED SHALL WITHSTAND STRUCTURAL MOVEMENT, THERMALLY INDUCED MOVEMENT, AND EXPOSURE TO WEATHER WITHOUT FAILURE DUE TO DEFECTIVE MANUFACTURE, FABRICATION, INSTALLATION, OR OTHER DEFECTS IN CONSTRUCTION. COMPLETED SHEET METAL FLASHING AND TRIM SHALL NOT RATTLE, LEAK, OR LOOSEN, AND SHALL REMAIN WATERTIGHT.
B. THERMAL MOVEMENTS: PROVIDE SHEET METAL FLASHING AND TRIM THAT ALLOWS FOR THERMAL MOVEMENTS FROM AMBIENT AND SURFACE TEMPERATURE CHANGES:
1. TEMPERATURE CHANGE (RANGE): 120 DEG F, AMBIENT; 180 DEG F, MATERIAL SURFACES.

1.3 SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED. INCLUDE CONSTRUCTION DETAILS, MATERIAL DESCRIPTIONS, AND DIMENSIONS OF INDIVIDUAL COMPONENTS AND PROFILES, AND FINISHES FOR EACH MANUFACTURED PRODUCT AND ACCESSORY.
B. SHOP DRAWINGS: SHOW FABRICATION AND INSTALLATION LAYOUTS OF SHEET METAL FLASHING AND TRIM, INCLUDING PLANS, ELEVATIONS, EXPANSION-JOINT LOCATIONS, AND KEYED DETAILS. DISTINGUISH BETWEEN SHOP- AND FIELD-ASSEMBLED WORK.

1.4 DELIVERY, STORAGE, AND HANDLING

A. DO NOT STORE FLASHING MATERIALS IN CONTACT WITH OTHER MATERIALS THAT MIGHT CAUSE STAINING, DENTING, OR OTHER DAMAGE. STORE FLASHING MATERIALS AWAY FROM UNCURED CONCRETE AND MASONRY.
B. PROTECT STRIPPABLE PROTECTIVE COVERING ON SHEET METAL FLASHING AND TRIM FROM EXPOSURE TO SUNLIGHT AND HIGH HUMIDITY, EXCEPT TO THE EXTENT NECESSARY FOR THE PERIOD OF SHEET METAL FLASHING AND TRIM INSTALLATION.

1.5 FLEXIBLE FLASHING

A. SELF-ADHESIVE FLEXIBLE FLASHING PRODUCT CONSISTING OF A FLUABLE, ADHESIVE RUBBERIZED-ASPHALT COMPOUND, BONDED TO A HIGH-DENSITY, CROSS-LAMINATED POLYETHYLENE FILM TO PRODUCE AN OVERALL THICKNESS OF NOT LESS THAN 40 MILS.
1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
a. ADVANCED BUILDING PRODUCTS INC.; STRIP-N-FLASH.
b. CARLISLE COATINGS & WATERPROOFING; CCW-705 AND AIR & VAPOR BARRIER STRIPS.
c. GRACE CONSTRUCTION PRODUCTS; PERM-A-BARRIER DETAIL MEMBRANE.
d. HENRY COMPANY.

1.6 HIGH TEMPERATURE FLASHING

A. SELF-ADHERING, HIGH-TEMPERATURE SHEET: MINIMUM 30 TO 40 MILS THICK, CONSISTING OF SLIP-RESISTING POLYETHYLENE-FILM TOP SURFACE LAMINATED TO LAYER OF BUTYL OR SBS-MODIFIED ASPHALT ADHESIVE, WITH RELEASE-PAPER BACKING; COLD-APPLIED. PROVIDE PRIMER WHEN RECOMMENDED BY MANUFACTURER.
1. THERMAL STABILITY: ASTM D 1970, STABLE AFTER TESTING AT 240 DEG F.
2. LOW-TEMPERATURE FLEXIBILITY: ASTM D 1970, PASSES AFTER TESTING AT MINUS 20 DEG F.
3. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
a. CARLISLE COATINGS & WATERPROOFING INC.; CCW WIP 300HT.
b. GRACE CONSTRUCTION PRODUCTS, A UNIT OF W. R. GRACE & CO.; ULTRA.
c. HENRY COMPANY; BLUESKIN PE300 HT.
d. OWENS CORNING; WEATHERLOCK METAL HIGH TEMPERATURE UNDERLAYMENT.

1.7 MISCELLANEOUS MATERIALS

A. GENERAL: PROVIDE MATERIALS AND TYPES OF FASTENERS, SEPARATORS, SEALANTS, AND OTHER MISCELLANEOUS ITEMS AS REQUIRED FOR COMPLETE METAL FLASHING INSTALLATION AND RECOMMENDED BY MANUFACTURER OF PRIMARY SHEET METAL OR MANUFACTURED ITEM UNLESS OTHERWISE INDICATED.
B. ELASTOMERIC SEALANT: ASTM C 920, ELASTOMERIC SILICONE POLYMER SEALANT; LOW MODULUS; OF TYPE, GRADE, CLASS, AND USE CLASSIFICATIONS REQUIRED TO SEAL JOINTS IN SHEET METAL FLASHING AND TRIM AND REMAIN WATERTIGHT.

1.8 EXAMINATION

A. A. EXAMINE SUBSTRATES, AREAS, AND CONDITIONS, WITH INSTALLER PRESENT, TO VERIFY ACTUAL LOCATIONS, DIMENSIONS AND OTHER CONDITIONS AFFECTING PERFORMANCE OF THE WORK.
1. VERIFY COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES OF SUBSTRATES.
2. VERIFY THAT SUBSTRATE IS SOUND, DRY, SMOOTH, CLEAN, SLOPED FOR DRAINAGE, AND SECURELY ANCHORED.
B. FOR THE RECORD, PREPARE WRITTEN REPORT, ENDORSED BY INSTALLER, LISTING CONDITIONS DETRIMENTAL TO PERFORMANCE OF THE WORK.
C. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

1.9 FLASHING INSTALLATION

A. GENERAL: INSTALL AS INDICATED ON DRAWINGS AND PER MANUFACTURER'S RECOMMENDATIONS.
B. SELF-ADHERING SHEET FLASHING: INSTALL SELF-ADHERING SHEET FLASHING, WRINKLE FREE. APPLY PRIMER IF REQUIRED BY FLASHING MANUFACTURER. COMPLY WITH TEMPERATURE RESTRICTIONS OF FLASHING MANUFACTURER FOR INSTALLATION. APPLY IN SHINGLE FASHION TO SHED WATER, WITH END LAPS OF NOT LESS THAN 6 INCHES STAGGERED 24 INCHES BETWEEN COURSES. OVERLAP SIDE EDGES NOT LESS THAN 3-1/2 INCHES. ROLL LAPS WITH ROLLER. COVER FLASHING WITH SUBSEQUENT CONSTRUCTION WITHIN 14 DAYS.
C. C. LOCATION:
1. FLEXIBLE FLASHING: AS INDICATED ON DRAWINGS, OR AT ALL EXTERIOR WINDOWS, DOORS OR OTHER PENETRATIONS WHERE HIGH TEMPERATURE FLASHING IS NOT REQUIRED.
2. HIGH TEMPERATURE FLASHING: AS INDICATED ON DRAWINGS, OR AT ALL LOCATIONS WHERE FLASHING WILL BE IN CONTACT WITH METAL COPING OR METAL PANELS WHERE HIGH TEMPERATURES EXIST.

07 71 29 - MANUFACTURED ROOF EXPANSION JOINTS

1.1 SUMMARY

A. SECTION INCLUDES:
1. FLANGED BELLOWS-TYPE ROOF EXPANSION JOINTS.
2. ALUMINUM ROOF EXPANSION JOINTS.

1.2 PREINSTALLATION MEETINGS

A. PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE.

1.3 ACTION SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT.
B. SHOP DRAWINGS: FOR ROOF EXPANSION JOINTS.
C. SAMPLES: FOR EACH EXPOSED PRODUCT AND FOR EACH COLOR SPECIFIED.
1. ACCURATE TO PROFILES

1.4 INFORMATIONAL SUBMITTALS

A. QUALIFICATION DATA.
B. PRODUCT TEST REPORTS.
C. SAMPLE WARRANTY.

1.5 QUALITY ASSURANCE

A. INSTALLER QUALIFICATIONS: INSTALLER OF ROOFING MEMBRANE.

1.6 WARRANTY

A. SPECIAL WARRANTY: MANUFACTURER AND INSTALLER AGREE TO REPAIR OR REPLACE ROOF EXPANSION JOINTS AND COMPONENTS THAT LEAK, DETERIORATE BEYOND NORMAL WEATHERING, OR OTHERWISE FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD.
1. WARRANTY PERIOD: TWO

07 84 13 - PENETRATION FIRESTOPPING (CONT)

1.3 MANUFACTURERS

A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
1. GRACE CONSTRUCTION PRODUCTS.
2. HILTI, INC.
3. NELSON FIRESTOP PRODUCTS.
4. RECTORSEAL CORPORATION.
5. SPECIFIED TECHNOLOGIES INC.
6. 3M FIRE PROTECTION PRODUCTS.

1.4 PENETRATION FIRESTOPPING

A. PROVIDE PENETRATION FIRESTOPPING THAT IS PRODUCED AND INSTALLED TO RESIST SPREAD OF FIRE ACCORDING TO REQUIREMENTS INDICATED, RESIST PASSAGE OF SMOKE AND OTHER GASES, AND MAINTAIN ORIGINAL FIRE-RESISTANCE RATING OF CONSTRUCTION PENETRATED. PENETRATION FIRESTOPPING SYSTEMS SHALL BE COMPATIBLE WITH ONE ANOTHER, WITH THE SUBSTRATES FORMING OPENINGS, AND WITH PENETRATING ITEMS IF ANY.
B. PENETRATIONS IN FIRE-RESISTANCE-RATED WALLS: PROVIDE PENETRATION FIRESTOPPING WITH RATINGS DETERMINED PER ASTM E 814 OR UL 1479, BASED ON TESTING AT A POSITIVE PRESSURE DIFFERENTIAL OF 0.01-INCH WG.
1. FIRE-RESISTANCE-RATED WALLS INCLUDE FIRE WALLS SMOKE-BARRIER WALLS AND FIRE PARTITIONS.
2. F-RATING: NOT LESS THAN THE FIRE-RESISTANCE RATING OF CONSTRUCTIONS PENETRATED.
C. PENETRATIONS IN HORIZONTAL ASSEMBLIES: PROVIDE PENETRATION FIRESTOPPING WITH RATINGS DETERMINED PER ASTM E 814 OR UL 1479, BASED ON TESTING AT A POSITIVE PRESSURE DIFFERENTIAL OF 0.01-INCH WG.
1. HORIZONTAL ASSEMBLIES INCLUDE FLOORS FLOOR/CEILING ASSEMBLIES AND CEILING MEMBRANES OF ROOF/CEILING ASSEMBLIES.
2. F-RATING: AT LEAST 1 HOUR, BUT NOT LESS THAN THE FIRE-RESISTANCE RATING OF CONSTRUCTIONS PENETRATED.
3. T-RATING: AT LEAST 1 HOUR, BUT NOT LESS THAN THE FIRE-RESISTANCE RATING OF CONSTRUCTIONS PENETRATED EXCEPT FOR FLOOR PENETRATIONS WITHIN THE CAVITY OF A WALL.
D. PENETRATIONS IN SMOKE BARRIERS: PROVIDE PENETRATION FIRESTOPPING WITH RATINGS DETERMINED PER UL 1479.
1. L-RATING: NOT EXCEEDING 5.0 CFM/SQ. FT. OF PENETRATION OPENING AT 0.30-INCH WG AT BOTH AMBIENT AND ELEVATED TEMPERATURES.
E. EXPOSED PENETRATION FIRESTOPPING: PROVIDE PRODUCTS WITH FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES OF LESS THAN 25 AND 450, RESPECTIVELY, AS DETERMINED PER ASTM E 84.
F. VOC CONTENT: PROVIDE PENETRATION FIRESTOPPING THAT COMPLIES WITH THE FOLLOWING LIMITS FOR VOC CONTENT WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24):
1. ARCHITECTURAL SEALANTS: 250 G/L.
2. SEALANT PRIMERS FOR NONPOROUS SUBSTRATES: 250 G/L.
3. SEALANT PRIMERS FOR POROUS SUBSTRATES: 775 G/L.
G. ACCESSORIES: PROVIDE COMPONENTS FOR EACH PENETRATION FIRESTOPPING SYSTEM THAT ARE NEEDED TO INSTALL FILL MATERIALS AND TO MAINTAIN RATINGS REQUIRED. USE ONLY THOSE COMPONENTS SPECIFIED BY PENETRON FIRESTOPPING MANUFACTURER AND APPROVED BY QUALIFIED TESTING AND INSPECTING AGENCY FOR FIRESTOPPING INDICATED.

1.5 MIXING

A. FOR THOSE PRODUCTS REQUIRING MIXING BEFORE APPLICATION, COMPLY WITH PENETRATION FIRESTOPPING MANUFACTURER'S WRITTEN INSTRUCTIONS FOR ACCURATE PROPORTIONING OF MATERIALS, WATER (IF REQUIRED), TYPE OF MIXING EQUIPMENT, SELECTION OF MIXER SPEEDS,

1.6 EXAMINATION

A. EXAMINE SUBSTRATES AND CONDITIONS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR OPENING CONFIGURATIONS, PENETRATING ITEMS, SUBSTRATES, AND OTHER CONDITIONS AFFECTING PERFORMANCE OF THE WORK.
B. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

1.7 PREPARATION

A. SURFACE CLEANING: CLEAN OUT OPENINGS IMMEDIATELY BEFORE INSTALLING PENETRATION FIRESTOPPING TO COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND WITH THE FOLLOWING REQUIREMENTS:
1. REMOVE FROM SURFACES OF OPENING SUBSTRATES AND FROM PENETRATING ITEMS FOREIGN MATERIALS THAT COULD INTERFERE WITH ADHESION OF PENETRATION FIRESTOPPING.
2. CLEAN OPENING SUBSTRATES AND PENETRATING ITEMS TO PRODUCE CLEAN, SOUND SURFACES CAPABLE OF DEVELOPING OPTIMUM BOND WITH PENETRATION FIRESTOPPING. REMOVE LOOSE PARTICLES REMAINING FROM CLEANING OPERATION.
B. PRIMING: PRIME SUBSTRATES WHERE RECOMMENDED IN WRITING BY MANUFACTURER USING THAT MANUFACTURER'S RECOMMENDED PRODUCTS AND METHODS. CONFINE PRIMERS TO AREAS OF BOND; DO NOT ALLOW SPILLAGE AND MIGRATION ONTO EXPOSED SURFACES.

1.8 INSTALLATION

A. GENERAL: INSTALL PENETRATION FIRESTOPPING TO COMPLY WITH MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND PUBLISHED DRAWINGS FOR PRODUCTS AND APPLICATIONS INDICATED.
B. INSTALL FORMING MATERIALS AND OTHER ACCESSORIES OF TYPES REQUIRED TO SUPPORT FILL MATERIALS DURING THEIR APPLICATION AND IN THE POSITION NEEDED TO PRODUCE CROSS-SECTIONAL SHAPES AND DEPTHS REQUIRED TO ACHIEVE FIRE RATINGS INDICATED.
1. AFTER INSTALLING FILL MATERIALS AND ALLOWING THEM TO FULLY CURE, REMOVE COMBUSTIBLE FORMING MATERIALS AND OTHER ACCESSORIES NOT INDICATED AS PERMANENT COMPONENTS OF FIRESTOPPING.

1.9 PENETRATION FIRESTOPPING SCHEDULE

A. WHERE UL-CLASSIFIED SYSTEMS ARE INDICATED, THEY REFER TO SYSTEM NUMBERS IN UL'S "FIRE RESISTANCE DIRECTORY" UNDER PRODUCT CATEGORY XHEZ.
B. WHERE INTERTEK ETI, SEMKO-LISTED SYSTEMS ARE INDICATED, THEY REFER TO DESIGN NUMBERS IN INTERTEK ETL SEMKO'S "DIRECTORY OF LISTED BUILDING PRODUCTS" UNDER "FIRESTOP SYSTEMS."
C. WHERE FM GLOBAL-APPROVED SYSTEMS ARE INDICATED, THEY REFER TO DESIGN NUMBERS LISTED IN FM GLOBAL'S "BUILDING MATERIALS APPROVAL GUIDE" UNDER "WALL AND FLOOR PENETRATION FIRE STOPS."
D. FIRESTOP SYSTEMS WITH NO PENETRATING ITEMS (FS-1): COMPLY WITH THE FOLLOWING:
PIPES; PLASTIC OR METAL CONDUIT IN VERTICAL RUNS, INSTALLED THROUGH CAST-IN-PLACE FIRESTOP DEVICES.
a. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH FA 1000 SERIES SYSTEMS EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING:
b. FA1016, FA1017, FA2053, FA2054 BY HILTI.
c. CP 680 CAST-IN FIRESTOP DEVICE BY HILTI.
d. CP653 SPEED SLEEVE BY HILTI.
E. FIRESTOP SYSTEMS WITH NO PENETRATING ITEMS (FS-2): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ 0000 SERIES SYSTEMS EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ0000, CAJ0001 BY HILTI OR CAJ0002, CAJ0102 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR MORE OF THE FOLLOWING:
a. LATEX SEALANT.
b. SILICONE SEALANT.
c. ACRYLIC SEALANT.
d. INTUMESCENT PUTTY.
e. MORTAR.
f. PREFORMED INTUMESCENT BLOCKS.
g. PILLOWS/BAGS.
F. FIRESTOP SYSTEMS FOR METALLIC PIPES, CONDUIT, OR TUBING (FS-3): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ, WL, OR FC 1000 SERIES SYSTEMS, EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ1184, CAJ1291, CAJ1277, CAJ1362, CAJ1388, WL1056, WL1249, FC1009 BY HILTI OR CAJ1403, CAJ1235, CAJ1406, WL1152, WL1207, FC1020 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR MORE OF THE FOLLOWING:
a. LATEX SEALANT.
b. SILICONE SEALANT.
c. ACRYLIC SEALANT.
d. INTUMESCENT PUTTY.
e. MORTAR.
f. POLYURETHANE FIRESTOP FOAM.
G. FIRESTOP SYSTEMS FOR NONMETALLIC PIPE, CONDUIT, OR TUBING (FS-4): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ, FA, OR WL 2000 SERIES SYSTEMS, EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ2169, FA2003, WL2078, WL2128 BY HILTI OR CAJ2212, CAJ2171, CAJ2210, WL2167, WL2185, WL2170, WL2259 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR MORE OF THE FOLLOWING:
a. INTUMESCENT SEALANT.
b. INTUMESCENT PUTTY.
c. INTUMESCENT WRAP STRIPS.
d. FIRESTOP DEVICE.
e. FIRESTOP SLEEVE DEVICE.
f. LATEX SEALANT.
H. FIRESTOP SYSTEMS FOR ELECTRICAL CABLES (FS-5): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ OR WL 4000 SERIES SYSTEMS EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ4095, FC3012, WL3085, WL3112 BY HILTI OR CAJ4185, CAJ3196, CAJ3234, FC3016, FC3060, WL3179 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR MORE OF THE FOLLOWING:
a. INTUMESCENT SEALANT.
b. LATEX SEALANT.
c. PILLOWS/BAGS
d. INTUMESCENT PUTTY.
e. SILICONE FOAM.
I. FIRESTOP SYSTEMS FOR CABLE TRAYS (FS-6): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ OR WL 4000 SERIES SYSTEMS EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ4035, CAJ4064, WL4011, WL4034 BY HILTI OR CAJ4035, CBJA023, WL4025, WL4039 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR MORE OF THE FOLLOWING:
a. INTUMESCENT SEALANT.
b. INTUMESCENT PUTTY.
c. SILICONE FOAM.
d. PILLOWS/BAGS.
e. OMM BLOCKS.
f. FIRESTOP MORTAR.
g. POLYURETHANE FIRESTOP FOAM.

07 84 13 - PENETRATION FIRESTOPPING (CONT)

J. FIRESTOP SYSTEMS FOR INSULATED PIPES (FS-7): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ OR WL 9000 SERIES SYSTEMS, EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ9091, WL9039 BY HILTI OR CAJ9222, WL5171 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR MORE OF THE FOLLOWING:
a. INTUMESCENT SEALANT.
b. SILICONE FOAM.
c. INTUMESCENT WRAP STRIPS.
d. PRE-FORMED INTUMESCENT BLOCKS.
e. LATEX SEALANT.
K. FIRESTOP SYSTEMS FOR MISCELLANEOUS ELECTRICAL PENETRANTS (FS-8): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ 6000 SERIES SYSTEMS EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ6001, CAJ 607 BY HILTI OR CAJ6012, CAJ6013, CAJ6027 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR MORE OF THE FOLLOWING:
a. INTUMESCENT SEALANT.
b. LATEX SEALANT
c. INTUMESCENT PUTTY.
d. MORTAR.
L. FIRESTOP SYSTEMS FOR MISCELLANEOUS MECHANICAL PENETRATIONS (FS-9): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ 7000 SERIES SYSTEMS EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ7046, CAJ7051, CAJ7040, CAJ7021 BY HILTI OR CAJ7067, CAJ7075, CAJ7082 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR BOTH OF THE FOLLOWING:
a. INTUMESCENT SEALANT.
b. LATEX SEALANT.
c. MORTAR.
d. ACRYLIC SEALANT.
e. SILICONE SEALANT.
M. FIRESTOP SYSTEMS FOR GROUPINGS OF PENETRATIONS (FS-10): COMPLY WITH THE FOLLOWING:
1. ACCEPTABLE UL-CLASSIFIED SYSTEMS WITH CAJ OR WL 8000 SERIES SYSTEMS, EQUIVALENT TO, BUT NOT LIMITED TO, THE FOLLOWING: CAJ8086, CAJ8096, WL8037, WL8014, WL8019 BY HILTI OR CAJ8042, CAJ8101, CAJ8133, WL8007 BY GRACE.
2. TYPE OF FILL MATERIALS: ONE OR MORE OF THE FOLLOWING:
a. LATEX SEALANT.
b. MORTAR.
c. INTUMESCENT WRAP STRIPS.
d. FIRESTOP DEVICE.
e. INTUMESCENT COMPOSITE SHEET.
f. PRE-FORMED INTUMESCENT BLOCKS.

07 92 00 - JOINT SEALANTS

1.1 WARRANTY

A. SPECIAL MANUFACTURER'S WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH JOINT-SEALANT MANUFACTURER AGREES TO FURNISH JOINT SEALANTS TO REPAIR OR REPLACE THOSE THAT DO NOT COMPLY WITH PERFORMANCE AND OTHER REQUIREMENTS SPECIFIED IN THIS SECTION WITHIN SPECIFIED WARRANTY PERIOD.
1. WARRANTY PERIOD: 20 YEARS FROM DATE OF SUBSTANTIAL COMPLETION FOR SILICONE SEALANTS.

1.2 MATERIALS, GENERAL

A. COMPATABILITY: PROVIDE JOINT SEALANTS, BACKINGS, AND OTHER RELATED MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH JOINT SUBSTRATES UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY JOINT-SEALANT MANUFACTURER, BASED ON TESTING AND FIELD EXPERIENCE.
B. LIQUID-APPLIED JOINT SEALANTS: COMPLY WITH ASTM C 920 AND OTHER REQUIREMENTS INDICATED FOR EACH LIQUID-APPLIED JOINT SEALANT SPECIFIED INCLUDING THOSE REFERENCING ASTM C 920 CLASSIFICATIONS FOR TYPE, GRADE, CLASS, AND USES RELATED TO EXPOSURE AND JOINT SUBSTRATES.
1. SUITABILITY FOR IMMERSION IN LIQUIDS: WHERE SEALANTS ARE INDICATED FOR USE I FOR JOINTS THAT WILL BE CONTINUOUSLY IMMERSED IN LIQUIDS, PROVIDE PRODUCTS THAT HAVE UNDERGONE TESTING ACCORDING TO ASTM C 1247. LIQUID USED FOR TESTING SEALANTS IS DEIONIZED WATER, UNLESS OTHERWISE INDICATED.
C. COLORS OF EXPOSED JOINT SEALANTS: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.

1.3 SILICONE JOINT SEALANTS

A. MILDEW-RESISTANT, SINGLE-COMPONENT, ACID-CURING SILICONE JOINT SEALANT (S-S-): ASTM C 920, TYPE S, GRADE NS, CLASS 25, FOR USE NT.
1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
a. BASF BUILDING SYSTEMS: OMNIPLUS.
b. DOW CORNING CORPORATION: 786 MILDEW RESISTANT.
c. GE ADVANCED MATERIALS - SILICONES: SANITARY SCS1700.
d. TREMCO INCORPORATED: TREMSIL 200 SANITARY.

1.4 URETHANE JOINT SEALANTS

A. MULTICOMPONENT, SELF-LEVELLING, TRAFFIC-GRADE, URETHANE JOINT SEALANT (U-TB): ASTM C 920, TYPE M, GRADE SL, CLASS 50, FOR USE T.
1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
a. POLYMERIC SYSTEMS, INC.: PSI-270.
b. TREMCO INCORPORATED: DYMERIC 240 FC.
c. PECORA CORPORATION: THOSE REFERENCED.
d. BASF BUILDING SYSTEMS: MASTERSEAL SL-2

1.5 LATEX JOINT SEALANTS

A. LATEX JOINT SEALANT (AL): ACRYLIC LATEX OR SILICONIZED ACRYLIC LATEX, ASTM C 834, TYPE OP, GRADE NF.
1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
a. BASF BUILDING SYSTEMS: SONOLASTIC.
b. BOSTIK, INC.; CHEM-CALK 600
c. MAY NATIONAL ASSOCIATES, INC.
d. PECORA CORPORATION; AC-20+.
e. TREMCO INCORPORATED: TREMFLEX 834.

1.6 ACOUSTICAL JOINT SEALANTS (AC)

A. ACOUSTICAL JOINT SEALANT: MANUFACTURER'S STANDARD NON-SAG, PAINTABLE, NON-STAINING LATEX SEALANT COMPLYING WITH ASTM C 834. PRODUCT EFFECTIVELY REDUCES AIRBORNE SOUND TRANSMISSION THROUGH PERIMETER JOINTS AND OPENINGS IN BUILDING CONSTRUCTION AS DEMONSTRATED BY TESTING REPRESENTATIVE ASSEMBLIES ACCORDING TO ASTM E 90.
1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
a. PECORA CORPORATION; AC-20 FTR.
b. USG CORPORATION; SHEETROCK ACOUSTICAL SEALANT.

1.7 MISCELLANEOUS MATERIALS

A. PRIMER: MATERIAL RECOMMENDED BY JOINT-SEALANT MANUFACTURER WHERE REQUIRED FOR ADHESION OF SEALANT TO JOINT SUBSTRATES INDICATED, AS DETERMINED FROM PRECONSTRUCTION JOINT-SEALANT-SUBSTRATE TESTS AND FIELD TESTS.
B. CLEANERS FOR NONPOROUS SURFACES: CHEMICAL CLEANERS ACCEPTABLE TO MANUFACTURERS OF SEALANTS AND SEALANT BACKING MATERIALS, FREE OF OILY RESIDUES OR OTHER SUBSTANCES CAPABLE OF STAINING OR IMPAIRING JOINT SUBSTRATES AND ADJACENT NONPOROUS SURFACES IN ANY WAY, AND FORMULATED TO PROMOTE OPTIMUM ADHESION OF SEALANTS TO JOINT SUBSTRATES.
C. MASKING TAPE: NONSTAINING, NONABSORBENT MATERIAL COMPATIBLE WITH JOINT SEALANTS AND SURFACES ADJACENT TO JOINTS.

1.8 PREPARATION

A. SURFACE CLEANING OF JOINTS: CLEAN OUT JOINTS IMMEDIATELY BEFORE INSTALLING JOINT SEALANTS TO COMPLY WITH JOINT-SEALANT MANUFACTURER'S WRITTEN INSTRUCTIONS AND THE FOLLOWING REQUIREMENTS:
1. REMOVE ALL FOREIGN MATERIAL FROM JOINT SUBSTRATES THAT COULD INTERFERE WITH ADHESION OF JOINT SEALANT, INCLUDING DUST, PAINT, OTHER RESIDUES, AND JOINT TRANSVERSE TESTS OR PRIOR EXPERIENCE, APPLY PRIMER TO COMPLY WITH JOINT-SEALANT MANUFACTURER'S WRITTEN INSTRUCTIONS. CONFINE PRIMERS TO AREAS OF JOINT-SEALANT BOND; DO NOT ALLOW SPILLAGE OR MIGRATION ONTO ADJACENT SURFACES.
2. CLEAN NONPOROUS JOINT SUBSTRATE SURFACES WITH CHEMICAL CLEANERS OR OTHER MEANS THAT DO NOT STAIN, HARM SUBSTRATES, OR LEAVE RESIDUES CAPABLE OF INTERFERING WITH ADHESION OF JOINT SEALANTS. NONPOROUS JOINT SUBSTRATES INCLUDE THE FOLLOWING:
a. METAL.
b. GLASS.
c. PORCELAIN ENAMEL.
d. GLAZED SURFACES OF CERAMIC TILE.
B. JOINT PRIMING: PRIME JOINT SUBSTRATES WHERE RECOMMENDED BY JOINT-SEALANT MANUFACTURER OR AS INDICATED BY PRECONSTRUCTION JOINT-SEALANT-SUBSTRATE TESTS OR PRIOR EXPERIENCE. APPLY PRIMER TO COMPLY WITH JOINT-SEALANT MANUFACTURER'S WRITTEN INSTRUCTIONS. CONFINE PRIMERS TO AREAS OF JOINT-SEALANT BOND; DO NOT ALLOW SPILLAGE OR MIGRATION ONTO ADJACENT SURFACES.
C. MASKING TAPE: USE MASKING TAPE WHERE REQUIRED TO PREVENT CONTACT OF SEALANT OR PRIMER WITH ADJOINING SURFACES THAT OTHERWISE WOULD BE PERMANENTLY STAINED OR DAMAGED BY SUCH CONTACT OR BY CLEANING METHODS REQUIRED TO REMOVE SEALANT SMEARS. REMOVE TAPE IMMEDIATELY AFTER TOOLING WITHOUT DISTURBING JOINT SEAL.

1.9 INSTALLATION OF JOINT SEALANTS

A. GENERAL: COMPLY WITH JOINT-SEALANT MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS FOR PRODUCTS AND APPLICATIONS INDICATED, UNLESS MORE STRINGENT REQUIREMENTS APPLY.
B. SEALANT INSTALLATION STANDARD: COMPLY WITH RECOMMENDATIONS IN ASTM C 1193 FOR USE OF JOINT SEALANTS AS APPLICABLE TO MATERIALS, APPLICATIONS, AND CONDITIONS INDICATED.
C. INSTALL SEALANT BACKINGS OF KIND INDICATED TO SUPPORT SEALANTS DURING APPLICATION AND AT POSITION REQUIRED TO PRODUCE CROSS-SECTIONAL SHAPES AND DEPTHS OF INSTALLED SEALANTS RELATIVE TO JOINT WIDTHS THAT ALLOW OPTIMUM SEALANT PERFORMANCE.
1. DO NOT LEAVE GAPS BETWEEN ENDS OF SEALANT BACKINGS.
2. DO NOT STRETCH, TWIST, PUNCTURE, OR TEAR SEALANT BACKINGS.
3. REMOVE ABSORBENT SEALANT BACKINGS THAT HAVE BECOME WET BEFORE SEALANT APPLICATION AND REPLACE THEM WITH DRY MATERIALS.
D. INSTALL SEALANTS USING PROVEN TECHNIQUES THAT COMPLY WITH THE FOLLOWING AND AT THE SAME TIME BACKINGS ARE INSTALLED:
1. PLACE SEALANTS SO THEY DIRECTLY CONTACT AND FULLY WET JOINT SUBSTRATES.
2. PRODUCE UNIFORM, CROSS-SECTIONAL SHAPES AND DEPTHS RELATIVE TO JOINT WIDTHS THAT ALLOW OPTIMUM SEALANT MOVEMENT CAPABILITY.
E. TOOLING OF NONSAG SEALANTS: IMMEDIATELY AFTER SEALANT APPLICATION AND BEFORE SKINNING OR CURING BEGINS, TOOL SEALANTS ACCORDING TO REQUIREMENTS SPECIFIED IN SUBPARAGRAPHS BELOW TO FORM SMOOTH, UNIFORM BEADS OF CONFIGURATION INDICATED; TO ELIMINATE AIR POCKETS; AND TO ENSURE CONTACT AND ADHESION OF SEALANT WITH SIDES OF JOINT.
1. REMOVE EXCESS SEALANT FROM SURFACES ADJACENT TO JOINTS.
2. USE TOOLING AGENTS THAT ARE APPROVED IN WRITING BY SEALANT MANUFACTURER AND THAT DO NOT DISCOLOR SEALANTS OR ADJACENT SURFACES.
3. PROVIDE CONCAVE JOINT PROFILE PER FIGURE 8A IN ASTM C 1193, UNLESS OTHERWISE INDICATED.
4. PROVIDE FLUSH JOINT PROFILE WHERE INDICATED PER FIGURE 8B IN ASTM C 1193.

07 92 00 - JOINT SEALANTS (CONT)

F. ACOUSTICAL SEALANT INSTALLATION: AT SOUND-RATED ASSEMBLIES AND ELSEWHERE AS INDICATED, SEAL CONSTRUCTION AT PERIMETERS, BEHIND CONTROL JOINTS, AND AT OPENINGS AND PENETRATIONS WITH A CONTINUOUS BEAD OF ACOUSTICAL SEALANT. INSTALL ACOUSTICAL SEALANT AT BOTH FACES OF PARTITIONS AT PERIMETERS AND THROUGH PENETRATIONS. COMPLY WITH ASTM C 919 AND WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS.

1.10 JOINT-SEALANT SCHEDULE

A. SEALANT SCHEDULE (SEE SEALANT ABBREVIATIONS ABOVE FOR CORRESPONDING PRODUCT):
1. INTERIOR JOINTS:
a. WALL AND CEILING JOINTS SUBJECT TO MOVEMENT: DESIGNATION U-MC.
b. WALL AND CEILING JOINTS NOT SUBJECT TO MOVEMENT: DESIGNATION AL.
c. INTERIOR SIDE OF EXTERIOR OPENINGS: U-MC.
d. FLOOR JOINTS: DESIGNATION U-MC.
e. WALL AND CEILING JOINTS BETWEEN FRAMES AND THEIR ROUGH OPENING: DESIGNATION AL
f. WALL AND CEILING JOINTS BETWEEN FRAMES AND ADJOINING SURFACES: DESIGNATION AL
g. INTERIOR SANITARY JOINTS; JOINTS BETWEEN PLUMBING FIXTURES AND ADJOINING FLOOR, WALL, AND CEILING SURFACES; JOINTS BETWEEN SHOWER DOOR ENCLOSURE COMPONENTS AND ADJACENT FINISH SURFACES; JOINTS IN DIETARY AND FOOD PREPARATION AREAS, KITCHENS, FOOD STORAGE AREAS, AND AREAS SUBJECT TO FREQUENT WET CLEANING, INCLUDING JOINTS BETWEEN WALLS AND FLOORS, JOINTS BETWEEN BACK SPLASHES AND WALL SUBSTRATES: DESIGNATION S-S.
2. EXTERIOR LOCATIONS:
a. WALL JOINTS:
3. BORDERED ON BOTH SIDES BY POROUS BUILDING MATERIAL (CONCRETE, STONE, MASONRY, CEMENT PLASTER): DESIGNATION S-GP.
4. BORDERED ON BOTH SIDES BY NON-POROUS BUILDING MATERIAL (COATED AND UNCOATED METALS, ANODIZED ALUMINUM, PORCELAIN TILE, AND GLASS): DESIGNATION S-GP.
5. BORDERED ON ONE SIDE BY POROUS BUILDING MATERIAL (CONCRETE, STONE, MASONRY) AND OTHER SIDE BY NON-POROUS BUILDING MATERIAL (COATED AND UNCOATED METALS, ANODIZED ALUMINUM, PORCELAIN TILE, AND GLASS): DESIGNATION S-GP.
a. PERIMETER OF PENETRATIONS THROUGH WALLS: DESIGNATION S-GP
b. EXPANSION JOINTS IN CEILINGS, SOFFITS, AND OVERHEAD SURFACES: DESIGNATION S-GP
c. CONTROL JOINTS AND PERIMETER OF PENETRATIONS IN CEILINGS, SOFFITS, AND OVERHEAD SURFACES: DESIGNATION S-GP
d. WALL AND CEILING JOINTS BETWEEN FRAMES AND THEIR ROUGH OPENING: DESIGNATION S-GP.
e. WALL AND CEILING JOINTS BETWEEN FRAMES AND ADJOINING SURFACES: DESIGNATION S-GP.
f. JOINTS AND PERIMETER OF PENETRATIONS IN HORIZONTAL PEDESTRIAN AND VEHICLE TRAFFIC SURFACES: DESIGNATION U-TB.

07 95 13.13 - INTERIOR EXPANSION JOINT COVER ASSEMBLIES

1.1 SUMMARY

A. SECTION INCLUDES INTERIOR EXPANSION JOINT COVER ASSEMBLIES.

1.2 ACTION SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT.
B. SHOP DRAWINGS: FOR EACH EXPANSION JOINT COVER ASSEMBLY.
1. INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, SPLICES, BLOCK-OUT REQUIREMENT, ATTACHMENTS TO OTHER WORK, AND LINE DIAGRAMS AND A TABULAR SCHEDULE OF EXPANSION JOINT COVER ASSEMBLIES.
C. SAMPLES: FOR EACH EXPANSION JOINT COVER ASSEMBLY AND FOR EACH COLOR AND TEXTURE SPECIFIED.

1.3 ASSEMBLY DESCRIPTION

A. FURNISH UNITS IN LONGEST PRACTICABLE LENGTHS TO MINIMIZE FIELD SPLICING.
B. INCLUDE FACTORY-FABRICATED CLOSURE MATERIALS AND TRANSITION PIECES, T-JOINTS, CORNERS, CURBS, CROSS-CONNECTIONS, AND OTHER ACCESSORIES AS REQUIRED TO PROVIDE CONTINUOUS EXPANSION JOINT COVER ASSEMBLIES.

1.4 PERFORMANCE REQUIREMENTS

A. SEISMIC PERFORMANCE: EXPANSION JOINT COVER ASSEMBLIES SHALL WITHSTAND THE EFFECTS OF EARTHQUAKE MOTIONS DETERMINED ACCORDING TO ASCE/SEI 7.
B. FIRE-RESISTANCE RATINGS: PROVIDE EXPANSION JOINT COVER ASSEMBLIES WITH FIRE BARRIERS IDENTICAL TO THOSE OF SYSTEMS TESTED FOR FIRE RESISTANCE ACCORDING TO UL 2079 OR ASTM E 1966 BY A QUALIFIED TESTING AGENCY.
1. HOSE STREAM TEST: WALL-TO-WALL AND WALL-TO-CEILING ASSEMBLIES SHALL BE SUBJECTED TO HOSE STREAM TESTING.
C. C. EXPANSION JOINT DESIGN CRITERIA:
1. TYPE OF MOVEMENT: THERMAL.
a. NOMINAL JOINT WIDTH: AS INDICATED IN DRAWINGS.
b. MINIMUM JOINT WIDTH: AS INDICATED IN DRAWINGS.
c. MAXIMUM JOINT WIDTH: AS INDICATED IN DRAWINGS.
2. 2. TYPE OF MOVEMENT: SEISMIC.
a. JOINT MOVEMENT: AS INDICATED IN DRAWINGS.

1.5 FLOOR EXPANSION JOINT COVERS

A. METAL-PLATE FLOOR JOINT COVER: METAL COVER PLATE FIXED ON ONE SIDE OF JOINT GAP AND FREE TO SLIDE ON OTHER.
1. APPLICATION: FLOOR-TO-FLOOR AND FLOOR-TO-WALL AS INDICATED IN DRAWINGS.
2. INSTALLATION: SURFACE MOUNTED.
3. LOAD CAPACITY:
a. UNIFORM LOAD: 50 LBS/G. FT. INSERT LOAD.
b. CONCENTRATED LOAD: 300 LB INSERT LOAD.
c. MAXIMUM DEFLECTION: 0.0625 INCH .
4. FIRE-RESISTANCE RATING: NOT LESS THAN THAT INDICATED ON DRAWINGS.
5. COVER-PLATE DESIGN: PLAIN.
6. EXPOSED METAL:
a. ALUMINUM: CLEAR ANODIC, CLASS I.
B. CENTER-PLATE ALUMINUM JOINT COVER: ASSEMBLY CONSISTING OF CENTER PLATE THAT SLIDES OVER METAL FRAMES FIXED TO SIDES OF JOINT GAPS.
1. APPLICATION: FLOOR TO FLOOR AND FLOOR TO WALL.
2. INSTALLATION: SURFACE MOUNTED, RECESSED, AND NO BUMP AS INDICATED IN DRAWINGS.
3. LOAD CAPACITY:
a. UNIFORM LOAD: 50 LBS/G. FT.
b. CONCENTRATED LOAD: 300 LB.
c. MAXIMUM DEFLECTION: 0.0625 INCH.
4. FIRE-RESISTANCE RATING: NOT LESS THAN THAT INDICATED ON DRAWINGS.
5. COVER-PLATE DESIGN: PLAIN.
6. EXPOSED METAL:
a. ALUMINUM: CLEAR ANODIC, CLASS I.
C. GLIDE-PLATE FLOOR JOINT COVER: ASSEMBLY CONSISTING OF CENTER PLATE THAT SLIDES IN AND OUT OF SLOTS IN METAL FRAMES FIXED TO SIDES OF JOINT GAP.
1. APPLICATION: FLOOR TO FLOOR AND FLOOR TO WALL.
2. INSTALLATION: SURFACE MOUNTED, RECESSED, AND NO BUMP AS INDICATED IN DRAWINGS.
3. LOAD CAPACITY:
a. UNIFORM LOAD: 50 LBS/G. FT.
b. CONCENTRATED LOAD: 300 LB.
c. MAXIMUM DEFLECTION: 0.0625 INCH.
4. FIRE-RESISTANCE RATING: NOT LESS THAN THAT INDICATED ON DRAWINGS.
5. COVER-PLATE DESIGN: PLAIN.
6. EXPOSED METAL:
a. ALUMINUM: CLEAR ANODIC, CLASS I.
D. ELASTOMERIC-SEAL FLOOR JOINT COVER: ASSEMBLY CONSISTING OF ELASTOMERIC SEAL ANCHORED TO FRAMES F

CAUTION: IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PR

3.2.c

08 11 13 - HOLLOW METAL DOORS AND FRAMES (CONT)

1.8 INSTALLATION

A. INSTALL IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFIED DOOR GRADE STANDARD AND NAAMM HMMA 840.
B. IN ADDITION, INSTALL FIRE RATED UNITS IN ACCORDANCE WITH NFPA 80.
C. COORDINATE FRAME ANCHOR PLACEMENT WITH WALL CONSTRUCTION.
D. COORDINATE INSTALLATION OF HARDWARE.
E. COORDINATE INSTALLATION OF GLAZING.
F. COORDINATE INSTALLATION OF ELECTRICAL CONNECTIONS TO ELECTRICAL HARDWARE ITEMS.

1.9 TOLERANCES

A. CLEARANCES BETWEEN DOOR AND FRAME: AS SPECIFIED IN ANSI A250.8.
B. MAXIMUM DIAGONAL DISTORTION: 1/16 IN MEASURED WITH STRAIGHT EDGE, CORNER TO CORNER.

1.10 ADJUSTING

A. ADJUST FOR SMOOTH AND BALANCED DOOR MOVEMENT.

08 36 11 - SECTIONAL DOORS

1.1 PERFORMANCE REQUIREMENTS

A. GENERAL PERFORMANCE: SECTIONAL DOORS SHALL MEET PERFORMANCE REQUIREMENTS SPECIFIED WITHOUT FAILURE DUE TO DEFECTIVE MANUFACTURE, FABRICATION, INSTALLATION, OR OTHER DEFECTS IN CONSTRUCTION AND WITHOUT REQUIRING TEMPORARY INSTALLATION OF REINFORCING COMPONENTS.
B. STRUCTURAL PERFORMANCE: EXTERIOR SECTIONAL DOORS SHALL WITHSTAND THE EFFECTS OF GRAVITY LOADS, AND THE FOLLOWING LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED ACCORDING TO ASCE/SEI 7.
   1. DESIGN WIND LOADS: AS INDICATED ON STRUCTURAL DRAWINGS OR AS OTHERWISE DETERMINED USING DESIGN WIND LOADS APPLICABLE TO PROJECT FROM BASIC WIND SPEED INDICATED IN MILES PER HOUR, ACCORDING TO ASCE 7, SECTION 6.5, "METHOD 2-ANALYTICAL PROCEDURE".
   2. DEFLECTION LIMITS: DESIGN SECTIONAL DOORS TO WITHSTAND DESIGN WIND LOADS WITHOUT EVIDENCING PERMANENT DEFORMATION OR DISENGAGEMENT OF DOOR COMPONENTS. DEFLECTION OF DOOR IN HORIZONTAL POSITION (OPEN) SHALL NOT EXCEED 1/120 OF THE DOOR WIDTH.

1.2 SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE AND SIZE OF SECTIONAL DOOR AND ACCESSORY. INCLUDE THE FOLLOWING:
B. CONSTRUCTION DETAILS, MATERIAL DESCRIPTIONS, DIMENSIONS OF INDIVIDUAL COMPONENTS, PROFILE DOOR SECTIONS, AND FINISHES.
C. RATED CAPACITIES, OPERATING CHARACTERISTICS, ELECTRICAL CHARACTERISTICS, AND FURNISHED ACCESSORIES.

1.3 DOOR SECTIONS

A. EXTERIOR SECTION FACES AND FRAMES: FABRICATE FROM ZINC-COATED (GALVANIZED), COLD-ROLLED, COMMERCIAL STEEL (CS) SHEET, COMPLYING WITH ASTM A 653, WITH INDICATED ZINC COATING AND THICKNESS.
B. SECTION ENDS AND INTERMEDIATE STILES: ENCLOSE OPEN ENDS OF SECTIONS WITH CHANNEL END STILES FORMED FROM GALVANIZED-STEEL SHEET NOT LESS THAN 0.064-INCH- (1.63-MM-) NOMINAL COATED THICKNESS AND WELDED TO DOOR SECTION. PROVIDE INTERMEDIATE STILES FORMED FROM NOT LESS THAN 0.064-INCH- (1.63-MM-) THICK GALVANIZED-STEEL SHEET, CUT TO DOOR SECTION PROFILE, AND WELDED IN PLACE. SPACE STILES NOT MORE THAN 48 INCHES (1219 MM) APART.
C. REINFORCE BOTTOM SECTION WITH A CONTINUOUS CHANNEL OR ANGLE CONFORMING TO BOTTOM-SECTION PROFILE[AND ALLOWING INSTALLATION OF ASTRAGAL].
D. REINFORCE SECTIONS WITH CONTINUOUS HORIZONTAL AND DIAGONAL REINFORCEMENT, AS REQUIRED TO STIFFEN DOOR AND FOR WIND LOADING. PROVIDE GALVANIZED-STEEL BARS, STRUTS, TRUSSES, OR STRIP STEEL, FORMED TO DEPTH AND BOLTED OR WELDED IN PLACE. ENSURE THAT REINFORCEMENT DOES NOT OBSTRUCT VISION LITES.
E. PROVIDE REINFORCEMENT FOR HARDWARE ATTACHMENT.

1.4 TRACKS, SUPPORTS, AND ACCESSORIES

A. TRACKS: MANUFACTURER'S STANDARD, GALVANIZED-STEEL TRACK SYSTEM OF CONFIGURATION INDICATED, SIZED FOR DOOR SIZE AND WEIGHT, DESIGNED FOR LIFT TYPE INDICATED AND CLEARANCES SHOWN ON DRAWINGS, AND COMPLYING WITH ASTM A 653 FOR MINIMUM G60 (Z180) ZINC COATING. PROVIDE COMPLETE TRACK ASSEMBLY INCLUDING BRACKETS, BRACING, AND REINFORCEMENT FOR RIGID SUPPORT OF BALL-BEARING ROLLER GUIDES FOR REQUIRED DOOR TYPE AND SIZE. SLOT VERTICAL SECTIONS OF TRACK SPACED 2 INCHES (51 MM) APART FOR DOOR-DROP SAFETY DEVICE. SLOPE TRACKS AT PROPER ANGLE FROM VERTICAL OR DESIGN TRACKS TO ENSURE TIGHT CLOSURE AT JAMBS WHEN DOOR UNIT IS CLOSED.
B. TRACK REINFORCEMENT AND SUPPORTS: GALVANIZED-STEEL TRACK REINFORCEMENT AND SUPPORT MEMBERS, COMPLYING WITH ASTM A 36 AND ASTM A 123. SECURE, REINFORCE, AND SUPPORT TRACKS AS REQUIRED FOR DOOR SIZE AND WEIGHT TO PROVIDE STRENGTH AND RIGIDITY WITHOUT SAG, SWAY, AND VIBRATION DURING OPENING AND CLOSING OF DOORS.
C. HORIZONTAL TRACK ASSEMBLY: TRACK WITH CONTINUOUS REINFORCING ANGLE ATTACHED TO TRACK AND SUPPORTED AT POINTS FROM CURVE IN TRACK TO END OF TRACK BY LATERALLY BRACED ATTACHMENTS TO OVERHEAD STRUCTURAL MEMBERS.
D. WEATHERSEALS: REPLACEABLE, ADJUSTABLE, CONTINUOUS, COMPRESSIBLE WEATHER-STRIPPING GASKETS OF FLEXIBLE VINYL, RUBBER, OR NEOPRENE FITTED TO BOTTOM AND TOP OF SECTIONAL DOOR UNLESS OTHERWISE INDICATED.
E. WINDOWS: MANUFACTURER'S STANDARD INSULATED UNITS OF TYPE AND SIZE INDICATED AND IN ARRANGEMENT SHOWN. SET GLAZING IN VINYL, RUBBER, OR NEOPRENE GLAZING CHANNEL FOR METAL-FRAMED DOORS AND ELASTIC GLAZING COMPOUND FOR WOOD DOORS, AS REQUIRED. PROVIDE REMOVABLE STOPS OF SAME MATERIAL AS DOOR-SECTION FRAMES.

08 36 11 - SECTIONAL DOORS (CONT)

1.5 HARDWARE

A. GENERAL: PROVIDE HEAVY-DUTY, CORROSION-RESISTANT HARDWARE, WITH HOT-DIP GALVANIZED, STAINLESS-STEEL, OR OTHER CORROSION-RESISTANT FASTENERS, TO SUIT DOOR TYPE.
B. HINGES: HEAVY-DUTY, GALVANIZED-STEEL HINGES OF NOT LESS THAN 0.079-INCH- (2.01-MM-) NOMINAL COATED THICKNESS AT EACH END STILE AND AT EACH INTERMEDIATE STILE, ACCORDING TO MANUFACTURER'S WRITTEN RECOMMENDATIONS FOR DOOR SIZE. ATTACH HINGES TO DOOR SECTIONS THROUGH STILES AND RAILS WITH BOLTS AND LOCK NUTS OR LOCK WASHERS AND NUTS. USE RIVETS OR SELF-TAPPING FASTENERS WHERE ACCESS TO NUTS IS NOT POSSIBLE. PROVIDE DOUBLE-END HINGES WHERE REQUIRED, FOR DOORS OVER 16 FEET (4.88 M) WIDE UNLESS OTHERWISE RECOMMENDED BY DOOR MANUFACTURER.
C. ROLLERS: HEAVY-DUTY ROLLERS WITH STEEL BALL-BEARINGS IN CASE-HARDENED STEEL RACES, MOUNTED WITH VARYING PROJECTIONS TO SUIT SLOPE OF TRACK. EXTEND ROLLER SHAFT THROUGH BOTH HINGES WHERE DOUBLE HINGES ARE REQUIRED. PROVIDE 3-INCH- (76-MM-) DIAMETER ROLLER TIRES FOR 3-INCH- (76-MM-) WIDE TRACK AND 2-INCH- (51-MM-) DIAMETER ROLLER TIRES FOR 2-INCH- (51-MM-) WIDE TRACK.
D. PUSH/PULL HANDLES: FOR PUSH-UP OR EMERGENCY-OPERATED DOORS, PROVIDE GALVANIZED-STEEL LIFTING HANDLES ON EACH SIDE OF DOOR.

1.6 LOCKING DEVICES

A. SLIDE BOLT: FABRICATE WITH SIDE-LOCKING BOLTS TO ENGAGE THROUGH SLOTS IN TRACKS FOR LOCKING BY PADLOCK, LOCATED ON SINGLE-JAMB SIDE, OPERABLE FROM INSIDE ONLY.
B. SAFETY INTERLOCK SWITCH: EQUIP POWER-OPERATED DOORS WITH SAFETY INTERLOCK SWITCH TO DISENGAGE POWER SUPPLY WHEN DOOR IS LOCKED.

1.7 COUNTERBALANCE MECHANISM

A. TORSION SPRING: COUNTERBALANCE MECHANISM CONSISTING OF ADJUSTABLE-TENSION TORSION SPRINGS FABRICATED FROM STEEL SPRING WIRE COMPLYING WITH ASTM A 229, MOUNTED ON TORSION SHAFT MADE OF STEEL TUBE OR SOLID STEEL. PROVIDE SPRINGS DESIGNED FOR NUMBER OF OPERATION CYCLES INDICATED.
B. CABLE DRUMS AND SHAFT FOR DOORS: CAST-ALUMINUM OR GRAY-IRON CASTING CABLE DRUMS MOUNTED ON TORSION SHAFT AND GROOVED TO RECEIVE DOOR-LIFTING CABLES AS DOOR IS RAISED. MOUNT COUNTERBALANCE MECHANISM WITH MANUFACTURER'S STANDARD BALL-BEARING BRACKETS AT EACH END OF TORSION SHAFT. PROVIDE ONE ADDITIONAL MIDPOINT BRACKET FOR SHAFTS UP TO 16 FEET LONG AND TWO ADDITIONAL BRACKETS AT ONE-THIRD POINTS TO SUPPORT SHAFTS MORE THAN 16 FEET LONG UNLESS CLOSER SPACING IS RECOMMENDED BY DOOR MANUFACTURER.
C. CABLES: GALVANIZED-STEEL LIFTING CABLES WITH CABLE SAFETY FACTOR OF AT LEAST 5 TO 1.
D. BRACKET: PROVIDE ANCHOR SUPPORT BRACKET AS REQUIRED TO CONNECT STATIONARY END OF SPRING TO THE WALL AND TO LEVEL THE SHAFT AND PREVENT SAG.
E. PROVIDE A SPRING BUMPER AT EACH HORIZONTAL TRACK TO CUSHION DOOR AT END OF OPENING OPERATION.

1.8 DOOR ASSEMBLY

A. SECTIONAL DOOR: SECTIONAL DOOR FORMED WITH HINGED SECTIONS.
   1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
      a. CLOPAY BUILDING PRODUCTS; A GRIFFON COMPANY.
      b. OVERHEAD DOOR CORPORATION.
      c. REPUBLIC DOORS.
      d. RAAS.
      e. RAYNOR.
B. OPERATION CYCLES: NOT LESS THAN 20,000.
C. TRACK CONFIGURATION: HIGH LIFT.
D. WEATHERSEALS: FITTED TO BOTTOM AND TOP AND AROUND ENTIRE PERIMETER OF DOOR.
E. ROLLER-TIRE MATERIAL: MANUFACTURER'S STANDARD.
F. LOCKING DEVICE ASSEMBLY: SINGLE-JAMB SIDE LOCKING BARS, OPERABLE FROM INSIDE WITH THUMBTURN.
G. COUNTERBALANCE TYPE: TORSION SPRING.
H. DOOR FINISH: AS SELECTED BY ARCHITECT.
I. PROVIDE DOORS WITH EXHAUST PORT HOLES WHERE REQUIRED FOR EXHAUSTING VEHICLES.

1.9 GENERAL FINISH REQUIREMENTS

A. DOOR FRAME FINISH: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL AVAILABLE RANGE.

1.10 INSTALLATION

A. INSTALL SECTIONAL DOORS AND OPERATING EQUIPMENT COMPLETE WITH NECESSARY HARDWARE, ANCHORS, INSERTS, HANGERS, AND EQUIPMENT SUPPORTS, ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AND AS SPECIFIED.
B. TRACKS:
   1. FASTEN VERTICAL TRACK ASSEMBLY TO OPENING JAMBS AND FRAMING, SPACED NOT MORE THAN 24 INCHES APART.
   2. HANG HORIZONTAL TRACK ASSEMBLY FROM STRUCTURAL OVERHEAD FRAMING WITH ANGLES OR CHANNEL HANGERS ATTACHED TO FRAMING BY WELDING OR BOLTING, OR BOTH. PROVIDE SWAY BRACING, DIAGONAL BRACING, AND REINFORCEMENT AS REQUIRED FOR RIGID INSTALLATION OF TRACK AND DOOR-OPERATING EQUIPMENT.
   3. REPAIR GALVANIZED COATING ON TRACKS ACCORDING TO ASTM A 780.
C. ACCESSIBILITY: INSTALL SECTIONAL DOORS, SWITCHES, AND CONTROLS ALONG ACCESSIBLE ROUTES IN COMPLIANCE WITH REGULATORY REQUIREMENTS FOR ACCESSIBILITY.

1.11 ADJUSTING

A. ADJUST HARDWARE AND MOVING PARTS TO FUNCTION SMOOTHLY SO THAT DOORS OPERATE EASILY, FREE OF WARP, TWIST, OR DISTORTION.
B. LUBRICATE BEARINGS AND SLIDING PARTS AS RECOMMENDED BY MANUFACTURER.
C. ADJUST DOORS AND SEALS TO PROVIDE WEATHERTIGHT FIT AROUND ENTIRE PERIMETER.
D. ALIGN AND ADJUST MOTORS, PULLEYS, BELTS, SPROCKETS, CHAINS, AND CONTROLS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

08 63 13 - ALUMINUM-FRAMED STOREFRONTS

1.1 SUBMITTALS

A. PRODUCT DATA: PROVIDE COMPONENT DIMENSIONS, DESCRIBE COMPONENTS WITHIN ASSEMBLY, ANCHORAGE AND FASTENERS, GLASS AND INFILL, DOOR HARDWARE, INTERNAL DRAINAGE DETAILS.
B. SHOP DRAWINGS: PROVIDE ENGINEERED, SEALED SHOP DRAWINGS INDICATING SYSTEM DIMENSIONS, FRAMED OPENING REQUIREMENTS AND TOLERANCES, AFFECTED RELATED WORK, EXPANSION AND CONTRACTION JOINT LOCATION AND DETAILS, AND FIELD WELDING REQUIRED.

1.2 MANUFACTURERS

A. A. ACCEPTABLE MANUFACTURERS:
   1. YKK AP AMERICA INC. : WWW.YKKAP.COM
   2. KAWNEER NORTH AMERICA : WWW.KAWNEER.COM.
   3. UNITED STATES ALUMINUM CORP : WWW.USALUM.COM.
   4. OLDCASTLE BUILDING ENVELOPE PRODUCTS : WWW.OLDCASTLEBE.COM
   5. ARCADI: WWW.ARCADIA.COM
   6. OTHERS APPROVED AS EQUAL

1.3 STOREFRONT

A. ALUMINUM-FRAMED STOREFRONT: FACTORY FABRICATED, FACTORY FINISHED ALUMINUM FRAMING MEMBERS WITH INFILL, AND RELATED FLASHINGS, ANCHORAGE AND ATTACHMENT DEVICES.
   1. GLAZING RABBET: FOR 1 INCH INSULATING GLAZING.
   2. GLAZING POSITION: CENTER-SET.
   3. VERTICAL MULLION DIMENSIONS: 2 INCHES WIDE BY 4-1/2 INCHES DEEP.
   4. WATER LEAKAGE TEST PRESSURE DIFFERENTIAL: 2.86 LBF/SQ FT.
   5. AIR INFILTRATION TEST PRESSURE DIFFERENTIAL: 1.57 PSF.
   6. CONDENSATION RESISTANCE FACTOR: 42 MINIMUM.
B. PERFORMANCE REQUIREMENTS:
   1. DESIGN AND SIZE COMPONENTS TO WITHSTAND THE SPECIFIED LOAD REQUIREMENTS WITHOUT DAMAGE OR PERMANENT SET, WHEN TESTED IN ACCORDANCE WITH ASTM E330, USING LOADS 1.5 TIMES THE DESIGN WIND LOADS AND 10 SECOND DURATION OF MAXIMUM LOAD.
      a. MEMBER DEFLECTION: LIMIT MEMBER DEFLECTION TO FLEXURE LIMIT OF GLASS IN ANY DIRECTION, WITH FULL RECOVERY OF GLAZING MATERIALS.
   2. MOVEMENT: ACCOMMODATE MOVEMENT BETWEEN STOREFRONT AND PERIMETER FRAMING AND DEFLECTION OF LINTEL, WITHOUT DAMAGE TO COMPONENTS OR DETERIORATION OF SEALS.
   3. SYSTEM INTERNAL DRAINAGE: DRAIN TO THE EXTERIOR BY MEANS OF A WEEP DRAINAGE NETWORK ANY WATER ENTERING JOINTS, CONDENSATION OCCURRING IN GLAZING CHANNEL, AND MIGRATING MOISTURE OCCURRING WITHIN SYSTEM.
   4. EXPANSION/CONTRACTION: PROVIDE FOR EXPANSION AND CONTRACTION WITHIN SYSTEM COMPONENTS CAUSED BY CYCLING TEMPERATURE RANGE OF 170 DEGREES F OVER A 12 HOUR PERIOD WITHOUT CAUSING DETRIMENTAL EFFECT TO SYSTEM COMPONENTS, ANCHORAGES, AND OTHER BUILDING ELEMENTS.

08 63 13 - ALUMINUM-FRAMED STOREFRONTS (CONT.)

1.4 COMPONENTS

A. ALUMINUM FRAMING MEMBERS: TUBULAR ALUMINUM SECTIONS, THERMALLY BROKEN WITH INTERIOR SECTION INSULATED FROM EXTERIOR, DRAINAGE HOLES AND INTERNAL WEEP DRAINAGE SYSTEM.
   1. GLAZING STOPS: FLUSH.
   2. STRUCTURALLY REINFORCED MEMBERS: EXTRUDED ALUMINUM WITH INTERNAL REINFORCEMENT OF STRUCTURAL STEEL MEMBER.
   3. SUBSILLS: PROVIDE MANUFACTURER'S STANDARD SUBSILLS FOR ALL STOREFRONT FRAMING.
B. DOORS: GLAZED ALUMINUM, HEAVY DUTY (1/8 INCH WALL THICKNESS; WITH FULLY WELDED INTERNAL JOINTS).
   1. THICKNESS: 1-3/4 INCHES.
   2. TOP RAIL: 4 INCHES WIDE.
   3. VERTICAL STILES: 4-1/2 INCHES WIDE.
   4. BOTTOM RAIL: 10 INCHES WIDE.
   5. GLAZING STOPS: SQUARE.
   6. FINISH: SAME AS STOREFRONT.

1.5 MATERIALS

A. EXTRUDED ALUMINUM: ASTM B221 (ASTM B221M).
B. FASTENERS: STAINLESS STEEL.
C. CONCEALED FLASHINGS: 0.018 INCH THICK GALVANIZED STEEL.
D. PERIMETER SEALANT: TYPE S-GP SPECIFIED IN SECTION 07 9005.
E. GLASS: AS SPECIFIED IN SECTION 088000.
F. GLAZING GASKETS: TYPE TO SUIT APPLICATION TO ACHIEVE WEATHER, MOISTURE, AND AIR INFILTRATION REQUIREMENTS.
G. GLAZING ACCESSORIES: AS SPECIFIED IN SECTION 088000.

1.6 FINISHES

A. REFER TO FINISH LEGEND IN DRAWINGS.

1.7 HARDWARE

A. DOOR HARDWARE: REFER TO DRAWINGS.
B. WEATHERSTRIPPING: WOOL PILE, CONTINUOUS AND REPLACEABLE; PROVIDE ON ALL DOORS.
C. SILL SWEEP STRIPS: RESILIENT SEAL TYPE, RETRACTING, OR NEOPRENE; PROVIDE ON ALL DOORS.

1.8 FABRICATION

A. FABRICATE COMPONENTS WITH MINIMUM CLEARANCES AND SHIM SPACING AROUND PERIMETER OF ASSEMBLY, YET ENABLING INSTALLATION AND DYNAMIC MOVEMENT OF PERIMETER SEAL.
B. ACCURATELY FIT AND SECURE JOINTS AND CORNERS. MAKE JOINTS FLUSH, HAIRLINE, AND WEATHERPROOF.
C. PREPARE COMPONENTS TO RECEIVE ANCHOR DEVICES. FABRICATE ANCHORS.
D. COAT CONCEALED METAL SURFACES THAT WILL BE IN CONTACT WITH CEMENTITIOUS MATERIALS OR DISSIMILAR METALS WITH BITUMINOUS PAINT.
E. ARRANGE FASTENERS AND ATTACHMENTS TO CONCEAL FROM VIEW.
F. REINFORCE COMPONENTS INTERNALLY FOR DOOR HARDWARE.
G. REINFORCE FRAMING MEMBERS FOR IMPOSED LOADS.
H. FINISHING: APPLY FACTORY FINISH TO ALL SURFACES THAT WILL BE EXPOSED IN COMPLETED ASSEMBLIES, INCLUDING JOINT EDGES.
   1. TOUCH-UP SURFACES CUT DURING FABRICATION SO THAT NO NATURAL ALUMINUM IS VISIBLE IN COMPLETED ASSEMBLIES, INCLUDING JOINT EDGES.

1.9 INSTALLATION

A. INSTALL WALL SYSTEM IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
B. ATTACH TO STRUCTURE TO PERMIT SUFFICIENT ADJUSTMENT TO ACCOMMODATE CONSTRUCTION TOLERANCES AND OTHER IRREGULARITIES.
C. PROVIDE ALIGNMENT ATTACHMENTS AND SHIMS TO PERMANENTLY FASTEN SYSTEM TO BUILDING STRUCTURE.
D. ALIGN ASSEMBLY PLUMB AND LEVEL, FREE OF WARP OR TWIST. MAINTAIN ASSEMBLY DIMENSIONAL TOLERANCES, ALIGNING WITH ADJACENT WORK.
E. PROVIDE THERMAL ISOLATION WHERE COMPONENTS PENETRATE OR DISRUPT BUILDING INSULATION.
F. INSTALL SILL FLASHINGS. TURN UP ENDS AND EDGES; SEAL TO ADJACENT WORK TO FORM WATERTIGHT DAM.
G. WHERE FASTENERS PENETRATE SILL FLASHINGS, MAKE WATERTIGHT BY SEATING AND SEALING FASTENER HEADS TO SILL FLASHING.
H. COORDINATE ATTACHMENT AND SEAL OF PERIMETER AIR AND VAPOR BARRIER MATERIALS.
I. FILL SHIM SPACES WITH LOW RISE URETHANE FOAM SEALANT AT PERIMETER OF ASSEMBLY TO MAINTAIN CONTINUITY OF THERMAL BARRIER.
J. SET THRESHOLDS IN BED OF MASTIC AND SECURE.
K. INSTALL HARDWARE USING TEMPLATES PROVIDED.
L. INSTALL GLASS AND INFILL PANELS IN ACCORDANCE WITH SECTION 088000, USING GLAZING METHOD REQUIRED TO ACHIEVE PERFORMANCE CRITERIA.
M. TOUCH-UP MINOR DAMAGE TO FACTORY APPLIED FINISH; REPLACE COMPONENTS THAT CANNOT BE SATISFACTORILY REPAIRED.

1.10 TOLERANCES

A. MAXIMUM VARIATION FROM PLUMB: 0.06 INCHES EVERY 3 FT NON-CUMULATIVE OR 1/16 INCHES PER 10 FT, WHICHEVER IS LESS.
B. MAXIMUM MISALIGNMENT OF TWO ADJOINING MEMBERS ABUTTING IN PLANE: 1/32 INCH.

1.11 ADJUSTING

A. ADJUST OPERATING HARDWARE AND SASH FOR SMOOTH OPERATION.

Seals of Illinois Design Firm Registration No. 184-006269

WARE MALCOMB

ARCHITECTURE CIVIL ENGINEERING
PLANNING INTERIORS BUILDING MEASUREMENT

1313 22nd St. #410
Downers Grove, IL 60515
P 630.218.0063

GRANT A. BRANDENBURG
001-020842
STATE OF ILLINOIS
REGISTERED
ARCHITECT

EXP: 11 - 30 - 2022

THE MIDWEST GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

SPECIFICATIONS

DATE	REMARKS
2022-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	C

SHE

A0

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

4/19/2022 8:53:26 AM 2022-04-08 PERMIT SET

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

CAUTION: IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PR

3.2.c

08 71 00 - DOOR HARDWARE

1.1 QUALITY ASSURANCE

A. DOOR HARDWARE INSTALLER QUALIFICATIONS: AN EXPERIENCED AND FACTORY TRAINED INSTALLER WHO HAS COMPLETED BOTH STANDARD AND ELECTRIFIED BUILDERS HARDWARE AND INTEGRATED ACCESS CONTROL INSTALLATIONS SIMILAR IN MATERIAL, DESIGN, AND EXTENT TO THAT INDICATED FOR THIS PROJECT AND WHOSE WORK HAS RESULTED IN CONSTRUCTION WITH A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE.
B. DOOR HARDWARE SUPPLIER QUALIFICATIONS: DOOR HARDWARE SUPPLIER WITH WAREHOUSING FACILITIES IN PROJECT'S VICINITY WHICH IS NOT MORE THEN A HALF DAY OF TRAVEL FROM THE JOBSITE AND WHO EMPLOYS A QUALIFIED ARCHITECTURAL HARDWARE CONSULTANT OR EQUIVALENT EXPERIENCE AVAILABLE DURING THE COURSE OF THE WORK TO CONSULT WITH CONTRACTOR, ARCHITECT, AND OWNER ABOUT DOOR HARDWARE AND KEYING. SUPPLIER RECOGNIZED BY MANUFACTURERS TO BE A DIRECT FACTORY-AUTHORIZED DISTRIBUTOR OF THE SPECIFIED HARDWARE PRODUCTS. SUPPLIER IS REQUIRED TO BE AVAILABLE FOR ONSITE MEETINGS WITH TWO DAYS NOTICE REGARDING ISSUES THAT ARISE WITH OPENING FUNCTIONS, INSTALLATION, KEYING, ON-SITE WAREHOUSING, TROUBLE SHOOTING OF PRODUCTS, AND FINAL PUNCH OUT RELATED ISSUES.
C. REGULATORY REQUIREMENTS: COMPLY WITH PROVISIONS OF THE FOLLOWING:
1. WHERE INDICATED TO COMPLY WITH ACCESSIBILITY REQUIREMENTS, COMPLY WITH 'AMERICANS WITH DISABILITIES ACT' (ADA); "ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG)," ANSI/ A117.1.
2. NFPA 101: COMPLY WITH THE FOLLOWING FOR MEANS OF EGRESS DOOR.
3. APPLICABLE BUILDING CODE, AS INDICATED ON DRAWINGS.
D. FIRE-RATED DOOR ASSEMBLIES: FURNISH DOOR HARDWARE FOR ASSEMBLIES COMPLYING WITH NFPA 80 THAT ARE LISTED AND LABELED BY A TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, FOR FIRE RATINGS INDICATED, BASED ON TESTING ACCORDING TO NFPA 252 (NEUTRAL PRESSURE AT 40" ABOVE SILL) OR UL-10C.
1. TEST PRESSURE: POSITIVE PRESSURE LABELING.

1.2 DELIVERY, STORAGE, AND HANDLING

A. TAG EACH ITEM OR PACKAGE SEPARATELY WITH IDENTIFICATION RELATED TO THE FINAL DOOR HARDWARE SCHEDULE, AND INCLUDE BASIC INSTALLATION INSTRUCTIONS WITH EACH ITEM OR PACKAGE.
B. DELIVER PERMANENT KEYS, CYLINDERS, CORES, ACCESS CONTROL CREDENTIALS, ELECTRONIC KEY SOFTWARE WITH LOADED BITTING AND KEY RECORDS PER CYLINDER, AND RELATED ACCESSORIES DIRECTLY TO OWNER VIA REGISTERED MAIL OR OVERNIGHT PACKAGE SERVICE. INSTRUCTIONS FOR DELIVERY TO THE OWNER SHALL BE ESTABLISHED AT THE "KEYING CONFERENCE". HARDWARE SUPPLIER MUST BE A REGIONAL SUPPLIER TO ADDRESS OWNER QUESTIONS AND CONCERNS RELATING TO KEYING ISSUES THAT ARISE AS PROJECT CLOSE-OUT.

1.3 COORDINATION

A. TEMPLATES: DOOR HARDWARE SUPPLIER TO FURNISH AND DISTRIBUTE TO THE PARTIES INVOLVED FOR TEMPLATING FOR DOORS, FRAMES, AND OTHER WORK SPECIFIED TO BE FACTORY PREPARED FOR INSTALLING STANDARD, ELECTRIFIED AND ACCESS CONTROL DOOR HARDWARE. CHECK SHOP DRAWINGS OF OTHER WORK TO CONFIRM THAT ADEQUATE PROVISIONS ARE MADE FOR LOCATING AND INSTALLING HARDWARE TO COMPLY WITH INDICATED REQUIREMENTS.

1.4 SCHEDULED DOOR HARDWARE

A. GENERAL: FURNISH DOOR HARDWARE FOR EACH DOOR TO COMPLY WITH REQUIREMENTS IN THIS SECTION AND THE DOOR HARDWARE SCHEDULE ON THE DRAWINGS.
1. DOOR HARDWARE SETS: FINISH QUANTITY, ITEM, SIZE, FINISH OR COLOR INDICATED FOR NAMED PRODUCTS LISTED IN HARDWARE SETS.
2. SEQUENCE OF OPERATION: FURNISH ELECTRIFIED AND ACCESS CONTROL HARDWARE FUNCTION, SEQUENCE OF OPERATION, AND INTERFACEWITH OTHER BUILDING CONTROL SYSTEMS INDICATED.
B. DESIGNATIONS: REQUIREMENTS FOR DESIGN, GRADE, FUNCTION, FINISH, SIZE, AND OTHER DISTINCTIVE QUALITIES OF EACH TYPE OF DOOR HARDWARE ARE INDICATED IN THE DOOR HARDWARE SCHEDULE ON DRAWINGS

08 80 00 - GLAZING

1.1 PERFORMANCE REQUIREMENTS

A. GENERAL: INSTALLED GLAZING SYSTEMS SHALL WITHSTAND NORMAL THERMAL MOVEMENT AND WIND LOADS WITHOUT FAILURE, INCLUDING LOSS OR GLASS BREAKAGE ATTRIBUTABLE TO THE FOLLOWING: DEFECTIVE MANUFACTURE, FABRICATION, OR INSTALLATION; FAILURE OF SEALANTS OR GASKETS TO REMAIN WATERTIGHT AND AIRTIGHT; DETERIORATION OF GLAZING MATERIALS; OR OTHER DEFECTS IN CONSTRUCTION.

1.2 SUBMITTALS

A. PRODUCT DATA: FOR EACH GLASS PRODUCT AND GLAZING MATERIAL INDICATED.

1.3 QUALITY ASSURANCE

A. MANUFACTURER QUALIFICATIONS FOR INSULATING-GLASS UNITS WITH SPUTTER-COATED, LOW-E COATINGS: A QUALIFIED INSULATING-GLASS MANUFACTURER WHO IS APPROVED AND CERTIFIED BY COATED-GLASS MANUFACTURER.
B. SAFETY GLAZING LABELING: WHERE SAFETY GLAZING LABELING IS INDICATED, PERMANENTLY MARK GLAZING WITH CERTIFICATION LABEL OF THE SGCC OR ANOTHER CERTIFICATION AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION. LABEL SHALL INDICATE MANUFACTURER'S NAME, TYPE OF GLASS, THICKNESS, AND SAFETY GLAZING STANDARD WITH WHICH GLASS COMPLIES.

1.4 DELIVERY, STORAGE, AND HANDLING

A. PROTECT GLAZING MATERIALS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. PREVENT DAMAGE TO GLASS AND GLAZING MATERIALS FROM CONDENSATION, TEMPERATURE CHANGES, DIRECT EXPOSURE TO SUN, OR OTHER CAUSES.
B. COMPLY WITH INSULATING-GLASS MANUFACTURER'S WRITTEN RECOMMENDATIONS FOR VENTING AND SEALING UNITS TO AVOID HERMETIC SEAL RUPTURES DUE TO ALTITUDE CHANGE.

1.5 WARRANTY

A. MANUFACTURER'S SPECIAL WARRANTY FOR COATED-GLASS PRODUCTS: MANUFACTURER'S STANDARD FORM IN WHICH COATED-GLASS MANUFACTURER AGREES TO REPLACE COATED-GLASS UNITS THAT DETERIORATE WITHIN SPECIFIED WARRANTY PERIOD. DETERIORATION OF COATED GLASS IS DEFINED AS DEFECTS DEVELOPED FROM NORMAL USE THAT ARE NOT ATTRIBUTED TO GLASS BREAKAGE OR TO MAINTAINING AND CLEANING COATED GLASS CONTRARY TO MANUFACTURER'S WRITTEN INSTRUCTIONS. DEFECTS INCLUDE PEELING, CRACKING, AND OTHER INDICATIONS OF DETERIORATION IN COATING.

08 80 00 - GLAZING (CONT)

1. WARRANTY PERIOD: 10 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.
B. MANUFACTURER'S SPECIAL WARRANTY ON LAMINATED GLASS: MANUFACTURER'S STANDARD FORM IN WHICH LAMINATED-GLASS MANUFACTURER AGREES TO REPLACE LAMINATED-GLASS UNITS THAT DETERIORATE WITHIN SPECIFIED WARRANTY PERIOD. DETERIORATION OF LAMINATED GLASS IS DEFINED AS DEFECTS DEVELOPED FROM NORMAL USE THAT ARE NOT ATTRIBUTED TO GLASS BREAKAGE OR TO MAINTAINING AND CLEANING LAMINATED GLASS CONTRARY TO MANUFACTURER'S WRITTEN INSTRUCTIONS. DEFECTS INCLUDE EDGE SEPARATION, DELAMINATION MATERIALLY OBSTRUCTING VISION THROUGH GLASS, AND BLEMISHES EXCEEDING THOSE ALLOWED BY REFERENCED LAMINATED-GLASS STANDARD.
1. WARRANTY PERIOD: 10 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

1.6 GLASS PRODUCTS, GENERAL

A. THICKNESS: WHERE GLASS THICKNESS IS INDICATED, IT IS A MINIMUM. PROVIDE GLASS LITES IN THICKNESSES AS NEEDED TO COMPLY WITH REQUIREMENTS INDICATED.
1. MINIMUM GLASS THICKNESS FOR EXTERIOR LITES: NOT LESS THAN 6.0 MM.
B. STRENGTH: WHERE FLOAT GLASS IS INDICATED, PROVIDE ANNEALED FLOAT GLASS, KIND HS HEAT-TREATED FLOAT GLASS, OR KIND FT HEAT-TREATED FLOAT GLASS AS NEEDED TO COMPLY WITH "PERFORMANCE REQUIREMENTS" ARTICLE. WHERE HEAT-STRENGTHENED GLASS IS INDICATED, PROVIDE KIND HS HEAT-TREATED FLOAT GLASS OR KIND FT HEAT-TREATED FLOAT GLASS AS NEEDED TO COMPLY WITH "PERFORMANCE REQUIREMENTS" ARTICLE. WHERE FULLY TEMPERED GLASS IS INDICATED, PROVIDE KIND FT HEAT-TREATED FLOAT GLASS.

1.7 GLASS PRODUCTS

A. FLOAT GLASS: ASTM C 1036, TYPE I, QUALITY-Q3, CLASS I (CLEAR) UNLESS OTHERWISE INDICATED.
B. HEAT-TREATED FLOAT GLASS: ASTM C 1048; TYPE I; QUALITY-Q3; CLASS I (CLEAR) UNLESS OTHERWISE INDICATED; OF KIND AND CONDITION INDICATED.
1. FABRICATION PROCESS: BY HORIZONTAL (ROLLER-HEARTH) PROCESS WITH ROLL-WAVE DISTORTION PARALLEL TO BOTTOM EDGE OF GLASS AS INSTALLED UNLESS OTHERWISE INDICATED.
2. FOR UNCOATED GLASS, COMPLY WITH REQUIREMENTS FOR CONDITION A.
3. FOR COATED VISION GLASS, COMPLY WITH REQUIREMENTS FOR CONDITION C (OTHER COATED GLASS).

1.8 GLAZING GASKETS

A. DENSE COMPRESSION GASKETS: MOLDED OR EXTRUDED GASKETS OF PROFILE AND HARDNESS REQUIRED TO MAINTAIN WATERTIGHT SEAL MADE FROM ONE OF THE FOLLOWING:
1. NEOPRENE COMPLYING WITH ASTM C 864.
2. EPDM COMPLYING WITH ASTM C 864.
3. SILICONE COMPLYING WITH ASTM C 1115.
4. THERMOPLASTIC POLYOLEFIN RUBBER COMPLYING WITH ASTM C 1115.

1.9 GLAZING SEALANTS

A. A. GENERAL:
1. COMPATIBILITY: PROVIDE GLAZING SEALANTS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH OTHER MATERIALS THEY WILL CONTACT, INCLUDING GLASS PRODUCTS, SEALS OF INSULATING-GLASS UNITS, AND GLAZING CHANNEL SUBSTRATES, UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY SEALANT MANUFACTURER BASED ON TESTING AND FIELD EXPERIENCE.
2. SUITABILITY: COMPLY WITH SEALANT AND GLASS MANUFACTURERS' WRITTEN INSTRUCTIONS FOR SELECTING GLAZING SEALANTS SUITABLE FOR APPLICATIONS INDICATED AND FOR CONDITIONS EXISTING AT TIME OF INSTALLATION.
3. VOC CONTENT: FOR SEALANTS USED INSIDE OF THE WEATHERPROOFING SYSTEM, NOT MORE THAN 250 G/L WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D.
B. GLAZING SEALANT: NEUTRAL-CURING SILICONE GLAZING SEALANT COMPLYING WITH ASTM C 920, TYPE S, GRADE NS, CLASS 50, USE NT.
1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
a. DOW CORNING CORPORATION; 795.
b. GE ADVANCED MATERIALS - SILICONES; SILGLAZE II SCS2800.
c. PECORA CORPORATION; 864.
d. TREMCO INCORPORATED; SPECTREM 2.

1.10 GLAZING TAPES

A. BACK-BEDDING MASTIC GLAZING TAPES: PREFORMED, BUTYL-BASED, 100 PERCENT SOLIDS ELASTOMERIC TAPE; NON-STAINING AND NON-MIGRATING IN CONTACT WITH NONPOROUS SURFACES; WITH OR WITHOUT SPACER ROD AS RECOMMENDED IN WRITING BY TAPE AND GLASS MANUFACTURERS FOR APPLICATION INDICATED; AND COMPLYING WITH ASTM C 1281 AND AAMA 800 FOR PRODUCTS INDICATED BELOW:
1. AAMA 804.3 TAPE, WHERE INDICATED.
2. AAMA 806.3 TAPE, FOR GLAZING APPLICATIONS IN WHICH TAPE IS SUBJECT TO CONTINUOUS PRESSURE.
3. AAMA 807.3 TAPE, FOR GLAZING APPLICATIONS IN WHICH TAPE IS NOT SUBJECT TO CONTINUOUS PRESSURE.

1.11 MISCELLANEOUS GLAZING MATERIALS

A. GENERAL: PROVIDE PRODUCTS OF MATERIAL, SIZE, AND SHAPE COMPLYING WITH REFERENCED GLAZING STANDARD, REGULATIONS AND GLAZING PUBLICATIONS OF MANUFACTURERS OF GLASS AND GLAZING MATERIALS FOR APPLICATION INDICATED, AND WITH A PROVEN RECORD OF COMPATIBILITY WITH SURFACES CONTACTED IN INSTALLATION.
B. CLEANERS, PRIMERS, AND SEALERS: TYPES RECOMMENDED BY SEALANT OR GASKET MANUFACTURER.
C. SETTING BLOCKS: ELASTOMERIC MATERIAL WITH A SHORE, TYPE A DUROMETER HARDNESS OF 85, PLUS OR MINUS 5.
D. SPACERS: ELASTOMERIC BLOCKS OR CONTINUOUS EXTRUSIONS OF HARDNESS REQUIRED BY GLASS MANUFACTURER TO MAINTAIN GLASS LITES IN PLACE FOR INSTALLATION INDICATED.
E. EDGE BLOCKS: ELASTOMERIC MATERIAL OF HARDNESS NEEDED TO LIMIT GLASS LATERAL MOVEMENT (SIDE WALKING).
F. CYLINDRICAL GLAZING SEALANT BACKING: ASTM C 1330, TYPE O (OPEN-CELL MATERIAL), OF SIZE AND DENSITY TO CONTROL GLAZING SEALANT DEPTH AND OTHERWISE PRODUCE OPTIMUM GLAZING SEALANT PERFORMANCE.
G. PERIMETER INSULATION FOR FIRE-RESISTIVE GLAZING: PRODUCT THAT IS APPROVED BY TESTING AGENCY THAT LISTED AND LABELED FIRE-RESISTANT GLAZING PRODUCT WITH WHICH IT IS USED FOR APPLICATION AND FIRE-PROTECTION RATING INDICATED.

1.12 FABRICATION OF GLAZING UNITS

A. FABRICATE GLAZING UNITS IN SIZES REQUIRED TO FIT OPENINGS INDICATED FOR PROJECT, WITH EDGE AND FACE CLEARANCES, EDGE AND SURFACE CONDITIONS, AND BITE COMPLYING WITH WRITTEN INSTRUCTIONS OF PRODUCT MANUFACTURER AND REFERENCED GLAZING PUBLICATIONS, TO COMPLY WITH SYSTEM PERFORMANCE REQUIREMENTS.
B. CLEAN-CUT OR FLAT-GRIND VERTICAL EDGES OF BUTT-GLAZED MONOLITHIC LITES TO PRODUCE SQUARE EDGES WITH SLIGHT CHAMFER AT JUNCTIONS OF EDGES AND FACES.
C. GRIND SMOOTH AND POLISH EXPOSED GLASS EDGES AND CORNERS.

1.13 GLASS SCHEDULE

A. REFER TO ENVELOPE ASSEMBLY INFORMATION ON DRAWINGS FOR GLAZING TYPES
B. PROVIDE SAFETY GLAZING LABELING WHERE APPROPRIATE.

1.14 GLAZING, GENERAL

A. COMPLY WITH COMBINED WRITTEN INSTRUCTIONS OF MANUFACTURERS OF GLASS, SEALANTS, GASKETS, AND OTHER GLAZING MATERIALS, UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED, INCLUDING THOSE IN REFERENCED GLAZING PUBLICATIONS.
B. ADJUST GLAZING CHANNEL DIMENSIONS AS REQUIRED BY PROJECT CONDITIONS DURING INSTALLATION TO PROVIDE NECESSARY BITE ON GLASS, MINIMUM EDGE AND FACE CLEARANCES, AND ADEQUATE SEALANT THICKNESSES, WITH REASONABLE TOLERANCES.
C. PROTECT GLASS EDGES FROM DAMAGE DURING HANDLING AND INSTALLATION. REMOVE DAMAGED GLASS FROM PROJECT SITE AND LEGALLY DISPOSE OF OFF PROJECT SITE. DAMAGED GLASS IS GLASS WITH EDGE DAMAGE OR OTHER IMPERFECTIONS THAT, WHEN INSTALLED, COULD REVEAL THE IMPERFECTION IN NORMAL VIEW AND AFFECT PERFORMANCE AND APPEARANCE.
D. APPLY PRIMERS TO JOINT SURFACES WHERE REQUIRED FOR ADHESION OF SEALANTS, AS DETERMINED BY PRECONSTRUCTION TESTING.
E. INSTALL SETTING BLOCKS IN SILL RABBETS, SIZED AND LOCATED TO COMPLY WITH REFERENCED GLAZING PUBLICATIONS, UNLESS OTHERWISE REQUIRED BY GLASS MANUFACTURER. SET BLOCKS IN THIN COURSE OF COMPATIBLE SEALANT SUITABLE FOR HEEL BEAD.
F. DO NOT EXCEED EDGE PRESSURES STIPULATED BY GLASS MANUFACTURERS FOR INSTALLING GLASS LITES.
G. PROVIDE SPACERS FOR GLASS LITES WHERE LENGTH PLUS WIDTH IS LARGER THAN 50 INCHES (1270 MM).
1. LOCATE SPACERS DIRECTLY OPPOSITE EACH OTHER ON BOTH INSIDE AND OUTSIDE FACES OF GLASS. INSTALL CORRECT SIZE AND SPACING TO PRESERVE REQUIRED FACE CLEARANCES, UNLESS GASKETS AND GLAZING TAPES ARE USED THAT HAVE DEMONSTRATED ABILITY TO MAINTAIN REQUIRED FACE CLEARANCES AND TO COMPLY WITH SYSTEM PERFORMANCE REQUIREMENTS.
2. PROVIDE 1/8-INCH MINIMUM BITE OF SPACERS ON GLASS AND USE THICKNESS EQUAL TO SEALANT WIDTH, WITH GLAZING TAPE, USE THICKNESS SLIGHTLY LESS THAN FINAL COMPRESSED THICKNESS OF TAPE.
H. PROVIDE EDGE BLOCKING WHERE INDICATED OR NEEDED TO PREVENT GLASS LITES FROM MOVING SIDEWAYS IN GLAZING CHANNEL, AS RECOMMENDED IN WRITING BY GLASS MANUFACTURER AND ACCORDING TO REQUIREMENTS IN REFERENCED GLAZING PUBLICATIONS.
I. SET GLASS LITES IN EACH SERIES WITH UNIFORM PATTERN, DRAW, BOW, AND SIMILAR CHARACTERISTICS.
J. SET GLASS LITES WITH PROPER ORIENTATION SO THAT COATINGS FACE EXTERIOR OR INTERIOR AS SPECIFIED.
K. WHERE WEDGE-SHAPED GASKETS ARE DRIVEN INTO ONE SIDE OF CHANNEL TO PRESSURIZE SEALANT OR GASKET ON OPPOSITE SIDE, PROVIDE ADEQUATE ANCHORAGE SO GASKET CANNOT WALK OUT WHEN INSTALLATION IS SUBJECTED TO MOVEMENT.

08 80 00 - GLAZING (CONT)

L. SQUARE CUT WEDGE-SHAPED GASKETS AT CORNERS AND INSTALL GASKETS IN A MANNER RECOMMENDED BY GASKET MANUFACTURER TO PREVENT CORNERS FROM PULLING AWAY; SEAL CORNER JOINTS AND BUTT JOINTS WITH SEALANT RECOMMENDED BY GASKET MANUFACTURER.

1.15 TAPE GLAZING

A. POSITION TAPES ON FIXED STOPS SO THAT, WHEN COMPRESSED BY GLASS, THEIR EXPOSED EDGES ARE FLUSH WITH OR PROTRUDE SLIGHTLY ABOVE SIGHTLINE OF STOPS.
B. INSTALL TAPES CONTINUOUSLY, BUT NOT NECESSARILY IN ONE CONTINUOUS LENGTH. DO NOT STRETCH TAPES TO MAKE THEM FIT OPENING.
C. COVER VERTICAL FRAMING JOINTS BY APPLYING TAPES TO HEADS AND SILLS FIRST AND THEN TO JAMBS. COVER HORIZONTAL FRAMING JOINTS BY APPLYING TAPES TO JAMBS AND THEN TO HEADS AND SILLS.
D. PLACE JOINTS IN TAPES AT CORNERS OF OPENING WITH ADJOINING LENGTHS BUTTED TOGETHER, NOT LAPPED. SEAL JOINTS IN TAPES WITH COMPATIBLE SEALANT APPROVED BY TAPE MANUFACTURER.
E. DO NOT REMOVE RELEASE PAPER FROM TAPE UNTIL RIGHT BEFORE EACH GLAZING UNIT IS INSTALLED.
F. APPLY HEEL BEAD OF SEALANT.
G. CENTER GLASS LITES IN OPENINGS ON SETTING BLOCKS AND PRESS FIRMLY AGAINST TAPE BY INSERTING DENSE COMPRESSION GASKETS FORMED AND INSTALLED TO LOCK IN PLACE AGAINST FACES OF REMOVABLE STOPS. START GASKET APPLICATIONS AT CORNERS AND WORK TOWARD CENTERS OF OPENINGS.
H. APPLY CAP BEAD OF ELASTOMERIC SEALANT OVER EXPOSED EDGE OF TAPE.

1.16 GASKET GLAZING (DRY)

A. CUT COMPRESSION GASKETS TO LENGTHS RECOMMENDED BY GASKET MANUFACTURER TO FIT OPENINGS EXACTLY, WITH ALLOWANCE FOR STRETCH DURING INSTALLATION.
B. INSERT SOFT COMPRESSION GASKET BETWEEN GLASS AND FRAME OR FIXED STOP SO IT IS SECURELY IN PLACE WITH JOINTS MITER CUT AND BONDED TOGETHER AT CORNERS.
C. INSTALLATION WITH DRIVE-IN WEDGE GASKETS: CENTER GLASS LITES IN OPENINGS ON SETTING BLOCKS AND PRESS FIRMLY AGAINST SOFT COMPRESSION GASKET BY INSERTING DENSE COMPRESSION GASKETS FORMED AND INSTALLED TO LOCK IN PLACE AGAINST FACES OF REMOVABLE STOPS. START GASKET APPLICATIONS AT CORNERS AND WORK TOWARD CENTERS OF OPENINGS. COMPRESS GASKETS TO PRODUCE A WEATHERTIGHT SEAL WITHOUT DEVELOPING BENDING STRESSES IN GLASS. SEAL GASKET JOINTS WITH SEALANT RECOMMENDED BY GASKET MANUFACTURER.
D. INSTALLATION WITH PRESSURE-GLAZING STOPS: CENTER GLASS LITES IN OPENINGS ON SETTING BLOCKS AND PRESS FIRMLY AGAINST SOFT COMPRESSION GASKET. INSTALL DENSE COMPRESSION GASKETS AND PRESSURE-GLAZING STOPS, APPLYING PRESSURE UNIFORMLY TO COMPRESSION GASKETS. COMPRESS GASKETS TO PRODUCE A WEATHERTIGHT SEAL WITHOUT DEVELOPING BENDING STRESSES IN GLASS. SEAL GASKET JOINTS WITH SEALANT RECOMMENDED BY GASKET MANUFACTURER.
E. INSTALL GASKETS SO THEY PROTRUDE PAST FACE OF GLAZING STOPS.

08 91 19 - FIXED LOUVERS

1.1 ACTION SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT.
1. LOUVERS SHALL BEAR AMCA SEAL, INCLUDE PRINTED CATALOG PAGES SHOWING SPECIFIED MODELS WITH APPROPRIATE LOUVER CERTIFIED RATINGS SEALS.
B. SHOP DRAWINGS: FOR LOUVERS AND ACCESSORIES. INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK. SHOW FRAME PROFILES AND BLADE PROFILES, ANGLES, AND SPACING.
C. SAMPLES: FOR EACH TYPE OF METAL FINISH REQUIRED.
D. DELEGATED-DESIGN SUBMITTAL: FOR LOUVERS INDICATED TO COMPLY WITH STRUCTURAL AND SEISMIC PERFORMANCE REQUIREMENTS, INCLUDING ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.

1.2 INFORMATIONAL SUBMITTALS

A. PRODUCT TEST REPORTS: BASED ON TESTS PERFORMED ACCORDING TO AMCA 500-L.
B. WINDBORNE-DEBRIS-IMPACT RESISTANCE TEST REPORTS.

1.3 PERFORMANCE REQUIREMENTS

A. DELEGATED DESIGN: DESIGN LOUVERS, INCLUDING COMPREHENSIVE ENGINEERING ANALYSIS BY A QUALIFIED PROFESSIONAL ENGINEER, USING STRUCTURAL AND SEISMIC PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA INDICATED.
B. STRUCTURAL PERFORMANCE: LOUVERS SHALL WITHSTAND THE EFFECTS OF GRAVITY LOADS AND THE FOLLOWING LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED WITHOUT PERMANENT DEFORMATION OF LOUVER COMPONENTS, NOISE OR METAL FATIGUE CAUSED BY LOUVER-BLADE RATTLE OR FLUTTER, OR PERMANENT DAMAGE TO FASTENERS AND ANCHORS. WIND PRESSURES SHALL BE CONSIDERED TO ACT NORMAL TO THE FACE OF THE BUILDING.
1. WIND LOADS: DETERMINE LOADS BASED ON PRESSURES AS INDICATED ON DRAWINGS.
2. WIND LOADS: DETERMINE LOADS BASED ON A UNIFORM PRESSURE OF 20 LBF/SQ. FT., ACTING INWARD OR OUTWARD.
C. WINDBORNE-DEBRIS-IMPACT RESISTANCE: LOUVERS LOCATED WITHIN 30 FEET OF GRADE SHALL PASS BASIC-PROTECTION, LARGE-MISSILE TESTING REQUIREMENTS IN ASTM E 1996 FOR WIND ZONE 3 WHEN TESTED ACCORDING TO ASTM E 1886. TEST SPECIMENS SHALL BE NO SMALLER IN WIDTH AND LENGTH THAN LOUVERS INDICATED FOR USE ON PROJECT.
D. SEISMIC PERFORMANCE: LOUVERS, INCLUDING ATTACHMENTS TO OTHER CONSTRUCTION, SHALL WITHSTAND THE EFFECTS OF EARTHQUAKE MOTIONS DETERMINED ACCORDING TOASCE/SEI 7.
1. DESIGN EARTHQUAKE SPECTRAL RESPONSE ACCELERATION, SHORT PERIOD (SDS) FOR PROJECT IS INDICATED IN DRAWINGS.
2. COMPONENT IMPORTANCE FACTOR: AS INDICATED IN DRAWINGS).
E. LOUVER PERFORMANCE RATINGS: PROVIDE LOUVERS COMPLYING WITH REQUIREMENTS SPECIFIED, AS DEMONSTRATED BY TESTING MANUFACTURER'S STOCK UNITS IDENTICAL TO THOSE PROVIDED, EXCEPT FOR LENGTH AND WIDTH ADJUSTED PURSUANT TO AMCA 500-L.

1.4 FIXED, EXTRUDED-ALUMINUM LOUVERS

A. A. HORIZONTAL, NONDRAINABLE-BLADE LOUVER:
1. LOUVER DEPTH: AS INDICATED IN DRAWINGS.
2. BLADE PROFILE: PLAIN BLADE WITHOUT CENTER BAFFLE.
3. FRAME AND BLADE MATERIAL AND NOMINAL THICKNESS: NOT LESS THAN 0.060 INCH FOR BLADES AND 0.080 INCH FOR FRAMES.
4. MULLION TYPE: EXPOSED.
5. LOUVER PERFORMANCE RATINGS:
a. FREE AREA: NOT LESS THAN 7.0 SQ. FT. FOR 48-INCH- WIDE BY 48-INCH- HIGH LOUVER.
b. POINT OF BEGINNING WATER PENETRATION: NOT LESS THAN 700 FPM.
c. AIR PERFORMANCE: NOT MORE THAN 0.10-INCH WG STATIC PRESSURE DROP AT 700-FPM FREE-AREA INTAKEVELOCITY.
B. B. HORIZONTAL, DRAINABLE-BLADE LOUVER:
1. LOUVER DEPTH: AS INDICATED IN DRAWINGS.
2. FRAME AND BLADE NOMINAL THICKNESS: NOT LESS THAN 0.060 INCH FOR BLADES AND 0.080 INCH FOR FRAMES.
3. MULLION TYPE: EXPOSED.
4. LOUVER PERFORMANCE RATINGS:
a. FREE AREA: NOT LESS THAN 7.0 SQ. FT. FOR 48-INCH- WIDE BY 48-INCH- HIGH LOUVER.
b. POINT OF BEGINNING WATER PENETRATION: NOT LESS THAN 900 FPM.
c. AIR PERFORMANCE: NOT MORE THAN 0.10-INCH WG STATIC PRESSURE DROP AT 700-FPM FREE-AREA INTAKEVELOCITY.
5. AMCA SEAL: MARK UNITS WITH AMCA CERTIFIED RATINGS SEAL.
C. HORIZONTAL, WIND-DRIVEN-RAIN-RESISTANT LOUVER:
1. LOUVER DEPTH: AS INDICATED IN DRAWINGS.
2. FRAME AND BLADE NOMINAL THICKNESS: NOT LESS THAN 0.060 INCH FOR BLADES AND 0.080 INCH FOR FRAMES.
3. LOUVER PERFORMANCE RATINGS:
a. FREE AREA: NOT LESS THAN 5.0 SQ. FT. FOR 48-INCH- WIDE BY 48-INCH- HIGH LOUVER.
b. AIR PERFORMANCE: NOT MORE THAN 0.10-INCH WG STATIC PRESSURE DROP AT 600-FPM FREE-AREA INTAKE VELOCITY.
c. WIND-DRIVEN RAIN PERFORMANCE: NOT LESS THAN 99 PERCENT EFFECTIVENESS WHEN SUBJECTED TO A RAINFALL RATE OF 3 INCHES PER HOUR AND A WIND SPEED OF 29 MPH PER HOUR AND A WIND SPEED OF 50 MPH AT A CORE-AREA INTAKE VELOCITY OF 300 FPM.
4. AMCA SEAL: MARK UNITS WITH AMCA CERTIFIED RATINGS SEAL.
D. VERTICAL, WIND-DRIVEN-RAIN-RESISTANT LOUVER:
1. LOUVER DEPTH: AS INDICATED IN DRAWINGS.
2. FRAME AND BLADE NOMINAL THICKNESS: NOT LESS THAN 0.060 INCH FOR BLADES AND 0.080 INCH FOR FRAMES.
3. LOUVER PERFORMANCE RATINGS:
a. FREE AREA: NOT LESS THAN 5.0 SQ. FT. FOR 48-INCH- WIDE BY 48-INCH- HIGH LOUVER.
b. AIR PERFORMANCE: NOT MORE THAN 0.10-INCH WG STATIC PRESSURE DROP AT 600-FPM FREE-AREA INTAKE VELOCITY.
c. WIND-DRIVEN RAIN PERFORMANCE: NOT LESS THAN 99 PERCENT EFFECTIVENESS WHEN SUBJECTED TO A RAINFALL RATE OF 3 INCHES PER HOUR AND A WIND SPEED OF 29 MPH AT A CORE-AREA INTAKE VELOCITY OF 550 FPM FREE-AREA INTAKE VELOCITY.
4. AMCA SEAL: MARK UNITS WITH AMCA CERTIFIED RATINGS SEAL.

1.5 FIXED, FORMED-METAL LOUVERS

A. HORIZONTAL, NONDRAINABLE-BLADE LOUVER:
1. LOUVER DEPTH: AS INDICATED IN DRAWINGS.
2. BLADE PROFILE: PLAIN BLADE WITHOUT CENTER BAFFLE.
3. FRAME AND BLADE MATERIAL AND NOMINAL THICKNESS: GALVANIZED-STEEL SHEET, NOT LESS THAN 0.052 INCH FOR FRAMES AND 0.040 INCH FOR BLADES.
4. MULLION TYPE: EXPOSED.
5. LOUVER PERFORMANCE RATINGS:
a. FREE AREA: NOT LESS THAN 6.5 SQ. FT. FOR 48-INCH- WIDE BY 48-INCH- HIGH LOUVER.
b. POINT OF BEGINNING WATER PENETRATION: NOT LESS THAN 550 FPM.
c. AIR PERFORMANCE: NOT MORE THAN 0.10-INCH WG STATIC PRESSURE DROP AT 550-FPM FREE-AREA INTAKE VELOCITY.
B. B. HORIZONTAL, DRAINABLE-BLADE LOUVER:
1. LOUVER DEPTH: AS INDICATED IN DRAWINGS.
2. FRAME AND BLADE MATERIAL AND NOMINAL THICKNESS: GALVANIZED-STEEL SHEET, NOT LESS THAN 0.052 INCH FOR FRAMES AND 0.040 INCH FOR BLADES.
3. MULLION TYPE: EXPOSED.

08 91 19 - FIXED LOUVERS (CONT.)

4. LOUVER PERFORMANCE RATINGS:
a. FREE AREA: NOT LESS THAN 7.0 SQ. FT. FOR 48-INCH- WIDE BY 48-INCH- HIGH LOUVER.
b. POINT OF BEGINNING WATER PENETRATION: NOT LESS THAN 800 FPM.
c. AIR PERFORMANCE: NOT MORE THAN 0.10-INCH WG STATIC PRESSURE DROP AT 700-FPM FREE-AREA INTAKE VELOCITY.
5. AMCA SEAL: MARK UNITS WITH AMCA CERTIFIED RATINGS SEAL.

1.6 LOUVER SCREENS

A. GENERAL: PROVIDE SCREEN AT EACH EXTERIOR LOUVER.
1. SCREEN LOCATION FOR FIXED LOUVERS: INTERIOR FACE.
2. SCREENING TYPE: BIRD SCREENING.
B. LOUVER SCREEN FRAMES: SAME TYPE AND FORM OF METAL AS INDICATED FOR LOUVER TO WHICH SCREENS ARE ATTACHED.
C. LOUVER SCREENING FOR GALVANIZED-STEEL LOUVERS:
1. BIRD SCREENING: STAINLESS STEEL, 1/2-INC

CAUTION: IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PR

3.2.c

09 29 00 - GYPSUM BOARD (CONT)

1.10 APPLYING AND FINISHING PANELS, GENERAL

A. COMPLY WITH ASTM C840, GA-216-2007
B. INSTALL CEILING PANELS ACROSS FRAMING TO MINIMIZE THE NUMBER OF ABUTTING END JOINTS AND TO AVOID ABUTTING END JOINTS IN CENTRAL AREA OF EACH CEILING. STAGGER ABUTTING END JOINTS OF ADJACENT PANELS NOT LESS THAN ONE FRAMING MEMBER.
C. INSTALL PANELS WITH FACE SIDE OUT. BUTT PANELS TOGETHER FOR A LIGHT CONTACT AT EDGES AND ENDS WITH NOT MORE THAN 1/16 INCH (1.5 MM) OF OPEN SPACE BETWEEN PANELS. DO NOT FORCE INTO PLACE.
D. LOCATE EDGE AND END JOINTS OVER SUPPORTS, EXCEPT IN CEILING APPLICATIONS WHERE INTERMEDIATE SUPPORTS OR GYPSUM BOARD BACK-BLOCKING IS PROVIDED BEHIND END JOINTS. DO NOT PLACE TAPERED EDGES AGAINST CUT EDGES OR ENDS. STAGGER VERTICAL JOINTS ON OPPOSITE SIDES OF PARTITIONS. DO NOT MAKE JOINTS OTHER THAN CONTROL JOINTS AT CORNERS OF FRAMED OPENINGS.
E. FORM CONTROL AND EXPANSION JOINTS WITH SPACE BETWEEN EDGES OF ADJOINING GYPSUM PANELS.
F. COVER BOTH FACES OF SUPPORT FRAMING WITH GYPSUM PANELS IN CONCEALED SPACES (ABOVE CEILINGS, ETC., EXCEPT IN CHASES BRACED INTERNALLY.
   1. FIT GYPSUM PANELS AROUND RUNS, PIPES, AND CONDUITS.
   2. WHERE PARTITIONS INTERSECT STRUCTURAL MEMBERS PROJECTING BELOW UNDERSIDE OF FLOOR/ROOF SLABS AND DECKS, CUT GYPSUM PANELS TO FIT PROFILE FORMED BY STRUCTURAL MEMBERS; ALLOW 1/4- TO 3/8-INCH-WIDE JOINTS TO INSTALL SEALANT.
G. ISOLATE PERIMETER OF GYPSUM BOARD APPLIED TO NON-LOAD-BEARING PARTITIONS AT STRUCTURAL ABUTMENTS, EXCEPT FLOORS. PROVIDE 1/4 TO 1/2-INCH- WIDE SPACES AT THESE LOCATIONS AND TRIM EDGES WITH EDGE TRIM WHERE EDGES OF PANELS ARE EXPOSED. SEAL JOINTS BETWEEN EDGES AND ABUTTING STRUCTURAL SURFACES WITH ACOUSTICAL SEALANT.
H. INSTALL SOUND ATTENUATION BLANKETS BEFORE INSTALLING GYPSUM PANELS UNLESS BLANKETS ARE READILY INSTALLED AFTER PANELS HAVE BEEN INSTALLED ON ONE SIDE.
I. CEILING WITH PERIMETER RELIEF: CONTROL JOINTS IN INTERIOR CEILINGS WITH PERIMETER RELIEF SHALL BE INSTALLED SO THAT LINEAR DIMENSIONS BETWEEN CONTROL JOINTS DO NOT EXCEED 50 FT OR 2500 SQ. FT.
J. CEILING, WITHOUT PERIMETER RELIEF: CONTROL JOINTS IN INTERIOR CEILINGS WITHOUT PERIMETER RELIEF SHALL BE INSTALLED SO THAT LINEAR DIMENSIONS BETWEEN CONTROL JOINTS DO NOT EXCEED 30 FT.
K. AT ACOUSTICAL OR FIRE-RATED WALLS WHERE A CONTROL JOINT OCCURS IN AN ACOUSTICAL OR FIRE RATED SYSTEM, BLOCKING SHALL BE PROVIDED BEHIND THE CONTROL JOINT BY USING A BACKING MATERIAL SUCH AS 5/8 IN. TYPE X GYPSUM PANEL PRODUCTS, MINERAL FIBER, OR OTHER TESTED EQUIVALENT.
L. INTERIOR TRIM: INSTALL IN THE FOLLOWING LOCATIONS:
   1. CORNERBEAD: USE AT OUTSIDE CORNERS.
   2. LC-BEAD: USE AT EXPOSED PANEL EDGES.
   3. L-BEAD: USE WHERE INDICATED.

1.14 FINISHING GYPSUM BOARD

A. PREFILL OPEN JOINTS, ROUNDED OR BEVELED EDGES, AND DAMAGED SURFACE AREAS.
B. APPLY JOINT TAPE OVER GYPSUM BOARD JOINTS, EXCEPT FOR TRIM PRODUCTS SPECIFICALLY INDICATED AS NOT INTENDED TO RECEIVE TAPE.
C. GYPSUM BOARD FINISH LEVELS: FINISH PANELS TO LEVELS INDICATED BELOW AND ACCORDING TO ASTM C 840:
   1. LEVEL 1: CEILING PLENUM AREAS, CONCEALED AREAS, AND WHERE INDICATED.
   2. LEVEL 2: WAREHOUSE STORAGE AREAS.
   3. LEVEL 3: BENEATH WALL COVERING.
   4. LEVEL 4: AT PANEL SURFACES THAT WILL BE EXPOSED TO VIEW UNLESS OTHERWISE INDICATED.

1.11 APPLYING INTERIOR GYPSUM BOARD

A. INSTALL INTERIOR GYPSUM BOARD IN THE FOLLOWING LOCATIONS (UNLESS NOTED OTHERWISE):
   1. TYPE X: VERTICAL SURFACES UNLESS OTHERWISE INDICATED.
   2. MOISTURE- AND MOLD-RESISTANT TYPE: AT DAMP LOCATIONS WHERE TILE BACKER BOARD IS NOT USED.
B. SINGLE-LAYER APPLICATION:
   1. ON CEILINGS, APPLY GYPSUM PANELS BEFORE WALL/PARTITION BOARD APPLICATION TO GREATEST EXTENT POSSIBLE AND AT RIGHT ANGLES TO FRAMING UNLESS OTHERWISE INDICATED.
   2. ON PARTITIONS/WALLS, APPLY GYPSUM PANELS VERTICALLY (PARALLEL TO FRAMING) UNLESS OTHERWISE INDICATED OR REQUIRED BY FIRE-RESISTANCE-RATED ASSEMBLY, AND MINIMIZE END JOINTS.
      a. STAGGER ABUTTING END JOINTS NOT LESS THAN ONE FRAMING MEMBER IN ALTERNATE COURSES OF PANELS.
   3. ON Z-FURRING MEMBERS, APPLY GYPSUM PANELS VERTICALLY (PARALLEL TO FRAMING) WITH NO END JOINTS. LOCATE EDGE JOINTS OVER FURRING MEMBERS.
   4. FASTENING METHODS: APPLY GYPSUM PANELS TO SUPPORTS WITH STEEL DRILL SCREWS.
C. MULTILAYER APPLICATION:
   1. ON CEILINGS, APPLY GYPSUM BOARD INDICATED FOR BASE LAYERS BEFORE APPLYING BASE LAYERS ON WALLS/PARTITIONS; APPLY FACE LAYERS IN SAME SEQUENCE. APPLY BASE LAYERS AT RIGHT ANGLES TO FRAMING MEMBERS AND OFFSET FACE-LAYER JOINTS ONE FRAMING MEMBER, 16 INCHES MINIMUM, FROM PARALLEL BASE-LAYER JOINTS, UNLESS OTHERWISE INDICATED OR REQUIRED BY FIRE-RESISTANCE-RATED ASSEMBLY.
   2. ON PARTITIONS/WALLS, APPLY GYPSUM BOARD INDICATED FOR BASE LAYERS AND FACE LAYERS VERTICALLY (PARALLEL TO FRAMING) WITH JOINTS OF BASE LAYERS LOCATED OVER STUD OR FURRING MEMBER AND FACE-LAYER JOINTS OFFSET AT LEAST ONE STUD OR FURRING MEMBER WITH BASE-LAYER JOINTS, UNLESS OTHERWISE INDICATED OR REQUIRED BY FIRE-RESISTANCE-RATED ASSEMBLY. STAGGER JOINTS ON OPPOSITE SIDES OF PARTITIONS.
   3. ON Z-FURRING MEMBERS, APPLY BASE LAYER VERTICALLY (PARALLEL TO FRAMING) AND FACE LAYER EITHER VERTICALLY (PARALLEL TO FRAMING) OR HORIZONTALLY (PERPENDICULAR TO FRAMING) WITH VERTICAL JOINTS OFFSET AT LEAST ONE FURRING MEMBER. LOCATE EDGE JOINTS OF BASE LAYER OVER FURRING MEMBERS.
   4. FASTENING METHODS: FASTEN BASE LAYERS AND FACE LAYERS SEPARATELY TO SUPPORTS WITH SCREWS.

1.12 INSTALLING TRIM ACCESSORIES

A. CONTROL JOINTS: INSTALL CONTROL JOINTS AT LOCATIONS INDICATED ON DRAWINGS, AND ACCORDING TO ASTM C 840 AND IN SPECIFIC LOCATIONS APPROVED BY ARCHITECT FOR VISUAL EFFECT, AND AS FOLLOWS:
B. WALL/ CEILING JOINTS SHALL BE INSTALLED WHERE A WALL OR PARTITION RUNS IN AN UNINTERRUPTED STRAIGHT PLANE EXCEEDING 30 LINEAR FEET, OR 900 FT2

09 61 16 - CONCRETE FLOOR SEALING

1.1 SUBMITTALS

A. PRODUCT DATA: SUBMIT MANUFACTURER'S TECHNICAL LITERATURE, INCLUDING CHEMICAL PROPERTIES AND PERCENTAGE OF SOLIDS, FOR EACH PRODUCT.

1.2 ENVIRONMENTAL REQUIREMENTS

A. DO NOT APPLY MATERIALS WHEN AMBIENT OR SUBSTRATE SURFACE TEMPERATURES ARE BELOW 40 DEGREES F OR HIGHER THAN 100 DEGREES F.
B. DO NOT APPLY DURING INCLEMENT WEATHER OR WHEN FORECASTED CONDITIONS WILL NOT PERMIT COMPLIANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS.
C. PROVIDE MECHANICAL VENTILATION DURING AND AFTER APPLICATION TO DISSIPATE FUMES IF NATURAL VENTILATION IS INSUFFICIENT.

1.3 MATERIALS

A. LIQUID MEMBRANE-FORMING SEALER (FOR USE ON CONCRETE FLOOR SLABS INTENDED TO BE LEFT EXPOSED):
   1. ACCEPTABLE PRODUCTS:
      a. DAYTON SUPERIOR CORPORATION; ULTRA SEAL EF.

1.4 PREPARATION

A. REMOVE LOOSE PARTICLES, FOREIGN MATTER, AND OIL BY METHOD WHICH WILL NOT AFFECT SEALER APPLICATION.
B. PREPARE SURFACES IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS.
C. PROVIDE PROTECTION AS NECESSARY TO PROTECT ADJACENT MATERIALS AND SURFACES FROM DIRT, DUST, SPILLAGE, OVERSPRAY AND OTHER SURFACE OR PHYSICAL DAMAGE.

1.5 APPLICATION

A. GENERAL:
   1. PROVIDE FINISHES TO MATCH APPROVED SAMPLES AT LOCATIONS INDICATED.
   2. APPLY MATERIALS IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS.
B. LIQUID MEMBRANE-FORMING SEALER:
   1. APPLY SEALER USING LOW PRESSURE AIRLESS SPRAYER IN SINGLE COAT AT 250 FT/GAL (6.0-7.0 WFT) COVERAGE UNLESS GREATER AMOUNT IS RECOMMENDED BY MANUFACTURER TO OBTAIN PENETRATION AND FULL COVERAGE.
   2. DO NOT ALLOW FLOODING OR PUDDLING OF MATERIAL ON SURFACE.
   3. DO NOT DILUTE OR ALTER MATERIAL AS PACKAGED.
   4. LOCATIONS: AS INDICATED ON PLANS AND ON ALL EXPOSED CONCRETE FLOORING INSIDE OF BUILDING.

09 91 00 - PAINTING

1.1 QUALITY ASSURANCE

A. PRODUCT MANUFACTURER: COMPANY SPECIALIZING IN MANUFACTURING QUALITY PAINT AND FINISH PRODUCTS WITH 3 YEARS EXPERIENCE.
B. APPLICATOR: COMPANY SPECIALIZING IN COMMERCIAL PAINTING AND FINISHING WITH 2 YEARS EXPERIENCE.
C. PRODUCT LABELS: INCLUDE MANUFACTURER'S NAME, TYPE OF PAINT, STOCK NUMBER, COLOR AND LABEL ANALYSIS ON LABEL OF CONTAINERS.

1.2 SUBMITTALS

A. PROVIDE PRODUCT DATA DESCRIBING PHYSICAL PERFORMANCE CRITERIA AND COMPOSITION ON ALL FINISHING PRODUCTS.
B. SUBMIT 2 SAMPLES, 12 BY 12 INCHES IN SIZE ILLUSTRATING RANGE OF COLORS AND TEXTURES SELECTED FOR EACH SURFACE FINISHING PRODUCT SCHEDULED.

09 91 00 - PAINTING (CONT)

1.3 FIELD SAMPLES

A. PROVIDE FIELD SAMPLE PANEL, 96 INCHES LONG BY 96 INCHES WIDE, ILLUSTRATING EACH COATING COLOR, TEXTURE, AND FINISH INTENDED FOR USE.
B. LOCATE WHERE DIRECTED.
C. ACCEPTED SAMPLE MAY REMAIN AS PART OF THE WORK.

1.4 DELIVERY, STORAGE, AND HANDLING

A. DELIVER PRODUCTS TO SITE IN SEALED AND LABELED CONTAINERS; INSPECT TO VERIFY ACCEPTANCE.
B. CONTAINER LABELING TO INCLUDE MANUFACTURER'S NAME, TYPE OF PAINT, BRAND NAME, BRAND CODE, COVERAGE, SURFACE PREPARATION, DRYING TIME, CLEANUP, COLOR DESIGNATION, AND INSTRUCTIONS FOR MIXING AND REDUCING.
C. STORE PAINT MATERIALS AT MINIMUM AMBIENT TEMPERATURE OF 45 DEGREES F AND A MAXIMUM OF 90 DEGREES F. IN WELL VENTILATED AREA, UNLESS REQUIRED OTHERWISE BY MANUFACTURER'S INSTRUCTIONS.
D. TAKE PRECAUTIONARY MEASURES TO PREVENT FIRE HAZARDS AND SPONTANEOUS COMBUSTION.

1.5 ENVIRONMENTAL REQUIREMENTS

A. DO NOT APPLY MATERIALS WHEN SURFACE AND AMBIENT TEMPERATURES ARE OUTSIDE THE RANGES REQUIRED BY PAINT MANUFACTURER.
B. PROVIDE CONTINUOUS VENTILATION AND HEATING FACILITIES TO MAINTAIN SURFACE AND AMBIENT TEMPERATURES ABOVE 45 DEGREES F FOR 24 HOURS BEFORE, DURING, AND 48 HOURS AFTER APPLICATION OF FINISHES, UNLESS REQUIRED OTHERWISE BY MANUFACTURER'S INSTRUCTIONS.
C. DO NOT APPLY EXTERIOR COATINGS DURING RAIN OR SNOW, OR WHEN RELATIVE HUMIDITY IS ABOVE 75 PERCENT, UNLESS REQUIRED OTHERWISE BY MANUFACTURER'S INSTRUCTIONS.
D. MINIMUM APPLICATION TEMPERATURES FOR LATEX PAINTS: 45 DEGREES F FOR INTERIORS; 50 DEGREES F FOR EXTERIOR; UNLESS REQUIRED OTHERWISE BY MANUFACTURER'S INSTRUCTIONS.
E. PROVIDE LIGHTING LEVEL OF 80 FT CANDLES MEASURED MID- HEIGHT AT SUBSTRATE SURFACE.

1.6 EXTRA STOCK

A. PROVIDE A 1 GALLON CONTAINER OF EACH COLOR TO OWNER.
B. LABEL EACH CONTAINER WITH COLOR, COLOR NUMBER, TEXTURE, AND ROOM LOCATIONS, IN ADDITION TO THE MANUFACTURER'S LABEL.

1.7 SCAFFOLDS AND PROTECTION

A. PROVIDE ADEQUATE SAFE LADDERS, SCAFFOLDS, AND STAGES NECESSARY TO COMPLETE WORK.
B. PROTECT COMPLETED FINISH AND PAINT WORK, AND PROTECT ADJACENT FINISH SURFACES FROM PAINT SPLATTER, SPILLS AND STAINS. USE ADEQUATE DROP CLOTHS AND MASKING PROCEDURES DURING PROGRESS OF WORK.

1.8 PRECAUTIONS

A. DO NOT STORE PAINTS, OILS, THINNERS AND OTHER FLAMMABLE ITEMS INSIDE THE BUILDING AND SHALL BE STORED IN APPROVED CONTAINERS WHEN NOT IN ACTUAL USE DURING THE PAINTING JOB. THE FIRE HAZARD SHALL BE KEPT AT A MINIMUM.
B. PRECAUTION SHALL BE TAKEN TO PROTECT THE PUBLIC AND CONSTRUCTION WORKERS DURING THE PROGRESS OF THE WORK.
C. FURNISH A TEMPORARY FIRE EXTINGUISHER OF SUITABLE CHEMICALS AND CAPACITY, LOCATED NEAR FLAMMABLE MATERIALS.

1.9 MANUFACTURERS

A. ACCEPTABLE MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS INDICATED, PROVIDE PRODUCTS OF ONE OF THE FOLLOWING:
   1. SHERWIN, WILLIAMS
   2. P.P.G. INDUSTRIES.
   3. BENJAMIN MOORE.
   4. KELLEY MOORE.
   5. GLIDDEN PROFESSIONAL.
B. MATERIALS SELECTED FOR COATING SYSTEMS FOR EACH TYPE SURFACE SHALL BE PRODUCT OF A SINGLE MANUFACTURER UNLESS OTHERWISE SPECIFIED. SECONDARY PRODUCTS SUCH AS LINSEED OIL, TURPENTINE AND SHELLACS SHALL BE FIRST QUALITY PRODUCTS OF A REPUTABLE MANUFACTURER.
C. PRODUCTS SPECIFIED IN SCHEDULE ARE THOSE OF GLIDDEN PROFESSIONAL AS A STANDARD OF QUALITY UNLESS OTHERWISE NOTED.

1.10 MATERIALS

A. COATINGS: READY MIXED. PROCESS PIGMENTS TO A SOFT PASTE CONSISTENCY, CAPABLE OF BEING READILY AND UNIFORMLY DISPERSED TO A HOMOGENEOUS COATING WITH GOOD FLOW AND BRUSHING PROPERTIES; CAPABLE OF DRYING OR CURING FREE OF STREAKS OR SAGS.
B. ACCESSORY MATERIALS: LINSEED OIL, SHELLAC, TURPENTINE, PAINT THINNERS AND OTHER MATERIALS NOT SPECIFICALLY INDICATED BUT REQUIRED TO ACHIEVE THE FINISHES SPECIFIED, OF COMMERCIAL QUALITY.
C. PATCHING MATERIALS: LATEX FILLER

1.11 FINISHES

A. COLOR AND SHEEN: REFER TO FINISH LEGEND ON DRAWINGS.

1.12 INTERIOR PAINT SCHEDULE

A. DRYWALL (GYPSUM):
   1. ACRYLIC LATEX: GLIDDEN: 1 COAT GLIDDEN PROFESSIONAL PVA WALL 1030 PRIMER, 2 COATS GLIDDEN PROFESSIONAL ULTRA-HIDE 250
B. GALVANIZED METAL:
   1. ACRYLIC LATEX: GLIDDEN: 1 COAT DEVOE COATINGS DEVFLEX DIRECT-TO-METAL 4020 PRIMER; SEMI-GLOSS: 2 COATS GLIDDEN PROFESSIONAL ULTRA-HIDE 250 1406 TOPCOAT.
C. SHOP PRIMED FERROUS METAL:
   1. ACRYLIC LATEX: GLIDDEN: 1 COAT DEVOE COATINGS DEVFLEX DIRECT-TO-METAL 4020 PRIMER, 2 COATS GLIDDEN PROFESSIONAL ULTRA-HIDE 250.

1.13 EXTERIOR PAINT SCHEDULE

A. SHOP PRIMED METAL DOORS, TRIM, PANELS AND MISCELLANEOUS SURFACES:
   1. HIGH PERFORMANCE COATING WATER-BASED ACRYLIC:
      a. GLIDDEN: SEMI-GLOSS: 2 TOPCOATS DEVOE COATINGS DEVFLEX HIGH PERFORMANCE WB ACRYLIC 4216 OVER PREPARED SUBSTRATE.

1.14 EXAMINATION

A. VERIFY THAT SURFACES AND SUBSTRATE CONDITIONS ARE READY TO RECEIVE WORK AS INSTRUCTED BY THE PRODUCT MANUFACTURER.
B. EXAMINE SURFACES SCHEDULED TO BE FINISHED PRIOR TO COMMENCEMENT OF WORK. REPORT TO ARCHITECT ANY CONDITION THAT MAY POTENTIALLY AFFECT PROPER APPLICATION.
C. MEASURE MOISTURE CONTENT OF SURFACES USING AN ELECTRONIC MOISTURE METER. DO NOT APPLY FINISHES UNLESS MOISTURE CONTENT OF SURFACES ARE BELOW THE FOLLOWING MAXIMUMS
   1. GYPSUM WALLBOARD: 12 PERCENT.
D. TEST SHOP-APPLIED PRIMERS FOR COMPATIBILITY WITH SUBSEQUENT COVER MATERIALS.
E. BEGINNING OF INSTALLATION MEANS ACCEPTANCE OF EXISTING SURFACES AND SUBSTRATE.

1.15 PREPARATION

A. REMOVE ELECTRICAL PLATES, HARDWARE, LIGHT FIXTURE TRIM, AND FITTINGS PRIOR TO PREPARING SURFACES OR FINISHING.
B. CORRECT MINOR DEFECTS AND CLEAN SURFACES WHICH AFFECT WORK OF THIS SECTION. REMOVE EXISTING COATINGS WHICH EXHIBIT LOOSE SURFACE DEFECTS.
C. IMPERVIOUS SURFACES: REMOVE MILDEW BY SCRUBBING WITH SOLUTION OF TRI_SODIUM PHOSPHATE AND BLEACH. RINSE WITH CLEAN WATER AND ALLOW SURFACE TO DRY.
D. GYPSUM BOARD SURFACES: LATEX FILL MINOR DEFECTS. SPOT PRIME DEFECTS AFTER REPAIR.
E. GALVANIZED SURFACES: REMOVE SURFACE CONTAMINATION AND OILS AND WASH WITH SOLVENT. APPLY COAT OF ETCHING PRIMER.
F. UNCOATED STEEL AND IRON SURFACES: REMOVE GREASE, SCALE, DIRT, AND RUST.
G. WHERE HEAVY COATINGS OF SCALE ARE EVIDENT, REMOVE BY WIRE BRUSHING OR SANDBLASTING; CLEAN BY WASHING WITH SOLVENT. APPLY A TREATMENT OF PHOSPHORIC ACID SOLUTION, ENSURING WELD JOINTS, BOLTS, AND NUTS ARE SIMILARLY CLEANED. SPOT PRIME PAINT AFTER REPAIRS.
H. SHOP PRIMED STEEL SURFACES: SAND AND SCRAPE TO REMOVE LOOSE PRIMER AND RUST. FEATHER EDGES TO MAKE TOUCH_UP PATCHES INCONSPICUOUS. CLEAN SURFACES WITH SOLVENT. PRIME BARE STEEL SURFACES.
I. SHOP FINISHED ITEMS: FINISH IN ACCORDANCE WITH AWI STANDARDS AND GUIDE LINES.
J. WOOD AND METAL DOORS SCHEDULED FOR PAINTING: SEAL TOP AND BOTTOM EDGES WITH PRIMER.

1.16 SURFACE PREPARATION OF PREVIOUSLY COATED SURFACES

A. GENERAL:
   1. REMOVE CRACKED AND DETERIORATED SEALANTS AND CALKING.
   2. REMOVE CHALK DEPOSITS AND LOOSE, BLISTERED, PEELING, SCALING, OR CRAZED FINISH TO BARE BASE MATERIAL OR SOUND SUBSTRATE BY SCRAPING AND SANDING.
   3. WASH SURFACES WITH SOLUTION OF TSP TO REMOVE WAX, OIL, GREASE, AND OTHER FOREIGN MATERIAL; RINSE, AND ALLOW TO DRY. EXERCISE CAUTION THAT TSP SOLUTION DOES NOT SOFTEN EXISTING COATING.
   4. ABRADE GLOSSY SURFACES BY SANDING OR WIPING WITH LIQUID DE-GLOSSER.
   5. REMOVE MILDEW AS SPECIFIED ABOVE.
   6. TEST COMPATIBILITY OF EXISTING COATINGS BY APPLYING NEW COATING TO SMALL, INCONSPICUOUS AREA. IF NEW COATINGS LIFT OR BLISTER EXISTING COATINGS, REQUEST RECOMMENDATION FROM ARCHITECT.
   7. APPLY SPECIFIED PRIMER TO SURFACES SCHEDULED TO RECEIVE COATINGS.
B. GYPSUM WALLBOARD:
   1. FILL CRACKS AND VOIDS WITH SPACKLING COMPOUND.
   2. APPLY PRIMER OVER BARE SURFACES AND NEWLY APPLIED TEXTURE COATINGS.
C. METAL:
   1. REMOVE RUST FROM SURFACES TO BARE METAL IN ACCORDANCE WITH SP3 "POWER TOOL CLEANING".
   2. EXERCISE CARE NOT TO REMOVE GALVANIZING.
   3. COMPLETE PREPARATION AS SPECIFIED FOR NEW WORK.

1.17 PROTECTION

A. PROTECT ELEMENTS SURROUNDING THE WORK OF THIS SECTION FROM DAMAGE OR DISFIGURATION.
B. REPAIR DAMAGE TO OTHER SURFACES CAUSED BY WORK OF THIS SECTION.
C. FURNISH DROP CLOTHS, SHIELDS, AND PROTECTIVE METHODS TO PREVENT SPRAY OR DROPPINGS FROM DISFIGURING OTHER SURFACES.
D. REMOVE EMPTY PAINT CONTAINERS FROM SITE.

09 91 00 - PAINTING (CONT.)

1.18 APPLICATION

A. THE INTENT OF THESE SPECIFICATIONS IS TO PRODUCE THE HIGHEST QUALITY APPEARANCE OF PAINT AND FINISH SURFACES. EMPLOY SKILLED MECHANICS ONLY. THE PROPER PREPARATION OF ALL SURFACES WILL BE STRICTLY ENFORCED AND WHEREVER FINISHED SURFACES SHOW ANY DEFECTS DUE TO IMPROPER PREPARATION, WORKMANSHIP, ETC., THE DEFECTS SHALL BE REMOVED AND THE WORK REFINISHED AT THE EXPENSE OF THE CONTRACTOR.
B. APPLY PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. FINAL FINISH COATS SHALL HAVE VISUAL EVIDENCE OF SOLID HIDING AND UNIFORM APPEARANCE, AND SHALL BE FREE AND SMOOTH OF BRUSH MARKS, STREAKS, SAGS, RUNS, LAPS, OR SKIPPED AREAS.
C. DO NOT APPLY FINISHES TO SURFACES THAT ARE NOT DRY.
D. APPLY IN EACH COAT TO NORMAL WET FILM OF UNIFORM THICKNESS.
E. APPLY EACH COAT OF PAINT SLIGHTLY DARKER THAN PRECEDING COAT UNLESS OTHERWISE APPROVED.
F. SAND LIGHTLY BETWEEN COATS ON WOOD AND METAL ITEMS TO ACHIEVE REQUIRED FINISH.
G. ALLOW APPLIED COAT TO DRY BEFORE NEXT COAT IS APPLIED.
H. EDGES OF PAINT ADJOINING OTHER MATERIALS OR COLORS SHALL BE SHARP AND CLEAN WITH NO OVERLAPPING.

1.19 CLEANING/TOUCH_UP

A. AS WORK PROCEEDS, PROMPTLY REMOVE PAINT WHERE SPILLED, SPLASHED, OR SPATTERED.
B. DURING PROGRESS OF WORK MAINTAIN PREMISES FREE OF UNNECESSARY ACCUMULATION OF TOOLS, EQUIPMENT, SURPLUS MATERIALS, AND DEBRIS.
C. COLLECT COTTON WASTE, CLOTHS, AND MATERIAL WHICH MAY CONSTITUTE A FIRE HAZARD, PLACE IN CLOSED METAL CONTAINERS AND REMOVE DAILY FROM SITE.
D. SPOT PAINTING WILL BE ALLOWED TO CORRECT SOILED OR DAMAGED PAINT SURFACES ONLY WHEN TOUCH_UP SPOT WILL BLEND INTO SURROUNDING FINISH AND IS INVISIBLE TO NORMAL VIEWING (AS DETERMINED BY THE ARCHITECT). OTHERWISE, RE_COAT ENTIRE SECTION TO CORNERS OR VISIBLE STOPPING POINT.
E. PRODUCTS LISTED IN FOLLOWING SCHEDULE AND/OR SUBSTITUTES PROPOSED FOR USE BY CONTRACTOR MUST BE FORMULATED TO MEET ALL APPLICABLE ORDINANCES AND REGULATIONS REGARDING MAXIMUM V.O.C. CONTENT. UTILIZE PRODUCTS WHICH HAVE BEEN SPECIALLY FORMULATED TO MEET SUCH REQUIREMENTS.

09-600 - PAINTING: NEED A PERFORMANCE SPEC

PRECAST: (2 COAT) ACRYLIC, (1 COAT) PRIMER, (1 COAT) TOP APPROPRIATE FOR PRECAST

BC STEEL: INDUSTRIAL ENAMEL, MISC METALS, FERROUS METAL PRODUCTS

09 96 63 - TEXTURED PLASTIC/ ACRYLIC COATING

1.1 SECTION INCLUDES

A. ACRYLIC BASED TEXTURED COATING ON ALL EXPOSED PORTIONS OF EXTERIOR EXPOSED CONCRETE WALL PANELS.

2.1 ACCEPTABLE MANUFACTURERS

A. ULTRACRETE BY SHERWIN WILLIAMS
B. SUBSTITUTIONS: SUBMIT IN ACCORDANCE WITH SECTION 012500

2.2 PRODUCTS

A. COMPOSITION AND MATERIALS: DECORATIVE, ACRYLIC BASED COATING, PRE-MIXED
B. THICKNESS: APPLY AT THE RATE AND IN THE NUMBER OF COATS AS RECOMMENDED BY MANUFACTURER FOR FULL AND COMPLETE COVERAGE, BUT NOT LESS THAN 15 MIL DFT
C. FINISH TEXTURE: MEDIUM TEXTURE, OR AS OTHERWISE SELECTED BY ARCHITECT
D. COLOR: REFER TO FINISH LEGEND
E. PRIMER: TYPE AS RECOMMENDED BY MANUFACTURER FOR SUBSTRATE ENCOUNTERED.

10 44 00 - FIRE PROTECTION SPECIALTIES

1.1 SUBMITTALS

A. PRODUCT DATA: PROVIDE EXTINGUISHER OPERATIONAL FEATURES AND ANCHORAGE DETAILS.

1.2 MANUFACTURERS

A. FIRE EXTINGUISHERS:
   1. ANSUL, INC.: WWW.ANSUL.COM.
   2. JL INDUSTRIES, INC: WWW.JLINDUSTRIES.COM.
   3. PYRO-CHEM: WWW.PYROCHEM.COM.
B. FIRE EXTINGUISHER CABINETS AND ACCESSORIES:
   1. JL INDUSTRIES, INC.: WWW.JLINDUSTRIES.COM
   2. LARSEN'S MANUFACTURING CO.: WWW.LARSENSMFG.COM.
   3. POTTER-ROEMER: WWW.POTTERROEMER.COM.

1.3 FIRE EXTINGUISHERS

A. FIRE EXTINGUISHERS - GENERAL: COMPLY WITH PRODUCT REQUIREMENTS OF NFPA 10 AND APPLICABLE CODES, WHICHEVER IS MORE STRINGENT.
   1. PROVIDE EXTINGUISHERS LABELED BY UL FOR THE PURPOSE SPECIFIED AND INDICATED.
   2. PROVIDE UNIT TYPES AS INDICATED.

1.4 FIRE EXTINGUISHER CABINETS

A. METAL: FORMED PREFINISHED SHEET STEEL, 0.036 INCH THICK.
B. CABINET CONFIGURATION: SEMI-RECESSED TYPE.
   1. SIZED TO ACCOMMODATE ACCESSORIES.
   2. TRIM: RETURNED TO WALL SURFACE, WITH 2-1/2 INCH PROJECTION.
C. DOOR: 0.036 INCH THICK, REINFORCED FOR FLATNESS AND RIGIDITY; LATCH: HINGE DOORS FOR 180 DEGREE OPENING WITH TWO BUTT HINGE. PROVIDE NYLON CATCH.
D. DOOR GLAZING: GLASS, CLEAR, 1/8 INCH THICK FLOAT, SET IN RESILIENT CHANNEL GASKET GLAZING.
E. CABINET MOUNTING HARDWARE: APPROPRIATE TO CABINET. PRE-DRILL FOR ANCHORS.
F. WELD, FILL, AND GRIND COMPONENTS SMOOTH.
G. FINISH OF CABINET EXTERIOR TRIM AND DOOR: BAKED ENAMEL, COLOR AS SELECTED.
H. FINISH OF CABINET INTERIOR: WHITE ENAMEL.

1.5 INSTALLATION

A. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
B. INSTALL CABINETS PLUMB AND LEVEL IN WALL OPENINGS, FROM FINISHED FLOOR TO HEIGHT AS NEEDED TO MEET ACCESSIBILITY REQUIREMENTS.
C. SECURE RIGIDLY IN PLACE.
D. PLACE EXTINGUISHERS AND ACCESSORIES IN CABINETS.

10 90 00 - MISCELLANEOUS SPECIALTIES

1.1 SUBMITTALS

A. PRODUCT DATA: INCLUDING ALL PERTINENT PERFORMANCE CHARACTERISTICS AND CRITERIA.

1.2 PRODUCTS

A. FIRE CONTROL KEY BOX: PROVIDE RECESSED FIRE DEPARTMENT KEY CONTROL BOX, EQUAL TO MODEL 3200 BY KNOX BOX.
   1. PROVIDE KNOX LOCKS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

11 13 00 - LOADING DOCK EQUIPMENT

1.1 THIS SECTION INCLUDES THE FOLLOWING: DOCK BUMPERS; DOCK LEVELERS; DOCK SEALS

1.2 SUBMITTALS

A. PRODUCT DATA: INCLUDE CONSTRUCTION DETAILS, RATED CAPACITIES, OPERATING CHARACTERISTICS, DIMENSIONS OF INDIVIDUAL COMPONENTS AND PROFILES AND FINISHES.
B. MAINTENANCE DATA

1.2 PRODUCTS

A. DOCK BUMPERS

1. MANUFACTURERS
   - DURABLE CORPORATION
   - KELLEY COMPANY
   - PAWLING CORPORATION
   - PIONEER LOADING DOCK EQUIPMENT
   - RITE-HITE CORPORATION
   - SERCO
2. LAMINATED TREAD BUMPERS: FABRICATED FROM MULTIPLE, UNIFORMLY THICK PLIES CUT FROM FABRIC-REINFORCED RUBBER TIRES; LAMINATE PLIES UNDER PRESSURE ON NOT LESS THAN 2 3/4-INCH DIAMETER, STEEL SUPPORTING RODS THAT ARE WELDED AT ONE END TO 1/4-INCH THICK, STRUCTURAL STEEL END ANGLE AND SECURED WITH A NUT AND ANGLE AT THE OTHER END. FABRICATE ANGLES WITH PRE-DRILLED ANCHOR HOLES AND SIZED TO PROVIDE NOT LESS THAN 1 INCH OF TREAD PILES EXTENDING BEYOND THE FACE OF CLOSURE ANGLES

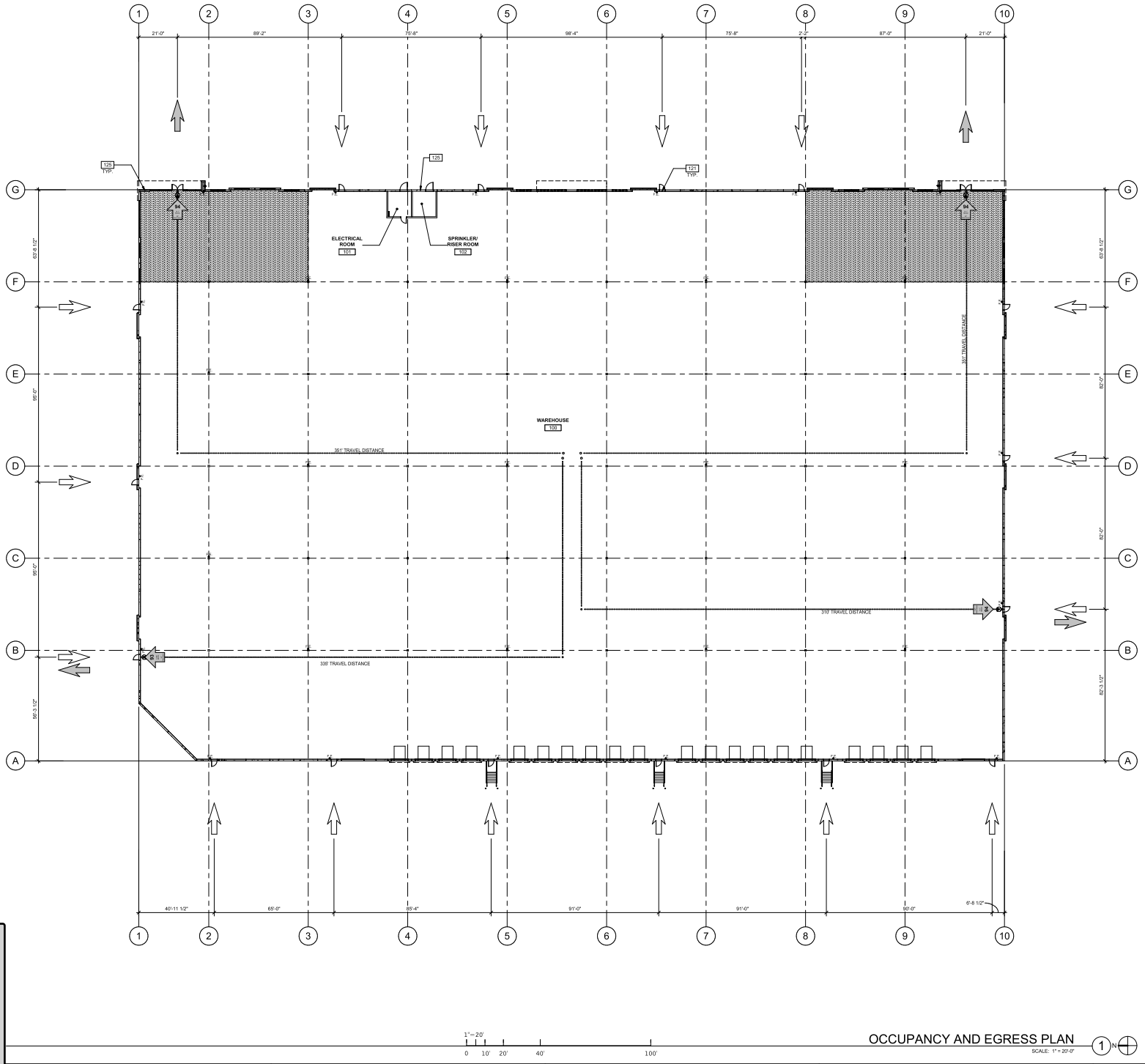
B. RECESSED DOCK LEVELERS

1. RECESSED, HINGED-LIP-TYPE DOCK LEVELERS DESIGNED FOR PERMANENT INSTALLATION IN CONCRETE PITS PREFORMED IN THE EDGE OF LOADING PLATFORM; OF TYPE, FUNCTION, OPERATION, CAPACITY, SIZE AND CONSTRUCTION INDICATED; AND COMPLETE WITH CONTROLS, SAFETY DEVICES, AND ACCESSORIES REQUIRED.
2. MANUFACTURERS
   - BLUE GIANT EQUIPMENT CORPORATION
   - KELLEY COMPANY
   - MCGUIRE W. B. CO.
   - PIONEER LOADING DOCK EQUIPMENT
   - RITE HITE CORPORATION
   - SERCO
3. QUALITY STANDARD: MH-30.1, "SAFETY, PERFORMANCE AND TESTING OF DOCK LEVELING DEVICES"
4. RATED CAPACITY: CAPABLE OF SUPPORTING TOTAL GROSS LOAD OF 35,000 LB AND RATED CAPACITY OR DYNAMIC RATING (REFER TO DRAWINGS FOR LOCATIONS) WITHOUT PERMANENT DEFLECTION OR DISTORTION, AS DETERMINED BY ACTUAL TESTS ACCORDING TO MH-30.1.

C. FOAM-PAD DOCK SEALS

1. DOCK SEALS CONSISTING OF FABRIC-COVERED FOAM PADS DESIGNED TO COMPRESS TO 4 TO

CAUTION: IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PR



OCCUPANCY AND EGRESS PLAN

SCALE: 1" = 20'-0"

1" = 20'

0 10' 20' 40' 100'

GENERAL NOTES

SEE SHEET A0.2 FOR ADDITIONAL GENERAL NOTES

1. SEE SHEETS A0.1 AND/OR A0.2 FOR ADDITIONAL GENERAL NOTES.
2. POSTED SIGNS IN AN ASSEMBLY OCCUPANCY SHALL BE OF AN APPROVED LEGIBLE PERMANENT DESIGN AND SHALL BE MAINTAINED BY THE OWNER OR AUTHORIZED AGENCY.
3. ILLUMINATION SHALL BE PROVIDED BY THE MEANS OF EGRESS IN ACCORDANCE WITH SECTION 1008.2 UNDER EMERGENCY POWER, MEANS OF EGRESS ILLUMINATION SHALL COMPLY WITH SECTION 1008.3.
4. PROVIDE BATTERY BACKUP ILLUMINATED EXTERIOR AREA OF ASSISTED RESCUE SIGN AND TACTILE SIGN IN COMPLIANCE WITH ICC A117.1 AT ALL EXIT DOORS WITH ASSOCIATED EXTERIOR AREA FOR ASSISTED RESCUE.
5. PROVIDE ONE FIRE EXTINGUISHER (WITH MINIMUM RATING OF 10A:80B:C FOR EVERY 3,000 SQ. FT.) AND LOCATE SO NO TRAVEL DISTANCE TO A FIRE EXTINGUISHER EXCEEDS 75 FEET. MOUNT TOP OF THE FIRE EXTINGUISHER NOT TO EXCEED 48" AFF.
6. COLUMN MOUNTED FIRE EXTINGUISHER (CLASS A), 10-A:80B:C, NOMINAL CAPACITY WITH BRACKET.
7. PROVIDE WALL-HUNG FIRE EXTINGUISHERS (UL-RATED 10-A:80B:C, 10LB.) IN THE WAREHOUSE AS REQUIRED BY CODE AND PER FIRE MARSHALL FINAL INSPECTION. 75'-0" MAXIMUM DISTANCE PER 906.3.
8. AREA OF RESCUE ASSISTANCE AT DEDICATED EGRESS DOORS, TYP.
9. PROVIDE KNOX BOX AT FRONT ENTRANCE AND AT FACP ROOM DOOR. LOCATION TO BE VERIFIED WITH A.H.J.

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

ALL REQUIRED EXITS TO RECEIVE WALL-MOUNTED TACTILE EXIT SIGN WITH THE WORD "EXIT" (14, A0.3)

ALL EXTERIOR WALLS SEPARATING THE EXTERIOR AREA OF ASSISTED RESCUE FROM INTERIOR ARE TO HAVE A MIN. FIRE-RESISTANCE RATING OF 1 HOUR (14, A0.3)

121 COORDINTAE WITH ELEC. DRAWINGS FOR PLACEMENT OF EXIT SIGNS. PROVIDE WALL-MOUNTED TACTILE SIGN WITH THE WORDS "AREA OF REFUGE" IN FRONT OF EXITS WITH AN AREA OF REFUGE.

125 PROVIDE KNOX BOX AT FRONT ENTRANCE AND AT FACP ROOM DOOR. LOCATION TO BE VERIFIED WITH A.H.J.

LEGEND

- PROPOSED FUTURE OFFICE AREA (N.I.C.)
- REQUIRED EXIT AND FIRE DEPARTMENT ACCESS.
- FIRE DEPARTMENT ACCESS.
- MAXIMUM TRAVEL DISTANCE.
- F.E. FIRE EXTINGUISHER
- WALL-MOUNTED ILLUMINATED EMERGENCY EXIT SIGN ABOVE DOOR WITH BATTERY POWERED BACK-UP. SHADED QUADRANT INDICATES FACE OF LETTERING.

ADDITIONAL DIRECTIONAL EXIT SIGNS MAY BE REQUIRED PRIOR TO FINAL INSPECTION AND SUBJECT TO BUILDING INSPECTOR.

EGRESS ANALYSIS

FUNCTION SPACE AND USE OCCUPANCY	(N) GROSS AREA (SF)	(F) AREA PER OCC. (SF/PERSON)	(O) = NF OCCUPANT LOAD	NUMBER OF EXITS REQUIRED	DOOR (AND OTHER EGRESS COMPONENTS) WIDTH REQUIRED	NUMBER OF EXITS PROVIDED (PER PLAN)	WIDTH OF EXITS PROVIDED (PER PLAN)	NUMBER OF EXITS REQUIRED (PER PLAN)	TOTAL DOOR WIDTH PROVIDED
WAREHOUSE S-1	145,406	500	291	2	291* 15" / 43.65"	2	-	2	192"

MAX. TRAVEL DISTANCE TO EXITS

MAXIMUM TRAVEL DISTANCE TO EXITS (1017.2 SPRINKLERED BUILDING)

S-1/STORAGE (MODERATE-HAZARD WAREHOUSE)..... 400 FEET MAX.

3206.6.1.1 NUMBER OF DOORS REQUIRED NOT LESS THAN ONE ACCESS DOOR SHALL BE PROVIDED IN EACH 100 LINEAR FEET (30 480 MM), OR FRACTION THEREOF, OF THE EXTERIOR WALLS THAT FACE REQUIRED FIRE APPARATUS ACCESS ROADS. THE REQUIRED ACCESS DOORS SHALL BE DISTRIBUTED SUCH THAT THE LINEAL DISTANCE BETWEEN ADJACENT ACCESS DOORS DOES NOT EXCEED 100 FEET (30 480 MM).

1009.7.2 SEPARATION.
EXTERIOR WALLS SEPARATING THE EXTERIOR AREA OF ASSISTED RESCUE FROM THE INTERIOR OF THE BUILDING SHALL HAVE A MINIMUM FIRE-RESISTANCE RATING OF 1 HOUR, RATED FOR EXPOSURE TO FIRE FROM THE INSIDE. THE FIRE-RESISTANCE-RATED EXTERIOR WALL CONSTRUCTION SHALL EXTEND HORIZONTALLY NOT LESS THAN 10 FEET (3048 MM) BEYOND THE LANDING ON EITHER SIDE OF THE LANDING OR EQUIVALENT FIRE-RESISTANCE-RATED CONSTRUCTION IS PERMITTED TO EXTEND OUT PERPENDICULAR TO THE EXTERIOR WALL NOT LESS THAN 4 FEET (1220 MM) ON THE SIDE OF THE LANDING. THE FIRE-RESISTANCE-RATED CONSTRUCTION SHALL EXTEND VERTICALLY FROM THE GROUND TO A POINT NOT LESS THAN 10 FEET (3048 MM) ABOVE THE FLOOR LEVEL OF THE AREA FOR ASSISTED RESCUE OR TO THE ROOF LINE, WHICHEVER IS LOWER. OPENINGS WITHIN SUCH FIRE-RESISTANCE-RATED EXTERIOR WALLS SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 716.

State of Illinois Design Firm Registration No. 184.006269
WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING INTERIORS BUILDING MEASUREMENT
1333 22nd St. #410
Downers Grove, IL 60515
P 630.218.0063

GRANT A. BRANDENBURG 001-020842 REGISTERED ARCHITECT STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

OCCUPANCY AND EGRESS PLAN

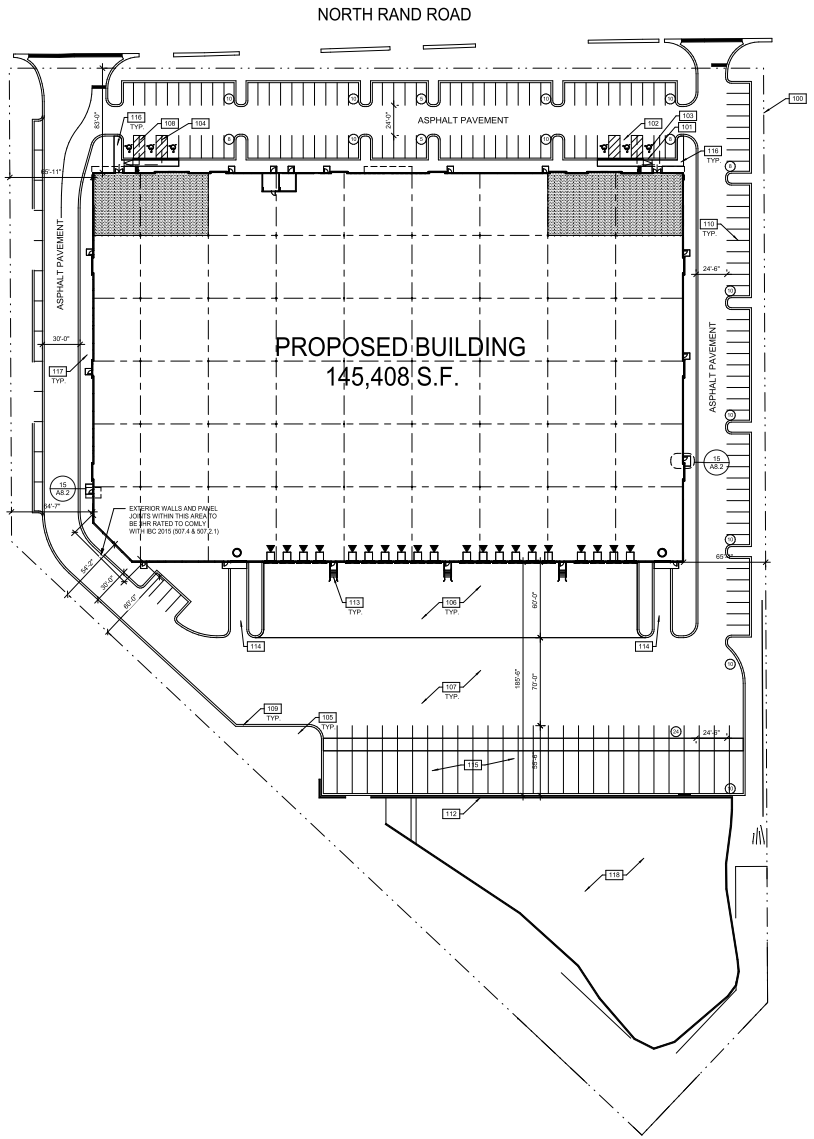
REMARKS	DATE
PROGRESS PACKAGE	2022-04-04
PERMIT SET	2022-04-06

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	C

SHEET NO.: A0

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

4/19/2022 8:53:33 AM 2022-04-06 PERMIT SET



1"=40'
0 20' 40' 80' 200'

SITE PLAN (FOR REFERENCE ONLY)
SCALE: 1" = 40'-0"

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

100. PROPERTY LINE.
101. ACCESSIBLE ENTRY SIGNAGE.
102. ACCESSIBLE PARKING STALL WITH SIGNAGE.
103. VAN ACCESSIBLE PARKING STALL WITH SIGNAGE.
104. ACCESSIBLE PATH OF TRAVEL. 1:20 MAX. SLOPE, 2% MAX. CROSS S
105. LANDSCAPE AND IRRIGATION AREA. REFER TO CIVIL/ LANDSCAPE D
106. CONCRETE PAVEMENT.
107. ASPHALT PAVEMENT.
108. ACCESSIBLE LOADING ZONE.
109. 6" CONCRETE CURB.
110. PAINTED PARKING STRIPING PER CITY STANDARDS.
111. ACCESS RAMP FOR D.I.D. DOOR
112. CONCRETE RETAINING WALL.

LEGEND

- ACCESSIBLE PATH OF TRAVEL, 1:20 MAX. SLOPE, 2% MAX. CROSS SLOPE.
- PROPERTY LINE.
- T — TRANSFORMER WITH CONCRETE PAD. (PROVIDE PROTECTION BOLLARDS PER LOCAL UTILITY OR PUBLIC WORK STANDARDS) (REFER TO ELEC FOR TRANSFORMER LOCATION)
- 1 — PARKING STALL COUNT TOTAL
- DOCK HIGH TRUCK DOOR
- GRADE LEVEL TRUCK DOOR

State of Illinois Design Firm Registration No. 184.006269
WARE MALCOMB
ARCHITECTURE
PLANNING
INTERIORS
CIVIL ENGINEERING
LANDSCAPE
BUILDING MEASUREMENT
1333 22nd St #410
Downers Grove, IL 60515
P 630.218.0063

GRANT A BRANDENBURG 001-020842 STATE OF ILLINOIS REGISTERED ARCHITECT
EXP: 11 - 30 - 2022

THE MIDWEST GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

SITE PLAN (FOR REFERENCE ONLY)

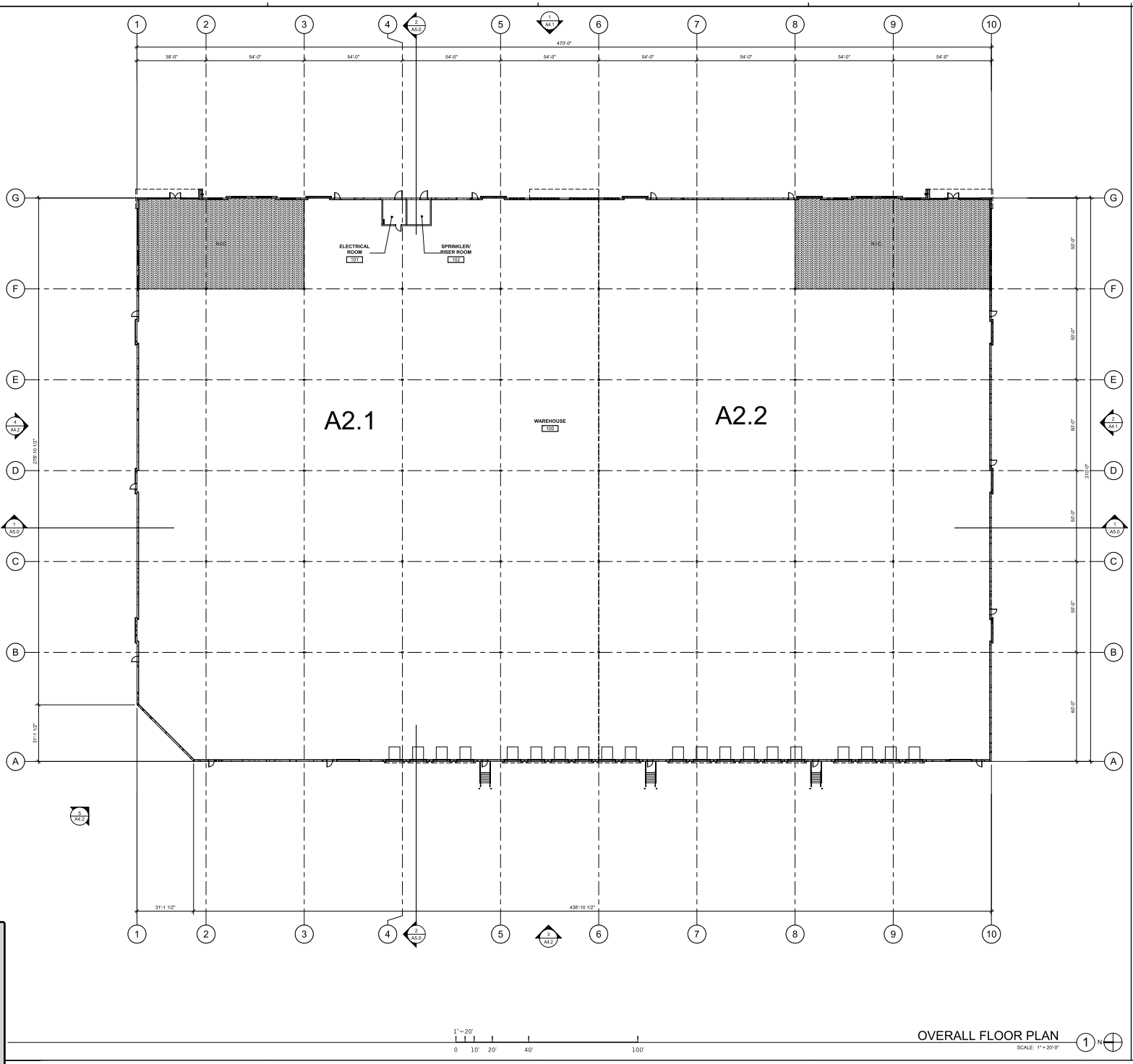
DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-06	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	C

SHEET
A1

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



LEGEND

PROPOSED FUTURE OFFICE AREA (N.I.C.)

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

OVERALL FLOOR PLAN
SCALE: 1" = 20'-0"

1" = 20'
0 10' 20' 40' 100'

State of Illinois Design Firm Registration No. 184.006806
WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING LAND SURVEYING
INTERIORS BUILDING MEASUREMENT
1333 22nd St. #410
Oakbrook, IL 60523
P 630.218.0063

GRANT A. BRANDENBURG
001-020842
STATE OF ILLINOIS
REGISTERED ARCHITECT
EXP: 11 - 30 - 2022

THE MISSNER GROUP LLC

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

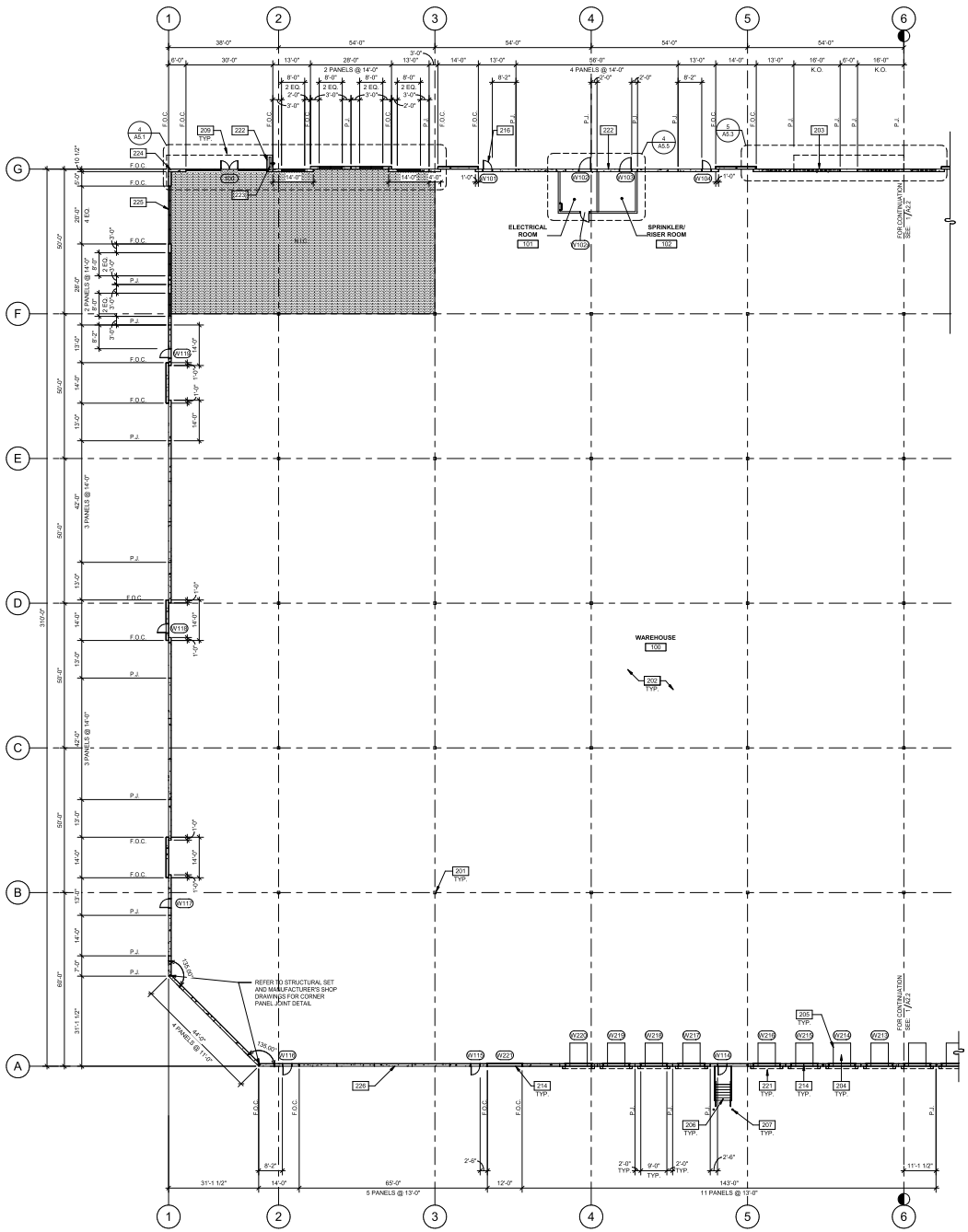
OVERALL FLOOR PLAN

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-06	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	C

SHEET
A2

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)



1/16"=1'-0"
0 8' 16' 32' 64'

PARTIAL FLOOR PLAN
SCALE: 1/16" = 1'-0"

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

201 STRUCTURAL STEEL COLUMN. REFER TO STUCTURAL.
202 CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.
203 KNOCK-OUT PANEL FOR FUTURE WINDOWS OR DOORS.
204 8'X 8' MECHANICAL DOCK LEVELER. 35,000 LBS DYNAMIC CAPACITY, MANUALLY OPERATED (SPRING ASSISTED), REFER TO A0.2 ENVELOPE ASSEMBLY NOTES.
205 DOCK PIT, DOCK SEAL, LEVELER AND DOCK BUMPERS, TYP. U.N.O. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
206 EXTERIOR STEEL STAIR. ALL COMPONENTS GALVANIZED.
207 STEEL BOLLARD, CONCRETE-FILLED PAINTED SAFETY YELLOW.
209 OUTLINE OF CANOPY ABOVE.
214 HIGH LIFT OVERHEAD SECTIONAL DOOR, REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
216 SERVICE/MAN DOORS, COLOR: TO MATCH ADJACENT CONCRETE PANEL COLOR.
221 DOCK SEAL
222 PROVIDE KNOX BOX AT FRONT ENTRANCE AND AT THE FACP ROOM DOOR. LOCATION TO BE VERIFIED WITH A.H.J.
223 ENTRY PORTAL - PRE-FINISH ACM PANEL RAINSCREEN SYSTEM. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
224 WRAP REVEALS AT EXPOSED PANEL ENDS - TYP.
225 ALUMINUM STOREFRONT SYSTEM WITH 1" INSULATED GLASS. REFER TO A0.2, ENVELOPE. ASSEMBLY NOTES FOR GLAZOMG SPECIFICATION.
226 PRECAST CONCRETE WALLS, PAINTED.

LEGEND

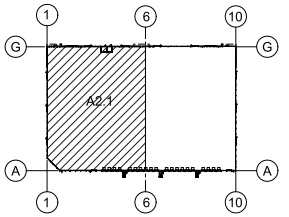
PROPOSED FUTURE OFFICE AREA (N.I.C.)

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

KEY PLAN



NOT TO SCALE

State of Illinois Design Firm Registration No. 184.006269
WARE MALCOMB
1313 22nd St. #410
Downers Grove, IL 60515
P 630.218.0063
ARCHITECTURE CIVIL ENGINEERING
PLANNING INTERIORS BUILDING MEASUREMENT

GRANT A BRANDENBURG 001-020842 STATE OF ILLINOIS REGISTERED ARCHITECT
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

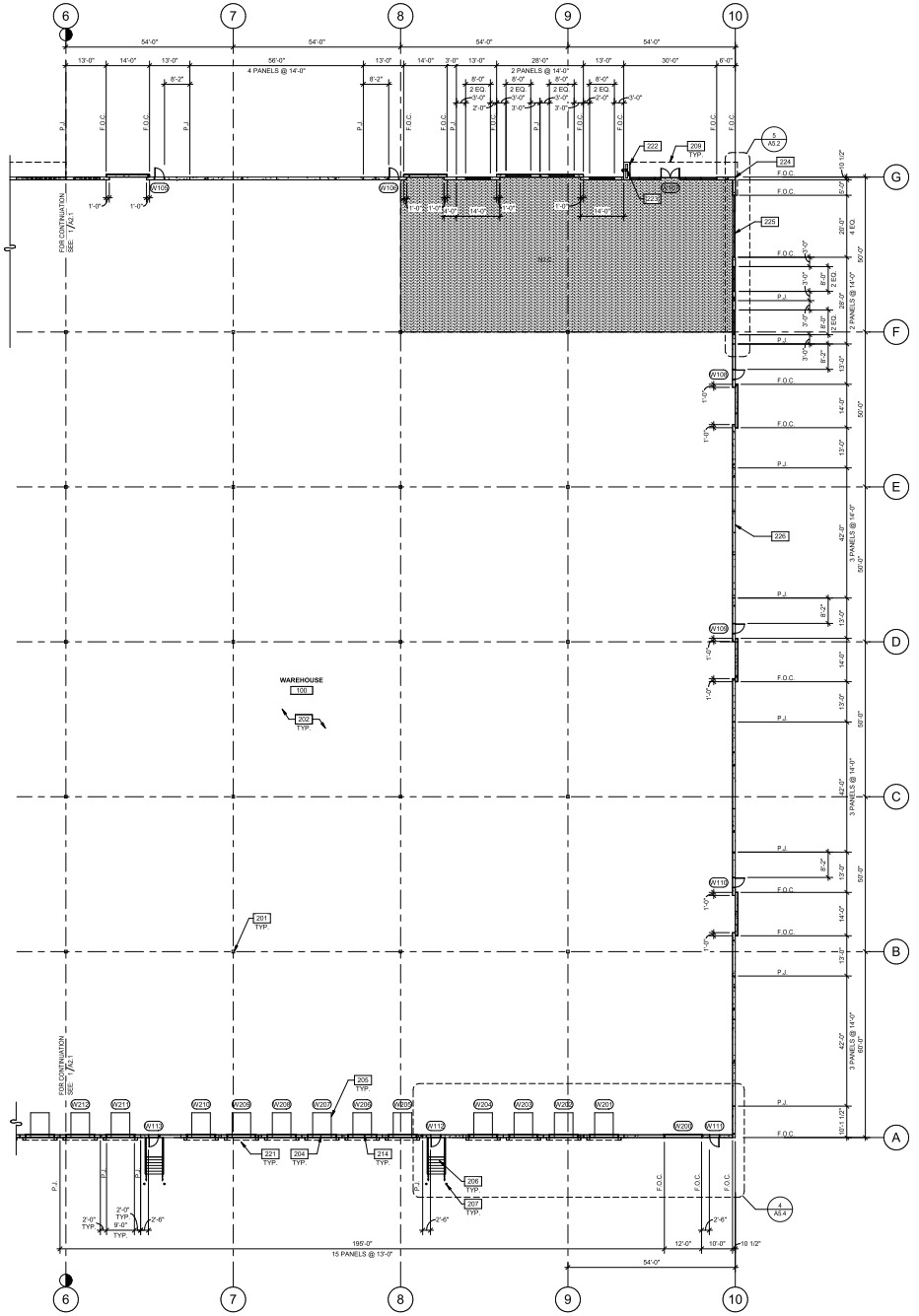
PARTIAL FLOOR PLAN

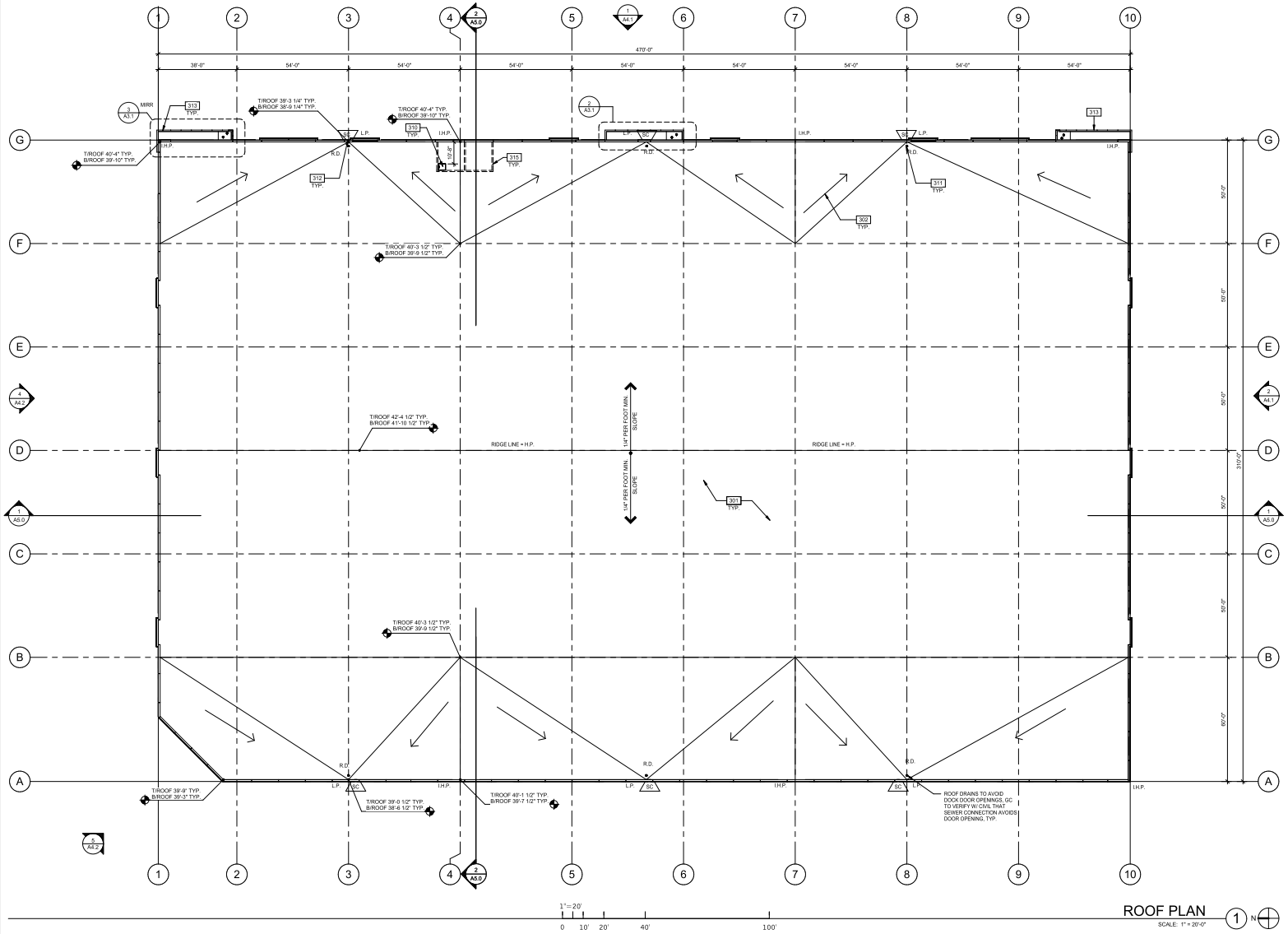
REMARKS	DATE
PERMIT SET	2022-04-06

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	

SHEET NO.: A2.1

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)


WAREHOUSE
100
FOR CONTINUATION SEE 1/A2.1
FOR CONTINUATION SEE 2/A2.1
54'-0"
4 PANELS @ 14'-0"
2 PANELS @ 14'-0"
15 PANELS @ 13'-0"
195'-0"
F.O.C.
P.J.
W105
W106
W107
W108
W109
W110
W111
W112
W113
W114
W115
W116
W117
W118
W119
W120
W121
W122
W123
W124
W125
W126
W127
W128
W129
W130
W131
W132
W133
W134
W135
W136
W137
W138
W139
W140
W141
W142
W143
W144



ROOF PLAN
SCALE: 1" = 20'-0"

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

301	ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
302	FLOW LINE TO DRAIN.
310	2'-8" x 2'-0" ROOF HATCH. VERIFY ROOF JOIST LOCATIONS WITH STRUCTURAL DRAWINGS. HATCH TO BE MINIMUM OF 18" FROM ROOF EDGE.
311	PRIMARY DRAIN TIED TO STORM DRAIN WITH OVERFLOW SCUPPERS
312	PRIMARY AND SECONDARY INTERNAL ROOF DRAIN AND OVERFLOW SCUPPERS TO BE SIZED PER APPLICABLE PLUMBING CODE.
313	PRE-FINISHED METAL CANOPY.
315	LINE OF WALL BELOW.
401	PRECAST CONCRETE WALL. PAINTED.
402	PRE-FINISHED ALUMINUM COMPOSITE METAL PANEL OVER METAL STUD FRAMING REFER A0.2, ENVELOPE ASSEMBLY NOTES. COLOR TO MATCH SW 6236 EVENING GRAY.

ABBREVIATIONS

H.P.	=	TOP OF ROOFING - HIGH POINT
I.H.P.	=	TOP OF ROOFING - INTERMEDIATE HIGH POINT
L.P.	=	TOP OF ROOFING - LOW POINT
R.D.	=	ROOF DRAIN
SC	=	SCUPPER

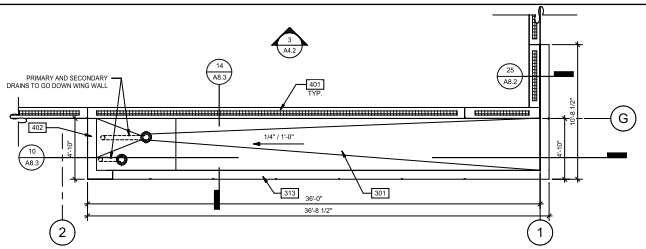
*ALL SPOT ELEVATIONS ARE TO TOP OF ROOF MEMBRANE. REFER TO THE STRUCTURAL PLAN FOR B.O.D. (BOTTOM OF DECK) ELEVATIONS.
ASSUMED ROOF THICKNESS = +-5.0" (1 1/2" METAL DECK + 4" RIGID INSULATION (R-25))

1. REFER TO DETAILS ON SHEET A8.3 FOR TYPICAL ROOF PENETRATION FLASHING DETAILS
2. REFER TO DETAILS ON SHEET A8.3 ROOF, MECHANICAL EQUIPMENT CURB AND CRICKET DETAILS.

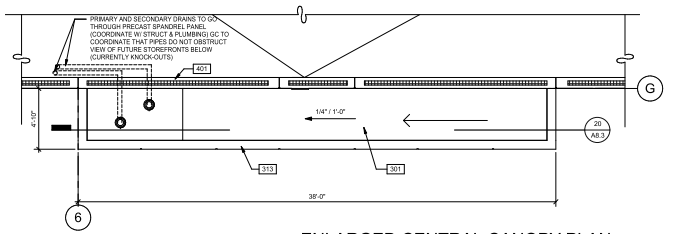
PER PALATINE CODE OF ORDINANCES SEC. 6-42.2 Screening:

ROOF-TOP EQUIPMENT SCREENING TO BE PROVIDED FOR VISIBLE ROOF-TOP EQUIPMENT PENDING SUBMISSION OF MEP EQUIPMENT LOCATION

NEW CONSTRUCTION. ALL MECHANICAL EQUIPMENT AND OTHER SIMILAR DEVICES LOCATED ON ANY ROOF SHALL BE VISUALLY AND ACOUSTICALLY SCREENED ON ALL SIDES. DESIGN AND DETAIL OF SUCH SCREENING ON ALL ELEVATIONS SHALL BE COORDINATED WITH REGARD TO COLOR, TYPES OF MATERIALS, NUMBER OF MATERIALS, ARCHITECTURAL FORM, AND DETAILING TO ACHIEVE HARMONY AND CONTINUITY OF DESIGN WITH THE MAJOR PORTIONS OF THE BUILDING.



ENLARGED CANOPY PLAN, MIR.
SCALE: 1/4" = 1'-0"



ENLARGED CENTRAL CANOPY PLAN
SCALE: 1/4" = 1'-0"

State of Illinois Design Firm Registration No. 184.006269
WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING LANDSCAPE
INTERIORS BUILDING MEASUREMENT
1333 22nd St #410
Downers Grove, IL 60515
P 630.218.0063

GRANT A. BRANDENBURG 001-020842 STATE OF ILLINOIS REGISTERED ARCHITECT
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

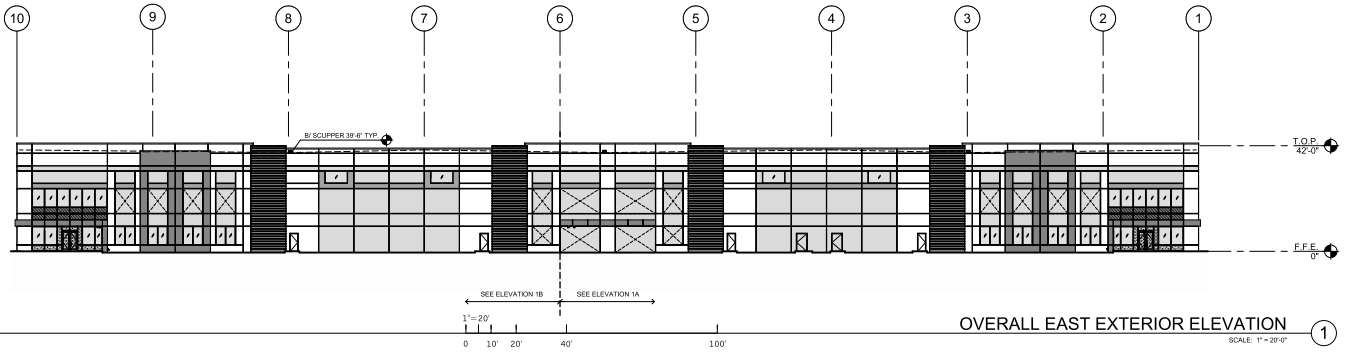
ROOF PLAN

DATE	REMARKS
2022-04-04	PROGRESS PACKAGE
2022-04-06	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	

SHEET NO.: A3

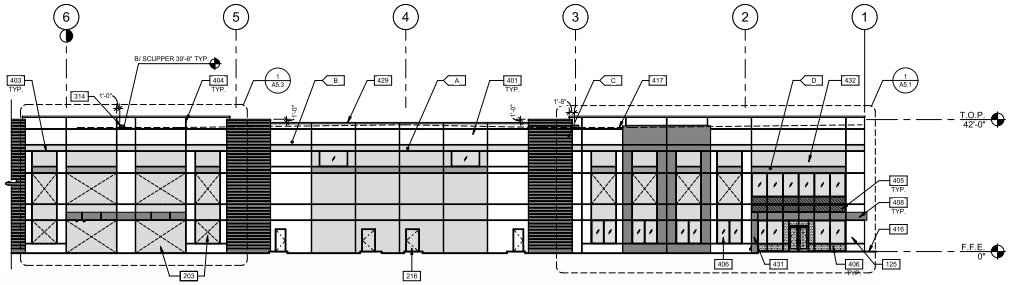
Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)



OVERALL EAST EXTERIOR ELEVATION

SCALE: 1" = 20'-0"

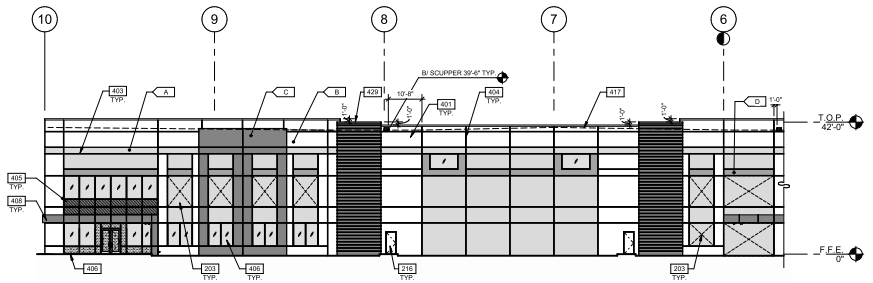
1



PARTIAL EAST EXTERIOR ELEVATION

SCALE: 1/16" = 1'-0"

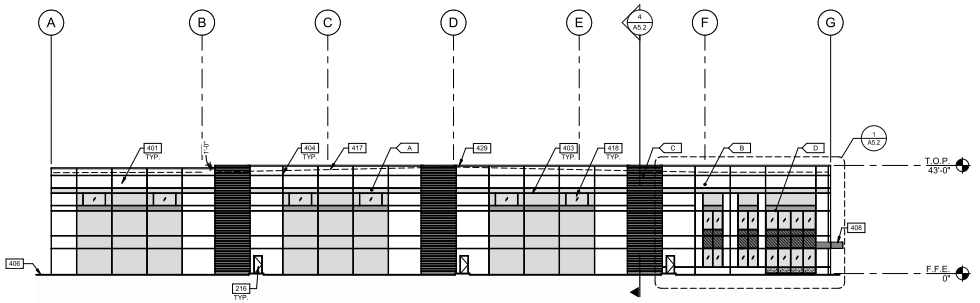
1A



PARTIAL EAST EXTERIOR ELEVATION

SCALE: 1/16" = 1'-0"

1B



SOUTH EXTERIOR ELEVATION

SCALE: 1" = 20'-0"

2

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

125	PROVIDE KNOX BOX AT FRONT ENTRANCE AND AT FACP ROOM DOOR. LOCATION TO BE VERIFIED WITH A.H.J.
203	KNOCK-OUT PANEL FOR FUTURE WINDOWS OR DOORS.
216	SERVICE/MAN DOORS, COLOR: TO MATCH ADJACENT CONCRETE PANEL COLOR.
314	OVERFLOW SCUPPER TO BE SIZED PER APPLICABLE PLUMBING CODE. REFER TO PLUMBING DRAWINGS.
401	PRECAST CONCRETE WALL, PAINTED.
403	2" REVEAL.
404	CONCRETE WALL JOINT.
405	ALUMINUM STOREFRONT SYSTEM - SPANDREL PANEL. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
406	ALUMINUM WINDOW SYSTEM WITH 1" INSULATED GLASS REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
408	METAL CANOPY, PAINTED REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
416	FINISH GRADE VARIES, REFER TO CIVIL.
417	LINE OF ROOF BEYOND.
418	CLERESTORY WINDOW 1" INSULATED GLAZING. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
429	CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.
431	PROVIDE INSULATION IN THE ENTRY PORTAL - PRE-FINISH ACM PANEL RAINSCREEN SYSTEM WALL FRAMING AND AROUND THE CANOPY STORM SEWER DRAIN: VERTICAL/ HORIZONTAL LEADER.
432	CONCRETE SPANDREL PANEL.

LEGEND

GLASS:

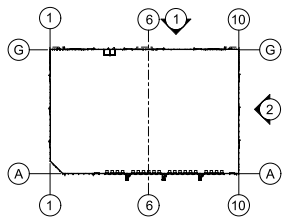
- VISION GLASS
- SPANDREL GLASS
- TEMPERED GLASS

COLORS:

PROVIDE 6'-0" WIDE PAINT COLOR MOCK-UP FULL HEIGHT OF BUILDING FOR OWNER/ARCHITECT REVIEW. GC TO PROVIDE ARCHITECT DRAW DOWNS OF EACH PAINT COLOR.

- A — BASE COLOR: SHERWIN-WILLIAMS "SW 7662 - EVENING SHADOW"
- B — SHERWIN-WILLIAMS "7656 - PHINESTONE"
- C — SHERWIN-WILLIAMS " 6256 - EVENING GRAY"
- D — SHERWIN-WILLIAMS "6794 - FLYWAY"

KEY PLAN



State of Illinois Design Firm Registration No. 184.006269
WARE MALCOMB
ARCHITECTURE
PLANNING
INTERIORS
CIVIL ENGINEERING
LANDSCAPE
BUILDING MEASUREMENT
1333 22nd St. #410
Downers Grove, IL 60515
P 630.218.0063

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

EXTERIOR ELEVATIONS

REMARKS	DATE
PERMIT SET	2022-04-06

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	

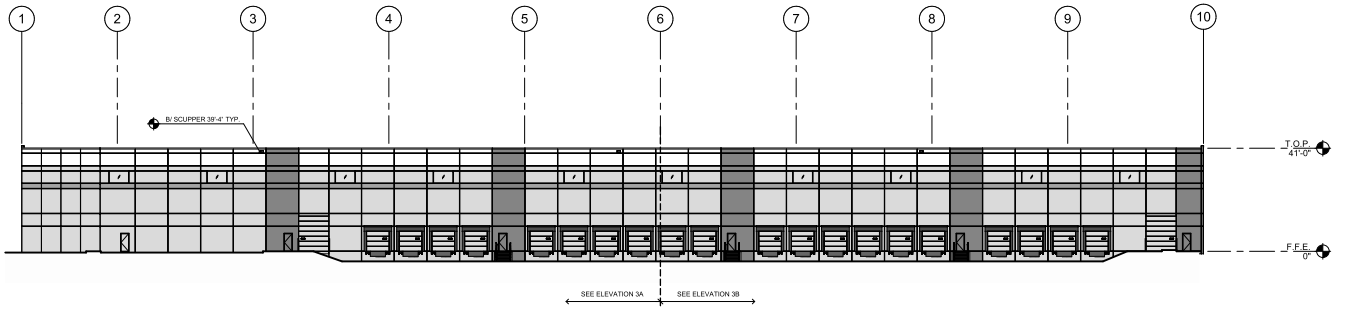
SHEET NO.

A4

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

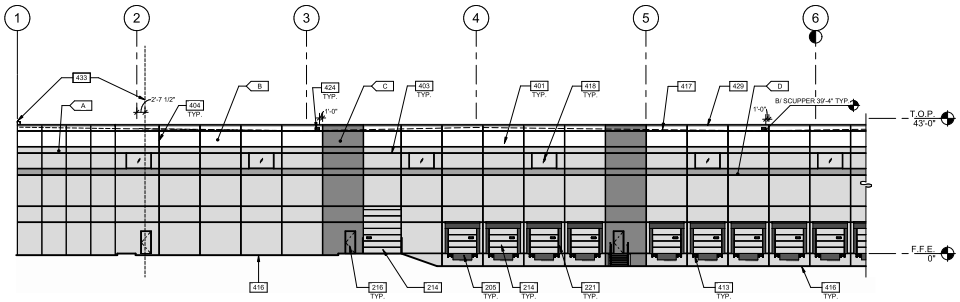
4/19/2022 8:53:51 AM 2022-04-06 PERMIT SET

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



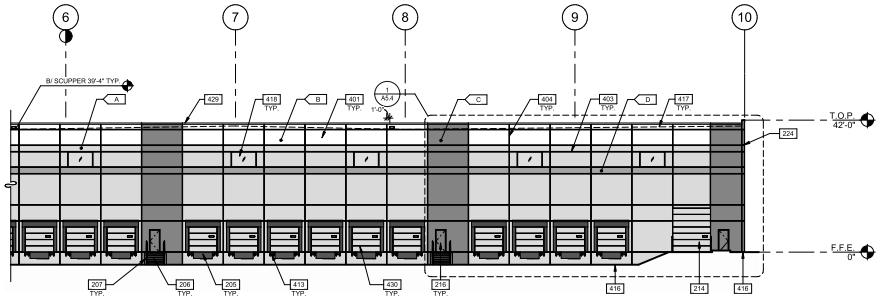
1" = 20'
0 10' 20' 40' 100'

OVERALL WEST EXTERIOR ELEVATION 3
SCALE: 1" = 20'-0"

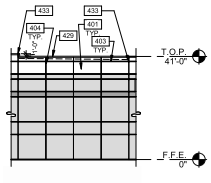


1/16"=1'-0"
0 8' 16' 32' 64'

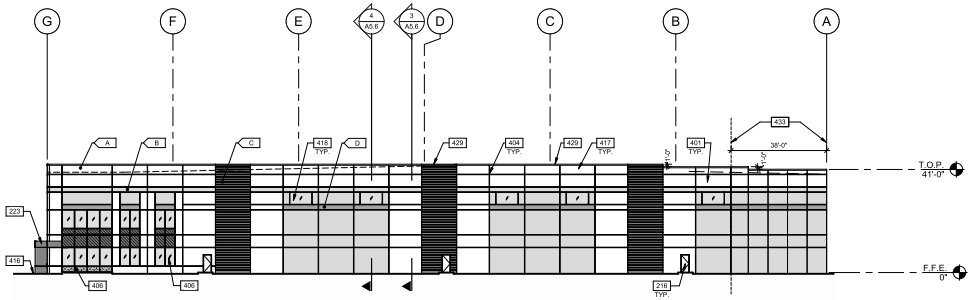
PARTIAL WEST EXTERIOR ELEVATION 3A
SCALE: 1/16" = 1'-0"



PARTIAL WEST EXTERIOR ELEVATION 3B
SCALE: 1/16" = 1'-0"



SOUTHWEST EXTERIOR ELEVATION 5
SCALE: 1" = 20'-0"



NORTH EXTERIOR ELEVATION 4
SCALE: 1" = 20'-0"

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

205	DOCK PIT, DOCK SEAL, LEVELER AND DOCK BUMPERS, TYP. U.N.O. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
206	EXTERIOR STEEL STAIR, ALL COMPONENTS GALVANIZED.
207	STEEL BOLLARD, CONCRETE-FILLED PAINTED SAFETY YELLOW.
214	HIGH LIFT OVERHEAD SECTIONAL DOOR, REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
216	SERVICE/MAN DOORS, COLOR: TO MATCH ADJACENT CONCRETE PANEL COLOR.
221	DOCK SEAL
223	ENTRY PORTAL - PRE-FINISH ACM PANEL RAINSCREEN SYSTEM. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
224	WRAP REVEALS AT EXPOSED PANEL ENDS - TYP.
401	PRECAST CONCRETE WALL, PAINTED.
403	2" REVEAL.
404	CONCRETE WALL JOINT.
406	ALUMINUM WINDOW SYSTEM WITH 1" INSULATED GLASS REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
413	DOCK BUMPER.
416	FINISH GRADE VARIES, REFER TO CIVIL.
417	LINE OF ROOF BEYOND.
418	CLERESTORY WINDOW 1" INSULATED GLAZING. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
424	OVERFLOW SCUPPER OPENING TO BE SIZED PER APPLICABLE PLUMBING CODE.REFER TO PUMBING DRAWINGS.
429	CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.
430	OVERHEAD DOOR
433	EXTERIOR WALLS AND PANEL JOINTS WITHIN THIS AREA TO BE 3HR RATED TO COMPLY WITH IBC 2015 (507.4 & 507.2.1)

LEGEND

GLASS:

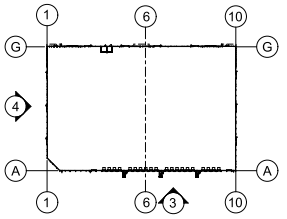
- VISION GLASS
- SPANDREL GLASS
- TEMPERED GLASS

COLORS:

PROVIDE 6'-0" WIDE PAINT COLOR MOCK-UP FULL HEIGHT OF BUILDING FOR OWNER/ARCHITECT REVIEW. GC TO PROVIDE ARCHITECT DRAW DOWNS OF EACH PAINT COLOR.

- A — BASE COLOR: SHERWIN-WILLIAMS "SW 7662 - EVENING SHADOW"
- B — SHERWIN-WILLIAMS "7656 - PHINESTONE"
- C — SHERWIN-WILLIAMS " 6256 - EVENING GRAY"
- D — SHERWIN-WILLIAMS "6794 - FLYWAY"

KEY PLAN



State of Illinois Design Firm Registration No. 184.006269
WARE MALCOMB
1313 22nd St. #410
Downers Grove, IL 60515
P 630.218.0063
ARCHITECTURE
PLANNING
INTERIORS
CIVIL ENGINEERING
LANDSCAPE
BUILDING MEASUREMENT

GRANT A. BRANDENBURG 001-020842 STATE OF ILLINOIS REGISTERED ARCHITECT
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

EXTERIOR ELEVATIONS

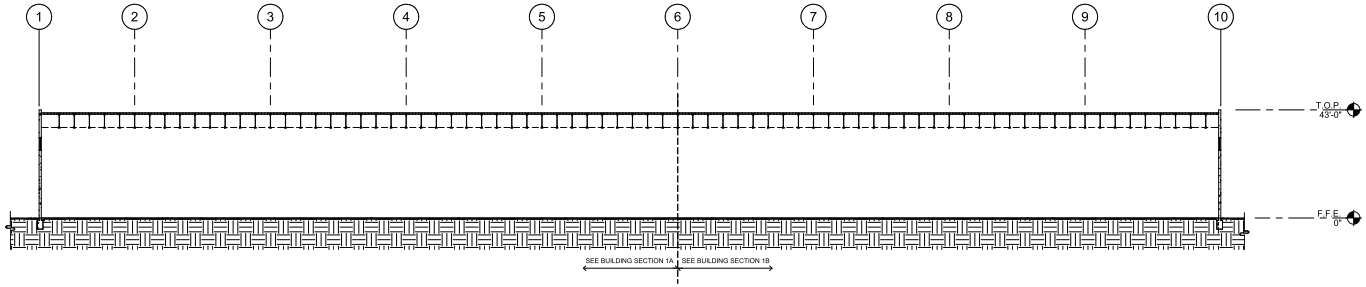
DATE	REMARKS
2022.04.06	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	

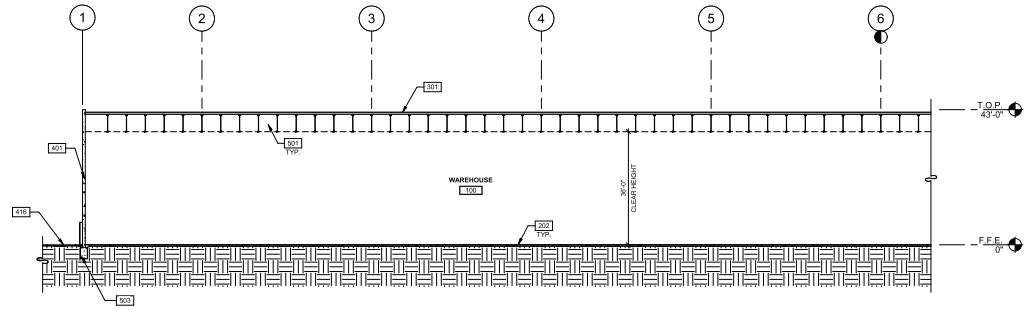
SHEET NO.
A4

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

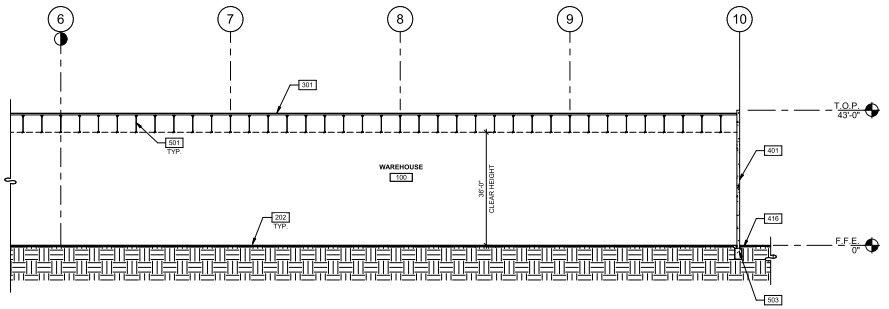
CAUTION: IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PR 3.2.c



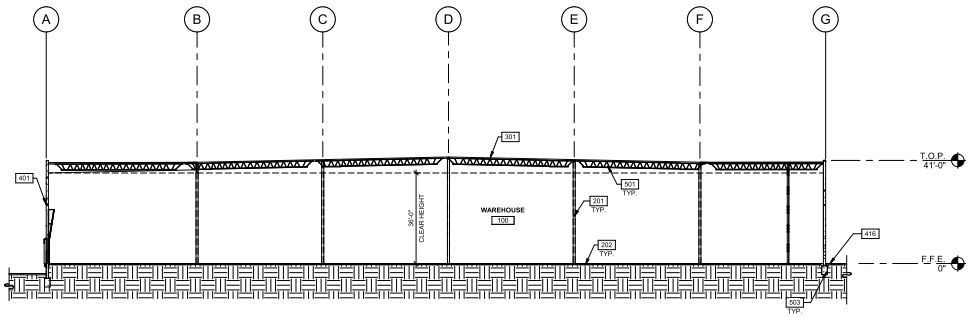
OVERALL BUILDING SECTION 1
SCALE: 1" = 20'-0"



PARTIAL BUILDING SECTION 1A
SCALE: 1/16" = 1'-0"



PARTIAL BUILDING SECTION 1B
SCALE: 1/16" = 1'-0"



BUILDING SECTION 2
SCALE: 1" = 20'-0"

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

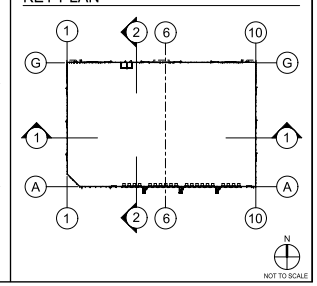
201	STRUCTURAL STEEL COLUMN. REFER TO STUCTURAL.
202	CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.
301	ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
401	PRECAST CONCRETE WALL, PAINTED.
416	FINISH GRADE VARIES, REFER TO CIVIL.
501	STRUCTURAL STEEL JOIST, REFER TO STRUCTURAL.
503	CONCRETE FOOTING, REFER TO STRUCTURAL.

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

KEY PLAN



State of Illinois Design Firm Registration No. 184-004089

WARE MALCOMB

1315 22nd St #410
Oak Brook, IL 60523
P 630.218.0063

ARCHITECTURE
PLANNING
INTERIORS
CIVIL ENGINEERING
BRANDING
BUILDING MEASUREMENT

LICENSED ARCHITECT
GRANT A BRANDENBURG
001-020842
STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

BUILDING SECTIONS

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	C

SHE
A5

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

4/19/2022 8:51:00 AM 2022-04-08_ PERMIT SET

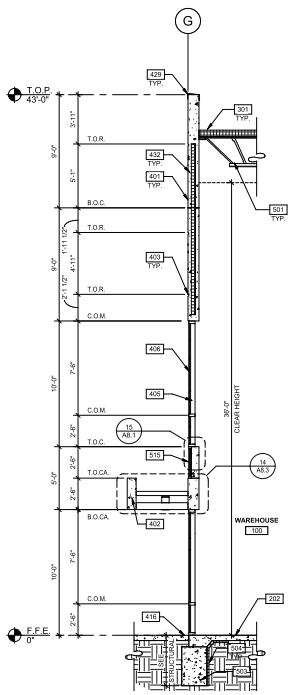
Pg. 88

7.C.1.A.p

Packet Pg. 363

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

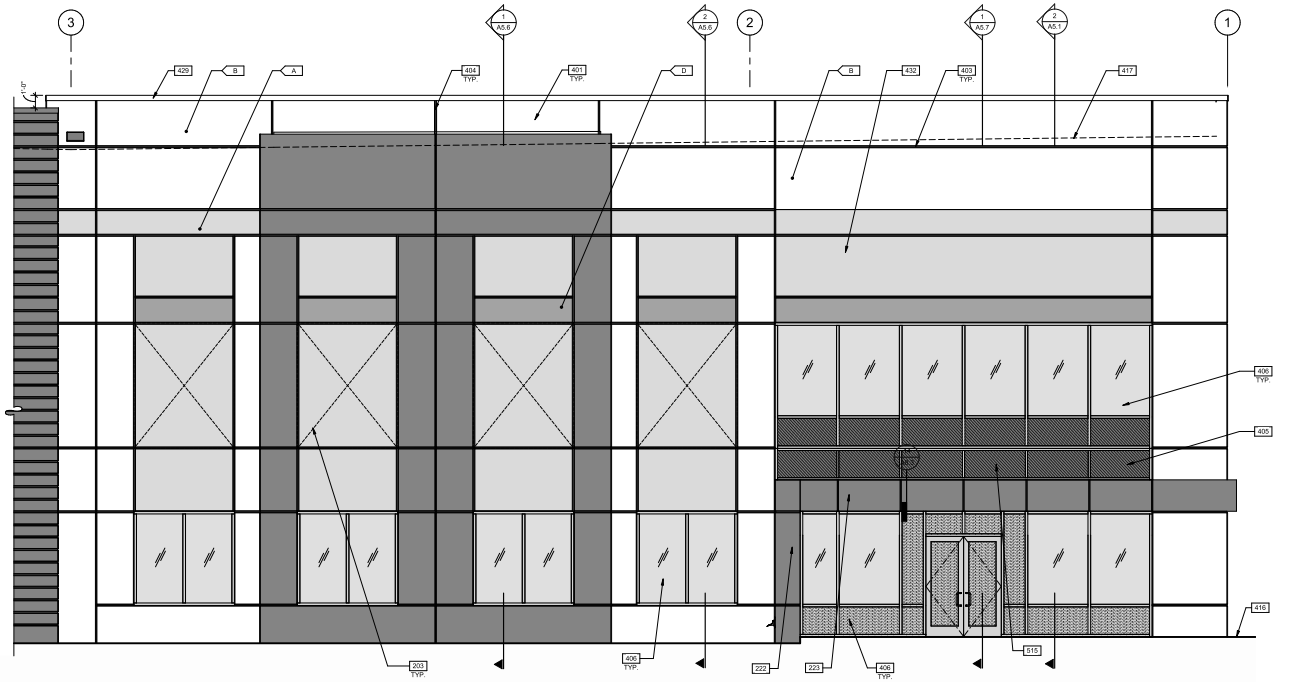
CAUTION: IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PR



WALL SECTION

SCALE: 1/4" = 1'-0"

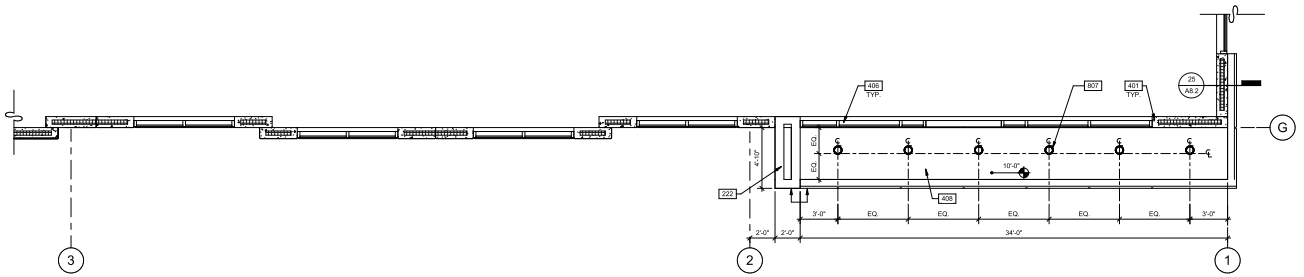
2



ENLARGED EXTERIOR ELEVATION

SCALE: 1/4" = 1'-0"

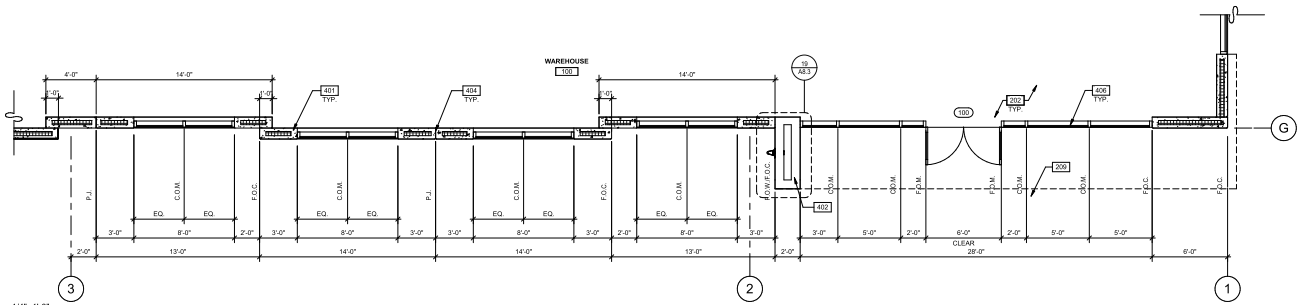
1



ENLARGED ENTRY SOFFIT PLAN

SCALE: 1/4" = 1'-0"

3



ENLARGED FLOOR PLAN

SCALE: 1/4" = 1'-0"

4

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

202	CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.
203	KNOCK-OUT PANEL FOR FUTURE WINDOWS OR DOORS.
209	OUTLINE OF CANOPY ABOVE.
222	PROVIDE KNOX BOX AT FRONT ENTRANCE AND AT THE FACP ROOM DOOR. LOCATION TO BE VERIFIED WITH A.H.J.
223	ENTRY PORTAL - PRE-FINISH ACM PANEL RAINSCREEN SYSTEM. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
301	ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
401	PRECAST CONCRETE WALL, PAINTED.
402	PRE-FINISHED ALUMINUM COMPOSITE METAL PANEL OVER METAL STUD FRAMING REFER A0.2, ENVELOPE ASSEMBLY NOTES. COLOR TO MATCH SW 6256 EVENING GRAY.
403	2" REVEAL.
404	CONCRETE WALL JOINT.
405	ALUMINUM STOREFRONT SYSTEM - SPANDREL PANEL. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
406	ALUMINUM WINDOW SYSTEM WITH 1" INSULATED GLASS REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
408	METAL CANOPY, PAINTED REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
416	FINISH GRADE VARIES, REFER TO CIVIL.
417	LINE OF ROOF BEYOND.
429	CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.
432	CONCRETE SPANDREL PANEL.
501	STRUCTURAL STEEL JOIST, REFER TO STRUCTURAL.
503	CONCRETE FOOTING, REFER TO STRUCTURAL.
504	PROVIDE RIGID INSULATION AT FOOTINGS AND WALL PANELS BELOW SLAB.
515	2 1/2" WIDE STOREFRONT SYSTEM INSTALLED IN FRONT OF THE CONCERETE SPANDREL PANEL.
807	CAN LIGHTS

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

LEGEND

GLASS:

VISION GLASS

SPANDREL GLASS

TEMPERED GLASS

CEILING:

RECESSED 6" OR 8" LED DOWNLIGHT.

COLORS:

PROVIDE 6'-0" WIDE PAINT COLOR MOCK-UP FULL HEIGHT OF BUILDING FOR OWNER/ARCHITECT REVIEW. GC TO PROVIDE ARCHITECT DRAW DOWNS OF EACH PAINT COLOR.

A		BASE COLOR: SHERWIN-WILLIAMS "SW 7662 - EVENING SHADOW"
B		SHERWIN-WILLIAMS "7656 - PHINESTONE"
C		SHERWIN-WILLIAMS " 6256 - EVENING GRAY"
D		SHERWIN-WILLIAMS "6794 - FLYWAY"

State of Illinois Design Firm Registration No. 184.006269
WARE MALCOMB
ARCHITECTURE PLANNING INTERIORS
CIVIL ENGINEERING LANDSCAPE ARCHITECTURE BUILDING MEASUREMENT
1333 22nd St. #410
Downers Grove, IL 60515
P 630.218.0063

GRANT A BRANDENBURG 001-020842 LICENSED ARCHITECT STATE OF ILLINOIS

EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

ENLARGED ELEVATION, PLAN AND WALL SECTIONS

REVISIONS	DATE
PROGRESS PACKAGE	2022-04-04
PERMIT SET	2022-04-06

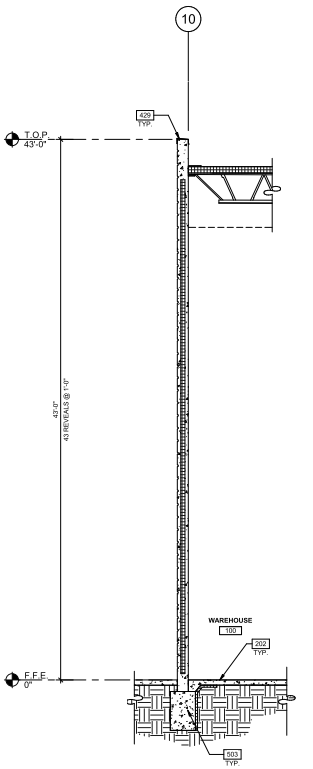
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	

SHEET

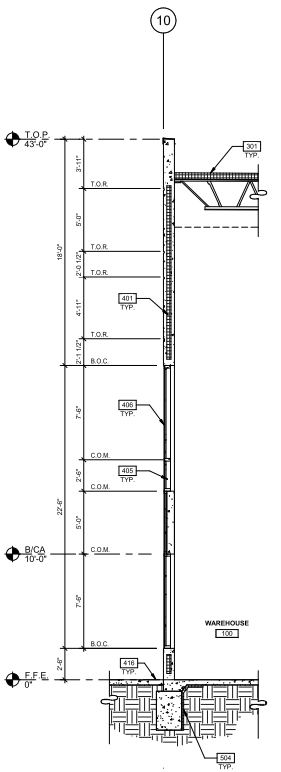
A5

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

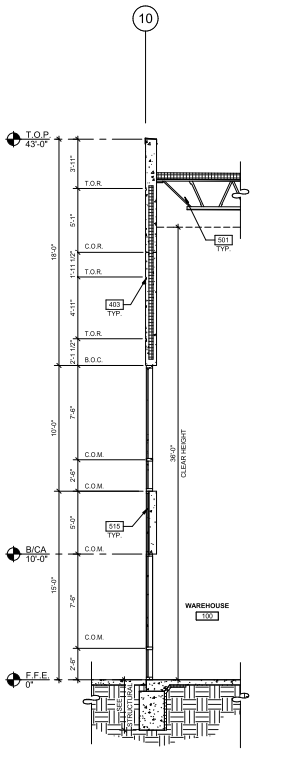
CAUTION: IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PRINT



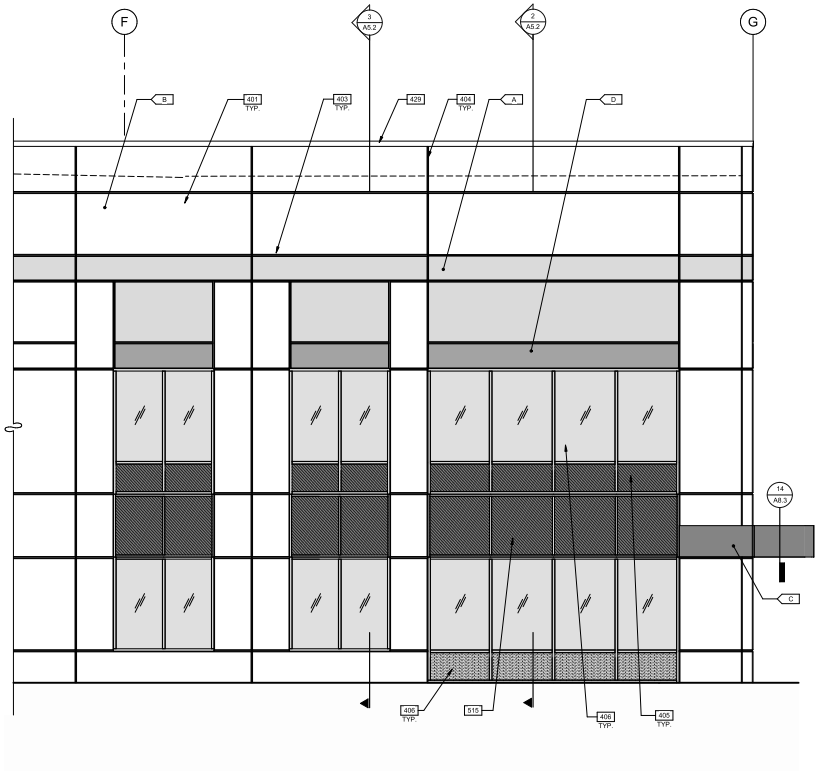
WALL SECTION 4
SCALE: 1/4" = 1'-0"



WALL SECTION 3
SCALE: 1/4" = 1'-0"



WALL SECTION 2
SCALE: 1/4" = 1'-0"



ENLARGED EXTERIOR ELEVATION 1
SCALE: 1/4" = 1'-0"

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

202	CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.
301	ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
401	PRECAST CONCRETE WALL, PAINTED.
403	2" REVEAL.
404	CONCRETE WALL JOINT.
405	ALUMINUM STOREFRONT SYSTEM - SPANDREL PANEL. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
406	ALUMINUM WINDOW SYSTEM WITH 1" INSULATED GLASS REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
416	FINISH GRADE VARIES, REFER TO CIVIL.
429	CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.
501	STRUCTURAL STEEL JOIST, REFER TO STRUCTURAL.
503	CONCRETE FOOTING, REFER TO STRUCTURAL.
504	PROVIDE RIGID INSULATION AT FOOTINGS AND WALL PANELS BELOW SLAB.
515	2 1/2" WIDE STOREFRONT SYSTEM INSTALLED IN FRONT OF THE CONCRETE SPANDREL PANEL.

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

LEGEND

GLASS:

VISION GLASS

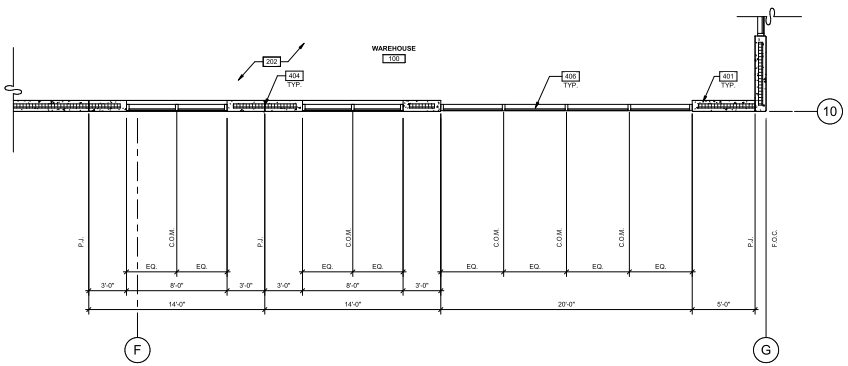
SPANDREL GLASS

TEMPERED GLASS

COLORS:

PROVIDE 6'-0" WIDE PAINT COLOR MOCK-UP FULL HEIGHT OF BUILDING FOR OWNER/ARCHITECT REVIEW. GC TO PROVIDE ARCHITECT DRAW DOWNS OF EACH PAINT COLOR.

A	BASE COLOR: SHERWIN-WILLIAMS "SW 7662 - EVENING SHADOW"
B	SHERWIN-WILLIAMS "7666 - PHINESTONE"
C	SHERWIN-WILLIAMS " 6256 - EVENING GRAY"
D	SHERWIN-WILLIAMS "6794 - FLYWAY"



1/4"=1'-0"
0 2' 4' 8' 16'

ENLARGED FLOOR PLAN 5
SCALE: 1/4" = 1'-0"

State of Illinois Design Firm Registration No. 184.006269
WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING ELECTRICAL
INTERIORS BUILDING MEASUREMENT
1333 22nd St. #410
Oakbrook, IL 60523
P 630.218.0063

GRANT A. BRANDENBURG
001-020842
STATE OF ILLINOIS
REGISTERED ARCHITECT
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

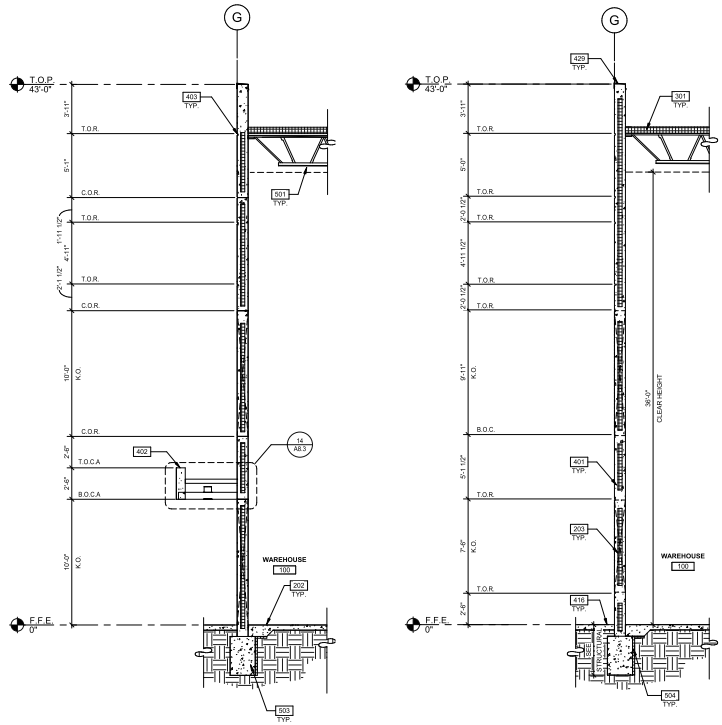
ENLARGED ELEVATION, PLAN AND WALL SECTIONS

REVISIONS	DATE
PERMIT SET	2022-04-06

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	

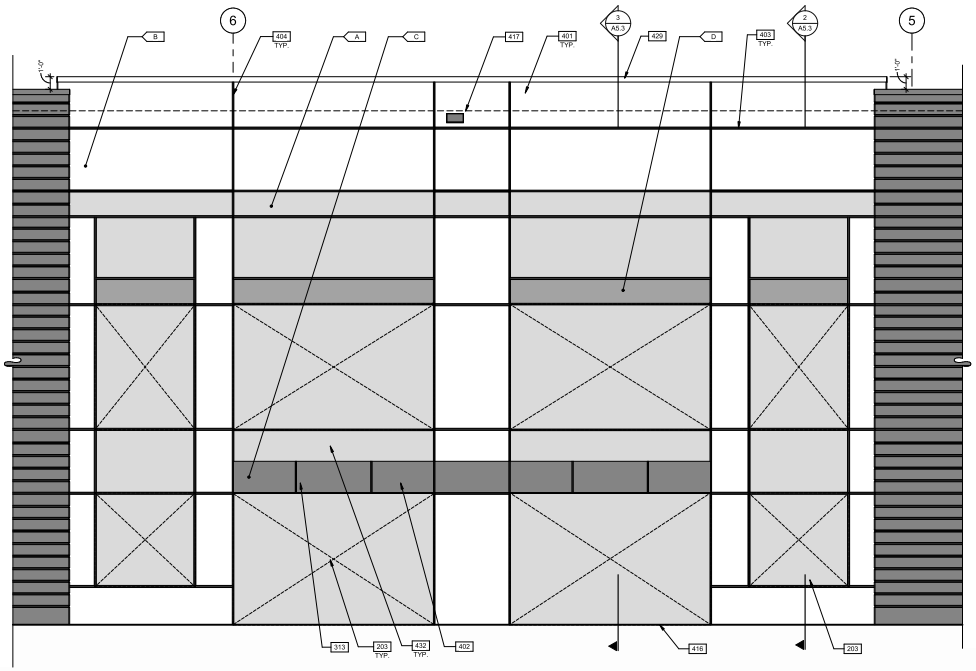
SHEET A5

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)
4/19/2022 8:53:08 AM 2022-04-06 PERMIT SET
Packet Pg. 365
7.C.1.a.d
Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

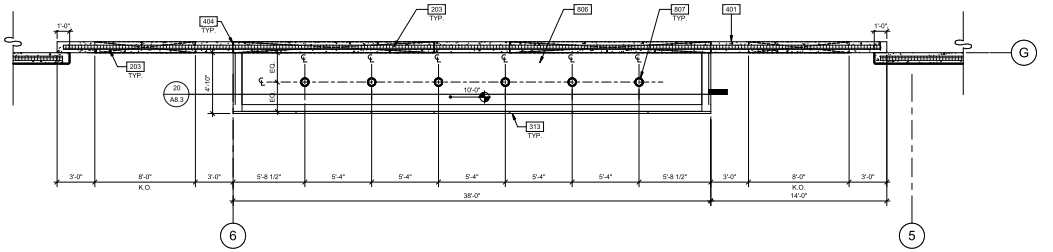


WALL SECTION 3
SCALE: 1/4" = 1'-0"

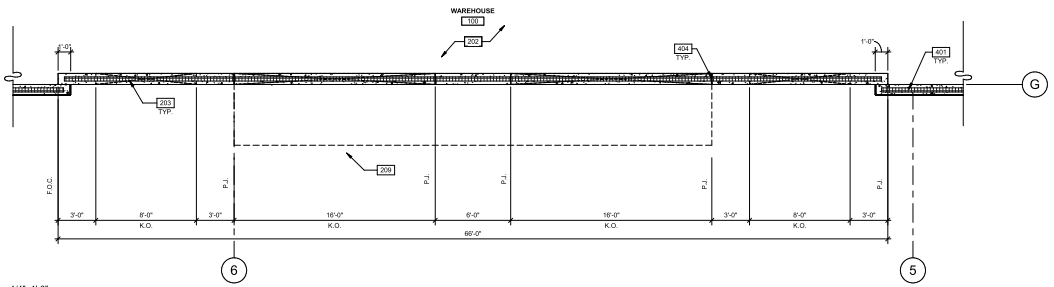
WALL SECTION 2
SCALE: 1/4" = 1'-0"



ENLARGED EXTERIOR ELEVATION 1
SCALE: 1/4" = 1'-0"



ENLARGED ENTRY SOFFIT PLAN 4
SCALE: 1/4" = 1'-0"



ENLARGED FLOOR PLAN 5
SCALE: 1/4" = 1'-0"

1/4"=1'-0"
0 2' 4' 8' 16'

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

202 CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.
203 KNOCK-OUT PANEL FOR FUTURE WINDOWS OR DOORS.
209 OUTLINE OF CANOPY ABOVE.
301 ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
313 PRE-FINISHED METAL CANOPY.
401 PRECAST CONCRETE WALL, PAINTED.
402 PRE-FINISHED ALUMINUM COMPOSITE METAL PANEL OVER METAL STUD FRAMING REFER A0.2, ENVELOPE ASSEMBLY NOTES. COLOR TO MATCH SW 6256 EVENING GRAY.
403 2" REVEAL.
404 CONCRETE WALL JOINT.
416 FINISH GRADE VARIES, REFER TO CIVIL.
417 LINE OF ROOF BEYOND.
429 CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.
432 CONCRETE SPANDREL PANEL.
501 STRUCTURAL STEEL JOIST, REFER TO STRUCTURAL.
503 CONCRETE FOOTING, REFER TO STRUCTURAL.
504 PROVIDE RIGID INSULATION AT FOOTINGS AND WALL PANELS BELOW SLAB.
806 CEILING
807 FAN LIGHTING

LEGEND

COLORS:

PROVIDE 6'-0" WIDE PAINT COLOR MOCK-UP FULL HEIGHT OF BUILDING FOR OWNER/ARCHITECT REVIEW. GC TO PROVIDE ARCHITECT DRAW DOWNS OF EACH PAINT COLOR.

A BASE COLOR: SHERWIN-WILLIAMS "SW 7662 - EVENING SHADOW"
B SHERWIN-WILLIAMS "7656 - PHINESTONE"
C SHERWIN-WILLIAMS " 6256 - EVENING GRAY"
D SHERWIN-WILLIAMS "6794 - FLYWAY"

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

LEGEND

GLASS:

VISION GLASS
SPANDREL GLASS
TEMPERED GLASS

CEILING:

RECESSED 6" OR 8" LED DOWNLIGHT.

State of Illinois Design Firm Registration No. 184.006269
WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING MEP/FP
INTERIORS BUILDING MEASUREMENT
3333 22nd St. #410
Dallas, TX 75201
P 630.218.0063

GRANT A. BRANDENBURG 001-020842 STATE OF ILLINOIS REGISTERED ARCHITECT
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

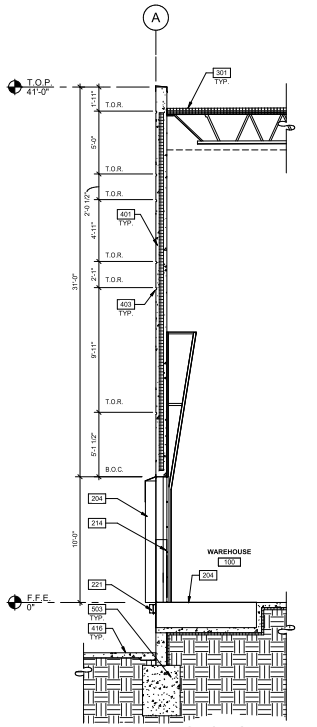
ENLARGED ELEVATION, PLAN AND WALL SECTIONS

REVISIONS	DATE
PROGRESS PACKAGE	2022-04
PERMIT SET	2022-04-06

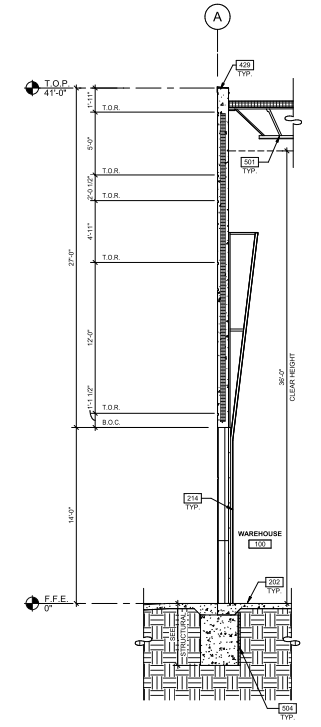
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	

SHEET A5

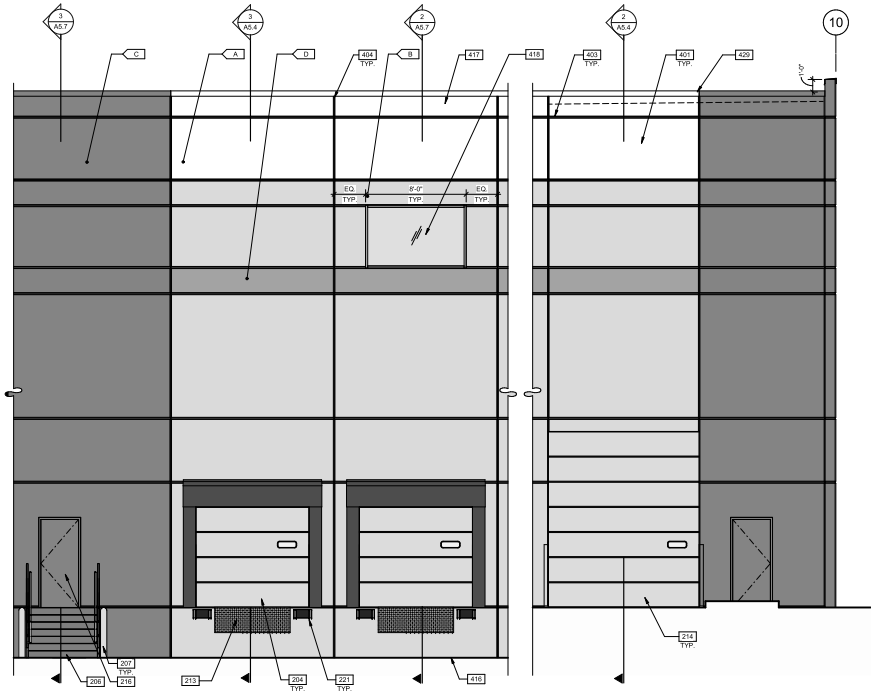
Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)



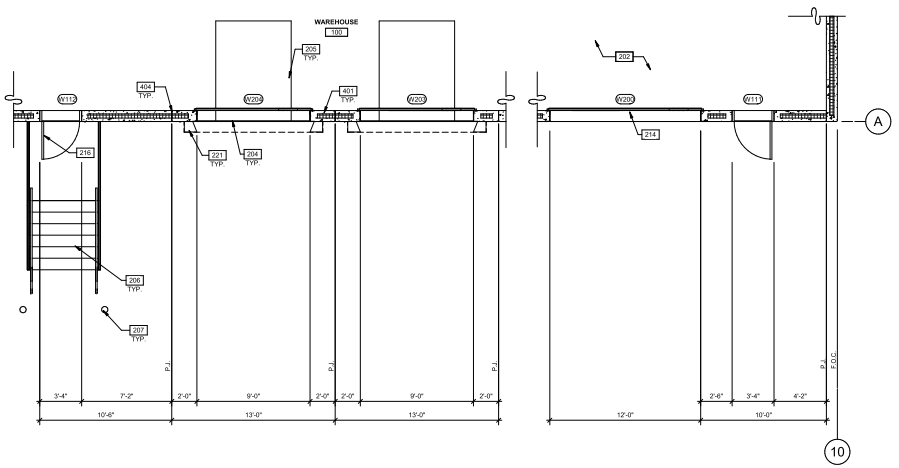
WALL SECTION 3
SCALE: 1/4" = 1'-0"



WALL SECTION 2
SCALE: 1/4" = 1'-0"



ENLARGED EXTERIOR ELEVATION 1
SCALE: 1/4" = 1'-0"



ENLARGED FLOOR PLAN 4
SCALE: 1/4" = 1'-0"

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

202	CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.
204	6'X 8' MECHANICAL DOCK LEVELER. 35,000 LBS DYNAMIC CAPACITY, MANUALLY OPERATED (SPRING ASSISTED), REFER TO A0.2 ENVELOPE ASSEMBLY NOTES.
205	DOCK PIT, DOCK SEAL, LEVELER AND DOCK BUMPERS, TYP. U.N.O. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
206	EXTERIOR STEEL STAIR, ALL COMPONENTS GALVANIZED.
207	STEEL BOLLARD, CONCRETE-FILLED PAINTED SAFETY YELLOW.
213	42"H. CONTINUOUS METAL GUARDRAIL, PAINTED.
214	HIGH LIFT OVERHEAD SECTIONAL DOOR, REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
216	SERVICE/MAN DOORS, COLOR: TO MATCH ADJACENT CONCRETE PANEL COLOR.
221	DOCK SEAL.
301	ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
401	PRECAST CONCRETE WALL, PAINTED.
403	2" REVEAL.
404	CONCRETE WALL JOINT.
416	FINISH GRADE VARIES. REFER TO CIVIL.
417	LINE OF ROOF BEYOND.
418	CLERESTORY WINDOW 1" INSULATED GLAZING. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
429	CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.
501	STRUCTURAL STEEL JOIST, REFER TO STRUCTURAL.
503	CONCRETE FOOTING, REFER TO STRUCTURAL.
504	PROVIDE RIGID INSULATION AT FOOTINGS AND WALL PANELS BELOW SLAB.

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

LEGEND

GLASS:

VISION GLASS

COLORS:

PROVIDE 6'-0" WIDE PAINT COLOR MOCK-UP FULL HEIGHT OF BUILDING FOR OWNER/ARCHITECT REVIEW. GC TO PROVIDE ARCHITECT DRAW DOWNS OF EACH PAINT COLOR.

- A — BASE COLOR: SHERWIN-WILLIAMS "SW 7662 - EVENING SHADOW"
- B — SHERWIN-WILLIAMS "7656 - PHINESTONE"
- C — SHERWIN-WILLIAMS " 6256 - EVENING GRAY"
- D — SHERWIN-WILLIAMS "6794 - FLYWAY"

State of Illinois Design Firm Registration No. 184.006269
WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING BUILDING MEASUREMENT
INTERIORS
3333 22nd St. #410
Downers Grove, IL 60515
P 630.218.0063

GRANT A. BRANDENBURG 001-020842 STATE OF ILLINOIS REGISTERED ARCHITECT
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

ENLARGED ELEVATION, PLAN AND WALL SECTIONS

REVISIONS	DATE
PROGRESS PACKAGE	2022-03-04
PERMIT SET	2022-04-06

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	

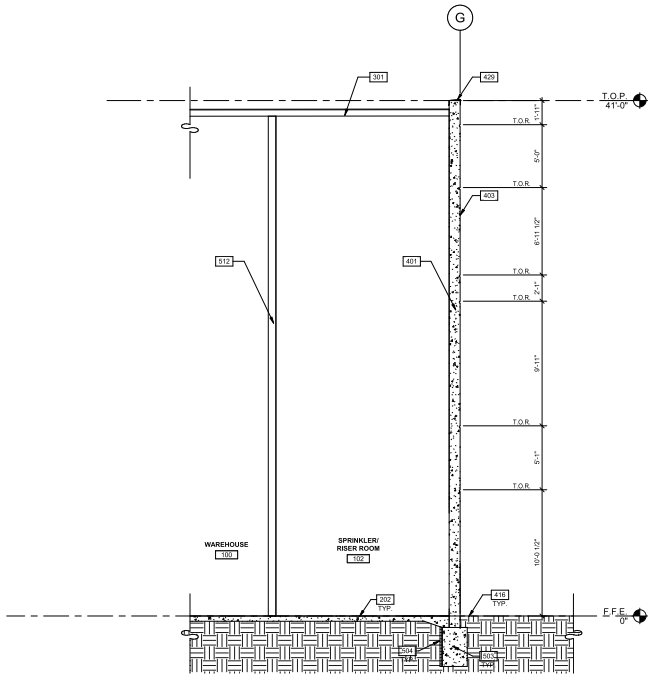
SHEET A5

4/19/2022 8:51:10 AM 2022-04-06_PERMIT SET

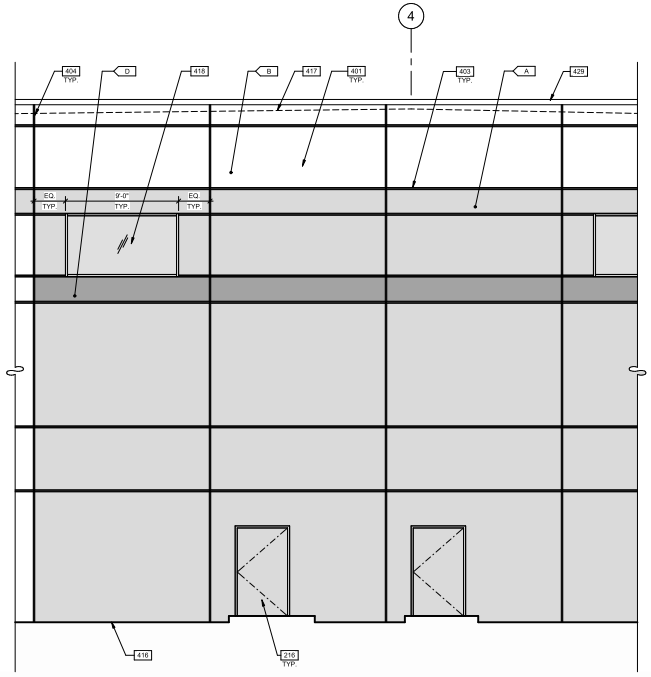
Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

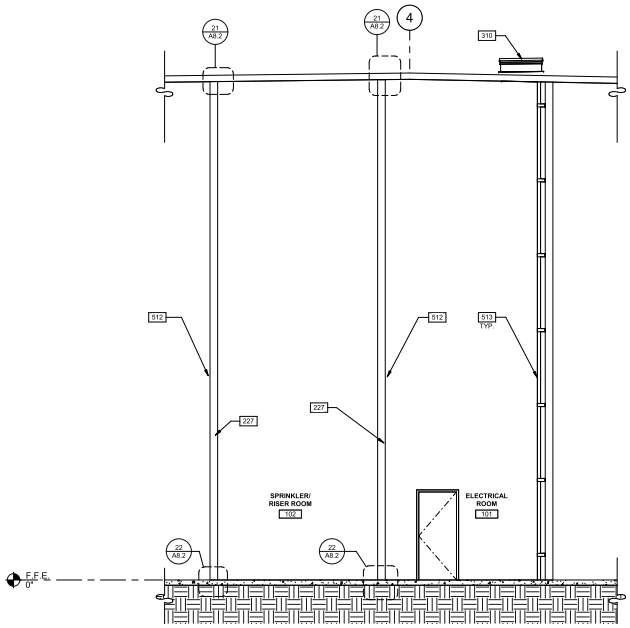
CAUTION: IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PR 3.2.c



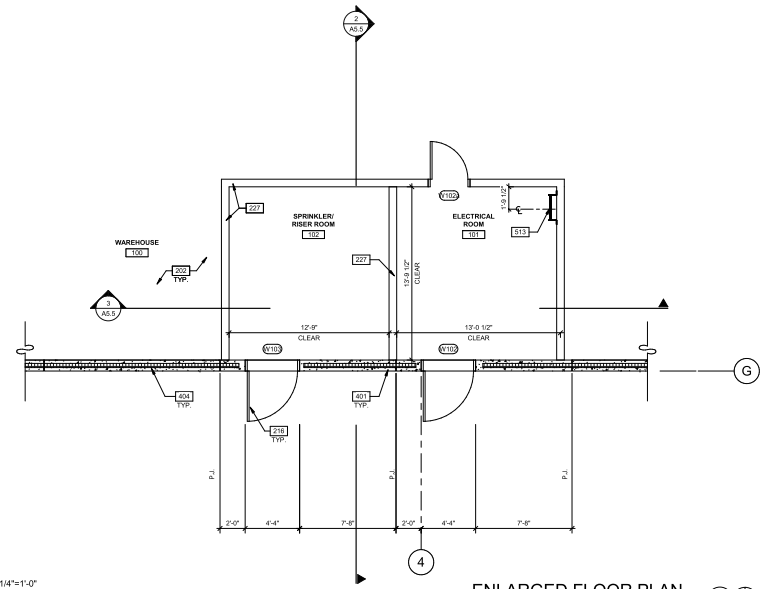
ENLARGED BUILDING SECTION 2
SCALE: 1/4" = 1'-0"



ENLARGED EXTERIOR ELEVATION 1
SCALE: 1/4" = 1'-0"



ENLARGED BUILDING SECTION 3
SCALE: 1/4" = 1'-0"



ENLARGED FLOOR PLAN 4
SCALE: 1/4" = 1'-0"

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

202	CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.
216	SERVICE/MAN DOORS, COLOR: TO MATCH ADJACENT CONCRETE PANEL COLOR.
227	SPRINKLER ROOM INTERIOR WALL TO BE 1HR RATED.
301	ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
310	2'-6" x 3'-0" ROOF HATCH. VERIFY ROOF JOIST LOCATIONS WITH STRUCTURAL DRAWINGS. HATCH TO BE MINIMUM OF 10' FROM ROOF EDGE.
401	PRECAST CONCRETE WALL, PAINTED.
403	2" REVEAL.
404	CONCRETE WALL JOINT.
416	FINISH GRADE VARIES, REFER TO CIVIL.
417	LINE OF ROOF BEYOND.
418	CLERESTORY WINDOW 1" INSULATED GLAZING. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
429	CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.
503	CONCRETE FOOTING, REFER TO STRUCTURAL.
504	PROVIDE RIGID INSULATION AT FOOTINGS AND WALL PANELS BELOW SLAB.
512	INTERIOR RATED WALL PARTITION.
513	ROOF ACCESS LADDER . COORDINATE LOCATION WITH STRUCTURAL ROOF FRAME DRAWINGS.

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

LEGEND

GLASS:

VISION GLASS

COLORS:

PROVIDE 6'-0" WIDE PAINT COLOR MOCK-UP FULL HEIGHT OF BUILDING FOR OWNER/ARCHITECT REVIEW. GC TO PROVIDE ARCHITECT DRAW DOWNS OF EACH PAINT COLOR.

A		BASE COLOR: SHERWIN-WILLIAMS "SW 7662 - EVENING SHADOW"
B		SHERWIN-WILLIAMS "7656 - PHINESTONE"
C		SHERWIN-WILLIAMS " 6256 - EVENING GRAY"
D		SHERWIN-WILLIAMS "6794 - FLYWAY"

State of Illinois Design Firm Registration No. 184-004089

WARE MALCOMB

1315 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063

ARCHITECTURE
PLANNING
INTERIORS
CIVIL ENGINEERING
BRANDING
BUILDING MEASUREMENT

LICENSED ARCHITECT
GRANT A BRANDENBURG
001-020842
STATE OF ILLINOIS

EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

ENLARGED ELEVATION, PLAN AND WALL SECTIONS

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	C

SHE

A5

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

4/19/2022 8:51:20 AM 2022-04-08_PERMIT SET

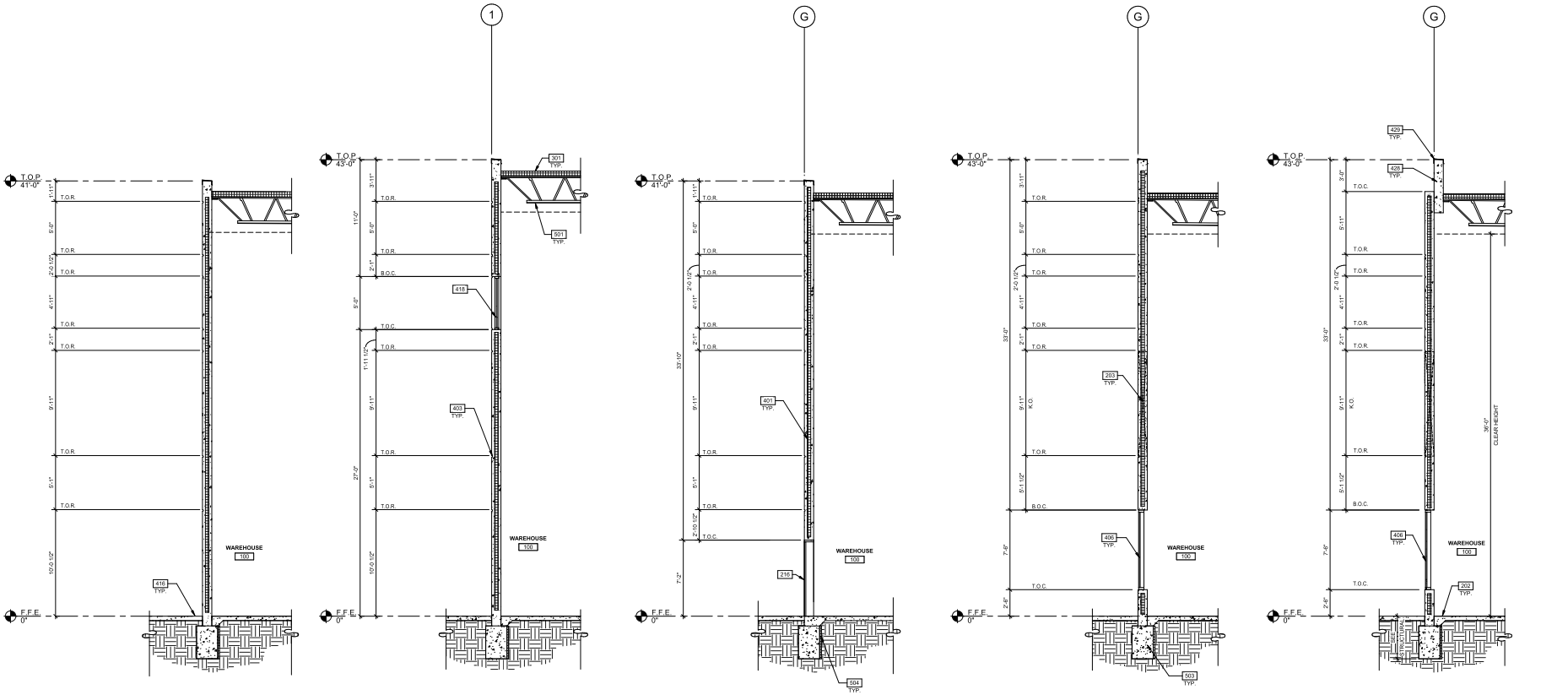
Pg. 93

7.C.1.A.p

Packet Pg. 368

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

CAUTION: IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PR 3.2.c



WALL SECTION 5
SCALE: 1/4" = 1'-0"

WALL SECTION 4
SCALE: 1/4" = 1'-0"

WALL SECTION 3
SCALE: 1/4" = 1'-0"

WALL SECTION 2
SCALE: 1/4" = 1'-0"

1/4"=1'-0"
0 2' 4' 8' 16'

WALL SECTION 1
SCALE: 1/4" = 1'-0"

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

202 CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.
203 KNOCK-OUT PANEL FOR FUTURE WINDOWS OR DOORS.
216 SERVICEMAN DOORS, COLOR: TO MATCH ADJACENT CONCRETE PANEL COLOR.
301 ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
401 PRECAST CONCRETE WALL, PAINTED.
403 2" REVEAL.
406 ALUMINUM WINDOW SYSTEM WITH 1" INSULATED GLASS REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
416 FINISH GRADE VARIES, REFER TO CIVIL.
418 CLERESTORY WINDOW 1" INSULATED GLAZING. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
428 PRECAST CONRETE SPANDREL PANEL, PAINTED
429 CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.
501 STRUCTURAL STEEL JOIST, REFER TO STRUCTURAL.
503 CONCRETE FOOTING, REFER TO STRUCTURAL.
504 PROVIDE RIGID INSULATION AT FOOTINGS AND WALL PANELS BELOW SLAB.

State of Illinois Design Firm Registration No. 184-004089

WARE MALCOMB

ARCHITECTURE
PLANNING
INTERIORS
CIVIL ENGINEERING
BRANDING
BUILDING MEASUREMENT

1315 22nd St #410
Oak Brook, IL 60523
P 630.218.0063

LICENSED ARCHITECT
GRANT A BRANDENBURG
001-020842
STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

WALL SECTIONS

DATE	REMARKS
2022-03-04	PROGRESS PACKAGE
2022-04-08	PERMIT SET

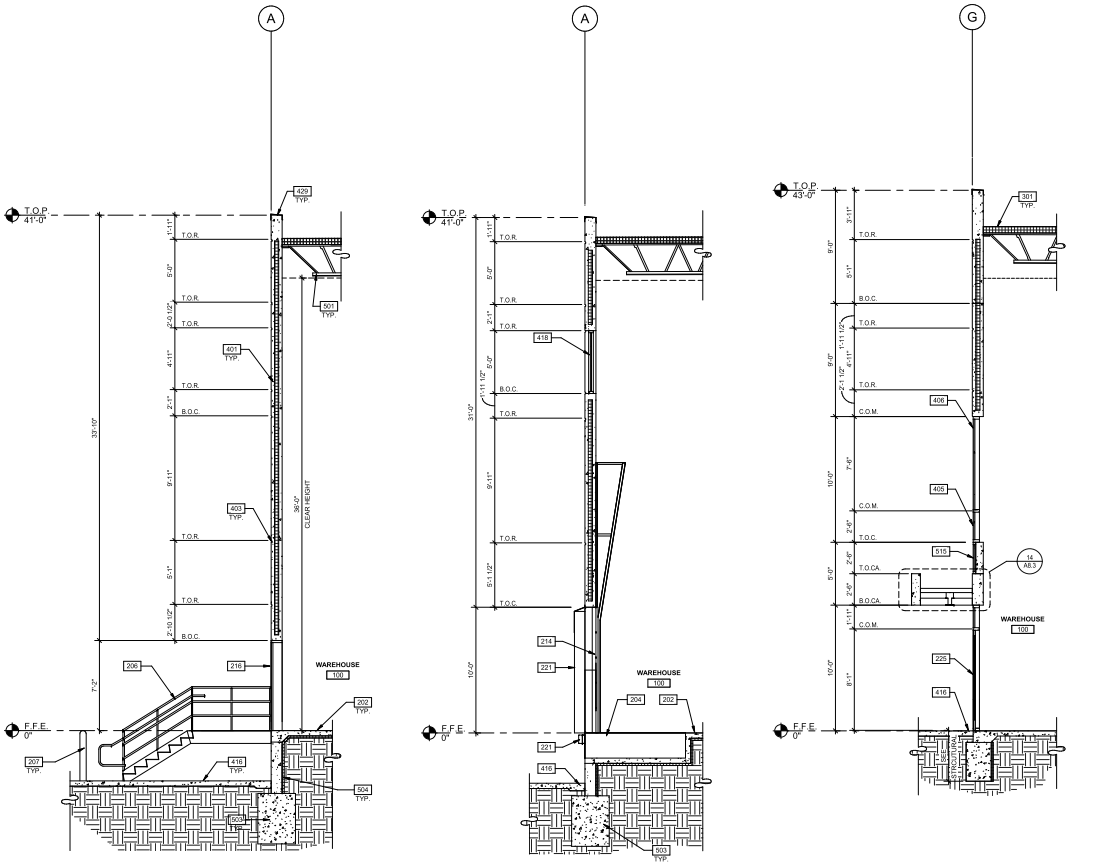
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	C

SHE
A5

4/19/2022 8:51:23 AM 2022-04-08_PERMIT SET

Pg. 94

7.C.1.A.p



WALL SECTION 3
SCALE: 1/4" = 1'-0"

WALL SECTION 2
SCALE: 1/4" = 1'-0"

WALL SECTION 1
SCALE: 1/4" = 1'-0"

1/4"=1'-0"
0 2' 4' 8' 16'

WALL LEGEND

CONCRETE WALL

COLD FORMED STUD FRAMING WALL CONSTRUCTION. SEE NOTES ON PLAN FOR FIRE RATING

KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

202 CONCRETE SLAB. PROVIDE VAPOR RETARDER AT OFFICE AREA PER SOILS REPORT. PROVIDE SEALER FOR CONCRETE FLOOR AREA IN WAREHOUSE. REFER TO STRUCTURAL DRAWINGS.
204 6'X 8' MECHANICAL DOCK LEVELER, 35,000 LBS DYNAMIC CAPACITY, MANUALLY OPERATED (SPRING ASSISTED), REFER TO A0.2 ENVELOPE ASSEMBLY NOTES.
206 EXTERIOR STEEL STAIR, ALL COMPONENTS GALVANIZED.
207 STEEL BOLLARD, CONCRETE-FILLED PAINTED SAFETY YELLOW.
214 HIGH LIFT OVERHEAD SECTIONAL DOOR, REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
216 SERVICE/MAN DOORS, COLOR: TO MATCH ADJACENT CONCRETE PANEL COLOR.
221 DOCK SEAL
225 ALUMINUM STOREFRONT SYSTEM WITH 1" INSULATED GLASS. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZIONG SPECIFICATION.
301 ROOF ASSEMBLY. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
401 PRECAST CONCRETE WALL, PAINTED.
403 2" REVEAL.
405 ALUMINUM STOREFRONT SYSTEM - SPANDREL PANEL, REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
406 ALUMINUM WINDOW SYSTEM WITH 1" INSULATED GLASS REFER TO A0.2, ENVELOPE ASSEMBLY NOTES.
416 FINISH GRADE VARIES, REFER TO CIVIL.
418 CLERESTORY WINDOW 1" INSULATED GLAZING. REFER TO A0.2, ENVELOPE ASSEMBLY NOTES FOR GLAZING SPECIFICATION.
429 CONTINUOUS PRE-FINISH METAL COPING TO BE PROVIDED AT TOP OF ALL PANELS. COPING COLOR TO MATCH PAINT COLOR AT TOP OF EACH CONCRETE PANEL.
501 STRUCTURAL STEEL JOIST, REFER TO STRUCTURAL.
503 CONCRETE FOOTING, REFER TO STRUCTURAL.
504 PROVIDE RIGID INSULATION AT FOOTINGS AND WALL PANELS BELOW SLAB.
515 2 1/2" WIDE STOREFRONT SYSTEM INSTALLED IN FRONT OF THE CONCERETE SPANDREL PANEL.

State of Illinois Design Firm Registration No. 184.006269
WARE MALCOMB
ARCHITECTURE PLANNING INTERIORS
CIVIL ENGINEERING STRUCTURAL BUILDING MEASUREMENT
1333 22nd St #410 Downers Grove, IL 60515 P 630.218.0063

GRANT A. BRANDENBURG 001-020842 STATE OF ILLINOIS REGISTERED ARCHITECT
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

WALL SECTIONS

REMARKS	DATE
PERMIT SET	2022-04-06

PA/PM:	Approver
DRAWN BY.:	Author
JOB NO.:	C

SHEET NO.
A5

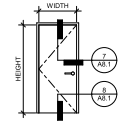
4/18/2022 8:57:26 AM 2022-04-06 PERMIT SET

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

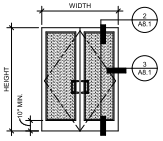
DOOR SCHEDULE

DOOR NO.	ROOM NAME	DOOR TYPE	DOOR WIDTH	DOOR HEIGHT	DOOR THICK	DOOR MATERIAL	DOOR FINISH	FRAME MATERIAL	FRAME FINISH	FIRE RATING	HDWARE NO.	COMMENTS
100	WAREHOUSE	SF2	8'-0"	8'-0"	1 3/4"	ALUMINUM STOREFRONT	CLEAR ANODIZED	ALUMINUM STOREFRONT	CLEAR ANODIZED		2.1	
W101	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W102	ELECTRICAL ROOM	F1	4'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1B	
W103a	ELECTRICAL ROOM	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		3.1	
W103	SPRINKLER/ RISER ROOM	F1	4'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W104	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W105	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W106	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W107	WAREHOUSE	SF2	8'-0"	8'-0"	1 3/4"	ALUMINUM STOREFRONT	CLEAR ANODIZED	ALUMINUM STOREFRONT	CLEAR ANODIZED		2.1	
W108	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W109	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W110	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED	45min	1.1	
W111	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W112	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W113	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W114	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W115	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W116	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED	90min	1.1	
W117	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED	45min	1.1	
W118	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W119	WAREHOUSE	F1	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	HOLLOW METAL	PAINTED		1.1	
W200	WAREHOUSE	SD2	12'-0"	14'-0"	2"	STEEL	PAINT				4.1	
W201	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W202	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W203	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W204	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W205	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W206	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W207	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W208	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W209	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W210	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W211	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W212	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W213	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W214	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W215	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W216	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W217	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W218	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W219	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W220	WAREHOUSE	SD1	9'-0"	10'-0"	2"	STEEL	PAINT				4.1	
W221	WAREHOUSE	SD2	12'-0"	14'-0"	2"	STEEL	PAINT				4.1	

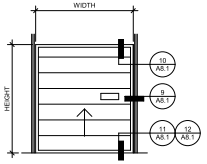
DOOR TYPES



F1
SOLID FLUSH



SF2
DOUBLE STOREFRONT



SD
SECTIONAL DOOR

DOOR HARDWARE

SINGLE EXTERIOR DOOR
1.1

3EA HINGES (4EA IF DOOR IS 4X7)
1EA CYLINDRICAL LEVER LOCK (GC TO VERIFY LOCK FUNCTION W/ OWNER
1EA FSIC INTERCHANGEABLE CORE
1EA DOOR CLOSER
1EA INTERIOR KICK PLATE
1EA THRESHOLD
1EA WEATHERSTRIP
1EA DOOR SWEEP
1EA RAIN GUARD

SEE DOOR SCHEDULE FOR REQUIRED FIRE RATING

SINGLE EXTERIOR DOOR - ELECTRICAL ROOM
1.1B

4EA HINGE
1EA EXIT DEVICE
1EA EXTERIOR TRIM WITH LEVER
1EA FSIC INTERCHANGEABLE CORE
1EA RIM CYLINDER
1EA DOOR CLOSER
1EA INTERIOR KICK PLATE
1EA THRESHOLD
1EA WEATHERSTRIP
1EA DOOR SWEEP
1EA RAIN GUARD

STOREFRONT DOUBLE DOORS
2.1

2EA PIVOT SET
4EA PIVOT
1EA 2PT DEADLOCK
1EA INDICATOR LEVER SET
1EA RIM CYLINDER
1EA FSIC INTERCHANGEABLE CORE
1EA DOOR CLOSER
1EA PUSH / PULL BAR
1EA THRESHOLD
1EA DOOR SWEEP

SINGLE INTERIOR DOOR - ELECTRICAL ROOM
3.1

3EA HINGE
1EA EXIT DEVICE
1EA EXTERIOR TRIM WITH LEVER
1EA FSIC INTERCHANGEABLE CORE
1EA RIM CYLINDER
1EA DOOR CLOSER
2EA KICK PLATE
1EA HEAVY DUTY DOORSTOP

SECTIONAL OVERHEAD DOOR
4.1

1 SLIDE BOLT - - -
1 PAD LOCK - - -

GC TO VERIFY ALL NECESSARY HARDWARE WITH OVERHEAD DOOR MANUFACTURER

GENERAL NOTES

SEE SHEET A0.2 FOR GENERAL DOOR NOTES

1. REFER TO THE PARTITION PLAN AND SPECIFICATIONS (IF PROVIDED) FOR ADDITIONAL DOOR INFORMATION.
2. HOLLOW METAL DOORS TO BE PAINTED SAME COLOR AS THE ADJACENT WALL FINISH TO BE SEMI-GLOSS. SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
3. PROVIDE RATED WIRE GLASS IN RATED ASSEMBLIES, U.O.N.
4. FIELD VERIFY OPENING WIDTH AND HEIGHT FOR ALL NEW DOORS IN EXISTING OPENINGS.
5. ALL HOLLOW METAL FRAMES TO BE WELDED TYPE, U.O.N.
6. RATED DOORS SHALL HAVE AUTOMATIC CLOSERS AND COMPLY WITH REQUIREMENTS OF ALL GOVERNING CODES & STANDARDS.

State of Illinois Design Firm Registration No. 184.006269
WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING MEP/FP
INTERIORS BUILDING MEASUREMENT
1313 22nd St. #410
Downers Grove, IL 60515
P 630.218.0063

EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

DOOR SCHEDULE

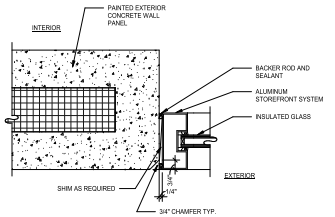
DATE	REMARKS
2022-04-04	PROGRESS PACKAGE
2022-04-06	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	C

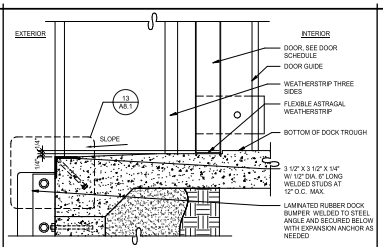
SHE A7

4/18/2022 8:57:29 AM 2022-04-06 PERMIT SET

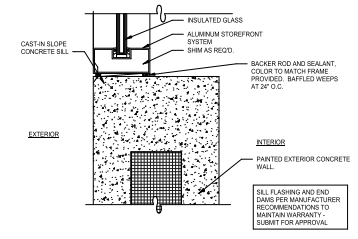
Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)



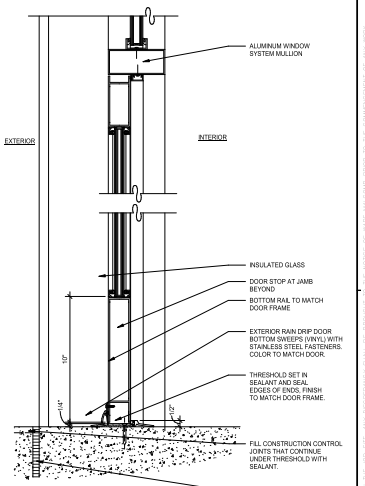
WINDOWS JAMB @ CON. WALL 16
SCALE: 3" = 1'-0"



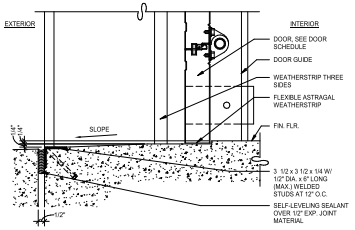
OH DR. SILL @ VERT DOCK TROUGH 11
SCALE: 3" = 1'-0"



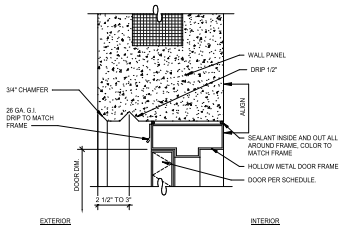
WINDOW SILL 6
SCALE: 3" = 1'-0"



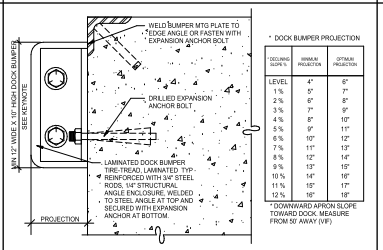
STOREFRONT DOOR 2
SCALE: 3" = 1'-0"



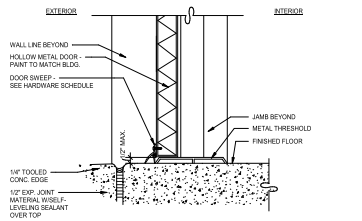
OH DOOR SILL AT GRADE 12
SCALE: 3" = 1'-0"



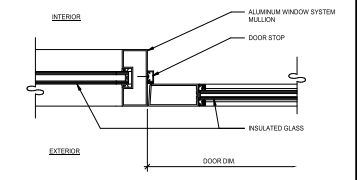
HOLLOW METAL DOOR HEAD 7
SCALE: 3" = 1'-0"



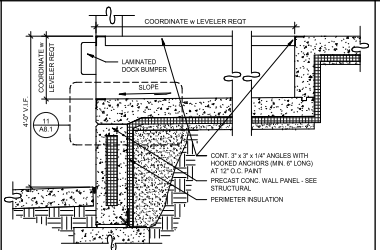
DOCK BUMPER 13
SCALE: 3" = 1'-0"



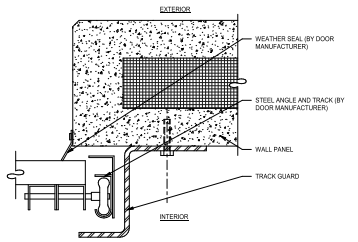
HOLLOW METAL DOOR SILL 8
SCALE: 3" = 1'-0"



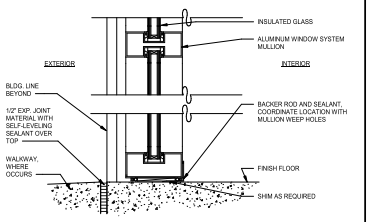
STOREFRONT JAMB 3
SCALE: 3" = 1'-0"



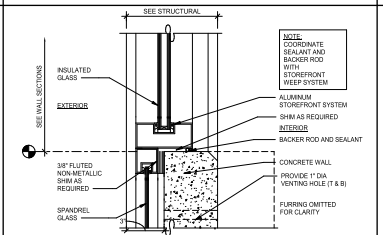
DOCK LEVELER PIT SECTION 14
SCALE: 3/4" = 1'-0"



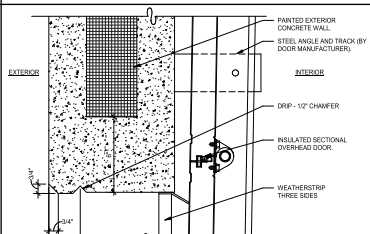
SECTIONAL DOOR JAMB W/ GUARD 9
SCALE: 3" = 1'-0"



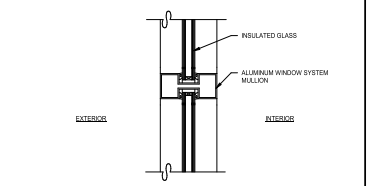
WINDOW SILL 4
SCALE: 3" = 1'-0"



STOREFRONT SYSTEM - WINDOW SILL 15
SCALE: 3" = 1'-0"



SECTIONAL DOOR HEAD 10
SCALE: 3" = 1'-0"



TYP. VERT./HORIZ. MULLION 5
SCALE: 3" = 1'-0"

State of Illinois Design Firm Registration No. 184.006269
WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING LANDSCAPE ARCHITECTURE
INTERIORS BUILDING MEASUREMENT
1333 22nd St. #410
Oak Brook, IL 60523
P 630.218.0063

GRANT A. BRANDENBURG 001-020842 STATE OF ILLINOIS PROFESSIONAL ENGINEER
EXP: 11 - 30 - 2022

THE MIDWEST GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

DETAILS

DATE	REMARKS
2022-04	PROGRESS PACKAGE
2022-04-06	PERMIT SET

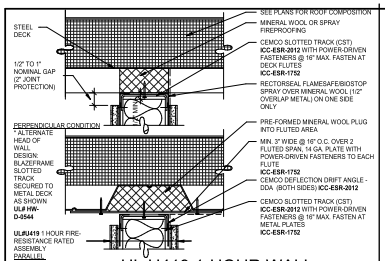
PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	C

SHEET NO.
A8

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

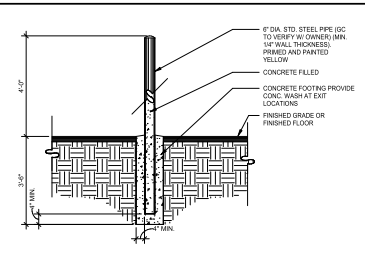
Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

CAUTION: IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PRINT 3.2.c



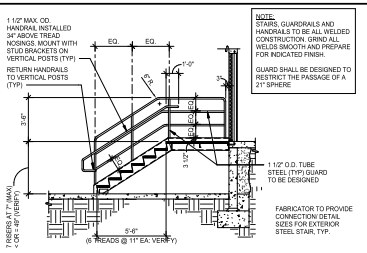
UL U419 1-HOUR WALL

SCALE: 3" = 1'-0" 21



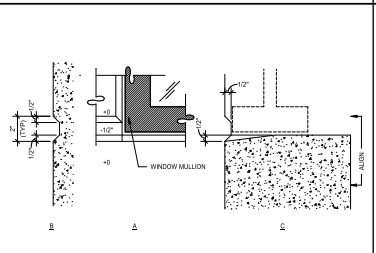
BOLLARD

SCALE: 1/2" = 1'-0" 16



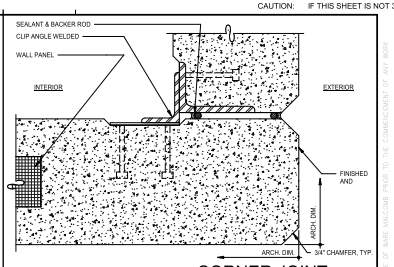
STEEL STAIR SECTION

SCALE: 1/4" = 1'-0" 11



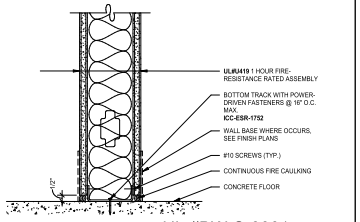
REVEAL AT WINDOW MULLION

SCALE: 3" = 1'-0" 6



CORNER JOINT

SCALE: 3" = 1'-0" 1



UL #BW-S-0001
1 HOUR WALL BASE

1 HOUR FIRE-RESISTANCE RATED WALL SCALE: 3" = 1'-0" 22

MEMBER DEPTH:
(EXAMPLE: 6" = 600 X 1/100 INCHES) ALL MEMBER DEPTHS ARE TAKEN IN 1/100 INCHES. FOR ALL "T" SECTIONS MEMBER DEPTH IS THE INSIDE DIMENSION.

FLANGE WIDTH:
(EXAMPLE: 1 5/8" = 1.625" – 162 X 1/100 INCHES) ALL FLANGE WIDTHS ARE TAKEN IN 1/100 INCHES.

STYLE:
(EXAMPLE: STUD OR JOIST SECTION = S) THE FOUR ALPHA CHARACTERS UTILIZED BY THE DESIGNATOR SYSTEM ARE:
S = STUD OR JOIST, T = TRACK, U = CHANNEL, F = FURRING

MATERIAL THICKNESS:
(EXAMPLE: 0.054 IN. = 54 MILS; 1 MIL =1/1000 IN.) MATERIAL THICKNESS IS THE MINIMUM BASE METAL THICKNESS IN MILS. MINIMUM BASE METAL THICKNESS REPRESENTS 95% OF THE DESIGN THICKNESS.

600 S 162 54

INTERIOR NON-STRUCTURAL NON-COMPOSITE:

USE FOR FURRING PURPOSES ONLY, U.O.N.

(S) STUD MEMBER	SPACING (IN.) O.C.	5 PSF L/240
250S125-18	12"	10'-6"
250S125-18	16"	9'-7"
250S125-18	24"	8'-3"
250S125-33	12"	13'-2"
250S125-33	16"	12'-0"
250S125-33	24"	10'-6"
250S125-43	12"	14'-4"
250S125-43	16"	13'-0"
250S125-43	24"	11'-5"
362S125-18	12"	14'-0"
362S125-18	16"	12'-2"
362S125-18	24"	9'-11" ●
362S125-33	12"	17'-7"
362S125-33	16"	16'-0"
362S125-33	24"	14'-0"
362S125-43	12"	19'-2"
362S125-43	16"	17'-5"
362S125-43	24"	15'-3"
362S125-54 (50 KSI)	12"	20'-6"
362S125-54 (50 KSI)	16"	18'-7"
362S125-54 (50 KSI)	24"	16'-3"
362S125-68 (50 KSI)	12"	21'-11"
362S125-68 (50 KSI)	16"	19'-11"
362S125-68 (50 KSI)	24"	17'-5"
400S125-18 X	12"	14'-9" ●
400S125-18 X	16"	12'-10" ●
400S125-18 X	24"	10'-5" ●
400S125-33	12"	19'-0"
400S125-33	16"	17'-3"
400S125-33	24"	15'-1"

(S) STUD MEMBER	SPACING (IN.) O.C.	5 PSF L240
400S125-43	12"	20'-9"
400S125-43	16"	18'-10"
400S125-43	24"	16'-5"
400S125-54 (50 KSI)	12"	22'-2"
400S125-54 (50 KSI)	16"	20'-2"
400S125-54 (50 KSI)	24"	17'-7"
400S125-68 (50 KSI)	12"	23'-8"
400S125-68 (50 KSI)	16"	21'-4"
400S125-68 (50 KSI)	24"	18'-10"
600S125-27 X	12"	24'-4" ●
600S125-27 X	16"	21'-6" ●
600S125-27 X	24"	17'-7" ●
600S125-33	12"	26'-2"
600S125-33	16"	23'-9"
600S125-33	24"	20'-6"
600S125-43	12"	28'-9"
600S125-43	16"	26'-1"
600S125-43	24"	22'-10"
600S125-54 (50 KSI)	12"	30'-0"
600S125-54 (50 KSI)	16"	27'-11"
600S125-54 (50 KSI)	24"	24'-5"
600S125-68 (50 KSI)	12"	33'-0"
600S125-68 (50 KSI)	16"	30'-0"
600S125-68 (50 KSI)	24"	26'-2"
800S125-43	12"	36'-1"
800S125-43	16"	32'-9"
800S125-43	24"	28'-8"
800S125-54 (50 KSI)	12"	38'-0"
800S125-54 (50 KSI)	16"	35'-2"
800S125-54 (50 KSI)	24"	30'-9"
800S125-68 (50 KSI)	12"	41'-11"
800S125-68 (50 KSI)	16"	38'-1"
800S125-68 (50 KSI)	24"	33'-4"

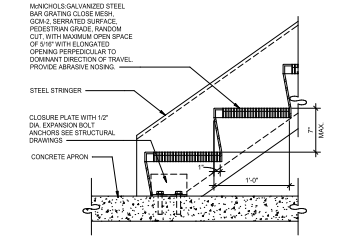
NOTE: ALL STUD INFORMATION IS BASED ON: STEEL STUD MANUFACTURERS ASSOCIATION (SSMA) ICC ESR-3064P

* INDICATES THAT WEB STIFFENERS ARE REQUIRED AT ALL SUPPORT POINTS AND CONCENTRATED LOADS

* INDICATES THAT WEB STIFFENERS ARE REQUIRED AT ENDS

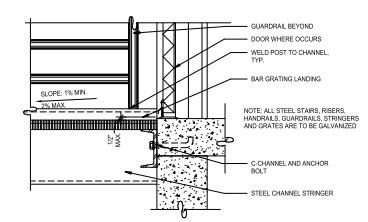
LIMITING WALL HEIGHT TABLE-L/240

SCALE: 12" = 1'-0" 18



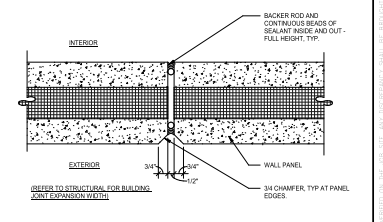
STEEL STAIR @ BOTTOM

SCALE: 1 1/2" = 1'-0" 12



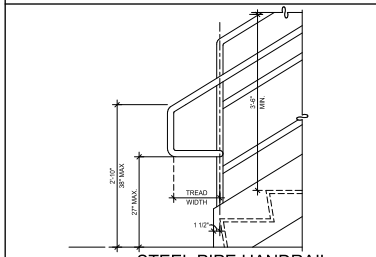
STEEL STAIR LANDING

SCALE: 1 1/2" = 1'-0" 7



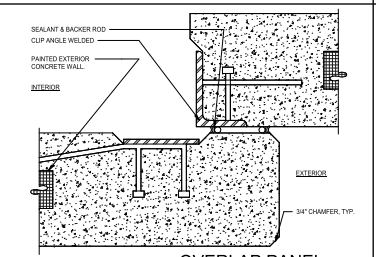
PANEL JOINT (TYP.)

SCALE: 3" = 1'-0" 2



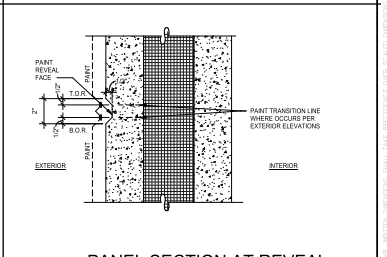
STEEL PIPE HANDRAIL

SCALE: 1" = 1'-0" 13



OVERLAP PANEL

SCALE: 3" = 1'-0" 8



PANEL SECTION AT REVEAL

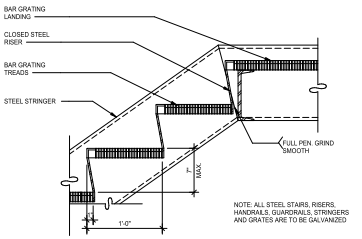
SCALE: 3" = 1'-0" 3

WALL TYPE NOTES:

1. INTERIOR GYP. BD. WALLS SHALL CONFORM TO ICC-ESR-1338
2. SEE LIMITING WALL HEIGHT TABLE FOR METAL STUD GAUGE AND SPACING BASED ON WALL HEIGHTS AND STUD SIZES AS NOTED ON EACH WALL TYPE.
3. MAX. STUD SPACING SHALL BE 24".
4. MINIMUM FASTENER SIZE SHALL BE #6 - 1-1/4" SCREWS.
5. MAXIMUM FASTENER SPACING SHALL BE 12" FIELD AND 8" AT EDGES.
6. ALL WALL STUDS TO BE 3-5/8", U.O.N.
7. ALL RESTROOM WALL STUDS TO BE 6" AND FULLY INSULATED, U.O.N.

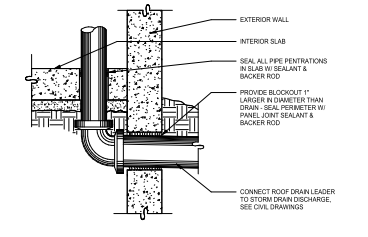
WALL TYPE NOTES

SCALE: 12" = 1'-0" 19



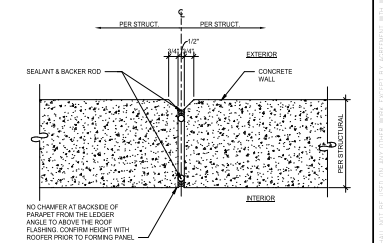
STEEL STAIR TREADS

SCALE: 1 1/2" = 1'-0" 14



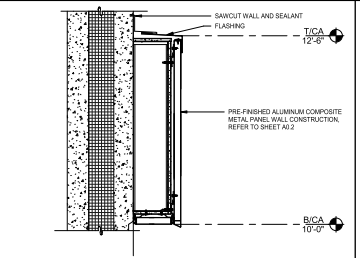
ROOF DRAIN EXITING

SCALE: 1 1/2" = 1'-0" 9



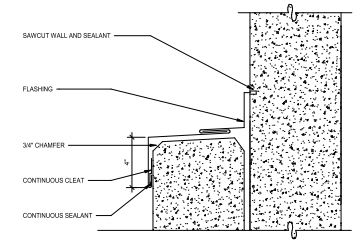
PANEL JOINT ABOVE ROOF LINE

SCALE: 3" = 1'-0" 4



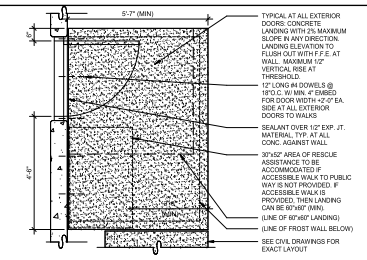
CANOPY WALL SECTION, MIR.

SCALE: 1 1/2" = 1'-0" 25



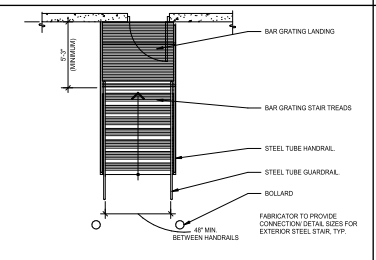
WALL FLASHING

SCALE: 3" = 1'-0" 20



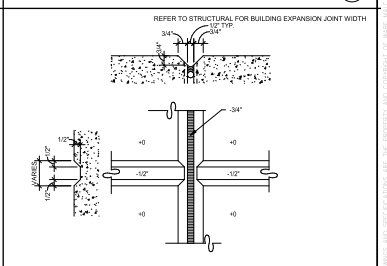
CONCRETE LANDING

SCALE: 1/2" = 1'-0" 15



EXTERIOR STEEL STAIR PLAN

SCALE: 1/4" = 1'-0" 10



REVEAL AT PANEL JOINT

SCALE: 3" = 1'-0" 5

Seals of Illinois Design Firm Registration No. 184.006269

WARE MALCOMB

1313 22nd St. #410
Downers Grove, IL 60515
P 630.218.0063

ARCHITECTURE
PLANNING
INTERIORS

CIVIL ENGINEERING
PLANNING
BUILDING MEASUREMENT

GRANT A. BRANDENBURG
001-020842
REGISTERED ARCHITECT
STATE OF ILLINOIS
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

DETAILS

DATE	REMARKS
2022-05-04	PROGRESS PACKAGE
2022-10-05	PERMIT SET

PA/PM:	M. PULA
DRAWN BY.:	S.R.
JOB NO.:	

SHEET NO.
A8

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

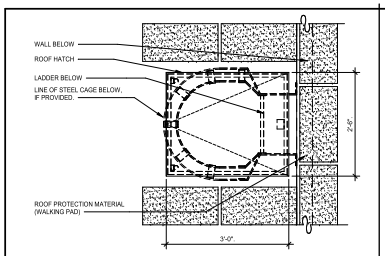
n:\#2022\3-5\13-7.pln 2022-04-06 PERMIT SET

7.C.1.A.p

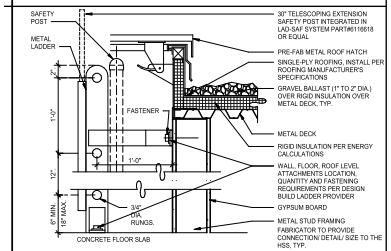
Packet Pg. 373

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

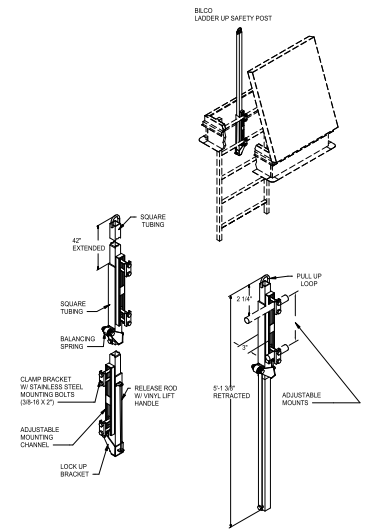
Pg. 98



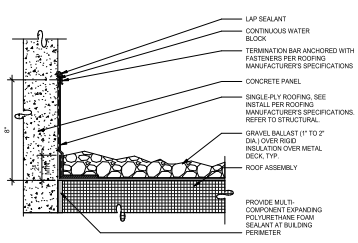
ROOF HATCH PLAN 21
SCALE: 3/4" = 1'-0"



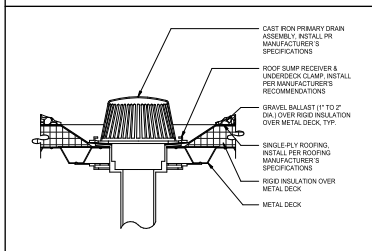
ROOF HATCH & LADDER 22
SCALE: 1 1/2" = 1'-0"



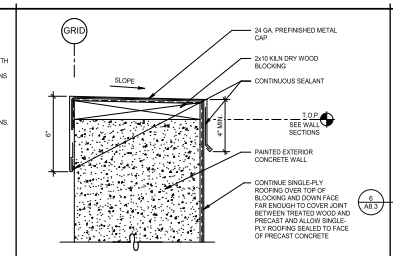
SAFETY POST 17
SCALE: 1" = 1'-0"



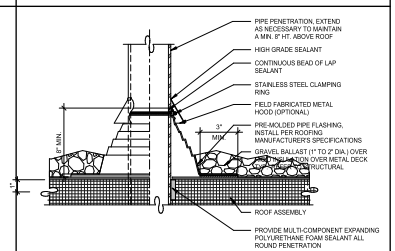
ROOF FLASHING 11
SCALE: 3" = 1'-0"



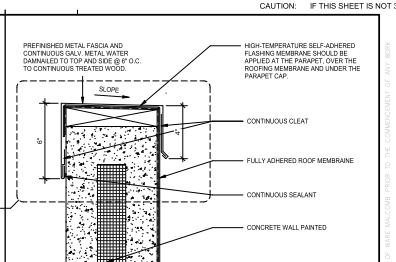
DRAIN 12
SCALE: 1 1/2" = 1'-0"



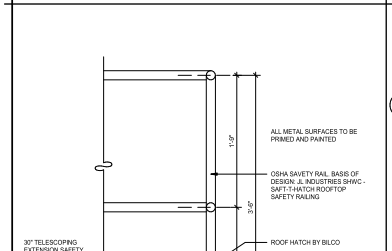
PARAPET, TYP. 6
SCALE: 3" = 1'-0"



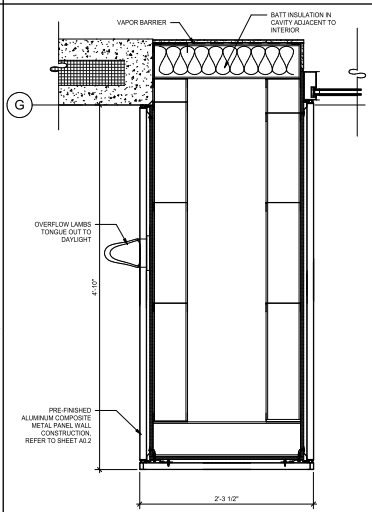
ROOF PENETRATION FLASHING 7
SCALE: 3" = 1'-0"



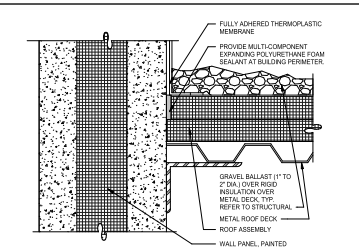
SINGLE-PLY ROOFING @ PARAPET 2
SCALE: 3" = 1'-0"



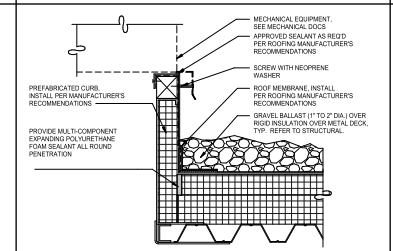
ROOF HATCH & LADDER 24
SCALE: 1 1/2" = 1'-0"



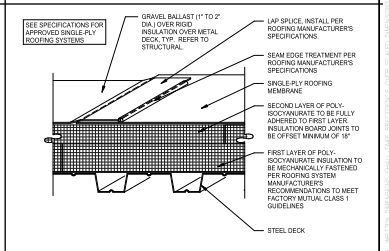
WING WALL PLAN SECTION, SIM. 19
SCALE: 1 1/2" = 1'-0"



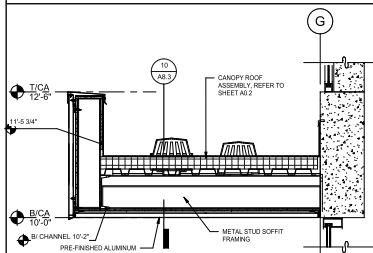
BASE PARAPET, TYP. 13
SCALE: 3" = 1'-0"



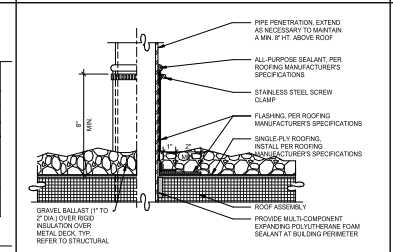
ROOFING @ PREFABRICATED CURB 8
SCALE: 3" = 1'-0"



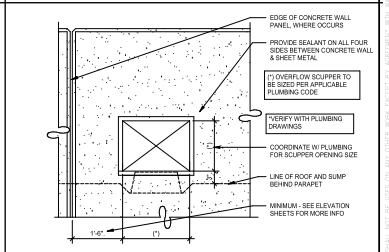
SINGLE-PLY ROOFING SECTION 3
SCALE: 3" = 1'-0"



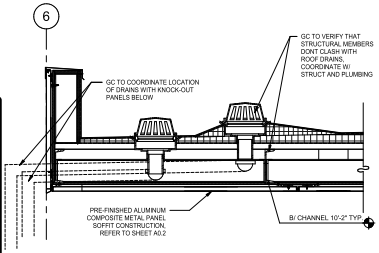
CANOPY SECTION 14
SCALE: 1" = 1'-0"

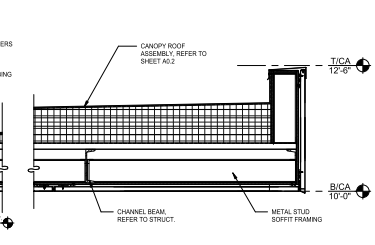


ROOF PENETRATION FLASHING 9
SCALE: 3" = 1'-0"

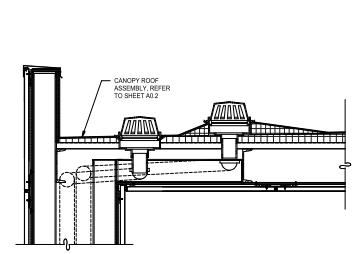


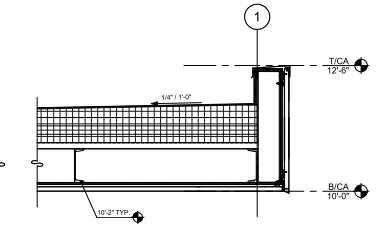
OVERFLOW SCUPPER - ELEVATION 4
SCALE: 1" = 1'-0"



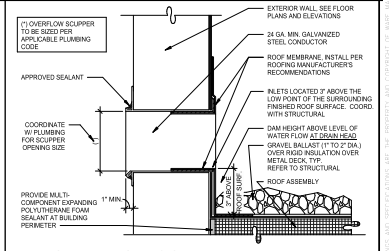


CENTRAL CANOPY SECTION 20
SCALE: 1" = 1'-0"





CANOPY SECTION, MIR. 10
SCALE: 1" = 1'-0"



OVERFLOW SCUPPER - DETAIL 5
SCALE: 3" = 1'-0"

State of Illinois Design Firm Registration No. 184.006269
WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING FACILITY MANAGEMENT
INTERIORS BUILDING MEASUREMENT
3333 22nd St. #410
Moline, IL 61265
P 630.218.0063

GRANT A. BRANDENBURG 001-020842 STATE OF ILLINOIS PROFESSIONAL ENGINEER
EXP: 11 - 30 - 2022

THE MISSNER GROUP

MISSNER GROUP - PALATINE
2250 NORTH RAND ROAD
PALATINE, ILLINOIS 60074

DETAILS

REVISIONS	DATE
PROGRESS PACKAGE	2022-04-04
PERMIT SET	2022-04-06

PA/PM:	M. PULA
DRAWN BY:	S.R.
JOB NO.:	C...

SHEET NO.
A8...

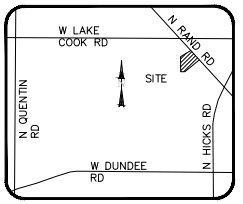
4/19/2022 8:51:42 AM 2022-04-06 PERMIT SET

Attachment: Missner Group - ARCH Plans (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

MISSNER - PALATINE CONSOLIDATION

PART OF THE NORTHEAST QUARTER (NE1/4) OF THE NORTHWEST QUARTER (NW1/4) OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, ILLINOIS

VICINITY MAP



OWNER'S CERTIFICATE

STATE OF }
COUNTY OF } S.S.

THIS IS TO CERTIFY THAT _____ ARE THE PROPERTY OWNERS OF THE PROPERTY DESCRIBED HEREON AND THAT THEY HAVE CAUSED THE SAID PROPERTY TO BE SURVEYED AND CONSOLIDATED AS SHOWN HEREON, FOR THE USES AND PURPOSES THEREIN SET FORTH, AND DO HEREBY ACKNOWLEDGE AND ADOPT THE SAME UNDER THE TITLE HEREON INDICATED.
DATED THIS _____ DAY OF _____, A.D., 2____

_____
OWNER

_____
TITLE

NOTARY'S CERTIFICATE

STATE OF }
COUNTY OF } S.S.

I, _____ A NOTARY PUBLIC IN AND FOR SAID COUNTY IN THE STATE AFORESAID, DO HEREBY CERTIFY THAT _____ ARE PERSONALLY KNOWN TO ME TO BE THE SAME PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT AS SUCH OWNERS, APPEARED BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGED THAT THEY SIGNED AND DELIVERED SAID INSTRUMENT OF THEIR OWN FREE AND VOLUNTARY ACT AND AS THE FREE AND VOLUNTARY ACT FOR THE USES AND PURPOSES THEREIN SET FORTH.
GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS _____ DAY OF _____, A.D., 2____.

_____
NOTARY PUBLIC

_____
MY COMMISSION EXPIRES

PLAN COMMISSION

APPROVED BY THE PLAN COMMISSION OF THE VILLAGE OF PALATINE, COOK COUNTY, ILLINOIS, THISDAY OF _____, 2____.

SIGNED: _____
CHAIRMAN

ATTEST: _____
SECRETARY

VILLAGE COUNCIL

Approved by the Village Council of the Village of Palatine, Cook County, Illinois, this _____ day of _____, 2____.

Signed: _____
Mayor

Attest: _____
Village Clerk

I.D.O.T. CERTIFICATE

THIS PLAT HAS BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION WITH RESPECT TO THE ROADWAY ACCESS PURSUANT TO SECTION 2 OF "AN ACT TO REVISE THE LAW IN RELATION TO PLATS" AS AMENDED. A PLAN THAT MEETS THE REQUIREMENTS CONTAINED IN DEPARTMENT'S "POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS" WILL BE REQUIRED BY THE DEPARTMENT.

_____
DISTRICT ENGINEER

SURVEYORS NOTES

1. NO NEW EASEMENTS OR SET BACKS ARE TO BE CRATED OR GRANTED WITHIN THIS DOCUMENT.

VILLAGE ENGINEER

STATE OF }
COUNTY OF } S.S.

THIS PLAT HAS BEEN CHECKED FOR CONFORMANCE TO THE VILLAGE OF PALATINE STANDARDS AND
REQUIREMENTS, AND WORKING DRAWINGS AND SPECIFICATIONS FOR IMPROVEMENTS HAVE BEEN PREPARED IN CONFORMANCE WITH THE VILLAGE STANDARDS AND REQUIREMENTS, AND ENGINEERING FEES DUE TO THE VILLAGE OF PALATINE HAS BEEN PAID.

DATED THIS _____ DAY OF _____, A.D., 2____.

SIGNED: _____
VILLAGE ENGINEER

VILLAGE COLLECTOR

I DO HEREBY CERTIFY THAT THERE ARE NO DEFERRED SPECIAL ASSESSMENTS OR UNPAID CURRENT
ASSESSMENTS DUE AGAINST THE LAND INCLUDED IN THE ABOVE PLAT.

DATED THIS _____ DAY OF _____, A.D., 2____.

BY: _____

SURFACE WATER DRAINAGE CERTIFICATE

STATE OF }
COUNTY OF } S.S.

WE HEREBY CERTIFY TO THE BEST OF OUR KNOWLEDGE AND BELIEF THAT ADEQUATE PROVISIONS HAVE BEEN MADE FOR THE DIVERSION AND DETENTION OF SURFACE WATERS INTO PUBLIC AREAS OR DRAINS WITHIN THE RIGHTS OF THE SUBDIVIDER AND THAT SUCH SURFACE WATERS WILL NOT BE DEPOSITED ON ADJACENT LAND OWNERS PROPERTY IN SUCH CONCENTRATION AS MAY CAUSE DAMAGE BY EROSION OR SEDIMENTATION TO SUCH PROPERTY BECAUSE OF CONSTRUCTION OF THE SUBDIVISION.

BY: _____ DATED: _____
OWNER

BY: _____ DATED: _____
ILLINOIS PROFESSIONAL ENGINEER

VILLAGE ATTORNEY

APPROVED BY THE VILLAGE ATTORNEY OF THE VILLAGE OF PALATINE, COOK COUNTY, ILLINOIS.

Dated this _____ day of _____, A.D., 2____.

By: _____
VILLAGE ATTORNEY

VILLAGE BLOCK

APPROVED BY THE VILLAGE PRESIDENT AND THE VILLAGE CLERK OF THE VILLAGE OF PALATINE, COOK COUNTY, ILLINOIS AT A MEETING HELD this _____ day of _____, A.D., 2____.

By: _____
VILLAGE PRESIDENT

By: _____
VILLAGE CLERK

BUILDING INSPECTOR

APPROVED BY THE BUILDING INSPECTOR OF THE VILLAGE OF PALATINE, COOK COUNTY, ILLINOIS AT A MEETING HELD this _____ day of _____, A.D., 2____.

By: _____
BUILDING INSPECTOR

COUNTY CLERKS CERTIFICATE

STATE OF ILLINOIS }
COUNTY OF COOK } S.S.

I, _____ COUNTY CLERK OF COOK COUNT, ILLINOIS, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT GENERAL TAXES, NO UNPAID FORFEITED TAXES, AND NO REDEEMABLE TAX SALES AGAINST ANY OF THE LAND INCLUDED IN THE PLAT. I FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEESIN CONNECTIONWITH THE PLAT.

GIVEN UDER MY HAND AND SEAL OF THE COUNTY DATED THIS _____ DAY OF _____, A.D., 2____.

_____
COUNTY CLERK

COUNTY RECORDER CERTIFICATE

STATE OF ILLINOIS }
COUNTY OF COOK } S.S.

THIS PLAT WAS FILED FOR RECORD IN THE RECORDER'S OFFICE OF COOK COUNTY, ILLINOIS, ON THIS _____ DAY OF _____, A.D., 2____, AT _____ O'CLOCK. AS DOCUMENT NUMBER _____.

_____
COUNTY RECORDER

LEGAL DESCRIPTION

THAT PART OF THE NORTHEAST QUARTER (NE1/4) OF THE NORTHWEST QUARTER (NW1/4) OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID NORTHEAST QUARTER OF THE NORTHWEST QUARTER;
THENCE ALONG THE WEST LINE OF SAID NORTHEAST QUARTER OF THE NORTHWEST QUARTER, N00°20'12"E, A DISTANCE OF 688.67 FEET;
THENCE DEPARTING SAID WEST LINE, N46°46'44"E, A DISTANCE OF 376.51 FEET TO THE SOUTHWESTERLY RIGHT OF WAY OF NORTH RAND ROAD;
THENCE ALONG SAID SOUTHWESTERLY RIGHT OF WAY, S42°50'27"E, A DISTANCE OF 599.98 FEET;
THENCE DEPARTING SAID RIGHT OF WAY, S46°46'45"W, A DISTANCE OF 743.21 FEET TO THE SOUTH LINE OF THE AFORESAID NORTHEAST QUARTER OF THE NORTHWEST QUARTER;
THENCE ALONG SAID SOUTH LINE N89°28'05"W, A DISTANCE OF 145.26 FEET TO THE POINT OF BEGINNING.
CONTAINING 385,827 SQUARE FEET, OR 8.86 ACRES OF LAND, MORE OR LESS.

BASIS OF BEARINGS

BEING THE WEST LINE OF NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN ON AN ASSUMED BEARING N00°20'12"E.

SURVEYOR CERTIFICATION

I, JAMES A. FATANINI, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, CERTIFY THAT THE INFORMATION SHOWN HEREON WAS COMPILED USING DATA FROM AN ACTUAL FIELD SURVEY MADE UNDER MY DIRECT SUPERVISION AND THAT THE FIELD SURVEY AND THE COMPILATION OF INFORMATION SHOWN HEREIN WERE CONDUCTED IN ACCORDANCE WITH THE ILLINOIS MINIMUM STANDARDS OF PRACTICE.

I, FURTHER CERTIFY THAT THIS LAND IS WITHIN THE CORPORATE LIMITS OF A MUNICIPALITY WHICH HAS AUTHORIZED A COMPREHENSIVE PLAN AND IS EXERCISING THE SPECIAL POWERS AUTHORIZED BY DIVISION 12 OF ARTICLE 11 OF THE ILLINOIS MUNICIPAL CODE, AS NOW OR HEREAFTER AMENDED.

I, FURTHER CERTIFY THAT THE ANNEXED PLAT IS A CORRECT REPRESENTATION OF SAID SURVEY AND SUBDIVISION. ALL DISTANCES ARE SHOWN IN FEET AND DECIMALS THEREOF. 5/8" REBAR AND YELLOW PLASTIC CAPS STAMPED "XCEL" WILL BE SET AT EACH OF THE CORNERS.

I, FURTHER CERTIFY THAT THE ABOVE DESCRIBED AREA FALLS WITHIN FLOOD ZONE X, AREA OF MINIMAL FLOODING, PER FLOOD INSURANCE RATE MAP COMMUNITY AND PANEL NUMBER 17031C0043J, WITH AN EFFECTIVE DATE OF AUGUST 19, 2008.

PRELIMINARY

JAMES A. FAETANINI
LICENSE NUMBER 035-003494
MY LICENSE RENEWAL DATE IS NOVEMBER 30, 2022
SHEETS COVERED BY THIS SEAL B-1

MISSNER - PALATINE CONSOLIDATION

REVISIONS

REV.	DATE	DESCRIPTION

8300 42ND STREET WEST
ROCK ISLAND, IL 61201
(O) 309-787-9988
(F) 309-787-9540
(E) XCEL@XCELCONSULTANTSINC.COM

XCEL Consultants

PREPARED FOR:
MISSNER REALITY
1700 W HIGGINS RD,
SUITE 400
DES PLAINES, IL 60018

SITE ADDRESS:
2296 N RAND RD &
2234-2240 N RAND RD,
PALATINE, IL 60074

CHK BY:	APV BY:
BCH	JAF

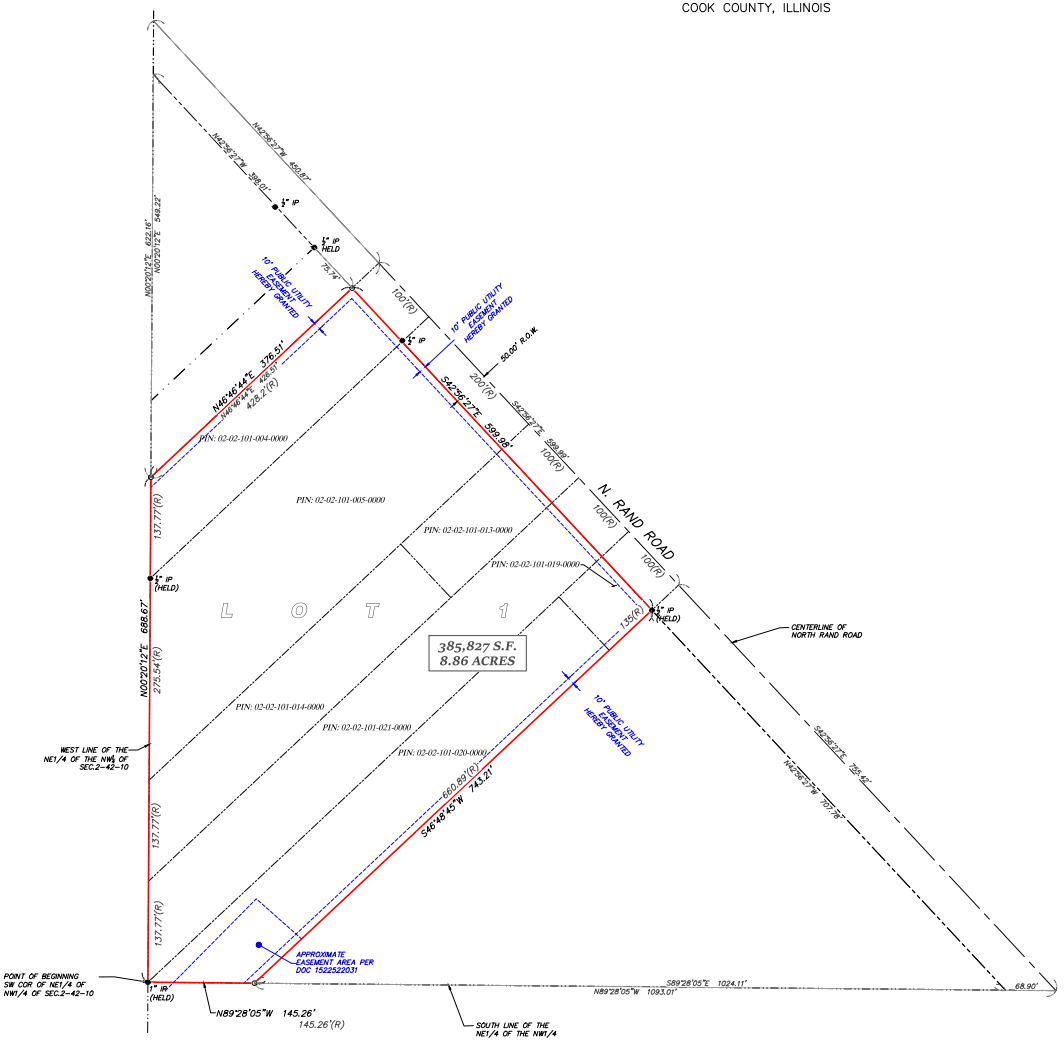
XCEL JOB NUMBER:
213402

DRAWING NUMBER:
1 OF 2

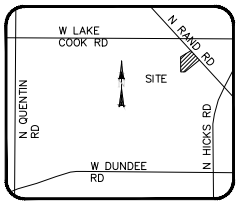
Attachment: 0615222 - Missner Group Palatine - PLAT of Subdivision (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

MISSNER - PALATINE CONSOLIDATION

PART OF THE NORTHEAST QUARTER (NE1/4) OF THE NORTHWEST QUARTER (NW1/4) OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, ILLINOIS



VICINITY MAP



LEGEND

	CENTERLINE
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	INTERNAL PROPERTY LINE
	RIGHT OF WAY LINE
	SURVEY TIE LINE
●	FOUND MONUMENT (AS NOTED)
○	SET 5/8" XCEL CAPPED IR
IR	IRON ROD
IP	IRON PIPE
POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
(M&R)	RECORD & MEASURED
S.F.	SQUARE FEET
BC	BACK OF CURB

EASEMENT PROVISIONS

WHENEVER THE WORDS "PUBLIC UTILITIES" OR PUBLIC UTILITY EASEMENT"SHALL APPEAR ON THIS PLAT, THE VILLAGE OF PALATINE, A MUNICIPAL CORPORATION, COOK COUNTY, ILLINOIS, AND ITS SUCCESSORS OR ASSIGNS, JOINTLY AND SEVERALLY SHALL HOLD A PERPETUAL EASEMENT UNDER, OVER AND ACROSS THE SURFACE OF THE PROPERTY SHOWN WITHIN THE LINES ON THE PLAT MARKED AS SUCH FOR INSTALLATION , CONSTRUCTION, USE, REPAIR AND MAINTENANCE OF ALL PUBLIC UTILITY EQUIPMENT, INCLUDING BUT NOT LIMITED TO, FACILITIES USED IN CONNECTION WITH THE TRANSMISSION AND DISTRIBUTION OF ELECTRICITY AND SOUNDS AND SIGNALS, WATER AND SEWAGE MAINS AND PIPING, THE RIGHT TO CUT, TRIM OR REMOVE TREES, BUSHES AND ROOTS, AS MAY BE REASONABLY REQUIRED INCIDENT TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE SUBDIVIDED PROPERTY FOR ALL SUCH PURPOSES. OBSTRUCTIONS SHALL NOT BE PLACED OVER GRANTEES FACILITIES OR IN, UPON OR OVER THE PROPERTY WITHIN THE LINES MARKED "EASEMENT" WITHOUT THE PRIOR WRITTEN CONSENT OF GRANTEES. AFTER INSTALLATION OF ANY SUCH FACILITIES, THE GRADE OF THE SUBDIVIDED PROPERTY SHALL NOT BE ALTERED IN A MANNER SO AS TO UNREASONABLY INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THERE OF.

THE VILLAGE OF PALATINE SHALL BE GIVEN THE RIGHT TO REPAIR/ MAINTAIN ON SITE UTILITIES, BUT NOT THE OBLIGATION TO. IF THE VILLAGE NEEDS TO PERFORM MAINTENANCE OR REPAIRS THE VILLAGE SHALL HAVE THE ABILITY TO RECOVER THE COST OF REPAIRS FROM THE PROPERTY OWNER.

MISSNER - PALATINE CONSOLIDATION

REVISIONS

REV.	DATE	DESCRIPTION

8300 42ND STREET WEST
ROCK ISLAND, IL 61201
(O) 309-787-9988
(F) 309-787-9540
(E) XCEL@XCELCONSULTANTSINC.COM

XCEL Consultants

PREPARED FOR:
MISSNER REALITY
1700 W HIGGINS RD, SUITE 400
DES PLAINES, IL 60018

SITE ADDRESS:
2296 N RAND RD & 2234-2240 N RAND RD, PALATINE, IL 60074

CHK BY:	APV BY:
BCH	JAF

XCEL JOB NUMBER: 213402

DRAWING NUMBER: 2 OF 2

Attachment: 0615222 - Missner Group Palatine - - PLAT of Subdivision (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

PLANT KEY

SHADE TREE

ORNAMENTAL TREE

EVERGREEN TREE

SEED MIX & GROUND TREATMENT KEY

BASE OF DETENTION AREAS BELOW THE NWL

Areas below NWL to be planted with emergent plugs. See sheet L2.1 for schedule.

DETENTION AREAS BETWEEN THE NWL & HWL

Area of detention between the NWL & HWL to be seeded with "Swale Seed Mix" as supplied by Cardno Native Plant Nursery. See sheet L2.1 for preferred installation method.

OPEN AREAS - NO MOW

All open areas, not including detention, to be planted with low profile prairie grass mix as specified on planting schedule. See sheet L2.1 for preferred installation method.

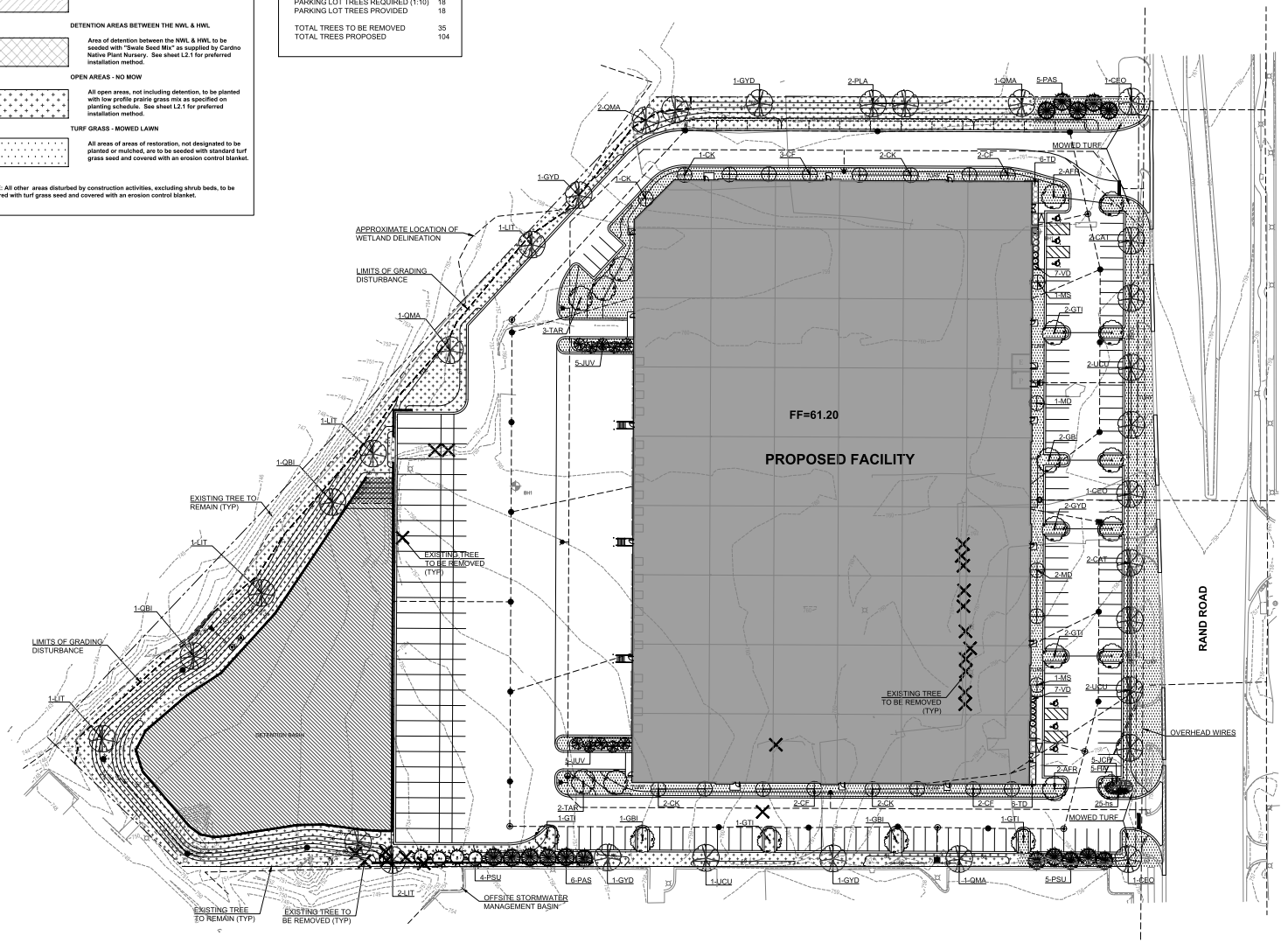
TURF GRASS - MOWED LAWN

All areas of areas of restoration, not designated to be planted or mulched, are to be seeded with standard turf grass seed and covered with an erosion control blanket.

NOTE: All other areas disturbed by construction activities, excluding shrub beds, to be restored with turf grass seed and covered with an erosion control blanket.

LANDSCAPE REQUIREMENT SUMMARY

PARKING SUMMARY	
PASSENGER PARKING	148
TRAILER STALLS	24
TOTAL PARKING SPACES	172
PARKING LOT TREES REQUIRED (1:10)	18
PARKING LOT TREES PROVIDED	18
TOTAL TREES TO BE REMOVED	35
TOTAL TREES PROPOSED	104



ERALL LANDSCAPE PLAN

1" = 40'-0"

0 20' 40' 80'

Kathryn Talty landscape architecture
Winnetka, Illinois 60093
847.602.5154
www.kmtallydesign.com

no.	revision description	initial	date
	ISSUED FOR REVIEW	KMT	03-29-22
	PER SITE PLAN ADJUSTMENTS	KMT	04-12-22

PROPOSED DEVELOPMENT
2234-2240 RAND ROAD
PALATINE, IL

LANDSCAPE PLAN
LANDSCAPE REQUIREMENTS

date 11-29-22 | drawn DW | checked KMT

job no. 22030

sheet no. L

Attachment: Missner Group - 2240-2296 N. Rand Road - Landscaping Plan (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Master Plant List

Symbol	Quantity	Botanical Name	Common Name	Size	Origin	Notes
Shade Trees						
AFR	4	ACER X FREEMANII 'AUTUMN BLAZE'	AUTUMN BLAZE FREEMAN MAPLE	3" BB		MOIST
CAT	4	CATALPA SPECIOSA	NORTHERN CATALPA	3" BB	NATIVE	
CEO	3	CELTUS OCCIDENTALIS	HACKBERRY	3" BB		URBAN, MOIST
GBI	4	GINKGO BILOBA	GINKGO	3" BB		URBAN, MALE SPEC, CI
GTI	7	GLEDITSIA TRIACANTHOS F. INERMIS	THORNLESS HONEYLOCUST	3" BB		URBAN, MOIST
GYD	6	GYMNOCLADUS DIOICUS	KENTUCKY COFFEETREE	3" BB	NATIVE	MOIST
LIT	5	LIRODENDRON TULIPIFERA	TULIP TREE	3" BB	NATIVE	MOIST
PLA	2	PLATANUS x ACERIFOLIA 'MORTON CIRCLE'	EXCLAMATION LONDON PLANETREE	3" BB		URBAN, MOIST
QBI	3	QUERCUS BICOLOR	SWAMP WHITE OAK	3" BB	NATIVE	
QMA	5	QUERCUS MACROCARPA	BUR OAK	3" BB	NATIVE	URBAN
TAR	5	TILIA AMERICANA 'REDMOND'	REDMOND AMERICAN LINDEN	3" BB	NATIVE	URBAN, MOIST
UCU	5	ULMUS CULTIVAR 'ACCOLADE' 'TRIUMPH'	ACCOLADE ELM	3" BB		URBAN
Evergreen Trees						
JUV	10	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	8' BB	NATIVE	
PAS	11	PICEA AIBES	NORWAY SPRUCE	8' BB		
PSU	9	PSEUDOSTUGA MENZIESII	DOUGLAS FIR	8' BB		
Ornamental Trees						
CF	9	CORNUS FLORIDA	FLOWERING DOGWOOD	6' BB		
CK	8	CORNUS KOUSA	KOUSA DOGWOOD	6' BB		
MD	3	MALUS 'DONALD WYMAN'	CRABAPPLE	6' BB		25', GREEN, LT PINK
MS	2	MALUS SARGENT	SARGENT CRABAPPLE	6' BB		8', GREEN, PINK
Evergreen Shrubs						
JCP	5	JUNIPERUS CHINENSIS 'PFITZER COMPACT'	COMPACT PFITZER JUNIPER	5 GAL		
TD	12	TAXUS x MEDIA 'DENSI'	DENSE YEW	24" BB		
Deciduous Shrubs						
HA	5	HYDRANGEA ARBORESCENS	ANNABELLE HYDRANGEA	5 GAL	NATIVE	
VD	14	VIBURNUM DENTATUM 'CHICAGO LUSTRE'	CHICAGO LUSTRE ARROWWOOD VIBURNUM	48" BB	NATIVE	
Perennials						
hs	25	HEMEROCALLIS 'STELLA D'ORO'	SELLA D'ORO DAYLILY	1 GAL		18" YELLOW

Low-Profile Prairie Seed Mix

Botanical Name	Common Name	PLS Ounces/Acre
Permanent Grasses:		
Bouteloua curtipendula	Side-Oats Grama	16.00
Carex spp.	Prairie Sedge Species	4.00
Elymus canadensis	Canada Wild Rye	32.00
Koeleria macrantha	June Grass	1.00
Panicum virgatum	Switch Grass	1.00
Schizachyrium scoparium	Little Bluestem	36.00
	Total	**90.00**
Temporary Cover:		
Avena sativa	Common Oat	512.00
	Total	**512.00**
Forbs:		
Amorpha canescens	Lead Plant	0.50
Asclepias syriaca	Common Milkweed	2.00
Asclepias tuberosa	Butterfly Weed	2.00
Baptisia alba	White Wild Indigo	2.00
Chamaecrista fasciculata	Partridge Pea	10.00
Coreopsis lanceolata	Sand Coreopsis	5.00
Coreopsis palmata	Prairie Coreopsis	1.00
Dalea candida	White Prairie Clover	1.50
Dalea purpurea	Purple Prairie Clover	1.50
Desmanthus illinoensis	Illinois Sensitive Plant	3.00
Echinacea purpurea	Broad-Leaved Purple Coneflower	8.00
Eryngium yuccifolium	Rattlesnake Master	2.00
Lespedeza capitata	Round-Headed Bush Clover	2.00
Liatris aspera	Rough Blazing Star	0.50
Lupinus perennis v. occidentalis	Wild Lupine	4.00
Monarda fistulosa	Wild Bergamot	0.50
Oligoneuron rigidum	Stiff Goldenrod	1.00
Parthenium integrifolium	Wild Quinine	1.00
Penstemon digitalis	Foxglove Beard Tongue	0.50
Penstemon hirsutus	Hairy Beard Tongue	1.00
Ratibida pinnata	Yellow Coneflower	4.00
Rudbeckia hirta	Black-Eyed Susan	5.00
Rudbeckia subtomentosa	Sweet Black-Eyed Susan	1.00
Silphium terebinthinaceum	Prairie Dock	1.00
Solidago speciosa	Showy Goldenrod	0.50
Symphyotrichum ericoides	Heath Aster	0.25
Symphyotrichum laeve	Smooth Blue Aster	1.00
Symphyotrichum novae-angliae	New England Aster	0.50
Tradescantia ohiensis	Common Spiderwort	1.00
Verbena stricta	Hoary Vervain	1.00
Vernonia gigantea	Smooth Tall Ironweed	1.50
Veronicastrum virginicum	Culver's Root	0.25
	Total	**66.00**

Mix Statistics

Native Component	PLS lbs./Acre	PLS Seeds/Acre	PLS Seeds/Sq. Ft.	% of Native Mix
Forbs	4.13	1,731,814	39.76	66.02%
Grasses	5.63	891,416	20.46	33.98%
Total Natives	9.75	2,623,230	60.22	100.00%
Cover	32.00	576,000	13.22	
Totals	41.75	3,199,230	73.44	

Swale Seed Mix

Botanical Name	Common Name	PLS Ounces/Acre
Permanent Grasses/Sedges:		
Andropogon gerardii	Big Bluestem	4.00
Carex crisitatella	Crested Oval Sedge	0.50
Carex lurida	Bottlebrush Sedge	3.00
Carex spp.	Prairie Sedge Species	8.00
Carex vulpinoidea	Brown Fox Sedge	3.00
Elymus canadensis	Canada Wild Rye	16.00
Elymus virginicus	Virginia Wild Rye	16.00
Juncus canadensis	Canadian Rush	1.00
Panicum virgatum	Switch Grass	3.00
Scirpus atrovirens	Dark Green Rush	2.00
Scirpus cyperinus	Wool Grass	0.50
Spartina pectinata	Prairie Cord Grass	3.00
	Total	**60.00**
Temporary Cover:		
Avena sativa	Common Oat	512.00
	Total	**512.00**
Forbs:		
Alisma subcordatum	Common Water Plantain	1.00
Asclepias incarnata	Swamp Milkweed	2.00
Coreopsis tripteris	Tall Coreopsis	1.00
Euthamia graminifolia	Common Grass-Leaved Goldenrod	0.50
Eutrochium maculatum	Spotted Joe-Pye Weed	1.00
Iris virginica v. shrevei	Blue Flag	4.00
Liatris spicata	Marsh Blazing Star	1.00
Lycopus americanus	Common Water Horehound	0.50
Mimulus ringens	Monkey Flower	0.50
Penthorum sedoides	Ditch Stonecrop	1.00
Pycnanthemum virginianum	Common Mountain Mint	0.50
Rudbeckia triloba	Brown-Eyed Susan	1.00
Senna hebecarpa	Wild Senna	1.00
Silphium terebinthinaceum	Prairie Dock	1.00
Symphyotrichum novae-angliae	New England Aster	0.50
Verbena hastata	Blue Vervain	1.50
Zizia aurea	Golden Alexanders	2.00
	Total	**20.00**

Mix Statistics

Native Component	PLS lbs./Acre	PLS Seeds/Acre	PLS Seeds/Sq. Ft.	% of Native Mix
Forbs	1.25	1,181,895	27.13	31.09%
Grasses	3.75	2,619,949	60.15	68.91%
Total Natives	5.00	3,801,804	87.28	100.00%
Cover	32.00	576,000	13.22	
Totals	37.00	4,377,804	100.50	

Emergent Plugs

Symbol	Quantity	Botanical Name	Common Name	Size	Mean height	Notes
	8	ASCLEPIAS INCARNATA	SWAMP MILKWEED	3" PLUG	4'	36" O.C. - FORB
	8	BOLTONIA ASTERIODES	FALSE ASTER	3" PLUG	3'	36" O.C. - FORB
	8	CAREX STRICTA	COMMON TUSSOCK SEDGE	3" PLUG	3'	36" O.C. - GSR
	8	CAREX VULPINOIDEA	FOX SEDGE	3" PLUG	3'	36" O.C. - GSR
	4	CHELONE GLABRA	WHITE TURTLEHEAD	3" PLUG	5'	48" O.C. - FORB
	4	HIBISCUS LAEVIS	ROSEMALLOW	3" PLUG	5'	48" O.C. - FORB
	4	IRIS VERSICOLOR	BLUE FLAG IRIS	3" PLUG	3'	48" O.C. - FORB
	8	LIATRIS PYCNOSTACHYA	PRAIRIE BLAZING STAR	3" PLUG	4'	36" O.C. - FORB
	8	LOBELIA CARDINALIS	CARDINAL FLOWER	3" PLUG	4'	36" O.C. - FORB
	4	SCHOENOPLECTUS ACUTUS	HARD-STEMMED BULRUSH	3" PLUG	6'	48" O.C. - GSR
	8	SOLIDAGO OHIOENSIS	OHIO GOLDENROD	3" PLUG	3'	36" O.C. - FORB
	8	SPARGANIUM EURYCARPUM	GREAT BUR REED	3" PLUG	4'	36" O.C. - FORB
	4	SPARTINA PECTINATA	PRAIRIE CORDGRASS	3" PLUG	7'	48" O.C. - GSR
	4	VERBENA HASTATA	BLUE VERVAIN	3" PLUG	5'	48" O.C. - FORB

Notes:
Plant quantities are estimated based on spacing recommended. Quantity reflects 1,000 SF
Plugs to be planted in groupings of "like species"
Final layout to be approved by Landscape Architect

GENERAL CONSTRUCTION NOTES

1. REQUIRED LANDSCAPE MATERIAL SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS AND BE STAKED, WRAPPED, WATERED AND MULCHED PER ORDINANCE.
2. BEFORE ANY EXCAVATION ON THE SITE, CALL TO LOCATE ANY EXISTING UTILITIES ON THE SITE. THE CONTRACTOR SHALL FAMILIARIZE HIMHERSELF WITH THE LOCATIONS OF ALL BURIED UTILITIES IN THE AREAS OF WORK BEFORE STARTING OPERATIONS. THE CONTRACTOR SHALL BE LIABLE FOR THE COST OF REPAIRING OR REPLACING ANY BURIED CONDUITS, CABLES OR PIPING DAMAGED DURING THE INSTALLATION OF THIS WORK.
3. FOUR FOOT HIGH FENCING OR OTHER RIGID MATERIAL IS TO BE ERECTED AROUND THE DRIP-LINE OF ALL TREES TO BE SAVED.
4. PLANT QUANTITIES ON PLANT LIST INTENDED TO BE A GUIDE. ALL QUANTITIES SHALL BE CHECKED AND VERIFIED ON PLANTING PLAN. ANY DISCREPANCIES SHALL BE DISCUSSED WITH THE LANDSCAPE ARCHITECT.
5. ANY DEVIATIONS FROM OR MODIFICATIONS TO THIS PLAN SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
6. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT UPON DELIVERY OF PLANT MATERIAL TO THE SITE. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL THAT DOESN'T MEET STANDARDS OR SPECIFICATIONS OF THE PROJECT.
7. ALL PLANT MATERIAL TO BE INSTALLED PER THE PLANTING DETAILS PROVIDED ON THIS PLAN SET.
8. ALL BED EDGES TO BE WELL SHAPED, SPADE CUT, WITH LINES AND CURVES AS SHOWN ON THIS PLAN SET.
9. ALL PLANTING BEDS TO BE PREPARED WITH PLANTING MIX: 50% TOPSOIL, 50% SOIL AMENDMENTS (3 PARTS PEATMOSS, 1 PART COMPOST, 1 PART SAND)
10. ALL PARKING LOT ISLANDS SHALL BE BACKFILLED WITH THE FOLLOWING: 2' OF BLENDED GARDEN SOIL MIX (60% TOPSOIL, 30% COMPOST, 10% SAND) OR 6" OF *ONE STEP* BY MIDWEST TRADING, TOP DRESSED AND TILLED INTO 18" OF TOPSOIL.
11. ALL SPECIFIED LANDSCAPE MATERIAL INDICATED ON THE CONSTRUCTION DOCUMENTS WILL BE REQUIRED TO BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT AND MUST BE REPLACED SHOULD IT DIE OR BECOME DAMAGED.
12. ALL PLANT MATERIAL SHALL HAVE A ONE YEAR GUARANTEE FROM SUBSTANTIAL COMPLETION AS DETERMINED BY THE LANDSCAPE ARCHITECT, AND SHALL BE REPLACED SHOULD IT DIE WITHIN THAT PERIOD.
13. PROTECT STRUCTURES, SIDEWALKS, PAVEMENTS AND UTILITIES TO REMAIN FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUTS AND OTHER HAZARDS CAUSED BY SITE IMPROVEMENT OPERATIONS.
14. ALL LAWN AREAS TO BE SEEDED WITH STANDARD TURF GRASS SEED AND COVERED WITH EROSION CONTROL BLANKET. ESS OTHERWISE SPECIFIED ON THE PLAN.

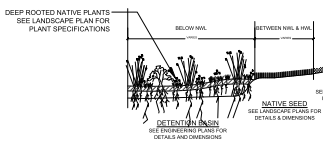
EFULLY MAINTAIN PRESENT GRADE AT BASE OF ALL EXISTING TREES TO REMAIN. PREVENT ANY DISTURBANCE OF TING TREES INCLUDING ROOT ZONES. USE TREE PROTECTION BARRICADES WHERE INDICATED. PROTECT EXISTING ES TO REMAIN AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, BRUISING OF BARK OR THERING OF TREES. DRIVING, PARKING, DUMPING, STOCKPILING AND/OR STORAGE OF VEHICLES, EQUIPMENT, PLIES, MATERIALS OR DEBRIS ON TOP THE ROOT ZONES AND/OR WITHIN THE DRIPLINE OF EXISTING TREES OR OTHER IT MATERIAL TO REMAIN IS STRICTLY PROHIBITED.

CONTRACTOR AT ALL TIMES SHALL KEEP THE PREMISES ON WHICH WORK IS BEING DONE, CLEAR OF RUBBISH AND RIS. ALL PAVEMENT AND DEBRIS REMOVED FROM THE SITE SHALL BE DISPOSED OF LEGALLY.

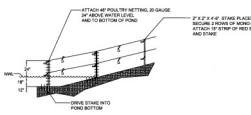
WORK AND OPERATIONS SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES.

PLANTING NOTES FOR DETENTION AREAS

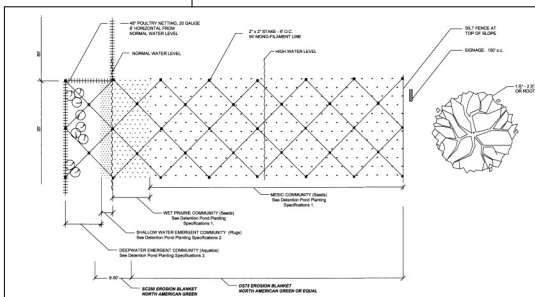
1. REFER TO CIVIL ENGINEERING DRAWINGS FOR CONSTRUCTION DETAILS OF DETENTION AREAS
2. REQUIRED LANDSCAPE MATERIAL SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS AND BE WATERED AND MULCHED PER CONSTRUCTION DOCUMENTS.
3. ALL PROPOSED PLANT SUBSTITUTIONS WITHIN DETENTION AREAS MUST BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
4. ALL REQUIRED LANDSCAPE MATERIAL INDICATED ON THE APPROVED PLANS WILL BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT AND MUST BE REPLACED SHOULD IT DIE.
5. CONTRACTOR RESPONSIBLE FOR THE MAINTENANCE ALL PLANT MATERIAL WITHIN DETENTION AREAS AS SPECIFIED BY THE LANDSCAPE ARCHITECT FOR THE FIRST YEAR AFTER INSTALLATION.
6. ALL PLANT MATERIAL WITHIN DETENTION AREAS TO HAVE A 1 YEAR WARRANTEE STARTING UPON LANDSCAPE ARCHITECT ISSUING "SUBSTANTIAL COMPLETION".
7. WATER FOWL BARRIER CONTROL TO BE INSTALLED AT 8' O.C. IN ALL DETENTION AREAS PLANTED WITH PLUGS.
8. METAL SIGNS (12"x18") TO BE INSTALLED AT 150' INTERVALS AROUND ALL NATIVE AREAS STATING "NATIVE PLANTING DO NOT MOW".
9. ALL WORK AND OPERATIONS SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES.



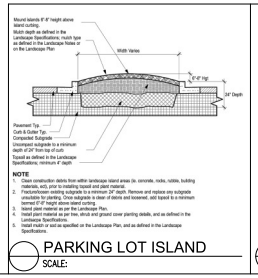
BIODETENTION PLANTING DETAIL
SCALE: NO SCALE



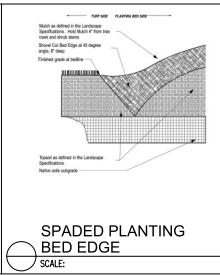
GOOSE BARRIER SECTION
SCALE: NO SCALE



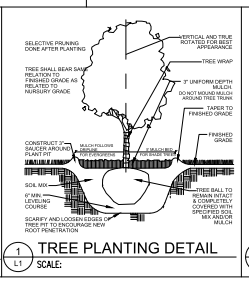
GOOSE BARRIER PLAN
SCALE: NO SCALE



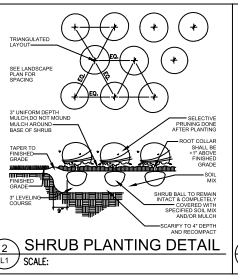
PARKING LOT ISLAND
SCALE:



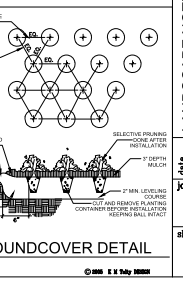
SPADED PLANTING BED EDGE
SCALE:



1 L1 TREE PLANTING DETAIL
SCALE:



2 L1 SHRUB PLANTING DETAIL
SCALE:



3 L1 GROUNDCOVER DETAIL
SCALE:

© 2005 K K Tally ASSOC

Kathryn Talty
landscape architecture
Winnetka, Illinois 60093
847.612.5154
www.kmtallydesign.com

no.	revision description	initial	date
1	ISSED FOR REVIEW	KMT	03-29-22
2	PER SITE PLAN ADJUSTMENTS	KMT	04-12-22

PROPOSED DEVELOPMENT
2234-2240 RAND ROAD
PALATINE, IL

LANDSCAPE NOTES
MASTER PLANT LIST
PLANTING SPECIFICATIONS
DETAILS

date 01.26.22 | drawn KMT | checked KMT

job no. 22030

sheet no. L

Attachment: Missener Group - 2240-2296 N. Rand Road - Landscaping Plan (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

NATIVE PLANT & SEED INSTALLATION
MANAGEMENT AND MONITORING PLAN

All native planting and seeding installation, management and monitoring to be conducted by a qualified, experienced contractor specializing in restoring and managing natural landscapes in the Midwest.

PLANT MATERIAL INSTALLATION – NATIVE SEEDING

Prepare area for seeding - prepare the soil and create optimal plant conditions, before disturbing any ground:

- Check for any buried utilities
- Clear area of debris that would interfere with planting
- Mow any excess existing vegetation growth
- Apply broad-spectrum or targeted herbicide, depending on species present
- De-compact any areas of special concern
  - Lightly de-compact tilled or loose soil with a roller, cultipacker, or similar equipment. If using a no-till seed drill, tilling can usually be omitted.
  - If ground is wet, tilling should not occur until the soil dries enough to break apart when tilled.

Follow the appropriate timing:

- The optimal time to install seed is from the fall (November 1) to late spring (June 15).
- Wetlands should be seeded in the winter while the site is frozen and equipment can more easily access the site.

Method for seeding and erosion control:

- Broadcasting:
  - For small (typically two acres or less) or irregularly shaped areas, seed can be planted by hand broadcasting. To aid seed distribution, combine the seed mix with filler materials, such as dry sawdust, sand, or vermiculite.
  - Using a hand-crank or tow-behind broadcaster, start with half of the seed and try to cover the entire area with that amount of seed. Take the remaining half of the seed, go to the opposite end of the site and cover it again. After broadcasting is complete, it is important to use a cultipacker or roller over the area to make good seed-to-soil contact. Do not cover seed more than 1/4-inch deep.
- No-Till Drill:
  - For larger areas and sites with existing vegetation, use a no-till seed drill, which does not require the soil to be tilled before planting, resulting in minimal soil disturbance. No-till drills plant seed in rows by opening slits in the soil, into which seed is deposited. If using a no-till drill, follow the specific manufacturer's recommendations. Because the diversity of seed sizes makes drill calibration a challenge, perform a few test areas first to help prevent running out of seed.
- Erosion control method:
  - Install biodegradable erosion control blanket (NAG S75 or equal) until seed has germinated.

PLANT MATERIAL MANAGEMENT – NATIVE SEEDING

To help ensure success, projects need a maintenance and monitoring plan that is flexible and supports site development goals. While native plants tend to germinate and develop at a slower rate than ornamental perennials or turf grass, regular maintenance during the establishment period greatly improves project success. Regular maintenance and monitoring controls invasive species, ensures optimal moisture levels are present, and identifies other necessary management actions.

- Native areas need between 3 to 5 years to establish.
- Preferred planting late fall (any time after November 1; if the soil surface is dry and cold enough to prevent germination and seed can be worked into soil.
- Let seed germinate and grow for one full season. **Do not** apply herbicides for weed control within the first growing season. If large weeds are unsightly, clip off; **do not pull** weeds to keep growth down. **Do not** allow seed heads to form.
- Mow first time when established in first season to 4"- 6" high, to scatter seed heads. If clumping occurs lightly rake to disburse seed.
- Mow 2-3 additional times to maintain 6-8 inches in height.
- Some perennial seeds may not germinate until the following year.
- If fall planting is not possible, spring seeding can be done (weather permitting) as early as January - preferably before April 15.
- Second season mow 3-4 times to maintain 8-10 inches in height.
- At the end of the third season a controlled burn program to be performed.
- 4 (four) annual weed control events (selective herbicide and mechanical) to be performed starting in the second season.

MINIMUM PERFORMANCE STANDARDS AND MONITORING ACTIVITIES

Performance standards are established for all proposed projects involving naturalized areas so that the relative success of creation and enhancement efforts may be evaluated. If the performance standards are not achieved by the end of the three-year management and monitoring program, the owner is responsible for correction of any deficiencies through further management activities, which may include replanting or reseeding.

- Native areas are to be monitored for a minimum of 3 (three) years from date of installation.
- Within 3 months of seed installation, at least 90% of the seeded areas (mesic prairie and broad-spectrum seed mix), as measured by aerial coverage, shall be vegetated. A minimum 90% vegetative coverage shall be maintained throughout, and at the end of, the three-year period for these areas.
  - This standard does not apply to the emergent zones.
- The naturalized areas shall not contain any rills greater than 4 inches wide and 4 inches deep throughout, and at the end, of the three-year period.
- At the end of the second growing season, 30% seed mix presence for the mesic and broad-spectrum seed mixes shall be achieved. At the end of the third growing season, 50% seed mix presence for the mesic and broad-spectrum seed mixes shall be achieved.
  - Seed mix presence shall be evaluated separately for these two mixes.
- No area over the entire native planted site greater than 1 square meter will be devoid of vegetation (as measured by aerial coverage/ocular estimation). unless specified on approved plans.
  - This annual performance standard does not apply to emergent and aquatic communities.
- The native planted areas will meet the following annual standards for the presence of native, non-invasive perennial species (as measured by aerial coverage/ocular estimation): Year 1 – 15%, Year 2 – 50%, Year 3 – 75%
  - This standard to be measured separately for each seed mix zone.
- At the end of the third growing season, none of the three most dominant species within the planted areas will be invasive or non-native species as inspected annually. The project manager will determine the appropriate target invasive or non-native species. They will typically include, but are not limited to, the following: Ragweed (Ambrosia spp.), Cattail (Typha spp.), Reed Canary Grass (Phalaris arundinacea), Purple Loosestrife (Lythrum salicaria), Common Reed (Phragmites australis), Canadian Thistle (Cirsium arvense), Sandbar Willow (Salix interior), Kentucky Blue Grass (Poa pratensis), Yellow Sweet-Clover (Melilotus officinalis), Teasel (Dipsacus spp.), Japanese-Knotweed (Reynoutria japonica), and Asian Bittersweet (Celastrus orbiculatus), Buckthorn (Rhamnus spp.).
  - This standard to be measured separately for each seed mix zone.
- Emergents: At the end of the third growing season, 50% vegetative coverage shall be achieved (as measured by aerial coverage/ocular estimation).
- Emergents: Relative coverage of cattails (as measured by aerial coverage/ocular estimation) shall be less than 5% throughout, and at the end of, the three year monitoring period.
- Plugs: 90% of the plants will be alive, in healthy condition, and representative of the individual species at the end of each growing season. Replanting will take place until this standard is achieved.
- Woody plants: 90% of the planted trees and shrubs will be alive, in healthy condition, and representative of the individual species at the end of each growing season.
- Relative coverage (determined by ocular estimation) of invasive species (i.e., common reed, reed canary grass, purple loosestrife, etc.) in aggregate shall be less than 5% throughout, and at the end of, the three-year period.
  - This standard shall be evaluated separately for each seed and plant mix zone (i.e., mesic prairie, broad spectrum seed mix, emergent).
- Native Mean C value > 3.0 and Native FQI value > 20.0 for all native plant communities.
  - This standard shall be evaluated separately for each seed and plant mix zone (i.e., mesic prairie, broad spectrum seed mix, emergent).
- Soil erosion and sediment control measures shall be regularly maintained.

LANDSCAPE MAINTENANCE SPECIFICATIONS

STANDARDS
All landscape maintenance services shall be performed by trained personnel using current, acceptable horticultural practices.

All work shall be performed in a manner that maintains the original intent of the landscape design.

All chemical applications shall be performed in accordance with current county, state and federal laws, using EPA registered materials and methods of application. These applications shall be performed under the supervision of a Licensed Certified applicator.

APPROVALS
Any work performed in addition to that which is outlined in the contract shall only be done upon written approval by the Owner's Representative.

All seasonal color selections shall be approved by the Owner's Representative prior to ordering and installation.

SOIL TESTING
The maintenance contractor shall perform soil tests as needed to identify imbalances or deficiencies causing plant material decline. The owner shall be notified of the recommendation for approval, and the necessary corrections made at an additional cost to the owner.

Acceptable Soil Test Results:

	Landscape Trees & Shrubs	Turf
pH Range	5.0-7.0	6.0-7.0
Organic Matter	>1.5%	>2.5%
Magnesium (Mg)	100+lbs./acre	100+lbs./acre
Phosphorus (P2O5)	150+lbs./acre	150+lbs./acre
Potassium (K2O)	120+lbs./acre	120+lbs./acre
Soluble salts	Not to exceed 900ppm/1.9 mmhos/cm in soil; not to exceed 1400 ppm/2.5 mmhos/cm in high organic mix	Not to exceed 750ppm/0.75 mmhos/cm in soil; not to exceed 2000 ppm/2.0 mmhos/cm in high organic mix

For unusual soil conditions, the following optional tests are recommended with levels not to exceed:

Boron	3 pounds per acre
Manganese	50 pounds per acre
Potassium (K2O)	450 pounds per acre
Sodium	20 pounds per acre

WORKMANSHIP
During landscape maintenance operations, all areas shall be kept neat and clean. Precautions shall be taken to avoid damage to existing structures. All work shall be performed in a safe manner to the operators, the occupants and any pedestrians.

Upon completion of maintenance operations, all debris and waste material shall be cleaned up and removed from the site, unless provisions have been granted by the owner to use on-site trash receptacles.

Any damage to the landscape, the structure, or the irrigation system caused by the maintenance contractor, shall be repaired by the maintenance contractor without charge to the owner.

TURF

GENERAL CLEAN UP
Prior to mowing, all trash, sticks, and other unwanted debris shall be removed from lawns, plant beds, and paved areas.

MOWING
Turf grasses, including blue grass, tall fescue, perennial ryegrass, etc., shall be maintained at a height of 2" to 3" in spring and fall. From June through September, mowing height shall be maintained at no less than 3".

The mowing operation includes trimming around all obstacles, raking excessive grass clippings and removing debris from walks, curbs, and parking areas. Caution: Mechanical weeders should NOT be used around trees because of potential damage to the bark.

EDGING
Edging of all sidewalks, curbs and other paved areas shall be performed once every other mowing. Debris from the edging operations shall be removed and the areas swept clean. Caution shall be used to avoid flying debris.

FERTILIZING
Seasonally stepped fertilizer shall be applied in areas based on the existing turf species.

LAWN WEED CONTROL: HERBICIDES
Selection and proper use of herbicides shall be the landscape contractor's responsibility. All chemical applications shall be performed under the supervision of a Licensed Certified Applicator. **Read the label prior to applying any chemical.**

INSECT & DISEASE CONTROL FOR TURF
The contractor shall be responsible for monitoring the site conditions on each visit to determine if any insect pest or disease problems exist. The contractor shall identify the insect pest or disease, as well as the host plant, and then consult the most current edition of the Cooperative Extension Service's "Commercial Insecticide Recommendation for Turf" for control. The licensed applicator shall be familiar with the label provided for the selected product prior to application.

Inspection and treatment to control insect pests shall be included in the contract price.

TREES, SHRUBS, & GROUND COVER

PRUNING
All ornamental trees, shrubs and ground cover shall be pruned when appropriate to remove dead or damaged branches, develop the natural shapes. Do not shear trees or shrubs. If previous maintenance practice has been to shear and ball, then a natural shape will be restored gradually.

Pruning Guidelines:

1. Prune plants that flower before the end of June (spring blooming) immediately after flowering. Flower buds develop during the previous growing season. Fall, winter or spring pruning would reduce the spring flowering display.
2. Prune plants that flower in July – September (summer or autumn blooming) in winter or spring before new growth begins, since these plants develop flowers on new growth.
3. Delay pruning plants grown for ornamental fruits, such as Cotoneasters and Viburnums.
4. Hollies and other evergreens may be pruned during winter in order to use their branches for seasonal decoration. However, severe pruning of evergreens should be done in early spring only.
5. Broadleaf evergreen shrubs shall be hand-pruned to maintain their natural appearance after the new growth hardens off.
6. Hedges or shrubs that require shearing to maintain a formal appearance shall be pruned as required. Dead wood shall be removed from sheared plants before the first shearing of the season.
7. Conifers shall be pruned, if required, according to their genus.
   A. Yews, Junipers, Hemlocks and Arborvitae may be pruned after new growth has hardened off in late summer. If severe pruning is necessary, it must be done in early spring.
   B. Firs and spruces may be lightly pruned in late summer, fall, or winter after completing growth. Leave side buds. Never cut central leader.
   C. Pines may be lightly pruned in early June by reducing candles.
8. Groundcover shall be edged and pruned as needed to contain it within its borders.
9. Thinning: Remove branches and water sprouts by cutting them back to their point of origin on parent stems. This method results in a more open plant, without stimulating excessive growth. Thinning is used on Crab Apples, Lilacs, Viburnums, etc.
10. Renewal pruning: Remove oldest branches of shrub at ground, leaving the younger, more vigorous branches. Also remove weak stems. On overgrown plants, this method may be best done over a three-year period. Renewal pruning may be used on Forsythia, Hydrangea, Spiraea, etc.

Plants overhanging passageways and parking areas and damaged plants shall be pruned as needed.

Shade trees that cannot be adequately pruned from the ground shall not be included in the Maintenance Contract. A certified arborist under a separate contract shall perform this type of work.

SPRING CLEANUP
Plant beds shall receive a general cleanup before fertilizing and mulching. Cleanup includes removing debris and trash from beds and cutting back herbaceous perennials left standing through winter; e.g. ornamental grasses, Sedum Autumn Joy.

FERTILIZING
For trees, the rate of fertilization depends on the tree species, tree vigor, area available for fertilization, and growth stage of the tree. Mature specimens benefit from fertilization every 3 to 4 years; younger trees shall be fertilized more often during rapid growth stages.

The current recommendation is based on the rate of 1000 square feet of area under the tree to be fertilized. For deciduous trees, 2 to 6 pounds of Nitrogen per 1000 square feet; for narrow-leaf evergreens, 1 to 4 pounds of Nitrogen per 1000 square feet; for broadleaf evergreens, 1 to 3 pounds of Nitrogen per 1000 square feet.

Shrubs and groundcover shall be top-dressed with compost 1" deep or fertilized once in March with 10-6-4 analysis fertilizer at the rate of 3 pounds per 100 square feet of bed area.
Ericaceous material shall be fertilized with an ericaceous fertilizer at the manufacturer's recommendation rate. If plants are growing poorly, a soil sample should be taken.

MULCHING
Annually, all tree and shrub beds will be prepared and mulched. to a minimum depth of 3" with quality mulch to match existing. Bed preparation shall include removing all weeds, cleaning up said bed, edging and cultivating decayed mulch into the soil. Debris from edging is to be removed from beds where applicable. If deemed necessary, a pre-emergent herbicide may be applied to the soil to inhibit the growth of future weeds.

Organically maintained gardens shall not receive any pre-emergent herbicides. Mulch in excess of 4" will be removed from the bed areas. SPECIAL CARE shall be taken in the mulching operation not to over-mulch or cover the base of trees and shrubs. This can be detrimental to the health of the plants.

WEEDING
All beds shall be weeded on a continuous basis throughout the growing season to maintain a neat appearance at all times.

Pre-emergent (soil-applied) and post-emergent (foliar-applied) herbicides shall be used where and when applicable and in accordance with the product's label.

INSECT & DISEASE CONTROL: TREES, SHRUBS & GROUNDCOVER

The maintenance contractor shall be responsible for monitoring the landscape site on a regular basis. The monitoring frequency shall be monthly except for growing season, which will be every other week. Trained personnel shall monitor for plant damaging insect activity, plant pathogenic diseases and potential cultural problems in the landscape. The pest or cultural problem will be identified under the supervision of the contractor.

For plant damaging insects and mites identified in the landscape, the contractor shall consult and follow the recommendations of the most current edition of the state Cooperative Service publication on insect control on landscape plant material.

Plant pathogenic disease problems identified by the contractor that can be resolved by pruning or physical removal of damaged plant parts will be performed as part of the contract. For an additional charge, plant pathogenic diseases that can be resolved through properly timed applications of fungicides shall be made when the owner authorizes it.

If the contractor notes an especially insect-or disease-prone plant species in the landscape, he/she will suggest replacement with a more pest-resistant cultivar or species that is consistent with the intent of the landscape design.

NOTE: For identification of plant-damaging insects and mites, a reference textbook that can be used is *Insects that feed on Trees and Shrubs* by Johnson and Lyon, Comstock Publishing Associates. For plan pathogenic diseases, two references are suggested: *Scouting and Controlling Woody Ornamental Diseases in Landscapes and Nurseries*, authorized by Gary Moorman, published by Penn State College of Agricultural Sciences, and *Diseases of Trees and Shrubs* by Sinclair and Lyon, published by Comstock Publishing Press.

TRASH REMOVAL
The maintenance contractor shall remove trash from all shrub and groundcover beds with each visit.

LEAF REMOVAL
All fallen leaves shall be removed from the site in November and once in December. If requested by the owner, the maintenance contractor, at an additional cost to the owner shall perform supplemental leaf removals.

WINTER CLEAN-UP
The project shall receive a general clean-up once during each of the winter months, i.e., January, February, and March.

Clean-up includes:

- Cleaning curbs and parking areas
- Removing all trash and unwanted debris
- Turning mulch where necessary
- Inspection of grounds

SEASONAL COLOR: PERENNIALS, ANNUALS, AND BULBS

The installation of perennials, annuals, and bulbs, unless specified herein, shall be reviewed with the owner, and, if accepted, installed and billed to the owner.

SEASONAL COLOR MAINTENANCE

Perennialization of Bulbs:

1. After flowering, cut off spent flower heads.
2. Allow leaves of daffodils and hyacinths to remain for six weeks after flowers have faded. Cut off at base.
3. Allow leaves of other bulbs to yellow naturally and then cut off at base.
4. Apply fertilizer after flowering in spring, possibly again in fall. Apply 10-10-10 at the rate of 2 pounds per 1000 square feet or top-dress with compost 1" deep. Fall fertilization with a bulb fertilizer or mulching with 1" of compost is optional.

Flower Rotation:

1. Bulbs: Remove the entire plant and bulb after flowers have faded or at the direction of the owner and install new plants if included in contract.
2. Summer Annuals or Fall Plants:
   a. Dead heading: Pinch and remove dead flowers on annuals as necessary.
   b. Fertilizing Summer Annuals: Fertilize using one or two methods: Apply a slow-release fertilizer in May following manufacturer's recommendations. A booster such as 10-10-10 may be necessary in late summer. Or, apply liquid fertilizations of 20-20-20 water-soluble fertilizers, not to exceed 2 pounds of 20-20-20 per 100 gallons of water, monthly; or mulch with compost 1" deep.
   c. Removal: If fall plants are to be installed, summer annuals shall be left in the ground until the first killing frost and then removed, unless otherwise directed by the owner.

Perennials:

1. After initial installation, if a time-released fertilizer has been incorporated during plant installation, no more fertilizer need be applied the first growing season.
2. The following year:
   a. Fertilize perennials with a slow-release fertilizer or any 50% organic fertilizer, or mulch perennials with compost 1" deep.
   b. Cut all deciduous perennials flush to the ground by March 1, if this was not done the previous fall, to allow new growth to develop freely.
   c. Mulch the perennial bed once in early spring at 1"-2" depth. If soil is bared in late fall, re-mulch lightly after ground is frozen to protect perennials.
   d. Inspect for insect or disease problems on perennials. Monitor and control slugs on hostas and ligularias. Powdery mildew on phlox, monardas, and asters can be prevented with properly timed fungicides or use of disease-resistant varieties.
   e. Weed perennial bed as specified in "WEEDING" above.
   f. Prune branching species to increase density. Cut only the flowering stems after blooming. Do not remove the foliage.
3. The following fall cut back deteriorating plant parts unless instructed to retain for winter interest, e.g. Sedum Autumn Joy and ornamental grasses.
4. Long-term Care:
   a. Divide plants that overcrowd the space provided. Divide according to the species. Some need frequent dividing, e.g asters and yarrow every two years; other rarely, if ever, e.g. peonies, hostas, and astilbe.
   b. For detailed information regarding the care of specific perennials, refer to *All About Perennials* by Ortho; *Perennials: How to Select, Grow and Enjoy* by Pamela Harper and Frederick McGourty, Hp Books Publisher; *Herbaceous Perennial Plants: A Treatise on their Identification, Culture and Garden Attributes* by Allan Armitage, Stipes Pub LLC.

SUMMARY OF MAINTENANCE

LAWN MAINTENANCE

1. Soil analysis performed annually to determine pH. If pH does not fall within specified range, adjust according to soil test recommendations.
2. Maintain proper fertility and pH levels of the soil to provide an environment conducive to turf vitality for turf grasses.
3. Mow turf on a regular basis and as season and weather dictates. Remove no more than the top 1/3 of leaf blade. Clippings on paved and bed areas will be removed.
4. Aerate warm season turf areas to maintain high standards of turf appearance.
5. Apply pre-emergent to turf in two applications in early February and early April to extend barrier.
6. Apply post emergent as needed to control weeds.
7. Mechanically edge curbs and walks.
8. Apply non-selective herbicide, to mulched bed areas and pavement and remove excess runners to maintain clean defined beds.

TREE, GROUNDCOVER AND SHRUB BED MAINTENANCE

1. Prune shrubs, trees and groundcovers to encourage healthy growth and create a natural appearance.
2. Mulch to be applied in February/March with a half rate in late summer to top dress.
3. Apply pre-emergent herbicides in February and April.
4. Manual weed control to maintain clean bed appearance.
5. Apply fungicides and insecticides as needed to control insects and disease.
6. Ornamental shrubs, trees and groundcovers to be fertilized three (3) times per year with a balanced material (January/February, April/May, and October/November)
7. Edge all mulched beds.
8. Remove all litter and debris.

GENERAL MAINTENANCE

1. Remove all man-made debris, blow edges.
2. Inspect grounds on a monthly basis and schedule inspection with Unit Operator.

Kathryn Talty
landscape architecture
Winnetka, Illinois 60093
847.612.5154
www.kmtaltydesign.com

no.	revision description	initial	date
1	ISSUED FOR REVIEW	KMT	03-29-22
2	PER SITE PLAN ADJUSTMENTS	KMT	04-12-22

PROPOSED DEVELOPMENT
2234-2240 RAND ROAD
PALATINE, IL

LANDSCAPE INSTALLATION AND MONITORING SPECIFICATIONS

date 01.26.22
drawn SDW
checked

job no. 22030

sheet no. L

Attachment: Missener Group - 2240-2296 N. Rand Road - Landscaping Plan (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

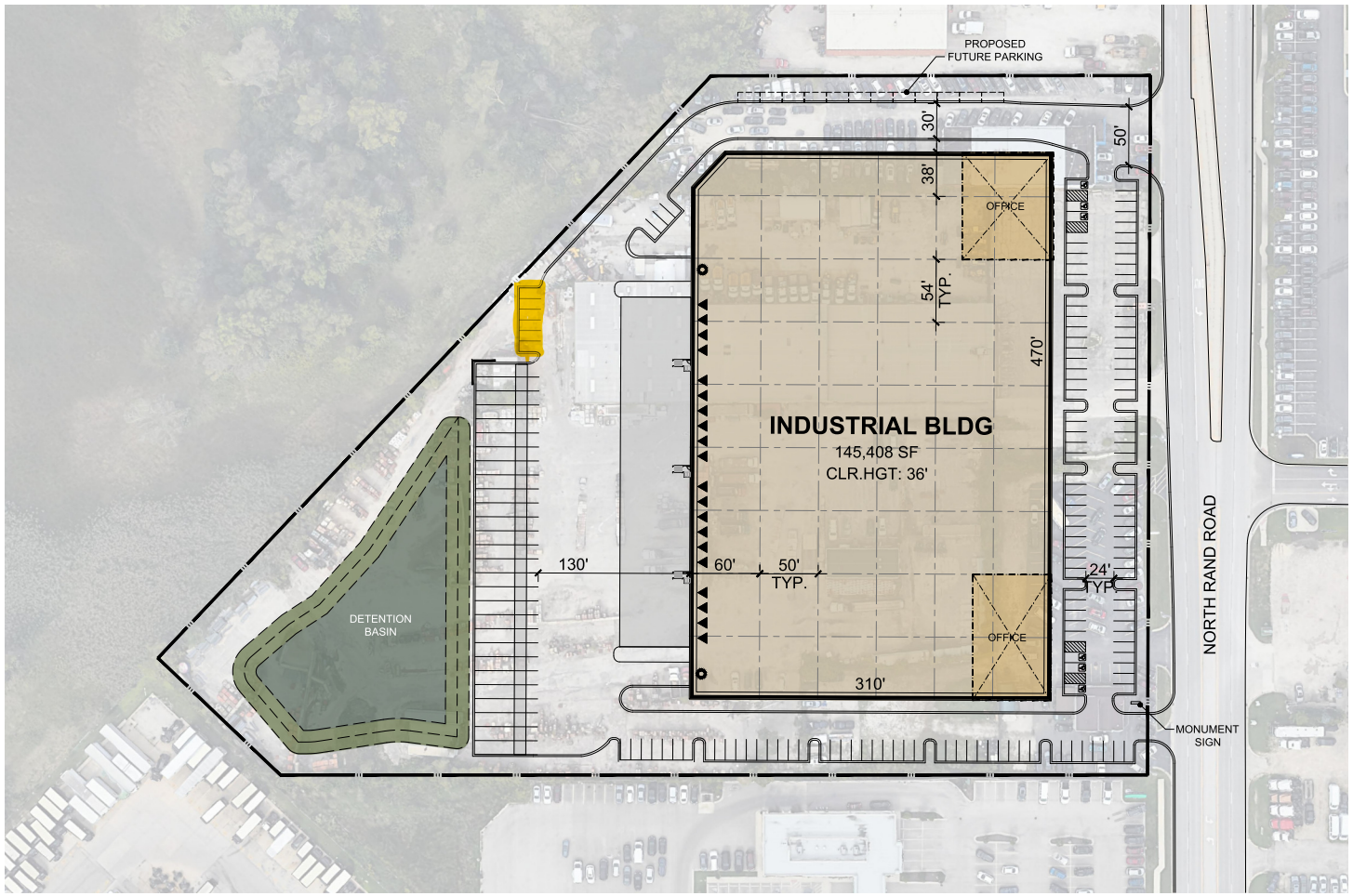
3.2.e

Packet Pg. 379

7.C.1.A.p

104

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



PROJECT DATA:		
SITE AREA:		
GROSS:		8.86 AC
		385,828 SF
DETENTION:	@ 9%	34,746 SF
NET:		8.06 AC
		351,082 SF
BUILDING FOOTPRINT:		145,408 SF
BUILDING USE:		
WAREHOUSE		130,867 SF
OFFICE	@ 10%	14,541 SF
COVERAGE:		
GROSS:		38%
NET:		41%
PARKING REQUIRED:		
WAREHOUSE	1/1000 SF	131 STALLS
OFFICE	1/300 SF	48 STALLS
TOTAL		179 STALLS
PARKING PROVIDED:		
AUTO:		141 STALLS
		@0.97/1000 SF
REQ. ACCESSIBLE		*5 STALLS*
TRAILER:		28 STALLS
FUTURE PARKING PROPOSED:		
AUTO:		13 STALLS
TRUCK DOCKS:		
▲ DOCK-HIGH DOORS		20

DEVELOPMENT STANDARDS:	
ZONING:	M
MAX. F.A.R.:	0.70
MAX. COVERAGE:	TBD [1]
MAX. HEIGHT:	60 FT
BUILDING SETBACKS:	
FRONT:	30 FT
SIDE:	15 FT
REAR:	15 FT
LANDSCAPE SETBACKS:	
FRONT:	5 FT
SIDE:	2 FT
REAR:	2 FT
LANDSCAPE REQ.:	[2]
OFF-STREET PARKING:	
STANDARD:	9X19
COMPACT:	8X16
DRIVE AISLE:	25 FT
FIRE LANE:	TBD [1]
REQ. PARKING RATIO BY USE:	
WAREHOUSE:	1/1000 SF
OFFICE:	1/300 SF

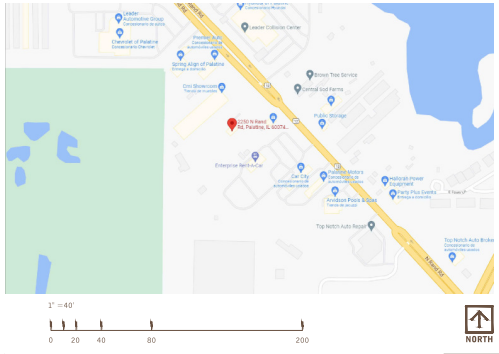
NOTES:
1 To be confirmed by city.
2 1 tree for every 10 parking stalls.

A PORTION OF THE ZONING INFORMATION IS UNKNOWN AT THIS TIME AND REQUIREMENTS MAY DIFFER THAN WHAT IS SHOWN IN THE SITE PLAN.

This conceptual design is based upon a preliminary review of entitlement requirements and on unverified and possibly incomplete site and/or building information, and is intended merely to assist in exploring how the project might be developed.

Stormwater Management Design:
AVERAGE REGIONAL REQUIRED PROVIDED

Boundary Source:
CIVIL CAD FILE



THE MISSNER GROUP EST. 1945

scheme: 08

Conceptual Site Plan

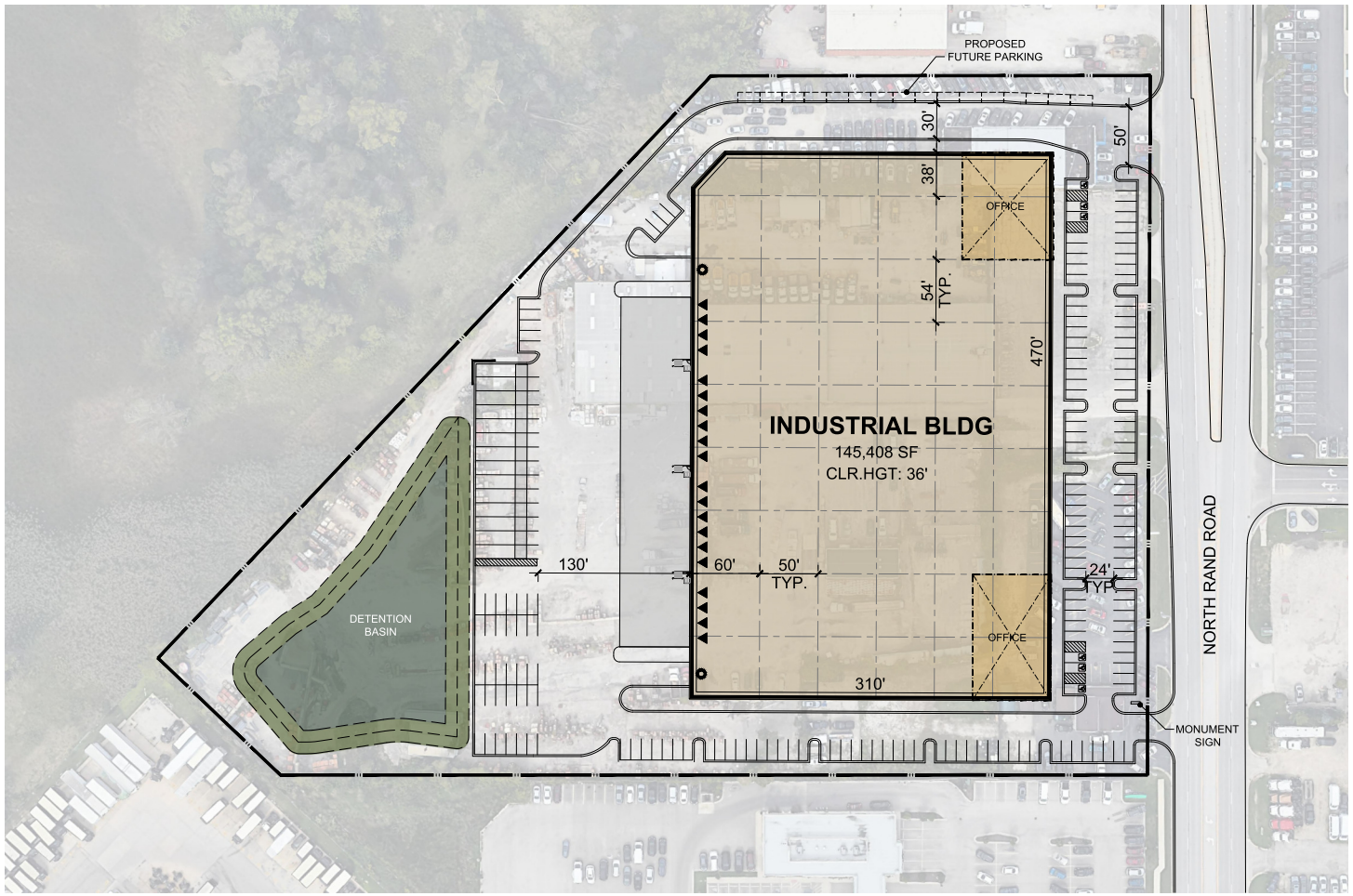
2250 North Rand Road
Palatine, IL 60074

WARE MALCOMB

CHI21-0193-00
06.01.2022

SHEET
1

Attachment: Site Plan (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)



PROJECT DATA:		
SITE AREA:		
GROSS:		8.86 AC
		385,828 SF
DETENTION:	@ 9%	34,746 SF
NET:		8.06 AC
		351,082 SF
BUILDING FOOTPRINT:		145,408 SF
BUILDING USE:		
WAREHOUSE		130,867 SF
OFFICE	@ 10%	14,541 SF
COVERAGE:		
GROSS:		38%
NET:		41%
PARKING REQUIRED:		
WAREHOUSE	1/1000 SF	131 STALLS
OFFICE	1/300 SF	48 STALLS
TOTAL		179 STALLS
PARKING PROVIDED:		
AUTO:		169 STALLS
		@1.16/1000 SF
REQ. ACCESSIBLE		*6 STALLS*
TRAILER:		14 STALLS
FUTURE PARKING PROPOSED:		
AUTO:		16 STALLS
TRUCK DOCKS:		
▲ DOCK-HIGH DOORS		20

DEVELOPMENT STANDARDS:	
ZONING:	M
MAX. F.A.R.:	0.70
MAX. COVERAGE:	TBD [1]
MAX. HEIGHT:	60 FT
BUILDING SETBACKS:	
FRONT:	30 FT
SIDE:	15 FT
REAR:	15 FT
LANDSCAPE SETBACKS:	
FRONT:	5 FT
SIDE:	2 FT
REAR:	2 FT
LANDSCAPE REQ.:	[2]
OFF-STREET PARKING:	
STANDARD:	9X19
COMPACT:	8X16
DRIVE AISLE:	25 FT
FIRE LANE:	TBD [1]
REQ. PARKING RATIO BY USE:	
WAREHOUSE:	1/1000 SF
OFFICE:	1/300 SF

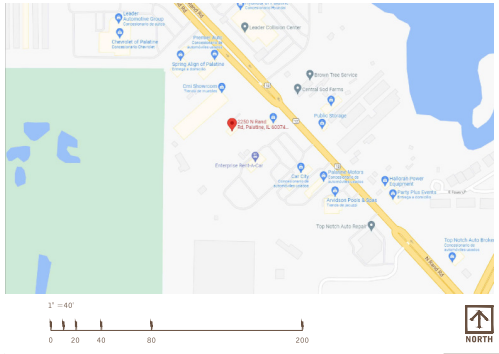
NOTES:
1. To be confirmed by city.
2. 1 tree for every 10 parking stalls.

A PORTION OF THE ZONING INFORMATION IS UNKNOWN AT THIS TIME AND REQUIREMENTS MAY DIFFER THAN WHAT IS SHOWN IN THE SITE PLAN.

This conceptual design is based upon a preliminary review of entitlement requirements and on unverified and possibly incomplete site and/or building information, and is intended merely to assist in exploring how the project might be developed.

Stormwater Management Design:
AVERAGE REGIONAL REQUIRED PROVIDED

Boundary Source:
CIVIL CAD FILE



THE MISSNER GROUP EST. 1945

scheme: 09

Conceptual Site Plan

2250 North Rand Road
Palatine, IL 60074

WARE MALCOMB

CHI21-0193-00
06.02.2022

SHEET
1

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Attachment: ARCH site plan - additional parking exhibit (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Traffic Impact Study
Proposed Industrial Development
Palatine, Illinois

Prepared For:

THE MISSNER GROUP
EST. 1945

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

April 7, 2022

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

1. Introduction

This report summarizes the methodologies, results, and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for a proposed industrial development to be located in Palatine, Illinois. The site, which currently contains Premier Auto, Contractors Material, Inc., and Auto Land Group is located on the west side of Rand Road (U.S. Route 12) approximately 600 feet south of its intersection with Lake Cook Road. As proposed, the site will be developed with an approximately 145,408 square-foot light industrial building with 148 parking spaces. Access to the development will be provided via a full movement access drive and a right-in/right-out access drive on Rand Road.

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed development will have on traffic conditions in the area, and determine if any roadway or access improvements are necessary to accommodate traffic generated by the proposed development.

Figure 1 shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site.

The sections of this report present the following:

- Existing roadway conditions
- A description of the proposed development
- Directional distribution of the development traffic
- Vehicle trip generation for the development
- Future traffic conditions including access to the development
- Traffic analyses for the weekday morning and weekday evening peak hours
- Recommendations with respect to adequacy of the site access and adjacent roadway system
- Evaluation of the proposed parking supply

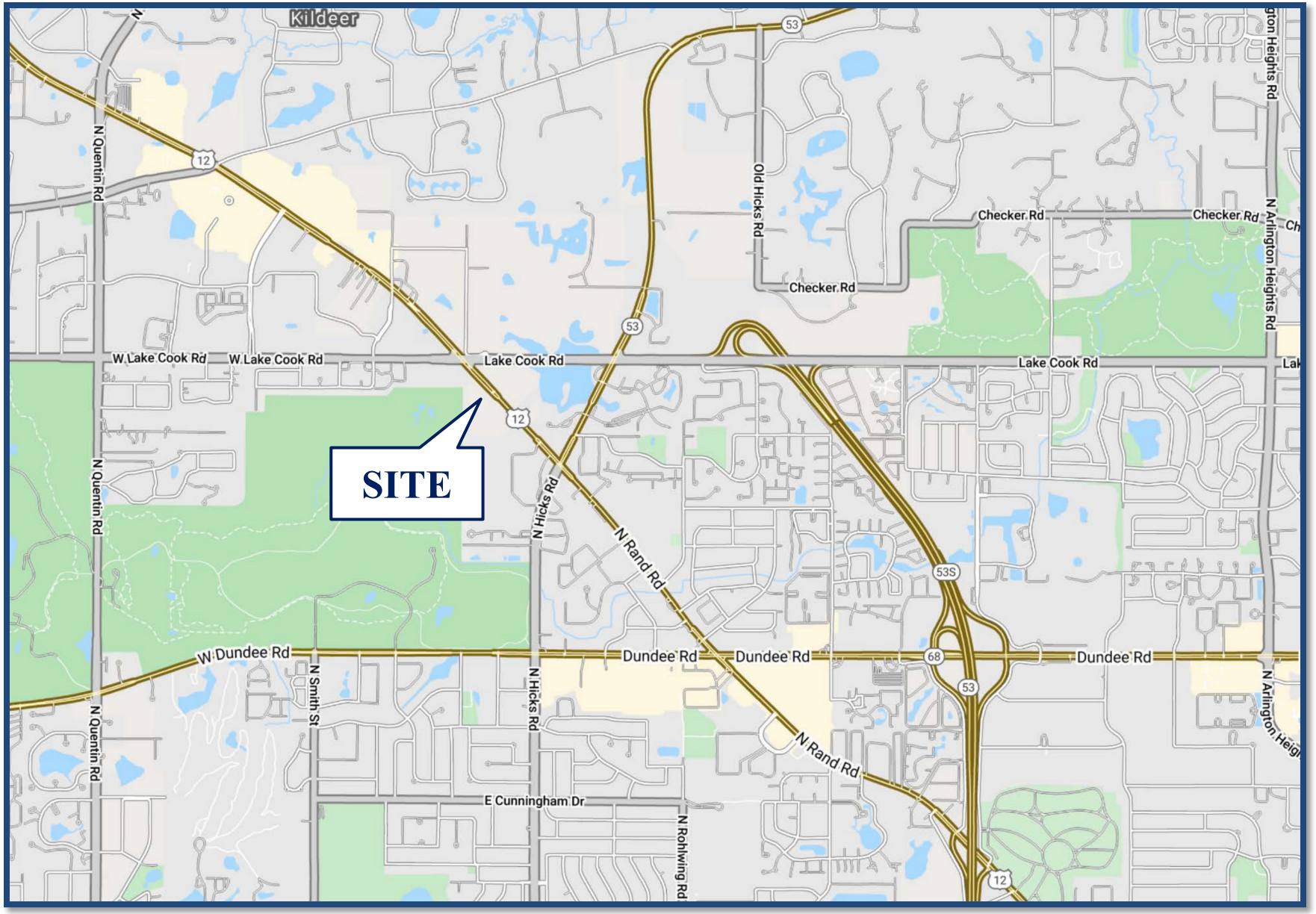
Traffic capacity analyses were conducted for the weekday morning and evening peak hours for the following conditions:

1. Existing Conditions – Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.

2. No-Build Conditions – Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes increased by an ambient area growth factor not attributable to any particular development.

3. Projected Conditions – Analyzes the capacity of the future roadway system using the projected traffic volumes that include the existing traffic volumes, ambient area growth not attributable to any particular development, and the increase in traffic estimated to be generated by the proposed development.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



Site Location
Proposed Industrial Development
Palatine, Illinois

Figure 1

Attachment: KLOA Rand Rd. Traffic Study (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)
Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)
Packet Pg. 384
7.C.1.A.b

Aerial View of Site
Proposed Industrial Development
Palatine, Illinois

Figure 2

KLOA

Attachment: KLOA Rand Rd. Traffic Study (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)
Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)
Packet Pg. 385
7.C.1.A.p
g. 11

2. Existing Conditions

Existing transportation conditions in the vicinity of the site were documented based on field visits conducted by KLOA, Inc. in order to obtain a database for projecting future conditions. The following provides a description of the geographical location of the site, physical characteristics of the area roadway system including lane usage and traffic control devices, and existing peak hour traffic volumes.

Site Location

The site, which currently contains Premier Auto, Contractors Material, Inc., and Auto Land Group, is bounded by Spring Align to the northwest, Rand Road to the northeast, Enterprise to the southeast, Deer Grove Forest Preserve to the west, and UPS to the south. Land uses in the site are a mixture of commercial, residential, and industrial and include Chevrolet of Palatine and Avers Auto Sales to the north, Car City and Palatine Motors to the south, and Hyundai of Palatine, Central Sod Farms, International Auto Brokers, and Public Storage on the northeast side of Rand Road.

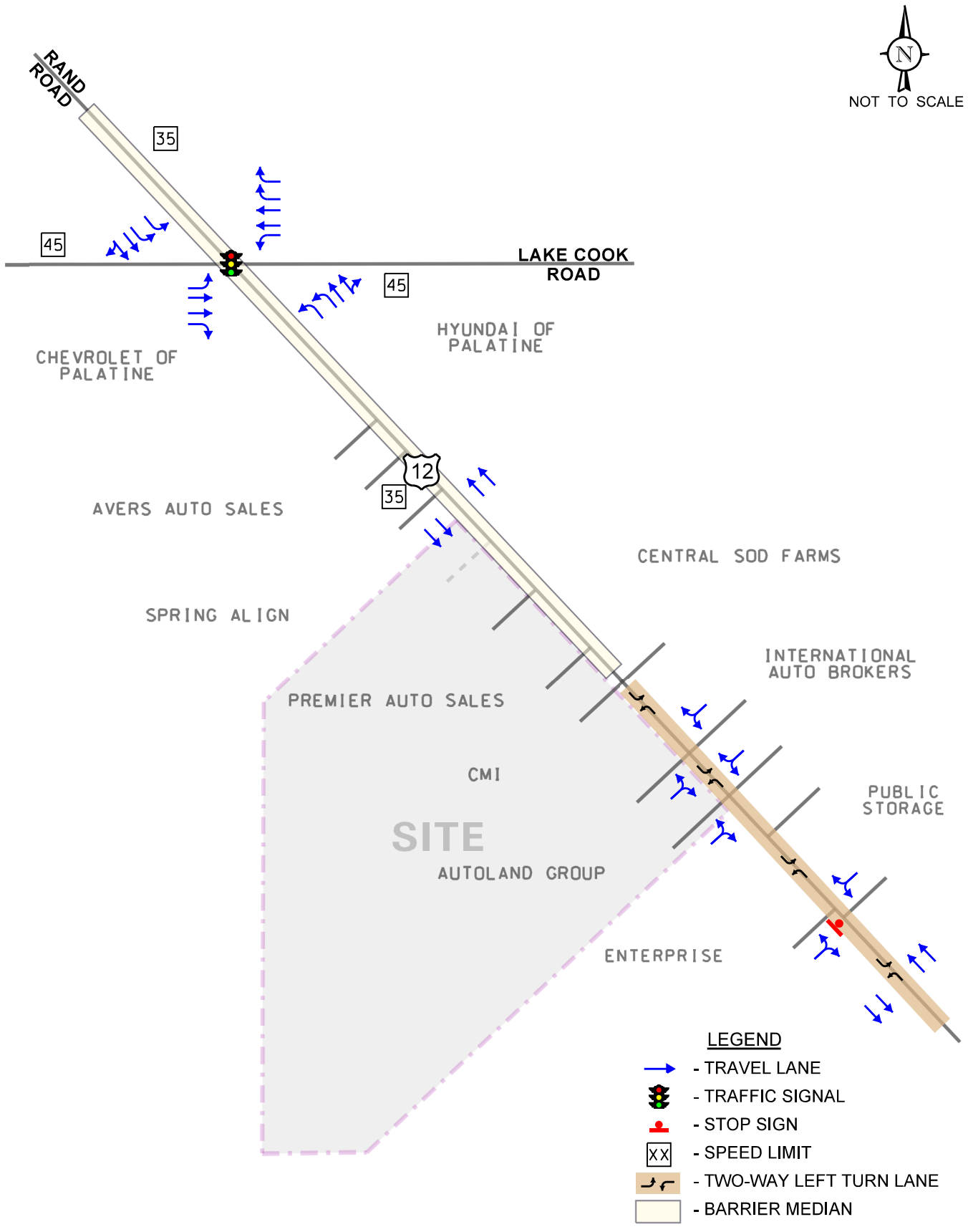
Existing Roadway System Characteristics

The characteristics of the existing roadways near the development are described below and illustrated in **Figure 3**.

Rand Road (U.S. Route 12) is a northwest-southeast, principal arterial roadway that provides two lanes in each direction generally divided by a two-way left-turn lane. At its signalized intersection with Lake Cook Road, Rand Road provides dual left-turn lanes, a through lane, and a shared through/right-turn lane on both approaches. At its unsignalized intersections with the access drives south of Lake Cook Road Rand Road provides two lanes in each direction. For approximately 700 feet south of Lake Cook Road, Rand Road is divided by a barrier median. South of the barrier median, Rand Road is divided by a two-way left-turn lane. This turn lane serves numerous access drives including the Auto Land Group, Central Sod Farm, International Auto Brokers, Enterprise, and Public Storage access drives that are analyzed in this study. Rand Road is under the jurisdiction of the Illinois Department of Transportation (IDOT), is designated as a Strategic Regional Arterial (SRA) route, has a posted speed limit of 35 miles per hour, and carries an annual average daily traffic (AADT) volume of 49,700 vehicles northwest of Lake Cook Road and 14,900 vehicles southeast of Lake Cook Road (IDOT 2019).

Lake Cook Road is an east-west, principal arterial roadway that provides two lanes in each direction. At its signalized intersection with Rand Road, Lake Cook Road provides an exclusive left-turn lane, two through lanes, and an exclusive right-turn lane on the eastbound approach and an exclusive left-turn lane, two through lanes, and dual right-turn lanes on the westbound approach. Lake Cook Road is under the jurisdiction of the Cook County Division of Highways and Transportation (CCDTH), has a posted speed limit of 45 miles per hour, and carries AADT volume of 19,700 vehicles west of Rand Road and 43,600 vehicles east of Rand Road (IDOT 2018). East of Rand Road, Lake Cook Road is designated as an SRA route.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



Industrial Development
Palatine, Illinois

Existing Roadway Characteristics

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 21-242 Figure: 3

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Existing Traffic Volumes

In order to determine current traffic conditions within the study area, KLOA, Inc. conducted peak period traffic counts utilizing Miovision Scout Collection Units at the following intersections:

- Rand Road with Lake Cook Road
- Rand Road with the north Auto Land Group access drive and the Central Sod Farms access drive
- Rand Road with the south Auto Land Group Access Drive and the north International Auto Brokers access drive
- Rand Road with the Enterprise access drive and the Public Storage access drive

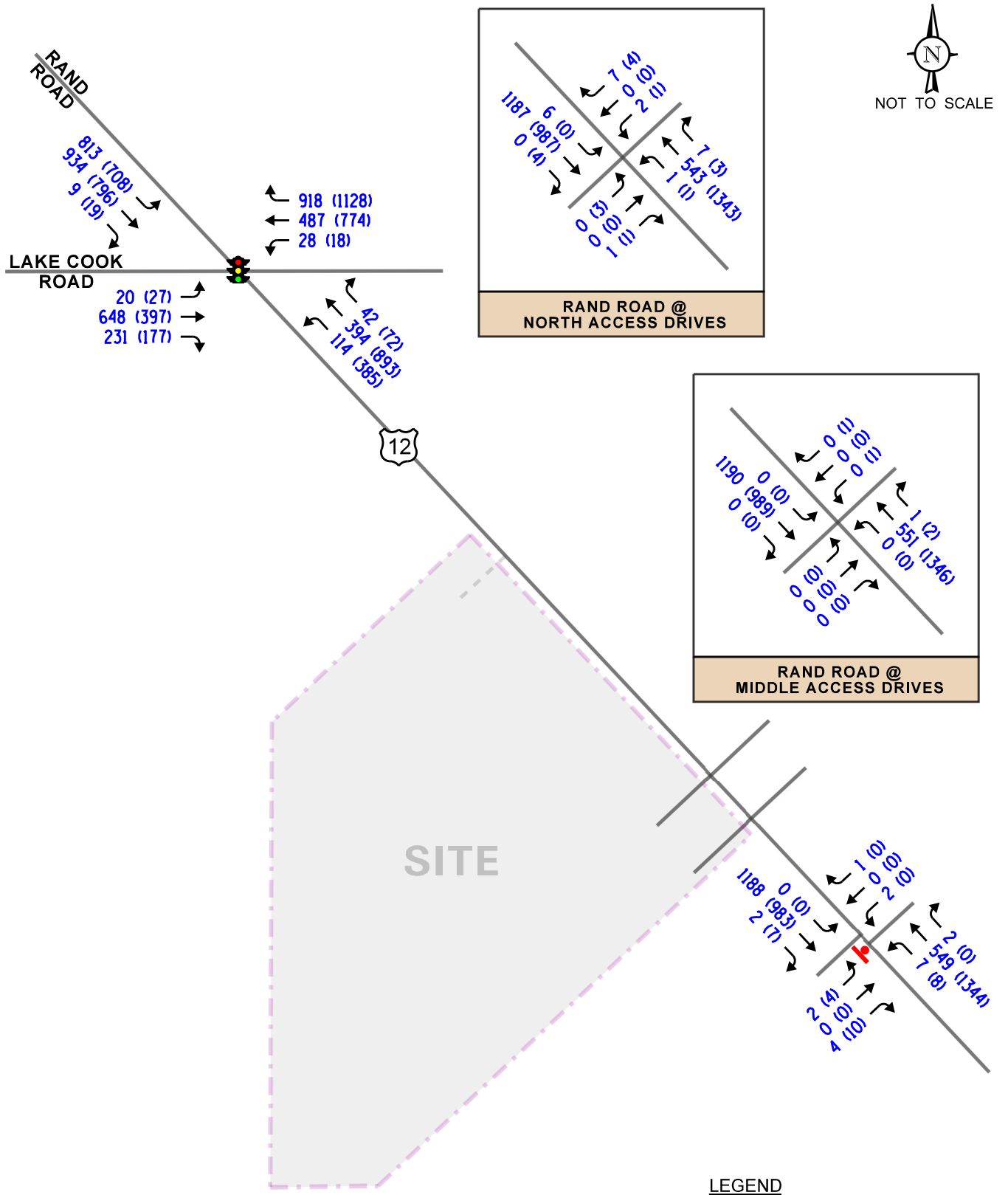
The traffic counts were conducted on Wednesday, September 22, 2021 during the weekday morning (6:30 A.M. to 9:00 A.M.) and weekday evening (4:00 P.M. to 6:30 P.M.) peak periods. The results of the traffic counts show that the peak hours of traffic generally occur between 7:15 A.M. and 8:15 A.M. during the weekday morning peak period and between 4:30 P.M. and 5:30 P.M. during the weekday evening peak period. Copies of the traffic count summary sheets are included in the Appendix. The existing traffic volumes, inclusive of heavy vehicles, are illustrated in **Figure 4**. The existing heavy vehicle traffic volumes are illustrated in **Figure 5.**

Crash Analysis

KLOA, Inc. obtained crash data for the most recent available past five years (2016 to 2020) at the intersections of Rand Road with Lake Cook Road and along Rand Road at its intersections with the access drives analyzed in the study. A review of the crash data revealed no fatalities were reported at any of the study area intersections during the review period. A summary of the crash data for the intersections is shown in **Tables 1** and **2.** [1]

[1] IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s). Additionally, for coding years 2015 to present, the Bureau of Data Collection uses the exact latitude/longitude supplied by the investigating law enforcement agency to locate crashes. Therefore, location data may vary in previous years since data prior to 2015 was physically located by bureau personnel.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



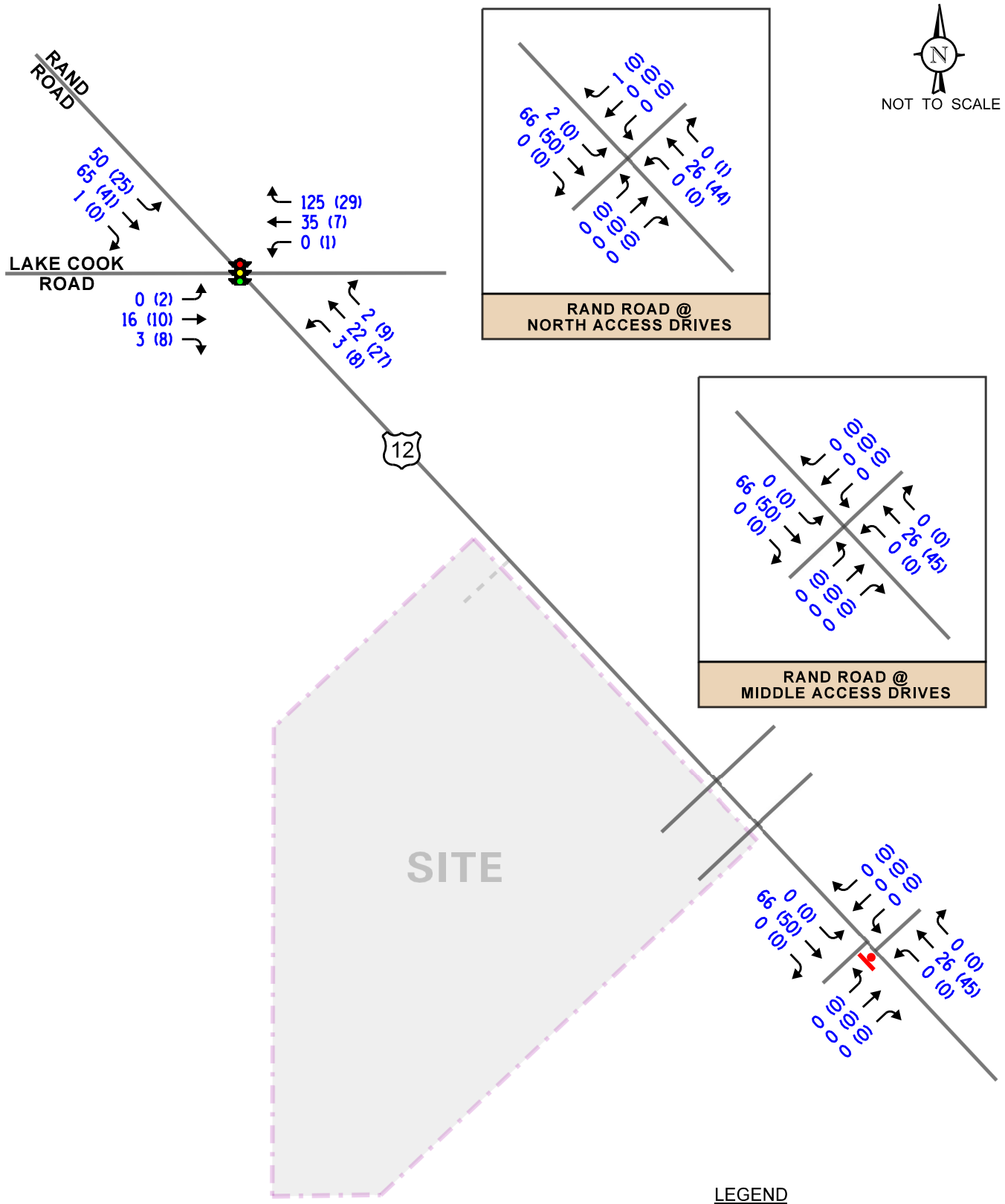
LEGEND

00 - AM PEAK HOUR (7:15-8:15 AM)

(00) - PM PEAK HOUR (4:30-5:30 PM)

Industrial Development Palatine, Illinois	Existing Traffic Volumes	KLOA Kenig,Lindgren,O'Hara,Aboona,Inc. Job No: 21-242 Figure: 4

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



LEGEND

00 - AM PEAK HOUR (7:15-8:15 AM)

(00) - PM PEAK HOUR (4:30-5:30 PM)

Industrial Development Palatine, Illinois	Existing Truck Traffic Volumes	KLOA Kenig,Lindgren,O'Hara,Aboona,Inc. Job No: 21-242 Figure: 5

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Table 1
RAND ROAD WITH LAKE COOK ROAD - CRASH SUMMARY

	Type of Accident Frequency						
Year	**Angle**	**Object**	**Rear End**	**Sideswipe**	**Turning**	**Other**	**Total**
2016	3	0	33	3	8	2	49
2017	1	0	24	4	8	0	37
2018	1	1	21	4	8	0	35
2019	1	0	27	8	11	1	48
2020	1	1	18	1	8	0	29
Total	**7**	**2**	**123**	**20**	**43**	**3**	**198**
Average/Year	**1.4**	**<1.0**	**24.6**	**4.0**	**8.6**	**<2.0**	**39.6**

Table 2
RAND ROAD WITH ACCESS DRIVES - CRASH SUMMARY

	Type of Accident Frequency						
Year	**Angle**	**Object**	**Rear End**	**Sideswipe**	**Turning**	**Other**	**Total**
2016	0	0	2	0	1	0	3
2017	0	0	0	1	1	0	2
2018	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0
Total	**0**	**0**	**2**	**1**	**2**	**0**	**5**
Average/Year	**--**	**--**	**<1.0**	**<1.0**	**<1.0**	**0**	**1.0**

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

3. Traffic Characteristics of the Proposed Development

In order to properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed development, including the directional distribution and volumes of traffic that it will generate.

Proposed Site and Development Plan

As proposed, the site will be developed with an approximately 145,408 square-foot industrial building. The development will provide 45 parking spaces for employees on the southeast side of the site, 86 spaces on the northeast side of the building, and 17 spaces on the northwest side of the building for a total of 148 employee parking spaces. 28 trailer storage spaces will be provided on the southwest side of the site. Access to the development is proposed to be provided as follows:

- A full movement access drive on the southwest side of Rand Road located approximately 1,045 feet southeast of Lake Cook Road that will serve the employee parking lots. This access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control. This access drive will replace an existing access drive at this location. Inbound left-turn movements at this access drive can be accommodated within the existing two-way left-turn lane on Rand Road.

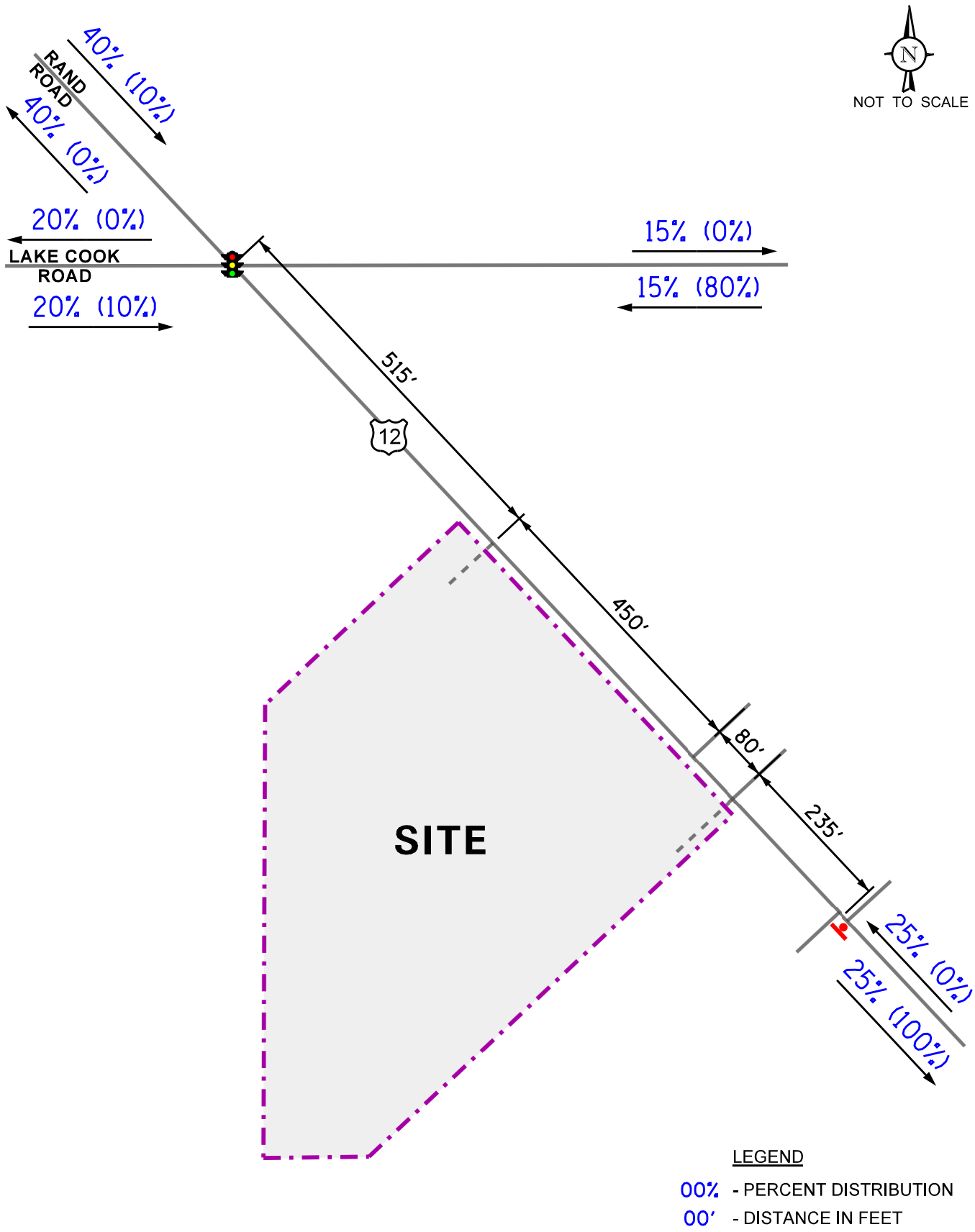
- A right-in/right-out access drive on the southwest side of Rand Road located approximately 515 feet south of Lake Cook Road that will serve the employee parking lots and truck loading bays. This access drive will provide one inbound lane and one outbound lane restricted to right-turn movements only via the barrier median on Rand Road. Outbound movements will be under stop sign control. This access drive will replace an existing access drive at this location.

It should be noted that the proposed development will replace six existing access drives along the site frontage of which two are full movement access drives. This reduction in conflict points will improve safety and traffic flow on Rand Road. This is especially true given the proximity of the development to the signalized intersection of Rand Road with Lake Cook Road and the proximity of the other numerous existing access drives on Rand Road. A copy of the preliminary site plan is included in the appendix.

Directional Distribution

The directions from which employees and truck traffic will approach and depart the site were estimated based on existing travel patterns, as determined from the traffic counts. It is important to note that access to Illinois Route 53 will primarily be provided via the Dundee Road and Rand Road interchanges south of the site. Given the restricted nature of the access drive serving the truck loading bays, all truck traffic will approach the site from the north on Rand Road and exit the site to the south on Rand Road. **Figure 6** illustrates the directional distribution of the site-generated traffic. Figure 6 also shows the distance, in feet, between the existing and proposed access intersections.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



Industrial Development
Palatine, Illinois

Estimated Directional Distribution

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.
Job No: 21-242 Figure: 6

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Development-Generated Traffic Volumes

The number of trips estimated to be generated by the proposed development was based on trip generation rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 11th Edition. The "General Light Industrial" (Land-Use Code 110) rate was used for the development. **Table 3** summarizes the trips projected to be generated by the development during the peak hours and on a daily basis. **Tables 4** summarizes the truck trips projected to be generated by the development throughout the day. Copies of the ITE trip generation sheets are included in the Appendix.

Table 3
ESTIMATED PEAK HOUR AND DAILY TRIP GENERATION

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Daily Trips	
		In	Out	Total	In	Out	Total	In	Out
110	**General Light Industrial (145,408 s.f.)[1]**	**90**	**13**	**103**	**13**	**81**	**94**	**299**	**299**
	Truck Trips[2]	3	3	6	1	1	2	18	18
	Passenger Vehicle Trips[3]	87	10	97	12	80	92	281	281

1 - Based on the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 11th Edition
2 – Daily rate based on ITE Manual.
3 – Equal to total trips less truck trips.

Table 4
ESTIMATED 24-HOUR TRUCK TRIP GENERATION

Hour	Volume of Site Generated Truck Traffic General Light Industrial (ITE Land-Use Code 110) – 145,260 s.f.					
	Weekday AM			Weekday PM		
	In	Out	Total	In	Out	Total
12:00	0	0	**0**	1	1	**2**
1:00	0	0	**0**	2	2	**4**
2:00	0	0	**0**	2	2	**4**
3:00	0	0	**0**	2	2	**4**
4:00	0	0	**0**	1	1	**2**
5:00	0	0	**0**	0	0	**0**
6:00	0	0	**0**	0	0	**0**
7:00	2	1	**3**	0	0	**0**
8:00	2	2	**4**	0	0	**0**
9:00	3	3	**6**	0	0	**0**
10:00	2	3	**5**	0	0	**0**
11:00	1	1	**2**	0	0	**0**

Based on daily truck trips (Table A) and ITE's Hourly Distribution of Entering and Exiting Truck Trips tables.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

4. Projected Traffic Conditions

The total projected traffic volumes include the existing traffic volumes, increase in background traffic due to ambient growth, and the traffic estimated to be generated by the proposed subject development.

Development Traffic Assignment

The estimated weekday morning and evening traffic volumes that will be generated by the proposed development were assigned to the roadway system in accordance with the previously described directional distribution (Figure 6). The new passenger traffic assignment for the development is illustrated in **Figure 7** and the new truck traffic assignment is illustrated in **Figure 8.**

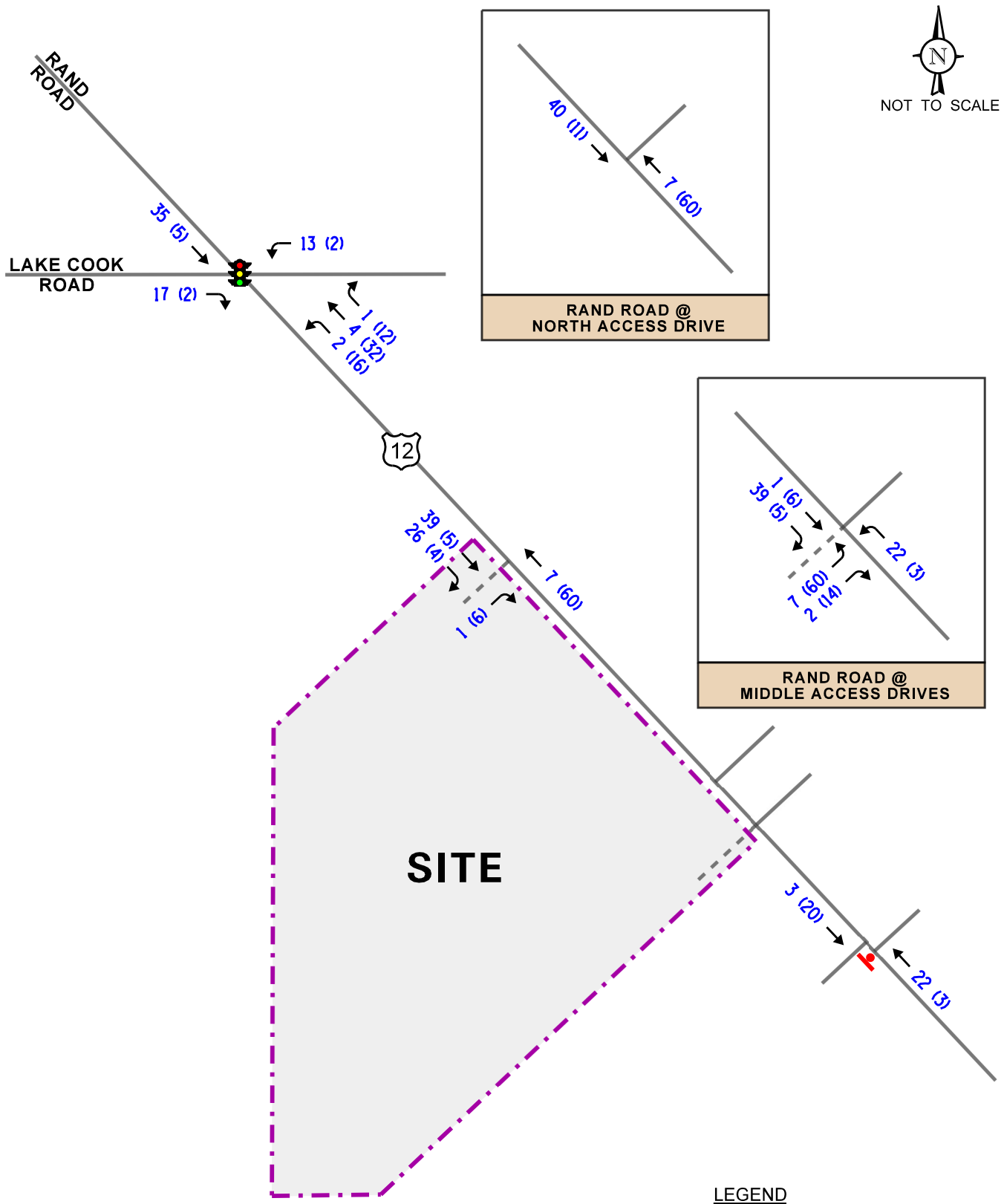
Background (No-Build) Traffic Conditions

The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any planned development). Based on AADT projections provided by the Chicago Metropolitan Agency for Planning (CMAP), the existing traffic volumes were increased by an annually compounded growth rate of 0.4 percent per year for seven years (buildout year plus five years) for a total of 2.8 percent. The projected Year 2028 no-build traffic volumes, which include the projected existing traffic volumes increased by the regional growth factor, are illustrated in **Figure 9**.

Total Projected Traffic Volumes

The development-generated traffic (Figures 7 and 8) was added to the Year 2028 no-build traffic volumes to determine the projected Year 2028 total projected traffic volumes, as shown in **Figure 10**.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



LEGEND

00 - AM PEAK HOUR (7:15-8:15 AM)

(00) - PM PEAK HOUR (4:30-5:30 PM)

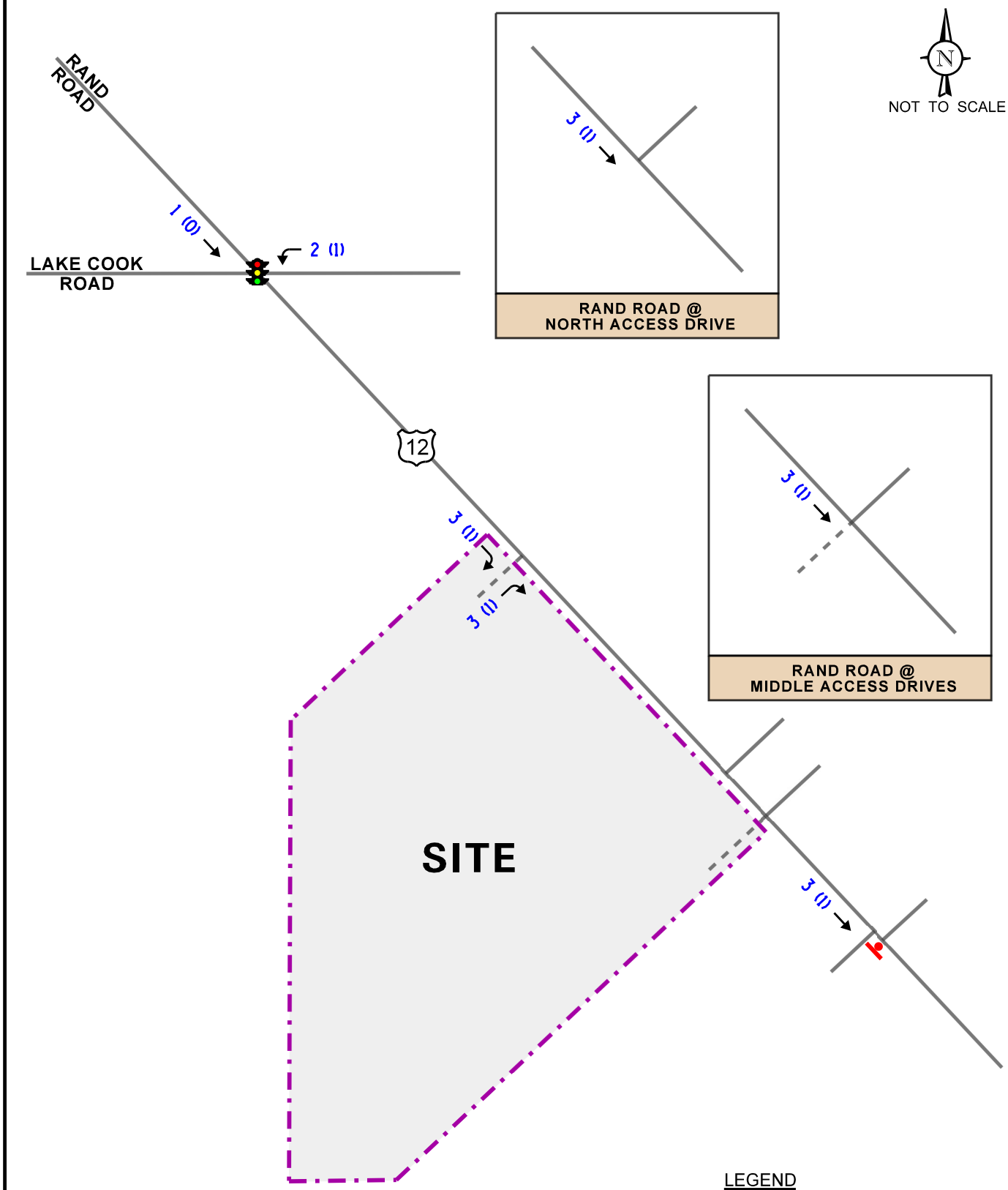
Industrial Development
Palatine, Illinois

Estimated Site-Generated
Passenger Vehicle Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 21-242 Figure: 7

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



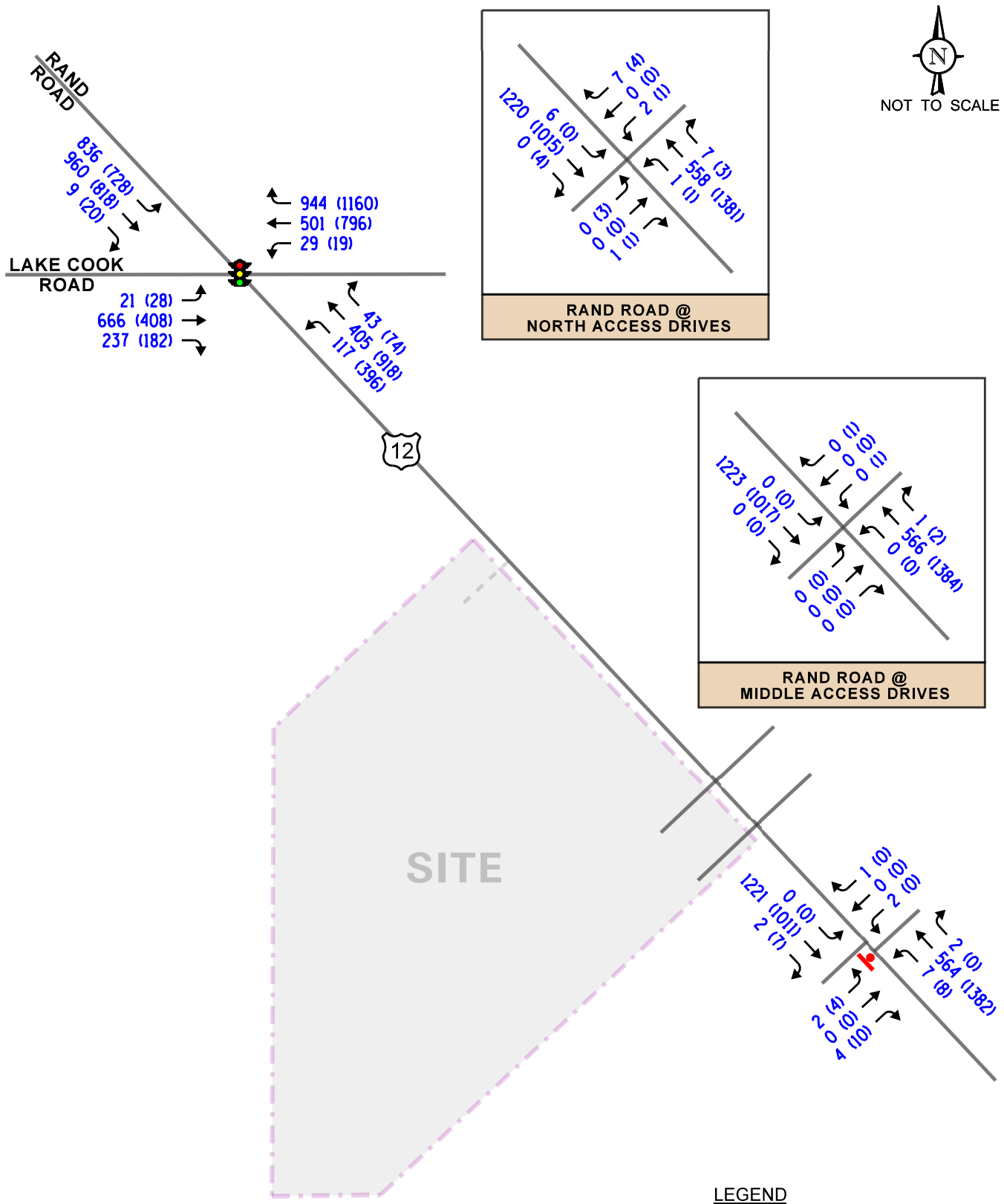
Industrial Development
Palatine, Illinois

Estimated Site-Generated
Truck Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 21-242 Figure: 8

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



LEGEND

00 - AM PEAK HOUR (7:15-8:15 AM)

(00) - PM PEAK HOUR (4:30-5:30 PM)

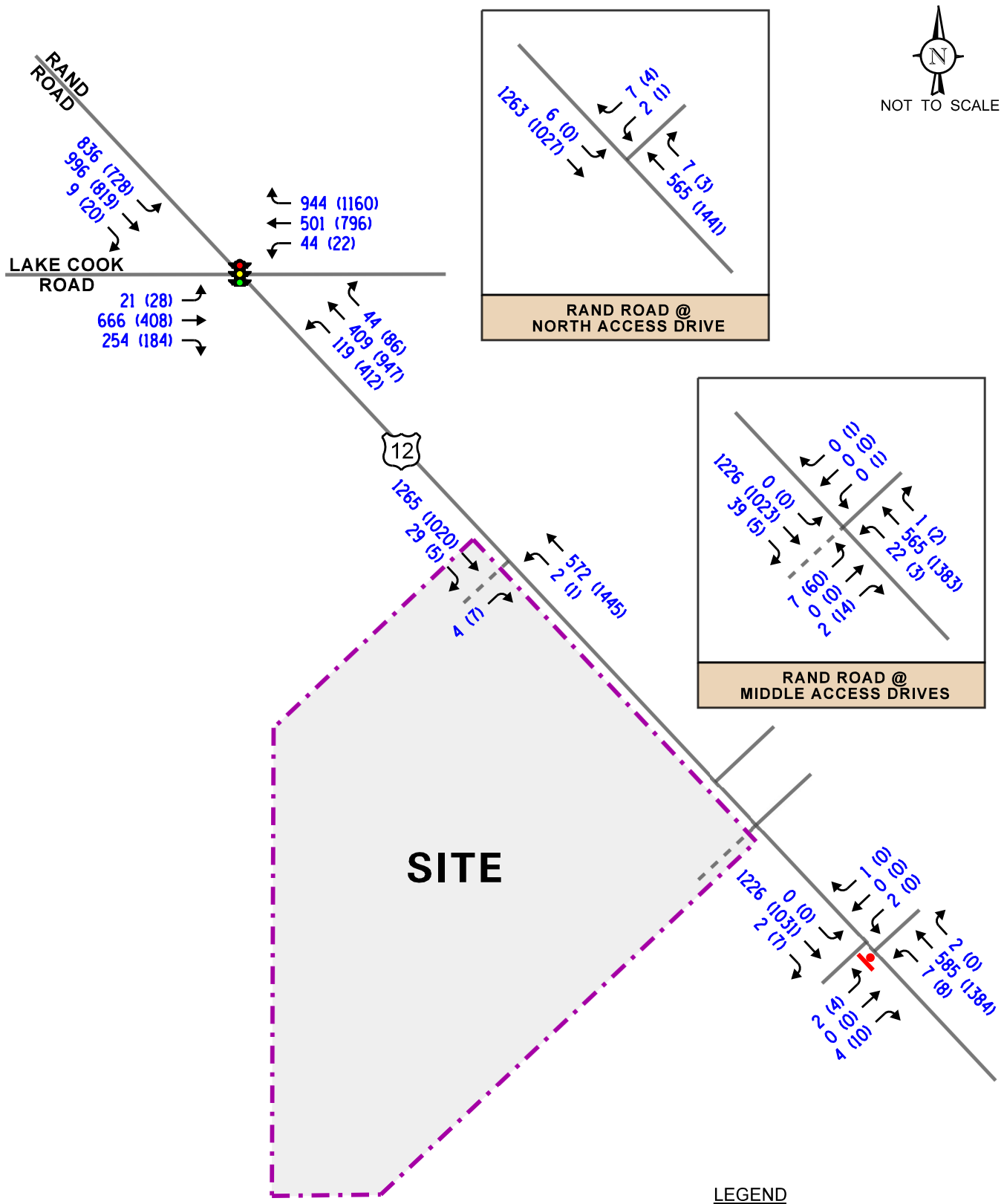
Industrial Development
Palatine, Illinois

Year 2027 No-Build Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 21-242 Figure: 9

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



Industrial Development
Palatine, Illinois

Year 2027 Total Projected Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 21-242 Figure: 10

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday morning and evening peak hours. The analysis includes conducting capacity analyses to determine how well the roadway system and access drives are projected to operate and whether any roadway improvements or modifications are required.

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning and evening peak hours for the existing, Year 2028 no-build, and Year 2028 total projected traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM),* 6th Edition and analyzed using Synchro/SimTraffic 11 software. The analysis for the traffic-signal controlled intersections were accomplished using actual cycle lengths and phasings to determine the average overall vehicle delay and levels of service.

The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections and unsignalized intersections are included in the Appendix of this report.

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the existing, Year 2028 no-build, and Year 2028 total projected conditions are presented in **Tables 5** through **8**. A discussion of each intersection follows. Summary sheets for the capacity analyses are included in the Appendix.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Table 5
CAPACITY ANALYSIS RESULTS – SIGNALIZED - RAND ROAD WITH LAKE COOK ROAD

	Peak Hour	Eastbound (Lake Cook Road)			Westbound (Lake Cook Road)			Northwest-bound (Rand Road)			Southeast-bound (Rand Road)			Overall
		L	T	R	L	T	R	L	T	R	L	T	R	
Existing Conditions	Weekday Morning Peak Hour	C 30.5	D 51.7	D 36.5	C 32.0	D 47.7	B 17.8	E 79.6	D 53.3		D 52.7	C 27.9		D 39.8
		D – 47.3			C – 28.2			E – 58.8			D – 39.4			
	Weekday Evening Peak Hour	D 37.5	D 47.5	C 29.9	C 34.2	E 59.0	C 33.3	F 95.0	D 51.7		E 74.6	C 30.9		D 50.7
		D – 41.8			D – 43.7			E – 64.1			D – 51.2			
Year 2028 No-Build Conditions	Weekday Morning Peak Hour	C 30.4	D 51.4	D 36.4	C 32.0	D 47.4	B 17.2	F 81.1	D 55.1		D 52.4	C 28.6		D 39.9
		D – 47.1			C – 27.8			E – 60.5			D – 39.7			
	Weekday Evening Peak Hour	D 37.9	D 47.3	C 29.7	C 34.2	E 59.5	C 33.8	F 95.9	D 54.7		E 76.8	C 31.7		D 51.8
		D – 41.7			D – 44.1			E – 66.4			D – 52.7			
Year 2028 Total Projected Conditions	Weekday Morning Peak Hour	C 29.7	D 52.2	D 37.8	C 31.9	D 45.6	B 15.9	F 81.9	E 57.5		D 52.4	C 30.7		D 40.2
		D – 47.8			C – 26.4			E – 62.6			D – 40.6			
	Weekday Evening Peak Hour	D 37.8	D 47.5	C 29.8	C 34.5	E 59.5	C 34.0	F 103.1	E 57.8		E 75.3	C 31.7		D 53.0
		D – 41.8			D – 44.3			E – 70.7			D – 52.0			

Letter denotes Level of Service L – Left-Turns R – Right-Turns
Delay is measured in seconds. T – Through

Attachment: KLOA Rand Rd. Traffic Study (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Table 6
CAPACITY ANALYSIS RESULTS – UNSIGNALIZED INTERSECTIONS
EXISTING TRAFFIC CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Rand Road with the North Auto Land Group Access Drive and the Central Sod Farms Access Drive				
• Northeast-bound Approach (ALG)	B	13.4	C	23.2
• Southwest-bound Approach (CSF)	B	12.3	C	18.6
• Northwest-bound Left Turn (Rand Road)	B	11.5	B	10.2
• Southeast-bound left Turn (Rand Road)	A	9.5	--	--
Rand Road with the South Auto Land Group Access Drive and the North International Auto Brokers Access Drive				
• Northeast-bound Approach (ALG)	--	--	--	--
• Southwest-bound Approach (IAB)	--	--	C	24.7
• Northwest-bound Left Turn (Rand Road)	--	--	--	--
• Southeast-bound left Turn (Rand Road)	--	--	--	--
Rand Road with the Enterprise Access Drive and the Public Storage Access Drive				
• Northeast-bound Approach (Enterprise)	C	18.9	C	16.5
• Southwest-bound Approach (PS)	C	15.9	--	--
• Northwest-bound Left Turn (Rand Road)	B	11.6	B	10.2
• Southeast-bound left Turn (Rand Road)	--	--	--	--

LOS = Level of Service
Delay is measured in seconds.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Table 7
CAPACITY ANALYSIS RESULTS – UNSIGNALIZED INTERSECTIONS
YEAR 2028 NO-BUILD TRAFFIC CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Rand Road with the North Auto Land Group Access Drive and the Central Sod Farms Access Drive				
• Northeast-bound Approach (ALG)	B	13.7	C	24.0
• Southwest-bound Approach (CSF)	B	12.5	C	19.2
• Northwest-bound Left Turn (Rand Road)	B	11.7	B	10.4
• Southeast-bound left Turn (Rand Road)	A	9.6	--	--
Rand Road with the South Auto Land Group Access Drive and the North International Auto Brokers Access Drive				
• Northeast-bound Approach (ALG)	--	--	--	--
• Southwest-bound Approach (IAB)	--	--	D	25.8
• Northwest-bound Left Turn (Rand Road)	--	--	--	--
• Southeast-bound left Turn (Rand Road)	--	--	--	--
Rand Road with the Enterprise Access Drive and the Public Storage Access Drive				
• Northeast-bound Approach (Enterprise)	C	19.5	C	17.0
• Southwest-bound Approach (PS)	C	16.2	--	--
• Northwest-bound Left Turn (Rand Road)	B	11.8	B	10.4
• Southeast-bound left Turn (Rand Road)	--	--	--	--

LOS = Level of Service
Delay is measured in seconds.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Table 8
CAPACITY ANALYSIS RESULTS – UNSIGNALIZED INTERSECTIONS
YEAR 2028 TOTAL PROJECTED TRAFFIC CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Rand Road with the Central Sod Farms Access Drive				
• Southwest-bound Approach (CSF)	B	12.1	C	18.4
• Southeast-bound left Turn (Rand Road)	A	9.6	--	--
Rand Road with the Proposed South Access Drive and the North International Auto Brokers Access Drive				
• Northeast-bound Approach (Site)	D	28.8	E	38.1
• Southwest-bound Approach (IAB)	--	--	D	26.1
• Northwest-bound Left Turn (Rand Road)	B	12.3	B	10.4
• Southeast-bound left Turn (Rand Road)	--	--	--	--
Rand Road with the Enterprise Access Drive and the Public Storage Access Drive				
• Northeast-bound Approach (Enterprise)	C	19.5	C	17.2
• Southwest-bound Approach (PS)	C	16.5	--	--
• Northwest-bound Left Turn (Rand Road)	B	11.8	B	10.5
• Southeast-bound left Turn (Rand Road)	--	--	--	--
Rand Road with the Proposed North Site Access Drive				
• Northeast-bound Approach (Site)	C	19.1	B	13.0

LOS = Level of Service
Delay is measured in seconds.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Discussion and Recommendations

The following summarizes how the intersections are projected to operate and identifies any roadway and traffic control improvements necessary to accommodate the development-generated traffic.

Rand Road with Lake Cook Road

The results of the capacity analysis indicate that overall, this intersection currently operates at Level of Service (LOS) D during the weekday morning and weekday evening peak hours. Further, all approaches operate at LOS E or better during both peak hours. Under Year 2028 no-build traffic conditions, this intersection is projected to continue to operate at LOS D during the weekday morning and weekday evening peak hours with increases in delay of approximately one second or less.

Under Year 2028 total projected traffic conditions, this intersection is projected to continue to operate at LOS D during the weekday morning peak and weekday evening peak hours with increases in delay of less than one second over no-build conditions. Further, all approaches are projected to continue to operate at the same LOS during both peak hours. Overall, the proposed development will increase the volume of traffic at this intersection by less than two percent and the traffic estimated to be generated by the proposed development will have a limited impact on the operations of this intersection.

Rand Road with the North Auto Land Group Access Drive and the Central Sod Farms Access Drive

The results of the capacity analyses indicate that the critical movements at this intersection currently operate at LOS B or better during the weekday morning peak hour and LOS C or better during the weekday evening peak hour. Assuming the projected Year 2028 no-build traffic volumes, the critical movements are projected to continue to operate at same LOS during both peak hours.

Under Year 2028 total projected conditions, the North Auto Land Group access drive will be removed. The remaining critical movements are projected to continue to operate at the same LOS during both peak hours. As such the intersection has sufficient reserve capacity to accommodate the development-generated traffic.

Rand Road with the South Auto Land Group Access Drive/Proposed Site Access Drive and the North International Auto Brokers Access Drive

The results of the capacity analyses indicate that the critical movements at this intersection currently operate at LOS C or better during the weekday morning and weekday evening peak hours Assuming the projected Year 2028 no-build traffic volumes, the critical movements are projected to operate at LOS D or better.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

As proposed, the south Auto Land Group access drive will be replaced with the proposed South Site Access Drive. The proposed access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control. Left-turn movements from Rand Road will continue to be accommodated by the existing two-way left-turn lane on Rand Road.

Under Year 2028 total projected traffic conditions, outbound movements from the site access drive are projected to operate at LOS D during the weekday morning peak hour and LOS E during the weekday evening peak hour with a volume-to-capacity ratio of less than one and 95th percentile queues of one to two vehicles. Further, northwest-bound left-turn movements into the site are projected to operate at LOS B during the weekday morning and weekday evening peak hour with 95th percentile queues of one to two vehicles, which can be accommodated within the existing two-way left-turn lane. Turing movements in and out of the existing International Auto Brokers access drive are projected to continue to operate at the same LOS during both peak hours.

When the projected traffic volumes are compared to the turn lane warrant guidelines published in Chapter 36 of the IDOT *Bureau of Design and Environment* (BDE) Manual, an exclusive right-turn lane serving the proposed access drive will not be warranted during either peak hour. As such, this access drive will be adequate in accommodating the traffic estimated to be generated by the proposed development and will ensure efficient and flexible access is provided.

Rand Road with the Enterprise Access Drive and the Public Storage Access Drive

The results of the capacity analyses show that the critical movements at this intersection currently operate at LOS C or better during the weekday morning and weekday evening peak hours. Assuming the projected Year 2028 no-build and total projected conditions, all critical movements are projected to continue to operate at the same LOS during both peak hours. As such the intersection has sufficient reserve capacity to accommodate the development-generated traffic.

Rand Road with the West Site Access Drive

As proposed, a right-in/right-out access drive will be provided on the southwest side of Rand Road located approximately 515 feet south of Lake Cook Road. This access drive will provide one inbound lane and one outbound lane restricted to right-turn movements only via the barrier median on Rand Road. Outbound movements will be under stop sign control. This access drive will replace an existing access drive at this location.

Under Year 2028 total projected traffic conditions, outbound right-turn movements are projected to operate at LOS C during the weekday morning peak hour and LOS B during the weekday evening peak hour with a volume-to-capacity ratio of less than one and 95th percentile queues of one to two vehicles. When the projected traffic volumes are compared to the turn lane warrant guidelines published in Chapter 36 of the IDOT *Bureau of Design and Environment* (BDE) Manual, an exclusive right-turn lane serving the proposed access drive will not be warranted during either peak hour. As such, this access drive will be adequate in accommodating the traffic estimated to be generated by the proposed development and will ensure efficient and flexible access is provided.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Parking Evaluation

As previously mentioned, the proposed development will provide 148 parking spaces.

Village of Palatine Requirements

The Village of Palatine Code of Ordinances requires a parking ratio of one space per 1,000 square feet of gross floor area in manufacturing and warehousing uses plus one space per 300 square feet of gross floor area in office uses. Based on the village ordinance the development should provide parking as follows:

- 131 parking spaces for 130,867 square feet of Light Industrial Space
- 48 parking spaces for 14,541 square feet of Office Space

Based on the above, the proposed development should provide 179 parking spaces resulting in a deficit of 31 spaces.

ITE Parking Generation Manual

In reviewing the survey data published in the Institute of Transportation Engineers' (ITE) 5th Edition of the *Parking Generation Manual*, the following average peak parking demand was determined based on Land Use Code 110 (General Light Industrial):

- 95 parking spaces for 145,408 square feet of Light Industrial Space (ratio of 0.65 spaces per 1,000 square feet)

Based on the above, the proposed development should provide a total of 95 parking spaces to accommodate the peak parking demand, which results in a surplus of 53 parking spaces. To provide a conservative analysis, the development was also evaluated accounting for the office space independently. The following average peak park demand was determined based on Land Use Codes 110 (General Light Industrial) and 710 (General Office Building):

- 85 parking spaces for 130,867 square feet of Light Industrial Space (ratio of 0.65 spaces per 1,000 square feet)
- 35 parking spaces for 14,541 square feet of Office Space (ratio of 2.39 spaces per 1,000 square feet)

Based on the above, the proposed development should provide a total of 120 parking spaces to accommodate the peak parking demand, which results in a surplus of 28 parking spaces. It should be noted that Land-Use Code 110 (General Light Industrial) has a higher average peak parking demand than Land-Use Code 150 (Warehouse)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

6. Conclusion

Based on the preceding analyses and recommendations, the following conclusions have been made:

- The roadway system has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed development.
- With the proposed redevelopment of the site, the number of access points along the site frontage will be reduced from six to two.
- The proposed access system on Rand Road will be adequate in accommodating the development-generated traffic and will ensure that efficient and flexible access is provided.
- Northwest-bound traffic on Rand Road entering the proposed development will be accommodated by the existing two-way left-turn lane.
- A southeast-bound right-turn lane will not be warranted on Rand Road at either of the site access drives.
- The proposed parking supply of 148 parking spaces will be adequate in accommodating the projected peak parking demand of the proposed development.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Appendix

Traffic Count Summary Sheets
Preliminary Site Plan
ITE Trip Generation Worksheets
CMAP 2050 Projections Letter
Level of Service Criteria
Capacity Analysis Summary Sheets
Turn Lane Warrants

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Traffic Count Summary Sheets

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Rand Road with Lake Cook Road
Site Code:
Start Date: 09/22/2021
Page No: 1

Turning Movement Data

Start Time	Lake Cook Road Eastbound						Lake Cook Road Westbound						Rand Road Northbound					Rand Road Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
6:30 AM	0	3	148	36	0	187	0	5	81	198	0	284	0	18	80	0	98	0	313	210	1	0	524	1093
6:45 AM	0	6	136	46	0	188	0	9	98	242	0	349	0	11	99	0	110	0	264	219	2	0	485	1132
Hourly Total	0	9	284	82	0	375	0	14	179	440	0	633	0	29	179	0	208	0	577	429	3	0	1009	2225
7:00 AM	0	8	157	50	0	215	0	7	73	211	0	291	0	28	95	0	123	0	263	228	3	0	494	1123
7:15 AM	0	9	179	53	0	241	0	4	127	226	0	357	0	19	86	0	105	0	218	236	1	0	455	1158
7:30 AM	0	5	169	55	0	229	0	7	112	228	0	347	0	32	96	0	128	0	215	249	1	0	465	1169
7:45 AM	0	3	157	50	0	210	2	6	122	230	0	360	0	33	89	0	122	0	199	219	2	0	420	1112
Hourly Total	0	25	662	208	0	895	2	24	434	895	0	1355	0	112	366	0	478	0	895	932	7	0	1834	4562
8:00 AM	0	3	143	73	0	219	0	9	126	234	0	369	0	30	123	0	153	0	181	202	5	0	388	1129
8:15 AM	0	2	116	55	0	173	0	10	118	222	0	350	0	33	82	0	115	0	173	169	5	0	347	985
8:30 AM	0	2	106	44	0	152	0	7	144	201	0	352	0	29	89	0	118	0	172	187	5	0	364	986
8:45 AM	0	4	116	52	0	172	0	7	105	228	0	340	1	49	141	0	191	0	211	188	5	0	404	1107
Hourly Total	0	11	481	224	0	716	0	33	493	885	0	1411	1	141	435	0	577	0	737	746	20	0	1503	4207
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	8	111	58	0	177	0	3	176	305	0	484	0	58	193	0	251	0	193	222	6	0	421	1333
4:15 PM	0	7	98	46	0	151	0	12	182	292	0	486	0	62	189	0	251	0	166	196	5	1	367	1255
4:30 PM	0	7	102	49	0	158	0	5	189	274	0	468	0	90	235	0	325	0	172	204	7	0	383	1334
4:45 PM	0	7	72	48	0	127	0	3	210	293	0	506	0	105	207	0	312	0	176	186	5	0	367	1312
Hourly Total	0	29	383	201	0	613	0	23	757	1164	0	1944	0	315	824	0	1139	0	707	808	23	1	1538	5234
5:00 PM	0	6	104	38	1	148	0	6	209	275	3	490	0	101	219	0	320	0	189	210	2	1	401	1359
5:15 PM	0	7	119	42	0	168	0	4	166	286	0	456	0	89	232	0	321	0	171	182	5	0	358	1303
5:30 PM	0	13	91	40	0	144	0	3	188	278	0	469	1	87	209	0	297	0	182	172	6	0	360	1270
5:45 PM	1	4	86	53	0	144	0	6	194	300	1	500	0	46	244	0	290	0	168	174	5	0	347	1281
Hourly Total	1	30	400	173	1	604	0	19	757	1139	4	1915	1	323	904	0	1228	0	710	738	18	1	1466	5213
6:00 PM	0	5	89	45	0	139	0	6	171	298	0	475	2	48	164	0	214	0	165	168	12	0	345	1173
6:15 PM	0	7	72	39	0	118	0	10	127	284	0	421	0	32	167	0	199	0	172	169	4	0	345	1083
Grand Total	1	116	2371	972	1	3460	2	129	2918	5105	4	8154	4	1000	3039	0	4043	0	3963	3990	87	2	8040	23697
Approach %	0.0	3.4	68.5	28.1	-	-	0.0	1.6	35.8	62.6	-	-	0.1	24.7	75.2	-	-	0.0	49.3	49.6	1.1	-	-	-
Total %	0.0	0.5	10.0	4.1	-	14.6	0.0	0.5	12.3	21.5	-	34.4	0.0	4.2	12.8	-	17.1	0.0	16.7	16.8	0.4	-	33.9	-
Lights	1	112	2320	923	-	3356	2	123	2836	4749	-	7710	4	960	2904	-	3868	0	3752	3748	77	-	7577	22511
% Lights	100.0	96.6	97.8	95.0	-	97.0	100.0	95.3	97.2	93.0	-	94.6	100.0	96.0	95.6	-	95.7	-	94.7	93.9	88.5	-	94.2	95.0
Buses	0	0	4	5	-	9	0	0	9	7	-	16	0	5	1	-	6	0	8	2	0	-	10	41
% Buses	0.0	0.0	0.2	0.5	-	0.3	0.0	0.0	0.3	0.1	-	0.2	0.0	0.5	0.0	-	0.1	-	0.2	0.1	0.0	-	0.1	0.2
Single-Unit Trucks	0	3	28	38	-	69	0	3	47	147	-	197	0	32	86	-	118	0	80	137	5	-	222	606
% Single-Unit Trucks	0.0	2.6	1.2	3.9	-	2.0	0.0	2.3	1.6	2.9	-	2.4	0.0	3.2	2.8	-	2.9	-	2.0	3.4	5.7	-	2.8	2.6

Attachment: KLOA Rand Rd. Traffic Study (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Articulated Trucks	0	1	19	6	-	26	0	3	26	201	-	230	0	3	48	-	51	0	123	103	5	-	231	538
% Articulated Trucks	0.0	0.9	0.8	0.6	-	0.8	0.0	2.3	0.9	3.9	-	2.8	0.0	0.3	1.6	-	1.3	-	3.1	2.6	5.7	-	2.9	2.3
Bicycles on Road	0	0	0	0	-	0	0	0	0	1	-	1	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	0	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Attachment: KLOA Rand Rd. Traffic Study (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Rand Road with Lake Cook Road
Site Code:
Start Date: 09/22/2021

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Lake Cook Road Eastbound						Lake Cook Road Westbound						Rand Road Northbound					Rand Road Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:15 AM	0	9	179	53	0	241	0	4	127	226	0	357	0	19	86	0	105	0	218	236	1	0	455	1158
7:30 AM	0	5	169	55	0	229	0	7	112	228	0	347	0	32	96	0	128	0	215	249	1	0	465	1169
7:45 AM	0	3	157	50	0	210	2	6	122	230	0	360	0	33	89	0	122	0	199	219	2	0	420	1112
8:00 AM	0	3	143	73	0	219	0	9	126	234	0	369	0	30	123	0	153	0	181	202	5	0	388	1129
Total	0	20	648	231	0	899	2	26	487	918	0	1433	0	114	394	0	508	0	813	906	9	0	1728	4568
Approach %	0.0	2.2	72.1	25.7	-	-	0.1	1.8	34.0	64.1	-	-	0.0	22.4	77.6	-	-	0.0	47.0	52.4	0.5	-	-	-
Total %	0.0	0.4	14.2	5.1	-	19.7	0.0	0.6	10.7	20.1	-	31.4	0.0	2.5	8.6	-	11.1	0.0	17.8	19.8	0.2	-	37.8	-
PHF	0.000	0.556	0.905	0.791	-	0.933	0.250	0.722	0.959	0.981	-	0.971	0.000	0.864	0.801	-	0.830	0.000	0.932	0.910	0.450	-	0.929	0.977
Lights	0	20	632	228	-	880	2	26	452	793	-	1273	0	111	372	-	483	0	763	841	8	-	1612	4248
% Lights	-	100.0	97.5	98.7	-	97.9	100.0	100.0	92.8	86.4	-	88.8	-	97.4	94.4	-	95.1	-	93.8	92.8	88.9	-	93.3	93.0
Buses	0	0	3	1	-	4	0	0	3	0	-	3	0	1	0	-	1	0	4	0	0	-	4	12
% Buses	-	0.0	0.5	0.4	-	0.4	0.0	0.0	0.6	0.0	-	0.2	-	0.9	0.0	-	0.2	-	0.5	0.0	0.0	-	0.2	0.3
Single-Unit Trucks	0	0	5	2	-	7	0	0	19	55	-	74	0	2	14	-	16	0	17	33	1	-	51	148
% Single-Unit Trucks	-	0.0	0.8	0.9	-	0.8	0.0	0.0	3.9	6.0	-	5.2	-	1.8	3.6	-	3.1	-	2.1	3.6	11.1	-	3.0	3.2
Articulated Trucks	0	0	8	0	-	8	0	0	13	70	-	83	0	0	8	-	8	0	29	32	0	-	61	160
% Articulated Trucks	-	0.0	1.2	0.0	-	0.9	0.0	0.0	2.7	7.6	-	5.8	-	0.0	2.0	-	1.6	-	3.6	3.5	0.0	-	3.5	3.5
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Attachment: KLOA Rand Rd. Traffic Study (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Rand Road with Lake Cook Road
Site Code:
Start Date: 09/22/2021
Page No: 4

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Lake Cook Road Eastbound						Lake Cook Road Westbound						Rand Road Northbound					Rand Road Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:30 PM	0	7	102	49	0	158	0	5	189	274	0	468	0	90	235	0	325	0	172	204	7	0	383	1334
4:45 PM	0	7	72	48	0	127	0	3	210	293	0	506	0	105	207	0	312	0	176	186	5	0	367	1312
5:00 PM	0	6	104	38	1	148	0	6	209	275	3	490	0	101	219	0	320	0	189	210	2	1	401	1359
5:15 PM	0	7	119	42	0	168	0	4	166	286	0	456	0	89	232	0	321	0	171	182	5	0	358	1303
Total	0	27	397	177	1	601	0	18	774	1128	3	1920	0	385	893	0	1278	0	708	782	19	1	1509	5308
Approach %	0.0	4.5	66.1	29.5	-	-	0.0	0.9	40.3	58.8	-	-	0.0	30.1	69.9	-	-	0.0	46.9	51.8	1.3	-	-	-
Total %	0.0	0.5	7.5	3.3	-	11.3	0.0	0.3	14.6	21.3	-	36.2	0.0	7.3	16.8	-	24.1	0.0	13.3	14.7	0.4	-	28.4	-
PHF	0.000	0.964	0.834	0.903	-	0.894	0.000	0.750	0.921	0.962	-	0.949	0.000	0.917	0.950	-	0.983	0.000	0.937	0.931	0.679	-	0.941	0.976
Lights	0	25	387	169	-	581	0	17	767	1099	-	1883	0	377	866	-	1243	0	683	741	19	-	1443	5150
% Lights	-	92.6	97.5	95.5	-	96.7	-	94.4	99.1	97.4	-	98.1	-	97.9	97.0	-	97.3	-	96.5	94.8	100.0	-	95.6	97.0
Buses	0	0	0	0	-	0	0	0	0	2	-	2	0	1	0	-	1	0	0	0	0	-	0	3
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.2	-	0.1	-	0.3	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	0.1
Single-Unit Trucks	0	1	6	7	-	14	0	1	6	11	-	18	0	6	12	-	18	0	10	31	0	-	41	91
% Single-Unit Trucks	-	3.7	1.5	4.0	-	2.3	-	5.6	0.8	1.0	-	0.9	-	1.6	1.3	-	1.4	-	1.4	4.0	0.0	-	2.7	1.7
Articulated Trucks	0	1	4	1	-	6	0	0	1	16	-	17	0	1	15	-	16	0	15	10	0	-	25	64
% Articulated Trucks	-	3.7	1.0	0.6	-	1.0	-	0.0	0.1	1.4	-	0.9	-	0.3	1.7	-	1.3	-	2.1	1.3	0.0	-	1.7	1.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Attachment: KLOA Rand Rd. Traffic Study (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Rand Road with South Access Drives
Site Code:
Start Date: 09/22/2021
Page No: 1

Turning Movement Data

Start Time	Enterprise Access Drive Eastbound						Public Storage Access Westbound						Rand Road Northbound						Rand Road Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
6:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	101	0	0	101	0	0	231	0	0	231	332
6:45 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	1	118	2	0	121	0	0	277	0	0	277	399
Hourly Total	0	0	0	1	1	1	0	0	0	0	0	0	0	1	219	2	0	222	0	0	508	0	0	508	731
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	116	0	0	116	0	0	279	3	0	282	399
7:15 AM	0	0	0	0	0	0	0	1	0	1	0	2	0	0	118	1	0	119	0	0	281	1	0	282	403
7:30 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	133	0	0	133	0	0	330	0	0	330	465
7:45 AM	0	1	0	1	0	2	0	0	0	0	0	0	0	6	146	0	0	152	0	0	283	0	0	283	437
Hourly Total	0	1	0	3	0	4	0	1	0	2	0	3	0	6	513	1	0	520	0	0	1173	4	0	1177	1704
8:00 AM	0	1	0	1	0	2	0	1	0	0	0	1	0	1	152	1	0	154	0	0	291	1	0	292	449
8:15 AM	0	1	0	1	1	2	0	0	0	0	0	0	0	0	128	1	0	129	0	0	250	2	0	252	383
8:30 AM	0	1	0	1	0	2	0	1	0	0	0	1	0	1	130	1	0	132	0	0	233	1	0	234	369
8:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	3	201	0	0	204	0	1	243	1	0	245	450
Hourly Total	0	4	0	3	1	7	0	2	0	0	0	2	0	5	611	3	0	619	0	1	1017	5	0	1023	1651
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	263	1	0	264	0	1	252	1	0	254	519
4:15 PM	0	2	0	0	0	2	0	1	0	0	0	1	0	2	260	0	0	262	0	0	293	1	0	294	559
4:30 PM	0	1	0	2	0	3	0	0	0	0	0	0	0	2	323	0	0	325	0	0	264	2	0	266	594
4:45 PM	0	1	0	2	0	3	0	0	0	0	0	0	0	3	343	0	0	346	0	0	238	2	0	240	589
Hourly Total	0	4	0	4	0	8	0	1	0	1	0	2	0	7	1189	1	0	1197	0	1	1047	6	0	1054	2261
5:00 PM	0	1	0	2	0	3	0	0	0	0	0	0	0	1	345	0	0	346	0	0	249	2	0	251	600
5:15 PM	0	1	0	4	1	5	0	0	0	0	0	0	0	2	333	0	0	335	0	0	232	1	0	233	573
5:30 PM	0	0	0	3	0	3	0	0	0	0	0	0	0	1	303	1	0	305	0	0	234	1	0	235	543
5:45 PM	0	2	0	2	0	4	0	0	0	1	0	1	0	0	303	1	0	304	0	0	217	1	0	218	527
Hourly Total	0	4	0	11	1	15	0	0	0	1	0	1	0	4	1284	2	0	1290	0	0	932	5	0	937	2243
6:00 PM	0	2	0	2	1	4	0	2	0	0	0	2	0	1	223	1	0	225	0	2	222	2	0	226	457
6:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	1	213	1	0	215	0	0	244	0	0	244	461
Grand Total	0	15	0	24	4	39	0	6	0	6	0	12	0	25	4252	11	0	4288	0	4	5143	22	0	5169	9508
Approach %	0.0	38.5	0.0	61.5	-	-	0.0	50.0	0.0	50.0	-	-	0.0	0.6	99.2	0.3	-	-	0.0	0.1	99.5	0.4	-	-	-
Total %	0.0	0.2	0.0	0.3	-	0.4	0.0	0.1	0.0	0.1	-	0.1	0.0	0.3	44.7	0.1	-	45.1	0.0	0.0	54.1	0.2	-	54.4	-
Lights	0	15	0	23	-	38	0	6	0	6	-	12	0	25	4061	10	-	4096	0	4	4844	22	-	4870	9016
% Lights	-	100.0	-	95.8	-	97.4	-	100.0	-	100.0	-	100.0	-	100.0	95.5	90.9	-	95.5	-	100.0	94.2	100.0	-	94.2	94.8
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	4	0	-	4	0	0	7	0	-	7	11
% Buses	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.1	0.0	-	0.1	-	0.0	0.1	0.0	-	0.1	0.1
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	123	1	-	124	0	0	203	0	-	203	327
% Single-Unit Trucks	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	2.9	9.1	-	2.9	-	0.0	3.9	0.0	-	3.9	3.4

Attachment: KLOA Rand Rd. Traffic Study (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Articulated Trucks	0	0	0	1	-	1	0	0	0	0	-	0	0	0	63	0	-	63	0	0	88	0	-	88	152
% Articulated Trucks	-	0.0	-	4.2	-	2.6	-	0.0	-	0.0	-	0.0	-	0.0	1.5	0.0	-	1.5	-	0.0	1.7	0.0	-	1.7	1.6
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	1	0	-	1	2
% Bicycles on Road	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Attachment: KLOA Rand Rd. Traffic Study (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Rand Road with South Access Drives
Site Code:
Start Date: 09/22/2021
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Enterprise Access Drive Eastbound						Public Storage Access Westbound						Rand Road Northbound						Rand Road Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:15 AM	0	0	0	0	0	0	0	1	0	1	0	2	0	0	118	1	0	119	0	0	281	1	0	282	403
7:30 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	133	0	0	133	0	0	330	0	0	330	465
7:45 AM	0	1	0	1	0	2	0	0	0	0	0	0	0	6	146	0	0	152	0	0	283	0	0	283	437
8:00 AM	0	1	0	1	0	2	0	1	0	0	0	1	0	1	152	1	0	154	0	0	291	1	0	292	449
Total	0	2	0	4	0	6	0	2	0	1	0	3	0	7	549	2	0	558	0	0	1185	2	0	1187	1754
Approach %	0.0	33.3	0.0	66.7	-	-	0.0	66.7	0.0	33.3	-	-	0.0	1.3	98.4	0.4	-	-	0.0	0.0	99.8	0.2	-	-	-
Total %	0.0	0.1	0.0	0.2	-	0.3	0.0	0.1	0.0	0.1	-	0.2	0.0	0.4	31.3	0.1	-	31.8	0.0	0.0	67.6	0.1	-	67.7	-
PHF	0.000	0.500	0.000	0.500	-	0.750	0.000	0.500	0.000	0.250	-	0.375	0.000	0.292	0.903	0.500	-	0.906	0.000	0.000	0.898	0.500	-	0.899	0.943
Lights	0	2	0	4	-	6	0	2	0	1	-	3	0	7	524	2	-	533	0	0	1134	2	-	1136	1678
% Lights	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	95.4	100.0	-	95.5	-	-	95.7	100.0	-	95.7	95.7
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	1	0	-	1	2
% Buses	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.2	0.0	-	0.2	-	-	0.1	0.0	-	0.1	0.1
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	14	0	-	14	0	0	25	0	-	25	39
% Single-Unit Trucks	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	2.6	0.0	-	2.5	-	-	2.1	0.0	-	2.1	2.2
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	10	0	-	10	0	0	25	0	-	25	35
% Articulated Trucks	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	1.8	0.0	-	1.8	-	-	2.1	0.0	-	2.1	2.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Attachment: KLOA Rand Rd. Traffic Study (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Rand Road with South Access Drives
Site Code:
Start Date: 09/22/2021

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Enterprise Access Drive Eastbound						Public Storage Access Westbound						Rand Road Northbound						Rand Road Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:30 PM	0	1	0	2	0	3	0	0	0	0	0	0	0	2	323	0	0	325	0	0	264	2	0	266	594
4:45 PM	0	1	0	2	0	3	0	0	0	0	0	0	0	3	343	0	0	346	0	0	238	2	0	240	589
5:00 PM	0	1	0	2	0	3	0	0	0	0	0	0	0	1	345	0	0	346	0	0	249	2	0	251	600
5:15 PM	0	1	0	4	1	5	0	0	0	0	0	0	0	2	333	0	0	335	0	0	232	1	0	233	573
Total	0	4	0	10	1	14	0	0	0	0	0	0	0	8	1344	0	0	1352	0	0	983	7	0	990	2356
Approach %	0.0	28.6	0.0	71.4	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.6	99.4	0.0	-	-	0.0	0.0	99.3	0.7	-	-	-
Total %	0.0	0.2	0.0	0.4	-	0.6	0.0	0.0	0.0	0.0	-	0.0	0.0	0.3	57.0	0.0	-	57.4	0.0	0.0	41.7	0.3	-	42.0	-
PHF	0.000	1.000	0.000	0.625	-	0.700	0.000	0.000	0.000	0.000	-	0.000	0.000	0.667	0.974	0.000	-	0.977	0.000	0.000	0.931	0.875	-	0.930	0.982
Lights	0	4	0	10	-	14	0	0	0	0	-	0	0	8	1299	0	-	1307	0	0	938	7	-	945	2266
% Lights	-	100.0	-	100.0	-	100.0	-	-	-	-	-	-	-	100.0	96.7	-	-	96.7	-	-	95.4	100.0	-	95.5	96.2
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	1
% Buses	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	-	0.0	0.1	-	-	0.1	-	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	21	0	-	21	0	0	34	0	-	34	55
% Single-Unit Trucks	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	-	0.0	1.6	-	-	1.6	-	-	3.5	0.0	-	3.4	2.3
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	23	0	-	23	0	0	10	0	-	10	33
% Articulated Trucks	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	-	0.0	1.7	-	-	1.7	-	-	1.0	0.0	-	1.0	1.4
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	1
% Bicycles on Road	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	-	0.0	0.0	-	-	0.0	-	-	0.1	0.0	-	0.1	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Attachment: KLOA Rand Rd. Traffic Study (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Study Name Rand Road with North Access Drives
Start Date Wednesday, September 22, 2021 6:30 AM
End Date Wednesday, September 22, 2021 6:30 PM
Site Code

Report Summary

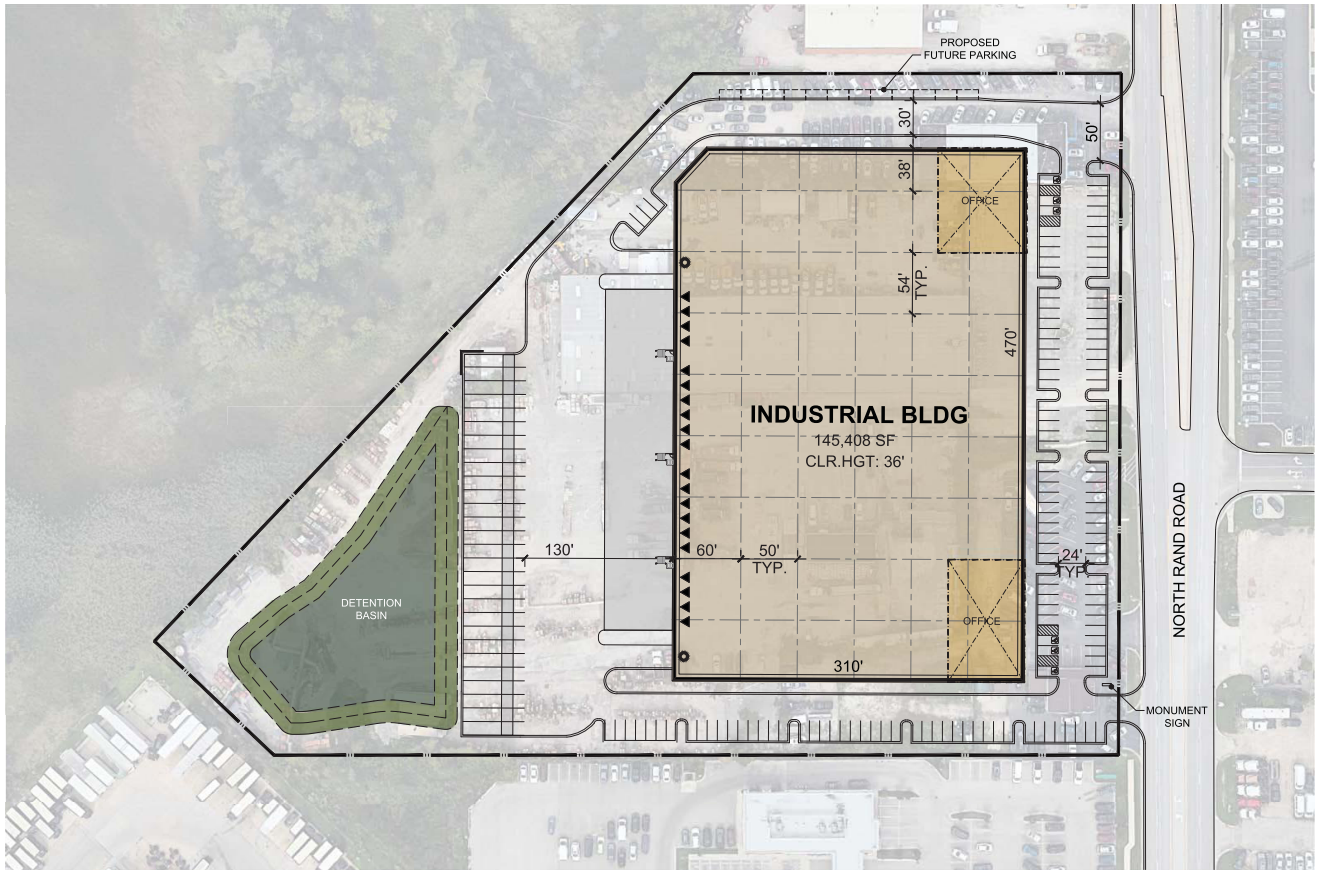
		Westbound						Northbound								Southbound								Southeastbound								Northeastbound								Southwestbound									Crosswalk	
Time Period	Class.	U	L	BL	BR	R	HR	I	O	U	HL	BL	T	BR	R	I	O	U	HL	L	T	BR	HR	I	O	U	HL	L	BL	BR	R	I	O	U	L	BL	T	BR	HR	I	O	U	HL	BL	T	R	HR	I	O	Total		ıdestria	Total
Peak 1	Lights	0	0	0	0	0	0	0	1	0	0	1	516	7	1	525	1130	0	4	0	1127	0	0	1131	522	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	2	0	0	6	8	11	1665	E	0	0
Specified Period	%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	95%	100%	100%	95%	95%	0%	67%	0%	95%	0%	0%	95%	95%	0%	0%	0%	0%	100%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	86%	89%	85%	95%		0%	
7:15 AM - 8:15 AM	Buses	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	S	0	0
One Hour Peak	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
7:15 AM - 8:15 AM	ngle-Unit Truc	0	0	0	0	0	0	0	0	0	0	0	15	0	0	15	26	0	2	0	26	0	0	28	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	44	N	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	3%	2%	0%	33%	0%	2%	0%	0%	2%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%	11%	15%	3%		0%	
	ticulated Truc	0	0	0	0	0	0	0	0	0	0	0	10	0	0	10	26	0	0	0	26	0	0	26	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	NW	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	2%	0%	0%	0%	2%	0%	0%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%		0%	
	icycles on Roa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SW	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
	Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**542**	**7**	**1**	**551**	**1184**	**0**	**6**	**0**	**1181**	**0**	**0**	**1187**	**549**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**7**	**9**	**13**	**1748**	NE	0	0
	PHF	0	0	0	0	0	0	0	0.25	0	0	0.25	0.92	0.58	0.25	0.91	0.91	0	0.75	0	0.91	0	0	0.91	0.92	0	0	0	0	0.25	0	0.25	0.25	0	0	0	0	0	0	0	0	0	0	0.25	0	0	0.88	0.75	0.65	0.94		0%	
	Approach %							0%	0%							32%	68%							68%	31%									0%	0%							0%	0%					1%	1%			**0**	**0**
Peak 2	Lights	0	1	0	0	1	0	2	2	0	0	1	1302	2	2	1307	936	0	0	0	933	0	4	937	1310	0	3	0	0	1	0	4	5	0	0	0	0	0	0	0	0	0	0	1	0	0	4	5	2	2255	E	0	0
Specified Period	%	0%	100%	0%	0%	100%	0%	100%	100%	0%	0%	100%	97%	67%	100%	97%	95%	0%	0%	0%	95%	0%	100%	95%	97%	0%	100%	0%	0%	100%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	100%	67%	96%		0%	
4:30 PM - 5:30 PM	Buses	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	S	0	0
One Hour Peak	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
4:30 PM - 5:30 PM	ngle-Unit Truc	0	0	0	0	0	0	0	0	0	0	0	14	1	0	15	33	0	0	0	33	0	0	33	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	48	N	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	33%	0%	1%	3%	0%	0%	0%	3%	0%	0%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	2%		0%	
	ticulated Truc	0	0	0	0	0	0	0	0	0	0	0	24	0	0	24	11	0	0	0	11	0	0	11	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	NW	12	12
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	1%	0%	0%	0%	1%	0%	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%		100%	
	icycles on Roa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	SW	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
	Total	**0**	**1**	**0**	**0**	**1**	**0**	**2**	**2**	**0**	**0**	**1**	**1341**	**3**	**2**	**1347**	**981**	**0**	**0**	**0**	**978**	**0**	**4**	**982**	**1349**	**0**	**3**	**0**	**0**	**1**	**0**	**4**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**	**5**	**3**	**2340**	NE	0	0
	PHF	0	0.25	0	0	0.25	0	0.5	0.5	0	0	0.25	0.97	0.38	0.5	0.98	0.95	0	0	0	0.94	0	0.5	0.94	0.96	0	0.38	0	0	0.25	0	0.33	0.62	0	0	0	0	0	0	0	0	0	0	0.25	0	0	0.25	0.25	0.38	0.97		0%	
	Approach %							0%	0%							58%	42%							42%	58%							0%	0%							0%	0%					0%	0%			**12**	**12**

Attachment: KLOA Rand Rd. Traffic Study (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Preliminary Site Plan

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



PROJECT DATA:		
SITE AREA:		
GROSS:		8.86 AC
		385,828 SF
DETENTION:	@ 9%	34,746 SF
NET:		8.06 AC
		351,082 SF
BUILDING FOOTPRINT:		145,408 SF
BUILDING USE:		
WAREHOUSE		130,867 SF
OFFICE	@ 10%	14,541 SF
COVERAGE:		
GROSS:		38%
NET:		41%
PARKING REQUIRED:		
WAREHOUSE	1/1000 SF	131 STALLS
OFFICE	1/300 SF	48 STALLS
TOTAL		179 STALLS
PARKING PROVIDED:		
AUTO:		135 STALLS
		@0.93/1000 SF
REQ. ACCESSIBLE		*5 STALLS*
TRAILER:		28 STALLS
FUTURE PARKING PROPOSED:		
AUTO:		13 STALLS
TRUCK DOCKS:		
▲ DOCK-HIGH DOORS		20

DEVELOPMENT STANDARDS:	
ZONING:	M
MAX. F.A.R.:	0.70
MAX. COVERAGE:	TBD [1]
MAX. HEIGHT:	60 FT
BUILDING SETBACKS:	
FRONT:	30 FT
SIDE:	15 FT
REAR:	15 FT
LANDSCAPE SETBACKS:	
FRONT:	5 FT
SIDE:	2 FT
REAR:	2 FT
LANDSCAPE REQ.:	[2]
OFF-STREET PARKING:	
STANDARD:	9X19
COMPACT:	8X16
DRIVE AISLE:	25 FT
FIRE LANE:	TBD [1]
REQ. PARKING RATIO BY USE:	
WAREHOUSE:	1/1000 SF
OFFICE:	1/300 SF

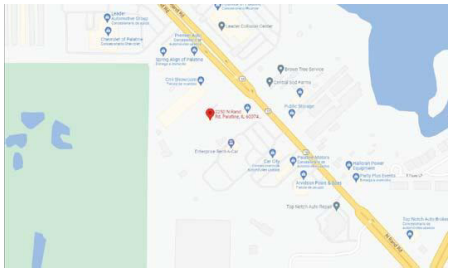
NOTES:
1 To be confirmed by city.
2 1 tree for every 10 parking stalls.

A PORTION OF THE ZONING INFORMATION IS UNKNOWN AT THIS TIME AND REQUIREMENTS MAY DIFFER THAN WHAT IS SHOWN IN THE SITE PLAN.

This conceptual design is based upon a preliminary review of entitlement requirements and on unverified and possibly incomplete site and/or building information, and is intended merely to assist in exploring how the project might be developed.

Stormwater Management Design:
AVERAGE REGIONAL REQUIRED PROVIDED

Boundary Source:
CIVIL CAD FILE



1" = 40'
0 20 40 80 200
NORTH

THE MISSNER GROUP EST. 1945

scheme: 05

Conceptual Site Plan

2250 North Rand Road
Palatine, IL 60074

WARE MALCOMB

CHI21-0193-00
04.04.2022

SHEET
1

Attachment: KLOA Rand Rd. Traffic Study (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

ITE Trip Generation Worksheets

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

General Light Industrial
(110)

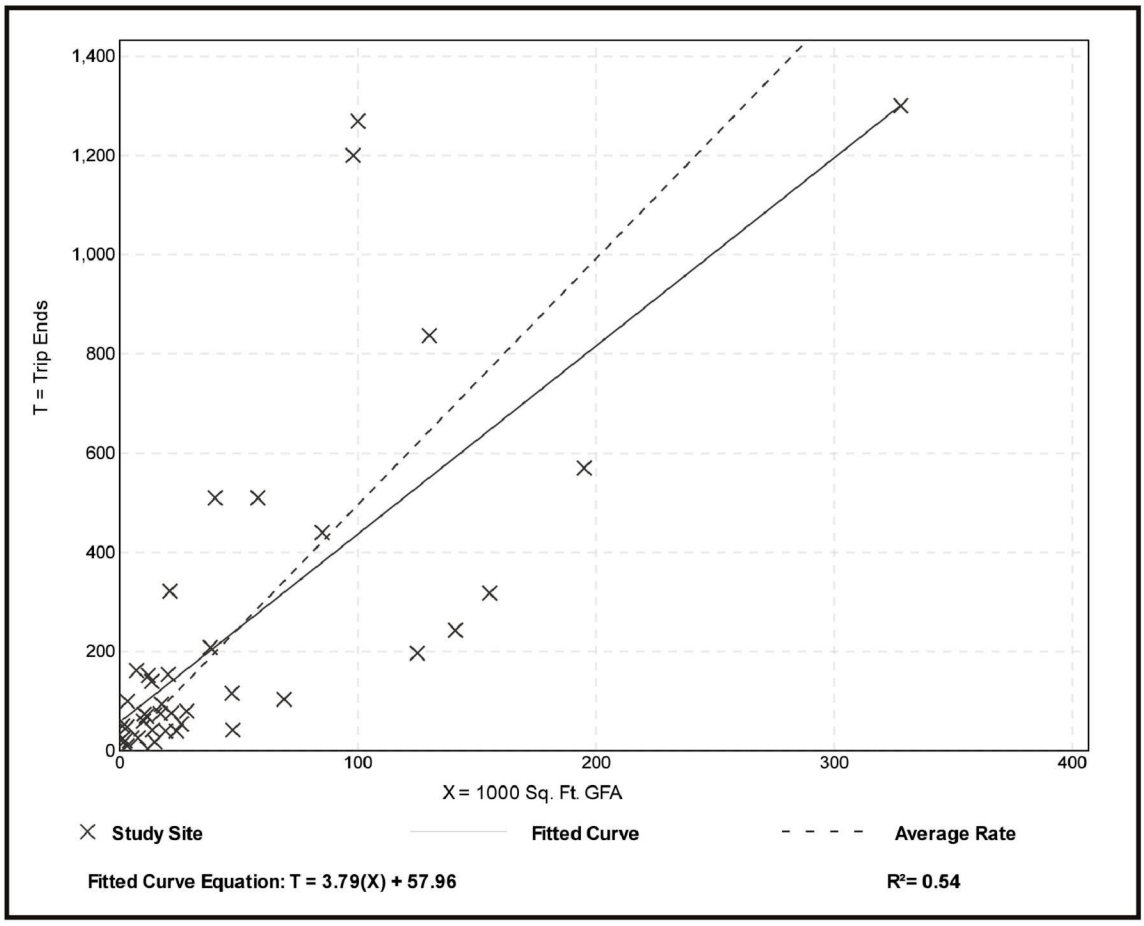
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 40
1000 Sq. Ft. GFA: 49
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
4.96	0.34 - 43.86	4.20

Data Plot and Equation



Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

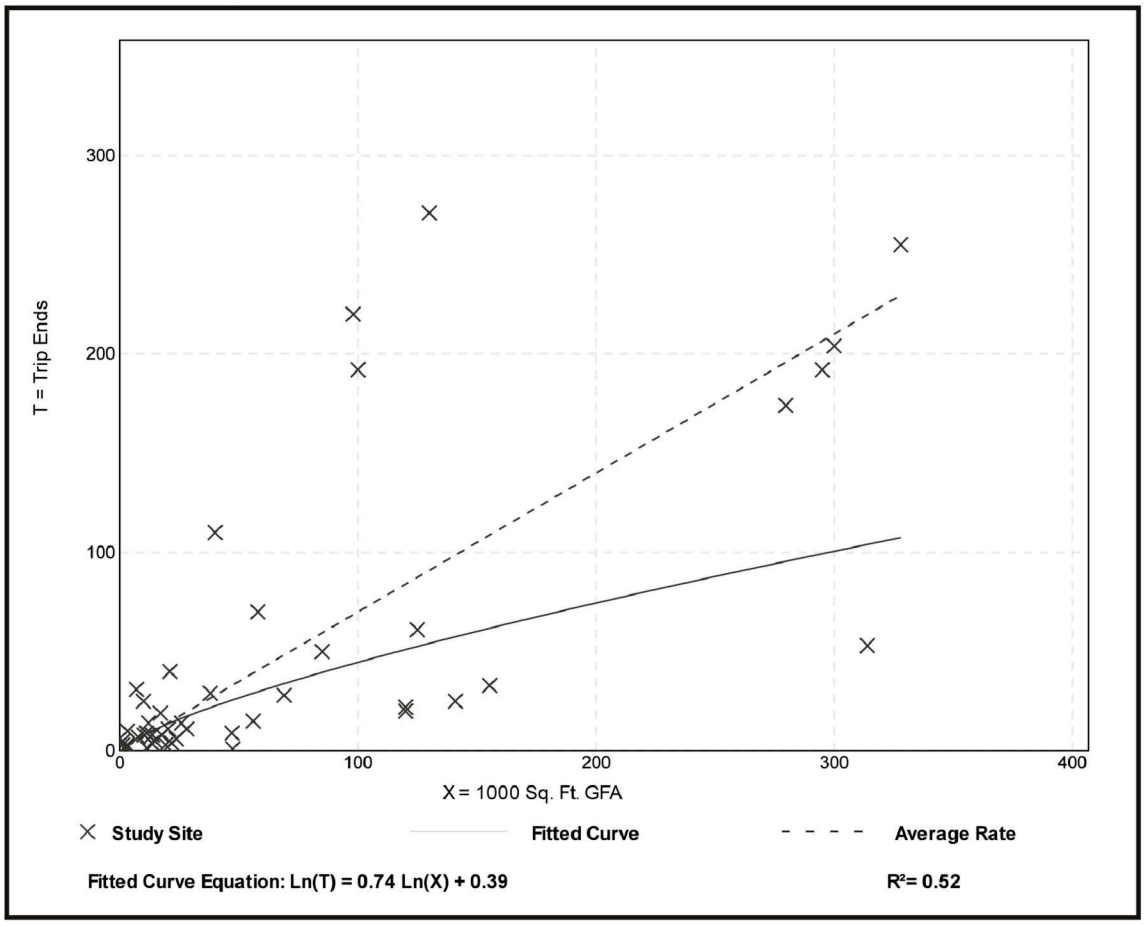
General Light Industrial
(110)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 45
1000 Sq. Ft. GFA: 73
Directional Distribution: 88% entering, 12% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.70	0.02 - 4.46	0.65

Data Plot and Equation



Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

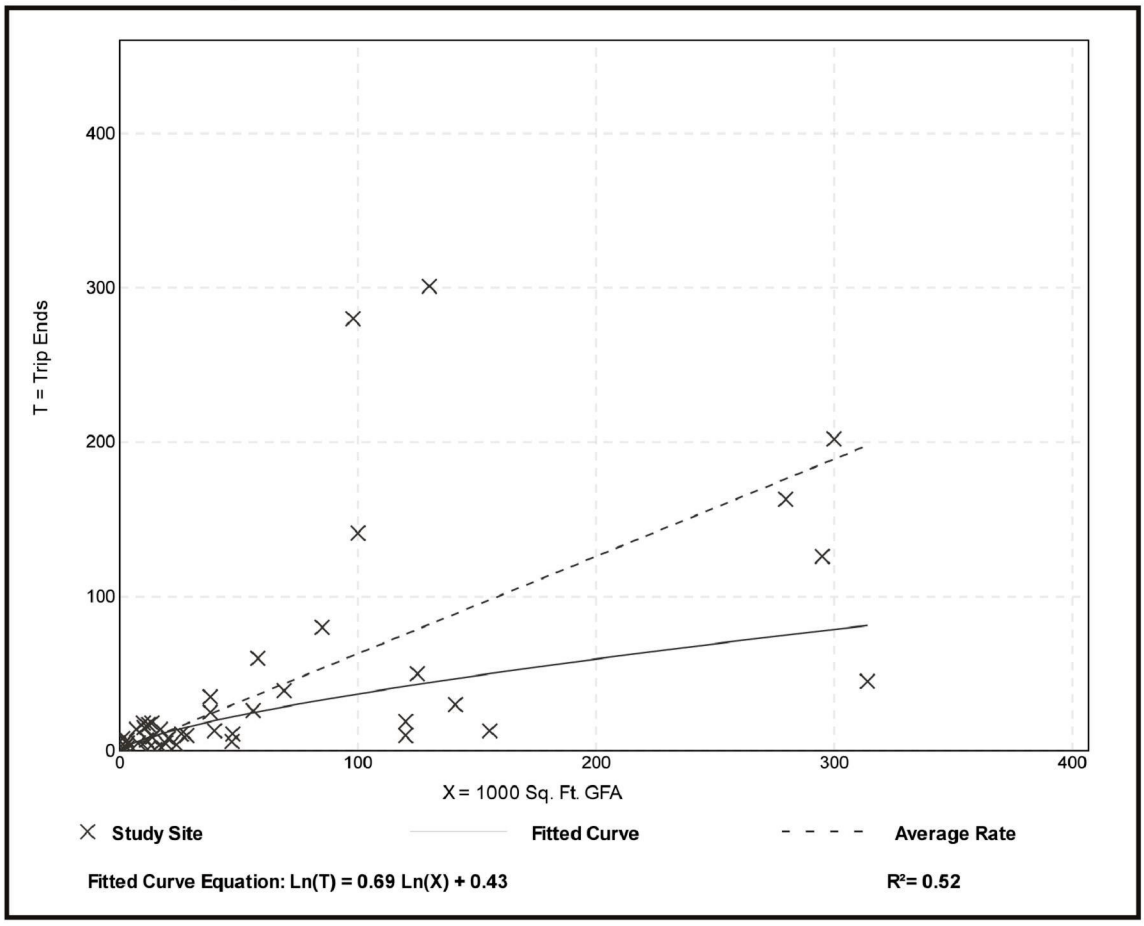
General Light Industrial
(110)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 44
1000 Sq. Ft. GFA: 67
Directional Distribution: 13% entering, 87% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.63	0.07 - 7.02	0.68

Data Plot and Equation



Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

General Light Industrial
(110)

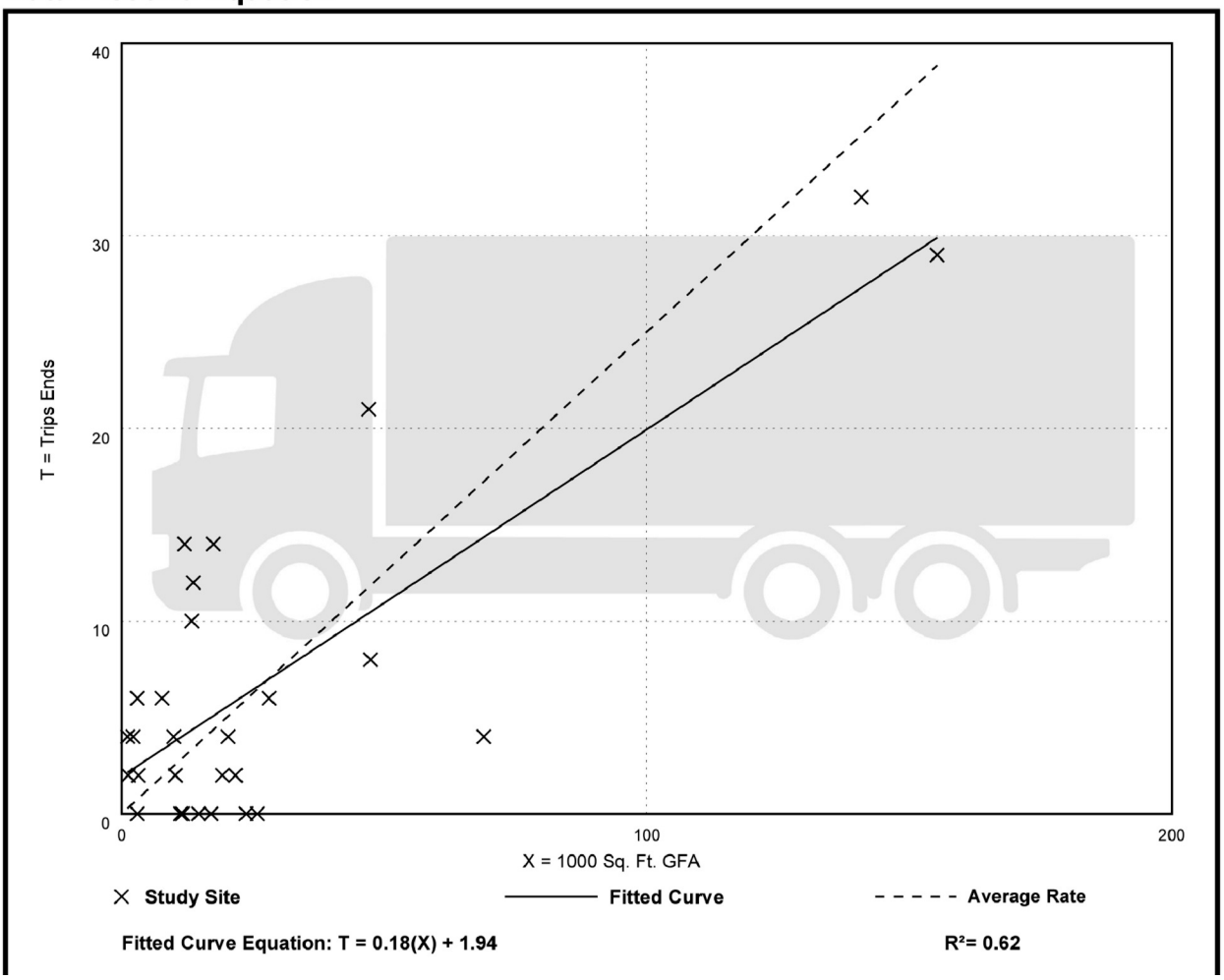
Truck Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 28
Avg. 1000 Sq. Ft. GFA: 27
Directional Distribution: 50% entering, 50% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.25	0.00 - 3.51	0.31

Data Plot and Equation



Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

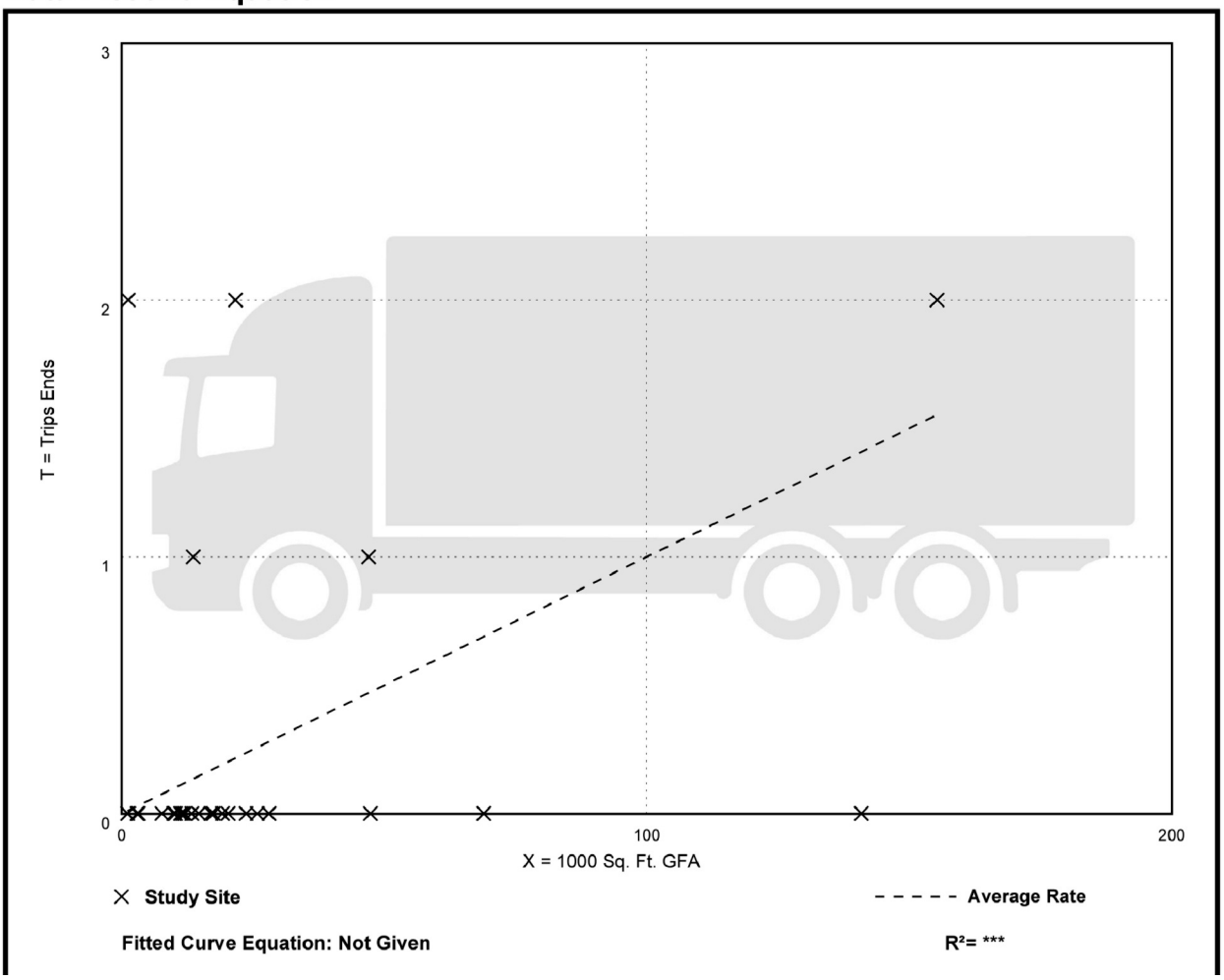
General Light Industrial
(110)

Truck Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 27
Avg. 1000 Sq. Ft. GFA: 28
Directional Distribution: 63% entering, 37% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.01	0.00 - 1.59	0.07

Data Plot and Equation



Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

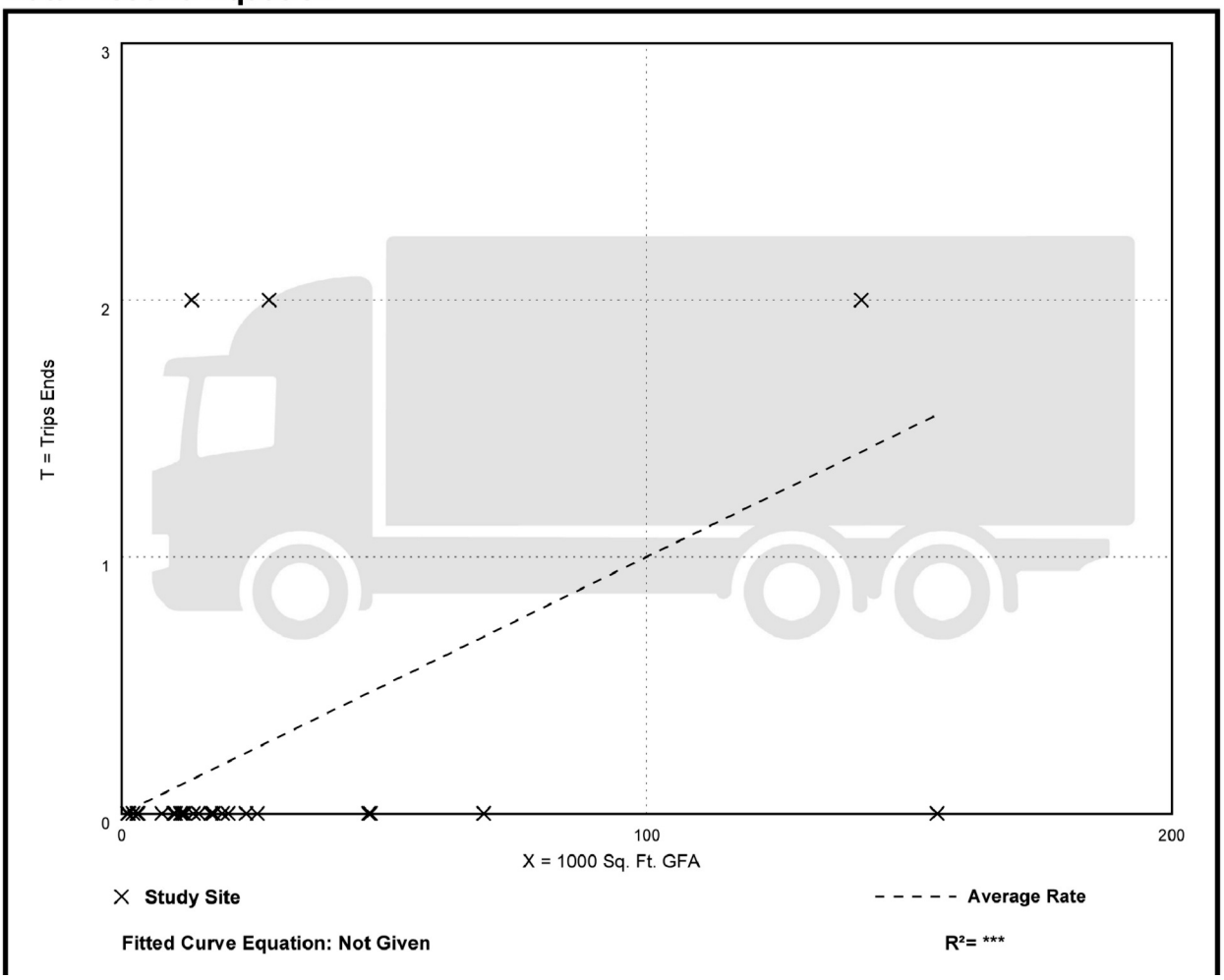
General Light Industrial
(110)

Truck Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 27
Avg. 1000 Sq. Ft. GFA: 27
Directional Distribution: 50% entering, 50% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.01	0.00 - 0.15	0.02

Data Plot and Equation



Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

CMAP 2050 Projections Letter

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Chicago Metropolitan Agency for Planning

433 West Van Buren Street
Suite 450
Chicago, IL 60607

312-454-0400
cmap.illinois.gov

September 29, 2021

Andrew Bowen
Traffic Engineer
Kenig, Lindgren, O'Hara and Aboona, Inc.
9575 West Higgins Road
Suite 400
Rosemont, IL 60018

Subject: ***Rand Road (US 12) @ Lake Cook Road***
IDOT

Dear Mr. Bowen:

In response to a request made on your behalf and dated September 28, 2021, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
Rand Rd north of Lake Cook Rd	49,600	50,400
Rand Rd south of Lake Cook Rd	14,900	17,700
Lake Cook Rd west of Rand Rd	19,700	25,400
Lake Cook Rd east of Rand Rd	43,600	46,300

Traffic projections are developed using existing ADT data provided in the request letter and the results from the June 2021 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Rios (IDOT)
2021_CY_TrafficForecast\Palatine\ck-119-21\ck-119-21.docx

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Level of Service Criteria

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

LEVEL OF SERVICE CRITERIA

Signalized Intersections		
Level of Service	Interpretation	Average Control Delay (seconds per vehicle)
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Good progression, with more vehicles stopping than for Level of Service A.	>10 - 20
C	Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 - 35
D	The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable.	>35 - 55
E	Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent.	>55 - 80
F	The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	>80.0

Unsignalized Intersections	
Level of Service	Average Total Delay (SEC/VEH)
A	0 - 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Source: *Highway Capacity Manual*, 2010.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Capacity Analysis Summary Sheets

Existing Weekday Morning Peak Hour Conditions

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

10/07/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	20	648	231	28	487	918	813	934	9	114	394	42
Future Volume (vph)	20	648	231	28	487	918	813	934	9	114	394	42
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		505	140		505	670		0	215		0
Storage Lanes	1		1	1		2	2		0	2		0
Taper Length (ft)	140			90			290			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.88	0.97	0.95	0.95	0.97	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850		0.999			0.986	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3725	1599	1805	3551	2493	3303	3369	0	3400	3361	0
Flt Permitted	0.330			0.199			0.950			0.950		
Satd. Flow (perm)	627	3725	1599	378	3551	2493	3303	3369	0	3400	3361	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		2957			2627			1774			763	
Travel Time (s)		44.8			39.8			34.6			14.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	1%	0%	7%	14%	6%	7%	11%	3%	6%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	661	236	29	497	937	830	962	0	116	445	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8	1	1	6		5	2	
Permitted Phases	4		4	8		8						
Detector Phase	7	4	5	3	8	1	1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	21.0	7.5	6.5	21.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	13.5	48.0	13.5	13.5	48.0	58.5	58.5	75.0		13.5	30.0	
Total Split (%)	9.0%	32.0%	9.0%	9.0%	32.0%	39.0%	39.0%	50.0%		9.0%	20.0%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.0	0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	4.5	3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	47.4	40.6	55.6	48.1	40.9	94.4	47.5	77.1		9.1	38.7	
Actuated g/C Ratio	0.32	0.27	0.37	0.32	0.27	0.63	0.32	0.51		0.06	0.26	

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

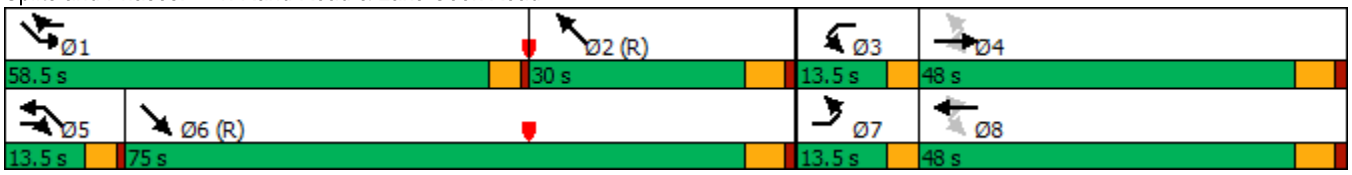
10/07/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio	0.08	0.66	0.40	0.15	0.51	0.60	0.79	0.56		0.57	0.51	
Control Delay	30.5	51.7	36.5	32.0	47.7	17.8	52.7	27.9		79.6	53.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	30.5	51.7	36.5	32.0	47.7	17.8	52.7	27.9		79.6	53.3	
LOS	C	D	D	C	D	B	D	C		E	D	
Approach Delay		47.3			28.2			39.4			58.8	
Approach LOS		D			C			D			E	
Queue Length 50th (ft)	12	296	162	18	212	273	379	366		57	210	
Queue Length 95th (ft)	31	364	242	40	268	294	433	442		93	#304	
Internal Link Dist (ft)		2877			2547			1694			683	
Turn Bay Length (ft)	190		505	140		505	670			215		
Base Capacity (vph)	283	1065	596	219	1024	1677	1189	1731		212	866	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.07	0.62	0.40	0.13	0.49	0.56	0.70	0.56		0.55	0.51	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 145.5 (97%), Referenced to phase 2:NWT and 6:SET, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 39.8 Intersection LOS: D
Intersection Capacity Utilization 72.7% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Rand Road & Lake Cook Road



Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
2: North ALG Access Drive/Central Sod Farms Access Drive & Rand Road 10/07/2021

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	6	1187	0	1	543	7	0	0	1	2	0	7
Future Vol, veh/h	6	1187	0	1	543	7	0	0	1	2	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	33	6	0	0	5	0	0	0	0	0	0	14
Mvmt Flow	6	1263	0	1	578	7	0	0	1	2	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	585	0	0	1263	0	0	1566	1862	632	1228	1859	293
Stage 1	-	-	-	-	-	-	1275	1275	-	584	584	-
Stage 2	-	-	-	-	-	-	291	587	-	644	1275	-
Critical Hdwy	4.76	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	7.18
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.53	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.44
Pot Cap-1 Maneuver	801	-	-	557	-	-	77	74	428	136	74	669
Stage 1	-	-	-	-	-	-	180	240	-	470	501	-
Stage 2	-	-	-	-	-	-	698	500	-	433	240	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	801	-	-	557	-	-	76	73	428	135	73	669
Mov Cap-2 Maneuver	-	-	-	-	-	-	150	175	-	265	175	-
Stage 1	-	-	-	-	-	-	179	238	-	467	500	-
Stage 2	-	-	-	-	-	-	689	499	-	429	238	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	13.4	12.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	428	557	-	-	801	-	-	500
HCM Lane V/C Ratio	0.002	0.002	-	-	0.008	-	-	0.019
HCM Control Delay (s)	13.4	11.5	-	-	9.5	-	-	12.3
HCM Lane LOS	B	B	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
3: South ALG Access Drive/North IAB Access Drive & Rand Road 10/07/2021

Intersection	
Int Delay, s/veh	0

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1190	0	0	551	1	0	0	0	0	0	0
Future Vol, veh/h	0	1190	0	0	551	1	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	6	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	1266	0	0	586	1	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	587	0	0	1266	0	0	1559	1853	633	1220	1853	294
Stage 1	-	-	-	-	-	-	1266	1266	-	587	587	-
Stage 2	-	-	-	-	-	-	293	587	-	633	1266	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	998	-	-	556	-	-	78	75	427	138	75	708
Stage 1	-	-	-	-	-	-	182	242	-	468	500	-
Stage 2	-	-	-	-	-	-	696	500	-	439	242	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	998	-	-	556	-	-	78	75	427	138	75	708
Mov Cap-2 Maneuver	-	-	-	-	-	-	152	178	-	270	178	-
Stage 1	-	-	-	-	-	-	182	242	-	468	500	-
Stage 2	-	-	-	-	-	-	696	500	-	439	242	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	0	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	-	556	-	-	998	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	-

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
4: Enterprise Access Drive/Public Storage Access Drive & Rand Road 10/07/2021

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1188	2	7	549	2	2	0	4	2	0	1
Future Vol, veh/h	0	1188	2	7	549	2	2	0	4	2	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	6	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	1264	2	7	584	2	2	0	4	2	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	586	0	0	1266	0	0	1571	1865	633	1231	1865	293
Stage 1	-	-	-	-	-	-	1265	1265	-	599	599	-
Stage 2	-	-	-	-	-	-	306	600	-	632	1266	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	999	-	-	556	-	-	76	74	427	136	74	709
Stage 1	-	-	-	-	-	-	182	243	-	460	494	-
Stage 2	-	-	-	-	-	-	684	493	-	440	242	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	999	-	-	556	-	-	75	73	427	133	73	709
Mov Cap-2 Maneuver	-	-	-	-	-	-	151	177	-	263	173	-
Stage 1	-	-	-	-	-	-	182	243	-	460	488	-
Stage 2	-	-	-	-	-	-	674	487	-	436	242	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0.1	18.9	15.9
HCM LOS			C	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	265	556	-	-	999	-	-	333
HCM Lane V/C Ratio	0.024	0.013	-	-	-	-	-	0.01
HCM Control Delay (s)	18.9	11.6	-	-	0	-	-	15.9
HCM Lane LOS	C	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Capacity Analysis Summary Sheets

Existing Weekday Evening Peak Hour Conditions

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

10/07/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	27	397	177	18	774	1128	708	796	19	385	893	72
Future Volume (vph)	27	397	177	18	774	1128	708	796	19	385	893	72
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		505	140		505	670		0	215		0
Storage Lanes	1		1	1		2	2		0	2		0
Taper Length (ft)	140			90			290			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.88	0.97	0.95	0.95	0.97	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850		0.997			0.989	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1687	3689	1538	1703	3762	2760	3367	3432	0	3433	3442	0
Flt Permitted	0.109			0.406			0.950			0.950		
Satd. Flow (perm)	194	3689	1538	728	3762	2760	3367	3432	0	3433	3442	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		2957			2627			1774			763	
Travel Time (s)		44.8			39.8			34.6			14.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	3%	5%	6%	1%	3%	4%	5%	0%	2%	3%	13%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	28	405	181	18	790	1151	722	831	0	393	984	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8	1	1	6		5	2	
Permitted Phases	4		4	8		8						
Detector Phase	7	4	5	3	8	1	1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	21.0	7.5	6.5	21.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	13.5	40.5	22.5	13.5	40.5	39.0	39.0	73.5		22.5	57.0	
Total Split (%)	9.0%	27.0%	15.0%	9.0%	27.0%	26.0%	26.0%	49.0%		15.0%	38.0%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.0	0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	4.5	3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	47.4	40.0	64.3	46.3	39.4	80.2	34.8	68.7		18.4	52.3	
Actuated g/C Ratio	0.32	0.27	0.43	0.31	0.26	0.53	0.23	0.46		0.12	0.35	

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

10/07/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio	0.21	0.41	0.27	0.07	0.80	0.78	0.92	0.53		0.94	0.82	
Control Delay	37.5	47.5	29.9	34.2	59.0	33.3	74.6	30.9		95.0	51.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	37.5	47.5	29.9	34.2	59.0	33.3	74.6	30.9		95.0	51.7	
LOS	D	D	C	C	E	C	E	C		F	D	
Approach Delay		41.8			43.7			51.2			64.1	
Approach LOS		D			D			D			E	
Queue Length 50th (ft)	19	176	117	12	390	517	360	306		200	468	
Queue Length 95th (ft)	43	233	182	31	#504	644	#478	371		#305	559	
Internal Link Dist (ft)		2877			2547			1694			683	
Turn Bay Length (ft)	190		505	140		505	670			215		
Base Capacity (vph)	162	982	659	297	988	1475	781	1571		420	1199	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.17	0.41	0.27	0.06	0.80	0.78	0.92	0.53		0.94	0.82	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 79.5 (53%), Referenced to phase 2:NWT and 6:SET, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.94
Intersection Signal Delay: 50.7 Intersection LOS: D
Intersection Capacity Utilization 83.4% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Rand Road & Lake Cook Road

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
2: North ALG Access Drive/Central Sod Farms Access Drive & Rand Road 10/07/2021

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	987	4	1	1343	3	3	0	1	1	0	4
Future Vol, veh/h	0	987	4	1	1343	3	3	0	1	1	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	5	0	0	3	33	0	0	0	0	0	0
Mvmt Flow	0	1018	4	1	1385	3	3	0	1	1	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1388	0	0	1022	0	0	1715	2410	511	1898	2411	694
Stage 1	-	-	-	-	-	-	1020	1020	-	1389	1389	-
Stage 2	-	-	-	-	-	-	695	1390	-	509	1022	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	500	-	-	687	-	-	59	33	513	43	33	390
Stage 1	-	-	-	-	-	-	257	317	-	153	212	-
Stage 2	-	-	-	-	-	-	403	211	-	520	316	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	500	-	-	687	-	-	58	33	513	43	33	390
Mov Cap-2 Maneuver	-	-	-	-	-	-	168	130	-	121	130	-
Stage 1	-	-	-	-	-	-	257	317	-	153	212	-
Stage 2	-	-	-	-	-	-	398	211	-	519	316	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	23.2	18.6
HCM LOS			C	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	202	687	-	-	500	-	-	270
HCM Lane V/C Ratio	0.02	0.002	-	-	-	-	-	0.019
HCM Control Delay (s)	23.2	10.2	-	-	0	-	-	18.6
HCM Lane LOS	C	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
3: South ALG Access Drive/North IAB Access Drive & Rand Road 10/07/2021

Intersection	
Int Delay, s/veh	0

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	989	0	0	1346	2	0	0	0	1	0	1
Future Vol, veh/h	0	989	0	0	1346	2	0	0	0	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	5	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	1020	0	0	1388	2	0	0	0	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1390	0	0	1020	0	0	1714	2410	510	1899	2409	695
Stage 1	-	-	-	-	-	-	1020	1020	-	1389	1389	-
Stage 2	-	-	-	-	-	-	694	1390	-	510	1020	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	499	-	-	688	-	-	59	33	514	43	33	389
Stage 1	-	-	-	-	-	-	257	317	-	153	212	-
Stage 2	-	-	-	-	-	-	404	211	-	519	317	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	499	-	-	688	-	-	59	33	514	43	33	389
Mov Cap-2 Maneuver	-	-	-	-	-	-	169	130	-	121	130	-
Stage 1	-	-	-	-	-	-	257	317	-	153	212	-
Stage 2	-	-	-	-	-	-	403	211	-	519	317	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	0	24.7
HCM LOS			A	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	-	688	-	-	499	-	-	185
HCM Lane V/C Ratio	-	-	-	-	-	-	-	0.011
HCM Control Delay (s)	0	0	-	-	0	-	-	24.7
HCM Lane LOS	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	983	7	8	1344	0	4	0	10	0	0	0
Future Vol, veh/h	0	983	7	8	1344	0	4	0	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	5	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	1003	7	8	1371	0	4	0	10	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1371	0	0	1010	0	0	1709	2394	505	1889	2397	686
Stage 1	-	-	-	-	-	-	1007	1007	-	1387	1387	-
Stage 2	-	-	-	-	-	-	702	1387	-	502	1010	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	507	-	-	694	-	-	60	34	518	44	34	395
Stage 1	-	-	-	-	-	-	262	321	-	153	212	-
Stage 2	-	-	-	-	-	-	400	212	-	525	320	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	507	-	-	694	-	-	59	34	518	43	34	395
Mov Cap-2 Maneuver	-	-	-	-	-	-	169	130	-	120	129	-
Stage 1	-	-	-	-	-	-	262	321	-	153	209	-
Stage 2	-	-	-	-	-	-	395	209	-	515	320	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0.1	16.5	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	326	694	-	-	507	-	-	-
HCM Lane V/C Ratio	0.044	0.012	-	-	-	-	-	-
HCM Control Delay (s)	16.5	10.2	-	-	0	-	-	0
HCM Lane LOS	C	B	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Capacity Analysis Summary Sheets

2027 No Build Weekday Morning Peak Hour Conditions

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

03/15/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	21	666	237	29	501	944	836	960	9	117	405	43
Future Volume (vph)	21	666	237	29	501	944	836	960	9	117	405	43
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		505	140		505	670		0	215		0
Storage Lanes	1		1	1		2	2		0	2		0
Taper Length (ft)	140			90			290			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.88	0.97	0.95	0.95	0.97	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850		0.999			0.986	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3725	1599	1805	3551	2493	3303	3369	0	3400	3361	0
Flt Permitted	0.321			0.192			0.950			0.950		
Satd. Flow (perm)	610	3725	1599	365	3551	2493	3303	3369	0	3400	3361	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		2957			2627			1774			763	
Travel Time (s)		44.8			39.8			34.6			14.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	1%	0%	7%	14%	6%	7%	11%	3%	6%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	680	242	30	511	963	853	989	0	119	457	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8	1	1	6		5	2	
Permitted Phases	4		4	8		8						
Detector Phase	7	4	5	3	8	1	1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	21.0	7.5	6.5	21.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	13.5	48.0	13.5	13.5	48.0	58.5	58.5	75.0		13.5	30.0	
Total Split (%)	9.0%	32.0%	9.0%	9.0%	32.0%	39.0%	39.0%	50.0%		9.0%	20.0%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.0	0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	4.5	3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	48.1	41.3	56.2	48.8	41.6	96.0	48.4	76.5		8.9	37.1	
Actuated g/C Ratio	0.32	0.28	0.37	0.33	0.28	0.64	0.32	0.51		0.06	0.25	

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

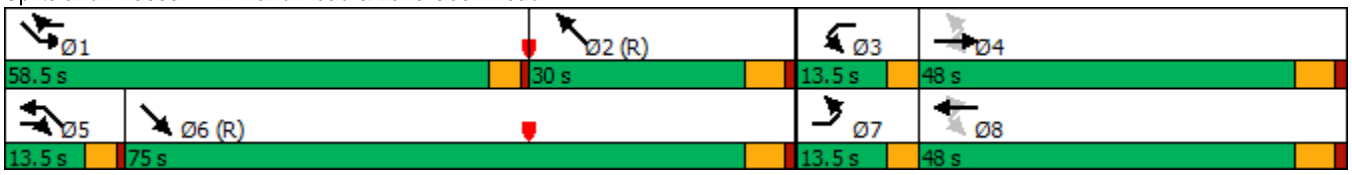
03/15/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio	0.08	0.66	0.40	0.16	0.52	0.60	0.80	0.58		0.59	0.55	
Control Delay	30.4	51.4	36.4	32.0	47.4	17.2	52.4	28.6		81.1	55.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	30.4	51.4	36.4	32.0	47.4	17.2	52.4	28.6		81.1	55.1	
LOS	C	D	D	C	D	B	D	C		F	E	
Approach Delay		47.1			27.7			39.7			60.5	
Approach LOS		D			C			D			E	
Queue Length 50th (ft)	13	302	166	18	215	270	389	383		59	222	
Queue Length 95th (ft)	32	376	248	42	276	307	448	458		95	#317	
Internal Link Dist (ft)		2877			2547			1694			683	
Turn Bay Length (ft)	190		505	140		505	670			215		
Base Capacity (vph)	282	1073	601	217	1030	1688	1189	1718		208	830	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.07	0.63	0.40	0.14	0.50	0.57	0.72	0.58		0.57	0.55	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 145.5 (97%), Referenced to phase 2:NWT and 6:SET, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 39.9 Intersection LOS: D
Intersection Capacity Utilization 74.3% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Rand Road & Lake Cook Road



Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
2: North ALG Access Drive/Central Sod Farms Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	6	1220	0	1	558	7	0	0	1	2	0	7
Future Vol, veh/h	6	1220	0	1	558	7	0	0	1	2	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	33	6	0	0	5	0	0	0	0	0	0	14
Mvmt Flow	6	1298	0	1	594	7	0	0	1	2	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	601	0	0	1298	0	0	1609	1913	649	1261	1910	301
Stage 1	-	-	-	-	-	-	1310	1310	-	600	600	-
Stage 2	-	-	-	-	-	-	299	603	-	661	1310	-
Critical Hdwy	4.76	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	7.18
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.53	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.44
Pot Cap-1 Maneuver	788	-	-	540	-	-	71	69	417	129	69	661
Stage 1	-	-	-	-	-	-	171	231	-	459	493	-
Stage 2	-	-	-	-	-	-	691	492	-	423	231	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	788	-	-	540	-	-	70	68	417	128	68	661
Mov Cap-2 Maneuver	-	-	-	-	-	-	142	168	-	257	168	-
Stage 1	-	-	-	-	-	-	170	229	-	455	492	-
Stage 2	-	-	-	-	-	-	682	491	-	419	229	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	13.7	12.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	417	540	-	-	788	-	-	490
HCM Lane V/C Ratio	0.003	0.002	-	-	0.008	-	-	0.02
HCM Control Delay (s)	13.7	11.7	-	-	9.6	-	-	12.5
HCM Lane LOS	B	B	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
3: South ALG Access Drive/North IAB Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1223	0	0	566	1	0	0	0	0	0	0
Future Vol, veh/h	0	1223	0	0	566	1	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	6	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	1301	0	0	602	1	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	603	0	0	1301	0	0	1602	1904	651	1254	1904	302
Stage 1	-	-	-	-	-	-	1301	1301	-	603	603	-
Stage 2	-	-	-	-	-	-	301	603	-	651	1301	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	984	-	-	539	-	-	72	70	416	131	70	700
Stage 1	-	-	-	-	-	-	173	233	-	458	492	-
Stage 2	-	-	-	-	-	-	689	492	-	429	233	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	984	-	-	539	-	-	72	70	416	131	70	700
Mov Cap-2 Maneuver	-	-	-	-	-	-	145	171	-	262	171	-
Stage 1	-	-	-	-	-	-	173	233	-	458	492	-
Stage 2	-	-	-	-	-	-	689	492	-	429	233	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	0	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	-	539	-	-	984	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	-

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
4: Enterprise Access Drive/Public Storage Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1221	2	7	564	2	2	0	4	2	0	1
Future Vol, veh/h	0	1221	2	7	564	2	2	0	4	2	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	6	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	1299	2	7	600	2	2	0	4	2	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	602	0	0	1301	0	0	1614	1916	651	1265	1916	301
Stage 1	-	-	-	-	-	-	1300	1300	-	615	615	-
Stage 2	-	-	-	-	-	-	314	616	-	650	1301	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	985	-	-	539	-	-	71	68	416	128	68	701
Stage 1	-	-	-	-	-	-	173	233	-	450	485	-
Stage 2	-	-	-	-	-	-	677	485	-	429	233	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	985	-	-	539	-	-	70	67	416	125	67	701
Mov Cap-2 Maneuver	-	-	-	-	-	-	144	169	-	255	166	-
Stage 1	-	-	-	-	-	-	173	233	-	450	479	-
Stage 2	-	-	-	-	-	-	667	479	-	425	233	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0.1	19.5	16.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	255	539	-	-	985	-	-	324
HCM Lane V/C Ratio	0.025	0.014	-	-	-	-	-	0.01
HCM Control Delay (s)	19.5	11.8	-	-	0	-	-	16.2
HCM Lane LOS	C	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Capacity Analysis Summary Sheets

2027 No Build Weekday Evening Peak Hour Conditions

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

03/15/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	28	408	182	19	796	1160	728	818	20	396	918	74
Future Volume (vph)	28	408	182	19	796	1160	728	818	20	396	918	74
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		505	140		505	670		0	215		0
Storage Lanes	1		1	1		2	2		0	2		0
Taper Length (ft)	140			90			290			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.88	0.97	0.95	0.95	0.97	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850		0.996			0.989	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1687	3725	1553	1703	3762	2760	3367	3428	0	3433	3441	0
Flt Permitted	0.099			0.399			0.950			0.950		
Satd. Flow (perm)	176	3725	1553	715	3762	2760	3367	3428	0	3433	3441	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		2957			2627			1774			763	
Travel Time (s)		44.8			39.8			34.6			14.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	2%	4%	6%	1%	3%	4%	5%	0%	2%	3%	13%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	29	416	186	19	812	1184	743	855	0	404	1013	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8	1	1	6		5	2	
Permitted Phases	4		4	8		8						
Detector Phase	7	4	5	3	8	1	1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	21.0	7.5	6.5	21.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	13.5	40.5	22.5	13.5	40.5	39.0	39.0	73.5		22.5	57.0	
Total Split (%)	9.0%	27.0%	15.0%	9.0%	27.0%	26.0%	26.0%	49.0%		15.0%	38.0%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.0	0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	4.5	3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	47.9	40.4	65.2	46.7	39.8	81.0	35.2	67.8		18.7	51.4	
Actuated g/C Ratio	0.32	0.27	0.43	0.31	0.27	0.54	0.23	0.45		0.12	0.34	

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

03/15/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio	0.22	0.41	0.28	0.07	0.81	0.79	0.94	0.55		0.94	0.86	
Control Delay	37.9	47.3	29.7	34.2	59.5	33.8	76.8	31.7		95.9	54.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	37.9	47.3	29.7	34.2	59.5	33.8	76.8	31.7		95.9	54.7	
LOS	D	D	C	C	E	C	E	C		F	D	
Approach Delay		41.7			44.1			52.7			66.4	
Approach LOS		D			D			D			E	
Queue Length 50th (ft)	19	181	120	12	404	543	373	318		206	488	
Queue Length 95th (ft)	44	238	187	33	#530	677	#501	384		#317	581	
Internal Link Dist (ft)		2877			2547			1694			683	
Turn Bay Length (ft)	190		505	140		505	670			215		
Base Capacity (vph)	157	1003	674	296	999	1490	789	1550		428	1178	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.18	0.41	0.28	0.06	0.81	0.79	0.94	0.55		0.94	0.86	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 79.5 (53%), Referenced to phase 2:NWT and 6:SET, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.94
Intersection Signal Delay: 51.8 Intersection LOS: D
Intersection Capacity Utilization 85.5% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Rand Road & Lake Cook Road

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
2: North ALG Access Drive/Central Sod Farms Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1015	4	1	1381	3	3	0	1	1	0	4
Future Vol, veh/h	0	1015	4	1	1381	3	3	0	1	1	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	5	0	0	3	33	0	0	0	0	0	0
Mvmt Flow	0	1046	4	1	1424	3	3	0	1	1	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1427	0	0	1050	0	0	1762	2477	525	1951	2478	714
Stage 1	-	-	-	-	-	-	1048	1048	-	1428	1428	-
Stage 2	-	-	-	-	-	-	714	1429	-	523	1050	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	483	-	-	671	-	-	55	30	502	39	30	378
Stage 1	-	-	-	-	-	-	247	307	-	144	203	-
Stage 2	-	-	-	-	-	-	393	202	-	510	307	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	483	-	-	671	-	-	54	30	502	39	30	378
Mov Cap-2 Maneuver	-	-	-	-	-	-	161	124	-	114	124	-
Stage 1	-	-	-	-	-	-	247	307	-	144	203	-
Stage 2	-	-	-	-	-	-	388	202	-	509	307	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	24	19.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	194	671	-	-	483	-	-	258
HCM Lane V/C Ratio	0.021	0.002	-	-	-	-	-	0.02
HCM Control Delay (s)	24	10.4	-	-	0	-	-	19.2
HCM Lane LOS	C	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
3: South ALG Access Drive/North IAB Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1017	0	0	1384	2	0	0	0	1	0	1
Future Vol, veh/h	0	1017	0	0	1384	2	0	0	0	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	5	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	1048	0	0	1427	2	0	0	0	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1429	0	0	1048	0	0	1762	2477	524	1952	2476	715
Stage 1	-	-	-	-	-	-	1048	1048	-	1428	1428	-
Stage 2	-	-	-	-	-	-	714	1429	-	524	1048	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	482	-	-	672	-	-	55	30	503	39	30	378
Stage 1	-	-	-	-	-	-	247	307	-	144	203	-
Stage 2	-	-	-	-	-	-	393	202	-	510	307	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	482	-	-	672	-	-	55	30	503	39	30	378
Mov Cap-2 Maneuver	-	-	-	-	-	-	162	124	-	114	125	-
Stage 1	-	-	-	-	-	-	247	307	-	144	203	-
Stage 2	-	-	-	-	-	-	392	202	-	510	307	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	0	25.8
HCM LOS			A	D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	-	672	-	-	482	-	-	175
HCM Lane V/C Ratio	-	-	-	-	-	-	-	0.012
HCM Control Delay (s)	0	0	-	-	0	-	-	25.8
HCM Lane LOS	A	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
4: Enterprise Access Drive/Public Storage Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1011	7	8	1382	0	4	0	10	0	0	0
Future Vol, veh/h	0	1011	7	8	1382	0	4	0	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	5	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	1032	7	8	1410	0	4	0	10	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1410	0	0	1039	0	0	1757	2462	520	1942	2465	705
Stage 1	-	-	-	-	-	-	1036	1036	-	1426	1426	-
Stage 2	-	-	-	-	-	-	721	1426	-	516	1039	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	490	-	-	677	-	-	55	31	506	40	31	383
Stage 1	-	-	-	-	-	-	251	311	-	145	203	-
Stage 2	-	-	-	-	-	-	389	203	-	515	310	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	490	-	-	677	-	-	55	31	506	39	31	383
Mov Cap-2 Maneuver	-	-	-	-	-	-	162	125	-	114	124	-
Stage 1	-	-	-	-	-	-	251	311	-	145	201	-
Stage 2	-	-	-	-	-	-	384	201	-	505	310	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0.1	17	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	315	677	-	-	490	-	- -
HCM Lane V/C Ratio	0.045	0.012	-	-	-	-	- -
HCM Control Delay (s)	17	10.4	-	-	0	-	- 0
HCM Lane LOS	C	B	-	-	A	-	- A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	- -

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Capacity Analysis Summary Sheets

2027 Projected Weekday Morning Peak Hour Conditions

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

03/15/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	21	666	254	44	501	944	836	996	9	119	409	44
Future Volume (vph)	21	666	254	44	501	944	836	996	9	119	409	44
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		505	140		505	670		0	215		0
Storage Lanes	1		1	1		2	2		0	2		0
Taper Length (ft)	140			90			290			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.88	0.97	0.95	0.95	0.97	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850		0.999			0.985	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3725	1599	1719	3551	2493	3303	3369	0	3400	3358	0
Flt Permitted	0.349			0.184			0.950			0.950		
Satd. Flow (perm)	663	3725	1599	333	3551	2493	3303	3369	0	3400	3358	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		2957			2627			1774			531	
Travel Time (s)		44.8			39.8			34.6			10.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	1%	5%	7%	14%	6%	7%	11%	3%	6%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	680	259	45	511	963	853	1025	0	121	462	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8	1	1	6		5	2	
Permitted Phases	4		4	8		8						
Detector Phase	7	4	5	3	8	1	1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	21.0	7.5	6.5	21.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	13.5	48.0	13.5	13.5	48.0	58.5	58.5	75.0		13.5	30.0	
Total Split (%)	9.0%	32.0%	9.0%	9.0%	32.0%	39.0%	39.0%	50.0%		9.0%	20.0%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.0	0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	4.5	3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	48.8	40.7	55.6	51.7	43.8	98.2	48.4	74.4		8.8	34.8	
Actuated g/C Ratio	0.33	0.27	0.37	0.34	0.29	0.65	0.32	0.50		0.06	0.23	

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

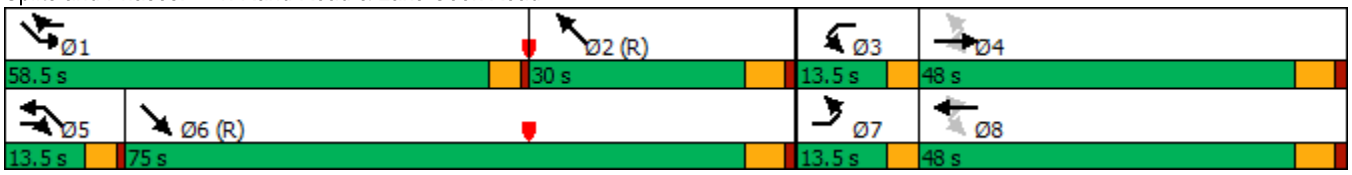
03/15/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio	0.08	0.67	0.44	0.24	0.49	0.59	0.80	0.61		0.60	0.59	
Control Delay	29.7	52.2	37.8	32.9	45.6	15.9	52.4	30.7		81.9	57.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	29.7	52.2	37.8	32.9	45.6	15.9	52.4	30.7		81.9	57.5	
LOS	C	D	D	C	D	B	D	C		F	E	
Approach Delay		47.8			26.4			40.6			62.6	
Approach LOS		D			C			D			E	
Queue Length 50th (ft)	13	303	182	28	214	267	389	404		60	225	
Queue Length 95th (ft)	32	380	271	56	276	307	448	482		96	#323	
Internal Link Dist (ft)		2877			2547			1694			451	
Turn Bay Length (ft)	190		505	140		505	670			215		
Base Capacity (vph)	302	1059	595	208	1073	1725	1189	1670		206	779	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.07	0.64	0.44	0.22	0.48	0.56	0.72	0.61		0.59	0.59	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 145.5 (97%), Referenced to phase 2:NWT and 6:SET, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 40.2 Intersection LOS: D
Intersection Capacity Utilization 74.5% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Rand Road & Lake Cook Road



Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
2: Rand Road & Central Sod Farms Access Drive 03/15/2022

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	6	1263	565	7	2	7
Future Vol, veh/h	6	1263	565	7	2	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	25	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	33	6	5	0	0	14
Mvmt Flow	6	1344	601	7	2	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	608	0	-	0	1289	304
Stage 1	-	-	-	-	605	-
Stage 2	-	-	-	-	684	-
Critical Hdwy	4.76	-	-	-	6.8	7.18
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.53	-	-	-	3.5	3.44
Pot Cap-1 Maneuver	783	-	-	-	158	658
Stage 1	-	-	-	-	513	-
Stage 2	-	-	-	-	468	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	783	-	-	-	157	658
Mov Cap-2 Maneuver	-	-	-	-	294	-
Stage 1	-	-	-	-	509	-
Stage 2	-	-	-	-	468	-

Approach	SE	NW	SW
HCM Control Delay, s	0	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	783	-	516
HCM Lane V/C Ratio	-	-	0.008	-	0.019
HCM Control Delay (s)	-	-	9.6	-	12.1
HCM Lane LOS	-	-	A	-	B
HCM 95th %tile Q(veh)	-	-	0	-	0.1

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
3: South Site Access Drive/North IAB Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1226	39	22	565	1	7	0	2	0	0	0
Future Vol, veh/h	0	1226	39	22	565	1	7	0	2	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	6	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	1304	41	23	601	1	7	0	2	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	602	0	0	1345	0	0	1672	1973	673	1300	1993	301
Stage 1	-	-	-	-	-	-	1325	1325	-	648	648	-
Stage 2	-	-	-	-	-	-	347	648	-	652	1345	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	985	-	-	519	-	-	64	63	402	121	61	701
Stage 1	-	-	-	-	-	-	167	227	-	430	469	-
Stage 2	-	-	-	-	-	-	648	469	-	428	222	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	985	-	-	519	-	-	62	60	402	116	58	701
Mov Cap-2 Maneuver	-	-	-	-	-	-	137	161	-	243	147	-
Stage 1	-	-	-	-	-	-	167	227	-	430	448	-
Stage 2	-	-	-	-	-	-	619	448	-	426	222	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0.5	28.8	0
HCM LOS			D	A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	161	519	-	-	985	-	-	-
HCM Lane V/C Ratio	0.059	0.045	-	-	-	-	-	-
HCM Control Delay (s)	28.8	12.3	-	-	0	-	-	0
HCM Lane LOS	D	B	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	-

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
4: Enterprise Access Drive/Public Storage Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1226	2	7	585	2	2	0	4	2	0	1
Future Vol, veh/h	0	1226	2	7	585	2	2	0	4	2	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	6	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	1304	2	7	622	2	2	0	4	2	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	624	0	0	1306	0	0	1630	1943	653	1289	1943	312
Stage 1	-	-	-	-	-	-	1305	1305	-	637	637	-
Stage 2	-	-	-	-	-	-	325	638	-	652	1306	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	967	-	-	537	-	-	69	66	415	123	66	690
Stage 1	-	-	-	-	-	-	172	232	-	437	475	-
Stage 2	-	-	-	-	-	-	667	474	-	428	232	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	967	-	-	537	-	-	68	65	415	121	65	690
Mov Cap-2 Maneuver	-	-	-	-	-	-	143	167	-	250	164	-
Stage 1	-	-	-	-	-	-	172	232	-	437	469	-
Stage 2	-	-	-	-	-	-	657	468	-	424	232	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0.1	19.5	16.5
HCM LOS			C	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	254	537	-	-	967	-	-	317
HCM Lane V/C Ratio	0.025	0.014	-	-	-	-	-	0.01
HCM Control Delay (s)	19.5	11.8	-	-	0	-	-	16.5
HCM Lane LOS	C	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
5: North Site Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	1265	29	0	572	0	4
Future Vol, veh/h	1265	29	0	572	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	6	10	0	5	0	75
Mvmt Flow	1332	31	0	602	0	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	682
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	8.4
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4.05
Pot Cap-1 Maneuver	-	-	0	-	0	259
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	259
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0	19.1
HCM LOS			C

Minor Lane/Major Mvmt	NELn1	NWT	SET	SER
Capacity (veh/h)	259	-	-	-
HCM Lane V/C Ratio	0.016	-	-	-
HCM Control Delay (s)	19.1	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Capacity Analysis Summary Sheets

2027 Projected Weekday Evening Peak Hour Conditions

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

03/15/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	28	408	184	22	796	1160	728	819	20	412	947	86
Future Volume (vph)	28	408	184	22	796	1160	728	819	20	412	947	86
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		505	140		505	670		0	215		0
Storage Lanes	1		1	1		2	2		0	2		0
Taper Length (ft)	140			90			290			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.88	0.97	0.95	0.95	0.97	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850		0.996			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1687	3725	1553	1656	3762	2760	3433	3485	0	3367	3407	0
Flt Permitted	0.100			0.396			0.950			0.950		
Satd. Flow (perm)	178	3725	1553	690	3762	2760	3433	3485	0	3367	3407	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		2957			2627			1774			531	
Travel Time (s)		44.8			39.8			34.6			10.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	2%	4%	9%	1%	3%	2%	3%	10%	4%	5%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	29	416	188	22	812	1184	743	856	0	420	1054	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8	1	1	6		5	2	
Permitted Phases	4		4	8		8						
Detector Phase	7	4	5	3	8	1	1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	21.0	7.5	6.5	21.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	13.5	40.5	22.5	13.5	40.5	39.0	39.0	73.5		22.5	57.0	
Total Split (%)	9.0%	27.0%	15.0%	9.0%	27.0%	26.0%	26.0%	49.0%		15.0%	38.0%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.0	0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	4.5	3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	47.7	40.2	65.3	46.9	39.8	80.7	34.9	67.5		19.1	51.7	
Actuated g/C Ratio	0.32	0.27	0.44	0.31	0.27	0.54	0.23	0.45		0.13	0.34	

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Lanes, Volumes, Timings
1: Rand Road & Lake Cook Road

03/15/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio	0.22	0.42	0.28	0.08	0.81	0.80	0.93	0.55		0.98	0.90	
Control Delay	37.8	47.5	29.8	34.5	59.5	34.0	75.3	31.7		103.1	57.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	37.8	47.5	29.8	34.5	59.5	34.0	75.3	31.7		103.1	57.8	
LOS	D	D	C	C	E	C	E	C		F	E	
Approach Delay		41.8			44.3			52.0			70.7	
Approach LOS		D			D			D			E	
Queue Length 50th (ft)	19	182	122	14	404	543	372	317		~227	518	
Queue Length 95th (ft)	44	240	189	36	#530	677	#493	382		#339	#645	
Internal Link Dist (ft)		2877			2547			1694			451	
Turn Bay Length (ft)	190		505	140		505	670			215		
Base Capacity (vph)	158	999	676	286	999	1484	797	1568		428	1174	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.18	0.42	0.28	0.08	0.81	0.80	0.93	0.55		0.98	0.90	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 79.5 (53%), Referenced to phase 2:NWT and 6:SET, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 53.0 Intersection LOS: D
Intersection Capacity Utilization 86.7% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Rand Road & Lake Cook Road

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
2: Rand Road & Central Sod Farms Access Drive 03/15/2022

Intersection	
Int Delay, s/veh	0

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	0	1027	1441	3	1	4
Future Vol, veh/h	0	1027	1441	3	1	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	25	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	5	3	33	0	0
Mvmt Flow	0	1059	1486	3	1	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1489	0	-	0	2018	745
Stage 1	-	-	-	-	1488	-
Stage 2	-	-	-	-	530	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	457	-	-	-	52	361
Stage 1	-	-	-	-	177	-
Stage 2	-	-	-	-	560	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	457	-	-	-	52	361
Mov Cap-2 Maneuver	-	-	-	-	139	-
Stage 1	-	-	-	-	177	-
Stage 2	-	-	-	-	560	-

Approach	SE	NW	SW
HCM Control Delay, s	0	0	18.4
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	457	-	274
HCM Lane V/C Ratio	-	-	-	-	0.019
HCM Control Delay (s)	-	-	0	-	18.4
HCM Lane LOS	-	-	A	-	C
HCM 95th %tile Q(veh)	-	-	0	-	0.1

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
3: South Site Access Drive/North IAB Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	1.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1023	5	3	1383	2	60	0	14	1	0	1
Future Vol, veh/h	0	1023	5	3	1383	2	60	0	14	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	5	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	1055	5	3	1426	2	62	0	14	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1428	0	0	1060	0	0	1777	2492	530	1961	2493	714
Stage 1	-	-	-	-	-	-	1058	1058	-	1433	1433	-
Stage 2	-	-	-	-	-	-	719	1434	-	528	1060	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	482	-	-	665	-	-	~ 53	30	499	39	30	378
Stage 1	-	-	-	-	-	-	244	304	-	143	201	-
Stage 2	-	-	-	-	-	-	390	201	-	507	303	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	482	-	-	665	-	-	~ 53	30	499	38	30	378
Mov Cap-2 Maneuver	-	-	-	-	-	-	159	123	-	112	123	-
Stage 1	-	-	-	-	-	-	244	304	-	143	200	-
Stage 2	-	-	-	-	-	-	387	200	-	492	303	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	38.1	26.1
HCM LOS			E	D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	183	665	-	-	482	-	-	173
HCM Lane V/C Ratio	0.417	0.005	-	-	-	-	-	0.012
HCM Control Delay (s)	38.1	10.4	-	-	0	-	-	26.1
HCM Lane LOS	E	B	-	-	A	-	-	D
HCM 95th %tile Q(veh)	1.9	0	-	-	0	-	-	0

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	1031	7	8	1384	0	4	0	10	0	0	0
Future Vol, veh/h	0	1031	7	8	1384	0	4	0	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	5	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	1052	7	8	1412	0	4	0	10	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1412	0	0	1059	0	0	1778	2484	530	1954	2487	706
Stage 1	-	-	-	-	-	-	1056	1056	-	1428	1428	-
Stage 2	-	-	-	-	-	-	722	1428	-	526	1059	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	489	-	-	665	-	-	53	30	499	39	30	383
Stage 1	-	-	-	-	-	-	244	305	-	144	203	-
Stage 2	-	-	-	-	-	-	389	203	-	508	304	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	489	-	-	665	-	-	53	30	499	38	30	383
Mov Cap-2 Maneuver	-	-	-	-	-	-	159	124	-	113	122	-
Stage 1	-	-	-	-	-	-	244	305	-	144	201	-
Stage 2	-	-	-	-	-	-	384	201	-	498	304	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0.1	17.2	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	310	665	-	-	489	-	- -
HCM Lane V/C Ratio	0.046	0.012	-	-	-	-	- -
HCM Control Delay (s)	17.2	10.5	-	-	0	-	- 0
HCM Lane LOS	C	B	-	-	A	-	- A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	- -

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

HCM 6th TWSC
5: North Site Access Drive & Rand Road 03/15/2022

Intersection	
Int Delay, s/veh	0

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	1020	5	0	1445	0	7
Future Vol, veh/h	1020	5	0	1445	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	20	0	3	0	14
Mvmt Flow	1074	5	0	1521	0	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	540
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.18
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.44
Pot Cap-1 Maneuver	-	-	0	-	0	456
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	456
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0	13
HCM LOS			B

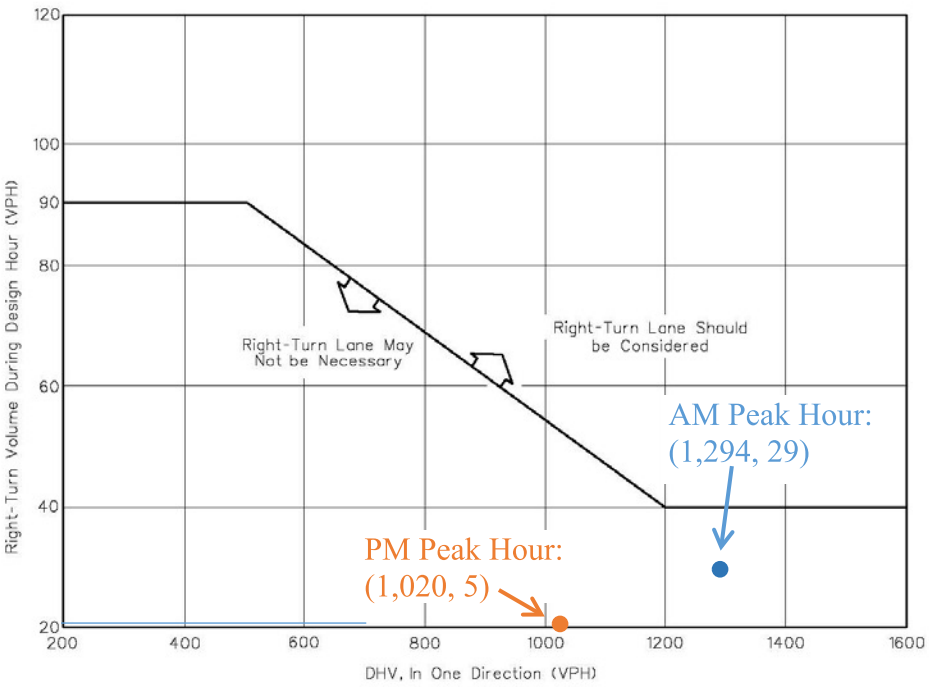
Minor Lane/Major Mvmt	NELn1	NWT	SET	SER
Capacity (veh/h)	456	-	-	-
HCM Lane V/C Ratio	0.016	-	-	-
HCM Control Delay (s)	13	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Turn Lane Warrants

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Rand Road with the Proposed North Access Drive Right Turn Lane Guidelines



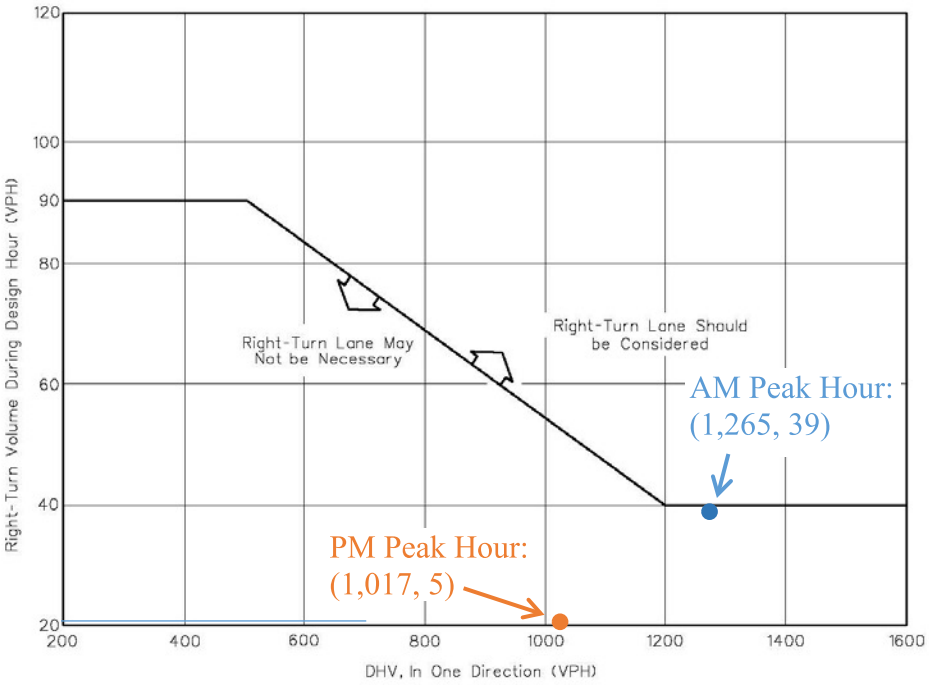
Note: For speeds less than 50 mph (80 km/hr), see Section 36-3.01(a).

GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTION ON FOUR-LANE HIGHWAYS
(Design Speed of 50 mph (80 km/hr) or Greater)

Figure 36-3.B

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Rand Road with the Proposed South Access Drive
Right Turn Lane Guidelines

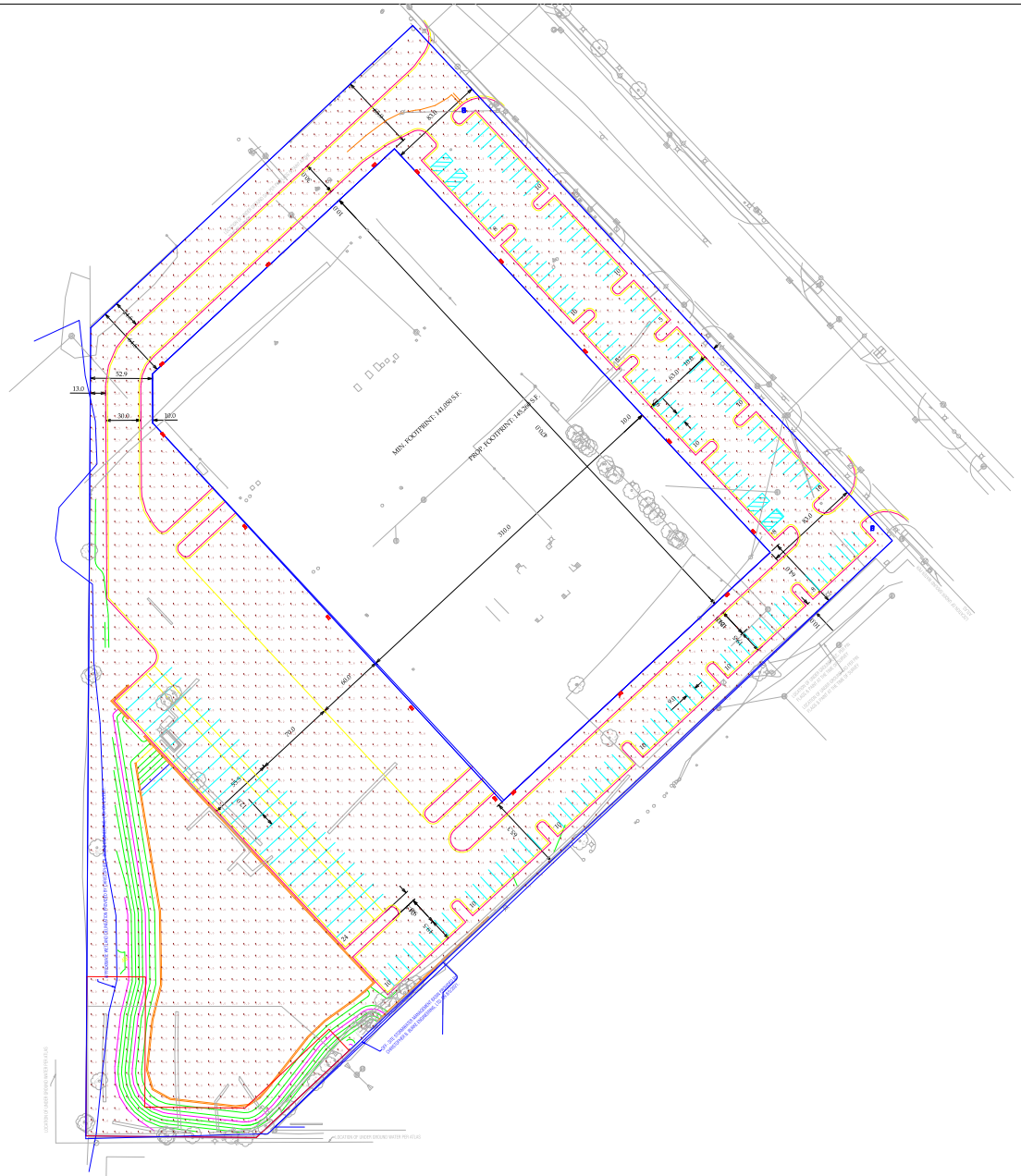


Note: For speeds less than 50 mph (80 km/hr), see Section 36-3.01(a).

GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTION ON FOUR-LANE HIGHWAYS (Design Speed of 50 mph (80 km/hr) or Greater)

Figure 36-3.B

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)



naire Schedule				
ol	Qty	LLF	Description	Type
	2	0.950	DSX0 LED P3 40K T3S MVOLT	P1
	6	0.950	WDGE4 LED P3 70CRI R3 40K	W1
	10	0.950	WDGE4 LED P3 70CRI RFT 40K	W2

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Site	Illuminance	Fc	0.97	8.0	0.0	N.A.	N.A.

Notes :
1. Calculation Work Plane : Ground Level

ment contains confidential and proprietary information of KSA Lighting & Controls. This document may only be used by or for the benefit of KSA Lighting & Controls representatives and customers. This lighting layout is not a professional drawing and is provided for informational purposes only, without warranty as to accuracy, completeness, reliability or otherwise. KSA Lighting & Controls is not responsible for specifying the light fixtures or illumination requirements for project, n
irements
t and app
Lighting & Controls be responsible for any loss resulting from any use of this drawing.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Packet Pg. 474

LIGHTING & CONTROLS

KSA

2234 Rand Rd

Drawn By: Scott Shellberg

7.C.1.A.p

Attachment: Photometric Lighting Plan (2240-2296 N Rand Rd - PFSIUB, PFPD, Rezone)

VILLAGE OF PALATINE

PRELIMINARY & FINAL PLANNED DEVELOPMENT
Department of Planning & Zoning
200 E. Wood Street · Palatine, IL · 60067-5339
Telephone: (847) 359-9047 · Fax (847) 963-6247
www.palatine.il.us

CONTACT INFORMATION WORKSHEET

Petitioner(s)		**Business Name (if applicable)**
TMG Acquisition Disposition 1, LLC		
Address		City/State/Zip Code
1700 W. Higgins Rd Suite 400 Des Plaines, IL 60018		
Telephone 847-675-8877	Fax	Email bmissner@missnergroup.com
Subject Property Address		
2240-2296 N Rand Road Palatine, IL 60074		
Authorized Agent (if applicable)		**Business Name (if applicable)**
Lawrence Freedman		
Address		City/State/Zip Code
10 North Dearborn, Suite 300 Chicago, IL 60602		
Telephone 312-346-1390	Fax	Email LMFreedman@aflaw.com

I swear that the information contained herein and in any accompanying documents is accurate to the best of my knowledge.

Signature

6/14/22
Date

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

VILLAGE OF PALATINE

PRELIMINARY & FINAL PLANNED DEVELOPMENT

Department of Planning & Zoning

200 E. Wood Street · Palatine, IL · 60067-5339
Telephone: (847) 359-9047 · Fax (847) 963-6247
www.palatine.il.us

Office Use Only		
	Project Planner	Zoning Case #
	Filing Fee	Notification Deadline
	PC Public Hearing Date	Village Council Date

date received

PLEASE TYPE OR PRINT IN INK:

1. Name of Petitioner(s): TMG Acquisition Disposition 1, LLC

2. Authorized Agent of Petitioner (if different):

   Name: Lawrence Freedman

   Address: 95 Revere Drive, Unit G Northbrook, IL 60062

   Telephone No. 312-346-1390 Business No. _____

   Email: LMFreedman@aflaw.com

   Relationship to Petitioner: Attorney

3. Property Interest of Petitioner(s): Contract Purchaser
   Owner, Lessee, Contract Purchaser, etc.

4. Address of the property for which this application is being filed:

   2240-2296 N Rand Road, Palatine, IL 60074

5. All existing land use(s) on the property are: Used Car lot, and construction materials company.

6. Current zoning of property: B-5 Size of the property: 8.88 acres

7. Briefly describe the proposed Planned Development with regards to types of uses proposed, number and types of units, development mix, amenities to be provided, etc.:

The proposed Planned Development is to build a multi-tenant 145,408 Sq. Class A industrial building. The proposed development will have 20 exterior docks, room for 140 car parking spots, and an additional 28 trailer positions. The types of uses we could see at this building are warehousing, utilities and services, light industrial and light manufacturing, etc.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

8. Describe any Variations from the Village Ordinances which would be required if the proposed Planned Development ere to be developed as a traditionally zoned project (if any):

Depending on the ultimate mix of office and warehouse. A parking variation of up too 36 spaces will be required.

9. The attached Checklist of Documents outlines all required submittals before a project may be scheduled for the required public hearing before the Plan Commission. All required documents must be submitted with this Petition.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

10. The petitioner's signature below indicates that the information contained in this application and on any accompanying documents is true and correct to the best of his/her knowledge.

Signature: _____ Date: 6/14/22

State of Illinois

County of Cook

This instrument was acknowledged before me on June 14, 2022 by Barry Missner

(Seal)

CODY BALOGH
Official Seal
Notary Public - State of Illinois
My Commission Expires Jun 21, 2022

_____
Notary Public

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

VILLAGE OF PALATINE

Real Estate Interest Disclosure Form

Name of Disclosing Party (individual, business, etc.)
TMG Acquisition Disposition 1, LLC

Relationship to Petitioner (check one)

■ Petitioner □ Legal Entity holding an Interest (i.e. realtor, attorney, etc.)

□ Legal Entity Holding a Right of Control (i.e. landlord, etc.)

Address of Disclosing Party	City/State/Zip Code
1700 W. Higgins Road Suite 400, Des Plaines, IL 60018	

Telephone	Fax	Email
847-675-8877		bmissner@missnergroup.com

Address of Subject Property	**City/State/Zip Code**
2240-2296 N Rand Road, Palatine, IL 60074	

Legal Description of Subject Property (see plat of survey or title)

List All Persons Deriving an Interest in Subject Property (i.e. owner, lessee, etc.)

Name	Address	Legal Interest
TMG Acquisition Disposition 1, LLC	1700 W. Higgins Rd Suite 400, Des Plaines, IL 60018	Contract Purchaser

I affirm that there are no other persons deriving any interest from or through me or from or through any other person or entities above set forth in the property which is the subject of the contract or application for which I am filing this disclosure notice whom I have not disclosed.

I understand that if there are any changes in the interest disclosed in this disclosure notice during the terms of the subject contract or before the Village has taken final action on the matter for which this disclosure notice is filed, I shall file a subsequent disclosure notice disclosing such changes.

Signature _____ Date

SUBSCRIBED AND SWORN TO before me this 14 day of June 2022.

Notary Public Signature

Project Planner	Zoning Case #

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

VILLAGE OF PALATINE

REZONING

Department of Planning & Zoning
200 E. Wood Street • Palatine, IL • 60067-5339
Telephone: (847) 359-9047 • Fax (847) 963-6247
www.palatine.il.us

Office Use Only		
	Project Planner	Zoning Case #
	Filing Fee	Notification Deadline

Date received

PLEASE TYPE OR PRINT IN INK:

1. Name of Petitioner(s): TMG Acquisition Disposition I, LLC

2. Authorized Agent of Petitioner (if different):
   Name: Lawrence Freedman
   Address: 95 Revere Drive, Unit G Northbrook, IL 60062
   Telephone No. 312-346-1390 Business No. _____
   Relationship to Petitioner: Attorney

3. Property Interest of Petitioner(s): Contract Purchaser
   Owner, Lessee, Contract Purchaser, etc.

4. Address of the property for which this application is being filed:
   2240-2296 N Rand Road, Palatine, IL 60074

5. This petition is for: (check one)
   X Rezoning of currently incorporated property (within Village limits)
   _____ Rezoning of currently unincorporated property, in conjunction with annexation

6. All existing land use(s) on the property are: Used car lot, and construction materials company

7. The proposed use(s) on the property, if this petition is approved is (are):

8. Current zoning of property: B-5 Size of the Property: 8.88 acres

9. Proposed new zoning classification: PUD

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

PETITIONER JUSTIFICATION:

The Petitioner is required to present specific evidence, not opinions, to justify the proposed rezoning. Please respond to the following questions, attaching a separate sheet if necessary:

10. Describe why the subject property cannot be reasonably developed in accordance with the existing zoning classification.

The existing zoning classification of B-5 restricts the ability to construct an office/industrial building. Whereas the PUD would allow us to develop the desired office/industrial building.

11. Is the proposed zoning classification similar to or harmonious with the existing zoning of surrounding properties? Explain.

Currently the surrounding properties zoning classifications are also B-5 with various uses such as Auto Dealership, an Enterprise Rent-A-Car, and a self-storage facility. Our request for the zoning classification be changed to PUD would be similar to the existing uses of the surrounding properties since we are proposing to development a state-of-the-art Industrial Building.

12. Does the proposed zoning classification conflict with the Village's Comprehensive Plan? Explain.

It does not conflict with the Village's Comprehensive Plan because figure 4.21 of the Future Land Use Map lays out our site as well as the surrounding properties as Commercial & Manufacturing. This rezone to a PUD for an office/industrial building would fit within the Village's Comprehensive Plan for that area.

13. Will any of the uses permitted under the proposed zoning classification have an injurious effect on the value and/or the use and enjoyment of surrounding properties?

None of the permitted uses will have an injurious effect on the value of the surrounding properties. Currently on the site is a used car dealership & a construction materials company. Our project would be an added benefit to the surrounding properties because as mentioned it will be a state-of-the-art building while also beautifying the street scape along Rand Road.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

14. The petitioner's signature below indicates that the information contained in this application and on any accompanying documents is true and correct to the best of his/her knowledge.

Signature: _____ Date: 6/14/22

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

VILLAGE OF PALATINE

PRELIMINARY & FINAL PLAT OF SUBDIVISION

Department of Planning & Zoning
200 E. Wood Street · Palatine, IL · 60067-5339
Telephone: (847) 359-9047 · Fax (847) 963-6247
www.palatine.il.us

CONTACT INFORMATION WORKSHEET

PETITIONER(S)	**Business Name (If applicable)**
TMG Acquisition Disposition 1, LLC	
Address	City/State/Zip Code
1700 W Higgins Road Suite 400 Des Plaines, IL 60018	
Telephone: 847-675-8877	Fax:
Email: bmissner@missnergroup.com	
Subject Property Address: 2240-2296 N Rand Road Palatine, IL 60074	
AUTHORIZED AGENT (if applicable)	**Business Name (if applicable)**
Lawrence Freedman	
Address	City/State/Zip Code
95 Revere Drive, Unit G Northbrook, IL 60062	
Telephone: 312-346-1390	Fax:
Email: LMFreedman@aflaw.com	

I swear that the information contained herein and in any accompanying documents is accurate to the best of my knowledge.

Signature _____ Date _____

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

VILLAGE OF PALATINE

PRELIMINARY & FINAL PLAT OF SUBDIVISION

Department of Planning & Zoning
200 E. Wood Street · Palatine, IL · 60067-5339
Telephone: (847) 359-9047 · Fax (847) 963-6247
www.palatine.il.us

Office Use Only		
	Project Planner	Zoning Case #
	Filing Fee	Notification Deadline
	PC Public Hearing Date	Village Council Date

date received

PLEASE TYPE OR PRINT IN INK:

1. Name of Petitioner(s): TMG Acquisition Disposition 1, LLC
2. Authorized Agent of Petitioner (if different):
   Name: Lawrence Freedman
   Address: 95 Revere Drive, Unit G Northbrook, IL 60062
   Telephone No. 312-346-1390 Business No. _____
   Email: LMFreedman@aflaw.com
   Relationship to Petitioner: Attorney
3. Property Interest of Petitioner(s): Contract Purchaser
   Owner, Lessee, Contract Purchaser, etc.
4. Address of the property for which this application is being filed:
   2240-2296 N Rand Road Palatine, IL 60074
5. All existing land use(s) on the property are: Used car lot & construction materials company.
6. The proposed use(s) on the property, if this petition is approved is (are): TBD - We plan to construct a speculative office/industrial building
7. Current zoning of property: B-5 Size of the property: 8.88 acres
8. State the specific action requested: Preliminary/Final Approval for a one lot subdvision.

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

9. The petitioner's signature below indicates that the information contained in this application and on any accompanying documents is true and correct to the best of his/her knowledge.

Signature: _____ Date: _____

State of Illinois

County of Cook

This instrument was acknowledged before me on June 14, 2022 by Barry Missner

CODY BALOGH
Official Seal
Notary Public - State of Illinois
My Commission Expires Jun 21, 2022

_____
Notary Public

(Seal)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

VILLAGE OF PALATINE

Real Estate Interest Disclosure Form

Name of Disclosing Party (individual, business, etc.)
TMG Acquisition Disposition 1, LLC

Relationship to Petitioner (check one)

■ Petitioner □ Legal Entity holding an Interest (i.e. realtor, attorney, etc.)

□ Legal Entity Holding a Right of Control (i.e. landlord, etc.)

Address of Disclosing Party	City/State/Zip Code
1700 W. Higgins Road Suite 400, Des Plaines, IL 60018	

Telephone	Fax	Email
847-675-8877		bmissner@missnergroup.com

Address of Subject Property	**City/State/Zip Code**
2240-2296 N Rand Road Palatine, IL 60074	

Legal Description of Subject Property (see plat of survey or title)

List All Persons Deriving an Interest in Subject Property (i.e. owner, lessee, etc.)

Name	Address	Legal Interest
TMG Acquisition Disposition 1, LLC	1700 W. Higgins Rd Suite 400, Des Plaines, IL 60018	Contract Purchaser

I affirm that there are no other persons deriving any interest from or through me or from or through any other person or entities above set forth in the property which is the subject of the contract or application for which I am filing this disclosure notice whom I have not disclosed.

I understand that if there are any changes in the interest disclosed in this disclosure notice during the terms of the subject contract or before the Village has taken final action on the matter for which this disclosure notice is filed, I shall file a subsequent disclosure notice disclosing such changes.

Signature _____ Date _____

SUBSCRIBED AND SWORN TO before me this 14 day of June 2022

Notary Public Signature

Project Planner	Zoning Case #

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

ALTA/NSPS LAND TITLE SURVEY

LEGAL DESCRIPTION

PARCEL 1: (PERMANENT INDEX NUMBER 02-02-101-005-0000)
THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, SAID POINT OF INTERSECTION BEING 16.12 FEET SOUTH OF THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE SOUTHEAST ALONG THE CENTER LINE OF SAID RAND ROAD, 551.08 FEET TO THE POINT OF BEGINNING; THENCE SOUTHEAST ALONG THE CENTER LINE OF SAID RAND ROAD, 200.00 FEET; THENCE SOUTHWEST IN A STRAIGHT LINE 711.71 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, BEING 1,034.76 FEET SOUTH OF THE ABOVE DESCRIBED POINT OF INTERSECTION OF THE CENTER OF RAND ROAD AND THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, AFORESAID, 275.54 FEET; THENCE NORTHEAST IN A STRAIGHT LINE, 522.14 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.

PARCEL 2: (PERMANENT INDEX NUMBERS 02-02-101-013-0000; 02-02-101-014-0000) THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, SAID POINT OF INTERSECTION BEING 16.12 FEET SOUTH OF THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF SAID SECTION 2; THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF SAID RAND ROAD, 751.08 FEET TO A POINT OF BEGINNING; THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF RAND ROAD, 100.00 FEET; THENCE SOUTHWESTERLY ON A STRAIGHT LINE, 806.47 FEET TO A POINT IN THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2 THAT IS 1,172.53 FEET SOUTH OF THE ABOVE-DESCRIBED POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2; THENCE NORTH ALONG THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, 137.77 FEET; THENCE NORTHEASTERLY IN A STRAIGHT LINE, 711.71 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.

PARCEL 3: (PERMANENT INDEX NUMBER 02-02-101-021-0000)
THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:
COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, SAID POINT OF INTERSECTION BEING 16.12 FEET SOUTH OF THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF SAID RAND ROAD, 851.08 FEET TO A POINT OF BEGINNING; THENCE SOUTHWESTERLY IN A STRAIGHT LINE, 806.47 FEET TO A POINT IN THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, AFORESAID, SAID POINT BEING 1,172.53 FEET SOUTH OF THE ABOVE-DESCRIBED POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE SOUTH ALONG THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, 137.77 FEET TO THE SOUTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE NORTHEAST 902.21 FEET TO A POINT IN THE CENTER LINE OF RAND ROAD THAT IS 100.00 FEET SOUTHEAST OF THE POINT OF BEGINNING; THENCE NORTHWESTERLY ALONG THE CENTER LINE OF RAND ROAD, 100.00 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.

PARCEL 4: (PERMANENT INDEX NUMBER 02-02-101-019-0000)
THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:
COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, SAID POINT OF INTERSECTION BEING 16.12 FEET SOUTH OF THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF SAID RAND ROAD, 851.08 FEET TO A POINT OF BEGINNING; THENCE SOUTHWESTERLY ALONG A LINE EXTENDED TO THE SOUTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, A DISTANCE OF 135.00 FEET; THENCE SOUTHEASTERLY PARALLEL TO THE CENTER LINE OF RAND ROAD, 100.00 FEET; THENCE NORTHEASTERLY 135.00 FEET TO THE CENTER LINE OF RAND ROAD, SAID POINT BEING 100.00 FEET SOUTHEASTERLY OF THE POINT OF BEGINNING; THENCE NORTHWESTERLY 100.00 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.

PARCEL 5: (PERMANENT INDEX NUMBER 02-02-101-020-0000)
THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, SAID POINT OF INTERSECTION BEING 16.12 FEET SOUTH OF THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF SAID RAND ROAD, 951.08 FEET TO A POINT OF BEGINNING; THENCE SOUTHWESTERLY IN A STRAIGHT LINE 902.21 FEET TO THE SOUTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE EAST ALONG THE SOUTH LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, AFORESAID, 145.26 FEET TO A POINT THAT IS 1,097.34 FEET WEST OF THE INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE SOUTH LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE NORTHEASTERLY IN A STRAIGHT LINE, 795.89 FEET TO A POINT IN THE CENTER LINE OF RAND ROAD THAT IS 755.42 FEET NORTHWESTERLY OF THE LAST ABOVE-DESCRIBED INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE SOUTH LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE NORTHWESTERLY ALONG THE CENTER LINE OF RAND ROAD, 100.00 FEET TO THE POINT OF BEGINNING; (EXCEPT THEREFROM THAT PART DESCRIBED AS PARCEL 4 ABOVE), IN COOK COUNTY, ILLINOIS.

THE TITLE DOCUMENT REFERENCED HEREON IS PER CHICAGO TITLE INSURANCE COMPANY, TITLE NUMBER 21GNW158194LZ, DATED APRIL 1, 2021.

ENCROACHMENTS

NO SIGNIFICANT OBSERVATIONS WERE NOTED AT THE TIME OF SURVEY

LAND AREA

1,135,[illegible] S.F.
26.0[illegible] ACRES

FLOOD INFORMATION

BY GRAPHIC PLOTTING ONLY, THE SUBJECT PROPERTY LIES WITHIN FLOOD ZONE X, AREA OF MINIMAL FLOODING, PER FLOOD INSURANCE RATE MAP COMMUNITY AND PANEL NUMBER 17031C0043J, WITH AN EFFECTIVE DATE OF AUGUST 19, 2008. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE.

PARKING SPACES

214 REGULAR SPACES
1 HANDICAP SPACE

215 MARKED PARKING SPACES

BASIS OF BEARINGS

WEST LINE OF NW[illegible] SECTION 34, TOWNSHIP 35 NORTH, RANGE 8 WEST – N00°02'56"W

SURVEYOR CERTIFICATION

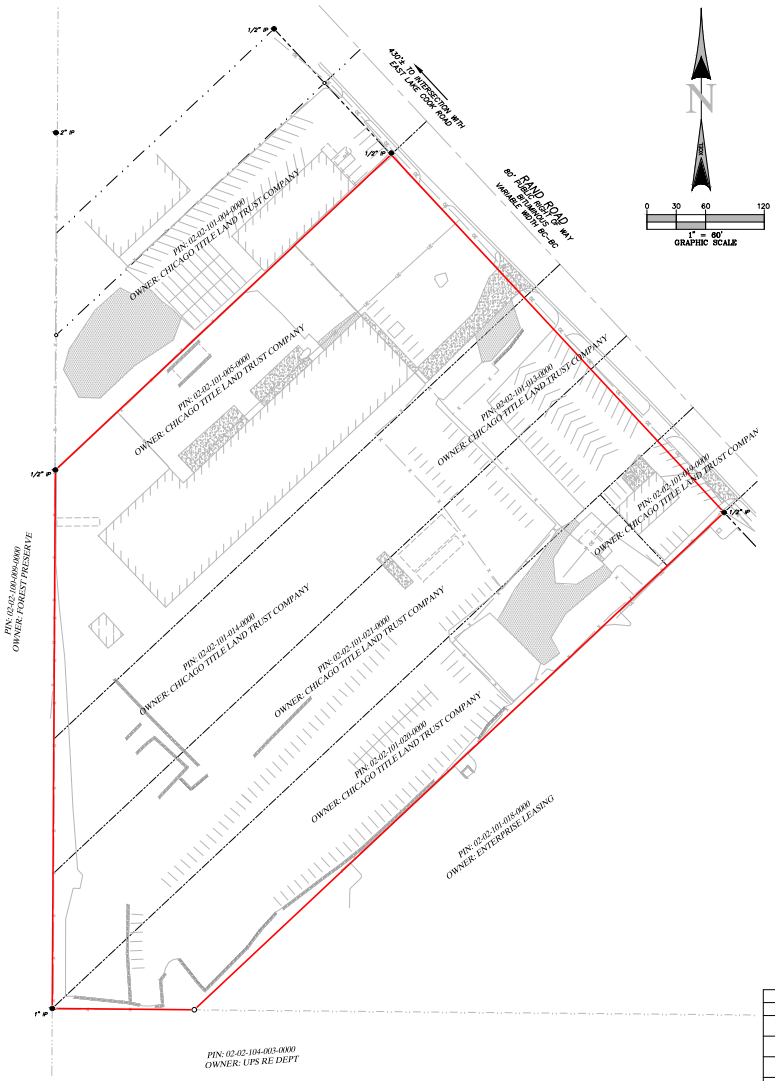
TO: MARIO PROSPERI TRUST DATED JANUARY 12, 1993

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6, 7A, 7B, 8, 9, 11(A) (811 DESIGN LOCATE), 13, 14, 17, 18, 19, AND 20 OF TABLE A THEREOF.

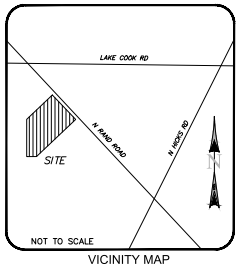
THE FIELD WORK WAS COMPLETED ON JULY 2, 2021.

PRELIMINARY

JAMES A. FAETANINI, PROFESSIONAL LAND SURVEYOR — DATE
ILLINOIS LAND SURVEYOR NUMBER 035-003494
EXPIRES: NOVEMBER 30, 2022
8301 42ND STREET WEST
ROCK ISLAND, IL 61201
TELEPHONE: 309-787-9988
xcel@xcelconsultantsinc.com



0 30 60 120
1" = 60'
GRAPHIC SCALE



VICINITY MAP

SITE INFORMATION

PREPARED FOR:
MARIO PROSPERI AS TRUSTEE OF THE MARIO PROSPERI TRUST DATED JANUARY 12, 1993
916 LINDMEADOW COURT
LAKE BARRINGTON, IL 60010

SITE ADDRESS:
2240, 2242, 2250, 2260, AND 2266 N RAND ROAD
PALATINE, IL

TITLE INFORMATION-SCHEDULE 'B' ITEMS

AFFECTS – AS SHOWN

(15) RIGHTS OF WAY FOR DRAINAGE TILES, DITCHES, FEEDERS, LATERALS AND UNDERGROUND PIPES, IF ANY. (AFFECTS ALL)

(16) RIGHTS OF THE PUBLIC, THE STATE OF ILLINOIS AND THE MUNICIPALITY IN AND TO THAT PART OF THE LAND, IF ANY, TAKEN OR USED FOR ROAD AND HIGHWAY PURPOSES. NOTE: A PLAT OF SURVEY SHOWING RAND ROAD WAS DEDICATED FOR HIGHWAY PURPOSES BY PLAT WAS RECORDED DECEMBER 10, 1940, AS DOCUMENT 12592034. (AFFECTS ALL)

(17) RIGHTS OF THE ADJOINING AND CONTIGUOUS OWNERS TO HAVE MAINTAINED THE UNINTERRUPTED FLOW OF THE WATERS OF ANY STREAM WHICH MAY FLOW ON OR THROUGH THE LAND. (AFFECTS PARCEL 1)

(18) GRANT OF EASEMENT RECORDED AUGUST 28, 1946 AS DOCUMENT 13879675 MADE BY BEATRICE AND FELIX J. BONK TO PUBLIC SERVICE COMPANY OF NORTHERN ILLINOIS, GRANTING THE RIGHT TO LAY, MAINTAIN AND OPERATE AN 18-INCH GAS MAIN OVER, UPON, ALONG AND UNDER THE SOUTHWEST SIDE OF THE PUBLIC HIGHWAY KNOWN AS RAND ROAD, WHICH EXTENDS ALONG THE NORTHEAST SIDE OF THE LAND. (AFFECTS PARCEL 1)

(19) GRANT OF EASEMENT DATED JUNE 28, 1946 AND RECORDED JULY 17, 1946 AS DOCUMENT 13846670 MADE BY FRANK C. GREENWOOD AND ELNORA GREENWOOD, HIS WIFE, TO PUBLIC SERVICE COMPANY OF NORTHERN ILLINOIS, A CORPORATION OF ILLINOIS GRANTING THE RIGHT TO LAY, MAINTAIN AND OPERATE AN 18-INCH GAS MAIN AND NECESSARY APPURTENANCES IN, UPON, UNDER AND ALONG THE SOUTHWEST SIDE OF THE PUBLIC HIGHWAY KNOWN AS RAND ROAD WHICH EXTENDS ALONG THE NORTHEAST SIDE OF THE LAND. (AFFECTS PARCEL 2)

(20) GRANT OF EASEMENT JULY 19, 1946, AS DOCUMENT 13848909 MADE BY WILLIAM H. WENDLAND AND ANNA WENDLAND, HIS WIFE, TO PUBLIC SERVICE COMPANY OF NORTHERN ILLINOIS, A CORPORATION OF ILLINOIS GRANTING THE RIGHT TO LAY, MAINTAIN AND OPERATE AN 18-INCH GAS MAIN AND NECESSARY APPURTENANCES IN, UPON, UNDER AND ALONG THE SOUTHWEST SIDE OF THE PUBLIC HIGHWAY KNOWN AS RAND ROAD WHICH EXTENDS ALONG THE NORTHEAST SIDE OF THE LAND. (AFFECTS PARCELS 4 AND 5)

(21) RIGHTS OF THE PUBLIC IN AND TO THAT PART OF THE LAND FALLING IN RAND ROAD AND IN THAT PART OF THE WEST 33 FEET OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2, FALLING IN THE LAND, SAID TRACTS TO BE LEFT OPEN FOR PUBLIC ROADS, AS DISCLOSED BY DEED FROM CHICAGO TITLE & TRUST COMPANY AS TRUSTEE UNDER TRUST NUMBER 19745 TO PETER J. LIND AND THYRA L. LIND, HIS WIFE, DATED NOVEMBER 14, 1933 AND RECORDED APRIL 13, 1934 AS DOCUMENT 11385459 AND IN SUBSEQUENT DEEDS IN THE CHAIN OF TITLE. (AFFECTS PARCELS 1 AND 2)

(22) RIGHTS OF THE PUBLIC, THE STATE OF ILLINOIS AND THE MUNICIPALITY IN AND TO THAT PART OF THE LAND FALLING IN THE WEST 33 FEET AND IN THE SOUTH 33 FEET OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2 AFORESAID, TO BE LEFT OPEN FOR USE AS A PUBLIC ROAD; WHICH RIGHTS WERE SET FORTH IN THE TRUSTEE'S DEED FROM CHICAGO TITLE AND TRUST COMPANY, AS TRUSTEE UNDER TRUST NO. 19745, TO MARION BAIR, RECORDED APRIL 3, 1931, AS DOCUMENT 10874958, AND IN SUBSEQUENT DEEDS IN THE CHAIN OF TITLE. (AFFECTS PARCELS 3 AND 5)

(23) THE INTEREST OF THE PARTY OR PARTIES WHO MAINTAIN THE "HELGENSEN BROTHERS" SIGN ON THE LAND SHOULD BE DISCLOSED, AND THIS COMMITMENT IS SUBJECT TO SUCH FURTHER EXCEPTIONS AS MAY BE DEEMED NECESSARY. (AFFECTS PARCELS 3, 4 AND 5)

(24) NOTE: IF AND WHEN THERE IS A SEVERANCE OF TITLE BETWEEN PARCELS 4 AND 5 AND ALSO BETWEEN PARCELS 3 AND 5, PARCEL 5 WILL NOT HAVE A MEANS OF ACCESS OF RECORD, ABSENT CREATION OF AN EASEMENT FOR INGRESS AND EGRESS. (AFFECTS PARCELS 3, 4 AND 5)

(25) TERMS AND PROVISIONS OF ORDINANCE NO. O-64-07 RECORDED JULY 13, 2007 AS DOCUMENT NO. 0719415050, ANNEXING CERTAIN PROPERTY TO THE VILLAGE OF PALATINE GENERALLY LOCATED ALONG THE EAST AND WEST SIDES OF RAND ROAD BETWEEN LAKE COOK ROAD AND HICKS ROAD.

(26) TERMS AND PROVISIONS OF ORDINANCE NO. O-35-07 RECORDED JULY 13, 2007 AS DOCUMENT NO. 0719415047, AUTHORIZING THE EXECUTION OF ANNEXATION AGREEMENTS FOR 2240-2260, 2296, 2313, 2319, 2273, 2275 AND 2239 RAND ROAD.

(27) EASEMENT(S) FOR THE PURPOSE(S) AND RIGHTS INCIDENTAL THERETO AS RESERVED IN A DOCUMENT; RESERVED BY EASEMENT AGREEMENT, FOR PURPOSE OF UTILIZING FOR DRAINAGE PURPOSES, OPERATING, MAINTAINING AND REPAIRING THE DRAINAGE PIPE, RECORDED ON AUGUST 13, 2015 AS DOCUMENT NO. 1522522031, AFFECTS PARCEL 5.

SURVEYOR'S NOTES

1. THE PROPERTY HAS DIRECT VEHICULAR ACCESS TO RAND ROAD.
2. THE PHYSICAL SITE ADDRESS WAS NOT OBSERVED ON SITE. COOK COUNTY GIS AND ASSESSOR RECORDS VERIFY THE ADDRESSES AS:
   PARCEL 02-02-101-005-0000 IS 2260 RAND ROAD
   PARCEL 02-02-101-013-0000 IS 2260 RAND ROAD
   PARCEL 02-02-101-014-0000 IS 2260 RAND ROAD
   PARCEL 02-02-101-020-0000 IS 2240 RAND ROAD
   PARCEL 02-02-101-021-0000 IS 2250 RAND ROAD
   PARCEL 02-02-101-019-0000 IS 2242 RAND ROAD
   ALL IN PALATINE, ILLINOIS.
3. THE ACCOMPANYING SURVEY WAS MADE ON THE GROUND AND CORRECTLY SHOWS THE LOCATION OF ALL BUILDINGS, STRUCTURES AND OTHER IMPROVEMENTS SITUATED ON THE ABOVE PREMISES; THERE ARE NOT VISIBLE ENCROACHMENTS ON THE SUBJECT PROPERTY OR UPON ADJACENT LAND ABUTTING SAID PROPERTY EXCEPT AS SHOWN HEREON AND WAS MADE IN ACCORDANCE WITH LAWS AND/OR MINIMUM STANDARDS OF THE STATE OF ILLINOIS.
4. THE PREMISES IS MADE UP OF SIX TAX PARCEL NUMBERS THAT COVER THE PREMISES IN ITS ENTIRETY AND DOES NOT INCLUDED ANY OTHER LAND.
5. NO OBSERVABLE EVIDENCE OF CHANGES IN STREET RIGHT OF WAY LINES COMPLETED, AND AVAILABLE FROM THE CONTROLLING JURISDICTION AND NO OBSERVABLE EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.
6. NO OBSERVABLE EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.
7. THERE IS NO VISIBLE EVIDENCE OF CEMETERIES ON THE SUBJECT PROPERTY AT THE TIME OF SURVEY.
8. ALL STATEMENTS WITHIN THE CERTIFICATION, AND OTHER REFERENCES LOCATED ELSEWHERE HEREON, RELATED TO: UTILITIES, IMPROVEMENTS, STRUCTURES, BUILDINGS, PARTY WALLS, PARKING, EASEMENTS, SERVITUDES, AND ENCROACHMENTS; ARE BASED SOLELY ON ABOVE GROUND, VISIBLE EVIDENCE, UNLESS ANOTHER SOURCE OF INFORMATION IS SPECIFICALLY REFERENCED HEREON.
9. THE LOCATION OF THE UTILITIES SHOWN HEREON ARE FROM OBSERVED EVIDENCE OF ABOVE GROUND APPURTENANCES AND PER ILLINOIS DESIGN REQUEST TICKET #A180260625. UTILITY SERVICE FOR THIS PROPERTY ARE PROVIDED BY AT&T DISTRIBUTION, COMED, COMCAST, MCI/VERIZON, METROPOLITAN WATER RECLAMATION DISTRICT, NICOR GAS, AND VILLAGE OF PALATINE. ONLY UTILITY MAPS PROVIDED BY SAID COMPANIES ARE SHOWN HEREON. BEFORE DIGGING IN THIS AREA CALL J.U.L.I.E. AT 811.
10. AT THE TIME OF THIS SURVEY AND TITLE REVIEW, THERE WERE NEITHER OBSERVABLE APPARENT USES NOR [illegible]NTS NOR SERVITUDES THAT BENEFIT THIS PROPERTY.

REVISIONS	
DATE	DESCRIPTION

XCEL Consultants
8300 42ND STREET WEST
ROCK ISLAND, IL 61201
(O) 309-787-9988
(F) 309-756-5540
(E) XCEL@XCELCONSULTANTSINC.COM

CHK BY:	APV BY:
BCH	JAF

XCEL JOB NUMBER: 213436

DRAWING NUMBER: 1 OF 2

Attachment: ALTA survey - 2234-2240 Rand Road (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)
3.2.m
Packet Pg. 488
7.C.1.A.p
213
Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

ALTA/NSPS LAND TITLE SURVEY

UTILITY INVERT DATA

CB#2
LID=758.776
INV(12"CONC)NE=756.376
WELL=752.876

CB#3
LID=757.435
WELL=752.035
(3' DARK WATER-UNABLE TO SEE INVERT PIPES)

CB#4
LID=756.334
INV(12"CONC)NE=754.824
WELL=754.824

CB#5
LID=756.706
INV(118"CONC)E=753.706
INV(12"CONC)W=753.806
WELL=753.706

CB#6
LID=757.144
INV(12"CONC)NW=753.544
INV(12"CONC)E=753.744
INV(24"CONC)S=753.344
WELL=753.344

CB#7
LID=757.003
INV(12"CONC)E=754.303
WELL=751.703
(2' DARK WATER-UNABLE TO SEE INVERT PIPES)

CB#8
LID=757.667
WELL=754.567
(FULL OF DARK WATER-UNABLE TO SEE INVERT PIPES)

CB#9
LID=757.215
(FILLED WITH DEBRIS-UNABLE TO LOCATE INVERTS)

CB#10
LID=757.546
(UNABLE TO OPEN)

CB#11
LID=759.378
WELL=754.978

CB#12
LID=758.917
INV(6"METAL)W=756.017
WELL=755.717

DRAINAGE INLET
DI#1 GRATE=759.321
WELL=755.521

DI#2 GRATE=758.617
INV(18"CONC)NW=755.617
WELL=755.517

DI#3
GRATE=757.474
INV(18"CONC)SE=754.474
WELL=754.074

DI#4
GRATE=757.276
INV(12"CONC)NW=753.576
INV(12"CONC)SE=753.576
WELL=753.576

MANHOLE
MH#4
LID=760.405
(RUSTED SHUT)

MH#5
LID=745.777
INV(8"CONC)S=741.477
INV(8"CONC)E=741.577
WELL=741.477

0 30 60 120
1" = 60'
GRAPHIC SCALE

SITE INFORMATION

PREPARED FOR:
MARIO PROSPERI AS TRUSTEE OF THE MARIO PROSPERI TRUST DATED JANUARY 12, 1993
916 LONGMEADOW COURT
LAKE BARRINGTON, IL 60010

SITE ADDRESS:
2240, 2242, 2250, 2260, AND 2266 N RAND ROAD
PALATINE, IL

LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- INTERNAL PROPERTY LINE
- BUILDING SETBACK LINE
- EASEMENT LINE
- RIGHT OF WAY LINE
- SURVEY TIE LINE
- BUILDING FEATURE
- BUILDING
- CHAINLINK FENCE
- WALL
- CURB LINE
- CENTERLINE
- OVERHEAD ELECTRIC LINE
- UNDERGROUND ELECTRIC LINE
- FOUND MONUMENT (AS NOTED)
- SET 5/8" XCEL CAPPED IR
- TITLE EXCEPTION NUMBER
- SIGNIFICANT OBSERVATION LETTER
- PARKING COUNT
- MANHOLE (WATER, MISC)
- FIRE HYDRANT
- WATER VALVE
- HANDICAP PARKING
- DRAINAGE INLETS
- AREA LIGHT
- METER (ELECTRIC, GAS)
- TRAFFIC VAULT
- UTILITY POLE
- GUY WIRE
- TRAFFIC SIGN
- MONITOR WELL
- CONCRETE BOLLARD
- TRANSFORMER
- AIR CONDITIONER
- MAIL BOX
- IR — IRON ROD
- IP — IRON PIPE
- POB — POINT OF BEGINNING
- POC — POINT OF COMMENCEMENT
- BUILDING HEIGHT LOCATION
- (M&R) — RECORD & MEASURED
- S.F. — SQUARE FEET
- BC — BACK OF CURB
- CONCRETE SURFACE
- GRAVEL SURFACE

REVISIONS	
DATE	DESCRIPTION

XCEL Consultants
8300 42ND STREET WEST
ROCK ISLAND, IL 61201
(O) 309-787-9988
(F) 309-756-5540
(E) XCEL@XCELCONSULTANTSINC.COM

CHK BY:	APV BY:
BCH	JAF

XCEL JOB NUMBER: 213436

DRAWING NUMBER: 2 OF 2

Attachment: ALTA survey - 2234-2240 Rand Road (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

ALTA/NSPS LAND TITLE SURVEY

LEGAL DESCRIPTION

THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

COMMENCING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF RAND ROAD WITH THE NORTH LINE OF THE NORTHWEST 1/4 OF SAID SECTION 2, AND RUNNING THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF SAID RAND ROAD 453.69 FEET TO THE PLACE OF BEGINNING; THENCE CONTINUING SOUTHEASTERLY ALONG SAID CENTER LINE 100 FEET; THENCE SOUTHWESTERLY, 522.95 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION, SAID POINT BEING 773.79 FEET SOUTH OF THE NORTH LINE OF SAID 1/4 SECTION; THENCE NORTH ALONG THE WEST LINE OF THE NORTHEAST 1/4 OF SAID 1/4 SECTION, 137.77 FEET; THENCE NORTHEASTERLY 428.2 FEET TO THE PLACE OF BEGINNING, EXCEPT THAT PART DEDICATED FOR HIGHWAY PURPOSES, ALL IN COOK COUNTY, ILLINOIS

THE TITLE DESCRIPTION AND SCHEDULE B ITEMS HEREON ARE FROM CHICAGO TITLE INSURANCE COMPANY, COMMITMENT #2105SC27801TLP, DATED JULY 7, 2021.

TITLE INFORMATION-SCHEDULE 'B' ITEMS

AFFECTS – AS SHOWN

(13) TERMS AND PROVISIONS OF AN ANNEXATION AGREEMENT AS DISCLOSED BY INSTRUMENT RECORDED JULY 13, 2007 AS DOCUMENT NO. 0719415047.

(14) EASEMENT IN FAVOR OF PUBLIC SERVICE COMPANY OF NORTHERN ILLINOIS, AND ITS/THEIR RESPECTIVE SUCCESSORS AND ASSIGNS, TO INSTALL, OPERATE AND MAINTAIN ALL EQUIPMENT NECESSARY FOR THE PURPOSE OF SERVING THE LAND AND OTHER PROPERTY, TOGETHER WITH THE RIGHT OF ACCESS TO SAID EQUIPMENT, AND THE PROVISIONS RELATING THERETO CONTAINED IN THE GRANT RECORDED/FILED AS DOCUMENT NO. 13866556.

(15) RIGHTS OF THE PUBLIC, THE STATE OF ILLINOIS AND THE MUNICIPALITY IN AND TO THAT PART OF THE LAND, IF ANY, TAKEN OR USED FOR ROAD, HIGHWAY AND WATERWAY PURPOSES.

(16) RIGHTS OF THE PUBLIC, THE STATE OF ILLINOIS AND ADJOINING OWNERS IN RAND ROAD AND THAT PART OF THE WEST 33 FEET OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 2 THAT FALLS WITHIN THE ABOVE DESCRIBED TRACT OF LAND TO BE LEFT OPEN FOR A PUBLIC ROAD TOGETHER WITH THE RIGHT TO USE THE WEST 33 FEET OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2 FOR A ROAD AS RESERVED IN THE DEED RECORDED AS DOCUMENT NO. 1202638.

(17) SANITARY SEWER ALONG THE WESTERLY PORTION OF THE PREMISES AS DISCLOSED BY SURVEY MADE BY BARRINGTON ENGINEERING DATED APRIL 6, 1998. WATER MAIN GOING ACROSS AND THRU THE PREMISES AS DISCLOSED BY THE ABOVE NOTED SURVEY.

UTILITY INVERT DATA

CATCH BASIN
CB#1
LID=759.526
WELL=755.926

CB#2
LID=758.776
INV(12"CONC)NE=756.376
WELL=752.876

DRAINAGE INLET
DI#1
GRATE=759.321
WELL=755.521

MANHOLE
MH#1
LID=762.894
INV(8"METAL)NE=750.194
INV(8"METAL)NW=749.894
INV(8"METAL)SW=750.694
WELL=749.894

MH#2
LID=759.457
INV(8"METAL)N=748.657
INV(8"METAL)S=748.457

MH#3
LID=758.527
(COULD NOT OPEN)

SURVEYOR CERTIFICATION

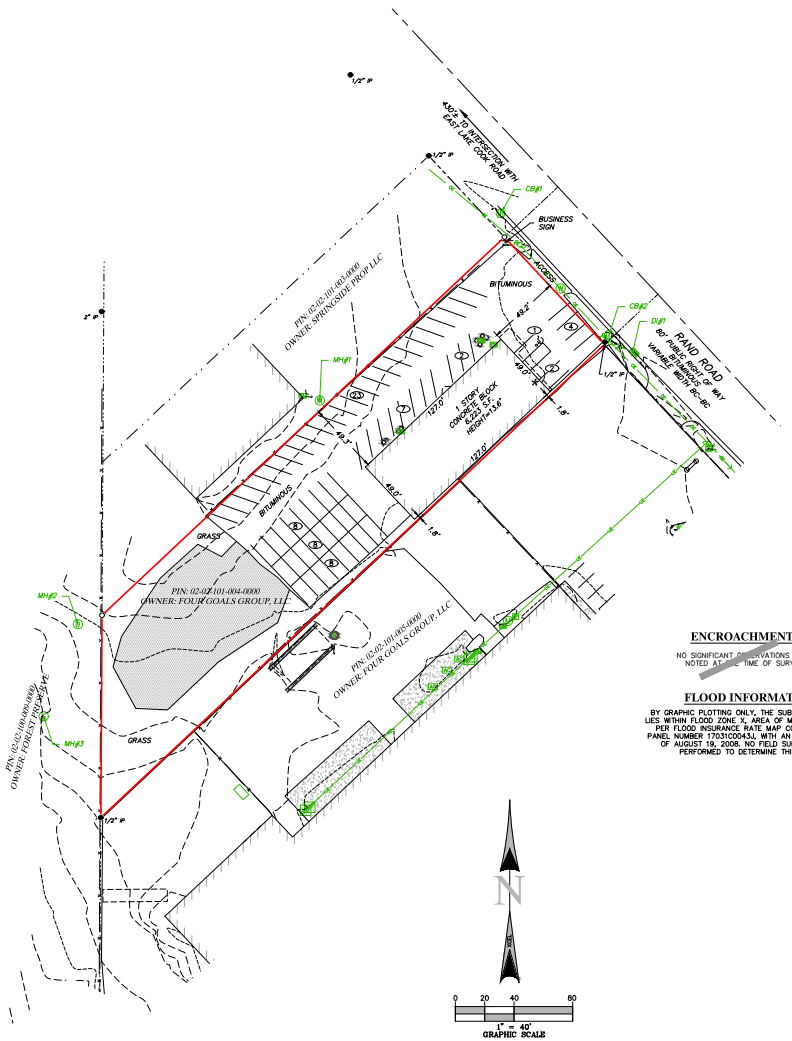
TO: CHICAGO TITLE INSURANCE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6, 7A, 7B, 8, 9, 11(A) (811 DESIGN LOCATE), 13, 14, 17, 18, 19, AND 20 OF TABLE A THEREOF.

THE FIELD WORK WAS COMPLETED ON JULY 2, 2021.

PRELIMINARY

JAMES A. FAETANINI, PROFESSIONAL LAND SURVEYOR — DATE
ILLINOIS LAND SURVEYOR NUMBER 035-003494
EXPIRES: NOVEMBER 30, 2022
8301 42ND STREET WEST
ROCK ISLAND, IL 61201
TELEPHONE: 309-787-9988
xcel@xcelconsultantsinc.com



ENCROACHMENTS

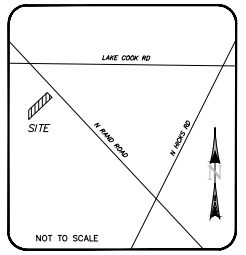
NO SIGNIFICANT OBSERVATIONS WERE NOTED AT THE TIME OF SURVEY

FLOOD INFORMATION

BY GRAPHIC PLOTTING ONLY, THE SUBJECT PROPERTY LIES WITHIN FLOOD ZONE X, AREA OF MINIMAL FLOODING, PER FLOOD INSURANCE RATE MAP COMMUNITY AND PANEL NUMBER 17031C0043J, WITH AN EFFECTIVE DATE OF AUGUST 19, 2008. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE.

LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- INTERNAL PROPERTY LINE
- BUILDING SETBACK LINE
- EASEMENT LINE
- RIGHT OF WAY LINE
- SURVEY TIE LINE
- BUILDING FEATURE
- BUILDING
- CHAINLINK FENCE
- CONCRETE BLOCK WALL
- CURB LINE
- CENTERLINE
- OVERHEAD ELECTRIC LINE
- FOUND MONUMENT (AS NOTED)
- SET 5/8" XCEL CAPPED IR
- TITLE EXCEPTION NUMBER
- SIGNIFICANT OBSERVATION LETTER
- PARKING COUNT
- MANHOLE (WATER, MISC)
- FIRE HYDRANT
- HANDICAP PARKING
- DRAINAGE INLETS
- AREA LIGHT
- METER (ELECTRIC, GAS)
- TRAFFIC VAULT
- UTILITY POLE
- GUY WIRE
- TRAFFIC SIGN
- CONCRETE BOLLARD
- TRANSFORMER
- AIR CONDITIONER
- IR — IRON ROD
- IP — IRON PIPE
- POB — POINT OF BEGINNING
- POC — POINT OF COMMENCEMENT
- BUILDING HEIGHT LOCATION
- (M&R) — RECORD & MEASURED
- S.F. — SQUARE FEET
- BC — BACK OF CURB
- GRAVEL SURFACE



VICINITY MAP

SITE INFORMATION

PREPARED FOR:
THE MISSNER REALTY
1700 W HIGGINS ROAD, SUITE 400
DES PLAINES, IL 60018

SITE ADDRESS:
2296 RAND ROAD
PALATINE, ILLINOIS 60074

LAND AREA

1,135,606 S.F.
26.07 ACRES

PARKING SPACES

62 REGULAR SPACES
1 HANDICAP SPACES
63 TOTAL MARKED SPACES

BASIS OF BEARINGS

WEST LINE OF NW1/4 SECTION 34, TOWNSHIP 35 NORTH, RANGE 10 WEST – N00°02'56"W

SURVEYOR'S NOTES

1. THE PROPERTY HAS DIRECT VEHICULAR ACCESS TO RAND ROAD, A DEDICATED PUBLIC RIGHT OF WAY.
2. THE PHYSICAL SITE ADDRESS WAS NOT OBSERVED ON SITE. COOK COUNTY GIS AND ASSESSOR RECORDS VERIFY THE ADDRESS AS 2296 RAND ROAD, PALATINE, ILLINOIS.
3. THE ACCOMPANYING SURVEY WAS MADE ON THE GROUND AND CORRECTLY SHOWS THE LOCATION OF ALL BUILDINGS, STRUCTURES AND OTHER IMPROVEMENTS SITUATED ON THE ABOVE PREMISES; THERE ARE NOT VISIBLE ENCROACHMENTS ON THE SUBJECT PROPERTY OR UPON ADJACENT LAND ABUTTING SAID PROPERTY EXCEPT AS SHOWN HEREON AND WAS MADE IN ACCORDANCE WITH LAWS AND/OR MINIMUM STANDARDS OF THE STATE OF ILLINOIS.
4. THE PREMISES IS MADE UP OF A SINGLE TAX PARCEL NUMBER THAT COVER THE PREMISES IN ITS ENTIRETY AND DOES NOT INCLUDED ANY OTHER LAND.
5. NO OBSERVABLE EVIDENCE OF CHANGES IN STREET RIGHT OF WAY LINES COMPLETED, AND AVAILABLE FROM THE CONTROLLING JURISDICTION AND NO OBSERVABLE EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.
6. NO OBSERVABLE EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.
7. THERE IS NO VISIBLE EVIDENCE OF CEMETERIES ON THE SUBJECT PROPERTY AT THE TIME OF SURVEY.
8. ALL STATEMENTS WITHIN THE CERTIFICATION, AND OTHER REFERENCES LOCATED ELSEWHERE HEREON, RELATED TO: UTILITIES, IMPROVEMENTS, STRUCTURES, BUILDINGS, PARTY WALLS, PARKING, EASEMENTS, SERVITUDES, AND ENCROACHMENTS; ARE BASED SOLELY ON ABOVE GROUND, VISIBLE EVIDENCE, UNLESS ANOTHER SOURCE OF INFORMATION IS SPECIFICALLY REFERENCED HEREON.
9. THE LOCATION OF THE UTILITIES SHOWN HEREON ARE FROM OBSERVED EVIDENCE OF ABOVE GROUND APPURTENANCES AND PER ILLINOIS DESIGN REQUEST TICKET #A180625. UTILITY SERVICE FOR THIS PROPERTY ARE PROVIDED BY AT&T DISTRIBUTION, COMED, COMCAST, MCI/VERIZON, METROPOLITAN WATER RECLAMATION DISTRICT, NICOR GAS, AND VILLAGE OF PALATINE. ONLY UTILITY MAPS PROVIDED BY SAID COMPANIES ARE SHOWN HEREON. BEFORE DIGGING IN THIS AREA CALL J.U.L.I.E. AT 811.
10. AT THE TIME OF THIS SURVEY AND TITLE REVIEW, THERE WERE [illegible] EASEMENTS NOR SERVITUDES THAT BENEFIT THIS PROPERTY.

REVISIONS	
DATE	DESCRIPTION

8300 42ND STREET WEST
ROCK ISLAND, IL 61201
(O) 309-787-9988
(F) 309-756-5540
(E) XCEL@XCELCONSULTANTSINC.COM

XCEL Consultants

CHK BY:	APV BY:
BCH	JAF

XCEL JOB NUMBER: 213402

DRAWING NUMBER: 1 OF 1

Attachment: 2296 N. Rand Road - ALTA survey (2240-2296 N Rand Rd - PFSUB, PFPD, Rezone)

Attachment: Plan Commission materials (2022-60 : 2240-2296 N. Rand Road)

2. 2240-2296 N. Rand Road **- Recommended to Approve**

Chairman Dwyer read the notice of public hearing that was published in the Daily Herald on June 6, 2022 and mailed to the owners of the surrounding properties.

The following petitioner's exhibits were introduced:

1. Missner Group - Engineer Plans
2. Missner Group - Architect Plans
3. Missner Group - Plat of Subdivision
4. Missner Group - Landscape Plan
5. Site Plan
6. Arch Site Plan - Additional Parking Exhibit
7. KLOA Rand Rd Traffic Study
8. Photometric Lighting Plan
9. PF PD Application
10. Rezoning Application
11. PF Subdivision Application
12. Alta Survey 2234-2240 Rand Rd
13. 2296 N Rand Rd - Alta Survey
14. Public Notice

Sworn in Petitioners:
Lawrence M. Freedman - Law Offices Ash, Anos, Freedman & Logan, LLC
Cody Balogh - The Missner Group
Edward Adler - The Missner Group
Charles Swanson - Ware Malcomb
Brett Duffy, P.E. - Spaceco, Inc.
Luay R. Aboona, PE, PTOE - KLOA

Commissioner Friedman states for the record that he has a working relationship with members of the Petitioner team, but that relationship will not affect his ability objectively review the request.
Commissioner Noonan also states for the record that he has a working relationship with members of the Petitioner team and confirmed the same.

Mr. Freedman - Authorized Agent and Attorney introduces Mr. Edward Adler of The Missner Group.

Petitioner, Mr. Adler, provides background information on their company and states that they are a developer of property, 3rd Generation, 75 year old company. He explains that they are a General Contractor and Real Estate Developers. They have been involved in Industrial Real Estate for approximately 45 years whether investing or developing. They are infill developers and don't typically buy farm land. Typically building buildings in the 80 to 250,000 sq. ft. range. Their operation has expanded into NW Indiana and Merrillville, IN. The location within Palatine was attractive as an infill location because of proximity to

Attachment: DRAFT June 21st Plan Commission minutes (2022-60 : 2240-2296 N. Rand Road)

Highway 53 and O'Hare airport.

Architect - Charles Swanson - Director of Architecture with Ware Malcomb Architects
Mr. Swanson talks about current conditions and is proposing a Class A, modern office/warehouse distribution facility. He presents a proposed site plan showing a rendering of the building with parking spaces. He states parking spaces will meet the requirements for the space. He further explains that truck parking would be at the back of the lot and the proposed office building would be an attractive structure from street view. He states that it would be a significant improvement to the existing conditions.

Mr. Vyverberg provides insight to the proposed Planned Development and states that the petitioner plans to consolidate the existing 7 parcels into one consolidated lot and develop a new warehouse/distribution center with associated office uses. He provides information on the surrounding properties and states it is zoned B5. He provides information on the existing utilities and states that the Village Engineer's review sited a new sidewalk would be required along Rand Rd. The Petitioner provided a Traffic Impact Study and talks about the parking demands which anticipates 10% of the building being occupied with office use and the balance for warehouse/distribution. He provides information from the developer as to the anticipated tenant that they are targeting which could be food use/distribution or light assembly use.

Mr. Friedman asks if the staff review considers this a development opportunity as one of the entry faces into Palatine. He questions whether constructing a building so close to the roadway without a way to screen it is the vision of Palatine. He would like to make sure we get it right for this corridor project.

Mr. Vyverberg states that the site plan complies with all the B5 standards and states the height requirement is also being met. The review considered what the underlying zoning allows and whether it is dissimilar to the surrounding properties and refers to the UPS building as a reference.

Mr. Friedman states that the scale of the UPS facility is not seen at street level. He states that there are buildings that surround the facility that provide screening. The structure is not visible unless you drove in.

Mr. Dwyer requests to see an elevation of what it would look like.

Mr. Swanson provides elevations of the Planned Development. He states that the design is attractive which would rent out well with the type of tenant they are hoping to attract. He states that the building complies with all setbacks.

Mr. Friedman states it is a beautiful facility that would look great along the I-55 corridor but has concerns whether it fits the vision of Palatine.

Mr. Swanson provides elevations showing the overview of the project site, aerial

Attachment: DRAFT June 21st Plan Commission minutes (2022-60 : 2240-2296 N. Rand Road)

view and site elevation.

STAFF RECOMMENDATION:

The Subject Property was annexed into the Village in 2007 from unincorporated Cook County. The proposed redevelopment will continue the redevelopment patterns along Rand Road and the contemplated warehouse/distribution/light industrial uses is not inconsistent with the surrounding developments. With the existing roadway systems along Rand and Lake Cook Roads, the proposed development has the necessary capacity to operate. Therefore, Staff recommends approval of the Preliminary and Final Planned Development, Preliminary and Final Plat of Subdivision, and Rezoning to Planned Development, subject to the following conditions:

Preliminary and Final Planned Development:

1. **The development shall substantially conform to the engineering plans by Spaceco., INC., dated March 22, 2022, as revised, the architectural plans by Ware Malcomb, date April 3, 2022, as revised, the KLOA Traffic Study, and the landscaping plans by Kathyrn Talty, dated January 28, 2022, except as such plans may be changed to conform to Village Codes and Ordinances.**

2. **Uses and signage shall be governed by the Manufacturing District use lists in the Village of Palatine Zoning Ordinance (note - this includes all of the required performance standards). Sign plans shall follow the Manufacturing district sign regulations.**

3. **As a component of the Final Planned Development, a Planned Development letter of credit shall be submitted in a manner acceptable to the Director of Planning and Zoning and Village Engineer.**
4. **The final engineering plans shall be revised in a manner acceptable to the Village Engineer.**

5. **The final landscape plans shall be subject to the review and approval of the Director of Planning and Zoning and shall include addition shrub plantings along the Rand Road frontage, adjacent to the parking lot.**

6. **The final photometric and lighting plan shall be revised in a manner acceptable to the Village Engineer. Light shields shall be required for any lights proximate to residential properties, at the determination of the Village Engineer. This may include a 25-foot mounting height for exterior lights, in order to reduce the glare, at the direction of the Village Engineer.**

7. **The final traffic directional signage plan shall be submitted in a manner acceptable to the Village Engineer.**

8. **Cross access easements, declarations and a Reciprocal Easement Agreement for the entire property governing the maintenance of access**

Attachment: DRAFT June 21st Plan Commission minutes (2022-60 : 2240-2296 N. Rand Road)

points, stormwater areas and any other common areas shall be submitted in a manner acceptable to the Village Attorney and Village Engineer. This could include a cross access easement for the property directly north of the Subject Property, if that property were to redevelop in the future, if requested by the Village of Palatine.

9. **The final dumpster locations and required screening materials shall be submitted in compliance with Village Code. The screening shall be constructed of durable materials similar to those of the building and shall have solid (opaque) walls and doors. The final locations could also require the submission of a revised auto-turn, in a manner acceptable to the Director of Fire Prevention.**

10. **As a condition of the Final Planned Development and pursuant to the project narrative, the Petitioner shall submit the proposed business and operations' plans (identified tenants) for Staff review for compliance with the manufacturing use list and standards.**

10. **If, at the determination of the Village, the proposed tenant composition (% of office uses) increases or the Village of Palatine determines that there is a significant parking demand deficiency, based upon the required parking needs, the trailer parking directly east of the detention basin shall be converted to auto parking stalls, or a portion thereof, as noted on Ware Malcomb Concept Site Plan ("Scheme 9"), depicting up to 30 additional parking spaces.**

Preliminary and Final Plat of Subdivision:

1. **The Final Engineering plans shall substantially conform to the engineering plans by Spaceco., INC., dated March 22, 2022, except as such plans shall be changed to conform with Village Codes and Ordinances and in a manner acceptable to the Village Engineer.**
2. **The Final Engineering Plans shall be revised in a manner acceptable to the Village Engineer.**
3. **The Final Plat of Subdivision shall be revised in a manner acceptable to the Village Engineer and submitted on a Mylar, with all required signatures.**
4. **Recording fees in an amount of $600 shall be submitted.**
5. **The Final Plan Review fees in the amount of 1.5% of total project improvement costs shall be submitted in a manner acceptable to the Village Engineer.**

6. **A Public Improvement Letter of Credit shall be submitted to ensure the completion of all public improvements, as defined within the Village Code, for an amount of 115% of the approved EEOC, along with a cash bond of 10% for the required one-year maintenance period in a manner acceptable to the Village Engineer.**

Attachment: DRAFT June 21st Plan Commission minutes (2022-60 : 2240-2296 N. Rand Road)

6. **The EEOPC shall be revised in a manner acceptable to the Village Engineer.**
7. **The Petitioners shall submit a Subdivision Improvement Agreement in a manner acceptable to the Village Attorney.**
8. **The cross-access easement, declarations, and reciprocal easement agreement regarding the maintenance of the access points, storm water areas, or any other required common areas shall be submitted in a manner acceptable to the Village Attorney and Village Engineer.**
9. **All extra-agency permits (e.g. IDOT, MWRD, etc.) shall be submitted in a manner acceptable to the Village Engineer.**

Mr. Noonan made a motion to close the public hearing.

DISCUSSION:

Mr. Kolososki states the proposed plan may be tall, but fits with the Rand Road vision and the gateway to Palatine.
Mr. Friedman states it is a lot of building for a busy road. He indicated that he feels that aggregating all of the properties together and putting a massive building doesn't feel like the intent is being met for that district.

Mr. Friedman inquired how staff reviewed the proposal given that these parcels represent a gateway into the Village. With this level of investment, this building will be here for some time.

Mr. Vyverberg noted that as the proposal complies with both the B-5 and Manufacturing district requirements and were the proposed uses permitted, only site plan review would be required. One of the underlying balances of the staff review is what is allowed within the given zoning district and that the architectural materials have been approved on other recent projects.

Mr. Friedman commented upon the scope of the UPS property and noted its setback.

Mr. Noonan inquired about the height of the Hyundai building.

Mr. Friedman commented on the prevalence of these type of distribution buildings.

The architect commented on the large amount of glazing on the building. The speculative nature of the building requires an 18-month lead time for the pre-cast materials. The windows, color of the panels, and materials will work to distinguish the building as a Class A building.

The architect commented that berming is typically provided for screening of the

Attachment: DRAFT June 21st Plan Commission minutes (2022-60 : 2240-2296 N. Rand Road)

loading docks, which would not apply here. The building would be 36 feet clear height. There are 156 auto parking spaces, with 140 installed initially and 16 additional parking spaces on the north side of the building.

Mr. Dwyer inquired if the Missner Group is the owner or contract purchaser.

They are the contract purchaser.

Mr. Kolososki commented that the location is appropriate, given the proximity to Route 53.

Mr. Friedman commented on the massing of the building, which may be too much.

Discussion about the Algonquin Road development and this proposal would be better were it smaller.

Mr. Noonan made a motion to approve subject staff's conditions; 2nd by Mr. Kolososki
Commissioner Dwyer summarized the request was accepted by a vote of 4-1. This will tentatively go to Village council on Monday July 11th, 2022.

Communication:
Ben states that the Text Amendments have not gone to the Village Council and is tentative for July 11th or the first meeting in August.
Mr. Dwyer states public notices refer to file # and the package refers to it as case #. Inquires if both should refer to the same reference.

RESULT:	**RECOMMENDED TO APPROVE [4 TO 1]**
MOVER:	Patrick Noonan, Plan Commissioner
SECONDER:	Robert Kolososki, Plan Commissioner
AYES:	Dwyer, Noonan, Williams, Kolososki
NAYS:	Friedman
ABSENT:	Bettenhausen, Fedota

Attachment: DRAFT June 21st Plan Commission minutes (2022-60 : 2240-2296 N. Rand Road)

PUBLIC NOTICE

A Public Hearing will be held before the Village of Palatine Plan Commission on Tuesday, June 21, 2022 at 7 PM, in the Village Council Chambers in the Palatine Village Hall, 200 E. Wood Street, relative to a request for the following:

1. Preliminary and Final Plat of Subdivision to allow for the consolidation of 7 existing lots into one consolidated lot;

2. Preliminary and Final Planned Development to permit a warehousing, light industrial or manufacturing building, with accessory office or accessory retail uses; and

3. Rezoning from B-5 to Planned Development

The properties are commonly known as 2240, 2242, 2250, 2260, 2266, and 2296 N. Rand Road.{PIN #s: (02-02-101-004-0000, 02-02-101-005-0000, 02-02-101-013-0000, 02-02-101-014-0000, 02-02-101-021-0000, 02-02-101-020-0000, and 02-02-101-019-0000)}

The Petitioners propose to consolidate the existing lots (currently containing multiple commercial buildings/parking lots) through a Preliminary and Final Plat of Subdivision to create a single lot and a Preliminary and Final Planned Development to allow a new warehouse/distribution or light assembly/light manufacturing or utilities and services building (approximately 145,000 square feet), with associated truck docks, vehicle and trailer parking areas, and accessory office uses.

The above petition has been filed by TMG Acquisition Disposition 1, LLC (Missner Group), with Lawrence Freedman, as the authorized agent, and is available for examination in the office of the Village Clerk, 200 E. Wood Street.

FILE #: 22-24

VILLAGE OF PALATINE

Dennis Dwyer, Chair

Palatine Plan Commission

DATED: This 6th day of June 2022

Published in Daily Herald June 6, 2022 (4583653)

CERTIFICATE OF PUBLICATION

Paddock Publications, Inc.

Daily Herald

Corporation organized and existing under and by virtue of the laws of the State of Illinois, DOES HEREBY CERTIFY that it is the publisher of the **DAILY HERALD**. That said **DAILY HERALD** is a secular newspaper and has been circulated daily in the Village(s) of Algonquin,Antioch,Arlington Heights,Aurora,North Aurora,Bannockburn, Barrington,Barrington Hills,Lake Barrington,North Barrington,South Barrington,Bartlett,Batavia,Buffalo Grove,Burlington,Campton Hills, Carpentersville,Cary,Crystal Lake,Deerfield,Deer Park,Des Plaines,Elburn, East Dundee,Elgin,South Elgin,Elk Grove Village,Fox Lake, Fox River Grove,Franklin Park,Geneva,Gilberts,Glenview,Grayslake, Green Oaks,Gurnee,Hainesville,Hampshire,Hanover Park,Hawthorn Woods, Highland Park,Highwood,Hoffman Estates,Huntley,Inverness,Island Lake, Kildeer,Lake Bluff,Lake Forest,Lake in the Hills,Lake Villa,Lake Zurich, Libertyville,Lincolnshire,Lindenhurst,Long Grove,Melrose Park,Montgomer Morton Grove,Mt.Prospect,Mundelein,Niles,Northbrook,Northfield,Northlak Palatine,Park Ridge,Prospect Heights,River Grove,Riverwoods, Rolling Meadows,Rosemont,Round Lake,Round Lake Beach, Round Lake Heights,Round Lake Park,Schaumburg,Schiller Park,Sleepy Hol St. Charles,Streamwood,Sugar Grove,Third Lake,Tower Lakes,Vernon Hills, Volo,Wadsworth,Wauconda,Waukegan,West Dundee,Wheeling,Wildwood, Wilmette

County(ies) of Cook, Kane, Lake, McHenry

and State of Illinois, continuously for more than one year prior to the date of the first publication of the notice hereinafter referred to and is of general circulation throughout said Village(s), County(ies) and State.

I further certify that the DAILY HERALD is a newspaper as defined in "an Act to revise the law in relation to notices" as amended in 1992 Illinois Compiled Statutes, Chapter 715, Act 5, Section 1 and 5. That a notice of which the annexed printed slip is a true copy, was published 06/06/2022 in said DAILY HERALD.

IN WITNESS WHEREOF, the undersigned, the said PADDOCK PUBLICATIONS, Inc., has caused this certificate to be signed by, this authorized agent, at Arlington Heights, Illinois.

PADDOCK PUBLICATIONS, INC.
DAILY HERALD NEWSPAPERS

BY _____
Authorized Agent

Control # 4583653

Attachment: Public Notice (2022-60 : 2240-2296 N. Rand Road)

Consider a Resolution of Support for the Filing of a 6B Cook County Tax Classification Application for the Property Located at 2240-2296 N. Rand Road

BACKGROUND:
One of the economic development tools available to communities within Cook County is the 6B Tax Classification program. This program is designed to encourage industrial/manufacturing development through the reduction of a property's tax assessment over a twelve-year period. In conjunction with an application for the program, a resolution of support is required from the municipality in which the property is located. Therefore, the Petitioner is seeking approval of the following:

> **Resolution of support for the filing of a 6B Cook County Tax Classification application for the property located at 2240-2296 N. Rand Road**

KEY ISSUES:

- The Petitioner, TMG Acquisition Disposition I, LLC is seeking to redevelop the approximately 8.86 acre site at 2240-2296 N. Rand Road.
- The Petitioner is proposing to redevelop the property with a new industrial/warehouse building totaling approximately 145,000 square feet. The Petitioner anticipates the proposed redevelopment will result in a total investment of nearly $20,000,000.
- Following completion of the proposed redevelopment, the Subject Property is projected to have a market value of approximately $19,500,000, which would generate an estimated $8,455,000 in total taxes over the life of the Class 6b Tax Incentive (or approximately $626,000 per year).
- The Cook County 6B Tax Classification is used for property tax relief for industrial/manufacturing uses. Properties are assessed at 10% of market value for the first 10 years, 15% for the 11th year, and 20% in the 12th year. In absence of this incentive, the property would normally be assessed at 25% of its market value.

ALTERNATIVES:

1. Recommend approval of the Resolution.
2. Do not recommend approval of the Resolution.

RECOMMENDATION:
Staff recommends approval of the Resolution.

ACTION REQUIRED:
Motion to approve a Resolution for support for the filing of a 6b Cook County Tax Classification for the property located at 2240-2296 N. Rand Road.

ATTACHMENTS:

- TMG 2240-2296 N Rand Road 6b Resolution of Support

- TMG Final 6b Application & Info - Rand
- Cook County 6B Eligibility Bulletin

RESULT:	**ADOPTED BY VOICE VOTE BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Doug Myslinski, District 3 Councilman
SECONDER:	Scott Lamerand, District 2 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

RESOLUTION NO. _____

A RESOLUTION SUPPORTING THE USE OF CLASS 6B PROPERTY TAX CLASSIFICATION FOR THE PROPERTY LOCATED AT 2240 – 2296 N. RAND ROAD

WHEREAS, the Village of Palatine (the "Village") is a Home Rule municipality within the purview of Article VII, Section 6(a) of the Illinois Constitution (1970), and the said Village, therefore, may exercise any power and perform any function pertaining to its government and affairs; and

WHEREAS, the Village desires to promote and preserve industrial uses in the Village; and

WHEREAS, the Village of Palatine is adopting this resolution supporting the use of Class 6B property tax classification by the County of Cook for the property located at 623 E. Algonquin Road; and

WHEREAS, the Village of Palatine finds that the Class 6B real estate tax classification is essential to the revitalization of the Property, while simultaneously ensuring the continued viability and redevelopment of industrial properties within the Village; and

WHEREAS, the Petitioner, TMG Acquisition Disposition I, LLC, has indicated they are not willing to complete the construction of a new office/warehouse buildings at 2240-2296 N. Rand Road without the approval of the 6B real estate tax classification; and

WHEREAS, an Economic Disclosure Statement has been received from the Petitioner and filed by the Village of Palatine.

Attachment: TMG 2240-2296 N Rand Road 6b Resolution of Support (2240-2296 N. Rand Road - 6B Tax Classification Request)

NOW, THEREFORE, BE IT RESOLVED, by the Mayor and Village Council of the Village of Palatine that the Village of Palatine supports and consents to this Class 6B application and that it finds Class 6B necessary for investment to occur on the Subject Property at 2240-2296 N. Rand Road, Palatine, Illinois (PIN # 02-02-101-004, -005, -013, -014, -019, -020 and 021).

DATED: This 11th day of July, 2022

AYES:_____ NAYS:_____ ABSENT:_____ PASS:_____

APPROVED by me this _____day of _____, 2022

_____
Mayor of the Village of Palatine

ATTEST and FILE in the office of the Village Clerk this ____ day of

_____, 2022

_____
Village Clerk

Attachment: TMG 2240-2296 N Rand Road 6b Resolution of Support (2240-2296 N. Rand Road - 6B Tax Classification Request)

THE LAW OFFICES OF
LISTON & TSANTILIS
A PROFESSIONAL CORPORATION

33 NORTH LASALLE STREET, 28TH FLOOR CHICAGO, ILLINOIS 60602
BRIAN P. LISTON (312) 580-1594 PETER TSANTILIS (312) 604-3808 FACSIMILE (312) 580-1592

July 6, 2022

VIA MAIL & EMAIL
Mike Jacobs
Village Manager's Office
200 E Wood Street
Palatine, IL 60067

RE: Class 6b Eligibility Application
TMG Acquisition Disposition I, LLC
2296 N. Rand/2240-2266 N. Rand Road
Palatine, IL 60074
PINs: 02-02-101-004-0000 & 02-02-101-005/-013/-014/-020/-021

Dear Mike,

TMG Acquisition Disposition I, LLC (the "Applicant" or "The Missner Group") is the contract purchaser of the above-referenced property (the "Subject Property"), and is requesting:

1. A Resolution from the Village of Palatine supporting and consenting to a Class 6b Tax Incentive for the Subject Property based on New Construction and Substantial Rehabilitation.

The Subject Property currently consists of two deteriorating industrial buildings sited on 385,941 square feet of land. The Missner Group intends on demolishing all remaining improvements and constructing a new state-of-the-art 145,408 square foot industrial building and associated detention basin at the site for lease to a suitable industrial user(s).

Background of the Applicant

Established in 1945, The Missner Group provides comprehensive and integrated real estate investment, development, acquisition and construction services throughout the Midwest. Missner is a recognized leader in construction with the resources to build exceptional projects with innovative processes across every major sector. Now, in its third generation, the principals of the firm have spent their careers facilitating numerous joint-venture partnerships resulting in over 15 MSF in development throughout the Chicagoland area. Currently, the Company has projects planned or under constriction (infill) of similar sizes in Chicago, Mundelein, East Chicago Indiana, Addison, Melrose Park and Merrillville Indiana.

Missner's business model includes speculative, ground-up developments, build-to-suits, existing building and vacant land acquisitions. The Company's portfolio covers office, retail,

Attachment: TMG Final 6b Application & Info - Rand (2240-2296 N. Rand Road - 6B Tax Classification Request)

automotive, healthcare, and specialty buildings, but they have also worked extensively with industrial clients to build distribution and warehousing properties, manufacturing and processing plants, and cold storage facilities. The Missner group primarily targets low supply in-fill markets with strong demand and high barriers to entry for new development. To provide seamless service, Missner provides a fully featured website where both tenants and vendors can monitor payment status, request documents, upload invoices, etc.

Potential Occupants & Employment

The Applicant does not yet have a tenant for the Subject Property but plans to lease the proposed facility to one or more industrial users. The property will be constructed for a warehouse/distribution type use with parking spaces for over 100 employees. Depending on the ultimate end user, the Applicant expects full time employment number around 50-75 full time employees upon stabilization. As such, an estimated 50 full time employees would produce approximately **$211,875** in annual Village revenue. The Applicant also expects the improvements described below to result in approximately 35-50 temporary construction jobs.

New Construction & Real Estate Tax Analysis

The Applicant is currently under contract to purchase the Subject Property for $4,225,000 and intends on spending over $15,000,000, in hard costs to construct the new 145,408 square foot facility and associated detention pond. The new facility will initially include 140 parking stalls, 28 trailer stalls, 20 truck docks, clear height of 36', 10% office space and a detention basis in the Southwest Please see the enclosed site plan, renderings and elevations.

After the purchase of the property and completion of the facility, the Subject Property is projected to have a market value of approximately $19,577,392, which would generate an estimated $8,455,384 in total taxes over the life of the Class 6b Tax Incentive (approximately $626,325 per year). Without the incentive and with full vacancy relief, the Subject Property would generate a total of only $2,566,406 in total taxes (approximately $213,867 per year) over the life of the incentive. Therefore, should the Class 6b Tax Incentive be approved, the Subject Property would generate an additional **$5,780,620** in real estate taxes over the life of the Class 6b Tax Incentive. Please see the attached "12 Year Tax Comparison Chart" for more details.

Once the facility is constructed, the Applicant plans to lease the Subject Property to one or more industrial users. As mentioned, the Applicant does not yet have a tenant for the space, but based on the parking counts and similar projects, expects around 50-75 full time workers to be employed at the site. All employees will be compensated in accordance with Cook County's Living Wage, and the Applicant will suggest that the Occupant give qualified local residents priority when hiring.

"But-For" Condition Statement

Attachment: TMG Final 6b Application & Info - Rand (2240-2296 N. Rand Road - 6B Tax Classification Request)

THE LAW OFFICES OF
LISTON & TSANTILIS

Without the assistance from the Class 6b Tax Incentive, the Applicant will not purchase nor construct the proposed facility nor purchase the Subject Property. The Applicant has determined that the without the incentive, the heavy 31.992% effective tax rate for this site will make the project infeasible. In the event the Subject Property will not be purchased, the existing buildings will remain standing and continue to deteriorate.

Economic Analysis & Conclusion

In addition to increased property tax revenues, the eventual occupant's operations at the Subject Property will significantly benefit the Village's economy. The Occupant's employees and patrons will frequent Village restaurants, gas stations, stores, and more. As mentioned above, an estimated 50 full time employees are projected to contribute an additional **$211,875** per year to the Village's economy. In total, the purchase, construction, and occupation of the proposed 145,408 square foot facility will generate approximately **$7,000,000** in additional revenue over the life of the incentive.

Based on the foregoing, the Applicant requests that the Village of Palatine review its Class 6b Tax Incentive request and approve a Resolution supporting and consenting to a Class 6b Tax Incentive for the Subject Property based on New Construction and, Substantial Rehabilitation Should you need any additional documentation or have any questions or concerns, do not hesitate to contact me at (312) 604-3898 or via email at mrogers@ltlawchicago.com.

Respectfully Submitted,

Mark Rogers

Attachment: TMG Final 6b Application & Info - Rand (2240-2296 N. Rand Road - 6B Tax Classification Request)

COOK COUNTY ASSESSOR
FRITZ KAEGI

COOK COUNTY ASSESSOR'S OFFICE
118 NORTH CLARK STREET, CHICAGO, IL 60602
PHONE: 312.443.7550 FAX: 312.603.6584
WWW.COOKCOUNTYASSESSOR.COM

CLASS 6B
ELIGIBILITY APPLICATION

Carefully review the Class 6B Eligibility Bulletin before completing this Application. For assistance, please contact the Assessor's Office, Development Incentives Department (312) 603-7529. This application, ***a filing fee of $500.00***, and supporting documentation *(except drawings and surveys)* must be filed as follows:

This application must be filed **PRIOR TO** the commencement of New Construction or **PRIOR TO** the commencement of Substantial Rehabilitation Activities or **PRIOR TO** the commencement of Reoccupation of Abandoned Property.

Applicant Information

Name: Barry Missner Telephone: (847) 675-8877

Company: TMG Acquisition Disposition I, L.L.C.

Address: 1700 W. Higgins Road, Suite 400

City: Des Plaines State: IL Zip Code: 60018

Email: BMissner@missnergroup.com

Contact Person (if different than the Applicant)

Name: _____ Telephone: (_____) _____

Company: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Email: _____

Property Description (per PIN)

If you are applying for more than three different PINs, please submit the additional PIN information in an attachment.

Street Address: (1) 2296 N. Rand Road, Palatine, IL

Permanent Real Estate Index Number: 02-02-101-004.0000

(2) 2240-2266 N. Rand Road, Palatine, IL

Permanent Real Estate Index Number: 02-02-101-005, 013, 014, 019, 020, 021

(3) _____

Permanent Real Estate Index Number: _____

City: Palatine State: IL Zip Code: 60074

Township: Palatine Existing Class: B-5

Attach legal description, site dimensions and square footage and building dimensions and square footage.

Attachment: TMG Final 6b Application & Info - Rand (2240-2296 N. Rand Road - 6B Tax Classification Request)

Identification of Person Having an Interest in the Property

Attach a complete list of all owners, developers, occupants and other interested parties *(including all beneficial owners of a land trust)* identified by names and addresses, and the nature and extent of their interest.

Industrial Use

Attach a detail description of the precise nature and extent of the intended use of the subject property, specifying in the case of the multiple uses the relative percentages of each use.

Include copies of materials, which explain the occupant's business, including corporate letterhead, brochures, advertising material, leases, photographs, etc.

Nature of Development

Indicate nature of proposed development by checking the appropriate space:

[X] New Construction **(Read and Complete Section A)**

[X] Substantial Rehabilitation **(Read and Complete Section A)**
Incentive only applied to the market value attributable to the rehabilitation

[ ] Occupation of Abandoned Property - No Special Circumstance
(Read and Complete Section B)

[ ] Occupation of Abandoned Property - With Special Circumstance
(Read and Complete Section C)

[ ] Occupation of Abandoned Property - **(TEERM Supplemental Application)**
(Read and Complete Section C)

[ ] Occupation of Abandoned Property - **(CEERM Supplemental Application)**
(Read and Complete Section C)

SECTION A (NEW CONSTRUCTION/SUBSTANTIAL REHABILITATION)

If the proposed development consists of *New Construction* or *Substantial Rehabilitation*, provide the following information:

Estimated date of construction commencement *(excluding demolition, if any)*: August 2022

Estimated date of construction completion: August 2023

Attach copies of the following:

1. Specific description of the proposed *New Construction* or *Substantial Rehabilitation*
2. Current Plat of Survey for subject property
3. 1st floor plan or schematic drawings
4. Building permits, wrecking permits and occupancy permits *(including date of issuance)*
5. Complete description of the cost and extent of the *Substantial Rehabilitation* or *New Construction (including such items as contracts, itemized statements of all direct and indirect costs, contractor's affidavits, etc)*

Attachment: TMG Final 6b Application & Info - Rand (2240-2296 N. Rand Road - 6B Tax Classification Request)

SECTION B (ABANDONED PROPERTY WITH NO SPECIAL CIRCUMSTANCE)

If the proposed development consists of the reoccupation of abandoned property, purchased for value, complete (1) and (2) below:

1. Was the subject property vacant and unused for at least 24 continuous months prior to the purchase for value?

   [ ] YES [ ] NO

   When and by whom was the subject property last occupied prior to the purchase for value?

   _____

   _____

   Attach copies of the following documents:

   (a) Sworn statements from person having personal knowledge attesting to the fact and the duration of vacancy and abandonment

   (b) Information *(such as statements of utility companies)* which demonstrate that the property was vacant and unused and indicate duration of such vacancy

2. Application must be made to the Assessor prior to occupation:

   Estimated date of reoccupation: _____
   Date of Purchase: _____
   Name of purchaser: _____
   Name of seller: _____
   Relationship of purchaser to seller: _____

   Attach copies of the following documents:

   (a) Sale Contract
   (b) Closing Statement
   (c) Recorded Deed
   (d) Assignment of Beneficial Interest
   (e) Real Estate Transfer Declaration

Attachment: TMG Final 6b Application & Info - Rand (2240-2296 N. Rand Road - 6B Tax Classification Request)

SECTION C (SPECIAL CIRCUMSTANCES)

If the applicant is seeking special circumstances to establish that the property was abandoned for purposes of the Incentive where there was a **purchase for value**, but the period of ***abandonment prior to purchase was less than 24 months***, complete section (1).

If the applicant is seeking special circumstances to establish that the property was abandoned for purposes of the Incentive where there was **no purchase for value**, but the period of **abandonment prior to the application 24 continuous months or greater**, complete section (2).

If the applicant is seeking special circumstances to establish that the property was abandoned for purposes of the Incentive where there was **no purchase for value**, but the period of **abandonment prior to the application was greater than 12 continuous months and less than 24 continuous month**, complete section (2) and the **TEERM Supplemental Application**.

If the applicant is seeking special circumstances to establish that the property was abandoned for purposes of the Incentive where there was **no purchase for value**, but the period of **abandonment prior to the application was greater than 3 continuous months and applicant will create or maintain at least 250 jobs for employees at the subject location**, complete section (2) and the **CEERM Supplemental Application**.

1. How long was the period of abandonment prior to the purchase for value? _____

   When and by whom was the subject property last occupied prior to the purchase for value?

   _____

   _____

   Attach copies of the following documents:

   (a) Sworn statements from persons having personal knowledge attesting to the fact and the duration of the vacancy and abandonment

   (b) Information *(such as statements of utility companies)* which demonstrate that the property was vacant and unused and indicate duration of vacancy

   (c) Include the finding of special circumstances supporting "abandonment" as determined by the municipality, or the County Board, if located in an unincorporated area. *Also include the ordinance or resolution from the Board of Commissioners of Cook County stating its approval for less than 24-month abandonment period.*

   Application must be made to the Assessor prior to the commencement of reoccupation of the abandoned property.

   Estimated date of Reoccupation: _____
   Date of purchase: _____
   Name of purchaser: _____
   Name of seller: _____
   Relationship of purchaser to seller: _____

   Attach copies of the following documents:

   (a) Sale Contract
   (b) Closing Statement
   (c) Recorded Deed
   (d) Assignment of Beneficial Interest
   (e) Real Estate Transfer Declaration

Attachment: TMG Final 6b Application & Info - Rand (2240-2296 N. Rand Road - 6B Tax Classification Request)

2. How long has the subject property been unused?

   [ ] 24 or greater continuous months *(Eligible for Special Circumstance)*

   [ ] 12 continuous months but less than 24 continuous months *(Eligible for Special Circumstance under TEERM)* - **Complete TEERM Supplemental Application**

   [ ] 3 continuous months and maintain/create 250 employee jobs (*Eligible for Special Circumstance under CEERM)* - **Complete CEERM Supplemental Application**

   [ ] **Not Eligible for Special Circumstance if No purchase and less than 12 continuous months vacant, or not a CEERM**

   When and by whom was the subject property last occupied prior to the filing of this application?

   _____

   _____

   Attach copies of the following documents:

   (a) Sworn statements from persons having personal knowledge attesting to the fact and the duration of the vacancy and abandonment

   (b) Information *(such as statements of utility companies)* which demonstrate that the property was vacant and unused and indicate duration of vacancy

   (c) Include the finding of special circumstances supporting "abandonment" as determined by the municipality, or the County Board, if located in an unincorporated area. Also include the ordinance or resolution from the Board of Commissioners of Cook County stating its approval for lack of a purchase for value.

   Application must be made to Assessor prior to the commencement of reoccupation of the abandoned property.

   Estimated date of reoccupation: _____

Attachment: TMG Final 6b Application & Info - Rand (2240-2296 N. Rand Road - 6B Tax Classification Request)

TEERM SUPPLEMENTAL APPLICATION

(This form will ONLY be utilized for applicants who specifically elect for TEERM)

This supplemental eligibility application is for properties that have been abandoned (due to special circumstances) for at least 12 continuous months and less than 24 continuous months with no purchase taking place.

*Under the **TEERM** Program, qualifying industrial real estate would be eligible for the Class 6B level of assessment from the date of substantial re-occupancy of the abandoned property. Properties receiving Class 6B will be assessed at 10% of market value for the first 10 years, 15% in the 11th year and 20% in the 12th year. **The terms of this program are Not Renewable.***

I _____ applicant/representative hereby specifically elect to submit this **Supplemental Application** for the **TEERM** program.

Further affiant sayeth not.

_____ _____

Agent's Signature | Agent's Name & Title

_____ _____

Agent's Mailing Address | Agent's Telephone Number

_____ _____

Applicant's Name | Applicant's Mailing Address

_____

Applicant's e-mail address

Subscribed and sworn before me this _____ day of _____, 20 _____

_____

Signature of Notary Public

Attachment: TMG Final 6b Application & Info - Rand (2240-2296 N. Rand Road - 6B Tax Classification Request)

CEERM SUPPLEMENTAL APPLICATION

(This form will ONLY be utilized for applicants who specifically elect for CEERM)

This supplemental eligibility application is for properties that have been abandoned (due to special circumstances) where there has been no purchase for value and the buildings and other structures have been vacant and unused for at least three continuous months and applicant has provided sufficient documentation to establish that such applicant will create or maintain at least 250 jobs for employees at the subject location.

The CEERM Program shall be limited to the party who is the initial applicant of the Class 6B Incentive under the CEERM Program and the subject of the municipal Resolution or Ordinance.

*Under the **CEERM** Program, qualifying industrial real estate would be eligible for the Class 6B level of assessment from the date of substantial re-occupancy of the abandoned property. Properties receiving the Class 6B will be assessed at 10% of market value for the first 10 years, 15% in the 11th year and 20% in the 12th year.* ***The terms of this program are Not Renewable.***

I _____ applicant/representative hereby specifically elect to submit this **Supplemental Application** for the **CEERM** program.

Further affiant sayeth not.

_____ _____

Agent's Signature | Agent's Name & Title

_____ _____

Agent's Mailing Address | Agent's Telephone Number

_____ _____

Applicant's Name | Applicant's Mailing Address

_____

Applicant's e-mail address

Subscribed and sworn before me this _____ day of _____, 20 _____

_____

Signature of Notary Public

Attachment: TMG Final 6b Application & Info - Rand (2240-2296 N. Rand Road - 6B Tax Classification Request)

EMPLOYMENT OPPORTUNITIES

How many construction jobs will be created or maintained as a result of this development? 35-50

How many new permanent full-time and part-time employees do you now employ in Cook County?

Full-time: 0 Part-time: 0

How many new permanent part-time jobs will be created as a result of this proposed development?

TBD

How many new permanent full-time jobs will be created as a result of this proposed development?

50-75

LOCAL APPROVAL

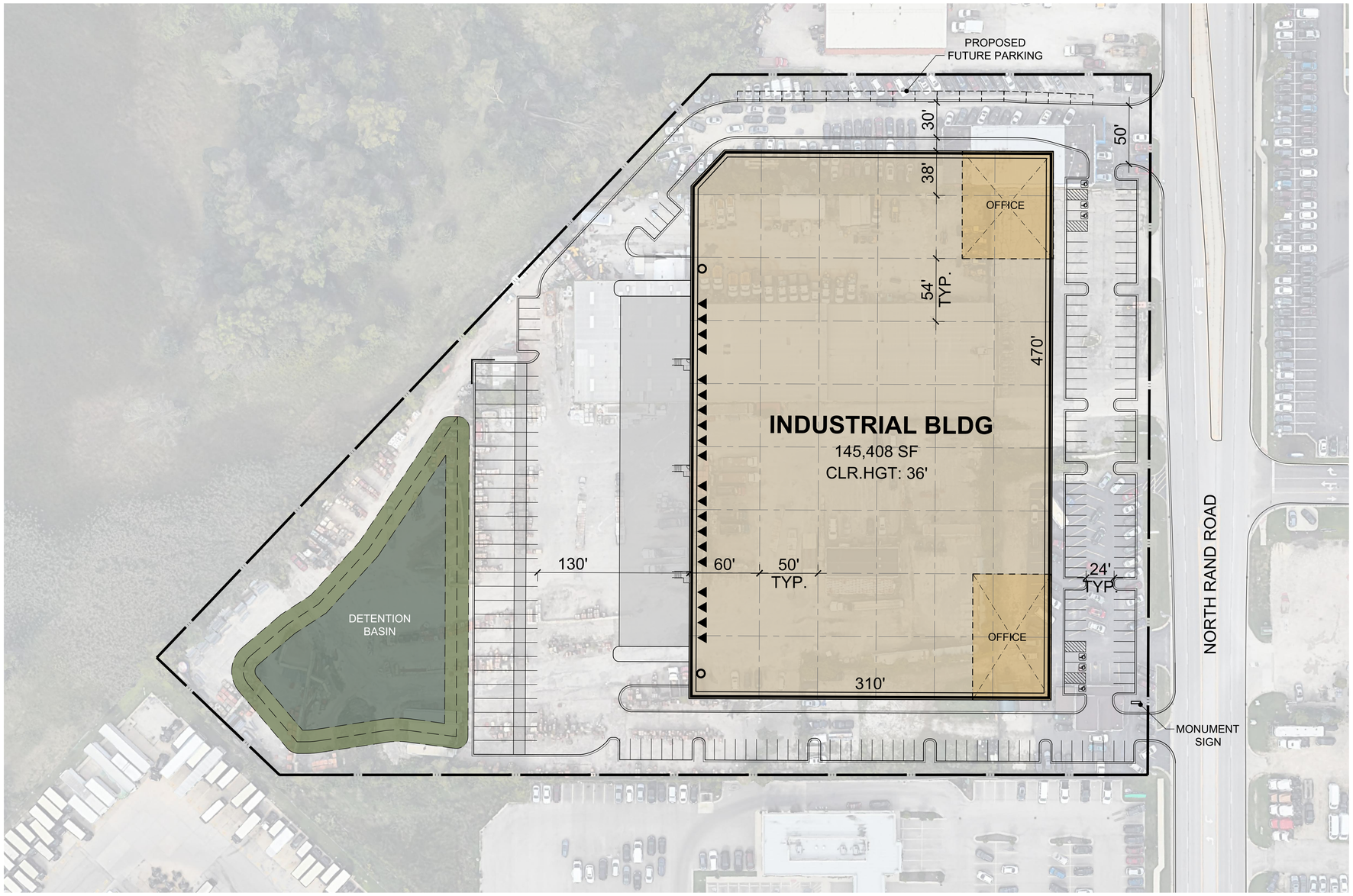
A certified copy of a resolution or ordinance from the municipality in which the real estate is located *(or the County Board, if the real estate is located in an unincorporated area)* should accompany this Application. *The ordinance or resolution must expressly state that the municipality supports and consents to this Class 6B Application and that it finds Class 6B necessary for development to occur on the subject property.* If a resolution is unavailable at the time the application is filed, a letter from the municipality or the County Board, as the case may be, stating that a resolution or ordinance supporting the incentive has been requested may be filed with this application instead. If the applicant is seeking to apply based on the reoccupation of abandoned property and will be seeking a finding of "special circumstances" from the municipality, in addition to obtaining a letter from the municipality confirming that a resolution or ordinance supporting the incentive has been requested, the applicant must file a letter from the County Board confirming that a resolution validating a municipal finding of special circumstances has been requested. If, at a later date, the municipality or the County Board denies the applicant's request for a resolution or ordinance, the applicant will be deemed ineligible for the Class 6B incentive, whether or not construction has begun. In all circumstances, the resolution must be submitted by the time the applicant files an "Incentive Appeal".

I, the undersigned, certify that I have read this Application and that the statements set forth in this Application and in the attachments hereto are true and correct, except as those matters stated to be on information and belief and as to such matters the undersigned certifies that he/she believes the same to be true.

Signature	Date: 4/14/22
Print Name: Barry Missner	Title

03/05/2021

Attachment: TMG Final 6b Application & Info - Rand (2240-2296 N. Rand Road - 6B Tax Classification Request)



PROJECT DATA:		
SITE AREA:		
GROSS:		8.86 AC
		385,828 SF
DETENTION:	@ 9%	34,746 SF
NET:		8.06 AC
		351,082 SF
BUILDING FOOTPRINT:		145,408 SF
BUILDING USE:		
WAREHOUSE		130,867 SF
OFFICE	@ 10%	14,541 SF
COVERAGE:		
GROSS:		38%
NET:		41%
PARKING REQUIRED:		
WAREHOUSE	1/1000 SF	131 STALLS
OFFICE	1/300 SF	48 STALLS
TOTAL		179 STALLS
PARKING PROVIDED:		
AUTO:		140 STALLS
		@0.96/1000 SF
REQ. ACCESSIBLE		*5 STALLS*
TRAILER:		28 STALLS
FUTURE PARKING PROPOSED:		
AUTO:		16 STALLS
TRUCK DOCKS:		
▲ DOCK-HIGH DOORS		20

DEVELOPMENT STANDARDS:	
ZONING:	M
MAX. F.A.R.:	0.70
MAX. COVERAGE:	TBD [1]
MAX. HEIGHT:	60 FT
BUILDING SETBACKS:	
FRONT:	30 FT
SIDE:	15 FT
REAR:	15 FT
LANDSCAPE SETBACKS:	
FRONT:	5 FT
SIDE:	2 FT
REAR:	2 FT
LANDSCAPE REQ.:	[2]
OFF-STREET PARKING:	
STANDARD:	9X19
COMPACT:	8X16
DRIVE AISLE:	25 FT
FIRE LANE:	TBD [1]
REQ. PARKING RATIO BY USE:	
WAREHOUSE:	1/1000 SF
OFFICE:	1/300 SF

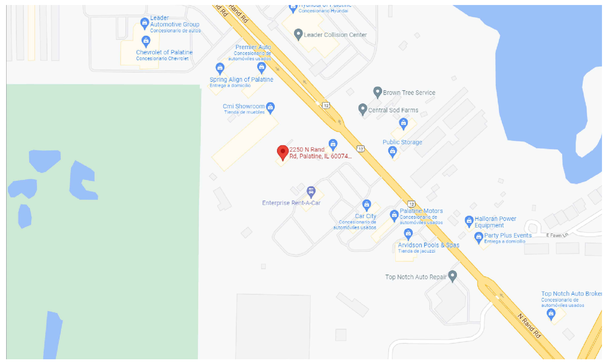
NOTES:
1 To be confirmed by city.
2 1 tree for every 10 parking stalls.

A PORTION OF THE ZONING INFORMATION IS UNKNOWN AT THIS TIME AND REQUIREMENTS MAY DIFFER THAN WHAT IS SHOWN IN THE SITE PLAN.

This conceptual design is based upon a preliminary review of entitlement requirements and on unverified and possibly incomplete site and/or building information, and is intended merely to assist in exploring how the project might be developed.

Stormwater Management Design:
AVERAGE REGIONAL REQUIRED
PROVIDED

Boundary Source:
CIVIL CAD FILE



1" = 40'
0 20 40 80 200
NORTH

THE MISSNER GROUP
EST. 1945

scheme: 11

Conceptual Site Plan

2250 North Rand Road
Palatine, IL 60074

WARE MALCOMB

CHI21-0193-00
06.02.2022

SHEET
1

Attachment: TMG Final 6b Application & Info - Rand (2240-2296 N. Rand Road - 6B Tax Classification Request)

12 Year Tax Estimates

2240 Rand Road
Palatine, Illinois 60074
(PIN: 02-23-114-010-/021/-022/-034/-035/-036/-037/-038/-039)

Estimated Taxes Based on:
Estimated Market Value based on Purchase Price + Hard Costs and a 6b
Compared to
Estimated Taxes based on the 2021 Cook County Market Value with Full Vacancy Relief and No 6b
Compared to
Estimated Taxes based on the current 2021 Cook County Market Value and No 6b

				Estimated Market Value based on Purchase Price + Hard Costs and a 6b				Estimated Taxes based on the 2021 Cook County Market Value with Full Vacancy Relief and No 6b				Estimated Taxes based on the current 2021 Cook County Market Value and No 6b			
Tax Year	2019 Tax Rate	2019 Multiplier	Estimated Effective Tax Rate*	Estimated Market Value based on Purchase Price + Hard Costs and a 6b	Assessment Level with a Class 6b**	Estimated Assessed Value With a Class 6b	Estimated Tax With a Class 6b	Estimated Taxes based on the 2021 Cook County Market Value with Full Vacancy Relief and No 6b	Assessment Level With NO Class 6b	Estimated Assessed Value at Full Vacancy Without a Class 6b	Estimated Taxes at Full Vacancy Without a Class 6b	Estimated Taxes based on the current 2021 Cook County Market Value and No 6b	Assessment Level without a Class 6b**	Estimated Assessed Value Without a Class 6b	Estimated Tax Without a Class 6b
2023	9.925%	3.2234	31.992%	$19,577,392	10%	$1,957,739	**$626,325**	$2,673,988	25%	$668,497	**$213,867**	$2,786,888	25%	$696,722	**$222,897**
2024	9.925%	3.2234	31.992%	$19,577,392	10%	$1,957,739	**$626,325**	$2,673,988	25%	$668,497	**$213,867**	$2,786,888	25%	$696,722	**$222,897**
2025	9.925%	3.2234	31.992%	$19,577,392	10%	$1,957,739	**$626,325**	$2,673,988	25%	$668,497	**$213,867**	$2,786,888	25%	$696,722	**$222,897**
2026	9.925%	3.2234	31.992%	$19,577,392	10%	$1,957,739	**$626,325**	$2,673,988	25%	$668,497	**$213,867**	$2,786,888	25%	$696,722	**$222,897**
2027	9.925%	3.2234	31.992%	$19,577,392	10%	$1,957,739	**$626,325**	$2,673,988	25%	$668,497	**$213,867**	$2,786,888	25%	$696,722	**$222,897**
2028	9.925%	3.2234	31.992%	$19,577,392	10%	$1,957,739	**$626,325**	$2,673,988	25%	$668,497	**$213,867**	$2,786,888	25%	$696,722	**$222,897**
2029	9.925%	3.2234	31.992%	$19,577,392	10%	$1,957,739	**$626,325**	$2,673,988	25%	$668,497	**$213,867**	$2,786,888	25%	$696,722	**$222,897**
2030	9.925%	3.2234	31.992%	$19,577,392	10%	$1,957,739	**$626,325**	$2,673,988	25%	$668,497	**$213,867**	$2,786,888	25%	$696,722	**$222,897**
2031	9.925%	3.2234	31.992%	$19,577,392	10%	$1,957,739	**$626,325**	$2,673,988	25%	$668,497	**$213,867**	$2,786,888	25%	$696,722	**$222,897**
2032	9.925%	3.2234	31.992%	$19,577,392	10%	$1,957,739	**$626,325**	$2,673,988	25%	$668,497	**$213,867**	$2,786,888	25%	$696,722	**$222,897**
2033	9.925%	3.2234	31.992%	$19,577,392	15%	$2,936,609	**$939,487**	$2,673,988	25%	$668,497	**$213,867**	$2,786,888	25%	$696,722	**$222,897**
2034	9.925%	3.2234	31.992%	$19,577,392	20%	$3,915,478	**$1,252,649**	$2,673,988	25%	$668,497	**$213,867**	$2,786,888	25%	$696,722	**$222,897**
				Total Estimated Taxes (2023 to 2034)			**$8,455,384**	**Total Estimated Taxes (2023 to 2034)**			**$2,566,406**	**Total Estimated Taxes (2023 to 2034)**			**$2,674,764**

Property Tax Revenue Generated from the Property's Class 6b Tax Incentive:	**$5,780,620**

Estimated Additional Revenue Generated by the Projected 50 Full Time Employees (PER YEAR)	**$211,875**

Notes:

* The 2019 Effective Tax Rate was used. It does not take into account any increases or decreases in the Effective Tax Rate between 2023 and 2034.

**The above is based on the assumption that the Class 6b Tax Incentive for the subject property will be granted in 2022 and activated in 2023 or 2024

***A 20% occupancy factor was applied to the 2021 Final Building Assessed Value, which was then added to the 2021Assessor Certified Land Assessed Value to create a revised 2021Assessed Value with Total Vacancy Reduction. The revised 2021 Assessed Value with Total Vacancy Reduction was then multiplied by 4 tocreate the "Estimated Market Value Based on the 2021 Cook County Assessed Value at Full Vacancy, No Improvements and no 6b"

The above estimates are speculative, and should be treated as such.

Attachment: TMG Final 6b Application & Info - Rand (2240-2296 N. Rand Road - 6B Tax Classification

New Employee Business Impact Chart					
Purchase	**Emp.**	**%**	**Exp./Week**	**Weeks**	**Total**
Lunch	50	55%	$55	50	$75,625
Grocery	50	30%	$50	50	$37,500
Consumer Goo	50	25%	$35	50	$21,875
Entertainment	50	15%	$55	50	$20,625
Auto-Gas	50	75%	$30	50	$56,250
TOTAL (Per Year)					**$211,875**

Attachment: TMG Final 6b Application & Info - Rand (2240-2296 N. Rand Road - 6B Tax Classification Request)

COOK COUNTY ASSESSOR
FRITZ KAEGI

COOK COUNTY ASSESSOR'S OFFICE
118 NORTH CLARK STREET, CHICAGO, IL 60602
PHONE: 312.443.7550 FAX: 312.603.3616
WWW.COOKCOUNTYASSESSOR.COM

CLASS 6B
ELIGIBILITY BULLETIN

Cook County Living Wage Ordinance

Please be advised that every applicant for this incentive will be required to provide an affidavit to the Assessor's Office to confirm compliance with the Cook County Living Wage Ordinance. The Cook County Assessor will not grant any request for incentive classification until it receives the required affidavit.

Incentive Benefits

The Class 6b classification is designed to encourage industrial development throughout Cook County by offering a real estate tax incentive for the development of new industrial facilities, the rehabilitation of existing industrial structures, and the industrial reutilization of abandoned buildings. The goal of Class 6b is to attract new industry, stimulate expansion and retention of existing industry and increase employment opportunities.

Under the incentive provided by Class 6b, qualifying industrial real estate would be eligible for the Class 6b level of assessment from the date that new construction or substantial rehabilitation is completed and initially assessed or, in the case of abandoned property, from the date of substantial re-occupancy. Properties receiving Class 6b will be assessed at 10% of market value for the first 10 years, 15% in the 11th year and 20% in the 12th year. This constitutes a substantial reduction in the level of assessment and results in significant tax savings. In the absence of this incentive, industrial real estate would normally be assessed at 25% of its market value.

Where buildings or other structures qualify for the incentive as new construction or as abandoned property as defined below, the reduced level of assessment under Class 6b will apply to those structures in their entirety as well as to the land upon which they are situated. Where there is substantial rehabilitation of an existing structure which has not been abandoned, the reduced incentive level of assessment is applicable to the additional market value attributable to the rehabilitation, including qualified land related to the rehabilitation. ***(Please note that the additional value attributable to the rehabilitation for assessment purposes is likely to be lower than the actual amount spent on the rehabilitation.)*** Land qualifies when the rehabilitation adds vertical or horizontal square footage to the improvements. The amount of land eligible for the incentive shall be in such proportion as the square footage added by the rehabilitation bears to the total square footage of the improvements on the parcel.

Attachment: Cook County 6B Eligibility Bulletin (2240-2296 N. Rand Road - 6B Tax Classification Request)

Eligibility Requirements

Real estate is eligible for Class 6b status under the following conditions:

1. The real estate is used primarily for "industrial purposes".
2. There is either (a) new construction, (b) substantial rehabilitation, or (c) substantial re-occupancy of "abandoned" property.
3. An Eligibility Application and supporting documents have been timely filed with the Office of the Assessor according to deadlines as set forth in the "What Must Be Filed" and "Time for Filing" sections of this Bulletin.
4. The municipality in which such real estate is located (or the County Board, if the real estate is located in an unincorporated area) must, by lawful resolution or ordinance, expressly state that it supports and consents to the filing of a Class 6b Application and that it finds Class 6b necessary for development to occur on the subject property.

The following definitions, as set forth in the Cook County Real Property Assessment Classification Ordinance, pertain to the Class 6b incentive provision:

Industrial purposes: "Any real estate used primarily in manufacturing ... or in the extraction or processing of raw materials unserviceable in their natural state to create new physical products or materials, or in the processing of materials for recycling, or in the transportation or storage of raw materials or finished or partially finished physical goods in the wholesale distribution of such materials or goods for sale or leasing."

Manufacturing: "The material staging and production of goods used in procedures commonly regarded as manufacturing, processing, fabrication, or assembling which changes existing material into new shapes, new qualities, or new combinations and including research and development associated with the production of goods."

Abandoned property: "Buildings and other structures that, after having been vacant and unused for at least 24 continuous months, are purchased for value by a purchaser in whom the seller has no direct financial interest." An exception to this definition shall be, “if the municipality or the Board of Commissioners, as the case may be, finds that special circumstances justify finding that the property is ‘abandoned’ for the purpose of Class 6b.”

The finding of abandonment, along with the specification of the special circumstances, shall be included in the resolution or ordinance supporting and consenting to the incentive application. Not withstanding the foregoing, special circumstances may not be determined to justify finding that a property is deemed “abandoned” where:

A. There has been a purchase for value and the buildings and other structures have not been vacant and unused prior to such purchase; or

B. There has been no purchase for value and the buildings and other structures have been vacant and unused for less than 24 continuous months.

If the ordinance or resolution containing a finding of “special circumstances” is that of a municipality, the approval of the County Board of Commissioners is required to validate such a finding that the property is deemed “abandoned” for purposes of the incentive, and a resolution to that effect shall be included with the eligibility application.

What Must Be Filed

An applicant seeking the reclassification of real estate to Class 6b is required to file a "Class 6b Eligibility Application" with the Office of the Assessor. At the time of filing the application, a filing fee of $500.00 must be paid. In addition, an applicant may submit, at the same time, a certified copy of an ordinance or resolution adopted by the municipality in which the real estate is located (or the County Board, if the real estate is located in an unincorporated area) expressly stating that it supports and consents to the filing of a Class 6b Application and that it finds Class 6b necessary for development to occur on the subject property. If the resolution is not filed at the time the Eligibility Application is submitted to the Assessor, the applicant must file, at that time, a letter from the municipality or the County Board confirming that a resolution or ordinance supporting the incentive has been requested. If the applicant is seeking to apply based on the reoccupation of abandoned property and will be seeking a finding of “special circumstances” from the municipality, in addition to obtaining a letter from the municipality confirming that a resolution or ordinance supporting the incentive has been requested, the applicant must also file a letter from the County Board confirming that a resolution validating a municipal finding of special circumstances has been requested.

Should the municipality or the County Board, at a later date, deny the applicant’s request for a resolution or ordinance, whether or not construction or re-occupancy has begun, the applicant will be deemed ineligible for reclassification to Class 6b. Any information that is not known or any supporting documents that are not available at the time of the initial filing must be submitted as a supplement to the Application.

After the construction or re-occupancy has taken place, an applicant must also file an "Incentives Appeal Form" requesting that the real estate be reclassified to Class 6b. At the time of filing the appeal, an appeal fee of $100.00 must be paid. If a resolution from the municipality where the property is located, or the Cook County Board of Commissioners if located in an unincorporated area, was not filed with the Eligibility Application, the applicant must file a certified copy of the resolution or ordinance supporting the incentive at this time. No final action on a request for reclassification to Class 6b will be taken until an Appeal and an Eligibility Application, along with the required documentation as described therein, are completed and filed with the Office of the Assessor.

In addition, during the term of the incentive, the Class 6b recipient must file a triennial affidavit attesting to the use of the property and the number of workers employed at the Class 6b site. The Assessor will mail Class 6b recipients the affidavit forms at the time of their triennial reassessments. The affidavit must be signed, notarized and returned to the Assessor within three weeks. Failure to file the triennial affidavits within that time will result in the loss of the incentive.

Time for Filing

The Eligibility Application along with the appropriate resolution or letter confirming that a resolution has been requested *must be filed* with the Assessor *prior to*, but no earlier than one year before, *commencement of new construction* (excluding demolition, if any) *or substantial rehabilitation*. With respect to abandoned property, the eligibility application must be made to the Assessor ***prior to the commencement of the reoccupation of the vacant and unused property***.

Where reoccupation of "abandoned" property and subsequent substantial rehabilitation is planned, a single Eligibility Application and resolution, ordinance, or letter confirming that a resolution has been requested, may be filed for both situations, provided that the Application is filed prior to the commencement of reoccupation and such rehabilitation.

To finalize the classification change, a "Real Estate Assessed Valuation Appeal" must be filed after the construction or re-occupancy has taken place. In instances where a certified copy of an ordinance or resolution expressly stating that the municipality or County Board supports and consents to filing of a Class 6b Application has not yet been filed, it must be filed at this time. For the purpose of certifying final assessments on a timely basis to the Board of Appeals, deadlines for filing Appeals are established on a township basis. Check with the Office of the Assessor to determine when the deadline occurs for a particular township.

The 6b classification may be renewed during the last year in which a property is entitled to a 10% assessment level or when the incentive is still applied at the 15% or 20% assessment level, by filing a renewal application and a certified copy of a resolution or ordinance adopted by the municipality in which the real estate is located, or by the County Board, if located in an unincorporated area of Cook County, expressly stating that it supports and consents to the renewal of the Class 6b incentive and that it has determined that the industrial use of the property is necessary and beneficial to the local economy. The notice of intent to request renewal will be forwarded by the Assessor's Office to the Cook County Board. The owners must notify the Assessor's Office of their intent to request renewal at the time they request a resolution or ordinance agreeing to the renewal from the municipality or County Board. The number of renewal period requests is not limited.

Questions regarding Class 6b may be directed to the Development Incentives Department of the Office of the Cook County Assessor, Room 301, 118 North Clark Street, Chicago, Illinois 60602, (312) 603-7529.

Motion to Approve an Ordinance Granting Site Plan Review for the Proposed Redevelopment of the Property at 301 W. Johnson Street

BACKGROUND:
The Subject Property is the former location of Kinsch Florist and Garden Center. The developer and contract purchaser, Northpointe Development Corporation, intend to acquire and redevelop the property into 58 residential units contained, within a single building. The Subject Property is presently zoned R-3 Multi-Family District and the proposed development complies with all of the R-3 District's underlying zoning requirements and bulk standards. Therefore, the Petitioner is requesting approval of the following:

Site Plan Review approval to allow for the development of a 58-unit residential building

KEY ISSUES:

- The Subject property is 4.96 acres and presently zoned R-3 Multi-family residential. It is also located within the boundaries for Downtown Land Use Guide, Downtown Design Guidelines, and the 2015 TOD Plan. Kinsch Florist and Garden Center previously operated from this location for many years, within a Special Use. Kinsch Florist relocated and the site was cleared and subsequently listed for sale.

- Northpointe Development Corporation plans to redevelop the site into a three-story, 58-unit building, with associated parking lot. The units along Johnson Street are proposed as two-story walk-up townhome-style apartments, with four units. The balance of the building moving south will be three stories and contain the remaining 54-units. The parking provided consists of both garage parking and surface parking spaces. The Zoning Ordinance requires a minimum of 2 spaces/unit and 2.25 spaces/unit with garages. The table below summarizes the bedroom distribution and parking for the units in the building:

Number of bedrooms	Number of units	Surface parking spaces	Garage parking spaces
One	**24**		
Two	**19**		
Three	**15 (4 units within the 2-story portion facing Johnson Street)**		
TOTAL	**58 units**	**69 spaces**	**54 spaces = 123 spaces (2.12/unit)**

- The proposed building complies with all the required R-3 setbacks and those identified within the Downtown Design Guidelines (Area “A”). The proposed unit count and bedroom distribution also exceed the minimum required Lot Area/

Dwelling unit for multi-family dwellings within the R-3 district. The minimum lot area required is 3.93 acres and the total property size is 4.96 acres.

- The proposed building and parking are located northeast of the creek and no improvements are proposed on the west side of the creek. This area of the property is a required component to satisfy the minimum lot area/dwelling unit and would require a significant variation, which Staff would not support, if ever proposed to develop in the future. To memorialize this buffer, Staff and the developer have discussed placing a conservation easement on this portion of the property. This is a condition of the proposed Ordinance.

- Access to the site is provided through one ingress/egress point on the west side of the building. The building will be fully sprinklered and the developer has provided the necessary auto-turn information to the Fire Marshal to satisfy the requirements.

- The architecture and proposed building materials, consist of brick, composite trim and lap siding, and vinyl windows, and comply with the Downtown Design Guidelines. It is also directly comparable to the other residential developments within the Downtown.

- Stormwater would be managed within a dry basin on the southwest corner of the property and adjacent to the creek. The proposed plans would not impact the floodplain in the area and the Village Engineer has conditionally reviewed the initial plans, without identifying any specific concerns.

- As required, the developer submitted and revised a Traffic Impact Study (TIS) for the proposed development. The TIS indicates that there is capacity within the existing street system for the development and further determined that the traffic generated will increase the traffic within the study area by less than 4%.

- The building's full-access drive will operate at a "good level of service" and the pick-up/drop-off activities at Paddock School are contained within Washington Court and will have "…a limited impact upon the accessibility of the site."

ALTERNATIVES:

1. Approve an ordinance granting site plan approval to allow for the development of a new 58-unit residential building at 301 W. Johnson Street.
2. Do not approve an ordinance granting site plan approval to allow for the development of a new 58-unit residential building at 301 W. Johnson Street.

RECOMMENDATION:
Staff recommends approval of the Site Plan Review Ordinance to allow a 58-unit residential building at 301 W. Johnson Street.

ACTION REQUIRED:

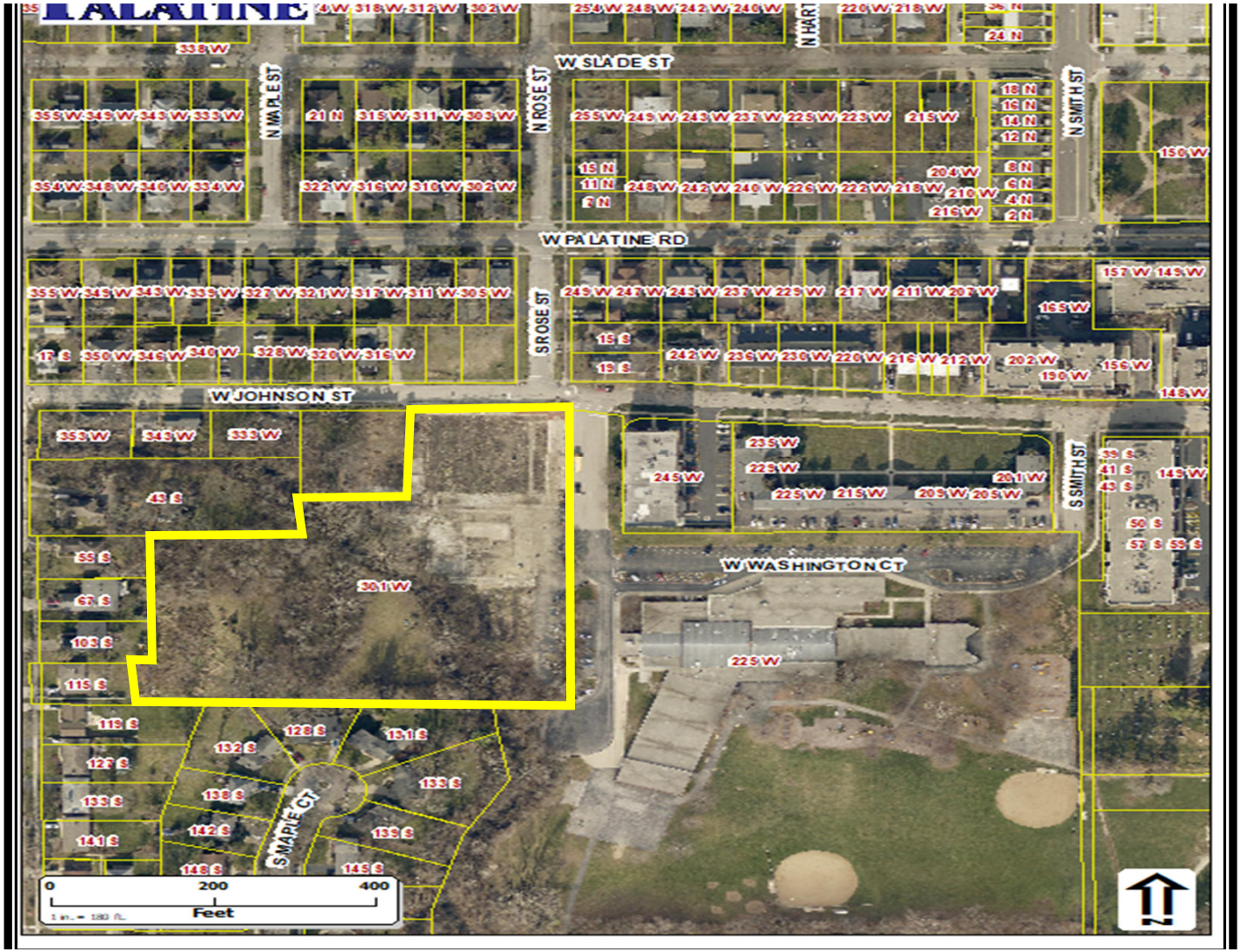
A motion to approve the ordinance granting Site Plan Review approval for the 58-unit residential development at 301 W. Johnson Street.

ATTACHMENTS:

- Aerial Map
- ORD - site plan review
- Zoning map with Legend (1)
- EXHIBIT - Letter of Transmittal and Project Narrative
- EXHIBIT - Site Plan
- EXHIBIT - Color Elevations - Annotated
- EXHIBIT - Traffic Impact Study

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Scott Lamerand, District 2 Councilman
SECONDER:	Doug Myslinski, District 3 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

301 W. Johnson Street – Site Plan Review



Attachment: Aerial Map (2022-61 : Site Plan Review - 301 W. Johnson Street)

ORDINANCE NO. _____

AN ORDINANCE GRANTING SITE PLAN APPROVAL FOR
301 W. JOHNSON STREET

WHEREAS, pursuant to an application for Site Plan approval and public meeting, held on July 11, 2022, the Village Council of the Village of Palatine, in accordance with the Municipal Code of the Village of Palatine, in such case made and provided, has held such public meeting regarding granting site plan approval to permit a 58-unit residential building, per Section 4.14 of the Palatine Zoning Ordinance, on the property commonly known as 301 W. Johnson Street.

NOW, THEREFORE, BE IT ORDAINED, by the Mayor and Village Council of the Village of Palatine, Cook County, Illinois, acting in the exercise of their home rule power, that:

SECTION 1: Site Plan approval to permit a 58-unit residential building, per Section 4.14 of the Palatine Zoning Ordinance, is hereby granted, pursuant to Section 4.14 of the Palatine Zoning Ordinance, subject to the following condition(s):

1. **The site plan for the residential building shall substantially conform to the plans prepared by KBA architects, dated 03/25/202, as revised, the elevations dated 05/16/22, the KLOA Traffic Impact Study, dated 05/13/22, as revised, and the transmittal letter from Northpointe Development Corporation, except as such plans may be changed to conform to Village Codes and Ordinances.**

2. **A conservation easement or other acceptable legal mechanism shall be submitted in a manner acceptable to the Village Attorney, prior to the issuance of a certificate of occupancy, to address the preservation and maintenance of the existing landscaping remaining on the portion of the property to the west and south of the creek.**

3. **The final landscape and screening plan shall be revised in a manner acceptable to the Director of Planning and Zoning.**

4. **The final traffic directional signage plan shall be submitted in a manner acceptable to the Village Engineer.**

5. **The final engineering plans shall be revised in a manner acceptable to the Village Engineer. MWRD and WMO floodplain requirements are in effect. MWRD and WMO wetland and riparian requirements are in effect. The creek banks should be evaluated for stability and any maintenance regarding erosion.**

Attachment: ORD - site plan review (2022-61 : Site Plan Review - 301 W. Johnson Street)

SECTION 2: **That this ordinance shall be in full force and effect from and after its passage and approval as provided by law.**

PASSED: This ____day of _____, 2022

AYES:_____ NAYS:_____ ABSENT:_____ PASS:_____

APPROVED by me this _____day of _____, 2022

_____
Mayor of the Village of Palatine

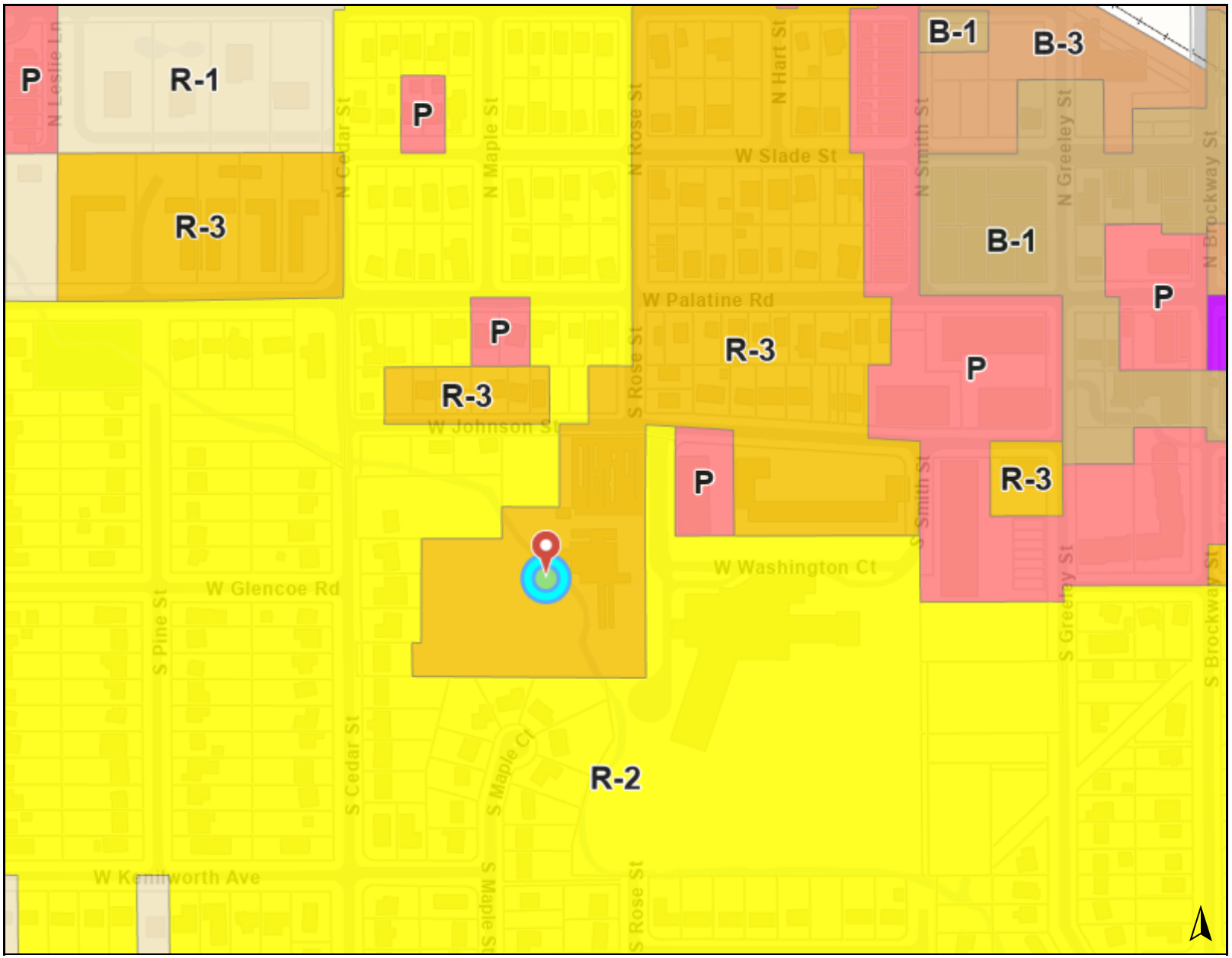
ATTESTED and FILED in the office of the Village Clerk

this ____day of _____, 2022

_____
Village Clerk

Attachment: ORD - site plan review (2022-61 : Site Plan Review - 301 W. Johnson Street)

GISConsortium | Current Zoning Map



Legend

Zoning and Development

Zoning

- P: Planned Unit Development
- R-1: Single Family
- R-2: Single Family
- R-3: High Density Multi-Family
- B-1: Shopping Center
- B-3: Central Business
- U: Utility/Municipal

0 500 1000 ft

Print Date: 6/30/2022

Notes

301 W. Johnson Street

Disclaimer: The GIS Consortium and MGP Inc. are not liable for any use, misuse, modification or disclosure of any map provided under applicable law. This map is for general information purposes only. Although the information is believed to be generally accurate, errors may exist and the user should independently confirm for accuracy. The map does not constitute a regulatory determination and is not a base for engineering design. A Registered Land Surveyor should be consulted to determine precise location boundaries on the ground.

Attachment: Zoning map with Legend (1) (2022-61 : Site Plan Review - 301 W. Johnson Street)

NORTHPOINTE
DEVELOPMENT CORPORATION

Letter of Transmittal and Project Narrative

Northpointe Development II Corporation is pleased to submit this Site Plan Review application for 301 W. Johnson Street in Palatine, Illinois (the "Community"). Northpointe plans to develop the Community on the 4.96 acres (216,145 S.F.) located on the former Kinsch Florist and Garden Center at the SWC of Johnson Street and S. Rose Street ("Site").

Specifically, 301 Johnson will be comprised of 58 residential units, contained within a single building that ranges from two to three stories in height. Specifically, 24 one-bedroom, 19 two-bedroom, and 15 three-bedroom units will be provided. Units along Johnson Street are proposed as two-story walk-up townhome style apartments.

To serve as a buffer to single family homes – no improvements are proposed on the West side of the Salt Creek. Additional landscaping will be provided along the site's periphery. ***See Exhibit 1.***

301 Johnson will set aside units for individuals earning between 30-80% of Area Median Income.

Residents will have access to a community garden, grill area, and playground (over 1,200 S.F.) along with indoor community space, a fitness room, and leasing office.

The site plan has been designed to adhere to all requirements of Palatine's R-3 Zoning District – no variances are being requested. An additional acre of land is provided beyond district density standards. Our team believes more parking spaces are provided than necessary – with most residents anticipated to park in underground stalls.

With masonry serving as the primary building material, elevations are proposed to confirm with surrounding multi-family developments. ***See Exhibit 2.***

Our team believes this is an incredible location for high-quality multi-family housing, provided:

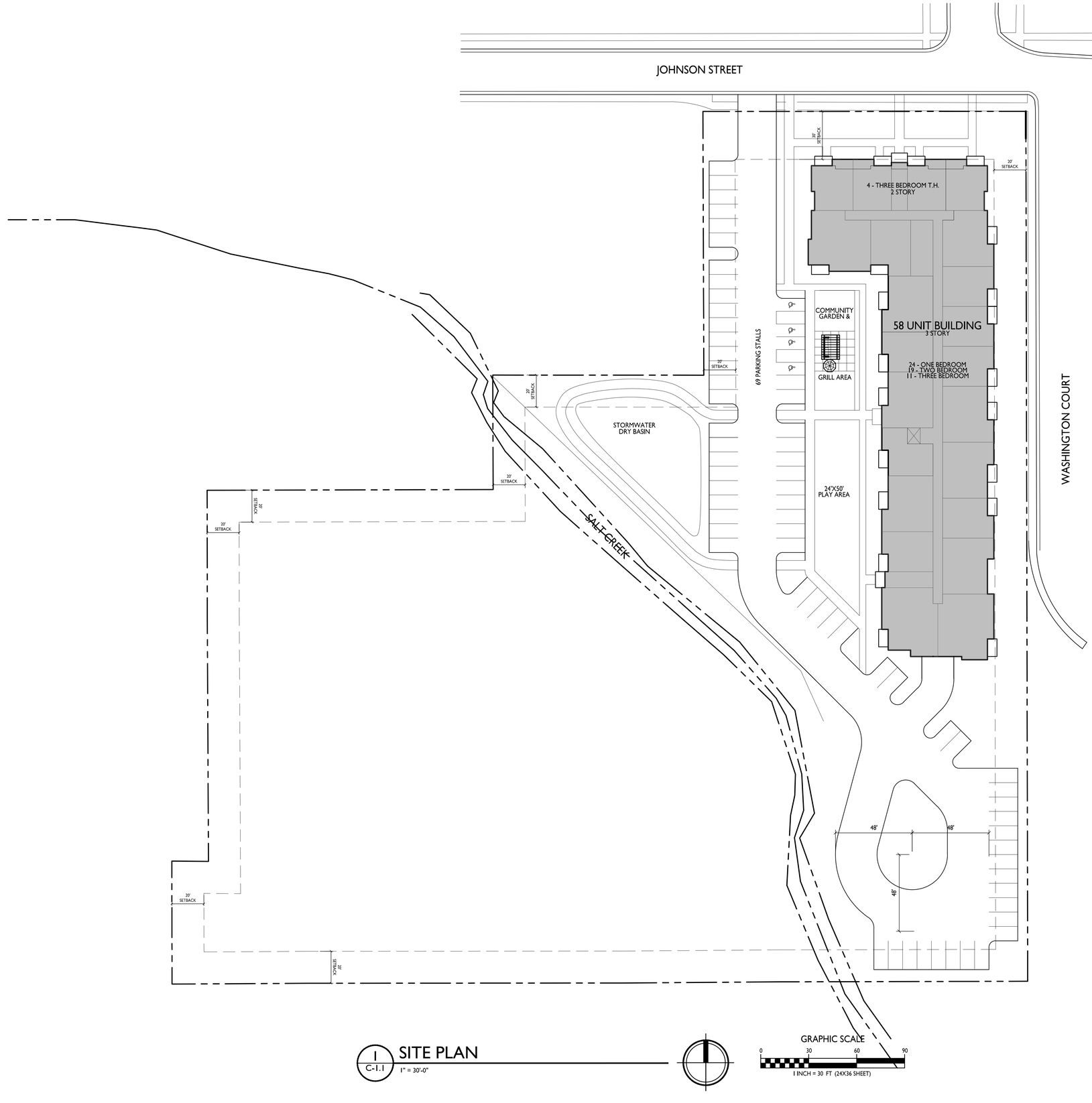
- Minimal Impact on Neighborhood Traffic Patterns. ***See Exhibit 3.***
- Surrounded by denser multi-family housing
- Location in the Downtown Transit Oriented Development District
    - Aligns with recommendation of providing Density Transitions
    - Site Plan aligns with Development Strategy - Site 13 Concept
- Walk Score of 70 – Very Walkable
    - Within a ½ mile walkable distance to the Palatine Metra Station
    - Immediate proximity to Stuart R. Paddock School

Northpointe looks forward to presenting details regarding the proposed Community, and to securing the City approval necessary to move forward.

Jacob Victor

Jacob Victor
Vice President of Development
Northpointe Development II Corporation

Attachment: EXHIBIT - Letter of Transmittal and Project Narrative (2022-61 : Site Plan Review - 301 W. Johnson Street)



1 C-1.1 SITE PLAN
1" = 30'-0"

GRAPHIC SCALE
0 30 60 90
1 INCH = 30 FT (24X36 SHEET)

SITE DEVELOPMENT DATA:

DENSITIES	
LOT AREA	216,145 S.F. / 4.96 ACRES
REQUIRED LOT AREA	171,000 S.F. / 3.93 ACRES
DWELLING UNITS	58 UNITS
LOT AREA / D.U.	3,726 S.F./UNIT
DENSITY	11.69 UNITS/ACRE
GROSS RESIDENTIAL FLOOR AREA	66,706 S.F. (NOT INCL. GARAGES)
TOTAL BUILDING FOOTPRINT	23,318 S.F.
FLOOR AREA RATIO	0.31
IMPERVIOUS (INCLUDING BLDG)	65,652 S.F.
LOT COVERAGE	30.37% (10.79% BLDG, 19.58% SITE)
BUILDING HEIGHT	2 STORIES / 37'-6 " (TOWNHOUSE) 3 STORIES / 49'-11 1/2"(APMT)
DWELLING UNIT MIX:	
ONE BED	24
TWO BED	19
THREE BED	11
THREE BED (TOWNHOUSE)	4
TOTAL	58 UNITS
VEHICLE PARKING :	
UNDERGROUND GARAGE	54
SURFACE	69
TOTAL	123 VEHICLE STALLS
PARKING RATIO	2.1 STALLS/UNIT

***ALL R-3 ZONING REQUIREMENTS ARE MET AND NO VARIANCES ARE BEING REQUESTED.

knothe bruce ARCHITECTS
Phone: 608.836.3690
7601 University Ave, Ste 201
Middleton, WI 53562

NORTHPOINTE DEVELOPMENT CORPORATION

ISSUED
Issued for City Review - March 25, 2022
Reissued for City Review - April 22, 2022
Reissued for City Review - May 13, 2022

PROJECT TITLE
Northpointe Development Palatine Site Development

Johnson St and Washington Ct

SHEET TITLE
Site Plan

SHEET NUMBER
C-1.1

PROJECT NO. 20xx

© Knothe & Bruce Architects, LLC

Attachment: EXHIBIT - Site Plan (2022-61 : Site Plan Review - 301 W. Johnson Street)

Palatine 2

Concept Elevations
Palatine, IL
May 16, 2022

knothe bruce ARCHITECTS

Attachment: EXHIBIT - Color Elevations - Annotated (2022-61 : Site Plan Review - 301 W. Johnson Street)

Traffic Impact Study
Proposed Residential Development
Palatine, Illinois

Prepared For:

NorthPoint™ DEVELOPMENT

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

May 13, 2022

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

1. Introduction

This report summarizes the methodologies, results, and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for a proposed residential development to be located in Palatine, Illinois. The site, which is currently vacant, is located in the southwest quadrant of the intersection of Johnson Street with Washington Court. As proposed, the site will be developed with a three-story apartment building with 58 units. Parking will be provided via a 54-space underground garage and a 62-space surface parking lot. Access to the development will be provided via a proposed full movement access drive on Johnson Street.

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed development will have on traffic conditions in the area, and determine if any additional roadway or access improvements are necessary to accommodate traffic generated by the proposed development. **Figure 1** shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site.

The sections of this report present the following:

- Existing roadway conditions
- A description of the proposed development
- Directional distribution of the development traffic
- Vehicle trip generation for the development
- Future traffic conditions including access to the development
- Traffic analyses for the weekday morning and weekday evening peak hours
- Recommendations with respect to adequacy of the site access and adjacent roadway system

Traffic capacity analyses were conducted for the weekday morning and weekday evening peak hours for the following conditions:

1. Existing Traffic Conditions – Analyzes the capacity of the existing roadway system using peak hour traffic volumes conducted in 2022.

2. Year 2028 No-Build Conditions – Analyzes the capacity of the existing roadway system using existing traffic volumes increased by an ambient area growth factor not attributable to any particular development.

3. Year 2028 Total Projected Conditions – Analyzes the capacity of the future roadway system using the projected traffic volumes that include the Year 2028 no-build conditions and the traffic estimated to be generated by the proposed development.

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

Site Location **Figure 1**

Proposed Residential Development
Palatine, Illinois

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

Aerial View of Site **Figure 2**

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

2. Existing Conditions

Existing transportation conditions in the vicinity of the site were documented based on field visits conducted by KLOA, Inc. in order to obtain a database for projecting future conditions. The following provides a description of the geographical location of the site, physical characteristics of the area roadway system including lane usage and traffic control devices, and existing peak hour traffic volumes.

Site Location

The site, which is currently vacant, is bounded by Johnson Street to the north, Washington Court to the east, and single-family homes to the west and south. Land uses in the vicinity of the site are primarily residential and consist of both single-family homes and other multi-family developments including the Palatine Park Apartments to the north and Washington Square Condos and The Stratford Condominiums to the east. The Stuart R. Paddock Elementary School is located on the east side of Washington Court south of Johnson Street.

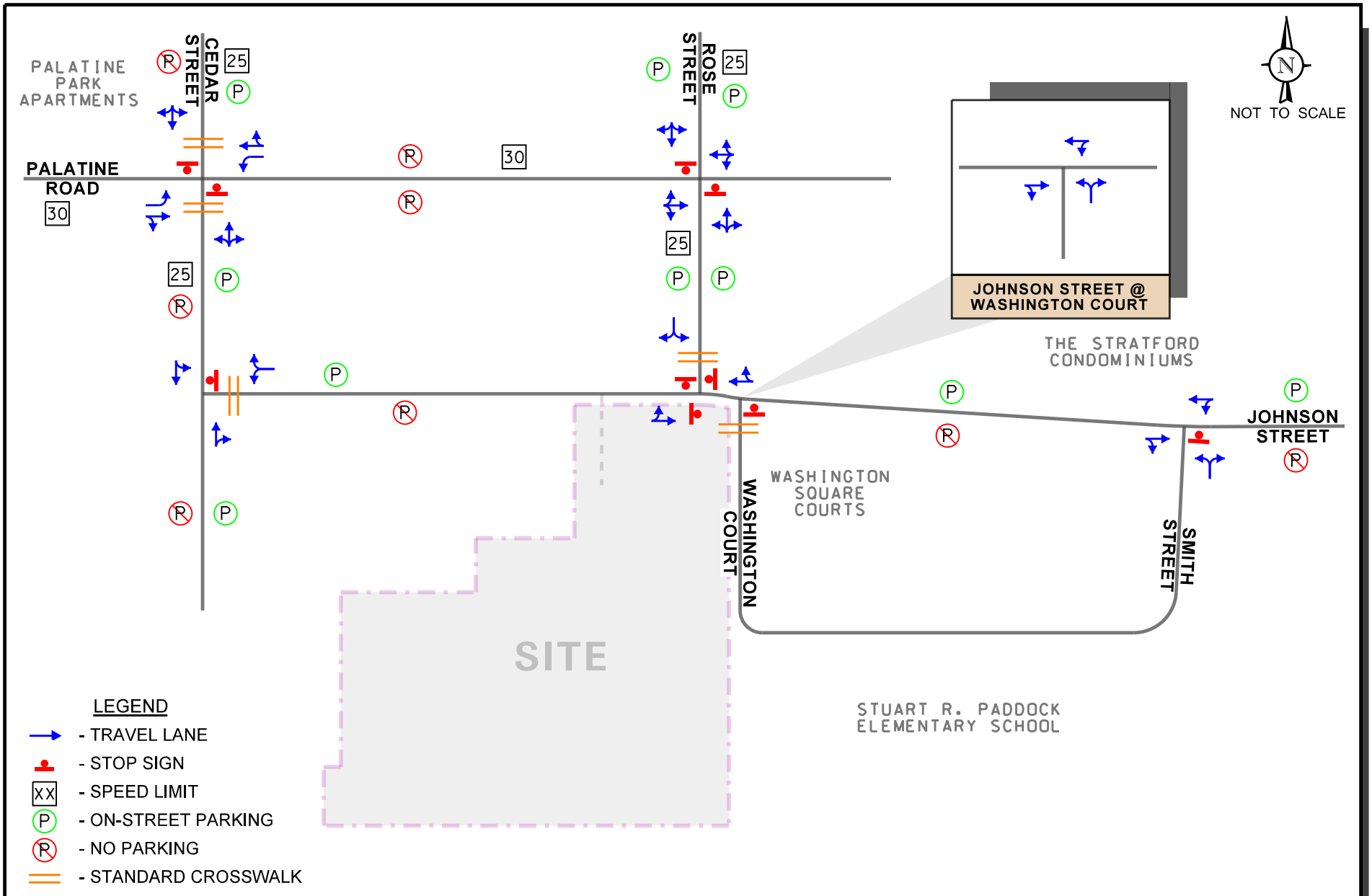
Existing Roadway System Characteristics

The characteristics of the existing roadways near the development are described below and illustrated in **Figure 3.**

Palatine Road is an east-west, minor arterial road that in the vicinity of the site provides one lane in each direction. At its unsignalized intersection with Cedar Street, Palatine Road provides an exclusive left-turn lane and a shared through/right-turn lane on both approaches. At its unsignalized intersection with Rose Street, Palatine Road provides one lane in each direction. The west leg of this intersection provides a high-visibility crosswalk. Palatine Road is under the jurisdiction of the Illinois Department of Transportation (IDOT), carries an annual average daily traffic (AADT) volume of 12,400 vehicles (IDOT 2018), and has posted speed limit of 30 miles per hour. Parking is prohibited on both side of the roadway. Palatine Road is designated as a school zone between Maple Street and approximately 200 feet east of Rose Street.

Cedar Street is a north-south, local road that provides one lane in each direction. At its unsignalized intersection with Palatine Road, provides a shared left-turn/through/right-turn lane on both approaches and is under stop sign control. At its unsignalized intersection with Johnson Street, Cedar Street provides one lane in each direction. The north and south legs of this intersection provide standard style crosswalks. Cedar Street is under the jurisdiction of the Village of Palatine, carries an annual average daily traffic (AADT) volume of 1,950 vehicles (IDOT 2018), and has posted speed limit of 25 miles per hour. Parking is generally permitted on the east side of the roadway but is restricted to 4-hour parking between 8:00 A.M. and 6:00 P.M. on weekdays.

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)



Proposed Residential Development
Palatine, Illinois

Existing Roadway Characteristics

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 22-153

Figure: 3

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

Johnson Street is an east-west, local road that extends east from Cedar Street to its terminus at Greely Street and provides one lane in each direction. At its unsignalized intersection with Cedar Street, Johnson Street provides a shared left-turn/right-turn lane on the westbound approach and is under stop sign control. The east leg of this intersection provides a standard style crosswalk. At its all-way stop controlled intersection with Rose Street, Johnson Street provides one lane in both directions. The east leg of this intersection provides a high-visibility crosswalk and the west leg provides a standard style crosswalk. At its unsignalized intersections Washington Court and Smith Street, Johnson Street provides one lane in each direction. Johnson Street is under the jurisdiction of the Village of Palatine. Parking is generally permitted on the north side of the roadway but is restricted to 4-hour parking between 8:00 A.M. and 6:00 P.M. on weekdays.

Rose Street is a north-south, local road that extends north from Johnson Street and provides one lane in each direction. At its unsignalized intersection with Palatine Road, Rose Street provides a shared left-turn/through/right-turn lane on both approaches and is under stop sign control. The north and south legs of this intersection provides a standard style crosswalk. At its all-way stop controlled intersection with Johnson Street, Rose Street provides a shared left-turn/right-turn lane on the southbound approach. The north leg of this intersection provides a standard style crosswalk. Rose Street is under the jurisdiction of the Village of Palatine. Parking is generally permitted on the north side of the roadway but is restricted to 4-hour parking between 8:00 A.M. and 6:00 P.M. on weekdays.

Washington Court is a north-south, local road that extends south from Johnson Street and provides one lane in each direction. At its unsignalized intersection with Johnson Street, Washington Court provides a shared left-turn/right-turn lane on the northbound approach and is under stop sign control. The south leg of this intersection provides a standard style crosswalk. Washington Court is under the jurisdiction of the Village of Palatine. Parking is generally permitted on both sides of the roadway.

Smith Street is a north-south, local road that extends south from Johnson Street and provides one lane in each direction. At its unsignalized intersection with Johnson Street, Smith Street provides a shared left-turn/right-turn lane on the northbound approach and is under stop sign control. Smith Street is under the jurisdiction of the Village of Palatine. Parking is generally permitted on the east side of the roadway.

Stuart R. Paddock Elementary School Operations

The Stuart R. Paddock Elementary School is located on the east side of Washington Court south of Johnson Street. Access to the school is provided via an access road that extends between Washington Court and Smith Street along the front of the school building. The school starts at 8:25 A.M. and dismissal is at 3:05 P.M. Observations of school activity indicated the following:

- All bus pick-up and drop-off activity was contained within the school site.
- All passenger vehicle pick-up and drop-off activity was contained within the school site.

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

- Passenger vehicle queueing occurred within the school site and on Washington Court north and south of the school access road.

- During the morning, passenger vehicles began queueing at 7:50 A.M. drop-off began at 8:10 A.M., and queues were cleared by 8:20 A.M.

- During the afternoon, passenger vehicles began queueing at 2:35 P.M. pick-up began at 3:00 P.M., and queues were cleared by 3:10 P.M.

- The maximum queue during the morning was 64 vehicles and the maximum queue during the afternoon was 61 vehicles.

- During the morning, passenger vehicles queues reached Johnson Street at 8:10 A.M. approximately 10 vehicles were required to queue on Johnson Street and Rose Street from 8:10 A.M. to 8:14 A.M.

- During the afternoon, passenger vehicle queues did not reach Johnson Street.

- A traffic controller was stationed at the intersection of Rose Street with Johnson Street to direct traffic and prevent vehicles from blocking the intersection.

As can be seen, school operations are generally contained to Washington Court and the school site and have a limited impact on traffic operation in the area.

Existing Traffic Volumes

In order to determine current traffic conditions within the study area, KLOA, Inc. conducted peak period traffic counts utilizing Miovision Scout Collection Units at the following intersections:

- Palatine Road with Cedar Street
- Palatine Road with Rose Street
- Johnson Road with Cedar Street
- Johnson Road with Rose Street
- Johnson Road with Washington Court
- Johnson Road with Smith Street

The traffic counts were conducted on Thursday, April 21, 2022 during the weekday morning (7:00 A.M. to 9:00 A.M.) and weekday afternoon/evening (2:00 P.M. to 6:00 P.M.) peak periods. The results of the traffic counts show that the peak hours of traffic generally occur between 7:30 A.M. and 8:30 A.M. during the weekday morning peak period and between 4:45 P.M. and 5:45 P.M. during the weekday afternoon/evening peak period. As can be seen, the peak hour of traffic during the weekday morning coincides with the start of the Stuart R. Paddock Elementary School, but the peak hour of traffic during the weekday afternoon/evening occurs after the school's release. Copies of the traffic count summary sheets are included in the Appendix. In order to accurately represent

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

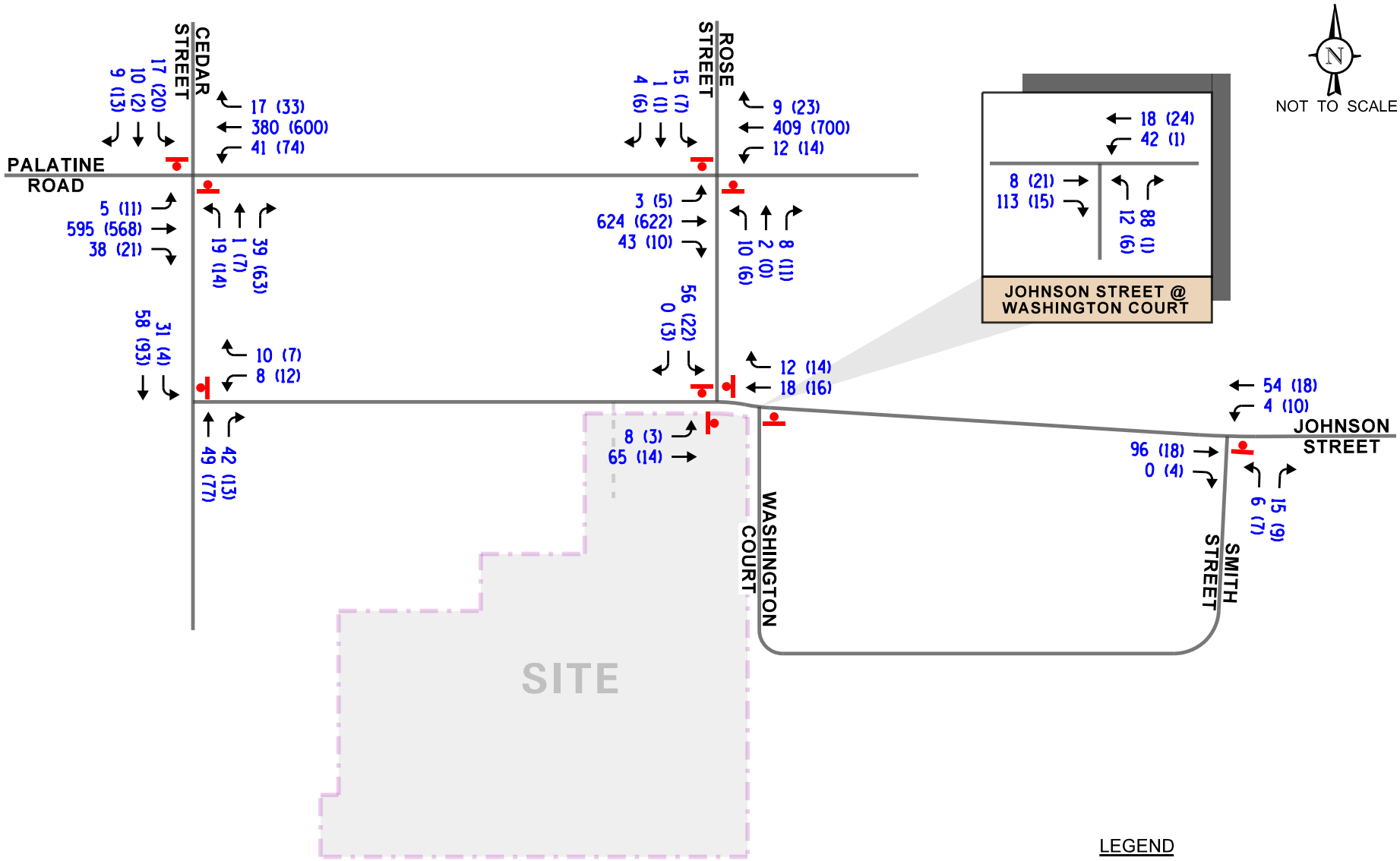
Year 2022 conditions due to the ongoing pandemic, the traffic volumes were compared to IDOT hourly counts on Palatine Road conducted in 2018. The 2022 traffic counts were found to be higher than the 2018 counts and were not increased. The Year 2022 base traffic volumes are illustrated in **Figure 4**.

Crash Analysis

KLOA, Inc. obtained accident data for the most recent available past five years (2016 to 2020) for the study area intersections. A review of the data revealed there were two crashes reported at the intersection of Palatine Road with Cedar Street, three crashes reported at the intersection of Palatine Road with Rose Street, one crash reported at the intersection of Johnson Street with Cedar Street, and no crashes reported at the intersections of Johnson Street with Rose Street, Washington Court, and Smith Street. Further, no fatalities were reported at any of the intersections during the reviewed period.[1].

[1] IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s). Additionally, for coding years 2015 to present, the Bureau of Data Collection uses the exact latitude/longitude supplied by the investigating law enforcement agency to locate crashes. Therefore, location data may vary in previous years since data prior to 2015 was physically located by bureau personnel.

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)



Proposed Residential Development
Palatine, Illinois

Existing Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 22-153

Figure: 4

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

3. Traffic Characteristics of the Proposed Development

In order to properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed development, including the directional distribution and volumes of traffic that it will generate.

Proposed Site and Development Plan

As proposed, the site will be developed with a three-story apartment building with 58 units. Parking will be provided via a 54-space underground garage and a 62-space surface parking lot. Access to the development will be provided via full movement access drive on Johnson Street located approximately 135 feet west of Rose Street. The access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control. A site plan depicting the proposed development layout and access is included in the Appendix.

Directional Distribution

The directions from which residents will approach and depart the site were estimated based on existing travel patterns, as determined from the traffic counts. **Figure 5** illustrates the directional distribution of the development-generated traffic. Figure 5 also shows the distance, in feet, between the existing and proposed access intersections.

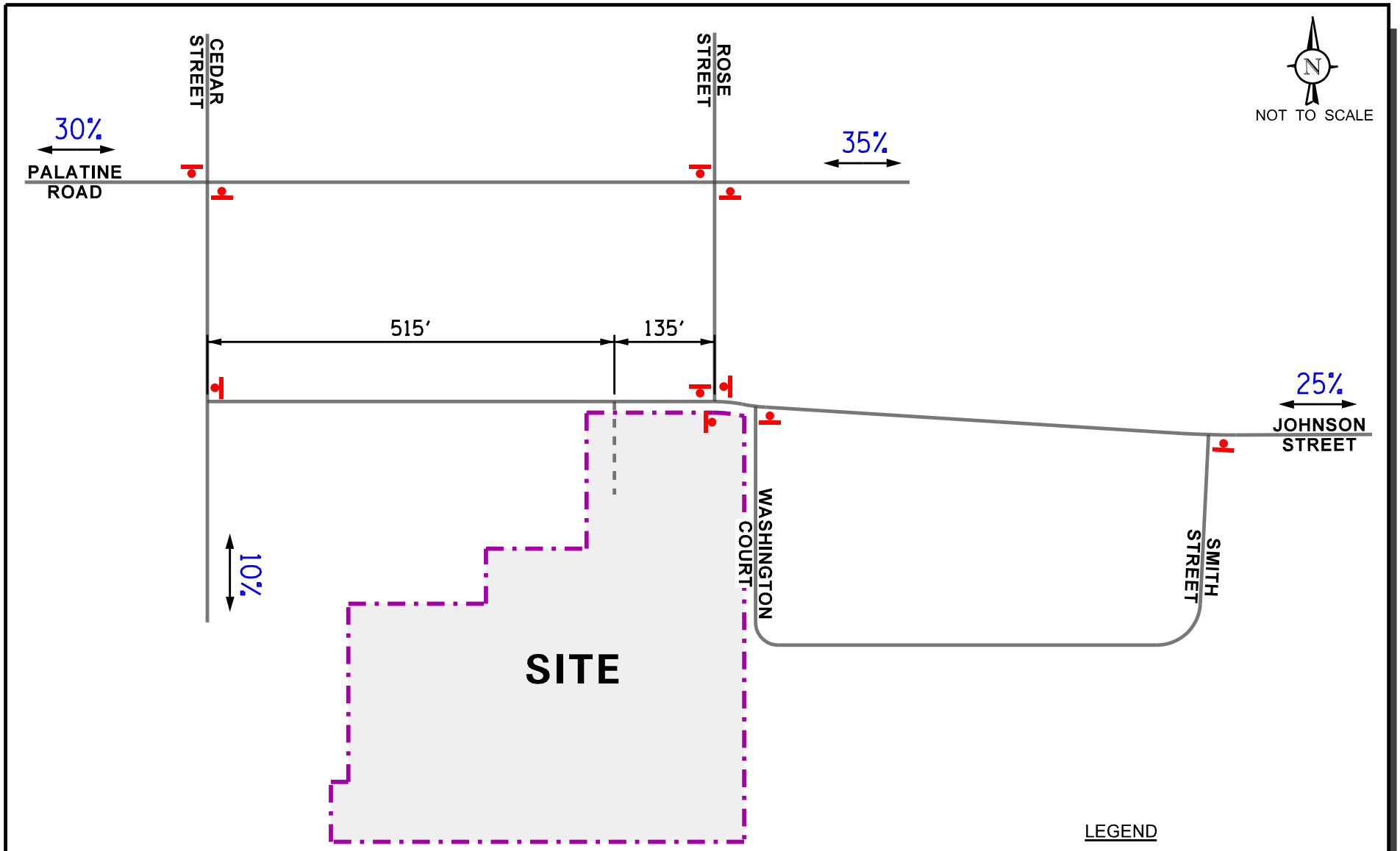
Peak Hour Traffic Volumes

The number of peak hour trips estimated to be generated by the proposed residential development was based on vehicle trip generation rates contained in *Trip Generation Manual*, 11th Edition, published by the Institute of Transportation Engineers (ITE). The "Multifamily Housing (Low-Rise)" (Land-Use Code 220) rates were used. **Table 1** shows the weekday morning and evening peak hour traffic to be generated by the proposed development.

Table 1
PROJECTED DEVELOPMENT-GENERATED TRAFFIC VOLUMES

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Daily Traffic	
		In	Out	Total	In	Out	Total	In	Out
220	Multifamily Housing (Low-Rise) - 58 Units	10	31	41	28	17	45	224	224

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)



Proposed Residential Development
Palatine, Illinois

Directional Distribution

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 22-153

Figure: 5

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

4. Projected Traffic Conditions

The total projected traffic volumes include the existing traffic volumes, increase in background traffic due to growth, and the traffic estimated to be generated by the proposed subject development.

Development Traffic Assignment

The estimated weekday morning and evening peak hour traffic volumes that will be generated by the proposed development were assigned to the roadway system in accordance with the previously described directional distribution (Figure 5). The traffic assignment for the development is illustrated in **Figure 6.**

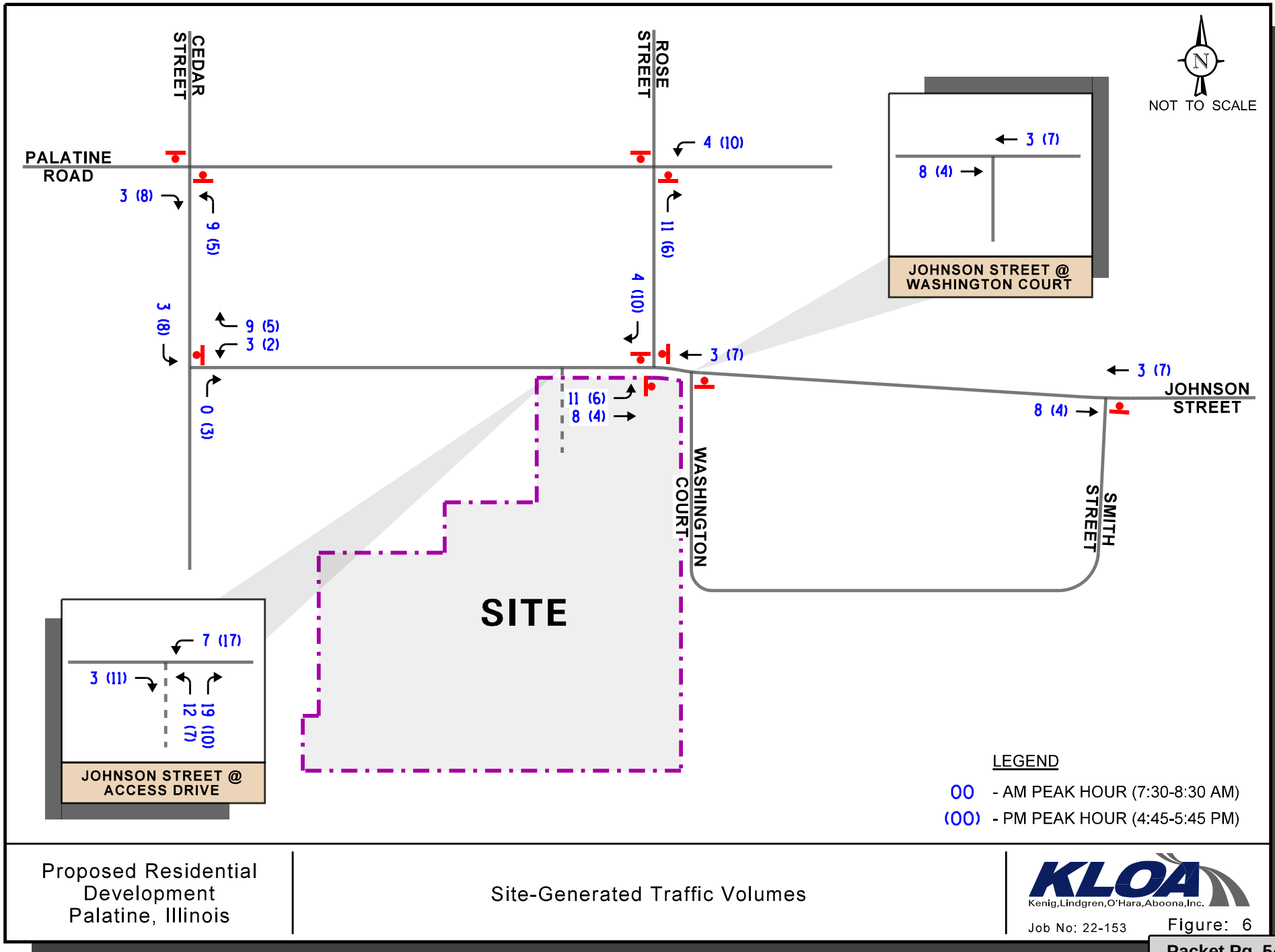
Background Traffic Conditions

The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on Average Daily Traffic (ADT) projections provided by the Chicago Metropolitan Agency for Planning (CMAP), the base traffic volumes were increased by an annually compounded growth rate of 0.6 percent per year for six years (buildout year plus five years) for a total of approximately 4.0 percent to project Year 2028 background conditions. **Figure 7** illustrates the Year 2028 no-build conditions. A copy of the CMAP 2050 projections letter is included in the Appendix.

Total Projected Traffic Volumes

The development-generated traffic (Figure 6) was added to the Year 2028 no-build traffic volumes (Figure 7) to determine the Year 2028 total projected traffic volumes, shown in **Figure 8.**

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)



Proposed Residential Development
Palatine, Illinois

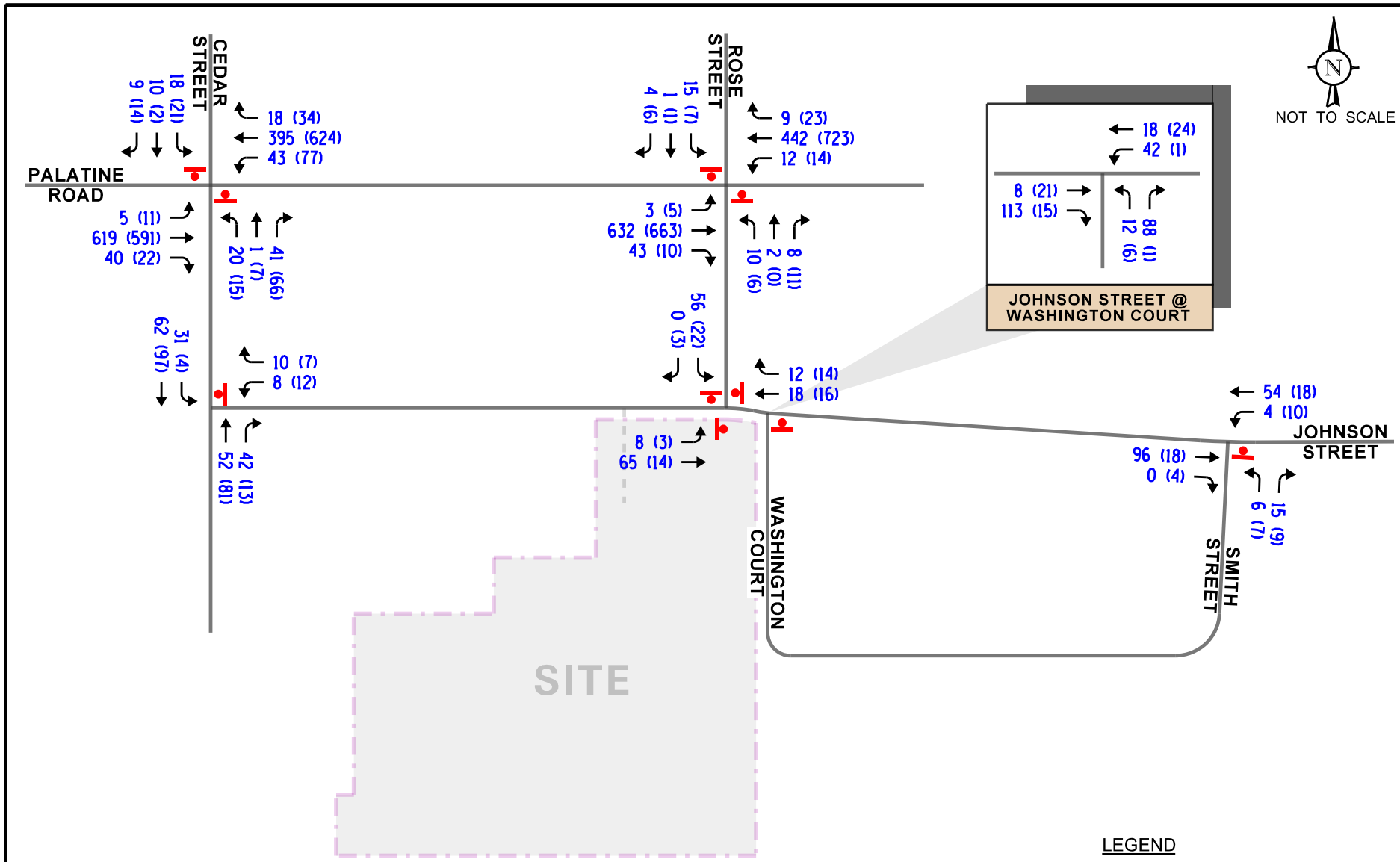
Site-Generated Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 22-153

Figure: 6

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)



Proposed Residential Development
Palatine, Illinois

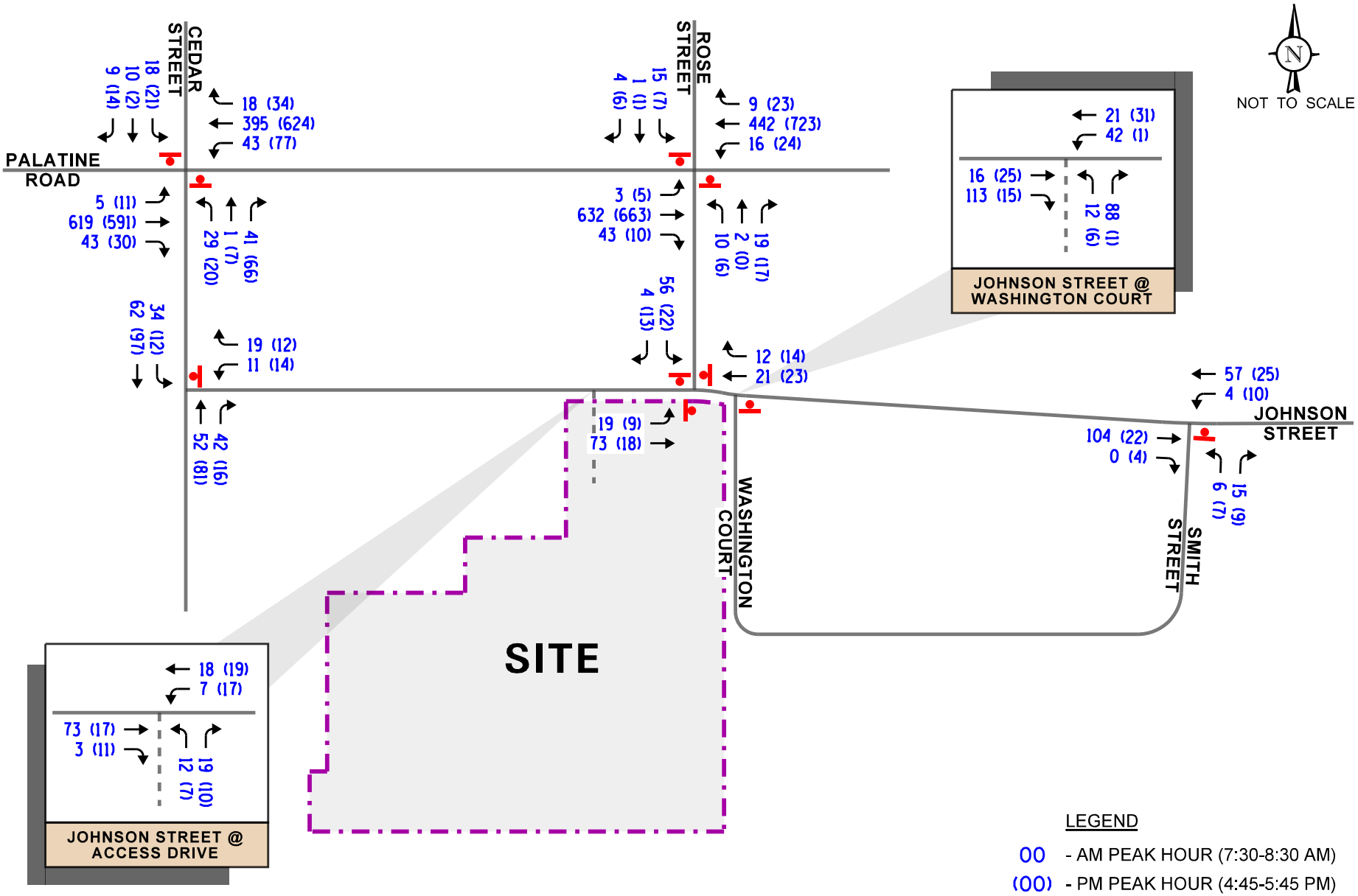
Year 2028 No-Build Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 22-153

Figure: 7

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)



Proposed Residential Development
Palatine, Illinois

Year 2028 Total Projected Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 22-153

Figure: 8

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday morning and weekday evening peak hours. The analysis includes conducting capacity analyses to determine how well the roadway system and access drives are projected to operate and whether any roadway improvements or modifications are required.

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning and evening peak hours for the existing traffic volumes, Year 2028 no-build traffic volumes, and Year 2028 total traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM), 6th Edition* and analyzed using Synchro/SimTraffic 11 software. The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections and unsignalized intersections are included in the Appendix of this report.

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the existing, no-build, and total projected conditions are presented in **Tables 2** through **4**. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix,

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

Table 2
CAPACITY ANALYSIS RESULTS – EXISTING CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Palatine Road with Cedar Street[1]				
• Eastbound Left Turn	A	8.8	A	8.9
• Westbound Left Turn	A	9.0	A	9.0
• Northbound Approach	C	16.1	C	17.2
• Southbound Approach	C	18.0	C	21.9
Palatine Road with Rose Street[1]				
• Eastbound Left Turn	A	8.2	A	9.2
• Westbound Left Turn	A	9.0	A	9.0
• Northbound Approach	C	22.4	C	24.2
• Northbound Left Turn	C	24.2	D	30.1
Johnson Street with Cedar Street[1]				
• Westbound Approach	A	9.7	A	9.4
• Southbound Left Turn	A	7.6	A	7.4
Johnson Street with Rose Street[2]				
• Overall	A	8.0	A	7.1
• Eastbound Approach	A	8.0	A	7.1
• Westbound Approach	A	7.6	A	6.9
• Northbound Approach	A	8.3	A	7.3
Johnson Street with Washington Court[1]				
• Westbound Left Turn	A	8.0	A	7.3
• Northbound Approach	B	10.3	A	9.0
Johnson Street with Smith Street[1]				
• Westbound Left Turn	A	7.6	A	7.3
• Northbound Approach	B	10.5	A	8.7

1 – Two-Way Stop Controlled
2 – All-Way Stop Controlled
LOS = Level of Service
Delay is measured in seconds.

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

Table 3
CAPACITY ANALYSIS RESULTS – NO-BUILD CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Palatine Road with Cedar Street[1]				
• Eastbound Left Turn	A	8.8	A	9.0
• Westbound Left Turn	A	9.1	A	9.2
• Northbound Approach	C	16.7	C	18.1
• Southbound Approach	C	18.9	C	23.1
Palatine Road with Rose Street[1]				
• Eastbound Left Turn	A	8.3	A	9.3
• Westbound Left Turn	A	9.0	A	9.2
• Northbound Approach	C	23.5	D	26.4
• Northbound Left Turn	D	25.6	D	32.8
Johnson Street with Cedar Street[1]				
• Westbound Approach	A	9.7	A	9.5
• Southbound Left Turn	A	7.6	A	7.4
Johnson Street with Rose Street[2]				
• Overall	A	8.0	A	7.1
• Eastbound Approach	A	8.0	A	7.1
• Westbound Approach	A	7.6	A	6.9
• Northbound Approach	A	8.3	A	7.3
Johnson Street with Washington Court[1]				
• Westbound Left Turn	A	8.0	A	7.3
• Northbound Approach	B	10.3	A	9.0
Johnson Street with Smith Street[1]				
• Westbound Left Turn	A	7.6	A	7.3
• Northbound Approach	B	10.5	A	8.7

1 – Two-Way Stop Controlled
2 – All-Way Stop Controlled
LOS = Level of Service
Delay is measured in seconds.

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

Table 4
CAPACITY ANALYSIS RESULTS –TOTAL PROJECTED CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Palatine Road with Cedar Street[1]				
• Eastbound Left Turn	A	8.8	A	9.0
• Westbound Left Turn	A	9.2	A	9.2
• Northbound Approach	C	17.8	C	19.2
• Southbound Approach	C	18.9	C	23.3
Palatine Road with Rose Street[1]				
• Eastbound Left Turn	A	8.3	A	9.3
• Westbound Left Turn	A	9.0	A	9.2
• Northbound Approach	C	20.5	C	24.3
• Northbound Left Turn	D	26.6	D	34.6
Johnson Street with Cedar Street[1]				
• Westbound Approach	A	9.7	A	9.5
• Southbound Left Turn	A	7.6	A	7.4
Johnson Street with Rose Street[2]				
• Overall	A	8.3	A	7.2
• Eastbound Approach	A	8.4	A	7.3
• Westbound Approach	A	7.7	A	7.0
• Northbound Approach	A	8.4	A	7.2
Johnson Street with Washington Court[1]				
• Westbound Left Turn	A	8.1	A	7.3
• Northbound Approach	B	10.4	A	9.0
Johnson Street with Smith Street[1]				
• Westbound Left Turn	A	7.7	A	7.3
• Northbound Approach	B	10.6	A	8.8
Johnson Street with the Proposed Site Access Drive[1]				
• Westbound Left Turn	A	7.4	A	7.3
• Northbound Approach	A	8.9	A	8.7

1 – Two-Way Stop Controlled
2 – All-Way Stop Controlled
LOS = Level of Service
Delay is measured in seconds.

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

Discussion and Recommendations

The following summarizes how the intersections are projected to operate and identifies any roadway and traffic control improvements necessary to accommodate the development-generated traffic.

Palatine Road with Cedar Street

The results of the capacity analysis indicate that the northbound and southbound movements at this intersection currently operate at LOS C during the weekday morning and weekday evening peak hours. Further, the eastbound and westbound left-turn movements operate at LOS A during both peak hours. Under Year 2028 no-build conditions, all critical movements are projected to continue to operate at the same LOS. Under Year 2028 total projected conditions, all critical movements are projected to operate at the same LOS during both peak hours with increases in delay of approximately one second or less. As such, this intersection can adequately accommodate site generated traffic, and no geometric improvements or traffic control modifications are required as part of the proposed development.

Palatine Road with Rose Street

The results of the capacity analysis indicate that the northbound and southbound movements at this intersection currently operate at LOS D or better during the weekday morning and weekday evening peak hours. Further, the eastbound and westbound left-turn movements operate at LOS A during both peak hours. Under Year 2028 no-build conditions, the northbound and southbound movements are projected to continue to operate at LOS D or better during both peak hours. Under Year 2028 total projected conditions, the northbound and southbound movements are projected to continue to operate at LOS D or better during both peak hours with increases in delay of approximately two seconds or less. Further, the eastbound and westbound left-turn movements are projected to continue to operate at LOS A during both peak hours. As such, this intersection can adequately accommodate site generated traffic, and no geometric improvements or traffic control modifications are required as part of the proposed development.

Johnson Street with Cedar Street

The results of the capacity analysis indicate that all critical movements at this intersection currently operate at LOS A during the weekday morning and weekday evening peak hours. Under Year 2028 no-build conditions, all critical movements are projected to continue to operate at the same LOS during both peak hours. Under Year 2028 total projected conditions, all critical movements are projected to continue to operate at LOS A during both peak hours with increases in delay of less than one second. As such, this intersection can adequately accommodate site generated traffic, and no geometric improvements or traffic control modifications are required as part of the proposed development.

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

Johnson Street with Rose Street

The results of the capacity analysis indicate that this intersection currently operate at LOS A during the weekday morning and weekday evening peak hours. Further, all approaches operate at LOS A during both peak hours. Under Year 2028 no-build conditions, all approaches are projected to continue to operate at the same LOS during both peak hours. Under Year 2028 total projected conditions, this intersection is projected to continue to operate at LOS A during both peak hours with increases in delay of less than one second. Further, all movements are projected to continue to operate at LOS A during both peak hours. As such, this intersection can adequately accommodate site generated traffic, and no geometric improvements or traffic control modifications are required as part of the proposed development.

Johnson Street with Washington Court

The results of the capacity analysis indicate that the northbound approach at this intersection currently operates at LOS B during the weekday morning peak hour and LOS A during the weekday evening peak hour. Further, the westbound left-turn movement operates at LOS A during both peak hours. Under Year 2028 no-build conditions, all critical movements are projected to continue to operate at the same LOS during both peak hours. Under Year 2028 total projected conditions, all critical movements are projected to continue to operate at the same LOS during both peak hours with increases in delay of less than one second. As such, this intersection can adequately accommodate site generated traffic, and no geometric improvements or traffic control modifications are required as part of the proposed development.

Johnson Street with Smith Street

The results of the capacity analysis indicate that the northbound approach at this intersection currently operates at LOS B during the weekday morning peak hour and LOS A during the weekday evening peak hour. Further, the westbound left-turn movement operates at LOS A during both peak hours. Under Year 2028 no-build conditions, all critical movements are projected to continue to operate at the same LOS during both peak hours. Under Year 2028 total projected conditions, all critical movements are projected to continue to operate at the same LOS during both peak hours with increases in delay of less than one second. As such, this intersection can adequately accommodate site generated traffic, and no geometric improvements or traffic control modifications are required as part of the proposed development.

Johnson Street with the Proposed Site Access Drive.

As proposed, access to the development will be provided via full movement access drive on Johnson Street located approximately 250 feet west of Rose Street. The access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control. The results of the capacity analysis indicate that the outbound movements from the proposed access drive are projected to operate at LOS A during the weekday morning and weekday evening peak hours. Further, the westbound left-turn movements into the site are projected to operate at LOS A during both peak hours. As such, this access drive will be adequate in accommodating the traffic projected to be generated by the proposed development and will provide efficient site access.

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

6. Conclusion

Based on the preceding analyses and recommendations, the following conclusions have been made:

- As proposed, the site will be developed with a three-story apartment building with 58 units. Access to the development will be provided via a full movement access drive on Johnson Street.

- The traffic that will be generated by the proposed development can be accommodated by the existing area roadway system and will increase the traffic within the study area by less than four percent.

- The proposed access drive is projected to operate at a good level of service and will be adequate in accommodating the traffic projected to be generated by the proposed development.

- Based on our observations, the Stuart R. Paddock School has a limited impact on area roadway operations and drop-off/pick-up queues are mostly contained along Washington Court and within the school site and will have a limited impact on the accessibility of the proposed development.

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

Appendix

Traffic Count Summary Sheets
Site Plan
CMAP Traffic Projections
Level of Service Criteria
Capacity Analysis Summary Sheets

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

Traffic Count Summary Sheets

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

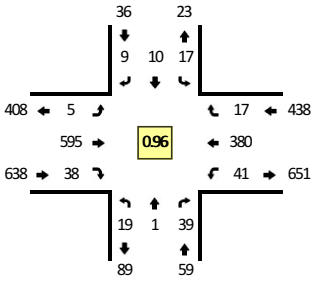
Type of peak hour being reported: System-wide Peak

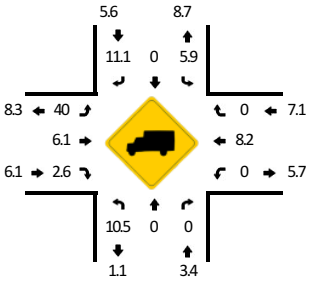
Method for determining peak hour: Total Entering Volume

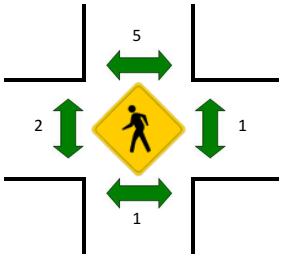
LOCATION: Cedar St -- W Palatine Rd
CITY/STATE: Palatine, IL

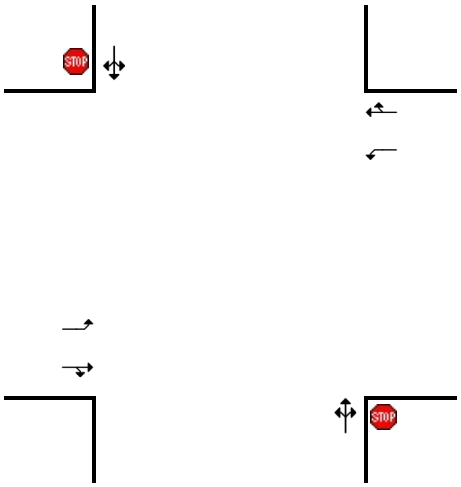
QC JOB #: 15788201
DATE: Thu, Apr 21 2022

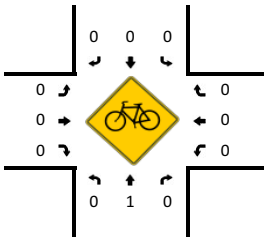
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 8:00 AM -- 8:15 AM

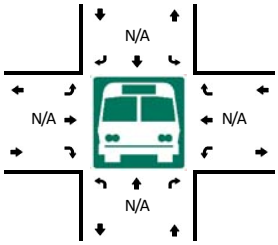


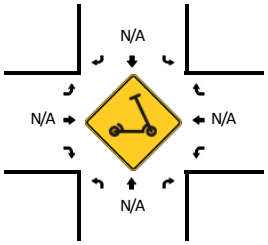












15-Min Count Period Beginning At	Cedar St (Northbound)				Cedar St (Southbound)				W Palatine Rd (Eastbound)				W Palatine Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	0	15	0	5	0	2	0	2	118	4	0	2	62	4	0	215	
7:15 AM	2	0	20	0	6	0	9	0	3	181	6	0	6	64	4	0	301	
7:30 AM	4	0	11	0	4	0	2	0	1	143	2	0	9	111	2	0	289	
7:45 AM	1	1	7	0	1	4	0	0	0	150	6	0	13	86	6	0	275	1080
8:00 AM	3	0	11	0	6	3	2	0	3	155	21	0	10	88	4	0	306	1171
8:15 AM	11	0	10	0	6	3	5	0	1	147	9	0	9	95	5	0	301	1171
8:30 AM	1	2	12	0	6	0	0	0	0	127	5	0	7	88	4	0	252	1134
8:45 AM	1	0	8	0	6	2	1	0	0	122	7	0	5	80	1	0	233	1092

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	12	0	44	0	24	12	8	0	12	620	84	0	40	352	16	0	1224
Heavy Trucks	0	0	0		0	0	0		8	60	4		0	24	0		96
Buses																	
Pedestrians		4				12				0				0			16
Bicycles	0	4	0		0	0	0		0	0	0		0	0	0		4
Scooters																	

Comments:

Report generated on 5/11/2022 6:07 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

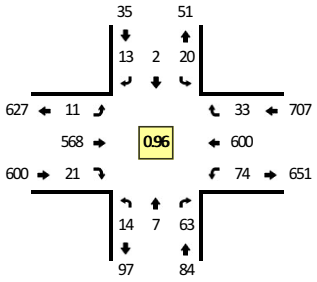
Type of peak hour being reported: System-wide Peak

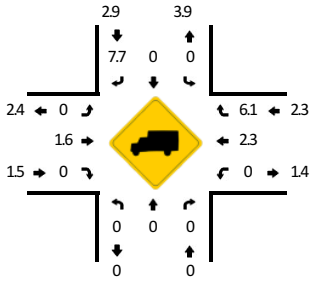
Method for determining peak hour: Total Entering Volume

LOCATION: Cedar St -- W Palatine Rd
CITY/STATE: Palatine, IL

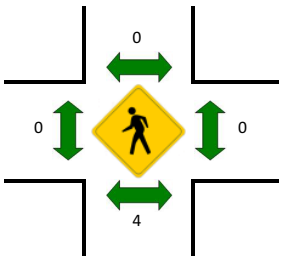
QC JOB #: 15788202
DATE: Thu, Apr 21 2022

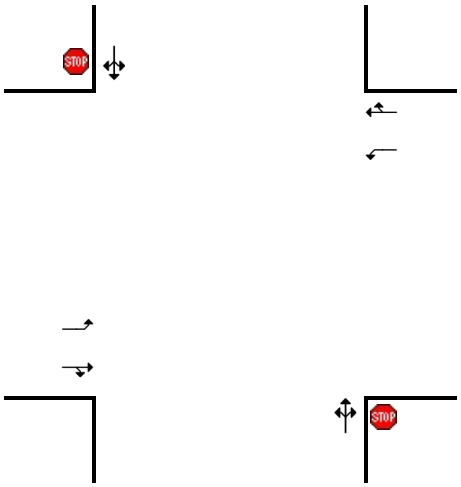
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 4:45 PM -- 5:00 PM

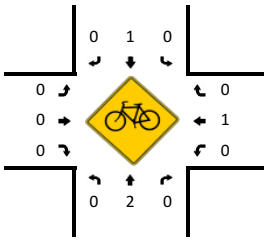


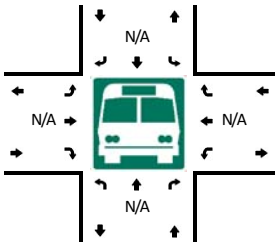


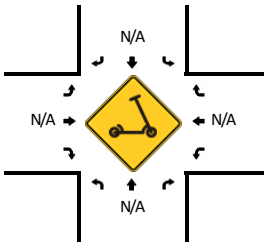
Quality Counts
DATA THAT DRIVES COMMUNITIES











15-Min Count Period Beginning At	Cedar St (Northbound)				Cedar St (Southbound)				W Palatine Rd (Eastbound)				W Palatine Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	2	8	0	5	1	3	0	0	109	2	0	5	91	4	0	230	
2:15 PM	1	1	9	0	6	0	3	0	0	94	5	0	10	106	6	0	241	
2:30 PM	1	1	12	0	5	0	1	0	4	113	7	0	14	102	4	0	264	
2:45 PM	5	2	8	0	1	1	2	0	4	92	6	0	19	132	8	0	280	1015
3:00 PM	4	2	15	0	4	1	7	0	5	113	7	0	12	143	5	0	318	1103
3:15 PM	6	1	25	0	4	0	1	0	1	107	9	0	12	137	15	0	318	1180
3:30 PM	2	1	10	0	4	1	2	0	3	120	3	0	18	151	7	0	322	1238
3:45 PM	3	2	8	0	8	0	1	0	3	121	7	0	19	144	12	0	328	1286
4:00 PM	1	0	17	0	9	0	5	0	4	109	5	0	20	153	8	0	331	1299
4:15 PM	5	0	11	0	2	0	1	0	1	134	3	0	21	150	9	0	337	1318
4:30 PM	0	1	13	0	8	1	2	0	2	119	6	0	12	147	9	0	320	1316
4:45 PM	8	1	15	0	4	1	2	0	1	165	4	0	23	144	5	0	373	1361
5:00 PM	3	2	20	0	5	0	3	0	6	121	4	0	21	153	12	0	350	1380
5:15 PM	1	4	19	0	4	0	3	0	2	151	4	0	9	135	7	0	339	1382
5:30 PM	2	0	9	0	7	1	5	0	2	131	9	0	21	168	9	0	364	1426
5:45 PM	2	0	17	0	8	0	2	0	1	142	6	0	11	144	12	0	345	1398

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	32	4	60	0	16	4	8	0	4	660	16	0	92	576	20	0	1492
Heavy Trucks	0	0	0		0	0	4		0	12	0		0	4	4		24
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	8	0		0	0	0		0	0	0		0	4	0		12
Scooters																	

Comments:

Report generated on 5/11/2022 6:08 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

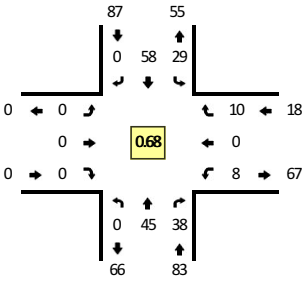
Type of peak hour being reported: System-wide Peak

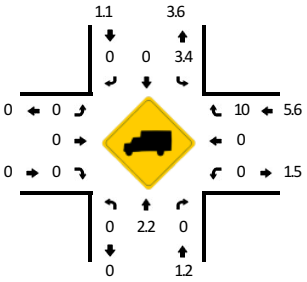
Method for determining peak hour: Total Entering Volume

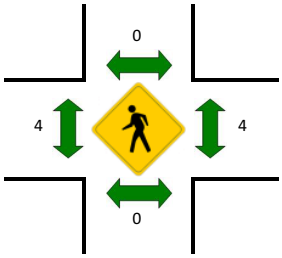
LOCATION: S Cedar St -- Johnson St
CITY/STATE: Palatine, IL

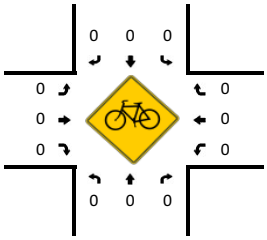
QC JOB #: 15788203
DATE: Thu, Apr 21 2022

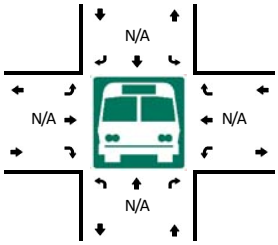
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 8:00 AM -- 8:15 AM

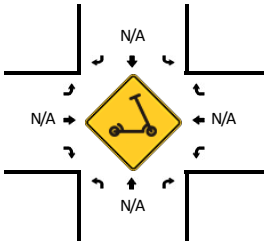












15-Min Count Period Beginning At	S Cedar St (Northbound)				S Cedar St (Southbound)				Johnson St (Eastbound)				Johnson St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	16	0	0	3	3	0	0	0	0	0	0	0	0	0	0	22	
7:15 AM	0	24	1	0	2	10	0	0	0	0	0	0	1	0	1	0	39	
7:30 AM	0	10	3	0	0	9	0	0	0	0	0	0	2	0	0	0	24	
7:45 AM	0	9	9	0	3	19	0	0	0	0	0	0	1	0	0	0	41	126
8:00 AM	0	15	17	0	15	19	0	0	0	0	0	0	2	0	1	0	69	173
8:15 AM	0	11	9	0	11	11	0	0	0	0	0	0	3	0	9	0	54	188
8:30 AM	0	15	0	0	1	10	0	0	0	0	0	0	2	0	1	0	29	193
8:45 AM	0	7	1	0	3	12	0	0	0	0	0	0	2	0	1	0	26	178

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	60	68	0	60	76	0	0	0	0	0	0	8	0	4	0	276
Heavy Trucks	0	0	0		4	0	0		0	0	0		0	0	0		4
Buses																	
Pedestrians		0				0				0				8			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 5/11/2022 6:07 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

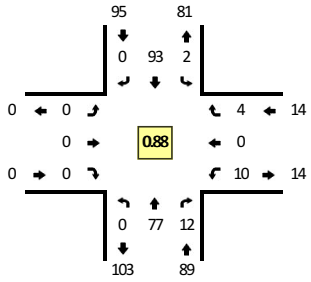
Type of peak hour being reported: System-wide Peak

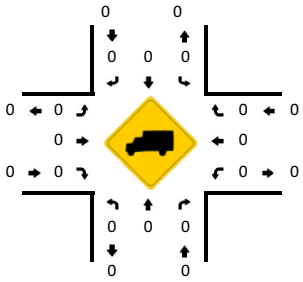
Method for determining peak hour: Total Entering Volume

LOCATION: S Cedar St -- Johnson St
CITY/STATE: Palatine, IL

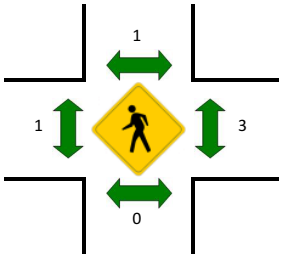
QC JOB #: 15788204
DATE: Thu, Apr 21 2022

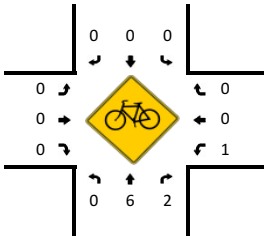
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

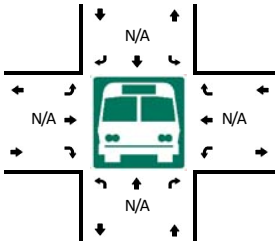


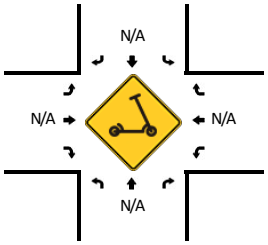


Quality Counts
DATA THAT DRIVES COMMUNITIES









15-Min Count Period Beginning At	S Cedar St (Northbound)				S Cedar St (Southbound)				Johnson St (Eastbound)				Johnson St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	11	2	0	0	8	0	0	0	0	0	0	1	0	0	0	22	
2:15 PM	0	10	7	0	0	15	0	0	0	0	0	0	3	0	0	0	35	
2:30 PM	0	13	6	0	2	16	0	0	0	0	0	0	2	0	1	0	40	
2:45 PM	0	15	4	0	5	21	0	0	0	0	0	0	2	0	1	0	48	145
3:00 PM	0	15	3	0	4	16	0	0	0	0	0	0	14	0	7	0	59	182
3:15 PM	0	26	3	0	2	17	0	0	0	0	0	0	4	0	4	0	56	203
3:30 PM	0	13	2	0	1	21	0	0	0	0	0	0	3	0	1	0	41	204
3:45 PM	0	13	5	0	3	24	0	0	0	0	0	0	4	0	0	0	49	205
4:00 PM	0	16	3	0	3	23	0	0	0	0	0	0	5	0	1	0	51	197
4:15 PM	0	16	3	0	2	21	0	0	0	0	0	0	5	0	2	0	49	190
4:30 PM	0	14	1	0	1	20	0	1	0	0	0	0	4	0	0	0	41	190
4:45 PM	0	23	3	0	0	27	0	0	0	0	0	0	1	0	1	0	55	196
5:00 PM	0	24	5	0	0	23	0	0	0	0	0	0	3	0	1	0	56	201
5:15 PM	0	19	3	0	1	14	0	0	0	0	0	0	5	0	2	0	44	196
5:30 PM	0	11	1	0	1	29	0	0	0	0	0	0	1	0	0	0	43	198
5:45 PM	0	19	3	0	1	17	0	0	0	0	0	0	1	0	0	0	41	184

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	96	20	0	0	92	0	0	0	0	0	0	12	0	4	0	224
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Buses																	
Pedestrians		0				0				0				4			4
Bicycles	0	4	4		0	0	0		0	0	0		0	0	0		8
Scooters																	

Comments:

Report generated on 5/11/2022 6:08 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

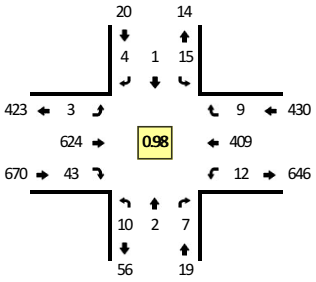
Type of peak hour being reported: System-wide Peak

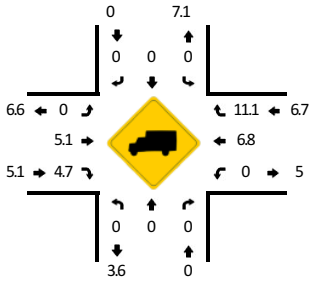
Method for determining peak hour: Total Entering Volume

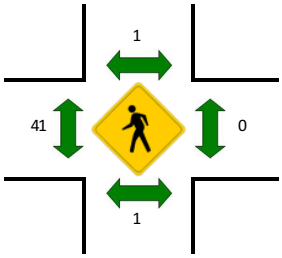
LOCATION: Rose St -- W Palatine Rd
CITY/STATE: Palatine, IL

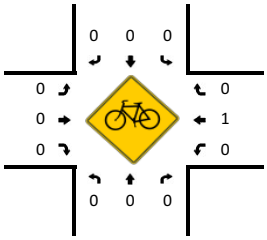
QC JOB #: 15788205
DATE: Thu, Apr 21 2022

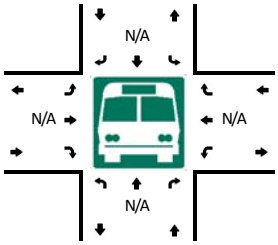
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

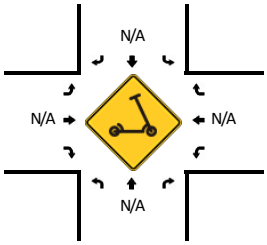












15-Min Count Period Beginning At	Rose St (Northbound)				Rose St (Southbound)				W Palatine Rd (Eastbound)				W Palatine Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	2	0	2	0	7	0	1	136	3	0	2	60	1	0	214	
7:15 AM	2	0	0	0	1	0	2	0	2	197	3	0	1	78	0	0	286	
7:30 AM	2	0	2	0	4	0	1	0	0	163	3	0	0	113	2	0	290	
7:45 AM	2	0	4	0	3	0	1	0	1	157	3	0	4	97	1	0	273	1063
8:00 AM	0	0	1	0	4	0	1	0	2	154	22	0	5	98	3	0	290	1139
8:15 AM	6	2	0	0	4	1	1	0	0	150	15	0	3	101	3	0	286	1139
8:30 AM	2	0	2	0	3	0	1	0	0	144	1	0	2	95	1	0	251	1100
8:45 AM	2	1	0	0	2	0	2	0	0	137	1	0	4	83	1	0	233	1060

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	0	8	0	16	0	4	0	0	652	12	0	0	452	8	0	1160
Heavy Trucks	0	0	0		0	0	0		0	12	0		0	28	0		40
Buses																	
Pedestrians		0				0				4				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 5/11/2022 6:07 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

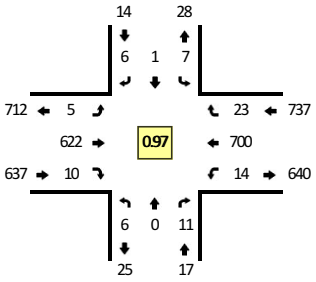
Type of peak hour being reported: System-wide Peak

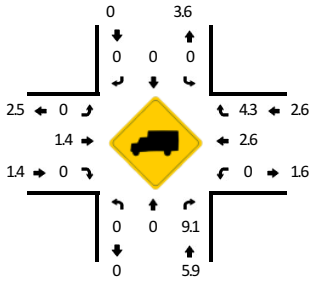
Method for determining peak hour: Total Entering Volume

LOCATION: Rose St -- W Palatine Rd
CITY/STATE: Palatine, IL

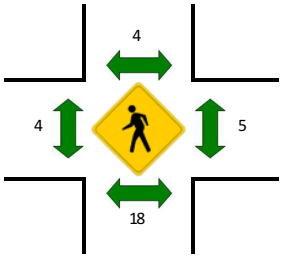
QC JOB #: 15788206
DATE: Thu, Apr 21 2022

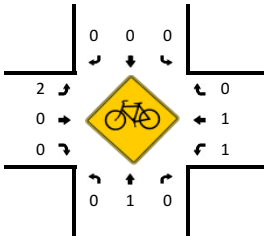
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

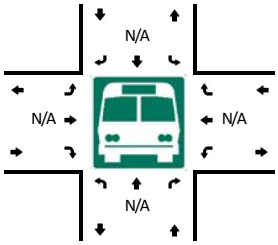


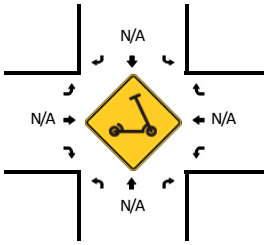


Quality Counts
DATA THAT DRIVES COMMUNITIES









15-Min Count Period Beginning At	Rose St (Northbound)				Rose St (Southbound)				W Palatine Rd (Eastbound)				W Palatine Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	0	1	0	0	0	0	0	0	121	1	0	2	100	0	0	225	
2:15 PM	6	0	3	0	0	0	0	0	1	101	7	0	2	120	0	0	240	
2:30 PM	2	1	0	0	0	1	0	0	1	114	12	0	4	123	2	0	260	
2:45 PM	3	0	0	0	2	0	0	0	1	92	9	0	1	151	2	0	261	986
3:00 PM	10	0	3	0	0	1	1	0	0	127	4	0	2	156	2	0	306	1067
3:15 PM	4	2	3	0	1	0	3	0	0	138	2	0	0	153	2	0	308	1135
3:30 PM	2	0	3	0	1	0	1	0	2	131	0	0	3	170	2	0	315	1190
3:45 PM	2	0	3	0	1	0	0	0	1	128	2	0	0	176	1	0	314	1243
4:00 PM	1	1	6	0	0	1	1	0	0	137	0	0	4	182	2	0	335	1272
4:15 PM	1	0	3	0	4	1	3	0	3	131	4	0	1	175	5	0	331	1295
4:30 PM	3	0	1	0	1	0	1	0	0	137	3	0	1	168	2	0	317	1297
4:45 PM	1	0	4	0	2	0	3	0	0	161	3	0	2	168	5	0	349	1332
5:00 PM	0	0	1	0	2	0	1	0	3	141	4	0	2	187	5	0	346	1343
5:15 PM	3	0	4	0	1	1	0	0	1	174	2	0	5	147	9	0	347	1359
5:30 PM	2	0	2	0	2	0	2	0	1	146	1	0	5	198	4	0	363	1405
5:45 PM	0	0	0	0	1	0	1	0	0	164	3	0	0	164	6	0	339	1395

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	0	8	0	8	0	8	0	4	584	4	0	20	792	16	0	1452
Heavy Trucks	0	0	4		0	0	0		0	8	0		0	8	0		20
Buses																	
Pedestrians		20				0				0				0			20
Bicycles	0	0	0		0	0	0		0	0	0		4	0	0		4
Scooters																	

Comments:

Report generated on 5/11/2022 6:08 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

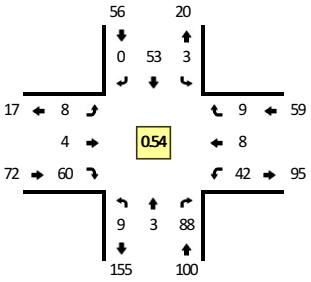
Type of peak hour being reported: System-wide Peak

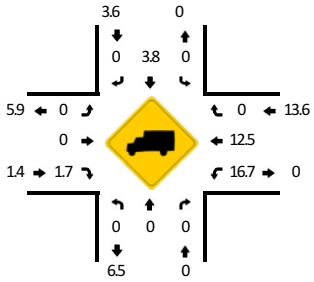
Method for determining peak hour: Total Entering Volume

LOCATION: S Rose St/Washington Ct -- Johnson St
CITY/STATE: Palatine, IL

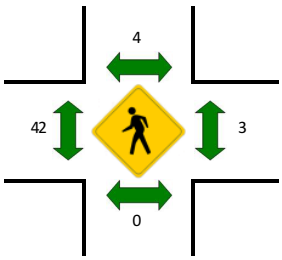
QC JOB #: 15788207
DATE: Thu, Apr 21 2022

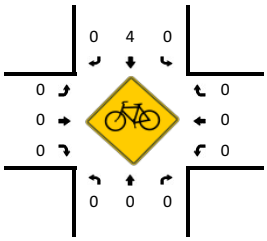
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

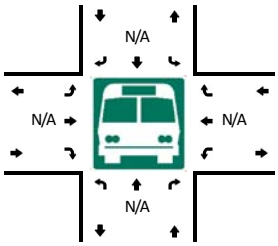


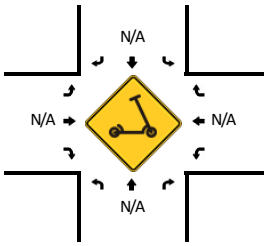


Quality Counts
DATA THAT DRIVES COMMUNITIES









15-Min Count Period Beginning At	S Rose St/Washington Ct (Northbound)				S Rose St/Washington Ct (Southbound)				Johnson St (Eastbound)				Johnson St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	1	0	1	4	0	0	1	3	2	0	2	0	1	0	15	
7:15 AM	0	0	1	0	0	4	0	0	0	2	2	0	2	1	2	0	14	
7:30 AM	0	0	2	0	1	2	0	0	1	1	2	0	5	2	3	0	19	
7:45 AM	0	0	0	0	0	7	0	0	4	0	8	0	7	0	2	0	28	76
8:00 AM	0	0	29	0	0	25	0	0	2	1	27	0	19	3	0	0	106	167
8:15 AM	9	3	57	0	2	19	0	0	1	2	23	0	11	3	4	0	134	287
8:30 AM	1	1	1	0	0	3	0	0	0	1	1	0	2	3	4	0	17	285
8:45 AM	0	0	0	0	2	1	1	0	0	2	1	0	3	1	1	0	12	269

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	36	12	228	0	8	76	0	0	4	8	92	0	44	12	16	0	536
Heavy Trucks	0	0	0		0	8	0		0	0	4		0	4	0		16
Buses																	
Pedestrians		0				0				48				0			48
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 5/11/2022 6:07 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

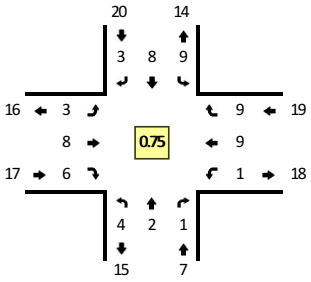
Type of peak hour being reported: System-wide Peak

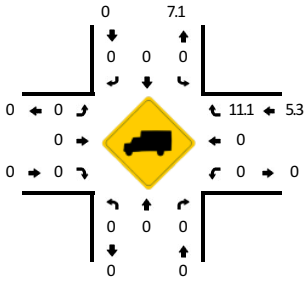
Method for determining peak hour: Total Entering Volume

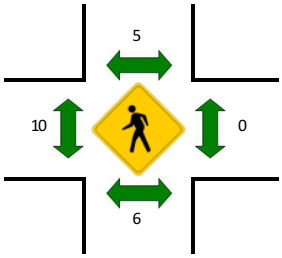
LOCATION: S Rose St/Washington Ct -- Johnson St
CITY/STATE: Palatine, IL

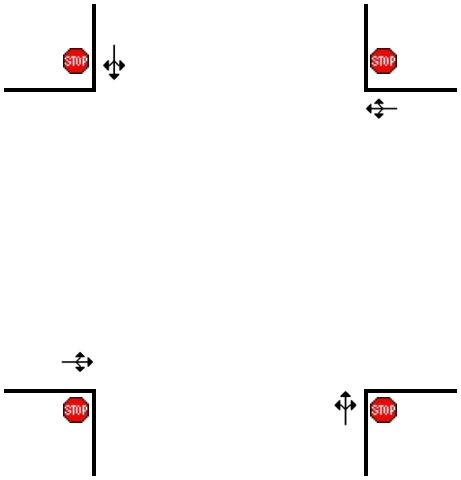
QC JOB #: 15788208
DATE: Thu, Apr 21 2022

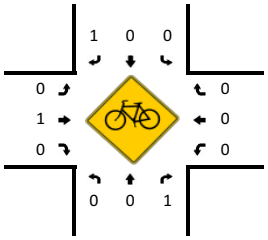
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

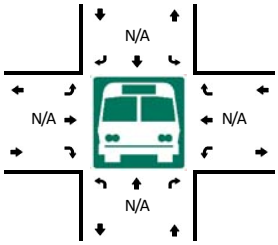


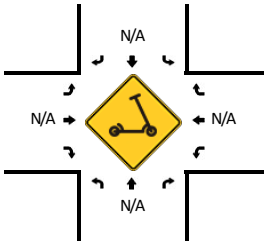












15-Min Count Period Beginning At	S Rose St/Washington Ct (Northbound)				S Rose St/Washington Ct (Southbound)				Johnson St (Eastbound)				Johnson St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	0	0	0	0	3	0	0	0	2	0	0	2	1	1	0	9	
2:15 PM	0	0	0	0	4	4	0	0	0	3	5	0	2	1	8	0	27	
2:30 PM	0	2	1	0	4	12	1	0	0	3	6	0	3	2	2	0	36	
2:45 PM	0	2	0	0	2	6	1	0	0	1	6	0	6	2	0	0	26	98
3:00 PM	11	8	33	0	3	3	2	0	1	2	5	0	6	11	7	0	92	181
3:15 PM	2	4	5	0	2	0	1	0	1	2	2	0	2	4	4	0	29	183
3:30 PM	0	4	1	0	0	2	1	0	0	2	0	0	0	3	1	0	14	161
3:45 PM	1	1	0	0	1	1	0	0	1	3	5	0	1	4	4	0	22	157
4:00 PM	1	3	3	0	1	3	1	0	1	2	2	0	2	4	2	0	25	90
4:15 PM	0	0	1	0	1	5	0	0	0	3	3	0	1	7	3	0	24	85
4:30 PM	2	1	1	0	1	3	0	0	0	2	0	0	0	2	3	0	15	86
4:45 PM	0	1	0	0	1	1	1	0	1	2	1	0	0	2	2	0	12	76
5:00 PM	1	0	0	0	3	4	0	0	1	2	5	0	0	4	0	0	20	71
5:15 PM	3	0	1	0	3	1	2	0	1	3	0	0	1	2	4	0	21	68
5:30 PM	0	1	0	0	2	2	0	0	0	1	0	0	0	1	3	0	10	63
5:45 PM	0	0	3	0	4	1	0	0	0	3	1	0	1	2	0	0	15	66

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	12	0	4	0	12	4	8	0	4	12	0	0	4	8	16	0	84
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Buses																	
Pedestrians		8				8				0				0			16
Bicycles	0	0	0		0	0	0		0	4	0		0	0	0		4
Scooters																	

Comments:

Report generated on 5/11/2022 6:08 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

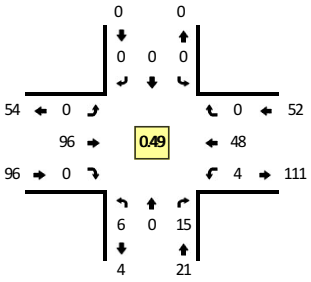
Type of peak hour being reported: System-wide Peak

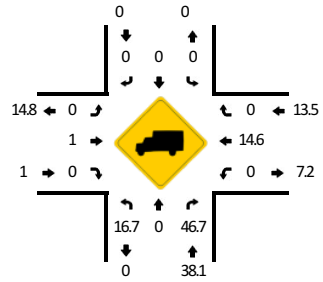
Method for determining peak hour: Total Entering Volume

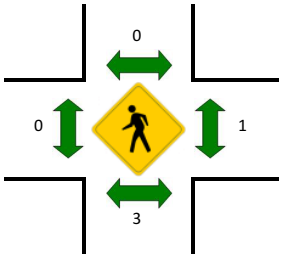
LOCATION: Smith St -- Johnson St
CITY/STATE: Palatine, IL

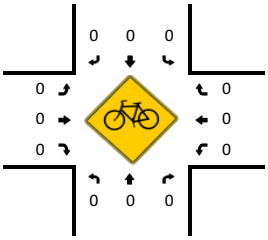
QC JOB #: 15788209
DATE: Thu, Apr 21 2022

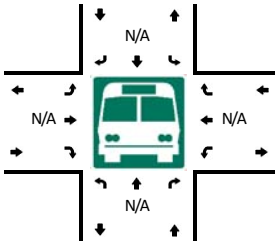
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

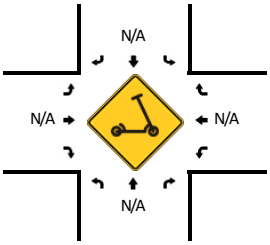












15-Min Count Period Beginning At	Smith St (Northbound)				Smith St (Southbound)				Johnson St (Eastbound)				Johnson St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	4	0	0	0	0	0	0	8	0	0	1	3	0	0	16	
7:15 AM	2	0	1	0	0	0	0	0	0	6	0	0	1	3	0	0	13	
7:30 AM	2	0	1	0	0	0	0	0	0	5	0	0	0	7	0	0	15	
7:45 AM	0	0	2	0	0	0	0	0	0	1	0	0	2	8	0	0	13	57
8:00 AM	1	0	4	0	0	0	0	0	0	28	0	0	2	20	0	0	55	96
8:15 AM	3	0	8	0	0	0	0	0	0	62	0	0	0	13	0	0	86	169
8:30 AM	3	0	8	0	0	0	0	0	0	2	0	0	1	4	0	1	19	173
8:45 AM	2	0	2	0	0	0	0	0	0	4	0	1	0	3	0	0	12	172

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	12	0	32	0	0	0	0	0	0	248	0	0	0	52	0	0	344
Heavy Trucks	4	0	20		0	0	0		0	4	0		0	0	0		28
Buses																	
Pedestrians		8				0				0				0			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 5/11/2022 6:07 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

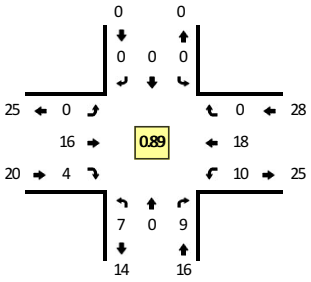
Type of peak hour being reported: System-wide Peak

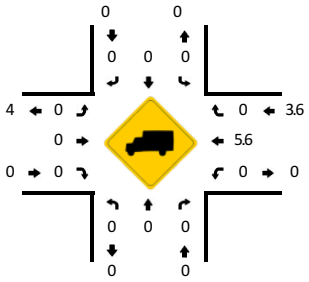
Method for determining peak hour: Total Entering Volume

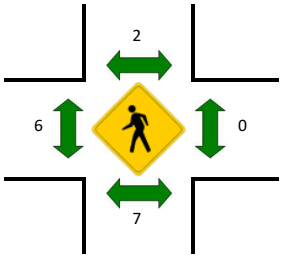
LOCATION: Smith St -- Johnson St
CITY/STATE: Palatine, IL

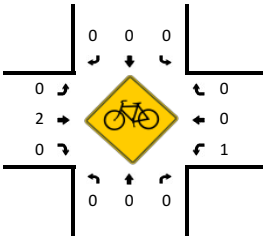
QC JOB #: 15788210
DATE: Thu, Apr 21 2022

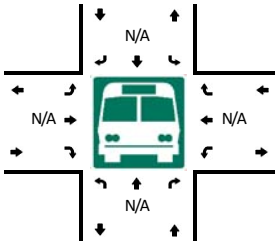
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

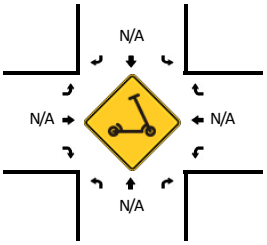












15-Min Count Period Beginning At	Smith St (Northbound)				Smith St (Southbound)				Johnson St (Eastbound)				Johnson St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	0	3	0	0	0	0	0	0	2	0	0	3	4	0	0	12	
2:15 PM	3	0	2	0	0	0	0	0	0	4	1	0	1	8	0	0	19	
2:30 PM	1	0	2	0	0	0	0	0	0	5	0	0	1	4	0	0	13	
2:45 PM	0	0	3	0	0	0	0	0	0	3	1	0	3	8	0	0	18	62
3:00 PM	12	0	15	0	0	0	0	0	0	36	1	0	3	10	0	0	77	127
3:15 PM	5	0	10	0	0	0	0	0	0	10	0	0	3	4	0	0	32	140
3:30 PM	2	0	3	0	0	0	0	0	0	6	0	0	1	4	0	0	16	143
3:45 PM	3	0	5	0	0	0	0	0	0	4	1	0	3	10	0	0	26	151
4:00 PM	1	0	4	0	0	0	0	0	0	6	0	0	0	6	0	0	17	91
4:15 PM	6	0	7	0	0	0	0	0	0	6	0	0	4	7	0	0	30	89
4:30 PM	2	0	1	0	0	0	0	0	0	3	1	0	2	2	0	0	11	84
4:45 PM	3	0	2	0	0	0	0	0	0	3	0	0	4	2	0	0	14	72
5:00 PM	2	0	4	0	0	0	0	0	0	5	0	0	2	5	0	0	18	73
5:15 PM	1	0	1	0	0	0	0	0	0	5	3	0	1	7	0	0	18	61
5:30 PM	1	0	2	0	0	0	0	0	0	3	1	0	3	4	0	0	14	64
5:45 PM	0	0	3	0	0	0	0	0	0	10	1	0	3	7	0	0	24	74

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	0	16	0	0	0	0	0	0	20	0	0	8	20	0	0	72
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Buses																	
Pedestrians		8				0				8				0			16
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

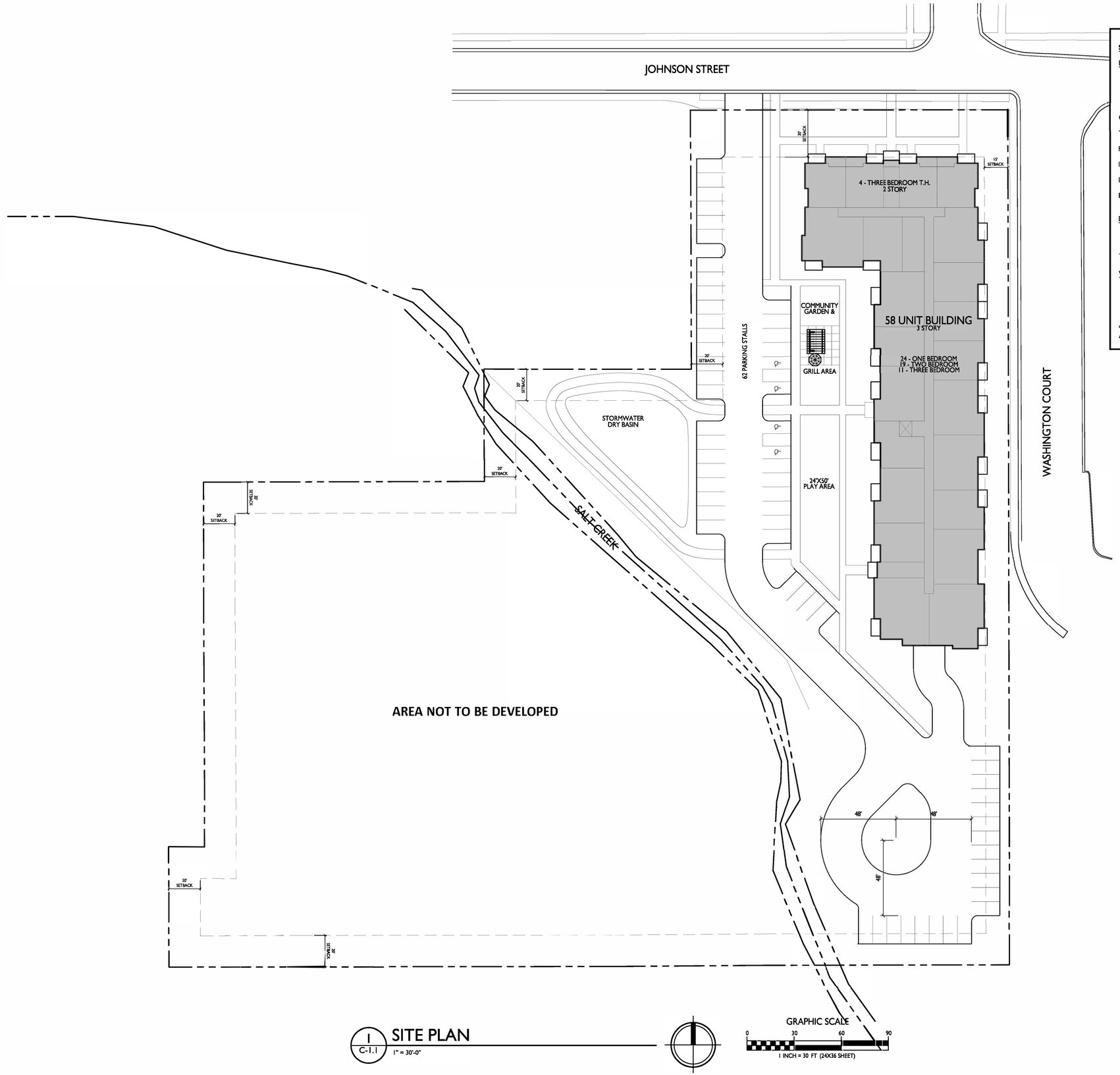
Report generated on 5/11/2022 6:08 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

Site Plan

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)



1 C-1.1 **SITE PLAN**
1" = 30'-0"

GRAPHIC SCALE
0 30 60 90
1 INCH = 30 FT (24X36 SHEET)

SITE DEVELOPMENT DATA:

DENSITIES	
LOT AREA	216,145 S.F. / 4.96 ACRES
REQUIRED LOT AREA	171,000 S.F. / 3.93 ACRES
DWELLING UNITS	58 UNITS
LOT AREA / D.U.	3,726 S.F./UNIT
DENSITY	11.69 UNITS/ACRE
GROSS RESIDENTIAL FLOOR AREA	66,706 S.F. (NOT INCL. GARAGES)
TOTAL BUILDING FOOTPRINT	23,318 S.F.
FLOOR AREA RATIO	0.31
IMPERVIOUS (INCLUDING BLDG)	62,620 S.F.
LOT COVERAGE	28.97% (10.78% BLDG, 18.19% SITE)
BUILDING HEIGHT	2 STORIES / 36'-0 " (TOWNHOUSE) 3 STORIES / 48'-0"(APARTMENT)
DWELLING UNIT MIX:	
ONE BED	24
TWO BED	19
THREE BED	11
THREE BED (TOWNHOUSE)	4
TOTAL	58 UNITS
VEHICLE PARKING :	
UNDERGROUND GARAGE	54
SURFACE	62
TOTAL	116 VEHICLE STALLS
PARKING RATIO	2.0 STALLS/UNIT

***ALL R-3 ZONING REQUIREMENTS ARE MET AND NO VARIANCES ARE BEING REQUESTED.

knothe bruce ARCHITECTS
Phone: 608.836.3690
7601 University Ave, Ste 201
Middleton, WI 53562

NORTHPOINTE DEVELOPMENT CORPORATION

ISSUED
Issued for City Review - March 25, 2022
Reissued for City Review - April 22, 2022

PROJECT TITLE
Northpointe Development Palatine Site Development

Johnson St and Washington Ct

SHEET TITLE
Site Plan

SHEET NUMBER
C-1.1

PROJECT NO. 20xx

© Knothe & Bruce Architects, LLC

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

CMAP Traffic Projections

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

Chicago Metropolitan Agency for Planning

433 West Van Buren Street
Suite 450
Chicago, IL 60607

312-454-0400
cmap.illinois.gov

May 11, 2022

Andrew Bowen
Traffic Engineer
Kenig, Lindgren, O'Hara and Aboona, Inc.
9575 West Higgins Road
Suite 400
Rosemont, IL 60018

Subject: ***Cedar Street @ Palatine Road***
IDOT

Dear Mr. Bowen:

In response to a request made on your behalf and dated May 11, 2022, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
Cedar St south of Palatine Rd	1,950	2,500
Palatine Rd east of Cedar St	12,400	14,000

Traffic projections are developed using existing ADT data provided in the request letter and the results from the December 2021 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Rios (IDOT)
\2022_ForecastTraffic\Palatine\ck-61-22\ck-61-22.docx

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

Level of Service Criteria

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

LEVEL OF SERVICE CRITERIA

Signalized Intersections		
Level of Service	**Interpretation**	**Average Control Delay (seconds per vehicle)**
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Good progression, with more vehicles stopping than for Level of Service A.	>10 - 20
C	Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 - 35
D	The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable.	>35 - 55
E	Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent.	>55 - 80
F	The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	>80.0

Unsignalized Intersections	
Level of Service	Average Total Delay (SEC/VEH)
A	0 - 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Source: *Highway Capacity Manual*, 2010.

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

Capacity Analysis Summary Sheets

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th AWSC
4: Johnson Street & Rose Street

05/12/2022

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	65	18	12	56	0
Future Vol, veh/h	8	65	18	12	56	0
Peak Hour Factor	0.54	0.54	0.54	0.54	0.54	0.54
Heavy Vehicles, %	0	2	13	0	4	0
Mvmt Flow	15	120	33	22	104	0
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8	7.6	8.3
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	11%	0%	100%
Vol Thru, %	89%	60%	0%
Vol Right, %	0%	40%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	73	30	56
LT Vol	8	0	56
Through Vol	65	18	0
RT Vol	0	12	0
Lane Flow Rate	135	56	104
Geometry Grp	1	1	1
Degree of Util (X)	0.156	0.066	0.129
Departure Headway (Hd)	4.146	4.274	4.495
Convergence, Y/N	Yes	Yes	Yes
Cap	852	843	785
Service Time	2.235	2.274	2.595
HCM Lane V/C Ratio	0.158	0.066	0.132
HCM Control Delay	8	7.6	8.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.6	0.2	0.4

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
1: Cedar Street & Palatine Road

05/12/2022

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	595	38	41	380	17	19	1	39	17	10	9
Future Vol, veh/h	5	595	38	41	380	17	19	1	39	17	10	9
Conflicting Peds, #/hr	5	0	1	1	0	5	2	0	1	1	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	90	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	40	6	3	0	8	0	11	0	0	6	0	11
Mvmt Flow	5	620	40	43	396	18	20	1	41	18	10	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	419	0	0	661	0	0	1154	1156	642	1168	1167	412
Stage 1	-	-	-	-	-	-	651	651	-	496	496	-
Stage 2	-	-	-	-	-	-	503	505	-	672	671	-
Critical Hdwy	4.5	-	-	4.1	-	-	7.21	6.5	6.2	7.16	6.5	6.31
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.5	-	6.16	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.5	-	6.16	5.5	-
Follow-up Hdwy	2.56	-	-	2.2	-	-	3.599	4	3.3	3.554	4	3.399
Pot Cap-1 Maneuver	963	-	-	937	-	-	167	198	478	167	195	621
Stage 1	-	-	-	-	-	-	443	468	-	548	549	-
Stage 2	-	-	-	-	-	-	534	544	-	439	458	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	958	-	-	936	-	-	153	187	477	146	184	617
Mov Cap-2 Maneuver	-	-	-	-	-	-	280	307	-	258	292	-
Stage 1	-	-	-	-	-	-	440	465	-	543	521	-
Stage 2	-	-	-	-	-	-	491	516	-	398	455	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.8	16.1	18
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	386	958	-	-	936	-	-	314
HCM Lane V/C Ratio	0.159	0.005	-	-	0.046	-	-	0.119
HCM Control Delay (s)	16.1	8.8	-	-	9	-	-	18
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-	0.4

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
2: Rose Street & Palatine Road

05/12/2022

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	624	43	12	409	9	10	2	8	15	1	4
Future Vol, veh/h	3	624	43	12	409	9	10	2	8	15	1	4
Conflicting Peds, #/hr	1	0	1	1	0	1	41	0	0	0	0	41
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	5	5	0	7	11	0	0	0	0	0	0
Mvmt Flow	3	637	44	12	417	9	10	2	8	15	1	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	427	0	0	682	0	0	1155	1117	660	1117	1135	464
Stage 1	-	-	-	-	-	-	666	666	-	447	447	-
Stage 2	-	-	-	-	-	-	489	451	-	670	688	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1143	-	-	920	-	-	175	209	467	186	204	602
Stage 1	-	-	-	-	-	-	452	460	-	595	577	-
Stage 2	-	-	-	-	-	-	564	574	-	450	450	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1142	-	-	919	-	-	163	204	467	178	199	578
Mov Cap-2 Maneuver	-	-	-	-	-	-	163	204	-	178	199	-
Stage 1	-	-	-	-	-	-	450	458	-	592	567	-
Stage 2	-	-	-	-	-	-	528	564	-	438	448	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	22.4	24.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	227	1142	-	-	919	-	-	208
HCM Lane V/C Ratio	0.09	0.003	-	-	0.013	-	-	0.098
HCM Control Delay (s)	22.4	8.2	0	-	9	0	-	24.2
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.3

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
3: Johnson Street & Cedar Street

05/12/2022

Intersection	
Int Delay, s/veh	2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	10	49	42	31	58
Future Vol, veh/h	8	10	49	42	31	58
Conflicting Peds, #/hr	0	0	0	4	4	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	0	10	2	0	3	0
Mvmt Flow	12	15	72	62	46	85

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	284	107	0	0	138	0
Stage 1	107	-	-	-	-	-
Stage 2	177	-	-	-	-	-
Critical Hdwy	6.4	6.3	-	-	4.13	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.39	-	-	2.227	-
Pot Cap-1 Maneuver	710	926	-	-	1440	-
Stage 1	922	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	683	922	-	-	1435	-
Mov Cap-2 Maneuver	683	-	-	-	-	-
Stage 1	918	-	-	-	-	-
Stage 2	830	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	2.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	798	1435	-
HCM Lane V/C Ratio	-	-	0.033	0.032	-
HCM Control Delay (s)	-	-	9.7	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
5: Washington Court & Johnson Street 05/12/2022

Intersection	
Int Delay, s/veh	4.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	8	113	42	18	12	88
Future Vol, veh/h	8	113	42	18	12	88
Conflicting Peds, #/hr	0	0	0	0	42	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	0	2	17	13	0	0
Mvmt Flow	15	209	78	33	22	163

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	224	0	351	123
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	231	-
Critical Hdwy	-	-	4.27	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.353	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1261	-	650	933
Stage 1	-	-	-	-	910	-
Stage 2	-	-	-	-	812	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1261	-	585	930
Mov Cap-2 Maneuver	-	-	-	-	585	-
Stage 1	-	-	-	-	910	-
Stage 2	-	-	-	-	731	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.6	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	869	-	-	1261	-
HCM Lane V/C Ratio	0.213	-	-	0.062	-
HCM Control Delay (s)	10.3	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.2	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
6: Smith Street & Johnson Street 05/12/2022

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	96	0	4	54	6	15
Future Vol, veh/h	96	0	4	54	6	15
Conflicting Peds, #/hr	0	3	3	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	49	49	49	49	49	49
Heavy Vehicles, %	1	0	0	15	17	47
Mvmt Flow	196	0	8	110	12	31

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	199	0	325	200
Stage 1	-	-	-	-	199	-
Stage 2	-	-	-	-	126	-
Critical Hdwy	-	-	4.1	-	6.57	6.67
Critical Hdwy Stg 1	-	-	-	-	5.57	-
Critical Hdwy Stg 2	-	-	-	-	5.57	-
Follow-up Hdwy	-	-	2.2	-	3.653	3.723
Pot Cap-1 Maneuver	-	-	1385	-	639	739
Stage 1	-	-	-	-	800	-
Stage 2	-	-	-	-	864	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1381	-	633	736
Mov Cap-2 Maneuver	-	-	-	-	633	-
Stage 1	-	-	-	-	798	-
Stage 2	-	-	-	-	859	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	703	-	-	1381	-
HCM Lane V/C Ratio	0.061	-	-	0.006	-
HCM Control Delay (s)	10.5	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th AWSC
4: Johnson Street & Rose Street

05/12/2022

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	14	16	14	22	3
Future Vol, veh/h	3	14	16	14	22	3
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	0	0	0	11	0	0
Mvmt Flow	4	19	21	19	29	4
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	7.1	6.9	7.3
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	18%	0%	88%
Vol Thru, %	82%	53%	0%
Vol Right, %	0%	47%	12%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	17	30	25
LT Vol	3	0	22
Through Vol	14	16	0
RT Vol	0	14	3
Lane Flow Rate	23	40	33
Geometry Grp	1	1	1
Degree of Util (X)	0.025	0.041	0.038
Departure Headway (Hd)	4.025	3.696	4.113
Convergence, Y/N	Yes	Yes	Yes
Cap	890	969	872
Service Time	2.045	1.716	2.132
HCM Lane V/C Ratio	0.026	0.041	0.038
HCM Control Delay	7.1	6.9	7.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.1	0.1

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
1: Cedar Street & Palatine Road

05/12/2022

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	568	21	74	600	33	14	7	63	20	2	13
Future Vol, veh/h	11	568	21	74	600	33	14	7	63	20	2	13
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	90	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	2	0	0	2	6	0	0	0	0	0	8
Mvmt Flow	11	592	22	77	625	34	15	7	66	21	2	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	659	0	0	618	0	0	1433	1442	607	1458	1436	642
Stage 1	-	-	-	-	-	-	629	629	-	796	796	-
Stage 2	-	-	-	-	-	-	804	813	-	662	640	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.28
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.372
Pot Cap-1 Maneuver	939	-	-	972	-	-	113	134	500	109	135	464
Stage 1	-	-	-	-	-	-	474	478	-	383	402	-
Stage 2	-	-	-	-	-	-	380	395	-	454	473	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	939	-	-	968	-	-	101	121	498	86	122	464
Mov Cap-2 Maneuver	-	-	-	-	-	-	220	237	-	193	229	-
Stage 1	-	-	-	-	-	-	467	470	-	378	370	-
Stage 2	-	-	-	-	-	-	338	363	-	384	465	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.9	17.2	21.9
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	382	939	-	-	968	-	-	249
HCM Lane V/C Ratio	0.229	0.012	-	-	0.08	-	-	0.146
HCM Control Delay (s)	17.2	8.9	-	-	9	-	-	21.9
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.9	0	-	-	0.3	-	-	0.5

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
2: Rose Street & Palatine Road

05/12/2022

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	622	10	14	700	23	6	0	11	7	1	6
Future Vol, veh/h	5	622	10	14	700	23	6	0	11	7	1	6
Conflicting Peds, #/hr	4	0	18	18	0	4	4	0	5	5	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	1	0	0	3	4	0	0	9	0	0	0
Mvmt Flow	5	641	10	14	722	24	6	0	11	7	1	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	750	0	0	669	0	0	1444	1452	669	1433	1445	742
Stage 1	-	-	-	-	-	-	674	674	-	766	766	-
Stage 2	-	-	-	-	-	-	770	778	-	667	679	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.29	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.381	3.5	4	3.3
Pot Cap-1 Maneuver	868	-	-	931	-	-	111	132	446	113	133	419
Stage 1	-	-	-	-	-	-	448	457	-	398	415	-
Stage 2	-	-	-	-	-	-	396	410	-	451	454	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	865	-	-	915	-	-	104	125	436	106	126	416
Mov Cap-2 Maneuver	-	-	-	-	-	-	104	125	-	106	126	-
Stage 1	-	-	-	-	-	-	436	445	-	393	403	-
Stage 2	-	-	-	-	-	-	378	398	-	433	442	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.2	24.2	30.1
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	205	865	-	-	915	-	-	158
HCM Lane V/C Ratio	0.085	0.006	-	-	0.016	-	-	0.091
HCM Control Delay (s)	24.2	9.2	0	-	9	0	-	30.1
HCM Lane LOS	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.3

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
3: Johnson Street & Cedar Street

05/12/2022

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	7	77	13	4	93
Future Vol, veh/h	12	7	77	13	4	93
Conflicting Peds, #/hr	0	1	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	8	88	15	5	106

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	215	100	0	0	106	0
Stage 1	99	-	-	-	-	-
Stage 2	116	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	778	961	-	-	1498	-
Stage 1	930	-	-	-	-	-
Stage 2	914	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	773	957	-	-	1494	-
Mov Cap-2 Maneuver	773	-	-	-	-	-
Stage 1	927	-	-	-	-	-
Stage 2	910	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	832	1494	-
HCM Lane V/C Ratio	-	-	0.026	0.003	-
HCM Control Delay (s)	-	-	9.4	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
5: Washington Court & Johnson Street 05/12/2022

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	21	15	1	24	6	1
Future Vol, veh/h	21	15	1	24	6	1
Conflicting Peds, #/hr	0	6	6	0	10	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	4	0	0
Mvmt Flow	28	20	1	32	8	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	54	0	88	44
Stage 1	-	-	-	-	44	-
Stage 2	-	-	-	-	44	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1564	-	918	1032
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	984	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1555	-	902	1026
Mov Cap-2 Maneuver	-	-	-	-	902	-
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	973	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	918	-	-	1555	-
HCM Lane V/C Ratio	0.01	-	-	0.001	-
HCM Control Delay (s)	9	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
6: Smith Street & Johnson Street 05/12/2022

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	18	4	10	18	7	9
Future Vol, veh/h	18	4	10	18	7	9
Conflicting Peds, #/hr	0	7	7	0	6	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	6	0	0
Mvmt Flow	20	4	11	20	8	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	31	0	77	29
Stage 1	-	-	-	-	29	-
Stage 2	-	-	-	-	48	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1595	-	931	1052
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	980	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1584	-	912	1045
Mov Cap-2 Maneuver	-	-	-	-	912	-
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	967	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.6	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	982	-	-	1584	-
HCM Lane V/C Ratio	0.018	-	-	0.007	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th AWSC
4: Johnson Street & Rose Street 05/12/2022

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	65	18	12	56	0
Future Vol, veh/h	8	65	18	12	56	0
Peak Hour Factor	0.54	0.54	0.54	0.54	0.54	0.54
Heavy Vehicles, %	0	2	13	0	4	0
Mvmt Flow	15	120	33	22	104	0
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8	7.6	8.3
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	11%	0%	100%
Vol Thru, %	89%	60%	0%
Vol Right, %	0%	40%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	73	30	56
LT Vol	8	0	56
Through Vol	65	18	0
RT Vol	0	12	0
Lane Flow Rate	135	56	104
Geometry Grp	1	1	1
Degree of Util (X)	0.156	0.066	0.129
Departure Headway (Hd)	4.146	4.274	4.495
Convergence, Y/N	Yes	Yes	Yes
Cap	852	843	785
Service Time	2.235	2.274	2.595
HCM Lane V/C Ratio	0.158	0.066	0.132
HCM Control Delay	8	7.6	8.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.6	0.2	0.4

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
1: Cedar Street & Palatine Road

05/12/2022

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	619	40	43	395	18	20	1	41	18	10	9
Future Vol, veh/h	5	619	40	43	395	18	20	1	41	18	10	9
Conflicting Peds, #/hr	5	0	1	1	0	5	2	0	1	1	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	90	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	40	6	3	0	8	0	11	0	0	6	0	11
Mvmt Flow	5	645	42	45	411	19	21	1	43	19	10	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	435	0	0	688	0	0	1199	1202	668	1215	1214	428
Stage 1	-	-	-	-	-	-	677	677	-	516	516	-
Stage 2	-	-	-	-	-	-	522	525	-	699	698	-
Critical Hdwy	4.5	-	-	4.1	-	-	7.21	6.5	6.2	7.16	6.5	6.31
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.5	-	6.16	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.5	-	6.16	5.5	-
Follow-up Hdwy	2.56	-	-	2.2	-	-	3.599	4	3.3	3.554	4	3.399
Pot Cap-1 Maneuver	949	-	-	916	-	-	156	186	462	155	183	608
Stage 1	-	-	-	-	-	-	428	455	-	535	538	-
Stage 2	-	-	-	-	-	-	522	533	-	424	445	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	944	-	-	915	-	-	143	175	461	134	172	604
Mov Cap-2 Maneuver	-	-	-	-	-	-	269	296	-	244	280	-
Stage 1	-	-	-	-	-	-	425	452	-	530	509	-
Stage 2	-	-	-	-	-	-	478	504	-	381	442	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.9	16.7	18.9
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	372	944	-	-	915	-	-	297
HCM Lane V/C Ratio	0.174	0.006	-	-	0.049	-	-	0.13
HCM Control Delay (s)	16.7	8.8	-	-	9.1	-	-	18.9
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.6	0	-	-	0.2	-	-	0.4

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
2: Rose Street & Palatine Road

05/12/2022

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	3	632	43	12	442	9	10	2	8	15	1	4
Future Vol, veh/h	3	632	43	12	442	9	10	2	8	15	1	4
Conflicting Peds, #/hr	1	0	1	1	0	1	41	0	0	0	0	41
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	5	5	0	7	11	0	0	0	0	0	0
Mvmt Flow	3	645	44	12	451	9	10	2	8	15	1	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	461	0	0	690	0	0	1197	1159	668	1159	1177	498
Stage 1	-	-	-	-	-	-	674	674	-	481	481	-
Stage 2	-	-	-	-	-	-	523	485	-	678	696	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1111	-	-	914	-	-	164	197	462	174	193	576
Stage 1	-	-	-	-	-	-	448	457	-	570	557	-
Stage 2	-	-	-	-	-	-	541	555	-	445	446	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1110	-	-	913	-	-	153	192	462	167	188	553
Mov Cap-2 Maneuver	-	-	-	-	-	-	153	192	-	167	188	-
Stage 1	-	-	-	-	-	-	446	455	-	567	546	-
Stage 2	-	-	-	-	-	-	506	544	-	433	444	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	23.5	25.6
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	215	1110	-	-	913	-	-	195
HCM Lane V/C Ratio	0.095	0.003	-	-	0.013	-	-	0.105
HCM Control Delay (s)	23.5	8.3	0	-	9	0	-	25.6
HCM Lane LOS	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.3

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
3: Johnson Street & Cedar Street

05/12/2022

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	10	52	42	31	62
Future Vol, veh/h	8	10	52	42	31	62
Conflicting Peds, #/hr	0	0	0	4	4	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	0	10	2	0	3	0
Mvmt Flow	12	15	76	62	46	91

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	294	111	0	0	142	0
Stage 1	111	-	-	-	-	-
Stage 2	183	-	-	-	-	-
Critical Hdwy	6.4	6.3	-	-	4.13	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.39	-	-	2.227	-
Pot Cap-1 Maneuver	701	921	-	-	1435	-
Stage 1	919	-	-	-	-	-
Stage 2	853	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	674	917	-	-	1430	-
Mov Cap-2 Maneuver	674	-	-	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	824	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	2.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	790	1430	-
HCM Lane V/C Ratio	-	-	0.034	0.032	-
HCM Control Delay (s)	-	-	9.7	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
5: Washington Court & Johnson Street 05/12/2022

Intersection	
Int Delay, s/veh	4.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	8	113	42	18	12	88
Future Vol, veh/h	8	113	42	18	12	88
Conflicting Peds, #/hr	0	0	0	0	42	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	0	2	17	13	0	0
Mvmt Flow	15	209	78	33	22	163

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	224	0	351	123
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	231	-
Critical Hdwy	-	-	4.27	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.353	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1261	-	650	933
Stage 1	-	-	-	-	910	-
Stage 2	-	-	-	-	812	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1261	-	585	930
Mov Cap-2 Maneuver	-	-	-	-	585	-
Stage 1	-	-	-	-	910	-
Stage 2	-	-	-	-	731	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.6	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	869	-	-	1261	-
HCM Lane V/C Ratio	0.213	-	-	0.062	-
HCM Control Delay (s)	10.3	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.2	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
6: Smith Street & Johnson Street 05/12/2022

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	96	0	4	54	6	15
Future Vol, veh/h	96	0	4	54	6	15
Conflicting Peds, #/hr	0	3	3	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	49	49	49	49	49	49
Heavy Vehicles, %	1	0	0	15	17	47
Mvmt Flow	196	0	8	110	12	31

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	199	0	325	200
Stage 1	-	-	-	-	199	-
Stage 2	-	-	-	-	126	-
Critical Hdwy	-	-	4.1	-	6.57	6.67
Critical Hdwy Stg 1	-	-	-	-	5.57	-
Critical Hdwy Stg 2	-	-	-	-	5.57	-
Follow-up Hdwy	-	-	2.2	-	3.653	3.723
Pot Cap-1 Maneuver	-	-	1385	-	639	739
Stage 1	-	-	-	-	800	-
Stage 2	-	-	-	-	864	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1381	-	633	736
Mov Cap-2 Maneuver	-	-	-	-	633	-
Stage 1	-	-	-	-	798	-
Stage 2	-	-	-	-	859	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	703	-	-	1381	-
HCM Lane V/C Ratio	0.061	-	-	0.006	-
HCM Control Delay (s)	10.5	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th AWSC
4: Johnson Street & Rose Street

05/12/2022

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	14	16	14	22	3
Future Vol, veh/h	3	14	16	14	22	3
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	0	0	0	11	0	0
Mvmt Flow	4	19	21	19	29	4
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	7.1	6.9	7.3
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	18%	0%	88%
Vol Thru, %	82%	53%	0%
Vol Right, %	0%	47%	12%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	17	30	25
LT Vol	3	0	22
Through Vol	14	16	0
RT Vol	0	14	3
Lane Flow Rate	23	40	33
Geometry Grp	1	1	1
Degree of Util (X)	0.025	0.041	0.038
Departure Headway (Hd)	4.025	3.696	4.113
Convergence, Y/N	Yes	Yes	Yes
Cap	890	969	872
Service Time	2.045	1.716	2.132
HCM Lane V/C Ratio	0.026	0.041	0.038
HCM Control Delay	7.1	6.9	7.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.1	0.1

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
1: Cedar Street & Palatine Road

05/12/2022

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	591	22	77	624	34	15	7	66	21	2	14
Future Vol, veh/h	11	591	22	77	624	34	15	7	66	21	2	14
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	90	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	2	0	0	2	6	0	0	0	0	0	8
Mvmt Flow	11	616	23	80	650	35	16	7	69	22	2	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	685	0	0	643	0	0	1490	1499	632	1516	1493	668
Stage 1	-	-	-	-	-	-	654	654	-	828	828	-
Stage 2	-	-	-	-	-	-	836	845	-	688	665	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.28
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.372
Pot Cap-1 Maneuver	918	-	-	951	-	-	103	123	484	99	124	448
Stage 1	-	-	-	-	-	-	459	466	-	368	389	-
Stage 2	-	-	-	-	-	-	364	382	-	440	461	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	918	-	-	947	-	-	91	111	482	77	112	448
Mov Cap-2 Maneuver	-	-	-	-	-	-	207	227	-	181	218	-
Stage 1	-	-	-	-	-	-	452	459	-	364	356	-
Stage 2	-	-	-	-	-	-	321	350	-	367	454	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	1	18.1	23.1
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	366	918	-	-	947	-	-	237
HCM Lane V/C Ratio	0.25	0.012	-	-	0.085	-	-	0.163
HCM Control Delay (s)	18.1	9	-	-	9.2	-	-	23.1
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1	0	-	-	0.3	-	-	0.6

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
2: Rose Street & Palatine Road

05/12/2022

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	663	10	14	723	23	6	0	11	7	1	6
Future Vol, veh/h	5	663	10	14	723	23	6	0	11	7	1	6
Conflicting Peds, #/hr	4	0	18	18	0	4	4	0	5	5	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	1	0	0	3	4	0	0	9	0	0	0
Mvmt Flow	5	684	10	14	745	24	6	0	11	7	1	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	773	0	0	712	0	0	1510	1518	712	1499	1511	765
Stage 1	-	-	-	-	-	-	717	717	-	789	789	-
Stage 2	-	-	-	-	-	-	793	801	-	710	722	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.29	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.381	3.5	4	3.3
Pot Cap-1 Maneuver	851	-	-	897	-	-	100	120	421	102	121	406
Stage 1	-	-	-	-	-	-	424	437	-	387	405	-
Stage 2	-	-	-	-	-	-	385	400	-	428	434	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	848	-	-	882	-	-	93	113	412	95	114	403
Mov Cap-2 Maneuver	-	-	-	-	-	-	93	113	-	95	114	-
Stage 1	-	-	-	-	-	-	413	425	-	382	392	-
Stage 2	-	-	-	-	-	-	366	387	-	410	422	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.2	26.4	32.8
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	186	848	-	-	882	-	-	144
HCM Lane V/C Ratio	0.094	0.006	-	-	0.016	-	-	0.1
HCM Control Delay (s)	26.4	9.3	0	-	9.2	0	-	32.8
HCM Lane LOS	D	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.3

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
3: Johnson Street & Cedar Street

05/12/2022

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	7	81	13	4	97
Future Vol, veh/h	12	7	81	13	4	97
Conflicting Peds, #/hr	0	1	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	8	92	15	5	110

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	223	104	0	0	110	0
Stage 1	103	-	-	-	-	-
Stage 2	120	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	770	956	-	-	1493	-
Stage 1	926	-	-	-	-	-
Stage 2	910	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	765	952	-	-	1489	-
Mov Cap-2 Maneuver	765	-	-	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	906	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	825	1489	-
HCM Lane V/C Ratio	-	-	0.026	0.003	-
HCM Control Delay (s)	-	-	9.5	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
5: Washington Court & Johnson Street 05/12/2022

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	21	15	1	24	6	1
Future Vol, veh/h	21	15	1	24	6	1
Conflicting Peds, #/hr	0	6	6	0	10	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	4	0	0
Mvmt Flow	28	20	1	32	8	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	54	0	88	44
Stage 1	-	-	-	-	44	-
Stage 2	-	-	-	-	44	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1564	-	918	1032
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	984	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1555	-	902	1026
Mov Cap-2 Maneuver	-	-	-	-	902	-
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	973	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	918	-	-	1555	-
HCM Lane V/C Ratio	0.01	-	-	0.001	-
HCM Control Delay (s)	9	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
6: Smith Street & Johnson Street 05/12/2022

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	18	4	10	18	7	9
Future Vol, veh/h	18	4	10	18	7	9
Conflicting Peds, #/hr	0	7	7	0	6	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	6	0	0
Mvmt Flow	20	4	11	20	8	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	31	0	77	29
Stage 1	-	-	-	-	29	-
Stage 2	-	-	-	-	48	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1595	-	931	1052
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	980	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1584	-	912	1045
Mov Cap-2 Maneuver	-	-	-	-	912	-
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	967	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.6	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	982	-	-	1584	-
HCM Lane V/C Ratio	0.018	-	-	0.007	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th AWSC
4: Johnson Street & Rose Street

05/12/2022

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	73	21	12	56	3
Future Vol, veh/h	19	73	21	12	56	3
Peak Hour Factor	0.54	0.54	0.54	0.54	0.54	0.54
Heavy Vehicles, %	0	2	13	0	4	0
Mvmt Flow	35	135	39	22	104	6
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8.4	7.7	8.4
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	21%	0%	95%
Vol Thru, %	79%	64%	0%
Vol Right, %	0%	36%	5%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	92	33	59
LT Vol	19	0	56
Through Vol	73	21	0
RT Vol	0	12	3
Lane Flow Rate	170	61	109
Geometry Grp	1	1	1
Degree of Util (X)	0.203	0.074	0.141
Departure Headway (Hd)	4.286	4.349	4.646
Convergence, Y/N	Yes	Yes	Yes
Cap	843	826	775
Service Time	2.286	2.362	2.659
HCM Lane V/C Ratio	0.202	0.074	0.141
HCM Control Delay	8.4	7.7	8.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.8	0.2	0.5

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
1: Cedar Street & Palatine Road

05/12/2022

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	619	43	43	395	18	29	1	41	18	10	9
Future Vol, veh/h	5	619	43	43	395	18	29	1	41	18	10	9
Conflicting Peds, #/hr	5	0	1	1	0	5	2	0	1	1	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	90	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	40	6	3	0	8	0	11	0	0	6	0	11
Mvmt Flow	5	645	45	45	411	19	30	1	43	19	10	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	435	0	0	691	0	0	1201	1204	670	1217	1217	428
Stage 1	-	-	-	-	-	-	679	679	-	516	516	-
Stage 2	-	-	-	-	-	-	522	525	-	701	701	-
Critical Hdwy	4.5	-	-	4.1	-	-	7.21	6.5	6.2	7.16	6.5	6.31
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.5	-	6.16	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.5	-	6.16	5.5	-
Follow-up Hdwy	2.56	-	-	2.2	-	-	3.599	4	3.3	3.554	4	3.399
Pot Cap-1 Maneuver	949	-	-	913	-	-	155	186	460	155	182	608
Stage 1	-	-	-	-	-	-	427	454	-	535	538	-
Stage 2	-	-	-	-	-	-	522	533	-	423	444	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	944	-	-	912	-	-	142	175	459	134	171	604
Mov Cap-2 Maneuver	-	-	-	-	-	-	269	296	-	244	279	-
Stage 1	-	-	-	-	-	-	424	451	-	530	509	-
Stage 2	-	-	-	-	-	-	478	504	-	380	441	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.9	17.8	18.9
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	354	944	-	-	912	-	-	297
HCM Lane V/C Ratio	0.209	0.006	-	-	0.049	-	-	0.13
HCM Control Delay (s)	17.8	8.8	-	-	9.2	-	-	18.9
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.8	0	-	-	0.2	-	-	0.4

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
2: Rose Street & Palatine Road

05/12/2022

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	3	632	43	15	442	9	10	2	19	15	1	4
Future Vol, veh/h	3	632	43	15	442	9	10	2	19	15	1	4
Conflicting Peds, #/hr	1	0	1	1	0	1	41	0	0	0	0	41
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	5	5	0	7	11	0	0	0	0	0	0
Mvmt Flow	3	645	44	15	451	9	10	2	19	15	1	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	461	0	0	690	0	0	1203	1165	668	1171	1183	498
Stage 1	-	-	-	-	-	-	674	674	-	487	487	-
Stage 2	-	-	-	-	-	-	529	491	-	684	696	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1111	-	-	914	-	-	163	196	462	171	191	576
Stage 1	-	-	-	-	-	-	448	457	-	566	554	-
Stage 2	-	-	-	-	-	-	537	552	-	442	446	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1110	-	-	913	-	-	152	191	462	159	186	553
Mov Cap-2 Maneuver	-	-	-	-	-	-	152	191	-	159	186	-
Stage 1	-	-	-	-	-	-	446	455	-	563	541	-
Stage 2	-	-	-	-	-	-	500	539	-	420	444	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	20.5	26.6
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	264	1110	-	-	913	-	-	187
HCM Lane V/C Ratio	0.12	0.003	-	-	0.017	-	-	0.109
HCM Control Delay (s)	20.5	8.3	0	-	9	0	-	26.6
HCM Lane LOS	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.4

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
3: Johnson Street & Cedar Street 05/12/2022

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	19	52	43	34	62
Future Vol, veh/h	11	19	52	43	34	62
Conflicting Peds, #/hr	0	0	0	4	4	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	0	10	2	0	3	0
Mvmt Flow	16	28	76	63	50	91

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	303	112	0	0	143	0
Stage 1	112	-	-	-	-	-
Stage 2	191	-	-	-	-	-
Critical Hdwy	6.4	6.3	-	-	4.13	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.39	-	-	2.227	-
Pot Cap-1 Maneuver	693	920	-	-	1434	-
Stage 1	918	-	-	-	-	-
Stage 2	846	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	665	916	-	-	1429	-
Mov Cap-2 Maneuver	665	-	-	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	815	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	2.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	805	1429	-
HCM Lane V/C Ratio	-	-	0.055	0.035	-
HCM Control Delay (s)	-	-	9.7	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
5: Washington Court & Johnson Street 05/12/2022

Intersection	
Int Delay, s/veh	4.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	16	113	42	21	12	88
Future Vol, veh/h	16	113	42	21	12	88
Conflicting Peds, #/hr	0	0	0	0	42	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	0	2	17	13	0	0
Mvmt Flow	30	209	78	39	22	163

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	239	0	372	138
Stage 1	-	-	-	-	135	-
Stage 2	-	-	-	-	237	-
Critical Hdwy	-	-	4.27	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.353	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1245	-	633	916
Stage 1	-	-	-	-	896	-
Stage 2	-	-	-	-	807	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1245	-	569	913
Mov Cap-2 Maneuver	-	-	-	-	569	-
Stage 1	-	-	-	-	896	-
Stage 2	-	-	-	-	725	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.4	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	851	-	-	1245	-
HCM Lane V/C Ratio	0.218	-	-	0.062	-
HCM Control Delay (s)	10.4	-	-	8.1	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.2	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
6: Smith Street & Johnson Street 05/12/2022

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	104	0	4	57	6	15
Future Vol, veh/h	104	0	4	57	6	15
Conflicting Peds, #/hr	0	3	3	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	49	49	49	49	49	49
Heavy Vehicles, %	1	0	0	15	17	47
Mvmt Flow	212	0	8	116	12	31

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	215	0	347	216
Stage 1	-	-	-	-	215	-
Stage 2	-	-	-	-	132	-
Critical Hdwy	-	-	4.1	-	6.57	6.67
Critical Hdwy Stg 1	-	-	-	-	5.57	-
Critical Hdwy Stg 2	-	-	-	-	5.57	-
Follow-up Hdwy	-	-	2.2	-	3.653	3.723
Pot Cap-1 Maneuver	-	-	1367	-	621	723
Stage 1	-	-	-	-	786	-
Stage 2	-	-	-	-	858	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1363	-	615	720
Mov Cap-2 Maneuver	-	-	-	-	615	-
Stage 1	-	-	-	-	784	-
Stage 2	-	-	-	-	853	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	10.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	687	-	-	1363	-
HCM Lane V/C Ratio	0.062	-	-	0.006	-
HCM Control Delay (s)	10.6	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
7: Site Access Drive & Johnson Street 05/12/2022

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	73	4	6	18	12	19
Future Vol, veh/h	73	4	6	18	12	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	0	0	11	0	0
Mvmt Flow	77	4	6	19	13	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	81	0	110	79
Stage 1	-	-	-	-	79	-
Stage 2	-	-	-	-	31	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1529	-	892	987
Stage 1	-	-	-	-	949	-
Stage 2	-	-	-	-	997	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1529	-	888	987
Mov Cap-2 Maneuver	-	-	-	-	888	-
Stage 1	-	-	-	-	949	-
Stage 2	-	-	-	-	993	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	946	-	-	1529	-
HCM Lane V/C Ratio	0.034	-	-	0.004	-
HCM Control Delay (s)	8.9	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th AWSC
4: Johnson Street & Rose Street

05/12/2022

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	18	23	14	22	13
Future Vol, veh/h	9	18	23	14	22	13
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	0	0	0	11	0	0
Mvmt Flow	12	24	31	19	29	17
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	7.3	7	7.2
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	33%	0%	63%
Vol Thru, %	67%	62%	0%
Vol Right, %	0%	38%	37%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	27	37	35
LT Vol	9	0	22
Through Vol	18	23	0
RT Vol	0	14	13
Lane Flow Rate	36	49	47
Geometry Grp	1	1	1
Degree of Util (X)	0.041	0.052	0.051
Departure Headway (Hd)	4.085	3.781	3.95
Convergence, Y/N	Yes	Yes	Yes
Cap	876	946	904
Service Time	2.112	1.808	1.983
HCM Lane V/C Ratio	0.041	0.052	0.052
HCM Control Delay	7.3	7	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.2	0.2

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
1: Cedar Street & Palatine Road

05/12/2022

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	591	30	77	624	34	20	7	66	21	2	14
Future Vol, veh/h	11	591	30	77	624	34	20	7	66	21	2	14
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	90	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	2	0	0	2	6	0	0	0	0	0	8
Mvmt Flow	11	616	31	80	650	35	21	7	69	22	2	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	685	0	0	651	0	0	1494	1503	636	1520	1501	668
Stage 1	-	-	-	-	-	-	658	658	-	828	828	-
Stage 2	-	-	-	-	-	-	836	845	-	692	673	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.28
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.372
Pot Cap-1 Maneuver	918	-	-	945	-	-	102	123	481	98	123	448
Stage 1	-	-	-	-	-	-	457	464	-	368	389	-
Stage 2	-	-	-	-	-	-	364	382	-	437	457	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	918	-	-	941	-	-	90	111	479	76	111	448
Mov Cap-2 Maneuver	-	-	-	-	-	-	206	227	-	180	216	-
Stage 1	-	-	-	-	-	-	450	457	-	364	356	-
Stage 2	-	-	-	-	-	-	320	350	-	364	450	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	1	19.2	23.3
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	350	918	-	-	941	-	-	235
HCM Lane V/C Ratio	0.277	0.012	-	-	0.085	-	-	0.164
HCM Control Delay (s)	19.2	9	-	-	9.2	-	-	23.3
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1.1	0	-	-	0.3	-	-	0.6

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
2: Rose Street & Palatine Road

05/12/2022

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	663	10	24	723	23	6	0	17	7	1	6
Future Vol, veh/h	5	663	10	24	723	23	6	0	17	7	1	6
Conflicting Peds, #/hr	4	0	18	18	0	4	4	0	5	5	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	1	0	0	3	4	0	0	9	0	0	0
Mvmt Flow	5	684	10	25	745	24	6	0	18	7	1	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	773	0	0	712	0	0	1532	1540	712	1524	1533	765
Stage 1	-	-	-	-	-	-	717	717	-	811	811	-
Stage 2	-	-	-	-	-	-	815	823	-	713	722	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.29	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.381	3.5	4	3.3
Pot Cap-1 Maneuver	851	-	-	897	-	-	96	117	421	98	118	406
Stage 1	-	-	-	-	-	-	424	437	-	376	396	-
Stage 2	-	-	-	-	-	-	374	391	-	426	434	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	848	-	-	882	-	-	88	108	412	89	109	403
Mov Cap-2 Maneuver	-	-	-	-	-	-	88	108	-	89	109	-
Stage 1	-	-	-	-	-	-	413	425	-	371	375	-
Stage 2	-	-	-	-	-	-	348	370	-	402	422	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	24.3	34.6
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	210	848	-	-	882	-	-	136
HCM Lane V/C Ratio	0.113	0.006	-	-	0.028	-	-	0.106
HCM Control Delay (s)	24.3	9.3	0	-	9.2	0	-	34.6
HCM Lane LOS	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.3

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
3: Johnson Street & Cedar Street

05/12/2022

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	12	81	16	12	97
Future Vol, veh/h	14	12	81	16	12	97
Conflicting Peds, #/hr	0	1	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	16	14	92	18	14	110

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	242	105	0	0	113	0
Stage 1	104	-	-	-	-	-
Stage 2	138	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	751	955	-	-	1489	-
Stage 1	925	-	-	-	-	-
Stage 2	894	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	741	951	-	-	1485	-
Mov Cap-2 Maneuver	741	-	-	-	-	-
Stage 1	922	-	-	-	-	-
Stage 2	885	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	0.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	825	1485	-
HCM Lane V/C Ratio	-	-	0.036	0.009	-
HCM Control Delay (s)	-	-	9.5	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
5: Washington Court & Johnson Street 05/12/2022

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	15	1	31	6	1
Future Vol, veh/h	25	15	1	31	6	1
Conflicting Peds, #/hr	0	6	6	0	10	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	4	0	0
Mvmt Flow	33	20	1	41	8	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	59	0	102	49
Stage 1	-	-	-	-	49	-
Stage 2	-	-	-	-	53	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1558	-	901	1025
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	975	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1549	-	886	1019
Mov Cap-2 Maneuver	-	-	-	-	886	-
Stage 1	-	-	-	-	973	-
Stage 2	-	-	-	-	964	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	903	-	-	1549	-
HCM Lane V/C Ratio	0.01	-	-	0.001	-
HCM Control Delay (s)	9	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
6: Smith Street & Johnson Street

05/12/2022

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	22	4	10	25	7	9
Future Vol, veh/h	22	4	10	25	7	9
Conflicting Peds, #/hr	0	7	7	0	6	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	6	0	0
Mvmt Flow	25	4	11	28	8	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	36	0	90	34
Stage 1	-	-	-	-	34	-
Stage 2	-	-	-	-	56	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1588	-	915	1045
Stage 1	-	-	-	-	994	-
Stage 2	-	-	-	-	972	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1577	-	897	1038
Mov Cap-2 Maneuver	-	-	-	-	897	-
Stage 1	-	-	-	-	987	-
Stage 2	-	-	-	-	959	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.1	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	971	-	-	1577	-
HCM Lane V/C Ratio	0.019	-	-	0.007	-
HCM Control Delay (s)	8.8	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

HCM 6th TWSC
7: Site Access Drive & Johnson Street 05/12/2022

Intersection	
Int Delay, s/veh	3.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	17	11	17	19	7	10
Future Vol, veh/h	17	11	17	19	7	10
Conflicting Peds, #/hr	0	6	6	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	12	18	20	7	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	36	0	86	30
Stage 1	-	-	-	-	30	-
Stage 2	-	-	-	-	56	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1588	-	920	1050
Stage 1	-	-	-	-	998	-
Stage 2	-	-	-	-	972	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1579	-	903	1044
Mov Cap-2 Maneuver	-	-	-	-	903	-
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	960	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.5	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	981	-	-	1579	-
HCM Lane V/C Ratio	0.018	-	-	0.011	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Attachment: EXHIBIT - Traffic Impact Study (2022-61 : Site Plan Review - 301 W. Johnson Street)

Consider an Ordinance Amending Section 18-81 of the Code of Ordinances to Add a No Parking Restriction on South Rose Street from Kenilworth Avenue to a Point 250 Feet North

BACKGROUND:
At the June 2022 Traffic Engineering Committee meeting, the group examined a parking concern from residents and Staff. The section of South Rose Street from Kenilworth Avenue to the creek has become a drop-off/pickup location for students attending Stuart R. Paddock Elementary School. This has resulted in traffic congestion not only for the residents in the area, but for the parents/guardians dropping off children.

KEY ISSUES:

- The Police Department and Public Works staff have observed the area and have concluded that a parking restriction would best ease this issue.
- Restricting parking for the east side of the roadway is considered preferable as the lot frontage for the one lot which would now have prohibited parking would have parking available on Kenilworth Avenue.
- The Traffic Engineering Committee is in agreement with the proposed restriction.
- The area has high pedestrian and bicycle traffic on the sidewalk due to the proximity to the school and an informal drop off and pick up use in the area.

ALTERNATIVES:

1. Prohibit parking on the east side of South Rose Street from Kenilworth Avenue to a point 250 feet north when school is in session.
2. Refer back to Staff with comments.

RECOMMENDATION:
Staff recommends the no parking restriction be added to the Village Code.

ACTION REQUIRED:
Motion to approve an ordinance amending Section 18-81 of the Code of Ordinances to add a no parking restriction “on the east side of South Rose Street from Kenilworth Avenue to a point 250 feet north, when school is in session”.

ATTACHMENTS:

- Ordinance - Farm Gate No Left Turns, Johnson No Left Turns, and Rose No Parking
- Exhibit A - Traffic Code
- GIS map

RESULT:	**MOTION CARRIED BY VOICE VOTE BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Attachment: Ordinance - Farm Gate No Left Turns, Johnson No Left Turns, and Rose No Parking [Revision 1] (2022-62 : Amend Section 18-81:

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE VILLAGE OF PALATINE'S TRAFFIC CODE SECTION 18-66: ILLEGAL TURNS – NO LEFT TURNS AND SECTION 18-81: PROHIBITED PLACES (EFFECTIVE JULY 18, 2022)

Published in pamphlet form by authority of the Mayor and Council of the Village of Palatine on July 11, 2022

Attachment: Ordinance - Farm Gate No Left Turns, Johnson No Left Turns, and Rose No Parking [Revision 1] (2022-62 : Amend Section 18-81:

ORDINANCE NO._____

AN ORDINANCE AMENDING THE VILLAGE OF PALATINE'S TRAFFIC CODE SECTION 18-66: ILLEGAL TURNS – NO LEFT TURNS AND SECTION 18-81: PROHIBITED PLACES

WHEREAS, SECTION 18-66 of the Code of Ordinances provides for the designation of areas where certain turns are prohibited; a complete listing of which shall be maintained at all times by the Village Clerk and by the Police Department; and

WHEREAS, SECTION 18-81 of the Code of Ordinances authorizes NO PARKING, a complete listing of which shall be maintained at all times by the Village Clerk and by the Police Department.

NOW, THEREFORE BE IT ORDAINED by the Mayor and Council of the Village of Palatine, Cook County, Illinois:

SECTION 1: That the following be REMOVED from Section 18-66 NO LEFT TURNS:

7. "No left turns at the entrance off of Farmgate Lane to Lincoln School between the hours of 8:00 a.m. and 9:00 a.m., Monday through Friday"

SECTION 2: That the following be ADDED to Section 18-66 NO LEFT TURNS, which shall read as follows and indicated in the attached Exhibit A:

7. "No left turns at the entrance off of Farm Gate Lane to Lincoln School between the hours of 8:00 a.m. and 9:30 a.m., Monday through Friday"

SECTION 3: That the following be ADDED to Section 18-66 NO LEFT TURNS, which shall read as follows and indicated in the attached Exhibit A:

"No left turns for westbound Johnson Street to southbound Washington Court between the hours of 7:00 a.m. and 9:00 a.m., Monday through Friday (except for buses)."

SECTION 4: **That the following by ADDED to Section 18-81 PROHIBITED PLACES, which shall read as follows and indicated in the attached Exhibit A:**

"Rose Street (east side): Kenilworth Avenue to a point 250 feet north (when school is in session)"

SECTION 5: **That the Public Works Department is hereby directed to erect the appropriate signage.**

SECTION 6: **That all ordinances in conflict with this ordinance are hereby repealed.**

SECTION 7: **This ordinance shall be in full force and effect seven (7) days after its passage and approvals as provided by law.**

PASSED: This _____ day of _____, 2022
AYES:_____ NAYS:_____ ABSENT:_____ PASS:_____
APPROVED by me this _____ day of _____, 2022

_____
Mayor of the Village of Palatine

ATTESTED and FILED in the Office of the Village Clerk
this _____ day of _____, 2022

_____
Village Clerk

EXHIBIT "A" - SECTION 18-66 - ILLEGAL TURNS

NO U-TURNS: The following u-turns are prohibited:

1 Benton Street (both directions): in front of St. Theresa School
2 Benton Street (SB): in front of 500 N. Benton Street
3 Cedar Street (NB) from northeast corner of Michigan Avenue to a point 368 feet north
4 Euclid Avenue (both directions): by the entrance to Harper College
5 Falcon Drive (NB): at Euclid Avenue
6 Hicks Road (SB): at Baldwin Road
7 Illinois Avenue (both directions): Quentin Road to Mallard Drive
8 Northwest Highway (NB): at Hicks Road
9 Northwest Highway (WB): at Hicks Road
10 Palatine Road (both directions): at Winston Drive
11 Plum Grove Road (NB): Slade Street to Wilson Avenue
12 Quentin Road (NB): in front of Fremd High School
13 Rohlwing Road (both directions): in front of Virginia Lake School
14 Smith Street (both directions): in front of Sundling Jr. High School
15 Wilke Road (both directions): Thomas Street to the Village limit
16 Winston Drive (NB): at north Palatine Frontage Road
17 Winston Drive (SB): at south Palatine Frontage Road

NO RIGHT TURNS: The following right turns are prohibited:

1 Colfax Street (EB): onto Bothwell Street
2 Dundee Road (WB): on red onto Quentin Road
3 Hicks Place (EB): on red onto Northwest Highway
4 Lincoln Street (WB): on red onto Northwest Highway
5 Northwest Highway (EB): into the eastern most entrance of Palatine Plaza
6 Northwest Highway (SB): onto Hicks Place
7 Old Hicks Road (SB): onto Westmoreland Drive
8 Palatine Road (both directions): on red onto Rohlwing Road when pedestrians are present
9 Palatine Road (WB): on red onto Smith Street when pedestrians are present
10 Palatine Road (WB): onto Harrison Street from 2:00 PM to 4:00 PM Mon - Fri when school in session
11 Quentin Road (both directions): on red onto Dundee Road when pedestrians are present
12 Rohlwing Road (SB): onto Lenox Lane from 2:00 PM to 4:00 PM Monday - Friday
13 Smith Street (SB): on red onto Northwest Highway when pedestrians are present
14 Smith Street (SB): on red onto Palatine Road when pedestrians are present
15 Wilke Road (SB): onto Lake Louse Drive

Attachment: Exhibit A - Traffic Code (2022-62 : Amend Section 18-81: No Parking on South Rose Street)

NO LEFT TURNS: The following left turns are prohibited:

1 Cedar Street (NB): into the Pleasant Hill Elementary School parking lot from 8:00 AM to 9:00 AM when school is in sess
2 Colfax Street (EB): onto Bothwell Street from 6:00 AM to 9:00 AM and 3:00 PM to 6:00 PM
3 Colfax Street (WB): onto Bothwell Street
4 Dundee Road (WB): onto Elm Street from 4:00 PM to 6:00 PM
5 Dundee Road (WB): onto Oak Street from 4:00 PM to 6:00 PM
6 Fremd H. S. Front Parking Lot (NB) onto Illinois Ave from 7:00AM to 8:00AM and 2:30PM to 3:30PM Monday-Friday
7 Farmgate Lane (EB): into the entrance of Lincoln School from 8:00AM to 9:~~00~~30 AM Monday - Friday
8 Illinois Avenue (WB) into the Fremd High School Front parking lot from 7:00AM to 8:00AM, Monday-Friday
9 Johnson Street (WB) toWashington Court (SB) between the hours of 7:00AM and 9:00AM, Monday-Friday (except for b ;)
10 Lake Louise Drive (EB): onto Wilke Road
11 Lenox Lane (EB): onto Rohlwing Road from 2:00 PM to 4:00 PM Monday - Friday
12 Michigan Avenue (WB): onto southbound Cedar Street from 8:00 AM to 9:00 AM and 3:00 PM to 4:00 PM Monday - Fı /
13 Northwest Highway (EB): onto Katie Lane
14 Northwest Highway (WB): onto Augustus Court
15 Old Hicks Road (NB): onto Westmoreland Drive
16 Palatine Road (EB): onto Harrison Street from 2:00 PM to 4:00 PM Monday - Friday
17 Palatine Road (EB): onto Middleton Drive from 6:00 AM to 9:00 AM Monday - Friday (except for buses)
18 Plum Grove Road (NB): onto Station Street
19 Plum Grove Road (SB): into the north entrance of the Jewel parking from 4:00 PM to 6:00 PM
20 Railroad Avenue (EB): onto Plum Grove Road
21 Rose Avenue (NB): onto Johnson Street from 7:00 AM to 9:00 AM and 2:00 PM to 4:00 PM when school is in session
22 Slade Street (WB): onto Plum Grove Road
23 Station Street (EB): onto Plum Grove Road
24 Wilke Road (NB): onto Lake Louse Drive
25 Wood Street (WB): onto southbond Smith Street from 6:00 AM to 8:00 AM and 4:00 PM to 6:00 PM Monday - Friday
26 Wood Street (WB): into the east driveway for the drop-off lane at the commuter train station

Note:

(NB) = Northbound traffic

(SB) = Southbound traffic

(EB) = Eastbound traffic

(WB) = Westbound traffic

Attachment: Exhibit A - Traffic Code (2022-62 : Amend Section 18-81: No Parking on South Rose Street)

EXHIBIT "A" - SECTION 18-81 (15) PROHIBITED PLACES

1 On any property without the consent of the property owner.

1.1 Continuing or recurring incidents of parking on private property or commercial zones without consent of owner as evidenced by the issuance of five (5) or more citations within a calendar year will require:

(a) The property owner/agent to file a written request for continued enforcement with the Chief of Police. Upon receipt of such written request, the Chief of Police shall forward the same to the Village Manager with recommendation concerning the request for continued enforcement and for posting of signs on the property as a condition of continued enforcement. The Village Manager's determination regarding continued enforcement and required signage shall be final, subject only to appeal by the property owner/agent to the Village Council.

(b) Approved enforcement authorization agreements shall remain in full force and effect until such time that the Villag property owner/agent notifies the other party in writing of the cancellation and associated effective date of said enforce ıt authorization agreement.

(c) All required signage will be at the expense of the property owner/agent.

2 Algonquin Road (both sides): Within the Palatine Village limits

3 Anderson Drive (north side): Clark Drive to Winston Drive

4 Babcock Drive (south side): Boynton Drive to Clark Street

5 Baldwin Road (both sides): Dundee Road to Nichols Road

6 Benton Street (east side): Palatine Road to Northwest Highway

7 Benton Street (west side): 500 N. Benton St., between "No Parking Loading" sign and Northwest Hwy.

8 Benton Street (west side): Comfort Lane to Sherman Street (from 7:00 AM to 1:00 PM on Sundays)

9 Benton Street (west side): Illinois Avenue to Michigan Avenue

10 Bothwell Street (east side): Helen Road to Daniels Street

11 Bothwell Street (east side): Johnson Street to north of 19 S. Bothwell Street

12 Bothwell Street (west side): Johnson Street to 24 S. Bothwell Street

13 Brockway Street (east side): Northwest Highway to Wood Street

14 Brockway Street (east side): Washington Street to Palatine Road

15 Brockway Street (west side): Helen Road to Daniels Road

16 Brockway Street (west side): Northwest Highway to a point 220 feet south

17 Brockway Street (west side): Wood Street to a point 70 feet north

18 Cambridge Drive (west side): Cornell Avenue to St. Johns Place

19 Capri Drive (south side): Rand Road to Lilac Drive

Attachment: Exhibit A - Traffic Code (2022-62 : Amend Section 18-81: No Parking on South Rose Street)

20 Carpenter Drive (both sides): Between 100 feet to the east and west of the centerline of Hicks Road.

21 Carpenter Drive (north side): Clark Drive to the east side of 1054 E. Carpenter Drive

22 Cedar Street (east side): Illinois Avenue to a point 100 feet north of Michigan Avenue

25 Cedar Street (west side): Illinois Avenue to Michigan Avenue

23 Cedar Street (east side): Palatine Road south to 5-feet south of the driveway for 17 S. Cedar Street

26 Cedar Street (west side): Palatine Road to 20 feet south of Johnson Street

27 Cedar Street (west side): Palatine Road to Wood Street

24 Cedar Street (east side): Slade Street to Wilson Street

28 Chestnut Street: North of Cornell Street

29 Church Drive (south side): Rohlwing Road to Babcock Drive

30 Clark Drive (both sides): Carpenter Drive to Cooper Drive

31 Clark Drive (east side): Babcock Drive to a point 60 feet north

32 Clark Street (both sides): Babcock Drive to Williams Drive

33 Clark Street (west side): Sayles Drive to Slayton Drive

34 Clark Drive (east side): from 25 ft. north of the bike path, south to the corner of Jane Addams Dr. (by Sycamore Park)

35 Clark Drive (west side): for a distance of 25 ft. on either side of the bike path (by Sycamore Park)

36 Colfax Street (both sides): Northwest Highway/Hicks Place to Northwest Highway/Baldwin Road

37 Comfort Lane (south side): Plum Grove Road to Benton Street

39 Consumers Avenue (east side): Northwest Highway to its north terminus

40 Consumers Avenue (west side): Northwest Highway to a point 175 feet north

41 Coolidge Avenue (west side): Northwest Highway to a point 630 feet north

42 Cornell Avenue (north side): Eric Drive to Carter Street

43 Cornell Street: Eric Drive to Chestnut Street

44 Countryside Drive (east and south sides): Northwest Highway to Sterling Avenue

45 Countryside Drive (west side): From 1078 feet to 1128 feet north of the R-O-W line at Northwest Hwy.

46 Countryside Drive (west side): Northwest Highway to the YMCA entrance

47 Creekside Drive (west side): Wilmette Road to a point 100-feet south

48 Cunningham Drive (both sides): Hicks Road to a point 300 feet east

49 Cunningham Drive (south side): Plum Grove Road to a point 170 feet west

Attachment: Exhibit A - Traffic Code (2022-62 : Amend Section 18-81: No Parking on South Rose Street)

50 Deer Run Drive (west side): Northwest Highway to Walden Drive

51 Dundee Road (both sides): Within the Palatine Village limits

52 Elm Street (both sides): Illinois Avenue to Revere Lane

53 Eric Drive (west side): Cornell Avenue to a point 120 feet south

54 Euclid Avenue (both sides): Within the Palatine Village limits

55 Evergreen Drive (west side): Rand Road to Williams Drive

56 Exner Court (south side): Quentin Road to a point 400 feet west

57 Fern Court (west side): Between both intersections with Plum Grove Road

58 Franklin Avenue (both sides): to a point 30 feet on either side of the centerline of the cross road culvert

59 Fremont Street (both sides): Colfax Street to a point 75 feet north

60 Fremont Street (east side): Colfax Street to Wood Street

61 Fremont Street (west side): Colfax Street to a point 75 feet south

62 Gardenia Lane (both sides): Capri Drive to Baldwin Road

63 Glencoe Road (north side): Northwest Highway to Linden Avenue

64 Glenn Drive (both sides): Carpenter Dr. to Cooper Dr. (8:00 AM to 6:00 PM except Sat., Sun. & Holidays)

65 Greeley Street (both sides): Johnson Street to Washington Street

66 Greeley Street (east side): Johnson Street to a point 160 feet north

67 Greeley Street (west side): Palatine Road to a point 50 feet south

68 Hale Street (east side): Colfax Street to a point 155 feet south

69 Hale Street (east side): From Colfax Street to its north end

70 Hale Street (east side): Palatine Road to Lincoln Street

71 Hale Street (west side): Colfax Street to Lincoln Street

72 Hart Street (east side): Slade Street to Wilson Street

73 Harvard Drive (east side): Illinois Avenue to 825 Harvard Drive

74 Helen Road (both sides): Hicks Road to Oak Street

75 Helen Road (north side): West side of the creek to Cedar Street (8:00 AM to 5:00 PM)

76 Helen Road (both sides): Plum Grove Road to a point 110 feet east

77 Helen Road (south side): Smith Street to Greeley Street

78 Hicks Place (both sides): Northwest Highway to Mozart Street

Attachment: Exhibit A - Traffic Code (2022-62 : Amend Section 18-81: No Parking on South Rose Street)

79 Hicks Road (both sides): Northwest Highway to Helen Road

80 Hicks Road (both sides): Northwest Highway to Lake Cook Road

81 Hicks Road (west side): Helen Road to the southern Palatine Village limit

82 High Grove Lane (both sides): Gardenia Lane south to its terminus

83 Hill Street (south side): Grove Avenue to Forest Avenue

84 Home Avenue (north side): Elm Street to Oak Street

85 Illinois Avenue (both sides): Cedar Street to Quentin Road

86 Illinois Avenue (both sides): Centerline of Hicks Road to a point 625 feet west

87 Illinois Avenue (both sides): Mallard Drive to White Willow Bay

88 Illinois Avenue (north side): Quentin Road to Harvard Court

89 Illinois Avenue (south side): Harvard Drive to a point 151 feet east

90 Illinois Avenue (south side): Quentin Road to a point 400 feet west

91 Jane Addams Drive (north side): Clark Street to Williams Drive

92 Johnson Street (north side): 18 W. Johnson Street east to Plum Grove Road

93 Johnson Street (south side): Brockway Street to Plum Grove Road

94 Johnson Street (south side): Cedar Street to a point 160 feet east of Smith Street

95 Joyce Avenue (north side): Winston Drive to a point 150 feet east

96 Kenilworth Ave.: 360 feet west of the west R-O-W on Elizabeth St. to the west end of Kenilworth Ave.

97 Kenilworth Avenue: (south side): Quentin Road to Harrison Avenue

98 Kenilworth Avenue (north side): Rohlwing Road to Clubhouse Drive

99 Kerwood Street (both sides): Palatine Road to Glencoe Road (between 10:00 PM and 1:00 AM)

100 King Edward Court (east side)

101 King Edward Court (west side): Prohibited from 8:00 PM to 6:00 AM

102 Kitson Drive (north side): Williams Drive to Fosket Drive

103 Lake-Cook Road (both sides): Within the Palatine Village limits

104 Laurel Drive (east side): Lilly Lane north to its terminus (Holly Way)

105 Leonard Road (east side): Palatine Road to Glencoe Road

106 Lilly Lane (north side): Rand Road to Rose Avenue

107 Lincoln Street (both sides): Centerline of Northwest Highway to a point 300 feet east

Attachment: Exhibit A - Traffic Code (2022-62 : Amend Section 18-81: No Parking on South Rose Street)

108 Lincoln Street (south side): Fremont Street to Plum Grove Road

109 Linden Avenue (both sides): Glencoe Road to Palatine Road (no truck parking)

110 Linden Avenue (east side): Glencoe Road north to its terminus (Lincoln Street)

111 Lynda Drive (both sides): Capri Road to Dundee Road

112 MacArthur Lane (east side): 450 feet east of Elmwood Ave. to 640 feet south of Eisenhower Ave.

113 Maple Avenue (both sides): Northwest Highway to a point 630 feet north

114 Maple Avenue (east side): Northwest Highway to Poplar Street

115 Maple Street (east side): Slade Street to Wilson Street (7:00 AM to 4:00 PM Mon - Fri)

116 Maple Street (east side): Wood Street to a point 320 feet south

117 Meadow Lane (south side): Stark Drive to Greenwood Avenue (April 1 through July 31)

118 Merrill Avenue (dead end): 325 north of the centerline of Palatine Road

119 Mozart Street (both sides): Colfax Street to a point 75 feet north.

120 Mozart Street (east side): Colfax Street to a point 130 feet north of Wood Street

121 Mozart Street (west side): Colfax Street to a point 475 feet south

122 N. Lake Shore Drive (west side): Cornell Avenue to its north end

123 N. Palatine Frontage Road (north side): Williams Drive to Route 53

124 N. Palatine Frontage Road (south side): Williams Drive to Wilke Road

125 N. Palatine Frontage Road (south side): Winston Drive to Alison Drive

126 Nichols Road (both sides): Baldwin Road to Old Hicks Road (1:00 AM to 6:00 AM)

127 North Coach Road (west side): Old Hicks Road to Castle Court (April 1 to August 15)

128 North Court (both sides): First Bank Drive to a point 820 feet northwesterly (to Renaissance Place)

129 North Court (east side): Renaissance Place to a point 175 feet south

130 Northwest Highway (both sides): Within the Palatine Village limits

131 Oak Street (both sides): Colfax Street to a point 75 feet north

132 Oak Street (east side): Dundee Road to Home Avenue

133 Oak Street (east side): Palatine Rd. to Slade St. (8:00 Am to 6:00 PM except Sat., Sun., and Holidays)

134 Oak Street (west side): Palatine Road to Wood Street

135 Old Hicks Road (north and west sides): Westmoreland Drive to Nichols Road

136 Old Hicks Road (north side): Wainwright Court west to Old Hicks Road

Attachment: Exhibit A - Traffic Code (2022-62 : Amend Section 18-81: No Parking on South Rose Street)

137 Old Hicks Road (south side): 140 feet west of Wainwright Court to Westmoreland Drive

138 Old Hicks Road (west side): 185 feet south of N. Coach Rd. to N. Coach Rd. (Apr. 1 - Aug. 15)

139 Olde Virginia Road (south side): Cottonwood Way to Williams Drive

140 Olive Street (both sides): Wilke Road to a point 250 feet west

141 Palatine Frontage Road North (north side): Between 150 feet west and east of Winston Drive

142 Palatine Road (both sides – not frontage roads): Northwest Highway to easterly Village limit

143 Palatine Road (both sides): Harrison Street to Roselle Road

144 Palatine Road (both sides): Quentin Road to Northwest Highway

145 Parallel Street (north side): From a 160 feet west of Northwest Highway to Glenwood Street

146 Parallel Street (north side): From Glenwood Street to a point 200 feet west

147 Parkside Drive (both sides): Throughout the 600 block

148 Parkside Drive (north side): Between the intersections with Euclid Avenue

149 Plum Grove Road (both sides): Colfax Street to a point 60 feet south of Richmond Street

150 Plum Grove Road (both sides): Comfort Street to Northwest Highway

151 Plum Grove Road (both sides): Palatine Road to the southern Palatine Village limit

152 Plum Grove Road (both sides): Russett Way to Farm Gate Lane

153 Plum Grove Road (west side): Wood Street to Colfax Street

154 Quentin Road (both sides): Within the Palatine Village limits

155 Rand Road (both sides): Within the Palatine Village limits

156 Robinson Drive (both sides): Sayles Drive to Plate Drive

157 Rohlwing Road (both sides): From the north edge of Cunningham Drive on the east side, northerly for a distance of 800 feet and from the northern edge of Cunningham Drive on the west side, northerly for a distance of 1,420 feet

158 Rohlwing Road (east side): Palatine Road to Church Street

159 Rosalind Drive (both sides): Quentin Road to Ruhl Road

160 Rosalind Drive (south side): North Troons Crossing to a point 550 feet west

161 Rose Street (east side): Kenilworth Avenue to a point 250 feet north (when school is in session)

162 Rose Street (both sides): Capri Drive to Lily Lane (Between signs)

163 Roselle Road (both sides): Palatine Road to Algonquin Road

164 Sanborn Drive (south side): adjacent to Lindberg Park

Attachment: Exhibit A - Traffic Code (2022-62 : Amend Section 18-81: No Parking on South Rose Street)

165 Sayles Drive (north side): Clark Drive to the east entrance drive of Jane Adams school

166 Sayles Drive (south side): Clark Drive to a point 50 feet east of Robinson Drive

167 Schiller Street (both sides): Colfax Street to a point 75 feet north.

168 Schubert Street (both sides): Colfax Street to a point 75 feet north.

169 Schubert Street (east side): Colfax Street to Wood Street (except between 7:00 AM & 1:00 PM on Sundays)

170 Slade Street (north side): Rose Street to Cedar Street

171 Slade Street (south side): Oak Street to Plum Grove Road

172 Smith Street (both sides): Center line of Colfax Street to a point 450 feet north

173 Smith Street (both sides): Dundee Road to a point 440 feet north of Tower Place

174 Smith Street (both sides): Johnson Street to its terminus

175 Smith Street (both sides): Wood Street to Colfax Street (except for cab & bus stand)

176 Springwood Drive (west side): Delgado Drive to Lenox Lane

177 Stark Drive (both sides): Tahoe Trail to Meadow Lane

178 Stark Drive (south side): Greenwood Drive to Wilton Court

179 Stark Drive (west side): From the 400 block of Stark Drive to Meadow Lane

180 Stark Drive (west side): Wilton Court to Meadow Lane

181 Stephan Drive (both sides): Geri Avenue to Colfax Street (8:00 AM to 5:00 PM Monday – Friday)

182 Sterling Ave. (east side): From 4138 feet to 4188 feet north and from 4244 feet to 4294 feet north of the north right-of-way line of Northwest Highway

183 Sterling Avenue (east side): From 1682 feet to 3323 feet north of the R-O-W line of Northwest Hwy.

184 Sterling Avenue (east side): From 3273 feet to 3323 feet north of the R-O-W line of Northwest Hwy.

185 Sterling Avenue (east side): From 5200 feet to 5250 feet north of the R-O-W line of Northwest Hwy.

186 Sterling Avenue (east side): From 5750 feet to 5800 feet north of the R-O-W line of Northwest Hwy.

187 Sterling avenue (east side): From 6112 feet to 6180 feet north of the R-O-W line of Northwest Hwy.

188 Sterling Avenue (west side): Northwest Highway to Countryside Drive

189 Twin Lake Drive (both sides): Creekside Drive east to its terminus

190 Twin Lake Drive (north side): Creekside Drive east to its terminus

191 Vermont Street (east side): Throughout the 600 block (no parking between driveways or signs)

192 Vermont Street (west side): North of Illinois Avenue

Attachment: Exhibit A - Traffic Code (2022-62 : Amend Section 18-81: No Parking on South Rose Street)

193 Vermont Street (east side): between the south driveway for 555/563 S. Vermont Street and the north driveway for 433 S. Vermont Street

194 Vermont Street (east side): between the south driveway for 555/563 S. Vermont Street and the north driveway for 601-617 S. Vermont Street

195 Vermont Street (east side): between the south driveway for 601-617 S. Vermont Street and the north driveway for 619-631 S. Vermont Street

196 Vermont Street (east side): for a distance of 25 ft. on either side of the driveway to the parking lot south of the 707-717 Vermont St. building

197 Vermont Street: 25 feet north of the southern drive located at 863 Vermont Street

198 Wainwright Court (east side): Old Hicks Road to the south end

199 Walnut Street (both sides): To a point 158 feet south of Palatine Road

200 Warren Avenue (east side): Northwest Highway to Olive Street

201 Washington Street (south side): Greeley Street to Fremont Street

202 Westmoreland Drive (east and south sides): From Old Hicks Road to Old Hicks Road

203 Whitcomb Drive (east side): Jane Addams Drive to a point 230 feet south

204 Wilke Road (west side): Within the Palatine Village limits

205 Williams Avenue (west side): 250 feet from Northwest Highway to 718 S. Williams Avenue

206 Williams Drive (both sides): Palatine Road to Clark Drive

207 Williams Drive (east side): Olive Street south to its terminus

208 Williams Drive (east side): Rand Road to a point 50 feet south of Prairie Brook Drive

209 Williams Drive (west side): Anderson Drive south to Salt Creek (8:00 AM to 6:00 PM except Saturday 4:00 PM to 6:00 PM and Sunday 7:00 AM to 1:00 PM)

210 Williams Drive (west side): Rand Road to Meadow Lake Drive

211 Wilmette Avenue (north side): Plum Grove Road to Benton Street

212 Wilmette Avenue (south side): Benton Street to a point 200 feet east of Plum Grove Road

213 Wilmette Road (north side): Rohlwing Road to Twin Lake Drive

214 Wilmette Road (south side): Creekside Drive to a point 100 feet west

215 Wilson Avenue (south side): Harrison Avenue to Clyde Avenue

216 Wilson Street (both sides): Linden Avenue to Northwest Highway

217 Wilson Street (south side): Benton Street to Plum Grove Road

218 Wilson Street (south side): Rose Street to Cedar Street

219 Winston Drive (east side): Within 50 feet of its intersection with Joyce Avenue

220 Winston Drive (west side): Joyce Avenue to a point 50 feet north

Attachment: Exhibit A - Traffic Code (2022-62 : Amend Section 18-81: No Parking on South Rose Street)

221 Winston Drive: between S. Frontage Road and N. Frontage Road.

222 Wood Street (north side): Benton Street to Plum Grove Road (except Sun. from 8:30 AM to 12:30 PM)

223 Wood Street (north side): Fremont St. to Benton St. (8:00 AM to 6:00 PM except Sun. & Holidays)

224 Wood Street (north side): Middleton Avenue to Clyde Avenue

225 Wood Street (north side): Oak Street to Fremont Street

226 Wood Street (north side): Quentin Road to a point 315 feet east

227 Wood Street (north side): Schubert Street to Mozart Street

228 Wood Street (north side): 15 feet west of the eastern bike path crossing to 15 feet east of the loading dock at 550 W. W Street

229 Wood Street (north side): 15 feet west to 15 east of the western bike path crossing

230 Wood Street (south side): Smith Street to Quentin Road

Attachment: Exhibit A - Traffic Code (2022-62 : Amend Section 18-81: No Parking on South Rose Street)

231 Wood Street (south side): Driveway entrance to Sanborn School to Mozart Street.

232 Wood Street (south side): Mozart Street to Northwest Highway (except Sundays 7:30 AM to 1:00 PM)

233 Wood Street (south side): Oak Street to Plum Grove Road

234 Woodwork Lane (east side): Wood Street to 15-feet north of the north edge of the driveway at 317 N. Woodwork Lane

235 Woodwork Lane (west side) from Wood Street to a point 50-feet north

236 Woodwork Lane (west side) for 15-feet south of the south edge of the driveway at 246 N. Woodwork Lane

237 Woodwork Lane (west side) for 85-feet north of the north edge of the driveway at 248 N. Woodwork Lane

18-81 (15) NO PARKING HERE TO CORNER

1 Bennett Avenue (both sides): Illinois Avenue north as indicated

2 Benton Street (east side): Illinois Avenue north as indicated

3 Bothwell Street (west side): Johnson Street south as indicated

4 Clark Street (west side): Driveway at 708 N. Clark Street to Sayles Drive

5 Cove Drive (both sides): Northwest Highway north as indicated

6 Cunningham Drive (both sides): Olde Virginia Road east as indicated

7 Cunningham Drive (both sides): Smith Street east as indicated

8 Illinois Avenue (north side): Benton Street east and west as indicated

9 Olde Virginia Road (both sides): Cunningham Drive south as indicated

10 Pleasant Hill Boulevard (both sides): Plum Grove Drive west as indicated

11 Warren Avenue (both sides): Northwest Highway north as indicated

18-81 (15) NO PARKING, STANDING OR STOPPING

53 frontage road (both sides): Rand Road to the north Village limit

Benton Street (west side): From 72.5 feet south of 500 N. Benton Street "Loading Zone" to Comfort Lane

Dundee Road (both sides): Baldwin Road to the east Village limit

Farmgate Lane (north side): Country Lane to Hicks Road

Glade Road (both sides) Plum Grove Road to a point 200 feet west

Attachment: Exhibit A - Traffic Code (2022-62 : Amend Section 18-81: No Parking on South Rose Street)

Illinois Avenue (south side): From 350 feet west to 900 feet west (creek) of Brockway Street

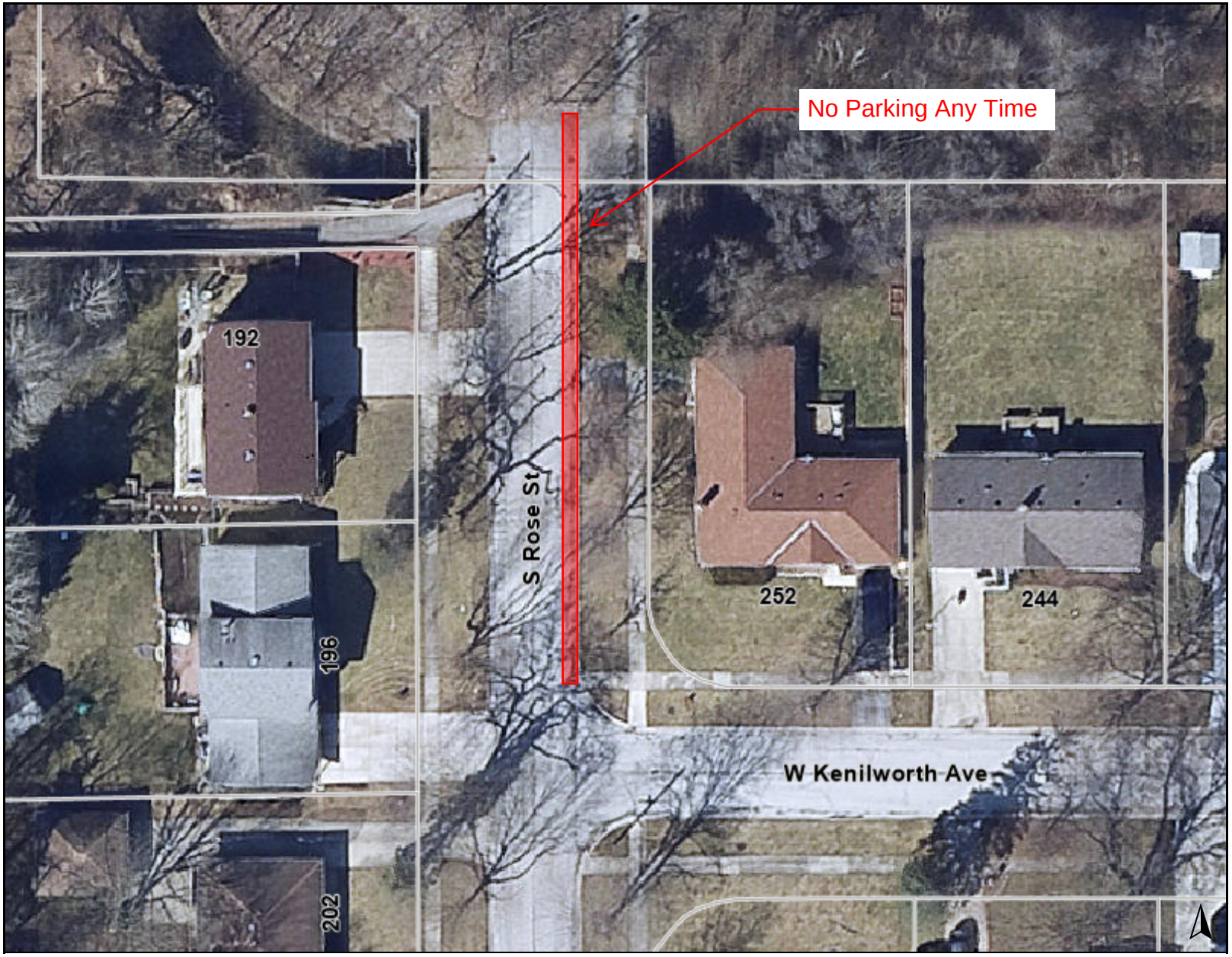
Rohlwing Road (east side): Adjacent to Virginia Lake School (bus loading only)

Rohlwing Road (west side): Between Carpenter Drive and Mill Valley Drive
(between 8:00 AM and 9:00 AM and between 2:30 PM and 3:30 PM on school days)

Attachment: Exhibit A - Traffic Code (2022-62 : Amend Section 18-81: No Parking on South Rose Street)

VILLAGE OF PALATINE Est. 1866

No Parking South Rose Street



Legend

0 50 100 ft

Print Date: 6/29/2022

Notes

Disclaimer: The GIS Consortium and MGP Inc. are not liable for any use, misuse, modification or disclosure of any map provided under applicable law. This map is for general information purposes only. Although the information is believed to be generally accurate, errors may exist and the user should independently confirm for accuracy. The map does not constitute a regulatory determination and is not a base for engineering design. A Registered Land Surveyor should be consulted to determine precise location boundaries on the ground.

Attachment: GIS map (2022-62 : Amend Section 18-81: No Parking on South Rose Street)

Consider an Ordinance Amending Section 18-66 of the Palatine Code of Ordinances to Add No Left Turns from Westbound Johnson Street to Southbound Washington Court

BACKGROUND:
The Traffic Engineering Committee examined a safety concern raised by residents, Community Consolidated School District 15, the Police Department, and Village staff regarding traffic issues near Stuart R. Paddock Elementary School.

KEY ISSUES:

- Over the last several years, the number of private passenger vehicles dropping children off at the local schools had increased.
- The increase in traffic has led to greater confusion and uncertainty for drivers in the area with several turning movements at an offset intersection during a period of high congestion.
- On several occasions, the queue to drop off students has backed up on to Cedar Street and caused bus traffic to back up on to both Johnson and Rose Streets, and on a few extreme occasions on to Palatine Road.
- This has also resulted in traffic trying to bypass the area by entering into the oncoming lane.
- This is creating a safety hazard for all the traveling public, especially students that are walking to school.
- The Police Department, Village staff, and School District 15 have worked on a compromise to have all bus traffic enter the area from westbound on Johnson Street and turn south on Washington Court to enter the school. Left turns would be prohibited for all other vehicles.
- This turn restriction would help direct the private passenger vehicles by avoiding confusion with both the school bus traffic and the walking public.

ALTERNATIVES:

1. Prohibit left turns during the morning peak travel period.
2. Refer back to Staff with comments.

RECOMMENDATION:
The Traffic Engineering Committee recommends the no left turn prohibition be added to the Village Code.

ACTION REQUIRED:
Motion to approve an ordinance amending Section 18-66 of the Palatine Code of Ordinances by adding a prohibition for left turns “from westbound Johnson Street to southbound Washington Court between the hours of 7:00 to 9:00 a.m., Monday through Friday (except for buses)”.

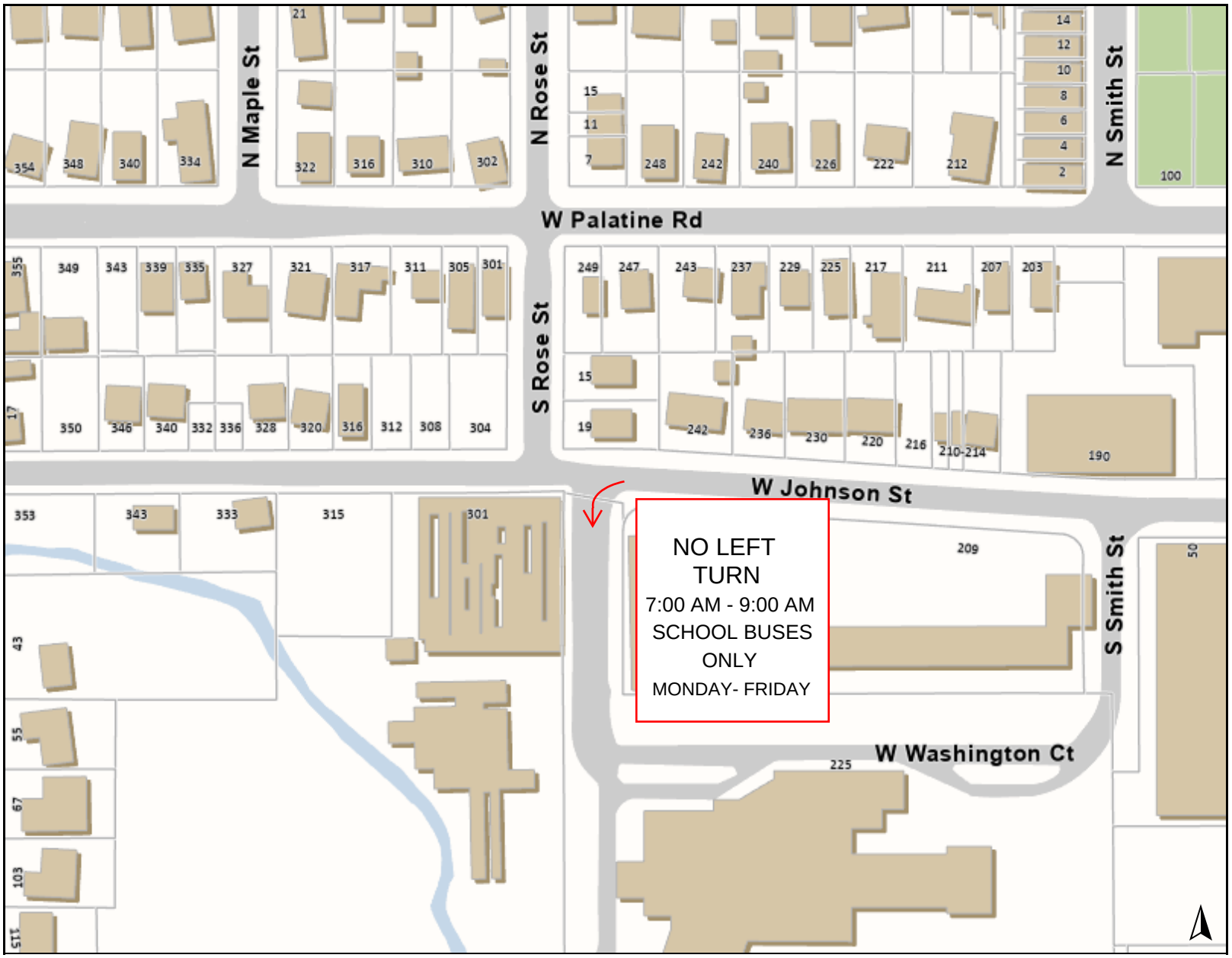
ATTACHMENTS:

- GIS MAP

RESULT:	**MOTION CARRIED BY VOICE VOTE BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

VILLAGE OF PALATINE Est. 1866

Map Title



Legend

0 300 600 ft

Print Date: 6/20/2022

Notes

Disclaimer: The GIS Consortium and MGP Inc. are not liable for any use, misuse, modification or disclosure of any map provided under applicable law. This map is for general information purposes only. Although the information is believed to be generally accurate, errors may exist and the user should independently confirm for accuracy. The map does not constitute a regulatory determination and is not a base for engineering design. A Registered Land Surveyor should be consulted to determine precise location boundaries on the ground.

Attachment: GIS MAP (2022-63 : Amend Section 18-66: No Left Turns (Except for Buses) - Johnson Street

Consider an Ordinance Amending Section 18-66 of the Palatine Code of Ordinances to Modify the No Left Turns for Eastbound Farm Gate Lane into the Lincoln Elementary School Parking Lot

BACKGROUND:
In February 2022, Community Consolidated School District 15 amended the start times for all the schools in the district. This, in turn, raised the issue of the many turn restrictions in place for school start and end times. The Traffic Engineering Committee asked both the Police Department and the Public Works Department to evaluate the turn restrictions at the schools for conformance with the newly adopted start and end times.

KEY ISSUES:

- All of the schools were observed and the corresponding turn restriction times evaluated.
- Only one location was determined to be out of sync with the newly adopted times.
- The current times for the no left turn restriction on Farm Gate Lane are 8:00 a.m. to 9:00 a.m., Monday to Friday. In order to accommodate school bus traffic for the new school start times, the restriction time should be extended by 30 minutes.
- The new times for the no left turn on Farm Gate Lane would be 8:00 a.m. to 9:30 a.m., Monday through Friday.

ALTERNATIVES:

1. Prohibit left turns during the morning peak travel period.
2. Refer back to Staff with comments.

RECOMMENDATION:
Staff recommends the existing no left turn prohibition times be modified and added to the Village Code.

ACTION REQUIRED:
Motion to approve an ordinance amending Section 18-66 of the Palatine Code of Ordinances by modifying the prohibition for left turns “from eastbound Farm Gate Lane into the Lincoln Elementary School parking lot between the hours of 8:00 to 9:30 a.m., Monday through Friday”.

ATTACHMENTS:

- GIS Map

RESULT:	**MOTION CARRIED BY VOICE VOTE BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

VILLAGE OF PALATINE Est. 1866

No Left turn on Farmgate Lane, 8:00 am to 9:30 am Monday to Friday

Legend

0 150 300 ft

Print Date: 7/6/2022

Notes

Disclaimer: The GIS Consortium and MGP Inc. are not liable for any use, misuse, modification or disclosure of any map provided under applicable law. This map is for general information purposes only. Although the information is believed to be generally accurate, errors may exist and the user should independently confirm for accuracy. The map does not constitute a regulatory determination and is not a base for engineering design. A Registered Land Surveyor should be consulted to determine precise location boundaries on the ground.

Attachment: GIS Map (2022-64 : Amend Section 18-66: No Left Turns - Farm Gate Lane and Lincoln

Consider a Motion Authorizing the Village Manager to Execute Amendment 1 to the Pole Replacement Agreement with Verizon Wireless

BACKGROUND:
On April 1, 2019, the Village Council approved amendments to Chapter 20 of the Village's Code of Ordinances to incorporate the Small Wireless Facilities Deployment Act ("SWFDA"). The update included regulations and restrictions related to small cell facilities, distributed antenna systems, and other personal wireless telecommunication facility installations in the public right-of-way. Small cell facilities are now allowed to be installed on Commonwealth Edison and Village-owned street lights. A Pole Replacement Maintenance and License Agreement with Verizon Wireless was approved at the Village Council meeting of September 3, 2019.

KEY ISSUES:

- Verizon Wireless has approached the Village to amend the Pole Replacement Maintenance and License Agreement.
- The amendment seeks to add six additional street light pole designs to the current Exhibit A.
- This agreement runs concurrently with the Small Wireless Communications Facilities Master License Agreement, which allows Verizon to install equipment on Village-owned poles.
- All other terms and conditions of the Agreement would remain unchanged.

ALTERNATIVES:

1. Authorize the Village Manager to execute Amendment 1 to the Pole Replacement Maintenance and License Agreement with Verizon Wireless.
2. Refer back to Staff with comments.

RECOMMENDATION:
Staff recommends authorizing the Village Manager to execute Amendment 1 to the Pole Replacement Maintenance and License Agreement with Verizon Wireless.

ACTION REQUIRED:
Motion to authorize the Village Manager to execute Amendment 1 to the Pole Replacement Maintenance and License Agreement with Verizon Wireless substantially conforming to the attached and subject to review by the Village Attorney.

ATTACHMENTS:

- Executed Verizon Master License Agreement
- Executed Verizon Pole Replacement Agreement
- Verizon Pole Replacement Agreement Amendment 1

RESULT:	**APPROVED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Doug Myslinski, District 3 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

SMALL WIRELESS COMMUNICATIONS FACILITIES MASTER LICENSE AGREEMENT

THIS SMALL WIRELESS COMMUNICATIONS FACILITIES MASTER LICENSE AGREEMENT ("Agreement") is entered into this 26 day of November, 2019 ("Effective Date"), by and between the Village of Palatine (" Village"), and Chicago SMSA Limited Partnership d/b/a Verizon Wireless ("Verizon"). Village and Verizon are at times collectively referred to hereinafter as the "Parties" or individually as the "Party."

In consideration of the covenants of this Agreement and other good and valuable consideration, the receipt and sufficiency of which is acknowledged by the Parties, the Parties agree as follows:

1. Grant. Subject to Laws (defined in Section 17) and this Agreement, Village grants Verizon a nonexclusive license to (i) access, use and occupy the Village's ROW (as defined below)., for the installation, construction, use, maintenance, operation, repair, modification, replacement and upgrade of equipment ("Equipment") that enables wireless communications ("Verizon's Use); (ii) use and/or replace Village owned or controlled poles (set forth on the attached Exhibit A) ("Village Poles") for Verizon's Use in accordance with a Village Pole License (defined in Section 4(a)); and (iii) install and/or replace Verizon owned poles for Verizon's Use. For purposes of this Agreement, the ROW means the surface of, and the space above and below, any public street or similar infrastructure (e.g., freeway, bridge, tunnel, etc.) and the associated rights-of-way over which the Village exercises any rights, management or control ("ROW"). Equipment includes Small Wireless Facilities, which shall mean a wireless facility that meets both of the following qualifications: (I) each antenna is located inside an enclosure of no more than 6 cubic feet in volume or, in the case of an antenna that has exposed elements, the antenna and all of its exposed elements could fit within an imaginary enclosure of no more than 6 cubic feet; and (ii) all other wireless equipment attached directly to a utility pole associated with the facility is cumulatively no more than 25 cubic feet in volume. The following types of associated ancillary equipment are not included in the calculation of equipment volume: electric meter, concealment elements, telecommunications demarcation box, ground-based enclosures, grounding equipment, power transfer switch, cutoff switch, and vertical cable runs for the connection of power and other services.

2. Term of Agreement. The term of this Agreement shall be for 15 years beginning on the Effective Date (the "Term"). Unless either Party provides written notice to the other Party at least ninety 90 days prior to expiration of the Term that such Party will not renew the Term, the Term will automatically renew for 3 additional 5 year period. After the expiration of this Agreement, it shall apply to all Pole Licenses entered into hereunder until the expiration or termination of such Pole Licenses. After expiration or earlier termination of this Agreement, its terms shall

Attachment: Executed Verizon Master License Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

continue to apply to any existing Equipment in the ROW until Verizon's right to have such Equipment in the ROW terminates or expires.

3. Fees. Verizon shall pay to the Village the Fees and costs set forth in the "Fee Schedule" attached hereto and made a part hereof as Exhibit B. Verizon shall pay the one-time application fee with submission of the Village Pole Application. Verizon shall pay the initial recurring fee on or before the commencement date and pay subsequent recurring fees on or before each anniversary of the Commencement Date. Before any recurring fees are paid, Village shall provide Verizon a completed, current Internal Revenue Service Form W-9 and state and local withholding forms if required. Verizon may make payments by check made out to the Village and sent to the following address or through electronic transfer subject to the Village's approval and necessary bank routing instructions.

Village of Palatine
Finance Department
200 E. Wood Street, Palatine, IL 60067

4. Village Poles.

a. Prior to installing any Equipment on a Village owned or controlled pole or a new Verizon owned pole, Verizon shall file a village pole application with the Village in the form produced by the Village from time to time ("Pole Application") for one or more poles. Within 60 days of receipt, the Village shall, in writing, approve or reject the Pole Application, otherwise the Pole Application shall be deemed accepted. If the Village timely rejects the Pole Application, the review period will be suspended until Verizon cures the non-compliance. Upon acceptance or approval, a Village Pole Application shall be deemed to be a Village pole license for that particular pole ("Pole License"). Upon receipt of a Village Pole Application from Village, then, within 30 days after receiving A Village Pole Application, the Village shall determine whether the Village Pole Application is complete and notify the Verizon. If a Village Pole Application is materially incomplete, the Village shall specifically identify the missing information and the timeframes to process the Village Pole Application set forth in this Section 4(a) shall restart.

b. Village may reject a Pole Application for any reason which it is legally allowed to reject a Pole Application, including but not limited to one or more of the following reasons, which must be stated in the rejection: (i) concerns about structural capacity, safety, reliability, or generally applicable engineering practices; (ii) the Pole Application is incomplete; (iii) the proposed Equipment exceeds the parameters of a Small Wireless Facility under applicable Law (defined in Section 17); (iv) the design documents attached to the Pole Application do not comply with this Agreement or with the Village's pole attachment laws for traffic light poles, show interference with the Village's

Attachment: Executed Verizon Master License Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

public safety radio system, traffic signal light system, or other communications components, or do not comply with the Design Criteria; or (v) the Pole Application does not include a load bearing study.

c. Any aesthetic or other design criteria for Small Wireless Facilities and poles upon which Small Wireless Facilities are attached (collectively, the "Design Criteria") which are adopted by the Village shall only apply if the criteria are published in advance of a Small Wireless Facility application. If pole reinforcement or replacement is necessary, Verizon shall provide engineering design and specification drawings demonstrating the proposed alteration to the pole. Changes made to the Village's Design Criteria shall not be imposed or otherwise applied retroactively unless required by Laws.

d. Verizon shall pay for any electricity service for Small Wireless Facilities. .

e. The term of each Pole License shall be 5 years with renewals governed in accordance with 50 ILCS 840/15(d)(13).

f. This Agreement including any and all Pole Licenses may be terminated prior to the expiration of their term: (i) by either Party upon written notice to the other Party, if such other Party fails to comply with this Agreement and the party has failed to initiate a cure within 60 days after receipt of written notice; or by Verizon in the event that Verizon fails to timely obtain, maintain, or is not satisfied with any governmental approval applicable to Verizon.

g. Following expiration or earlier termination of any Agreement or Pole License, Verizon shall remove all Equipment from the Village owned or controlled poles and, other than reasonable wear and tear, repair and restore the Village owned or controlled poles and the ROW to its prior condition, unless the Village authorized otherwise. In the event that Verizon removes any Village poles pursuant to this Agreement, the Village shall retain ownership of any poles Verizon or its contractor removes, and shall provide directions to Verizon for their reuse or disposal. Upon termination Verizon shall be responsible for returning all equipment to the Village Public Works Facility.

h. In the event a pole application seeks to replace a Village Pole, Verizon must execute a separate pole replacement agreement with the Village prior to any construction.

5. Permits/Municipal Code.

a. Village shall not require an application, approval, or permit, or require any fees or other charges, from Verizon, for: (i) routine maintenance; (ii) the replacement of wireless with wireless facilities that are substantially similar,

Attachment: Executed Verizon Master License Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

the same size, or smaller if Verizon notifies Village at least 10 days prior to the planned replacement and includes equipment specifications for the replacement of equipment consistent with the requirements of this Agreement; or the installation, placement, maintenance, operation, or replacement of Small Wireless Facilities that are suspended on cables that are strung between existing utility poles in compliance with applicable safety codes, provided this provision does not authorize such facilities to be suspended from municipal electric lines, if any.

b. A Small Wireless Facility that is not operated for a continuous period of 12 months shall be considered abandoned and Verizon may, upon request of Village, remove the Small Wireless Facility within 90 days after receipt of written notice from Village notifying Verizon of the abandonment and requesting its removal. If the Small Wireless Facility is not removed within 90 days of such notice, Village may remove or cause the removal of such facility and charge said costs to the Verizon. Verizon shall provide written notice to Village of any sale or transfer of small wireless facilities not less than 30 days prior to such transfer and said notice shall include the name and contact information of the new wireless provider. At any time Verizon abandons use of a Small Cell Wireless Facility, it shall provide notice to the Village within 30 days of abandonment.

6. Interference.

a. In accordance with 50 ILCS 835, Verizon will not cause harmful interference to Village traffic, public safety or other communications signal equipment in the ROW. Village agrees that Village will not cause interference to Verizon's Equipment or Verizon's Use.

b. If interference occurs, the non-interfering Party shall notify the interfering Party via telephone to Verizon's Network Operations Center at (800) 621-2622) or to Village at (847-358-5200), and the parties shall work together to cure the interference as soon as commercially possible.

7. Make-Ready Work.

a. Village shall not require more make-ready work than required to meet applicable codes or industry standards. Make-ready work may include work needed to accommodate additional public safety communications needs that are identified in a documented and approved plan for the deployment of public safety equipment as specified and included in an existing or preliminary Village or public service agency plan. Fees for make-ready work, including any Village utility pole attachment, shall not exceed actual costs or the amount charged to communications service providers for similar work and shall not include any consultants' fees or expenses for Village utility poles that do not

Attachment: Executed Verizon Master License Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

support aerial facilities used to provide communications services or electric service.

Any make-ready work, including pole replacements, shall be performed by Verizon or its qualified contractor unless otherwise agreed by the parties.

8. Maintenance and Modifications. Verizon shall keep and maintain all Equipment in commercially reasonable condition and in accordance with any applicable standard maintenance requirements of Village. Verizon may conduct testing and maintenance activities, and repair and replace damaged or malfunctioning Equipment between the hours of 7:30 a.m. and 5:00 p.m., however, this time limitation shall not apply (i) in the event of an emergency or (ii) where Verizon obtains permission from the Village.

Except as otherwise set forth in this Agreement, Verizon shall obtain all required permits and prior approvals from the Village for all other work. The parties agree that any replacement Village Poles should be maintained in accordance with the Maintenance and License Agreement for Pole Replacement in Village Right of Way Agreement dated 11 / 26 / 19 .

9. Removal and Relocation. No later than 180 days after receipt of written notice from Village, Verizon shall remove and may relocate the Equipment to an alternative location made available by Village due to: (i) construction, expansion, repair, relocation, or maintenance of a street or other public improvement project; or (ii) maintenance, upgrade, expansion, replacement, or relocation of Village traffic light poles and/or traffic signal light system; or (iii) permanent closure of a street or sale of Village property. The Village shall require removal or relocation only if necessary. If Verizon fails to remove or relocate any Equipment within 180 days, Village shall be entitled to remove the Equipment at Verizon's expense. The Parties shall cooperate to the extent possible to assure continuity of service during any relocation. Village shall use best efforts to provide a reasonably equivalent location that affords Verizon substantially similar engineering objectives.

10. Indemnity/Damages. Verizon shall indemnify, defend and hold the Village, its employees, officers, elected officials, agents and contractors (the "Indemnified Parties") harmless from and against all injury, loss, damage, liability, costs or expenses arising from any third party claims to the extent caused by Verizon's Use or Verizon's breach of this Agreement. Verizon's indemnity shall not apply to any liability resulting from the negligence or willful misconduct of the Village or other Indemnified Party. Verizon shall not settle any claim without reasonable consent of the Village, unless the settlement (i) will be fully funded by Verizon, and (ii) does not contain an admission of liability or wrongdoing by any Indemnified Party. Neither party will be liable under this Agreement for consequential, special, punitive or indirect damages, whether under theory of

Attachment: Executed Verizon Master License Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

contract, tort (including negligence), strict liability, or otherwise. Nothing contained in this Agreement shall constitute a waiver by the Village of any right, privilege or defense available to the Village under statutory or common law, including, but not limited to, the Illinois Local Governmental and Governmental Employees Tort Immunity Act, 745 ILCS 10/1-101 et seq., as amended.

11. Insurance.

a. Verizon and its subcontractors shall carry the following insurance: (i) commercial general liability insurance in an amount of $3,000,000 per occurrence and $4,000,000 general aggregate and which provides coverage for bodily injury, death, damage to or destruction of property of others, including loss of use thereof, and including products and completed operations; (ii) Workers' Compensation Insurance as required by law; and (iii) employers' liability insurance in an amount of $500,000 bodily injury each accident, $500,000 per each employee, and $500,000 per policy limit.

b. The insurance coverages identified in this Section: (i) except the workers' compensation insurance, shall include the Village as an additional insured as their interests may appears under this Agreement; (ii) will be primary and noncontributory with respect to any self-insurance or other insurance maintained by the Village; (iii) contain a waiver of subrogation for the Village's benefit; and (iv) will be obtained from insurance carriers having an A.M Best rating of at least A-
VII.

c. Verizon shall provide the Village with a Certificate of Insurance and a blanket additional insured endorsement to provide evidence of insurance. Verizon will provide the Village with thirty (30) days prior written notice of cancellation upon receipt of notice thereof from its insurer(s).

12. Assignment. Verizon may not assign this Agreement, any Pole License, and/or related permits to any entity without prior written consent of the Village. An assignment (i) to an affiliated entity of Verizon, (ii) as required by law, or (iii) to an entity that acquires all or substantially all of Verizon's assets shall not constitute an assignment under this Section.

13. Notices. Notices required by this Agreement may be given by registered or certified mail by depositing the same in the United States mail or with a commercial courier. Unless either party notifies the other of a change of address, notices shall be delivered as follows:

If to Village:	With a copy to:
Village of Palatine 200 E. Wood	Village of Palatine 200 E. Wood

Attachment: Executed Verizon Master License Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

Palatine, IL 60067 Attn: Village Manager	Palatine, IL 60067 Attn: Village Clerk's Office
If to Verizon:	With a copy to:
Chicago SMSA Limited Partnership d/b/a Verizon Wireless Washington Valley Road Bedminster, New Jersey 07921 Attention: Network Real Estate	Chicago SMSA Limited Partnership d/b/a Verizon Wireless 180 1515 E. Woodfield Road 10th Floor Attention: Legal Department

Notices shall be deemed effective upon delivery or refusal of delivery.

14. Taxes. If Village is required by Law to collect any federal, state, or local tax, fee, or other governmental imposition (each, a "Tax") from Verizon with respect to the transactions contemplated by this Agreement, then Village shall bill such Tax to Verizon in the manner and for the amount required by Law. Verizon shall pay such billed amount of Tax to Village, and Village shall remit such Tax to the appropriate tax authorities as required by Law. Verizon shall have no obligation to pay any Tax for which Verizon is exempt. Otherwise, Verizon shall be responsible for paying all Taxes that are the legal responsibility of Verizon under Laws.

15. Laws. The Parties shall comply with applicable laws including, without limitation, regulations and judicial decisions, Federal Communications regulations and order and the Illinois Small Wireless Facilities Deployment Act (50 ILCS 835) ("Law" or "Laws").

16. Miscellaneous. This Agreement shall be governed by the laws of the State of Illinois and all other applicable Laws. The provisions of this Agreement may be waived or modified only by written agreement signed by both parties. This Agreement may be executed in counterparts. A scanned or electronic copy shall have the same legal effect as an original signed version. If one or more provisions in this Agreement is found to be invalid, illegal or otherwise unenforceable, all other provisions will remain unaffected and shall be deemed to be in full force and effect and the Parties shall amend this Agreement, if needed to effect the original intent of the Parties. Neither Party shall be responsible for delays in the performance of its obligations caused by events beyond the Party's reasonable control. As to the subject matter hereof, this Agreement is the complete agreement of the Parties. The Parties represent and warrant that the individuals executing this Agreement are duly authorized.

[Remainder of page intentionally left blank; signature page to follow.]

Attachment: Executed Verizon Master License Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

IN WITNESS WHEREOF, the Parties have executed, or caused their respective duly authorized representatives to execute, this Agreement as of the day and year listed below.

VILLAGE OF Palatine

(Signature)

Printed Name: Reid T. Ottesen
Title: Village Manager
Date: 11/26/19

Chicago SMSA Limited Partnership

(Signature)

Printed Name: James R. Martin
Title: Director - Network Field Engineering
Date: 9/9/19

APPROVED AS TO FORM:

Village Attorney

Attachment: Executed Verizon Master License Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

EXHIBIT B

FEE SCHEDULE

1. One-Time Application Fee: Village may charge an application fee which shall not exceed the maximum amount allowable under Laws.

2. Village-Pole Recurring Fee: $200.00 per Village pole per year.

   a. For purposes of determining the total annual fee applicable to a Village Pole License for a partial calendar year in which the Commencement Date occurs in a month other than January, the total fee will be a pro-rated amount equal to the product obtained by multiplying 1/12th of the annual fee by the number of months remaining in such year.

3. Make-Ready Costs: To be determined for each Village Pole in accordance with Section 7.

4. Except as provided in this Fee Schedule, the Village shall not require any other or additional recurring fees, costs, or charges of any kind.

Attachment: Executed Verizon Master License Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

EXHIBIT C
Sample Form of Application for Village Pole License

Attachment: Executed Verizon Master License Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

Village of Palatine
R.O.W. Permit Application

All entities conducting work in Village owned or maintained Rights Of Way or Public Ways shall apply for and receive an R.O.W. Permit **prior** to the commencement of such work, repair, or construction. This permit application must be fully completed, signed and returned; complete with all required attachments, in duplicate to: Village Of Palatine - Department of Public Works, 148 W. Illinois Ave., Palatine, IL 60067, ATTN: Elias Koutas. Permit applications may also be faxed to: (847) 358-4242 ATTN: R.O.W. Permits, or Email to: ekoutas@palatine.il.us

1. Utility Identification/ Applicant.

	Name	Street Address	City	Zip	Telephone/FAX
Utility, Firm, or Individual.					
Subcontractor - If any.					
Responsible agent or individual.					

2. Type of Utility or Work (Circle One) GAS ELECTRICAL TELEVISION TELECOMMUNICATIONS OTHER
IF "Other"- Please describe:_____

3. Job Contact (For emergencies, questions, clarifications, and problem resolution.)

Name			
Title or Position			
Phone number(s)	Office:	Mobile:	Page:

4. Job Location/Type. (Attach Highlighted Utility System Map, and/or drawings and Finder's Map)

Address or Address Range.			
Street R.O.W., Rear Yard Easement, or Combination of both? Please Describe.			
Type of Work (Circle One)	New Construction	Maintenance/Repair	Emergency Repair

5. Work Description.

Describe the work to be performed and reason. (i.e. Replacement of failed underground cable.) Attach additional sheets as needed.		
Describe the means and methods to be used. (i.e. Open cut, trenched, plowed, augured, etc.) and the areas in which they will be employed. Attach additional sheets as needed.		
Is this work to be performed by a subcontractor? (Circle one) If YES, fill in the subcontractor's name and Sub-Contractor item of section one above.	YES:	NO

Attachment: Executed Verizon Master License Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

6. **Required attachments** include a.) A highlighted Utility System map, and/or drawings showing locations of work, new or changed structures, enclosures, vaults, pits and other work. System Maps or drawings should be of a scale to clearly show the details of the work to be performed and shall contain references to allow accurate orientation of the map to the Village location. I.e. Street names, intersections addresses etc. b.) A locator map or finders map to aid in identifying the area of the Village in which the work is taking place. Applications submitted without these attachments, or with incomplete applications will be rejected. c.) Traffic Control Plan-If required. d.) Request for any variations from Village Code requirements. e.) Emergency and Contingency plans. f.) Other attachments as may be required and applicable under the Village Code of Ordinances or required by the Village Department of Public Works. **NOTE:** Any new above grade enclosures or appurtenances, or expansion of existing, by Village Zoning Ordinance, may require a Zoning Variation **before** a utility permit can be issued. If same has already been obtained, a copy must be provided with this permit application. Failure to do so will result in application rejection.

7. **Utility Company Work Order/Reference Number** (If Any.) :_____

8. **Utility Company Village Registration Number** (Not Required If Franchised) :_____.

9. **Job Start Date:**_____ **Job Completion Date:**_____.

10. **I hereby certify** that the above information is complete, true, and correct. I further certify that all work will be performed in accordance with the Village Code of Ordinance requirements - copies available upon request from the Village Clerks Office. Copying fees may apply. **NOTE: A copy of this permit must be kept on the Job Site at all times. Failure to do so may result in a stop work order being issued. Permit must be shown to any Village Employee or Resident upon request. A sign identifying the utility responsible for the work must be posted at the job site or on vehicles/equipment used in the work.**

Signature	
Title	

VILLAGE USE ONLY BELOW THIS LINE

Date	

PERMIT REJECTED:

Permit application is rejected for the following reason(s):

____ Not in Village or Under Village Jurisdiction. ____ Incomplete application.
____ Insufficient Information/Detail. ____ Zoning Variation Required.
____ Other:_____

Signature	
Title	
Date	

****

PERMIT APPROVED:____ PERMIT APPROVED AS NOTED:____

Village Of Palatine - DPW Permit Number:_____

Signature	
Title	
Date	

Attachment: Executed Verizon Master License Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

Village of Palatine
200 E Wood St
Palatine, IL 60067

VILLAGE OF PALATINE
SMALL WIRELESS FACILITIES PERMIT APPLICATION

APPLICANT INFORMATION

Applicant Name:		Date:
Applicant is a: ☐ Carrier/Wireless Provider	☐ Representative	☐ Other:
Company Name:		
Address:		
City:	State:	ZIP Code:
Phone:	Email:	

PROPOSED SITE LOCATION

Property Address:		
City:	State:	ZIP Code:
Closest Intersection (Distance and Direction from):		

EXISTING POLE/STRUCTURE INFORMATION

New Pole/Structure Construction? Yes ☐ No ☐		
Pole/Structure ID Number:	Height of Pole/Structure (feet):	Pole Color:
Existing Attachment(s) on Pole/Structure? (*e.g.*, banners, light fixtures) Yes ☐		No ☐
Existing Structure Owner:		
Name of Structure Owner Representative:		
Address:		
City:	State:	ZIP Code:
Phone:	E-mail:	Fax:

CONTRACTOR INFORMATION (NAME AND ADDRESS)

General:	Phone:
Electric:	Phone:
Other:	Phone:

PROPERTY OWNER INFORMATION

In the event that the proposed small wireless facility is to be attached to an existing pole owned by an entity other than the Village, the wireless provider shall provide legally competent evidence of the consent of the owner of such pole to the proposed collocation. Permission has been granted by property owner? Yes ☐ No ☐

Name:		
Address:		
City:	State:	ZIP Code:
Phone:	Email:	

Attachment: Executed Verizon Master License Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

VILLAGE OF PALATINE
Est. 1866

Village of Palatine
200 E Wood St
Palatine, IL 60067

APPLICATION REQUIREMENTS

The following documents must be attached or included for the Application to be complete:

- ☐ Application fee(s)
- ☐ Site specific structural integrity, AND for a municipal utility pole ☐ Make-ready analysis prepared by a structural engineer
- ☐ The location where each proposed small wireless facility or utility pole would be installed
- ☐ Photographs of the proposed site location and its immediate surroundings
- ☐ Specifications and drawings prepared by a structural engineer for each proposed small wireless facility
- ☐ The equipment type and model numbers for the antennas and all other wireless equipment associated with the small wireless facility
- ☐ A proposed schedule for the installation and completion of each small wireless facility, if approved
- ☐ Proof of permission granted by property owner, if existing pole not owned by the Village

ATTESTATION, ACKNOWLEDGMENT & SIGNATURE

I attest to the best of my knowledge and belief, that the information stated in this application and in all supporting plans and documents is true and accurate. To the best of my knowledge, I certify that the proposed collocation complies with the terms of the "Collocation Requirements and Conditions" Section of Village's Small Wireless Facility Deployment Ordinance.

Signature of Applicant:	Date:
Printed Name of Applicant:	Title:

FOR ADMINISTRATIVE USE ONLY

Date Application was submitted:

Application is: ☐ Complete ☐ Incomplete If incomplete, date the Applicant was notified: _____

Permit Review: Planning _____ Public Works _____ Electrical _____

Finance Department and GIS notified date:

Final Inspection: Planning _____ Public Works _____ Electrical _____

Missing documents or information and resubmittal dates:

Attachment: Executed Verizon Master License Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

MAINTENANCE AND LICENSE AGREEMENT FOR POLE REPLACEMENT IN VILLAGE RIGHT OF WAY

THIS AGREEMENT (the "Agreement") entered into as of the 26 day of November 2019 (the "Effective Date") by and between the Village of Palatine, with its principal offices at 200 E. Wood Street, Palatine, Illinois 60067 ("Village") and CHICAGO SMSA LIMITED PARTNERSHIP, an Illinois limited partnership d/b/a VERIZON WIRELESS with its principal offices at One Verizon Way, Mail Stop 4AW100, Basking Ridge, New Jersey 07920 (telephone number 866-862-4404) ("Verizon"). VILLAGE and VERIZON are at times collectively referred to hereinafter as the "Parties" or individually as the "Party."

RECITALS

A. Verizon has been granted the right to replace certain existing street light poles owned by the Village with a new street light poles which will be owned by Village ("Pole"), at the locations identified, and pursuant to the plans attached hereto as Exhibit A.

B. Village will own and Verizon will maintain the Pole and use the Pole for installation and operation of its small wireless facility.

NOW THEREFORE, in consideration of the mutual covenants and conditions hereinafter set forth, and the above recitals which are by this reference incorporated herein, and other good and valuable consideration, the sufficiency of which is hereby acknowledged by the parties hereto, the parties hereto agree as follows:

1. INSTALLATION AND MAINTENANCE OF POLE. Verizon shall have the right to remove certain existing Village-owned street light poles and reinstall in its place a replacement Pole, all as pursuant to the plans and specifications attached hereto as Exhibit A. Village will own the Pole and Verizon shall use the Pole for the installation, operation and maintenance of a small wireless facility, pursuant to the plans attached hereto as Exhibit A. Verizon shall install and maintain the Pole at its sole cost and expense and in a manner consistent with Village standards. Upon removal of the existing Village-owned street light pole, Verizon shall deliver said pole to the Village's Department of Public Works in a substantially similar condition as it was in prior to its removal. Village shall be provided a Bill of Sale for all poles installed pursuant to this Agreement.

2. INSTALLATION OF STREET LIGHT. Verizon shall install on the Pole, on behalf of Village, a street light ("Street Light") pursuant to the plans attached hereto as Exhibit A. Verizon shall pay for the cost of the initial installation of the Street Light on the Pole. Village reserves the right to access to the Pole for installation, maintenance, repair or replacement of the Street Light.

Attachment: Executed Verizon Pole Replacement Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

3. DAMAGE TO POLE. In the event the Pole is damaged or knocked down such that it requires repair or replacement, Verizon shall repair or replace the Pole at Verizon's sole cost and expense and provide the Village with a date certain for replacement of the Pole but which shall be not greater than 30 days from the date of removal. Upon receipt of notice that the Pole requires replacement, Verizon shall replace the Pole with a new Pole of the same specifications as set forth on Exhibit A subject to the review and approval by Village prior to any installation. If the approved Pole is damaged beyond repair and a replacement Pole is not available, Verizon shall submit drawings for a replacement Pole for review and approval by the Village, prior to any installation. In the event the Village installs a temporary pole, Verizon shall be permitted to replace the temporary pole with a new Pole once such a Pole becomes available, subject to the terms of this Agreement. Furthermore, in the event the Village is required to install a full replacement pole, due to Verizon's failure to do so, the Village shall be entitled to invoice Verizon and Verizon agrees to pay the full cost of the installation.

4. ELECTRICAL. Verizon shall be solely responsible for the cost of electricity used by all facilities on the Pole. Verizon will be responsible for establishing its own account with Com Ed. Verizon or Com Ed shall not be allowed to place individual meters on any pole.

5. TERM. The term of this Agreement shall be coterminous with the Master License Agreement between Verizon and Village dated Nov. 26, 2019. Provided however, the Village shall have the right to terminate this Agreement upon 30 days notice to Verizon if deemed necessary by the Village.

6. ACCESS. Village agrees that Verizon, its employees and/or agents shall have access to the Pole Monday through Friday from 7:30 a.m. – 5:00 p.m. for maintenance and repair of the Pole, including testing of the radio frequency coverage of the area. Any access or work on the Pole shall not commence until approved in writing by the Village.

7. INDEMNIFICATION. Subject to Paragraph 9, below, each Party shall indemnify and hold the other harmless against any claim of liability or loss from personal injury or property damage resulting from or arising out of the acts or omissions of the indemnifying Party, its employees, contractors or agents, except to the extent such claims or damages may be due to or caused by the negligence or willful misconduct of the other Party, or its employees, contractors or agents. Nothing contained in this Agreement shall constitute a waiver by the Village of any right, privilege or defense available to the Village under statutory or common law, including, but not limited to, the Illinois Local Governmental and Governmental Employees Tort Immunity Act, 745 ILCS 10/1-101 et seq., as amended.

Attachment: Executed Verizon Pole Replacement Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

8. LIMITATION OF LIABILITY. Except for indemnification pursuant to Paragraph 7, neither Party shall be liable to the other, or any of their respective agents, representatives, employees for any lost revenue, lost profits, loss of technology, rights or services, incidental, punitive, indirect, special or consequential damages, loss of data, or interruption or loss of use of service, even if advised of the possibility of such damages, whether under theory of contract, tort (including negligence), strict liability or otherwise.

9. INSURANCE.

A. Required Coverages and Limits. Verizon shall secure and maintain the following liability insurance policies insuring the utility as named insured and naming the Village, and its elected and appointed officers, officials, agents, and employees as additional insureds on the policies listed in subsection (A)(1) and (A)(2) of this section:

1. Commercial general liability insurance, including premises-operations, explosion, collapse, and underground hazard (commonly referred to as "X," "C," and "U" coverages) and products-completed operations coverage with limits not less than:

   a. Five million dollars for bodily injury or death to each person,

   b. Five million dollars for property damage resulting from any one accident, and

   c. Five million dollars for all other types of liability;

2. Automobile liability for owned, non-owned and hired vehicles with a combined single limit of one million dollars for personal injury and property damage for each accident;

3. Worker's compensation with statutory limits; and

4. Employer's liability insurance with limits of not less than one million dollars per employee and per accident.

If Verizon is not providing such insurance to protect the contractors and subcontractors performing the work, then such contractors and subcontractors shall comply with this section.

B. Excess or Umbrella Policies. The coverages required by this section may be in any combination of primary, excess, and umbrella policies. Any excess or umbrella policy must provide excess coverage over underlying insurance on a following-form basis such that when any loss covered by the primary policy exceeds the limits under the primary policy, the excess or umbrella policy becomes effective to cover such loss.

C. Copies Required. Verizon shall provide copies of any of the policies required by this section to the Village within ten days following receipt of a written request therefor from the Village.

Attachment: Executed Verizon Pole Replacement Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

D. Maintenance and Renewal of Required Coverages. The insurance policies required by this section shall contain the following endorsement:

"It is hereby understood and agreed that this policy may not be canceled nor the intention not to renew be stated until thirty (30) days after receipt by the Village, by registered mail or certified mail, return receipt requested, of a written notice addressed to the Village Manager of such intent to cancel or not to renew."

Within ten days after receipt by the Village of said notice, and in no event later than ten days prior to said cancellation, Verizon shall obtain and furnish to the Village evidence of replacement insurance policies meeting the requirements of this section.

E. Insurance Companies. All insurance provided pursuant to this section shall be affected under valid and enforceable policies, issued by insurers legally able to conduct business with the licensee in the State of Illinois. All insurance carriers and surplus line carriers shall be rated "A-" or better and of a class size "X" or higher by A.M. Best Company.

10. REMOVAL. Upon the expiration or within 90 days of the earlier termination of this Agreement, Verizon shall remove its equipment from the Pole(s)

11. INTEGRATION. It is agreed and understood that this Agreement contains all agreements, promises and understandings between the Village and Verizon and that no verbal or oral agreements, promises or understandings shall be binding upon either the Village or Verizon in any dispute, controversy or proceeding at law, and any addition, variation or modification to this Agreement shall be void and ineffective unless made in writing signed by the parties. In the event any provision of the Agreement is found to be invalid or unenforceable, such finding shall not affect the validity and enforceability of the remaining provisions of this Agreement. The failure of either party to insist upon strict performance of any of the terms or conditions of this Agreement or to exercise any of its rights under the Agreement shall not waive such rights and such party shall have the right to enforce such rights at any time and take such action as may be lawful and authorized under this Agreement, either in law or in equity.

12. GOVERNING LAW. This Agreement and the performance thereof shall be governed, interpreted, construed and regulated by the laws of the State of Illinois.

13. NOTICES. All notices hereunder must be in writing and shall be deemed validly given if sent by certified mail, return receipt requested or by commercial courier, provided the courier's regular business is delivery service and provided further that it guarantees delivery to the addressee by the end of the next business day following the courier's receipt from the sender, addressed as follows (or any other address that the Party to be notified may have designated to the sender by like notice):

Attachment: Executed Verizon Pole Replacement Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

VILLAGE: VILLAGE OF PALATINE
200 E. Wood Street
Palatine, IL 60067
ATTN: Village Manager

VERIZON:

CHICAGO SMSA LIMITED PARTNERSHIP
d/b/a Verizon Wireless
180 Washington Valley Road
Bedminster, New Jersey 07921
Attention: Network Real Estate

14. ASSIGNMENT. This Agreement is assignable only upon the receipt of written consent by the non-assigning Party. Any purported assignment in violation of this paragraph is null and void.

[SIGNATURE PAGE FOLLOWS]

Attachment: Executed Verizon Pole Replacement Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

IN WITNESS WHEREOF, Village and Verizon have executed this Agreement as of the day and year first above written.

Village:

Village of Palatine

By: R J. Ott
Name: Reid T. Ottesen
Title: Village Manager
Date: 11/26/19

Verizon:

CHICAGO SMSA LIMITED PARTNERSHIP, d/b/a VERIZON WIRELESS, by CELLCO PARTNERSHIP, its general partner

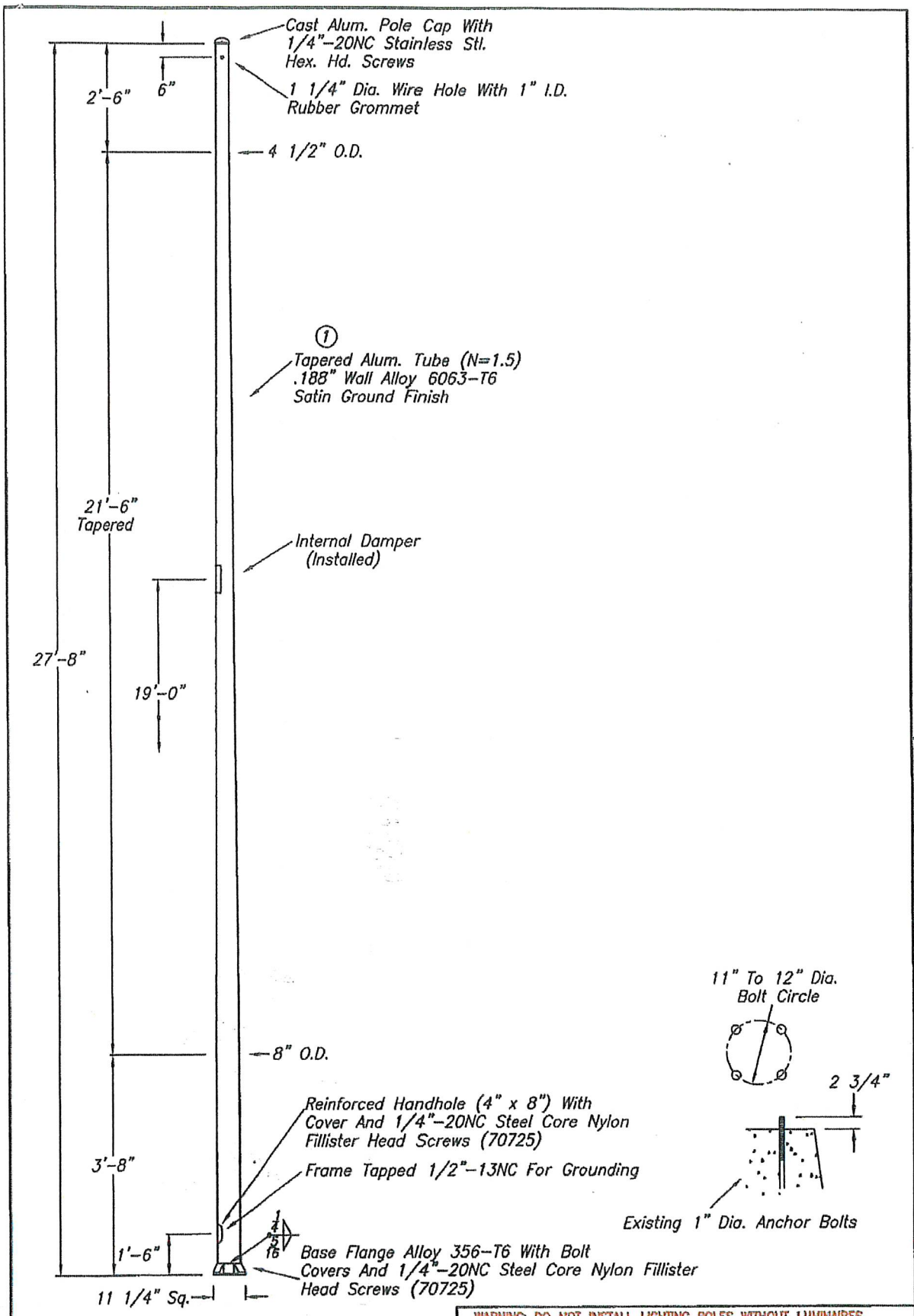
By:
Name: James R. Martin
Title: Director - Network Field Engineering
Date: 9/9/19

Attachment: Executed Verizon Pole Replacement Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

EXHIBIT A

(See attached Plans)

Attachment: Executed Verizon Pole Replacement Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)



B79992

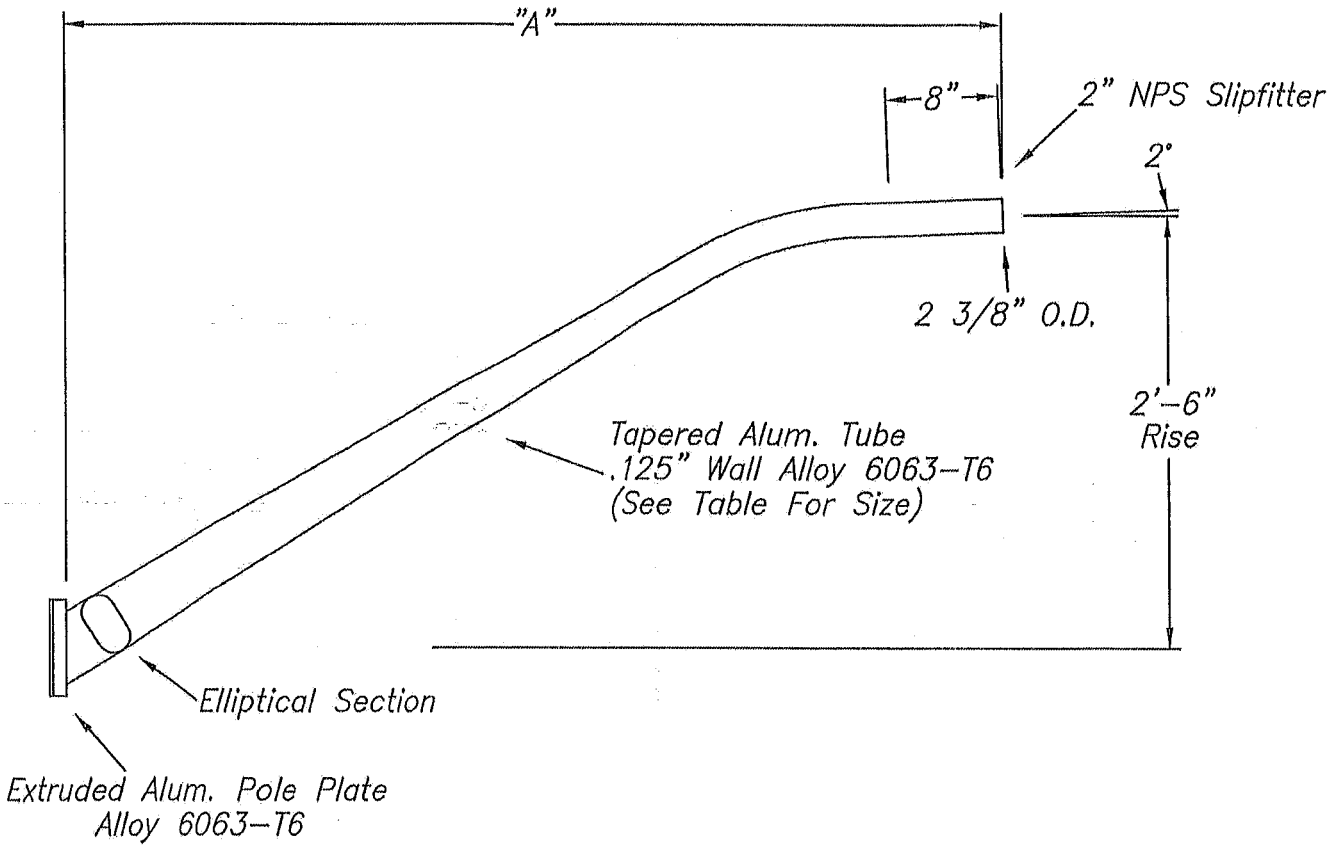
WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

NO.	REVISIONS	DATE

hapco
Abingdon, Va.

TITLE	SHAFT ASSEMBLY
CUSTOMER	STATE OF ILLINOIS
SCALE	NTS
DATE	09/20/00
BY	JLW
CHK'D	
DWG. NO.	B79992

Attachment: Executed Verizon Pole Replacement Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)



Item No.	A	Tube Size	Max. Lum. Wt. @ Cg=Length+1 Ft.
50004-001	3'-6"	3 1/2" O.D.	75#
50004-002	5'-6"	4" O.D.	71#
50004-003	7'-6"	4" O.D.	52#
50004-004	9'-6"	5" O.D.	55#

Furnish The Following Stainless Steel Hardware With Each Arm:
(4) 1/2"-13NC x 1 1/2" Long Hex. Hd. Bolts
(4) 1/2"-13NC Hex. Nuts
(4) 1/2" Lockwashers
(1) 1" I.D. Rubber Grommet

NO.	REVISIONS	DATE
5	Redrawn LW	01/02

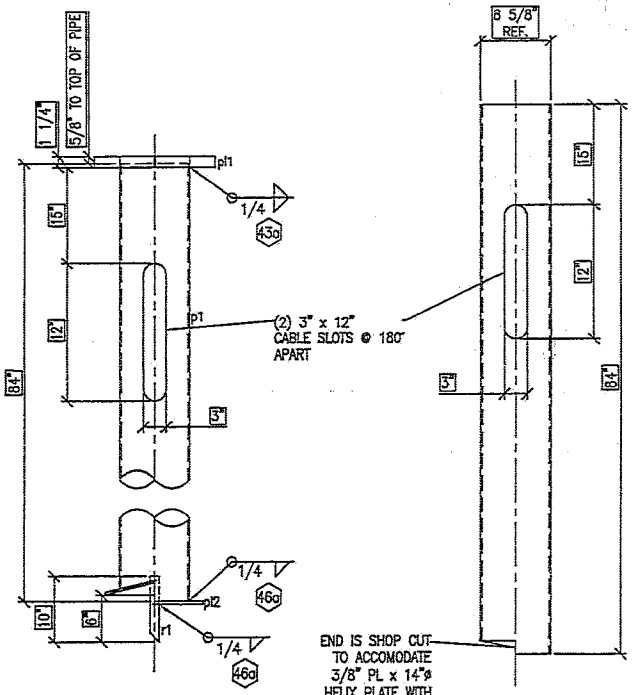
hapco
Abingdon, Va.

TITLE: TAPERED ARMS (4.5" O.D. Pole)
CUSTOMER:
SCALE: NTS
DATE: 10/11/66
BY: LW
CHK'D:
DWG. NO.: A50004

Attachment: Executed Verizon Pole Replacement Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

Bill of Materials

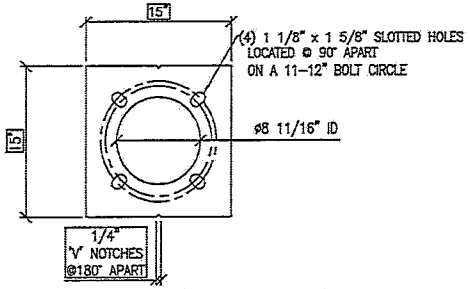
Customer					PO#					B/M #
H & H					M0019-6305				Page 1	K17901
	Quantity				Material Description				Producing	Weight
Item Code	Assem	Comp	Mark	FN	Thickness-Sect-Size X Length	SPEC	NAVISION CODE	WHSE	Mill Heat#	Component / Assembly
	6		SS1	G	HELIX FOUNDATION		HELIX08			1200
		6	r1		1 3/8"Ø x 0'-10"	ASTM Gr. 36	RDAM139			26
		6	pl1		1 1/4" PL x 15" x 1'-3" w/ 8 11/16" ID	ASTM Gr. 36	PLA125096240			479
		6	pl2		3/8" PL x 14"Ø w/ 1 3/4" ID	ASTM Gr. 36	PLA038096240			126
		6	p1		8-5/8" O.D. x 1/4" WALL x 7'-0"	A252-2	PIPE080020			569
					HARDWARE					
	24			G	1"(8)X 4" CARRIAGE BOLT GR 5 HDG DOM	GR. 5	CBUG5100400			15
	24			G	1(8) HVY HEX NUT A563-DH HDG-DOMESTIC	A563	VDHG100			5
	24			G	1" F436-1 STRUCTURAL WASHER HDG-DOMESTIC	F436	AAWG100			1
	24			G	1" MEDIUM LOCKWASHER HDG DOMESTIC	MED.	LWRG100			1
									Total Weight	1222



6~HELIX FOUNDATION~Mk. SS1

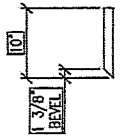
(8 5/8" O.D. x 1/4" WALL x 7'-0")

6~SHAFT PIPE~Mk. p1



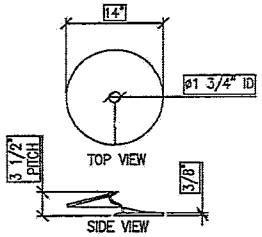
(1 1/4" PL x 15" x 1'-3")

6~TOP PLATE~Mk. pl1



(1 3/8" R x 10")

6~PILOT POINT~Mk. r1



(3/8" PL x 14"ø)

6~HELIX PLATE~Mk. pl2

⬡ = DENOTES WELDING PROCEDURE

SHOP NOTES

1) TOP PL TO BE PERMANENTLY NOTCHED TO INDICATE CABLE SLOT LOCATIONS
2) TOP PL TO BE PERMANENTLY STAMPED W/ MANUFACTURER'S ID IN 1/2" LETTERS AND DATE IN 1/2" LETTERS

GALVANIZING NOTES

(G) FOR ALL STEEL COMPONENTS TO BE HOT DIP GALV. PER ASTM A123 & AASHTO M111
(G) FOR ALL HARDWARE TO BE HOT DIP GALV. PER ASTM A153 & AASHTO M232

REV #	DESCRIPTION	DATE	BY
A	FOR RELEASE	10-30-18	RCS

REVISIONS

VILLAGE OF PALATINE – LIGHT POL FOUNDATION (STEEL HELIX)

REVISION: A	P.O. COMPANY: H & H	DRAWN BY: RCS
DATE: 10-30-18	P.O. NUMBER: M0019-6305	CHECKED BY:
CONTRACTOR: H & H ELECTRIC CO.		K17901

J. H. Botts LLC
BRIDGE & HWY. METAL PRODUCTS
AISC CERTIFIED FABRICATOR
253 E. BRUCE JOLIET, IL 60432

DWG. NO.

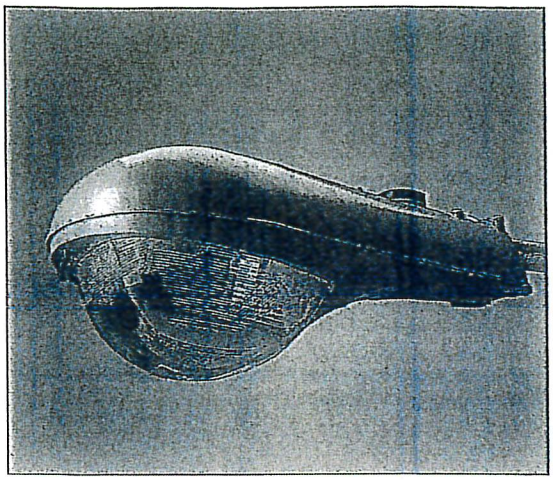
1 of 1

Roadway *Series 115*

Roadway Lighting

50-250W HPS, 70-250W MH

PRODUCT OVERVIEW



Features:

Rugged die-cast aluminum housing is powder-coated for durability and corrosion resistance

Two-bolt mast arm mount provides easy, secure installation and adjustability for arms from 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter. Optional four-bolt mounting provides extra security in high-vibration applications

Die-cast trigger latch on doorframe enables easy and secure one-hand opening for re-lamping and maintenance

Large surface area "breathing seal" gasket seals the optical chamber to prevent intrusion by insects and environmental contaminants. Heat-resistant gasket material remains effective over the life of the fixture

Wildlife shield is cast into the housing (not a separate piece) on the two-bolt unit and is easily adjustable for 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) mast arms

Photocontrol receptacle is adjustable without tools

Anodized aluminum reflectors provide uniform lighting distribution with borosilicate glass, acrylic, or polycarbonate refractor

NEMA wattage label, terminal block, and NEMA photocontrol receptacle are standard

E39 mogul base socket standard

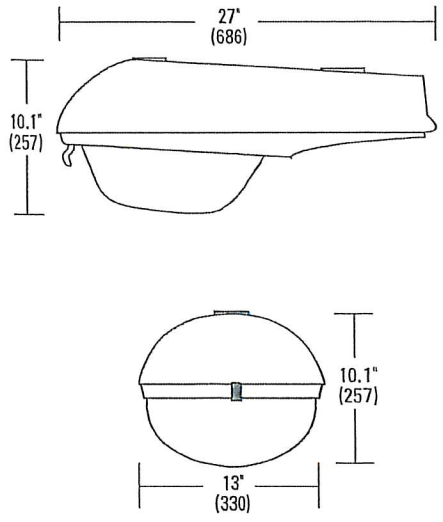
Suitable for -40°C

Complies with ANSI: C136.2, C136.10, C136.14, C136.15, C136.17, C136.31

Applications:

Roadways
Residential streets
Storage areas
Parking lots
Campuses
Parks

DIMENSIONS



Effective Projected Area (EPA)
The EPA for the Horizontal Luminaire Series 115 is 0.9 sq. ft.
Approx. Wt. = 19 lbs.

PREFERRED SELECTION CATALOG NUMBERS

115 10S RN 120 R2 DA
115 15S CA MT1 R2 DA EC
115 15S RH 120 R2 DA
115 25S CA MT1 R3 DG EC

Attachment: Executed Verizon Pole Replacement Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

Note: Specifications subject to change without notice.

Roadway *Series 115*

Roadway Lighting

50-250W HPS, 70-250W MH

BALLAST MATRIX

Roadway 115

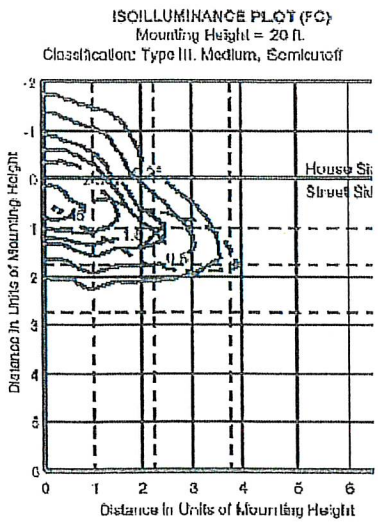
Watts	120	208	240	277	347	480	DT1	DT2	DT4
05S	RH,RN	-	-	XN	-	-	-	-	-
07S	RH,RN	XN, XH	XN, XH	XN, XH	XH,XN	XH,XN	XN, XH	XN, XH	-
07M	XN,XH	XN,XH	XN,XH	XN,XH	-	-	-	-	-
10S	CA,CT,MR,RH,RN	CA,CT,XN,XH	CA,CT,MR,XH,XN	CA,XH,XN	CT	CA	CA,CT,MR,XH,XH	CA,CT,MR,XH,XN	-
10M	XN,XH	XN,XH	XN,XH	XN,XH	-	-	-	-	-
15S	CA,CT,MR,RH,RN	CA,CT,XN,XH	CA,CT,MR,XH,XN	XN,XH,CA,CT	XH,XN,CT	CA,MR,XN,XH	CA,CT,MR,XH,XN	CA,CT,MR,XH,XN	-
13S	RN,RH	-	-	-	-	-	-	-	-
14S	RN,RH	-	-	-	-	-	-	-	-
15M	XN,XH,SC	XN,XH,SC	XN,XHSC	XN,XH,SC	-	XN,XH	-	-	-
17M	SC	SC	SC	SC	SC	SC	SC	SC	-
20S	CA,CT,XN,XH	CA,CT	CA,CT,XN,XH	CA,CT	-	CA	CA,CT,XN,XH	CA,CT,XN,XH	MR
25S	CA,CT,XN,XH	CA,CT	CA,CT,XN,XH	CA,CT	-	CA	CA,CT,XN,XH	CA,CT,XN,XH	-
25M	SC	SC	SC	SC	SC	SC	SC	SC	-
40S	-	RN,RH	RN,RH	-		-	-	-	-

Roadway 115 continued

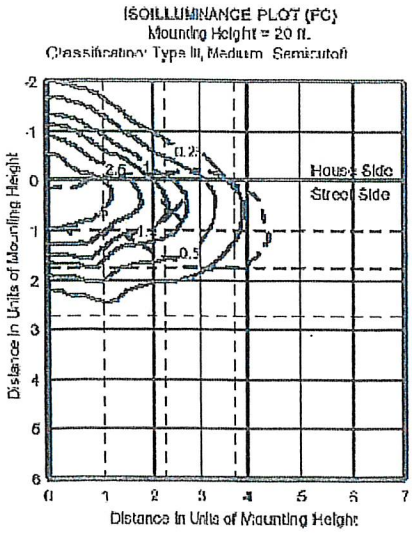
Watts	MT1	MT2	MT7	TT3
05S	XH,XN	XH,XN	XH,XN	-
07S	XH,XN	XH,XN	XH,XN	XH,XN
07M	XH, XN	XH, XN	XH, XN	-
10S	CA,CT,XH,XN	CA,CT,XH,XN	CA,CT,XN,XH	-
10M	XH,XN	XH,XN	XH,XN	-
15S	CA,CT,XH,XN	CA,CT,XH,XN	CA,CT,XH,XN	XH,XN
13S	-	-	-	-
14S	-	-	-	-
15M	SC, XH, XN	SC, XH, XN	SC, XH, XN	XH,XN
17M	SC	SC	SC	-
20S	CA,CT	CA,CT	CA,CT	-
25S	CA,CT	CA,CT	CA,CT	CA
25M	SC	SC	SC	SC
40S	-	-	-	

PHOTOMETRICS

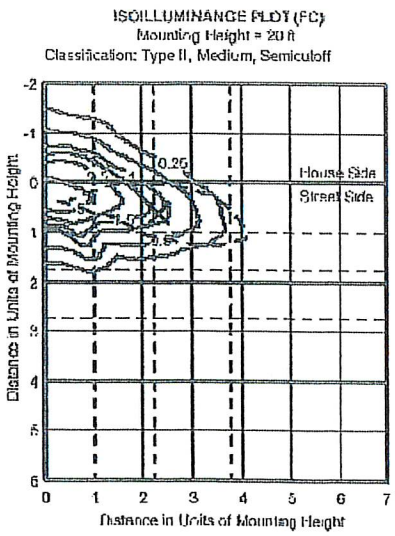
115 15S R3 DA



115 25S R3 DG



115 15S R2 DP



Maximum Intensity
1/2 Maximum Intensity

American Electric Lighting

AEL Headquarters, 3825 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com
© 2009-2019 Acuity Brands Lighting, Inc. All Rights Reserved. 08/06/19

Warranty Five-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
Actual performance may differ as a result of end-user environment and application.
Specifications subject to change without notice.

Please contact your sales representative for the latest product informati

Attachment: Executed Verizon Pole Replacement Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

INTERMATIC

LC4500 Series
Photo Controls

Project:

Location:

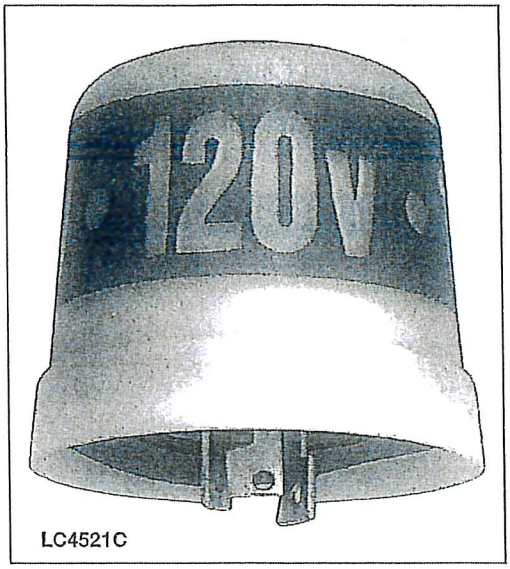
Product Type:

Contact/Phone:

Model #:

LC4500 Series
Low Cost, Locking-Type

The LC4500 Series Photo Controls feature low cost locking-type mounting, and thermal-type controls for street lighting and other applications requiring a twist and lock type plug connection. Thermal-type photo controls provide dusk-to-dawn lighting control and a delay action, which eliminates loads switching OFF due to car headlights and lightning. The thermal-type controls feature a cadmium sulfide photocell and polypropylene case to seal out moisture. The design utilizes a dual temperature compensating bimetal and composite resistor for reliable long life operation over ambient temperature extremes.



LC4521C

Features

- Polypropylene housing with UV protection
- Models with LA suffix equipped with a 2400 volt open type spark gap arrester

Ratings

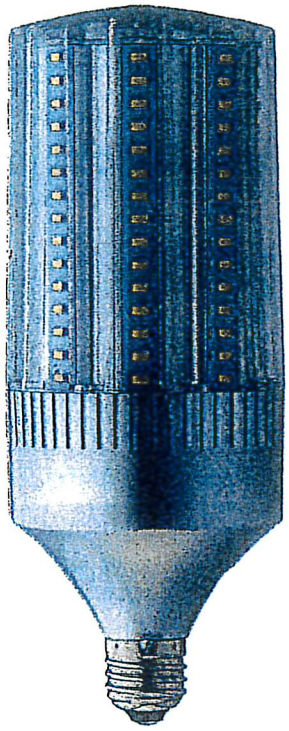
Size:	2 ¾" (7.0 cm) High, 3" (7.6 cm) diameter
Color:	Translucent with color coded band for voltage identification
Electrical Rating:	See table
Activation:	.5 FC minimum ON; 15 FC minimum OFF
Power Consumption:	Averages under 1 Watt
Operating Temperature:	-20°F to 104°F (-29°C to 40°C)
Shipping Weight:	.2 lb. (.09 kg)

Model Number	Tungsten (Watts)	Ballast (VA)	Tungsten (Amps)	Ballast (Amps)	VAC	Agency Listing
LC4521C	1800	1000	15	8.3	120	UL, CSA
LC4523	3120-4155	1700-2300	15	8.3	208-277	UL, CSA
LC4527	5205	2880	15	8.3	347	NONE
LC4535	7200	4000	15	8.3	480	UL, CSA
LC4536C	1800-4155	1000-2290	15	8.3	120-277	UL, CSA
LC4521LA	1800	1000	15	8.3	120	UL, CSA
LC4523LA	3120	1700-2300	15	8.3	208-277	UL, CSA
LC4535LA	7200	4000	15	8.3	480	UL, CSA
LC4536LA	1800-4155	1000-2290	15	8.3	120-277	UL, CSA

Attachment: Executed Verizon Pole Replacement Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

POST TOP RETROFITS 360° OMNI DIRECTIONAL DESIGN

versatility & quality



runs cooler so it lasts longer

- Available in 35W, 45W, 65W & 100W models replacing up to 400W HID.
- Advanced active cooling. Energetic cooling fan & dynamic temp control supports a longer, brighter life.
- Multi-directional mounting capability & 360° design. Use base down, base up or base sideways without affecting performance.
- Pretested & potted drivers are burnt in 3x prior to shipping and protected against vibration & moisture.
- Expertly engineered to work efficiently in enclosed fixtures & damp environments, while also protected against insects & dust.
- Dual stage MOV protection with integrated 6kA surge.
- USA designed & specified LED driver.

PART #	UPC	REPLACES	WATTAGE	LUMENS	LPW	CCT (K)*	BASE
LED-8033E57-A	844006081119	175W	35W	5617	160	5700K	E26
LED-8033M57-A	844006083366	175W	35W	5237	150	5700K	EX39
LED-8024E57-A	844006080242	250W	45W	6619	147	5700K	E26
LED-8024M57-A	844006083366	250W	45W	6632	147	5700K	EX39
LED-8046M57-A	844006081775	320W	65W	9499	146	5700K	EX39
LED-8027M57-A	844006080273	400W	100W	14613	146	5700K	EX39

* See page 2 for additional color temperatures.

** See page 2 for 347 volt options for Canada.

Light Efficient Design

RemPhos

Available from Major Electronix | sales@majorelectronix.com | 800-966-2345 | www.productsforautomation.com

09.19.18 Information is subje

Attachment: Executed Verizon Pole Replacement Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

Lighting Notes:

1. Wire shall be: #6 stranded copper, type use XLP, directional burial, 600V, 75 DEG. C
2. Vertical wire in pole shall be: #10 stranded copper, type THHN
3. Trench depth 18" to 24"
4. (Optional) Install underground wire in 1" HDPE smooth solid wall conduit, Dir. Bored
5. Install weatherproof in-line fuse holder 600V, 30A, with 10A fuse/solid neutral
6. Photocells shall be oriented to north

Attachment: Executed Verizon Pole Replacement Agreement (Verizon Wireless Pole Replacement Agreement Amendment 1)

AMENDMENT No. 1
TO THE MAINTENANCE AND LICENSE AGREEMENT FOR POLE REPLACEMENT
IN VILLAGE RIGHT-OF-WAY
BETWEEN THE VILLAGE OF PALATINE AND CHICAGO SMSA LIMITED PARTNERSHIP

This Amendment Number 1, ("Amendment") is entered into effective as of ___/___/___ ("Amendment Effective Date") by and between the Village of Palatine, Illinois, an Illinois municipal corporation ("Village"), and Chicago SMSA Limited Partnership, and Illinois limited partnership d/b/a Verizon Wireless ("Company"), referred to collectively as "Parties".

RECITALS

A. Village and Company entered in a Maintenance and License Agreement for Pole Replacement ("Agreement") effective November 26, 2019 which grants Company the right to replace certain existing street light poles with new street light poles and install and operate small wireless facilities in the Village right-of-way, set forth in Exhibit A of the Agreement.
B. The parties wish to amend the Agreement as set forth in this Amendment.

NOW THEREFORE, in consideration of the promises of each of the parties to the other and the covenants contained herein, it is agreed as follows:

1. Exhibit A of the Agreement is modified to include the attached pole designs.
2. All other terms and conditions that are not hereby amended are to remain in full force and effect.

VILLAGE OF PALATINE, an Illinois Municipal Corporation

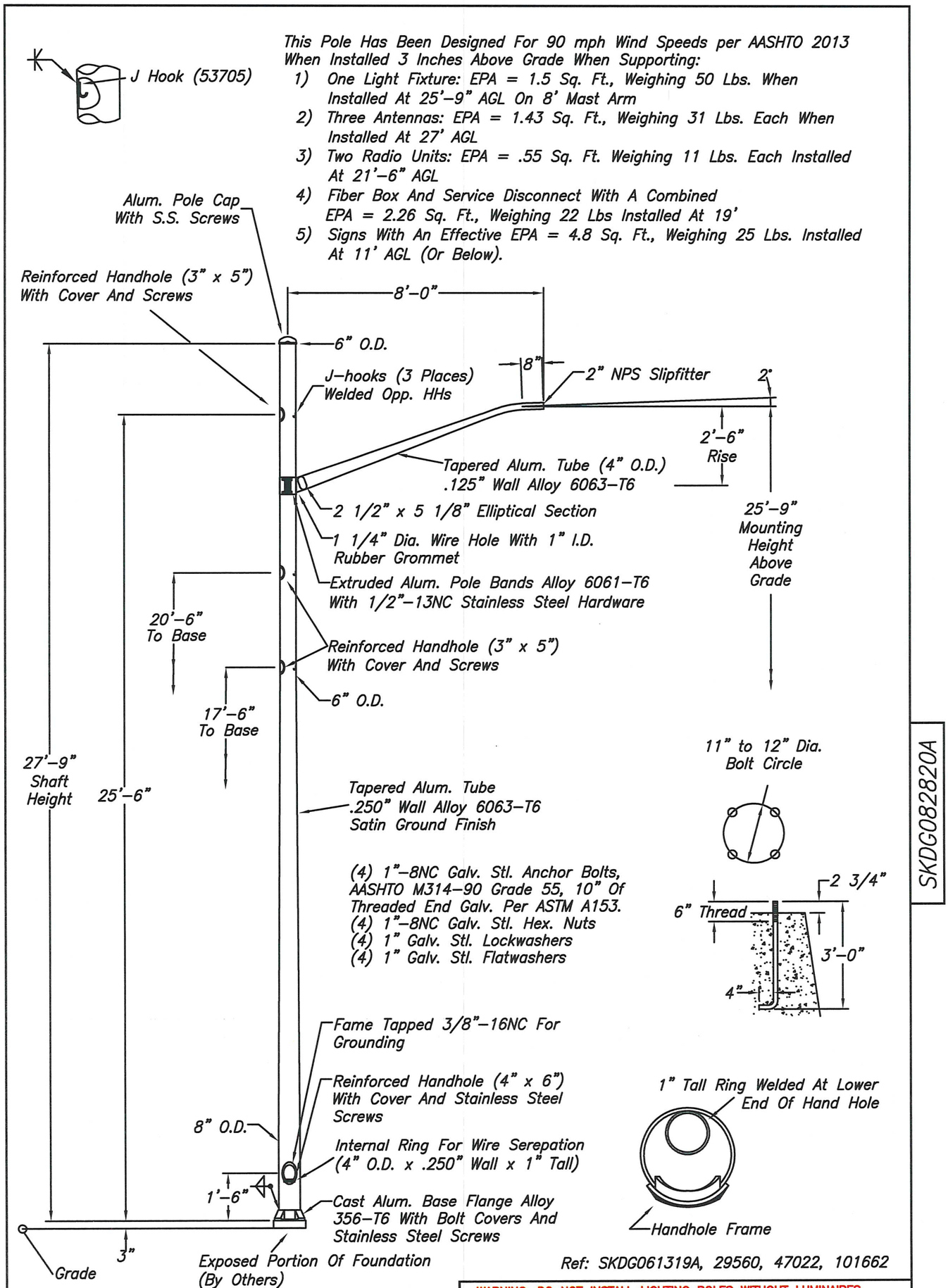
BY:_____
Reid T. Ottesen / Village Manager

CHICAGO SMSA LIMITED PARTNERSHIP, an Illinois Limited Partnership d/b/a Verizon Wireless

BY:_____
James R. Martin / Director, Network Field Engineering

Attachment: Verizon Pole Replacement Agreement Amendment 1 (Verizon Wireless Pole Replacement Agreement Amendment 1)

Exhibit A



WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

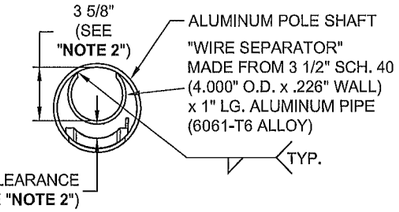
NO.	REVISIONS	DATE
1	Added PVC Conduit (DG)	9.20
2	Changed From PVC Conduit To Welded Rings(DG)	4.21
3	Added J-hooks (DG)	4.21

hapco
Abingdon, Va.

TITLE	Antenna/Light Pole
CUSTOMER	OPP-58243
SCALE	NTS
DATE	8.28.20
BY	RDG
CHK'D	
DWG. NO.	SKDG082820A

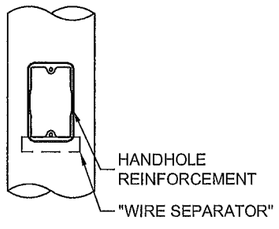
Exhibit A

DIMENSION TABLE								
E	F	G	H	WALL	1ST HH	2ND HH	3RD HH	4TH HH
27'-9"	10'-0"	6'-0"	25'-9"	.250"	1'-6" LOC. @ 0°	17'-6" LOC. @ 270°	20'-6" LOC. @ 270°	25'-6" LOC. @ 270°

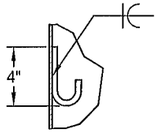


HANDHOLE NOTES:
1.) WORST CASE SCENARIO, AT POLE TOP, OF HANDHOLE REINFORCEMENT & WIRE SEPARATOR SHOWN.

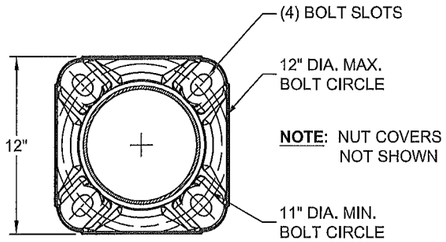
2.) CUSTOMER TO CONFIRM WIRE CLEARANCE DIMENSIONS INSIDE & OUTSIDE OF WIRE SEPARATOR.



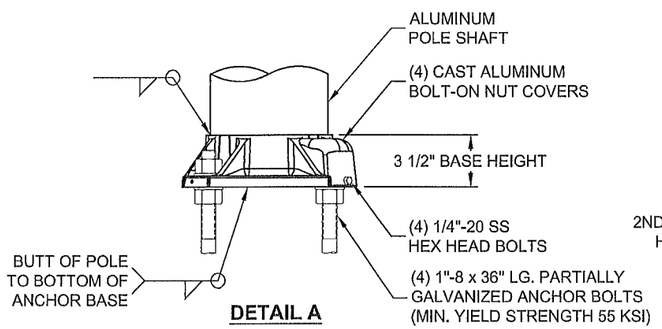
1 **HANDHOLE DETAIL**



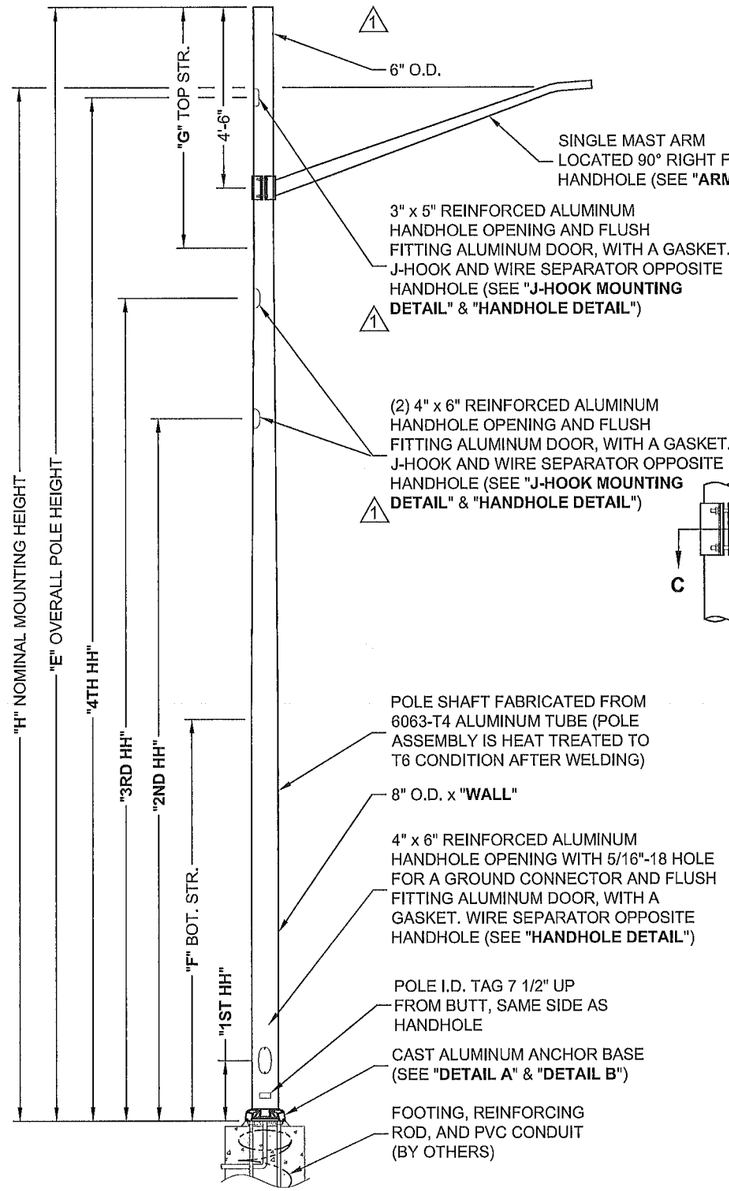
J-HOOK MOUNTING DETAIL

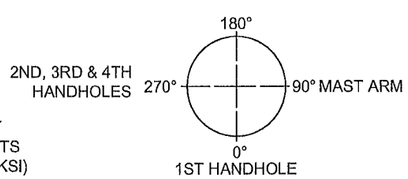


DETAIL B



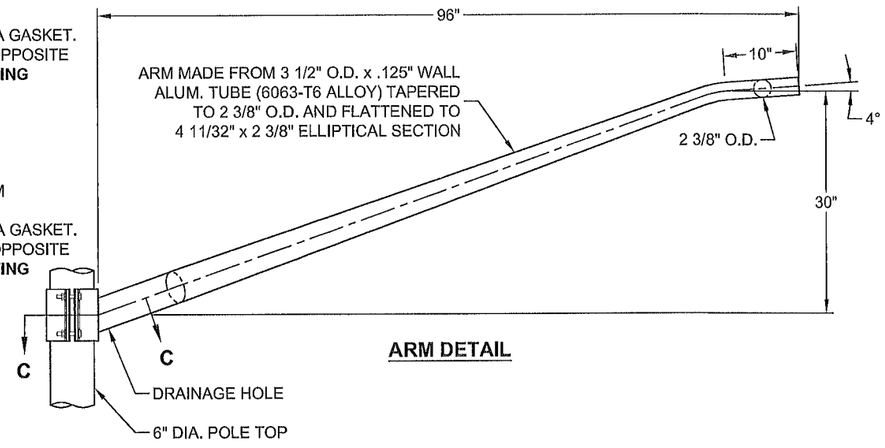
DETAIL A



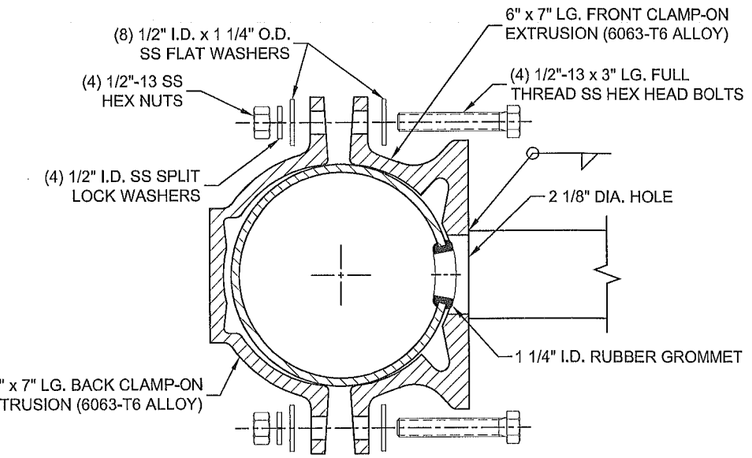


ORIENTATION DETAIL

POLE RATING (PER AASHTO 2013):
3-SEC GUST WIND SPEED: 90 MPH MAX
EXISTING FIXTURE @ 25'-9" A.G.L. : 1.5 SQ. FT. MAX. & 50 LBS MAX.
(3) - RADIOS WITH ANTENNAS @ 27'-0" A.G.L. : 1.43 SQ. FT. & 31 LBS EACH
(2) - SUPPORT UNIT W/ 2 RADIOS @ 21'-6" A.G.L. : 0.55 SQ. FT. & 11 LBS EACH
(1) - SERVICE DISCONNECT, (1) FIBER BOX @ 19'-0" A.G.L. : 2.26 SQ. FT. & 22 LBS TOTAL
(2) - SIGNS @ 11'-0" A.G.L. : 4.8 SQ. FT. & 25 LBS TOTAL
25 LBS OF CABLE (AXIALLY LOADED)



ARM DETAIL



SECTION C-C

DO NOT SCALE

valmont

Valmont Industries, Inc. Structures Division
20805 Eaton Ave Farmington, Minnesota 55024-7932
Phone: (651) 463-8990 (800) 899-7577
Fax: (651) 463-3349

****CONFIDENTIAL****
The information contained in this drawing is privileged and confidential, and may be protected from disclosure. Please be aware that any use or dissemination of this drawing may be subject to legal restriction or sanction.

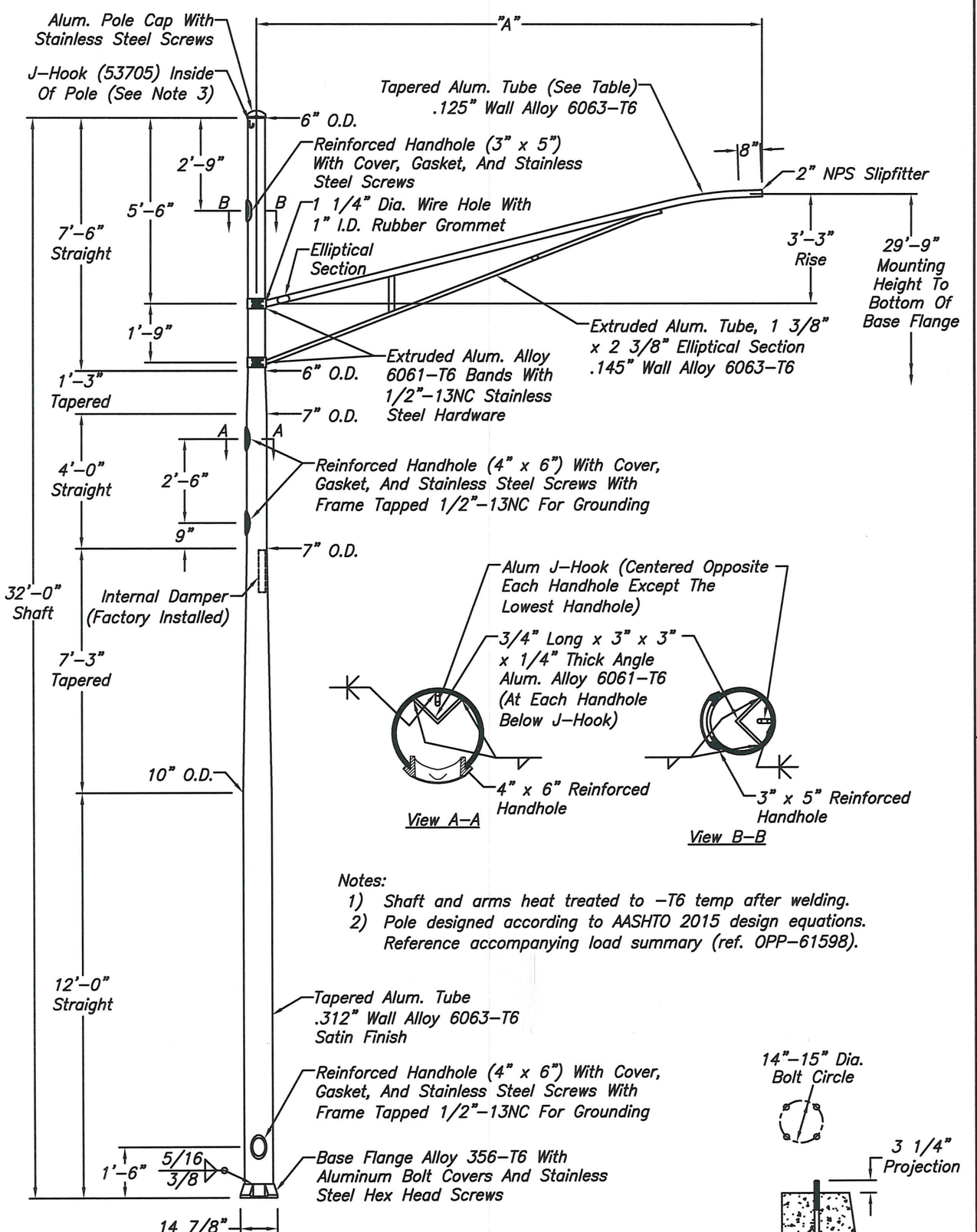
TITLE:	S ANCHOR BASE POLE
MODEL NO.:	
MATERIAL:	ALUMINUM ALLOY
FINISH:	100 GRIT SATIN FINISH
PROJECT:	PALATIN 042 & LOCATION ID #536142
SOLD TO:	
SHIP TO:	
P.O. NO:	738678
REP:	LIGHTING SOLUTIONS OF ILLINOIS

QTY:	1
DWN BY:	PVB
CHK'D BY:	
APPR BY:	KGB
DATE:	05-28-21
DWG NO:	A455248
PAGE:	1 / 1

REV	DATE	REVISION DESCRIPTION	BY
1	04/05/22	ADD WIRE SEPERATOR DET / DEL J-HK AT TOP	GGL

Attachment: Verizon Pole Replacement Agreement Amendment 1 (Verizon Wireless Pole Replacement Agreement Amendment 1)

Exhibit A



Item#	A	Tube Size	Elliptical Section
SKJK...A–008	8'	3" O.D. x .125" Wall	2 3/8" x 3 1/2"
SKJK...A–012	12'	3.5" O.D. x .125" Wall	2 3/8" x 4 3/8"
SKJK...A–015	15'	4" O.D. x .125" Wall	2 1/2" x 5 1/8"

SKJKOPP61598A

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

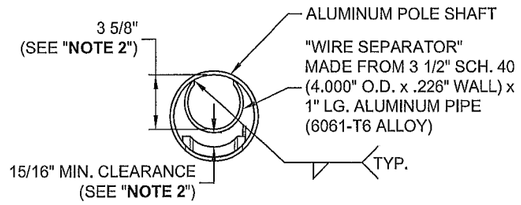
NO.	REVISIONS		DATE
1	Added j–hook	JK	1/21/2021
2	Added j–hook detail and pole finish	JK	7/7/2021

Proven Performance hapco pole products

TITLE	SMALL CELL LIGHTING POLE
CUSTOMER	
SCALE NTS	DATE 1/19/2021
BY JDK	DWG. NO. SKJKOPP61598A
CHK'D	

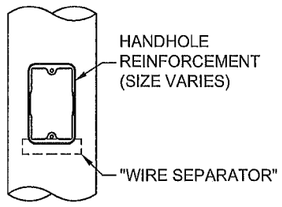
Exhibit A

DIMENSION TABLE									
E	F	G	H	I	WALL	1ST HH	2ND HH	3RD HH	4TH HH
32'-0"	14'-3"	7'-6"	29'-9"	18'-6"	.312"	1'-6" LOC. @ 0°	20'-0" LOC. @ 270°	22'-6" LOC. @ 270°	29'-3" LOC. @ 270°

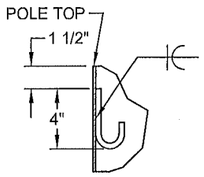


HANDHOLE NOTES:
1.) WORST CASE SCENARIO, AT POLE TOP, OF HANDHOLE REINFORCEMENT & WIRE SEPARATOR SHOWN.

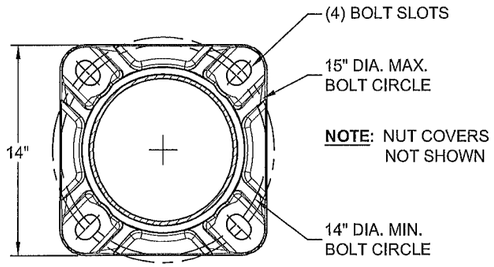
2.) CUSTOMER TO CONFIRM WIRE CLEARANCE DIMENSIONS INSIDE & OUTSIDE OF WIRE SEPARATOR.



HANDHOLE DETAIL

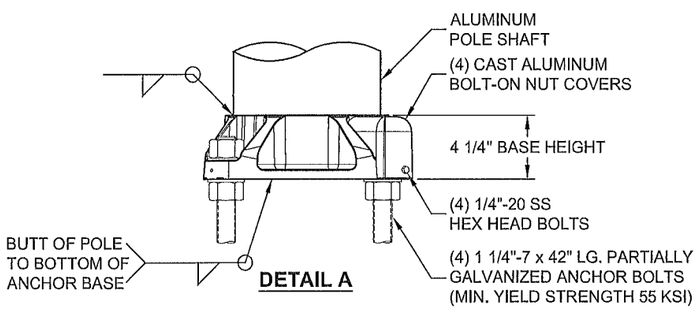


J-HOOK MOUNTING DETAIL

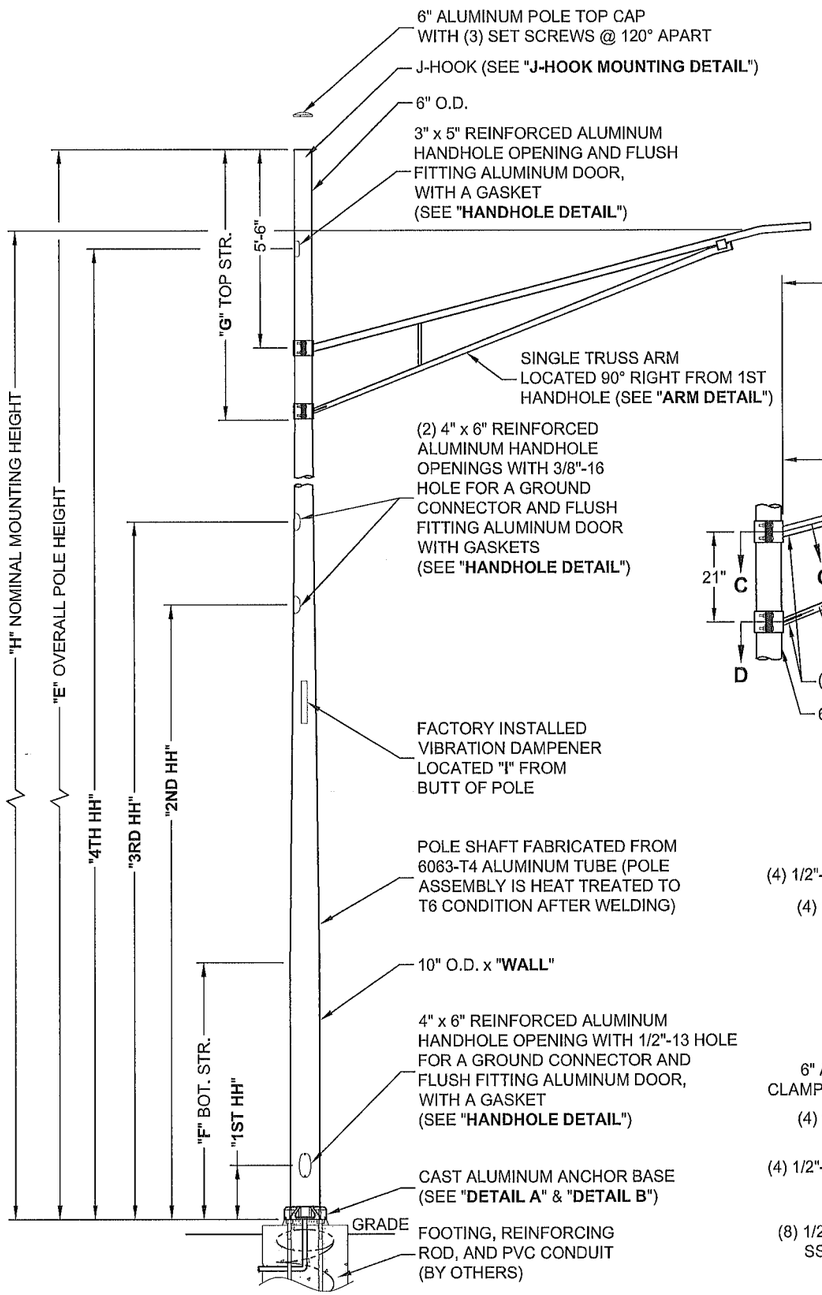


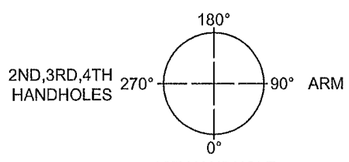
NOTE: NUT COVERS NOT SHOWN

DETAIL B



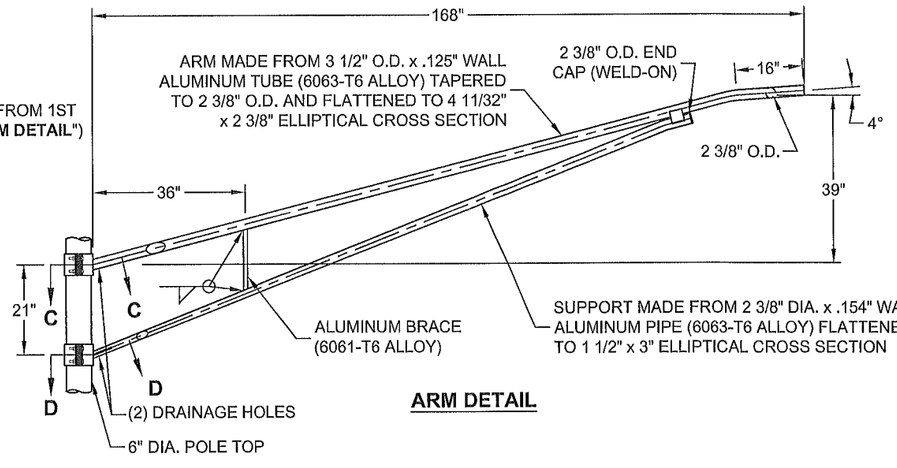
DETAIL A



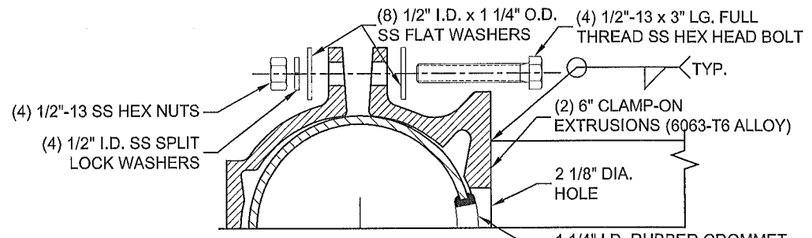


ORIENTATION DETAIL

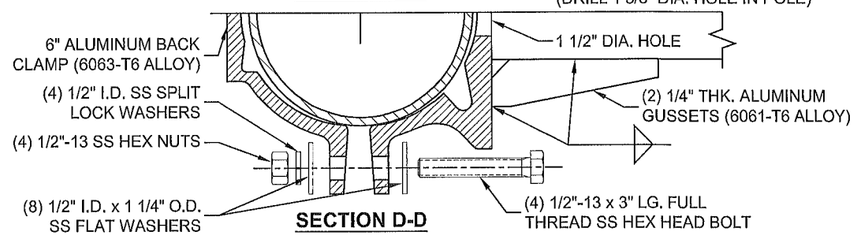
POLE RATING (PER AASHTO 2013):
3-SEC GUST WIND SPEED: 90 MPH MAX
EXISTING FIXTURE: 2.6 SQ. FT. MAX. AND 35 LBS MAX.
(3) - RADIOS WITH ANTENNAS @ 31'-3" A.G.L. : 2.36 SQ. FT. & 31 LBS EACH
(2) - CBRS RADIOS @ 23'-6" A.G.L. : 0.55 SQ. FT. & 11 LBS EACH
(1) SERVICE DISCONNECT, (1) FIBER BOX @ 21'-6" A.G.L.: 2.27 SQ. FT. & 12 LBS TOTAL
(1) - 42" x 63" BANNER @ 13'-10" A.G.L. TO BOTTOM ARM
(1) - 20" x 54" SOLAR PANEL @ 11'-1" A.G.L. TO BOTTOM
(1) - 24" x 18" SIGN @ 7'-7" A.G.L. TO BOTTOM
(1) - 22" x 20" BOX, (1) - 15" x 17" BOX @ 7'-7" A.G.L. TO TOP MAX
35 LBS OF CABLE (AXIALLY LOADED)
NOTE: SHAFT IS MOUNTED 3" A.G.L.



ARM DETAIL



SECTION C-C



SECTION D-D

DO NOT SCALE

valmont

Valmont Industries, Inc. Structures Division
20805 Eaton Ave Farmington, Minnesota 55024-7932
Phone: (651) 463-8990 (800) 899-7577
Fax: (651) 463-3349

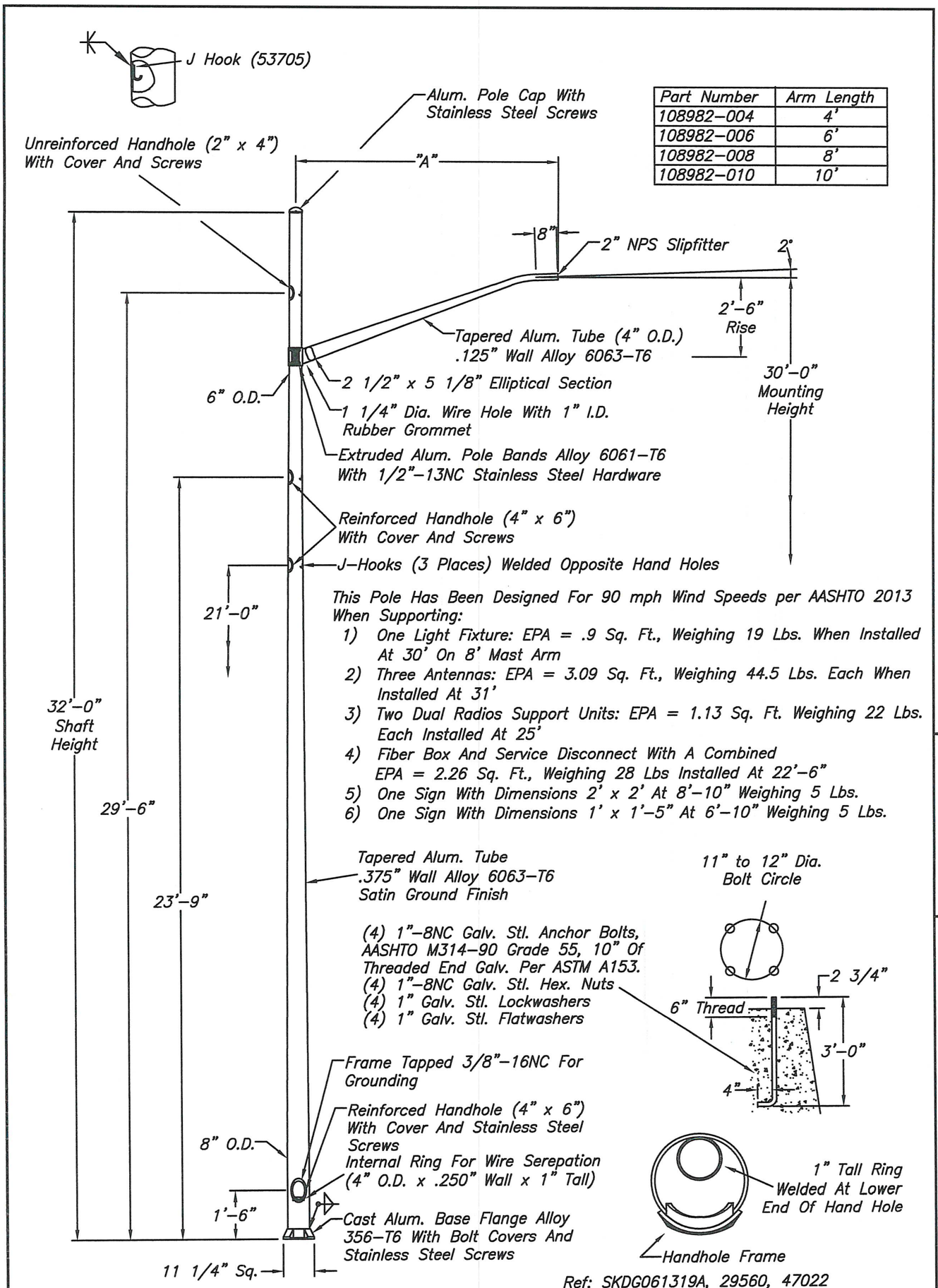
****CONFIDENTIAL****
The information contained in this drawing is privileged and confidential, and may be protected from disclosure. Please be aware that any use or dissemination of this drawing may be subject to legal restriction or sanction.

TITLE:	S ANCHOR BASE ALUMINUM POLE
QTY:	1
MODEL NO.:	
MATERIAL:	ALUMINUM ALLOY
FINISH:	100 GRIT SATIN FINISH
PROJECT:	PALATIN_012
SOLD TO:	
SHIP TO:	
P.O. NO:	
REP:	CONCORDIA WIRELESS
DWN BY:	PVB
CHK'D BY:	
APPR BY:	JRB
DATE:	08-25-20
DWG NO:	A25428
PAGE:	1 / 3

REV	DATE	REVISION DESCRIPTION	BY

Attachment: Verizon Pole Replacement Agreement Amendment 1 (Verizon Wireless Pole Replacement Agreement Amendment 1)

Exhibit A



Part Number	Arm Length
108982–004	4'
108982–006	6'
108982–008	8'
108982–010	10'

This Pole Has Been Designed For 90 mph Wind Speeds per AASHTO 2013 When Supporting:

1) One Light Fixture: EPA = .9 Sq. Ft., Weighing 19 Lbs. When Installed At 30' On 8' Mast Arm
2) Three Antennas: EPA = 3.09 Sq. Ft., Weighing 44.5 Lbs. Each When Installed At 31'
3) Two Dual Radios Support Units: EPA = 1.13 Sq. Ft. Weighing 22 Lbs. Each Installed At 25'
4) Fiber Box And Service Disconnect With A Combined EPA = 2.26 Sq. Ft., Weighing 28 Lbs Installed At 22'–6"
5) One Sign With Dimensions 2' x 2' At 8'–10" Weighing 5 Lbs.
6) One Sign With Dimensions 1' x 1'–5" At 6'–10" Weighing 5 Lbs.

Ref: SKDG061319A, 29560, 47022

108982

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

NO.	REVISIONS	DATE

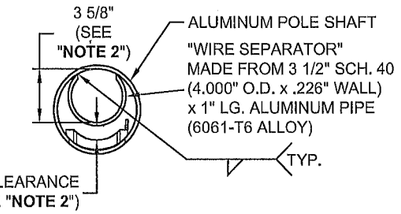
hapco
Abingdon, Va.

TITLE	32' Antenna/Light Pole
CUSTOMER	
SCALE 32	DATE 06/27/2022
BY JWD	DWG. NO. 108982
CHK'D	

Exhibit A

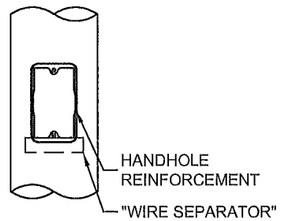
DIMENSION TABLE									
E	F	G	H	I	WALL	1ST HH	2ND HH	3RD HH	4TH HH
32'-0"	20'-3"	5'-0"	30'-0"	19'-2"	.312"	1'-6" LOC. @ 0°	21'-0" LOC. @ 270°	23'-9" LOC. @ 270°	29'-6" LOC. @ 270°

1 1

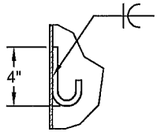


HANDHOLE NOTES:
1.) WORST CASE SCENARIO, AT POLE TOP, OF HANDHOLE REINFORCEMENT & WIRE SEPARATOR SHOWN.

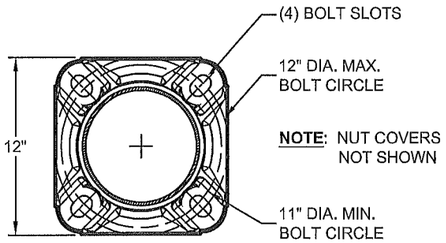
2.) CUSTOMER TO CONFIRM WIRE CLEARANCE DIMENSIONS INSIDE & OUTSIDE OF WIRE SEPARATOR.



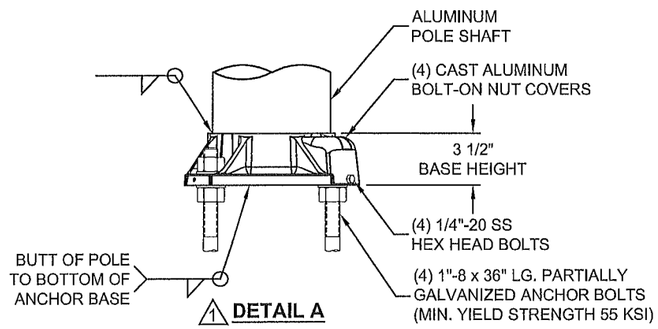
1 **HANDHOLE DETAIL**



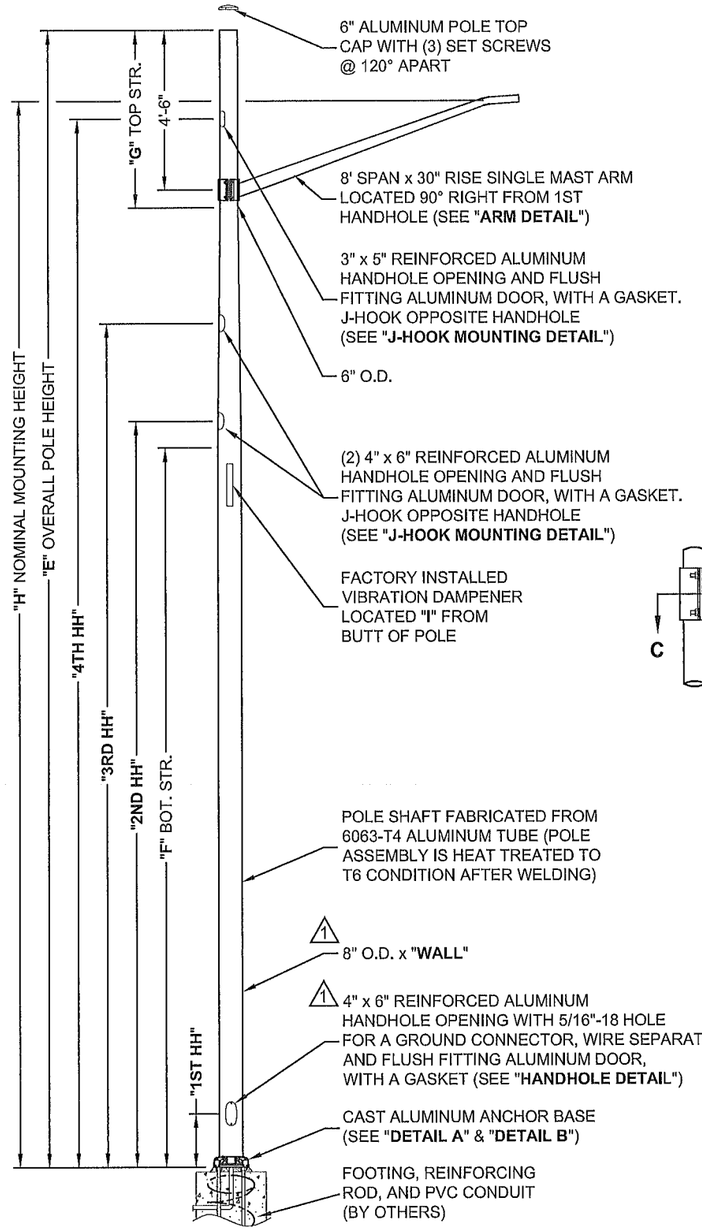
J-HOOK MOUNTING DETAIL

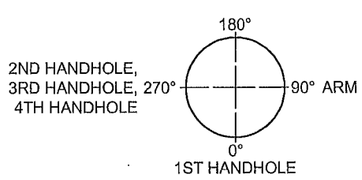


1 **DETAIL B**



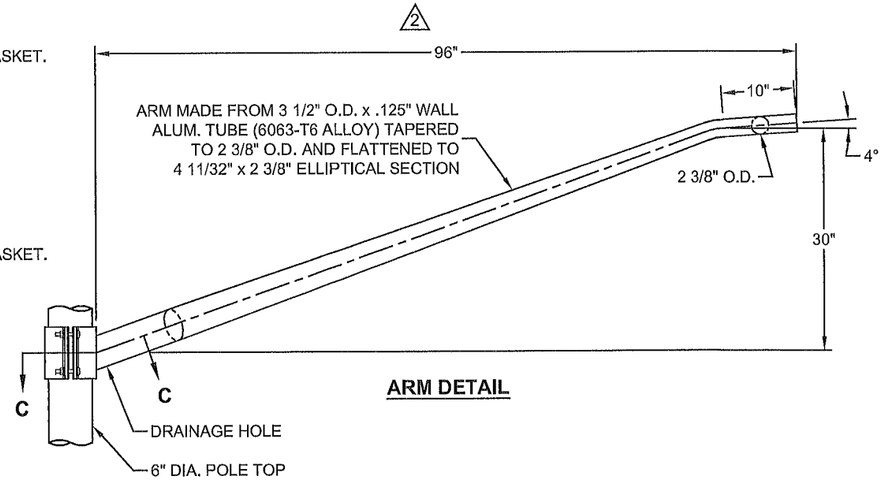
1 **DETAIL A**



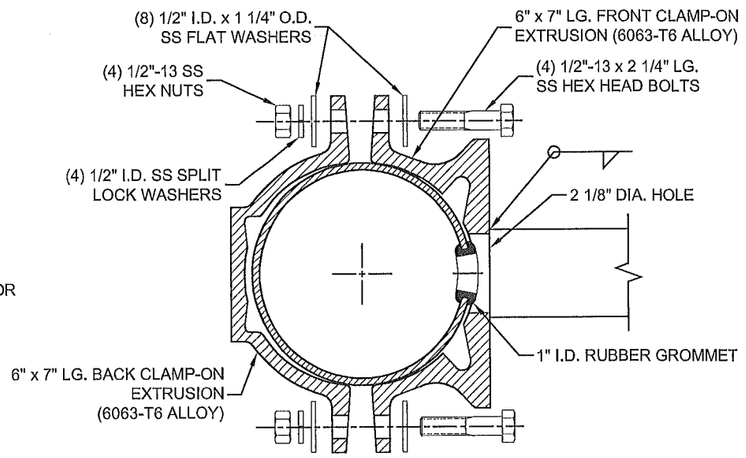


ORIENTATION DETAIL

POLE RATING (PER AASHTO 2013):
3-SEC GUST WIND SPEED: 90 MPH MAX
MAST ARM FIXTURE: 0.9 SQ. FT. MAX. AND 19 LBS MAX. @ 30'-0" A.G.L.
(3) - ANTENNAE @ 31'-0" A.G.L.: 3.09 SQ. FT. AND 44.5 LBS EACH
(2) - DUAL RADIO SUPPORT UNITS @ 25'-0" A.G.L.: 1.13 SQ. FT. AND 22 LBS EACH
1 (1) - FIBER BOX & SERVICE DISCONNECT @ 22'-6" A.G.L.: 2.26 SQ. FT. & 28 LBS TOTAL
(1) - 24" x 24" SIGN @ 8'-10" A.G.L. AND 5 LBS
(1) - 12" x 17" SIGN @ 6'-10" A.G.L. AND 5 LBS
1 30 LBS OF CABLE (AXIALLY LOADED)



ARM DETAIL



SECTION C-C

DO NOT SCALE

HOFFEST 028 & 039 & 43

valmont

Valmont Industries, Inc. Structures Division
20805 Eaton Ave Farmington, Minnesota 55024-7932
Phone: (651) 463-8990 (800) 899-7577
Fax: (651) 463-3349

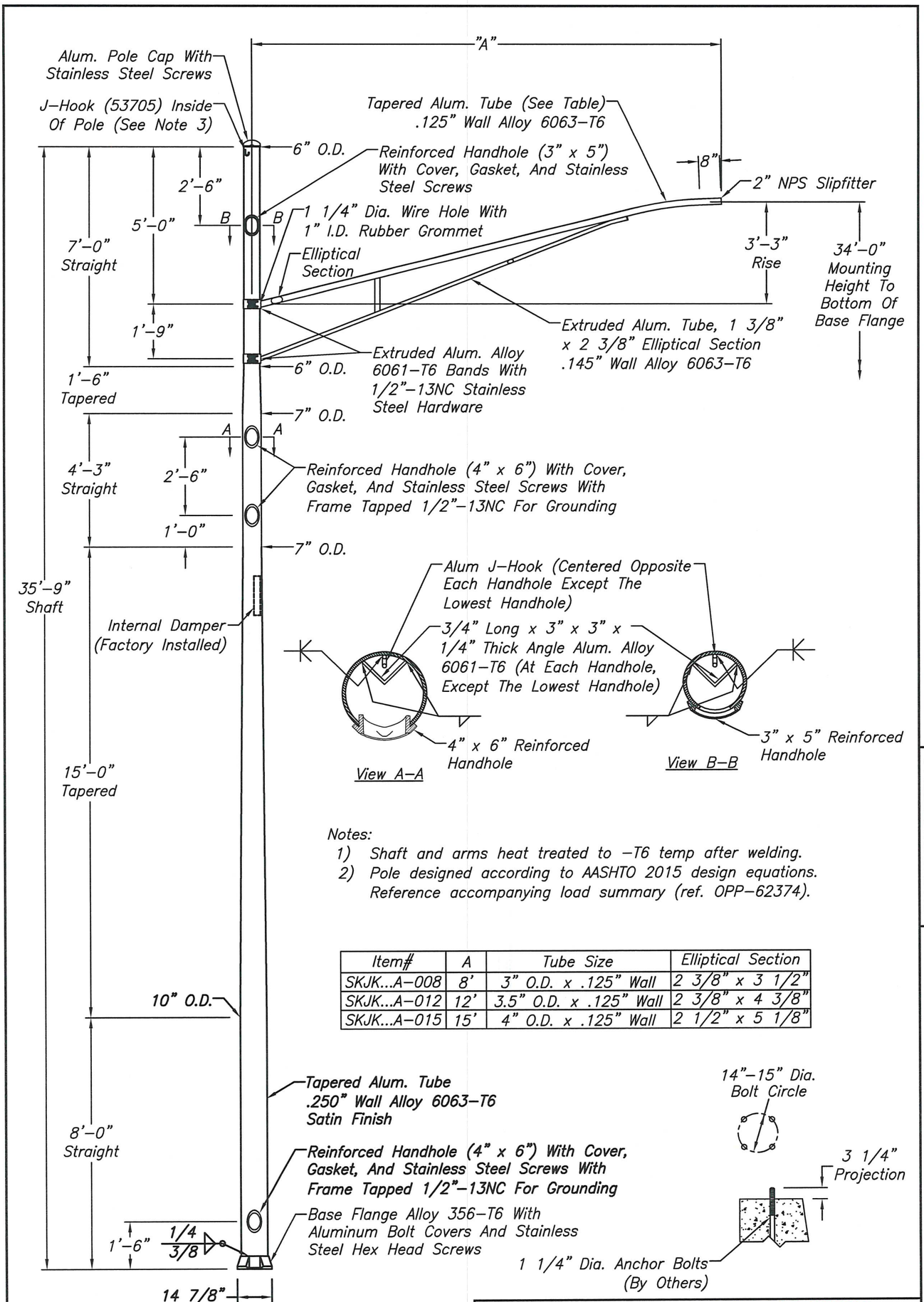
****CONFIDENTIAL****
The information contained in this drawing is privileged and confidential, and may be protected from disclosure. Please be aware that any use or dissemination of this drawing may be subject to legal restriction or sanction.

TITLE:	S ANCHOR BASE POLE
MODEL NO.:	
MATERIAL:	ALUMINUM ALLOY
FINISH:	100 GRIT SATIN FINISH
PROJECT:	ERM20-11069
SOLD TO:	ELECTRICAL RESOURCE MANAGEMENT
SHIP TO:	
P.O. NO:	738238
REP:	LIGHTING SOLUTIONS OF ILLINOIS
QTY:	1
DWN BY:	PTP
CHK'D BY:	
APPR BY:	KGB
DATE:	12-29-20
DWG NO:	A26973
PAGE:	1 / 1

REV	DATE	REVISION DESCRIPTION	BY
2	04-05-22	ARM SPAN LENGTH WAS 90"	GGL
1	01-31-22	REV O.D.;REV TABLE;REV HH NT;ADD DTL;REV DTL	HJT

Attachment: Verizon Pole Replacement Agreement Amendment 1 (Verizon Wireless Pole Replacement Agreement Amendment 1)

Exhibit A



SKJKOPP62374A

Notes:

1) Shaft and arms heat treated to –T6 temp after welding.
2) Pole designed according to AASHTO 2015 design equations. Reference accompanying load summary (ref. OPP–62374).

Item#	A	Tube Size	Elliptical Section
SKJK...A–008	8'	3" O.D. x .125" Wall	2 3/8" x 3 1/2"
SKJK...A–012	12'	3.5" O.D. x .125" Wall	2 3/8" x 4 3/8"
SKJK...A–015	15'	4" O.D. x .125" Wall	2 1/2" x 5 1/8"

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

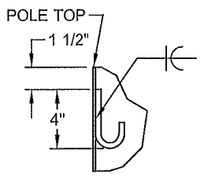
NO.	REVISIONS		DATE
1	Added J–hook and satin finish	JK	7/20/21

Proven Performance hapco pole products

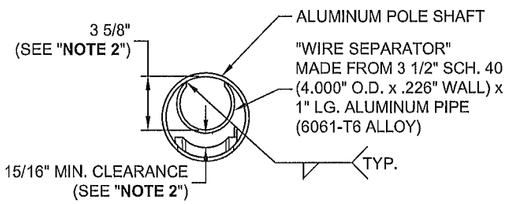
TITLE	SMALL CELL LIGHTING POLE
CUSTOMER	
SCALE	NTS
DATE	2/16/2021
BY	JDK
CHK'D	
DWG. NO.	SKJKOPP62374A

Exhibit A

DIMENSION TABLE									
E	F	G	H	I	WALL	1ST HH	2ND HH	3RD HH	4TH HH
35'-9"	7'-9"	8'-0"	33'-9"	21'-6"	.250"	1'-6" LOC. @ 0°	24'-0" LOC. @ 0°	26'-6" LOC. @ 0°	33'-3" LOC. @ 0°

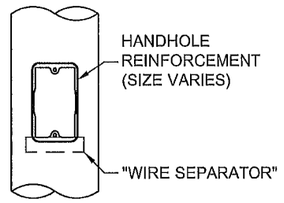


J-HOOK MOUNTING DETAIL (1)

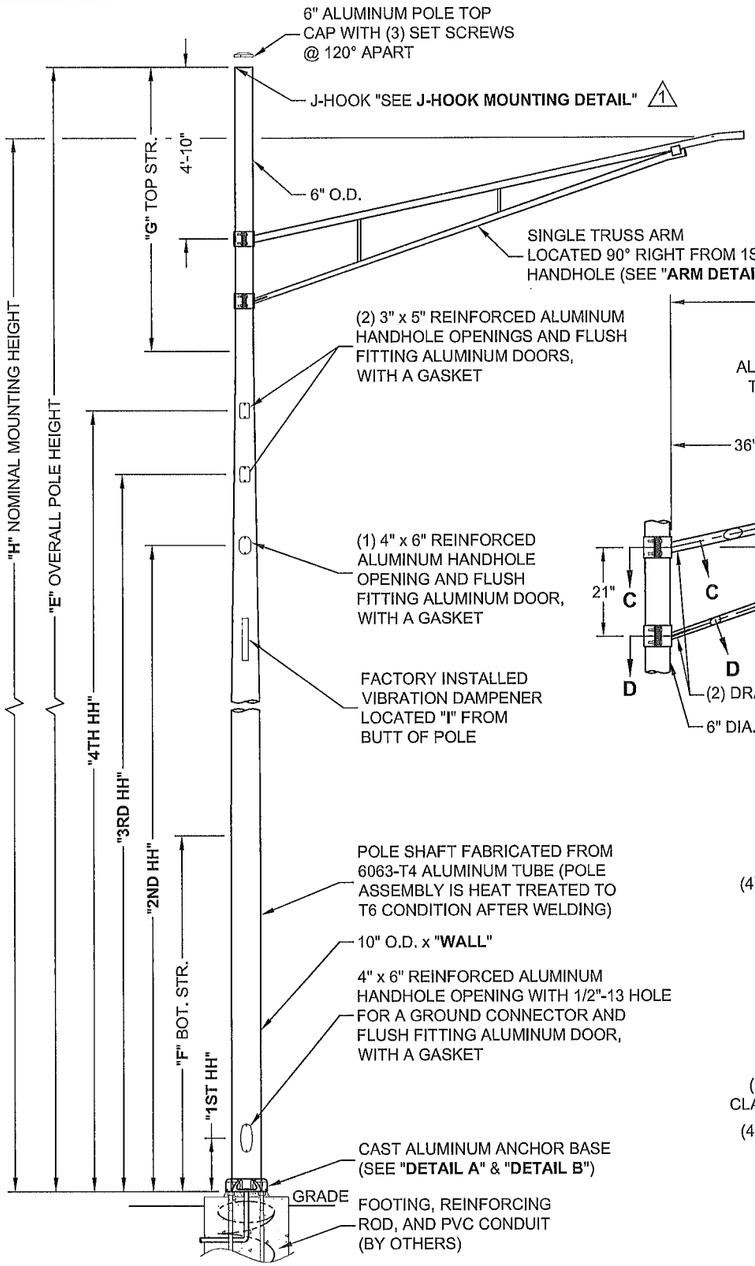


HANDHOLE NOTES:
1.) WORST CASE SCENARIO, AT POLE TOP, OF HANDHOLE REINFORCEMENT & WIRE SEPARATOR SHOWN.

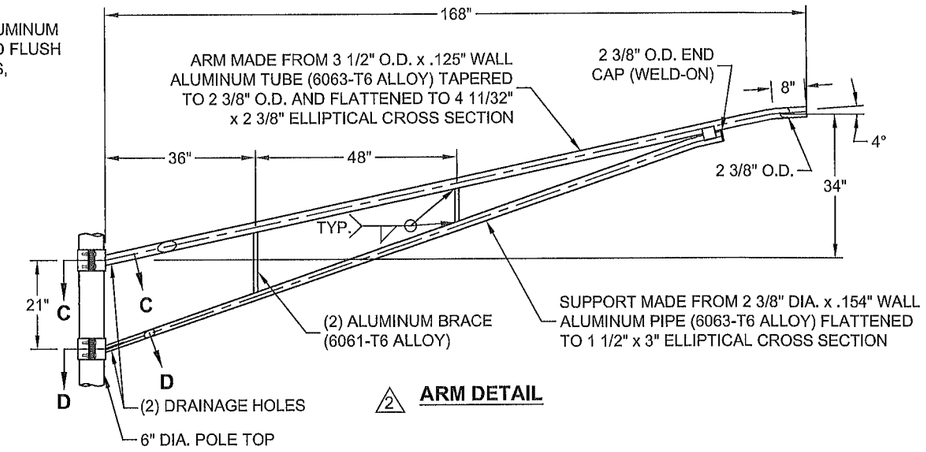
2.) CUSTOMER TO CONFIRM WIRE CLEARANCE DIMENSIONS INSIDE & OUTSIDE OF WIRE SEPARATOR.



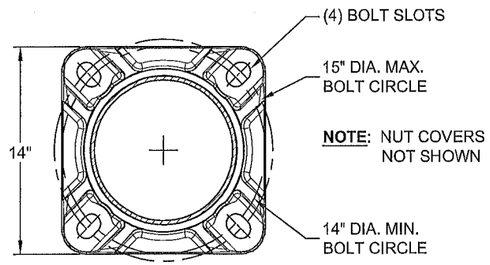
HANDHOLE DETAIL



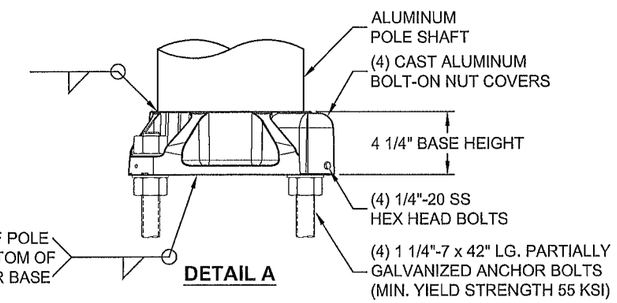
POLE RATING (PER AASHTO 2013):
3-SEC GUST WIND SPEED: 90 MPH MAX
EXISTING FIXTURE: 2.6 SQ. FT. MAX. AND 35 LBS MAX.
(3) - RADIOS WITH ANTENNAS @ 35'-2" A.G.L.: 2.36 SQ. FT. AND 31 LBS EACH
(2) - SUPPORT UNIT W/ 2 RADIOS @ 27'-6" A.G.L. : 1.12 SQ. FT. & 22 LBS EACH
(1) - SERVICE DISCONNECT, (1) FIBER BOX @ 25'-6" A.G.L. : 2.32 SQ. FT. & 28 LBS
35 LBS OF CABLE (AXIALLY LOADED)



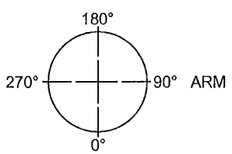
ARM DETAIL (2)



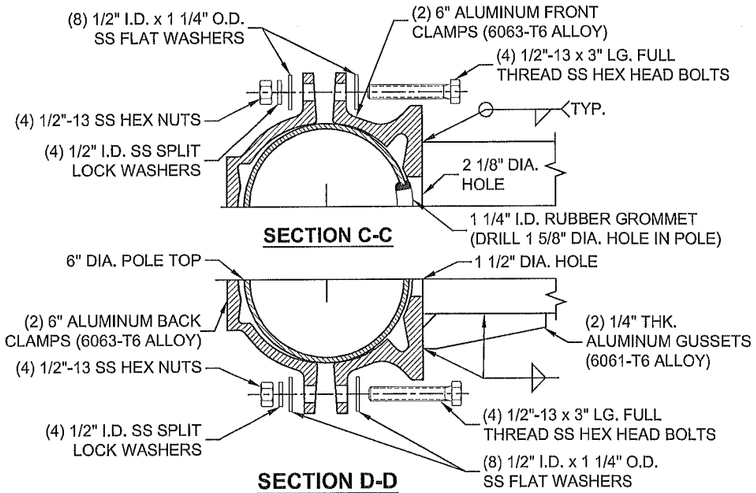
DETAIL B



DETAIL A



1ST, 2ND,3RD,4TH HANDHOLES
ORIENTATION DETAIL



SECTION C-C

SECTION D-D

DO NOT SCALE

valmont

Valmont Industries, Inc. Structures Division
20805 Eaton Ave Farmington, Minnesota 55024-7932
Phone: (651) 463-8990 (800) 899-7577
Fax: (651) 463-3349

****CONFIDENTIAL****
The information contained in this drawing is privileged and confidential, and may be protected from disclosure. Please be aware that any use or dissemination of this drawing may be subject to legal restriction or sanction.

TITLE:	S ANCHOR BASE POLE
MODEL NO.:	
MATERIAL:	ALUMINUM ALLOY
FINISH:	
PROJECT:	HOFFEST 031
SOLD TO:	
SHIP TO:	
P.O. NO:	
REP:	CONCORDIA WIRELESS
QTY:	
DWN BY:	PVB
CHK'D BY:	
APPR BY:	KGB
DATE:	08-24-20
DWG NO:	A25401
PAGE:	1 / 1

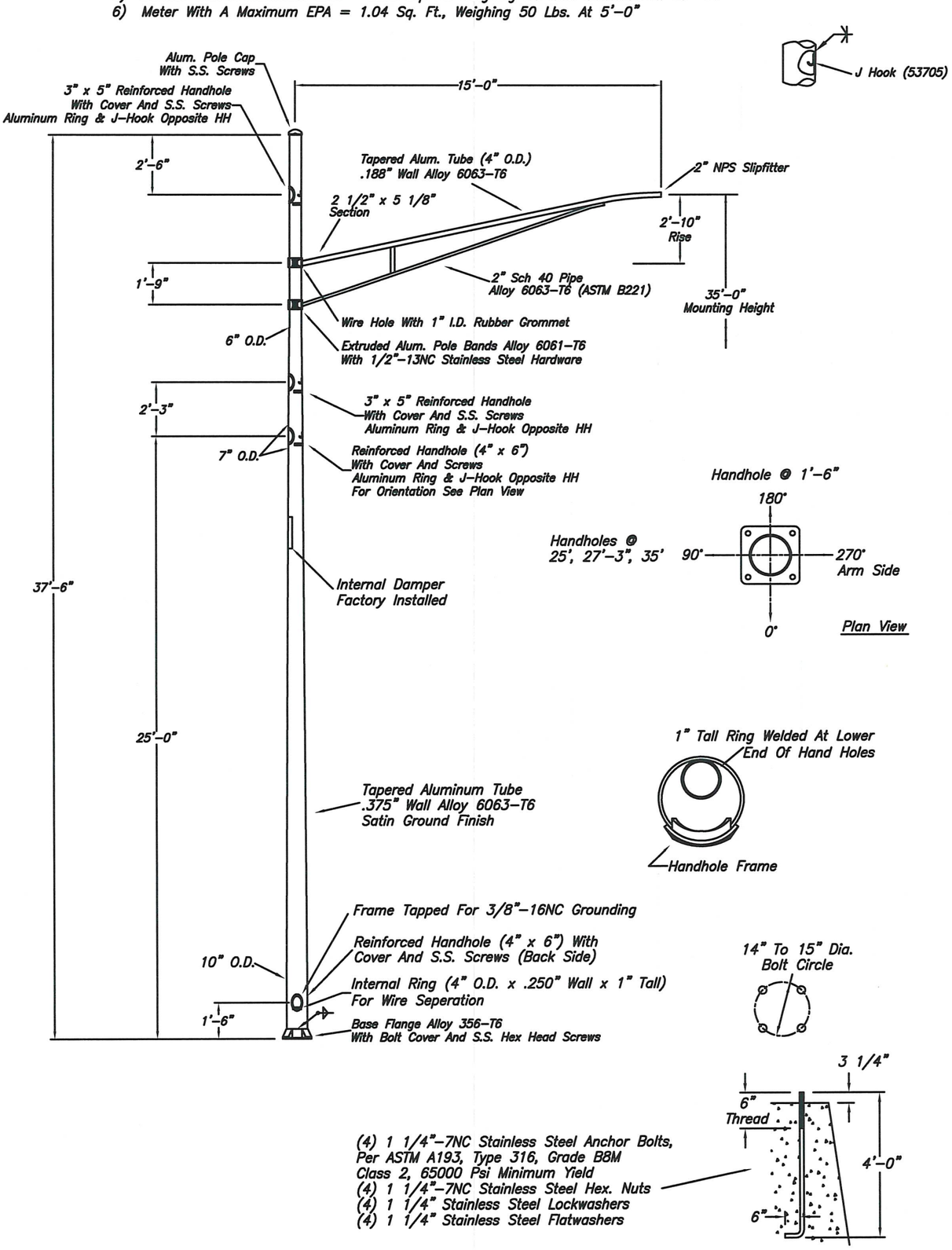
REV	DATE	REVISION DESCRIPTION	BY
2	09-14-20	ADDED AN ADDITIONAL TRUSS ARM BRACE	KGB
1	08-31-20	ADD J-HOOK AND DTL	HJT

Attachment: Verizon Pole Replacement Agreement Amendment 1 (Verizon Wireless Pole Replacement Agreement Amendment 1)

Exhibit A

This Pole Has Been Designed For 90 mph Wind Speeds per AASHTO 2013 When Supporting:

1) One Light Fixture: EPA = 1.75 Sq. Ft., Weighing 75 Lbs. When Installed At 35' On 15' Truss Arm
2) Three Antennas: EPA = 3.09 Sq. Ft., Weighing 44.5 Lbs. Each When Installed At 36'–6"
3) Two Dual Radios Support Units: EPA = 1.13 Sq. Ft. Weighing 22 Lbs. Each Installed At 28'–6"
4) Fiber Box And Service Disconnect With A Combined EPA = 2.11 Sq. Ft., Weighing 28 Lbs Installed At 26'
5) Banner With A Maximum EPA = 22.5 Sq. Ft. Weighing 25 Lbs. Centered At 19'–11"
6) Meter With A Maximum EPA = 1.04 Sq. Ft., Weighing 50 Lbs. At 5'–0"



Ref. SKDG062521A, 102941, 105279

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

NO.	REVISIONS	DATE
1	Removed Festoon Box Per Customer Request (Ref. OPP–74158) DG	6.24.22

hapco
Abingdon, Va.

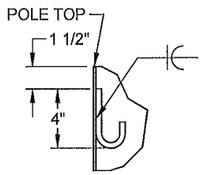
TITLE	Light / Antenna Pole
CUSTOMER	OPP–66097
SCALE	NTS
DATE	4.7.22
BY	RDG
DWG. NO.	108470
CHK'D	

108470

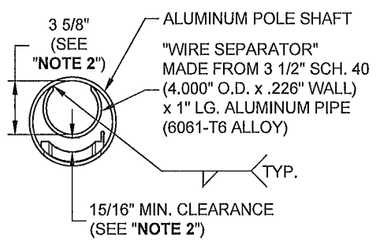
Exhibit A

DIMENSION TABLE									
E	F	G	H	I	WALL	1ST HH	2ND HH	3RD HH	4TH HH
37'-6"	19'-0"	7'-9"	35'-0"	22'-6"	.312"	1'-6" @ 0°	25'-0" @ 270°	27'-3" @ 270°	35'-0" @ 270°

POLE RATING (PER AASHTO 2013):
3-SEC GUST WIND SPEED: 90 MPH MAX
EXISTING FIXTURE: 1.75 SQ. FT. MAX. AND 75 LBS MAX.
(3) - RADIOS W / MOUNTING BRACKETS @ 36'-6" A.G.L.: 3.09 SQ. FT. AND 44.5 LBS EACH
(2) - SUPPORT UNIT W/ 2 RADIOS @ 28'-6" A.G.L. : 1.12 SQ. FT. & 22 LBS EACH
LOAD CENTER @ 26'-0" A.G.L. : .94 SQ. FT. & 9.7 LBS TOTAL
FIBER BOX @ 26'-0" A.G.L. : 1.33 SQ. FT. & 12 LBS TOTAL
OVERHEAD DECORATIVE LIGHT @ 15'-6" A.G.L. : 5 SQ. FT. & 75 LBS MAX.
(1) METER @ 5'-0" A.G.L.: 1.03 SQ. FT. AND 25 LBS MAX.
(1) 36" x 75" BANNER @ 16'-9" A.G.L. TO BOTTOM ARM MAX.
38 LBS OF CABLE (AXIALLY LOADED)

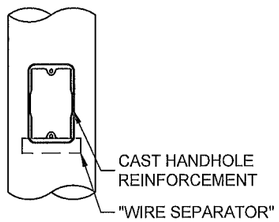


J-HOOK MOUNTING DETAIL

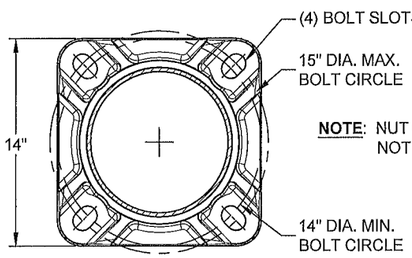


HANDHOLE NOTES:
1.) WORST CASE SCENARIO, AT POLE TOP, OF HANDHOLE REINFORCEMENT & WIRE SEPARATOR SHOWN.

2.) CUSTOMER TO CONFIRM WIRE CLEARANCE DIMENSIONS INSIDE & OUTSIDE OF WIRE SEPARATOR.

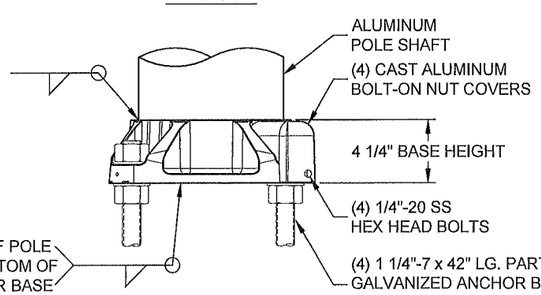


HANDHOLE DETAIL

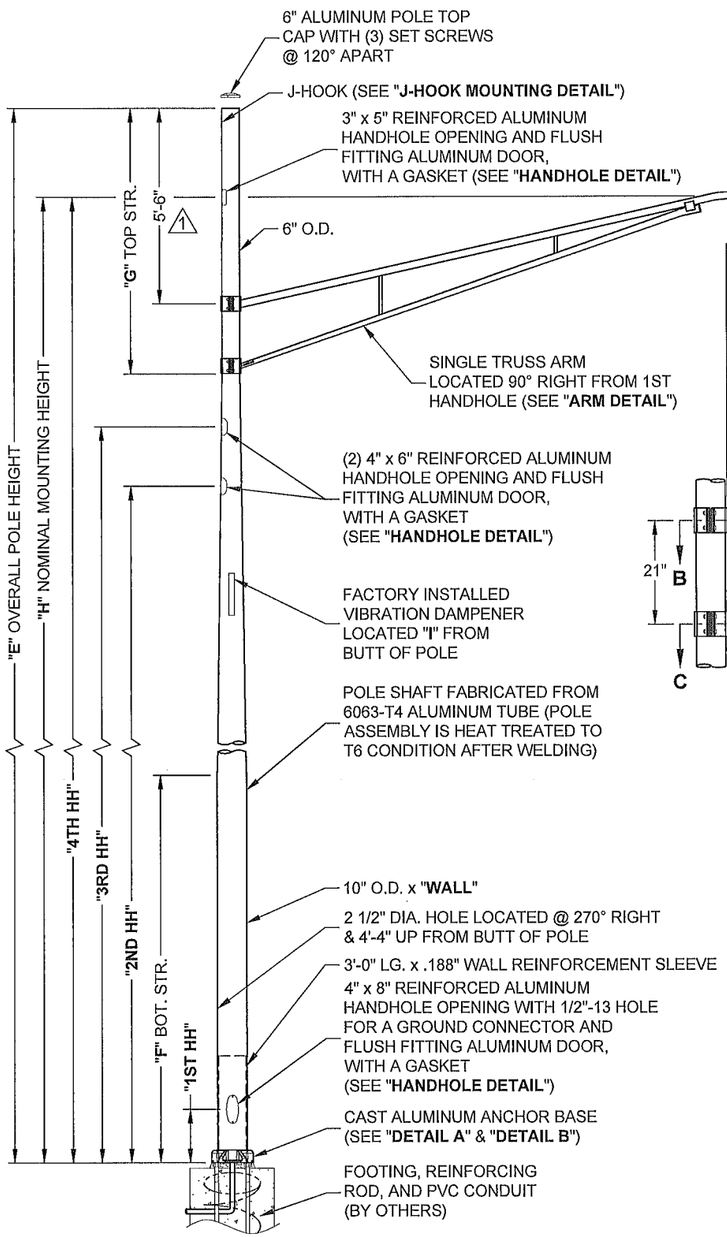


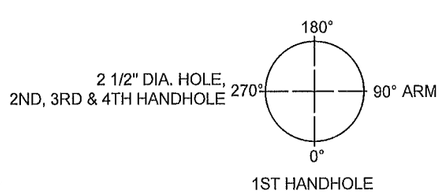
NOTE: NUT COVERS NOT SHOWN

DETAIL B

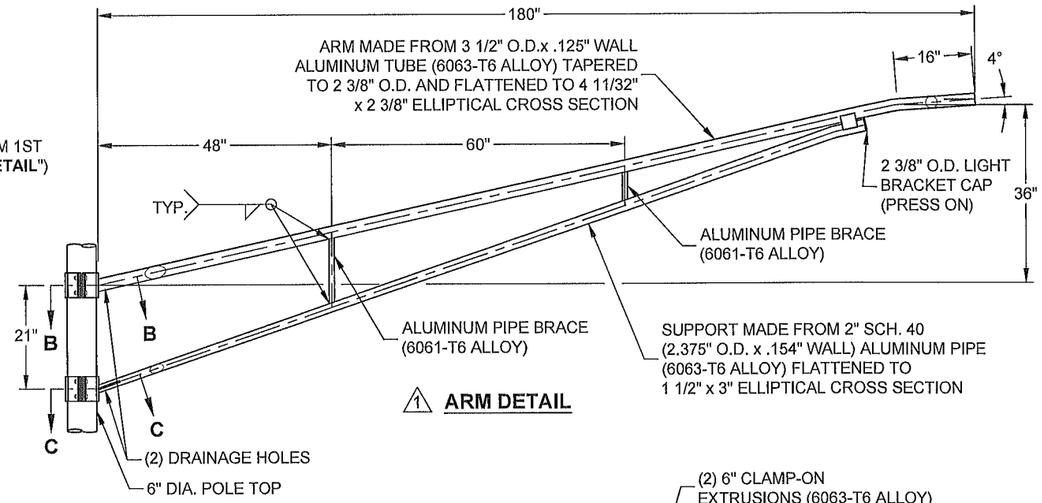


DETAIL A

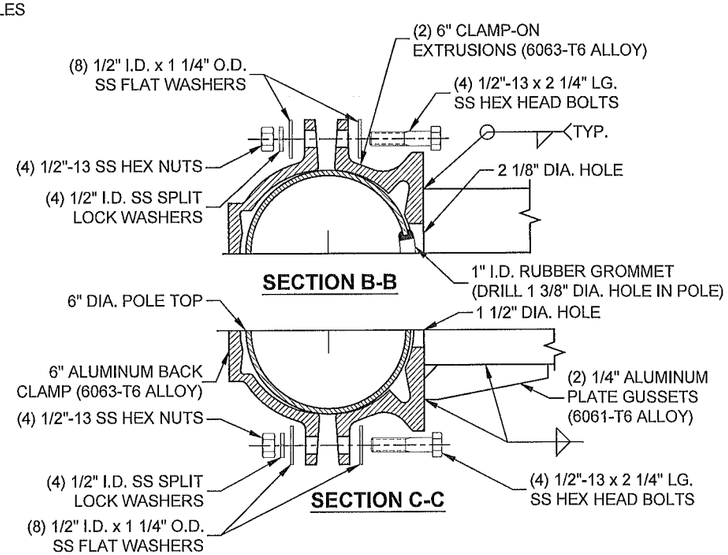




ORIENTATION DETAIL



1 ARM DETAIL



DO NOT SCALE

valmont

Valmont Industries, Inc. Structures Division
20805 Eaton Ave Farmington, Minnesota 55024-7932
Phone: (651) 463-8990 (800) 899-7577
Fax: (651) 463-3349

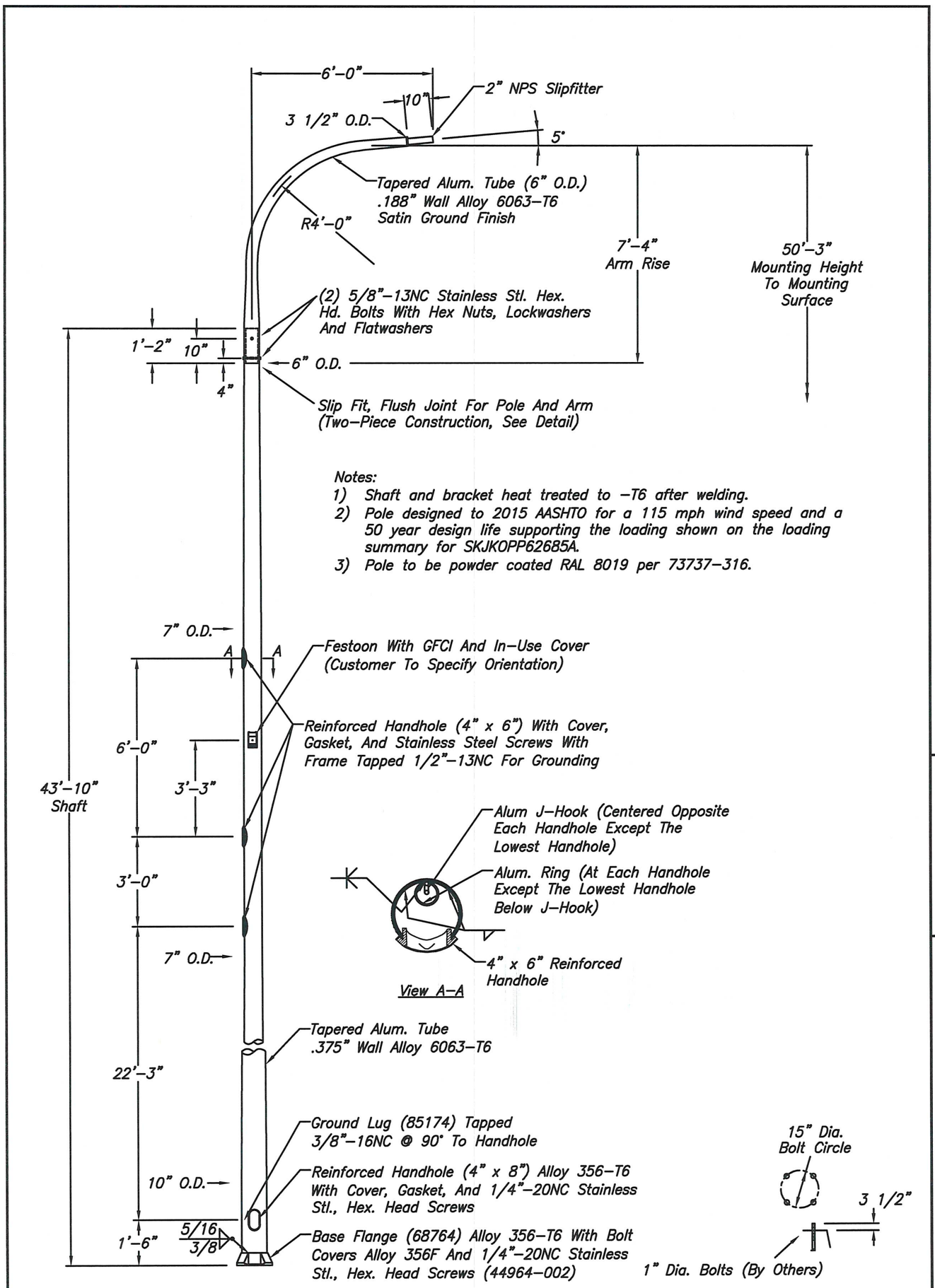
****CONFIDENTIAL****
The information contained in this drawing is privileged and confidential, and may be protected from disclosure. Please be aware that any use or dissemination of this drawing may be subject to legal restriction or sanction.

TITLE:	S ANCHOR BASE ALUMINUM POLE
QTY:	1
MODEL NO.:	
MATERIAL:	ALUMINUM ALLOY
FINISH:	100 GRIT SATIN FINISH
PROJECT:	LIGHTING SOLUTIONS OF ILLINOIS
SOLD TO:	
SHIP TO:	
P.O. NO:	
REP:	CONCORDIA WIRELESS
DWN BY:	PTP
CHK'D BY:	
APPR BY:	JRB
DATE:	06-16-22
DWG NO:	A37278
PAGE:	2 / 2

REV	DATE	REVISION DESCRIPTION	BY
1	06-28-22	REVISE ARM DETAIL & DIM	HJT

Attachment: Verizon Pole Replacement Agreement Amendment 1 (Verizon Wireless Pole Replacement Agreement Amendment 1)

Exhibit A



SKJKOPP62685A

Ref: 35391

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

NO.	REVISIONS		DATE
1	Added j-hooks and powder coat finish	JK	6/22/21
2	Added festoon	JK	2/16/21
3	HH was 4"x6", wire loops were angle	JK	6/21/22

Proven Performance
hapco pole products

TITLE	SMALL CELL DAVIT POLE
CUSTOMER	
SCALE	NTS
DATE	6/3/2021
BY	JDK
CHK'D	
DWG. NO.	SKJKOPP62685A

Exhibit A

DIMENSION TABLE									
E	F	G	H	I	WALL	1ST HH	2ND HH	3RD HH	4TH HH
41'-1"	22'-8"	0'-6"	50'-0"	28'-0"	.312"	1'-6" LOC. @ 0°	23'-9" LOC. @ 270°	26'-6" LOC. @ 270°	32'-6" LOC. @ 270°

3

3 5/8" (SEE "NOTE 2")
ALUMINUM POLE SHAFT
"WIRE SEPARATOR" MADE FROM 3 1/2" SCH. 40 (4.000" O.D. x .226" WALL) x 1" LG. ALUMINUM PIPE (6061-T6 ALLOY)
TYP.
15/16" MIN. CLEARANCE (SEE "NOTE 2")

HANDHOLE NOTES:
1.) WORST CASE SCENARIO, AT POLE TOP, OF HANDHOLE REINFORCEMENT & WIRE SEPARATOR SHOWN.
2.) CUSTOMER TO CONFIRM WIRE CLEARANCE DIMENSIONS INSIDE & OUTSIDE OF WIRE SEPARATOR.

CAST HANDHOLE REINFORCEMENT
"WIRE SEPARATOR"

HANDHOLE DETAIL

4"
CENTER IN HANDHOLE OPENING

J-HOOK MOUNTING DETAIL

180°
2ND, 3RD, 4TH HANDHOLE
270°
90° ARM
0°
1ST HANDHOLE

ORIENTATION DETAIL

(4) BOLT SLOTS
15" DIA. MAX. BOLT CIRCLE
14"
NOTE: NUT COVERS NOT SHOWN
14" DIA. MIN. BOLT CIRCLE

DETAIL B

ALUMINUM POLE SHAFT
(4) CAST ALUMINUM BOLT-ON NUT COVERS
4 1/4" BASE HEIGHT
(4) 1/4"-20 SS HEX HEAD BOLTS
BUTT OF POLE & SLEEVE TO BOTTOM OF ANCHOR BASE
(4) 1 1/4"-7 x 42" LG, PARTIALLY GALVANIZED ANCHOR BOLTS (MIN. YIELD STRENGTH 55 KSI)

DETAIL A

"H" NOMINAL MOUNTING HEIGHT
"E" OVERALL POLE HEIGHT
"G" TOP STR.
"4TH HH"
"3RD HH"
"2ND HH"
"F" BOT. STR.
"1ST HH"
30'-0"
2

SINGLE DAVIT ARM LOCATED 90° RIGHT FROM 1ST HANDHOLE (SEE "ARM DETAIL")
6" O.D.
4" x 6" REINFORCED ALUMINUM HANDHOLE OPENING AND FLUSH FITTING ALUMINUM DOOR, WITH A GASKET, WIRE SEPARATOR ACROSS FROM HANDHOLE (SEE "HANDHOLE DETAIL")
J-HOOK ACROSS FROM HANDHOLE (SEE "J-HOOK MOUNTING DETAIL")
1 FESTOON CASTING, GFCI RECEPTACLE, & IN-USE COVER (CUST. TO SPECIFY ORIENTATION)
FACTORY INSTALLED VIBRATION DAMPENER LOCATED "I" FROM BUTT OF POLE
(2) 4" x 6" REINFORCED ALUMINUM HANDHOLE OPENINGS AND FLUSH FITTING ALUMINUM DOOR, WITH A GASKET, WIRE SEPARATOR ACROSS FROM HANDHOLE (SEE "HANDHOLE DETAIL")
10" O.D. x "WALL"
POLE SHAFT FABRICATED FROM 6063-T4 ALUMINUM TUBE (POLE ASSEMBLY IS HEAT TREATED TO T6 CONDITION AFTER WELDING)
3'-0" LG x .250" WALL REINFORCEMENT SLEEVE
4" x 8" REINFORCED ALUMINUM HANDHOLE OPENING WITH 1/2"-13 HOLE FOR A GROUND CONNECTOR AND FLUSH FITTING ALUMINUM DOOR, WITH A GASKET, EXTERNAL COVER & WIRE SEPARATOR ACROSS FROM HANDHOLE (SEE "HANDHOLE DETAIL" & "1ST HANDHOLE DETAIL") 3 4
CAST ALUMINUM ANCHOR BASE (SEE "DETAIL A" & "DETAIL B")
FOOTING, REINFORCING ROD, AND PVC CONDUIT (BY OTHERS)

6'-0" SPAN
6"
4"
3 1/2" O.D.
4 1/2" O.D.
2 3/8" O.D. x .218" WALL FABRICATED ALUMINUM TENON
R3'-9"
3
8'-11" RISE
4 1/2" O.D.
5'-2"
1'-8" STR.
6" O.D. x .188" WALL ALUMINUM TUBE ARM TAPERED TO 3 1/2" O.D. (6063-T6 ALLOY)
(2) 11/16" DIA. HOLES LOCATED @ 180° APART & 90° RIGHT OF LOWER HOLES (SEE "CONNECTION DETAIL")
(2) 11/16" DIA. HOLES LOCATED @ 180° APART ORIENTATED 0° TO RIGHT OF ARM
6" O.D. POLE TOP

ARM DETAIL

POLE RATING (PER AASHTO 2013):
3-SEC GUST WIND SPEED: 90 MPH MAX
EXISTING FIXTURE: 1.75 SQ. FT. MAX. & 75 LBS MAX.
(3) - ANTENNA W/ MOUNTING KIT @ 35'-0" A.G.L. : 1.44 SQ. FT. & 31 LBS EACH
(2) - CBRS RADIOS @ 28'-6" A.G.L. : 0.6 SQ. FT. & 11 LBS EACH
(1) - 5'X8' FLAG MAX. @ 27'-0" A.G.L.
(1) - DISCONNECT @ 25'-6" A.G.L. : 0.96 SQ. FT. & 9.8 LBS
(1) - FIBER BOX @ 25'-6" A.G.L. : 1.33 SQ. FT. & 12 LBS
(1) - 24" X 78" BANNER W/ LOWER ARM @ 16'-0" A.G.L. MAX.
(1) - 24" X 78" BANNER W/ LOWER ARM @ 13'-9" A.G.L. MAX.
(1) - 39" X 39" SIGN @ 7'-6" A.G.L. TO BOTTOM MAX.
50 LBS OF CABLE (AXIALLY LOADED)
NOTE: TOP OF FOUNDATION IS 9" A.G.L.

1/4" THK. ALUMINUM T-STOCK GRD. LUG WITH A 1/2"-13 HOLE FOR A GROUND CONNECTOR WELDED OPPOSITE HANDHOLE
4" x 8" NOMINAL OPENING ALUMINUM REINFORCED HANDHOLE AND A FLUSH FITTING ALUMINUM DOOR ATTACHED WITH (2) 1/4"-20 x 3/4" LG. STEEL CORE NYLON SCREWS
GASKET
HANDHOLE COVER
EXTERNAL COVER

1ST HANDHOLE DETAIL 4

DAVIT ARM
6" O.D. x 1 1/4" x .188" WALL DAVIT ARM RING (6063-T6 ALLOY)
POLE TOP WITH TAPERED SLEEVE

RING DETAIL

(2) 5/8" I.D. x 1 1/2" O.D. SS FLAT WASHERS
(2) 5/8"-11 SS LOCK NUTS
7 3/4"
6"
1 3/4"
6" O.D. RING
6" O.D. POLE TOP
DAVIT ARM
(2) 5/8" I.D. x 1 1/2" O.D. SS FLAT WASHERS
(2) 5/8"-11 x 7" LG. SS HEX HEAD BOLTS
SEE "DETAIL A"

CONNECTION DETAIL

DO NOT SCALE

valmont

Valmont Industries, Inc. Structures Division
28805 Eaton Ave Farmington, Minnesota 55024-7932
Phone: (651) 463-8990 (800) 899-7577
Fax: (651) 463-3349

"CONFIDENTIAL"
The information contained in this drawing is privileged and confidential, and may be protected from disclosure. Please be aware that any use or dissemination of this drawing may be subject to legal restriction or sanction.

TITLE:	S ANCHOR BASE POLE
QTY:	1
MODEL NO.:	
MATERIAL:	ALUMINUM ALLOY
FINISH:	DURO - 313 3
PROJECT:	ASHLAND & NW - SC
SOLD TO:	
SHIP TO:	
P.O. NO.:	
REP:	CONCORDIA WIRELESS
DWN BY:	HJT
CHK'D BY:	
APP'R BY:	KGB
DATE:	10-07-20

REV	DATE	REVISION DESCRIPTION	BY
3	04-05-21	ADDED 1ST HANDHOLE DETAIL & EXTERNAL COVER	KPS
2	03-24-21	CHG'D POLE/DAVIT ARM/HANDHOLE/FINISH	PTP
1	10-23-20	REV. ELEVATION TO FESTOON	KGB

DWG NO: A26154
PAGE: 1 / 1

JOHN R. ERICKSEN 081.006366 LICENSED STRUCTURAL ENGINEER STATE OF ILLINOIS
EXPIRES 11-30-2021
5-14-2021

ERE, LLC
10321 ADAMS ROAD
GRANGER, IN 46530
ILLINOIS COA NUMBER: 184.006366-0003

Attachment: Verizon Pole Replacement Agreement Amendment 1 (Verizon Wireless Pole Replacement Agreement Amendment 1)

Consider a Motion Authorizing the Village Manager to Execute Amendment 3 to the Agreement for Use of the Rights-of-Way with Verizon Access/MCImetro

BACKGROUND:
An agreement for use of right-of-way with Verizon, through its wholly owned subsidiary MCImetro Access Transmission Services Corporation (d/b/a Verizon Access Transmission Services), was approved at the Village Council meeting of May 11, 2020. Verizon Access/MCImetro ROW Agreement Amendment 1 was approved at the Village Council meeting of February 16, 2021 and Amendment 2 was approved at the Village Council meeting of September 20, 2021. MCImetro Access has requested an additional amendment to the Agreement.

WOW Internet, Cable and Phone constructed a fiber optic network in the early 2000's and was previously licensed by the Village to own and maintain these facilities. Verizon purchased the facilities located within the Village rights-of-way and seeks to maintain and expand the network.

KEY ISSUES:
- MCImetro Access Transmission Services has approached the Village to again amend the Agreement for Use of Right-of-Way.
- This third amendment seeks to replace the current Exhibit B (a map of MCImetro's planned fiber routes) with an updated Exhibit B which includes expanding aerial facilities by over 13 miles and buried facilities by more than 35 miles.
- This amendment is expected to address Verizon's business needs for at least 18 months.
- The expansion of the Verizon network is designed to provide better, more reliable coverage for Palatine's residents and businesses, not to mention better coverage for first responders. This amendment entails the fiber expansion currently released by Verizon to build. Some of the permitted-for fiber runs connecting two other runs already in ground, while other runs are expansions of previous runs. While no other fiber runs are being studied for release in Palatine currently, this is subject to change since the very nature of fiber demand is dynamic.
- All other terms and conditions of the Agreement remain unchanged.

ALTERNATIVES:

1. Authorize the Village Manager to execute Amendment 3 to the Agreement for Use of Right-of-Way with MCImetro.
2. Refer back to Staff with comments.

RECOMMENDATION:
It is recommended the Village Manager be authorized to execute Amendment 3 to the Agreement for Use of Right-of-Way with MCImetro as MCImetro Access Transmission Services corporation has been certified by the Illinois Commerce Commission to provide telecommunication services by the Public Utilities Act.

ACTION REQUIRED:

Motion to authorize the Village Manger to execute Amendment 3 to the Agreement for Use of Right-of-Way with MCImetro Access Transmission Services substantially conforming to the attached and subject to review by the Village Attorney.

ATTACHMENTS:

- Executed MCImetro Agreement for Use of Right-of-Way
- MCImetro ROW License Amendment 3

RESULT:	**APPROVED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Doug Myslinski, District 3 Councilman
SECONDER:	Tim Millar, District 1 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

AGREEMENT FOR USE OF RIGHT-OF-WAY
BETWEEN THE VILLAGE OF PALATINE AND MCIMETRO ACCESS TRANSMISSION SERVICES CORP.

THIS AGREEMENT is made this 11 day of May 2020, by and between the **Village of Palatine**, Illinois, an Illinois municipal corporation ("Village"), and **MCImetro Access Transmission Services Corp.**, d/b/a Verizon Access Transmission Services, a subsidiary of Verizon, a Delaware Corporation ("Company").

RECITALS

1. Company has been certified by the Illinois Commerce Commission pursuant to Section 13-404 to provide and resell, intrastate and interstate telecommunication services within the State of Illinois and pursuant to Section 13-405 of the Public Utilities Act authorized to provide facilities-based local exchange telecommunications services within the State of Illinois, pursuant to Illinois Commerce Commission Order entered on November 22, 2005.
2. Company operates as a Telecommunications Retailer under the Telecommunications Infrastructure Maintenance Fee Act (TIMFA) (35 ILCS 635/10).
3. Sometime in or before 2017, Sigecom, LLC d/b/a WOW! Internet, Cable and Phone, an Illinois limited liability company ("WOW") constructed a fiber-optic communications network in the Village's right-of-way.
4. On December 14, 2017, Company purchased from WOW certain portions of the aforementioned fiber-optic communications network serving portions of the greater Chicago market ("Acquired Assets") as depicted and attached hereto as "Exhibit A."
5. Company desires to place fiber optic cable within the Village limits as depicted on the map of Planned Fiber Routes ("Proposed Network") attached hereto as "Exhibit B."
6. Company agrees to apply for and abide by all appropriate permits to install fiber optic cable, facilities and equipment within public rights of way in the Village.
7. Village desires to grant Company the right to install a communications network in public rights-of-way under the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the promises of each of the parties to the other and the covenants contained herein, it is agreed as follows:

8. Recitals. The recitals are a material part of this Agreement and are incorporated herein by reference.
9. Right to Install. Provided that Company complies with all Federal, State and Village statues, codes, rules and regulations, Village grants to the Company it successors and assigns the non-exclusive right to own, install, maintain, and operate a fiber optic communications network within, over or under the public rights-of-way of the Village, including in the areas depicted under Exhibits A and B.
10. Construction and Maintenance.
    a. Prior to the placement of a fiber optic cable in the public rights-of-way, Company shall provide plans and specifications for the placement to the Village. If the Village is satisfied with Company's detailed written application it shall issue a permit therefor as soon as practicable.
    b. Company agrees to obtain all applicable permits for work in the Village rights-of-way prior to commencing any work. As provided under State law, Village shall not require any fees for obtaining such permits. Company shall provide any necessary or required traffic control at its expense consistent with Village requirements, the Manual on Uniform Traffic Control Devices published by the Federal Highway Administration, and subject to permits from the Illinois Department of Transportation and the Cook County Highway Department when work is proposed in rights of way under their respective jurisdiction.
    c. Company agrees to comply with appropriate requirements to install JULIE locates on its fiber optic cable including maintaining a five foot separation from water mains other than when perpendicularly crossing an existing water main.

Attachment: Executed MCImetro Agreement for Use of Right-of-Way (Verizon Access/MCImetro ROW Agreement Amendment 3)

d. Company will make reasonable commercial efforts not to interfere with pre-existing, marked or located uses of the public rights of way.

e. Subject to appropriate weather conditions, within thirty (30) calendar days after completing placement or repairs to Company's fiber optic cable, facilities and equipment, Company, at its sole cost and expense, shall return the right of way to a condition reasonable equivalent to that which existed prior to commencing the placement or repairs.

11. Fees. Company shall not be required to pay any fees to the Village under this Agreement, including for site specific permits. Company shall maintain its status as a Telecommunications Retailer under the Telecommunications Infrastructure Maintenance Fee Act (TIMFA) (35 ILCS 635) and shall timely pay the taxes imposed by the Simplified Municipal Telecommunications Tax Act (SMTT) (35 ILCS 636/5) to the State of Illinois.

12. Term. The initial term of this Agreement shall be for a period of twenty (20) years. This agreement may be renewed by mutual agreement of the parties for one successive ten (10) year term, provided the Licensee is in full compliance with the terms and conditions of this agreement at the time of renewal.

13. Representations and Warranties by the Company. The Company represents and warrants to the Village that:

a. Company has and will maintain all approvals, authorizations, certifications, licenses, and franchises required by the State of Illinois, the FCC and/or any other agency to provide the communications service; and

b. Work to be performed by the Company pursuant to this Agreement will be performed in a good and workmanlike manner, consistent with any Permit specifications and Village standards, and applicable regulations.

14. No Lease or Easement. Company agrees that this Agreement will not grant to Company any real property interest in Village's public rights-of-way.

15. Relocation. From time to time, Village may request Company to relocate its fiber optic cable and associated equipment and facilities to accommodate Village projects for the benefit of the public good or emergencies. In such instances, Company shall promptly relocate its fiber optic cable, equipment and facilities at its sole cost and expense. However, if a relocation is requested or required due to the needs or actions of a third party or non-governmental use, the third party shall reimburse Company for all of its incurred costs and expenses for the relocation. Nothing in this Agreement is intended to abrogate or waive any right to reimbursement that Company may have under applicable law or the terms of and public project funding grant.

16. Abandonment of Facilities. Upon abandonment of a facility within the public rights-of-way of the Village, the Company shall notify the Village within 90 days. Following receipt of such notice the Village may direct the Company to remove all or any portion of the facility if the Village determines that such removal will be in the best interest of the public health, safety and welfare. In the event that the Village does not direct the Company that abandoned the facility to remove it, the abandoning Company shall be deemed to consent to the alteration or removal of all or any portion of the facility by another utility or person.

17. Interruptions. Village shall not be liable to the Company or its customers for any interruption of service to the Company or interference with the facilities arising in any manner relating to the Village's lawful operations within the right-of-way.

18. Indemnification. Company agrees to defend Village against all third party claims arising from Company's negligent acts or omissions related to its construction, operation, or maintenance of its fiber optic cable and related facilities and equipment located in the right of way and indemnify and hold Village, its officers, boards and employees harmless from all damages awarded by a court of competent jurisdiction or agreed to as part of a settlement for such claims. Notwithstanding any provision of this section to the contrary, Company shall not be obligated to indemnify, defend or hold the Village harmless to the extent any claim arises out of or in connection with the gross negligence or intentional misconduct of the Village, its officers, boards or employees.

19. Assignment. Except to an affiliate of Company, Company shall not assign any rights or obligation contained in this Agreement or the Agreement itself without the prior written consent of Village, which shall not be unreasonably withheld or delayed.

Attachment: Executed MCImetro Agreement for Use of Right-of-Way (Verizon Access/MCImetro ROW Agreement Amendment 3)

20. Termination. Village may terminate this agreement and all rights granted herein if Company materially breaches any of the terms of this agreement and fails to cure the breach within forty five (45) calendar days after receiving a detailed notice of the breach from Village.

21. Insurance. The Company shall maintain Commercial General Liability insurance for bodily injury (including death) and for property damage in the amount of $2 million per occurrence and $4 million in the aggregate ; in full force and effect, at its own cost and expense, during the term of this Agreement. Village shall be designated as an additional insured under this policy. Upon request, Company will provide a Certificate of Insurance and endorsements showing evidence of the coverage listed above. Upon receipt of notice from its insurer(s), Company shall provide thirty (30) days prior notice of cancellation to the Village.

22. Notices. All notices herein provided for shall be sent prepaid registered mail addressed to the parties as follows:

To the Village:

Village of Palatine
Attn: Village Manager
200 E. Wood Street
Palatine, IL 60067

To the Company:

Verizon Business Services, Inc.
Attn.: Franchise Manager
600 Hidden Ridge
Irving, TX 75038
Phone: (972) 457-7420

with copy (except for invoices) to:

Verizon Legal Department
Attn.: Network Legal Team
1300 I Street, NW, 5th Floor
Washington, DC 20005

Invoices:

Verizon
Attn: Contract Administrator
6929 N. Lakewood Ave. MD 5.3-4009
Tulsa, OK. 74117

Company Emergency Phone Number:

1-800-MCI-WORK

23. Severability. If any provision of this Agreement is held invalid for any reason, such invalidation shall not affect other provisions of this Agreement which can be given effect without the invalid provisions; and, to this end, the provisions of this Agreement are to be severable.

24. Amendment and Waiver. This Agreement may not be amended except pursuant to a written instrument signed by the Parties. Either party's failure to enforce any provision of this Agreement shall not be deemed a waiver of its right to enforce the provision in the future.

25. Reservation of Rights. There is hereby reserved to COMPANY every right and privilege available to COMPANY under applicable law, and COMPANY by its execution of this Agreement, shall not be deemed in any way to waive, relinquish, release or abrogate any of its lawful rights and privileges.

26. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Illinois without regard to its conflict of laws provisions. Venue and jurisdiction for any and all disputes related in any manner to this Agreement shall be in the federal and state courts with jurisdiction over Village in the State of Illinois.

Attachment: Executed MCImetro Agreement for Use of Right-of-Way (Verizon Access/MCImetro ROW Agreement Amendment 3)

27. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be original, but all of which together shall constitute one and the same instrument.

28. No Waiver of Immunity. Nothing contained in this Agreement shall constitute a waiver by the Village of any right, privilege or defense available to the Village under statutory or common law, including, but not limited to, the Illinois Local Governmental and Governmental Employees Tort Immunity Act, 745 ILCS 10/1-101 et seq., as amended.

29. Entire Agreement. This Agreement contains the entire agreement for the use of Village rights-of-way by Company for the Acquired Assets and the Proposed Network only and supersedes and replaces all prior negotiations, discussions, agreements, or statements whether written or oral.

[*Signature Page Follows*]

Attachment: Executed MCImetro Agreement for Use of Right-of-Way (Verizon Access/MCImetro ROW Agreement Amendment 3)

VILLAGE OF PALATINE, an Illinois Municipal Corporation

BY: _____
~~Jim Schwantz~~, ~~Mayor~~/Village ~~President~~
Reid T. Ottesen Manager

ATTEST: _____
Deputy Village Clerk

MCIMETRO ACCESS TRANSMISSION SERVICES CORP., d/b/a Verizon Access Transmission Services, a Delaware Corporation

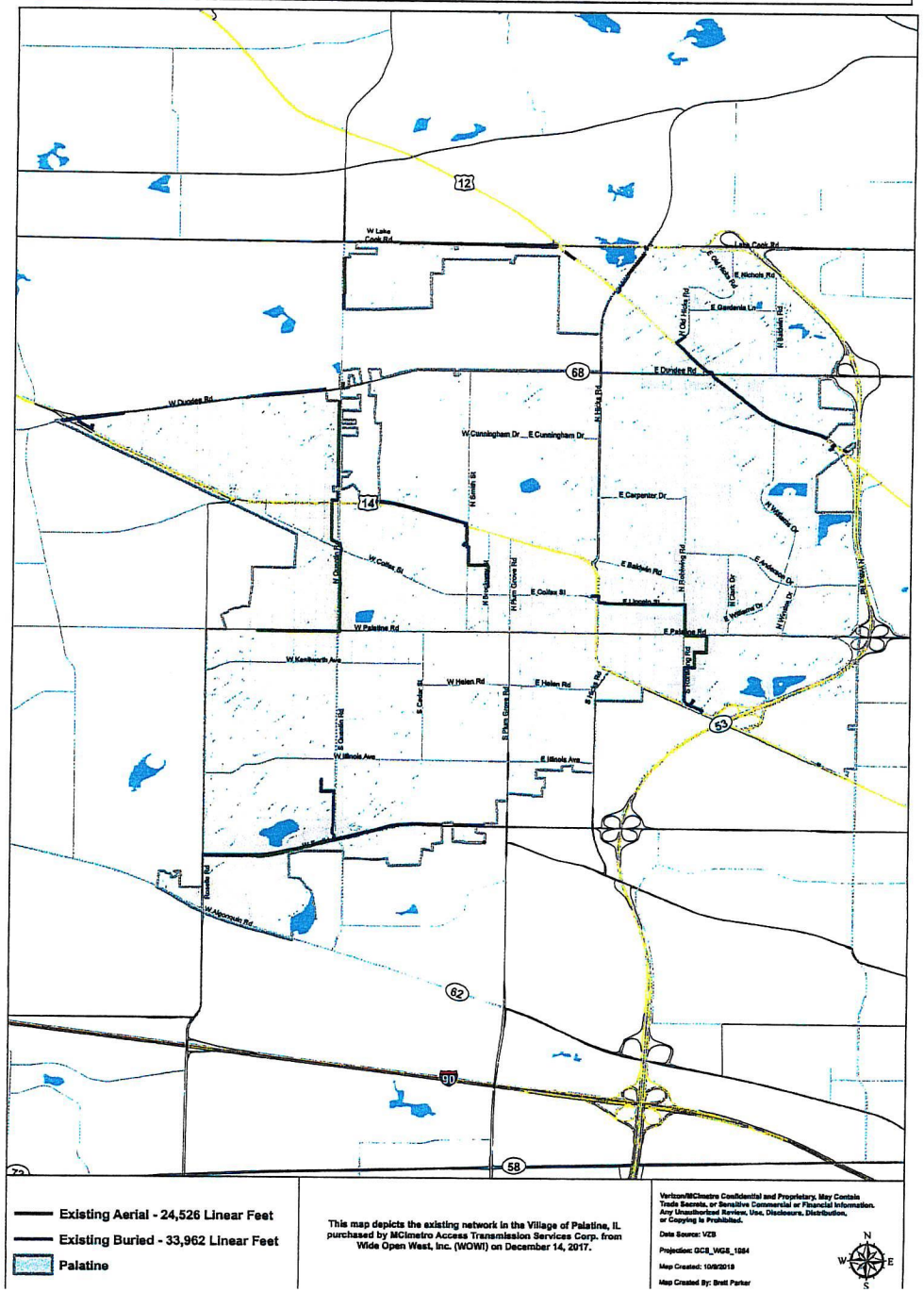
BY: _____

Name: Robert J. Hayes
Title: Senior Manager – Network Engineering & Operations

Attachment: Executed MCImetro Agreement for Use of Right-of-Way (Verizon Access/MCImetro ROW Agreement Amendment 3)

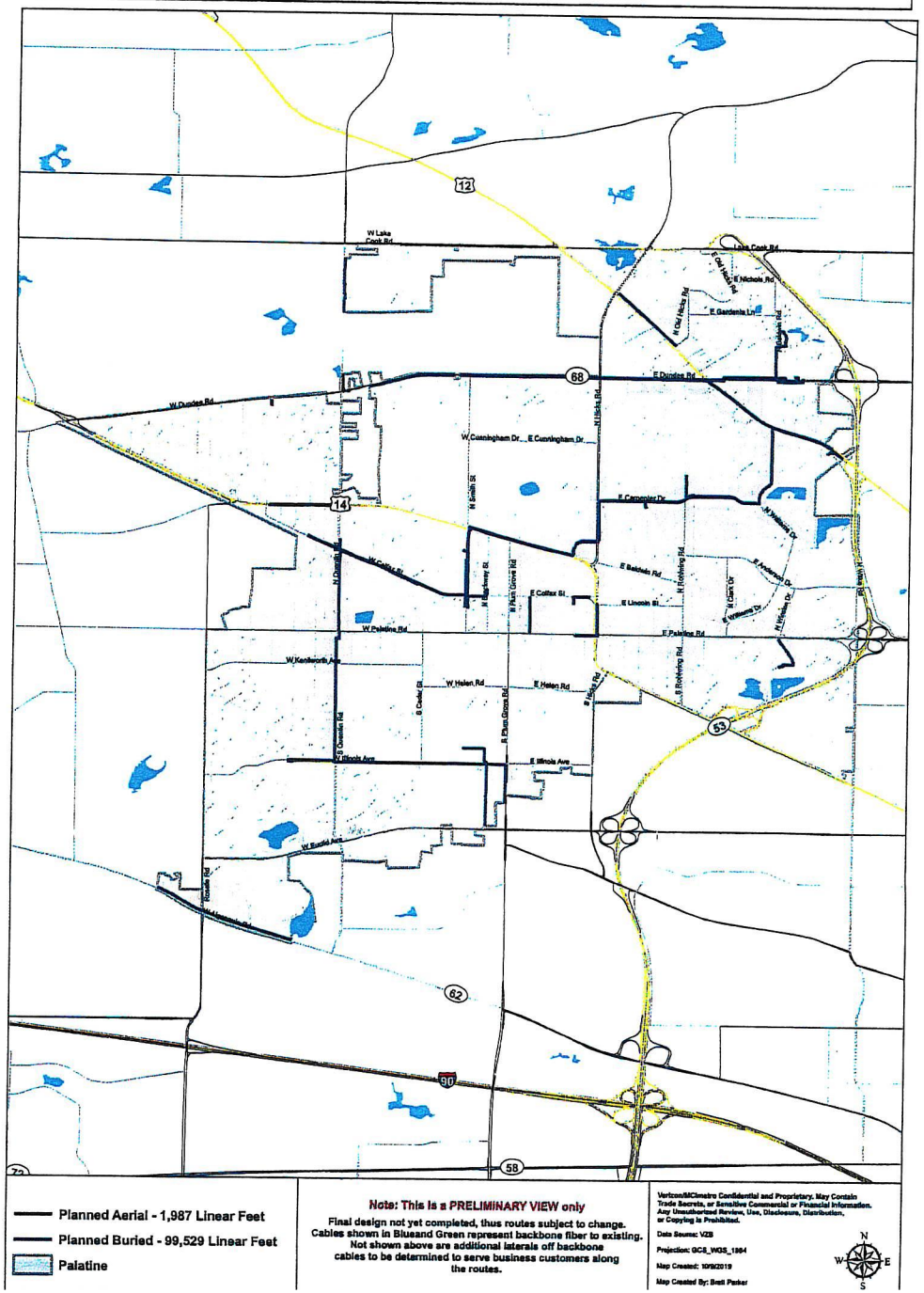
"EXHIBIT A"

MCImetro Access Transmission Services Corp. d/b/a Verizon Access Transmission Services
WOW! Existing Fiber Routes
Village of Palatine, IL



"EXHIBIT B"

MCImetro Access Transmission Services Corp. d/b/a Verizon Access Transmission Services
Planned Fiber Routes
Village of Palatine, IL



AMENDMENT No. 3
TO THE AGREEMENT FOR USE OF RIGHT-OF-WAY
BETWEEN THE VILLAGE OF PALATINE AND MCIMETRO ACCESS TRANSMISSION SERVICES CORP.

This Amendment Number 3, ("Amendment") is entered into effective as of ___/___/___ ("Amendment Effective Date") by and between the Village of Palatine, Illinois, an Illinois municipal corporation ("Village"), and MCImetro Access Transmission Services Corp., d/b/a Verizon Access Transmission Services, a subsidiary of Verizon, a Delaware Corporation ("Company"), referred to collectively as "Parties".

RECITALS

A. Village and Company entered in an Agreement for Use of Right-of-Way ("Agreement") effective May 11, 2020 which grants Company the right to install certain fiber in the Village right-of-way, set forth in Exhibit B of the Agreement.
B. Village and Company entered in an Amendment No. 1 for Use of Right-of-Way ("Agreement") effective February 24, 2021 which grants Company the right to install certain fiber in the Village right-of-way, set forth in Exhibit B of the Agreement.
C. Village and Company entered in an Amendment No. 2 for Use of Right-of-Way ("Agreement") effective December 6, 2021 which grants Company the right to install certain fiber in the Village right-of-way, set forth in Exhibit B of the Agreement.
D. The parties wish to amend the Agreement as set forth in this Amendment.

NOW THEREFORE, in consideration of the promises of each of the parties to the other and the covenants contained herein, it is agreed as follows:

1. Exhibit B of the Agreement is replaced with a new Exhibit B dated _____.
2. All other terms and conditions that are not hereby amended are to remain in full force and effect.

VILLAGE OF PALATINE, an Illinois Municipal Corporation

BY:_____
Reid T. Ottesen / Village Manager

MCI/METRO ACCESS TRANSMISSION CERVICES CORP., d/b/a Verizon Access Transmission Services, a Delaware Corporation

BY:_____
Robert J. Hayes / Senior Manager-Network Engineering & Operations

Attachment: MCImetro ROW License Amendment 3 (Verizon Access/MCImetro ROW Agreement Amendment 3)

EXHIBIT B

PALATINE MAP

TOTAL = 376,673 ft

AERIAL = 75,170 ft

UNDERGROUND = 301,504 ft

VILLAGE OF PALATINE

N PLUM GROVE RD

N HICKS RD

N QUENTIN RD

N OLD HICKS RD

N HICKS RD

W DUNDEE RD

W NORTHWEST HWY

N RAND RD

N PLUM GROVE RD

N WILLIAMS DR

W NORTHWEST HWY

N BENTON ST

E CARPENTER DR

W NORTHWEST HWY

E COLFAX ST

N SMITH ST

E BALDWIN RD

E BALDWIN RD

PALATINE RD

S QUENTIN RD

N ROHLWING RD

N BROCKWAY ST

PALATINE RD

E WOOD ST

LEONARD RD

S CLYDE AVE

N OAK ST

E GLENCOE ST

W GILBERT RD

S ROHLWING RD

N ROSELLE RD

W MICHIGAN AVE

E HELEN RD

W ILLINOIS AVE

S VERMONT ST

S QUENTIN RD

E WILMETTE AVE

E NORTHWEST HWY

W PEREGRINE DR

EUCLID AVE

S MEACHAM RD

W ALGONQUIN RD

BUFFALO GROVE

SOUTH BARRINGTON

ROLLING MEADOWS

ARLINGTON HEIGHTS

PALATINE

INVERNESS

Deer Lake

Inverness Shores

Brentwood

Barrington Woods

Capri Village

Hidden Creek Clubhouse

Buffalo Grove High School

Lake Park Estates

Palatine Hills Golf Course

Shotsen Memorial Park

Lake Arlington

Scarsdale

Frasciedi High School

Rolling Green Country Club

Old Orchard Country Club

Memory Gardens Cemetery

Arlington International Racecourse

Inverness Golf Club

Highland Woods Golf Course

William Rainey Harper College

Microsoft Data Center

Hillside Golf Club

Joseph L. Fabbri Park

Saint Alexius Medical Center

Yerkes Schaumburg Campus

Colonel P. Schulstad United States Army Reserve Center

Williamsburg

Mount Prospect Golf Course

Melas Park

East Dundee Road

Dundee Road

West Palatine Road

East Palatine Road

Bradwell Road

Baldwin Road

West Palatine Road

West Hintz Road

Palatine Road

Bernard Drive

Euclid Avenue

East Euclid Avenue

West Northwest Highway

East Northwest Highway

East Dundee Road

East Palatine Road

West Palatine Road

East Central Road

West Central Road

Jane Addams Memorial Tollway

West Higgins Road

Golf Road

Algonquin Road

East Algonquin Road

East Rand Road

East Thomas Street

West Willow Road

Central Road

Euclid Avenue

Kirchoff Road

Hicks Road

Rohlwing Road

East Frontage Road

West Frontage Road

South Roselle Road

North Roselle Road

South Barrington Road

North Barrington Road

South Elmhurst Road

South Arlington Heights Road

North Arlington Heights Road

South Wilke Road

North Wilke Road

North Dryden Avenue

North Kenneth Avenue

North Windsor Drive

Schaumburg Road

Schoenbeck Road

Schonbeck Road

East Palatine Road

West Palatine Road

West Palatine Road

West Palatine Road

West Palatine Road

West Palatine Road

Palatine Road

Palatine Road

Consideration of a Motion Approving an Intergovernmental Agreement (IGA) with Harper College for the Storage of a Bike Sharing Rack, Within the Train Station Parking Lot

BACKGROUND:
Harper College initiated a Transportation and Infrastructure Partnership, with multiple regional partners including IDOT, CMAP, PACE, and other surrounding municipalities and townships, including the Village. One of the initial items contemplated was a review of the various types of student access to campus. To that end, Harper engaged a bike-sharing service ("Koloni") to provide a campus location and requested that the Village partner for a second downtown location.

KEY ISSUES:

- Harper College invited the Village to participate in its Transportation and Infrastructure Partnership forum. In addition to reviewing and identifying shared assets and goals, Harper is also reviewing how students travel to and access campus resources. As an outcome of this discussion, Harper partnered with Koloni to provide a bike-sharing service on campus and identified the Village as a partner to provide another Downtown location for a second bike sharing rack. Depending upon the route, the bike rack location is approximately 3.8 miles from Harper.

- Harper is responsible for all of the initial pilot program costs but requested Village assistance with a second bike rack location, proximate to the train station. The Village identified an area within the train station (Lot “B”) parking lot to locate a bike-sharing rack with up to 5 bikes. Koloni is responsible for providing the bikes, all payments through their app, and any maintenance responsibilities for the bikes and equipment. The IGA indemnifies the Village from any damages or liabilities from the bike sharing rack. The initial pilot program lasts through November 2022.

ALTERNATIVES:

1. Approve the intergovernmental agreement with Harper College to allow for the pilot program placement of a bicycle rack in Parking Lot B.

2. Do not approve the intergovernmental agreement with Harper College to allow for the pilot program placement of a bicycle rack in Parking Lot B.

RECOMMENDATION:
Staff recommends approval of the Intergovernmental Agreement to be executed in a manner acceptable to the Village Attorney.

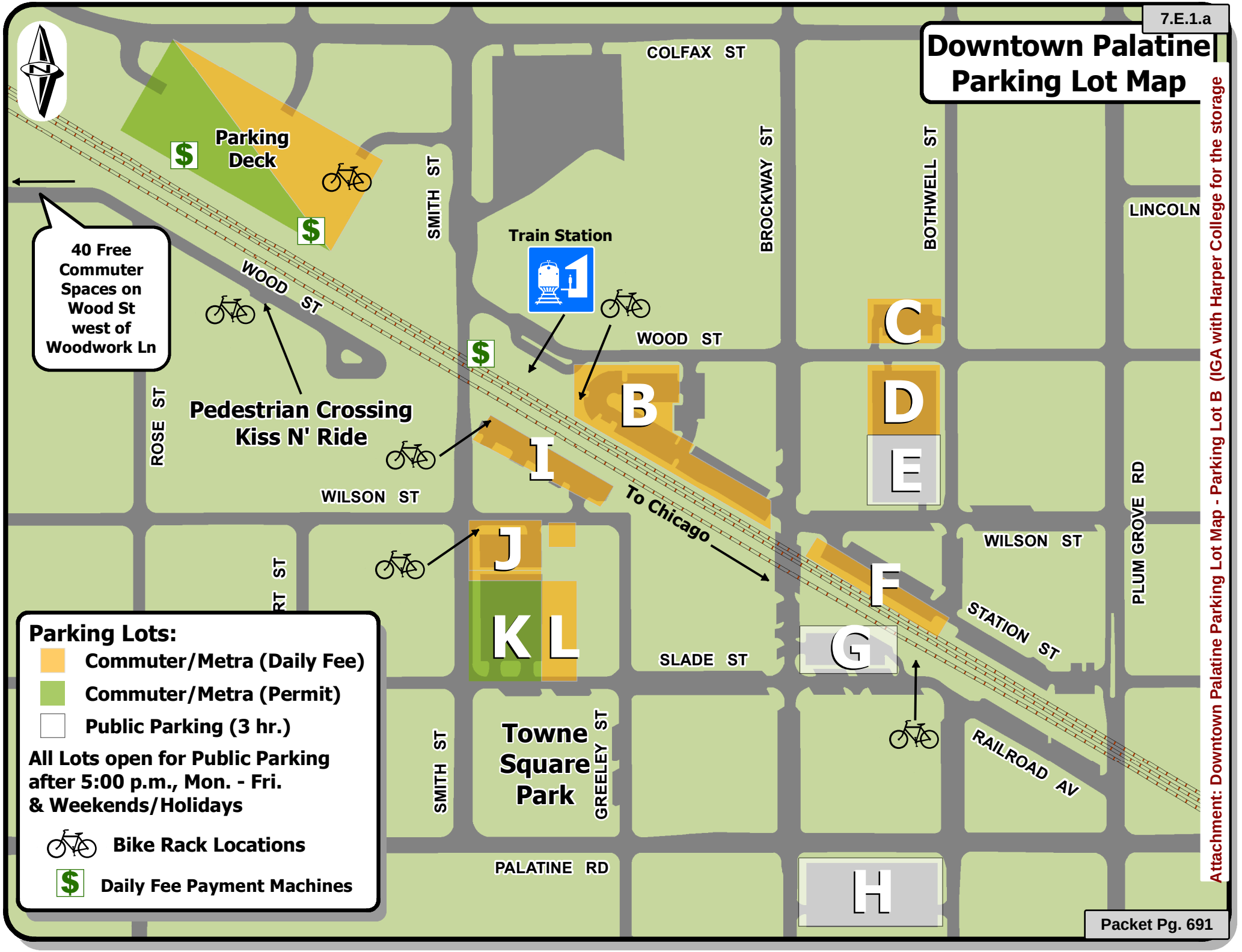
ACTION REQUIRED:
A motion to approve the intergovernmental agreement between the Village of Palatine and Harper College for the storage of a bike-share rack in the train station parking lot.

ATTACHMENTS:

- Downtown Palatine Parking Lot Map - Parking Lot B
- IGA with Village of Palatine 7-6-22 VA review
- Harper College - bike sharing information

RESULT:	**APPROVED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Brad Helms, District 6 Councilman
SECONDER:	Kollin Kozlowski, District 5 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Downtown Palatine Parking Lot Map



Attachment: Downtown Palatine Parking Lot Map - Parking Lot B (IGA with Harper College for the storage

Document Path: G:\Map Production\Map Projects\36x46\Downtown_Parking2021.mxd

Path: G:\Map Production\Map Projects\36x46\Downtown_Parking2021.mxd

Attachment: IGA with Village of Palatine 7-6-22 VA review (IGA with Harper College for the storage of a bike sharing rack - Train Station parking

INTERGOVERNMENTAL AGREEMENT

This Intergovernmental Agreement (the "Agreement") is executed on the date last written below, by and between William Rainey Harper College District 512 (the "College") and the Village of Palatine (the "Village"), each individually referred to below as a "Party" and collectively as the "Parties."

RECITALS

Whereas, each Party is a unit of local government authorized by Article VII, Section 10 of the Constitution of the State of Illinois of 1970, by the Intergovernmental Cooperation Act, 5 ILCS 220/1, *et seq.*, and the College is further authorized by the Public Community College Act, 110 ILCS 805/1-1, *et seq.*, to enter into and perform this Agreement;

Whereas, the Parties have agreed to cooperate with each other in furtherance of a commuter bicycle sharing program being piloted by the College in collaboration with Koloni, Inc., a Delaware corporation ("Koloni");

Whereas, the College and Koloni have entered into an agreement for purposes of allocating the risks and responsibilities attendant to the commuter bicycle sharing program;

Whereas, the Village has agreed to permit the College to locate a storage rack with a maximum capacity of five bicycles in the parking structure owned by the Village and located at 137 West Wood Street in Palatine, Illinois;

Whereas, the Village has further agreed to permit Koloni access to the storage rack from time to time for the purpose of performing maintenance and other services in connection with the agreement between the College and Koloni;

Whereas, the College has agreed to indemnify and hold the Village harmless from any claims arising from the locating of the storage rack and use of bicycles associated with the commuter bicycle sharing program;

NOW THEREFORE, in consideration of these recitals and the terms and conditions of this Agreement, and other good and valuable consideration, the sufficiency of which is hereby acknowledged by the Parties, the Parties agree as follows:

1. **Incorporation of Recitals.** The above recitals are incorporated into this Agreement.

2. **Use of the Campus.** During the Term of this Agreement, the Village hereby grants the College authorization to locate the above-referenced storage rack at the parking structure located at 137 West Wood Street in Palatine, Illinois. Further, the Village hereby grants Koloni, through the College, authorization to enter the premises at such address to perform maintenance or other services in connection with the commuter bicycle sharing program and pursuant to the terms of the agreement between the College and Koloni.

3. **Term and Termination.** The term of this Agreement shall commence on the date this Agreement is fully executed and shall continue until either Party terminates as provided in this Section (the "Term"). Either Party may terminate this Agreement at any time, for any reason in the terminating Party's sole discretion, upon thirty (30) days' written notice to the other Party.

4. **Indemnity.** The College shall indemnify, defend, and hold harmless the Village from all claims, demands, causes of action, losses, liabilities, damages, penalties, fines, and expenses, including reasonable attorneys' fees and court costs incurred by the Village. Notwithstanding this indemnity obligation, neither party is waiving any immunity, as it relates to third party claims. Nothing contained in this Agreement shall constitute a waiver by either party of any right, privilege, or defense available to either party under statutory or common law, including, but not limited to, the Illinois Local Governmental and Governmental Employees Tort Immunity Act, 745 ILCS 10/1-101 et seq., as amended.

5. **No Third-Party Beneficiary.** This Agreement is not intended to confer any right upon any third party who is not a Party to this Agreement.

6. **No Assignment or Delegation.** Each Party represents and warrants that it has not and will not assign any rights or delegate any duties arising from this Agreement.

7. **Advice of Counsel and Understanding of Agreement.** The Parties each understand their right to discuss all aspects of this Agreement with their legal counsel and have done so if desired. The Parties acknowledge that they have carefully read and fully understand all provisions of this Agreement.

8. **Choice of Law.** This Agreement shall be governed by, subject to, and construed in accordance with the laws of the State of Illinois without regard to conflict of law principles. Venue for any dispute arising under this Agreement shall be Cook County, Illinois.

9. **Binding Effect and Interpretation.** The Parties intend this Agreement to be legally binding. This Agreement shall bind and inure to the benefit of the Parties and their heirs, legal representatives, successors and assigns. The provisions of this Agreement are severable, and no provision shall be affected by the invalidity of any other provision.

10. **Execution in Counterparts.** This Agreement may be executed in counterparts. When both counterparts have been executed by both Parties and exchanged with the other Party, electronically or in hardcopy, this Agreement shall be deemed fully executed and binding as if both Parties had signed and exchanged the same originals.

11. **Integration.** This Agreement contains the entire agreement between the Parties and supersedes all prior agreements between the Parties, both oral and written, concerning any subject matter referenced in this Agreement. The Parties may review this agreement annually. This Agreement may only be modified or cancelled by a subsequent writing executed by both Parties.

Attachment: IGA with Village of Palatine 7-6-22 VA review (IGA with Harper College for the storage of a bike sharing rack - Train Station parking

12. **Authority to Execute.** Each of the undersigned signatories represents in his / her individual capacity that he / she has actual authority to execute this Agreement on behalf of the Party represented.

Executed on the date last written below, by and between:

William Rainey Harper College District 512	Village of Palatine
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____

Attachment: IGA with Village of Palatine 7-6-22 VA review (IGA with Harper College for the storage of a bike sharing rack - Train Station parking

7.E.1.c

Harper College

Harper Wellness

Bike Share Program

Harper College launched its very own Bike Share Program in Summer 2022 in Partnership with **Koloni**. We are excited that you are interested in learning more about the Bike Share Program! Bike Sharing can often be an effective complement to public transportation. It increases mobility options, reduces carbon emission, enhances the overall transportation networks in our surrounding communities, provides leisure activities and much more! Bike sharing involves a network of bicycles and stations, where a member or renter can check out a bike from a station and return it to any other station within the network. Bike Sharing can often supplement existing transportation systems by offering users an option for quick and

Harper uses cookies to enhance your browsing experience. Find out more on how we use cookies and how you can change your settings.

I Agree

Attachment: Harper College - bike sharing information (IGA with Harper College for the storage of a bike

COMING SOON: Bike Share Program racks will be located in downtown Palatine (Parking Garage near the train station) so that community users have additional options when riding or hopping off at the Palatine Metra station.

What is the Harper College Bike Share Program and How Does It Work?

The Harper College Bike Share Program is a transportation initiative meant to encourage folks to bike to campus as an alternative form of transportation, especially in the event that transportation is a barrier. Moreover, the Bike Share Program was also launched to provide additional leisure and physical wellness opportunities to students, employees and surrounding community members. Harper College has partnered with the company, **Koloni**, to launch the Bike Share Program on campus.

The Bike Share Program is a bike rental system where individuals can rent a bike from the designated rack (if they are not already in use) and ride the bikes at their leisure. In order to access the bikes and unlock them, individuals will need to download the FREE Koloni app from the App Store or Google Play store using a smart phone and follow the instructions on their phones to download the app. The app icon is blue with a white flag in the middle (it should be the first option when you search “Koloni”).

Harper uses cookies to enhance your browsing experience. Find out more on how we use cookies and how you can change your settings.

I Agree

Attachment: Harper College - bike sharing information (IGA with Harper College for the storage of a bike

2. Sign up in the app with their phone number or email address (Harper students and employees are encouraged to use their Harper email in order to receive additional hours FREE).

3. Input a credit or debit card information. The users card will not be charged as long as they do not bike over the allotted free hours.

4. Users will then scan the QR code located on the bike in order to unlock a bike that is not currently being used.

5. The bikes will then be unlocked and ready for use! Users can often hear a "click" when the bike has been unlocked. Users can adjust the height of the seat using lever below the bike seat.

6. Once a user is done using the bike, the user must return the bike to a designated Bike Share Program rack. These rack locations can be found on the Koloni app.

Where Can I Find the Bike Share Program Bike Racks On Campus?

Harper uses cookies to enhance your browsing experience. Find out more on how we use cookies and how you can change your settings.

I Agree

Attachment: Harper College - bike sharing information (IGA with Harper College for the storage of a bike

How Much Does it Cost to Ride the Bikes?

The pricing is as follows:

- If you sign up with a Harper College email address, the first 2 hours are FREE and then it is $1/hour afterwards.
- If you do not have a Harper College email address, the first 1 hour is FREE and then it is $2/hour afterwards.
- There is also the option to pay $15 for a membership for 365/yr. days after purchase. Riders can ride the bikes up to 4 hours with this option.

Can I Pause the Time on the Bike?

Koloni provides a pause feature on thee app in the event the rider is done riding for the moment, but not the day, and wants to ensure a bike will be there for them when they are complete with their present activity. For example, if someone rides a Koloni bike to get groceries, they would pause their ride to go into the store and then resume their ride when they leave the store. Pausing the ride also removes the availability of that specific bike, meaning no one can take it from the current rider if the pause feature is enabled.

Harper uses cookies to enhance your browsing experience. Find out more on how we use cookies and how you can change your settings.

I Agree

Attachment: Harper College - bike sharing information (IGA with Harper College for the storage of a bike

Currently, the Harper College location has 5 bikes available. However, users should be aware that there is no guarantee that the bikes will be available at all times if another user(s) has already rented a bike(s). There are no reservations available for the bikes as they are on a first come, first serve basis. However, users can see how many bikes are available to rent by opening the Koloni app on their smart phone.

Are There Bike Helmets Available to Users?

Currently, bike helmets are not included when renting the bikes on campus. While bike helmets are not required or included, Harper Wellness encourages users to use a helmet when riding one of the bikes by bringing their own. It's important to practice proper bicycle safety, and wearing a helmet can help protect users from potential injuries if an accident were to occur while riding. Riders must use the bicycles at their own risk. Harper Wellness encourages users to learn about **bicycle safety** before utilizing one of the

Harper uses cookies to enhance your browsing experience. Find out more on how we use cookies and how you can change your settings.

I Agree

Attachment: Harper College - bike sharing information (IGA with Harper College for the storage of a bike

Questions? Please contact Harper Wellness Manager, Beth McPartlin, at **eripperg@harpercollege.edu**.

Harper uses cookies to enhance your browsing experience. Find out more on how we use cookies and how you can change your settings.

I Agree

Attachment: Harper College - bike sharing information (IGA with Harper College for the storage of a bike

Consider an Ordinance Amending Chapter 2 of the Code of Ordinances of the Village of Palatine Related to the Sale of Real Estate

BACKGROUND:
Last year, the Village amended the section of the Code of Ordinances related to the acquisition and sale of real estate along with other administrative matters. The language related to the sale of Village-owned property in the Code of Ordinances at the time was verbatim out of state statutes and thus eliminated from our Code thus defaulting us to the statutes.

KEY ISSUES:
Upon further review of the statutes, the requirements to make multiple publications in a newspaper does not reflect the current practices and trends in real estate. As a Home Rule unit of government, we have an ability to exercise our discretion in areas such as this.

The proposed amendment to the Code would allow the Village Manager to pursue a variety of methods to dispose of Village real estate as well as publish the property on the Village's website for a minimum of two weeks. Anything within a Tax Increment Financing District would still need to follow the Notice of Development Opportunity process.

The Council would still be required to have a 3/4 majority vote to dispose of the property, as was the previous requirement.

ALTERNATIVES:

1. Approve amendment to Chapter 2 allowing Village discretion in disposal of property.
2. Do not approve an amendment and adhere to state statutes.

RECOMMENDATION:
Staff recommends approval of an ordinance amending Chapter 2 of the Code of Ordinances.

ACTION REQUIRED:
A motion to approve an ordinance amending Chapter 2 of the Code of Ordinances.

ATTACHMENTS:

- Sale of Property Text Amendment
- ORD. Ch. 2 Administration, Art. VI

RESULT:	**MOTION CARRIED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Kollin Kozlowski, District 5 Councilman
SECONDER:	Scott Lamerand, District 2 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Sec. 2-112. Disposal of Property

(1) Property Less Than $1,000 In Value.

Whenever the village owns any personal property which is determined by the Village Manager to be no longer necessary or useful to, or for the best interest of the village and having an original value of less than $1,000, the Village Manager, at his discretion, may authorize the disposal of said property, without any further action of the corporate authorities.

(2) Property Between $1,000 And $10,000 In Value

Whenever the Village owns any personal property which is determined by the Village Manager, in accordance with this section, to be no longer necessary or useful to, or for the best interest of the Village, and said property originally having a value of $1,000 or more and currently having a value of less than $10,000, the Village Manager shall be authorized to dispose of such personal property in accordance with the following conditions and procedures:

(A) The Village Manager or his designee shall make a written determination that the property is no longer needed by the village and shall set forth reasons therefor.

(B) The Village Manager or his designee shall set forth in writing, attaching such documentation as he deems necessary, the basis for his determination when the property is of a value of $10,000 or less.

(C) The Village Manager shall solicit proposals for the purchase of such property, sell it at public auction, scrap the property, or authorize a trade of it for the purchase of other property, whichever, in his judgment, such activity will generate a greater return and efficiency to the village. If the Village Manager chooses to solicit proposals, he may do so by such means as he deems suited to generate the best response. If the property cannot be disposed of through the preceding means, the Village Manager shall at his discretion authorize disposal without any further action of the corporate authority.

(D) Following the sale or disposition of such property, the Village Manager shall prepare a written report thereof and file the same with the Mayor and Village Council, on an annual basis.

(E) Disposal or sale of the property hereunder shall not be made to an officer or employee of the village or to a person related by blood or marriage to an officer or employee of the village, except items sold at public auction.

(3) Property Over $10,000 In Value; Having Title.

Whenever the village owns any personal property which is determined by the Village Manager to be no longer necessary or useful to, or for the best interest of the village, and having a value of more than $10,000, or consisting of an item having a title (i.e., vehicle), the items may only be disposed in accordance with the Village Council action.

(4) Real Estate Property Owned by the Village

Attachment: Sale of Property Text Amendment (2022-65 : Amending Chapter 2 Related to Sale of Real Estate)

The Corporate Authorities of the Village of Palatine has the power to direct the conveyance of any real estate owned by the Village, when, in the opinion of the Corporate Authorities, the real estate is no longer necessary, appropriate, required for the use of, profitable to, or for the best interests of the Village. This power shall be exercised by an ordinance passed by three-fourths of the Village Council then holding office, at any regular or at any special meeting called for that purpose.

Except as otherwise required by State statute and in exercise of its Home Rule authority, the Village Manager shall determine the appropriate method to dispose of real estate owned by the Village. At a minimum, the location of the real estate to be disposed of shall be published on the Village website for a minimum of fourteen (14) calendar days prior to Village Council action to dispose of the property.

ORDINANCE NO. _____

AN ORDINANCE AMENDING CHAPTER 2 ADMINISTRATION OF THE CODE OF ORDINANCES OF THE VILLAGE OF PALATINE

NOW, THEREFORE, BE IT ORDAINED, by the Mayor and Village Council of the Village of Palatine, Cook County, Illinois, acting in the exercise of their home rule power, that:

SECTION 1: That the Code of Ordinances, of the Village of Palatine, Illinois, as amended, be and the same is hereby further amended by amending Chapter 2, Administration, Article VI. Village Manager, Section 2-112. Disposal of Property, as indicated on Exhibit "A".

SECTION 2: That the Village Clerk is directed to maintain a record of the modifications to the existing ordinance, all of which are indicated on Exhibit "A" (a red-lined version of the modifications approved pursuant to this Ordinance).

SECTION 3: That this ordinance shall be in full force and effect from and after its passage and approval as provided by law.

PASSED: This _____ of _____, 2022

AYES:_____ NAYS:_____ ABSENT:_____ PASS:_____

APPROVED by me this _____ of _____, 2022

_____

Mayor of the Village of Palatine

ATTESTED and FILED in the office of the Village Clerk

this _____ of _____, 2022

_____

Village Clerk

Attachment: ORD. Ch. 2 Administration, Art. VI (2022-65 : Amending Chapter 2 Related to Sale of Real Estate)

Consider a Motion to Approve an Intergovernmental Agreement with the City of Evanston for the Use and Maintenance of Two Motorcycles

BACKGROUND:
Two Palatine Police Officers are scheduled for a two-week motorcycle training class that requires the use of gasoline powered motorcycles. The Palatine Police motorcycles are 100% electric and are unable to be used for the training class. The City of Evanston has agreed to loan the Village of Palatine Police Department two Harley Davidson motorcycles for the duration of the training course.

KEY ISSUES:
As the course requires the use of gasoline powered motorcycles, the City of Evanston has agreed to allow Palatine to use their motorcycles subject to approval of an Intergovernmental Agreement that indemnifies Evanston and agrees to cover all operating costs and any repairs caused by our use.

ALTERNATIVES:

1. Approve the motion to enter into an Intergovernmental Agreement with the City of Evanston.
2. Refer back to Staff with comments.

RECOMMENDATION:
Staff recommends approval of the motion.

ACTION REQUIRED:
A motion to approve the intergovernmental agreement between the Village of Palatine and the City of Evanston for the use and maintenance of two motorcycles.

ATTACHMENTS:

- IGA FOR THE USE AND MAINTENANCE OF TWO MOTORCYCLES BETWEEN THE VILLAGE OF PALATINE AND THE CITY OF EVANSTON

RESULT:	**APPROVED BY VOICE VOTE [UNANIMOUS]**
MOVER:	Kollin Kozlowski, District 5 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

INTERGOVERNMENTAL AGREEMENT FOR THE USE AND MAINTENANCE OF TWO MOTORCYCLES BETWEEN THE VILLAGE OF PALATINE AND THE CITY OF EVANSTON

This Intergovernmental Agreement (hereinafter referred to as the "Agreement") is entered into this _____ day of _____, 2022, by and between the Village of Palatine, an Illinois home rule municipal corporation ("Palatine") and the City of Evanston, an Illinois home rule municipal corporation ("Evanston") (Palatine and Evanston are each a "Party", and collectively "Parties").

WITNESSETH:

WHEREAS, Section 10 of Article VII of the Illinois Constitution of 1970 authorizes units of local government, such as Palatine and Evanston, to contract or otherwise associate amongst themselves in any manner not otherwise prohibited by law or by ordinance; and

WHEREAS, Section 3 of the Illinois Intergovernmental Cooperation Act, 5 ILCS 220/3, permits any powers, privileges, functions or authority exercised or which may be exercised by a unit of local government to be exercised, combined, transferred or enjoyed jointly with any other unit of local government; and

WHEREAS, the City of Evanston ("Evanston") is the owner of Harley Davidson motorcycles for use by its Police Department; and

WHEREAS, the Palatine Police Department has requested the use of two of Evanston's motorcycles ("the motorcycles") for a two-week training class taking place from August 8 through August 19, 2022; and

WHEREAS, the Parties desire to enter into the Agreement to govern the use, operation, and maintenance of the motorcycles while the motorcycles are on loan from Evanston; and

WHEREAS, the Parties by virtue of their powers as set forth in the Illinois Municipal Code, 65 ILCS 5/1-1-1 *et seq.* are authorized to enter into this Agreement; and

NOW, THEREFORE, in consideration of the aforementioned recitals and the mutual covenants and provisions in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereto agree as follows:

1. Incorporation. The preambles set forth above are incorporated and are part of this Agreement.

2. Use of Vessel. Palatine shall use the motorcycles only for: (i) training; (ii) maintenance of the motorcycles; and (iii) other uses agreed to by the Parties. In addition to the terms of this Agreement, the Parties shall use the motorcycles in strict accordance with standard operating procedures agreed to by the Parties, which standard operating procedures shall be agreed to prior to any use of the motorcycles.

Attachment: IGA FOR THE USE AND MAINTENANCE OF TWO MOTORCYCLES BETWEEN THE VILLAGE OF PALATINE AND THE CITY OF

3. Term. This Agreement shall be in full force and effect from the Effective Date, which shall be the last date on which Palatine or Evanston executes this Agreement**.** Unless otherwise provided in this Agreement, the obligations and terms of this Agreement shall continue in effect until the return of the motorcycles to the City.

4. Use of Motorcycles.

    a. Training of Personnel: Palatine shall: train sufficient personnel to use the motorcycles to respond and operate the motorcycles. Palatine shall bear its own costs for such training.

    b. Operation in Accordance with Law: Palatine shall operate the motorcycles at all times in accordance with all applicable federal, State, and local laws, statutes, regulations, and ordinances.

    c. Operation in Accordance with Agreement: Palatine shall operate the motorcycles at all times in accordance with the terms of this Agreement.

5. Maintenance and Fuel.

    a. Storage of Motorcycles: When not in operation, the motorcycles shall be stored in a safe and secure location. Palatine shall be responsible for properly and safely storing the motorcycles after each use, cleaning the motorcycles and properly storing the motorcycles and all relevant accessory equipment so that they are secure, safe, and ready for use.

    b. Maintenance of Motorcycles: Palatine shall be responsible for coordinating all necessary maintenance and repairs of the motorcycles. No maintenance or repairs shall be made to the motorcycles that cost more than $1,500.00 without the prior written approval of all of the Parties.

    c. Fuel: Palatine shall be responsible for keeping the motorcycles sufficiently fueled so that the motorcycles are returned with the same fuel level upon picking up the motorcycles.

    d. Costs: Palatine shall be solely responsible for all costs for maintaining, repairing, storing, and fueling the motorcycles during the term of this Agreement.

6. Insurance. Palatine shall procure and maintain as long as this Agreement is in effect an insurance policy in a form and from an insurance provider agreed to by the Parties, provided that the insurance policy shall cover the operation of the motorcycles by Palatine and, at a minimum, cover the replacement cost of the motorcycles and have repair cost endorsements. The costs to procure and maintain such insurance shall be solely be the responsibility of Palatine.

7. Indemnification. Palatine shall defend, indemnify, and hold harmless Evanston and Evanston's officials, officers, employees, agents, and representatives from and against any and all injuries, claims, demands, judgments, damages, losses and expenses, and costs of suit or defense, arising out of, resulting from, or alleged to arise out of or resulting from the negligent, careless, or wrongful acts, omissions, failures to act, or misconduct of the Palatine, and their officers, employees, and agents, in connection with their performance under this Agreement. Palatine will appear and defend all suits brought upon all such claims, demands, actions and proceedings and shall pay all costs and expenses incidental thereto, but Evanston will have the right, at its sole option and expense, to participate in the defense of any suit, without relieving Palatine of any of its obligations thereunder.

8. Non-Binding. Nothing contained in this Agreement, nor any act of any of the respective Parties pursuant to this Agreement, shall be deemed or construed by any of the Parties hereto or by third persons, to create any relationship of third party beneficiary, principal, agent, limited or general partnership, joint venture, or any association or relationship involving any of those Parties.

9. Counterparts. This Agreement may be executed in counterparts, all of which shall be deemed to be an original and all of which shall constitute one and the same instrument.

10. Amendments. This Agreement may only be modified by written modification executed by duly authorized representatives of the Parties hereto.

11. Assignment. This Agreement and the rights of the Parties hereunder may not be assigned (except by operation of law) and the terms and conditions of this Agreements shall inure to the benefit of and be binding upon the respective successors and assigns of the units of government as the Parties hereto.

12. Governing Law and Venue. The laws, cases and statutes of the State of Illinois shall govern the validity, performance and enforcement of this Agreement. Any court proceedings between the Parties related to this Agreement or the subject matters herein shall be brought in Cook County, Illinois.

13. Notice. All written reports, notices and other communications related to this Agreement shall be in writing and shall be personally delivered, mailed via certified mail, overnight mail delivery, or electronic mail delivery to the following persons at the following addresses:

To the Village of Palatine:	The Village of Palatine 200 E. Wood Street Palatine, IL 60067 Attn: Email:
To the City of Evanston:	The City of Evanston

2100 Ridge Avenue
Evanston, IL 60201
Attn: Nicholas Cummings, Corporation Counsel
Email: ncummings@cityofevanston.org

14. Severability. If any provision, clause or term of this Agreement is determined to be invalid or unenforceable, such provision shall, to the extent possible, be modified by the court in such manner as to be valid, legal and enforceable so as to most nearly retain the intent of the Parties, and, if such modification is not possible, such provision shall be severed from this Agreement, and in either case the validity, the legality, and enforceability of the remaining provisions of this Agreement shall not in any way be affected or impaired thereby.

15. Headings. The headings of the paragraphs of this Agreement are for convenience and reference only and do not form a part hereof and do not modify, interpret or construe the understandings of the Parties hereto.

16. Waiver. No waiver by either Party of any breach of any term or condition hereon shall be deemed a waiver of the same or any subsequent breach of the same or any other term or condition herein. No term or condition of this Agreement shall be deemed waived by either Party unless waived in writing.

17. Entire Agreement. This Agreement supersedes all other prior agreements, negotiations and representations and is a full integration of the agreement of the Parties regarding the subject matters of this Agreement.

18. Default and Breach. In the event of any breach of or default under this Agreement, the Parties shall give prompt written notice of such alleged breach or default and the Party receive such notice shall have thirty (30) days after receipt of such notice to cure such alleged breach or default, prior to the seeking of any remedy provided for herein, provided however, that said thirty (30) day period shall be reasonably extended if the defaulting Party has initiated the cure of said breach of default and is diligently proceeding therewith.

19. No Third-Party Beneficiaries. This Agreement and the covenants contained herein are made solely for the benefits of the Parties, and their respective successors, assigns, affiliates and representatives and no other person shall be entitled to any rights hereunder.

20. Authorization. The Village of Palatine and the City of Evanston each hereby warrant and represent that their respective signatures set forth below have been, and are on the date of this Agreement, duly authorized by all necessary and appropriate corporate and/or governmental action to execute this Agreement.

IN WITNESS THEREOF, the Parties have executed this Agreement on the dates indicated.

Attachment: IGA FOR THE USE AND MAINTENANCE OF TWO MOTORCYCLES BETWEEN THE VILLAGE OF PALATINE AND THE CITY OF

THE VILLAGE OF PALATINE

By: _____ Attest: _____
Village Mayor

Date: _____ Date: _____

THE CITY OF EVANSTON

By: _____ Attest: _____
City Mayor

Date: _____ Date: _____

Consider a Motion Ratifying the Village Manager's Approval of 2022 Warrant # 13

BACKGROUND:
Pursuant to Section 2-108 (19) of the Palatine Code of Ordinances, the Village Manager approved Warrant # 13 on July 5, 2022. This evening the Council ratification of the warrant is required.

ALTERNATIVES:
1. Approve a motion ratifying the Village Manager's approval of Warrant # 13 on July 5, 2022.
2. Refer back to Staff.

RECOMMENDATION:
Staff recommends approval of a motion ratifying the Village Manager's approval of Warrant #13 on July 5, 2022.

ACTION REQUIRED:
A motion ratifying the Village Manager's approval of Warrant # 13.

ATTACHMENTS:

- Warrant #13 2022

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Village of Palatine

Village Manager

Warrant # 13 having been approved by the Village Manager on 07-05-22 hereby authorizes the Treasurer to deposit funds from the accounts indicated below

		Check/ACH Disbursements	Electronic (EFT/W-T) Disbursements	Manual/Reissue Checks/EFT	UB Refunds Processed	Fund Expense
General Fund	100	91,886.65	3,000.00	-	-	94,886.65
Motor Fuel Tax Fund	205	871,081.00	-	-	-	871,081.00
CDBG Fund	210	9,469.25	-	-	-	9,469.25
Federal Equitable Sharing Fund	221	3,000.00	-	-	-	3,000.00
Downtown TIF Fund	233	27,974.82	-	-	-	27,974.82
Rand Corridor TIF Fund	234	304,218.50	-	-	-	304,218.50
CDBG - CV	255	7,477.50	-	-	-	7,477.50
Capital Equipment Fund	401	95,975.78	-	7,500.00	-	103,475.78
Capital Improvements Fund	402	34,339.65	-	-	-	34,339.65
Water Fund	605	27,179.37	-	-	-	27,179.37
Sewer Fund	610	1,847.59	-	-	-	1,847.59
Refuse Fund	615	-	-	-	1,182.21	1,182.21
Parking Fund	620	7,649.93	-	-	-	7,649.93
Liability Insurance Fund	702	14,003.00	-	-	-	14,003.00
Fleet Services Fund	710	47,608.92	-	-	-	47,608.92
Total Report		**1,543,711.96**	**3,000.00**	**7,500.00**	**1,182.21**	**1,555,394.17**

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

VILLAGE OF PALATINE

Warrant

Invoice Due Date Range 06/01/22 - 07/1
Report By Vendor - Inv
Summary Li

Invoice Number	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Net A
Vendor 1759 - Air One Equipment, Inc.									
180305	Lockout Kit	Open		05/01/2022	06/01/2022	06/28/2022			4
182337	Task Force Tips	Open		06/16/2022	07/15/2022	06/28/2022			1
			Vendor 1759 - Air One Equipment, Inc. Totals			Invoices	2		$5
Vendor 2611 - Al Warren Oil Co									
W1479933	Motor Fuel	Open		06/10/2022	07/10/2022	06/14/2022			35,7
			Vendor 2611 - Al Warren Oil Co Totals			Invoices	1		$35,7
Vendor 3060 - Allegra Print & Imaging									
98112	98112	Open		03/02/2022	06/28/2022	06/28/2022			1
			Vendor 3060 - Allegra Print & Imaging Totals			Invoices	1		$1
Vendor 2340 - Allied Air Conditioning Heating Co									
263472	Rooftop AC Repair-150 W. Wilson	Open		06/09/2022	07/09/2022	06/23/2022			3
			Vendor 2340 - Allied Air Conditioning Heating Co Totals			Invoices	1		$3
Vendor 2491 - Anderson Pest Solutions									
24005536	Pest Control Services-Fire Station 84	Open		06/16/2022	07/15/2022	06/23/2022			
			Vendor 2491 - Anderson Pest Solutions Totals			Invoices	1		$
Vendor 1730 - Andres Medical Billing									
255267	Billing Charges - May	Open		06/15/2022	06/30/2022	06/15/2022			7,(
			Vendor 1730 - Andres Medical Billing Totals			Invoices	1		$7,(
Vendor 5021 - Arlington Heights Ford LLC									
55365H	Parts - STOCK	Open		06/08/2022	07/07/2022	06/14/2022			
			Vendor 5021 - Arlington Heights Ford LLC Totals			Invoices	1		$
Vendor 2322 - Arrow Road Construction Company									
62422 * 3	2022 Supplemental Street Resurfacing Program-Anderson Drive	Open		06/24/2022	07/01/2022	06/21/2022			34,3
62322 * 3	2022 Street Resurfacing Program MFT Section #22-00000-00-GM	Open		06/27/2022	07/01/2022	06/21/2022			886,2
62722 * 2	2022 Parking Lots B, C, and F Resurfacing DPW-2215	Open		06/24/2022	07/01/2022	06/27/2022			12,7
			Vendor 2322 - Arrow Road Construction Company Totals			Invoices	3		$933,3
Vendor 1819 - Auto Tech Centers Inc									
INV072990	Parts - STOCK	Open		06/07/2022	07/07/2022	06/14/2022			1,2
			Vendor 1819 - Auto Tech Centers Inc Totals			Invoices	1		$1,2
Vendor 2975 - AWWA									

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

VILLAGE OF PALATINE

Warrant #1

Invoice Due Date Range 06/01/22 - 07/19
Report By Vendor - Invc
Summary List

Invoice Number	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Net Am
PWKH2022MEM	2022 AWWA Membership Dues - Hansen	Open		05/11/2022	06/10/2022	06/27/2022			23
			Vendor **2975 - AWWA** Totals			Invoices	1		$23
Vendor **2282 - Baxter And Woodman**									
0235634	Algonquin Road Water Main Extension Design Engineering Services	Open		06/17/2022	07/17/2022	06/20/2022			4,28
			Vendor **2282 - Baxter And Woodman** Totals			Invoices	1		$4,28
Vendor **1101 - Beverly Materials LLC**									
277385	Wash Stone-WMB Restoration Repair	Open		05/31/2022	07/01/2022	06/27/2022			2,34
			Vendor **1101 - Beverly Materials LLC** Totals			Invoices	1		$2,34
Vendor **2591 - Braniff Communications, Inc.**									
0034142	Outdoor Warning Siren Repair	Open		06/17/2022	07/16/2022	06/29/2022			25
			Vendor **2591 - Braniff Communications, Inc.** Totals			Invoices	1		$25
Vendor **2095 - Cannon Cochran Mgmnt Services Inc**									
2022-00000539	2022 Risk Claims Administration	Open		06/23/2022	07/01/2022	06/24/2022			9,25
			Vendor **2095 - Cannon Cochran Mgmnt Services Inc** Totals			Invoices	1		$9,25
Vendor **3050 - Cintas #22**									
4122107989	Uniform Cleaning	Open		06/10/2022	07/10/2022	06/15/2022			24
4122796474	Uniform Cleaning	Open		06/17/2022	07/17/2022	06/27/2022			13
5112857925	Restock Ready Room First Aid Kits	Open		06/17/2022	07/17/2022	06/29/2022			3
			Vendor **3050 - Cintas #22** Totals			Invoices	3		$40
Vendor **1488 - CNS Tire Supply**									
26238	Parts - STOCK	Open		06/07/2022	07/07/2022	06/14/2022			51
			Vendor **1488 - CNS Tire Supply** Totals			Invoices	1		$51
Vendor **2506 - College Of Dupage**									
14065	SLEA Basic Academy x 3 (03/28/22 - 07/01/22)	Open		06/09/2022	07/01/2022	06/24/2022			11,20
			Vendor **2506 - College Of Dupage** Totals			Invoices	1		$11,20
Vendor **3033 - Comcast Cable**									
CC 06-22 A	Backup Internet Connections	Open		06/16/2022	07/14/2022	06/20/2022			4
			Vendor **3033 - Comcast Cable** Totals			Invoices	1		$4
Vendor **2980 - Commonwealth Edison**									
1576144012 5/22	Electricity-Dundee Rd and Park Place Traffic Signal	Open		05/17/2022	07/01/2022	06/23/2022			1

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

VILLAGE OF PALATINE

Warrant

Invoice Due Date Range 06/01/22 - 07/1
Report By Vendor - Inv
Summary Li

Invoice Number	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Net Ar
8648014008 5/22	Electricity-135 W. Michigan Ave Heat Meter	Open		05/18/2022	07/18/2022	06/23/2022			3
			Vendor 2980 - Commonwealth Edison Totals			Invoices	2		$3
Vendor 5162 - Conduent Business Services, LLC									
1639774	Red Light Camera Vendor Fees (April)	Open		05/26/2022	07/10/2022	06/10/2022			3,3
			Vendor 5162 - Conduent Business Services, LLC Totals			Invoices	1		$3,3
Vendor 5150 - COPS and FIRE Personnel Testing Service									
107337	2022 Services Other (COPS & FIRE - PD Pre-employment Psych Exam)	Open		06/17/2022	06/21/2022	06/21/2022			4
			Vendor 5150 - COPS and FIRE Personnel Testing Service Totals			Invoices	1		$4
Vendor 3840 - Crown Trophy									
19801	Retirement Plaque - J. Ferraro	Open		06/24/2022	06/24/2022	06/24/2022			1
			Vendor 3840 - Crown Trophy Totals			Invoices	1		$1
Vendor 5075 - Daves Medical LLC									
2	EMS Supplies	Open		06/01/2022	07/01/2022	06/29/2022			
			Vendor 5075 - Daves Medical LLC Totals			Invoices	1		$
Vendor 2325 - Direct Fitness Solutions LLC									
00039570	Wellness Fitness Equipment	Open		05/26/2022	06/25/2022	06/21/2022			29,9
			Vendor 2325 - Direct Fitness Solutions LLC Totals			Invoices	1		$29,9
Vendor 2195 - FMP									
60-330037	Parts - STOCK	Open		05/05/2022	06/04/2022	06/29/2022			
162-115428	Parts - E-160	Open		06/10/2022	07/10/2022	06/14/2022			4
			Vendor 2195 - FMP Totals			Invoices	2		$4
Vendor 1667 - Gilio Landscape Contractors									
9053	153 S Leonard - 6/11/22	Open		06/13/2022	07/13/2022	06/14/2022			
9054	145 W Northwest Hwy #02-15-202-007-0000 6/11/22	Open		06/13/2022	07/13/2022	06/14/2022			
9055	145 W Northwest Hwy #02-15-202-008-0000	Open		06/13/2022	07/13/2022	06/14/2022			
9959	1101 E Dundee Rd - 6/16/22	Open		06/18/2022	07/18/2022	06/28/2022			1
			Vendor 1667 - Gilio Landscape Contractors Totals			Invoices	4		$1
Vendor 5025 - Hampton, Lenzini and Renwick, Inc									
000020221240	2022 Water Main Replacement Contract 1 Design DPW-2221	Open		06/16/2022	07/16/2022	06/17/2022			2,1
			Vendor 5025 - Hampton, Lenzini and Renwick, Inc Totals			Invoices	1		$2,1

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

VILLAGE OF PALATINE

Warrant #1

Invoice Due Date Range 06/01/22 - 07/19
Report By Vendor - Invc
Summary List

Invoice Number	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Net Am
Vendor **1916 - Harvard Maintenance Inc**									
1428478	Village Hall Janitorial Service-June 2022	Open		06/01/2022	07/01/2022	06/23/2022			3,32
1428551	Train Station Janitorial Service-June 2022	Open		06/01/2022	07/01/2022	06/23/2022			7,64
			Vendor **1916 - Harvard Maintenance Inc** Totals			Invoices	2		$10,97
Vendor **3116 - Bryan C Haupt**									
PWBRBH062222	Boot Reimbursement	Open		06/20/2022	07/04/2022	06/27/2022			12
			Vendor **3116 - Bryan C Haupt** Totals			Invoices	1		$12
Vendor **5163 - Healy Asphalt Company LLC**									
31645	Binder and Surface for Hot Paving	Open		06/09/2022	07/09/2022	06/28/2022			82
31697	Binder and Surface for Hot Paving	Open		06/10/2022	07/10/2022	06/28/2022			1,60
31716	Binder and Surface for Hot Paving	Open		06/13/2022	07/13/2022	06/28/2022			38
31770	Binder and Surface for Hot Paving	Open		06/16/2022	07/16/2022	06/28/2022			20
			Vendor **5163 - Healy Asphalt Company LLC** Totals			Invoices	4		$3,02
Vendor **4929 - Heartline Fitness Systems**									
146594	Replacement Cables for Workout Equipment	Open		06/15/2022	07/15/2022	06/24/2022			54
			Vendor **4929 - Heartline Fitness Systems** Totals			Invoices	1		$54
Vendor **5088 - HR Green, Inc**									
153369	Professional Svcs 5/1/22 - 5/31/22	Open		06/16/2022	07/16/2022	06/28/2022			5,75
			Vendor **5088 - HR Green, Inc** Totals			Invoices	1		$5,75
Vendor **2976 - Huffman Landscape**									
HUFF6-8-22	Replacement and 50/50 Parkway Tree Installations	Open		06/08/2022	07/02/2022	06/23/2022			1,75
			Vendor **2976 - Huffman Landscape** Totals			Invoices	1		$1,75
Vendor **5215 - I3-Imagesoft, LLC**									
S006467	"Safe Encounter" Software Subscription	Open		04/19/2022	06/19/2022	06/24/2022			3,00
			Vendor **5215 - I3-Imagesoft, LLC** Totals			Invoices	1		$3,00
Vendor **5061 - Illinois LEAP**									
0000187	2022 IL-LEAP Conference (Cordell)	Open		06/21/2022	07/05/2022	06/24/2022			25
			Vendor **5061 - Illinois LEAP** Totals			Invoices	1		$25
Vendor **1046 - Illinois Liquor Control Commission**									
2022 Stfest Liq	Streetfest - State Liquor Application Fee	Open		06/24/2022	07/05/2022	06/24/2022			

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

VILLAGE OF PALATINE

Warrant

Invoice Due Date Range 06/01/22 - 07/1
Report By Vendor - In
Summary Li

Invoice Number	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Net A
		Vendor 1046 - Illinois Liquor Control Commission Totals				Invoices	1		
Vendor 2822 - Illinois Secretary Of State									
PWVM 2023 C-372	License Plate Renewal C-372	Open		06/01/2022	06/30/2022	06/27/2022			
PWVM 2023 T-484	License Plate Renewal T-484	Open		06/01/2022	06/30/2022	06/27/2022			
PWVM 2023 T-485	License Plate Renewal T-485	Open		06/01/2022	06/30/2022	06/27/2022			
PWVM 2023 T-486	License Plate Renewal T-486	Open		06/01/2022	06/30/2022	06/27/2022			
PWVM 2023 T-487	License Plate Renewal T-487	Open		06/01/2022	06/30/2022	06/27/2022			
		Vendor 2822 - Illinois Secretary Of State Totals				Invoices	5		$
Vendor 1604 - Illinois State Police									
PD22-3601-MAY	Fingerprinting for Employment - LGE Checks (3601) - May	Open		06/01/2022	07/16/2022	06/24/2022			
		Vendor 1604 - Illinois State Police Totals				Invoices	1		$
Vendor 2992 - James Messineo									
Messineo 6/27/22	June 2022 Judge Messineo	Open		06/27/2022	07/05/2022	06/28/2022			2,
		Vendor 2992 - James Messineo Totals				Invoices	1		$2,
Vendor 2695 - JG Uniforms Inc									
100062	Exterior Vest Carriers/Uniform Items (Badges)	Open		05/31/2022	06/30/2022	06/24/2022			
100555	Exterior Vest Carriers/Uniform Items (New PA's)	Open		06/10/2022	07/10/2022	06/24/2022			
		Vendor 2695 - JG Uniforms Inc Totals				Invoices	2		$
Vendor 3869 - John Nelson Architect Inc									
JN 6/27/22	Services 6/15/22 - 6/24/22	Open		06/27/2022	06/28/2022	06/28/2022			2,
		Vendor 3869 - John Nelson Architect Inc Totals				Invoices	1		$2,
Vendor 3631 - Johnson Controls Security Solutions LLC									
37496708	Alarm Monitoring	Open		06/11/2022	07/10/2022	06/29/2022			
37496747	Alarm Monitoring	Open		06/11/2022	07/10/2022	06/29/2022			
37496749	Alarm Monitoring 148 W. Illinois Ave-07/01/22-9/30/22	Open		06/11/2022	07/10/2022	06/23/2022			
		Vendor 3631 - Johnson Controls Security Solutions LLC Totals				Invoices	3		$
Vendor 5179 - Johnstone Supply									
6041617	Village Hall HVAC Transformer	Open		06/07/2022	07/07/2022	06/14/2022			
		Vendor 5179 - Johnstone Supply Totals				Invoices	1		
Vendor 1129 - Journeys The Road Home									
2022-00000523	CDBG-CV Journeys	Open		06/20/2022	06/20/2022	06/20/2022			7,
		Vendor 1129 - Journeys The Road Home Totals				Invoices	1		$7,
Vendor 3903 - Robert R Kluzek									

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

VILLAGE OF PALATINE

Warrant #1

Invoice Due Date Range 06/01/22 - 07/19,
Report By Vendor - Invc
Summary List

Invoice Number	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Net Amc
2022-00000551	Tuition Reimbursement - FIR 3304	Open		06/28/2022	06/28/2022	06/28/2022			63
			Vendor **3903 - Robert R Kluzek** Totals			Invoices	1		$63
Vendor **5137 - Lakeshore Recycling Systems, LLC**									
V935217	Waste Disposal	Open		06/15/2022	07/15/2022	06/28/2022			2,69
			Vendor **5137 - Lakeshore Recycling Systems, LLC** Totals			Invoices	1		$2,69
Vendor **1176 - Liberty Tire Recycling Llc**									
2289332	Tire Disposal - PT-999 & M-999	Open		06/04/2022	07/04/2022	06/29/2022			15
			Vendor **1176 - Liberty Tire Recycling Llc** Totals			Invoices	1		$15
Vendor **5128 - M.J. Taylor Law, LLC**									
June 27, 2022	Palatine Prosecution, June 2022	Open		06/27/2022	07/05/2022	06/28/2022			3,45
			Vendor **5128 - M.J. Taylor Law, LLC** Totals			Invoices	1		$3,45
Vendor **4957 - MacQueen Equipment, LLC**									
P16595	Parts - T-504	Open		06/08/2022	07/08/2022	06/14/2022			17
P16656	Parts - T-504	Open		06/09/2022	07/09/2022	06/14/2022			1
			Vendor **4957 - MacQueen Equipment, LLC** Totals			Invoices	2		$18
Vendor **5155 - Charles F Malone**									
2022-00000522	Landscape Restoration Reimbursement-783 S. Spring Willow Bay	Open		06/20/2022	06/24/2022	06/20/2022			1,72
			Vendor **5155 - Charles F Malone** Totals			Invoices	1		$1,72
Vendor **5066 - Marco Technologies LLC**									
473634293	Copier Maintenance Agreement	Open		05/27/2022	06/24/2022	06/20/2022			1,63
			Vendor **5066 - Marco Technologies LLC** Totals			Invoices	1		$1,63
Vendor **2756 - Mc Master Carr Supply Co.**									
79482514	Parts - STOCK	Open		06/08/2022	07/08/2022	06/29/2022			5
			Vendor **2756 - Mc Master Carr Supply Co.** Totals			Invoices	1		$5
Vendor **2737 - Mes Inc/Global**									
IN1722319	SCBA Repair	Open		06/09/2022	07/08/2022	06/29/2022			3
			Vendor **2737 - Mes Inc/Global** Totals			Invoices	1		$3
Vendor **3994 - Metro Federal Credit Union**									
Date 06-23-2022	2022 Wellness Incentive - Metro Federal Credit Union -Gift Cards	Open		06/23/2022	06/27/2022	06/27/2022			16,16
			Vendor **3994 - Metro Federal Credit Union** Totals			Invoices	1		$16,16
Vendor **1118 - Mid American Water Of Wauconda Inc**									

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

VILLAGE OF PALATINE

Warrant

Invoice Due Date Range 06/01/22 - 07/1
Report By Vendor - Inv
Summary Li

Invoice Number	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Net Ar
249352W	Hymax Coupling and Repair Clamps	Open		05/31/2022	07/01/2022	06/27/2022			4,4
		Vendor 1118 - Mid American Water Of Wauconda Inc Totals				Invoices	1		$4,4
Vendor 2998 - Midwest Groundcovers									
I707275	Plants	Open		06/15/2022	07/15/2022	06/23/2022			1,4
		Vendor 2998 - Midwest Groundcovers Totals				Invoices	1		$1,4
Vendor 4489 - Midwest Paving Equipment Inc									
2272	Parts - E-202	Open		05/03/2022	06/02/2022	06/29/2022			1,4
		Vendor 4489 - Midwest Paving Equipment Inc Totals				Invoices	1		$1,4
Vendor 5164 - Midwest Power Industry, Inc									
758	Square D Lift Station Governor Controller Repair	Open		06/15/2022	07/15/2022	06/27/2022			2,5
		Vendor 5164 - Midwest Power Industry, Inc Totals				Invoices	1		$2,5
Vendor 1856 - Monroe Truck Equipment									
14774	Parts - T-411	Open		06/08/2022	07/08/2022	06/29/2022			
		Vendor 1856 - Monroe Truck Equipment Totals				Invoices	1		$
Vendor 5115 - NAC Supply, Inc									
52691	Glass Beads for Striping	Open		06/17/2022	07/17/2022	06/28/2022			1
		Vendor 5115 - NAC Supply, Inc Totals				Invoices	1		$1
Vendor 2616 - Nicor Gas									
93126652572-5/22	Natural Gas-150 W. Wilson Street Clu Building	Open		05/18/2022	07/06/2022	06/23/2022			
37917400006-5/22	Natural Gas-914 W. Lukas Avenue Square D Lift Station	Open		05/19/2022	07/06/2022	06/23/2022			
55424779829-5/22	Natural Gas-1545-47 Shires Court Lift Station	Open		05/20/2022	07/06/2022	06/23/2022			
19505219626-5/22	Natural Gas-251 W. Colfax Street Parking Deck	Open		05/25/2022	07/12/2022	06/23/2022			
46007255576-5/22	Natural Gas-804 W. Panorama Drive Deer Grove Lift Station	Open		05/25/2022	07/12/2022	06/23/2022			
70018165616-5/22	Natural Gas-432 W. Haleys Hill Court Dunhaven Woods Lift Station	Open		05/25/2022	07/12/2022	06/23/2022			
83980510966-5/22	Natural Gas-550 N. Smith Street Well 7 Generator	Open		05/25/2022	07/12/2022	06/23/2022			
66457600006-5/22	Natural Gas-555 E. Dundee Road Hicks and Dundee Pump Station	Open		05/26/2022	07/12/2022	06/23/2022			
68017400000-5/22	Natural Gas-137 W. Wood Street Train Station	Open		05/26/2022	07/12/2022	06/23/2022			

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

VILLAGE OF PALATINE

Warrant #1

Invoice Due Date Range 06/01/22 - 07/19,
Report By Vendor - Invc
Summary List

Invoice Number	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Net Amc
25623386239-5/22	Natural Gas-1484 N. Oak Street Pepper Tree Lift Station	Open		05/27/2022	07/12/2022	06/23/2022			5(
88271305703-5/22	Natural Gas-1465 E. Evergreen Drive Randville Lift Station	Open		05/27/2022	07/12/2022	06/23/2022			19
88097600006-5/22	Natural Gas-2175 N. Coach Road Long Grove Pump Station	Open		05/31/2022	07/18/2022	06/23/2022			24
36756460568-5/22	Natural Gas-884 E. Lilly Lane Rose and Lilly Lift Station	Open		06/01/2022	07/19/2022	06/23/2022			17
			Vendor 2616 - Nicor Gas Totals			Invoices	13		$1,86
Vendor 1567 - Nugent Consulting Group LLC									
1278	2022 Services Management Consulting (Installment 3 of 4 - Nugent)	Open		06/20/2022	06/21/2022	06/21/2022			4,74
			Vendor 1567 - Nugent Consulting Group LLC Totals			Invoices	1		$4,74
Vendor 5085 - Orbis Solutions Inc									
5573059	Microwave Date Project	Open		05/27/2022	06/27/2022	06/20/2022			44,29
			Vendor 5085 - Orbis Solutions Inc Totals			Invoices	1		$44,29
Vendor 4155 - Ozinga Ready Mix Concrete Inc									
ARI00375628	Concrete	Open		06/09/2022	07/09/2022	06/27/2022			1,35
			Vendor 4155 - Ozinga Ready Mix Concrete Inc Totals			Invoices	1		$1,35
Vendor 2572 - Paddock Publications, Inc									
219286	June 2022 Legal Notices	Open		06/10/2022	07/18/2022	06/21/2022			16
219670	June 2022 Legal Notice	Open		06/18/2022	07/19/2022	06/28/2022			37
			Vendor 2572 - Paddock Publications, Inc Totals			Invoices	2		$53
Vendor 1583 - Palatine Park District									
20220610	Kitchen Supplies	Open		06/10/2022	07/10/2022	06/15/2022			21
9030	May 2022 Grass Mowing Services Reimbursement	Open		06/03/2022	06/23/2022	06/29/2022			8,62
			Vendor 1583 - Palatine Park District Totals			Invoices	2		$8,83
Vendor 5149 - Peerless Network, Inc.									
532889	Landline Phone Service	Open		06/15/2022	07/01/2022	06/20/2022			87
			Vendor 5149 - Peerless Network, Inc. Totals			Invoices	1		$87
Vendor 1404 - Porter Lee Corporation									
27089	White Barcode Evidence Labels (6)	Open		06/07/2022	07/07/2022	06/10/2022			27
			Vendor 1404 - Porter Lee Corporation Totals			Invoices	1		$27
Vendor 4545 - Robinson Engineering Ltd									

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

VILLAGE OF PALATINE

Warrant

Invoice Due Date Range 06/01/22 - 07/1
Report By Vendor - Inv
Summary Li

Invoice Number	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Net Ar
22060087	2022 Water Main Extensions Project Design DPW-2224	Open		06/13/2022	07/13/2022	06/17/2022			2,5
22060088	2022 Palatine Road Sanitary Sewer Replacement Design Engineering	Open		06/13/2022	07/13/2022	06/17/2022			9,4
			Vendor 4545 - Robinson Engineering Ltd Totals			Invoices	2		$12,(
Vendor 1375 - Romeoville Fire Academy									
2022-264	Engine Ops- Beallis	Open		06/14/2022	07/13/2022	06/28/2022			5
			Vendor 1375 - Romeoville Fire Academy Totals			Invoices	1		$5
Vendor 4880 - Roto Sales, Inc									
Napleton May2022	RDA TIF Payment Subaru/Mazda	Open		06/29/2022	06/29/2022	06/29/2022			304,2
			Vendor 4880 - Roto Sales, Inc Totals			Invoices	1		$304,2
Vendor 4019 - Rush Truck Centers									
3028067483	Parts - T-346	Open		06/10/2022	07/10/2022	06/14/2022			2
3028079246	Parts - T-346	Open		06/10/2022	07/10/2022	06/14/2022			2
3028063604	Parts - T-346	Open		06/13/2022	07/13/2022	06/14/2022			
			Vendor 4019 - Rush Truck Centers Totals			Invoices	3		$(
Vendor 1377 - Southern Computer Warehouse									
INV00741428	UPS Network Management Card	Open		06/14/2022	07/14/2022	06/20/2022			:
			Vendor 1377 - Southern Computer Warehouse Totals			Invoices	1		$:
Vendor 1804 - Staples									
8066557651	Office Supplies	Open		06/11/2022	07/10/2022	06/29/2022			
8066627455	Staples Credit	Open		06/18/2022	07/17/2022	06/29/2022			(
			Vendor 1804 - Staples Totals			Invoices	2		:
Vendor 4360 - Strike Tactical Solutions									
061422RR1	ShotStop Duritium Ballistic Plate inserts	Open		06/14/2022	07/14/2022	06/24/2022			:
			Vendor 4360 - Strike Tactical Solutions Totals			Invoices	1		$:
Vendor 2725 - Stryker Sales Corp									
3709550M	Stairchair	Open		05/01/2022	06/01/2022	06/27/2022			
3782555M	Lucas Device Equip	Open		06/01/2022	07/01/2022	06/28/2022			9,:
			Vendor 2725 - Stryker Sales Corp Totals			Invoices	2		$9,:
Vendor 1776 - Suburban Accents, Inc.									
31950	Repairs & Maintenance - T-389 & T-427	Open		05/02/2022	06/01/2022	06/29/2022			(
			Vendor 1776 - Suburban Accents, Inc. Totals			Invoices	1		$(
Vendor 4754 - Tech Electronics of Illinois, Llc									

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

VILLAGE OF PALATINE

Warrant #1

Invoice Due Date Range 06/01/22 - 07/19/
Report By Vendor - Invo
Summary List

Invoice Number	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Net Amo
N000017523	Credit Memo	Open		04/03/2020	06/23/2022	06/20/2022			(1,490.
N000118220	Pump Station Door Security Enhancements-Smith and Long Grove	Open		12/29/2021	06/23/2022	06/20/2022			3,511
		Vendor 4754 - Tech Electronics of Illinois, Llc Totals				Invoices	2		$2,020
Vendor 2545 - Terrace Supply Co									
70531125	Oxygen	Open		05/01/2022	06/01/2022	06/27/2022			195
		Vendor 2545 - Terrace Supply Co Totals				Invoices	1		$195
Vendor 5069 - Theodore Polygraph Service Incorporated									
7845	2022 Services Other (Theodore Polygraph) PD Pre-Employment Exam	Open		06/20/2022	06/21/2022	06/21/2022			200
		Vendor 5069 - Theodore Polygraph Service Incorporated Totals				Invoices	1		$200
Vendor 1199 - Thompson Elevator Inspection Service Inc									
22-1374	Permit reinsp - 1111 N Rohlwing Rd	Open		06/10/2022	07/10/2022	06/14/2022			7!
		Vendor 1199 - Thompson Elevator Inspection Service Inc Totals				Invoices	1		$7!
Vendor 4058 - TransUnion Risk and Alternative Data Solutions Inc									
71751-May-22	Online Investigative Search Engine (May)	Open		06/01/2022	07/15/2022	06/10/2022			25
		Vendor 4058 - TransUnion Risk and Alternative Data Solutions Inc Totals				Invoices	1		$25
Vendor 2565 - Tredroc Tire Services LLC									
7220059814	Parts & Repairs E-603	Open		05/18/2022	06/17/2022	06/29/2022			43
7220060550	Parts & Repairs - E-603	Open		06/10/2022	07/10/2022	06/29/2022			2,12
		Vendor 2565 - Tredroc Tire Services LLC Totals				Invoices	2		$2,55
Vendor 4403 - Tyler Technologies Inc									
025-379259	General Business License Config Change Order	Open		05/11/2022	06/24/2022	06/20/2022			1,75
		Vendor 4403 - Tyler Technologies Inc Totals				Invoices	1		$1,75
Vendor 3157 - UniFirst Corporation									
061 1462441	Shop Rags/Carpets	Open		06/13/2022	07/13/2022	06/15/2022			5
		Vendor 3157 - UniFirst Corporation Totals				Invoices	1		$5
Vendor 2276 - USA Blue Book									
009307	50' Suspended SPST Float-Kasuba Lift Station	Open		06/10/2022	07/10/2022	06/14/2022			11
		Vendor 2276 - USA Blue Book Totals				Invoices	1		$11
Vendor 3709 - Verizon Wireless									

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

VILLAGE OF PALATINE

Warrant

Invoice Due Date Range 06/01/22 - 07/1
Report By Vendor - Inv
Summary Lis

Invoice Number	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Net Ar
9907755701	Cellular Usage	Open		06/01/2022	06/24/2022	06/20/2022			2,0
9908751274	Cellular In-Vehicle	Open		06/12/2022	07/04/2022	06/20/2022			2,5
			Vendor 3709 - Verizon Wireless Totals			Invoices	2		$4,5
Vendor 4624 - Viking Chemical Company									
130386	Water Treatment Chemicals	Open		06/17/2022	07/02/2022	06/27/2022			1,6
130387	Credit Memo	Open		06/17/2022	07/02/2022	06/27/2022			(1,4(
130389	Water Treatment Chemicals	Open		06/17/2022	07/02/2022	06/27/2022			2,1
			Vendor 4624 - Viking Chemical Company Totals			Invoices	3		$2,3
Vendor 5210 - Village of Elk Grove									
55203	Pierce Quantum Pumper	Open		06/10/2022	07/09/2022	06/14/2022			12,5
			Vendor 5210 - Village of Elk Grove Totals			Invoices	1		$12,5
Vendor 3020 - Village of Palatine Petty Cash									
2022-00000532	A. Calanca - GCCPCA Monthly Meeting/Luncheon x2	Open		06/08/2022	07/05/2022	06/23/2022			
2022-00000533	W. Nord - GCCPCA Monthly Meeting/Luncheon (x2)	Open		06/08/2022	07/05/2022	06/23/2022			
2022-00000534	M. Cohen - June Peer Jury Hearing Expenses	Open		06/15/2022	07/05/2022	06/23/2022			
2022-00000535	C. Felde - TK Enforcement Roadblock Lunch (Kosta's)	Open		06/07/2022	07/05/2022	06/23/2022			
2022-00000536	C. Felde - TK Enforcement Roadblock Lunch (Kosta's)	Open		06/21/2022	07/05/2022	06/23/2022			
			Vendor 3020 - Village of Palatine Petty Cash Totals			Invoices	5		$1
Vendor 3209 - Warehouse Direct									
5259849-0	Roll Towel, Can Liners, TP and Laundry Detergent	Open		06/14/2022	07/14/2022	06/23/2022			2,1
			Vendor 3209 - Warehouse Direct Totals			Invoices	1		$2,1
Vendor 2258 - Wickstrom Auto Group									
855368	Repairs & Maintenance - T-485	Open		05/20/2022	06/19/2022	06/29/2022			1
			Vendor 2258 - Wickstrom Auto Group Totals			Invoices	1		$1
Vendor Matthew Acevedo									
2022-00000552	VS #31183 New Resident	Open		06/29/2022	06/29/2022	06/29/2022			
			Vendor Matthew Acevedo Totals			Invoices	1		$
Vendor Togtokhbayar Batmunkh									
2022-00000528	Overpayment on Ticket # C1206-000138	Open		06/22/2022	07/05/2022	06/22/2022			
			Vendor Togtokhbayar Batmunkh Totals			Invoices	1		$
Vendor Gabriel Carreon									

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

VILLAGE OF PALATINE

Warrant #1

Invoice Due Date Range 06/01/22 - 07/19
Report By Vendor - Invc
Summary List

Invoice Number	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Net Am
2022-00000531	Ticket # P1168-000102 ws Paid Twice	Open		06/22/2022	07/05/2022	06/22/2022			5
			Vendor **Gabriel Carreon** Totals			Invoices	1		$5
Vendor **Hector Heraz**									
2022-00000526	Ticket # C1161-000276 was paid twice	Open		06/22/2022	07/05/2022	06/22/2022			5
			Vendor **Hector Heraz** Totals			Invoices	1		$5
Vendor **Craig Herriges**									
2022-00000521	Ambulance Fee Refund	Open		06/17/2022	06/17/2022	06/17/2022			55
			Vendor **Craig Herriges** Totals			Invoices	1		$55
Vendor **Mariann Leahy**									
2022-00000541	sign refund/ 60 W Illinois / 22-22	Open		06/24/2022	06/24/2022	06/24/2022			25
			Vendor **Mariann Leahy** Totals			Invoices	1		$25
Vendor **Olga Pavlova**									
2022-00000529	Ticket # P1034-000153 was Paid Twice	Open		06/22/2022	07/05/2022	06/22/2022			5
			Vendor **Olga Pavlova** Totals			Invoices	1		$5
Vendor **Pita Pita**									
2022-00000527	Refund - Duplicate March 2022 Payment	Open		06/22/2022	06/22/2022	06/22/2022			82
			Vendor **Pita Pita** Totals			Invoices	1		$82
Vendor **Rachel Rabey**									
2022-00000530	Ticket # P1144-000216 was Paid Twice	Open		06/22/2022	07/05/2022	06/22/2022			5
			Vendor **Rachel Rabey** Totals			Invoices	1		$5
Vendor **Lisa Rodriguez**									
2022-00000525	Admin Tow Refund - All Charges Stricken Off Leave to Reinstate	Open		06/15/2022	07/05/2022	06/22/2022			50
			Vendor **Lisa Rodriguez** Totals			Invoices	1		$50
Vendor **Alice Viera**									
2022-00000553	VS #31197 New Resident	Open		06/29/2022	06/29/2022	06/29/2022			3
			Vendor **Alice Viera** Totals			Invoices	1		$3
			Grand Totals			Invoices	153		$1,543,7

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

VILLAGE OF PALATINE

Warrant #3 EFT

Payment Date Range 06/24/22 - 06/2
Report By Vendor - Inv
Summary Lis

Invoice Number	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Net An
Vendor 2048 - Quadient Finance USA, Inc									
2022-00000540	Village Wide Postage for Postage Machine	Paid by EFT #6524		06/23/2022	06/24/2022	06/24/2022		06/24/2022	3,0
			Vendor 2048 - Quadient Finance USA, Inc Totals			Invoices	1		$3,0
			Grand Totals			Invoices	1		$3,0

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

VILLAGE OF PALATINE

Warrant #13 Reissue

Payment Date Range 06/23/22 - 06/23
Report By Vendor - Invc
Summary List

Invoice Number	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Net Amc
Vendor 5176 - Graylog, Inc									
5248	Graylog License	Paid by EFT #6523		05/02/2022	05/02/2022	05/02/2022		06/23/2022	7,50(
			Vendor 5176 - Graylog, Inc Totals			Invoices	1		$7,50(
				Grand Totals		Invoices	1		$7,50(

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

Village of Palatine

Payment Batch Register

Bank Account: AP - Accounts Payable ZBA
Batch Date: 06/17/2022

Type	Date	Number	Source	Payee Name	EFT Bank/Account			Transaction Amount
Bank Account: AP - Accounts Payable ZBA								
Check	06/17/2022	260107	Utility Management Refund	RENINGER , PAUL				55.50
	Account Type			Account Number	Transaction Date	Transaction Type		
	Residential - Single Family			405065002-001	06/13/2022	Refund		
Check	06/17/2022	260108	Utility Management Refund	SEILING , JERRY				241.02
	Account Type			Account Number	Transaction Date	Transaction Type		
	Residential - Single Family			100162001-001	06/13/2022	Refund		
Check	06/17/2022	260109	Utility Management Refund	SHERWIN , BRIAN				47.50
	Account Type			Account Number	Transaction Date	Transaction Type		
	Residential - Single Family			302999004-006	06/14/2022	Refund		
Check	06/17/2022	260110	Utility Management Refund	SINCLAIR , TYLER				40.00
	Account Type			Account Number	Transaction Date	Transaction Type		
	Residential - Single Family			101024002-010	06/13/2022	Refund		
Check	06/17/2022	260111	Utility Management Refund	TAYLOR , RICHARD				419.06
	Account Type			Account Number	Transaction Date	Transaction Type		
Check	06/17/2022	260112	Utility Management Refund	THON , RONALD				87.50
	Account Type			Account Number	Transaction Date	Transaction Type		
	Residential - Single Family			305903502-001	06/13/2022	Refund		
Check	06/17/2022	260113	Utility Management Refund	WEX , LEE				5.94
	Account Type			Account Number	Transaction Date	Transaction Type		
	Residential - Single Family			462816502-005	06/13/2022	Refund		
AP Accounts Payable ZBA Totals:				Transactions: 7				$896.52
	Checks:	7	$896.52					

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

Village of Palatine

Payment Batch Register

Bank Account: AP - Accounts Payable ZBA
Batch Date: 06/24/2022

Type	Date	Number	Source	Payee Name	EFT Bank/Account			Transaction Amount
Bank Account: AP - Accounts Payable ZBA								
Check	06/24/2022	260114	Utility Management Refund	CLESLE , JASON A				8.84
	Account Type			Account Number	Transaction Date	Transaction Type		
Check	06/24/2022	260115	Utility Management Refund	IYNOOLKHAN , YOUNUSKHAN				11.60
	Account Type			Account Number	Transaction Date	Transaction Type		
Check	06/24/2022	260116	Utility Management Refund	POLYAKOVA , EKATERINA				246.52
	Account Type			Account Number	Transaction Date	Transaction Type		
AP Accounts Payable ZBA Totals:				Transactions: 3				$266.96
	Checks:	3	$266.96					

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

Village of Palatine

Payment Batch Register

Bank Account: AP - Accounts Payable ZBA
Batch Date: 06/30/2022

Type	Date	Number	Source	Payee Name	EFT Bank/Account	Transaction Amount
Bank Account: AP - Accounts Payable ZBA						
Check	06/30/2022	260117	Utility Management Refund	FAREJOWICZ , RYSZARD		18.73

Account Type	Account Number	Transaction Date	Transaction Type

AP Accounts Payable ZBA Totals:	Transactions: 1		$18.73
Checks:	1	$18.73	

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

Attachment: Warrant #13 2022 (Warrant Authorization - July 5, 2022 (CA))

Consider a Motion Granting a Waiver of the Village's Sound Amplification Ordinance, the Temporary Closure of a Portion of Bothwell Street, and a Temporary Amendment to Lamplighter's Licensed Premises All in Conjunction with the Proposed 'Pipes for Pits' Event on August 7, 2022 at Lamplighter Inn, 60 N. Bothwell Street

BACKGROUND:
Bomb Shell Bullies (Bully Breed Rescue) is partnering with Lamplighters Inn, 60 N. Bothwell, for the 'Pipes for Pits' event on Sunday, August 7, 2022. To proceed with the proposed event, the Petitioners are requesting approval of the following:

- **Waiver of the Village's Sound Amplification Ordinance;**
- **Temporary Closure of a Portion of Bothwell Street; and**
- **Temporary amendment to the licensed premises of Lamplighter Inn's existing Liquor License all to allow for the 'Pipes for Pits' event on Sunday, August 7, 2022 (from 4 to 7 PM).**

KEY ISSUES:
- The proposed event would be held from 4 to 7 PM on Sunday, August 7, 2022 on the east side of Lamplighter Inn (within Bothwell Street, between Wilson and Station Streets). The closure of Bothwell Street would occur from approximately 2 to 8:00 PM on Sunday, August 7.

- The proposed event will include one food truck, amplified sound from an acoustic music player using one speaker and a microphone, and alcohol sales by Lamplighter Inn.

- The Council has previously approved this event, in 2021, at Lamplighter Inn.

ALTERNATIVES:

1. Approve the waiver of the Village's Sound Amplification Ordinance, temporary closure of a portion of Bothwell Street, and temporary amendment to the licensed premises of Lamplighter Inn's existing Liquor License all to allow for the 'Pipes for Pits' event on Sunday, August 7, 2022.

2. Do not approve the waiver of the Village's Sound Amplification Ordinance, temporary closure of a portion of Bothwell Street, and temporary amendment to the licensed premises of Lamplighter Inn's existing Liquor License all to allow for the 'Pipes for Pits' event on Sunday, August 7, 2022.

RECOMMENDATION:
Staff recommends action at the Village Council’s discretion.

ACTION REQUIRED:
A motion to approve the waiver of the Village's Sound Amplification Ordinance, temporary closure of a portion of Bothwell Street, and temporary amendment to the

licensed premises of Lamplighter Inn's existing Liquor License all to allow for the 'Pipes for Pits' event on Sunday, August 7, 2022.

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Consider an Ordinance Granting a Variation for Lot Coverage to Permit a Rear Yard Patio at 32 S. Kerwood Street

BACKGROUND:
The Petitioner is proposing to replace an existing crushed-gravel patio with a smaller concrete patio in the rear yard of the Subject Property. The proposed patio will add approximately 331 square feet to the total existing lot coverage, bringing the total lot coverage from 48% up to approximately 54%. Therefore, the Petitioner is requesting:

> **Variation to permit lot coverage to be 54%, instead of the maximum permitted 45%.**

KEY ISSUES:

- The Subject Property's existing lot size is nonconforming in lot area and is 26% smaller than the current minimum required 9,000 square feet. The surrounding lots in this subdivision are of comparable size and most of the homes have rear yard patio areas.

- In addition to the home, the property contains a 490 square foot detached garage. The existing lot coverage is approximately 48% (3,200 square feet) which exceeds the maximum 45% lot coverage by 207 square feet.

- The Petitioner is proposing to replace the existing crushed gravel patio in the rear yard of Subject Property with a concrete patio. The new patio will add approximately 331 square feet to the total existing lot coverage, bringing the total proposed lot coverage to approximately 54% (3,531 square feet). However, the proposed patio will have a smaller overall footprint than the existing gravel patio. A portion of the proposed patio also serves as a sidewalk to the driveway/detached garage.

- The Code requires a standard Variation to permit an increase in the lot coverage to 54% (3,531 square feet) instead of the maximum 45% (2,993 square feet), which is a difference of 538 square feet.

ALTERNATIVES:

1. Approve the Variation for lot coverage to permit a rear yard patio.
2. Do not approve the Variation for lot coverage to permit a rear yard patio.

RECOMMENDATION:

Public Hearing**:**	ZBA meeting on June 28, 2022
Residents testifying:	None.
Vote:	The ZBA voted unanimously approve a Lot Coverage Variation, and Staff concurs.

ACTION REQUIRED:
A motion to approve the ordinance granting Variation for lot coverage to permit a rear yard patio at 32 S. Kerwood Street.

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Consider an Ordinance Granting a Special Use for a Fence to be Located in the Side Yard Abutting a Street and Abutting the Side Lot Line of an Adjacent Front Yard at 1070 N. Cardinal Drive

BACKGROUND:
The Petitioners are proposing to replace an existing 4-foot fence with a 6-foot solid vinyl fence in the same location, approximately 10 feet from the side yard lot line abutting Olde Virginia Road. Therefore, the Petitioners are requesting approval of the following:

> **Special Use to permit a fence in the side yard abutting a street where the side lot line of said yard abuts the side lot line of the front yard of an adjacent lot.**

KEY ISSUES:

- The proposed fence will remain setback 10 feet from the side property line abutting Olde Virginia Road. Although it is not required by the Zoning Ordinance, there is existing landscaping that will remain and be maintained between the fence and the property line.

- The proposed fence will abut the 20 foot front yard of 1070 E. Olde Virginia Road (adjacent lot to the north). With the proposed 10-foot setback, there should be little impact to the driveway visibility of the adjacent lot on Olde Virginia Road.

- The property directly across Cardinal Drive from the Subject Property, 1071 E. Cardinal Drive, has an existing non-conforming 6-foot solid fence that is setback approximately 13 feet from the side lot line abutting Olde Virginia Road.

- The Petitioners have received letters of consent from all four directly adjacent property owners within a one property radius.

ALTERNATIVES:

1. Approve the Special Use for a fence in the side yard abutting a street.
2. Do not approve the Special Use for a fence in the side yard abutting a street.

RECOMMENDATION:

Public Hearing**:**	ZBA meeting on June 28, 2022
Residents testifying:	None.
Vote:	The ZBA voted unanimously approve a Special Use to permit a fence in the side yard abutting a street and Staff concurs.

ACTION REQUIRED:
A motion to approve the ordinance granting a Special Use for a fence in the side yard abutting a street at 1070 N. Cardinal Drive.

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Consider an Ordinance Granting a Variation for Lot Coverage to Permit a Rear Yard Deck at 110 N. Benton Street

BACKGROUND:
The Petitioners are proposing to replace and reconfigure an existing deck off the rear of the residence. A variation was previously granted to allow the existing deck to exceed the current maximum lot coverage by 11%. The proposed deck will add approximately 20 square feet to the total lot coverage and will maintain the existing setbacks. Therefore, the Petitioners are requesting:

Variation to permit the lot coverage to be 58%, instead of the maximum permitted 45%

KEY ISSUES:
- The Subject Property is substandard in lot area at approximately 4,356 square feet in size.

- The Subject Property contains a 498 square foot detached garage and an approximately 220 square foot existing deck. The current lot coverage is approximately 57% (2,499 square feet), which exceeds the maximum 45% lot coverage by roughly 540 square feet.

- The Petitioner is proposing to replace and reconfigure the deck of the rear of the home which will add approximately 20 square feet to the overall lot coverage. The deck was originally granted setback relief in 1996 to permit a 5.1-foot setback from the rear lot line (O-203-96), per the submitted Site Plan this setback will be maintained.

ALTERNATIVES:

1. Approve the Variation for lot coverage to permit a rear yard deck.
2. Do not approve the Variation for lot coverage to permit a rear yard deck.

RECOMMENDATION:

Public Hearing**:**	ZBA meeting on June 28, 2022
Residents testifying:	None.
Vote:	The ZBA voted unanimously approve a Lot Coverage Variation and Staff concurs.

ACTION REQUIRED:
A motion to approve the ordinance granting Variation for lot coverage to permit a rear yard deck at 110 N. Benton Street.

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Consider an Ordinance Granting a Special Use to Permit an Indoor Sports and Recreational Facility (Kid's Empire) at 619 E. Dundee Road

BACKGROUND:
The Petitioners are proposing to open an indoor play center, under the franchise name “Kid's Empire”. Therefore, they are requesting approval of the following:

Special Use to permit an indoor sports and recreation facility.

KEY ISSUES:

- Kids Empire is an indoor playground chain, with multiple locations across the country, currently 4 locations in the Chicago area. Deer Grove Centre is zoned Planned Development and follows the B-2 use list.
- The tenant space is approximately 10,584 square feet and is currently vacant. It is located between Hobby Lobby and Petco in the shopping center.
- The proposed hours of operation are identified below, with peak hours occurring Monday - Friday 4 PM - 8 PM and Saturday and Sundays 2 PM - 6 PM:
    - Monday - Thursday 10 AM - 8 PM
    - Friday - Sunday 10 AM - 10 PM
- The business plan indicates 5-7 employees per shift, with an average occupancy of 142 guests and an approximate parent/child ratio of 90 parents and 52 children.
- Including Kids Empire, there are 23 excess parking spaces within the shopping center.

ALTERNATIVES:
1. Approve the Special Use to Permit an Indoor Sports and Recreational Facility.
2. Do not approve the Special Use to Permit an Indoor Sports and Recreational Facility.

RECOMMENDATION:

Public Hearing**:**	ZBA meeting on June 28, 2022
Residents testifying:	None.
Vote:	The ZBA voted unanimously approve a Special Use to Permit an Indoor Sports and Recreational Facility and Staff concurs.

ACTION REQUIRED:
A motion to approve the ordinance granting Special Use to Permit an Indoor Sports and Recreational Facility at 619 E. Dundee Road.

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Consider an Ordinance Approving a Special Use Transfer to Permit the Continued Operation of a Service Station and Mart at 1228 E. Dundee Road

BACKGROUND:
The Special Use for a service station, automobile laundry, and food mart was originally approved in 1986. Casey's is requesting to acquire the business and is therefore requesting approval of the following:

- Transfer of Special Use #O-124-86 to permit the continued operation of service station, automobile laundry, and food mart at 1228 E. Dundee Road.

KEY ISSUES:

- The Subject Property, zoned B-2 General Business District, contains an existing service station, automobile laundry, and food mart (Bucky's Mobil). The Special Use was initially approved in September 1986 (Ordinance #O-124-86), transferred in December of 2015 (O-162-15), and transferred in February 2019 (O-012-19).

- Other than the ownership change, the Petitioner is not proposing any other changes. The gas station will operate as a Casey's.

- Any changes to the floor plan or business operations would require additional Village review. Staff also advised the Petitioner about the temporary sign regulations, as part of the Special Use transfer application process.

ALTERNATIVES:

1. Recommend approval of the Special Use Transfer.
2. Do not recommend approval of the Special Use Transfer.

RECOMMENDATION:
Staff recommends approval of the Special Use Transfer at 1228 E. Dundee Road.

ACTION REQUIRED:
A motion to approve the Special Use Transfer of Ordinance # O-124-86 to Casey's Retail Company (Casey's #6419) to permit the continued operation of a service station, automobile laundry and food mart at 1228 E. Dundee Road.

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Consider Ordinances and a Resolution Granting Preliminary & Final Planned Development, Preliminary & Final Plat of Subdivision, and Rezoning to Planned Development for the Properties Located at 2240-2296 N. Rand Road

BACKGROUND:

The Missner Group intends to consolidate 7 existing properties into one lot and develop a new warehouse/distribution or light manufacturing use, with associated office uses. Therefore, the Petitioner is requesting approval of the following:

1. **Preliminary & Final Planned Development;**
2. **Preliminary & Final Plat of Subdivision to permit a 145,000 square foot warehouse/distribution/light manufacturing/assembly building; and**
3. **Rezoning from B-5 to Planned Development.**

- The approximately 145,000 square foot building is being developed speculatively, within the anticipated tenancy identified above. As part of the Planned Development conditions, Staff is requiring that a specific business plan is submitted for each tenant to ensure compliance with the identified underlying B-5 uses lists, with the expanded uses to include warehousing, distribution, and light manufacturing/assembly.

- The proposed architecture includes pre-cast concrete panels, metal coping panels, and a combination of vision and spandrel/tempered glass. The architecture is comparable to other recently approved buildings in the Village, such as Midwest Industrial Funds (Weber property) and LPC (Algonquin Road).

- A Traffic Impact Study (TIS) was submitted as part of the Planned Development application materials. The TIS indicates that there is both sufficient capacity for the anticipated proposed traffic, and the Rand Road access systems are adequate to accommodate the traffic and will ensure that flexible access is provided. The northern access will be right-in/right-out and the southern access will provide full access to the site.

- The proposed site plan includes 156 parking spaces (including 16 future parking spaces on the north side of the building). The site plan anticipates 10% of the building could be occupied with office uses, with the remaining 90% utilized for warehouse/distribution. The following table summarizes the potentially required and provided parking for the site:

	Required parking	**Provided parking**	**Additional parking provided, if required by the Village**
Office - 10% (14,540)	**1/300 square feet 48 spaces**		

Warehouse- 90% (130,867)	**1/1,000 square feet 131 spaces**		
Total parking spaces	**179 spaces**	**140 spaces, included; 16 future parking spaces on the north side of the building=156 parking spaces.**	**30 parking spaces, within the trailer parking stall area on the west side of the building = 186 parking spaces total.**

- Through the review process, Staff directed the Petitioner to identify additional parking spaces to be added, within the trailer parking area. While Staff is initially comfortable with the provided parking, we are also recommending a condition to implement additional parking, at the direction of the Village, if the tenant composition or parking demand increases.

ALTERNATIVES:

1. Approve the Preliminary and Final Planned Development, Final Subdivision, and Rezoning from B-5 to Planned Development, for the proposed Missner Group development.

2. Do not approve the Preliminary and Final Planned Development, Final Subdivision, and Rezoning from B-5 to Planned Development, for the proposed Missner Group development.

RECOMMENDATION:

Public Hearing:	Plan Commission - June 21, 2022
Residents testifying:	0
Vote:	The Plan Commission voted 4-1 to approve the requested Preliminary and Final Planned Development, Preliminary and Final Plat of Subdivision, and Rezoning from B-5 to Planned Development and Staff concurs.

ACTION REQUIRED:

A motion to approve the Preliminary and Final Planned Development, Preliminary and Final Plat of Subdivision, and Rezoning from B-5 to Planned Development at 2240-2296 N. Rand Road.

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Consider a Resolution of Support for the Filing of a 6B Cook County Tax Classification Application for the Property Located at 2240-2296 N. Rand Road

BACKGROUND:
One of the economic development tools available to communities within Cook County is the 6B Tax Classification program. This program is designed to encourage industrial/manufacturing development through the reduction of a property's tax assessment over a twelve-year period. In conjunction with an application for the program, a resolution of support is required from the municipality in which the property is located. Therefore, the Petitioner is seeking approval of the following:

> **Resolution of support for the filing of a 6B Cook County Tax Classification application for the property located at 2240-2296 N. Rand Road**

KEY ISSUES:

- The Petitioner, TMG Acquisition Disposition I, LLC is seeking to redevelop the approximately 8.86 acre site at 2240-2296 N. Rand Road.
- The Petitioner is proposing to redevelop the property with a new industrial/warehouse building totaling approximately 145,000 square feet. The Petitioner anticipates the proposed redevelopment will result in a total investment of nearly $20,000,000.
- Following completion of the proposed redevelopment, the Subject Property is projected to have a market value of approximately $19,500,000, which would generate an estimated $8,455,000 in total taxes over the life of the Class 6b Tax Incentive (or approximately $626,000 per year).
- The Cook County 6B Tax Classification is used for property tax relief for industrial/manufacturing uses. Properties are assessed at 10% of market value for the first 10 years, 15% for the 11th year, and 20% in the 12th year. In absence of this incentive, the property would normally be assessed at 25% of its market value.

ALTERNATIVES:

1. Recommend approval of the Resolution.
2. Do not recommend approval of the Resolution.

RECOMMENDATION:
Staff recommends approval of the Resolution.

ACTION REQUIRED:
Motion to approve a Resolution for support for the filing of a 6b Cook County Tax Classification for the property located at 2240-2296 N. Rand Road.

RESULT:	**ADOPTED BY ROLL CALL BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Motion to Approve an Ordinance Granting Site Plan Review for the Proposed Redevelopment of the Property at 301 W. Johnson Street

BACKGROUND:
The Subject Property is the former location of Kinsch Florist and Garden Center. The developer and contract purchaser, Northpointe Development Corporation, intend to acquire and redevelop the property into 58 residential units contained, within a single building. The Subject Property is presently zoned R-3 Multi-Family District and the proposed development complies with all of the R-3 District's underlying zoning requirements and bulk standards. Therefore, the Petitioner is requesting approval of the following:

Site Plan Review approval to allow for the development of a 58-unit residential building

KEY ISSUES:

- The Subject property is 4.96 acres and presently zoned R-3 Multi-family residential. It is also located within the boundaries for Downtown Land Use Guide, Downtown Design Guidelines, and the 2015 TOD Plan. Kinsch Florist and Garden Center previously operated from this location for many years, within a Special Use. Kinsch Florist relocated and the site was cleared and subsequently listed for sale.

- Northpointe Development Corporation plans to redevelop the site into a three-story, 58-unit building, with associated parking lot. The units along Johnson Street are proposed as two-story walk-up townhome-style apartments, with four units. The balance of the building moving south will be three stories and contain the remaining 54-units. The parking provided consists of both garage parking and surface parking spaces. The Zoning Ordinance requires a minimum of 2 spaces/unit and 2.25 spaces/unit with garages. The table below summarizes the bedroom distribution and parking for the units in the building:

Number of bedrooms	Number of units	Surface parking spaces	Garage parking spaces
One	**24**		
Two	**19**		
Three	**15 (4 units within the 2-story portion facing Johnson Street)**		
TOTAL	**58 units**	**69 spaces**	**54 spaces = 123 spaces (2.12/unit)**

- The proposed building complies with all the required R-3 setbacks and those identified within the Downtown Design Guidelines (Area “A”). The proposed unit count and bedroom distribution also exceed the minimum required Lot Area/

Dwelling unit for multi-family dwellings within the R-3 district. The minimum lot area required is 3.93 acres and the total property size is 4.96 acres.

- The proposed building and parking are located northeast of the creek and no improvements are proposed on the west side of the creek. This area of the property is a required component to satisfy the minimum lot area/dwelling unit and would require a significant variation, which Staff would not support, if ever proposed to develop in the future. To memorialize this buffer, Staff and the developer have discussed placing a conservation easement on this portion of the property. This is a condition of the proposed Ordinance.

- Access to the site is provided through one ingress/egress point on the west side of the building. The building will be fully sprinklered and the developer has provided the necessary auto-turn information to the Fire Marshal to satisfy the requirements.

- The architecture and proposed building materials, consist of brick, composite trim and lap siding, and vinyl windows, and comply with the Downtown Design Guidelines. It is also directly comparable to the other residential developments within the Downtown.

- Stormwater would be managed within a dry basin on the southwest corner of the property and adjacent to the creek. The proposed plans would not impact the floodplain in the area and the Village Engineer has conditionally reviewed the initial plans, without identifying any specific concerns.

- As required, the developer submitted and revised a Traffic Impact Study (TIS) for the proposed development. The TIS indicates that there is capacity within the existing street system for the development and further determined that the traffic generated will increase the traffic within the study area by less than 4%.

- The building's full-access drive will operate at a "good level of service" and the pick-up/drop-off activities at Paddock School are contained within Washington Court and will have "…a limited impact upon the accessibility of the site."

ALTERNATIVES:

1. Approve an ordinance granting site plan approval to allow for the development of a new 58-unit residential building at 301 W. Johnson Street.
2. Do not approve an ordinance granting site plan approval to allow for the development of a new 58-unit residential building at 301 W. Johnson Street.

RECOMMENDATION:
Staff recommends approval of the Site Plan Review Ordinance to allow a 58-unit residential building at 301 W. Johnson Street.

ACTION REQUIRED:

A motion to approve the ordinance granting Site Plan Review approval for the 58-unit residential development at 301 W. Johnson Street.

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Consider an Ordinance Amending Section 18-81 of the Code of Ordinances to Add a No Parking Restriction on South Rose Street from Kenilworth Avenue to a Point 250 Feet North

BACKGROUND:
At the June 2022 Traffic Engineering Committee meeting, the group examined a parking concern from residents and Staff. The section of South Rose Street from Kenilworth Avenue to the creek has become a drop-off/pickup location for students attending Stuart R. Paddock Elementary School. This has resulted in traffic congestion not only for the residents in the area, but for the parents/guardians dropping off children.

KEY ISSUES:
- The Police Department and Public Works staff have observed the area and have concluded that a parking restriction would best ease this issue.
- Restricting parking for the east side of the roadway is considered preferable as the lot frontage for the one lot which would now have prohibited parking would have parking available on Kenilworth Avenue.
- The Traffic Engineering Committee is in agreement with the proposed restriction.
- The area has high pedestrian and bicycle traffic on the sidewalk due to the proximity to the school and an informal drop off and pick up use in the area.

ALTERNATIVES:
1. Prohibit parking on the east side of South Rose Street from Kenilworth Avenue to a point 250 feet north when school is in session.
2. Refer back to Staff with comments.

RECOMMENDATION:
Staff recommends the no parking restriction be added to the Village Code.

ACTION REQUIRED:
Motion to approve an ordinance amending Section 18-81 of the Code of Ordinances to add a no parking restriction “on the east side of South Rose Street from Kenilworth Avenue to a point 250 feet north, when school is in session”.

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Consider an Ordinance Amending Section 18-66 of the Palatine Code of Ordinances to Add No Left Turns from Westbound Johnson Street to Southbound Washington Court

BACKGROUND:
The Traffic Engineering Committee examined a safety concern raised by residents, Community Consolidated School District 15, the Police Department, and Village staff regarding traffic issues near Stuart R. Paddock Elementary School.

KEY ISSUES:
- Over the last several years, the number of private passenger vehicles dropping children off at the local schools had increased.
- The increase in traffic has led to greater confusion and uncertainty for drivers in the area with several turning movements at an offset intersection during a period of high congestion.
- On several occasions, the queue to drop off students has backed up on to Cedar Street and caused bus traffic to back up on to both Johnson and Rose Streets, and on a few extreme occasions on to Palatine Road.
- This has also resulted in traffic trying to bypass the area by entering into the oncoming lane.
- This is creating a safety hazard for all the traveling public, especially students that are walking to school.
- The Police Department, Village staff, and School District 15 have worked on a compromise to have all bus traffic enter the area from westbound on Johnson Street and turn south on Washington Court to enter the school. Left turns would be prohibited for all other vehicles.
- This turn restriction would help direct the private passenger vehicles by avoiding confusion with both the school bus traffic and the walking public.

ALTERNATIVES:
1. Prohibit left turns during the morning peak travel period.
2. Refer back to Staff with comments.

RECOMMENDATION:
The Traffic Engineering Committee recommends the no left turn prohibition be added to the Village Code.

ACTION REQUIRED:
Motion to approve an ordinance amending Section 18-66 of the Palatine Code of Ordinances by adding a prohibition for left turns “from westbound Johnson Street to southbound Washington Court between the hours of 7:00 to 9:00 a.m., Monday through Friday (except for buses)”.

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Consider an Ordinance Amending Section 18-66 of the Palatine Code of Ordinances to Modify the No Left Turns for Eastbound Farm Gate Lane into the Lincoln Elementary School Parking Lot

BACKGROUND:
In February 2022, Community Consolidated School District 15 amended the start times for all the schools in the district. This, in turn, raised the issue of the many turn restrictions in place for school start and end times. The Traffic Engineering Committee asked both the Police Department and the Public Works Department to evaluate the turn restrictions at the schools for conformance with the newly adopted start and end times.

KEY ISSUES:
- All of the schools were observed and the corresponding turn restriction times evaluated.
- Only one location was determined to be out of sync with the newly adopted times.
- The current times for the no left turn restriction on Farm Gate Lane are 8:00 a.m. to 9:00 a.m., Monday to Friday. In order to accommodate school bus traffic for the new school start times, the restriction time should be extended by 30 minutes.
- The new times for the no left turn on Farm Gate Lane would be 8:00 a.m. to 9:30 a.m., Monday through Friday.

ALTERNATIVES:
1. Prohibit left turns during the morning peak travel period.
2. Refer back to Staff with comments.

RECOMMENDATION:
Staff recommends the existing no left turn prohibition times be modified and added to the Village Code.

ACTION REQUIRED:
Motion to approve an ordinance amending Section 18-66 of the Palatine Code of Ordinances by modifying the prohibition for left turns “from eastbound Farm Gate Lane into the Lincoln Elementary School parking lot between the hours of 8:00 to 9:30 a.m., Monday through Friday”.

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Consider a Motion Authorizing the Village Manager to Execute Amendment 1 to the Pole Replacement Agreement with Verizon Wireless

BACKGROUND:
On April 1, 2019, the Village Council approved amendments to Chapter 20 of the Village's Code of Ordinances to incorporate the Small Wireless Facilities Deployment Act ("SWFDA"). The update included regulations and restrictions related to small cell facilities, distributed antenna systems, and other personal wireless telecommunication facility installations in the public right-of-way. Small cell facilities are now allowed to be installed on Commonwealth Edison and Village-owned street lights. A Pole Replacement Maintenance and License Agreement with Verizon Wireless was approved at the Village Council meeting of September 3, 2019.

KEY ISSUES:

- Verizon Wireless has approached the Village to amend the Pole Replacement Maintenance and License Agreement.
- The amendment seeks to add six additional street light pole designs to the current Exhibit A.
- This agreement runs concurrently with the Small Wireless Communications Facilities Master License Agreement, which allows Verizon to install equipment on Village-owned poles.
- All other terms and conditions of the Agreement would remain unchanged.

ALTERNATIVES:

1. Authorize the Village Manager to execute Amendment 1 to the Pole Replacement Maintenance and License Agreement with Verizon Wireless.
2. Refer back to Staff with comments.

RECOMMENDATION:
Staff recommends authorizing the Village Manager to execute Amendment 1 to the Pole Replacement Maintenance and License Agreement with Verizon Wireless.

ACTION REQUIRED:
Motion to authorize the Village Manager to execute Amendment 1 to the Pole Replacement Maintenance and License Agreement with Verizon Wireless substantially conforming to the attached and subject to review by the Village Attorney.

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Consider a Motion Authorizing the Village Manager to Execute Amendment 3 to the Agreement for Use of the Rights-of-Way with Verizon Access/MCImetro

BACKGROUND:
An agreement for use of right-of-way with Verizon, through its wholly owned subsidiary MCImetro Access Transmission Services Corporation (d/b/a Verizon Access Transmission Services), was approved at the Village Council meeting of May 11, 2020. Verizon Access/MCImetro ROW Agreement Amendment 1 was approved at the Village Council meeting of February 16, 2021 and Amendment 2 was approved at the Village Council meeting of September 20, 2021. MCImetro Access has requested an additional amendment to the Agreement.

WOW Internet, Cable and Phone constructed a fiber optic network in the early 2000's and was previously licensed by the Village to own and maintain these facilities. Verizon purchased the facilities located within the Village rights-of-way and seeks to maintain and expand the network.

KEY ISSUES:
- MCImetro Access Transmission Services has approached the Village to again amend the Agreement for Use of Right-of-Way.
- This third amendment seeks to replace the current Exhibit B (a map of MCImetro's planned fiber routes) with an updated Exhibit B which includes expanding aerial facilities by over 13 miles and buried facilities by more than 35 miles.
- This amendment is expected to address Verizon's business needs for at least 18 months.
- The expansion of the Verizon network is designed to provide better, more reliable coverage for Palatine's residents and businesses, not to mention better coverage for first responders. This amendment entails the fiber expansion currently released by Verizon to build. Some of the permitted-for fiber runs connecting two other runs already in ground, while other runs are expansions of previous runs. While no other fiber runs are being studied for release in Palatine currently, this is subject to change since the very nature of fiber demand is dynamic.
- All other terms and conditions of the Agreement remain unchanged.

ALTERNATIVES:

1. Authorize the Village Manager to execute Amendment 3 to the Agreement for Use of Right-of-Way with MCImetro.
2. Refer back to Staff with comments.

RECOMMENDATION:
It is recommended the Village Manager be authorized to execute Amendment 3 to the Agreement for Use of Right-of-Way with MCImetro as MCImetro Access Transmission Services corporation has been certified by the Illinois Commerce Commission to provide telecommunication services by the Public Utilities Act.

ACTION REQUIRED:

Motion to authorize the Village Manger to execute Amendment 3 to the Agreement for Use of Right-of-Way with MCImetro Access Transmission Services substantially conforming to the attached and subject to review by the Village Attorney.

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Consideration of a Motion Approving an Intergovernmental Agreement (IGA) with Harper College for the Storage of a Bike Sharing Rack, Within the Train Station Parking Lot

BACKGROUND:
Harper College initiated a Transportation and Infrastructure Partnership, with multiple regional partners including IDOT, CMAP, PACE, and other surrounding municipalities and townships, including the Village. One of the initial items contemplated was a review of the various types of student access to campus. To that end, Harper engaged a bike-sharing service ("Koloni") to provide a campus location and requested that the Village partner for a second downtown location.

KEY ISSUES:

- Harper College invited the Village to participate in its Transportation and Infrastructure Partnership forum. In addition to reviewing and identifying shared assets and goals, Harper is also reviewing how students travel to and access campus resources. As an outcome of this discussion, Harper partnered with Koloni to provide a bike-sharing service on campus and identified the Village as a partner to provide another Downtown location for a second bike sharing rack. Depending upon the route, the bike rack location is approximately 3.8 miles from Harper.

- Harper is responsible for all of the initial pilot program costs but requested Village assistance with a second bike rack location, proximate to the train station. The Village identified an area within the train station (Lot “B”) parking lot to locate a bike-sharing rack with up to 5 bikes. Koloni is responsible for providing the bikes, all payments through their app, and any maintenance responsibilities for the bikes and equipment. The IGA indemnifies the Village from any damages or liabilities from the bike sharing rack. The initial pilot program lasts through November 2022.

ALTERNATIVES:

1. Approve the intergovernmental agreement with Harper College to allow for the pilot program placement of a bicycle rack in Parking Lot B.

2. Do not approve the intergovernmental agreement with Harper College to allow for the pilot program placement of a bicycle rack in Parking Lot B.

RECOMMENDATION:
Staff recommends approval of the Intergovernmental Agreement to be executed in a manner acceptable to the Village Attorney.

ACTION REQUIRED:
A motion to approve the intergovernmental agreement between the Village of Palatine and Harper College for the storage of a bike-share rack in the train station parking lot.

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Consider an Ordinance Amending Chapter 2 of the Code of Ordinances of the Village of Palatine Related to the Sale of Real Estate

BACKGROUND:
Last year, the Village amended the section of the Code of Ordinances related to the acquisition and sale of real estate along with other administrative matters. The language related to the sale of Village-owned property in the Code of Ordinances at the time was verbatim out of state statutes and thus eliminated from our Code thus defaulting us to the statutes.

KEY ISSUES:
Upon further review of the statutes, the requirements to make multiple publications in a newspaper does not reflect the current practices and trends in real estate. As a Home Rule unit of government, we have an ability to exercise our discretion in areas such as this.

The proposed amendment to the Code would allow the Village Manager to pursue a variety of methods to dispose of Village real estate as well as publish the property on the Village's website for a minimum of two weeks. Anything within a Tax Increment Financing District would still need to follow the Notice of Development Opportunity process.

The Council would still be required to have a 3/4 majority vote to dispose of the property, as was the previous requirement.

ALTERNATIVES:

1. Approve amendment to Chapter 2 allowing Village discretion in disposal of property.
2. Do not approve an amendment and adhere to state statutes.

RECOMMENDATION:
Staff recommends approval of an ordinance amending Chapter 2 of the Code of Ordinances.

ACTION REQUIRED:
A motion to approve an ordinance amending Chapter 2 of the Code of Ordinances.

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Consider a Motion to Approve an Intergovernmental Agreement with the City of Evanston for the Use and Maintenance of Two Motorcycles

BACKGROUND:
Two Palatine Police Officers are scheduled for a two-week motorcycle training class that requires the use of gasoline powered motorcycles. The Palatine Police motorcycles are 100% electric and are unable to be used for the training class. The City of Evanston has agreed to loan the Village of Palatine Police Department two Harley Davidson motorcycles for the duration of the training course.

KEY ISSUES:
As the course requires the use of gasoline powered motorcycles, the City of Evanston has agreed to allow Palatine to use their motorcycles subject to approval of an Intergovernmental Agreement that indemnifies Evanston and agrees to cover all operating costs and any repairs caused by our use.

ALTERNATIVES:

1. Approve the motion to enter into an Intergovernmental Agreement with the City of Evanston.
2. Refer back to Staff with comments.

RECOMMENDATION:
Staff recommends approval of the motion.

ACTION REQUIRED:
A motion to approve the intergovernmental agreement between the Village of Palatine and the City of Evanston for the use and maintenance of two motorcycles.

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

Consider a Motion to Amend the 2022 Fee Schedule Supplement of the Village of Palatine's Code of Ordinances

BACKGROUND:
The Fee Schedule Supplement to the Village's Code of Ordinances is updated annually, or from time to time, when alterations are warranted.

KEY ISSUES:

- The fee for Alcoholic Beverage Seller Server Permits or renewals have consistently remained the same for several years. This fee for such permit is provided in the amended Fee Schedule.

- Updates to the Meter Connection fees are reflected in the amended Fee Schedule Supplement.

ALTERNATIVES:
1. Approve the updated Fee Schedule Supplement.
2. Do not approve the updated Fee Schedule Supplement.

RECOMMENDATION:
Staff recommends approval of the updated Fee Schedule Supplement as presented.

ACTION REQUIRED:
Motion to approve the updated Fee Schedule Supplement as presented, effective immediately.

ATTACHMENTS:

- CY 2022 Updated Fee Schedule Supplement July

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

VILLAGE OF PALATINE

FEE SCHEDULE SUPPLEMENT

TO THE

PALATINE CODE OF ORDINANCES

PUBLISHED IN PAMPHLET FORM BY AUTHORITY OF THE MAYOR AND VILLAGE COUNCIL OF THE VILLAGE OF PALATINE, ILLINOIS

Updated July 11, 2022

Attachment: CY 2022 Updated Fee Schedule Supplement July (2022 Fee Schedule Supplement Amendment (CA))

VILLAGE OF PALATINE
FEE SCHEDULE SUPPLEMENT

CH.NO.	ART.NO.	SECT.NO.	CLASSIFICATION		CY 2022
			CHAPTER 1 - General Provisions		
1		1-11	Insufficient Funds Administrative Fee	$	20
			CHAPTER 2, Article XXX - Administrative Hearing Division		
2	XXX	2-705(b)(8)	Administrative Adjudication Court Cost	$	55
			CHAPTER 3, Article I - Alcoholic Beverages, In General		
3	I	3-12	Alcoholic Beverages, In General Violations	$	200
			CHAPTER 3, Article II - Alcoholic Beverages, Licenses		
3	II	3-27(h)	Alcoholic Beverages Seller and Service Permit	$	24
		3-35(1)	Class "A" Liquor License (Tavern)	$	3,854
		3-35(2)	Class "A-1" Liquor License (Sports and Recreation Facility)	$	3,854
		3-35(3)	Class "B" Liquor License (Package Liquor Store)	$	3,878
		3-35(4)	Class "B-1" Liquor License (Grocery Store with Package Liquor)	$	3,878
		3-35(5)	Class "B-2" Liquor License (General Merchandise Store with Package Liquor)	$	3,878
		3-35(6)	Class "B-3" Liquor License (Drug Store with Package Liquor)	$	3,878
		3-35(7)	Class "B-4" Liquor License (Restaurant/Convenience Store with Package Liquor)	$	3,878
		3-35(8)	Class "C" Liquor License (Club)	$	512
		3-35(9)	Class "D" Liquor License (Restaurant)	$	3,854
		3-35(13)	Class "G" Liquor License (Restaurant with Beer and Wine)	$	2,532
		3-35(14)	Class "G-1" Liquor License (Seasonal)	$	1,267
		3-35(15)	Class "G-2" Liquor License (Beer and Wine Single Serve Package)	$	2,532
		3-35(16)	Class "H" Liquor License (Banquet Hall)	$	3,854
		3-35(17)	Class "K" Liquor License (Hotel)	$	5,142
		3-35(19)	Class "N" Liquor License (Microbrewery)	$	3,854
		3-35(21)	Class "P" Liquor License (Caterer)	$	125
		3-35(21)	Class "P" Liquor License (Outside Caterer) $50 any event after	$	125
		3-35(22)a	Class "LC-1"Liquor License (Late Closing License)	$	500
		3-35(22)b	Class "LC-2"Liquor License (Late Closing License)	$	3,000
		3-35(24)	Class "PS-1" Liquor License (Full Serving Product Sampling)	$	125
		3-35(25)	Class "VG" Liquor License (Video Gaming)	$	5,000
			CHAPTER 5, Article I - Animals, In General		
5	I	5-2 through 5-16	Animals In General Violations (except for Animal Biting in 5-6 (15,16) & Redemption Fee in 5-13)		
			Paid Within 35 Days	$	50
			Paid Between 36 and 60 Days	$	75
			Paid After 60 Days	$	125
5	I	5-6 (15, 16)	Animal Bite of Person/Bite of Domestic Animal Violations		
			First Offense	$	50
			Second and all subsequent Offense	$	100
5	I	5-13	Redemption Fee	$	50
			Plus the total boarding fee incurred during the time each animal is retained by the Village		
			CHAPTER 5, Article III - Animals, Dogs and Cats		
5	III	5-36 through 5-57	Dog & Cat Violations		
			Paid Within 35 Days	$	50
			Paid Between 36 and 60 Days	$	75
			Paid After 60 Days	$	125
5	III	5-38	Dog and Cat License (Annual)	$	8
			CHAPTER 6, Article I - Building Codes and Regulations, Building Codes and Amendments		
6	I	6-1.5(a)(1)	Plan Examination Fees		
		6-1.5(a)(1)a	Single Family Detached Dwellings, additions, alterations, remodeling, or detached structure having an estimated valuation of work:		
			1. $5,000 or less	$	52
			2. $5,001 or more (in addition to the above fee) per $1,000 valuation of work:	$	5
		6-1.5(a)(1)b	All other types of construction, based on estimated valuation of work:		
			1. Minimum fee	$	48
			2. $100,000 or less per $1,000 (in addition to the minimum fee)	$	9
			3. $100,001 or more per $1,000 (in addition to the above fee)	$	5
		6-1.5(a)(2)	Preliminary Plan Review Services, hourly rate per person	$	57

Attachment: CY 2022 Updated Fee Schedule Supplement July (2022 Fee Schedule Supplement Amendment (CA))

VILLAGE OF PALATINE
FEE SCHEDULE SUPPLEMENT

CH.NO.	ART.NO.	SECT.NO.	CLASSIFICATION	CY 2022
		6-1.5(a)(3)	Building Permit based on the estimated valuation of work:	
			$5,000 or less	$ 52
			$5,001 or more (in addition to the above fee) per $1,000 valuation of work:	$ 15
6	I	6-1.5(a)(3)a	Building Permit Extension; 10% of bldg permit fee or no less or more than	
			1. Residential occupancies	$ 70/210
			2. Non-Residential occupancies	$ 210/631
		6-1.5(a)(4)	Certificate of Occupancy; All occupancies, per unit	$ 65
		6-1.5(a)(4)a	Temporary Certificate of Occupancy; 10% of bldg permit fee or no less or more than	
			1. Residential occupancies	$ 70/210
			2. Non-Residential occupancies	$ 210/631
		6-1.5(a)(5)	Permit for demolition for each residential story or for other structures each 10 feet in height	$ 65
		6-1.5(a)(6)	Moving of Building	
			a. Using public right-of-way	$ 258
			b. Not using public right-of-way	$ 78
		6-1.5(a)(7)	Minimum inspection fee	$ 69
		6-1.5(a)(7)(a)	Inspection of Plumbing and Sanitation Fixtures (new and/or replacement)	
			1. Up to three (3) fixtures	$ 69
			2. Four to Six (4-6) fixtures	$ 137
			3. In excess of six (6) fixtures, per fixture (in addition to the above fee)	$ 17
		6-1.5(a)(7)(b)	Inspection of Fire Suppression System	
			1. Up to 100 sprinkler heads	$ 206
			2. Each additional 100 sprinkler heads or fraction thereof in excess of 100 (in addition to above)	$ 33
		6-1.5(a)(7)c	Inspection of Electrical Systems	
			1. Residential (new and/or renovation) per unit	
			i. 250 sq. ft. or less	$ 69
			ii. 251 to 1000 sq. ft. (in addition to the above)	$ 137
			iii. Each additional 1,000 sq. ft. or fraction thereof (in addition to the above fee)	$ 34
			2. In other than residential occupancies (new and/or renovation)	
			i. 42 circuits or less, per circuit	$ 39
			ii. 43 circuits or more, for each additional circuit (in addition to the above)	$ 23
		6-1.5(a)(7)(d)	Inspection of HVAC Systems	
			1. 250 sq. ft. or less	$ 69
			2. 251 to 10,000 sq. ft. (in addition to the above)	$ 137
			3. Each additional 10,000 sq. ft. or fraction thereof (in addition to the above)	$ 17
		6-1.5(a)(7)(e)	Inspection of Carpentry (framing, roofing, concrete, insulation, and similar)	
			1. 500 sq. ft. or less	$ 69
			2. 501 to 1,000 sq. ft. (in addition to the above)	$ 206
			3. 1,001 to 10,000 sq. ft., per 1,000 sq. ft. or fraction thereof (in addition to the above)	$ 34
			4. 10,001 to 20,000 sq. ft., per 1,000 sq. ft. or fraction thereof (in addition to the above)	$ 17
			5. 20,001 sq. ft. and up, per 10,000 sq. ft. or fraction thereof (in addition to the above)	$ 9
		6-1.5(a)(7)f	Reinspection Fee	$ 69
		6-1.5(a)(7)g	Cancellation Fee	$ 83
		6-1.5(a)(7)i	Existing Elevator Safety Inspection Fee	$ 91
		6-1.5(a)(7)i	Existing Elevator Safety Reinspection Fee	$ 65
		6-1.5(a)(7)i	New Elevator Inspection/Reinspection Fee	$ 118
		6-1.5(a)(7)i	Repairs of Existing Elevator Inspection/Reinspection Fee	$ 118
		6-1.5(f)(1)	Single family residential fence installation	$ 71
		6-1.5(f)(2)	Single family residential shed installation	$ 71
		6-1.5(f)(3)	Single family residential driveway installation	$ 95
		6-1.5(f)(4)	Single family residential patio & private walk installation	$ 95
		6-1.5(f)(5)	Single family residential tear-off roof & re-roof installation	$ 95
		6-1.5(f)(6)	Single family residential deck installation	$ 95
		6-1.5(f)(7)	Single Family above ground swimming pool	$ 95
		6-1.5(f)(8)	Single family heating, ventilating and central air conditioning (HVAC) replacement	$ 95
		6-1.5(f)(9)	Single family residential sewer repair or replacement	$ 95
		6-1.5(f)(10)	Single family residential lawn sprinklers	$ 95
		6-1.5(f)(11)	Single family residential electric service revision	$ 95
		6-1.5(f)(12)	Dumpster/screening enclosure	$ 95
		6-1.5(f)(13)	Single family water heater replacement	$ 95

Attachment: CY 2022 Updated Fee Schedule Supplement July (2022 Fee Schedule Supplement Amendment (CA))

VILLAGE OF PALATINE
FEE SCHEDULE SUPPLEMENT

CH.NO.	ART.NO.	SECT.NO.	CLASSIFICATION		CY 2022
			CHAPTER 6, Article III - Building Codes and Regulations, Building Operations		
6	III	6-32	Building Operations, Construction - Hours of Service Violations	$	200
			CHAPTER 6, Article VII - Building Codes and Regulations, Condominium Conversions & Deconversions		
6	VII	6-82(b)(2)	Review of Property Report plus $25 for each dwelling unit being converted to condo		
6	VII	6-89A(a)	Review of Property Report plus $25 for each dwelling unit being converted from condo		
			CHAPTER 7, Article III - Fire Prevention and Protection, Fire Prevention		
7	III	7-41	Regular Fire and Life Safety Inspection Fees		
			Initial and First Passing Re-Inspection	$	-
			Failed First Re-Inspection	$	69
			Failed Second Re-Inspection	$	103
			Failed Third or more Re-Inspection Fee (per re-inspection)	$	201
		7-63	Fire Lane Violations		
			Paid Within 35 Days	$	50
			Paid Between 36 and 60 Days	$	75
			Paid After 60 Days	$	125
			CHAPTER 7, Article V - Fire Prevention and Protection, Ambulance Service Fees		
7	V	7-80	Ambulance Service Fees		
			Resident	$	1,250
			Non-Resident	$	1,500
			Mileage Fee	$	12
			CHAPTER 7, Article V - Fire Prevention and Protection, Ambulance and Emergency Response Service Fees		
7	V	7-82	Motor Vehicle Incidents		
			Level 1	$	518
			Level 2	$	589
			Add-On Services		
			Extrication	$	1,554
			Additional Time On-Scene		
			Engine/per hour	$	476
			Truck/per hour	$	595
			Miscellaneous Equipment/per hour	$	357
			Chief Response		
			per hour	$	298
			CHAPTER 8, Garbage and Refuse		
8		8-1	For Each Single-Family Dwelling Unit		
			Basic User Billing Charge, per Month	$	2.75
		8-1(a)(1)	Curbside Pickup Charge, per month	$	20.00
		8-1(a)(2)	Rear Door Pickup Premium, per month	$	11.90
		8-1(a)(3)	Yard-Waste Exempt Discount, per month	$	1.50
		8-1(a)(4)	Senior Citizen Discount, per month	$	2.50
			CHAPTER 9, Article I - Health and Sanitation, In General		
9	1	9-9	Expectoration in Public Places Violations	$	200

Attachment: CY 2022 Updated Fee Schedule Supplement July (2022 Fee Schedule Supplement Amendment (CA))

VILLAGE OF PALATINE
FEE SCHEDULE SUPPLEMENT

CH.NO.	ART.NO.	SECT.NO.	CLASSIFICATION		CY 2022
			CHAPTER 9, Article IV - Health and Sanitation, Village of Palatine Clean Indoor Air Ordinance		
9	IV	9-72,73	Prohibition of Smoking in Public Places Violations	$	200
			CHAPTER 10, Article IV - Rental Property Rules and Regulations		
10	IV	10-15(f)	Rental license fee		
			Multiple Dwelling (Apartments)		
			25% of Units Inspected,		
			Whichever is Greater		
			Per building	$	122
			Per unit	$	25
			50% of Units Inspected		
			Per unit	$	86
			100% of Units Inspected		
			Per unit	$	143
			All Other Rental Dwelling Types (Condo, Townhome, SFR)		
			0 - 3 Violations	$	86
			4 or More Violations	$	160
			CHAPTER 10, Article VII - Notice of Violation Procedures, Penalties, Appeals and Conflict of Ordinances		
	VII	10-44(b)(2)	1st Re-inspection Fee	$	69
			2nd Re-Inspection Fee	$	103
			3rd or more Re-Inspection Fee (per re-inspection)	$	201
		10-44(b)(3)	Cancellation and absentee fee	$	75
			CHAPTER 11, Article I - Licenses, Permits and Business Regulations, In General		
11	I	11-3	License Required Violations		
			Paid Within 35 Days	$	200
			Paid Between 36 and 60 Days	$	300
			Paid After 60 Days	$	400
		11-8	Late Fee		
			After January 31st		50% of Fee
			After February 28/29th		100% of Fee
			All Fees in Section 11-21 are Based on Floor Area in Square Feet		
		11-21	Amusement & Entertainment Establishments (Type A)		
			Step 1: 0 - 2,500 sq ft	$	91
			Step 2: 2,501 sq ft and over	$	181
		11-21	Food Establishments (Type B)		
			Step 1: 0 - 2,500 sq ft	$	258
			Step 2: 2,501 - 5,000 sq ft	$	382
			Step 3: 5,001 - 7,500 sq ft	$	510
			Step 4: 7,501 sq ft and over	$	579
		11-21	Service Establishments (Type C)		
			Step 1: 0 - 2,500 sq ft	$	91
			Step 2: 2,501 sq ft and over	$	181
		11-21	Retail and Wholesale Establishments (Type D)		
			Step 1: 0 - 2,500 sq ft	$	129
			Step 2: 2,501 - 5,000 sq ft	$	258
			Step 3: 5,001 - 7,500 sq ft	$	386
			Step 4: 7,501 sq ft and over	$	579
		11-21	Industrial Establishments (Type E)		
			Step 1: 0 - 10,000 sq ft	$	192
			Step 2: 10,001 - 20,000 sq ft	$	386
			Step 3: 20,001 sq ft and over	$	579
		11-21	Home Occupations (Type F)	$	11

Attachment: CY 2022 Updated Fee Schedule Supplement July (2022 Fee Schedule Supplement Amendment (CA))

VILLAGE OF PALATINE
FEE SCHEDULE SUPPLEMENT

CH.NO.	ART.NO.	SECT.NO.	CLASSIFICATION		CY 2022
			CHAPTER 11, Article II - Licenses, Permits and Business Regulations, Amusement Facilities		
11	II	11-32(g)	Coin Operated Amusement Device	$	65
		11-32.1	Juke Boxes	$	26
		11-45	Circus License; per day	$	466
			Carnival License; per day	$	35
			Each sideshow, ride, game & concession (food or other) operated in connection with above; per day	$	12
			CHAPTER 11, Article III - Licenses, Permits and Business Regulations, Food Establishments		
11	III	11-67	Vending Machine - Only prepackaged, non TCS food or beverages	$	14
			Vending Machine - Ice Machine not ancillary to primary use	$	39
			Vending Machine - General Merchandise (no food or beverage of any kind)	$	14
			Vending Machine - Offers TCS foods or beverages	$	39
			Mobile food dispensing units and roadside stands	$	129
			Vehicle used for delivery of TCS food or beverages:		
			To individual residences	$	65
			To retail establishments	$	27
			CHAPTER 11, Article IV - Licenses, Permits and Business Regulations, Merchants		
11	IV	11-127	Auctioneers Permit - Annual		
			Annual	$	129
			Daily	$	13
		11-130	Auctioneers Employees License	$	8
		11-142	Cigarette and Tobacco Dealers	$	53
		11-145(a-c)	Sales to Minors, Possession of Tobacco Products Violations	$	200
		11-201	Itinerant Merchants License	$	13
		11-213	Junk Dealers Annual License (Maintaining store or yard in village); plus	$	258
			Junk Dealers Vehicle License (for each vehicle operated)	$	65
			Junk Dealers Vehicle License (for each vehicle operated in village by dealer not maintaining store or yard in Village)	$	65
		11-241	Real Estate Brokers License	$	65

Attachment: CY 2022 Updated Fee Schedule Supplement July (2022 Fee Schedule Supplement Amendment (CA))

VILLAGE OF PALATINE
FEE SCHEDULE SUPPLEMENT

CH.NO.	ART.NO.	SECT.NO.	CLASSIFICATION		CY 2022
			CHAPTER 11, Article V - Licenses, Permits and Business Regulations, Miscellaneous Business Operations		
11	V	11-312	House Movers		
			Annual License	$	122
			Daily License	$	13
		11-369	Outdoor Advertisers - Annual	$	37
		11-397	Abandoned Vehicles & Vehicles for Sale on Private Property Violations		
			Paid Within 35 Days	$	50
			Paid Between 36 and 60 Days	$	75
			Paid After 60 Days	$	125
		11-424	Residential Scavenger License	$	1,374
			Commercial, Industrial, Institutional License	$	2,309
		11-428	Garbage Collection (Hours of Service) Violations	$	200
		11-433&434	Public Passenger Vehicle and Vehicle Operator Violations	$	200
		11-434	Public Passenger Vehicle Operator's License	$	26
		11-442	Public Passenger Vehicle		
			Between 1/1 and 6/30	$	99
			Between 7/1 and 12/31	$	62
			Each Additional Vehicle		
			Between 1/1 and 6/30	$	74
			Between 7/1 and 12/31	$	50
		11-451,465,466	Taxi Violations		
			Paid Within 35 Days	$	50
			Paid Between 36 and 60 Days	$	75
			Paid After 60 Days	$	125
		11-473	Building Contractor Annual Registration		
		11-473(1)	General Contractor	$	258
		11-473(2)	All Other Contractors	$	65
		11-503	Kennel, Pet Shop, Shelter, Pound or Animal Hospital Annual License	$	120
		11-512	Dealers in Gold and Silver		
			Daily Fee	$	129
			Annual License Fee	$	65
			CHAPTER 11, Article VI - Licenses, Permits and Business Regulations, Solicitors		
11	VI	11-517	Solicitors - Registration Violations	$	200
		11-523	Solicitors - Wearing Identification Badge Violations	$	200
		11-524	Solicitors - Nametag or Badge	$	8
		11-525	Solicitors - Time Limit Violations	$	215
		11-527	Solicitor Registration - Annual Fee	$	39
			Solicitor Registration - Daily Activity Fee	$	13
			Solicitors for holders of a Village granted Franchise for the operation of a Cable Communications System - Annual Fee	$	39
			CHAPTER 11, Article VIII - Licenses, Permits and Business Regulations, Commercial Vehicle Relocators Licensing Law		
11	VIII	11-606(11)(a)	Reloacted Vehicle Permit	$	20
11	VIII	11-607(1)	Repossessed Vehicle Permit	$	20
11	VIII	11-609	Relocator's License	$	-

Attachment: CY 2022 Updated Fee Schedule Supplement July (2022 Fee Schedule Supplement Amendment (CA))

VILLAGE OF PALATINE
FEE SCHEDULE SUPPLEMENT

CH.NO.	ART.NO.	SECT.NO.	CLASSIFICATION		CY 2022
			CHAPTER 12 Offenses and Miscellaneous Provisions		
12		12-3 through 12-324	Offenses and Misc Provisions Violations (except for 12-29)	$	200
			CHAPTER 12, Article I, In General		
12	I	12-29	Possession of Cannabis 10 grams or less	$	200
			Possession of Cannabis >10 grams but less than 30 grams	$	400
			CHAPTER 16, Article I - Rights of Way, In General And Utilities		
16	I	16-5(f)	Application Fee	$	577
			Plus Cable Installation, per foot	$	0.16
			CHAPTER 16, Article VI - Rights of Way, Trees & Shrubs		
16	VI	16-104	Annual Commercial Tree License Fee	$	41
			CHAPTER 17, Article VIII - Taxes, Prepared Food and Beverage Tax		
17	VIII	17-75	Transmission of Tax Collections Violations		
			Paid Within 35 Days	$	200
			Paid Between 36 and 60 Days	$	300
			Paid After 60 Days	$	400
			CHAPTER 18, Article IV - Traffic, Parking		
18	IV	18-81 (16)	Handicapped Parking Violations	$	250
			CHAPTER 18, Article VII - Traffic, Violations		
18	VII	18-173(a)	Minor Violations; Parking Regulations		
			Paid Within 35 Days	$	50
			Paid Between 36 and 60 Days	$	75
			Paid After 60 Days	$	125
		18-173(b)	Minor Violations; Certain Sections of the Illinois Vehicle Code		
			Paid Within 35 Days	$	50
			Paid Between 36 and 60 Days	$	75
			Paid After 60 Days	$	125
			CHAPTER 18, Article VIII - Oversize and Overweight Vehicle Permit Fees		
18	VIII	18-176	Oversized Vehicles Only		
			Single Trip	$	40
			Round Trip	$	80
			Overweight Vehicles - Single Trip		
			100,000 pounds or less Gross Weight	$	50
			100,001 to 120,000 pounds Gross Weight	$	75
			120,001 to 150,000 pounds Gross Weight	$	100
			150,001 pounds or more Gross Weight	$	125
			Overweight Vehicles - Round Trip		
			100,000 pounds or less Gross Weight	$	100
			100,001 to 120,000 pounds Gross Weight	$	150
			120,001 to 150,000 pounds Gross Weight	$	200
			150,001 pounds or more Gross Weight	$	250

Attachment: CY 2022 Updated Fee Schedule Supplement July (2022 Fee Schedule Supplement Amendment (CA))

VILLAGE OF PALATINE
FEE SCHEDULE SUPPLEMENT

CH.NO.	ART.NO.	SECT.NO.	CLASSIFICATION		CY 2022
			CHAPTER 18, Article IX - Traffic, Motor Driven Scooters		
18	IX	18-185	Operation of Motor Driven Scooter Violations	$	200
			CHAPTER 19, Article I - Utility Services, In General		
19	I	19-2 & 19-53	Turn-On Fees		
			Between 8 am and 3 pm	$	65
			Between 3 pm and 8 am	$	185
			CHAPTER 19, Article II - Utility Services, Water		
19	II	19-16	Per Unit Construction Fees for Water		
			Incorporated Properties	$	112
			Unincorporated Properties	$	133
		19-20	Water Tap and Meter Inspection Fee		
			Residential/Business/Manufacturing	$	62
19	II	19-20 & 19-51	Connection and Meter Fees (all served by single meter):		
			Single Unit Less than or Equal to 3/4 Inch Meter, 1 Inch Tap		
			Meter	$	553
			Connection Fee	$	1,304
			2 Units - 1 Inch Meter, 1 1/4 Inch Tap		
			Meter	$	610
			Connection Fee	$	1,525
			2 Units - 1 Inch Meter, 1 1/2 Inch Tap		
			Meter	$	610
			Connection Fee	$	1,798
19	II	19-20 & 19-51	2-15 Units Inclusive, 1-1/2 Inch Meter, 2 Inch Tap		
			Meter	$	1,325
			Connection Fee	$	3,824
			15-35 Units Inclusive, 2 Inch Compound Meter, 3 Inch Tap		
			Meter	$	1,645
			Connection Fee	$	10,492
			36-50 Units Inclusive, 3 Inch Compound Meter, 4 Inch Tap		
			Meter	$	3,709
			Connection Fee	$	13,514
			51-100 Units Inclusive, 4 Inch Compound Meter, 6 Inch Tap		
			Meter	$	5,706
			Connection Fee	$	29,655
			51-100 Units Inclusive, 6 Inch Compound Meter, 8 Inch Tap		
			Meter	$	8,953
			Connection Fee	$	45,796
19	II	19-25	Unauthorized Use - Water Rate per 1,000 Gallons	$	22
		19-25	Penalty for Unauthorized Use		
			Not Less Than	$	60
			Not More Than	$	900
		19-51	Non Conversion of Meter		
			Meter (Per Residential Dwelling Unit Per Billing Cycle)	$	52
			External Transponder (Per Account Per Billing Cycle)	$	77
		19-54	Testing Fees		
			Meters No Larger Than 1 1/2 Inch	$	178
			1 3/4 and 2 Inch	$	302
			3 Inch	$	330
			4 Inch	$	363
			6 Inch	$	363
			8 Inch	$	385

Attachment: CY 2022 Updated Fee Schedule Supplement July (2022 Fee Schedule Supplement Amendment (CA))

VILLAGE OF PALATINE
FEE SCHEDULE SUPPLEMENT

CH.NO.	ART.NO.	SECT.NO.	CLASSIFICATION		CY 2022
		19-62(A)	For All Services to Premises Within the Village		
			Basic User Billing Charge, per Month	$	2.75
			Water Consumption Charge, per 1,000 Gallons (Minimum Charge 5,000 Gallons)		
		19-62(A)(1)	For Premises not Exempt from the Payment of Real Estate Taxes		
			For the First 74,810 Gallons	$	5.05
			For All Consumption Over 74,810 Gallons	$	6.50
		19-62(A)(2)	For Premises Exempt from the Payment of Real Estate Taxes		
			For the First 74,810 Gallons	$	8.75
			For All Consumption Over 74,810 Gallons	$	10.20
		19-62(B)	For All Services to Premises Not Within the Village		
			Basic User Billing Charge, per Month	$	3.35
			Water Consumption Charge, per 1,000 Gallons (Minimum Charge 5,000 Gallons)		
		19-62(B)(1)	For Premises Outside of the Village not in Deer Park		
			For the First 74,810 Gallons	$	11.60
			For All Consumption Over 74,810 Gallons	$	13.05
19	II	19-62(B)(2)	For Premises Outside of the Village that are in Deer Park		
			For All Consumption		
			Regular Rate	$	13.10
			Maintenance/Replacement Surcharge (included in regular rate)	$	1.50
			For Consumption in Excess of Daily Average Allotment		
			Excess Use Surcharge	$	2.00
		19-62(D)	For Contractor Usage from a Metered Hydrant, Water Consumption Charge, per 1,000 Gallons		
			For All Consumption	$	13.05
		19-63	Standardized Billing Rates (Number of Times the Minimum Usage Billing)		
			Single Family Residential Dwellings		2
			Non-Single Family Residential Dwellings		5
		19-63(A)	For All Services to Premises Within the Village		
			Basic User Billing Charge, per Month	$	2.75
			Consumption Charge, per 1,000 Gallons (Minimum Charge 5,000 Gallons)		
			Regular Rate	$	1.35
		19-63(B)	For All Services to Premises Not Within the Village		
			Basic User Billing Charge, per Month	$	3.35
			Consumption Charge, per 1,000 Gallons (Minimum Charge 5,000 Gallons)		
			Regular Rate	$	3.80
		19-64	Local Capital Financing (Sewer Separation) Surcharge, per Month	$	-
		19-65	Local Storm Water Drainage Facility Surcharge, per Month	$	1.46
		19-66	Flood Control Surcharge, per Month	$	5.00
		CHAPTER 19, Article III - Utility Services, Sewers			
19	III	19-83	Sewer Connection Fees; All connections		
			Single Family Residences	$	132
			Multiple Family Residence for each family unit	$	132
			Business Establishments	$	132
		19-88(2)	Penalties, Not to Exceed	$	750.00
		CHAPTER 19, Article V - Utility Services, Stormwater Discharge			
19	V	19-130	Criminal Penalty		
			Not Less Than	$	200
			Not More Than	$	1,000
		CHAPTER 20, Article V - Personal Wireless Telecommunication Services and Facilities			
20	V	20.94(3)(A)	Application Fee - Collocate on Existing Utility Pole	$	650
			Plus Per Each Location	$	350
		20.94(3)(B)	Application Fee - Collocate on New Utility Pole	$	1,000

Attachment: CY 2022 Updated Fee Schedule Supplement July (2022 Fee Schedule Supplement Amendment (CA))

VILLAGE OF PALATINE
FEE SCHEDULE SUPPLEMENT

CH.NO.	ART.NO.	SECT.NO.	CLASSIFICATION		CY 2022
			APPENDIX A, Article V - Zoning, Use Districts		
APP A	V	5.02(a)(2)	Official Zoning Map	$	29
			APPENDIX A, Article VIII - Zoning, Signage		
APP A	VIII	8.01(b)(1)	Illuminated and Nonilluminated Signs	$	56
			Plus one dollar ($1) per square foot of gross surface area of the proposed sign		
			Plan Exam Fee	$	26
			Inspection and Electrical Fees: as outlined in this Fee Schedule		
			Supplement shall be in addition to the fees shown above.		
			APPENDIX A, Article XIII - Zoning, Planned Development Districts		
APP A	XIII	13.04(a)	Preliminary Review of Planned Development; Plus	$	2,293
			Per Acre for the first 5 acres	$	34
			Per Acre for each acre over 5	$	23
		13.05(g)	Final Review of Planned Development; Plus	$	1,146
			Per Acre for the first 5 acres	$	34
			Per Acre for each acre over 5	$	23
			APPENDIX A, Article XIV - Zoning, Administration		
APP A	XIV	14.09	Text Amendments		
			Residential	$	386
			Non-Residential	$	772
			Zoning Map Change		
			Less than one acre	$	386
			One acre or more	$	913
			Variations		
			Single Family (excluding zoning relief applications for Lot Coverage)	$	258
			Administrative (excluding zoning relief applications for Lot Coverage)	$	130
			Minor Variation	$	22
			All Others	$	836
APP A	X	10.02-10.07(g)	Residential Lot Coverage applications requiring zoning relief, as a %		
			beyond the maximum % allowed per Zoning District:		
			Res Lot Coverage up to 14.99% above the maximum % Lot Coverage allowed, per Zoning Dist	$	275
			Res Lot Coverage from 15% to 25% above the maximum % Lot Coverage allowed, per Zoning Dist	$	500
			Res Lot Coverage over 25% above the maximum % Lot Coverage allowed, per Zoning Dist	$	750
APP A	XIV	14.09	Special Use Permits		
			Residential Uses	$	386
			Administrative Special Use	$	194
			Minor Special Use	$	22
			Special Use Amendments and for non-conforming businesses requiring a Special Use to		
			continue their operations	$	166
			Special Use Permit for Live Entertainment	$	515
			All Others	$	965
			Annexation Hearing	$	772
			Multiple Application Fee for each Additional Application	$	65
			In addition to the above fees, a document processing fee of		
			plus the actual Cook County Recording Fees shall be charged whenever recording is required.	$	182

Attachment: CY 2022 Updated Fee Schedule Supplement July (2022 Fee Schedule Supplement Amendment (CA))

VILLAGE OF PALATINE
FEE SCHEDULE SUPPLEMENT

CH.NO.	ART.NO.	SECT.NO.	CLASSIFICATION		CY 2022
			APPENDIX B, Article III - Subdivision, Site Development and Floodplain Regulations, Preliminary Plat		
APP B	III	3.01(a)(4)a	Preliminary Plat; plus	$	191
			Per Acre for the first five (5) acres	$	17
			Per Acre for each acre over five (5) acres	$	11
		3.01(a)(4)b	A Plan Review fee (rounded to the nearest dollar) based on one hundred fifty percent (150%) of the rate per hour of the present salary schedule adopted by the Village Council of those Village personnel participating in the review process shall be paid.		
			APPENDIX B, Article IV - Subdivision, Site Development and Floodplain Regulations, Final Plat		
APP B	IV	4.01(a)(2)a	Final Plat Fee; plus	$	258
			Per Acre for the first five (5) acres	$	17
			Per Acre for each acre over five (5) acres	$	11
			In addition to the above fees, a document processing fee of plus the actual Cook County Recording Fees shall be charged whenever recording is required.	$	186
		4.01(a)(2)b	Plan review fee, based 1.5% of total land improvements costs (which shall consist of, but not exclusively of curb and gutters, sidewalks, pavements, sanitary sewer system, storm sewer system, water distribution system, stormwater detention facilities, parkway trees, landscaping, street lights, plus soil erosion control measures) as estimated by the design engineer and approved by the Village Engineer.		
			APPENDIX B, Article V - Subdivision, Site Development and Floodplain Regulations,		
			Dedication of Park Land and School Sites for Payment of Fees in Lieu Thereof		
APP B	V	5.02(a)(1)a	Contribution of fees in lieu of park and school sites The cash contributions in lieu of land shall be based on the **"fair market value"** of the acres of land in the area improved as specified herein, that otherwise would have been dedicated as park and recreation and school sites. It has been determined that the **"fair market value"** per acre of such improved land in and surrounding the village, to be used in calculating the applicable fee in lieu is:	$	163,300
			APPENDIX B, Article VI - Subdivision, Site Development and Floodplain Regulations, Design Standards		
APP B	VI	6.09(f)(1)	Site Development Permit Plan Review/@ Gross Site Acre (Minimum $16)		
		6.09(f)(2)	Site Development Permit On-site Inspections		
			0-3 acres, each inspection	$	65
			3-6 acres, each inspection	$	129
			6-8 acres, each inspection	$	193
			Over 8 acres, each inspection	$	258
		6.09(f)(3)	Filing Fee	$	91
			APPENDIX B, Article VIII - Subdivision, Site Development and Floodplain Regulations, Required Land Improvements		
APP B	VIII	8.08(a)(1)	Exemption from Live Detention		
			Per Square Foot of Total Land Area to be Developed	$	0.25
			General Fees, Provided for Administratively		
			Police Fingerprinting Fees		
			Residents/Employees	$	15
			Non-Residents	$	40
			Concealed Carry Processing Fees		
			Retired Officers	$	40
			Public Works Mulch Delivery, per Cubic Yard		
			Residential	$	15
			Commercial	$	25
			Finance Utility Bill Fees		
			Online Utility Bill Convenience Fee	$	3.50

Attachment: CY 2022 Updated Fee Schedule Supplement July (2022 Fee Schedule Supplement Amendment (CA))

Consider an Ordinance Amending the Code of Ordinances, Articles I, II, III, IV and V of Chapter 10 Regulations

BACKGROUND:
The primary purpose of Chapter 10 is to set forth standards related to property maintenance, rental licensing, and the regulation of group homes. The adoption of these amendments will help ensure that residential rental property rules and regulations are consistent with the Village's Zoning Ordinance.

KEY ISSUES:
- Amends language to remove references to a dormitory and adds language prohibiting short term residential rentals.

- The proposed amendments will align the existing uses contemplated within the Village's Zoning Code and the residential rental property rules and regulations contained within Chapter 10 of the Village's Code of Ordinances.

ALTERNATIVES:

1. Approve the proposed ordinance.
2. Do not approve the proposed ordinance.

RECOMMENDATION:
Staff recommends approval of the ordinance.

ACTION REQUIRED:
Motion to approve the proposed ordinance amending Articles I, II, III, IV, and V of Chapter 10 Existing Structures' Maintenance and Occupancy.

ATTACHMENTS:

- ORD. Ch.10 Short Term Rental Amendment Ord
- Appendix A - Chapter 10 Code Amendments Short Term Rentals

RESULT:	**APPROVED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Greg Solberg, District 4 Councilman
SECONDER:	Brad Helms, District 6 Councilman
AYES:	Millar, Lamerand, Myslinski, Solberg, Kozlowski, Helms
ABSENT:	Jim Schwantz

ORDINANCE NO. _____

AN ORDINANCE AMENDING CHAPTER 10
EXISTING STRUCTURES MAINTENANCE AND OCCUPANCY
OF THE CODE OF ORDINANCES OF THE VILLAGE OF PALATINE

NOW, THEREFORE, BE IT ORDAINED, by the Mayor and Village Council of the Village of Palatine, Cook County, Illinois, acting in the exercise of their home rule power, that:

SECTION 1: That the Code of Ordinances, of the Village of Palatine, Illinois, as amended, be and the same is hereby further amended by amending Articles I, II, III, IV, and V of Chapter 10, Existing Structures Maintenance and Occupancy, which shall be read as indicated on Exhibit "A".

SECTION 2: That the Village Clerk is directed to maintain a record of the modifications to the existing ordinance, all of which are indicated on Exhibit "A" (a redlined version of the modifications approved pursuant to this Ordinance).

SECTION 3: That this ordinance shall be in full force and effect from and after its passage and approval as provided by law.

PASSED: This _____ of _____, 2022

AYES:_____ NAYS:_____ ABSENT:_____ PASS:_____

APPROVED by me this _____ of _____, 2022

_____
Mayor of the Village of Palatine

ATTESTED and FILED in the office of the Village Clerk

this _____ of _____, 2022

_____
Village Clerk

Attachment: ORD. Ch.10 Short Term Rental Amendment Ord (Ch 10 Art. I - V Short Term Rental Code Amendments (CA))

Chapter 10 EXISTING STRUCTURES' MAINTENANCE AND OCCUPANCY*

Art. I. Intent and Scope, §§ 10-1
Art. II. Definitions, §§ 10-2
Art. III. Property Maintenance Codes and Amendments, §§ 10-3--10-14
Art. IV. Rental Property Rules and Regulations, §§ 10-15--10-20
Art. V. ~~Rooming house, rooming units, dormitories, dormitory rooms, §§ 10-21--10-26~~ Short-Term Residential Rentals §§ 10-21--10-26

ARTICLE I. INTENT AND SCOPE

Sec. 10-1. Intent and scope

(a) *Legislative finding.* It is hereby found that there exists and may exist in the future within the village premises, commercial properties, dwelling units~~, rooming units~~ or parts thereof which, by reason of their structure, equipment, sanitation, maintenance, use or occupancy, affect, or are likely to affect, adversely the public health (including the physical, mental and social well-being of persons and families), safety and general welfare. To correct and prevent the existence of such adverse conditions, and to achieve and maintain such levels of residential environmental quality as will protect and promote public health, safety and general welfare, it is further found that the establishment and enforcement of minimum existing structure maintenance and occupancy standards are required.

ARTICLE II. DEFINITIONS

Sec. 10-2. Definitions.

Dwellings:

~~Dormitory: A space in a building where a group sleeping accommodations are provided in one room, or in a series of closely associated rooms, for persons not members of the same family.~~

Meaning of certain words. Whenever the words "dwelling," "dwelling unit," ~~"rooming units,"~~ "premises," or "structure" are used in this chapter, they shall be construed as though they were followed by the words "or any part thereof." Words used in the singular include the plural, and the plural the singular; the masculine gender includes the feminine and the feminine the masculine.

Owner. Any person who, along or jointly or severally with others, shall have legal title to any premises, dwelling, dwelling unit or commercial property with or without accompanying actual possession thereof, or shall have charge, care or control of any premises, dwelling or dwelling unit as owner or agent of owner, or an executor, administrator, trustee or guardian of the estate of owner. Any such person thus representing the actual owner shall be bound to comply with the provisions of this chapter and of rules and regulations adopted pursuant thereto to the same extent as if he were the owner.

Permissible occupancy. The maximum number of individuals permitted to reside in a dwelling unit.~~, rooming unit or dormitory.~~

Attachment: Appendix A - Chapter 10 Code Amendments Short Term Rentals (Ch 10 Art. I - V Short Term Rental Code Amendments (CA))

Attachment: Appendix A - Chapter 10 Code Amendments Short Term Rentals (Ch 10 Art. I - V Short Term Rental Code Amendments (CA))

ARTICLE III. PROPERTY MAINTENANCE CODES AND AMENDMENTS

(Ordinance #O-39-18, passed on April 16, 2018 – Amending Article III Property Maintenance Codes and Amendments by adopting the 2015 Edition of the International Property Maintenance Code)

Section 10-3.16. Multiple Occupancy

Section 309.4 This section shall be amended to read as follows:

Multiple occupancy. The owner of a structure containing two or more dwelling units, a multiple occupancy, ~~a rooming house~~ or a nonresidential structure shall be responsible for extermination in all areas of the structure and exterior property.

Section 10-3.17. Occupancy

Generally, no person shall occupy or let to be occupied any dwelling or dwelling unit for the purpose of living therein unless there is compliance with the following requirement:

(1) Not more than one (1) family, plus two (2) occupants unrelated to the family, except for guests or domestic employees, shall occupy a dwelling unit~~, unless a license for a rooming house has been granted by the appropriate authority~~.

(2) Such dwelling unit shall meet the density, space and use requirements as set forth in this code.

Section 10-3.26

Delete line number 3 of section 107.3 Method of service and replace with the following:

3. If one (1) or more persons to who such notice is addressed cannot be found after diligent effort to do so, service may be made upon such persons by posting the notice in a conspicuous place in or about the dwelling, dwelling unit, rental dwelling unit, ~~rooming unit~~ or commercial property described in the notice.

(Ord. #0-72-09, §3, 6/15/09)

Sec. 10-4 Inspections

The code official is hereby authorized and directed to develop and adopt plans for the inspection of dwelling units subject to the provisions of this chapter, including:

(1) A plan for the periodic inspection of multiple dwelling ~~and rooming houses~~ subject to the provisions of section 10-15, governing the licensing of the operation of such dwellings.

(2) A plan for the systematic inspection of dwelling units contained within the village as may from time to time be designated by the village manager.

Sec. 10-5. Inspections--Powers and duties of the code official.

(b) The code official is hereby authorized to inspect the premises surrounding dwellings, dwelling units, ~~rooming houses, rooming units, dormitories, dormitory rooms~~ and commercial properties subject to

this chapter for the purpose of determining whether there is compliance with its provisions.

(c) The code official and the owner, occupant or other person in charge of a dwelling **or** ~~,~~ dwelling unit~~, rooming house or dormitory room~~ subject to this chapter may agree to an inspection by appointment at a time other than the hours provided in this section.

(d) The owner, occupant or other person in charge of a dwelling, dwelling unit, ~~rooming unit, rooming house, dormitory room~~ or commercial property, upon presentation of proper identification by the code official or his representative, a copy of any relevant plan of inspection pursuant to which entry is sought, and a schedule of the specific areas and facilities to be inspected, shall give the code official entry and free access to every part of the dwelling, dwelling unit, ~~rooming unit, dormitory room~~ or commercial property, or to the premises surrounding any of these.

(f) If any owner, occupant or other person in charge of a dwelling, dwelling unit ~~or rooming unit~~, or of a multiple dwelling ~~or rooming house~~ subject to licensing under section 10-15, fails or refuses to permit free access and entry to the structure or premises under his control, or any part thereof, with respect to which an inspection authorized by this chapter is sought to be made, the code official may petition a court of competent jurisdiction for an administrative search warrant.

ARTICLE IV. RENTAL PROPERTY RULES AND REGULATIONS

Sec. 10-15. Licensing of the operation of multiple dwellings~~, rooming houses~~ and rental dwelling units.

(a) No person shall operate a multiple dwelling~~, rooming house,~~ or rental dwelling unit unless he holds a current, unrevoked operating license issued by the village manager or his designee in his name for the specifically named multiple dwelling~~, rooming house~~ or rental dwelling unit.

(b) All operating licenses for multiple dwellings under common ownership with common facilities (laundry, garage, furnace and storage rooms, etc.) and/or utilities (heat, water, etc.) ~~for rooming houses and~~ for those multiple dwellings in the process of converting to condominiums, where the conversion of the entire building has not been completed, shall be used for a period of one (1) year from the date of application, unless sooner revoked, and may be renewed for successive periods not to exceed one (1) year.

(c) The village manager or his designee is hereby authorized, upon application therefor, to issue new operating licenses and renewals thereof in the names of applicant owners or operators of multiple dwellings, ~~rooming houses~~ and rental dwelling units. No such license shall be issued unless the multiple dwelling ~~and rooming house~~, in connection with which the license is sought, is found after inspection to meet all applicable rules and regulations pursuant thereto. Rental dwelling units that change ownership will be required to be inspected before a new operating license can be issued. No such license shall be issued unless the rental dwelling unit is found after inspection to meet all applicable requirements of this chapter and applicable rules and regulations pursuant thereto.

(j) Each license shall be displayed in a conspicuous place within the common ways of the multiple dwelling ~~or rooming house~~. No license shall be transferable to another multiple dwelling~~, rooming house~~ or rental dwelling unit. Every person holding an operating license shall give notice in writing to the code official within twenty-four (24) hours after having transferred or otherwise disposed of the legal control of any licensed multiple dwelling~~, rooming house~~ or rental dwelling unit. Such notice shall include the name and address of the person succeeding to the ownership or control of such multiple dwelling~~, rooming house~~ or rental dwelling unit.

(k) Every owner or operator of a licensed multiple dwelling ~~or rooming house~~ shall keep or cause to be kept an accurate record of all repairs, alterations and equipment changes related to the provisions of this chapter, or to any rules and regulations pertaining thereto, and of all corrections made as the result of inspection by the code official. Such record shall be made available to the code official by the owner or operator when requested. Every owner or operator subject to this chapter shall be notified that such record may be used in administrative or judicial proceedings pursuant to the provisions of this chapter. The

administrative authority shall, upon the issuance of a license as required by this section, advise the licensee of the necessity for such record and the manner in which such record shall be kept.

(l) Whenever, upon inspection of the licensed multiple dwelling~~, rooming house~~ or rental dwelling unit, or of the records required to be kept by this section, the code official finds that conditions or practices exist which are in violation of the provisions of this chapter or of any applicable rules and regulations pursuant thereto, he shall serve the owner or operator with notice of such violation in accordance with article VI of this chapter. Unless the violations cited are corrected within the time frame indicated in the notice, the operating license may be suspended.

(m) Any person whose license to operate a multiple dwelling~~, rooming house~~ or rental dwelling unit has been suspended shall be entitled to a review of the order by the village manager in the manner hereinafter provided by this chapter. If no request for review or appeal is made within fourteen (14) days following the issuance of the order of suspension, the license shall be revoked; except that prior to revocation, any person whose license has been suspended may request inspection upon showing that the violation or violations cited in the notice have been corrected.

(n) If, upon re-inspection, the code official finds that the multiple dwelling~~, rooming house~~ or rental dwelling unit in connection with which the notice was issued, is now in compliance with this chapter and with the applicable rules and regulations issued pursuant thereto, he shall reinstate the license. A request for re-inspection shall not extend the suspension period unless the code official grants such request.

~~ARTICLE V. ROOMING HOUSE, ROOMING UNITS, DORMITORIES, DORMITORY ROOMS~~

~~Sec. 10-21. General Requirements~~

~~No person shall operate a rooming house or dormitory or shall occupy or let to another for occupancy any dormitory room and/or rooming unit in any rooming house or dormitory which is not in compliance with the appropriate provisions of every section of this chapter. No owner or other person shall occupy or let to another person any rooming unit or dormitory room unless it is clean and sanitary, and complies with all applicable requirements of the village.~~

~~(1) No person shall operate a rooming house unless he holds a valid rooming house license issued by the village manager or his designee in the name of the operator, and for the specific dwelling or dwelling unit. The operator shall apply to the code official upon compliance by the operator with the applicable provisions of this chapter and of any rules and regulations adopted pursuant thereto. This license shall be displayed in a conspicuous place within the rooming house at all times. No such license shall be transferable. Every person holding such a permit shall give notice in writing to the code official within twenty-four (24) hours after having sold, transferred, given away or otherwise disposed of ownership of, interest in or control of any rooming house. Such notice shall include the name and address of the person succeeding to the ownership or control of such rooming house. Every rooming house license shall expire at the end of one (1) year following its date of issuance, unless sooner suspended or revoked as hereinafter provided.~~

~~(2) The following provisions shall apply in all rooming houses and dormitories:~~

~~a. Cooking in dormitory rooms and rooming units is prohibited.~~
~~b. Communal cooking and dining facilities in a rooming house are prohibited, except as approved by the code official in writing.~~
~~c. All food service and dining facilities provided in a rooming house or dormitory for the occupants of same shall comply with applicable food service legislation.~~

~~(3) Unless exempt by the code official in writing, the operator of every rooming house shall change supplied bed linen and towels therein at least once a week, and prior to the letting of any room to any occupant, and the occupant shall be responsible for the maintenance of all supplied bedding in a clean and sanitary manner.~~

~~(4) Every rooming unit shall have convenient access to two (2) or more approved means of egress, appropriately marked, leading to safe and open space at ground level, as required by the appropriate codes, statutes and regulations of the village and the state.~~

ARTICLE V. SHORT-TERM RESIDENTIAL RENTALS

Sec. 10-21. Definitions

The following words and phrases shall, for the purposes of this Article, have the meanings respectively ascribed to them by this Section, as follows:

Short-Term Residential Rental: A dwelling unit offered for rent for a period which does not exceed thirty (30) consecutive days. The term "short-term residential rental" shall not include hotels, bed and breakfast establishments, or boarding facilities as those terms are defined in Appendix A hereof (Zoning Ordinance) as amended from time to time.

Short-Term Residential Rental Property Owner: The individual or entity which has title to the property which is the subject of a short-term residential rental.

Sec. 10-22. Purpose and Applicability

It is the intent and purpose of this Article (Short-Term Residential Rentals) is to preserve the character and integrity of residential neighborhoods within the Village by prohibiting residential structures from being used for the commercial purpose of providing short-term residential rentals.

Sec. 10-23. Short-Term Residential Rentals Prohibited

It shall be unlawful for any person or entity to operate, use, offer for rent or use, or advertise for rent or use, any property within the Village of Palatine as a short-term residential rental. Notwithstanding the provisions set forth in above, it shall not be considered a short-term residential rental when the preceding owner of a property maintains possession of a residential structure after closing for the sale thereof, but leases the property back from the successor owner for a period of time pursuant to a written agreement.

Sec. 10-24: Public Nuisance Declared

Operation of any short-term residential rental within the Village of Palatine in violation of the provisions of this Article may be deemed a public nuisance and abated pursuant to all available remedies, including but not limited to injunctive relief. In addition to the penalties provided for herein, the Village of Palatine shall be entitled to receive from the short-term residential rental owner reimbursement for the cost of the Village's reasonable attorney fees, costs and expenses incurred by the Village of Palatine to abate a short-term residential rental operating as a public nuisance.

Sec. 10-25: Penalties

Any short-term residential rental owner or other person or entity who violates any of the provisions set forth or referenced in this Article, shall be subject to the following penalties:

1. **A fine of five hundred dollars ($500.00) for a first offense within a 12-month period, and a fine of one thousand dollars ($1,000.00) for a second or subsequent offense within a 12-month period.**
2. **Each day that a violation of this Article continues shall be considered a separate and distinct offense and a fine shall be assessed for each day a provision of this Article is found to have been violated. Notwithstanding the forgoing, the escalation of fines as set forth above shall not occur until a prior adjudication of a violation against the same individual or entity has been entered.**
3. **Continued violations of this Article are subject to an injunction to enforce this Article.**

Sec. 10-26. Notice of Violation

The notice of a violation of the provisions set forth or referenced in this Article shall be served in any of the following manners:

1. **Personal service of process by handing the notice of violation to the respondent, or their employees or agents, by any authorized Village of Palatine official, police officer; or code enforcement officer.**
2. **Personal service of process as authorized by the Illinois Code of Civil Procedure, 735 ILCS 5/2-203.**
3. **Mailing the notice by certified mail, return receipt requested to the respondent's last known address, or in the case of a business, to the address for the registered agent or the address for its principal place of business.**
4. **E-mailing the notice to the short-term residential rental owner's last known email address when the respondent is the short-term residential rental owner.**
5. **Posting the notice upon the property where the violation is found when the respondent is the short-term residential rental owner.**