

AGENDA

PLANNING AND ZONING COMMISSION MEETING

February 19, 2025 - 7:00 PM
Village Hall - Board Room
300 Plaza Circle, Mundelein, IL 60060

- I. CALL TO ORDER
- II. PLEDGE OF ALLEGIANCE
- III. ATTENDANCE
- IV. MINUTES APPROVAL
 - A. Approve the Planning and Zoning Commission Regular meeting minutes from January 15, 2025
- V. PUBLIC COMMENTARY
- VI. OLD BUSINESS
- VII. NEW BUSINESS
 - A. Mundelein 83 III, LLC - 2910 W IL Route 60 - Preliminary and Final Plat of Subdivision
 - B. PUBLIC HEARING - PZC-22-2024 - 28884 and 28936 N IL Route 83 - Baseball and Pickleball Facility
- VIII. QUESTIONS AND COMMENTS
- IX. ADJOURNMENT

The Village of Mundelein, in compliance with the Americans with Disabilities Act, requests that persons with disabilities who require certain accommodations to allow them to observe and/or participate in this meeting, or who have questions about the accessibility of the meeting or facilities, to contact the ADA Coordinator at 847-949-3200 to allow the Village to arrange accommodations for those persons.

CALL TO ORDER

The Regular Meeting of the Planning and Zoning Commission of the Village of Mundelein was held on January 15, 2025 at 300 Plaza Circle, Mundelein. Commission Chairman T. Roswick called the meeting to order at 7:00 PM.

PLEDGE OF ALLEGIANCE

Chairman T. Roswick led the Pledge of Allegiance.

ATTENDANCE

Recording Secretary E. Swanson took the roll call. It indicated as follows:

Board Attendance

PRESENT: Chairman Roswick, Commissioner Anderson, Commissioner Garesche, Commissioner Holden, Commissioner Schneckloth, Commissioner Teehan
ABSENT: Commissioner Petti

Village Attendance

PRESENT: Senior Planner Malec, Senior Planner Guadarrama, Associate Planner Marvin, Recording Secretary Swanson

PUBLIC COMMENTARY

Chairman T. Roswick opened the floor to general public commentary.

Karen Rainish of 693 Wortham Drive spoke about a requested change to the minutes from the meeting held on December 18, 2024. She provided the attached document to clarify her statement at the December 18, 2024 meeting.

MINUTES APPROVAL

**Approve the Planning and Zoning Commission Regular meeting minutes from
December 18, 2024**

S. Schneckloth moved, seconded by K. Anderson to approve the December 18, 2024, Planning and Zoning Commission Regular Meeting Minutes with the addition of Ms. Rainish's clarification on her statement.

RESULT:	Passed [Yes 6, No 0, Abstained 0]
MOVER:	Commissioner Sophia Schneckloth
SECONDER:	Commissioner Kevin Anderson

AYES:	Terry Roswick, Kevin Anderson, Kerry Garesche, Jennifer Holden, Sophia Schneckloth, Kevin Teehan
NAYS:	None
ABSTAIN:	None

OLD BUSINESS

PUBLIC HEARING - Continuation from December 18, 2024 of PZC-15-2024 - 760-780 S Midlothian Road - Use Variation - Outdoor Contractor Storage Yard and Office in the R-1 District

Staff Presentation

C. Malec gave the attached PowerPoint presentation with a brief overview and history of the case. The applicant is requesting a variation to permit an Outdoor Storage Yard and Office in a R-1 Single-Family Residential zoning district.

Chairman T. Roswick swore in all in attendance who wished to speak at the public hearing.

Petitioner Presentation

At 7:18 PM, Jim Babowice, attorney on behalf of the applicant, began his presentation on the history of the case and the request of the applicant. He stated that Midlothian is a major collector road, and in review of the Village of Mundelein's Comprehensive Plan, one of the goals of the Village is to support business development and growth. It was also stated that the property is irregularly shaped consisting of two pie-like pieces that accumulate just under 3 acres of land.

Cindy Gonzalez, daughter of the property owner was brought forward to present information on conversations she witnessed during property walk-throughs with the previous owner and conversations at the property closing. When walking the property prior to closing Ms. Gonzalez stated that there were pallets and concrete paver stacks throughout the front parcel of land. She also stated that there was never any discussion with the previous homeowner that indicated that the property was in the process of being annexed into the Village of Mundelein.

Jose Gonzalez, the property owner, was brought forward to discuss the history of the property. Mr. Gonzalez (with Spanish interpretation being done by his daughter C. Gonzalez), stated that he bought the property for \$350,000. Prior to the purchase of the property, on walk-throughs there were commercial trailers and trucks already being parked on the property.

Commissioner K. Garesche questioned whether he had used an attorney to assist him with the real estate transaction. Mr. Gonzalez stated that he did have an attorney, but did not have a copy of the contract with them.

The commission reviewed the annexation timeline. The property was annexed into the Village of Mundelein in June 2019 and the property was purchased by the current owner in July 2019. Mr. Babowice stated that the annexation was not recorded nor publicly available until the closing of the property was already scheduled.

Commissioner K. Garesche questioned whether due diligence was performed for the zoning use. The deed to the property would have been taken with all restrictions and the annexation would have been recorded on the title. K. Garesche stated that it would be highly unusual to have a gap in record between all documents on record for residential use. There was further discussion on the zoning history. The property was zoned residential when it was under Lake County zoning, and the annexation into Mundelein was also residential. There was no history found of commercial or industrial zoning for this property.

Mr. Babowice presented a photograph of aerials from 2018 and 2024 showing commercial trucks allegedly present before and after the annexation. (STAFF NOTE: THE AERIAL SHOWN BY THE PETITIONER LABELED AS '2018' IS ACTUALLY A 2022 AERIAL FROM LAKE COUNTY GIS). It was stated by Mr. Babowice that the business has been in operation for several years without complaint until now.

Cindy Gonzalez stated that the property was only used at this point to park work trucks. She claims there is no landscaping production on site. She said that there is no office work done in the residential structure, as they conduct their office business at their family home in Mundelein.

Mr. Babowice asked Mr. Gonzalez (with Spanish interpretation assistance from his daughter, Cindy Gonzalez) about improvements made to the property since his purchase in 2019. Mr. Gonzalez stated that he improved the landscaping and added a secure fence with gate. He also installed lighting that faced down and away from the residences. Mr. Gonzalez also stated that the property would be of no use to him if he can not use it for his landscaping business. He also plans to provide more screening and has plans to add more arborvitae trees. He has been operating his business without incident.

At 7:55 PM a member of the public stood up during the Petitioner's presentation and requested clarification on the proceedings. She requested to be allowed to give her commentary immediately, but Chairman T. Roswick indicated that there would be a public commentary opportunity after the presentation. She asked how long the

applicant would be allowed to present and Chairman T. Roswick clarified that the applicant is allowed due process and has no time limit on their presentation. T. Roswick let all members of the public know that there will be more opportunity to present new information that was not heard at the last meeting after the applicant's presentation is complete.

Mr. Babowice continued his presentation and showed video footage taken by Cindy Gonzalez. The first video showed the arborvitae trees that were planted along the fence line on the front piece of the property. The second video showed the open field in the back piece of the property. She pointed out that there did not appear to be damage along the fence line a resident claimed was damaged by them. It was stated that there is no development planned for the rear of the property.

Glenn Christensen, a landscape architect on behalf of the applicant gave a presentation on the site plan. After a brief discussion on his background he stated that he recommended that the applicant install an 8 foot tall fence in the rear of the parcel, as well as more arborvitae trees along the side facing the neighbors to increase screening. He stated that he also recommended that the applicant hire a civil engineer to review any areas to be paved to ensure they would meet any watershed requirements with the issue of parking vehicles and the potential issue of vehicle fluids being put into the ground.

The commissioners did question Mr. Christensen as to the height of the fence he recommended. The maximum allowable fence height in the Village is 6 feet. Mr. Christensen said he had not looked into the code and had assumed since it was an interior yard that 8 feet would have been an allowable height.

Public Commentary was previously opened on December 18, 2024. At 8:26 PM on January 15th, 2025 public commentary resumed.

Claudio Diaconeasa of 681 Waverly Drive provided some photos to the commission showing the variety of commercial vehicles that can be seen from his property (also included in his written public commentary, which is attached). Mr. Diaconeasa also spoke of the petition against this application by several of the residential property owners in his subdivision.

Alicia Valestin of 677 Wortham Drive pointed on the map where the two neighbors that she knew of who were in support of the application. Ms. Valestin read a statement written by her son on his his experience in the cul-de-sac and the hindrance that having the contractor storage yard has placed on his ability to enjoy the outdoors. Ms. Valenstin continued on to read a statement she prepared highlighting the history of the property (included within the attached public commentary) including a recorded copy of the annexation agreement and statements made by Lake County staff as to the

history of the use of the property. Ms. Valestin also discussed the topic of the property's possible environmental impact of allowing outdoor contractor storage next to Wortham Park.

At 8:45 PM Ron Salski, Executive Director of the Mundelein Park District spoke of Wortham Park. Mr. Salski discussed that the intended use of this park is for residential use and this park in particular has had challenges relating to erosion and water quality that the Park District has been putting in effort to keep in good condition for residents. Mr. Salski went on to voice concerns on the environmental impacts of the outdoor contractor storage next to Wortham Park and stated that there may be an environmental impact study needed by an outside party to fully assess the intended use's impact.

Commission Discussion began at 8:48 PM

K. Garesche stated that historically on the PZC, we have spent much time considering impacts businesses have on surrounding areas even when the property in question is properly zoned for the use. It has been a priority of the Village to support and facilitate business growth, but that being said, Mundelein is a greenspace town and these areas should be protected. For the details of this particular case, the property owner entered a residential contract with the seller. If there was a conflict that caused a misunderstanding of the allowed use of the property, the complaint would be with the prior seller, not the Village. K. Garesche stated that she would not be in favor of this use on a residentially zoned parcel, and that there are other locations in Mundelein available for the storage of trucks.

S. Scheckloth discussed the facts and hardships related to the case. The hardships the property owner is facing are self created and allowing this use to continue would be a detriment. The property owner was operating without a business license on a property that was not zoned for the use, and the property location is adjacent to a park and neighborhood.

J. Holden stated that she would not want to set a precedent that would allow other businesses to move into R-1 zoned properties to convert them into commercial or industrial properties without any unique hardships.

K. Anderson stated that this location is not conducive to the business use and controls on future use of the property could be an issue.

Motion to recommend Denial of a use variation to Table 20.28-1 of Section 20.28.020 to permit an Outdoor Contractor Storage Yard and Office in the R-1 Single-Family Residential zoning district at 760-780 S Midlothian Road, Mundelein, Illinois, incorporating the findings of fact as presented.

RESULT:	Passed [Yes 6, No 0, Abstained 0]
MOVER:	Commissioner Anderson
SECONDER:	Commissioner Garesche
AYES:	Chairman Roswick, Commissioner Anderson, Commissioner Garesche, Commissioner Holden, Commissioner Schneckloth, Commissioner Teehan
NAYS:	None
ABSTAIN:	None

Motion to close Public Hearing PZC-15-2024

RESULT:	Passed [Yes 6, No 0, Abstained 0]
MOVER:	Commissioner Schneckloth
SECONDER:	Commissioner Anderson
AYES:	Chairman Roswick, Commissioner Anderson, Commissioner Garesche, Commissioner Holden, Commissioner Schneckloth, Commissioner Teehan
NAYS:	None
ABSTAIN:	None

NEW BUSINESS

PUBLIC HEARING - PZC-19-2024 - 1126 Magnolia Road - Variation - Size of Accessory Structure

Motion to open Public Hearing PZC-19-2024

RESULT:	Passed [Yes 6, No 0, Abstained 0]
MOVER:	Commissioner Sophia Schneckloth
SECONDER:	Commissioner Kerry Garesche
AYES:	Terry Roswick, Kevin Anderson, Kerry Garesche, Jennifer Holden, Sophia Schneckloth, Kevin Teehan
NAYS:	None
ABSTAIN:	None

Staff Presentation

I. Guadarrama reviewed the attached PowerPoint presentation and reviewed the details and history of the property. The petitioner is applying for a Variation to allow an

accessory structure (pergola) which exceed the allowed accessory structure maximum size of 144 square feet at 1126 Magnolia Road.

Commissioner S. Schneckloth stated that the commission had previously permitted larger pergolas over existing structures because it did not increase the impervious surface footprint of the property. One example is in the Longmeadow subdivision.

Public Commentary

Pat McCansky, a neighbor, questioned if the HOA had been contacted for approval. John Carter, property owner at 1126 Magnolia Road, responded that they had gone through the HOA and the pergola was approved. Mr. McCansky stated that the pergola is not obtrusive and has no objections.

Carol Marquist, a neighbor, stated that she sees the pergola when walking the neighborhood and feels it is a positive addition to the neighborhood and hopes it gets approved.

John Carter, property owner at 1126 Magnolia Road clarified that he had gone to the HOA originally for a gazebo. The HOA does not approve gazebos as they have roofs on the structures, but a pergola is open air and approved by the HOA.

Commission Discussion

Commissioner S. Schneckloth stated that she would be in support of the approval. There is no increase in footprint. The size discrepancy is mostly due to a large overhang. The lot in question is larger and falls in line with previous approvals by the commission for similar projects. Commissioner K. Garesche stated she also supports approval for the same reasons.

J. Holden questioned the alteration in the field. It was stated that there were several places that there were alterations during construction. Eric Hagen of Craiger Custom Design stated that they had picked up on the design from another bid on the property without viewing the project location. Upon installation there were conditions with the location that needed to be addressed to allow for access to the steps and to avoid drilling through the brick patio. I. Guadarrama stated that upon when the building inspector reviewed the post holes - the distance between post holes was not inspected, so discrepancy in size was not found by the Village until completion of the pergola.

Commissioner Schneckloth stated an interest in a possible zoning amendment for increasing maximum accessory building size. The commission discussed the possibility of using a sliding scale in relation to size of the lot.

Motion to recommend **Approval** of a variation from **Section 20.52.050(A)(9)** to allow a pergola, which exceeds the maximum allowed square footage of 144 square feet, in the R-1 Single-Family Residential zoning district at 1126 Magnolia Road, including the findings of facts.

RESULT:	Passed [Yes 6, No 0, Abstained 0]
MOVER:	Commissioner Jennifer Holden
SECONDER:	Commissioner Sophia Schneckloth
AYES:	Terry Roswick, Kevin Anderson, Kerry Garesche, Jennifer Holden, Sophia Schneckloth, Kevin Teehan
NAYS:	None
ABSTAIN:	None

Motion to close Public Hearing PZC-19-2024

RESULT:	Passed [Yes 6, No 0, Abstained 0]
MOVER:	Commissioner Kevin Anderson
SECONDER:	Commissioner Sophia Schneckloth
AYES:	Terry Roswick, Kevin Anderson, Kerry Garesche, Jennifer Holden, Sophia Schneckloth, Kevin Teehan
NAYS:	None
ABSTAIN:	None

PUBLIC HEARING - PZC-20-2024 - 1464 S Butterfield Road - Variation - Motor Vehicle Service and Repair (Minor) Use Standards

Motion to open Public Hearing PZC-20-2024

RESULT:	Passed [Yes 6, No 0, Abstained 0]
MOVER:	Commissioner Sophia Schneckloth
SECONDER:	Commissioner Kerry Garesche
AYES:	Terry Roswick, Kevin Anderson, Kerry Garesche, Jennifer Holden, Sophia Schneckloth, Kevin Teehan
NAYS:	None
ABSTAIN:	None

Staff Presentation

J. Marvin reviewed the attached PowerPoint presentation and reviewed the details and history of the property. The petitioner is applying for a Variation to allow vehicles to be stored on-site for a maximum of 21 days.

Petitioner Presentation

Luis Leon of Motus Auto Repair stated that the owner of the building had requested that he no longer use the parking spaces at American Mattress as they are trying to get a long-term lease in that location. The parking spaces for the American Mattress building exceed the amount needed. Mr. Leon is not concerned about people encroaching his designated spaces.

Commissioner Schneckloth stated that she would prefer to use area C on the map first for 21-day long-term storage.

Public Commentary

There was no public commentary.

Commission Discussion

Commissioner J. Holden brought up a difficulty finding hardhsip to warrant 21-day storage vs. what the Zoning Ordinance allows for "Major" auto repair (15 days). The Commission changed the length of time cars can be stored from the 21 days requested to 15 days.

Motion to recommend **Approval** of a variation to **Section 20.48.040(AA)** allowing vehicles to be stored on-site for a maximum of 15 days at 1464 S. Butterfield Road, incorporating the Findings of Fact as amended, with the following conditions:

- a. Long-Term parking must be located behind the building in location C and D; and
- b. Signage for the designated long-term parking stalls is required.

RESULT:	Passed [Yes 6, No 0, Abstained 0]
MOVER:	Commissioner Sophia Schneckloth
SECONDER:	Commissioner Jennifer Holden
AYES:	Terry Roswick, Kevin Anderson, Kerry Garesche, Jennifer Holden, Sophia Schneckloth, Kevin Teehan
NAYS:	None
ABSTAIN:	None

Motion to close Public Hearing PZC-20-2024

RESULT:	Passed [Yes 6, No 0, Abstained 0]
MOVER:	Commissioner Kevin Anderson
SECONDER:	Commissioner Jennifer Holden

AYES:	Terry Roswick, Kevin Anderson, Kerry Garesche, Jennifer Holden, Sophia Schneckloth, Kevin Teehan
NAYS:	None
ABSTAIN:	None

QUESTIONS AND COMMENTS

There were no additional questions and comments received.

ADJOURNMENT

Motion to adjourn the Planning & Zoning Commission Meeting of January 15, 2025

RESULT:	Passed [Yes 6, No 0, Abstained 0]
MOVER:	Commissioner Jennifer Holden
SECONDER:	Commissioner Kevin Anderson
AYES:	Terry Roswick, Kevin Anderson, Kerry Garesche, Jennifer Holden, Sophia Schneckloth, Kevin Teehan
NAYS:	None
ABSTAIN:	None

The Regular Meeting of the Planning and Zoning Commission adjourned at 10:31 PM.

Sign-In Sheet

NAME/COMPANY

ADDRESS

PHONE/EMAIL

Name: Karen Rainish	693 Waltham Dr. Mundelein	Phone: 847 749 525
Company: resident		Email:
Name: Alicia Valentin	1777 Northland	Phone: 847 970 0581
Company: resident	Mundelein	Email: nolechi1998@yahoo.com
Name: Linda & John Carter	1126 Magawood	Phone: (425) 512-5233
Company: Resident	Mundelein, IL	Email: LC9922@gmail.com
Name:		Phone:
Company:		Email:
Name:		Phone:
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Company:		Email:

Sign-In Sheet

NAME/COMPANY	ADDRESS	PHONE/EMAIL
Name: ERIC HAGEN	RE: 1126 MAGNOLIA	Phone: 815-479-9660
Company: CRARGER CUSTOM DESIGN		Email: ERIC@CRARGERCUSTOMDESIGN.COM
Name: LUIS LEON	1464 S BUTTERFIELD RD	Phone: 224-206-8915
Company: MOTUS INC	MUNDELEIN, IL 60060	Email: lleon@motusauto.com
Name: Ron Salski	1401 N. Middlebrook Rd	Phone: 224-290-4830
Company: Mundelein Park Dist Mundelein		Email: rsalski@mundeleinpark.org
Name: GLENN CHRISTENSEN	4990 PRAIRIE OAK	Phone: 847/404-2307
Company:	GURNEE, IL 60031	Email: gchristensen872@gmail.com
Name: TOMAS SOLNICKY	677 WAVERLY	Phone: 630-802-3546
Company:	MUNDELEIN	Email: T-SOLNICKY
Name:		Phone:
Company:		Email:
Name:		Phone:
Company:		Email:
Name:		Phone:
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Karen Rainish
693 Wortham Drive
Mundelein, IL 60060
January 15, 2025

Re: Of the properties: 760-780 Midlothian Road in Mundelein being rezoned or given variances from the current "R" designation.

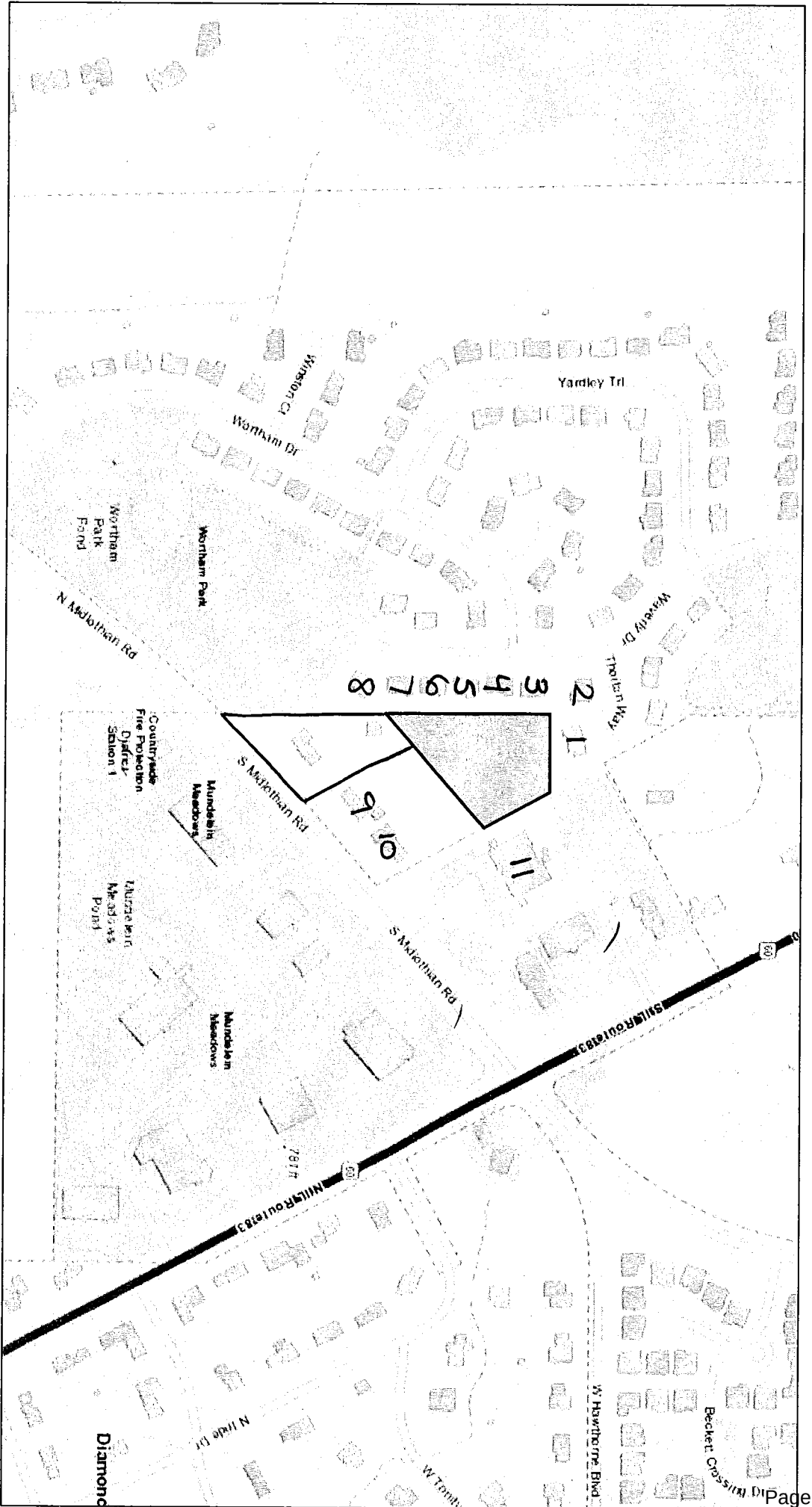
I am submitting this statement because the minutes for the December meeting did not include my most important statement. So I will clarify:

The above properties have two sections, front and back, starting off Midlothian Road. The side of the front property is higher than Wortham Lake in Wortham Park and is next to it. Rain run-off will go into the park district lake, which floods every spring and at other high-rain events. This covers the sidewalks at the front of the park. More paving and buildings on this property at the front will make this worse. The Lake has also caused flooding on Midlothian road, and I am not talking about last year when the pipe was broken. My property backs onto this park and lake that abuts a property line of these parcels. My family has lived here for over 30 years, and has a view of part of this property. The back part of this property is lower than all the residences along it. The back also abuts a daycare yard used for play.

In addition, I do not care to hear more dump trucks dump loads like large rocks, and I do not want to hear more grinding of trees into mulch. I am glad this business is successful, but we residents in this subdivision should not pay the price in disturbed peace and lower property value, should more development be allowed on this property.

Thank you,
Karen Rainish

1036100019 760 S MIDLOTHIAN RD, MUNDELEIN, IL, 60060



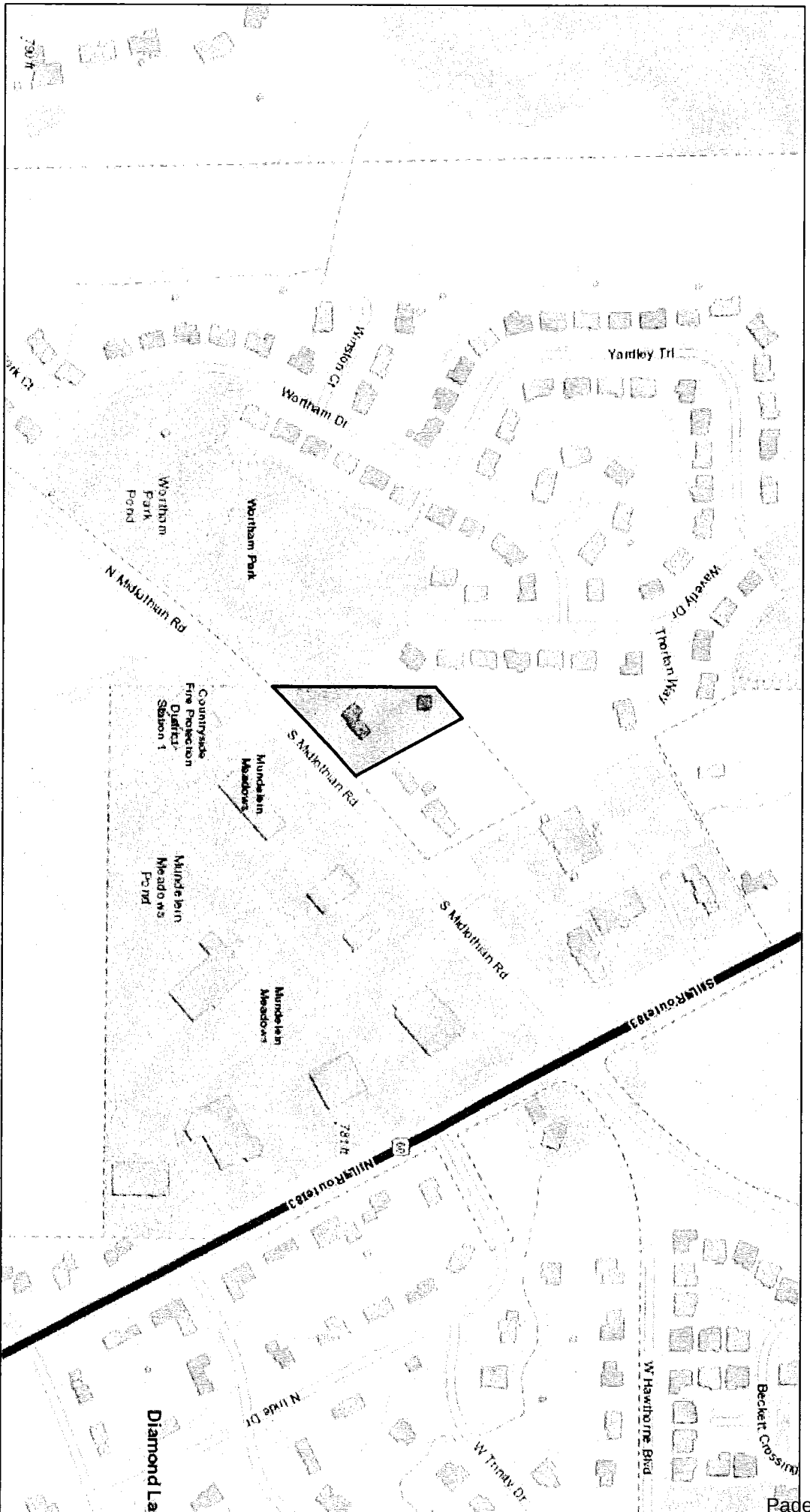
January 14, 2025

1:3,747
0 0.04 0.07 0.14 mi
0 0.05 0.1 0.2 km

County of Lake IL, East Canada, East, HERE, Garmin,
INCREMENT P, USGS, EPR, USDA, Lake County, Illinois
GIS Division

Lake County IL Assessment and Tax office

1036100003 780 S MIDLOTHIAN RD, MUNDELEIN, IL, 60060



January 14, 2025

1:3,747
0 0.04 0.07 0.1 0.14 mi
0 0.05 0.1 0.2 km

County of Lake, IL, Esri, HERE, Garmin,
INCORPORATED, USGS, EPA, USDA, Lake County, Illinois
GIS Division

Lake County, IL, Assessment and Tax Office

PARID: 1036116003
NBHD: 1215010
GAMROTH, DOUGLAS R
Tax Year: 2024 (Taxes Payable in 2025).

ASSESSOR #: 049
ROLL: RP
1401 THORTON WAY
Select **Tax Year** on the right:

Values History

Asmt Year	Pay Year	Class	Land AV	Building AV	Total AV	Land MV	Bldg MV	Total MV	Taxable EAV	Value Change Reason
2024	2025	RES	\$29,011	\$116,732	\$145,743	\$87,042	\$350,231	\$437,273	\$137,743	3 – SA Equalization
2023	2024	RES	\$26,581	\$106,956	\$133,537	\$79,751	\$320,900	\$400,651	\$125,537	3 – SA Equalization
2022	2023	RES	\$33,789	\$104,620	\$138,409	\$101,377	\$313,891	\$415,268	\$132,409	3 – SA Equalization
2021	2022	RES	\$32,605	\$100,955	\$133,560	\$97,825	\$302,895	\$400,720	\$127,560	3 – SA Equalization

(2)

PARID: 1035209021

ASSESSOR #: 049

NBHD: 1215010

ROLL: RP

SAKODA, AMY

1405 THORTON WAY

Tax Year: 2024 (Taxes Payable in 2025).

Select **Tax Year** on the right:

Values History

Asmt Year	Pay Year	Class	Land AV	Building AV	Total AV	Land MV	Bldg MV	Total MV	Taxable EAV	Value Change Reason
2024	2025	RES	\$29,011	\$100,615	\$129,626	\$87,042	\$301,875	\$388,917	\$113,626	3 – SA Equalization
2023	2024	RES	\$26,581	\$92,189	\$118,770	\$79,751	\$276,595	\$356,346	\$102,770	3 – SA Equalization
2022	2023	RES	\$33,789	\$87,134	\$120,923	\$101,377	\$261,428	\$362,805	\$109,923	3 – SA Equalization
2021	2022	RES	\$32,605	\$84,082	\$116,687	\$97,825	\$252,271	\$350,096	\$105,687	3 – SA Equalization

PARID: 1035209015
NBHD: 1215010
RANCHERO, JOSEPHINE M
Tax Year: 2024 (Taxes Payable in 2025).

ASSESSOR #: 049
ROLL: RP
673 WAVERLY DR
Select **Tax Year** on the right:

Values History

Asmt Year	Pay Year	Class	Land AV	Building AV	Total AV	Land MV	Bldg MV	Total MV	Taxable EAV	Value Change Reason
2024	2025	RES	\$27,334	\$114,034	\$141,368	\$82,010	\$342,136	\$424,146	\$125,368	3 – SA Equalization
2023	2024	RES	\$25,045	\$104,484	\$129,529	\$75,143	\$313,483	\$388,626	\$113,529	3 – SA Equalization
2022	2023	RES	\$27,490	\$99,100	\$126,590	\$82,478	\$297,330	\$379,808	\$115,590	3 – SA Equalization
2021	2022	RES	\$26,527	\$95,629	\$122,156	\$79,589	\$286,916	\$366,505	\$111,156	3 – SA Equalization

PARID: 1035209016

NBHD: 1215010

BUJAK, DOROTA

Tax Year: 2024 (Taxes Payable in 2025).

ASSESSOR #: 049

ROLL: RP

677 WAVERLY DR

Select **Tax Year** on the right:

Values History

Asmt Year	Pay Year	Class	Land AV	Building AV	Total AV	Land MV	Bldg MV	Total MV	Taxable EAV	Value Change	Reason
2024	2025	RES	\$27,334	\$106,895	\$134,229	\$82,010	\$320,717	\$402,727	\$126,229	3	– SA Equalization
2023	2024	RES	\$25,045	\$97,943	\$122,988	\$75,143	\$293,858	\$369,001	\$114,988	3	– SA Equalization
2022	2023	RES	\$27,490	\$90,861	\$118,351	\$82,478	\$272,610	\$355,088	\$112,351	3	– SA Equalization
2021	2022	RES	\$26,527	\$87,678	\$114,205	\$79,589	\$263,060	\$342,649	\$108,205	3	– SA Equalization

PARID: 1035209017
NBHD: 1215010
DIACONEASA, CLAUDIU & BIANCA C
Tax Year: 2024 (Taxes Payable in 2025).

ASSESSOR #: 049
ROLL: RP
681 WAVERLY DR
Select **Tax Year** on the right:

Values History

Asmt Year	Pay Year	Class	Land AV	Building AV	Total AV	Land MV	Bldg MV	Total MV	Taxable EAV	Value Change Reason
2024	2025	RES	\$27,334	\$115,740	\$143,074	\$82,010	\$347,255	\$429,265	\$135,074	3 – SA Equalization
2023	2024	RES	\$25,045	\$106,047	\$131,092	\$75,143	\$318,173	\$393,316	\$123,092	3 – SA Equalization
2022	2023	RES	\$27,490	\$100,877	\$128,367	\$82,478	\$302,661	\$385,139	\$122,367	3 – SA Equalization
2021	2022	RES	\$26,527	\$97,343	\$123,870	\$79,589	\$292,058	\$371,647	\$117,870	3 – SA Equalization

PARID: 1035209018
NBHD: 1215010
FURLAN, ALEX & CHRISTINA
Tax Year: 2024 (Taxes Payable in 2025).

ASSESSOR #: 049
ROLL: RP
685 WAVERLY DR
Select **Tax Year** on the right:

Values History

Asmt Year	Pay Year	Class	Land AV	Building AV	Total AV	Land MV	Bldg MV	Total MV	Taxable EAV	Value Change Reason
2024	2025	RES	\$27,334	\$107,001	\$134,335	\$82,010	\$321,035	\$403,045	\$126,335	3 – SA Equalization
2023	2024	RES	\$25,045	\$98,040	\$123,085	\$75,143	\$294,149	\$369,292	\$115,085	3 – SA Equalization
2022	2023	RES	\$27,490	\$91,980	\$119,470	\$82,478	\$275,968	\$358,446	\$113,470	3 – SA Equalization
2021	2022	RES	\$26,527	\$88,758	\$115,285	\$79,589	\$266,301	\$345,890	\$109,285	3 – SA Equalization

7

PARID: 1035209019
NBHD: 1215010
RICCI, RYAN M
Tax Year: 2024 (Taxes Payable in 2025).

ASSESSOR #: 049
ROLL: RP
689 WAVERLY DR
Select **Tax Year** on the right:

Values History

Asmt Year	Pay Year	Class	Land AV	Building AV	Total AV	Land MV	Bldg MV	Total MV	Taxable EAV	Value Change Reason
2024	2025	RES	\$27,334	\$107,070	\$134,404	\$82,010	\$321,242	\$403,252	\$124,246	3 – SA Equalization
2023	2024	RES	\$25,045	\$96,126	\$121,171	\$75,143	\$288,407	\$363,550	\$113,171	3 – SA Equalization
2022	2023	RES	\$27,490	\$88,932	\$116,422	\$82,478	\$266,823	\$349,301	\$110,422	3 – SA Equalization
2021	2022	RES	\$26,527	\$85,817	\$112,344	\$79,589	\$257,477	\$337,066	\$106,344	3 – SA Equalization

PARID: 1035209020
NBHD: 1215010
STEVEN D ODES & MARLENE L GALANTE
Tax Year: 2024 (Taxes Payable in 2025).

ASSESSOR #: 049
ROLL: RP
693 WAVERLY DR
Select **Tax Year** on the right:

Values History

Asmt Year	Pay Year	Class	Land AV	Building AV	Total AV	Land MV	Bldg MV	Total MV	Taxable EAV	Value Change Reason
2024	2025	RES	\$31,527	\$111,220	\$142,747	\$94,590	\$333,693	\$428,283	\$126,747	3 – SA Equalization
2023	2024	RES	\$28,887	\$101,906	\$130,793	\$86,670	\$305,749	\$392,419	\$114,793	3 – SA Equalization
2022	2023	RES	\$36,903	\$96,316	\$133,219	\$110,720	\$288,977	\$399,697	\$122,219	3 – SA Equalization
2021	2022	RES	\$35,610	\$92,942	\$128,552	\$106,841	\$278,854	\$385,695	\$117,552	3 – SA Equalization

9

PARID: 1036100004
NBHD: 1236460
LAURA M FINCH & ROBERT L ZAMOR
Tax Year: 2024 (Taxes Payable in 2025).

ASSESSOR #: 049
ROLL: RP
26862 N MIDLOTHIAN RD
Select **Tax Year** on the right:

Values History

Asmt Year	Pay Year	Class	Land AV	Building AV	Total AV	Land MV	Bldg MV	Total MV	Taxable EAV	Value Change Reason
2024	2025	RES	\$27,334	\$46,682	\$74,016	\$82,010	\$140,060	\$222,070	\$74,016	3 – SA Equalization
2023	2024	RES	\$25,045	\$42,773	\$67,818	\$75,143	\$128,332	\$203,475	\$67,818	3 – SA Equalization
2022	2023	RES	\$20,294	\$44,099	\$64,393	\$60,888	\$132,310	\$193,198	\$64,393	3 – SA Equalization
2021	2022	RES	\$19,583	\$42,554	\$62,137	\$58,755	\$127,675	\$186,430	\$62,137	3 – SA Equalization

PARID: 1036100005
NBHD: 1236460
BROWER, ROBERTA A
Tax Year: 2024 (Taxes Payable in 2025).

ASSESSOR #: 049
ROLL: RP
26878 N MIDLOTHIAN RD
Select **Tax Year** on the right:

Values History

Asmt Year	Pay Year	Class	Land AV	Building AV	Total AV	Land MV	Bldg MV	Total MV	Taxable EAV	Value Change Reason
2024	2025	RES	\$27,334	\$61,499	\$88,833	\$82,010	\$184,515	\$266,525	\$72,833	3 – SA Equalization
2023	2024	RES	\$25,045	\$56,349	\$81,394	\$75,143	\$169,064	\$244,207	\$65,394	3 – SA Equalization
2022	2023	RES	\$20,294	\$59,150	\$79,444	\$60,888	\$177,468	\$238,356	\$66,444	3 – SA Equalization
2021	2022	RES	\$19,583	\$57,078	\$76,661	\$58,755	\$171,251	\$230,006	\$63,661	3 – SA Equalization

(17)

PARID: 1036101011
NBHD: 1223750
GISLER FAMILY, LP
Tax Year: 2024 (Taxes Payable in 2025).

ASSESSOR #: 049
ROLL: RP
695 S IL ROUTE 83
Select **Tax Year** on the right:

Values History

Asmt Year	Pay Year	Class	Land AV	Building AV	Total AV	Land MV	Bldg MV	Total MV	Taxable EAV	Value Change Reason
2024	2025	COM	\$239,801	\$265,150	\$504,951	\$719,475	\$795,530	\$1,515,005	\$504,951	3 – SA Equalization
2023	2024	COM	\$219,719	\$242,945	\$462,664	\$659,223	\$728,908	\$1,388,131	\$462,664	3 – SA Equalization
2022	2023	COM	\$214,109	\$251,221	\$465,330	\$642,391	\$753,738	\$1,396,129	\$465,330	3 – SA Equalization
2021	2022	COM	\$206,609	\$242,421	\$449,030	\$619,889	\$727,336	\$1,347,225	\$449,030	42 – BR Decrease

From: [Erin Swanson](#)
To: [Colleen Malec](#)
Subject: FW: EXTERNAL -Planning & Zoning Commission Gonzalez petition (Case PZC-15-2024)
Date: Tuesday, January 14, 2025 8:10:51 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
Importance: High

From: Info <info@mundelein.org>
Sent: Tuesday, January 14, 2025 7:20 AM
To: Erin Swanson <eswanson@mundelein.org>; Amanda Orenchuk <aorenychuk@mundelein.org>
Subject: FW: EXTERNAL -Planning & Zoning Commission Gonzalez petition (Case PZC-15-2024)
Importance: High

Please see the attached public commentary for a PZC Case.

Please contact me if you have any questions or need additional information. Thank you and have a great day!



Jennifer Marshall | Executive Assistant to the Village Administrator
Village of Mundelein
300 Plaza Circle, Mundelein, IL 60060
P 847-949-3225 | F 847-949-0143
jmarshall@mundelein.org

From: Ricci, Ryan <RRicci@medline.com>
Sent: Monday, January 13, 2025 5:34 PM
To: Planning <planning@mundelein.org>; Info <info@mundelein.org>
Cc: ryanricci22@gmail.com
Subject: EXTERNAL -Planning & Zoning Commission Gonzalez petition (Case PZC-15-2024)
Importance: High

Caution: This message originated outside of the Village of Mundelein -- DO NOT CLICK on links or open attachments unless you are sure the content is safe. If you have any doubt, contact the sender by phone to confirm.

Hi Planning/Zoning team, my name is Ryan Ricci [689 Waverly Dr – property in green further below] and I was present at the December 18th hearing for the above case, to determine if 760-780 Midlothian Rd can be changed to commercial zoning versus its status today of residential. I will not be able to attend the continuance hearing this Wednesday, 1/15/25, as my wife and I

will be out of town, however, wanted to express our continued **opposition** for this petition from the Gonzalez family.

As we heard/confirmed at the 12/18 meeting, this property is surrounded by nothing but residential properties with the far point, the only part of which sits up against a commercial property [of which the petitioner has already confirmed not wanting to develop at this time], being a child care facility [KinderCare]. I expressed on 12/18 the damage that was already done to a portion of my fence, which was never fixed or even acknowledged in years past by the Gonzalez family – safety is a paramount concern especially having a 2 year old daughter. The amount of dust, dirt and vermin this site has brought, which neighbors have expressed concerns over both verbally and through email, I can personally validate being right on the property line. Their diesel engines are noisy and pungent, adding onto our environmental concerns, in addition to the parties held and what looks to be a dune buggy [or some type of other recreational vehicle] over the years that have resulted in the cops being called for being too loud.

Below are pictures to help visualize the operation of today [to confirm, none of these are zoomed in rather what I see, to scale, from my fence line or patio door] – this is a full blown commercial operation [trucks, heavy machinery, etc.], that only grows during the spring/summer/fall months, which has continued to operate as such on a residential property for years against a village code that all of us are expected to adhere to.

The Gonzalez family brings up in their petition that the topography of the property isn't suitable for residential use and that if the variation in use is not allowed, it would render it unusable to the Gonzalez family. To me, that speaks to a lack of research done on their end and ultimately their issue – I understand the annexation decision surrounding the property being made close to when the Gonzalez family purchased the property but, again, still their issue. They are only now filing due to complaints the Village has received after their operation became too big to ignore. There is no possible way the Gonzalez family can guarantee that public health or general safety would not be endangered, as they claim, when they have already proven both of them to be compromised through their practices of today.

While it was mentioned in the 12/18 meeting that if the property ever sold, it would revert back to residential, approving the zoning change would set a dangerous precedent for what other types of businesses could follow in similar footsteps. Any paving or formal development of this property would result in it being highly improbable of being purchased and/or used for residential purposes in the future.

I am aware that village members from 26862 N Midlothian and our neighbors, from 693 Waverly, have cast their approval for this petition. I would argue that the property at 26862 doesn't see/hear any of the concerns being outlined as the structure next to them is a house divided elsewhere by trees [not a storage yard filled with trucks, heavy machinery and material]. Our neighbors at 693 also do not reside in their property for 4 months of the year nor have young children that need to be considered.

I am not looking for the Gonzalez business to shut down, the ask is for their commercial base to simply move to a commercial property like all village members with businesses are expected to do. It does not matter what proposal is laid out by the Gonzalez family – my property value, nor my fellow neighbors, shouldn't have to plummet [as it undoubtedly will – the petitioner's claim that it won't is simply inaccurate] for a business that continues to operate in violation of village code. If the property isn't suitable for their residential use, they shouldn't have purchased it.

I would hope that the committee listens and respects the wishes of the overwhelming majority of voices who have spoken on this matter, who do abide by the ordinances we are all expected to follow rather than favoring a family that has done nothing but violate them over the past 5 years. We chose to purchase homes that backed up to a residential property. The Gonzalez family could have purchased any one of the vacant commercial properties in Mundelein, yet decided to purchase a residential property and willingly run a commercial business going against village ordinances for years.



Thank you for your time.

Ryan Ricci

689 Waverly Dr
Mundelein IL 60060
(847) 431-2187

Erin Swanson

From: Tomas Solnicky <tomsol11@yahoo.com>
Sent: Tuesday, January 14, 2025 10:27 PM
To: Planning
Cc: Dorotka; Tim - Neighbor; c.diaconeasa@gmail.com
Subject: EXTERNAL -Re: Petition Submission: Opposition to Case PZC-15-2024
Attachments: Signed petition 2.pdf

Caution: This message originated outside of the Village of Mundelein -- DO NOT CLICK on links or open attachments unless you are sure the content is safe. If you have any doubt, contact the sender by phone to confirm.

To: Mundelein Planning and Zoning Commission
Village Hall, 300 Plaza Circle
Mundelein, Illinois 60060

Dear Members of the Planning and Zoning Commission,

We, the undersigned residents, neighbors, and concerned citizens of Mundelein, hereby submit this updated petition in opposition to the request by Maria and Jose Gonzalez (Case PZC-15-2024) for a Variation from Table 20.28-1 of Section 20.28.020 to permit an Outdoor Contractor Storage Yard and Office within the R-1 Single-Family Residential zoning district at 760-780 South Midlothian Road, Mundelein, IL with included pictures of current whole fleet of vehicles and equipment stored at the property zoned as R-1 Single-Family Residential.





Sincerely

Tomas Solnicky

On behalf of Petitioning Residents and Neighbors

630-802-3546

tomsol11@yahoo.com

Petition Against the Proposed Variation for an Outdoor Contractor Storage Yard and Office in R-1 Residential Zoning at 760-780 South Midlothian Road, Mundelein, IL

To:

**The Mundelein Planning & Zoning Commission
Village Hall 300 Plaza Circle
Mundelein, IL 60060**

Reasons for Opposition:

1. Unlawful and unregistered operation of Petitioners' landscape business.
 - a. Upon securing the property on July 15, 2019, the Petitioners were fully aware that the property was zoned for R-1 residential use and begin to fully operate a commercial landscaping business illegally that subsequently led to profit and growth of their business, Jose Gonzalez Landscaping, Corp.. Petitioners' are not asking for permission to start a new business but rather after 5 years of unlawful operation ask for forgiveness to continue to operate such business on land that was and still remains zoned as R-1 residential zoning.
 - b. Petitioners' landscape business is not legally registered to operate in the city of Mundelein since its operation on property as of July 15, 2019.
2. The property is flanked on both the north, west and east by properties zoned in both Mundelein and unincorporated Lake County as R-1 Residential as noted in the attached Fremont Township Zoning map.
3. Property well suited for R-1 Residential District
 - a. The irregular shape of the lot should have no bearing nor impact on residential use. In fact, the use of vacant open space is what a lot of families within Mundelein seek. Kids would love to have a 3 acre back yard to play football, soccer, baseball field or a temporary hockey rink as most residential properties do not offer this residential benefit.
 - b. The property has been zoned as unincorporated Lake County and Mundelein since acquired by the Sawvell Family on June 21, 1985 and has never been petitioned nor has ever been not well suited for 40 years otherwise.
4. Property Annexation Responsibility & solely lies upon Petitioners and is irrelevant to the petition request.
 - a. Despite the fact the prior owner did not notify the Petitioner that the Property was in the process of being annexed to the Village, the application for annexation was dated on June 24, 2029. The Annexation page 2 of 32, lines 18-20 was signed by Village Mayor.

- b. It was not the intent of the previous owner who purchased the Property in 2015, at which time the Property was and continues to be used as a single-family residential home (“Exisiting Use”) as stated in the Annexation application with the interpretation of rezoning or redevelopment to be used as future development of multiple residential home sites, an extension of the Mundelein park district or open space use. The rezoning was not classified as Commercial Property zoning use.
 - c. Page 3 of 32 of the Annexation application, lines 41-45 clearly state the property was classified as R-1 Residential use.
- 5. Page 4 of 32, line 58-62 of the Annexation Application state the following statements:
 - a. Control the development of the area being annexed and,
 - b. Otherwise enhance, promote and serve the best interests and general welfare of the VILLAGE and its residents
 Permitting the variation to this current R-1 Residential property go against the general welfare of the VILLAGE and its surrounding residents
- 6. Page 5 of 32, lines 81-82 of the Annexation application Section 2.2 ZONING
 - a. The property shall be zoned as a single family residential
- 7. Page 9 of 32, lines 155-165 of the Annexation agreement state
 - a. Term- Annexation Agreement shall be binding and all subsequent OWNERS of the property for a (20) year term
- 8. Page 15 of 32, lines 252-260 of the Annexation application signed by Mayor & VILLAGE Effective June 24, 2019
 - a. This annexation was signed prior to the Petitioners owning and closing on the property on June 19, 2019 by Gerald R. Teegan per lines 295-302 with full knowledge and blaent disregard of the annexation approval that occurred prior to their ownership of the Property.
 - b. Page 18 of 32, A temporary water supply agreement was entered to the VILLAGE on Jan 14, 2024. Again demonstrating that the Petitioners were in full knowledge of upon entering to own the property with full disregard to the R-1 Residential terms of the Annexation application and approval by the Mayor and the VILLAGE.
- 9. Petition for Annexation was entered on Nov 1, 2018 and a signed affidavite entered on November 1, 2018 and signed on November 2, 2018.
- 10. Request for Annexation fee wavier was entered on May 10, 2019 also stating a R-1 Single Family Residential property. Record shows proof of Annexation request documentation at least 8 months prior to the sale of the Property to the current owners.
- 11. **As provided and attested by Thomas Chefalo, AICP, the Zoning Mpas** Updated as of 05/01/2019 as provided by Mr. Thomas Chefalo. Under Lake County, plats were zoned previously as Residential prior to and since May 2019 which was recorded as Residential 2 months prior to Gonzelaz entering into any purchase agreement with the Seller Gerald Teegen. AND were so as recorded in the historical files dated back to the property in 1985 always as R-1 single family Residential.
 - a. Dated back as 2010- Property was classified as Residential & Open grassland/open space

12. As provided by and attested by Thomas Chefalo, Areas of exiting gravel, including the gravel driveway leading up the side of the property in front of the house dwelling are in fact NOT grandfathered in and are not permissible per land code and is a current violation of the property. Plans to replace the installed gravel area both in front of and behind the house of the property will be required to be reassessed per land survey as it is compromising the structure of the pond and water runoffs.
13. The Property flanks on the west by Wortham Park.
 - a. Preservation of the park, its natural resource and wildlife in the water and land is of upmost importance to the community residents and residents of Mundelein. Allowing for this
 - b. The Mundelein Parks Foundation encourages health and recreation for the community through funding efforts that help promote and enhance facilities, services, programs, parks and special projects . The Mundelein Parks Foundation is a nonprofit 501 (c) (3) charitable organization governed by an independent, voluntary board . The foundation seeks to strengthen community and family ties with a self-generating funding source .
 - c. Mundelein Park & Recreation District has a long history of providing parks and recreation for its growing community. With over 780+ acres of dedicated park land, the District keeps advancing into an innovative and expansive system. Our mission has continued to evolve as it states, “Connecting the community with safe and quality recreation through diverse programs, facilities and open space.”
 - d. With 28 parks and natural space in the city of Mundelein, of which there are ZERO parks/natural space that are located to any R1 Residential Variation and ZERO properties that are zoned within Commercial limits or use.
14. A zoning variation to operate a landscaping business will compromise the integrity of the park and surrounding community in which it seeks to continue to operate and expand.
15. In a MPRD survey conducted, Almost all (96.0%) of the respondents believe the MPRD is valuable to their community, with additional findings that showed an increase usage of open space and walking trails AND perception and importance of natural areas being important for the future of the MPRD.
16. As residents of Mundelein for over 25 years, the Petitioners business should have been aware of the needs of their growing business, the requirements for operating a business within a city permits and within a R-1 single family residence. As such consider a more suitable land for their growing business, one that is legally obtained and registered in Mundelein and doesn't impede the social and well being of nearing families, children and residential homes or park and pond preservation.

**AFTER RECORDING
RETURN TO:**

Community Development
Village of Mundelein
300 Plaza Circle
Mundelein, Illinois 60060


Image# 058366740032 Type: ANX
Recorded: 07/02/2019 at 12:57:27 PM
Receipt#: 2019-00032282
Page 1 of 32
Fees: \$50.00
Lake County IL Recorder
Mary Ellen Vanderventer Recorder
File **7573380**

ANNEXATION AGREEMENT

by and between

THE VILLAGE OF MUNDELEIN

and

**GERALD R. TEEGEN
(Property Owner)**

DATED AS OF JUNE 24, 2019

UNOFFICIAL

10
11 PREAMBLES
12

13 **A.** The OWNER is the owner of record of certain real estate which is not within,
14 but is contiguous to, the corporate limits of the VILLAGE and is commonly known as 26754
15 and 26950 North Midlothian Road, Lake County, Illinois and legally described on **Exhibit**
16 **A** attached hereto and made a part hereof, comprising approximately 2.77 acres
17 (hereinafter referred to as "Property"); and

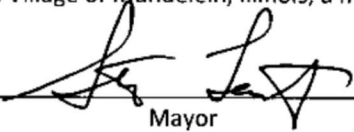
18 **B.** The OWNER purchased the Property in 2015, at which time the Property
19 was used and continues to be used as a single-family residential home ("Existing Use");
20 and

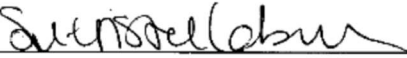
41 **G.** Section 6.4 of the VILLAGE'S Zoning Ordinance provides "Any territory
42 annexed into the VILLAGE shall automatically, upon annexation, be classified as R-1
43 Single-Family Residential District. That land shall be subject to the requirements of the R-
44 1 Single Family Residential District, unless otherwise provided for in the annexation
45 agreement or until the territory is rezoned."; and

56 J. The Corporate Authorities of the VILLAGE, after due and careful
57 consideration, have concluded that the annexation of the Property to the VILLAGE on the
58 terms and conditions herein set forth would further the VILLAGE's growth, enable it to
59 control the development of the area being annexed, increase the taxable value of the
60 Property within the VILLAGE, extend the corporate limits and jurisdiction of the VILLAGE,
61 and otherwise enhance, promote, and serve the best interests and general welfare of the
62 VILLAGE and its residents.

81 **2.2 Zoning.** At the same time as the Annexation is adopted, the Property shall
82 be zoned to the R-1 Single-Family Residential District.

252 **VILLAGE:** Village of Mundelein, Illinois, a municipal corporation

253
254 By:  _____
255 Mayor

256
257 Attest:  _____
258 Village Clerk

259
260 Dated: June 24, 2019
261

**TEMPORARY WATER
SUPPLY AGREEMENT**

THIS AGREEMENT entered into on January 14, 2019 by and between the VILLAGE OF MUNDELEIN, an Illinois home-rule municipality, 300 Plaza Circle, Mundelein, Illinois, 60060, (the "VILLAGE") and Gerald R. Teegan, 4071 Fairway Drive, Wilmette, Illinois 60091 (the "OWNER").

WHEREAS, the VILLAGE owns and operates a water supply system through which it sells and provides water to residents and businesses located within the Village boundaries; and

WHEREAS, the VILLAGE purchases Lake Michigan water from the Central Lake County Joint Action Water Agency ("CLCJAWA") through an agreement which provides, among other things, that the VILLAGE shall not sell and provide water to non-residents and businesses located outside the Village boundaries, unless it has received approval from the CLCJAWA Board to do so on a temporary basis not exceeding twelve (12) months while an annexation petition is pending; and

WHEREAS, the OWNER is the owner of record of the properties located at 26754 North Midlothian Road and 26950 North Midlothian Road, Mundelein IL, 60060 in unincorporated Lake County, Illinois which is legally described on Exhibit A attached hereto and made a part hereof (the "Subject Property"); and

PETITION FOR ANNEXATION

TO: The Mayor and Board of Trustees of the Village of Mundelein, Illinois

The undersigned Petitioner represents as follows:

1. The names and addresses of all of the owners of record of real estate covered by this Petition are as follows:

<u>Name</u>	<u>Address</u>
Gerald R. Teegen	4071 Fairway Drive
	Wilmette, IL 60091

2. The names and addresses of all electors residing on said real estate are as follows:

<u>Name</u>	<u>Address</u>
Same as above	

at least 51% of whom have signed this Petition.

3. The real estate proposed to be annexed hereunder is legally described and set forth on Exhibit A, which is attached hereto and made a part hereof.
4. A Plat of Annexation which contains an accurate map of the real estate proposed to be annexed hereunder is shown and set forth on Exhibit B, which is attached hereto and made a part hereof.
5. Said real estate is not within the boundaries of any municipality and is contiguous to the Village of Mundelein.

WHEREFORE, the Petitioner prays that the Mayor and Board of Trustees of the Village of Mundelein adopt an ordinance annexing said real estate to the Village of Mundelein, conditioned upon the parties entering into a mutually acceptable annexation agreement with respect to the subject property.

Dated: November 1, 2018

OWNERS OF RECORD:

Gerald R. Teegen

ELECTORS:

UNOFFICIAL

)

SS:

)

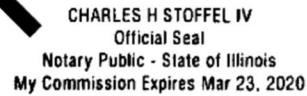
AFFIDAVIT

The undersigned, being first duly sworn on oath, deposes and says that the representations contained in the above Petition for Annexation are true to the best of his knowledge, information and belief.

Applicants Signature

Subscribed and Sworn to before me
this 2ND day of November, 2018.

Notary Public Signature



Gerald R. Teegen
4071 Fairway Drive
Wilmette, IL 60091

May 10, 2019

Village of Mundelein
Attn: Colleen Malec
300 Plaza Circle
Mundelein, IL 60060

**RE: ANNEXATION OF 26754 AND 26950 NORTH MIDLOTHIAN ROAD,
MUNDELEIN, IL**

Dear Ms. Malec:

Thank you for your help in guiding me through the annexation procedure.

At this time, I am requesting a partial waiver of the annexation fee, which was originally calculated to be \$11,384.70 (\$4,110 per acre for 2.77 acres). I'm asking for the fee to be reduced to \$1,150.80, to be paid at annexation, with the remaining \$10,233.90 to be paid upon redevelopment if it occurs.

The \$1,150.80 amount is suggested because the subject property, while 2.77 acres, only contains one single-family home. The annexation fee, which is calculated per acre and not by the intensity of the use, seems unreasonable for a single-family homeowner. Per the R-1 Single-Family Residential zoning regulations, the minimum lot size for one single-family home is 0.28 acres (12,000 SF). The requested reduction to \$1,150.80 is proportional to a typical R-1 single-family lot size (0.28 acres x the annexation fee rate of \$4,110/ acre). If the property is ever sold and redeveloped, it would make sense at that time for the developer to pay the remainder of the required annexation fee.

Thank you for your consideration of this request.

Sincerely,



	Date Filed	Index	Kind	Party One	Party Two	Remarks Not Warranted	Doc Number	Ref	Amount
1	06/21/1985 Instrument Date 05/29/1985	LAN	TRUST DEED/OF (MTG)	SAWVELL, RAY ALLEN SAWVELL, ANASTASIA V	GOLF MILL STATE BK	Pin #: 10-36-100-003- FREMONT - Area 10 Section: 36 Township: 44 Range: 10 Qtr: NW Qtr: NW PT Pin #: 10-36-100-019- FREMONT - Area 10 Section: 36 Township: 44 Range: 10 Qtr: NW Qtr: NW [+]	2363771		\$0.00
2	07/22/2005 Instrument Date 07/12/2005	LAN	RELEASE/SATISFACTION	BANK AMERICA	TEEGEN, BARRY G TEEGEN, LAURA A	Pin #: 10-36-100-003- FREMONT - Area 10 Township: 44 Range: 10 [REL] [Orig Docs: SEE NOTES]	5820611	3419066	\$0.00
3	08/10/2005 Instrument Date 05/25/2005	LAN	MORTGAGE	TEEGEN, BARRY G	BANK AMERICA	Pin #: 10-36-100-003- FREMONT - Area 10 Section: 36 Township: 44 Range: 10 Qtr: NW Address: 26754 NORTH MIDLOTHIAN RD MUNDELEIN, ILLINOIS 60060 Pin #: 10-36-100-019- FREMONT - Area 10 Section: 36 Township: 44 Range: 10 Qtr: NW [+]	5834571		\$0.00
4	08/31/2005 Instrument Date 07/12/2005	LAN	MORTGAGE-SUBORD AGMT	TEEGEN, BARRY G TEEGEN, LAURA A MUNDELEIN BK	BANK AMERICA	Pin #: 10-36-100-003- FREMONT - Area 10 Township: 44 Range: 10 [MTS] [Orig Docs: SEE NOTES]	5849866	4431767 5834571	\$0.00
5	12/29/2008 Instrument Date 12/11/2008	LAN	MORTGAGE	TEEGEN, BARRY G TEEGEN, LAURA	JPMORGAN CHASE BK	Pin #: 10-36-100-003- Section: 36 Township: 44 Range: 10 Qtr: NW PT /INC PARCEL 2 Address: 26754 NORTH MIDLOTHIAN ROAD MUNDELEIN, ILLINOIS 60060	6420394		\$0.00
6	01/08/2009 Instrument Date 12/23/2008	LAN	RELEASE/SATISFACTION	LIBERTYVILLE BK-TR CO	TEEGAN, BARRY G TEEGAN, LAURA A	Pin #: 10-36-100-003-	6423089	4431767	\$0.00
7	11/17/2015 Instrument Date 08/28/2015	LAN	DEED-WARRANTY	TEEGEN, BARRY G TEEGEN, LAURA	TEEGEN, GERALD R	Pin #: 10-36-100-003- Section: 36 Township: 44 Range: 10 Qtr: NW Qtr: NW Address: 26754 NORTH MIDLOTHIAN ROAD MUNDELEIN, ILLINOIS 60060 Pin #: 10-36-100-019- Section: 36 Township: 44 Range: 10 Qtr: NW Qtr: NW	7247824		\$400,000.00
8	05/04/2018 Instrument Date 04/25/2018	LAN	DEED-QUIT CLM(TRUST)	TEEGEN, GERALD R	TEEGEN, GERALD R TR TEEGEN GERALD R TR 06/05/1997	Pin #: 10-36-100-003-0000 Section: 36 Township: 44 Range: 10 Qtr: NW Qtr: NW Address: 26754 NORTH MIDLOTHIAN ROAD MUNDELEIN, ILLINOIS 60060	7481067		
9	07/02/2019 Instrument Date 06/24/2019	LAN	ANNEXATION	MUNDELEIN VIL	TEEGEN, GERALD R	Pin #: 10-36-100-003-0000 Address: 26754 NORTH MIDLOTHIAN ROAD MUNDELEIN, ILLINOIS 60060 Pin #: 10-36-100-019-0000 Address: 26950 NORTH MIDLOTHIAN ROAD MUNDELEIN, ILLINOIS 60060 ANNEX AGREE	7573380		
10	07/15/2019 Instrument Date 07/10/2019	LAN	DEED-WARRANTY	TEEGEN, GERALD R TR TEEGEN GERALD R TR 06/05/1997	GONZALEZ, MARIA S	Section: 36 Township: 44 Range: 10 Qtr: NW Qtr: NW Pin #: 10-36-100-003-0000 Address: 780 SOUTH MIDLOTHIAN ROAD MUNDELEIN, ILLINOIS 60060 Pin #: 10-36-100-019-0000 Address: 760 SOUTH MIDLOTHIAN ROAD MUNDELEIN, ILLINOIS 60060 [+]	7576243		\$350,000.00
11	07/15/2019 Instrument Date 07/10/2019	LAN	MORTGAGE	GONZALEZ, MARIA S	US MTG FUNDING INC MORTGAGE ELECTRONIC REGISTRATION SYS INC	Section: 36 Township: 44 Range: 10 Qtr: NW Qtr: NW Pin #: 10-36-100-003-0000 Address: 780 SOUTH MIDLOTHIAN ROAD MUNDELEIN, ILLINOIS 60060 Pin #: 10-36-100-019-0000 Address: 760 SOUTH MIDLOTHIAN ROAD MUNDELEIN, ILLINOIS 60060 [+]	7576244		

Updated as of 05/01/2019 as provided by Mr. Thomas Chefalo. Under Lake County, plats were zoned previously as Residential prior to and since May 2019 which was recorded as Residential 2 months prior to Gonzelaz entering into any purchase agreement with the Seller Gerald Teegen.

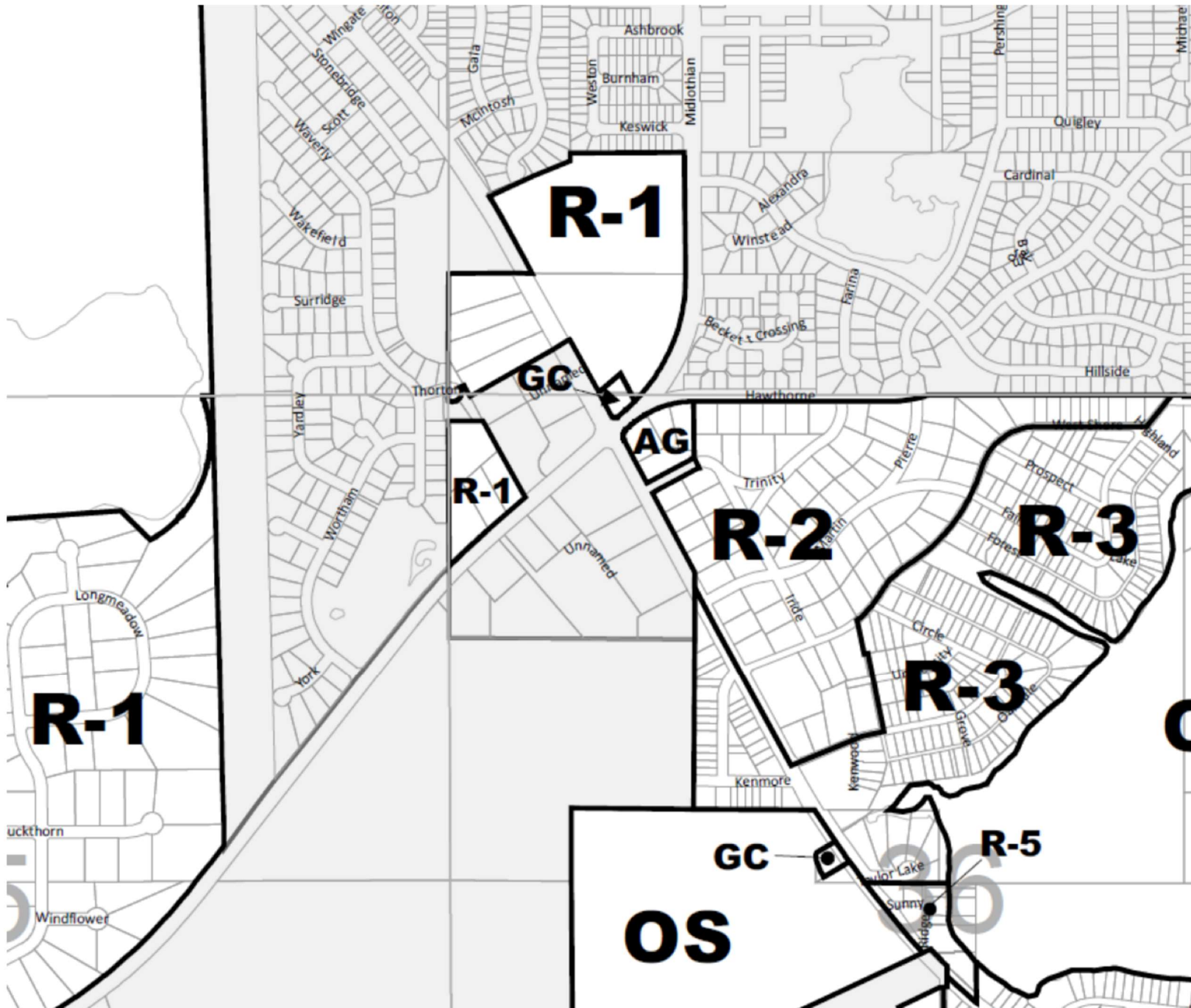
Thomas Chefalo, AICP

Principal Planner

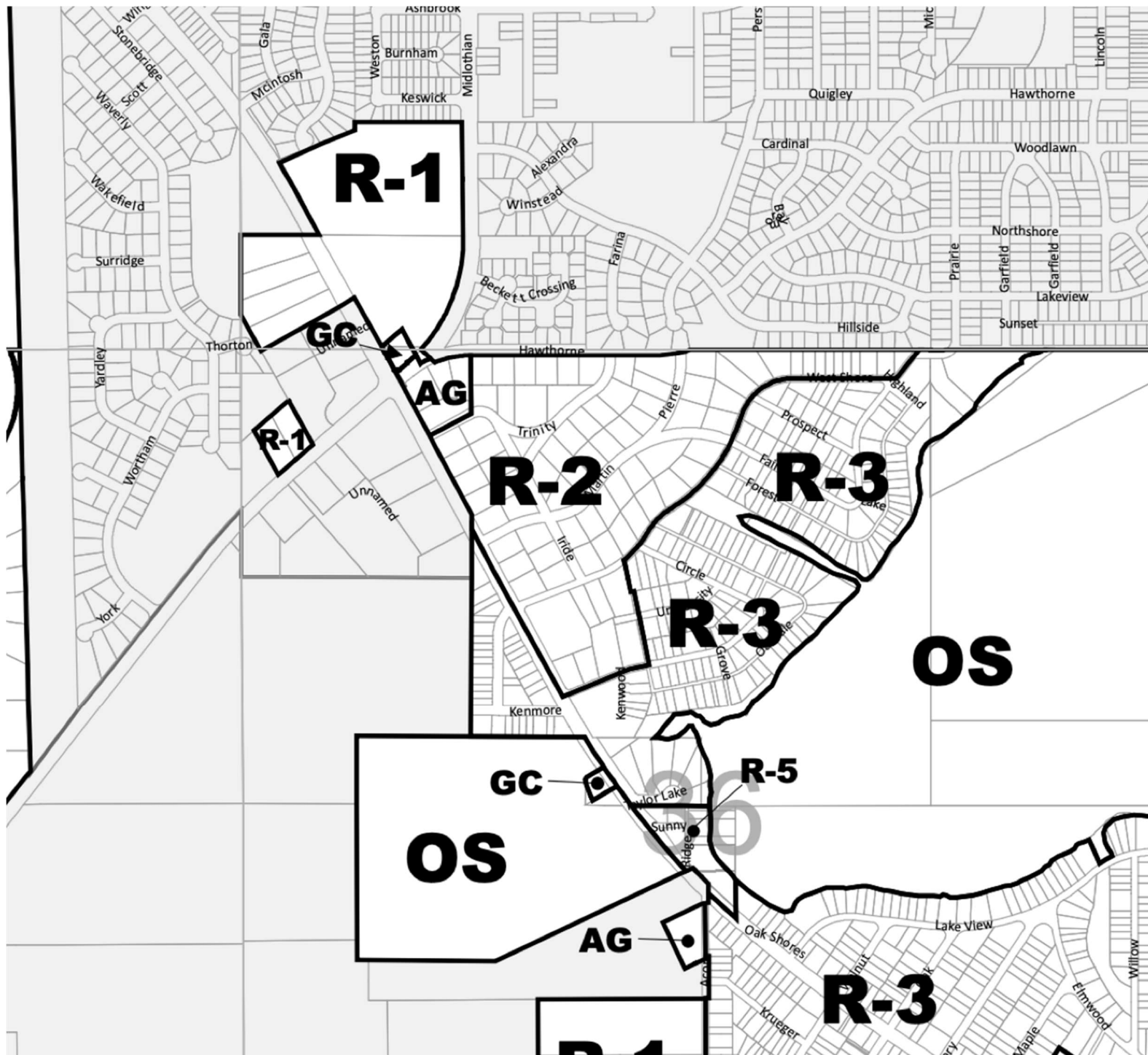
500 W. Winchester Road, Unit 101 | Libertyville, IL 60048

main: 847.377.2600 |direct: 847.377.2120

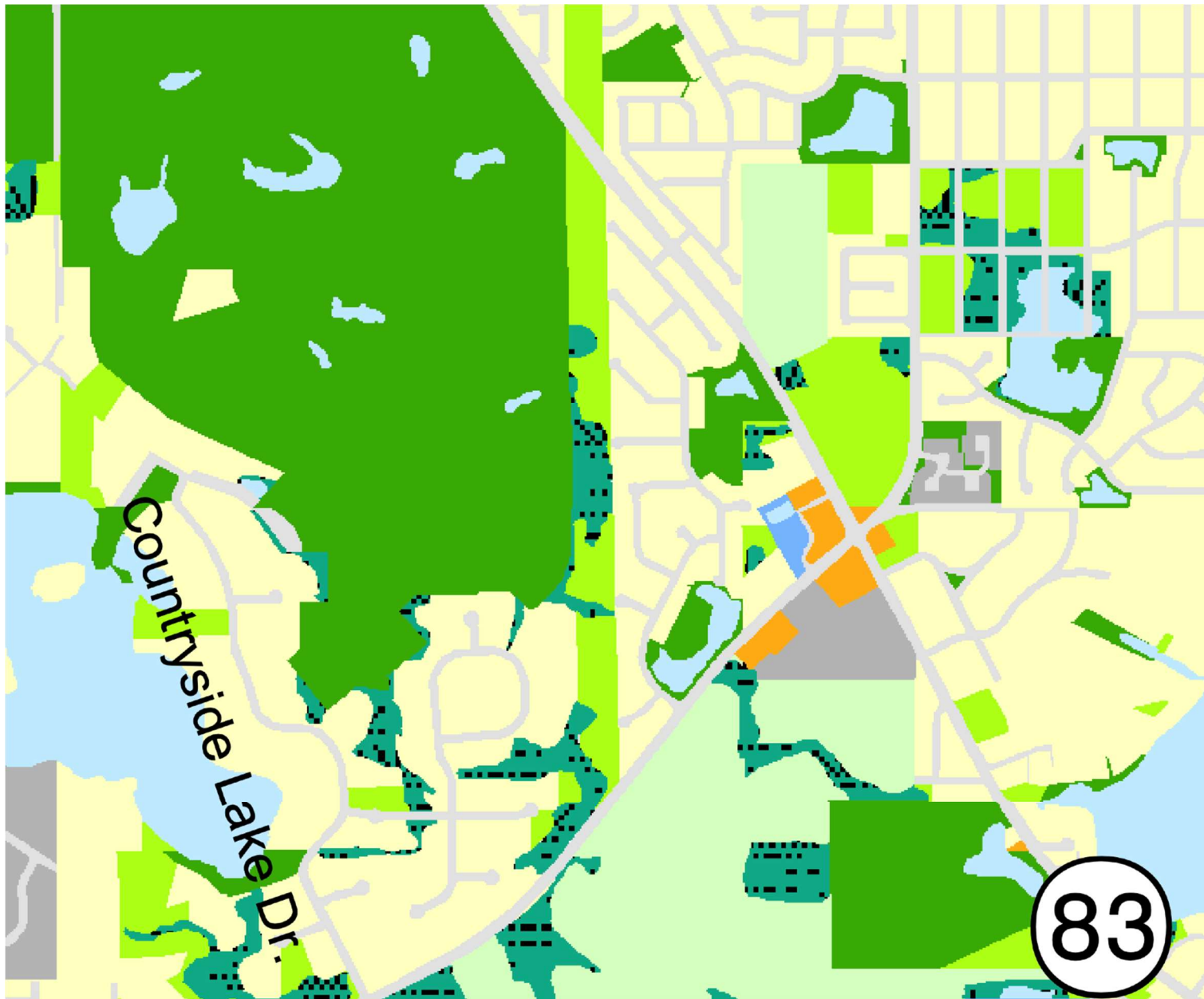
tcchefalo@lakecountyil.gov

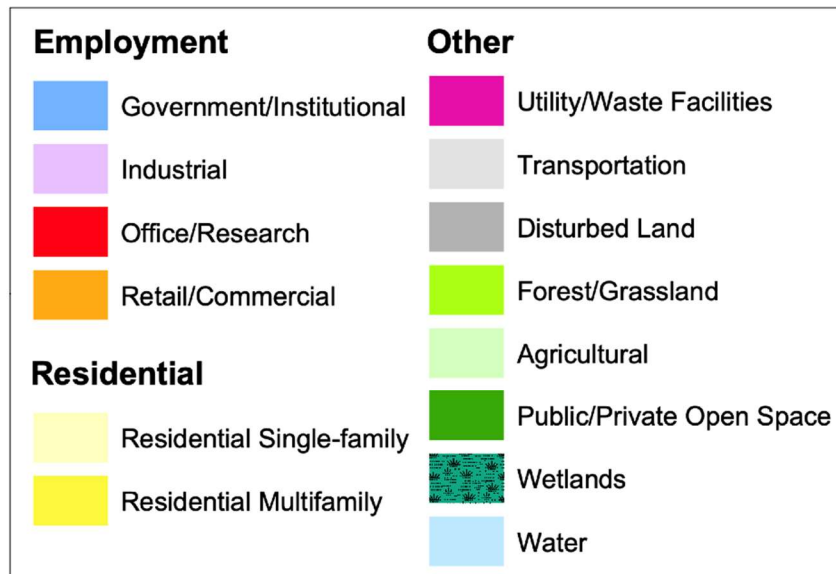


Updated 11/26/2024 Zoned as R-1 Residential under Mundelein Annexation while surrounding Lake County property still remains as R-1 Residential on both park sides.

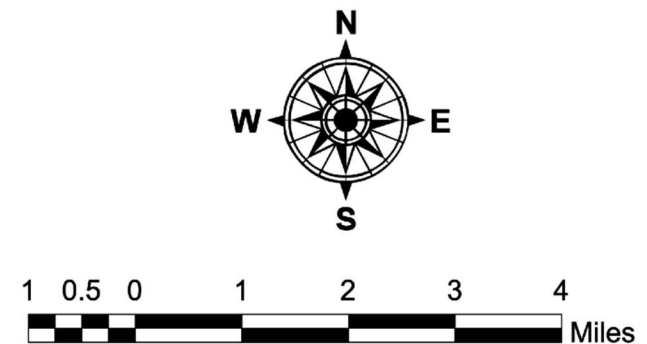


Zoning Year 2000

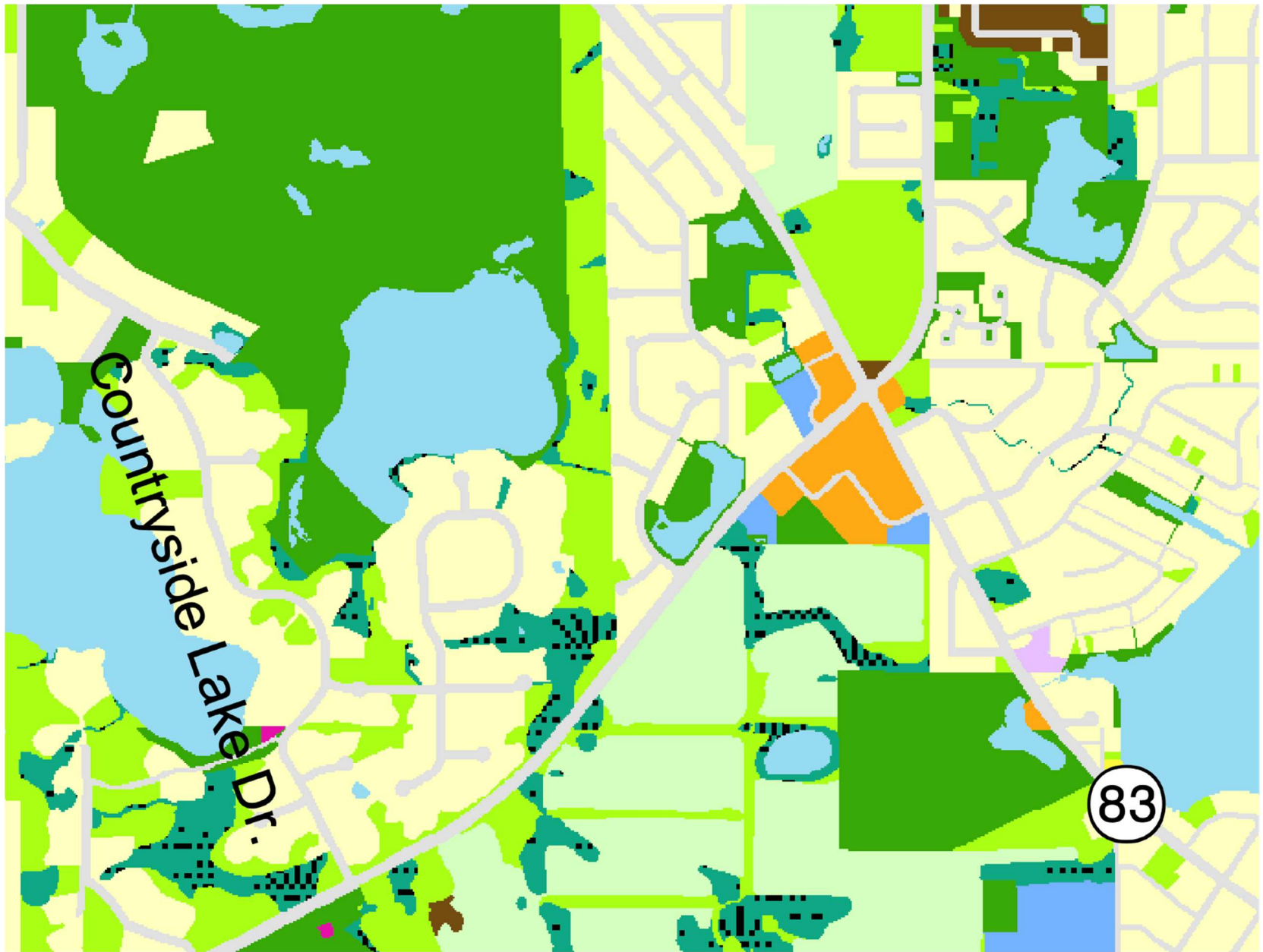




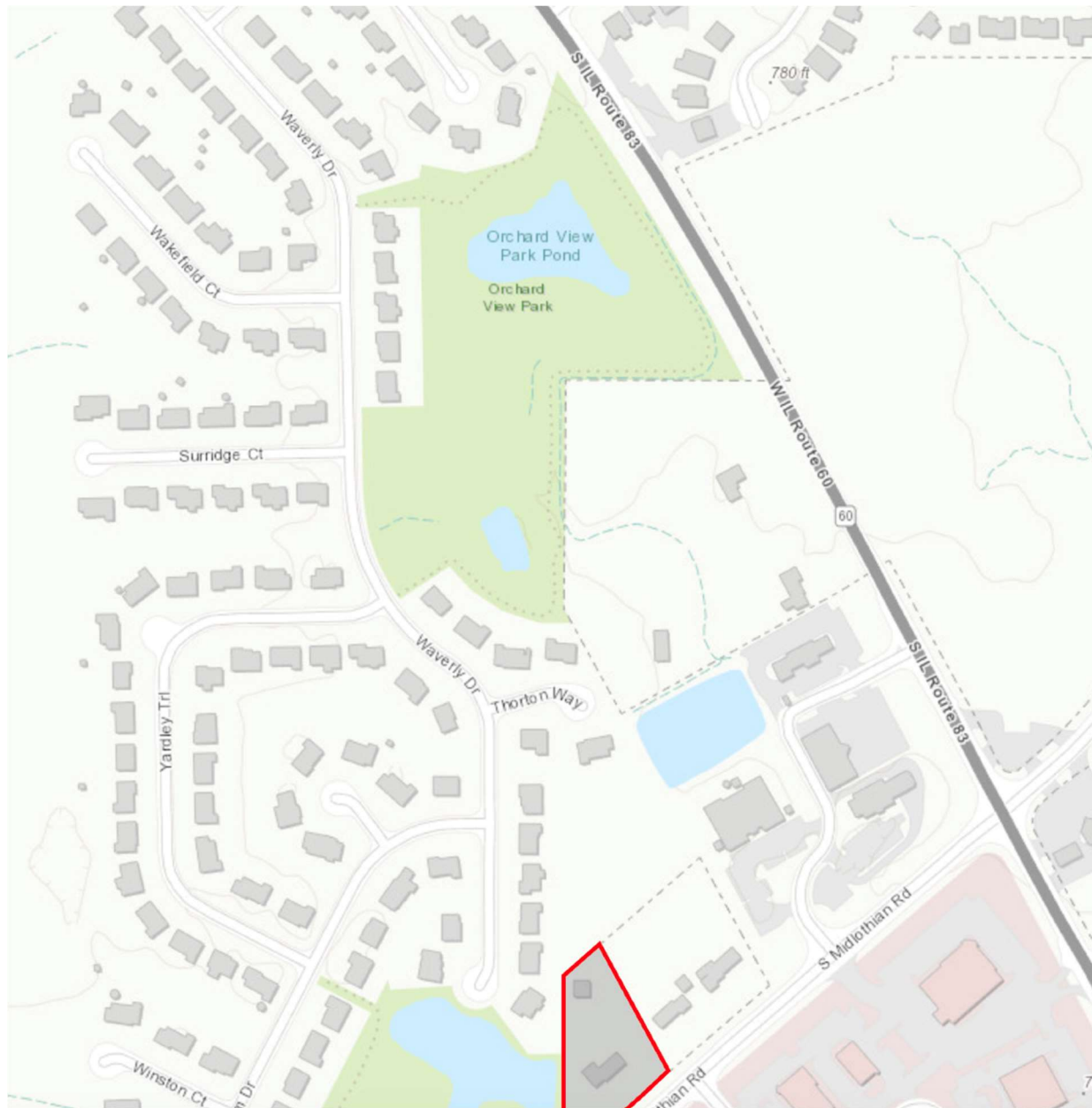
2000 Land Use

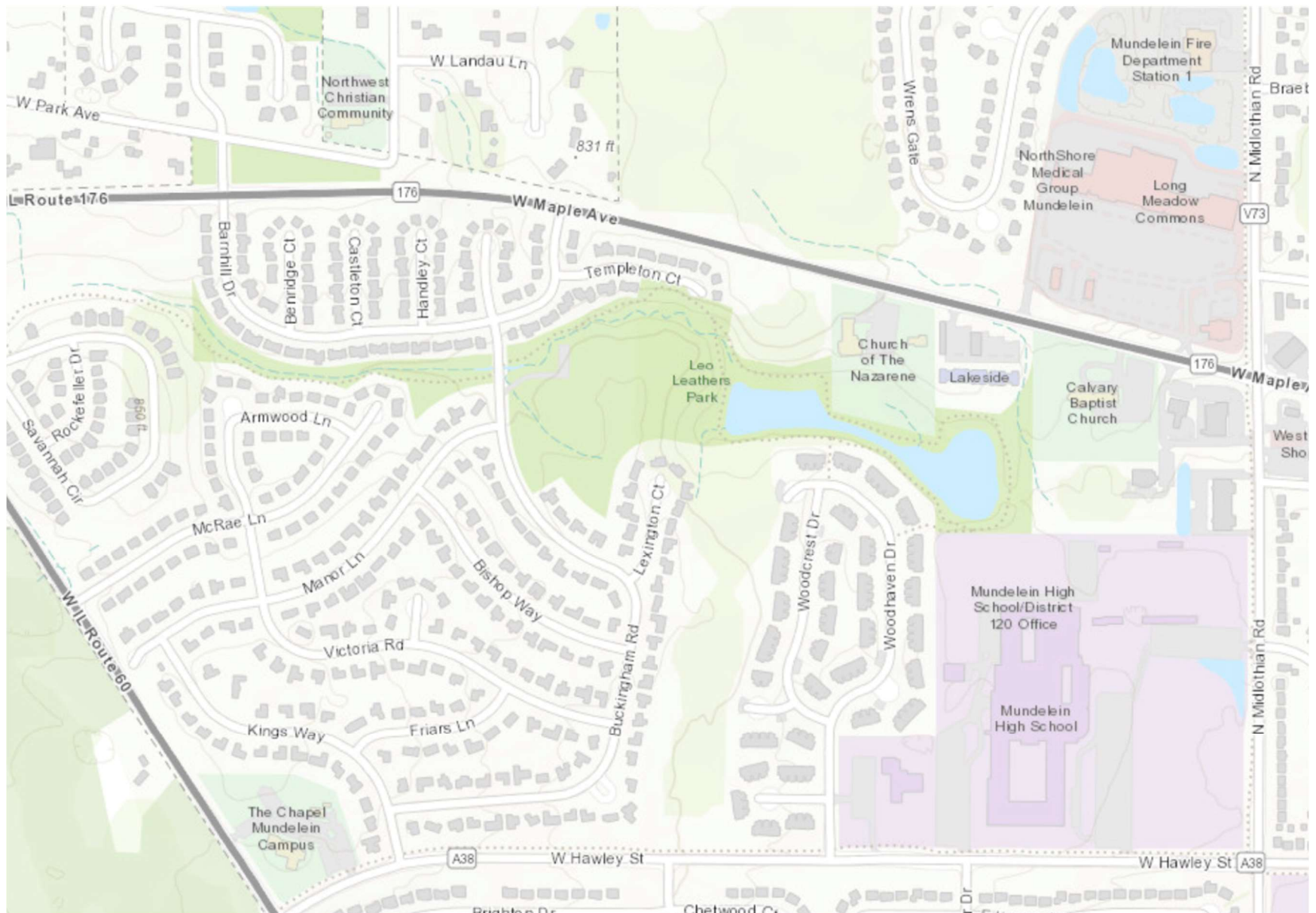


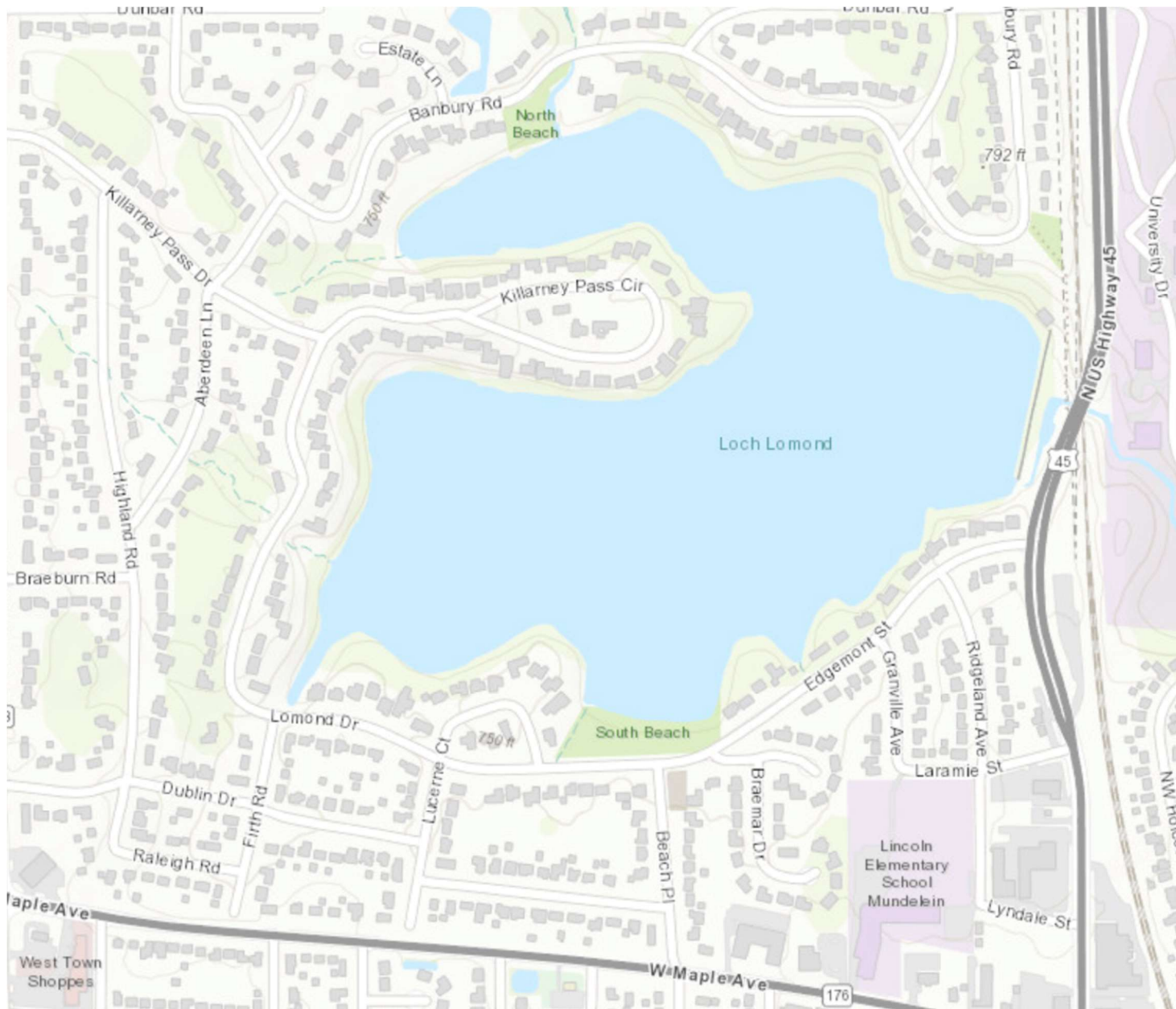
Zoning Year 2010

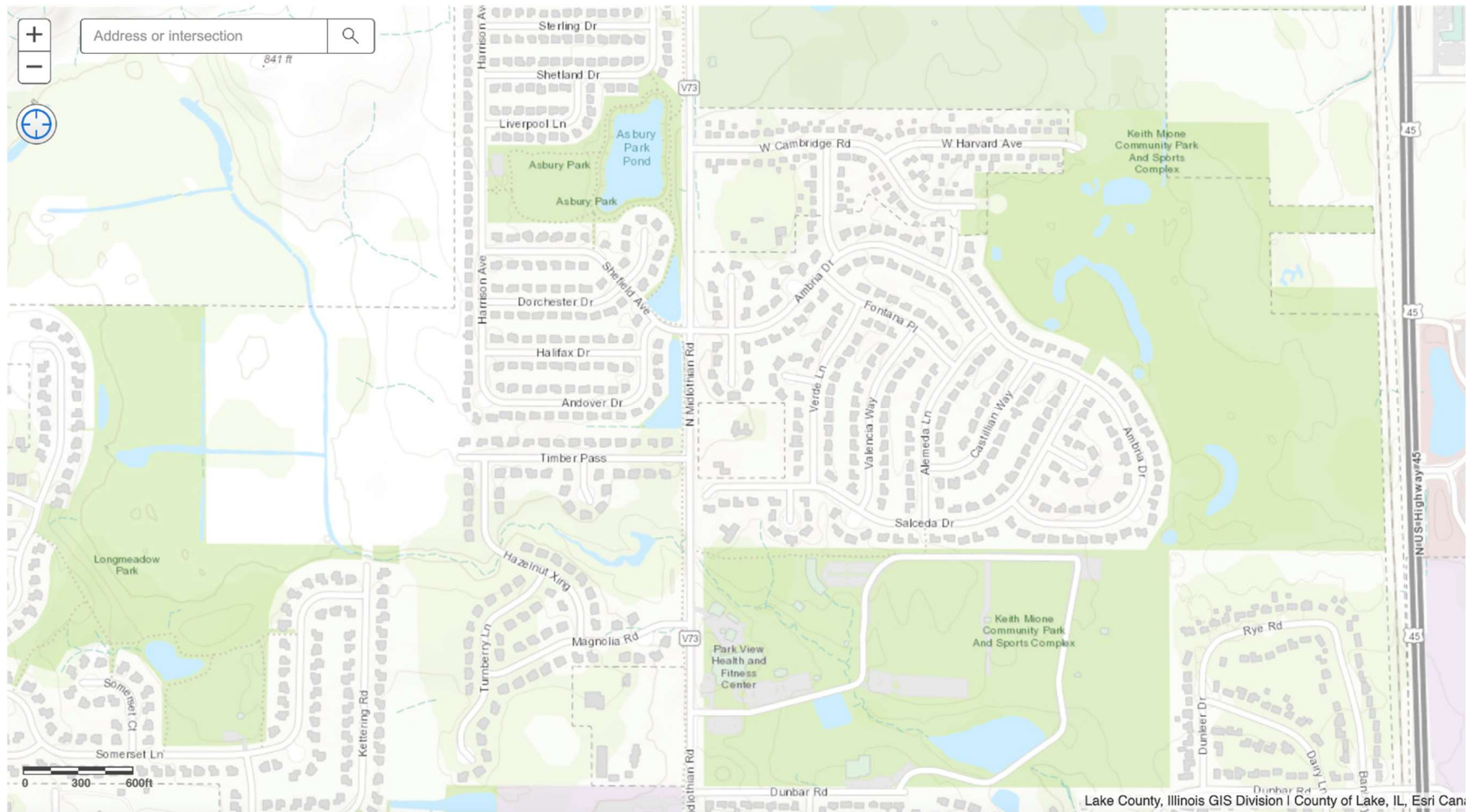


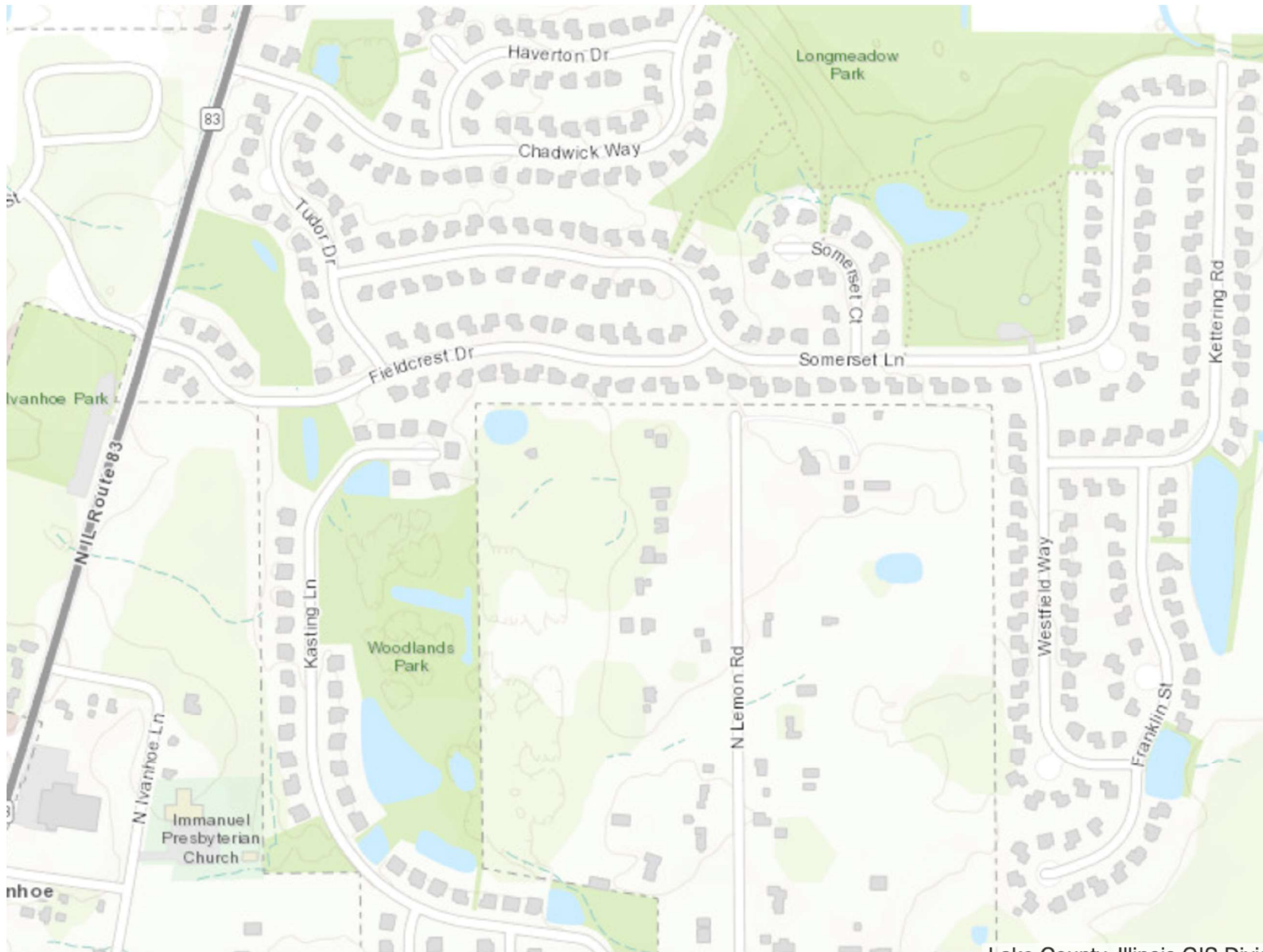














USE VARIATION — CONTRACTOR STORAGE YARD
PZC-15-2024
760-780 S. MIDLOTHIAN ROAD

Staff Presentation
January 15, 2025
Continued from December 18, 2024



UNINCORPORATED

UNINCORPORATED

ANNEXATION HISTORY

Annexed into village by Gerald Teegan (former owner) in 2019. Previously in Unincorporated Lake County.

Reason for annexing – Mr. Teegan had a failing well and asked to connect to the Village's water main instead.

- Village cannot provide water to unincorporated properties per agreement with Village's water provider CLCJAWA.

Unique elements to this annexation:

- **Use:** Use was listed as single-family residential, so Mr. Teegan did not request a rezoning. Annexations default to R-1 if not rezoned.
- **Sanitary Sewer Variation:** Previous owner received a variation to not connect to the Village's sanitary sewer (required for annexed properties). Change of use will require a sanitary sewer connection.
- **Annexation Fee Deferral:** Previous owner requested a deferral of a portion of the Annexation Fee (\$10,233.90 deferred), claiming financial hardship due to the single-family use. The remaining fee must be paid upon change of land use.



PRE-ANNEXATION HISTORY

Previously under Lake County's jurisdiction -
zoned **R-1 Residential**

Purpose of Lake County's R-1 District according to their Unified Development Ordinance:

- *Accommodates low-density, large-lot residential development.*
- *Ensure protection of areas that develop in such a manner.*
- *Primarily serves those households who desire to lie in low-density estate areas and are willing to assume the costs of doing so.*

*Permitted uses generally include **single-family residential and related accessory uses**. It also permits (some with a Conditional Use Permit) government facilities, parks and open space, religious institutions, schools, certain agricultural uses, and minor fill sites.*

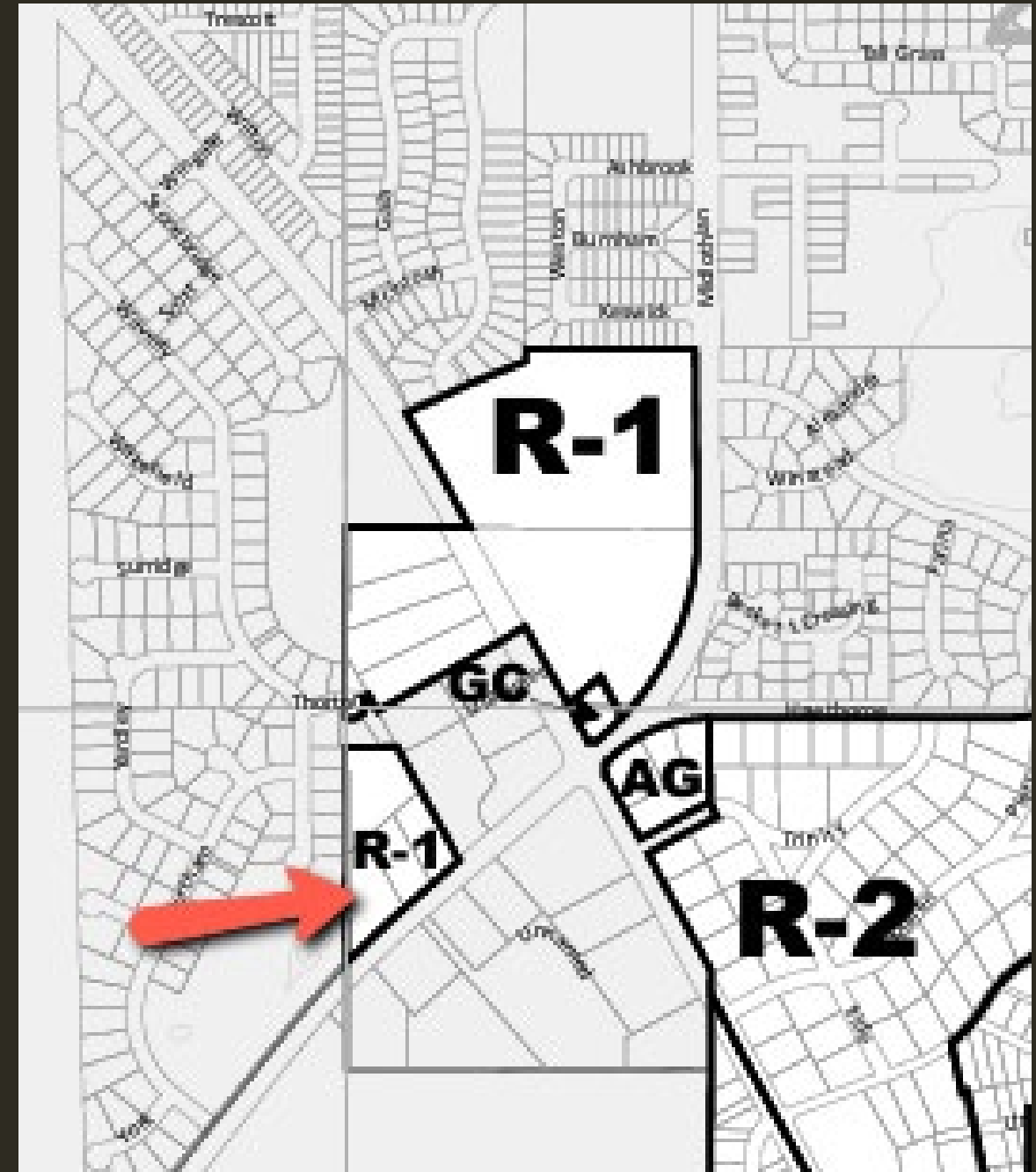


TABLE 20.28-1: RESIDENTIAL ZONING DISTRICTS PERMITTED AND SPECIAL USES

USE ¹	DISTRICT					USE STANDARDS
	R-1	R-2	R-3	R-4	R-5	
RESIDENTIAL						
Community Residence, Large (More than 8 persons)					P	Section 20.48.040(L)
Community Residence, Small (8 or less persons)	P	P	P	P	P	Section 20.48.040(L)
Dwelling, Multi-Family					P	Section 20.28.060(2)
Dwelling, Single-Family	P	P	P	P	P	Section 20.28.060(1)
Dwelling, Single-Family Attached				P	P	Section 20.28.060(2)
Dwelling, Townhouse					P	Section 20. 28.060(2)
Dwelling, Two-Family				P	P	Section 20. 28.060(1)
Residential Care Facility					P	Section 20.48.040(J)
INSTITUTIONAL						
Place of Worship	S	S	S	S	S	Section 20.48.040(E)
COMMERCIAL						
Day Care Home, Adult or Child	P	P	P	P	P	Section 20.48.040(P)
OPEN SPACE						
Park/Playground	P	P	P	P	P	
OTHER						
Planned Unit Development	S	S	S	S	S	Chapter 20.20
Utilities, Private					S	Section 20.48.040(O)
Wireless Telecommunications Antenna	S, P ²	S, P ²	S, P ²	S, P ²	S, P ²	Section 20.48.040(Q)
Wireless Telecommunications Facility	S	S	S	S	S	Section 20.48.040(Q)
Wireless Telecommunications Tower	S	S	S	S	S	Section 20.48.040(Q)

CODE ENFORCEMENT

Code Enforcement found the property being used for a landscaping contractor yard and business office.

- No permits or business registration.
- Code Enforcement Officer engaged with property owner in early 2024.

Commercial uses are not permitted in the R-1 Single-Family Residential District.

Purpose of R-1 District:

- “The R-1 Single-Family Residential District is intended to create a low density environment of single-family homes located upon larger sites. Limited non-residential uses that are compatible with surrounding residential neighborhoods may be permitted.”

Petitioner opted to apply for a **use variation** to continue the commercial use as-is.

SITE DETAILS

Residential structure is used as an office – no residents.

Two pre-existing metal garages to the rear of the office. Area around garages is used for storage of contractor vehicles, equipment, and material piles (mulch, etc.).

Existing concrete pad for storing material piles installed by the applicant in 2021 (retroactive permit received since then).

Future asphalt parking area for landscaping vehicles and equipment.

Existing solid wooden fence and arbor vitae around a portion of the property, with a proposal to add more of both.

Pre-annexation gravel areas are grandfathered in (Mundelein does not permit gravel areas).

- Gravel installed by Petitioner without a permit will be removed or replaced with asphalt.





Outdoor Storage Yard Use Standards

1. All outdoor storage must comply with the **screening requirements** of Section 20.60.150 (Screening Requirements).
2. When there is a structure affiliated with the storage yard, the structure shall be oriented toward the front of the lot and the **storage area shall be located to the rear of the lot**. The outdoor storage area should be located to the rear of the lot where possible. All structures must be located towards the front of the lot, in compliance with the front yard of the underlying zoning district.
3. Outdoor storage areas shall be **surfaced, and graded and drain all surface water**. Outdoor storage areas may be surfaced with pervious paving, if adequate drainage and erosion and dust control are provided. However, **gravel is prohibited**.
4. Any lighting used to illuminate an outdoor storage area shall be directed and shielded as to **not illuminate any adjacent residential areas**.
5. All **items stored outdoors must be related to the on-site business** and its operations.

OTHER STAFF COMMENTS

Building Department

Due to the conversion of a single-family home to a commercial use (office), please note that there may be modifications required to bring the building up to code for commercial use (ADA accessibility, fire alarms, etc.).

Public Works and Engineering

The Petitioner must comply with all Watershed Development Ordinance requirements with regards to new surfaces.

Community Development

Per the Annexation Agreement, the Petitioner will be responsible for paying the remainder of the Annexation Fee (\$10,233.90) and must connect to the Village's sanitary sewer system. The Petitioner has agreed to both.

QUESTIONS FOR STAFF?

STANDARDS FOR GRANTING A VARIATION

- a. The strict application of the terms of this Ordinance will result in **undue hardship**.
 - b. The plight of the owner is due **to unique circumstances**.
 - c. The variation, if granted, will not alter the **essential character of the locality**.
-
- a. The particular **physical surroundings, shape or topographical conditions** of the specific property impose a particular hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of the regulations were to be carried out.
 - b. The alleged difficulty or hardship has **not been created by any person presently having a proprietary interest** in the property in question.
 - c. The granting of the variation will **not be detrimental to the public welfare** in the neighborhood in which the property is located.
 - d. The proposed variation will **not impair** an adequate supply of light and air to adjacent property, substantially increase congestion in the public streets, increase the danger of fire, endanger the public safety or impair property values within the neighborhood.
 - e. The proposed variation is **consistent with the spirit and intent of this Ordinance** and Village land use policies.
 - f. The **value of the property in question will be substantially reduced** if permitted to be used only under the conditions allowed by the regulations governing the district in which it is located.

FINDINGS OF FACT – VARIATION

CASE NUMBER	PZC-15-2024
PUBLIC HEARING DATE	January 15, 2025 (Continued from December 18, 2024)
VARIATION	Variation to Table 20.28-1 of Section 20.28.020 to permit an Outdoor Contractor Storage Yard and Office in the R-1 Single-Family Residential zoning district.
DRAFT MOTION	<u>Motion</u> by K. Anderson, second by K. Garache to recommend approval of a Use Variation to Table 20.28-1 of Section 20.28.020 to permit an Outdoor Contractor Storage Yard and Office in the R-1 Single-Family Residential zoning district at 760-780 S. Midlothian Road, Mundelein, Illinois.
On January 15, 2025, the Planning and Zoning Commission voted 6-0 for denial of a Use Variation to Table 20.28-1 of Section 20.28.020 to permit an Outdoor Contractor Storage Yard and Office in the R-1 Single-Family Residential zoning district at 760-780 S. Midlothian Road, Mundelein, Illinois.	
<i>No variation from the provisions of this Ordinance shall be granted unless the Zoning Administrator, Planning & Zoning Commission, and Village Board makes specific written findings based on the standards imposed by this section. These standards are as follows:</i>	
1. The strict application of the terms of this Ordinance will result in undue hardship;	
The Commission finds that the strict application of the terms of this Ordinance will not result in undue hardship as due diligence is the responsibility of the property owner when constructing structures or changing land uses.	
2. The plight of the owner is due to unique circumstances;	
The plight of the owner is not due to unique circumstances because it is zoned R-1 Single-Family Residential and was previously used for this purpose. Prior to annexation, it was zoned R-1 Residential under Lake County jurisdiction, which also does not permit commercial uses.	
3. The variation, if granted, will not alter the essential character of the locality;	
If the variation is granted, it will alter the essential character of the locality, as the proposed contractor yard use is adjacent to noncompatible uses including single-family residences, a daycare, and recreational open space.	
<i>The Zoning Administrator, Planning & Zoning Commission, and Village Board, in making its findings, may inquire into the following evidentiary issues, as well as any others deemed appropriate.</i>	
1. Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship or difficulty to the owner would result, as distinguished from a mere inconvenience, if the strict letter of the regulations were to be carried out.	
The Commission finds that there is no hardship attributable to the shape, surroundings, and topographical conditions of the property.	
2. The alleged difficulty or hardship has not been created by any person presently having a proprietary interest in the property in question.	
The Commission finds that the petitioner has created this hardship, who purchased the property with the intention of operating a commercial use without contacting either Lake County or the Village of Mundelein about permitted uses on the property.	
3. The granting of the variation will not be detrimental to the public welfare in the neighborhood in which the property is located.	
The granting of the requested variation will be detrimental to the public welfare in which the property is located as it abuts nine single-family homes and a daycare, which may be unfairly impacted by noise, vehicular activity, fumes, dust, and vibrations caused by the contractor storage yard.	
4. The proposed variation will not impair an adequate supply of light and air to adjacent property, substantially increase congestion in the public streets, increase the danger of fire, endanger the public safety, or impair property values within the neighborhood.	
The Commission finds that the proposed contractor storage yard use may increase congestion due to vehicular activity and may impair property values due to noise, fumes, and other impacts.	
5. The proposed variation is consistent with the spirit and intent of this Ordinance and Village land use policies.	
The Commission finds that the proposed variation is inconsistent with the Zoning Ordinance, which assigns the R-1 Single-Family Residential zoning to this property and prescribes certain allowable uses. The Comprehensive Plan aims to preserve the character of residential areas.	
6. The value of the property in question will be substantially reduced if permitted to be used only under the conditions allowed by the regulations governing the district in which it is located.	

The value of the property in question will not be substantially reduced because it was used for single-family purposes prior to 2019.

Village Staff Overview: 1126 Magnolia Road

PZC-19-2024
January 15, 2025

1126 Magnolia Road

Petitioner: Eric Hagen – Craiger Custom Design

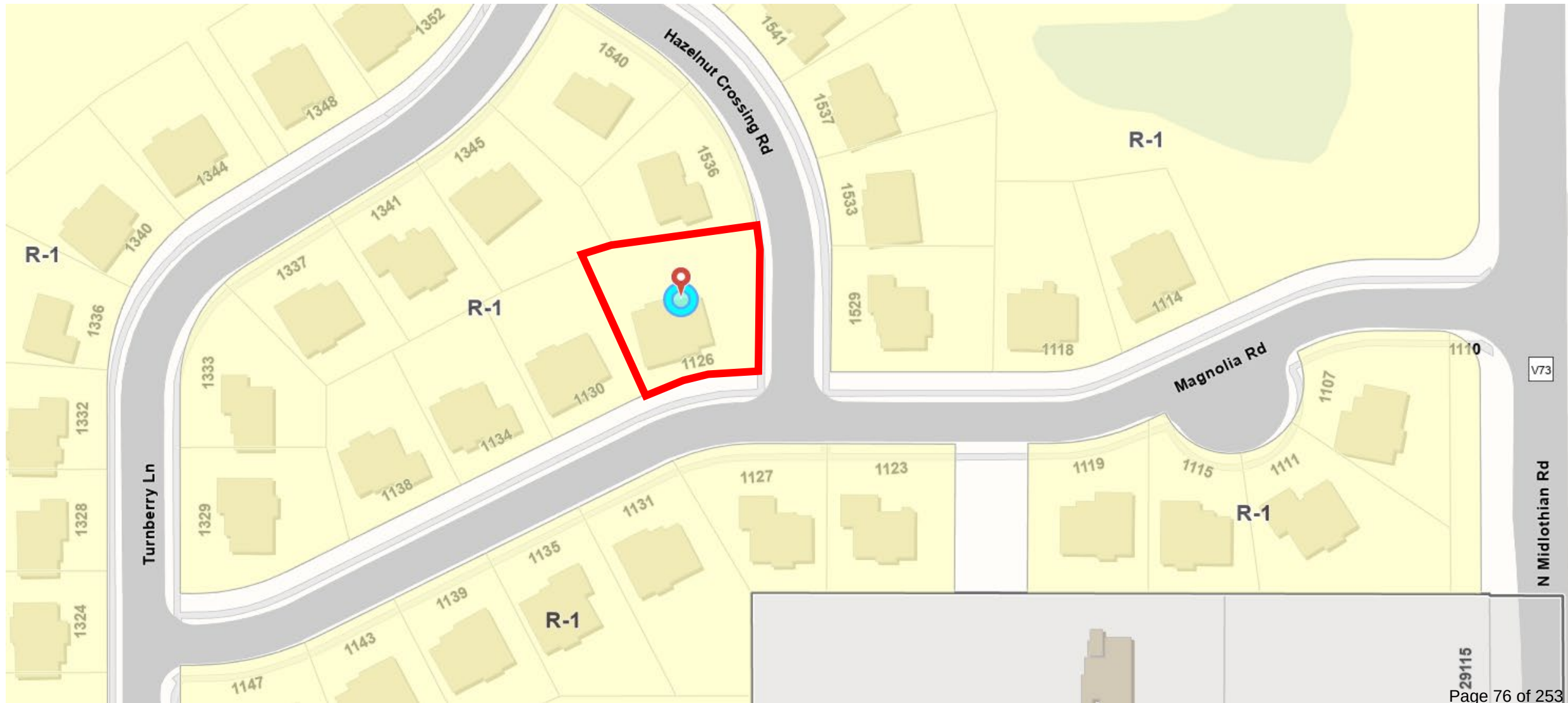
Property Owner: John Carter

Current Zoning: R-1 Single-Family Residential

Current Use: Single Family Residence - Hampton Reserve
Subdivision

Variance applications submitted to allow an accessory structure larger than the maximum allowed square footage of 144 sq. ft.

Location Map



Background

- The Petitioner applied for a building permit this year on behalf of the property to build a 9'4" by 14'5" freestanding pergola at the Subject Property.
- The building permit for the 9'4" by 14'5" pergola was approved.
- The post hole inspection passed.
- Final inspection did not pass. The pergola measured more than what was stated on the application, it also exceeded the maximum size allowed for accessory structures.

VILLAGE OF MUNDELEIN

DIGITALLY

RCVD 07-24-24



Building Department

300 Plaza Circle · Mundelein, IL 60060

Phone (847) 949-3283 · Fax (847) 949-4278 · building@mundelein.org

PERMIT NO. **B24-07-137**

BUILDING PERMIT APPLICATION

PROJECT ADDRESS: 1126 Magnolia Rd UNIT #: _____

DESCRIPTION OF WORK: 9'4" x 14'5" pergola - freestanding

NAME OF APPLICANT: Eric Hagen ADDRESS: 2510 IL Route 176, Unit D, Crystal Lake, IL 60014

PHONE: 815-479-9660 EMAIL: eric@craigercustomdesign.com

APPLICANT IS: ☐ PROPERTY OWNER ☒ CONTRACTOR ☐ ARCHITECT/ENGINEER ☐ OTHER: _____

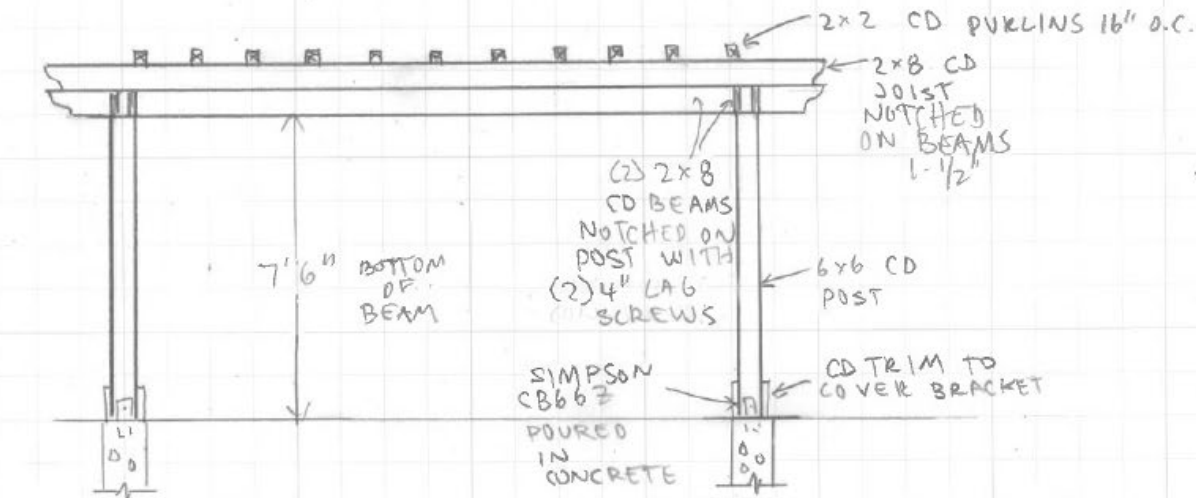
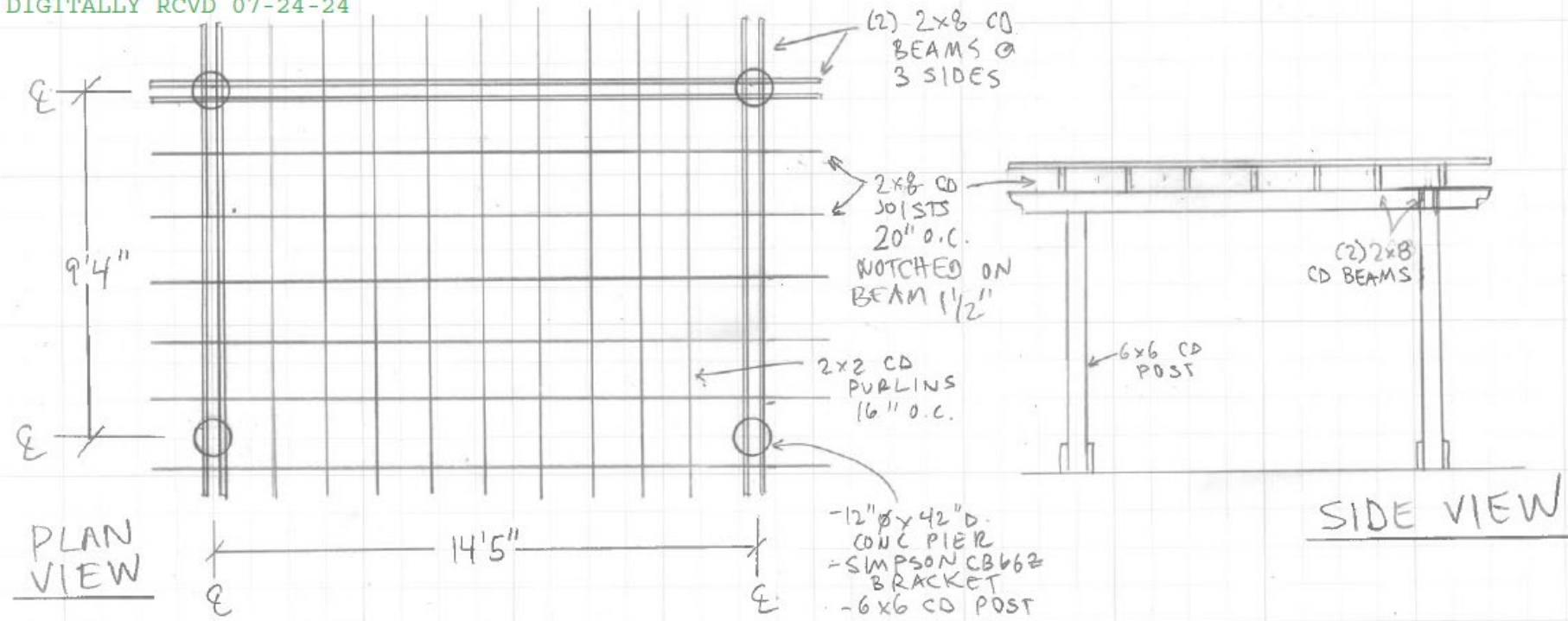
NAME OF CONTRACTOR: Craiger Custom Design ADDRESS: 2510 IL Route 176,

PHONE: 815-479-9660 EMAIL: eric@craigercustomdesign.com

PROJECT IS: ☒ SINGLE FAMILY ☐ MULTI-FAMILY ☐ COMMERCIAL ☐ INDUSTRIAL ☐ MIXED-USE ☐ PUBLIC

CATEGORY/SQUARE FOOTAGE: ☒ NEW: 138 S.F. ☐ ADDITION: _____ S.F. ☐ ALTERATION: _____ S.F.

COST OF PROJECT: \$9,650.00 NUMBER OF UNITS: _____



CD = ROUGH SAWN
"CLEAN & BRIGHT"
WESTERN RED CEDAR

FRONT VIEW/SECTION

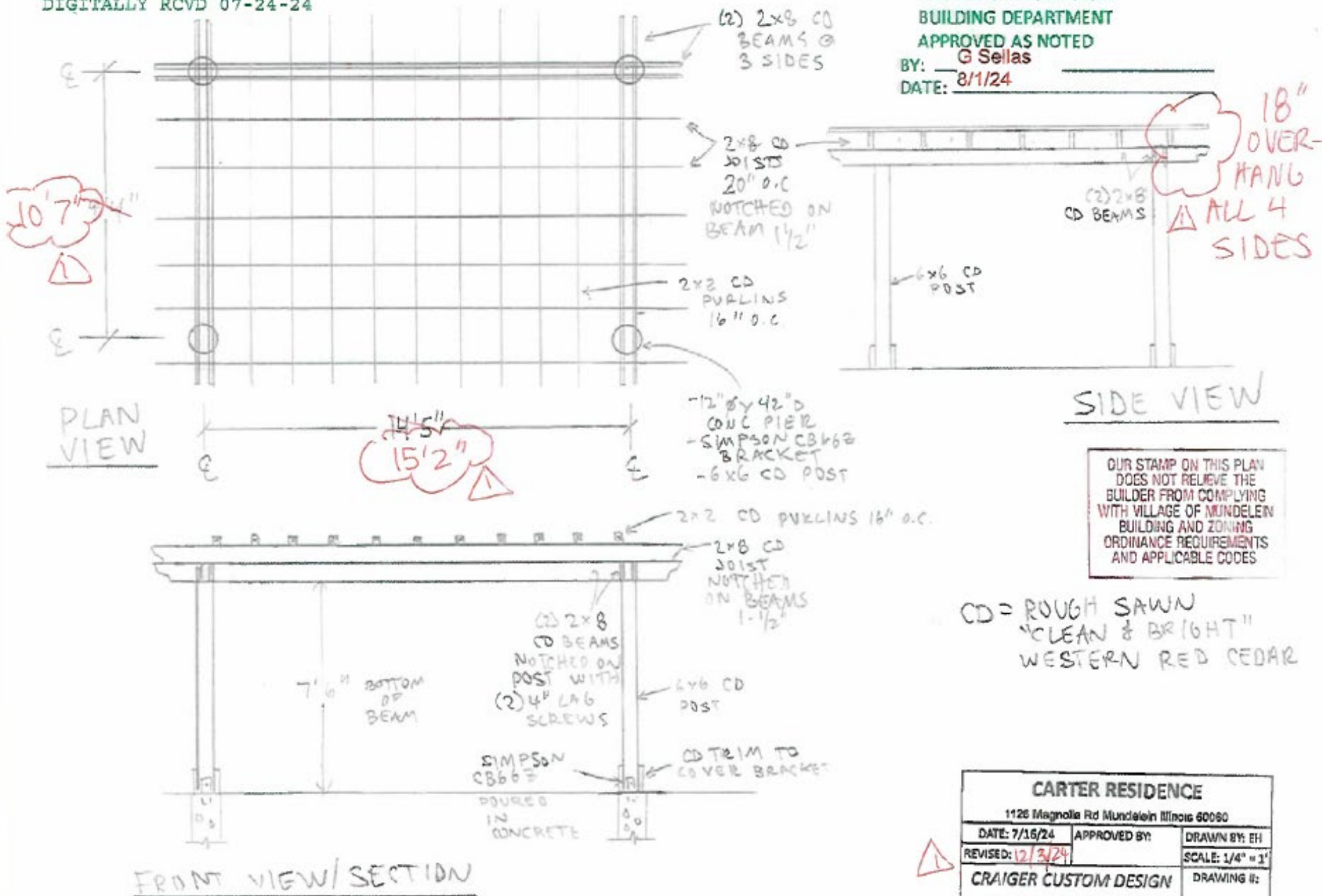
CARTER RESIDENCE		
1126 Magnolia Rd Mundelein Illinois 60060		
DATE: 7/16/24	APPROVED BY:	DRAWN BY: EH
REVISED:		SCALE: 1/4" = 1'
CRAIGER CUSTOM DESIGN		DRAWING #:
2510 Route 176, Unit D, Crystal Lake IL 60014		1
815-479-9660		



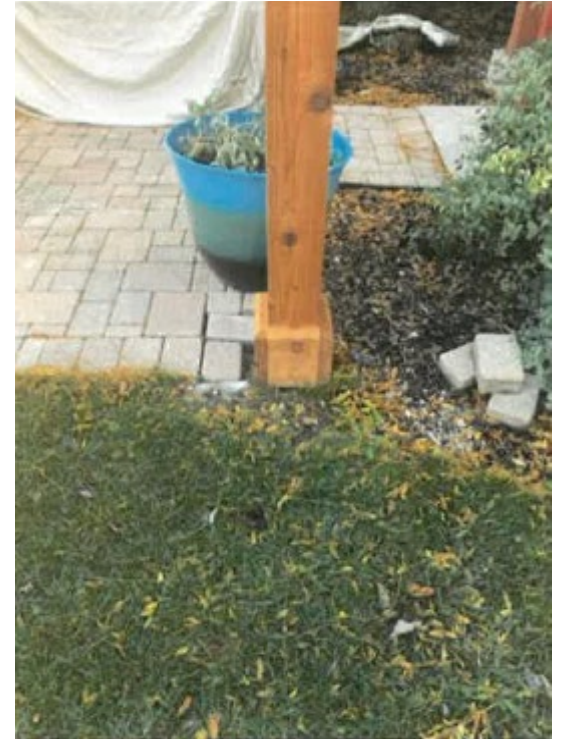
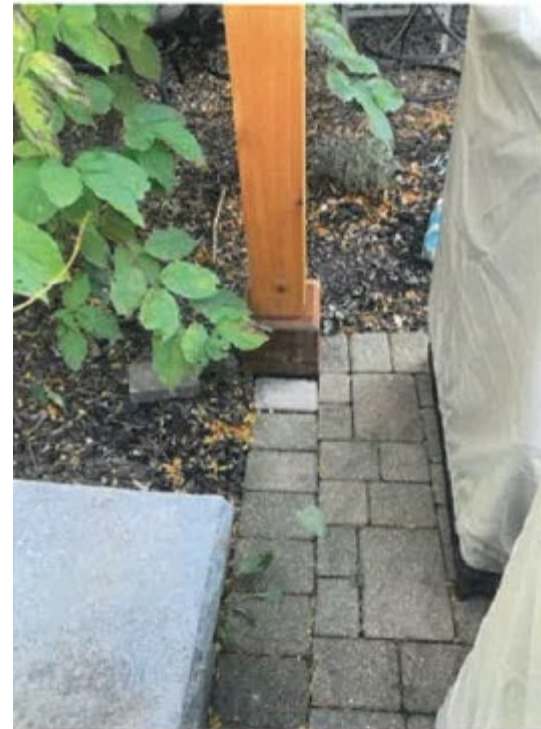
Variance Request

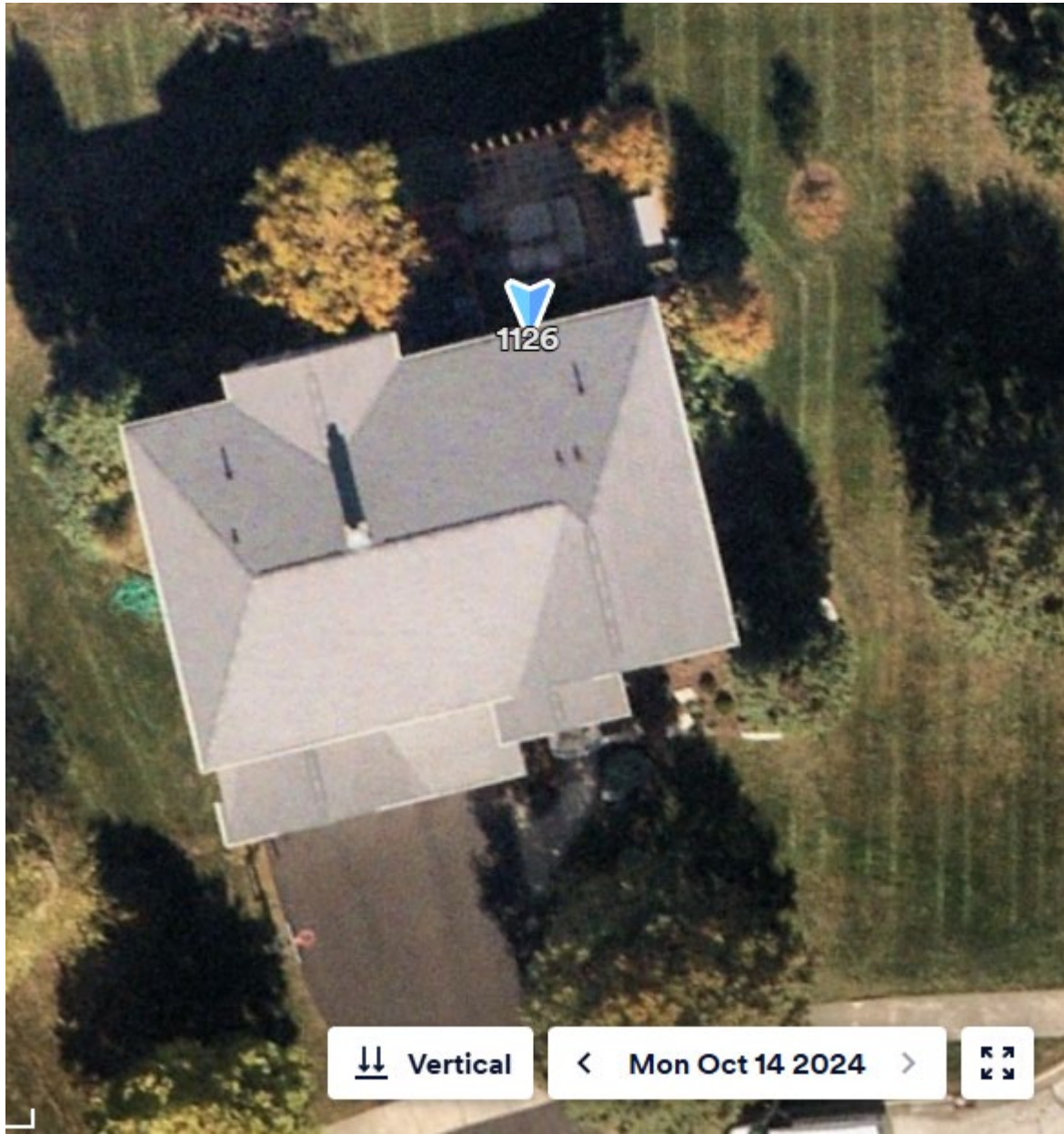
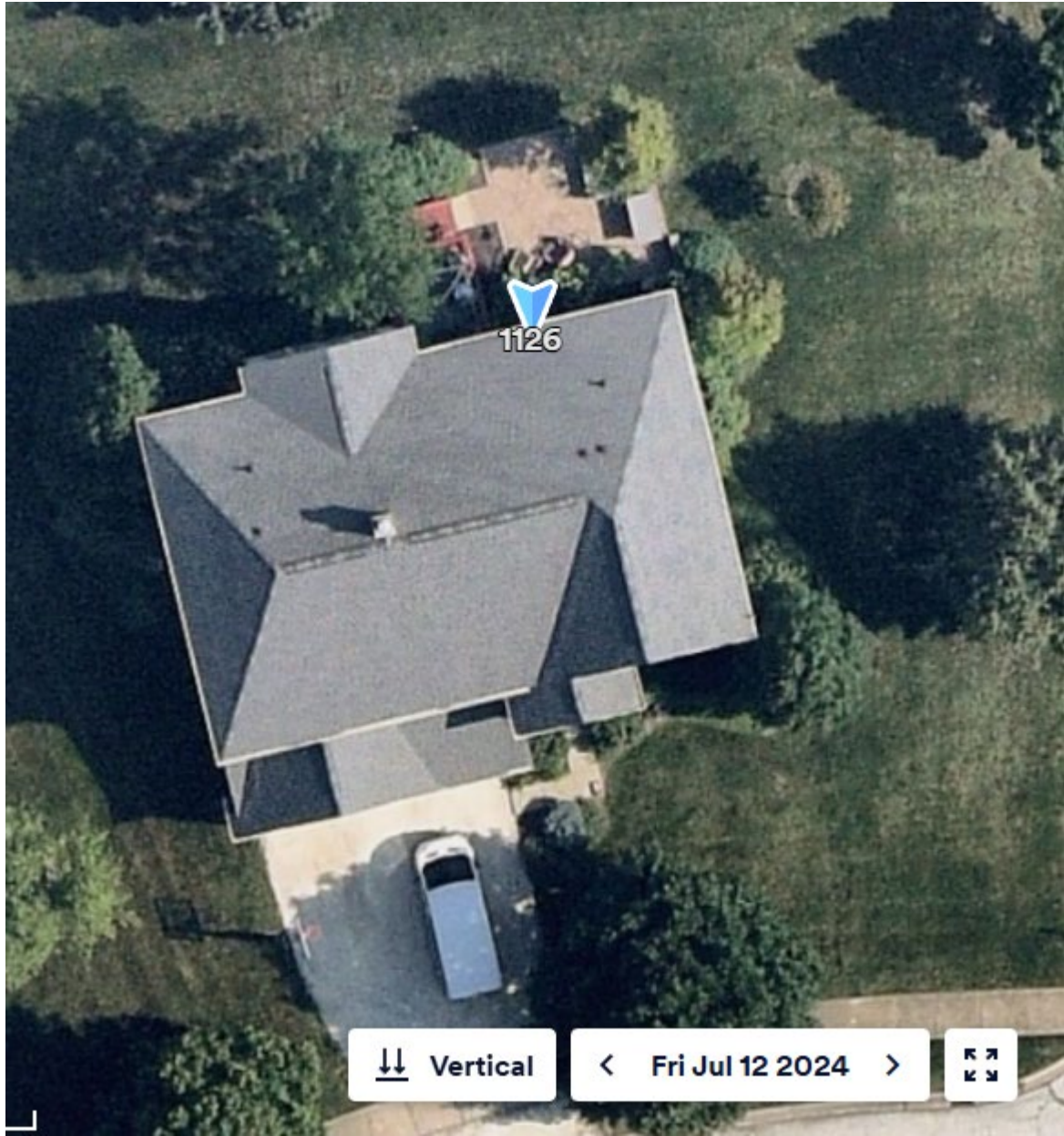
- Requesting a variation from Section 20.52.050(A)(9) to allow a 209-square-foot pergola, which exceeds the maximum allowed square footage of 144 square feet, in the R-1 Single-Family Residential zoning district at 1126 Magnolia Road.

BY: G Sella
DATE: 8/1/24









Analysis is

- The Petitioner did not demonstrate a hardship or unique circumstance specific to the subject property.
- Petitioner was following the request of the property owner to build a pergola that fits the square footage of the patio.
- Nearby lots do not show large accessory structures in the rear yard.



Analysis

- The Village has placed a maximum square footage on all accessory structures for several reasons:
 - Maintain the character of neighborhood
 - Prevent from altering the aesthetic appeal of a neighborhood
 - Maintain visual harmony
 - Prevent overbuilding
 - Prevent overcrowding lots
 - Manage stormwater and reduce the risk of flooding or erosion



Source: APEXPergola Design (12x12)



Source: APEXPergola Design (10x16)

12'x12' Big Kahuna Pergola - Attached



Source: Pergola Depot (12x12)



Source: Sunset Pergola Kits



Recommendation

As administrators of the Zoning Ordinance, we must treat all cases under the same standards.

Staff is not in favor of the variation request due to the Petitioner not able to demonstrate a zoning hardship or uniqueness to the circumstance on the Subject Property.

FINDINGS OF FACT – VARIATION

CASE NUMBER	PZC-19-2024
PUBLIC HEARING DATE	January 15, 2024
VARIATION	Variation from Section 20.52.050(A)(9) regarding an accessory structure over the maximum square footage
MOTION	Motion by J. Holden, second by S. Schneckloth to recommend approval of a variation from Section 20.52.050(A)(9) to allow an accessory structure (pergola) larger than the maximum allowed square footage of 144 square feet in the R-1 Single-Family Residential zoning district at 1126 Magnolia Road.
On January 15, 2024, the Planning and Zoning Commission voted 6-0 for approval of a variation from Section 20.52.050(A)(9) to allow an accessory structure larger than the maximum allowed square footage of 144 square feet in the R-1 Single-Family Residential zoning district at 1126 Magnolia Road.	
<i>No variation from the provisions of this Ordinance shall be granted unless the Zoning Administrator, Planning & Zoning Commission, and Village Board makes specific written findings based on the standards imposed by this section. These standards are as follows:</i>	
1. The strict application of the terms of this Ordinance will result in undue hardship;	
The strict application of the terms of this Ordinance would result in undue hardship for the Petitioner, as the brick patio existed when the Property Owners purchased the house. Additionally, a smaller pergola would block access to the house and require cutting holes in the brick.	
2. The plight of the owner is due to unique circumstances;	
The property is subject to unique circumstances because it is larger than most properties in the Village and, as a corner lot, has larger setbacks.	
3. The variation, if granted, will not alter the essential character of the locality;	
The variation will not alter the essential character of the locality, as the increase in the pergola's square footage is negligible. It will be built over the existing patio and will not increase the impervious surface. Due to the large setbacks, the pergola will not be significantly visible from the street. Additionally, the Village has not received any complaints.	
<i>The Zoning Administrator, Planning & Zoning Commission, and Village Board, in making its findings, may inquire into the following evidentiary issues, as well as any others deemed appropriate.</i>	
1. Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship or difficulty to the owner would result, as distinguished from a mere inconvenience, if the strict letter of the regulations were to be carried out.	
The Commission finds that there is hardship attributable to the shape, surroundings, and topographical conditions of the property.	
2. The alleged difficulty or hardship has not been created by any person presently having a proprietary interest in the property in question.	
The Commission finds that the petitioner successfully demonstrated the requested variation was not created by any person currently having a proprietary interest in the Subject Property, as the brick patio pre-existed the Property Owner's purchase of the property.	
3. The granting of the variation will not be detrimental to the public welfare in the neighborhood in which the property is located.	
The Commission finds, after considering the public commentary and testimony during the hearing, that granting the requested variation will not be detrimental to the public welfare of the area. The pergola is also supported by the neighbors.	
4. The proposed variation will not impair an adequate supply of light and air to adjacent property, substantially increase congestion in the public streets, increase the danger of fire, endanger the public safety, or impair property values within the neighborhood.	
The proposed variation will not impair an adequate supply of light and air to adjacent property, substantially increase congestion in the public streets, increase the danger of fire, endanger the public safety, or impair property values within the neighborhood.	
5. The proposed variation is consistent with the spirit and intent of this Ordinance and Village land use policies.	
The Commission finds that the proposed variation is consistent with the spirit and intent of this Ordinance and the Village's land use policies, as it preserves and beautifies the single-family residential neighborhood.	

6. The value of the property in question will be substantially reduced if permitted to be used only under the conditions allowed by the regulations governing the district in which it is located.

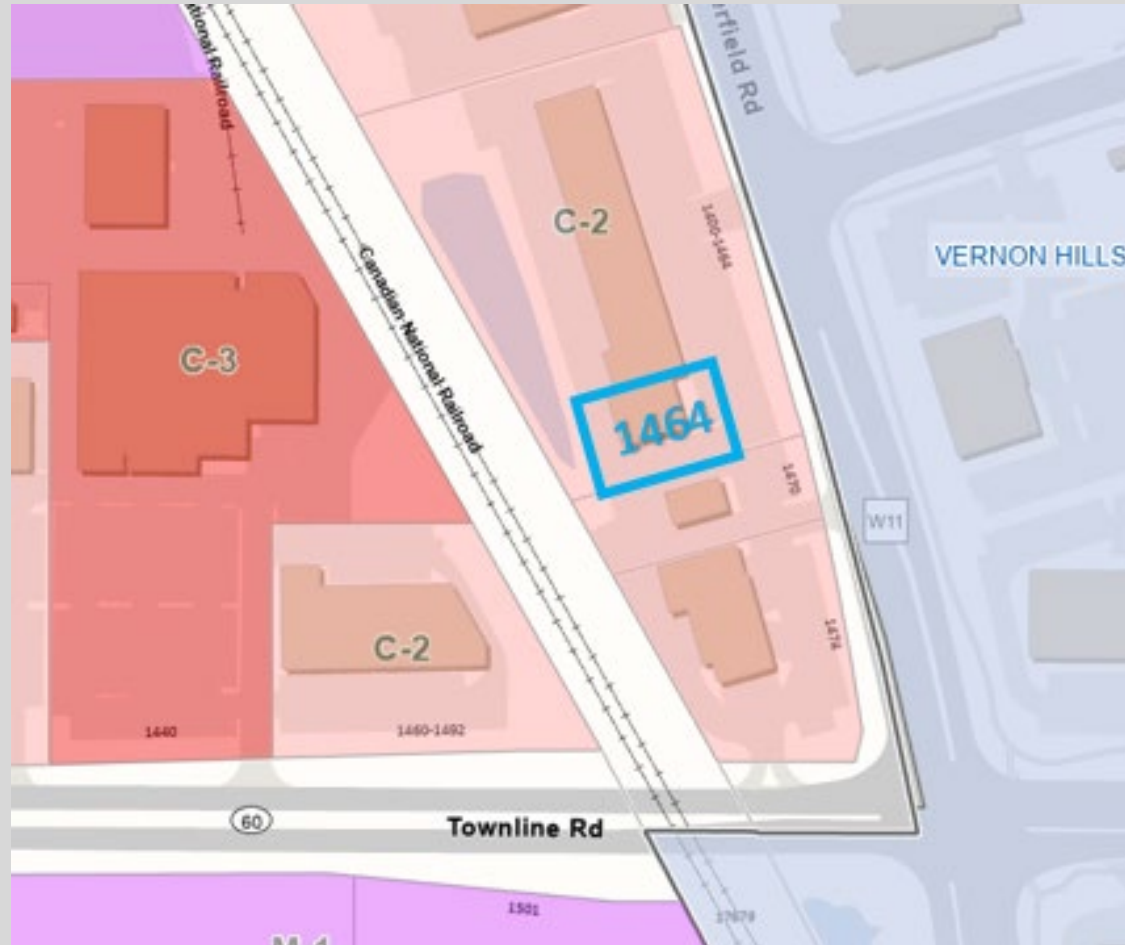
The value of the property will not be substantially reduced if used only under the conditions allowed by the regulations governing its district. Similarly, the value will not be substantially reduced if the proposed variation is approved.



Village Staff Overview: PZC-20-2024

1464 S. Butterfield Road - January 15, 2025

Location Map: 1464 S. Butterfield Road

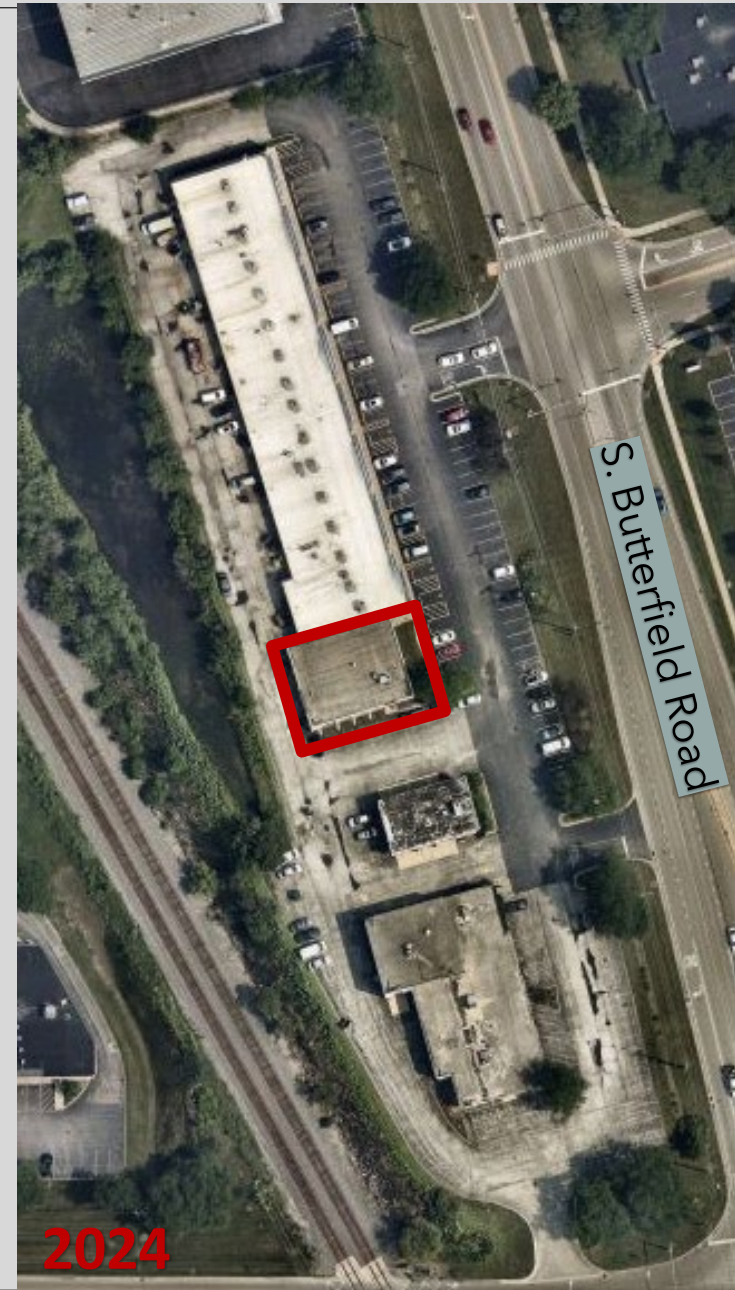


Aerial



Background

- The building at 1464 S. Butterfield Road was constructed in 1987 (outlined in red).
- Multi-tenant building:
 - Salon Centric, Hairtopia, Osaka Sushi, K.A.S.H. Insurance, Heartland Meditation, Golden Kitchen, Lotus Nail Spa, Yes Class, Awesome Tan, The Philly Special, and Subway.



Planning and Zoning History

Buildings and
Land Use
Approved

Substituted Midas
Muffler Company
Service Center with
Merlin Muffler Company
Service Center.

July 1986

Ordinance No.
86-7-29

October 1986

Amended Ordinance
No. 86-7-29
and approved
Ordinance No. 86-10-35

September 1987

Amended Ordinance
No. 86-7-29 and 86-10-
35 and approved
Ordinance No. 87-9-29

September 2018

Amending Ordinance
No. 86-7-29, Ordinance
No. 86-10-35, and
Ordinance No. 87-9-29.

Substituted Firestone
Tire and Service
Center with Midas
Muffler Company
Service Center.

Substituted Merlin
Muffler Company
Service Center with
Motus Incorporated.

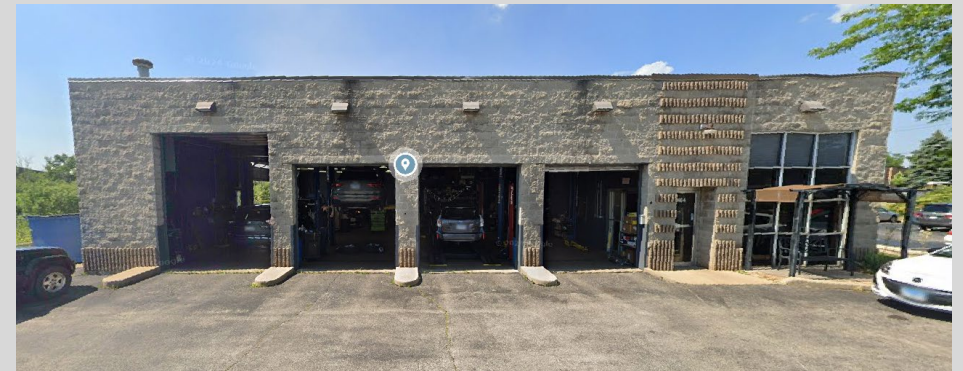
Motus Auto Repair

Petitioner: Luis Leon (Lessee)

- Motus is categorized as Motor Vehicle Service and Repair, Minor

Motor Vehicle Services and Repair Minor Includes:

- Repair or replacement of cooling, electrical, fuel and exhaust systems, brake adjustments, relining and repairs, wheel servicing, alignment and balancing, repair and replacement of shock absorbers, and replacement or adjustment of mufflers and tail pipes, hoses, belts, light bulbs, fuses, windshield wipers/wiper blades, grease retainers, wheel bearings, and the like.
- Additionally, Motus and previous businesses repair engines. Engine repair is not normally permitted for "Minor" auto repair businesses, but it was allowed through the 1986 ordinance and carried over to future tenants.



Variation Request

- A variation from Section 20.48.040(AA) increasing the maximum time vehicles can be stored outdoors from 72 hours to 21 days.

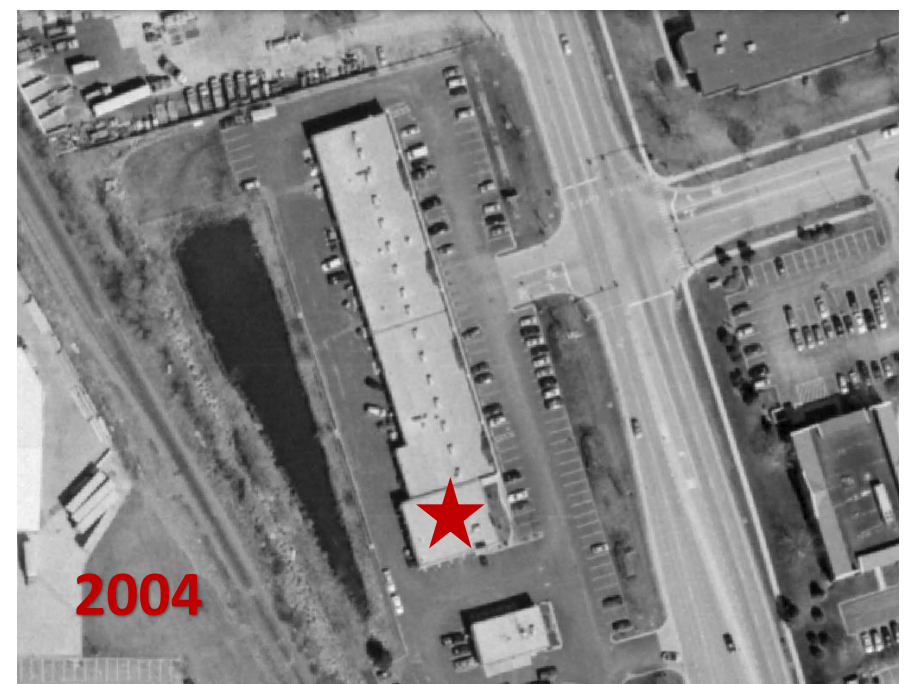
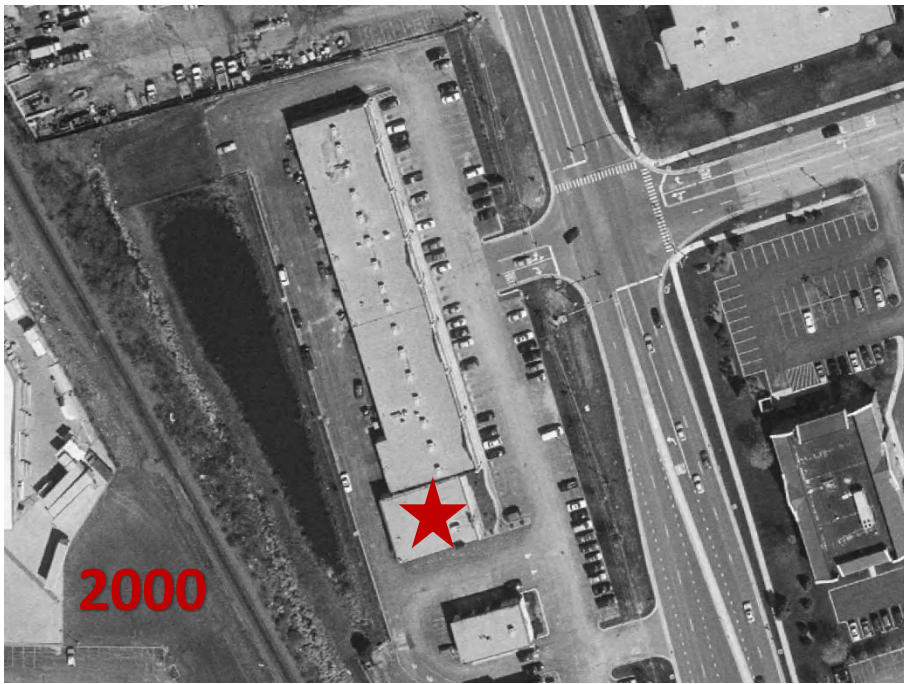
Zoning Ordinance Section 20.48.040(AA)

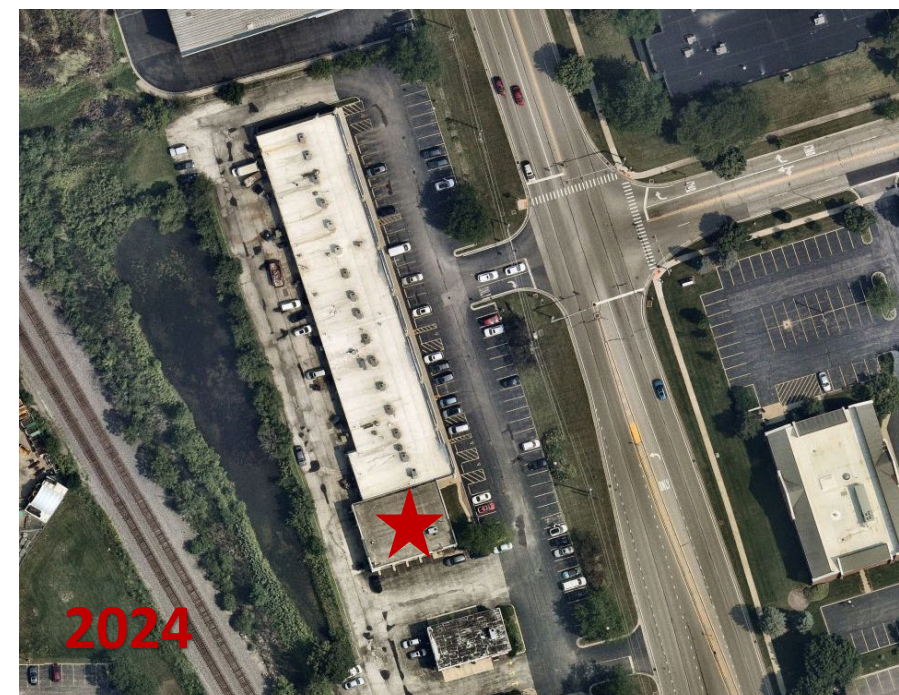
Long-term on-site storage of vehicles is **not permitted**.

- Minor motor vehicle service and repair shops and motor vehicle aftermarket enhancement establishments may not store the same vehicles outdoors on the site for longer than seventy-two hours.

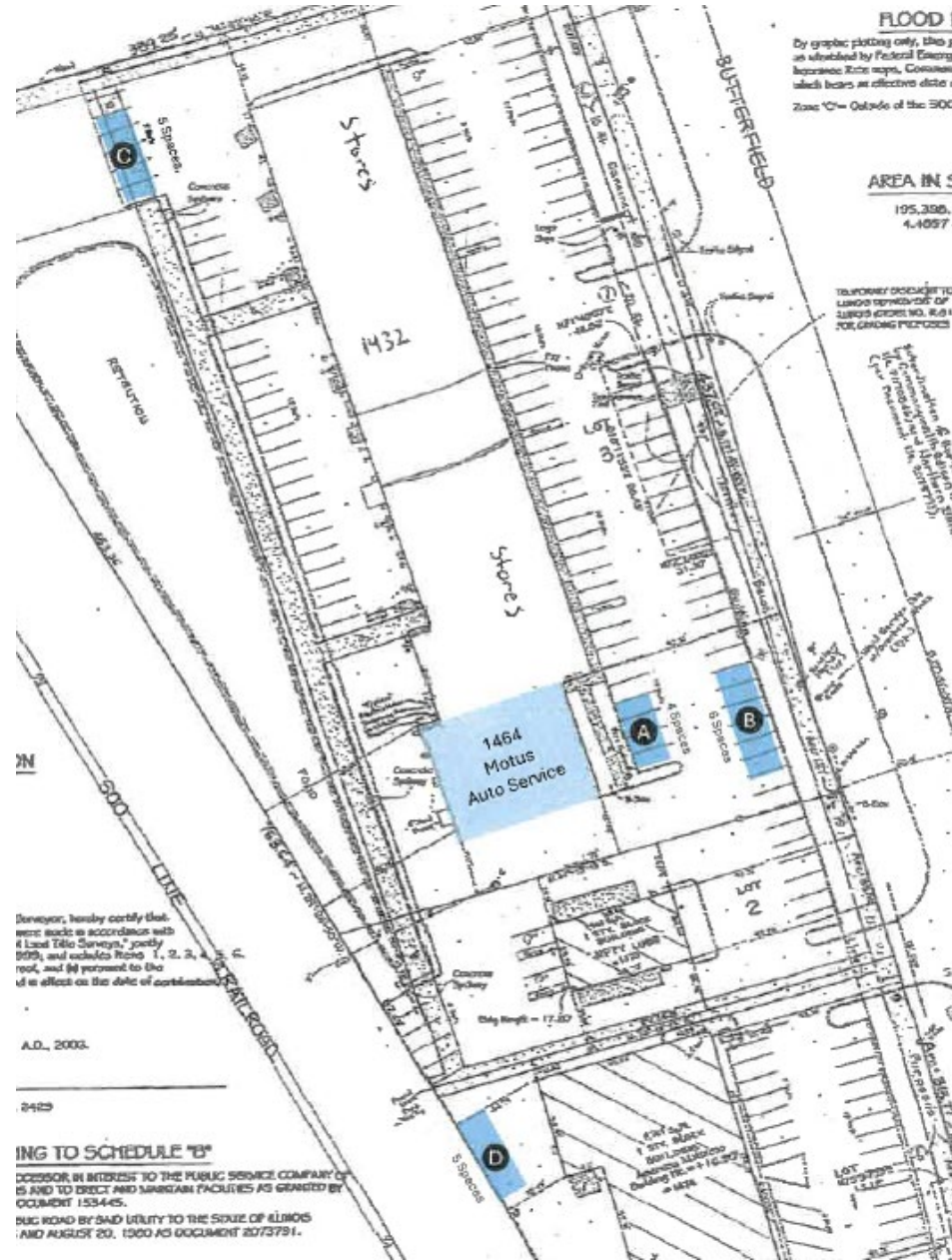
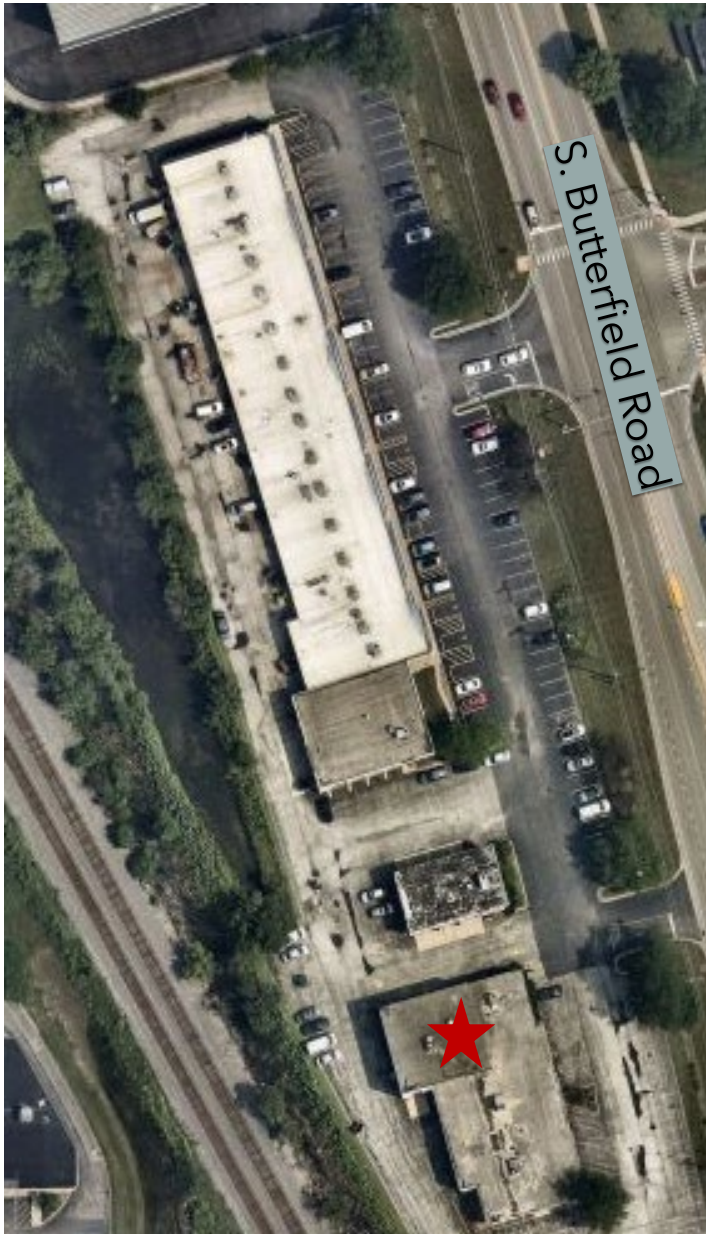
Use Standards

1. Minor motor vehicle service and repair shops and motor vehicle aftermarket enhancement establishments may not store the same vehicles outdoors on the site for longer than seventy-two hours. Major motor vehicle service and repair shops may not store the same vehicles outdoors on the site for longer than fifteen days. No required off-street parking may be used for vehicle storage.
2. All driveways must be located and designed to ensure that they will not adversely affect the safety and efficiency of traffic circulation on adjoining streets.
3. All operations must be fully enclosed. Only vehicles being serviced at the establishment may be stored outdoors. Wrecked or junked vehicles may not be stored on-site. Where the property abuts a residential use, the facility must install an opaque fence at least six feet high on the property line to buffer the residential use.
4. Minor motor vehicle service and repair shops may also include gas stations as an accessory use. All gas stations that are part of such an establishment must comply with the regulations of this title.
5. The sale of used or new automobiles is not permitted.
6. No motor vehicles may be stored and no repair work may be conducted in the public right-of-way.
7. All equipment and parts must be stored indoors.





Proposed Long Term Parking Stall Locations



This image is from the petitioner's application noting where they would like to store vehicles long term outdoor.

The petitioner is requesting 20 long-term parking stalls in addition to the required parking spaces.

Proposed Parking Sections – Parking Lot Street Side



Proposed Parking Section A

Next to building
Four Parking Spots



Proposed Parking Sections – Parking Lot Street Side



Proposed Parking Section B

Facing Butterfield Road
Six Parking Spots



Proposed Parking Sections – Parking Lot Rear Side of Building



Proposed Parking Section C

- Northwest Corner facing railroad track
- Five Parking Spots



Proposed Parking Sections – Parking Lot Rear Side of Building



Proposed Parking Section D

- Southwest Corner facing railroad track
- Five Parking Spots

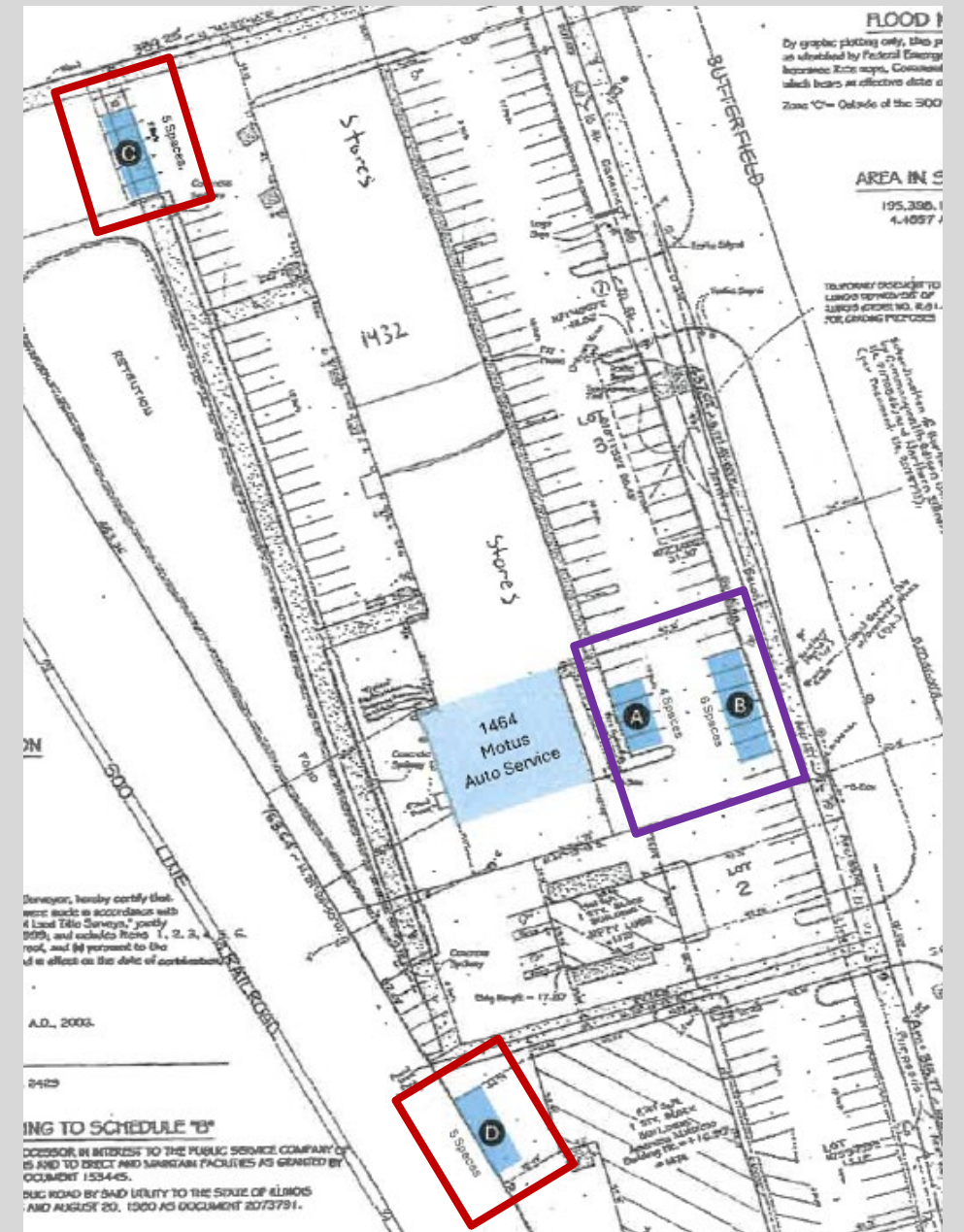


Comprehensive Plan

- The Comprehensive Plan identifies the subject property as remaining the same land use, Auto-Oriented Small to Mid-Size Retail, in the future. The Comprehensive Plan aims to capitalize on Mundelein's growing workforce to elevate economic development.

Analysis: Parking

- Staff recommends the PZC discuss the number of parking spaces used for different purposes so there is enough parking spaces to accommodate short term and long term parking.
- Staff recommends parking long-term vehicles behind the building in locations C and D (outlined in red), rather than in front of the building. Staff recommends short-term (72 hours) outdoor storage to be permitted in front of the building (outlined in purple). The PZC should consider the number of spaces the petitioner needs to provide sufficient long-term storage for their business.



Standards for Granting a Variation

No variation from the provisions of this Ordinance shall be granted unless the Zoning Administrator, Planning and Zoning Commission and Village Board makes specific written findings based on the standards imposed by this section. These standards are as follows:

- a. The strict application of the terms of this Ordinance will result in undue hardship.
- b. The plight of the owner is due to unique circumstances.
- c. The variation, if granted, will not alter the essential character of the locality.

The Zoning Administrator, Planning and Zoning Commission and Village Board, in making its findings, may inquire into the following evidentiary issues, as well as any others deemed appropriate:

- a. The particular physical surroundings, shape or topographical conditions of the specific property impose a particular hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of the regulations were to be carried out.
- b. The alleged difficulty or hardship has not been created by any person presently having a proprietary interest in the property in question.
- c. The granting of the variation will not be detrimental to the public welfare in the neighborhood in which the property is located.
- d. The proposed variation will not impair an adequate supply of light and air to adjacent property, substantially increase congestion in the public streets, increase the danger of fire, endanger the public safety or impair property values within the neighborhood.
- e. The proposed variation is consistent with the spirit and intent of this Ordinance and Village land use policies.
- f. The value of the property in question will be substantially reduced if permitted to be used only under the conditions allowed by the regulations governing the district in which it is located.

Name of Business	Use	Parking Requirement	SF of the Building	# of Parking Spaces Required
Subway	Restaurant	1 per 100 SF of Public Seating	1,462 (1,462/2 = 731)	*8 Spaces
The Philly Special	Restaurant	1 per 100 SF of Public Seating	2,762 (2,762/2 = 1,381)	*14 Spaces
Edible Arrangements	Retail	3 per 1,000 GFA	1,462	6 Spaces
Awesome Tan	Personal Services Establishment	3 per 1,000 GFA	1,462	6 Spaces
Vacant (Estimated)	Former Dentist (Medical)	1.5 per exam room + 1 per doctor	2,924 Estimated 3 exam rooms and 3 doctors	**7.5 Spaces
Pet Parlor	Pet "Day Care" Services	2 Per 1,000 GFA	1,462	4 Spaces
Yes Class	Personal Services Establishment	3 per 1,000 GFA	1,462	6 Spaces
Lotus Spa Nail Salon	Personal Services Establishment	3 per 1,000 GFA	1,462	6 Spaces
Golden Kitchen	Restaurant	1 per 100 SF of Public Seating	1,462 (1,462/2 = 731)	*8 Spaces
Heartland Meditation	Personal Services Establishment	3 per 1,000 GFA	1,462	6 Spaces
K.A.S.H Insurance	Office	3 per 1,000 GFA	1,462	6 Spaces
Osaka Sushi	Restaurant	1 per 100 SF of Public Seating	1,462 (1,462/2 = 731)	*8 Spaces
Hairtopia	Personal Services Establishment	3 per 1,000 GFA	1,462	6 Spaces
Salon Centric	Personal Services Establishment	3 per 1,000 GFA	1,462	6 Spaces
Motus Auto Repair	Motor Vehicle Service and Repair, Major	2 Per Bay + 2 per 1,000 GFA + 1 per loaner car	3,750 + 4 bays and 4 loaner cards	20 Spaces
Jiffy Lube	Motor Vehicle Service and Repair, Minor	2 Per Bay + 2 per 1,000 GFA	2,000 and 3 bays	8 Spaces
Vacant	Former American Mattress (Retail)	3 per 1,000 GFA	9,685	30 Spaces
Total Parking Spaces Required				156 (155.5)
Total Parking Spaces Currently Existing				134
* Please note that these parking calculations are estimates, and the actual parking requirements may differ. Staff assumes that for restaurant units, half of the space is used for restaurant operations and the other half is used for public seating. More information would be needed to be provided by property owner for an exact calculation. **Please note that due to the storefront being vacant, we cannot accurately determine the number of exam rooms or doctors at this business.				

FINDINGS OF FACT – VARIATION

CASE NUMBER	PZC-20-2024
PUBLIC HEARING DATE	January 15, 2025
VARIATION	A variation from Section 20.48.040(AA) increasing the maximum time vehicles can be stored on-site from 72 hours to 15 days.
DRAFT MOTION	<u>Motion</u> by S. Schneckloth, second by J. Holden to approve the Findings of Fact as published for PZC-20-2024 relating to a variation to Section 20.48.040(AA), increasing the maximum time vehicles can be stored on-site from 72 hours to 15 days.
On January 15, 2025, the Planning and Zoning Commission voted 6 - 0 for approval of a variation to Section 20.48.040(AA) increasing the maximum time vehicles can be stored on-site from 72 hours to 15 days.	
<i>No variation from the provisions of this Ordinance shall be granted unless the Zoning Administrator, Planning & Zoning Commission, and Village Board makes specific written findings based on the standards imposed by this section. These standards are as follows:</i>	
1. The strict application of the terms of this Ordinance will result in undue hardship;	
The strict application of the Zoning Ordinance would create an undue hardship for the petitioner because the building was built in 1987 and would not have anticipated that the 2012 Zoning Ordinance would later introduce time limits for on-site vehicle storage for the “Motor Vehicle Service and Repair, Minor” use. If the regulation was in place in 1987, they may have incorporated more indoor vehicle storage space.	
2. The plight of the owner is due to unique circumstances;	
The owner's plight is due to unique circumstances as the business use was permitted by a special use ordinance approved in 1986, which also allowed engine repair services which is categorized under "Motor Vehicle Service and Repair, Major" use.	
3. The variation, if granted, will not alter the essential character of the locality;	
The variation will not alter the essential character of the locality because the land use and parking practices have existed since 1987. Because the property has operated this way for decades, neighboring businesses may not notice any difference if vehicles are stored for 15 days. The Planning and Zoning Commission added a condition to the variation request that the front parking lot may only be used for 72-hour vehicle storage, which limits the visual impact from the public right of way.	
<i>The Zoning Administrator, Planning & Zoning Commission, and Village Board, in making its findings, may inquire into the following evidentiary issues, as well as any others deemed appropriate.</i>	
1. Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship or difficulty to the owner would result, as distinguished from a mere inconvenience, if the strict letter of the regulations were to be carried out.	
The Commission finds that there is hardship attributable to the shape, surroundings, and topographical conditions of the property because the building was constructed in 1987 before the adoption of the 2012 Zoning Ordinance, so the builder would not have anticipated future regulations concerning outdoor vehicle storage.	
2. The alleged difficulty or hardship has not been created by any person presently having a proprietary interest in the property in question.	
The Commission finds that the petitioner has not created this hardship because the building was built in 1987, and similar uses have previously occupied this space since then.	
3. The granting of the variation will not be detrimental to the public welfare in the neighborhood in which the property is located.	
The Commission finds that the granting of the requested variation will not be detrimental to the public welfare in which the property is located because the operations of the business have been similar to how the property was operated since 1987.	
4. The proposed variation will not impair an adequate supply of light and air to adjacent property, substantially increase congestion in the public streets, increase the danger of fire, endanger the public safety, or impair property values within the neighborhood.	
The proposed variation will not impair an adequate supply of light and air to adjacent property, substantially increase congestion in the public streets, increase the danger of fire, endanger the public safety, or impair property values within the neighborhood.	
5. The proposed variation is consistent with the spirit and intent of this Ordinance and Village land use policies.	

The Commission finds that the proposed variation is consistent with the spirit and intent of this Ordinance and Village land use policies.

6. The value of the property in question will be substantially reduced if permitted to be used only under the conditions allowed by the regulations governing the district in which it is located.

The value of the property in question could be reduced if permitted to be used only under the conditions allowed by the regulations governing the district in which it is located. The 72-hour maximum on-site storage of vehicles could hinder the business operation by limiting the services offered and number of vehicles that can be serviced.

To: Commission Members

From: Jessica Marvin, Associate Planner

For: Planning and Zoning Commission Meeting of February 19, 2025

Subject: Mundelein 83 III, LLC - 2910 W IL Route 60 - Preliminary and Final Plat of Subdivision

Attachments:

1. Proposed Preliminary and Final Plat of Subdivision
2. Petitioner's Application

Background:

Mundelein 83 III, LLC, owns the property at 2910 W IL Route 60. This property is currently a vacant outlot within the Mundelein Crossing Shopping Center. It is 2.12 acres in size. The owner desires to subdivide the property to create an individual lot to construct a future restaurant. The subdivision would result in two lots with an area of 1.249 acres and 0.872 acres.

Staff Comments

No comments were received by Staff at the time of this report.

Analysis

The Plat of Subdivision complies with the Village's requirements for a subdivision and the applicant has applied all the recommendations from Village Staff. For this reason, it is staff's recommend that the Planning and Zoning Commission recommend the Plat for approval.

Recommendation:

Motion to recommend approval of the Preliminary and Final Plat of Subdivision of Resubdivision of Lot 7 Mundelein Crossing First Resubdivision.



PART OF THE NORTHEAST QUARTER OF SECTION 22,
TOWNSHIP 44 NORTH, RANGE 10 EAST OF THE THIRD
PRINCIPAL MERIDIAN, IN LAKE COUNTY, ILLINOIS.

(IN FEET)
1 inch = 30 ft.

NET AREA: 92,412 SQUARE FEET OR 2.121 ACRES
(TO HEAVY LINES)
(BASED ON MEASURED VALUES)

LOT 7
MUNDELEIN CROSSINGS FIRST
RESUBDIVISION DOCK. 56-1523

PROPERTY INFORMATION

Address 2910 W IL Route 60, Mundelein, IL 60060

Property Index Numbers (PIN) 1022201011

Size of Property 92,412 SF / 2.121 Acres (sq. ft. / acres)

Size of Building Space N/A (sq. ft.)

Size of Space Utilized N/A

PETITIONER INFORMATION

Business/Org. Name Mundelein 83 III, LLC

Name William A. Shiner

Title Manager

Address 3201 Old Glenview Road Suite 235

City, State, Zip Wilmette, IL 60091

Phone 847-256-8800

Email wshiner@shinergroup.com

Petitioner Status: ☒ Owner ☐ Lessee ☐ Contract Purchaser

PLAT REQUEST – Please attach plat(s)

- ☐ Preliminary Plat of Subdivision
☐ Final Plat of Subdivision
☒ Preliminary and Final Plat of Subdivision
☐ Plat of Vacation
☐ Plat of Consolidation

PROPERTY OWNER INFORMATION

Business/Org. Name Mundelein 83 III, LLC

Name William A. Shiner

Title Manager

Address 3201 Old Glenview Road Suite 235

City, State, Zip Wilmette, IL 60091

Phone 847-256-8800

Email wshiner@shinergroup.com

PLAT APPLICATION FILING FEE (Preliminary Plats Exempt)

☒ **Five Acres or Less: \$500**

☐ **Over Five Acres: \$1,000**

AFFIDAVIT OF OWNERSHIP AND AUTHORIZATION

COUNTY OF LAKE)
)
STATE OF ILLINOIS)

I, William A. Shiner, under oath, state that I am
_____ the sole)
_____ an) owner of the property
X _____ an authorized officer of the)

commonly described as (Address) 2910 W IL Route 60, Mundelein, IL 60060 and that such property is owned by
(Printed Name) William A. Shiner as of this date. As owner of the property, I do
hereby authorize Dan Olson, President
Upstream Design Group (Printed Name or Not Applicable) to represent me in the following
Planning and Zoning Commission/Village Board matter, _____
Preliminary and Final Plat Approval _____ (Action).


Signature

Subscribed and sworn to before me

this 1st day of November, 2024.


Notary Public Signature



SITE VISIT AUTHORIZATION

I hereby grant employees of the Village of Mundelein, their agents, and members of the Mundelein Planning and Zoning Commission permission to enter on the property located at the following address:

(Address) 2910 W IL Route 60, Mundelein, IL 60060

Visual inspection of the site shall be accomplished during reasonable hours to examine only those portions of the property relating to this application. This permission is granted in regards to the Mundelein Planning and Zoning Commission Petition for the above-cited property.

**If Owner or if Owner is a
Corporation or Partnership:**



Signature of Owner

10/21/24
Date

By William A. Shiner

Manager - MUNDELEIN 83 III, LLC

Title/Full Corporate Name

If Contract Purchaser:

Signature of Contract Purchaser

Date

By _____

Title/Full Corporate Name

If Lessee (Corporate or Partnership):

Signature of Lessee

Date

By _____

Title/Full Corporate Name

REQUIRED SIGNATURES

The undersigned states under oath that he/she/they are the **Legal Owner(s)** of record of the realty described in this Planning and Zoning Commission Application, and the statements that he/she/they made in the foregoing application are true in substance and in fact.

Signature (Owner): 
Printed Name: William A. Shiner

Date: 10/31/24
Title: Manager - MUNDLEIN 83.14 VIC

Signature (Owner): _____
Printed Name: _____

Date: _____
Title: _____

The undersigned states under oath that he/she/they are the **Contract Purchaser** of record of the realty described in this Planning and Zoning Commission Application, and the statements that he/she/they made in the foregoing application are true in substance and in fact.

Signature Contract Purchaser: _____
Printed Name: _____

Date: _____
Title: _____

The undersigned states under oath that he/she/they are the **Lessee** of record of the realty described in this Planning and Zoning Commission Application, and the statements that he/she/they made in the foregoing application are true in substance and in fact.

Signature Lessee: _____
Printed Name: _____

Date: _____
Title: _____

To: Commission Members

From: Isabel Guadarrama, Senior Planner
Erin Swanson, Administrative Assistant

For: Planning and Zoning Commission Meeting of February 19, 2025

Subject: PUBLIC HEARING - PZC-22-2024 - 28884 and 28936 N IL Route 83 - Baseball and Pickleball Facility

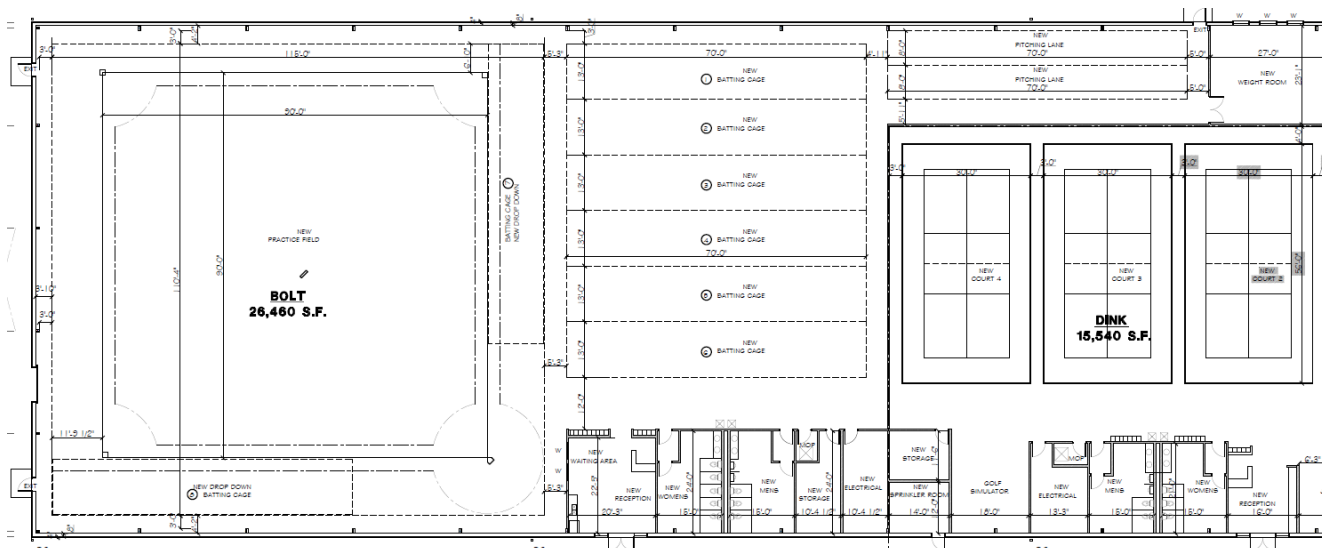
Attachments:

1. Location Map - 28884 and 28936 N IL Route 83
2. Certificate of Publication
3. Petitioner's Packet

Background:

JFox Enterprises plans to relocate its baseball facility to a new location at 28884 and 28936 N. IL Route 83, currently in unincorporated Lake County. To facilitate this move, JFox Enterprises is entering into a purchase agreement with FRAN 61, LLC, to acquire the two vacant lots. In support of the development, the Community Development Department received several zoning applications from JFox Enterprises, including an Annexation request, Map Amendment, Plat of Subdivision, and two Variance applications, all aimed at establishing a baseball and pickleball facility at the new site.

For several years, JFox Enterprises successfully operated its baseball facility at 300 Townline Road in Mundelein, Illinois, until the property recently underwent a use change with its new owner. The upcoming facility on IL Route 83 will continue to serve baseball players and feature pickleball courts, as highlighted in the layout plan below.



Facility Floor Plan of Proposed Facility

The planned facility will be a 42,000-square-foot structure, including a practice field, eight batting cages, two pitching lanes, four pickleball courts, a practice wall, a juice bar, and a golf simulator. The building will be constructed with two different-colored metal insulated wall panels and metal insulated roof panels. It will feature two main entrances and several windows on the façade facing IL Route 83.

Map Amendment Requested

Upon annexation into the Village, properties are automatically assigned the R-1, Single Family Residential zoning district. However, given the proposed use of the site and the future land use outlined in the Village's Comprehensive Plan, the Village Staff and the Petitioner agree that the most appropriate zoning designation for the property is C-4, Shopping Center District. This zoning aligns with the adjacent C-4 district, thereby minimizing the risk of "spot zoning," which the Village actively discourages. This zoning designation supports a more cohesive and well-planned development for the area. Furthermore, an indoor entertainment facility, such as the proposed baseball and pickleball operations, is allowed within the C-4 district.

Plat of Subdivision Requested

The property currently consists of two separate lots. The Petitioner requests to combine these lots into one single parcel. The submitted Plat of Subdivision outlines the proposed property boundaries and easements for utilities and stormwater management.

Variances Requested

Section 20.32.040 of the Zoning Ordinance outlines design standards for the C-4 Shopping Center District. Notably, this section prohibits the use of metal wall panels, requires rooflines to be articulated with breaks in the façade, and mandates that façades visible from public rights-of-way incorporate design elements to reduce the perceived scale of the building. Blank walls are only permissible on the rear and side elevations. Additionally, structural bays must be 20 feet wide and articulated by columns or pilasters projecting at least 3 inches from the wall face. The proposed

building, however, does not fully comply with these design standards. It features metal panels and a continuous roofline without the required articulations. While the design includes two entrance canopies and clearstory windows, the architecture does not fully meet the intent of the zoning ordinance's aesthetic requirements.



Exterior Perspective of Proposed Facility (first version without the windows)

Table 20.56-1 of Section 20.56.130 of the Zoning Ordinance mandates that indoor amusement facilities provide three parking spaces for every 1,000 square feet of public use area. For the 42,000-square-foot facility, 126 parking spaces are required. The proposed facility includes 53 parking stalls, four designated as handicapped spaces. Additionally, the Petitioner has allocated space for an extra 23 parking stalls to accommodate future needs. By comparison, the previous baseball facility at 300 Townline Road provided 38 parking spaces, which sufficed for its operation. The Petitioner is, therefore, requesting a parking variance of 58%.

Department Comments

The following comments, which were provided during the Departmental Review Process, are still relevant to the final submittal:

Public Works and Engineering Department

- An IDOT access permit will be required for a full-service driveway prior to Village permit approval

Community Development Department

- All signage requires a Sign Permit prior to installation. The flat sign panels shown on the elevations are not allowed by code.
- The proposed façade does not follow the Village's design guidelines. Although a variance

application has been submitted, staff advised that there is a desire for more architectural elements incorporated into the façade, such as windows, larger entrances, and other features to help eliminate the blank walls. Staff included examples of different sports facilities during the cursory review. See the analysis section for further comments.

- The Village Municipal Code requires new sidewalks along the right of way; however, due to the lack of sidewalks along Route 83, the Village requests a fee in lieu.

Public Comments

A request was made by Fremont Township for an opaque fence to be installed along the property line.

Comprehensive Plan

The Comprehensive Plan designates the properties at 28884 and 28936 N. IL Route 83 as part of a future multi-family residential district, continuing the residential development to the north (Crossings of Mundelein). These future land use designations reflect the area's intended use, character, and development density over the next 10 years, based on existing land use patterns when the Village adopted the Comprehensive Plan. However, the Comprehensive Plan recognizes that land use designations should be flexible enough to accommodate unforeseen developments. The Village should allow for alternative uses, even those not explicitly designated in the future land use map when they support the community's broader goals.

Analysis

JFox Enterprises has established a strong reputation in the community, having successfully operated a baseball facility at 300 Townline Road in the past. Given JFox's previous presence in Mundelein, it is reasonable to assume that many former patrons will visit this new facility. Moreover, the location on the west side of town is expected to draw visitors from various parts of Lake County, expanding the potential customer base beyond the immediate area. The demand for indoor amusement facilities has

also grown over the years, driven by the increasing popularity of sports. Based on these factors, Staff generally supports the proposed use of this location. The unique nature of the proposed facility suggests that the building will not operate at full capacity consistently. With specific courts and batting cages having limited capacities, 126 parking spaces, as required by code, seem excessive. The Petitioner has estimated that 46 parking stalls will be sufficient to accommodate peak-hour demand for both sports. Additionally, many of the facility's users are minors who do not drive, reducing parking demand. However, the Petitioner has designated open areas to accommodate additional parking, supporting potential future growth. Community Development wishes the PZC and Board to consider the impacts of the proposed building's architectural design. While the Petitioner has incorporated some feedback by adding windows, color, and entrance canopies, the overall aesthetic does not fully meet our expectations. We see considerable potential and longevity in this structure and believe that with further refinement, it could better align with the architectural standards we envision for this important corridor of the Village. The location is within the Growth Area, that is expected to continue experiencing growth. Each new development is asked to continue improving upon the aesthetics and quality of previous developments. Additionally, properties outside of the Village, such as the Roadster Shop, are enhancing facades in the attractive

commercial corridor. Staff provided examples of other successful indoor amusement centers from across the country, showcasing designs with larger windows, grander entrances, and varied color schemes and textures. These elements contribute to a more visually appealing and engaging environment that better reflects the nature of the use.



Example 1 Grand Rapids, Michigan – Please note the two colors, large windows, and awning.

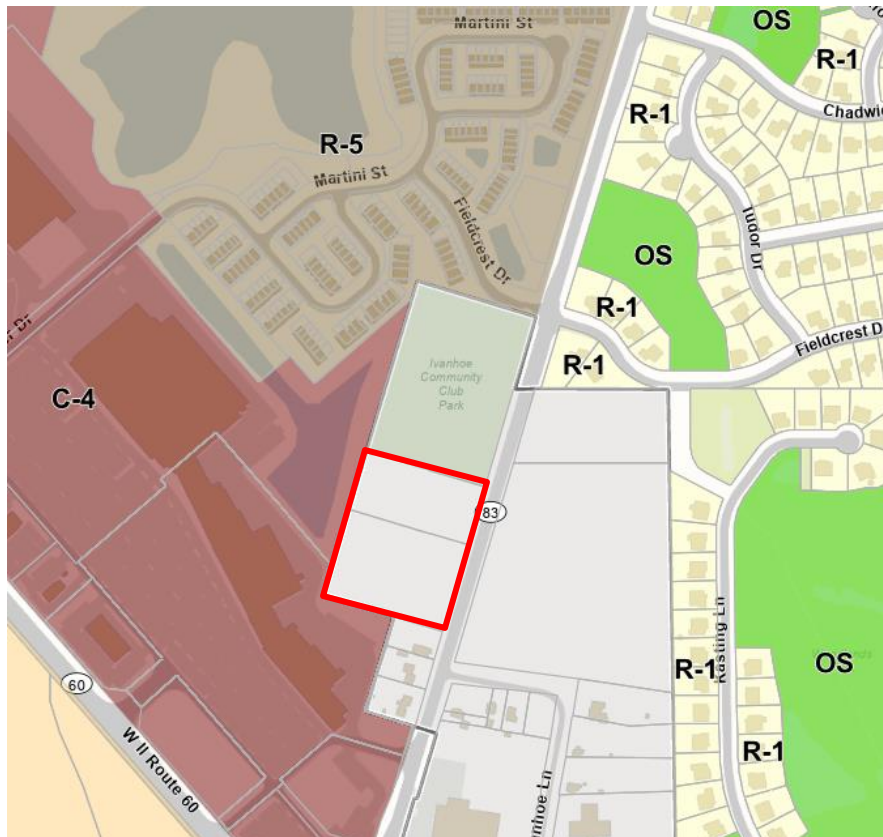


Example 2 Little Rock, Arkansas – Please note the two colors, windows, and different elevations.

As urban planners, we must evaluate the long-term viability of the site. Furthermore, given that the property is outside the Village boundaries, it is within our discretion to approve a design that aligns with the aesthetic standards of the Village. Currently, we cannot support the proposed variance to Section 20.32.040 of the Zoning Ordinance. While we recognize that the requirements for the proposed district are tailored to shopping centers, the C-1, C-2, and C-3 districts impose similar, if not more stringent, architectural standards. Poor architectural design often leads to undesirable future uses, such as contractor yards or commercial storage facilities. To ensure the continued success of this location and prevent such outcomes, we recommend that the Planning and Zoning Commission approve the project, contingent upon enhancing the entrances and windows as shown in the provided examples. This will create a more prominent, inviting façade contributing to the facility's long-term success and appeal.

Recommendation:

Location Map: 28884 & 28936 N. IL Route 83



Legend:

 Subject Property



NOTICE OF HEARING BEFORE THE
VILLAGE OF MUNDELEIN
PLANNING & ZONING COMMISSION

NOTICE IS HEREBY GIVEN that on February 19, 2025, at 7:00 p.m., there will be a public hearing before the Village of Mundelein Planning and Zoning Commission at the Mundelein Village Hall, 300 Plaza Circle, Mundelein, Illinois, concerning a petition for the property commonly known as 28884 and 28936 N. IL Route 83 (PINs 10-23-100-005 and 10-23-100-004), filed by Jerry Fox of JFox Enterprises. The petitioner is requesting the following, pending the approval of an annexation of the subject property into the Village of Mundelein:

1. A Map Amendment to rezone the property from the R1 Single Family Residence zoning district to the C-4 Shopping Center zoning district;

2. A Variation from Section 20.32.040 of the Mundelein Zoning Ordinance regarding specific building materials and design;

3. A Variation from Section 20.56.130, Table 20.56-1 of the Mundelein Zoning Ordinance regarding off-street parking requirements; and

4. A Preliminary and Final Plat of Subdivision.

If you cannot attend the meeting in-person and you wish to submit a question or comment to be provided to the Planning and Zoning Commission, please email your full name and your question or comment to planning@mundelein.org. Please put "Public Commentary" in the subject line. Comments received during the meeting, but after the public commentary portion has ended, will be provided to the Commission Members after the meeting.

CASE NO.: PZC-22-2024

The name and address of the legal and/or beneficial Owner of the subject property:

FRAN61, LLC c/o Mark Muno

17536 W. Bluff Dr.

Grayslake, IL 60030

The name and address of the Petitioner:

JFox Enterprises c/o Jerry Fox

207 Peregrine Ln

Hawthorn Woods, Illinois 60047

This Notice serves as an invitation to all interested parties to submit oral or written testimony or other evidence regarding the above case to the Village of Mundelein Planning and Zoning Commission at planning@mundelein.org. Comments received by 5:00 p.m. CT on February 12, 2025, will be included in the meeting agenda packet. Comments submitted after this date will be provided to the Commissioners on the day of the public hearing. Those with questions are encouraged to contact the Village of Mundelein at (847) 949-3282.

The Planning and Zoning Commission's actions are not final for this case. The Planning and Zoning Commission will forward its findings and recommendations to the Village Board of Trustees for final consideration and action.

Dated at Mundelein, Illinois, this 3rd day of February 2025.

Terry Roswick /s/, Chairman

Planning and Zoning Commission

Published in Daily Herald Feb. 4, 2025 (278029)

CERTIFICATE OF PUBLICATION

Paddock Publications, Inc.

Lake County
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 **Lake County DAILY HERALD**. That said **Lake County DAILY HERALD** is a secular newspaper, published in Libertyville, Lake County, State of Illinois, and has been in general circulation daily throughout Lake County, continuously for more than 50 weeks prior to the first Publication of the attached notice, and a newspaper as defined by 715 ILCS 5/5.

I further certify that the **Lake County 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 02/04/2025

in said **Lake County DAILY HERALD**. This notice was also placed on a statewide public notice website as required by 5 ILCS 5/2.1.

BY

Designee of the Publisher of the Daily Herald

Control # 278029 *LAKE*



TYPICAL PLANNING AND ZONING COMMISSION PROCESS

Meeting Schedule

The Planning and Zoning Commission consists of seven members who act as a recommending body to the Village Board. The Planning and Zoning Commission meet the first and third Wednesday of each month at the Village Hall, located at 300 Plaza Circle, Mundelein, Illinois. Meetings begin at 7:00 p.m.

Preliminary Conference

Prior to filling out this form you must first meet with a representative of Community Development to discuss the proposal and determine the necessary process for approval (see Exhibit A, Step A). If applicable, a concept plan consisting of measurable sketches with a scale/ruler, existing and proposed site data, and site photo(s) should be available for review by a planner. To schedule a preliminary conference, contact Community Development at (847) 949-3282.

Petition Submittal

Submit (1) legible copy, no larger than 11" x 17" of the full petition application to Community Development. The petition must be complete with all attachments. Applications and fees can be mailed to or dropped off at Community Development, 300 Plaza Circle, Mundelein, Illinois 60060. Community Development staff will review the application and may request additional materials prior to acceptance.

Internal Department Review

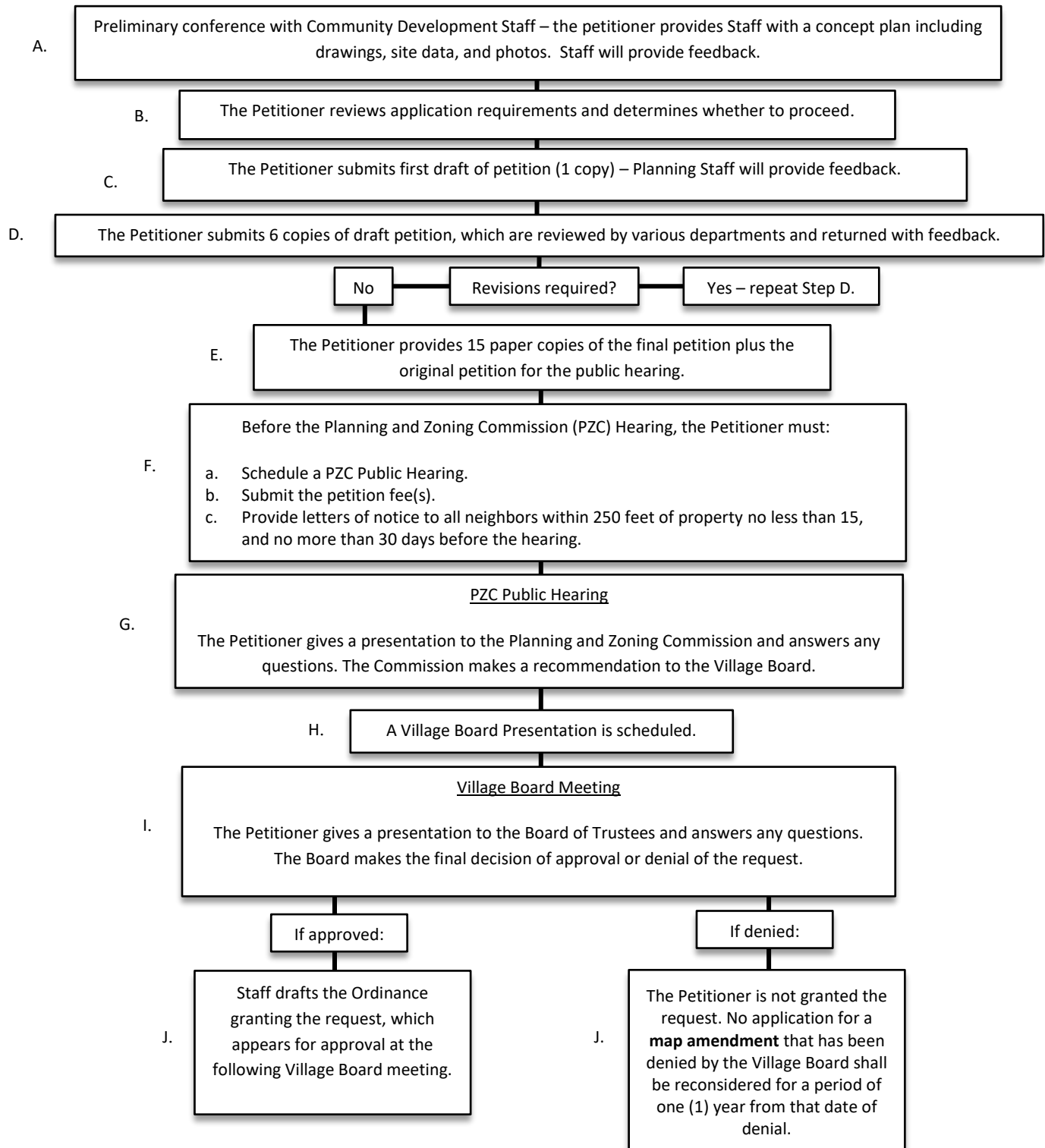
After Community Development accepts the Draft Petition the Fire, Police, Public Works and Engineering, Building Department, and Community Development Divisions will review the proposal and provide comments. Petitioners may be asked to provide additional and/or electronic copies of the petition at this time. Upon review, staff will provide feedback to the petitioner, if applicable. If it is determined that the documents are in compliance with Village codes, a Planning and Zoning Commission hearing will be scheduled. If changes are required, the petitioner shall resubmit revised plans for another departmental review, which will delay the date for a public hearing.

Final Petition

After all issues have been adequately addressed, staff will direct the petitioner to proceed with the final petition submittal (see Exhibit A, Steps E & F). The final petition submittal must include (1) paper copy plus the petition fee. Additional paper or digital copies of the petition may be requested at this time. The Planning and Zoning Commission shall evaluate the application, based upon the evidence presented at the public hearing, recommend approval, approval with conditions, or denial of the application, and forward its recommendation to the Village Board within (60) days (see Exhibit A, Step G). The Village Board shall consider the variation within (60) days of receipt of the Planning and Zoning Commission recommendation (see Exhibit A, Step I).

EXHIBIT A

PLANNING AND ZONING COMMISSION PROCESS FLOWCHART



The initial submittal must contain:

- ☒ Completed Application – Pages 4-10
- ☒ Current or accurate Plat of Survey or Preliminary Plat of Subdivision
 - a. (1) no larger than 11" x 17"
- ☒ Preliminary Drawings
 - a. Site Plan – indicating all site improvements, such as sign locations, screened trash container areas, loading docks, fire lanes, area lighting, parking, handicap parking, all dimensions and project data (building area, land area, floor area ratio, coverage, parking calculations, etc.)
 - b. Preliminary Floor Plan *(if applicable)*
 - c. Preliminary Building Elevations, including height *(if applicable)*
 - d. Tree Preservation Plan *(if applicable)* **Not Included**
 - e. Preliminary Engineering *(if applicable)*
- ☐ Analysis or Report justifying requested rezoning *(if applying for a map amendment)*
- ☒ Photos of the property
- ☒ Other Supporting Documentation *(if applicable)*
 - ☒ Traffic Impact Study
 - ☐ Market Study
 - ☐ Fiscal Impact Analysis
 - ☐ _____
 - ☐ _____
- ☒ Application fee *(Additional fees may apply if additional actions are required)*

VARIATION FEES	
Variation Type	Fee
Variation - Single Family Residential	\$150
Each Additional Variation	\$50 each
Without a Permit	\$200
Variation - Residential Developer	\$300
Each Additional Variation	\$50 each
Without a Permit	\$300
Variation - Non-Residential	\$300
Each Additional Variation	\$50 each
Without a Permit	\$600

SPECIAL USE PERMIT FEES	
Special Use Permit Type	Fee
Special Use Permit – Single Family Residential	\$125
Special Use Permit – Residential Developer	\$250
Special Use Permit – Non-Residential	\$450

MAP AMENDMENTS/REZONING FEES	
REZONING TYPE	Fee
Map Amendment – Residential Single Family	
<i>Less than 2 acres</i>	\$150
<i>2 acres, but less than 5 acres</i>	\$200
<i>5 acres, but less than 10 acres</i>	\$250
<i>10-20 acres</i>	\$300
<i>Each additional acre</i>	\$15 each
Map Amendment – Residential Developer	
<i>Less than 2 acres</i>	\$400
<i>2 acres, but less than 5 acres</i>	\$500
<i>5 acres, but less than 10 acres</i>	\$1,000
<i>10-20 acres</i>	\$1,500
<i>Each additional acre</i>	\$15 each
Map Amendment – Non-Residential	
<i>Less than 2 acres</i>	\$1,000
<i>2 acres, but less than 5 acres</i>	\$1,500
<i>5 acres, but less than 10 acres</i>	\$2,000
<i>10-20 acres</i>	\$2,500
<i>Each additional acre</i>	\$100 each

PLAT FILING FEES	
Plat Type (Preliminary Plats Exempt)	Fee
5 acres or less	\$500
More than 5 acres	\$1,000

Additional submittal requirements:

- ☒ Affidavit of Notification and Certified Mail receipts, return receipts, and undeliverable envelopes
(See Exhibit B and C. Must be submitted to Community Development prior to public hearing)

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

PROPERTY INFORMATION

Address 28884 & 28936 N IL Route 83, Mundelein, IL, 60060
Property Index Numbers (PIN) 1023100004 & 1023100005

Size of Property 204,841 s.f. / 4.7025 Ac. (sq. ft. / acres)
Size of Building Space 42,000 (sq. ft.)
Size of Space Utilized 42,000 s.f.

PETITIONER INFORMATION

Business/Org. Name JFox Enterprises
Name Jerry Fox
Title Owner
Address 207 Peregrine Ln
City, State, Zip Hawthorn Woods, IL 60047
Phone 847.438.1500
Email JFox@bishdisplay.com
Petitioner Status: ☐ Owner ☐ Lessee ☒ Contract Purchaser

ZONING

Current Zoning Unincorporated Lake County
Proposed Zoning Annex to R-1, Rezone to C-4
Current Use Vacant
Proposed Use Indoor Amusement

PROPERTY OWNER INFORMATION

Business/Org. Name _____
Name _____
Title _____
Address _____
City, State, Zip _____
Phone _____
Email _____

SECTION(S) OF ZONING ORDINANCE: C-4 Shopping Center Zoning District - Section: 20.32-1

SECTION(S) OF COMPREHENSIVE PLAN (IF APPLICABLE): Amendment to the Future Land Use Plan : from Multi-Family Residential to Auto-Oriented Small- to Mid-Size Retail

DESCRIPTION OF PROPOSED VARIATION(S) *(Attach sheet if additional space is needed)*

Variation #1 - Requesting relief from Section 20.32.040 as it relates to specific building materials.

Variation #2 - Requesting relief from Table 20.56-1 regarding off-street parking requirements as it relates to the proposed development and use.

DESCRIPTION OF PROPOSED SPECIAL USE(S) *(Attach sheet if additional space is needed)*

N/A

DESCRIPTION OF PROPOSED MAP AMENDMENT(S) *(Attach sheet if additional space is needed)*

Upon annexation into the Village, the property defaults to R-1: Single Family Residential Zoning District, needing the Map Amendment to rezone it to C-4: Shopping Center, where indoor amusement is permitted.

PLAT REQUEST

- ☒ Preliminary Plat of Subdivision
☒ Final Plat of Subdivision
☐ Plat of Consolidation
☐ Plat of Vacation

STANDARDS FOR GRANTING A VARIATION

No variation from the provisions of this Ordinance shall be granted unless the Zoning Administrator, Planning and Zoning Commission, and Village Board makes specific written findings based on the standards imposed by this section. **Please provide a detailed response to each of the following criteria** (*attach additional pages, if necessary*):

- a. The strict application of the terms of this Ordinance will result in undue hardship.
- b. The plight of the owner is due to unique circumstances.
- c. The variation, if granted, will not alter the essential character of the locality

The Zoning Administrator, Planning and Zoning Commission, and Village Board, in making its findings, may inquire into the following evidentiary issues, as well as any others deemed appropriate.

Please provide a detailed response to each of the following criteria (*attach additional pages, if necessary*):

- a. The particular physical surroundings, shape, or topographical conditions of the specific property impose a particular hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of regulations were to be carried out.
- b. The alleged difficulty or hardship has not been created by any person presently having a proprietary interest in the property in question.
- c. The granting of the variation will not be detrimental to the public welfare in the neighborhood in which the property is located.
- d. The proposed variation will not impair an adequate supply of light and air to adjacent property, substantially increase congestion in the public streets, increase the danger of fire, endanger the public safety, or impair property values within the neighborhood.
- e. The proposed variation is consistent with the spirit and intent of this Ordinance and Village land use policies.
- f. The value of the property in question will be substantially reduced if permitted to be used only under the conditions allowed by the regulations governing the district in which it is located.

STANDARDS FOR GRANTING A SPECIAL USE

No special use shall be recommended for approval by the Planning and Zoning Commission and approved by the Village Board unless it has made findings, based upon the evidence presented at the public hearing, to support each of the following conclusions. **Please provide a detailed response to each of the following criteria** (*attach additional pages, if necessary*):

- a. The establishment, maintenance and operation of the special use in the specific location proposed will not endanger the public health, safety or general welfare of any portion of the community.
- b. The proposed special use is compatible with adjacent properties and other property within the immediate vicinity of the special use.
- c. The special use in the specific location proposed is consistent with the spirit and intent of this Ordinance and the Village land use policies.
- d. The special use conforms to the applicable regulations of the zoning district in which it is to be located.

STANDARDS FOR GRANTING A MAP AMENDMENT

The Planning and Zoning Commission recommendation and the Village Board decision on any zoning amendment is a matter of legislative discretion that is not controlled by any particular standard. However, in making their recommendation and decision, the Planning and Zoning Commission and the Village Board shall consider the following standards. The approval of amendments is based on a balancing of these standards.

Please provide a detailed response to each of the following criteria *(attach additional pages, if necessary):*

- a. The existing use and zoning of nearby property;
- b. The extent to which property values of the subject property are diminished by the existing zoning;
- c. The extent to which the proposed amendment promotes the public health, safety, and welfare of the Village;
- d. The relative gain to the public, as compared to the hardship imposed upon the applicant;
- e. The suitability of the property for the purposes for which it is presently zoned, i.e. the feasibility of developing the property in question for 1 or more uses permitted under the existing zoning classification;
- f. The length of time that a property in question has been vacant, as presently zoned, considered in the context of development in the area where the property is located;
- g. The evidence, or lack of evidence, of community need for the use proposed by the applicant;
- h. The consistency of the proposed amendment with the Comprehensive Plan;
- i. That the proposed amendment will benefit the residents of the Village as a whole, and not just the applicant, property owner(s), neighbors of any property under consideration, or other special interest groups, and the extent to which the proposed use would be in the public interest and would not serve solely on the interest of the applicant;
- j. The extent to which the proposed amendment creates nonconformities;
- k. The trend of development, if any, in the general area of the property in question; and
- l. Whether adequate public facilities are available including, but not limited to, schools, parks, police and fire protection, roads, sanitary sewers, storm sewers, and water lines, or are reasonably capable of being provided prior to the development of the uses, which would be permitted on the subject property if the amendment were adopted.

(Address) 28884 & 28936 N IL Route 83, Mundelein, IL, 60060

If Owner or if Owner is a Corporation or Partnership:

Signature of Owner	Date
--------------------	------

By _____

Title/Full Corporate Name

If Contract Purchaser:

Signature of Contract Purchaser	Date
---------------------------------	------

By [Jerry Fox](#)

Owner / JFox Enterprises

Title/Full Corporate Name

If Lessee (Corporate or Partnership):

Signature of Lessee	Date
---------------------	------

By _____

Title/Full Corporate Name

REQUIRED SIGNATURES

The undersigned states under oath that he/she/they are the **Legal Owner(s)** of record of the realty described in this Planning and Zoning Commission Application, and the statements that he/she/they made in the foregoing application are true in substance and in fact.

Signature (Owner): _____

Date: _____

Printed Name: _____

Title: _____

Signature (Owner): _____

Date: _____

Printed Name: _____

Title: _____

The undersigned states under oath that he/she/they are the **Contract Purchaser** of record of the realty described in this Planning and Zoning Commission Application, and the statements that he/she/they made in the foregoing application are true in substance and in fact.

Signature Contract Purchaser: _____

Date: _____

Printed Name: Jerry Fox

Title: Owner

The undersigned states under oath that he/she/they are the **Lessee** of record of the realty described in this Planning and Zoning Commission Application, and the statements that he/she/they made in the foregoing application are true in substance and in fact.

Signature Lessee: _____

Date: _____

Printed Name: _____

Title: _____

EXHIBIT B

NOTIFICATION REQUIREMENTS

The petitioner is required to notify all property owners and taxpayers within two hundred and fifty (250) feet of the subject property **after the Planning and Zoning Commission hearing date has been scheduled and staff has given authorization to send.** (Please see Exhibit C for sample letter). The notification must be sent USPS Certified Mail, Return Receipt Requested. Mailing labels must contain the property owner name or taxpayer name, address, and property identification number (PIN). Notification must be postmarked no more than thirty (30) days and no less than fifteen (15) days prior to the public hearing date. All certified receipts must be submitted to Community Development. Petitioners can obtain property owner information from the following sources:

Lake County
18 North County Street
Waukegan, IL 60085
847-377-2323

Fremont Township
22376 West Erhart Road
Mundelein, Illinois 60060
847-223-2847
Fax 847-223-2858

Libertyville Township
359 Merrill Court
Libertyville, Illinois 60048
847-816-6800
Fax 847-816-0861

Vernon Township
3050 North Main Street
Buffalo Grove, IL 60089
847-634-4600
Fax 847-634-1569

A Public Hearing Notice sign is required on the subject property and will be placed by the Village. Postings of the public notice will be done no more than thirty (30) days and no less than fifteen (15) days prior to the public hearing date.

The Village will publish the notification in the *Daily Herald*. The *Daily Herald* requires five-day lead time for publishing public notices. Therefore, in order to have the notification published no later than fifteen (15) days prior to the public hearing, we must be able to provide the necessary information twenty one (21) days prior to the date of the hearing.

FAILURE TO COMPLY WITH THE NOTIFICATION REQUIREMENTS WILL CAUSE THE

PUBLIC HEARING TO BE POSTPONED

EXHIBIT C

NEIGHBOR NOTIFICATION LETTER SAMPLE

DATE _____

NOTICE TO ALL INTERESTED PARTIES

The Planning and Zoning Commission will address the petition for NAME/COMPANY (Case PZC-XX-YEAR), ADDRESS _____ Mundelein, concerning a petition requesting _____. The Planning and Zoning Commission will address this petition on DATE, at TIME, at the Village Hall, 300 Plaza Circle, Mundelein, Illinois. All interested parties may attend this meeting and voice their opinions and concerns.

If you have any questions, please do not hesitate to call Community Development at (847) 949-3282, Monday through Friday, 8:00 a.m. to 5:00 p.m.

Sincerely,

AFFIDAVIT OF NOTIFICATION

(See Exhibit B)

COUNTY OF LAKE)
)
STATE OF ILLINOIS)

I, _____, under oath, state that I am

_____ the sole)
_____ an) owner of the property
_____ an authorized officer of the)

hereby swear and affirm that in accordance with the provisions of Chapter 3.3 of the Zoning Ordinance, have notified by certified mail, return receipt requested, all property owners and taxpayers within 250 feet of the subject property, attached hereto as Exhibit A, on this _____ day of _____, 20____.

Signature

Subscribed and sworn to before me

this ____ day of _____, 20____.

Notary Public

STATE OF ILLINOIS)

) SS:

COUNTY OF LAKE)

AFFIDAVIT

The undersigned, being first duly sworn on oath, deposes and says that the representations contained in the above Petition for Annexation are true to the best of his knowledge, information and belief.


Applicants Signature

Applicants Signature

Subscribed and Sworn to before me
this 19 day of December, 2024.


Notary Public Signature



PETITION FOR ANNEXATION

TO: The Mayor and Board of Trustees of the Village of Mundelein, Illinois

The undersigned Petitioner represents as follows:

1. The names and addresses of all of the owners of record of real estate covered by this Petition are as follows:

<u>Name</u>	<u>Address</u>
JFox Enterprises	207 Peregrine Ln, Hawthorn Woods, IL 60047

2. The names and addresses of all electors residing on said real estate are as follows:

<u>Name</u>	<u>Address</u>
Jerry Fox	207 Peregrine Ln, Hawthorn Woods, IL 60047

at least 51% of whom have signed this Petition.

3. The real estate proposed to be annexed hereunder is legally described and set forth on **Exhibit A**, which is attached hereto and made a part hereof.
4. A Plat of Annexation which contains an accurate map of the real estate proposed to be annexed hereunder is shown and set forth on **Exhibit B**, which is attached hereto and made a part hereof.
5. Said real estate is not within the boundaries of any municipality and is contiguous to the Village of Mundelein.

SITE VISIT AUTHORIZATION

I hereby grant employees of the Village of Mundelein, their agents, and members of the Mundelein Planning and Zoning Commission permission to enter on the property located at the following address:

(Address) 28884 & 28936 N IL Route 83, Mundelein, IL, 60060

Visual inspection of the site shall be accomplished during reasonable hours to examine only those portions of the property relating to this application. This permission is granted in regards to the Mundelein Planning and Zoning Commission Petition for the above-cited property.

**If Owner or if Owner is a
Corporation or Partnership:**

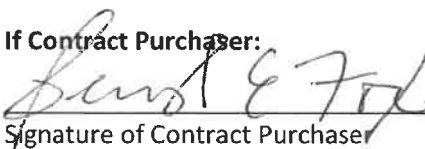
Signature of Owner

Date

By _____

Title/Full Corporate Name

If Contract Purchaser:


Signature of Contract Purchaser

Date

By Jerry Fox

Owner / JFox Enterprises

Title/Full Corporate Name

If Lessee (Corporate or Partnership):

Signature of Lessee

Date

By _____

Title/Full Corporate Name

REQUIRED SIGNATURES

The undersigned states under oath that he/she/they are the **Legal Owner(s)** of record of the realty described in this Planning and Zoning Commission Application, and the statements that he/she/they made in the foregoing application are true in substance and in fact.

Signature (Owner): _____

Date: _____

Printed Name: _____

Title: _____

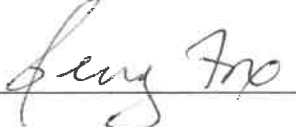
Signature (Owner): _____

Date: _____

Printed Name: _____

Title: _____

The undersigned states under oath that he/she/they are the **Contract Purchaser** of record of the realty described in this Planning and Zoning Commission Application, and the statements that he/she/they made in the foregoing application are true in substance and in fact.

Signature Contract Purchaser: 

Date: 12/20/24

Printed Name: Jerry Fox

Title: Owner

The undersigned states under oath that he/she/they are the **Lessee** of record of the realty described in this Planning and Zoning Commission Application, and the statements that he/she/they made in the foregoing application are true in substance and in fact.

Signature Lessee: _____

Date: _____

Printed Name: _____

Title: _____

PETITION FOR ANNEXATION

TO: The Mayor and Board of Trustees of the Village of Mundelein, Illinois

The undersigned Petitioner represents as follows:

1. The names and addresses of all of the owners of record of real estate covered by this Petition are as follows:

<u>Name</u>	<u>Address</u>
FRAN 61 LLC	28884-28936
	N. IL R.T. 83

2. The names and addresses of all electors residing on said real estate are as follows:

<u>Name</u>	<u>Address</u>

at least 51% of whom have signed this Petition.

3. The real estate proposed to be annexed hereunder is legally described and set forth on **Exhibit A**, which is attached hereto and made a part hereof.
4. A Plat of Annexation which contains an accurate map of the real estate proposed to be annexed hereunder is shown and set forth on **Exhibit B**, which is attached hereto and made a part hereof.
5. Said real estate is not within the boundaries of any municipality and is contiguous to the Village of Mundelein.

WHEREFORE, the Petitioner prays that the Mayor and Board of Trustees of the Village of Mundelein adopt an ordinance annexing said real estate to the Village of Mundelein, conditioned upon the parties entering into a mutually acceptable annexation agreement with respect to the subject property.

Dated: 1-22-25

OWNERS OF RECORD:

FRAN 61 L.L.C.

Mark Munoz

MARIA MUNO

ELECTORS:

AFFIDAVIT OF OWNERSHIP AND AUTHORIZATION

COUNTY OF LAKE)
)
STATE OF ILLINOIS)

I, MARK MUNO, under oath, state that I am

X the sole)
_____ an) owner of the property
_____ an authorized officer of the)

commonly described as (Address) 28884+28936 N. 1L 83 and that such property is owned by

(Printed Name) FRAN 61-L-L-C- as of this date. As owner of the property, I do

hereby authorize Jerry Fox (Printed Name or Not Applicable) to represent me in the following

Planning and Zoning Commission/Village Board matter, ANNEXATION

(Action).

Mark Munro
Signature

Subscribed and sworn to before me

this 22nd day of January, 2025.



Erin Swanson
Notary Public Signature

SITE VISIT AUTHORIZATION

I hereby grant employees of the Village of Mundelein, their agents, and members of the Mundelein Planning and Zoning Commission permission to enter on the property located at the following address:

(Address) _____

Visual inspection of the site shall be accomplished during reasonable hours to examine only those portions of the property relating to this application. This permission is granted in regards to the Mundelein Planning and Zoning Commission Petition for the above-cited property.

**If Owner or if Owner is a
Corporation or Partnership:**

Mark Munro 1-22-25

Signature of Owner

Date

By MARK MUNRO

Owner

Title/Full Corporate Name

If Contract Purchaser:

Signature of Contract Purchaser

Date

By _____

Title/Full Corporate Name

If Lessee (Corporate or Partnership):

Signature of Lessee

Date

By _____

Title/Full Corporate Name

REQUIRED SIGNATURES

The undersigned states under oath that he/she/they are the **Legal Owner(s)** of record of the realty described in this Planning and Zoning Commission Application, and the statements that he/she/they made in the foregoing application are true in substance and in fact.

Signature (Owner): Mark Munro
Printed Name: MARK MUNRO

Date: 1-22-25
Title: Owner

Signature (Owner): _____
Printed Name: _____

Date: _____
Title: _____

The undersigned states under oath that he/she/they are the **Contract Purchaser** of record of the realty described in this Planning and Zoning Commission Application, and the statements that he/she/they made in the foregoing application are true in substance and in fact.

Signature Contract Purchaser: _____
Printed Name: _____

Date: _____
Title: _____

The undersigned states under oath that he/she/they are the **Lessee** of record of the realty described in this Planning and Zoning Commission Application, and the statements that he/she/they made in the foregoing application are true in substance and in fact.

Signature Lessee: _____
Printed Name: _____

Date: _____
Title: _____

STANDARDS FOR GRANTING A MAP AMENDMENT

Requesting a map amendment to the Future Land Use Plan upon annexation into the Village, the property defaults to R-1: Single Family Residential Zoning District, needing the Map Amendment to rezone it to C-4: Shopping Center, where indoor amusement is permitted.

a. The existing use and zoning of nearby property;

The site is located just south of the Ivanhoe Baseball Field, north of unincorporated single family home, west of vacant unincorporated land (farm field), and east of the rear of the Mundelein Crossing shopping center which includes loading docks and outdoor trash enclosures.

b. The extent to which property values of the subject property are diminished by the existing zoning;

The site has been vacant for many years and the existing Future Land Use Plan zoning does not support the current market. The rezoning allows for the property to become desirable and increase the value.

c. The extent to which the proposed amendment promotes the public health, safety, and welfare of the Village;

The amendment allows for the development of the vacant land. This improves the stormwater drainage, access, and utilities in the area.

d. The relative gain to the public, as compared to the hardship imposed upon the applicant;

The public gains a non-for profit organization focused on the development of youth baseball players and athletes. This includes developing confidence, discipline, and athletic ability among many others through coaching and mentorship.

e. The suitability of the property for the purposes for which it is presently zoned, i.e. the feasibility of developing the property in question for 1 or more uses permitted under the existing zoning classification;

The site has been vacant for many years and the existing zoning does not support the current market at this location.

f. The length of time that a property in question has been vacant, as presently zoned, considered in the context of development in the area where the property is located;

The site has been vacant for many years and currently unincorporated Lake County with an Agricultural Zoning.

g. The evidence, or lack of evidence, of community need for the use proposed by the applicant;

These facilities are very unique as they are designed to meet the evolving training demands of local youth baseball players and their development. While much of this has changed over the years, there is a significant importance in having a modern facility that is accessible year-round that provides the resources to assist in each players success. This facility will strengthen the community through positive leadership and mentorship to youth athletes.

h. The consistency of the proposed amendment with the Comprehensive Plan;

Requesting a map amendment to the Future Land Use Plan upon annexation into the Village, the property defaults to R-1: Single Family Residential Zoning District, needing the Map Amendment to rezone it to C-4: Shopping Center, where indoor amusement is permitted.

i. That the proposed amendment will benefit the residents of the Village as a whole, and not just the applicant, property owner(s), neighbors of any property under consideration, or other special interest

groups, and the extent to which the proposed use would be in the public interest and would not serve solely on the interest of the applicant;

This facility will strengthen the community through positive leadership and mentorship to youth athletes.

j. The extent to which the proposed amendment creates nonconformities;

The proposed amendment creates two (2) nonconformities; one building materials, and the other parking requirements.

k. The trend of development, if any, in the general area of the property in question; and

The trend of development in the area has been limited. When compared to the previous Future Land Use Plan, this use would strengthen the participants at the local Ivanhoe Baseball Field and local youth in the Village.

l. Whether adequate public facilities are available including, but not limited to, schools, parks, police and fire protection, roads, sanitary sewers, storm sewers, and water lines, or are reasonably capable of being provided prior to the development of the uses, which would be permitted on the subject property if the amendment were adopted.

The project is supported by Village utilities that are adjacent to the site. These utilities have capacity for the future use. Access is provided by IL Rt 83 which is under control by IDOT. The use does not impact the schools but would require less policing than the previous Shopping Center use.

STANDARDS FOR GRANTING A VARIATION

Requesting a variation from Section 20.32.040 as it relates to specific building materials. Due to the very unique use of the non-for-profit youth athletic training facility, the design incorporates metal building materials, walls without windows, and a single roof line.

a. The strict application of the terms of this Ordinance will result in undue hardship.

Section 20.32.040 does not allow for traditional metal panel buildings, walls without windows, and single roof line. Due to the nature of the use, a significant number of local youth baseballs players will be practicing in this facility. The metal panel architecture, accented by the covered entrances, provides the largest value to the youth players in terms of building size. Also, the single roof line provides the best opportunity for high ceilings to maximize types of training. Lastly, when training with windows in the facility, the sun can hinder the vision of the players indoors causing potential injury. With player safety in mind, windows were removed for this reason.

b. The plight of the owner is due to unique circumstances.

These facilities are very unique as they are designed to meet the evolving training demands of youth baseball players and their development. While much of this has changed over the years, there is a significant importance in having a modern facility that is accessible year-round that provides the resources to assist in each players success. These requested variances allow for this.

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

If a variation is granted, the described changes will not impact the local character. The proposed building is located just south of the Ivanhoe Baseball Field, north of unincorporated single family home, west of vacant unincorporated land (farm field), and east of the rear of the Mundelein Crossing shopping center which includes loading docks and outdoor trash enclosures.

Please provide a detailed response to each of the following criteria (attach additional pages, if necessary):

a. The particular physical surroundings, shape, or topographical conditions of the specific property impose a particular hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of regulations were to be carried out.

The physical size, shape, and topography of the lot restrict the building size causing the need for the variation.

b. The alleged difficulty or hardship has not been created by any person presently having a proprietary interest in the property in question.

The alleged difficulty had not been created by any person having an interest in the property.

c. The granting of the variation will not be detrimental to the public welfare in the neighborhood in which the property is located.

The granting of the variation will not be detriment to the public welfare in the surrounding neighborhood.

d. The proposed variation will not impair an adequate supply of light and air to adjacent property, substantially increase congestion in the public streets, increase the danger of fire, endanger the public safety, or impair property values within the neighborhood.

The proposed variation will not impair an adequate supply of light and air to adjacent property.

substantially increase congestion in the public streets, increase the danger of fire, endanger the public safety, or impair property values within the neighborhood.

e. The proposed variation is consistent with the spirit and intent of this Ordinance and Village land use policies.

The proposed variation is consistent with the spirit and intent of the Ordinance. This variation will have a positive impact on the community and youth.

f. The value of the property in question will be substantially reduced if permitted to be used only under the conditions allowed by the regulations governing the district in which it is located.

The property in question will be substantially reduced and limited by the current governing regulations.

STANDARDS FOR GRANTING A VARIATION

Requesting a variation from Table 20.56-1 regarding off-street parking requirements as it relates to the proposed development and use. The proposed classification of the development is Indoor Amusement Facility which requires 3 parking spaces per 1,000 building SF.

a. The strict application of the terms of this Ordinance will result in undue hardship.

In review of Table 20.56-1 and based on the current classification, the required parking is 127 spaces. The actual facility will require much less. Generally, there will be two teams of 15 kids with a couple coaches and a few people using the pickleball facility.

Peak Projected Parking Demands

- 2 Teams = 30 players
- Coaches = 6
- Facilities Staff = 2
- Pickleball = 8
- **TOTAL: 46 / PROVIDED: 53 Parking Stalls**

Note, a large percentage of the players are under 16 years old and are generally dropped off. This would further reduce the parking needed.

b. The plight of the owner is due to unique circumstances.

These facilities are very unique as they are designed to meet the evolving training demands of youth baseball players and their development. This building is being designed for a very specific use and the required parking is not representative of the actual use.

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

If a variation is granted, the described changes will not impact the local character. The proposed development is requesting a reduced parking count which lends itself to less traffic than the required classification.

Please provide a detailed response to each of the following criteria (attach additional pages, if necessary):

a. The particular physical surroundings, shape, or topographical conditions of the specific property impose a particular hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of regulations were to be carried out.

The physical size, shape, and topography of the lot restrict the building size causing the need for the variation.

b. The alleged difficulty or hardship has not been created by any person presently having a proprietary interest in the property in question.

The alleged difficulty had not been created by any person having an interest in the property.

c. The granting of the variation will not be detrimental to the public welfare in the neighborhood in which the property is located.

The granting of the variation will not be detriment to the public welfare in the surrounding neighborhood.

d. The proposed variation will not impair an adequate supply of light and air to adjacent property,

substantially increase congestion in the public streets, increase the danger of fire, endanger the public safety, or impair property values within the neighborhood.

The proposed variation will not impair an adequate supply of light and air to adjacent property, substantially increase congestion in the public streets, increase the danger of fire, endanger the public safety, or impair property values within the neighborhood.

e. The proposed variation is consistent with the spirit and intent of this Ordinance and Village land use policies.

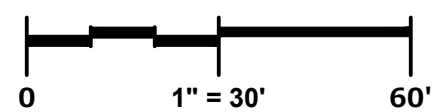
The proposed variation is consistent with the spirit and intent of the Ordinance. This variation will have a positive impact on the community and youth.

f. The value of the property in question will be substantially reduced if permitted to be used only under the conditions allowed by the regulations governing the district in which it is located.

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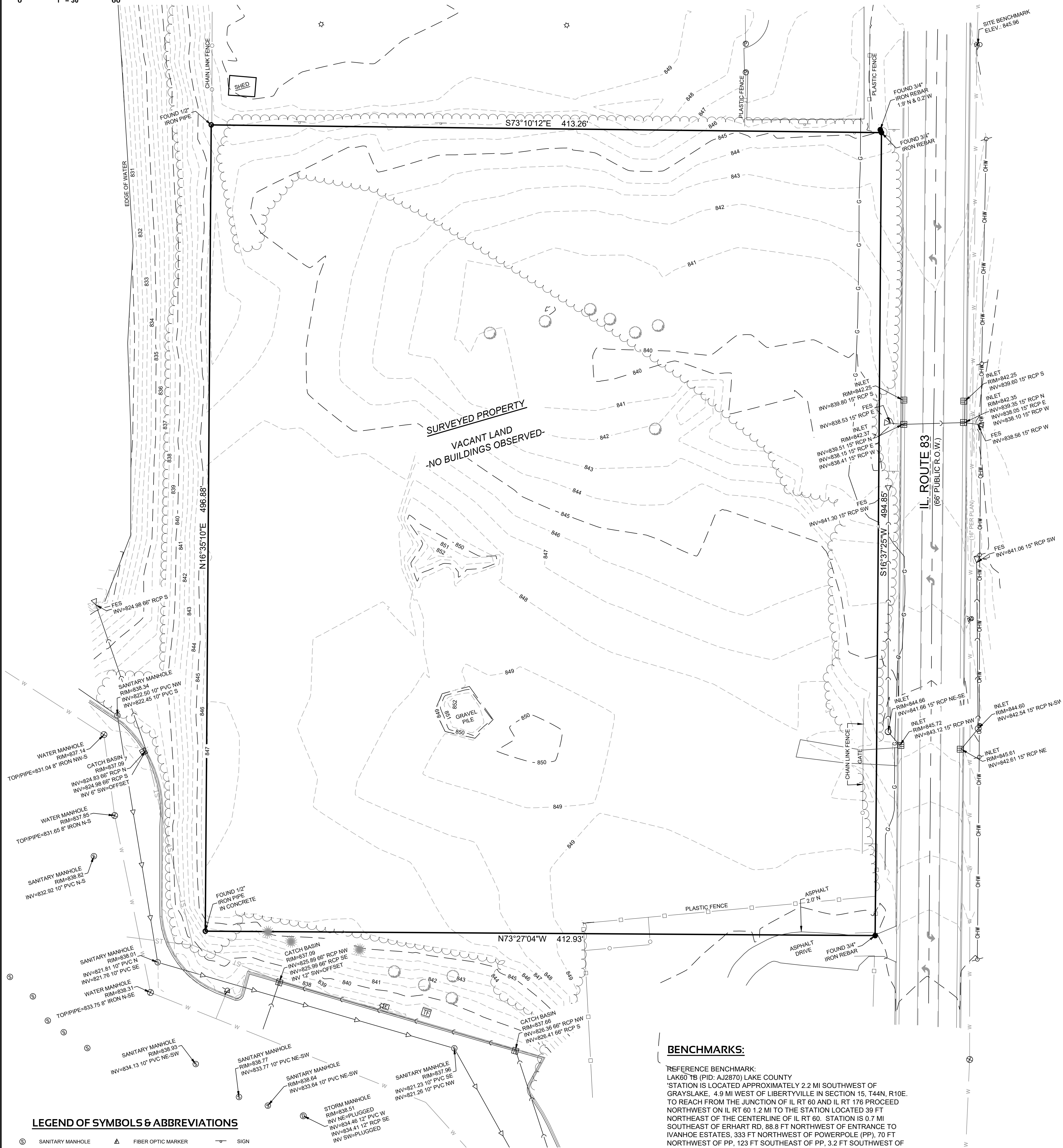


GRAPHICAL SCALE (FEET)



LEGAL DESCRIPTION:

THAT PART OF THE WEST 1/2 OF THE NORTHWEST 1/4 OF SECTION 23, TOWNSHIP 44 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS, TO-WIT: COMMENCING AT THE SOUTHWEST CORNER OF SAID NORTHWEST 1/4 AND RUNNING THENCE NORTH 84 DEGREES 15 MINUTES EAST 3.81 CHAINS; THENCE NORTH 8 DEGREES 45 MINUTES EAST 23.21 CHAINS TO A POINT IN THE CENTER OF THE PUBLIC HIGHWAY; THENCE NORTH 17 DEGREES EAST ALONG THE CENTER OF SAID HIGHWAY, 4.50 CHAINS, WHICH IS THE PLACE OF BEGINNING OF THE PREMISES HEREBY DESCRIBED, AND RUNNING THENCE NORTH 73 DEGREES 6.75 CHAINS; THENCE NORTH 17 DEGREES EAST 7.50 CHAINS; THENCE SOUTH 73 DEGREES EAST 6.75 CHAINS TO THE CENTER OF SAID HIGHWAY; THENCE SOUTH 17 DEGREES 7.50 CHAINS TO THE PLACE OF BEGINNING, IN LAKE COUNTY, ILLINOIS.



LEGEND OF SYMBOLS & ABBREVIATIONS

⊙	SANITARY MANHOLE	▲	FIBER OPTIC MARKER	—	SIGN
⊙	STORM MANHOLE	⊙	FIBER OPTIC MANHOLE/VAULT	✉	MAIL BOX
□	STORM INLET	⊞	TELEPHONE PEDESTAL	⚓	FLAG POLE
⊞	CLEANOUT	⊞	TELEPHONE MANHOLE/VAULT	○	BASKETBALL HOOP
○	CATCH BASIN	▲	TELEPHONE MARKER	●	BOLLARD
⊞	LATERAL	⊞	TRANSFORMER	✕	CROSS CUT
⊞	UNKNOWN MANHOLE	⊞	ELECTRIC METER/PEDESTAL	⊞	IRON PIPE
⊞	WELL	⊞	ELECTRIC MANHOLE/VAULT	●	IRON REBAR/ROD
⊞	HYDRANT	⊞	CABLE TV RISER/BOX CABLE	●	MAG NAIL
⊞	WATER VALVE	⊞	TV MANHOLE/VAULT	■	SECTION MONUMENT
⊞	DOWN SPOUT	⊞	GAS VALVE	●	BENCH MARK
⊞	SPRINKLER VALVE	⊞	GAS METER	●	CONIFER TREE
⊞	WATER SHUT OFF	⊞	GAS MARKER	●	DECIDUOUS TREE
⊞	STANDPIPE	⊞	AIR CONDITIONING UNIT	●	BUSH
⊞	WATER MANHOLE	⊞	VENT	●	WETLAND SYMBOL
⊞	LIGHT LIGHT	⊞	DIRECTIONAL ARROW	CL	=CENTERLINE
⊞	LIGHT POLE	⊞	DUMPSYTER	CONC.	=CONCRETE
⊞	TRAFFIC SIGNAL POLE	⊞	HANDICAP STALL	EL.	=ELEVATION
⊞	UTILITY POLE	⊞	SPOT ELEVATION	EXT.	=EXISTING
⊞	GUY WIRE	⊞	FLARED END SECTION	INV.	=INVERT
—		—	SANITARY SEWER	MON.	=MONUMENT
—		—	STORM SEWER	P.O.B.	=POINT OF BEGINNING
—		—	WATER MAIN	P.O.C.	=POINT OF COMMENCEMENT
—		—	FIBER OPTIC LINE	R.O.W.	=RIGHT OF WAY
—		—	TELEPHONE LINE	SEC.	=SECTION
—		—	ELECTRIC LINE	SQ. FT.	=SQUARE FEET
—		—	OVERHEAD WIRES	WI	=WITH
—		—	CABLE TELEVISION	(R)	=RECORDED AS
—		—	GAS MAIN	(D)	=DEEDED AS
—		—	TREE LINE		

GENERAL NOTES

- Survey prepared for: JFox Enterprises
- Field work completed on October 3, 2024
- No title or letter report was provided for this survey. Boundary based on field evidence.
- Flood Zone Classification: The property lies with in Zone "X" of the Flood Insurance Rate Map Community Panel No. 17097C0141L with an effective date of FEBRUARY 17, 2016. Zone "X" areas are determined to be outside the 0.2% annual chance floodplain.
- Land Area: 204,839 Square Feet (4.7025 Acres).
- Vertical Datum: North American Vertical Datum of 1988 (12), (NAVD88). Contours are shown at a 1' interval based on actual ground survey of the current ground terrain.
- Underground utility locations shown are based on field location markings by J.U.L.I.E. ticket #X242681011 & #A242681183 with a clear date of September 27, 2024. The location and size of underground structures and utilities shown hereon have been located based on a reasonable visual observation and are shown for informational purposes only. PINNACLE ENGINEERING GROUP, LLC, does not guarantee the location of utilities shown. Contact J.U.L.I.E. prior to the start of any activity. Underground utilities shown in gray are based upon plans and information furnished by the municipality and utility companies. While this information is believed to be reliable, its accuracy and completeness cannot be guaranteed nor certified to.
- No wetlands were delineated or observed in the process of conducting the fieldwork.

BENCHMARKS:

REFERENCE BENCHMARK:
LAK60 TB (PID: AJ2870) LAKE COUNTY
'STATION IS LOCATED APPROXIMATELY 2.2 MI SOUTHWEST OF GRAYSLAKE, 4.9 MI WEST OF LIBERTYVILLE IN SECTION 15, T44N, R10E. TO REACH FROM THE JUNCTION OF IL RT 60 AND IL RT 176 PROCEED NORTHWEST ON IL RT 60 1.2 MI TO THE STATION LOCATED 39 FT NORTHEAST OF THE CENTERLINE OF IL RT 60. STATION IS 0.7 MI SOUTHEAST OF ERHART RD, 88.8 FT NORTHWEST OF ENTRANCE TO IVANHOE ESTATES, 333 FT NORTHWEST OF POWERPOLE (PP), 70 FT NORTHWEST OF PP, 123 FT SOUTHWEST OF PP, 3.2 FT SOUTHWEST OF WOODFENCE, AND 3.0 FT SOUTHWEST OF AN ORANGE FIBERGLASS WITNESS POST. NOTE- ACCESS TO DATUM POINT THROUGH 6 INCH LOGO CAP. DATUM POINT IS 0.3 FT BELOW CAP. PK NAILS WERE SET IN WOOD PHYSICAL TIES. (WB)

DATUM: NAVD88
ELEVATION: 822.31

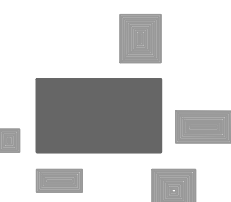
SITE BENCHMARK 1:
NORTHWEST FLANGE BOLT ON FIRE HYDRANT LOCATED NORTHEAST OF THE NORTHEAST PROPERTY CORNER, ON THE EAST SIDE OF IL ROUTE 83,
ELEVATION: 845.96

I, Paul A. Kubicek, an Illinois Professional Land Surveyor, do hereby certify that "This professional service conforms to the current Illinois minimum standards for a boundary survey" and that the PLAT OF SURVEY hereon drawn is a correct representation to the best of my knowledge and belief with the information provided.

SIGNED *Paul A. Kubicek*
PAUL A. KUBICEK, ILLINOIS PROFESSIONAL LAND SURVEYOR 035-003296
EXPIRES 11/30/2024
PINNACLE ENGINEERING GROUP, LLC #184006289-0010
EXPIRES 04/30/2025



28884 N. IL ROUTE 83
MUNDELEIN, ILLINOIS



PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

ILLINOIS OFFICE:
1051 E. MAIN STREET - SUITE 217
EAST OUNDE, IL 60118
(847) 551-5300

CHICAGO | MILWAUKEE | NATIONWIDE

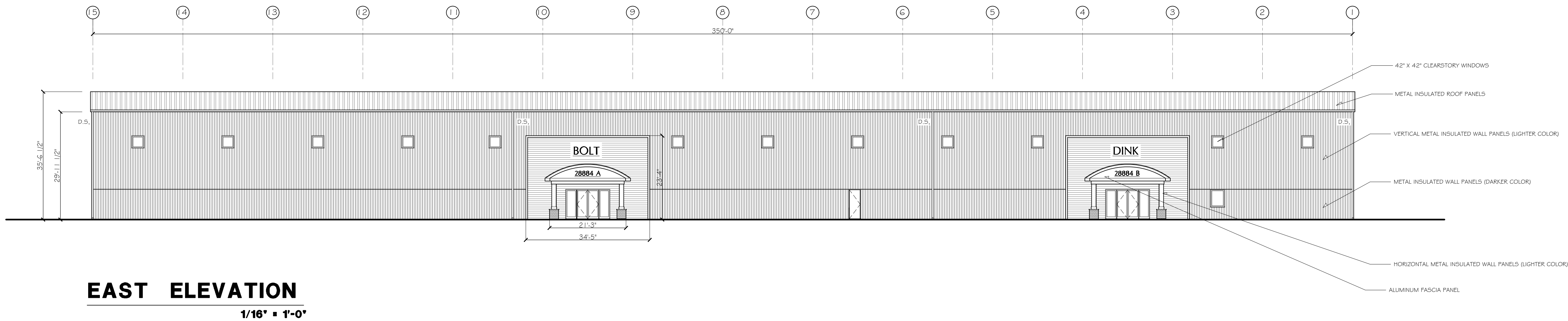
PLAT OF SURVEY

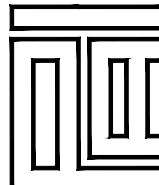
REVISIONS

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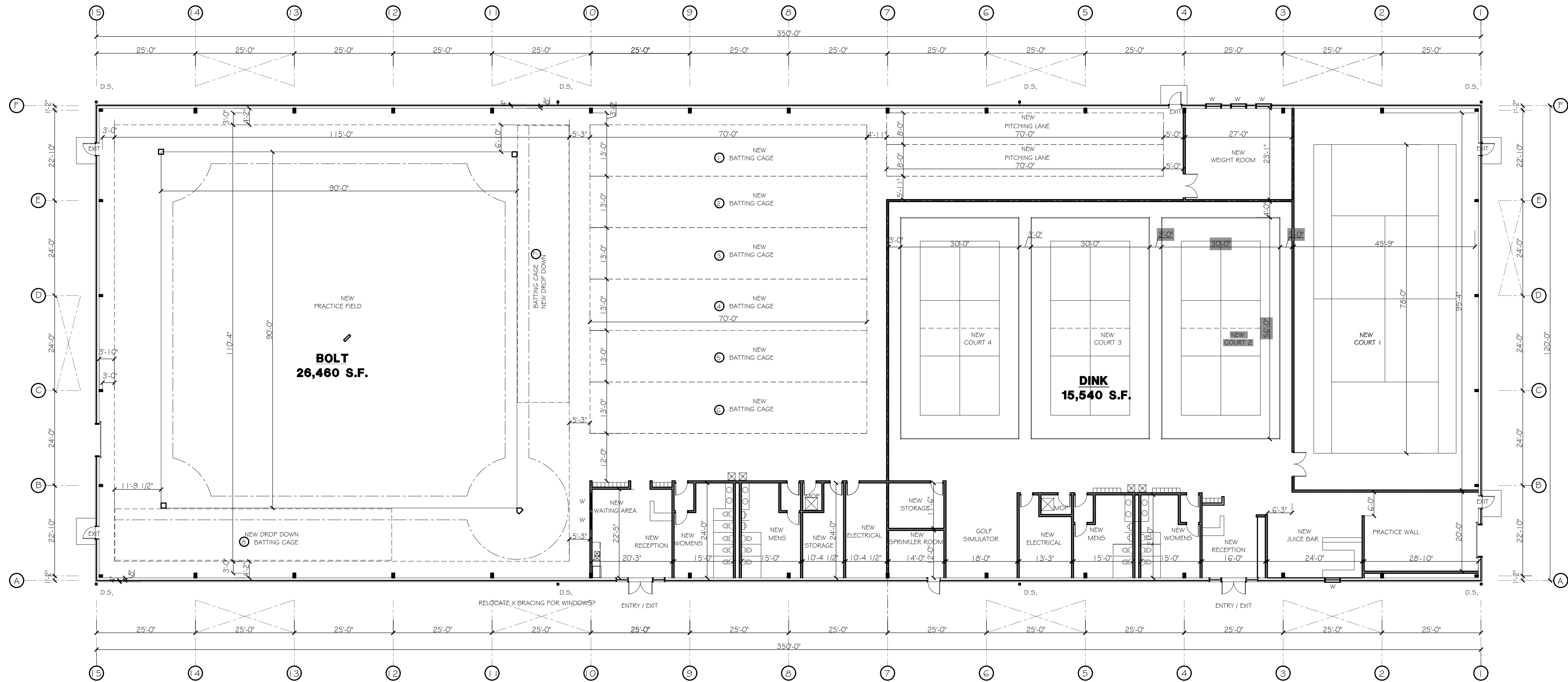
PEC JOB NO.	5897.00	BDJ
PEC PM	BDJ	
DATE	10/07/24	
SCALE	1"=30'	
DRAFTED BY:	KGD	
SHEET	1	
1 of 1		

A NEW
PICKLEBALL AND
BASEBALL TRAINING FACILITY
MUNDELEIN, ILLINOIS



SHEET NO.		JOB NO.		PSENKA ARCHITECTS Inc.		COPYRIGHT		ISSUE DATES:	
A NEW PICKLEBALL AND BASEBALL TRAINING FACILITY MUNDELEIN, ILLINOIS		DRAWN BY: PAP CHECKED BY: PAP APPROVED BY: PAP		 PSENKA ARCHITECTS Inc. ARCHITECTURE • PLANNING • DESIGN • BUILD 40 LANDOVER PARKWAY, SUITE 4 HAWTHORN WOODS, IL 60047 TEL: 847-394-0101 FAX: 847-394-0101		THE DRAWING, SPECIFICATIONS AND NOTES ARE THE PROPERTY OF PSENKA ARCHITECTS INC. AND ARE NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF PSENKA ARCHITECTS INC. © 2017 PSENKA ARCHITECTS		DATE: 1-30-25	
								REMARKS: FOR REVIEW	

A NEW
PICKLEBALL AND
BASEBALL TRAINING FACILITY
MUNDELEIN, ILLINOIS

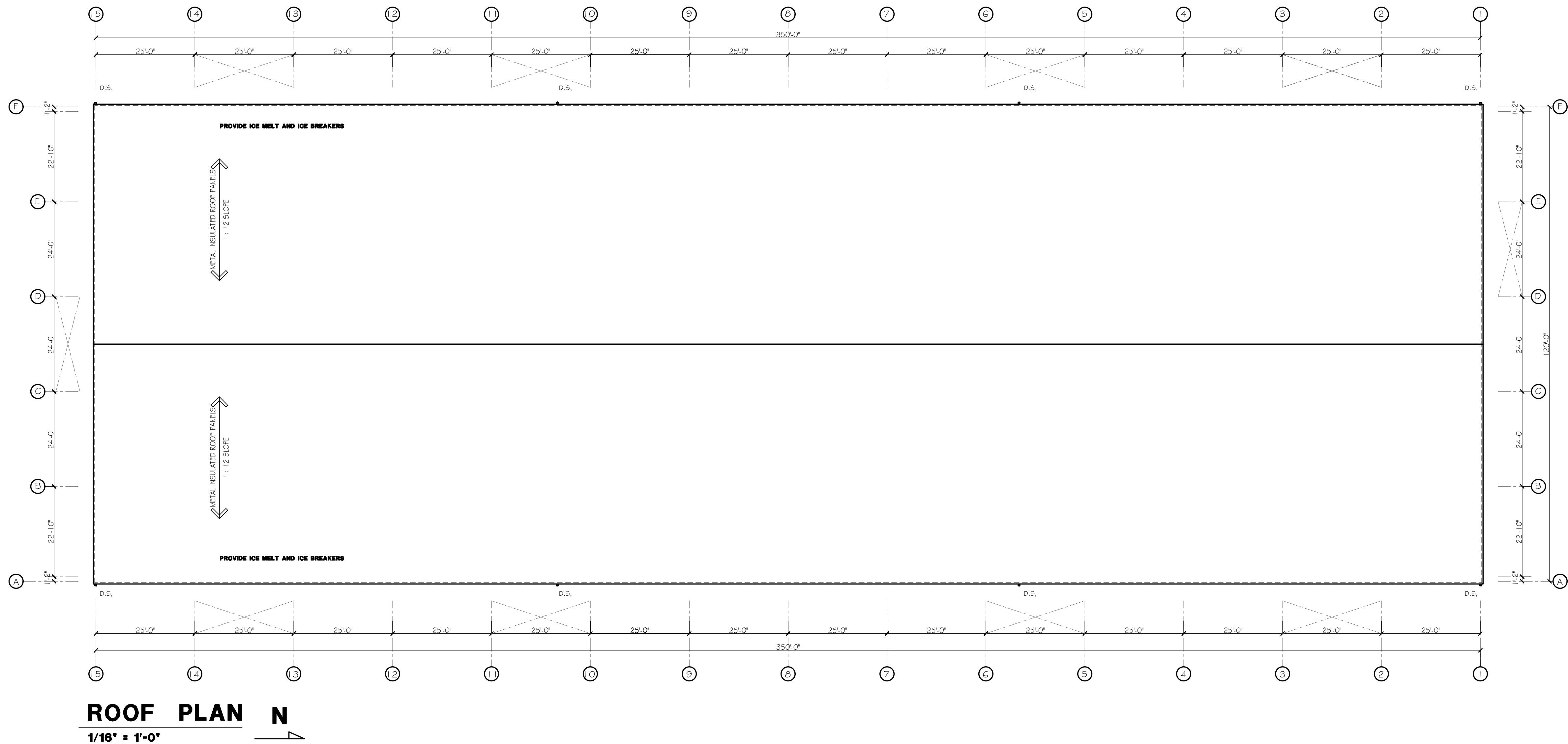


FLOOR PLAN **N**
1/16" = 1'-0"
42,000 S.F. GROSS AREA

250' MAX TRAVEL DISTANCE WITH SPRINKLER SYSTEM																			
ILLINOIS PLUMBING CODE																			
OCCUPANT LOAD FOR EXERCISE ROOMS = 1 PER 50 S.F., PER 2018 IBC / IL PLUMB CODE SIMILAR.																			
<u>PICKLE BALL FACILITY</u> 15,300 S.F.		<u>BATTING CAGE FACILITY</u> 26,000 S.F.																	
306 OCCUPANTS 153M 153W		520 OCCUPANTS 260M / 260W																	
REQUIRED FIXTURES																			
<table><tr><td>MEN</td><td>WOMEN</td></tr><tr><td>2T</td><td>4T</td></tr><tr><td>2U</td><td></td></tr><tr><td>1 LAV</td><td>1 LAV</td></tr></table>		MEN	WOMEN	2T	4T	2U		1 LAV	1 LAV	<table><tr><td>MEN</td><td>WOMEN</td></tr><tr><td>3T</td><td>5T</td></tr><tr><td>3U</td><td></td></tr><tr><td>2 LAV</td><td>2 LAV</td></tr></table>		MEN	WOMEN	3T	5T	3U		2 LAV	2 LAV
MEN	WOMEN																		
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3T	5T																		
3U																			
2 LAV	2 LAV																		

JOB NO.	DRAWN BY: PAP	CHECKED BY: PAP	APPROVED BY: PAP	COPYRIGHT THE DRAWING, SPECIFICATIONS AND ALL INFORMATION CONTAINED HEREIN ARE THE PROPERTY OF PSENKA ARCHITECTS. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF PSENKA ARCHITECTS.	ISSUE DATES: DATE 1-7-25 FOR REVIEW	REMARKS				
A NEW PICKLEBALL AND BASEBALL TRAINING FACILITY MUNDELEIN, ILLINOIS				PSENKA ARCHITECTS, INC. ARCHITECTURE • PLANNING • DESIGN • BUILD 40 LANDOVIE PARKWAY, SUITE 4 HAWTHORN WOODS, IL 60047 TEL: 847-734-9101 FAX: 847-734-9100						
SHEET NO.				P-1						

A NEW
PICKLEBALL AND
BASEBALL TRAINING FACILITY
MUNDELEIN, ILLINOIS



SHEET NO.	A NEW PICKLEBALL AND BASEBALL TRAINING FACILITY MUNDELEIN, ILLINOIS			JOB NO.	PAP	DRAWN BY: PAP	CHECKED BY: PAP	APPROVED BY: PAP	PSENKA ARCHITECTS, Inc. ARCHITECTURE • PLANNING • DESIGN • BUILD 40 LANDOVIE PARKWAY, SUITE 4 HAWTHORN WOODS, IL 60047 TEL: 847-394-7011 FAX: 847-394-7010	COPYRIGHT THE DRAWING, SPECIFICATIONS AND ALL OTHER INFORMATION CONTAINED HEREIN IS THE PROPERTY OF PSENKA ARCHITECTS, INC. NO PART OF THIS DRAWING OR SPECIFICATIONS MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF PSENKA ARCHITECTS, INC.	ISSUE DATES: DATE 1-7-25 FOR REVIEW	REMARKS FOR REVIEW

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC
1/10/2023 8:35 AM - 2: Projects\2024\1887.00-IL-600 - CAD\FINAL SHEETSET (C-1) COVER SHEET.dwg
DESIGNED: SSS
DRAWN: BDU
REVIEWED: SSS
DATE: 1/10/2023 8:35 AM
DRAFTED: SSS

LEGEND		EXISTING	PROPOSED
SANITARY MANHOLE			
STORM MANHOLE			
CATCH BASIN			
INLET			
PRECAST FLARED END SECTION			
PRESSURE TAP			
VALVE VAULT			
VALVE BOX			
FIRE HYDRANT			
PRIVATE WATER WELL			
CLEANOUT			
SANITARY SEWER			
FORCE MAIN			
STORM SEWER			
WATER MAIN			
UTILITY CROSSING			
LIGHTING			
ELECTRICAL CABLE			
ELECTRICAL TRANSFORMER OR PEDESTAL			
POWER POLE			
POWER POLE WITH LIGHT			
GUY WIRE			
STREET SIGN			
GAS MAIN			
TELEPHONE LINE			
CONTOUR			
SPOT ELEVATION			
WETLANDS			
FLOODWAY			
FLOODPLAIN			
HIGH WATER LEVEL (HWL)			
NORMAL WATER LEVEL (NWL)			
DIRECTION OF SURFACE FLOW			
DITCH OR SWALE			
DIVERSION SWALE			
OVERFLOW RELIEF ROUTING			
TREE WITH TRUNK SIZE			
SOIL BORING			
TOPSOIL PROBE			
FENCE LINE, TEMPORARY SILT			
FENCE LINE, WIRE			
FENCE LINE, CHAIN LINK OR IRON			
FENCE LINE, WOOD OR PLASTIC			
CONCRETE SIDEWALK			
CURB AND GUTTER			
DEPRESSED CURB			
REVERSE PITCH CURB & GUTTER			
EASEMENT LINE			
PROPERTY LINE			

ABBREVIATIONS

BL	BASE LINE	PC	POINT OF CURVATURE
C	LONG CHORD OF CURVE	PT	POINT OF TANGENCY
C & G	CURB AND GUTTER	PVI	POINT OF VERTICAL INTERSECTION
CB	CATCH BASIN	R	RADIUS
CL	CENTERLINE	ROW	RIGHT-OF-WAY
D	DEGREE OF CURVE	SAN	SANITARY SEWER
EP	EDGE OF PAVEMENT	ST	STORM SEWER
FF	FINISHED FLOOR	T	TANGENCY OF CURVE
FG	FINISHED GRADE	TB	TOP OF BANK
FL	FLOW LINE	TF	TOP OF FOUNDATION
FP	FLOODPLAIN	TP	TOP OF PIPE
FR	FRAME	TS	TOP OF SIDEWALK
FW	FLOODWAY	W	TOP OF WALL ELEVATION
HWL	HIGH WATER LEVEL	BW	BOTTOM OF WALL
INV	INVERT	BC	BACK OF CURB
L	LENGTH OF CURVE	TDC	TOP OF DEPRESSED CURB
MH	MANHOLE	WM	WATER MAIN
NWL	NORMAL WATER LEVEL	EC	EDGE OF CONCRETE

CONTACTS

PINNACLE ENGINEERING GROUP, LLC

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EAST DUNDEE, ILLINOIS 60118
(847) 551-5300

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AMANDA ORENCHUK - COMMUNITY DEVELOPMENT DIRECTOR
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VILLAGE OF MUNDELEIN - PUBLIC WORKS

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KARL GEWALT - DEPUTY BUILDING COMMISSIONER
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MUNDELEIN, ILLINOIS 60060
(847) 949-3283

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ELECTRIC
COMED (800) 334-7661

NATURAL GAS
NICOR (847) 642-6748

PHONE
AT&T (800) 288-2020

CABLE/TELEVISION
COMCAST (866) 594-1234

BENCHMARKS

LAKE COUNTY REFERENCE BENCHMARK:

'STATION IS LOCATED APPROXIMATELY 2.2 MI. SOUTHWEST OF GRAYSLAKE, 4.9 MI. WEST OF LIBERTYVILLE IN SECTION 15, T44N, R10E. TO REACH FROM THE JUNCTION OF IL RT 60 AND IL RT 176 PROCEED NORTHWEST ON IL RT 60 1.2 MI TO THE STATION LOCATED 39 FT. NORTHEAST OF THE CENTERLINE OF IL RT 60. STATION IS 0.7 MI. SOUTHEAST OF ERHART RD, 88.8 FT. NORTHWEST OF ENTRANCE TO IVANHOE ESTATES, 333 FT. NORTHWEST OF POWERPOLE (PP), 70 FT. NORTHWEST OF PP, 123 FT. SOUTHEAST OF PP, 3.2 FT. SOUTHWEST OF WOODFENCE, AND 3.0 FT. SOUTHWEST OF AN ORANGE FIBERGLASS WITNESS POST. NOTE: ACCESS TO DATUM POINT THROUGH 6 INCH LOGO CAP. DATUM POINT IS 0.3 FT. BELOW CAP. PK NAILS WERE SET IN WOOD PHYSICAL TIES. (WB)

DATUM: NAVD88
ELEVATION: 822.31

SITE BENCHMARK 1:

NORTHWEST FLANGE BOLT ON FIRE HYDRANT LOCATED NORTHEAST OF THE NORTHEAST PROPERTY CORNER, ON THE EAST SIDE OF IL ROUTE 83

DATUM: NAVD88
ELEVATION: 845.96

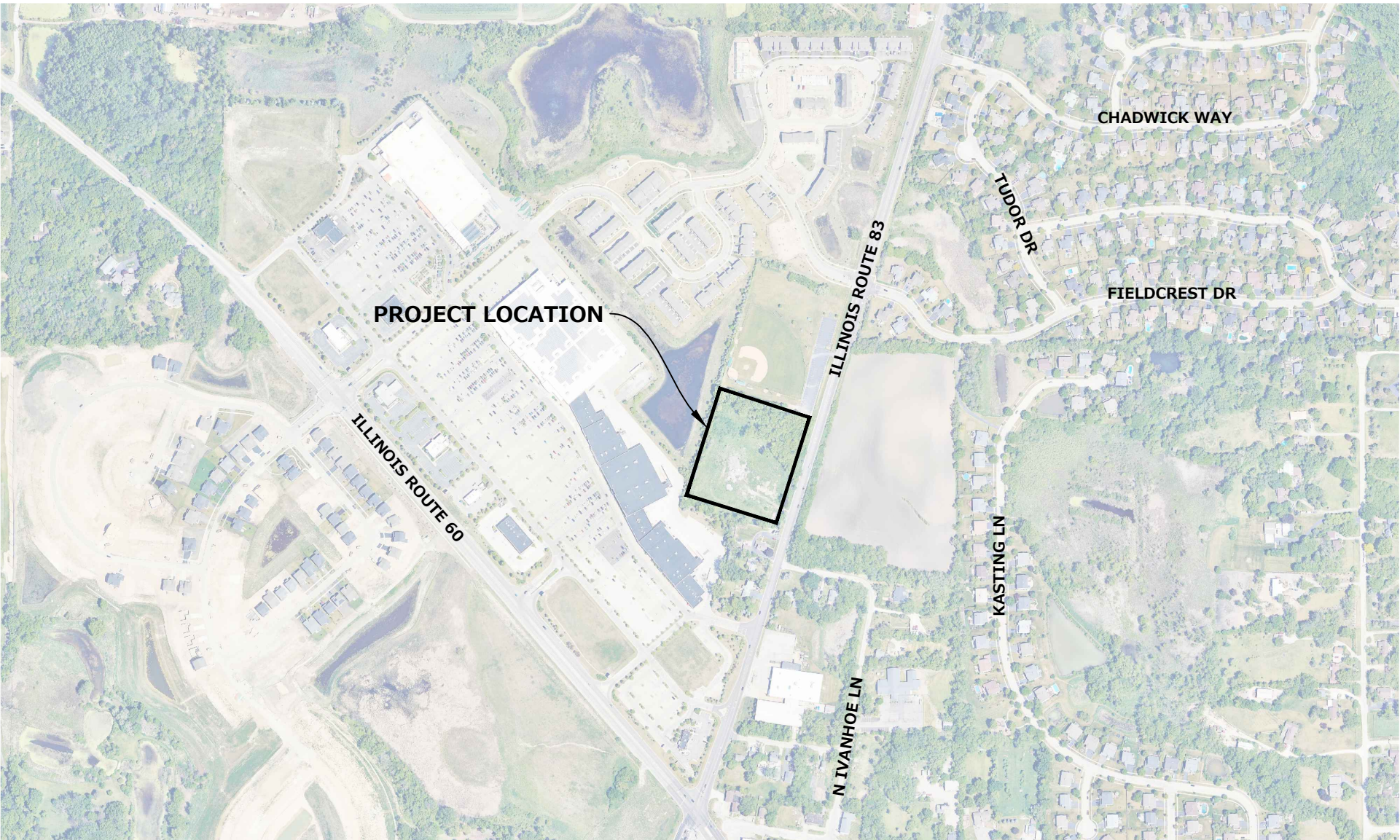
EXISTING CONDITIONS:

EXISTING TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS AS PREPARED BY PINNACLE ENGINEERING GROUP, DATED OCTOBER 3, 2024. CONTRACTOR SHALL FIELD CHECK EXISTING HORIZONTAL AND VERTICAL SITE FEATURES AND CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION.

ENGINEERING IMPROVEMENT PLANS FOR BOLT 2.0

28884 N. ILLINOIS ROUTE 83
MUNDELEIN, ILLINOIS

PLANS PREPARED FOR



LOCATION MAP
SCALE: 1"=600'

GENERAL NOTES

1. THE VILLAGE OF MUNDELEIN BUILDING DEPARTMENT SHALL BE NOTIFIED 48 HOURS PRIOR TO COMMENCEMENT OF WORK AND 24 HOURS PRIOR TO EACH INSPECTION AT (847) 949-3283.
2. ALL UTILITY COMPANIES, INCLUDING VILLAGE OF MUNDELEIN, SHALL BE CONTACTED AND THEIR FACILITIES SHALL BE LOCATED PRIOR TO ANY WORK IN ANY EASEMENT, RIGHT-OF-WAY, OR SUSPECTED UTILITY LOCATION. REPAIR OF ANY DAMAGE TO EXISTING FACILITIES SHALL BE RESPONSIBILITY OF THE CONTRACTOR. UTILITY LOCATIONS SHOWN HEREIN ARE FOR GRAPHIC ILLUSTRATION ONLY AND ARE NOT TO BE RELIED UPON.
3. PRIOR TO COMMENCEMENT OF ANY OFFSITE CONSTRUCTION, THE CONTRACTOR SHALL SECURE WRITTEN AUTHORIZATION THAT ALL OFFSITE EASEMENTS HAVE BEEN SECURED, AND THAT PERMISSION HAS BEEN GRANTED TO ENTER ONTO PRIVATE PROPERTY.
4. EXCEPT WHERE MODIFIED BY THE CONTRACT DOCUMENTS, ALL WORK PROPOSED HEREON SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS (LATEST EDITION):
 - a. THE VILLAGE OF MUNDELEIN MUNICIPAL CODE - THE LAKE COUNTY WATERSHED DEVELOPMENT ORDINANCE (WDO) IS ADOPTED BY REFERENCE AS THE STORMWATER CONTROL AND WATERSHED DEVELOPMENT REGULATIONS.
 - b. THE VILLAGE OF MUNDELEIN SUBDIVISION REGULATIONS
 - c. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" BY ILLINOIS DEPARTMENT OF TRANSPORTATION.
 - d. "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS" BY ILLINOIS DEPARTMENT OF TRANSPORTATION.
 - e. "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" BY ILLINOIS DEPARTMENT OF TRANSPORTATION.
 - f. "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" BY ILLINOIS SOCIETY OF PROFESSIONAL ENGINEERS, ET AL.
 - g. OTHER STANDARDS OR SPECIFICATIONS SPECIFICALLY REFERRED TO IN AN INDIVIDUAL PROVISION OF THESE STANDARDS AND SPECIFICATIONS.
 - h. "ILLINOIS URBAN MANUAL" AS PREPARED BY THE U.S. DEPT. OF AGRICULTURE & IL ASSOCIATION OF SOIL AND WATER CONSERVATION DISTRICTS.
 - i. THE CONTRACT DOCUMENTS, GENERAL CONDITIONS, SPECIAL PROVISIONS AND SUPPLEMENTAL CONDITIONS OF THE PROJECT AS PREPARED BY PINNACLE ENGINEERING GROUP, LLC.
 - j. ALL DOCUMENTS CITED IN THE ABOVE STANDARDS AND SPECIFICATIONS RELEVANT TO THE SUBJECT UNDER CONSIDERATION. IF A CONFLICT ARISES BETWEEN ANY PROVISION(S) OF THE REFERENCE ITEMS ABOVE AND ANY PROVISION(S) OF THESE STANDARDS AND SPECIFICATIONS, THEN THE MORE RESTRICTIVE PROVISION(S) SHALL APPLY.
 - k. UPON COMPLETION OF THE PROJECT, THE DEVELOPER SHALL PROVIDE FINAL "RECORD DRAWINGS" (PDF VERSION SHALL BE DELIVERED ON CD-ROM AS WELL AS DGN OR DWG CAD FILES) OF ALL UTILITIES WHICH INCLUDE THE LOCATIONS AND ELEVATIONS OF ALL MAINS, SERVICE LINES, STRUCTURES, PAVED AREAS, SITE GRADING, STREET LIGHTS AND CABLES, CURBS, AND MONUMENTS. FINAL RECORD DRAWINGS MUST ALSO INCLUDE A STATE PLANE COORDINATE SYSTEM TIE-IN. IN ADDITION TO THE DRAWINGS, AN ELECTRONIC FILE (IN DWG OR DGN FORMAT) OF THE RECORD DRAWINGS MUST BE SUBMITTED ON CD-ROM.

INDEX OF SHEETS

C-1	COVER SHEET
C-2	PROJECT SPECIFICATIONS
C-3	EXISTING CONDITIONS & DEMOLITION PLAN
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C-7	UTILITY PLAN
C-8	SITE STABILIZATION PLAN
C-9	CONSTRUCTION STANDARDS
C-10	CONSTRUCTION STANDARDS
C-11	CONSTRUCTION STANDARDS
C-12	CONSTRUCTION STANDARDS

ATTACHMENTS

L-1 - L-3 LANDSCAPE PLANS

DRAINAGE CERTIFICATE

I, BRIAN JOHNSON, HEREBY CERTIFY THAT ADEQUATE STORM WATER STORAGE AND DRAINAGE CAPACITY HAS BEEN PROVIDED FOR THIS DEVELOPMENT, SUCH THAT SURFACE WATER FROM THE DEVELOPMENT WILL NOT BE DIVERTED ONTO AND CAUSE DAMAGE TO THE ADJACENT PROPERTY FOR STORMS UP TO AND INCLUDING THE ONE HUNDRED (100) YEAR EVENT, AND THAT THE DESIGN PLANS ARE IN COMPLIANCE WITH ALL APPLICABLE STATE, COUNTY, AND VILLAGE ORDINANCES.

DATED THIS 3RD DAY OF OCTOBER, 2024.

ENGINEER

ISSUED FOR PERMIT

 EXPIRATION DATE: NOVEMBER 30, 2025	 Formerly JULIE 1-800-892-0123
PINNACLE ENGINEERING GROUP, LLC ENGINEER'S LIMITATION	
PINNACLE ENGINEERING GROUP, LLC AND THEIR CONSULTANTS DO NOT WARRANT OR GUARANTEE THE ACCURACY AND COMPLETENESS OF THE DELIVERABLES HEREIN BEYOND A REASONABLE DILIGENCE. IF ANY MISTAKES, OMISSIONS, OR DISCREPANCIES ARE FOUND TO EXIST WITHIN THE DELIVERABLES, THE ENGINEER SHALL BE PROMPTLY NOTIFIED PRIOR TO BID SO THAT HE MAY HAVE THE OPPORTUNITY TO TAKE WHATEVER STEPS NECESSARY TO RESOLVE THEM. FAILURE TO PROMPTLY NOTIFY THE ENGINEER OF SUCH CONDITIONS SHALL ABSOLVE THE ENGINEER FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES OF SUCH FAILURE. ACTIONS TAKEN WITHOUT THE KNOWLEDGE AND CONSENT TO THE ENGINEER, OR IN CONTRADICTION TO THE ENGINEER'S DELIVERABLES OR RECOMMENDATIONS, SHALL BECOME THE RESPONSIBILITY NOT OF THE ENGINEER BUT OF THE PARTIES RESPONSIBLE FOR TAKING SUCH ACTION.	
FURTHERMORE, PINNACLE ENGINEERING GROUP, LLC IS NOT RESPONSIBLE FOR CONSTRUCTION SAFETY OR THE MEANS AND METHODS OF CONSTRUCTION.	



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www.pinnacle-engr.com

CHICAGO OFFICE:
1051 E. MAIN ST. | SUITE 217
EAST DUNDEE, IL 60118
(847) 551-5300
CHICAGO | MILWAUKEE | NATIONWIDE

BOLT 2.0
28884 N. ILLINOIS ROUTE 83
MUNDELEIN, IL

REVISIONS

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COVER SHEET

PEG JOB NO. 5897.00-IL	BDJ	START DATE 10/03/24	SCALE NONE	SHEET C-1 OF C-12
PEG PM				

DESIGNED: SSS
DRAWN: SSS
CHECKED: SSS
IN CHARGE: SSS
DATE: 1/10/2025 8:35 AM
PROJECT: 2024A-0897-00-ILL-060 - CAD FINAL SHEET 1C-2 - PROJECT SPECIFICATIONS.dwg

GENERAL NOTES	
1.	THE STANDARD SPECIFICATIONS LISTED ON THE COVER SHEET, THESE CONSTRUCTION PLANS, THE SPECIAL PROVISIONS, GENERAL CONDITIONS AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT DOCUMENTS. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE TO BE CONSIDERED A PART OF THE CONTRACT.
2.	NO CONSTRUCTION PLANS SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY MARKED "FOR CONSTRUCTION" PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE INDIVIDUAL SUBCONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, THEY MUST IMMEDIATELY REPORTED SAME TO THE ENGINEER BEFORE DOING ANY WORK, OTHERWISE THE INDIVIDUAL SUBCONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISCREPANCY BETWEEN THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE INDIVIDUAL SUBCONTRACTOR SHALL SECURE WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILURE TO SECURE WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING SHALL BE CONSIDERED TO HAVE PROCEEDED AT THEIR OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.
3.	ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE GUARANTEED AGAINST ALL DEFECTS IN MATERIALS AND WORKMANSHIP OF THE INDIVIDUAL SUBCONTRACTOR AND THEIR SURETY FOR A PERIOD OF 24 MONTHS FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK BY THE MUNICIPALITY, OTHER APPLICABLE GOVERNMENTAL AGENCIES, AND THE OWNER.
4.	BEFORE ACCEPTANCE BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED AND APPROVED BY THE OWNER OR HIS REPRESENTATIVE. FINAL PAYMENT WILL BE MADE AFTER ALL OF THE INDIVIDUAL SUBCONTRACTOR'S WORK HAS BEEN APPROVED AND ACCEPTED, AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
5.	UPON AWARD OF THE CONTRACT AND WHEN REQUIRED BY THE OWNER, THE INDIVIDUAL SUBCONTRACTOR SHALL FURNISH A LABOR, MATERIAL AND PERFORMANCE BOND IN THE PENAL SUM OF 100 PERCENT OF THE CONTRACT GUARANTEEING COMPLETION OF THE WORK. THE UNDERSIGNED SHALL BE APPROVED BY THE OWNER.
6.	THE INDIVIDUAL SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS INCLUDING THE USE AND ACCESS OF EXISTING STREETS. THE INDIVIDUAL SUBCONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS BEFORE CONSTRUCTION BEGINS. THE INDIVIDUAL SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE ENGINEER.
7.	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 INDIVIDUAL SUBCONTRACTOR 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 IN LOCATION WITH NEW CONSTRUCTION, THE INDIVIDUAL SUBCONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
8.	THE INDIVIDUAL SUBCONTRACTOR SHALL REVIEW AND DETERMINE ALL IMPROVEMENTS AND SHALL VERIFY ALL QUANTITIES AS PROVIDED BY THE ENGINEER OR OWNER FOR BIDDING PURPOSES. THE INDIVIDUAL SUBCONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER. THE CONTRACT PRICE SUBMITTED BY THE INDIVIDUAL SUBCONTRACTOR SHALL BE CONSIDERED A LUMP SUM FOR THE COMPLETE PROJECT UNLESS THERE IS A PLAN REVISION AND/OR WRITTEN CHANGE TO THE SCOPE OF WORK.
9.	WHENEVER THE PERFORMANCE OF WORK IS INDICATED ON THE PLANS, AND NO ITEM IS INCLUDED IN THE CONTRACT FOR PAYMENT, THE WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT, AND NO ADDITIONAL PAYMENT WILL BE ALLOWED.
10.	WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTER, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THIS LOOSE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY BY THE RESPONSIBLE PARTY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
11.	THE INDIVIDUAL SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES, AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF CONSTRUCTION. BARRICADES AND WARNING SIGNS SHALL BE PROVIDED BY THE INDIVIDUAL SUBCONTRACTOR. ADEQUATE LIGHTING SHALL BE MAINTAINED FROM DUSK TO DAWN AT ALL LOCATIONS WHERE CONSTRUCTION OPERATIONS WARRANT, OR AS DESIGNATED BY THE ENGINEER OR MUNICIPALITY. ALL TRAFFIC CONTROL WORK SHALL BE DONE IN ACCORDANCE WITH THE I.D.O.T. "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
12.	ALL PERMANENT TYPE PAVEMENTS OR OTHER PERMANENT IMPROVEMENTS WHICH ABUT THE PROPOSED IMPROVEMENT AND MUST BE REMOVED, SHALL BE SAVED FULL DEPTH, PRIOR TO REMOVAL. ALL ITEMS SO REMOVED SHALL BE REPLACED WITH SIMILAR CONSTRUCTION MATERIALS TO THEIR ORIGINAL CONDITION, OR BETTER. PAYMENT SHALL BE INCLUDED IN THE COST FOR REMOVAL OF EACH ITEM AND REPLACEMENT WILL BE PAID UNDER THE RESPECTIVE ITEMS IN THE CONTRACT, UNLESS OTHERWISE INDICATED.
13.	REMOVED PAVEMENT, SIDEWALK, CURB AND GUTTER, ETC. SHALL BE DISPOSED OF BY THE INDIVIDUAL SUBCONTRACTOR AT HIS OWN EXPENSE. SIGNS NOT REQUIRED TO BE REMOVED AFTER RECEIVING APPROVAL OF THE OWNER. THE OWNER SHALL DESIGNATE WHICH TREES ARE TO BE REMOVED.
14.	WHERE OVERHANGING BRANCHES INTERFERE WITH OPERATIONS OF CONSTRUCTION, SAID BRANCHES SHALL BE TRIMMED AND SEALED IN ACCORDANCE WITH ARTICLE 253.09 OF THE I.D.O.T. STANDARD SPECIFICATIONS, AND THE COST OF SAME SHALL BE INCIDENTAL TO THE CONTRACT. TREES SHALL BE REMOVED ONLY AFTER RECEIVING APPROVAL OF THE OWNER. THE OWNER SHALL DESIGNATE WHICH TREES ARE TO BE REMOVED.
15.	ALL EXISTING TRAFFIC SIGNS, STREET SIGNS, ETC., WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND ARE NOT NOTED FOR REMOVAL OR DISPOSAL, SHALL BE REMOVED AND RESET BY THE INDIVIDUAL SUBCONTRACTOR AT HIS OWN EXPENSE. SIGNS NOT REQUIRED TO BE RESET SHALL BE DELIVERED TO THE MUNICIPALITY AS APPROPRIATE. ALL MAIL BOXES THAT INTERFERE WITH CONSTRUCTION SHALL BE SIMILARLY RELOCATED AT NO ADDITIONAL COST.
16.	NOTIFY THE ENGINEER OF ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS. NO FIELD TILE SHALL BE DIRECTLY OR INDIRECTLY CONNECTED TO THE PROPOSED STORM SEWER. A RECORD OF THE LOCATION OF ALL FIELD TILE OR ON-SITE/UNDER PIPE ENCOUNTERED SHALL BE KEPT BY THE CONTRACTOR AND TURNED OVER TO THE 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.
17.	DURING CONSTRUCTION OPERATIONS THE INDIVIDUAL SUBCONTRACTOR SHALL INSURE POSITIVE DRAINAGE AT THE CONCLUSION OF EACH DAY. DRAINAGE MAY BE ACHIEVED BY DITCHING, PUMPING OR ANY OTHER ACCEPTABLE METHOD. THE INDIVIDUAL SUBCONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF.
18.	IT SHALL BE THE RESPONSIBILITY OF THE INDIVIDUAL SUBCONTRACTOR TO REMOVE FROM THE SITE ANY AND ALL MATERIALS AND DEBRIS WHICH RESULT FROM HIS CONSTRUCTION OPERATIONS AT NO ADDITIONAL EXPENSE TO THE OWNER.
19.	THE INDIVIDUAL SUBCONTRACTOR SHALL COMPLY WITH AND OBSERVE THE RULES AND REGULATIONS OF O.S.H.A. AND APPROPRIATE AUTHORITIES REGARDING SAFETY PROVISIONS.
20.	THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR FOR ANY SAFETY PRECAUTIONS USED BY THE INDIVIDUAL SUBCONTRACTOR. THE INDIVIDUAL SUBCONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS.
21.	ALL INDIVIDUAL SUBCONTRACTORS AND THEIR SUBCONTRACTORS OR ANY TIER SHALL INDEMNIFY THE OWNER, ENGINEER, AND ARCHITECT FROM ALL LIABILITY RESULTING FROM ANY NEGLIGENCE ACT OR OMISSION WITH THEIR CONSTRUCTION, INSTALLATION, AND TESTING OF WORK ON THIS PROJECT AND SHALL NAME THEM AS ADDITIONAL INSURED ON THEIR COMMERCIAL GENERAL LIABILITY POLICIES FOR CLAIMS ARISING OUT OF THE WORK ON THIS PROJECT. A PROPER CERTIFICATE OF INSURANCE SHALL BE ISSUED PRIOR TO THE START OF CONSTRUCTION.
22.	ELECTRIC, TELEPHONE, NATURAL GAS, AND OTHER UTILITY COMPANIES HAVE UNDERGROUND AND/OR OVERHEAD SERVICE FACILITIES IN THE VICINITY OF THE PROPOSED WORK. 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 CONTRACTOR SHALL CALL 811 FOR UTILITY LOCATIONS.
23.	THE INDIVIDUAL SUBCONTRACTOR TO HAVE A COMPETENT SUPERINTENDENT ON THE PROJECT SITE AT ALL TIMES RESPECTIVE OF THE AMOUNT OF WORK SUBLET THE SUPERINTENDENT SHALL BE CAPABLE OF READING AND UNDERSTANDING THE PLANS AND SPECIFICATIONS, SHALL HAVE FULL AUTHORITY TO EXECUTE ORDERS TO EXPEDITE THE PROJECT, AND SHALL BE RESPONSIBLE FOR SCHEDULING AND HAVE CONTROL OF ALL WORK AS THE AGENT OF THE INDIVIDUAL SUBCONTRACTOR. FAILURE TO COMPLY WITH THIS PROVISION WILL RESULT IN A SUSPENSION OF WORK.
24.	THE INDIVIDUAL SUBCONTRACTOR SHALL KEEP A SET OF "APPROVED" CONSTRUCTION PLANS ON THE JOB SITE, AND SHALL MAINTAIN (AS INDICATED HEREIN AND ELSEWHERE WITHIN THESE CONSTRUCTION NOTES, SPECIFICATIONS, AND PLANS) A LEGIBLE RECORD ON SAID PLANS OF AND FIELD TILE ENCOUNTERED, ANY MODIFICATIONS TO ALIGNMENT AND/OR TO PLANS AND SPECIFICATIONS OF PROPOSED IMPROVEMENTS, ETC. UPON COMPLETION OF THE INDIVIDUAL SUBCONTRACTOR'S WORK, SAID PLANS AND INFORMATION SHALL BE PROVIDED TO ENGINEER. FINAL CONTRACT PAYMENT SHALL NOT COME DUNTIL THIS INFORMATION IS RECEIVED BY THE ENGINEER.

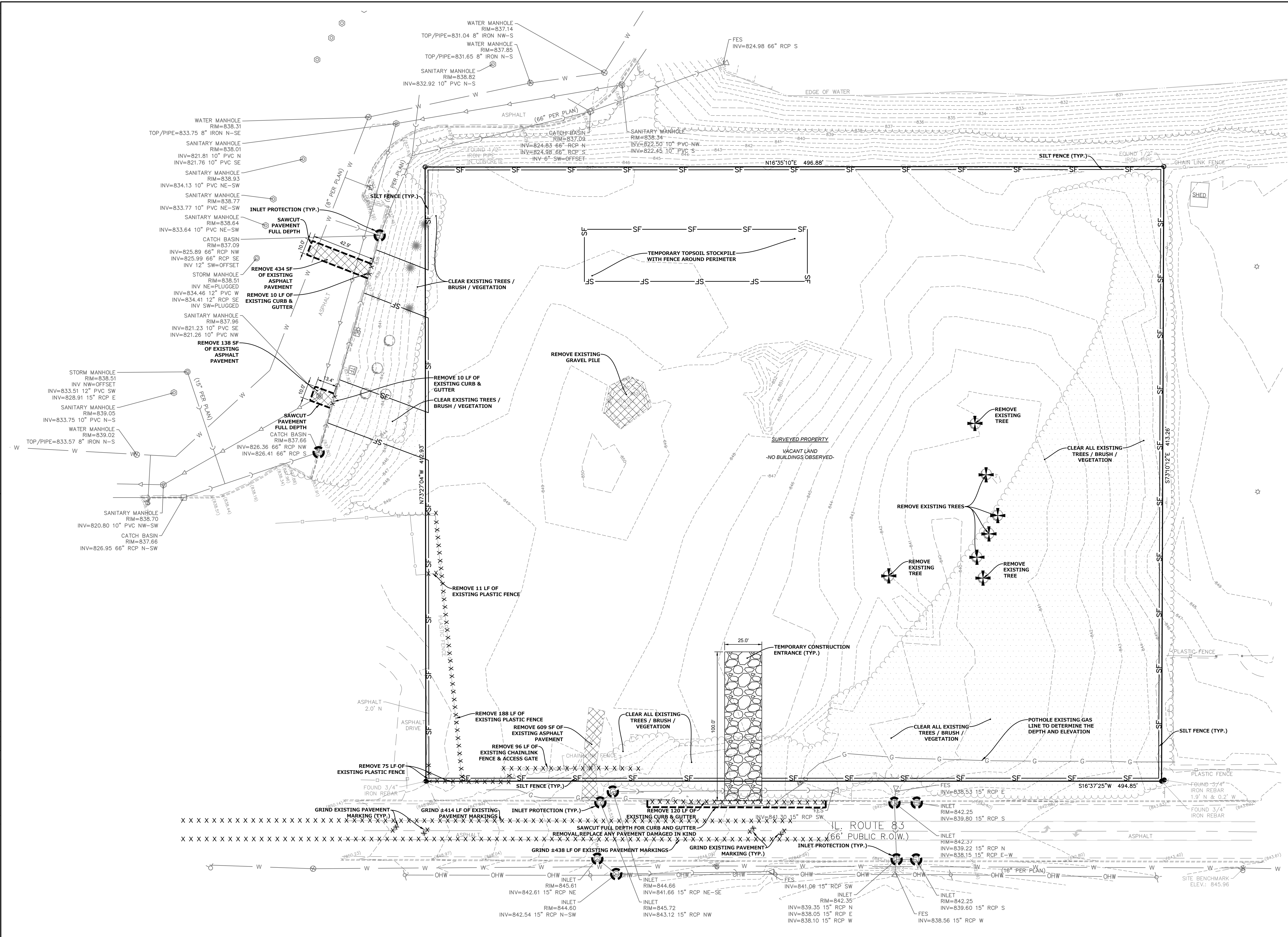
EARTHWORK	
1.	WORK UNDER THIS SECTION SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING: A. CLEARING AND REMOVAL OF ALL UNDESIRABLE TREES AND OTHER VEGETATIVE GROWTH WITHIN THE CONSTRUCTION AREA. TREE REMOVAL SHALL BE AS DESIGNATED BY THE PLANS AND SHALL BE KEPT TO A MINIMUM, WHERE FEASIBLE, AND WHEN PERMITTED BY OWNER, TREES AND BRUSH REMOVED MAY BE BURNED ONSITE IN FUTURE YARD AND OPEN SPACE AREAS. IF ADEQUATE AND APPROPRIATE TRENCHING OR OTHER METHODS ARE AVAILABLE FOR ONSITE BURN, THE TREES AND BRUSH SHALL BE DISPOSED OF OFFSITE. B. STRIPPING OF TOPSOIL FROM ALL STREET, DRIVEWAY, PARKING AREA, RIGHT-OF-WAY, BUILDING PAD, AND OTHER DESIGNATED STRUCTURAL AREAS. C. STOCKPILING OF TOPSOIL AT LOCATIONS AS DIRECTED BY THE OWNER. TOPSOIL STOCKPILED FOR FUTURE USE SHALL BE RELATIVELY FREE FROM LARGE ROOTS, STICKS, WEEDS, BRUSH, STONES AND OTHER DESIRABLE STRUCTURAL AREAS. D. EXCAVATION OF EXISTING PAVEMENTS AND/OR EXISTING UTILITIES SHALL BE STOCKPILED IN SEQUENCE TO ELIMINATE ANY REHANDLING OR DOUBLE MOVEMENTS BY THE CONTRACTOR. E. FAILURE TO PROPERLY FOLLOW THE STRIPPING OPERATION SHALL NOT CONSTITUTE A CLAIM FOR ADDITIONAL COMPENSATION. NO MATERIAL SHALL BE STOCKPILED IN FRONT YARDS, OVERLAND DRAINAGE SWALES (FLOOD ROUTING AREAS), PROPOSED UTILITY LOCATIONS, UTILITY GASMENTS, OR IN THE RIGHT-OF-WAY. F. REMOVING UNSUITABLE MATERIALS AS SPECIFIED FROM ROADWAY, DRIVEWAY/PARKING, BUILDING PAD, AND OTHER DESIGNATED AREAS. G. DEMOLITION AND REMOVAL OF EXISTING PAVEMENTS INCLUDING OFFSITE DISPOSAL OF SAME, AT A DUMP SITE AS SELECTED BY THE CONTRACTOR. ONSITE DISPOSAL MAY BE ALLOWED IF APPROVED BY THE OWNER. H. CLAY CUT AND CLAY FILL WITH COMPACTION WITHIN ROADWAY, DRIVEWAY/PARKING, BUILDING PAD, AND OTHER DESIGNATED AREAS. I. EXCAVATION AND GRADING OF THE OPEN SPACE AND/OR YARD AREAS PER PLAN INCLUDING DESIGNATED DETENTION BASIN GRADING, CONSTRUCTION OF BERMS, ETC. J. PLACEMENT AND COMPACTION OF CLAY TO THE DESIGN SUBGRADE ELEVATIONS AS REQUIRED BY THE STANDARDS AND DETAILS ON THE CONSTRUCTION PLANS. THE CONTRACTOR WILL NOTE THAT THE ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS ARE FINISHED GRADE ELEVATIONS AND THAT PAVEMENT AND/OR TOPSOIL REPLACEMENT THICKNESS MUST BE SUBTRACTED TO DETERMINE SUBGRADE ELEVATIONS. K. PLACEMENT AND COMPACTION OF NON-STRUCTURAL FILL. L. IF REQUIRED, REMOVAL FROM SITE AND DISPOSAL OF ANY EXCESS OR UNSUITABLE MATERIAL UPON COMPLETION OF MASS GRADING. M. EXCAVATION AND COMPACTION OF SOIL MATERIAL FROM THE CONSTRUCTION OF UNDERGROUND UTILITIES. N. BACKFILLING OF CURBS AND/OR PAVEMENT AND SIDEWALK AFTER INSTALLATION OF SAME IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. O. BACKFILLING OF EXISTING MANHOLES AND BELL HOLES WITHIN TUNK AREAS. P. FINAL SHAPING AND TRIMMING TO THE LINES, GRADES, AND CROSS SECTIONS SHOWN IN THESE PLANS; AND TOPSOIL PLACEMENT TO DESIGN FINISHED GRADE ELEVATIONS AT LOCATIONS DESIGNATED IN THE CONTRACT DOCUMENTS. Q. SOIL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE SOIL EROSION CONTROL SPECIFICATIONS INCLUDED WITHIN THE CONTRACT DOCUMENTS.
2.	THE QUANTITIES GIVEN IN THE ENGINEER'S SUMMARY FOR EARTHWORK ARE INTENDED AS A GUIDE FOR THE CONTRACTOR IN DETERMINING THE SCOPE OF THE COMPLETED PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE MATERIAL QUANTITIES AND TO PROVIDE THEMSELVES 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.
3.	PRIOR TO ONSET OF MASS GRADING OPERATIONS, THE EARTHWORK CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE SOIL EROSION CONTROL SPECIFICATIONS, THE INITIAL ESTABLISHMENT OF EROSION CONTROL PROCEDURES AND THE PLACEMENT OF FILTER FENCING, ETC. TO PROTECT ADJACENT PROPERTY SHALL OCCUR BEFORE MASS GRADING BEGINS, AND IN ACCORDANCE WITH THE SOIL EROSION CONTROL DOCUMENTS.
4.	PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES, A TREE PROTECTION FENCE SHALL BE ERECTED AROUND THE PLANS TO BE PROTECTED. SAID FENCE SHALL BE PLACED IN THE FIELD OF 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 PROTECTED AREA SHALL NOT BE DISTURBED.
5.	THE GRADING OPERATIONS ARE TO BE CLOSELY SUPERVISED AND INSPECTED, PARTICULARLY DURING THE REMOVAL OF UNSUITABLE MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE GRADING PADS, BY THE SOILS ENGINEER OR HIS REPRESENTATIVE. ALL TESTING, INSPECTION AND SUPERVISION OF SOIL QUALITY, UNSUITABLE REMOVAL, REPLACEMENT, MODIFICATION AND OTHER SOILS RELATED OPERATIONS SHALL BE ENTIRELY THE RESPONSIBILITY OF THE SOILS ENGINEER.
6.	A QUALIFIED SOILS ENGINEER SHALL REGULARLY INSPECT THE EXCAVATION OF ANY OPEN WATER AREAS TO INSURE THAT THEY WILL BE CAPABLE OF WITHSTANDING DESIGNED NORMAL WATER LEVELS. GRAVEL OR SAND SEAMS OR OTHER CONDITIONS WHICH MAY BE ENCOUNTERED, AND WHICH MIGHT TEND TO DE-WATER THESE AREAS, SHALL BE REMEDIED AS DIRECTED BY THE SOILS ENGINEER (FOR EXAMPLE, LIVING CLAY BLANKET, BENTONITE, ETC.).
7.	THE GRADING AND COMPACTION OF THE SITE IMPROVEMENTS SHALL NOT BE GRADED PONDING OF WATER, AND AREAS ADJACENT TO THESE IMPROVEMENTS SHALL BE GRADED TO ALLOW POSITIVE DRAINAGE.
8.	THE PROPOSED GRADING ELEVATIONS SHOWN ON THE PLANS ARE FINISHED GRADE. TOPSOIL OF THE THICKNESS SHOWN IN THE STANDARDS AND DETAILS ON THE CONSTRUCTION PLANS IS TO BE PLACED BEFORE FINISHED GRADE ELEVATIONS ARE ACHIEVED.
9.	THE SELECTED STRUCTURAL FILL MATERIAL SHALL BE PLACED IN LEVEL UNIFORM LAYERS SO THAT THE COMPACTED THICKNESS IS APPROXIMATELY SIX INCHES; IF COMPACTION EVIDENCE DEMONSTRATES THE ABILITY TO COMPACT GREATER THICKNESS, A GREATER THICKNESS MAY BE ALLOWED WITH APPROVAL FROM SOILS ENGINEER. EACH LAYER SHALL BE THOROUGHLY MIXED DURING SPREADING TO INSURE UNIFORMITY.
10.	EMBANKMENT MATERIAL WITHIN ROADWAY, DRIVEWAY, PARKING AREAS, AND OTHER STRUCTURAL CLAY FILL AREAS SHALL BE COMPACTED TO A MINIMUM OF NINETY PERCENT (90%) OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557 (MODIFIED PROCTOR METHOD), OR TO SUCH OTHER DENSITY AS MAY BE DETERMINED APPROPRIATE BY THE SOILS ENGINEER. EMBANKMENT MATERIAL FOR BUILDING PADS SHALL BE COMPACTED TO A MINIMUM OF NINETY FIVE PERCENT (95%) OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557 (MODIFIED PROCTOR METHOD), OR TO SUCH OTHER DENSITY AS MAY BE DETERMINED APPROPRIATE BY THE SOILS ENGINEER.
11.	EMBANKMENT MATERIAL (RANDOM FILL) WITHIN NON-STRUCTURAL FILL AREAS SHALL BE COMPACTED TO A MINIMUM OF EIGHTY FIVE PERCENT (85%) OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557 (MODIFIED PROCTOR METHOD), OR TO SUCH OTHER DENSITY AS MAY BE DETERMINED APPROPRIATE BY THE SOILS ENGINEER.
12.	THE SURFACE VEGETATION, TOPSOIL, AND ANY OBVIOUSLY SOFT UNDERLYING SOIL SHOULD BE STRIPPED FROM ALL AREAS TO RECEIVE CLAY FILL. IF THE UNDERLYING SUBGRADE SOILS RUP DEEPER THAN ONE INCH UNDER THE CONSTRUCTION EQUIPMENT OR IF THE MOISTURE CONTENT EXCEEDS TWENTY PERCENT, THE SOIL SHALL BE SCARIFIED AND RECOMPACTED AND BE RECOMPACTED TO THE REQUIRED SPECIFICATIONS (SEE SECTIONS 205 AND 301 OF THE I.D.O.T. SPECIFICATIONS).
13.	ALL PAVEMENT SUBGRADE SHALL HAVE A MINIMUM IIR OF 3.0 AS DETERMINED BY THE SOILS ENGINEER. THE PROPOSED PAVEMENT DESIGN HAS BEEN BASED ON A MINIMUM IIR OF 3.0; THEREFORE, IF AREAS OF PAVEMENT SUBGRADE ARE ENCOUNTERED WHICH DO NOT PROVIDE A MINIMUM IIR OF 3.0, SUBGRADE REPLACEMENT OR PAVEMENT DESIGN REVISIONS SHALL BE PROVIDED WHICH ARE ADEQUATE TO OBTAIN EQUIVALENT PAVEMENT STRENGTH, AS DETERMINED BY THE SOILS ENGINEER AND THE ENGINEER.
14.	PRIOR TO UTILITY CONSTRUCTION, PROPOSED PAVEMENT AREAS, BUILDING PADS, DRIVEWAYS AND SIDEWALKS, AND YARD/OPEN SPACE AREAS SHALL BE ROUGH EXCAVATED OR FILLED TO PLUS OR MINUS ONE FOOT OF DESIGN SUBGRADE ELEVATION BY THE CONTRACTOR.
15.	COMPLETED GRADING FOR PROPOSED BUILDING PADS, AS WELL AS PROPOSED SUBGRADE AREAS FOR PAVEMENT, DRIVEWAYS AND SIDEWALKS, AND YARD/OPEN SPACE AREAS SHALL BE WITHIN A TOLERANCE OF PLUS OR MINUS 0.1 FOOT OF DESIGN SUBGRADE ELEVATIONS.
16.	THE SUBGRADE FOR PROPOSED STREET AND PAVEMENT AREAS SHALL BE PROOF-ROLLED BY THE CONTRACTOR AND ANY UNSTABLE AREAS ENCOUNTERED SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE SOILS ENGINEER.
17.	UPON COMPLETION OF THE SURFACE IMPROVEMENTS, AND EXCEPT WHERE OTHERWISE NOTED, THE EXCAVATION CONTRACTOR SHALL RESPADE A MINIMUM OF 6 INCHES OF TOPSOIL ON ALL DESIGNATED OPEN SPACE, PARKWAY, LANDSCAPE, AND OTHER NON-STRUCTURAL AREAS PER PLAN. SAID DESIGNATED AREAS TO BE RESPADED BY THE EXCAVATION CONTRACTOR SHALL BE AS INDICATED WITHIN THE CONTRACT DOCUMENTS. TOPSOIL SHALL BE RESPADED ON THE REMAINING AREAS BY THE LANDSCAPE CONTRACTOR.
18.	RIPRAP MATERIAL TO BE PROVIDED IN CONJUNCTION WITH THE EARTHWORK IMPROVEMENTS SHALL CONFORM TO SECTION 281 OF THE I.D.O.T. SPECIFICATIONS.
19.	SOIL BORING REPORTS, AVAILABLE AT THE OFFICE OF THE ENGINEER AND THE OWNER, ARE SOLELY FOR THE INFORMATION AND GUIDANCE OF THE CONTRACTORS. THE OWNER AND ENGINEER MAKE NO REPRESENTATION OR WARRANTY REGARDING THE INFORMATION CONTAINED IN THE BORING LOGS. THE CONTRACTOR SHALL MAKE HIS OWN INVESTIGATIONS AND SHALL PLAN THEIR WORK ACCORDINGLY. ARRANGEMENTS TO ENTER THE PROPERTY DURING THE BIDDING PHASE MAY BE MADE UPON REQUEST OF THE OWNER. THERE WILL BE NO ADDITIONAL PAYMENT FOR EXPENSES INCURRED BY THE CONTRACTOR RESULTING FROM ADVERSE SOIL OR GROUND WATER CONDITIONS.
20.	IF SHOWN ON THE PLANS, OPEN AREAS TO BE SEEDDED SHALL BE SEEDDED IN ACCORDANCE WITH THE SOIL EROSION CONTROL SPECIFICATIONS AND FINAL LANDSCAPE PLAN.
21.	IT SHALL BE THE RESPONSIBILITY OF THE EXCAVATION CONTRACTOR TO REMOVE FROM THE SITE ANY AND ALL MATERIALS AND DEBRIS WHICH RESULT FROM HIS CONSTRUCTION OPERATIONS AT NO ADDITIONAL EXPENSE TO THE OWNER.
22.	SOILS ENGINEER SHALL BE ON SITE DURING ALL EARTHWORK OPERATIONS, PAVING, AND CONCRETE PREPARATION AND POUR.

UNDERGROUND UTILITIES	
1.	WORK UNDER THIS SECTION SHALL INCLUDE TRENCHING, AUGERING AND 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.
2.	ALL SEWER AND WATER MAIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN ENDS" LATEST EDITION, THE SANITARY DISTRICT SEWER PERMIT ORDINANCE AND THE STANDARD SPECIFICATIONS AND CONSTRUCTION DETAILS AND ORDINANCES OF THE MUNICIPALITY.
3.	ROUGH GRADING TO WITHIN ONE FOOT OF FINISHED SUBGRADE SHALL BE COMPLETED BY THE EARTHWORK CONTRACTOR PRIOR TO COMMENCEMENT OF UNDERGROUND UTILITY INSTALLATION.
4.	ALL UTILITY TRENCHES BENEATH PROPOSED OR EXISTING UTILITIES, PROPOSED OR EXISTING PAVEMENT, EXISTING DRIVEWAYS AND SIDEWALKS, PROPOSED DRIVEWAYS AND SIDEWALKS WERE DESIGNATED BY THE OWNER AND AT A 1:1 SLOPE ON EITHER SIDE OF SAME, AND/OR WHEREVER ELSE SHOWN ON THE CONSTRUCTION PLAN SHALL BE BACKFILLED WITH SELECT GRANULAR IN ACCORDANCE WITH THE CONSTRUCTION STANDARDS.
5.	"BAND-SEAL" OR SIMILAR FLEXIBLE TYPE COUPLINGS SHALL BE USED WHEN CONNECTING SEWER PIPES OF DISSIMILAR MATERIALS, 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. CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUB-WYE SADDLE OR HUB-TEE SADDLE. B. REMOVE AN ENTIRE SECTION OF PIPE (BREAKING INTO THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION. C. WITH A 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.
6.	ALL FLOOR DRAINS AND FLOOR DRAIN SUMP PUMPS SHALL DISCHARGE INTO THE SANITARY SEWER, ALL DOWNSPOUTS, FOOTING DRAINS AND SUBSURFACE STORMWATERS SHALL DISCHARGE INTO THE STORM SEWER OR ONTO THE GROUND BUT NOT INTO THE SANITARY SEWER.
7.	SANITARY SEWERS SHALL BE CONSTRUCTED OF THE FOLLOWING MATERIALS UNLESS SPECIFIED OTHERWISE ON THE PLANS: A. POLYVINYL CHLORIDE PLASTIC GRAVITY SEWER PIPE (PVC) CONFORMING TO ASTM DESIGNATION D-3034 FOR SANITARY SEWERS OF 15 INCH DIAMETER OR LESS, AND CONFORMING TO ASTM DESIGNATION F-679 FOR PIPE OF 18 INCH TO 21 INCH DIAMETER, WITH AN SDR OF 26, WITH AN EXCAVATION PROTECTION CONFORMING TO ASTM DESIGNATION D-3122. THE GASKET SHALL COMPLY WITH ASTM F-477. B. WATER MAIN QUALITY C-900 PRESSURE PIPE IN ACCORDANCE WITH AWWA C900 FOR SIZES 4 INCH TO 12 INCH DIAMETER OR AWWA C905 FOR SIZES 14 INCH TO 48 INCH DIAMETER. PIPE JOINTS SHALL BE FLEXIBLE ELASTOMERIC SEALS PER ASTM D-3139 AND F-477.
8.	ALL SANITARY SEWER MANHOLES SHALL HAVE ECCENTRIC CONES. CONE OPENINGS SHALL BE CENTERED PARALLEL TO THE MAINLINE FLOW. ALL STRUCTURE SECTIONS AND ADJUSTING RINGS SHALL BE SECURELY SEALED TO EACH OTHER OR TO THE CONE SECTION OR TOP BARREL SECTION OF THE MAINLINE SEWER. THE MAINLINE SEWER SHALL BE CONSTRUCTED OF PRECAST MANHOLE (RAN-NEK, OR APPROVED EQUAL), THIS MASTIC SHALL BE APPLIED IN SUCH A MANNER THAT NO SURFACE WATER OR GROUND WATER INFLOW CAN ENTER THE MANHOLE THROUGH GAPS BETWEEN BARREL SECTIONS AND CONE SECTIONS. SANITARY SEWER MANHOLES SHALL BE 4 FOOT DIAMETER PRECAST STRUCTURES (UNLESS OTHERWISE NOTED ON THE PLANS), WITH APPROPRIATE FRAME AND LIDS (SEE CONSTRUCTION STANDARDS SHEET). ALL SANITARY SEWER MANHOLES SHALL INCORPORATE THE USE OF EXTERNAL CHIMNEY SEALS (SEE CONSTRUCTION STANDARDS).
9.	ALL SANITARY SEWERS, STORM SEWERS, AND SEWER SERVICES IN SEPARATE SEWER AREAS SHALL BE INSTALLED ON GRANULAR CRUSHED STONE BEDDING CLASS 1A, (I.D.O.T. GRADATION CA-11), CONFORMING TO ASTM D-2321, WITH A MINIMUM THICKNESS EQUAL TO ONE FOURTH OF THE OUTSIDE DIAMETER OF THE PIPE. THE BEDDING SHALL BE PLACED IN THE FIELD OF A CIRCLE CENTERED AROUND THE PIPE, 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 PROTECTED AREA SHALL NOT BE DISTURBED.
10.	ALL SANITARY SERVICE CONNECTIONS TO MAINLINE SEWER SHALL BE MADE WITH PRECAST WYES OR POLYMER MANHOLES SPECIFICALLY FOR THAT WATER MAIN SIZE. THE GASKET IS REQUIRED TO BE THE SAME AS MAINLINE SEWER UNLESS SPECIFICALLY INDICATED OTHERWISE.
11.	SANITARY SERVICES SHALL BE LAID TO A MINIMUM GRADE OF 1.00 PERCENT. THE END OF EACH SERVICE SHALL BE SEALED WITH A MANUFACTURER'S WATERTIGHT PLUG. SANITARY SERVICE STUBS SHALL BE MARKED IN ACCORDANCE WITH THESE CONSTRUCTION NOTES.
12.	UNLESS OTHERWISE INDICATED STORM SEWER SHALL BE HOPE ADS N12 HP FOR SIZES 12"-30". PIPE SHALL HAVE A SMOOTH INTERIOR AND ANNUAL EXTERIOR CORRUGATIONS AND MEET OR EXCEED AASTHO MP-21. PIPE SHALL BE JOINTED WITH A GASKETED INTEGRAL BELL AND SPIGOT JOINT MEETING THE REQUIREMENTS OF AASTHO MP-21. FOR PIPE 18 INCH AND OVER, THE GASKET SHALL BE WATERTIGHT. ACCORDING TO THE REQUIREMENTS OF ASTM D3212, SPIGOTS SHALL HAVE GASKETS MEETING THE REQUIREMENTS OF ASTM F477. GASKET SHALL BE INSTALLED BY THE PIPE MANUFACTURER AND COVERED WITH A REMOVABLE PROTECTIVE WATER TIGHT GASKET. JOINT LUBRICANT SHALL BE USED ON THE GASKET AND BELL DURING JOINT ASSEMBLY. INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM D3231 AND ADS RECOMMENDED INSTALLATION GUIDELINES. THE EXISTING GRADE WITHIN THE PROTECTED AREA SHALL NOT BE DISTURBED. THE GASKET SHALL MEET HS-25 LOADING. INSTALLATION SHALL MEET OR EXCEED MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
13.	STORM SEWER MANHOLES SHALL BE PRECAST STRUCTURES, WITH THE DIAMETER DEPENDENT ON THE PIPE SIZE AND WITH APPROPRIATE FRAME AND LIDS (SEE CONSTRUCTION STANDARDS). WHERE NOTED ON THE PLANS, THE REDUCER MATERIAL SHALL BE USED TO INCORPORATE WATERSTOP GASKETS AT ALL PIPE PENETRATIONS.
14.	WATER MAIN SHALL BE PLASTIC PIPE, AWWA STANDARD PVC C-900 CONFORMING TO NSF (NATIONAL SANITATION FOUNDATION) STANDARD 14, ELASTOMERIC SEALS (GASKETS) USED FOR PUSH-ON JOINTS SHALL COMPLY WITH ASTM STANDARD F477 AND SHALL BE PRESSURE RATED IN ACCORDANCE WITH ASTM D3139. MIN. COVER FROM FINISHED GRADE TO TOP OF WATER MAIN SHALL BE 4 FEET.
15.	WATER MAIN FITTINGS (BENDS, ELBOWS, TEES, INCREASES, REDUCERS, ETC.) MAY OR MAY NOT BE SPECIFICALLY IDENTIFIED ON THE PLANS. HOWEVER, THE PLANS SHALL BE CONSIDERED AS INCIDENTAL AND INCLUDED IN THE LINEAL FOOTAGE COST OF THE WATER MAIN.
16.	UNLESS NOTED OTHERWISE, GATE VALVES IN ACCORDANCE WITH MUNICIPAL STANDARDS SHALL BE USED WHEREVER VALVES ARE CALLED FOR. VALVES SHALL BE IRON BODY, BRONZE MOUNTED, PARALLEL RESILIENT SEAT VALVES PER AWWA C-509. ALL VALVES SHALL BE RATED FOR 300 PSI TEST PRESSURE AND 200 PSI WORKING PRESSURE. THE SOIL SHALL BE SCARIFIED AND RECOMPACTED TO THE REQUIRED SPECIFICATIONS (SEE SECTIONS 205 AND 301 OF THE I.D.O.T. SPECIFICATIONS).
17.	VALVE VAULTS SHALL BE USED AT LOCATIONS SHOWN ON THE PLANS. VAULTS SHALL BE PRECAST CONCRETE STRUCTURES, WITH APPROPRIATE FRAME AND LIDS (SEE CONSTRUCTION STANDARDS SHEET).
18.	HYDRANTS SHALL BE OF THE MANUFACTURE AND EQUIPPED WITH AUXILIARY VALVES AND VALVE BOXES IN ACCORDANCE WITH THE MUNICIPALITY'S STANDARD. EACH HYDRANT SHALL BE EQUIPPED WITH TWO 2-1/2 INCH HOSE NOZZLE AND ONE 4-1/2 INCH PUMPER PORT. HOSE THREADS SHALL BE THE STANDARD OF THE MUNICIPALITY. ALL HYDRANTS SHALL OPEN LEFT (COUNTER-CLOCKWISE). ALL FIRE HYDRANTS SHALL BE SET 3 FEET TO 7 FEET FROM BACK OF CURB.
19.	WATER SERVICES SHALL BE LAID NOT LESS THAN 5.5 FEET BELOW GRADE.
20.	THRUST BLOCKING SHALL BE INSTALLED ON WATER MAINS AT ALL BENDS, TEES, ELBOWS, ETC. COST SHALL BE MERGED WITH UNIT PRICE FOR INSTALLED PIPE. RETAINER GLANDS OR MEGA-LUG FITTINGS MAY BE USED AS AN ALTERNATE IF APPROVED BY THE MUNICIPALITY.
21.	ALL WATER MAINS SHALL HAVE COMPACTED (CA-6) GRANULAR BEDDING, A MINIMUM OF 4 INCHES BELOW THE BOTTOM OF THE PIPE FOR THE FULL LENGTH. COST FOR BEDDING SHALL BE MERGED WITH THE UNIT PRICE BID FOR THE WATER MAIN.
22.	WHENEVER POSSIBLE, A WATER MAIN MUST BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN OR SEWER LINE. SHOULD LOCAL CONDITIONS EXIST WHICH WOULD PREVENT A LATERAL SEPARATION OF 10 FEET, A WATER MAIN MAY BE LAID CLOSER THAN 10 FEET TO A STORM OR SANITARY SEWER PROVIDED THAT THE WATER MAIN INVERT IS AT LEAST 18 INCHES ABOVE THE CROWN OF THE SEWER, AND IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELf LOCATED TO ONE SIDE OF THE SEWER. IF IT IS IMPROSSIBLE TO OBTAIN PROPER HORIZONTAL OR VERTICAL SEPARATION AS DESCRIBED ABOVE, THEN THE SEWER MUST ALSO BE CONSTRUCTED OF WATER MAIN TYPE MATERIAL AND PRESSURE TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD TO ASSURE WATERTIGHTNESS BEFORE BACKFILLING.
23.	WHENEVER WATER MAINS MUST CROSS HOUSE SEWERS, STORM SEWERS OR SANITARY SEWERS, THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE INVERT OF THE WATER MAIN IS 18 INCHES ABOVE THE CROWN OF THE DRAIN OR SEWER. THIS VERTICAL SEPARATION MUST BE MAINTAINED FOR THAT PORTION OF THE WATER MAIN LOCATED WITHIN 10 FEET HORIZONTALLY OF ANY SEWER OR DRAIN CROSSING. THIS MUST BE MEASURED AS THE NORMAL DISTANCE FROM THE WATER MAIN TO THE DRAIN OR SEWER. IF IT IS POSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED ABOVE, OR IF IT IS NECESSARY FOR THE WATER MAIN TO PASS UNDER A SEWER OR DRAIN, THEN THE SEWER MUST BE CONSTRUCTED OF WATER MAIN TYPE MATERIAL. THIS CONSTRUCTION MUST EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE NORMAL DISTANCE FROM THE WATER MAIN TO THE SEWER OR DRAIN LINE IS AT LEAST 10 FEET. IN MAKING SUCH CROSSINGS, CENTER A LENGTH OF WATER MAIN PIPE OVER/UNDER THE SEWER TO BE CROSSED SO THAT THE JOINTS WILL BE EQUIDISTANT FROM THE SEWER AND AS REMOVE THERE FROM AS POSSIBLE, WHERE A WATER MAIN MUST CROSS UNDER A SEWER, A VERTICAL SEPARATION OF 18 INCHES BETWEEN THE INVERT OF THE SEWER AND THE CROWN OF THE WATER MAIN SHALL BE MAINTAINED. THIS MEANS TO SUPPORT THE LARGER SIZED SEWER LINES TO PREVENT THEIR SETTLING AND BREAKING THE WATER MAIN.
24.	WATER AND SANITARY BUILDING SERVICES SHALL BE IN SEPARATE TRENCHES WITH A MINIMUM OF 10 FEET HORIZONTAL SEPARATION; OR IF THE SANITARY SEWER AND WATER SERVICES ARE INSTALLED IN THE SAME TRENCH, THE WATER SERVICE IS TO BE PLACED ON A SOLID SHELf A MINIMUM OF 18 INCHES ABOVE THE SANITARY SERVICE AND THE SANITARY SEWER SERVICE SHALL BE CONSTRUCTED WITH EITHER PVC C-900 AND SOLVENT CEMENT OR SIMILAR TYPE MATERIAL AS APPROVED BY THE MUNICIPAL, BUILDING DEPARTMENT.

UNDERGROUND UTILITIES (CONT'D)	
25.	THE UNDERGROUND CONTRACTOR SHALL PLAN AND MOUND EXCESS EXCAVATED TRENCH MATERIAL ADJACENT TO THE TRENCHES IN AN ORDERLY FASHION SO AS NOT TO CREATE A HAZARD OR OBSTRUCTION, AND TO MAINTAIN THE SITE IN A WORKABLE CONDITION. THE DISPOSAL AND PLACEMENT OF EXCESS TRENCH MATERIAL SHALL BE THE RESPONSIBILITY OF THE EARTH EXCAVATING CONTRACTOR.
26.	THE UNDERGROUND CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING ANY EXCAVATION FOR THE INSTALLATION OF THE SEWER OR WATER SYSTEMS.
27.	ANY ANTICIPATED COST OF SHEETING SHALL BE REFLECTED IN THE CONTRACT AMOUNTS. NO ADDITIONAL COST WILL BE ALLOWED FOR SHEETING OR BRACING.
28.	FRAMES AND LIDS (OR GRATES) FOR SANITARY, WATER MAIN AND STORM SEWER STRUCTURES SHALL BE AS INDICATED WITHIN THESE IMPROVEMENT PLANS. (SEE CONSTRUCTION STANDARDS).
29.	ALL STRUCTURES SHALL HAVE A MINIMUM OF 3 INCHES AND A MAXIMUM OF 8 INCHES OF ADJUSTING RINGS (2 RINGS MAXIMUM).
30.	ALL TOP OF FRAMES FOR STORM AND SANITARY SEWERS AND VALVE VAULT COVERS AND B-BOXES ARE TO BE ADJUSTED TO MEET FINAL FINISHED GRADE UPON COMPLETION OF FINISHED GRADING AND FINAL INSPECTIONS. THIS ADJUSTMENT IS TO BE MADE BY THE UNDERGROUND CONTRACTOR AND THE COST IS TO BE CONSIDERED INCIDENTAL. THE UNDERGROUND CONTRACTOR SHALL INSURE THAT ALL ROAD AND PAVEMENT INLETS OR STRUCTURES (FRAMES AND GRATES) ARE AT FINISHED GRADE. ANY ADJUSTMENTS NECESSITATED BY THE CURB OR PAVING CONTRACTOR TO ACHIEVE FINAL RIM GRADE, RESULTING IN AN EXCESS FOR SAID ADJUSTMENTS, WILL BE CHARGED TO THE UNDERGROUND CONTRACTOR.
31.	THE CONTRACTOR SHALL INSTALL A 2 IN. X 4 IN. X 8 FT. POST ADJACENT TO THE TERMINUS OF THE SANITARY SERVICE, STORM SERVICE, AND WATER MAIN SERVICE, AS WELL AS SANITARY MANHOLES, STORM MANHOLES, CATCH BASINS, INLETS, AND VALVE VAULTS WITHIN TURF AREAS. THE POST SHALL EXTEND A MINIMUM 4 FEET ABOVE THE GROUND. THE TOP 12 INCHES OF SAID POST SHALL BE PAINTED AS FOLLOWS: SANITARY-RED; WATER MAIN-BLUE; STORM-GREEN.
32.	SANITARY SEWERS INCLUDING MANHOLES AND SERVICE LINES SHALL BE SUBJECTED TO EITHER AN INFILTRATION TEST OR AIR TEST, AND APPLICABLE DEFLECTION TEST BY THE CONTRACTOR. ALLOWABLE INFILTRATION SHALL NOT EXCEED 100 GALLONS PER INCH DIAMETER OF PIPE PER MILE PER DAY. THE CONTRACTOR SHALL COORDINATE ALL TESTING SO THAT IT CAN BE WITNESSED BY THE MUNICIPAL ENGINEER, MUNICIPAL PUBLIC WORKS DEPARTMENT AND SANITARY DISTRICT AS APPROPRIATE. TESTING PROCEDURES SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN CONSTRUCTION, SECTION 31-1. IN ADDITION, VACUUM TESTING OF A MANHOLE SHALL BE REQUIRED PER ASTM C-1244.
33.	THE MAIN LINE SANITARY SEWER SHALL BE TELEVIEWED PRIOR TO ACCEPTANCE AND A VIDEO TAPE SHALL BE PROVIDED TO THE MUNICIPALITY. ALL NECESSARY CORRECTIVE WORK SHALL BE PERFORMED BY THE CONTRACTOR WITHOUT DELAY. COST FOR TELEVIEWING AND FURNISHING VIDEO TAPE AND CORRECTIVE WORK SHALL BE INCIDENTAL TO THE CONTRACT (MERGED INTO UNIT PRICE OF THE SEWER PIPE).
34.	ALL WATER MAINS SHALL BE SUBJECTED TO A PRESSURE TEST BY THE CONTRACTOR. HYDROSTATIC PRESSURE TEST AND LEAKAGE SHALL BE BASED ON 150 PSI FOR 2 HOURS. WATER MAINS SHALL BE CHLORINATED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
35.	THE UNDERGROUND CONTRACTOR SHALL CONSIDER INCIDENTAL TO THE CONTRACT ANY CHLORINATION AND TESTING OF EXISTING WATER MAIN WHERE CONNECTIONS TO AND INCLUSION OF SUCH MAINS IS INDICATED ON THE DRAWINGS. IN THE EVENT THAT THE PRESSURE TESTS REVEAL EXISTING MAINS FAIL, AND SUCH FAILURES ARE ATTRIBUTABLE TO DEFECTIVE ORIGINAL WORKMANSHIP AND MATERIAL, THEN THE CONTRACTOR SHALL BE ENTITLED TO ADDITIONAL PAYMENT FOR CORRECTING THE DEFICIENCIES.
36.	THE CONTRACTOR SHALL MAINTAIN A LEGIBLE RECORD ON A SET OF CONSTRUCTION PLANS INFORMATION CONCERNING ALL MANHOLES, WYES AND SERVICES, VALVE BOXES, CURB BOXES, ETC. SUCH THAT THEY CAN BE LOCATED IN THE FIELD IN A MANNER ACCEPTABLE TO THE APPLICABLE GOVERNMENTAL AGENCY. FINAL CONTRACT PAYMENT SHALL NOT COME DUE UNTIL THIS INFORMATION IS RECEIVED BY THE ENGINEER.
37.	ALL CATCH BASINS, SUMPS, DETENTION BASINS AND OTHER AREAS ACCUMULATING SEDIMENT ARE TO BE CLEANED AT THE END OF THE PROJECT PRIOR TO FINAL ACCEPTANCE. CLEANING MAY ALSO BE REQUIRED DURING THE COURSE OF THE CONSTRUCTION OF THE PROJECT IF IT IS DETERMINED THAT THE SILT AND DEBRIS TRAPS ARE NOT FUNCTIONING PROPERLY OR EXCESS DEBRIS HAS COLLECTED.
38.	IT SHALL BE THE RESPONSIBILITY OF THE UNDERGROUND CONTRACTOR TO REMOVE FROM THE SITE ANY AND ALL MATERIALS AND DEBRIS WHICH RESULT FROM HIS CONSTRUCTION OPERATIONS AT NO ADDITIONAL EXPENSE TO THE OWNER.

PAVING, CURBS & WALKS	
1.	WORK UNDER THIS SECTION SHALL INCLUDE FINAL SUBGRADE SHAPING AND PREPARATION; FORMING; JOINTING, PLACEMENT OF ROADWAY AND PAVEMENT BASE COURSE MATERIALS AND SUBSEQUENT BINDER AND/OR SURFACE COURSES; PLACEMENT, FINISHING AND CURING OF CONCRETE; FINAL CLEAN-UP; AND ALL RELATED WORK.
2.	ALL PAVING, SIDEWALK, AND CURB AND GUTTER WORK SHALL BE DONE IN ACCORDANCE WITH THE I.D.O.T. STANDARD SPECIFICATIONS AND PER THE VILLAGE OF MUNDELEIN CONSTRUCTION STANDARDS AND DETAILS.
3.	PAVEMENT SUBGRADE AND BASE COURSE SHALL BE PROOF-ROLLED AND WITNESSED BY THE VILLAGE ENGINEER PRIOR TO PLACEMENTS OF THE AGGREGATE BASE AND HOT-MIX ASPHALT BINDER COURSE.
4.	SUBGRADE FOR PROPOSED PAVEMENT SHALL BE FINISHED BY THE EXCAVATION CONTRACTOR TO WITHIN 0.1 FOOT, PLUS OR MINUS, OF PLAN ELEVATION. THE PAVING CONTRACTOR SHALL SATISFY HIMSELF THAT THE SUBGRADE HAS BEEN PROPERLY PREPARED AND THAT THE FINISH TOP OF SUBGRADE ELEVATION HAS BEEN GRADED WITHIN TOLERANCES ALLOWED IN THESE SPECIFICATIONS. UNLESS THE PAVING 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. PRIOR TO PLACEMENT OF PAVEMENT BASE MATERIALS, THE PAVING CONTRACTOR SHALL FINE GRADE THE SUBGRADE SO AS TO INSURE THE PROPER THICKNESS OF PAVEMENT COURSES, NO CLAIMS FOR EXCESS TONNAGE OF BASE MATERIALS DUE TO IMPROPER SUBGRADE PREPARATION WILL BE HONORED.
5.	THE PROPOSED PAVEMENT SHALL CONSIST OF THE SUB-BASE COURSE, BASE COURSE, HOT-MIX ASPHALT BINDER COURSE, AND HOT-MIX ASPHALT SURFACE COURSE, OF THE THICKNESS AND MATERIALS AS SPECIFIED ON THE CONSTRUCTION PLANS. A PRIME COAT OF THE TYPE AND AT THE RATE SPECIFIED ON THE CONSTRUCTION PLANS SHALL BE APPLIED TO THE SUB-BASE COURSE AND BETWEEN HMA BINDER AND HMA SURFACE COURSES, UNLESS SHOWN AS A BID ITEM. PRIME COAT SHALL BE CONSIDERED AS INCIDENTAL TO THE COST OF THE CONTRACT. ALL PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE I.D.O.T. STANDARD SPECIFICATIONS.
6.	THE MAXIMUM SIZED AGGREGATE FOR THE HOT-MIX ASPHALT SURFACE COURSE MIXTURE SHALL BE 3/8 INCH. THE HOT-MIX ASPHALT BINDER COURSE SHALL BE AS SPECIFIED IN ARTICLE 1030.04 OF THE I.D.O.T. STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL SUBMIT A HOT-MIX ASPHALT DESIGN TO THE ENGINEER PRIOR TO THE INSTALLATION OF THE HOT-MIX ASPHALT.
7.	HOT-MIX ASPHALT BINDER COURSE SHALL BE PLACED ONLY WHEN THE AMBIENT AIR TEMPERATURE IS AT LEAST 40 DEGREES FAHRENHEIT AND THE FORECAST CALLS FOR RISING TEMPERATURES. HOT-MIX ASPHALT SURFACE COURSE SHALL BE PLACED ONLY WHEN THE AMBIENT AIR TEMPERATURE IS AT LEAST 45 DEGREES FAHRENHEIT AND THE FORECAST CALLS FOR RISING TEMPERATURES. NO ASPHALT WORK SHALL BE ALLOWED BETWEEN NOVEMBER 1ST AND APRIL 1ST WITHOUT PERMISSION FROM THE VILLAGE ENGINEER.
8.	AFTER THE INSTALLATION OF THE BASE COURSE, ALL TRAFFIC SHALL BE KEPT OFF THE BASE UNTIL THE BINDER COURSE IS LAID. AFTER INSTALLATION OF THE BINDER COURSE, AND UPON THE COMPLETION OF INSPECTION OF SAME AND APPROVAL BY THE VILLAGE AND OWNER, THE PAVEMENT SHALL BE CLEANED, A TACK COAT PROVIDED AND THE SURFACE COURSE PLACED. ALL DAMAGED AREAS IN THE BINDER, BASE, OR CURB AND GUTTER SHALL BE REPAIRED TO

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REVIEWED: BDU
DESIGNED: SSS
DRAFTED: SSS



DEMOLITION NOTES

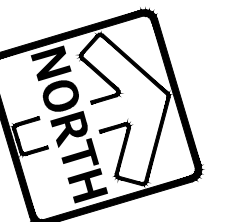
- CONTRACTOR SHALL CONTACT 811 PRIOR TO CONSTRUCTION AND NOTIFY ENGINEERING OF ANY CONFLICTS WITH THE PROPOSED IMPROVEMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION, REMOVAL AND DISPOSAL OF ALL STRUCTURES, FOUNDATIONS, SIDEWALKS, PAVEMENT, DRIVES, DRAINAGE STRUCTURES, UTILITIES, BRUSH/TREE CLEARING ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THESE PLANS CAN BE CONSTRUCTED. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. ALL MATERIAL REMOVED SHALL BE DISPOSED OF IN AN APPROVED LOCATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
- CONSTRUCTION ENTRANCE AND SILT FENCE SHALL BE INSTALLED PRIOR TO DEMOLITION.
- CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING FOR ALL FEES AND CHARGES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ANY DRAIN TILES PRIOR TO CONSTRUCTION.
- ALL EXISTING INFORMATION AND EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR LOCATION OF EXISTING UTILITIES.
- ALL UTILITIES SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY OR AGENCY.
- CONTRACTOR SHALL SECURE THE SITE FROM THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, AND/OR OTHER APPROVED PRACTICES.
- ACCESS SHALL BE MAINTAINED FOR SURROUNDING PROPERTIES AT ALL TIMES DURING CONSTRUCTION.
- PRIOR TO DEMOLITION OCCURRING, ALL SPECIFIED EROSION CONTROL PRACTICES SHALL BE INSTALLED.
- SHOULD REMOVAL AND/OR RELOCATION ACTIVITIES DAMAGE FEATURES INDICATED TO REMAIN, THE CONTRACTOR SHALL PROVIDE NEW MATERIALS IN ACCORDANCE WITH THE PLAN DOCUMENTS.
- CONTRACTOR SHALL SAW-CUT (FULL DEPTH) ALL EXISTING HARD SURFACES WHERE A PORTION OF THE HARD SURFACE SHALL REMAIN AND OTHER BE REMOVED. IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IT'S REMOVAL AND REPAIR.
- CONTRACTOR SHALL MAINTAIN AND KEEP CLEAN ALL EXISTING ROADS, SIDEWALKS, WALKING PATHS, AND SITE ACCESS TO ENSURE THE SAFETY OF THE SURROUNDS PUBLIC AND BUSINESSES.

NOTE:
EXISTING TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS AS PREPARED BY PINNACLE ENGINEERING GROUP, DATED OCTOBER 3, 2024. CONTRACTOR SHALL FIELD CHECK EXISTING HORIZONTAL AND VERTICAL SITE FEATURES AND CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION.

TREE REMOVAL AREA = 1.203 AC
(+52,417.1 SF)

DEMOLITION LEGEND

- FULL DEPTH PAVEMENT REMOVAL
- TREE / BRUSH / VEGETATION REMOVAL
- PIPE / UTILITY REMOVAL
- SITE FEATURE TO BE REMOVED
- SILT FENCE
- TREE PROTECTION FENCE
- SAWCUT PAVEMENT FULL DEPTH
- TREE REMOVAL
- INLET PROTECTION



GRAPHICAL SCALE (FEET)

0 1" = 30' 60'

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28884 N. ILLINOIS ROUTE 83

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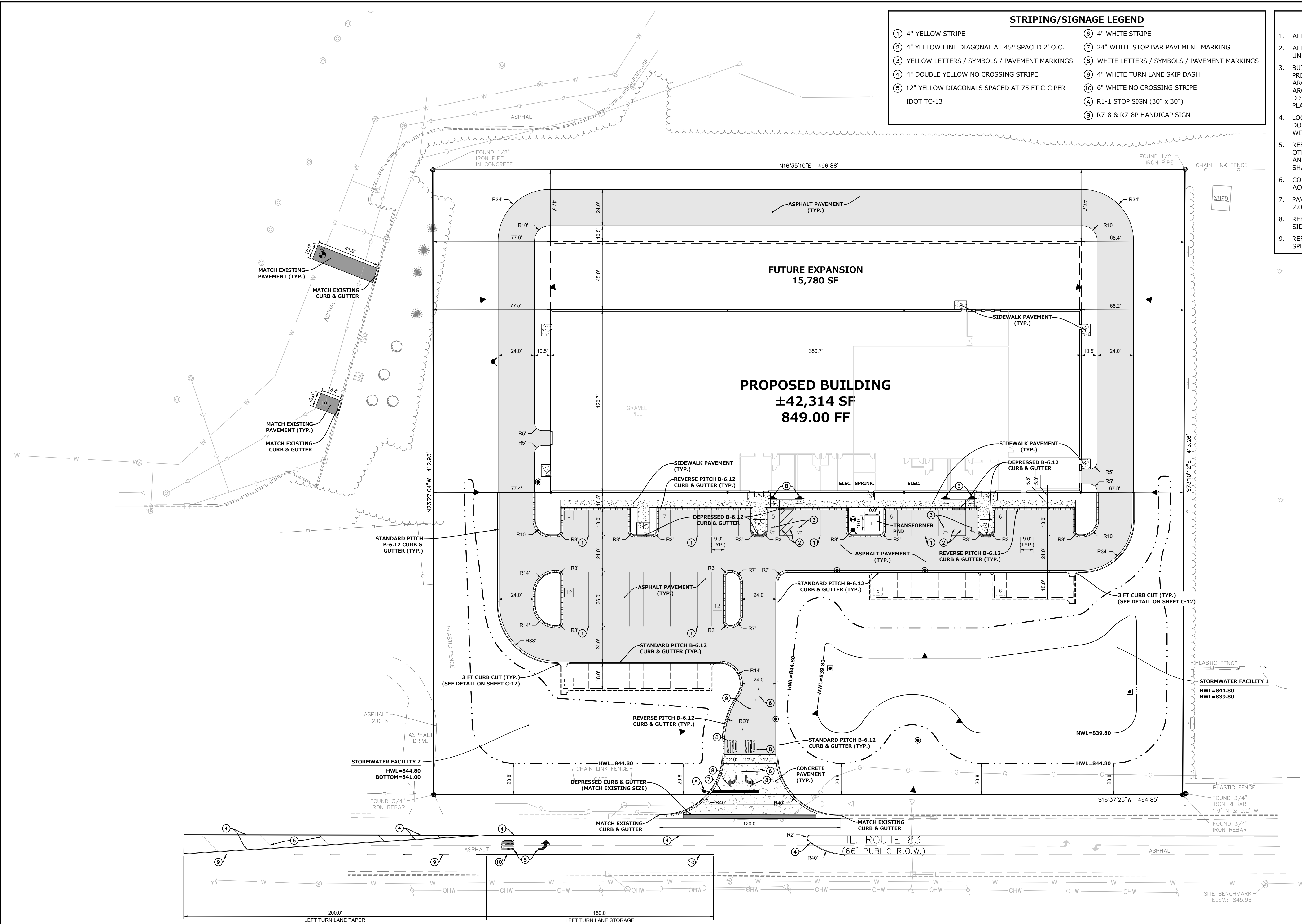
EXISTING CONDITIONS & DEMOLITION PLAN

SHEET
C-3
OF
C-12

PEJ JOB NO. 5897.00-IL
BDJ
REG. PM
START DATE 10/03/24
SCALE 1" = 30'

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1/10/2025 8:39 AM - Z:\Projects\2024\1887-00-IL\600 - CAD\FINAL\SITE\TC-4 SITE DIMENSIONAL & PAVING PLAN.dwg
DESIGNED: SSS
REVIEWED: BDI
DRAFTED: SSS

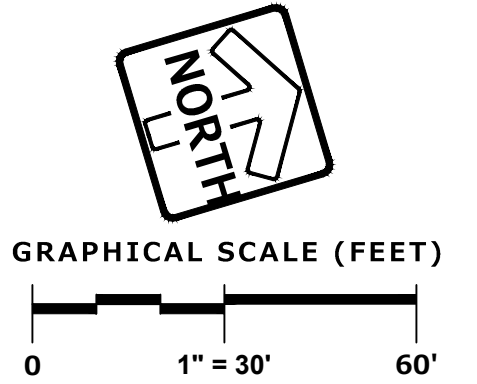


STRIPING/SIGNAGE LEGEND	
① 4" YELLOW STRIPE	⑥ 4" WHITE STRIPE
② 4" YELLOW LINE DIAGONAL AT 45° SPACED 2' O.C.	⑦ 24" WHITE STOP BAR PAVEMENT MARKING
③ YELLOW LETTERS / SYMBOLS / PAVEMENT MARKINGS	⑧ WHITE LETTERS / SYMBOLS / PAVEMENT MARKINGS
④ 4" DOUBLE YELLOW NO CROSSING STRIPE	⑨ 4" WHITE TURN LANE SKIP DASH
⑤ 12" YELLOW DIAGONALS SPACED AT 75 FT C-C PER IDOT TC-13	⑩ 6" WHITE NO CROSSING STRIPE
	Ⓐ R1-1 STOP SIGN (30" x 30")
	Ⓑ R7-8 & R7-8P HANDICAP SIGN

- SITE DIMENSIONAL AND PAVING NOTES**
- ALL PROPOSED CURB AND GUTTER SHALL BE B6.12 UNLESS OTHERWISE NOTED.
 - ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB OR BUILDING FACE UNLESS OTHERWISE NOTED.
 - BUILDING DIMENSIONS, GRADING, PARKING, AND UTILITY LAYOUT HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST AND CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION. IN CASE OF DISCREPANCIES BETWEEN ARCHITECTURAL PLANS AND CIVIL PLANS, THE CIVIL PLANS SHALL TAKE PRECEDENCE.
 - LOCATION OF PRIVATE SIDEWALKS SHALL BE COORDINATED WITH PROPOSED DOORWAYS. CONTRACTOR TO VERIFY ACTUAL BUILDING PLAN LOCATIONS WITH ARCHITECT/DEVELOPER PRIOR TO CONSTRUCTING THE SIDEWALKS.
 - REBAR / TIEBARS SHALL BE USED IN ALL LOCATIONS WHERE CONCRETE ABUTS OTHER CONCRETE FEATURES (ie. SIDEWALK ADJACENT TO FOUNDATION WALL AND SIDEWALK ADJACENT TO CURB & GUTTER). TIEBAR SIZE AND SPACING SHALL BE PER IDOT SPECIFICATIONS.
 - CONTRACTOR SHALL CONSTRUCT ALL HANDICAP ACCESSIBLE ROUTES IN ACCORDANCE WITH LOCAL AND STATE ADA REQUIREMENTS.
 - PAVEMENT SLOPES THROUGH HANDICAP ACCESSIBLE PARKING AREAS SHALL BE 2.00% MAXIMUM IN ANY DIRECTION.
 - REFER TO CONSTRUCTION DETAILS AND GRADING ENLARGEMENTS FOR SIDEWALK RAMPS AND HANDICAP STRIPING.
 - REFER TO PHOTOMETRICS PLAN (BY OTHERS) FOR LIGHT STANDARDS AND SPECIFICATIONS.

SITE DATA TABLE	
LOT AREA:	4.702 ACRES (204,838.8 SF)
BUILDING	
BUILDING AREA:	±42,314 SF
FUTURE BUILDING AREA:	15,780 SF
PARKING	
PARKING PROVIDED:	53 STALLS INCLUDING 4 ADA
FUTURE PARKING:	25 STALLS
STORMWATER FACILITIES	
STORMWATER FACILITY 1	
TOP OF BERM	= 845.80
EMERGENCY SPILLWAY ELEVATION	= 845.00
HWL	= 844.80
NWL	= 839.80
BOTTOM	= 839.70
PROVIDED DETENTION	= 1.872 AC-FT
STORMWATER FACILITY 2	
TOP OF BERM	= 846.00 (MIN.)
HWL	= 844.80
BOTTOM	= 841.00
PROVIDED DETENTION	= 0.397 AC-FT
STORMWATER DETENTION AND VOLUME CONTROL	
TOTAL REQUIRED DETENTION	= 2.224 AC-FT
TOTAL PROVIDED DETENTION	= 2.268 AC-FT
TOTAL VOLUME CONTROL REQUIRED	= 0.121 AC-FT
TOTAL VOLUME CONTROL PROVIDED	= 0.140 AC-FT
OUTLET CONTROL STRUCTURE (STM-2)	
RIM	= 846.40
INTERNAL WEIR WALL ELEVATION	= 844.80
100-YEAR ORIFICE ELEVATION	= 842.10
ORIFICE SIZE	= 3.20 INCHES
2-YEAR ORIFICE ELEVATION	= 839.00
ORIFICE SIZE	= 2.00 INCHES

LEGEND	
	CONCRETE PAVEMENT
8"	PORTLAND CEMENT CONCRETE
6"	COMP. CA-6 AGGREGATE BASE COURSE, TYPE B
	SIDEWALK
5"	PORTLAND CEMENT CONCRETE
4"	COMP. CA-6 AGGREGATE BASE COURSE, TYPE B
	ASPHALT PAVEMENT
1.5"	BIT. SURFACE COURSE, HMA, MIX D, N50, 9.5mm NOMINAL SIZE
2.5"	BIT. BINDER COURSE, HMA, IL-19, N50, 19.0mm NOMINAL SIZE
0.35 GAL/SY	BITUMINOUS PRIME COAT (MC-30)
10"	COMP. CA-6 AGGREGATE SUBBASE, TYPE B
	MATCH EXISTING ASPHALT PAVEMENT SECTION
TBD	
	B-6.12 CURB & GUTTER (UNLESS NOTED OTHERWISE)
	REVERSE PITCH B-6.12 CURB & GUTTER
	DEPRESSED PITCH B-6.12 CURB & GUTTER



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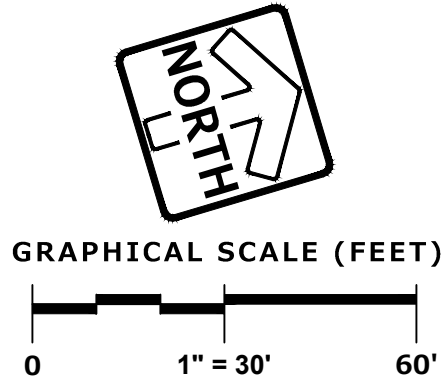
SITE DIMENSIONAL & PAVING PLAN

PEB JOB No. 1887-00-IL
REG. NO. BDI
START DATE 10/03/24
SCALE 1" = 30'

SHEET
C-4
OF
C-12

CROSS SECTION (E-E) N.T.S.

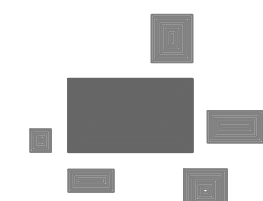
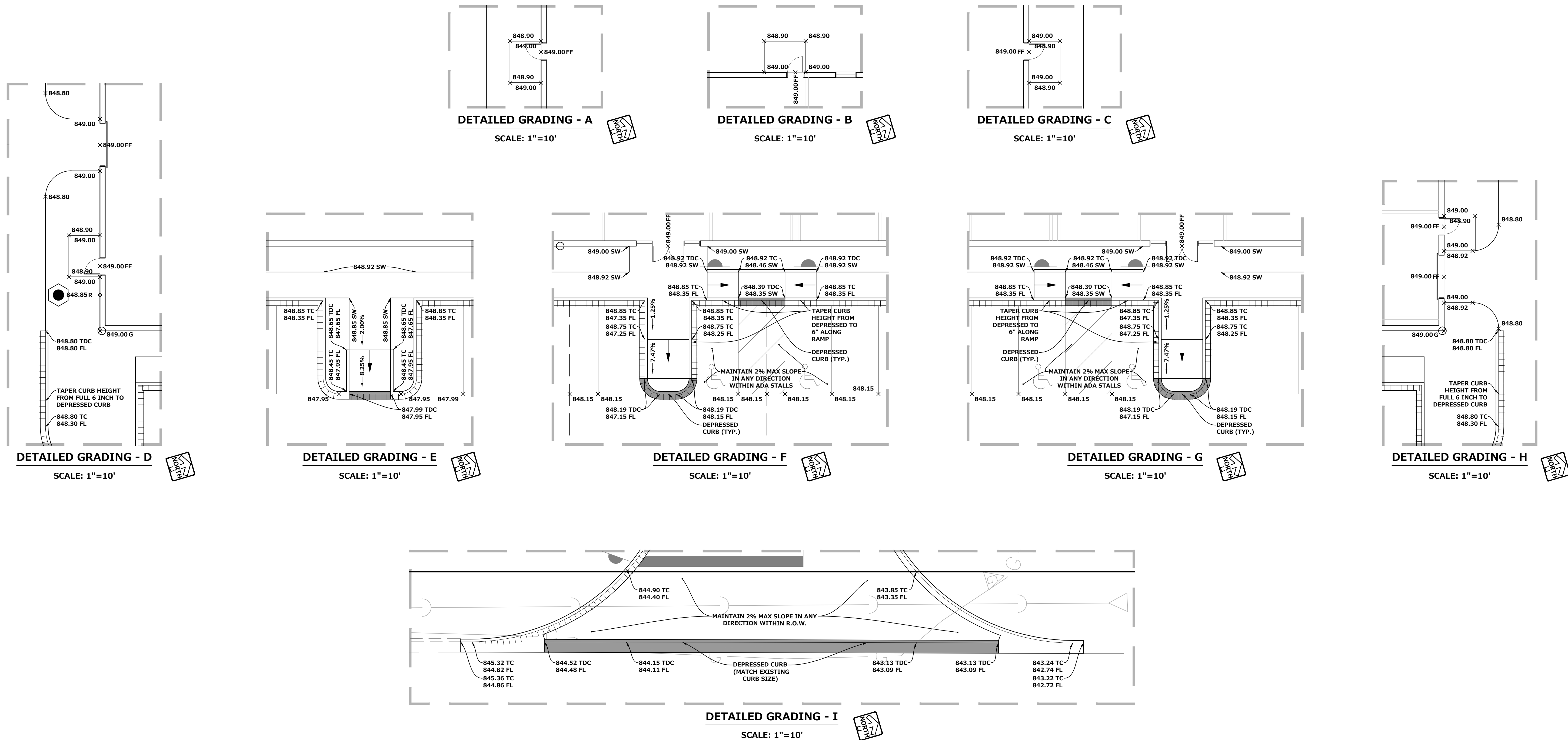
- ## ELEVATIONS
1. CONTOURS ARE SHOWN AS FINISHED GRADE.
 2. SPOT ELEVATIONS ARE SHOWN AS FLOW LINE ALONG THE CURB AND GUTTER AND FINISHED GRADE ELSE WHERE UNLESS SPECIFIED AS BELOW:
- T/W = TOP OF RETAINING WALL
B/W = BOTTOM OF RETAINING WALL
TC = TOP OF CURB
TDC = TOP OF DEPRESSED CURB
TS = TOP OF SIDEWALK
R = STRUCTURE RIM GRADE



ELEVATIONS

1. CONTOURS ARE SHOWN AS FINISHED GRADE.
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T/W = TOP OF RETAINING WALL
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FL = FLOW LINE
R = STRUCTURE RIM GRADE



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DETAILED GRADING PLAN

PEG JOB No. 5897.00-IL

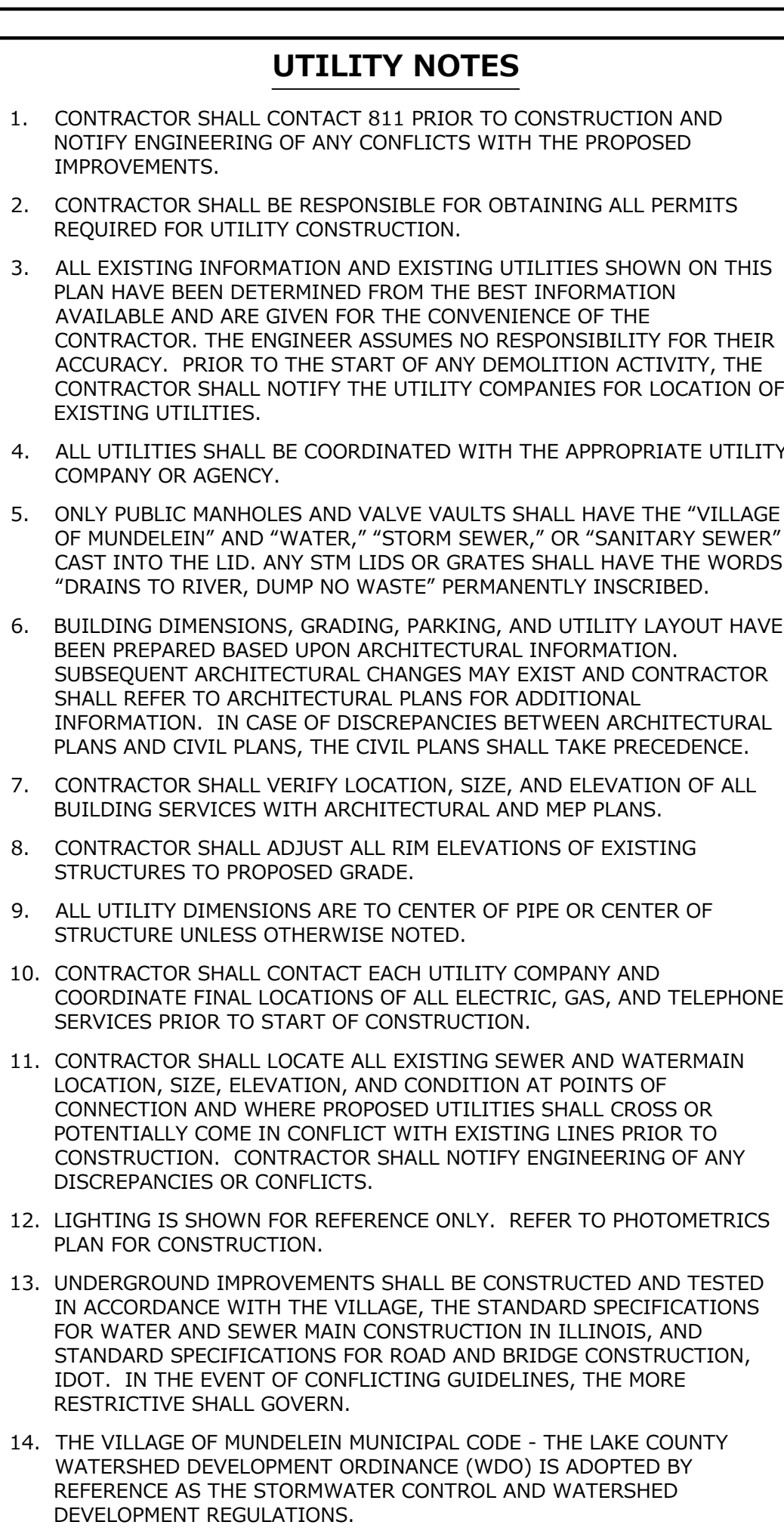
PEG PM BDJSTART DATE 10/03/24

SCALE 1" = 10'

SHEET
C-6
OF
C-12

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BOLT 2.0 - DETAILED GRADING PLAN



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DESIGNED: SSS
REVIEWED: BDI
DRAWN: SSS
CHECKED: SSS
DATE: 10/03/24
SCALE: 1" = 30'

EROSION CONTROL LEGEND

SEED & BLANKET

NORTH AMERICAN GREEN S-75 BLANKET
(SEE LANDSCAPE PLAN FOR SEED MIX)

SEED & BLANKET

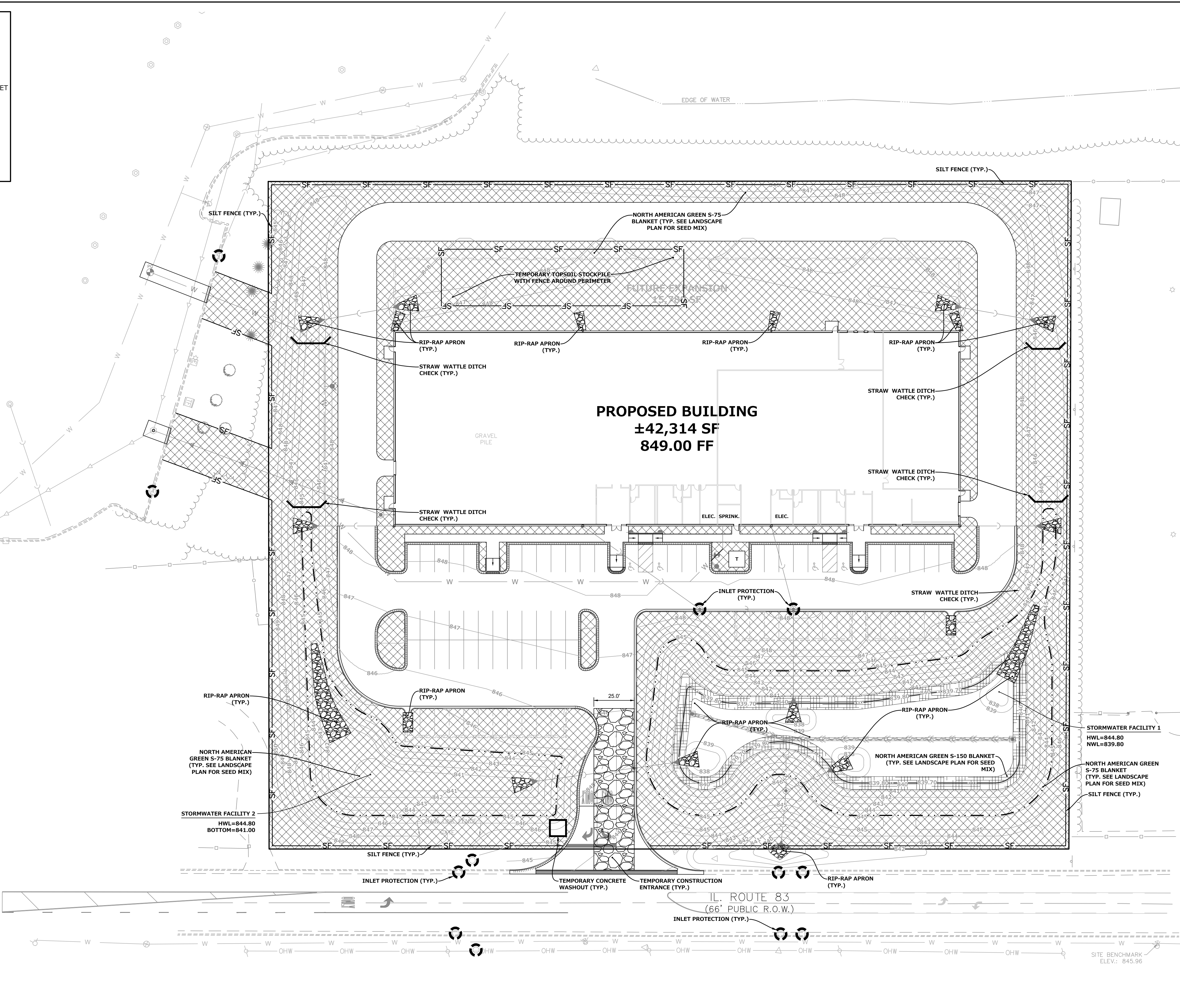
NORTH AMERICAN GREEN SC-150 BLANKET
(SEE LANDSCAPE PLAN FOR SEED MIX)

RIP-RAP APRON

DITCH CHECK

INLET PROTECTION

SILT FENCE



- SITE STABILIZATION NOTES
1.

AN INITIAL SEDIMENTATION AND EROSION CONTROL INSPECTION IS REQUIRED PRIOR TO STARTING CONSTRUCTION. CONTRACTOR SHALL CONTACT THE BUILDING DEPARTMENT AT (847) 359-9042 TO SCHEDULE THIS INSPECTION; THIS NOTIFICATION SHALL BE AT LEAST 24 HOURS IN ADVANCE OF CONSTRUCTION.
2.

THE NOTICE OF INTENT (NOI) AND NPDES PERMIT SHALL BE OBTAINED PRIOR TO ANY EARTH MOVING ACTIVITIES.
3.

ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL, LATEST EDITION.
4.

ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CONSTRUCTION OR DISTURBANCE OF THE SITE. THE MEASURES MAY HAVE TO BE ADJUSTED TO MEET FIELD CONDITIONS DURING CONSTRUCTION. ANY MEASURES, IN ADDITION TO THOSE OUTLINED IN THE PLANS AND WHICH ARE DEEMED NECESSARY BY THE CITY, SHALL BE IMPLEMENTED IMMEDIATELY BY THE DEVELOPER. ALL TEMPORARY EROSION CONTROL MEASURES NECESSARY TO MEET THE REQUIREMENTS OF THE VILLAGE OF MUNDELEIN STORMWATER AND FLOOD PLAIN ORDINANCE SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SEDIMENT AND EROSION AND CONTROL MEASURES ARE OPERATIONAL.
5.

THE VILLAGE OF MUNDELEIN MUNICIPAL CODE - THE LAKE COUNTY WATERSHED DEVELOPMENT ORDINANCE (WDO) IS ADOPTED BY REFERENCE AS THE STORMWATER CONTROL AND WATERSHED DEVELOPMENT REGULATIONS.
6.

REGULAR INSPECTION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE PROVIDED BY THE DEVELOPER. INSPECTIONS SHOULD OCCUR WEEKLY, AND AFTER ANY RAINFALL GREATER THAN 1/2". ANY NON-FUNCTIONING SEDIMENT CONTROL MEASURES OR DAMAGED DEVICES THAT ARE FOUND DURING INSPECTION SHALL BE REPAIRED OR REPLACED IMMEDIATELY. THE DEVELOPER SHALL BE RESPONSIBLE FOR ANY SEDIMENT WHICH LEAVES THE PROPERTY, AND THE DEVELOPER IS ALSO RESPONSIBLE FOR MAINTENANCE OF ALL SEDIMENT CONTROL MEASURES UNTIL THE SITE IS PERMANENTLY STABILIZED.
7.

ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS SHALL BE MADE ACROSS THE STABILIZED CONSTRUCTION ENTRANCE AND SHALL BE UTILIZED TO PREVENT TRACKING OF DEBRIS, DIRT, AND MUD ONTO ADJACENT STREETS, PARKING LOTS, OR PROPERTIES. ANY DEBRIS, DIRT, OR MUD THAT REACHES AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, OR PARKING AREA SHALL BE PROMPTLY REMOVED (BEFORE THE END OF EACH WORK DAY), AND TRANSPORTED TO A PROPER DISPOSAL AREA.
8.

ALL SEDIMENT MUST BE PREVENTED FROM ENTERING ANY PUBLIC OR PRIVATE STORM DRAINAGE SYSTEM. REUSABLE INLET FILTER BASKETS (FLEXSTORM, CATCHALL, OR EQUIVALENT), SEDIMENT BASINS, AND WATER FILTERING BAGS, SHALL BE PROVIDED AS NEEDED.
9.

ALL DRAINAGE SWALES SHALL BE STABILIZED WITH SPECIFIED EROSION CONTROL BLANKET.
10.

TOPSOIL STOCKPILES SHALL BE LOCATED TO AVOID EROSION OF STOCKPILE ONTO NEIGHBORING PROPERTIES OR INTO RESTORED PROJECT AREAS. STOCKPILES SHALL BE LOCATED SO THAT A DRAINAGE SWALE IS LOCATED BETWEEN THE STOCKPILE AND ANY DOWNSTREAM PROPERTIES AND SHALL NOT BE LOCATED WITHIN ANY DRAINAGEWAYS, FLOOD PLAINS, WETLANDS OR LOCALIZED POOR DRAINAGE AREAS. IF A STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN 3 DAYS, IT MUST BE SEEDED AND BLANKETED TO MINIMIZE SOIL EROSION BY BOTH WIND AND WATER. REFER TO DETAIL IN THE CONSTRUCTION STANDARDS.
11.

THE SURFACE OF STRIPPED AREAS SHALL BE PERMANENTLY OR TEMPORARY PROTECTED FROM SOIL EROSION WITHIN FIFTEEN DAYS AFTER FINAL GRADE IS REACHED. STRIPPED AREAS THAT WILL REMAIN UNDISTURBED FOR MORE THAN FIFTEEN DAYS AFTER INITIAL DISTURBANCE SHALL BE PROTECTED FROM EROSION.
12.

THE DEVELOPER IS RESPONSIBLE FOR OBTAINING A SEPARATE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FROM THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY WHENEVER 1 ACRE OR MORE OF PROPERTY IS DISTURBED. FOR DEVELOPMENTS OVER 1 ACRE, THE DEVELOPER MUST ALSO PREPARE AND MAINTAIN A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AT THE PROJECT SITE, ALONG WITH THE NPDES PERMIT. FOR DEVELOPMENTS LESS THAN 1 ACRE, A SEDIMENT AND EROSION CONTROL PLAN MUST BE MAINTAINED BY THE DEVELOPER.
13.

IF DEWATERING SERVICES ARE USED, OR IF THE VOLUME, VELOCITY, SEDIMENT LOAD, OR PEAK FLOW RATES OF STORMWATER RUNOFF ARE TEMPORARILY INCREASED DURING CONSTRUCTION, ADJACENT PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. DISCHARGES FROM CONSTRUCTION DEWATERING SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT CONTROL MEASURE SUCH AS A SEDIMENT TRAP, A SEDIMENT BASIN, OR ANY OTHER APPROPRIATE MEASURE.
14.

ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL STABILIZATION IS ACHIEVED. TRAPPED SEDIMENT AND OTHER DISTURBED SOILS RESULTING FROM TEMPORARY MEASURES SHALL BE PROPERTY DISPOSED OF PRIOR TO PERMANENT STABILIZATION.

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SITE STABILIZATION PLAN

PEJ JOB NO. 1887.00-IL

PEJ PM BDI

START DATE 10/03/24

SCALE 1" = 30'

SHEET C-8

OF C-12

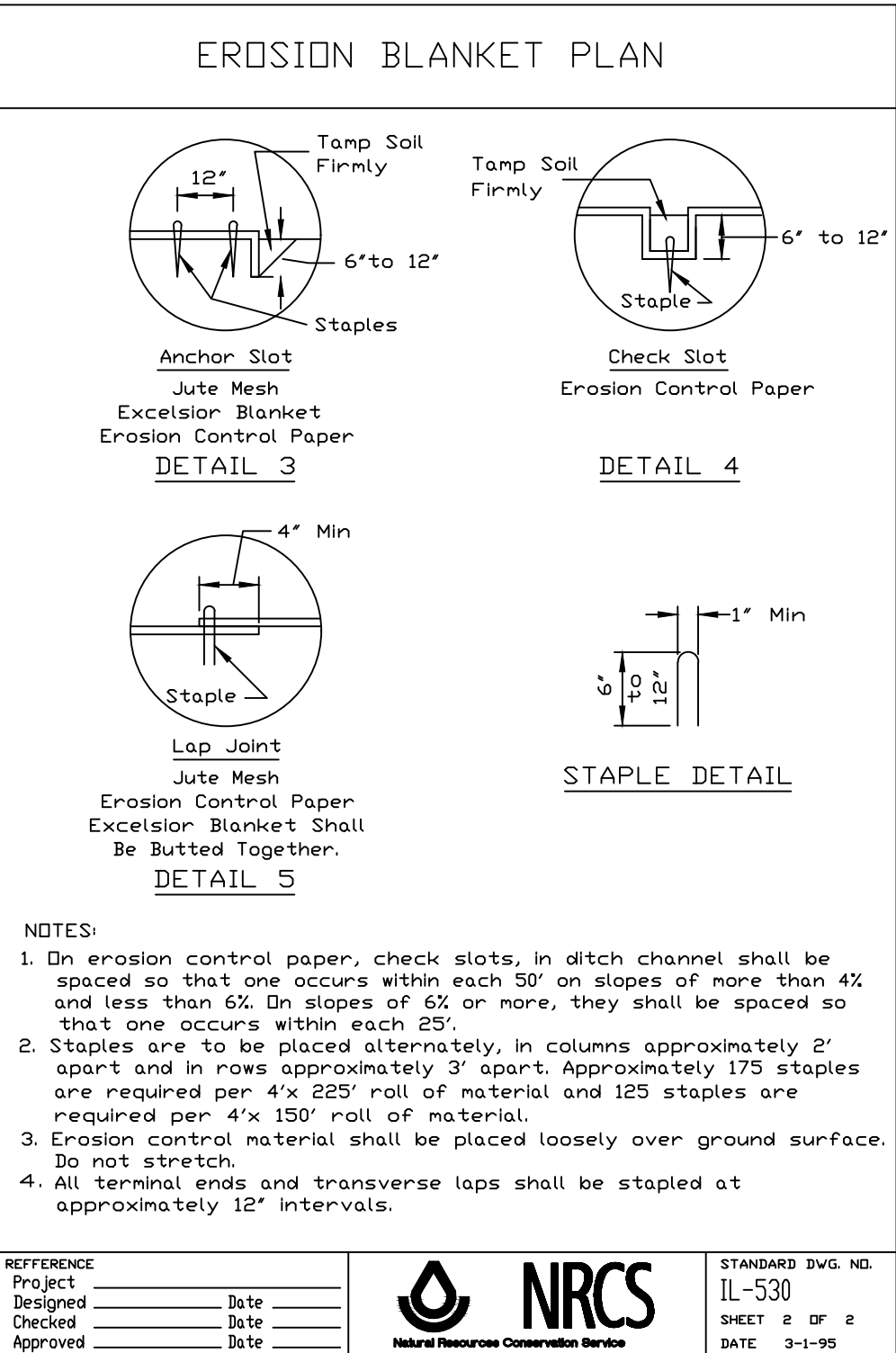
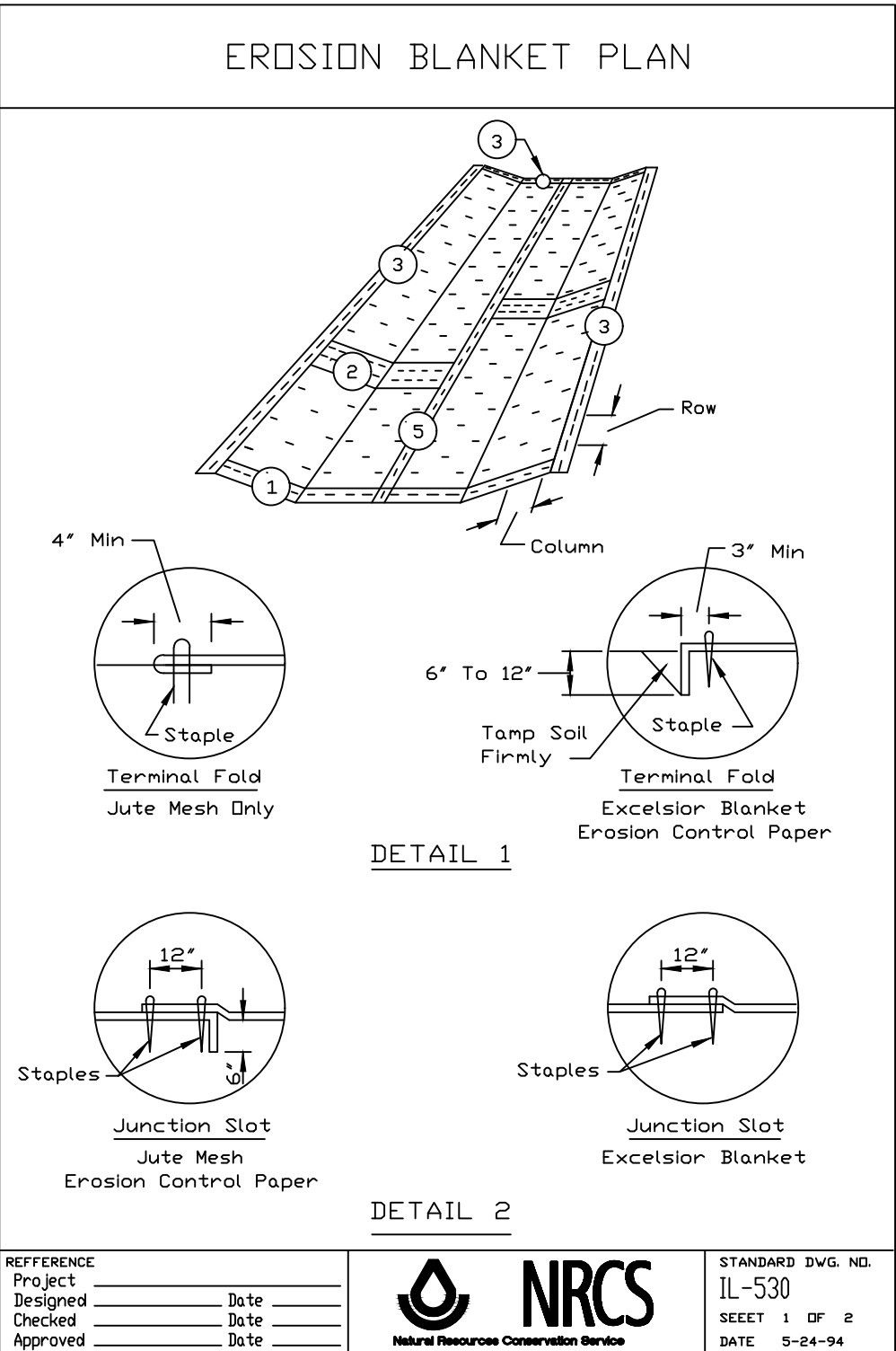
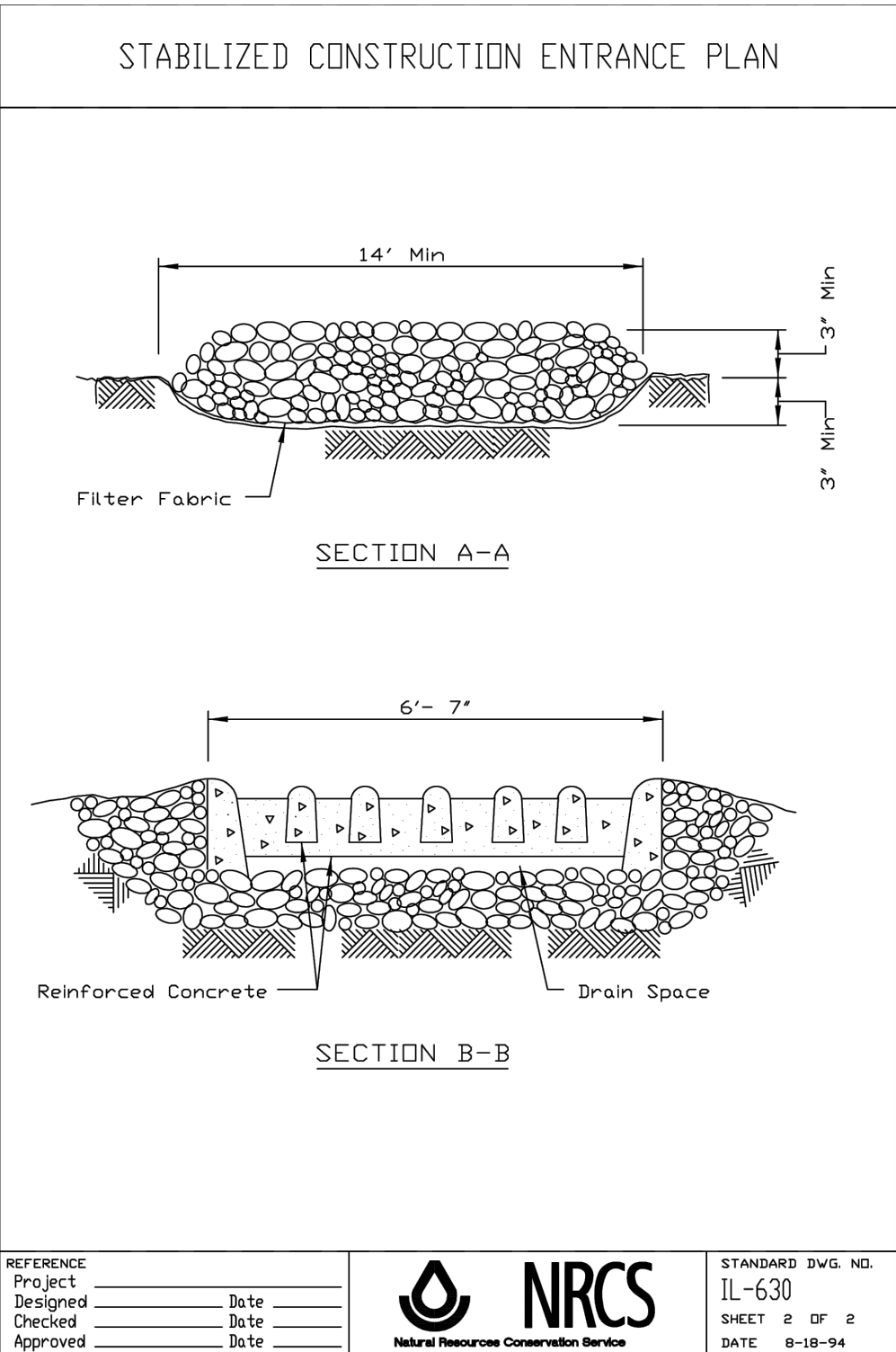
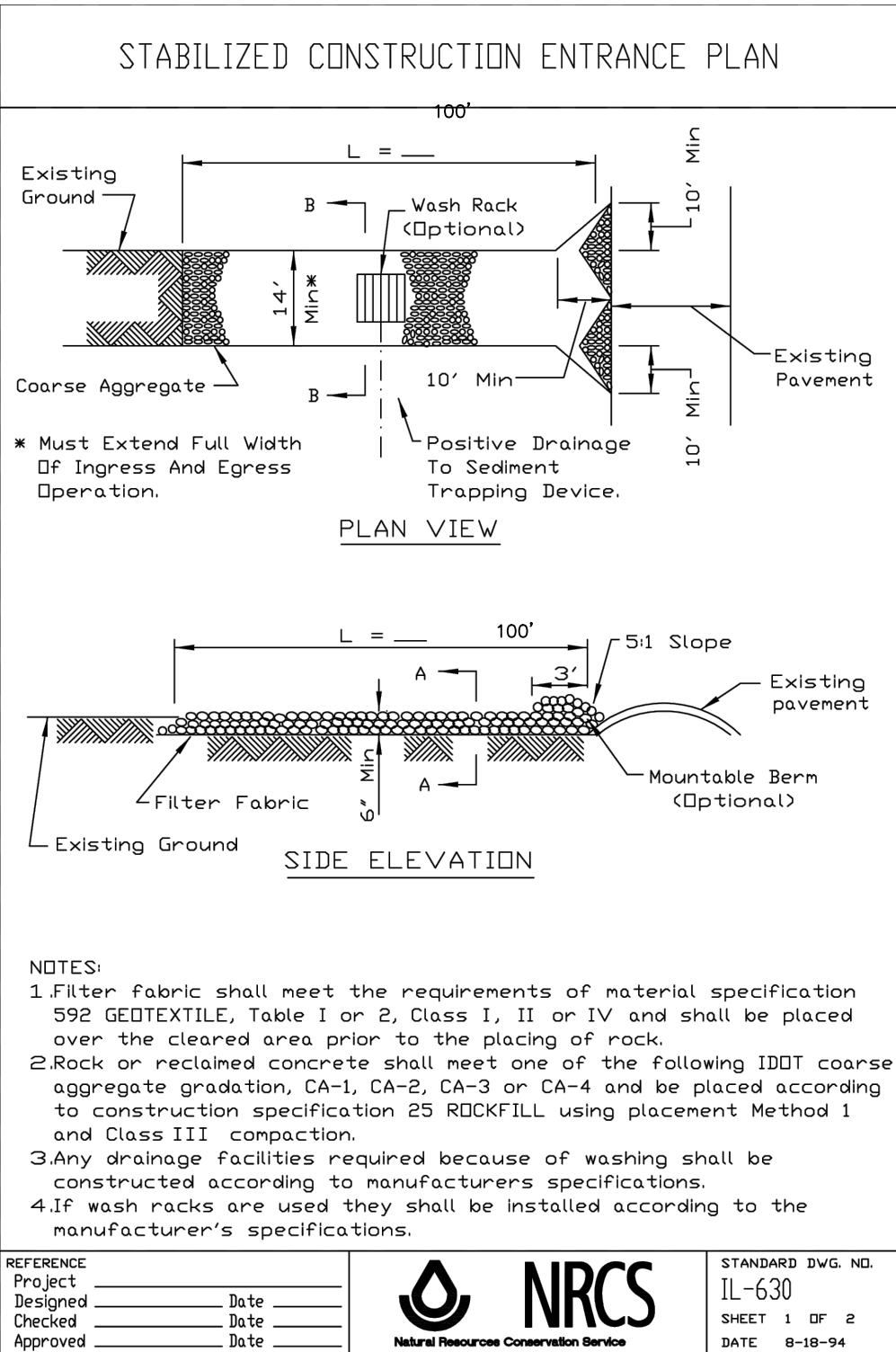
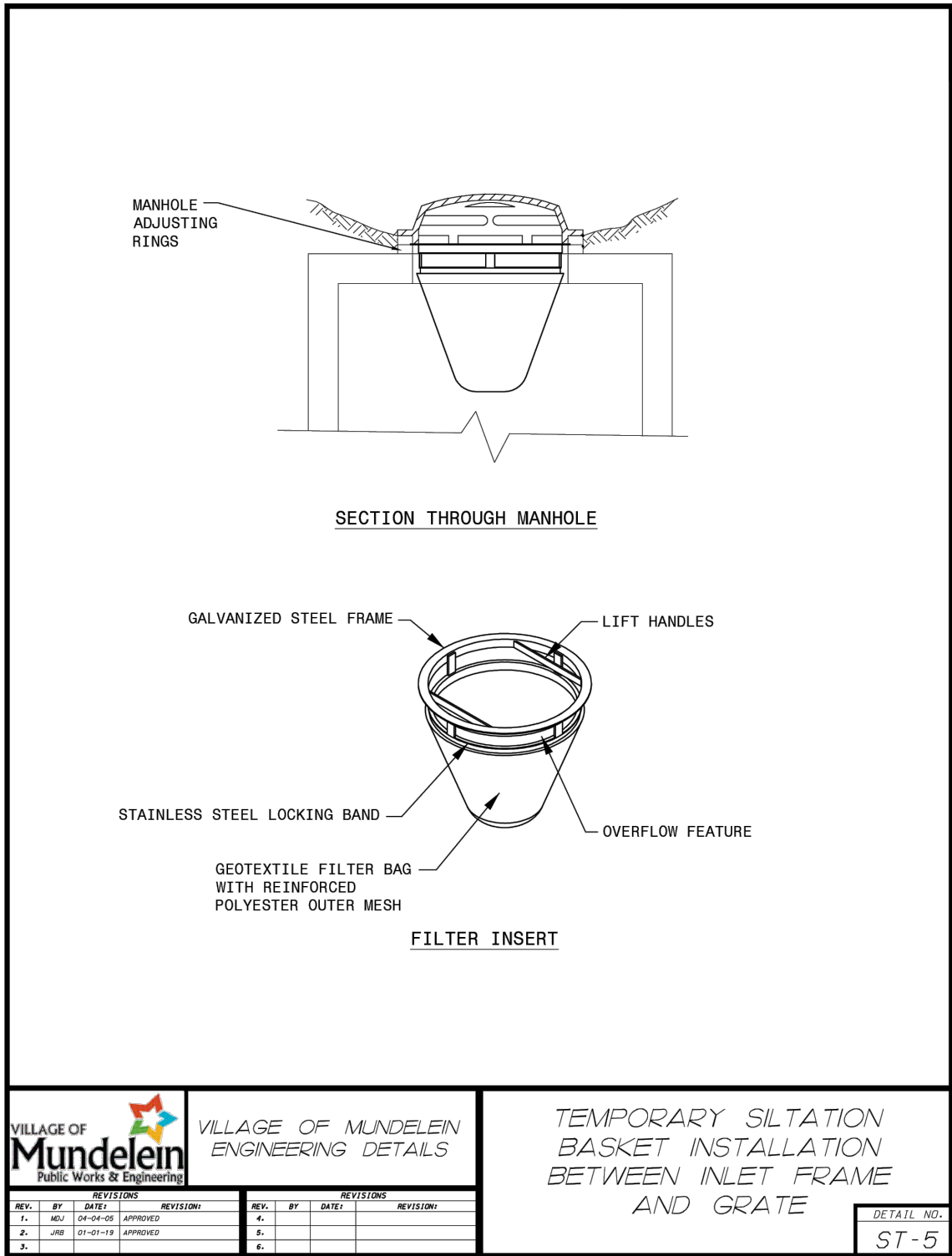
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1/10/2025 8:39 AM - Z:\Projects\2024\8897.00-IL-600 - CAD\FINAL\SHEET\TC-8 - CONSTRUCTION STANDARDS.dwg

DESIGNED: SSS

REVIEWED: BDJ

DRAFTED: SSS



MINIMUM TAILWATER CONDITIONS												
CULVERT DIAMETER	IDOT ROCK GRADATION	VELOCITY 0-5 fps					VELOCITY 5-10* fps					
		L _{apron} (ft.)	W ₁ (ft.)	W ₂ (ft.)	t _{min.} (in.)	t _{bed} (in.) MATERIAL RR-1,2	IDOT ROCK GRADATION	L _{apron} (ft.)	W ₁ (ft.)	W ₂ (ft.)	t _{min.} (in.)	t _{bed} (in.) MATERIAL RR-1,2
12"	RR-3	10'	3'	11'	8"	—	RR-3	12'	3'	13'	8"	—
15"	RR-3	12'	3.75'	13.25'	8"	—	RR-3	14'	3.75'	15.25'	8"	—

PLAN VIEW

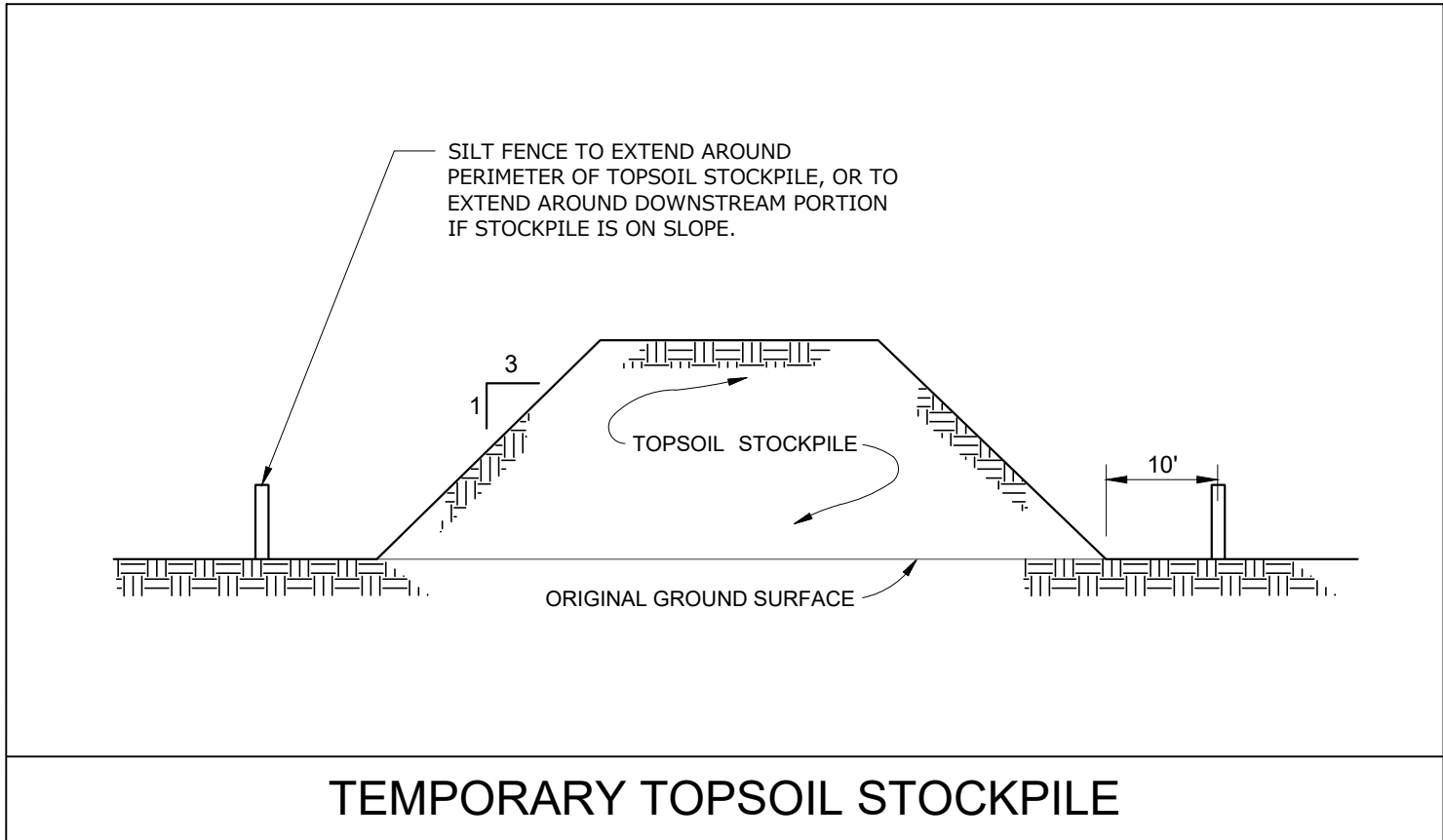
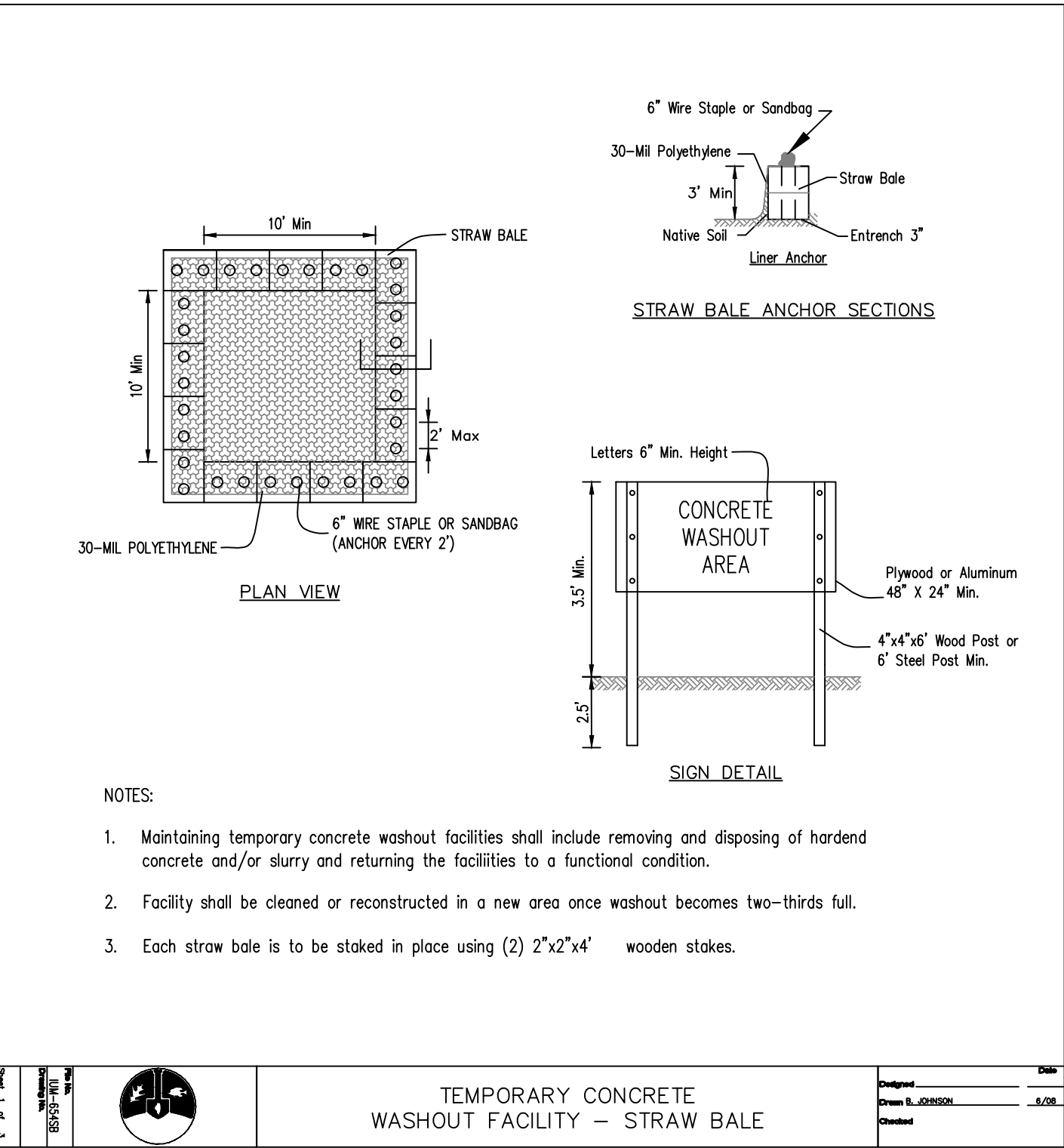
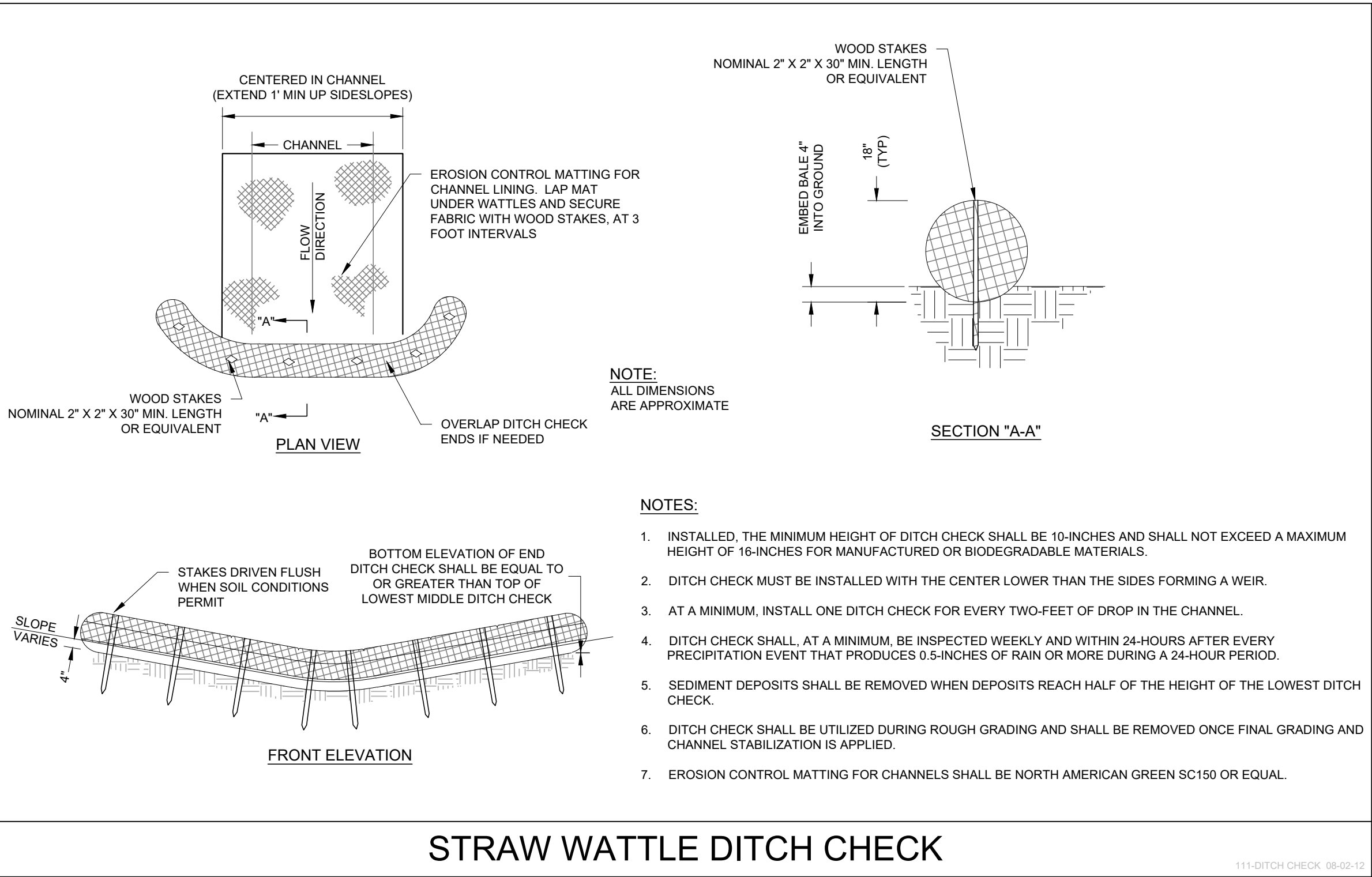
PROFILE VIEW

NOTES:

1. THE FILTER FABRIC SHALL MEET OR EXCEED THE REQUIREMENTS IN MATERIAL SPECIFICATIONS 592 GEOTEXTILE TABLE 1 OR 2, CLASS I, II, OR III.

2. THE ROCK RIPRAP SHALL MEET IDOT REQUIREMENTS AND SPECIFICATIONS.

RIP-RAP AT END SECTIONS



Technical drawing of the Village of Mundelein Sanitary Man-Hole Self Sealing Lid. The drawing includes a top view of the lid with a circular manhole opening, a side view showing the lid's profile, and a detail view of the self-sealing mechanism. The lid is made of cast iron and features a gasket and a locking mechanism. Dimensions are provided in inches and millimeters. The drawing is labeled "VILLAGE OF MUNDELEIN SANITARY MAN-HOLE SELF SEALING LID" and "QUARTER SCALE".

Top View Details:

- Overall diameter: 24" (610mm)
- Manhole opening diameter: 18" (457mm)
- Distance from center to edge of manhole opening: 9" (229mm)
- Distance from center to edge of lid: 12" (305mm)
- Distance from center to edge of locking mechanism: 1" (25mm)
- Distance from center to edge of locking mechanism: 1/2" (13mm)
- Distance from center to edge of locking mechanism: 1/4" (6mm)
- Distance from center to edge of locking mechanism: 1/8" (3mm)
- Distance from center to edge of locking mechanism: 1/16" (1.6mm)
- Distance from center to edge of locking mechanism: 1/32" (0.8mm)
- Distance from center to edge of locking mechanism: 1/64" (0.4mm)
- Distance from center to edge of locking mechanism: 1/128" (0.2mm)
- Distance from center to edge of locking mechanism: 1/256" (0.1mm)
- Distance from center to edge of locking mechanism: 1/512" (0.05mm)
- Distance from center to edge of locking mechanism: 1/1024" (0.025mm)
- Distance from center to edge of locking mechanism: 1/2048" (0.0125mm)
- Distance from center to edge of locking mechanism: 1/4096" (0.00625mm)
- Distance from center to edge of locking mechanism: 1/8192" (0.003125mm)
- Distance from center to edge of locking mechanism: 1/16384" (0.0015625mm)
- Distance from center to edge of locking mechanism: 1/32768" (0.00078125mm)
- Distance from center to edge of locking mechanism: 1/65536" (0.000390625mm)
- Distance from center to edge of locking mechanism: 1/131072" (0.0001953125mm)
- Distance from center to edge of locking mechanism: 1/262144" (0.00009765625mm)
- Distance from center to edge of locking mechanism: 1/524288" (0.000048828125mm)
- Distance from center to edge of locking mechanism: 1/1048576" (0.0000244140625mm)
- Distance from center to edge of locking mechanism: 1/2097152" (0.00001220703125mm)
- Distance from center to edge of locking mechanism: 1/4194304" (0.000006103515625mm)
- Distance from center to edge of locking mechanism: 1/8388608" (0.0000030517578125mm)
- Distance from center to edge of locking mechanism: 1/16777216" (0.00000152587890625mm)
- Distance from center to edge of locking mechanism: 1/33554432" (0.000000762939453125mm)
- Distance from center to edge of locking mechanism: 1/67108864" (0.0000003814697265625mm)
- Distance from center to edge of locking mechanism: 1/134217728" (0.00000019073486328125mm)
- Distance from center to edge of locking mechanism: 1/268435456" (0.000000095367431640625mm)
- Distance from center to edge of locking mechanism: 1/536870912" (0.0000000476837158203125mm)
- Distance from center to edge of locking mechanism: 1/1073741824" (0.00000002384185791015625mm)
- Distance from center to edge of locking mechanism: 1/2147483648" (0.000000011920928955078125mm)
- Distance from center to edge of locking mechanism: 1/4294967296" (0.0000000059604644775390625mm)
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96" ϕ 8" ϕ 2" 12" 12"

NO EPOXY COATED DOMES
DRILL & GROUT ϕ 16" O.C.

THIN REINFORC. 17700-A
FIBRES & LIDS
IMPRINTED "VILLAGE OF
MUNDELEN" & "STORM"

RIM E.L.E. = **\$46.40**

INTERIOR, SPILLWAY
8' 100 YR. W.E.L.
E.L.E. = **\$44.95**

100 YR. EVENT
INV. E.L.E. = **\$35.10**
DIAMETER **3.50"**

8" X 8" TRASH GRATE

54" MIN.

84" MIN. PRECAST
CONCRETE CATCH BASIN
WITH 8" REINFORCED
CONCRETE Baffle WALL

STEPS ϕ 18" O.C.
BOTH SIDES

NO EPOXY COATED BARS ϕ 8"
O.C. VERT & HORIZONTAL

INV = **\$39.00**

OUTLET

INV = **\$39.00**

2 YR. EVENT
INV. E.L.E. = **\$39.00**
DIAMETER **2.00"**

CLUMP
18" MIN.

4" COMPACTED
CA-8

UNDISTURBED EARTH

VILLAGE OF MUNDELEN
Restrictor Structure

REINFORCING DETAILS

RESTRICTOR STRUCTURE

DETAIL NO. **ST-4**

The diagram illustrates a cross-section of a storm sewer trench. At the top, a horizontal line represents the 'FINISHED GRADE'. Below this, a dashed line indicates the 'TRENCH TOP'. The trench itself is a circular structure. The layers are numbered as follows:

- 1**: SELECT TRENCH BACKFILL. This layer is shown on both sides of the trench, above the bedding. It is described as granular material to be used under existing or proposed pavement, curb and gutter, stormbox or within 2' of any existing or proposed curb and gutter or stormbox, shall be mechanically compacted CA-6, CRUSHED CONCRETE OR GRADE #9.
- 2**: PIPE BEDDING & INITIAL TRENCH BACKFILL. This layer is shown directly beneath the pipe. It is described as materials in other locations if approved by the engineer, refer to trench backfill. Special provisions for materials and compaction requirements.
- 3**: UNSUITABLE MATERIALS. This layer is shown on the sides of the trench, below the bedding. It is described as if encountered, shall be removed where directed by the engineer and replaced with suitable and compacted material.
- 4**: TRENCH WIDTH. This layer is shown at the bottom of the trench, below the bedding. It is described as minimum = PIPE O.D. + 12", maximum = PIPE O.D. + 18".

At the bottom of the diagram, there is a note: 'NOTES: 1. ALL CA-6 MATERIAL TO BE TIGHT APPROVED.'

9" HEAVY DUTY FRAME NENAH CATALOG NO. 8-1773 OR 8-1772 MANHOLE FRAME, W/ TYPE G STANDARD FLAT GRATE

OR

EAST JORDAN IRON WORKS CATALOG NO. 1022 FRAME W/ TYPE B2 FLAT BAR GRATE

CUREX PRO-RING[®]
ADJUSTING RINGS (IF NEEDED - 2
MAX. ALLOWED, MAX # APPROVED
ADHESIVE/SEALANT MATERIAL)

PRE-CAST MONOLITHIC
CONCRETE STRUCTURE

24"

APPROVED
ADHESIVE/
SEALANT
MATERIAL

Variable
(6" Min.)

12" Pipe
Manhole

6" MIN.

CA-8 GRAVEL BEDDING

VILLAGE OF Mundelein
Mundelein
Village of Mundelein
ENGINEERING DESIGN

NO.	QTY.	DESCRIPTION	REMARKS
1	1	MANHOLE INLET	
2	1	12" PIPE	
3	1	GRATE	

NO.	QTY.	DESCRIPTION	REMARKS
4	1	GRAVEL BEDDING	
5	1	CONCRETE STRUCTURE	

CURB INLET

DETAIL NO.
SI-1

[illegible][illegible]

The diagram illustrates a cross-section of an underdrain system. At the top, there is a layer of aggregate represented by a pattern of small circles. A line points to this layer with the label "IDOT CA-7 COURSE AGGREGATE STORAGE BED". Below the aggregate is a circular underdrain. A horizontal line indicates the "INV=839.20" (Invert) level. The bottom of the aggregate layer is marked "BOTTOM=839.70". Below the underdrain is a hatched rectangular area. The width of the entire structure is labeled "2 FT" at the bottom.

UNDERDRAIN CROSS SECTION DETAIL (N.T.S.)

PLAN
(REINFORCEMENT FABRIC)

SECTION A-A

SECTION B-B

ALTERNATE JOINT CONFIGURATIONS

GENERAL NOTES

The first four lists may be used in lieu of the repeated lists shown on Standards, 602020, 602030, 602040, 602050, 604040, or 602020 at the option of the Contractor or when field conditions prohibit the use of clearance lists.

All dimensions are in millimeters (inches) unless otherwise shown.

TABLE		Reinforcement		No. 4 (No. 13)	
D	T	D ₁ (in.)	T ₁ (in.)	"A ₁ " R.F.F. Bar exam dimension	"B ₁ " R.F.F. Bar exam dimension
36 (900)	18 (450)	6	0.20	10.11 ft	19
48 (1200)	24 (600)	10	0.30	15.17 ft	26
60 (1500)	30 (750)	14	0.35	20.22 ft	32
72 (1800)	36 (900)	18	0.40	25.28 ft	39
84 (2100)	42 (1050)	22	0.45	30.33 ft	46
96 (2400)	48 (1200)	26	0.50	35.38 ft	53
108 (2700)	54 (1350)	30	0.55	40.43 ft	60
120 (3000)	60 (1500)	34	0.60	45.48 ft	67
132 (3300)	66 (1650)	38	0.65	50.53 ft	74
144 (3600)	72 (1800)	42	0.70	55.58 ft	81
156 (3900)	78 (1950)	46	0.75	60.63 ft	88
168 (4200)	84 (2100)	50	0.80	65.68 ft	95
180 (4500)	90 (2250)	54	0.85	70.73 ft	102
192 (4800)	96 (2400)	58	0.90	75.78 ft	109
204 (5100)	102 (2550)	62	0.95	80.83 ft	116
216 (5400)	108 (2700)	66	1.00	85.88 ft	123
228 (5700)	114 (2850)	70	1.05	90.93 ft	130
240 (6000)	120 (3000)	74	1.10	95.98 ft	137
252 (6300)	126 (3150)	78	1.15	101.03 ft	144
264 (6600)	132 (3300)	82	1.20	106.08 ft	151
276 (6900)	138 (3450)	86	1.25	111.13 ft	158
288 (7200)	144 (3600)	90	1.30	116.18 ft	165
300 (7500)	150 (3750)	94	1.35	121.23 ft	172
312 (7800)	156 (3900)	98	1.40	126.28 ft	179
324 (8100)	162 (4050)	102	1.45	131.33 ft	186
336 (8400)	168 (4200)	106	1.50	136.38 ft	193
348 (8700)	174 (4350)	110	1.55	141.43 ft	200
360 (9000)	180 (4500)	114	1.60	146.48 ft	207
372 (9300)	186 (4650)	118	1.65	151.53 ft	214
384 (9600)	192 (4800)	122	1.70	156.58 ft	221
396 (9900)	198 (4950)	126	1.75	161.63 ft	228
408 (10200)	204 (5100)	130	1.80	166.68 ft	235
420 (10500)	210 (5250)	134	1.85	171.73 ft	242
432 (10800)	216 (5400)	138	1.90	176.78 ft	249
444 (11100)	222 (5550)	142	1.95	181.83 ft	256
456 (11400)	228 (5700)	146	2.00	186.88 ft	263
468 (11700)	234 (5850)	150	2.05	191.93 ft	270
480 (12000)	240 (6000)	154	2.10	196.98 ft	277
492 (12300)	246 (6150)	158	2.15	202.03 ft	284
504 (12600)	252 (6300)	162	2.20	207.08 ft	291
516 (12900)	258 (6450)	166	2.25	212.13 ft	298
528 (13200)	264 (6600)	170	2.30	217.18 ft	305
540 (13500)	270 (6750)	174	2.35	222.23 ft	312
552 (13800)	276 (6900)	178	2.40	227.28 ft	319
564 (14100)	282 (7050)	182	2.45	232.33 ft	326
576 (14400)	288 (7200)	186	2.50	237.38 ft	333
588 (14700)	294 (73				

CAST IRON STEPS

PLAN VIEW

ELEVATION VIEW

SECTION A-A

All dimensions are in inches (millimeters)
unless otherwise shown.

DATE	REVISIONS
11-09	Switched units to English (metric).
01-08	Revised title, graphics, and added plate(s)
	(revision number)

MANHOLE STEPS

(Sheet 1 of 2)

STANDARD 602701-02

City of Philadelphia Department of Transportation	
DRAWN BY	01/04/11 J.A.M.
CHECKED BY	01/04/11 J.A.M.
APPROVED BY	01/04/11 J.A.M.

The technical drawing illustrates the design of a manhole step assembly, consisting of three views:

- PLAN VIEW:** Shows the top-down layout of the step. It features a central rectangular area with rounded corners, labeled "Slab face of structure". The overall width is 10 (250) mm. The depth of the step is 150 (380) mm. The drawing is labeled "PLAN VIEW" and includes a section line "A-A" across the top.
- ELEVATION VIEW:** Shows the side profile of the step. It is a simple rectangular block with a height of 150 (380) mm. The drawing is labeled "ELEVATION VIEW".
- SECTION A-A:** A cross-sectional view showing the internal structure. It reveals a central core of 1/2 (12.5) Reinforcement bar, surrounded by a concrete or plaster layer. The total width of the section is 10 (250) mm. The drawing is labeled "SECTION A-A".



PINNACLE ENGINEERING GROUP

IL DESIGN FIRM 184.006289-0010

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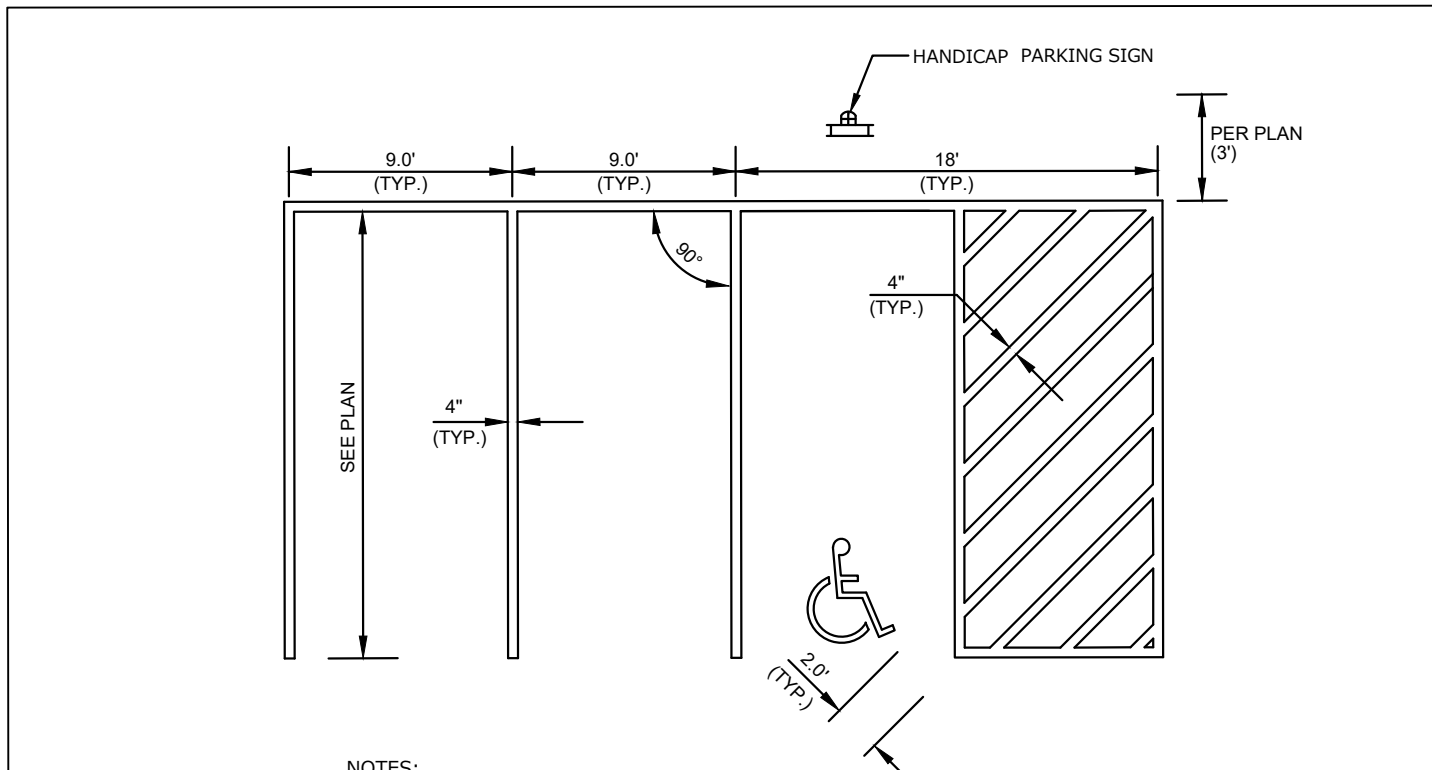
BOLT 2.0
28884 N. ILLINOIS ROUTE 83
MUNDELEIN, IL

REVISIONS			

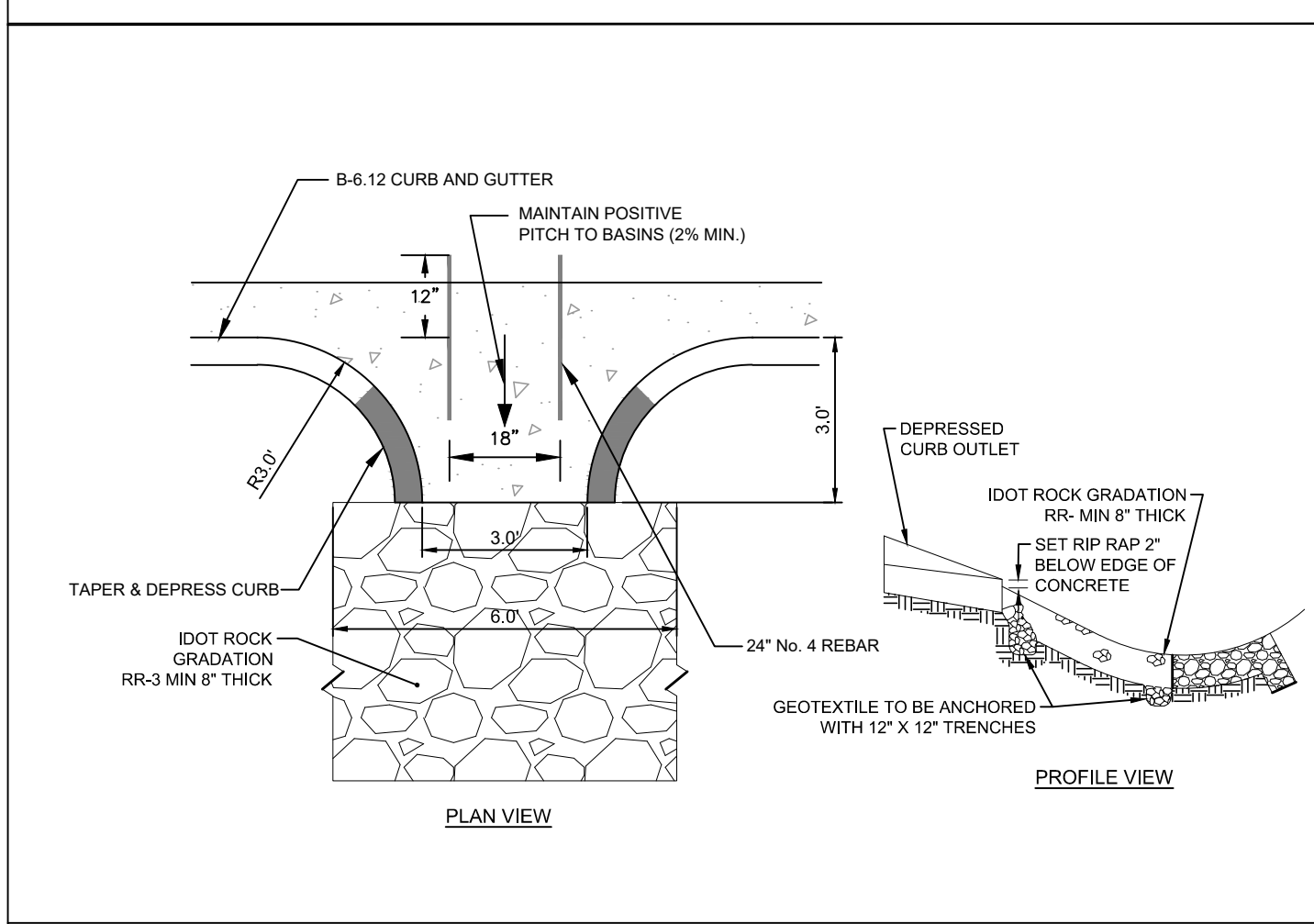
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SHEET
C-10
 OF
C-12

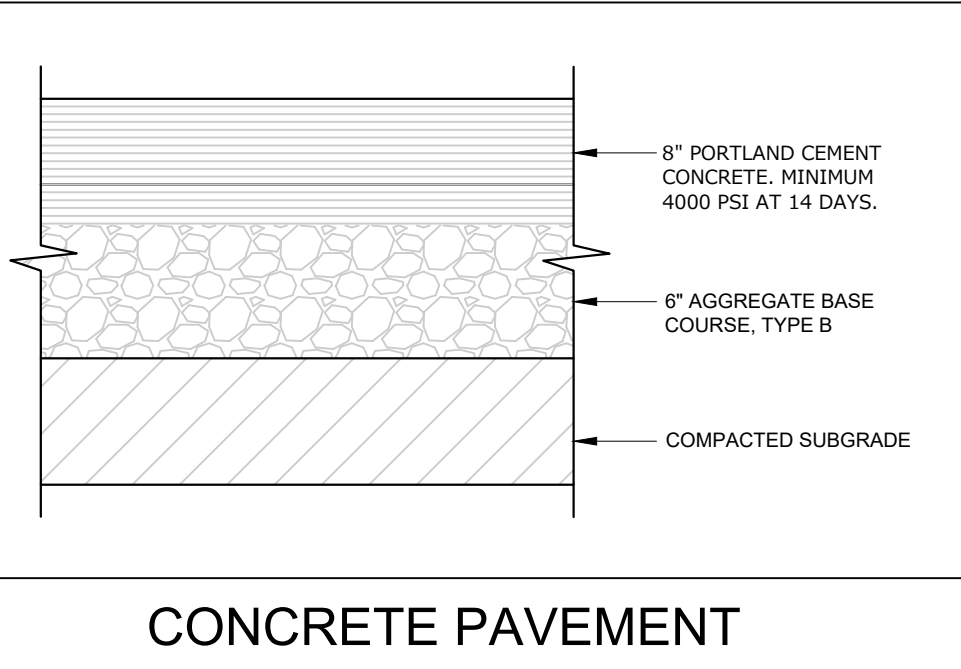
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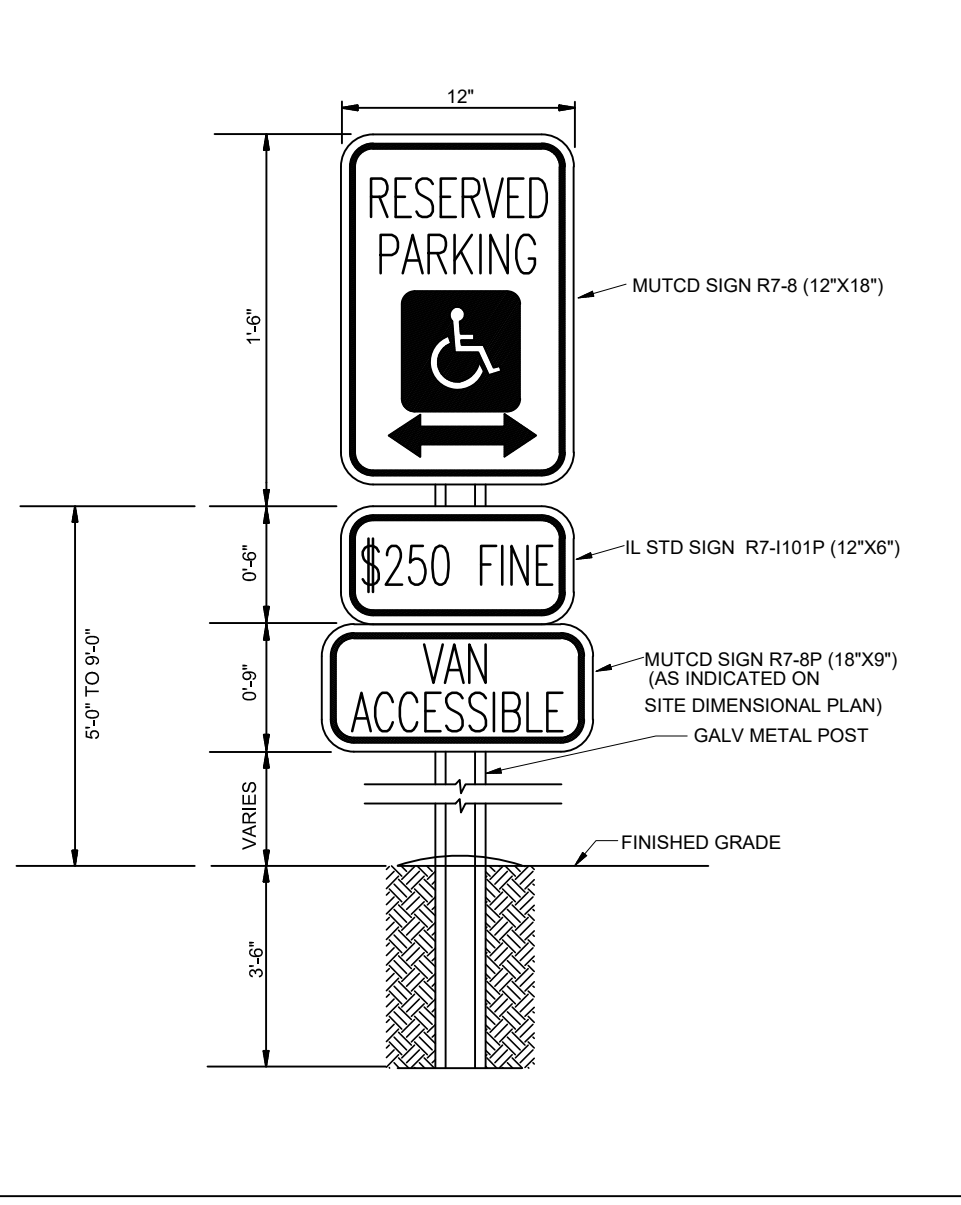
NOTES:
1. HANDICAP STALL SHALL BE CONSTRUCTED PER LOCAL ADA STANDARDS.
2. PAINT SHALL BE HIGH QUALITY YELLOW PAINT PER IDOT SPECIFICATIONS.



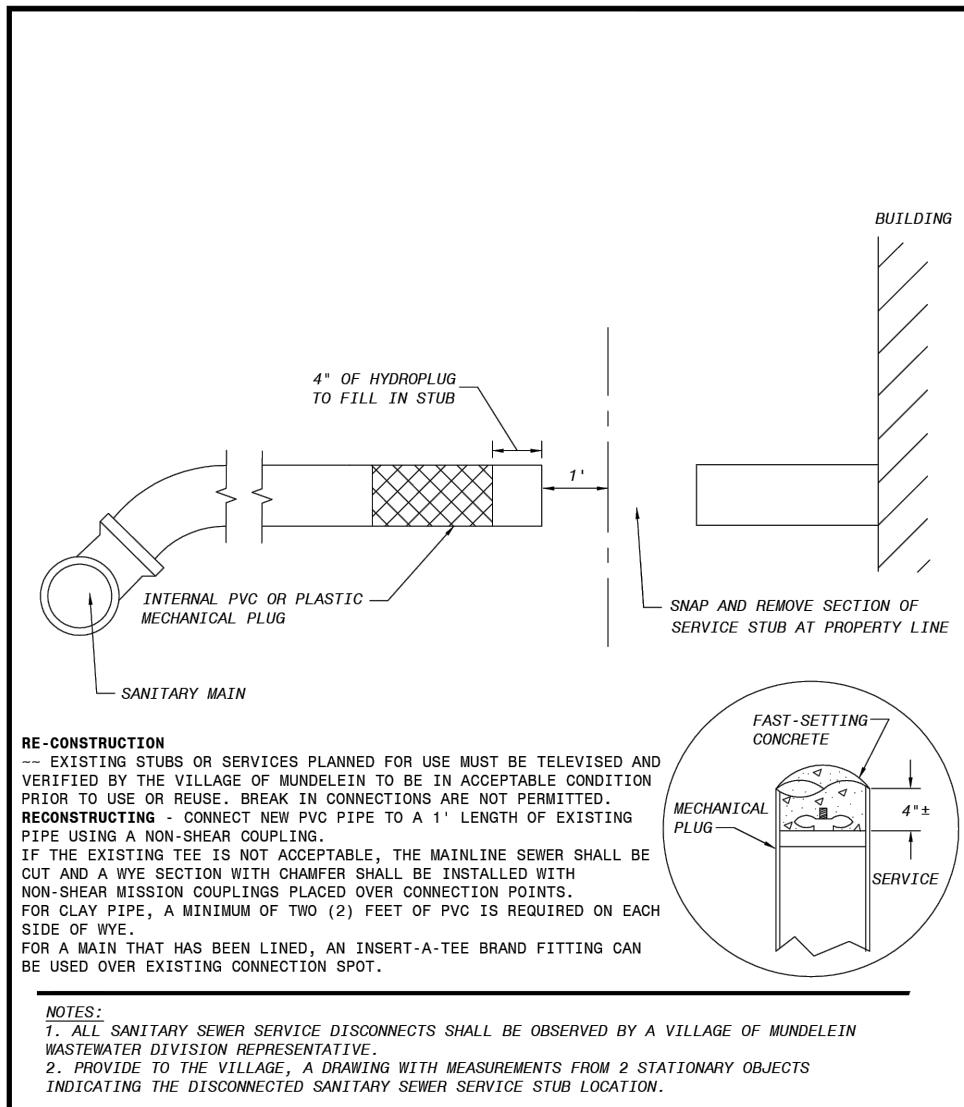
DEPRESSED CURB OUTLET



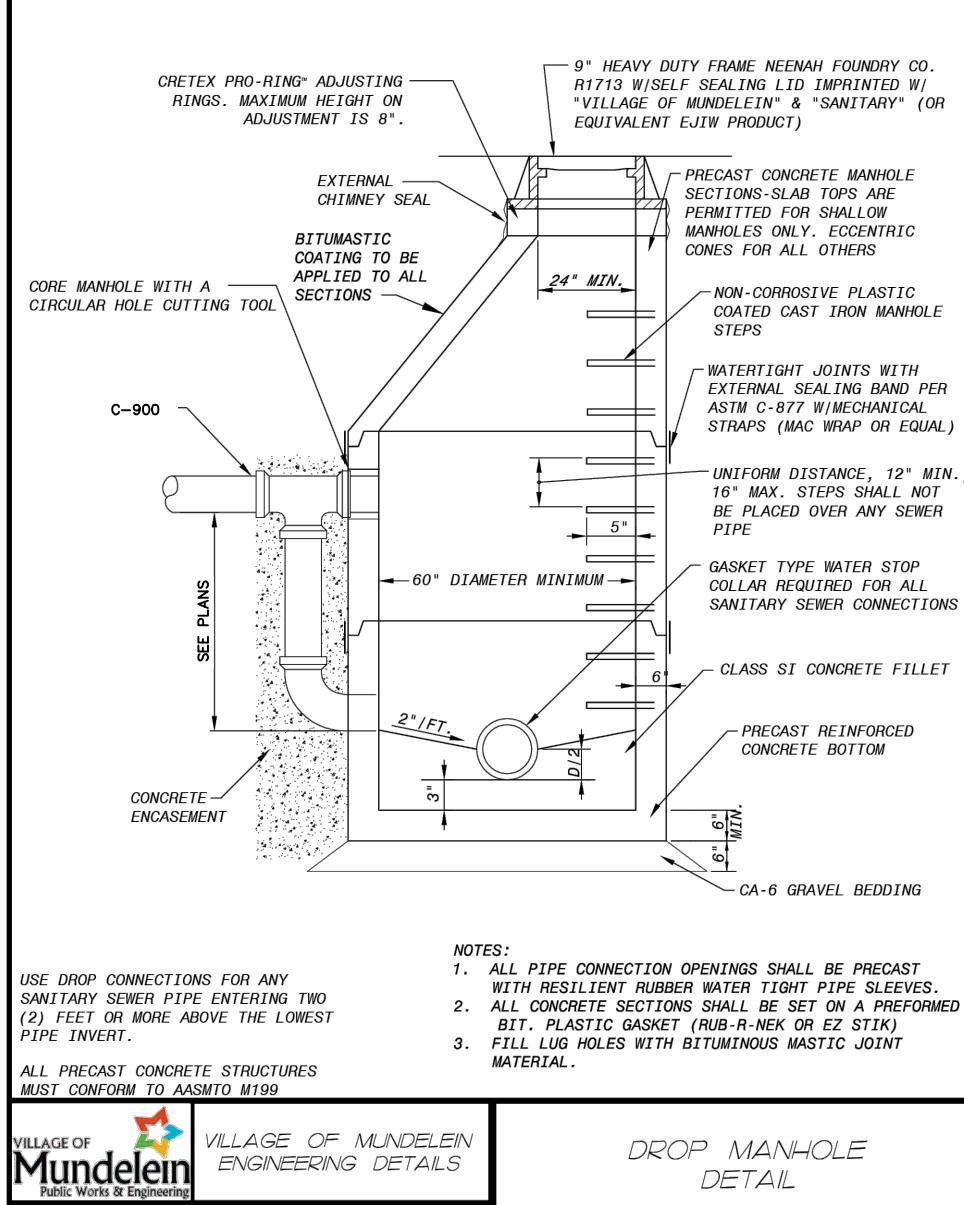
CONCRETE PAVEMENT



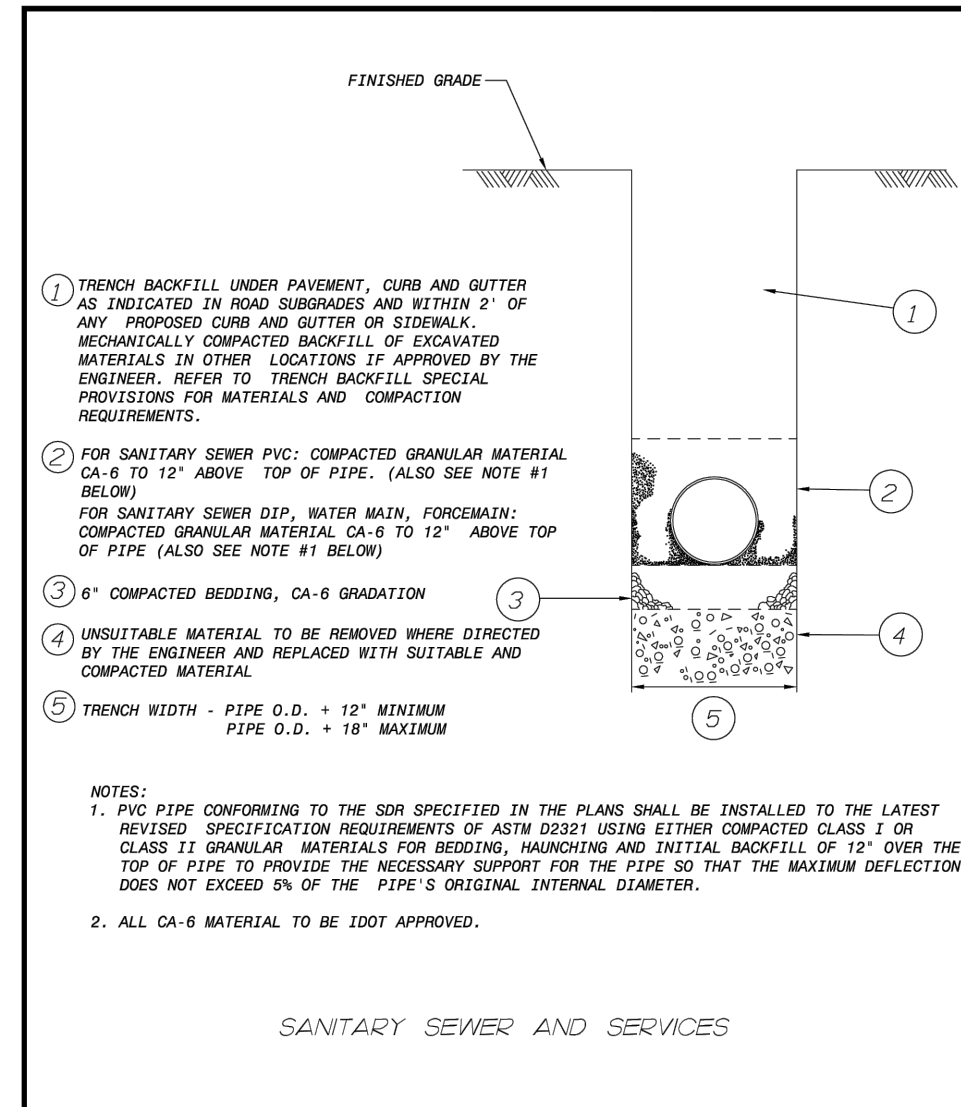
HANDICAP SIGN



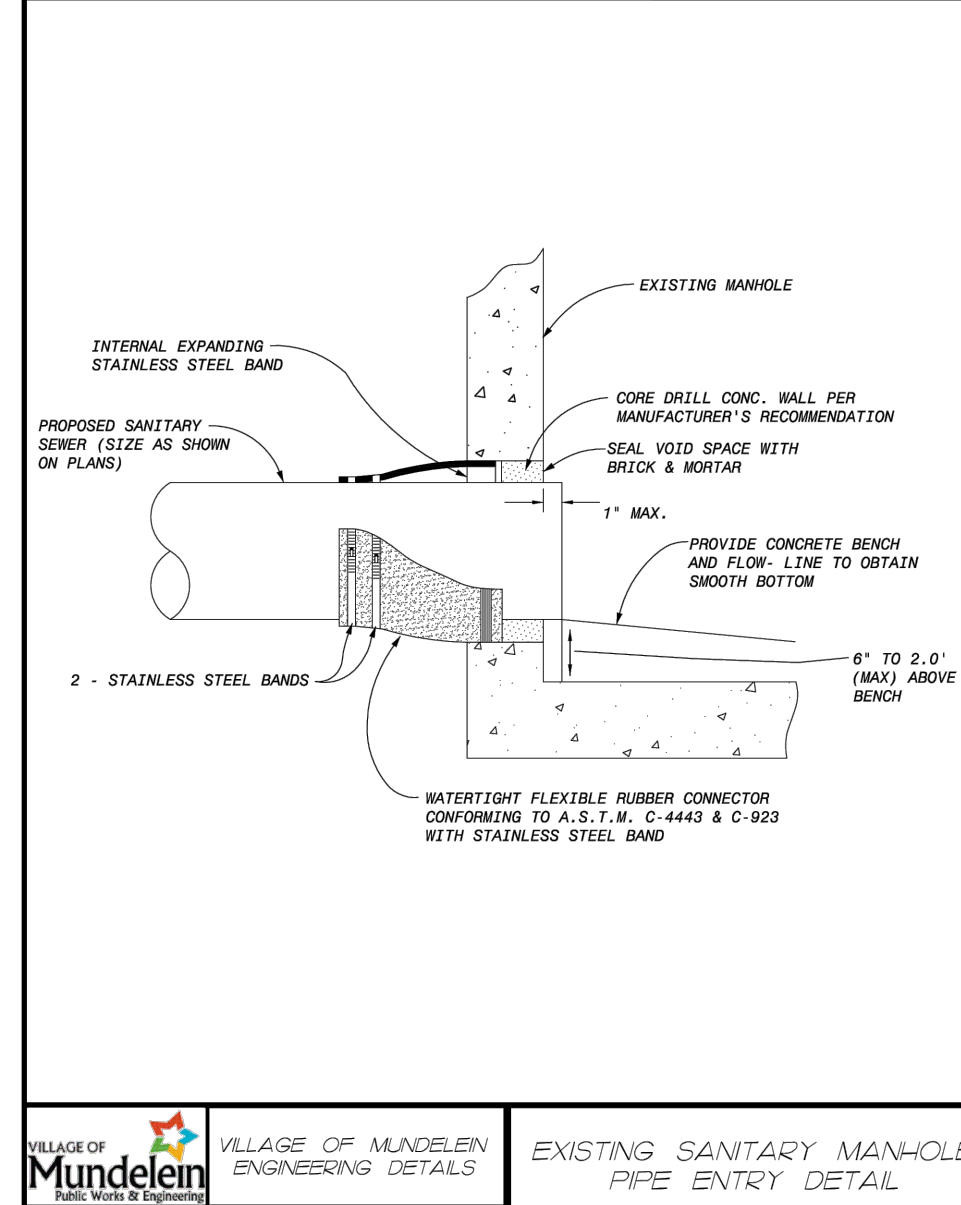
SANITARY SEWER AND SERVICES



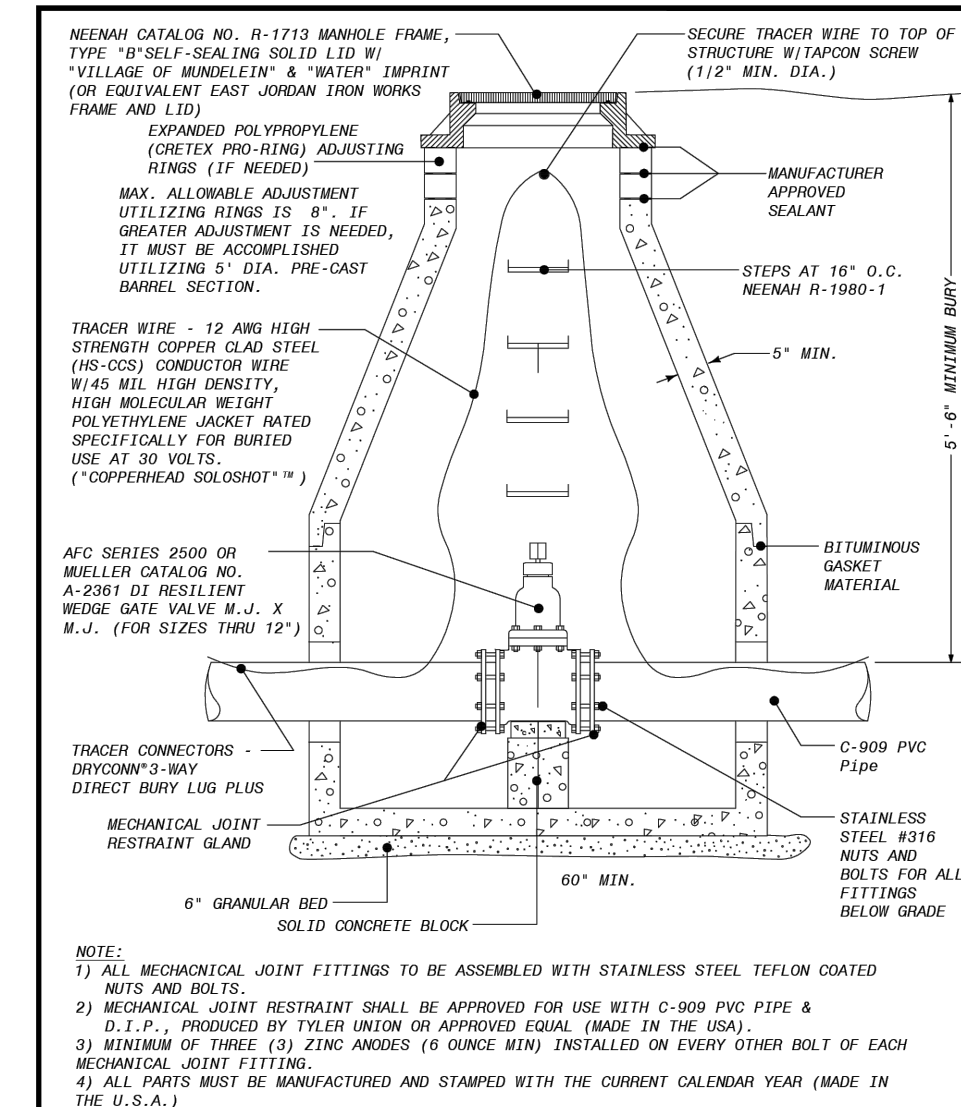
DROP MANHOLE DETAIL



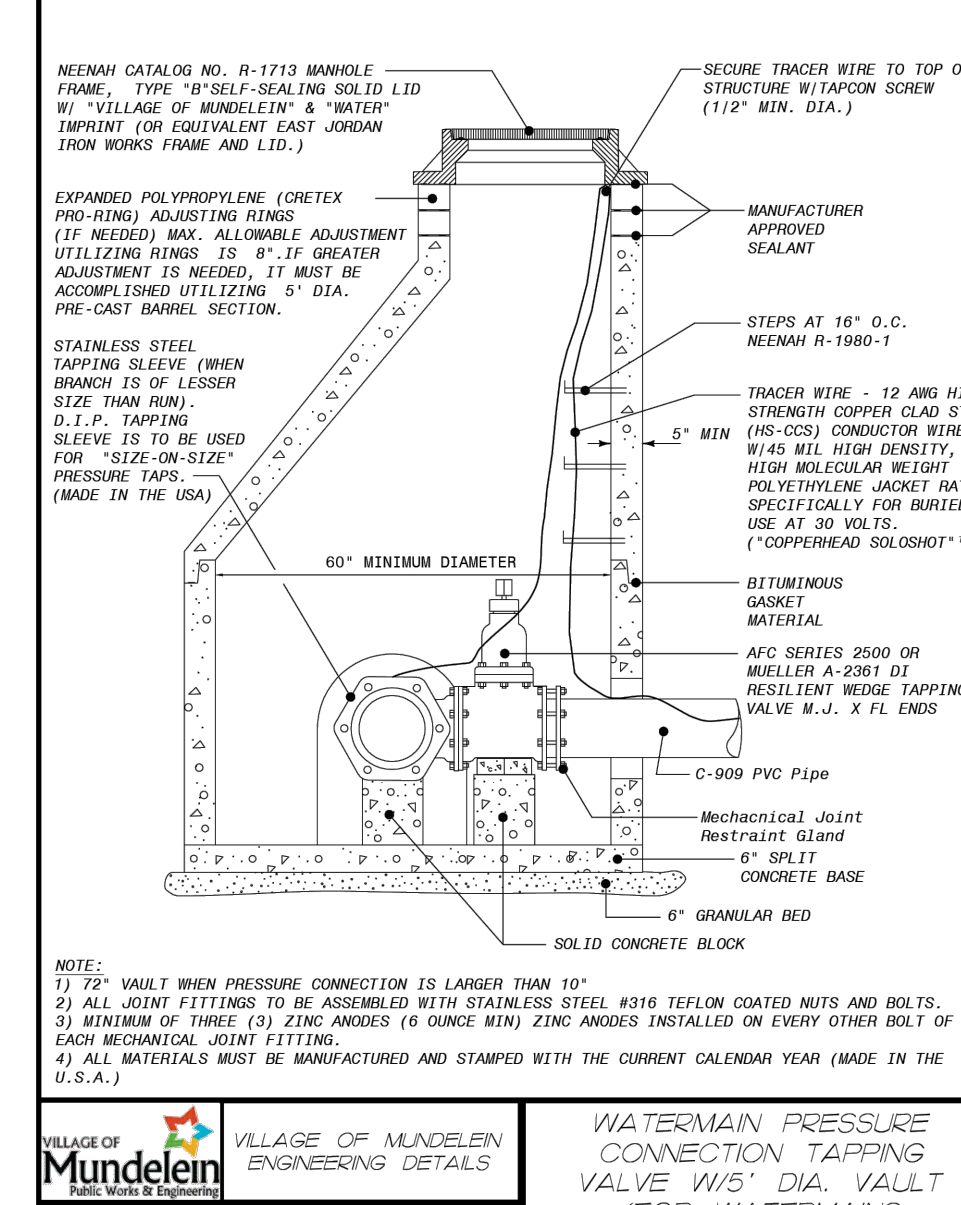
TYPICAL SANITARY TRENCH CROSS SECTION



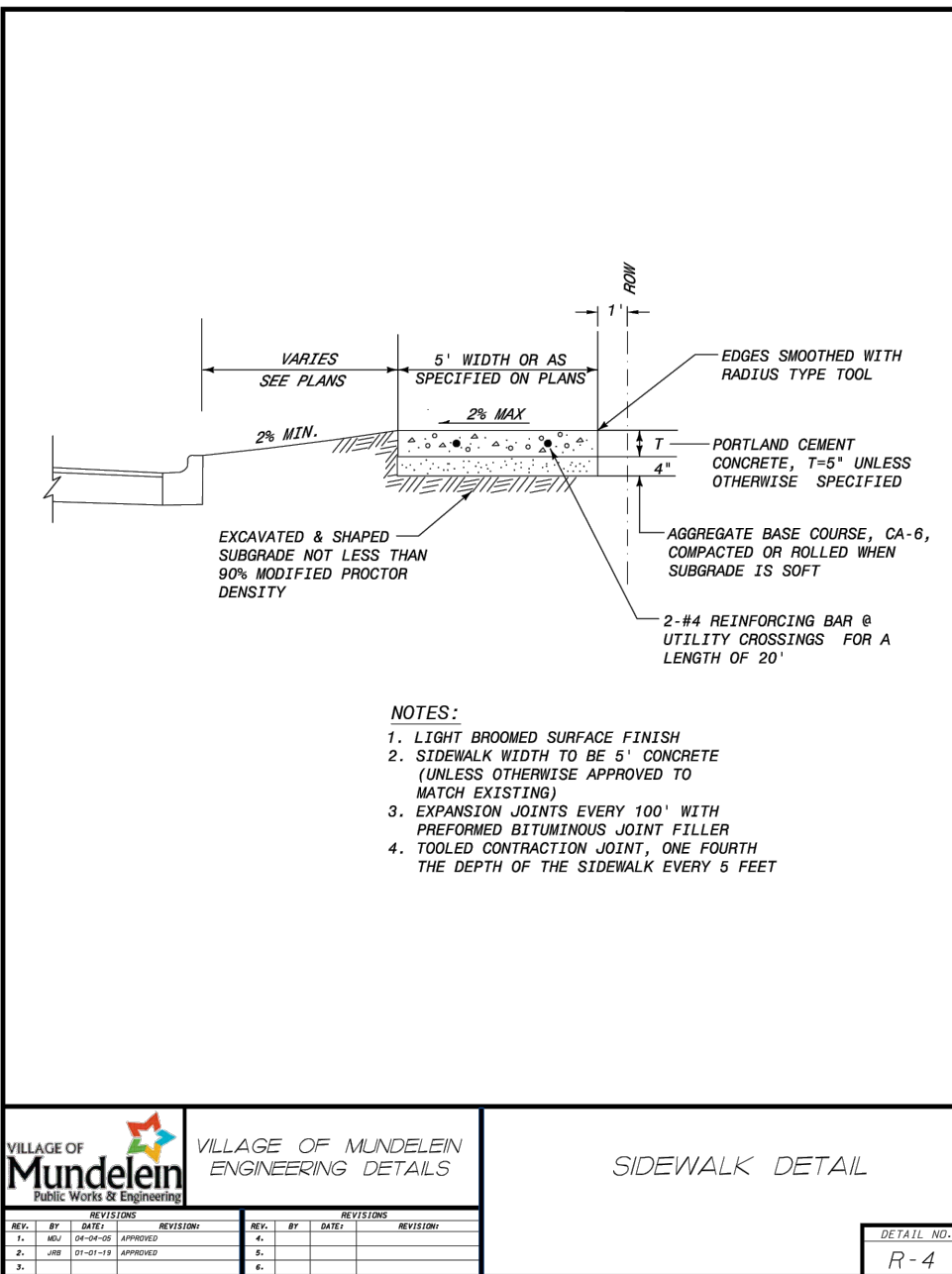
EXISTING SANITARY MANHOLE PIPE ENTRY DETAIL



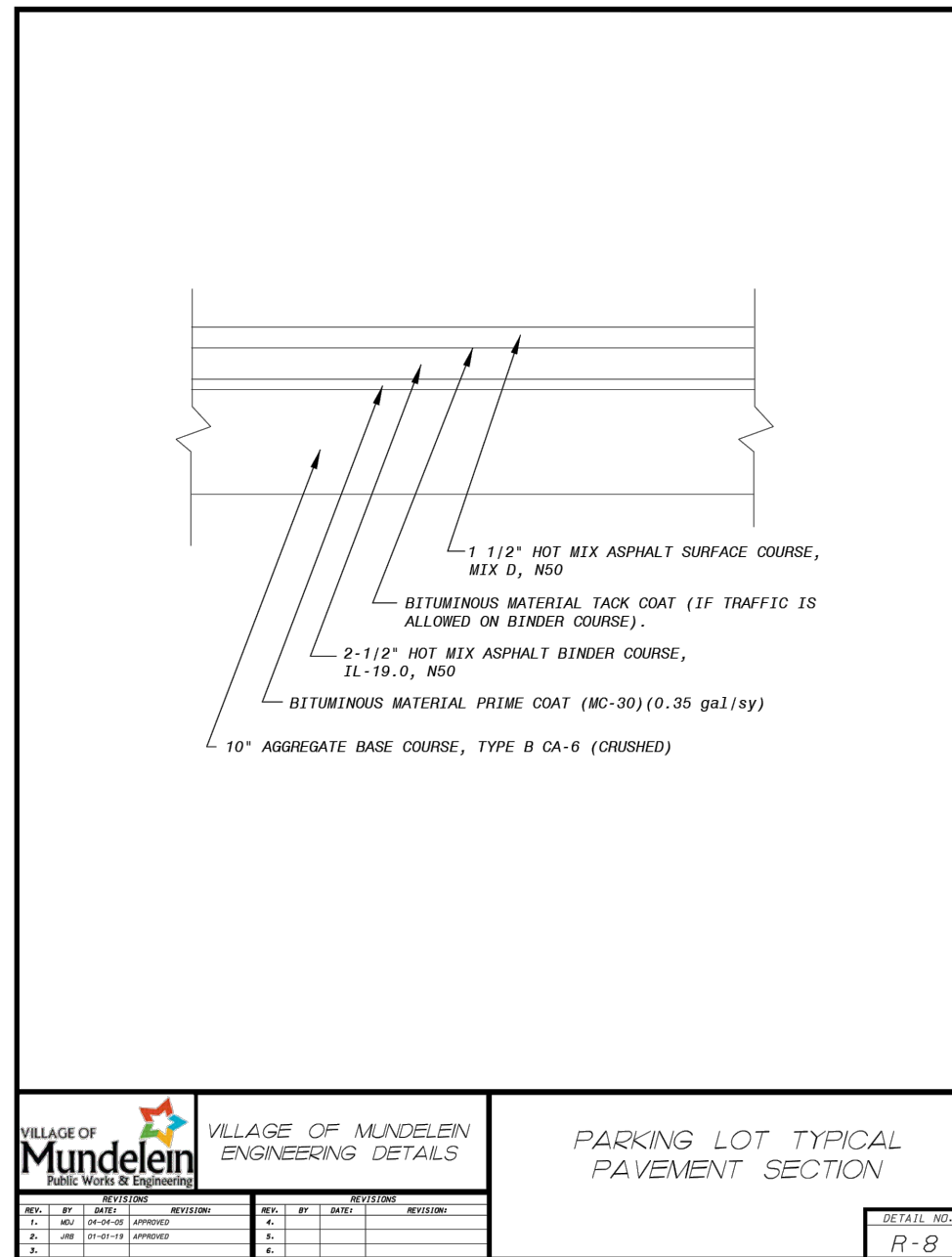
TYPICAL VALVE VAULT (5' ID.)



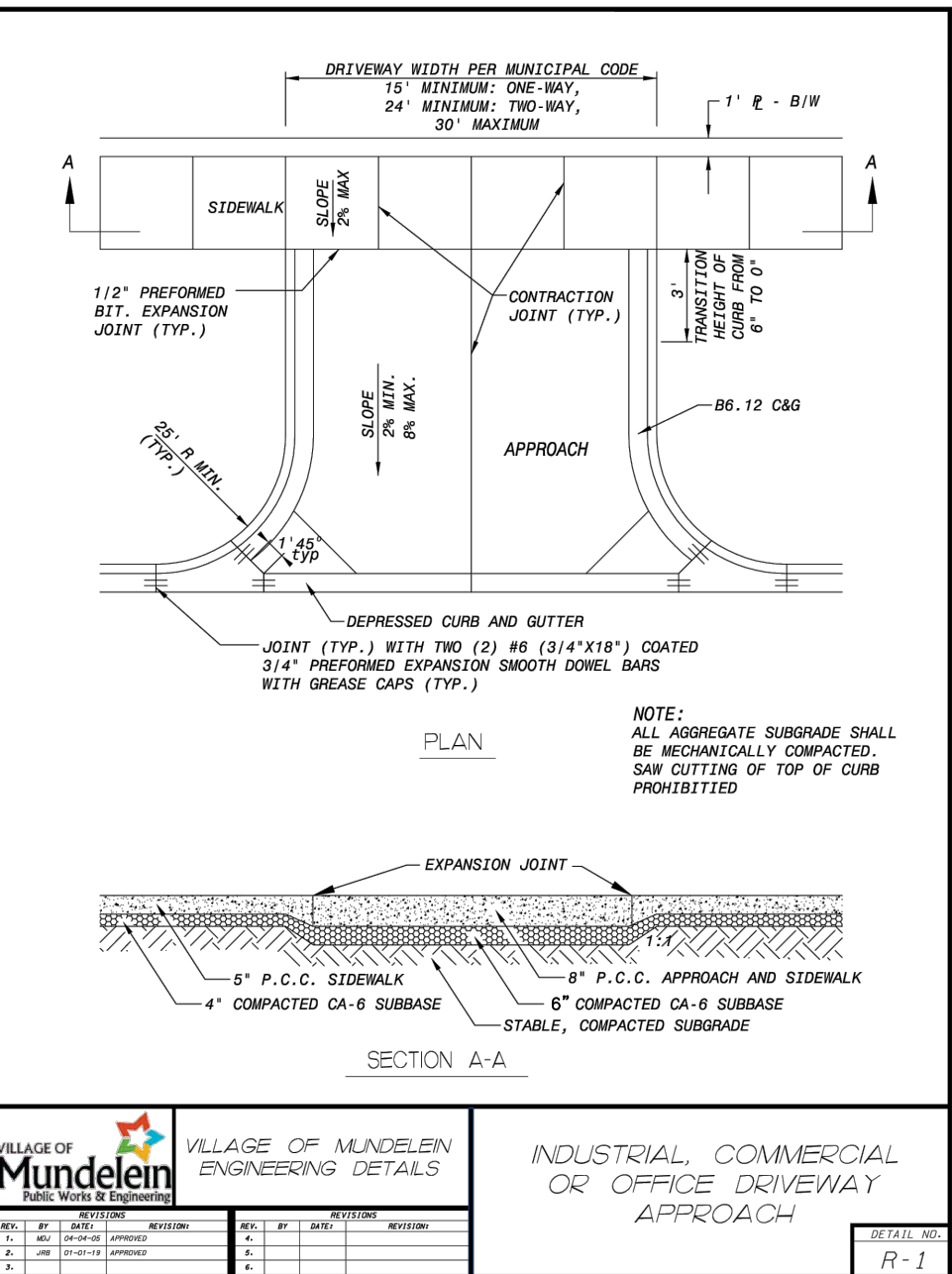
WATERMAIN PRESSURE CONNECTION TAPPING VALVE (10" & SMALLER)



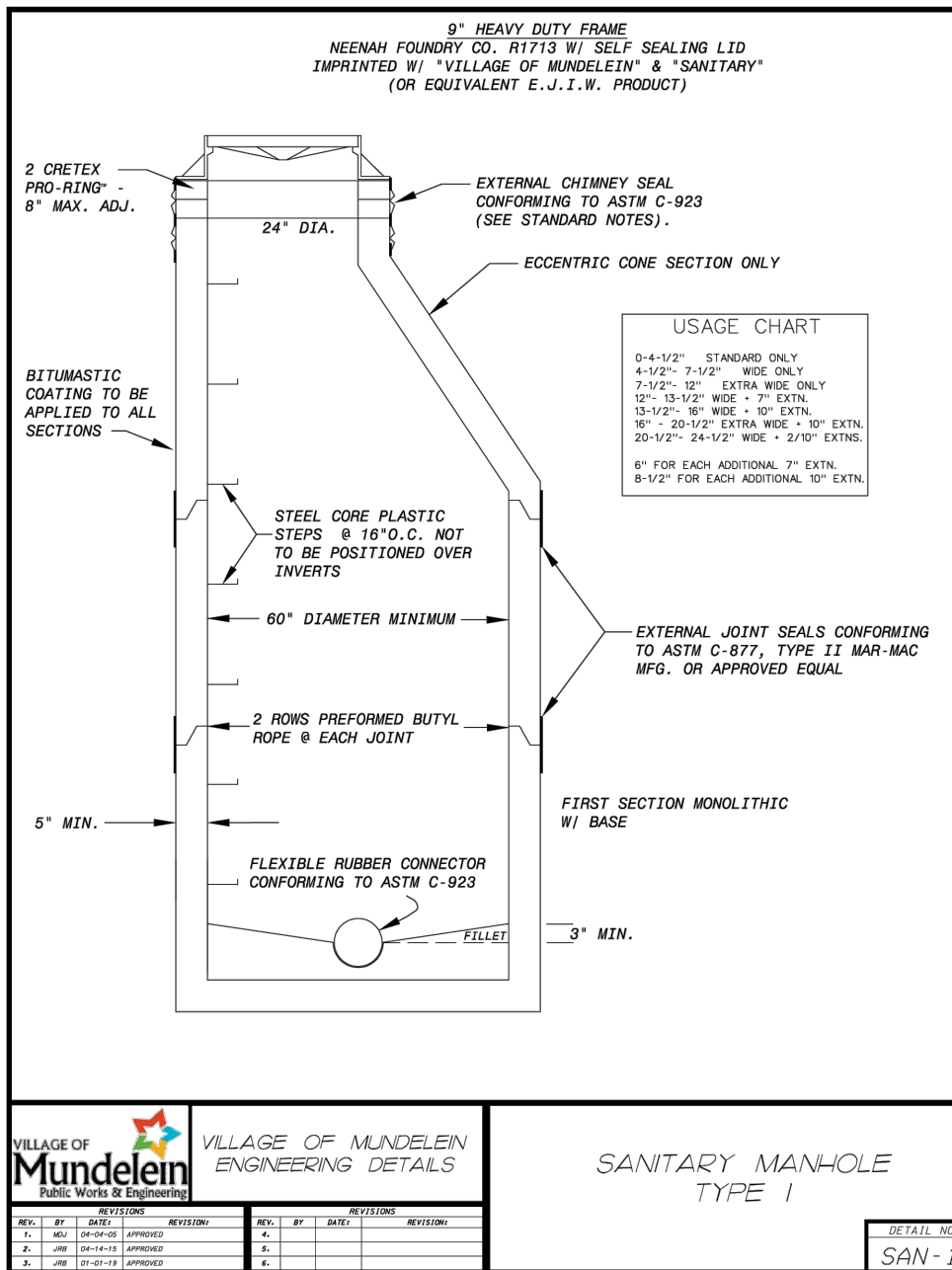
SIDEWALK DETAIL



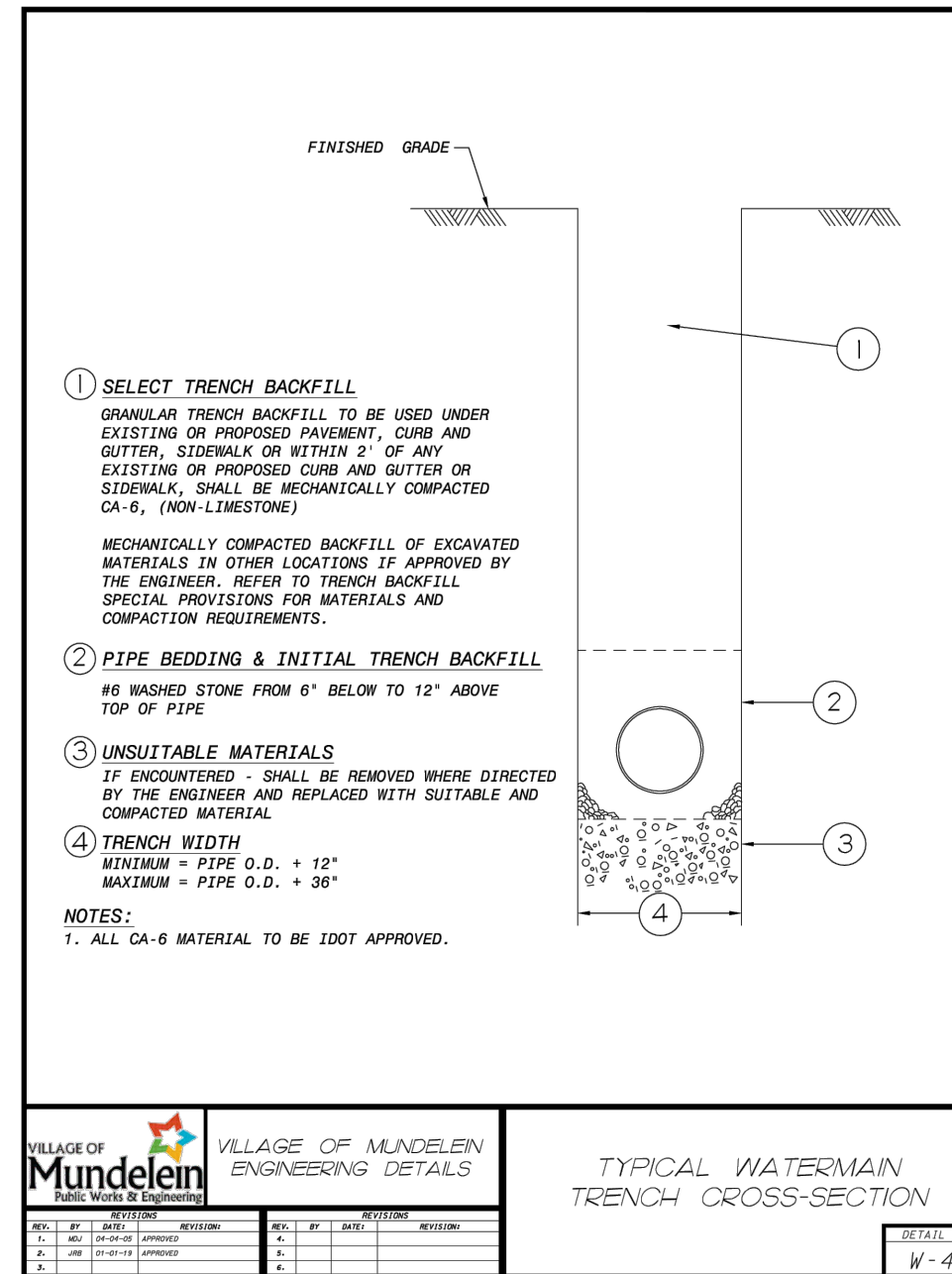
PARKING LOT TYPICAL PAVEMENT SECTION



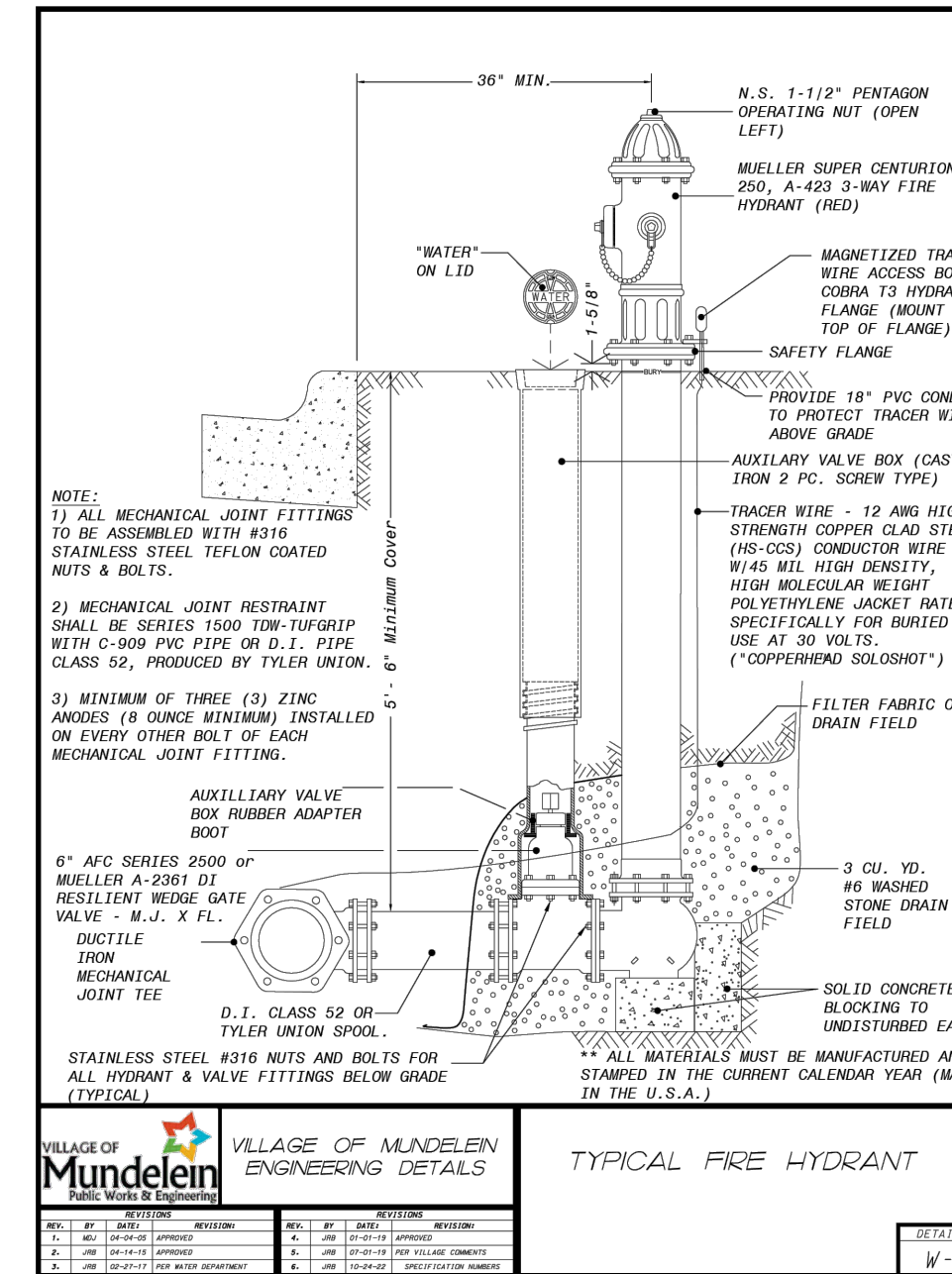
INDUSTRIAL, COMMERCIAL OR OFFICE DRIVEWAY APPROACH



SANITARY MANHOLE TYPE I



TYPICAL WATERMAIN TRENCH CROSS-SECTION



TYPICAL FIRE HYDRANT

DESIGNED: SSS REVIEWED: SSS 1/10/2025 9:39 AM - 2:10 PM 1/2024 9:57 AM - 1:00 PM - CAD/FINAL SHEET/C-8 - CONSTRUCTION STANDARDS.dwg

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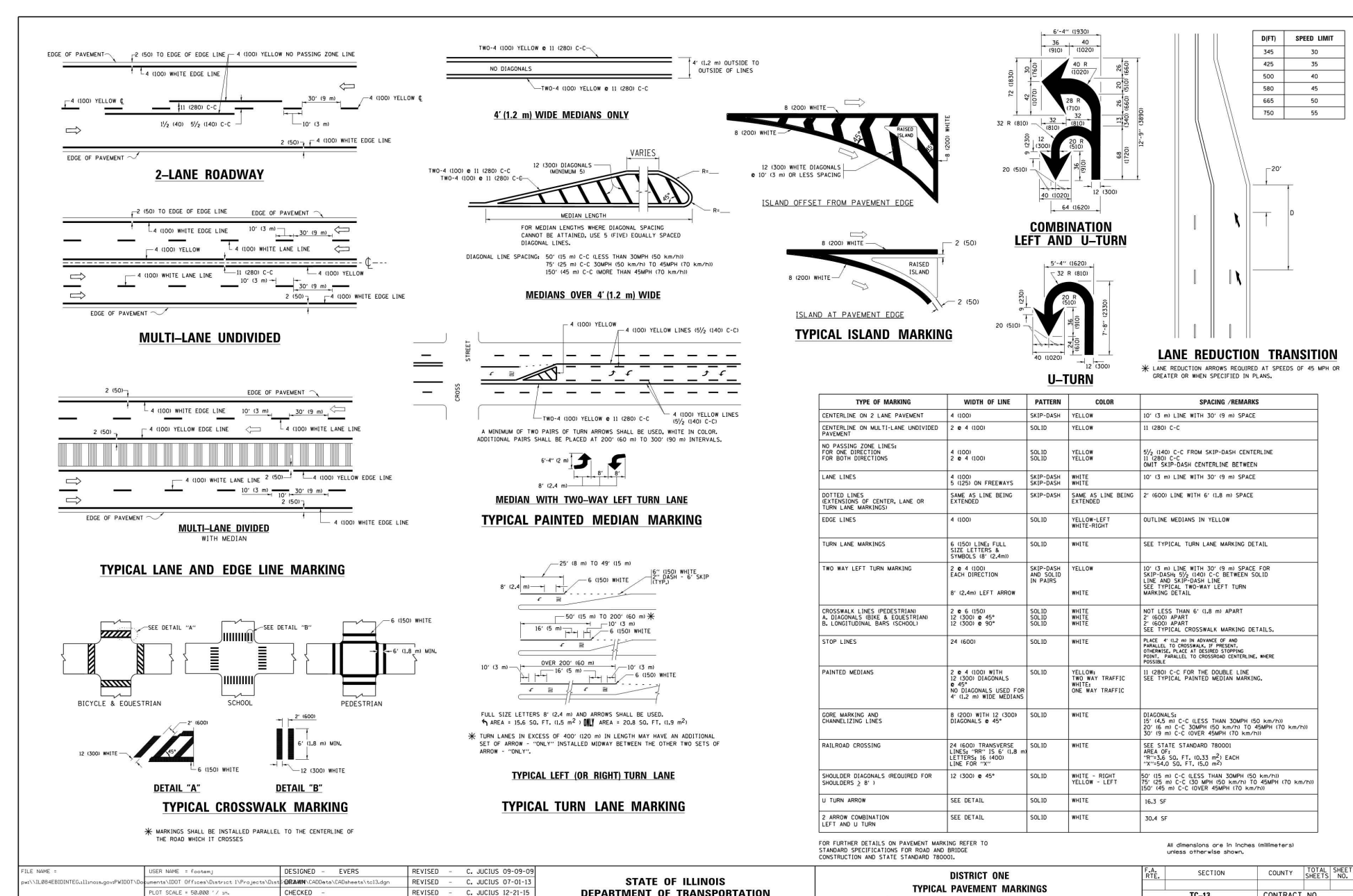
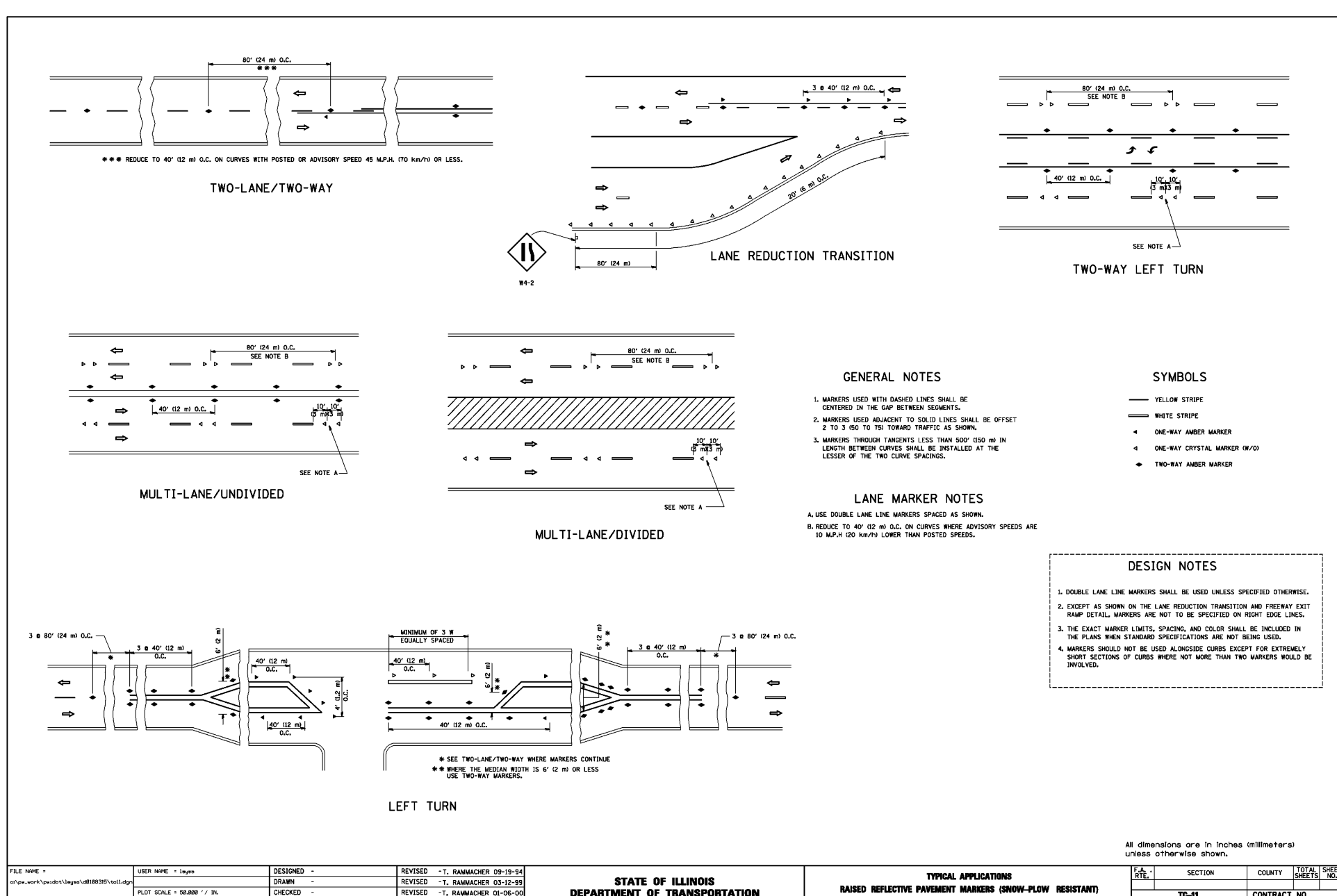
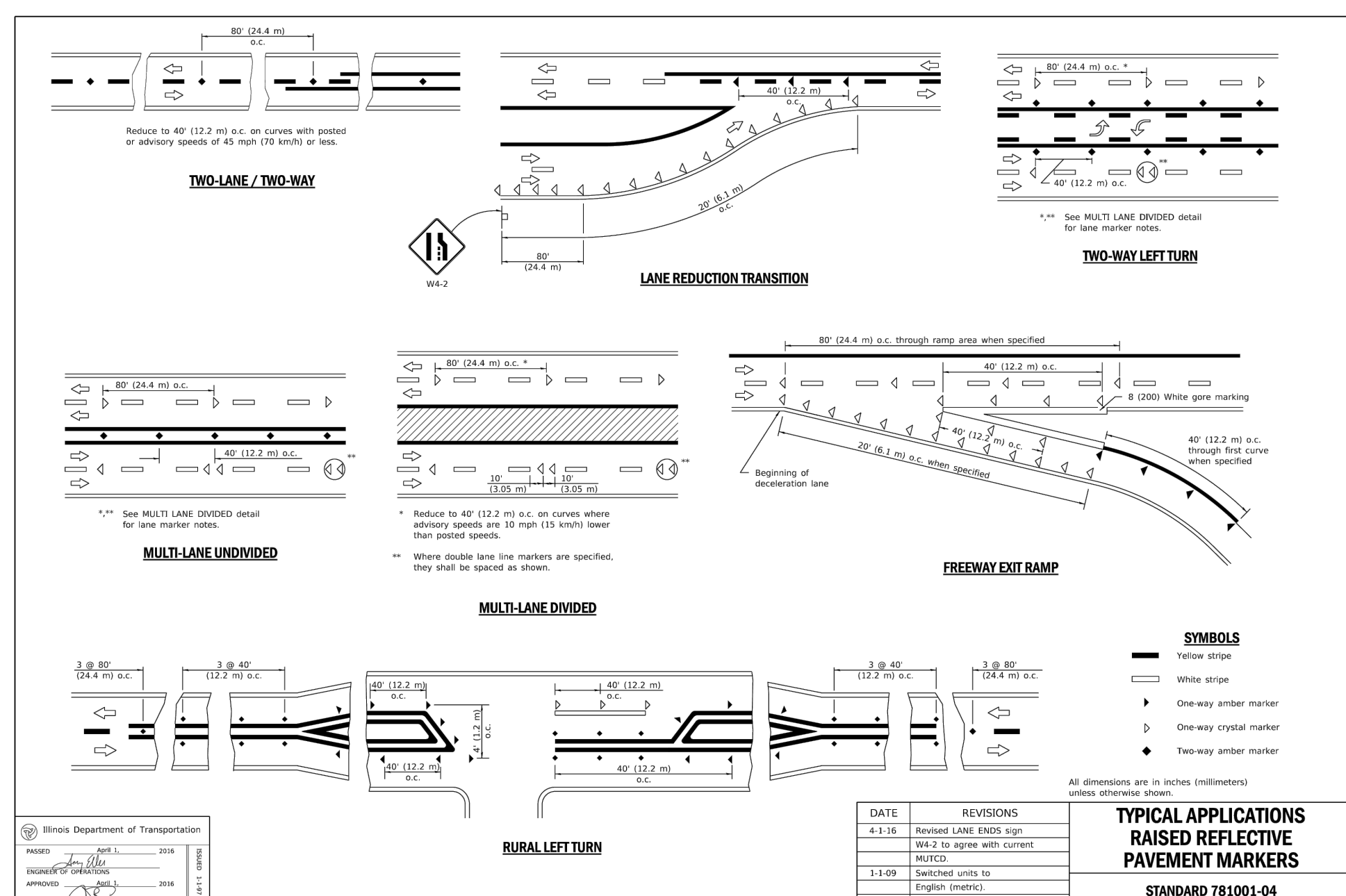
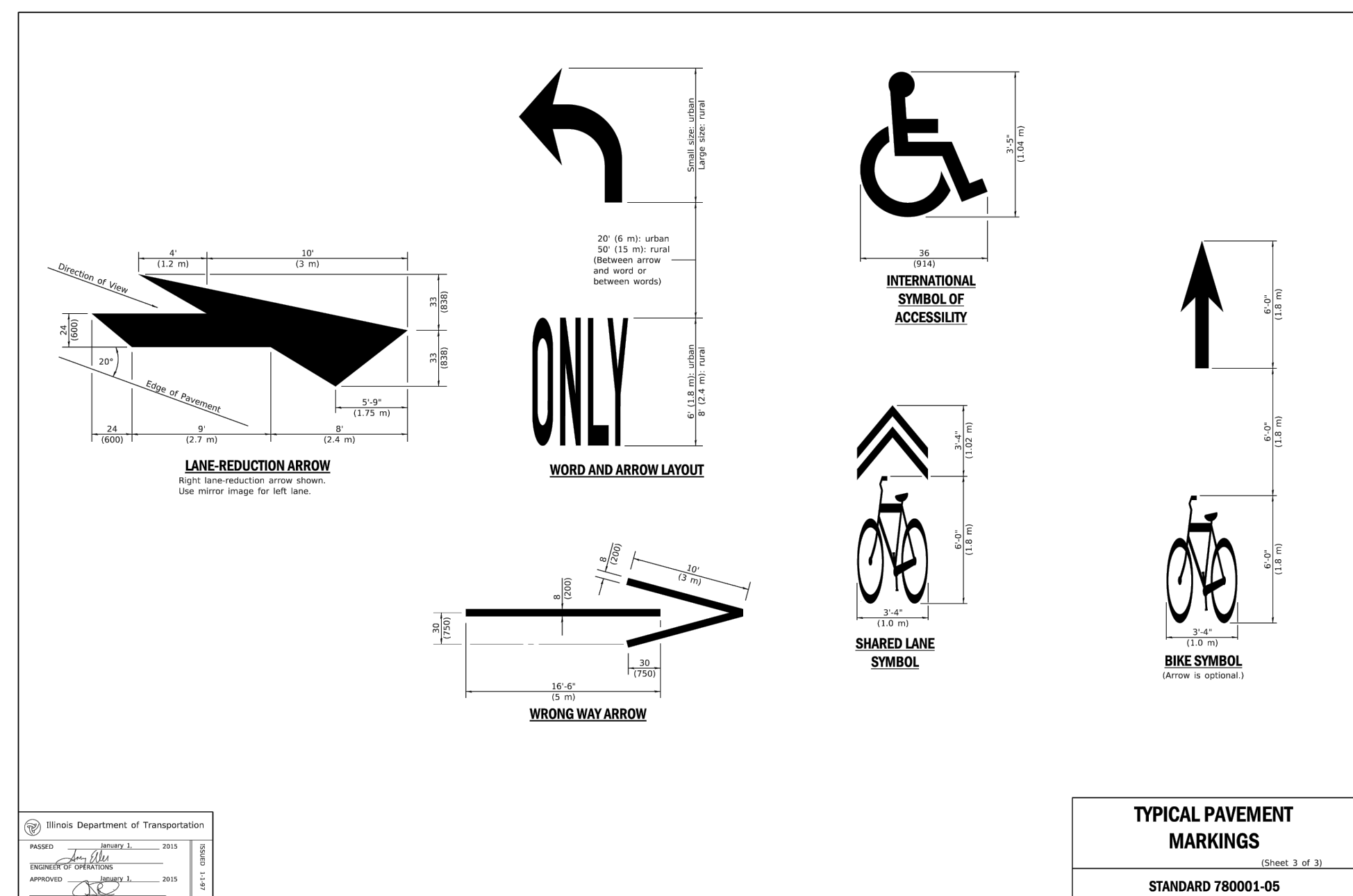
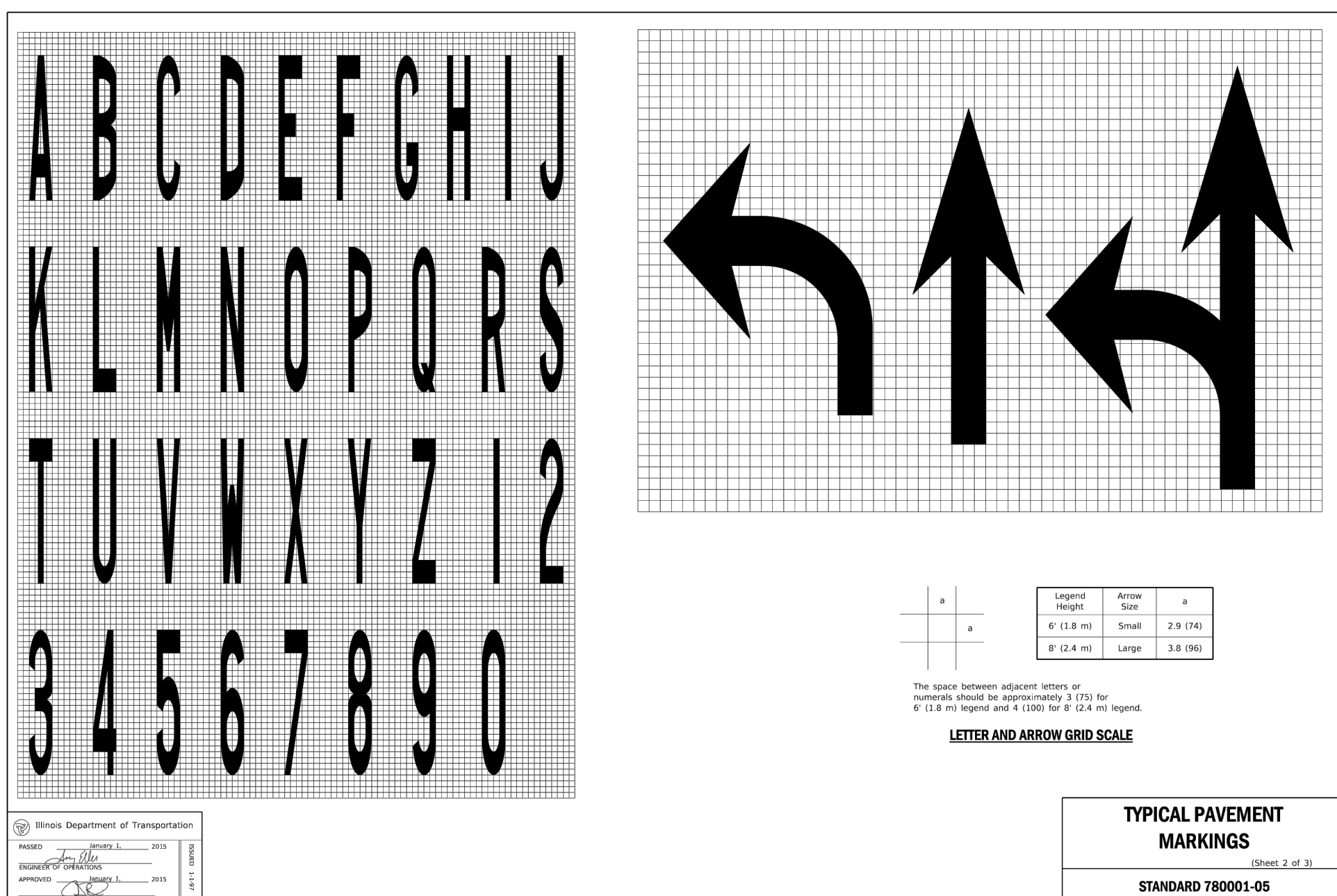
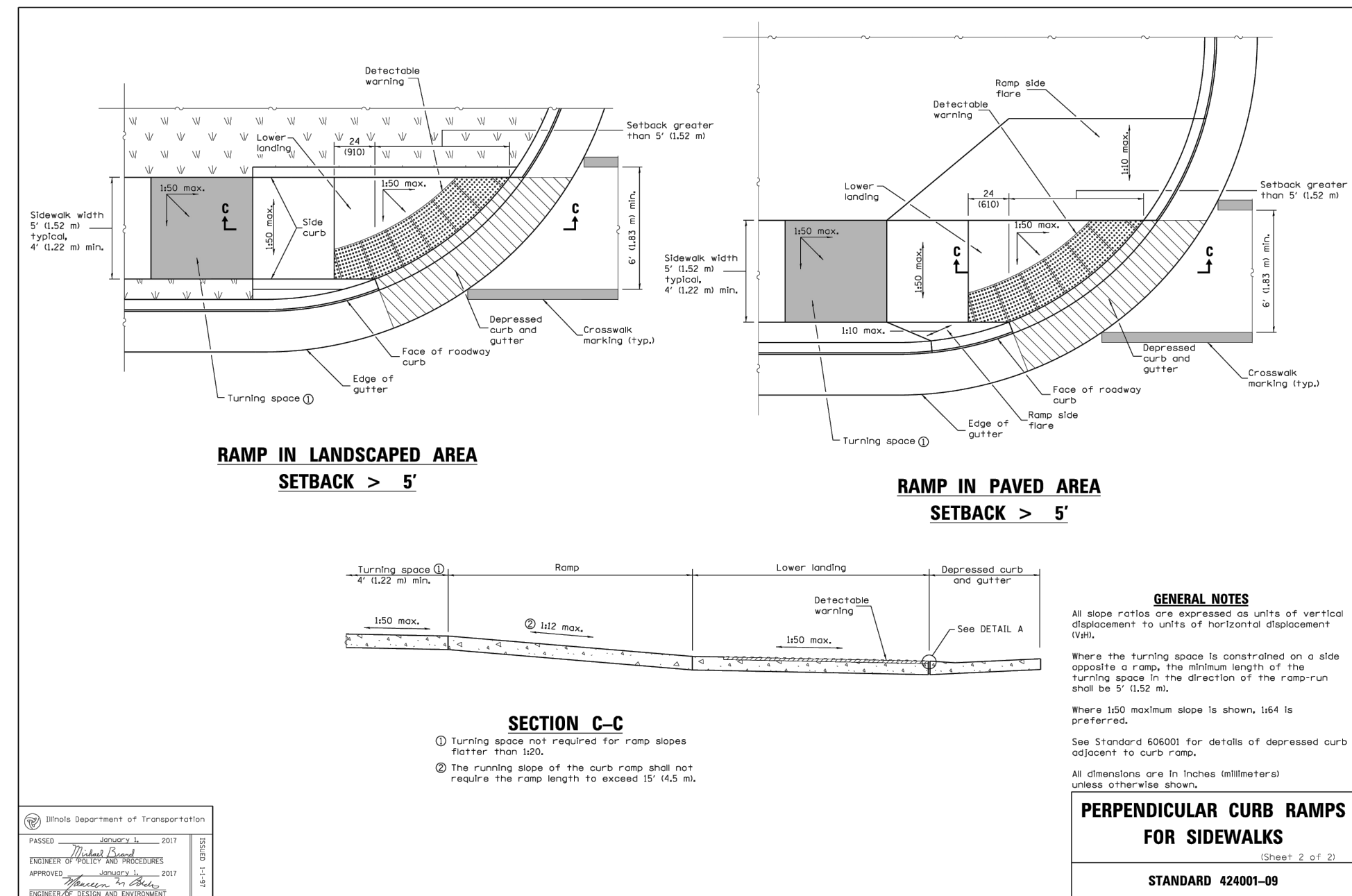
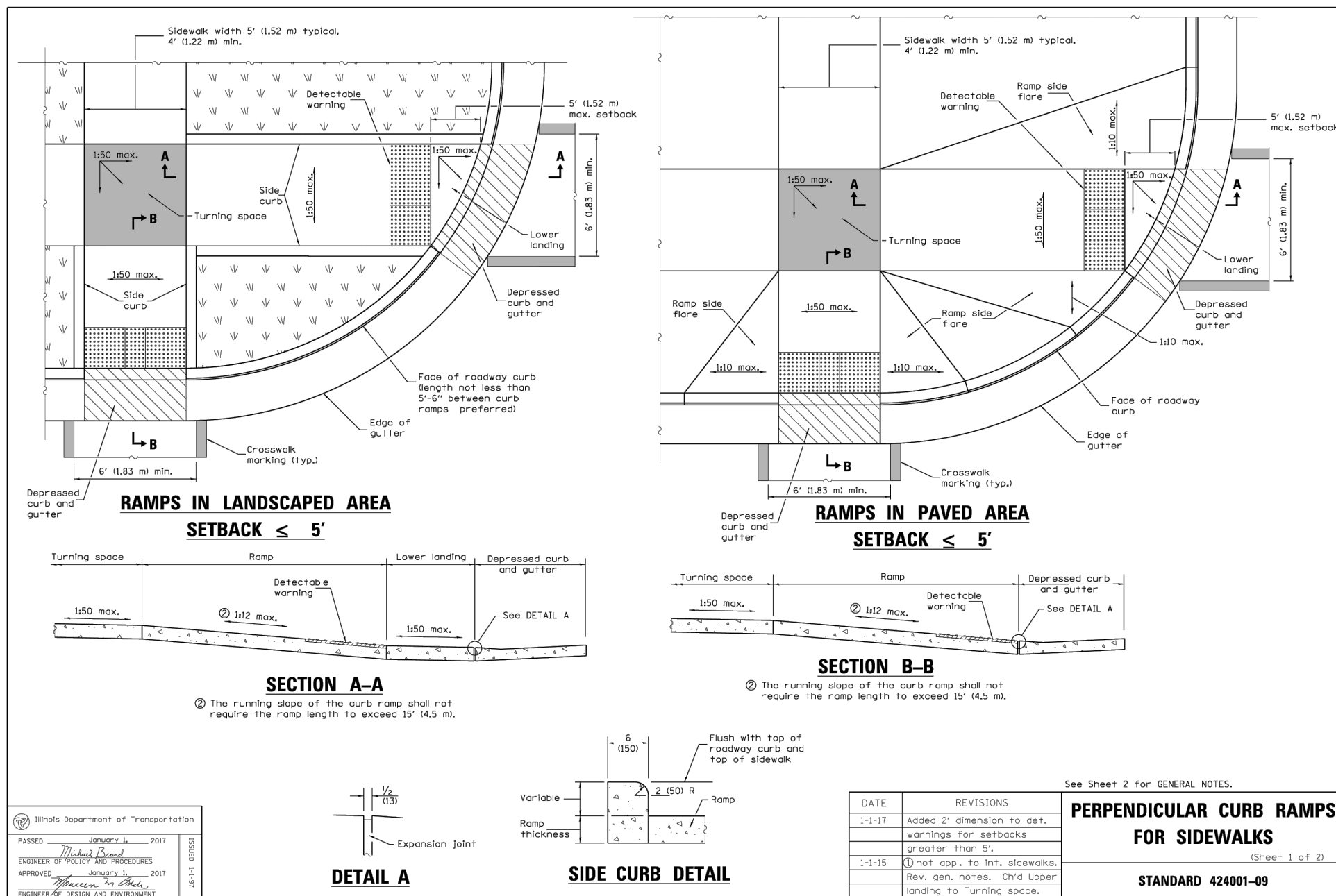
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BOLT 2.0
28884 N. ILLINOIS ROUTE 83
MUNDELEIN, IL

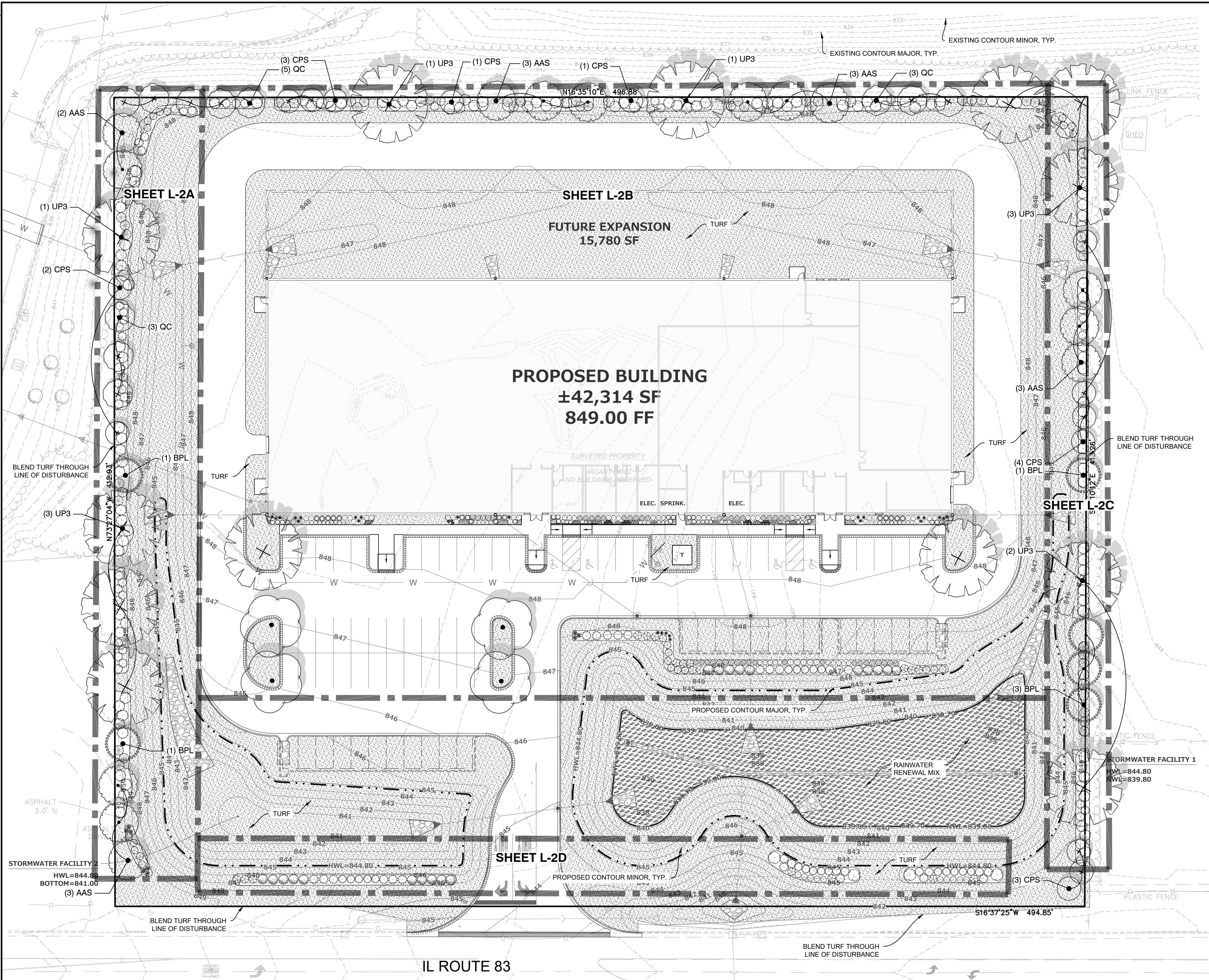
REVISIONS	

CONSTRUCTION STANDARDS

PEJ JOB No. 5897-00-LL
BOL
START DATE 10/03/24
SCALE 1" = 30'
SHEET C-11 OF C-12
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PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
AAS	14	Acer rubrum 'Autumn Spire'	Autumn Spire Maple	2" Cal.	30' T x 20' W
ANO	4	Acer rubrum 'Northwood'	Northwood Maple	3" Cal.	50' T x 35' W
BPL	6	Betula pendula 'Laciniata'	Cutleaf Weeping Birch	3" Cal.	40' T x 20' W
CPS	14	Celtis occidentalis 'Prairie Sentinel'	Prairie Sentinel Hackberry	3" Cal.	45' T x 12' W
QC	11	Quercus robur x alba 'Crimschmidt'	Crimson Spire™ Oak	3" Cal.	45' T x 15' W
UP3	13	Ulmus x 'New Horizon'	New Horizon Elm	3" Cal.	55' T x 45' W

SHRUBS					
CS5	36	Cornus sanguinea 'Anny's Winter Orange'	Anny's Winter Orange Dogwood	18" Ht.	4' T x 3' W
HP2	20	Hydrangea paniculata 'Vanilla Strawberry'	Vanilla Strawberry Hydrangea	36" Ht.	7' T x 5' W
HR	29	Hydrangea paniculata 'AJ14'	Early Evolution Hydrangea	18" Ht.	2' T x 2' W
PCA	18	Philadelphus coronarius 'Aureus'	Golden Mockorange	36" Ht.	6' T x 5' W
RS	24	Rosa x 'Meiswetdom'	Sweet Drift® Groundcover Rose	18" Ht.	2' T x 3' W
RP	15	Rosa x 'Meithatie'	Sweet Spirit™ Rose	18" Ht.	4' T x 3' W
SB2	4	Sambucus nigra 'Black Lace'	Black Lace Elderberry	36" Ht.	7' T x 7' W
SO3	22	Syringa x 'SMNJRPI'	Bloomerang Dwarf Pink Lilac	18" Ht.	4' T x 3' W
WS2	20	Weigela florida 'Bokrasopin'	Sonic Bloom® Pink Weigela	36" Ht.	5' T x 5' W

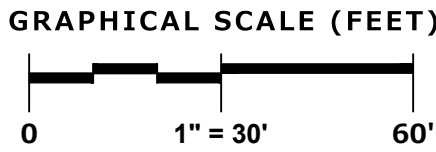
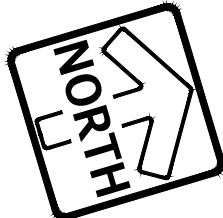
EVERGREEN SHRUBS					
CB	25	Chamaecyparis pisifera 'Boulevard'	Boulevard Sawara Cypress	36" Ht.	12' T x 4' W
JCS	124	Juniperus chinensis 'Sea Green'	Sea Green Juniper	24" Ht.	5' T x 7' W
JB	31	Juniperus chinensis 'Blue Vase'	Blue Vase Juniper	18" Ht.	4' T x 3' W
PM	45	Picea pungens 'Montgomery'	Montgomery Colorado Spruce	36" Ht.	6' T x 6' W
PT	73	Pinus mugo 'Tannenbaum'	Tannenbaum Mugo Pine	36" Ht.	12' T x 6' W
PMP	15	Pinus mugo pumilio	Dwarf Mugo Pine	18" W	4' T x 5' W
PB3	16	Pinus strobus 'Blue Shag'	Blue Shag White Pine	18" Ht.	4' T x 3' W
TH3	23	Thuja occidentalis 'Hetz Midget'	Hetz Midget Arborvitae	18" W	3' T x 3' W

ORNAMENTAL GRASSES					
AB	9	Andropogon gerardii 'Blackhawks'	Blackhawks Big Bluestem	1 gal.	48" T x 30" W
ML	23	Miscanthus sinensis 'Little Kitten'	Little Kitten Eulalia Grass	1 gal.	24" T x 15" W
SS	25	Schizachyrium scoparium 'Standing Ovation'	Standing Ovation Little Bluestem	1 gal.	4' T x 2' W

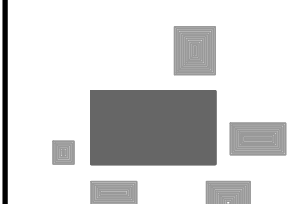
CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS
PERENNIALS						
CC4	21	Coreopsis grandiflora 'Sunburst'	Sunburst Tickseed	4.5" Cont.	15" o.c.	12" T x 18" W
EE	43	Echinacea x 'PAS702917'	PowWow® Wild Berry Coneflower	4.5" Cont.	14" o.c.	22" T x 15" W
NS	20	Nepeta racemosa 'Snowflake'	Snowflake White Catmint	4.5" Cont.	14" o.c.	12" T x 16" W
PT2	29	Phlox paniculata 'Purple Kiss'	Top Shelf Purple Kiss Garden Phlox	4.5" Cont.	12" o.c.	12" T x 14" W

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
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AGRECOL MIXES				
	9,153 sf	Rain Garden	AGRECOL RAINWATER RENEWAL MIX	
	91,408 sf	Turf Hydroseed	Drought Tolerant Fescue Blend	



	LANDSCAPE IMPROVEMENT TABLE	REQUIRED	PROVIDED
20.60.070	ON-SITE LANDSCAPING • TREES	4	4
20.60.080	FOUNDATION PLANTINGS • 60% OF BUILDING FACADE @ 350'	210'	215'
20.60.100	PARKING LOT PERIMETER • 1 SHRUB / 3' @ 441'	147	147
20.60.110	PARKING LOT INTERIOR • 1 ISLAND / 10 PARKING SPACES @ 53 STALLS • 1 TREE PER ISLAND	6	
20.60.120	BUFFER YARDS - 1 SHADE TREE / 25' • NORTH - SIDE YARD @ 415' • WEST - REAR YARD @ 597' • SOUTH - SIDE YARD @ 441' CONTINUOUS EVERGREEN HEDGE	17 20 18 X	17 20 18 X



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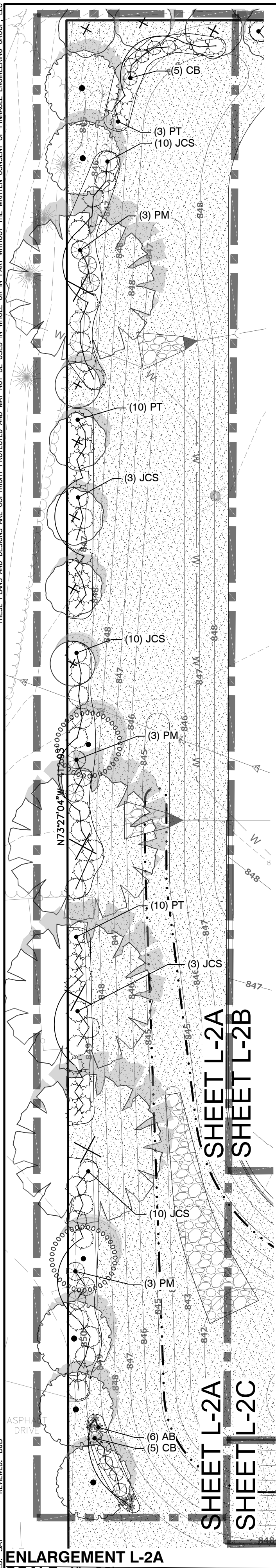
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LANDSCAPE OVERVIEW

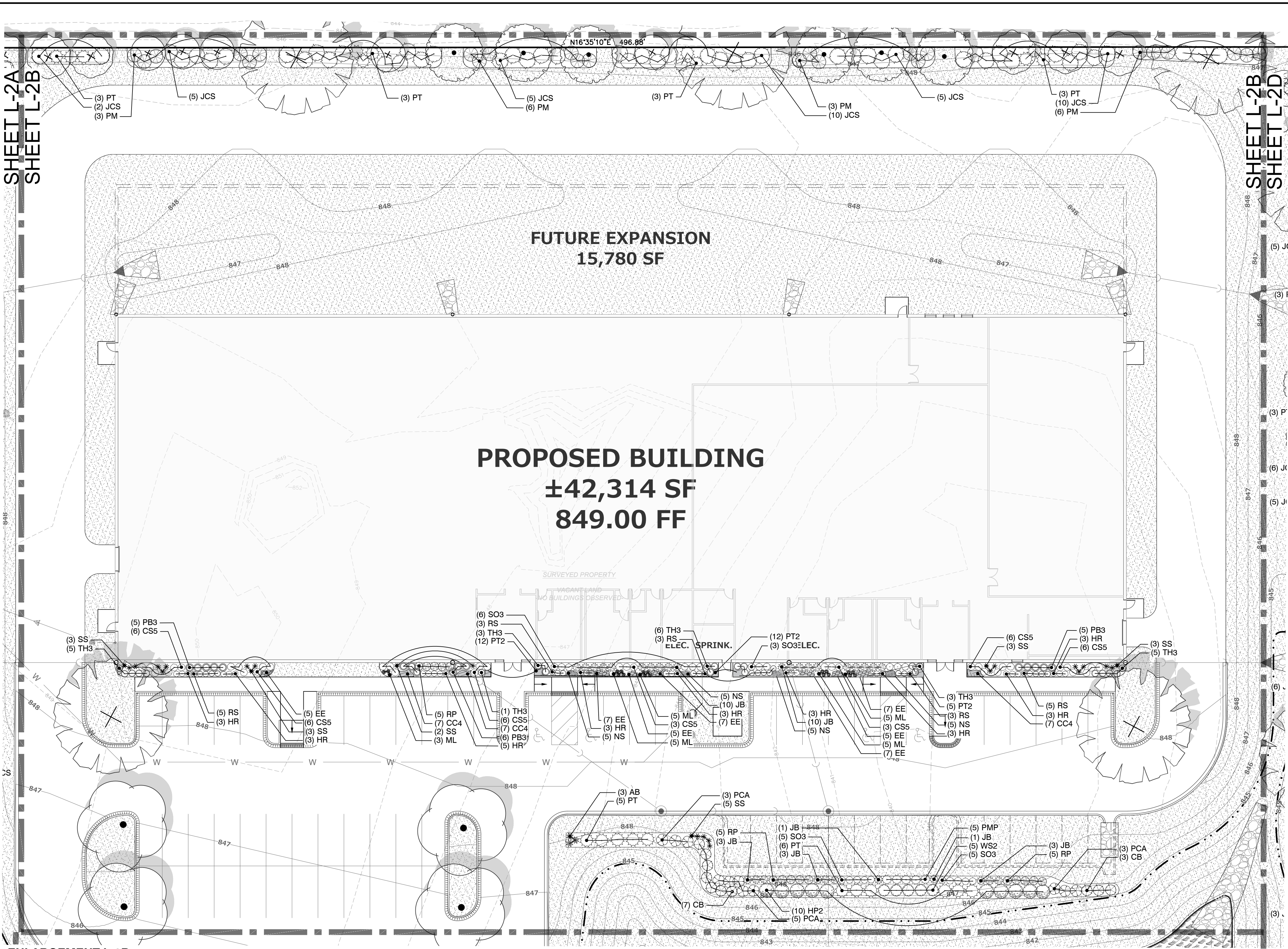
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PEG PM: **BDJ**
START DATE: **10/03/24**
SCALE: **1" = 30'**

SHEET
L-1
OF
L-3

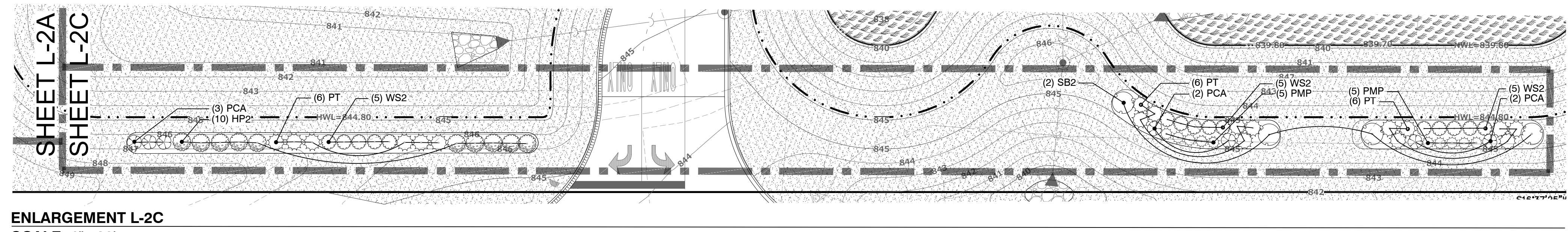
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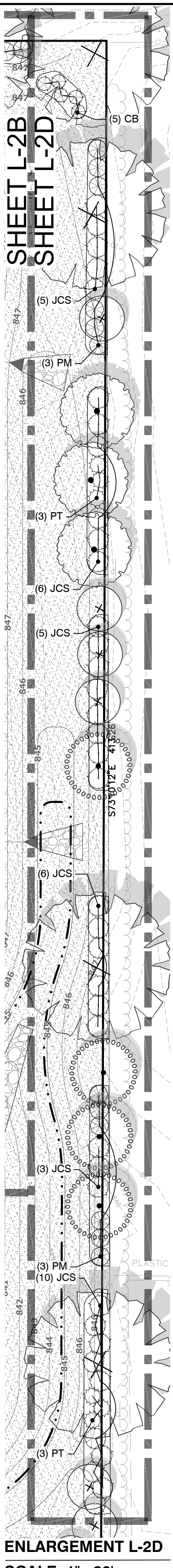
ENLARGEMENT L-2A
SCALE: 1"=20'



ENLARGEMENT L-2B
SCALE: 1"=20'

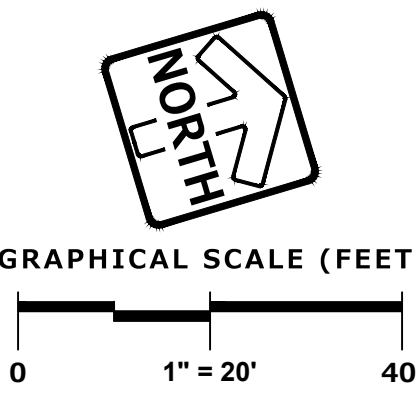


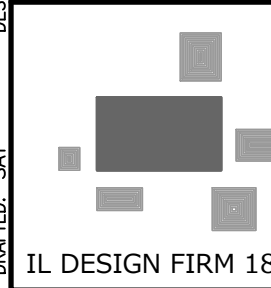
ENLARGEMENT L-2C
SCALE: 1"=20'



ENLARGEMENT L-2D
SCALE: 1"=20'

PLANT KEY	
CODE	BOTANICAL / COMMON NAME
TREES	
AAS	Acer rubrum 'Autumn Spire'
ANO	Acer rubrum 'Northwood'
BPL	Betula pendula 'Laciniata'
CPS	Celtis occidentalis 'Prairie Sentinel'
QC	Quercus robur x alba 'Crimschmidt'
UP3	Ulmus x 'New Horizon'
SHRUBS	
CS5	Cornus sanguinea 'Anny's Winter Orange'
HP2	Hydrangea paniculata 'Vanilla Strawberry'
HR	Hydrangea paniculata 'AJ14'
PCA	Philadelphus coronarius 'Aureus'
RS	Rosa x 'Meisweddom'
RP	Rosa x 'Meisthater'
SO3	Syringa x 'SMNJRPI'
WS2	Weigela florida 'Bokrasopin'
EVERGREEN SHRUBS	
CB	Chamaecyparis pisifera 'Boulevard'
JCS	Juniperus chinensis 'Sea Green'
JB	Juniperus chinensis 'Blue Vase'
PM	Picea pungens 'Montgomery'
PT	Pinus mugo 'Tannenbaum'
PB3	Pinus strobus 'Blue Shag'
TH3	Thuja occidentalis 'Hetz Midget'
ORNAMENTAL GRASSES	
AB	Andropogon gerardii 'Blackhawks'
ML	Miscanthus sinensis 'Little Kitten'
SS	Schizachyrium scoparium 'Standing Ovation'
PERENNIALS	
CC4	Coreopsis grandiflora 'Sunburst'
EE	Echinacea x 'PAS702917'
NS	Nepeta racemosa 'Snowflake'
PT2	Phlox paniculata 'Purple Kiss'
SYMBOL	
AGRECOL MIXES	
	Rain Garden
	AGRECOL RAINWATER RENEWAL MIX
TURF	
	Turf Hydroseed
	Drought Tolerant Fescue Blend





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LANDSCAPE ENLARGEMENT

REG JOB No. 5897.00-IL
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SHEET
L-2
OF
L-3

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GENERAL PLANTING NOTES

- THE LAYOUT OF ALL PLANTING BEDS AND INDIVIDUAL TREES AND SHRUBS SHALL BE STAKED BY THE CONTRACTOR IN ADVANCE OF INSTALLATION. FLAGGING, STAKES, OR PAINT MAY BE USED TO DELINEATE LOCATIONS AS SCALED FROM THE PLANS. AN APPROVED REPRESENTATIVE WILL REVIEW THESE LOCATIONS WITH THE CONTRACTOR AND MAKE MINOR ADJUSTMENTS AS NECESSARY. BED LAYOUT SHALL ALSO INCLUDE PERENNIAL GROUPINGS BY SPECIES.
- THE CONTRACTOR IS RESPONSIBLE FOR INDEPENDENTLY DETERMINING THE PLANT MATERIAL QUANTITIES REQUIRED BY THE LANDSCAPE PLANS. REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT.
- NO PLANT MATERIAL OR PLANT SIZE SUBSTITUTIONS WILL BE ACCEPTED WITHOUT APPROVAL BY THE LANDSCAPE ARCHITECT. ANY CHANGES SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO INSTALLATION.
- ALL BNB STOCK SHALL BE NURSERY GROWN IN A CLAY LOAM SOIL FOR A MINIMUM OF THREE GROWING SEASONS WITHIN 200 MILES OF PROJECT LOCATION, IN A ZONE COMPATIBLE WITH USDA HARDINESS ZONE 5A. SEED SHALL BE PROVIDED FROM A NURSERY (WITHIN 200 MILES) WITH A SIMILAR PLANT HARDINESS ZONE AS PROJECT LOCATION. EXISTING SOIL SHALL BE AMENDED PER SOIL ANALYSIS REPORT TO ENSURE A PROPER GROWING MEDIUM IS ACHIEVED.
- ALL PLANT MATERIAL SHALL COMPLY WITH STANDARDS DESCRIBED IN AMERICAN STANDARD OF NURSERY STOCK - Z60.1 ANSI. LANDSCAPE ARCHITECT OR OWNERS AUTHORIZED REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND POTENTIALLY REJECT ANY PLANT MATERIAL DEEMED TO NOT MEET THE REQUIRED STANDARDS.
- ALL STOCK SHALL BE FREE OF DISEASES AND HARMFUL INSECTS, DAMAGE, DISORDERS AND DEFORMITIES.
- TREES SHALL HAVE SINGLE, STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. MULTI-STEM TREES SHALL HAVE 3-4 STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. HEIGHT-TO-CALIPER RATIOS SHALL BE CONSISTENT WITH THE LATEST EDITION OF ANSI Z60.1.
- ROOT SYSTEMS SHALL BE LARGE ENOUGH TO ALLOW FOR FULL RECOVERY OF THE TREE, AND SHALL CONFORM TO STANDARDS AS THEY APPEAR IN THE MOST CURRENT REVISION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S AMERICAN STANDARD OF NURSERY STOCK ANSI Z60.1.
- BNB TREES SHALL BE DUG WITH A BALL OF SOIL, NOT SOFT BALLED OR POTTED AND SHALL BE FIRM IN THEIR ROOTBALL. ROOT BALL SHALL BE WRAPPED (WITH BIODEGRADABLE MATERIAL). THE TREE ROOT FLARE, OR COLLAR, SHALL BE AT OR WITHIN THE TOP THREE INCHES OF GRADE.
- ALL SPRING TREES MUST BE FRESHLY DUG IN THE MOST RECENT SPRING.
- ALL AUTUMN TREES MUST BE FRESHLY DUG IN THE MOST RECENT AUTUMN.
- TREES SHALL BE ALIVE, HEALTHY AND APPROPRIATELY MOIST, AT TIME OF DELIVERY. TREES SHALL BE SUBJECT TO INSPECTION FOR CONFORMITY TO SPECIFICATION REQUIREMENTS AND APPROVAL BY THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE. THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY TREES THAT DO NOT MEET THE SPECIFICATIONS OR THAT HAVE BEEN DAMAGED DURING SHIPMENT. THE LANDSCAPE INSTALLER MUST RECEIVE APPROVAL FROM LANDSCAPE ARCHITECT FOR ANY SUBSTITUTIONS OR ALTERATIONS.
- ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH PLANTING DETAILS.
- ALL PLANTING BEDS SHALL HAVE A MINIMUM 10" DEPTH OF PREPARED SOIL. WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 10" OF SOIL. REFER TO SOIL PLACEMENT NOTES.
- WHILE PLANTING TREES AND SHRUBS, BACKFILL ¾ OF PLANTING HOLE AND WATER TREE THOROUGHLY BEFORE INSTALLING THE REMAINDER OF SOIL MIXTURE. AFTER ALL SOIL HAS BEEN PLACED INTO THE PLANTING HOLE WATER THOROUGHLY AGAIN.
- THE CONTRACTOR MUST LABEL ALL TREES WITH THE COMMON AND BOTANICAL NAMES PRIOR TO FINAL INSPECTION.
- OAK TREES SHALL BE TREATED FOR TWO-LINE CHESTNUT BORER BOTH AT THE TIME OF INSTALLATION AND DURING THE SECOND GROWING SEASON.
- ALL PLANTING BEDS SHALL BE MULCHED WITH 3" DEEP SHREDDED HARDWOOD MULCH, AND ALL TREES PLANTED IN TURF AREAS SHALL RECEIVE A 3" DEEP SHREDDED HARDWOOD MULCHED RING AS SHOWN IN PLANTING DETAILS.
- ALL PLANTING BEDS AND TREE RINGS SHALL HAVE A 4" DEEP TRENCHED BED EDGE CREATED BY EITHER A FLAT LANDSCAPE SPADE OR MECHANICAL EDGER. BED EDGES ARE TO BE CUT CLEAN AND SMOOTH AS SHOWN ON LANDSCAPE PLANS WITH A CLEAN DEFINITION BETWEEN TURF AND PLANTING AREAS.
- ALL TURF SEED AREAS SHALL RECEIVE A MINIMUM OF 6" DEPTH OF TOPSOIL. WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 6" OF SOIL AS INDICATED IN THE SOIL PLACEMENT NOTES. REQUIRED AMENDMENTS SHALL BE DETERMINED BASED ON A SOIL ANALYSIS TO BE PERFORMED. ALL TOPSOIL AMENDMENT SHALL BE AGED WEED FREE MANURE OR CLASS 1 ORGANIC MATTER.
- FOR LAWN SEEDING, APPLY A STARTER FERTILIZER AND SEED UNIFORMLY AT THE RATE RECOMMENDED BY MANUFACTURER, AND PROVIDE A MULCH COVERING THAT IS SUITABLE TO PROMOTE SEED GERMINATION AND TURF ESTABLISHMENT. CONTRACTOR TO PROVIDE FERTILIZER, SEED, AND MULCH SPECIFICATIONS TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. EROSION CONTROL MEASURES ARE TO BE INSTALLED IN THOSE AREAS REQUIRING STABILIZATION (SWALES, SLOPES EXCEEDING 1:3, AND THOSE LOCATIONS INDICATED IN CIVIL DRAWINGS).
- THE CONTRACTOR TO ENSURE A SMOOTH, UNIFORM QUALITY TURF IS ACHIEVED WITH NO BARE SPOTS LARGER THAN 6" X 6". ANY BARE SPOTS LARGER THAN 6" X6" AT THE END OF ESTABLISHMENT PERIOD SHALL BE RESEEDD AT THE CONTRACTORS EXPENSE TO OBTAIN A DENSE, UNIFORM LAWN.
- ALL FINISH GRADING AND LAWN AREAS TO BE INSTALLED BY LANDSCAPE CONTRACTOR.
- ALL DISTURBED AREAS WITHIN THE PROJECT SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.
- ALL DISTURBED AREAS OUTSIDE THE LIMITS OF WORK SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE OWNER.

- THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, INCLUDING ANY IRRIGATION LINES, PRIOR TO DIGGING. CONSULT J.U.L.I.E.
- TREES SHALL BE INSTALLED NO CLOSER THAN:
 - 10 FEET FROM ANY FIRE HYDRANT
 - 7 FEET FROM STORM SEWER, SANITARY SEWER LATERALS, DRIVEWAYS, AND WATER SERVICE
- THE CONTRACTOR SHALL ENSURE THAT SOIL CONDITIONS AND COMPACTION ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AROUND THE CONSTRUCTION SITE. UNDESIRABLE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING OF WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE PROPER SURFACE AND SUBSURFACE DRAINAGE IN ALL AREAS
- THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES, AND LICENSES NECESSARY FOR THE INSTALLATION OF THIS PLAN.
- THE CONTRACTOR IS TO REVIEW ALL SITE ENGINEERING DOCUMENTS PRIOR TO INSTALLATION. ANY CONFLICTS MUST BE REPORTED TO THE LANDSCAPE ARCHITECT. THESE LANDSCAPE DRAWINGS ARE FOR THE INSTALLATION OF PLANT MATERIALS ONLY UNLESS OTHERWISE STATED.
- THE CONTRACTOR SHALL PROVIDE WATERING AND MAINTENANCE SERVICES FOR A PERIOD OF 60 DAYS TO ENSURE VEGETATIVE ESTABLISHMENT. UPON COMPLETION OF THE PROJECT, CONTRACTOR SHALL SUPPLY THE OWNER IN WRITING WITH ONGOING WATERING AND MAINTENANCE INSTRUCTIONS.
- PLANT MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM TIME OF OWNER ACCEPTANCE. ONLY ONE REPLACEMENT PER PLANT WILL BE REQUIRED DURING THE WARRANTY PERIOD EXCEPT IN THE EVENT OF FAILURE TO COMPLY WITH THE SPECIFIED REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE TO CONDUCT A FINAL WALK THROUGH WITH THE LANDSCAPE ARCHITECT AND OR OWNERS REPRESENTATIVE TO ANSWER QUESTIONS, PROVIDE INSTRUCTIONS, AND ENSURE THAT PROJECT REQUIREMENTS HAVE BEEN MET.

SOIL PLACEMENT NOTES

- LOOSEN SUBGRADE TO A MINIMUM DEPTH INDICATED IN PLANTING NOTES USING A CULTI-MULCHER OR SIMILAR EQUIPMENT, AND REMOVE STONES MEASURING OVER 1-1/2 INCHES IN ANY DIMENSION, STICKS, RUBBISH AND OTHER EXTRANEOUS MATTER. AREAS ADJACENT TO WALKS AND PAVEMENT SHALL BE FREE OF EXCESS STONE AND PAVING MATERIALS SO AS TO PROVIDE AN UNINTERRUPTED CROSS SECTION OF SOIL. INTERNAL PARKING ISLANDS SHALL BE LOOSENED TO A DEPTH OF 30".
- THOROUGHLY BLEND PLANTING SOIL MIX FOR PLANTING BED AREAS. (1 PART EXISTING SOIL, 1 PART TOPSOIL, 1 PART ORGANIC SOIL AMENDMENT, 2.9 POUNDS PER CUBIC YARD OF 4-4-4 ANALYSIS SLOW-RELEASE FERTILIZER)
- TREE AND SHRUB HOLES SHALL BE FILLED WITH A PREPARED PLANTING MIXTURE OF 1 PART TOPSOIL, 2 PARTS PLANTING SOIL MIX.
- SPREAD SOIL AND SOIL AMENDMENTS TO DEPTH INDICATED ON DRAWINGS, BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. (FINISH GRADE OF PLANTING BEDS SHALL BE 3" BELOW ALL ADJACENT SURFACES. FINISH GRADE OF TURF SEEDING AREAS SHALL BE 1" BELOW ALL ADJACENT HARD SURFACES, WALKS, AND CURBS.)
- PLACE APPROXIMATELY 1/2 OF TOTAL AMOUNT OF SOIL REQUIRED. WORK INTO TOP OF LOOSENED SUBGRADE TO CREATE A TRANSITION LAYER, THEN PLACE REMAINDER OF THE SOIL. SOIL TRANSITION LAYER SHALL BE TILLED TO A MINIMUM DEPTH OF 6" BELOW THE DEPTH OF NEWLY PLACED SOIL. PARKING LOT ISLANDS SHALL BE CROWNED TO A HEIGHT OF 6" TO PROVIDE PROPER DRAINAGE UNLESS OTHERWISE NOTED.
- DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
- FINISH GRADING: GRADE SOIL TO A SMOOTH, UNIFORM SURFACE PLANE WITH A LOOSE, UNIFORMLY FINE TEXTURE.
- ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES.
- RESTORE PLANTING BEDS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING AND BEFORE PLANTING.

NATIVE SEEDING

ESTABLISHMENT OF A VIABLE VEGETATION COMMUNITY WITHIN THE BIO INFILTRATION BASINS WILL BE COMPLETED BY HAND-BROADCASTING OF PRE-DESIGNED SEED MIXES TO CREATE A DYNAMIC PLANTING.

PRIOR TO SEEDING:

- ALL WEEDS AND EXISTING VEGETATION SHALL BE REMOVED. EXISTING VEGETATION SHALL BE TREATED WITH GLYPHOSATE OR SIMILAR HERBICIDE BY A LICENSED PROFESSIONAL. TREATMENT SHALL OCCUR A MINIMUM OF 10 DAYS PRIOR TO SEEDING/PLANTING. VEGETATION STILL ALIVE AFTER INITIAL HERBICIDE TREATMENT SHALL BE TREATED A SECOND TIME PRIOR TO TILLING INTO THE SOIL. TREATED VEGETATION SHALL BE TILLED INTO THE SOIL NO EARLIER THAN 1 DAY PRIOR TO SEEDING.
- PREPARATION OF SOIL PRIOR TO SEEDING
 - REFER TO CIVIL PLANS FOR SOIL MIXTURE.
 - ALL FOREIGN MATERIALS LARGER THAN 1-INCH SHALL BE REMOVED FROM THE SOIL PRIOR TO SEEDING OR PLANTING.
 - AREA SHOULD BE FREE FROM UNSIGHTLY VARIATIONS, RIDGES, AND DEPRESSIONS.
 - AVOID DRIVING OVER THE SPECIFIED AREA WITH MACHINERY.

SPECIFICATIONS FOR HAND BROADCASTING:

SEEDING SHALL BE CONDUCTED IN LATE FALL (SEPTEMBER 1- SOIL FREEZE) SO THAT SEEDS MAY LIE DORMANT DURING THE WINTER, ALLOWING FOR STRATIFICATION, OR SPRING (MARCH 1-JUNE 1) TO ALLOW A COMPLETE GROWING SEASON TO BECOME ESTABLISHED.

A. COVER CROP

- ANNUAL RYE SHALL BE SPREAD AT A DENSITY OF 20 POUNDS PER ACRE DURING THE PLANTING OR SEEDING OF THE NATIVE PLANT SPECIES TO STABILIZE THE SOIL AND REDUCE THE GROWTH OF UNWANTED VEGETATION. THIS ANNUAL GRASS GROWS RAPIDLY WITHOUT COMPETING WITH THE WILDFLOWERS AND GRASSES THAT ARE PLANTED IN THE TARGET AREAS.
- WINTER WHEAT OR PERENNIAL RYE SHALL NOT BE USED AS A COVER CROP. THESE GRASSES MAY OUT COMPETE PRAIRIE SEEDLINGS, LEADING TO A REDUCTION IN THE SUCCESS OF THE PLANTINGS.

B. SEED MIX:

- MIX ALL NATIVE SEED WITH VERMICULITE ACCORDING TO AGRECOL RECOMMENDATIONS AND INSTALLATION GUIDELINES.
- BROADCAST HALF THE SEED OVER THE ENTIRE SITE OR TARGET AREA.
- BROADCAST THE OTHER HALF OF SEED PERPENDICULAR TO THE DIRECTION THAT THE FIRST HALF OF THE SEED WAS BROADCAST.
- COVER SEED WITH ¼-INCH TO ½-INCH OF SOIL (USE ANY EXCESS SOIL FROM THE SITE) WITH RAKE OR DRAG.
- ROLL SITE TO ENSURE FIRM SEED-TO-GROUND CONTACT.
- KEEP SEED CONSTANTLY WET THROUGH GERMINATION PERIOD. GENERALLY 3 WEEKS.

ALL SEEDING SHALL BE COVERED WITH 1-INCH OF CLEAN, NON-INVASIVE STRAW (NO MARSH HAY, OR REED CANARY GRASS) WITHOUT SEEDS, WITHIN SEVEN DAYS. WHEAT, RYE, OATS, OR BARLEY ARE ACCEPTABLE FORMS OF STRAW. THOSE AREAS OF SLOPES STEEPER THAN 8:1 (EIGHT FEET HORIZONTAL TO ONE FOOT VERTICAL) SHALL BE PLANTED NO LATER THAN OCTOBER 1 AND STAKED WITH AN EROSION CONTROL BLANKET TO PREVENT EROSION.

NATIVE PLANTINGS:

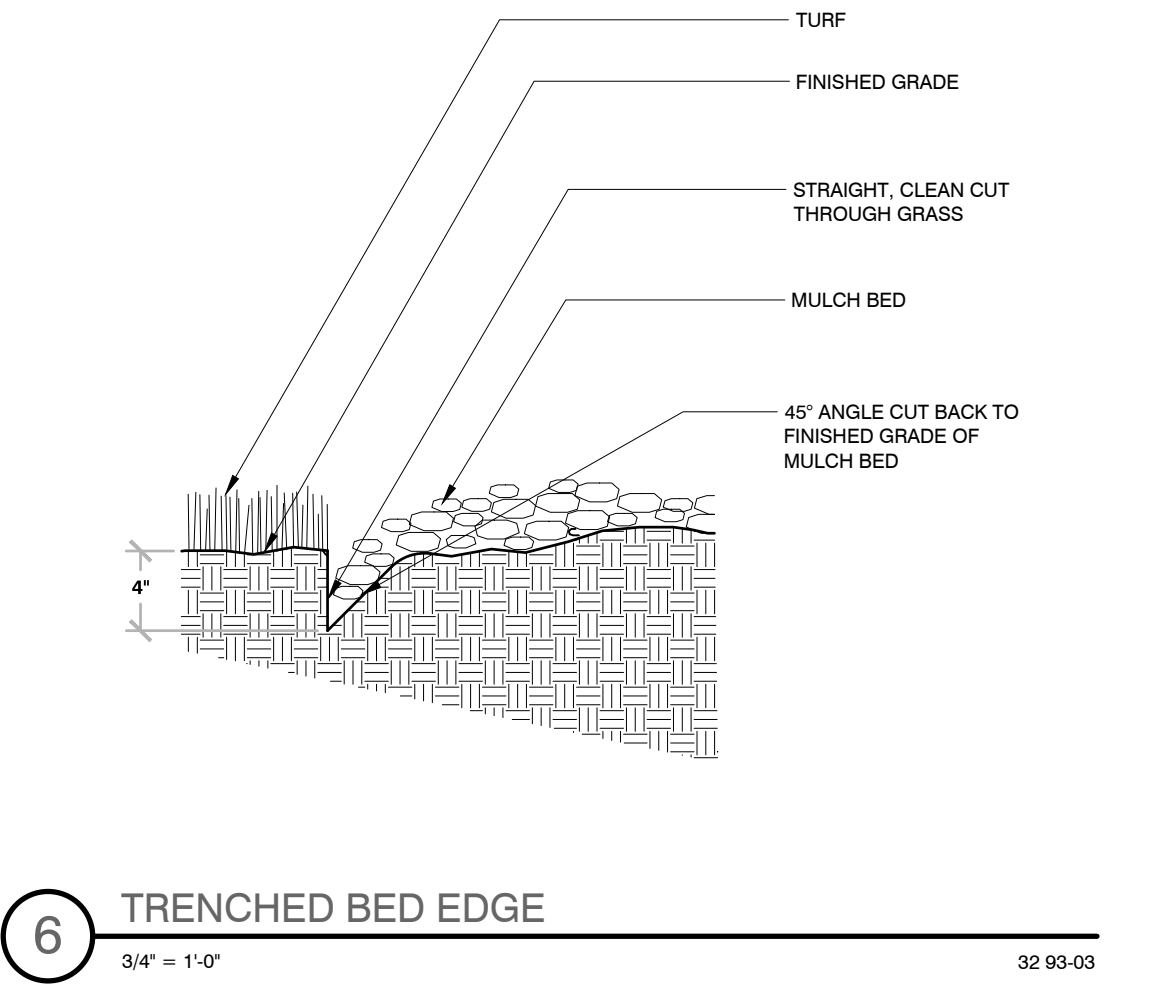
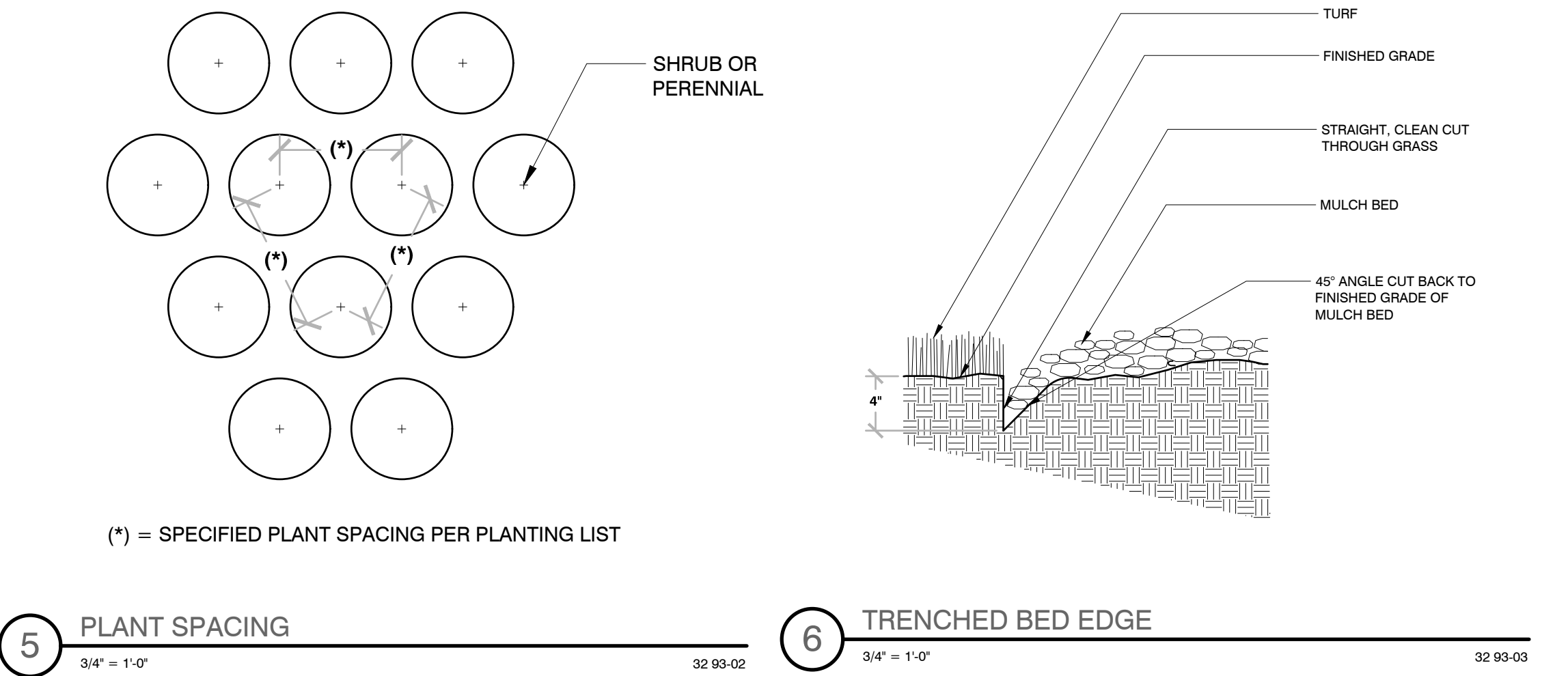
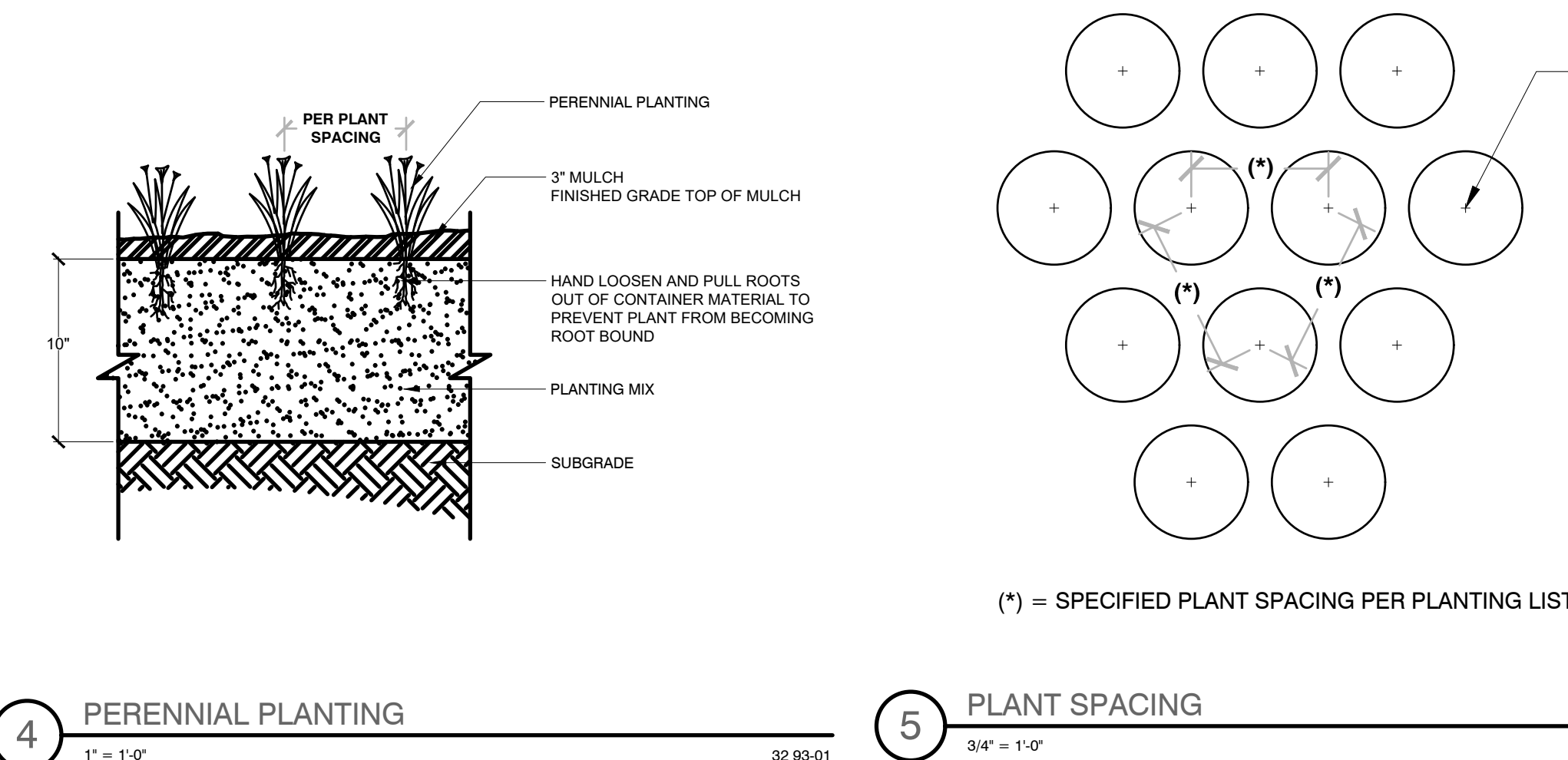
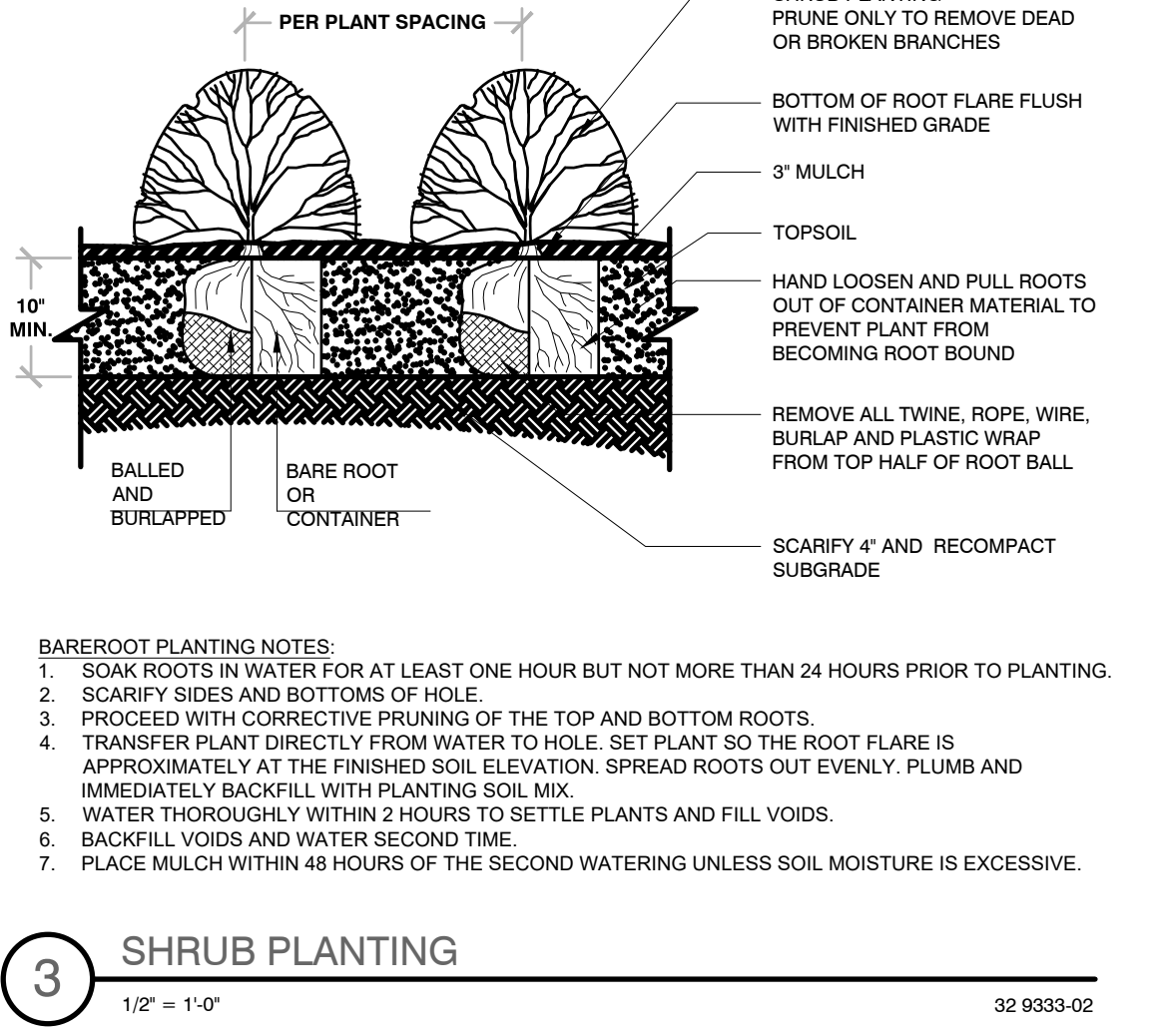
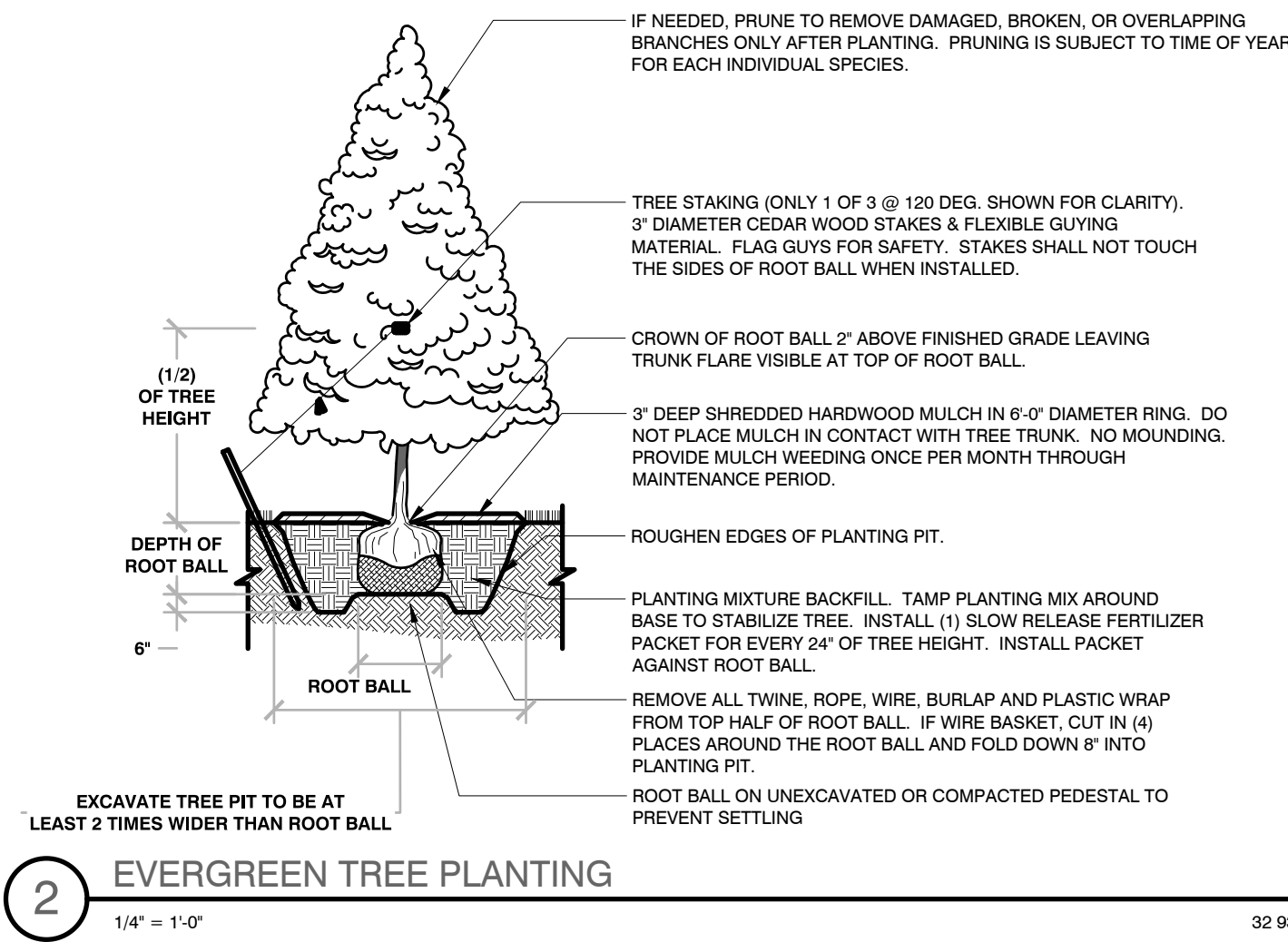
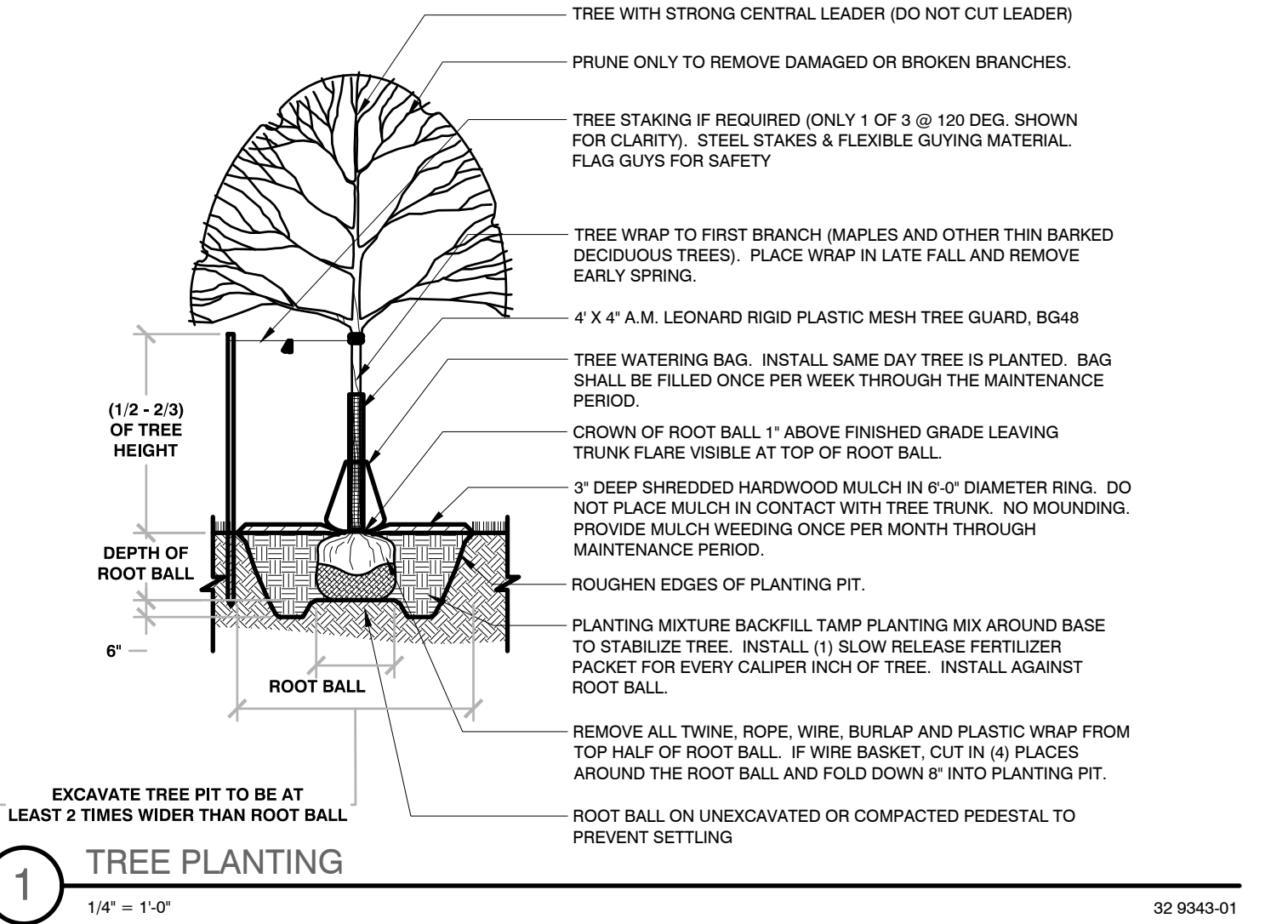
WEED SUPPRESSION MEASURES:

1st YEAR - PERFORM SPOT SPRAY WITH HERBICIDE TO SUPPRESS WEEDS. THIS SHOULD OCCUR APPROXIMATELY EVERY MONTH OF THE GROWING SEASON AFTER NATIVE PLANTINGS HAVE BEEN ROUGH GRADED.

2nd YEAR - IN MAY/JUNE MOW NATIVE PLANTINGS AT 6" HEIGHT TO SUPPRESS THE WEEDS. PERFORM SPOT SPRAY WITH HERBICIDE TO SUPPRESS WEEDS. HAVE PROFESSIONAL ASSESS PLANTINGS. REPEAT MOWING NATIVE PLANTINGS AND SPOT-SPRAY IN EARLY JULY.

3rd YEAR - IN MAY/JUNE MOW NATIVE PLANTINGS AT 8" HEIGHT TO SUPPRESS THE WEEDS. PERFORM SPOT SPRAY WITH HERBICIDE TO SUPPRESS WEEDS.

4th YEAR - IN MAY PERFORM A PRESCRIBED BURN. IN JUNE HAVE A QUALIFIED PROFESSIONAL ASSESS PLANTINGS. IF A PRESCRIBED BURN CAN NOT BE UTILIZED, NATIVE PLANTINGS SHALL BE CUT TO THE GROUND AND ALL CUT MATERIAL SHALL BE REMOVED AND DISPOSED OF OFF SITE.





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REVISIONS

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LANDSCAPE NOTES & DETAILS

REG JOB No. **5987-00-JL**
REG PM **BDJ**
START DATE **10/03/24**
SCALE **VARIABLES**

SHEET
L-3
OF
L-3



THE BOLT ⚡

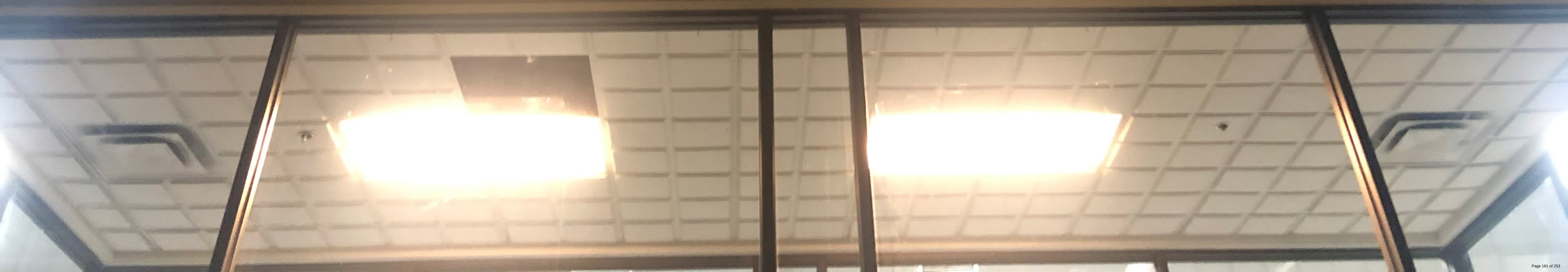


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***THE* BOLT** 

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LEGEND OF LINES

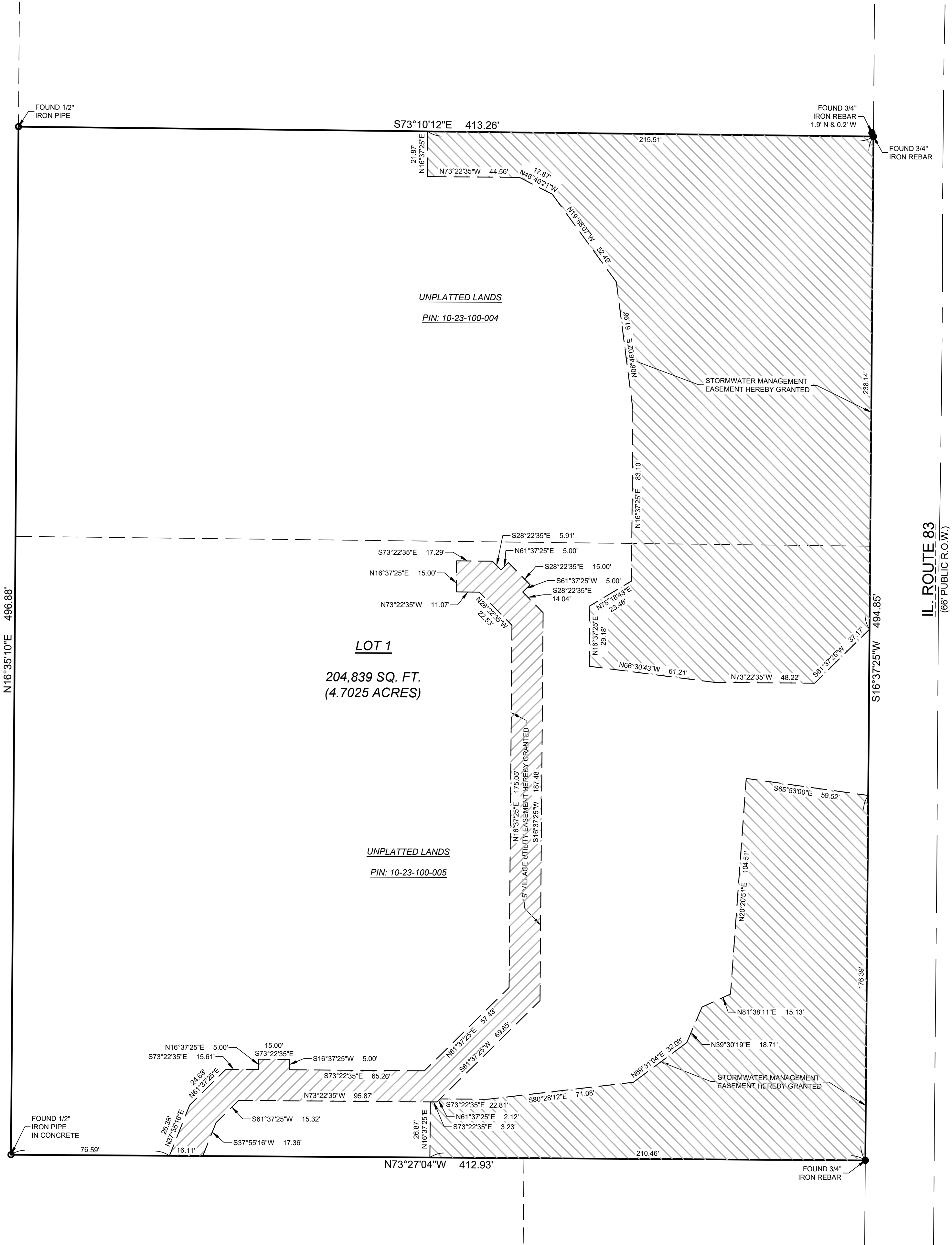
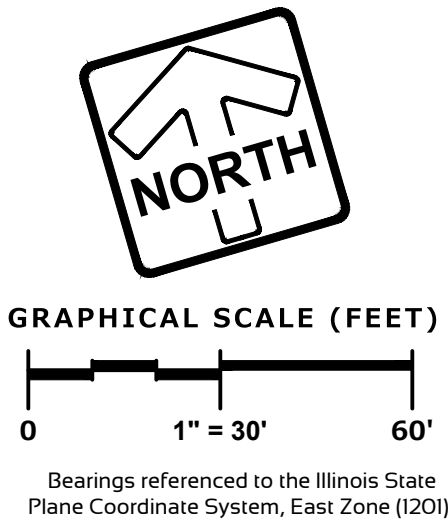
- PARCEL BOUNDARY
- RIGHT-OF-WAY
- CENTER OF RIGHT-OF-WAY
- ADJACENT BOUNDARY
- SECTION LINE
- BUILDING SETBACK
- PUBLIC UTILITY EASEMENT LINE
- (180.00')

RECORD DIMENSION
- 180.00'

MEASURED DIMENSION
- VILLAGE UTILITY EASEMENT
- STORMWATER MANAGEMENT EASEMENT

BOLT SUBDIVISION

BEING PART OF THE WEST 1/2 OF THE NORTHWEST 1/4 OF SECTION 23, TOWNSHIP 44 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, ILLINOIS.



GENERAL NOTES

- Survey prepared for: JFox Enterprises
- Field work completed on October 3, 2024
- No title or letter report was provided for this survey. Boundary based on field evidence.
- Land Area: 204,839 Square Feet (4.7025 Acres).

PLAN | DESIGN | DELIVER

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PINNACLE ENGINEERING GROUP

ENGINEERING | NATURAL RESOURCES | SURVEYING

ILLINOIS OFFICE:
1051 E. MAIN STREET - SUITE 217
EAST DUNDEE, IL 60118
(847) 551-5300

CHICAGO | MILWAUKEE | NATIONWIDE

PRELIMINARY PLAT OF SUBDIVISION

REVISIONS

PEC JOB No.	5897.00
REG. PM.	BDJ
DATE	1/30/2025
SCALE	1"=30'
DRAFTED BY:	TLS

SHEET
1
2

SURVEY

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Page 182 of 253

BOLT SUBDIVISION

BEING PART OF THE WEST 1/2 OF THE NORTHWEST 1/4 OF SECTION 23, TOWNSHIP 44 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, ILLINOIS.

VILLAGE BOARD CERTIFICATE

STATE OF ILLINOIS)) SS
COUNTY OF LAKE)

APPROVED AND ACCEPTED BY THE VILLAGE BOARD OF TRUSTEES OF THE VILLAGE OF MUNDELEIN, LAKE COUNTY, ILLINOIS, THIS ___ DAY OF _____, 20__.

PRESIDENT

ATTEST

PLANNING COMMISSION CERTIFICATE

STATE OF ILLINOIS)) SS
COUNTY OF LAKE)

I, _____, CHAIRMAN OF THE PLANNING COMMISSION OF THE VILLAGE OF MUNDELEIN, LAKE COUNTY, ILLINOIS, DO HEREBY CERTIFY THAT THE ANNEXED PLAT HAS BEEN EXAMINED BY THE SAID COMMISSION AND APPROVED AND ACCEPTED.

DATED THIS ___ DAY OF _____, 20__.

CHAIRMAN

VILLAGE ENGINEER CERTIFICATE

STATE OF ILLINOIS)) SS
COUNTY OF LAKE)

APPROVED BY THE VILLAGE ENGINEER OF MUNDELEIN, ILLINOIS, THIS ___ DAY OF _____, 20__.

VILLAGE ENGINEER

CERTIFICATE OF SPECIAL ASSESSMENTS

STATE OF ILLINOIS)) SS
COUNTY OF LAKE)

I, _____, VILLAGE TREASURER OF THE VILLAGE OF MUNDELEIN, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT OR UNPAID CURRENT OR FORFEITED SPECIAL ASSESSMENTS OR ANY DEFERRED INSTALLMENTS THEREOF THAT HAVE BEEN APPORTIONED AGAINST THE TRACT OF LAND INCLUDED ON THIS PLAT.

DATED THIS ___ DAY OF _____, 20__.

VILLAGE TREASURER

LAKE COUNTY CLERK CERTIFICATE

STATE OF ILLINOIS)) SS
COUNTY OF LAKE)

I, _____, COUNTY CLERK OF LAKE COUNTY, ILLINOIS, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT GENERAL TAXES, NO UNPAID CURRENT TAXES OR SPECIAL ASSESSMENTS, NO UNPAID FORFEITED TAXES, AND NO REDEEMABLE TAX SALES AGAINST ANY OF THE LAND INCLUDED IN THIS PLAT. I FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THE PLAT.

GIVEN UNDER MY NAME AND SEAL THIS ___ DAY OF _____, 20__.

COUNTY CLERK

LAKE COUNTY RECORDER CERTIFICATE

STATE OF ILLINOIS)) SS
COUNTY OF LAKE)

THIS INSTRUMENT NO. _____, WAS FILED FOR RECORD IN THE RECORDER'S OFFICE OF LAKE COUNTY, ILLINOIS, ON THE ___ DAY OF _____, 20__.

COUNTY RECORDER

ILLINOIS DEPARTMENT OF TRANSPORTATION CERTIFICATE

THIS PLAT HAS BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION WITH RESPECT TO ROADWAY ACCESS PURSUANT OF § 2 OF "AN ACT TO REVISE THE LAW IN RELATION TO PLATS," AS AMENDED, A PLAN THAT MEETS THE REQUIREMENTS CONTAINED IN THE DEPARTMENTS "POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS" WILL BE REQUIRED BY THE DEPARTMENT.

JOSE RIOS, P.E.
REGION ONE ENGINEER

OWNER'S CERTIFICATE

STATE OF _____)) SS
COUNTY OF _____)

THIS IS TO CERTIFY THAT _____, A _____ CORPORATION, IS THE RECORD OWNER OF THE PROPERTY DESCRIBED IN THE SURVEYOR'S CERTIFICATE AFFIXED HEREON, AND DOES HEREBY CONSENT TO THE SUBDIVISION OF SAID PROPERTY, AND THE VARIOUS DEDICATIONS, GRANTS AND RESERVATIONS OF EASEMENT AND RIGHTS-OF-WAY DEPICTED HEREON.

ALSO, THIS IS TO CERTIFY THAT THE PROPERTY BEING SUBDIVIDED AFORESAID AND, TO THE BEST OF OWNER'S KNOWLEDGE AND BELIEF, SAID SUBDIVISION LIES ENTIRELY WITHIN THE LIMITS OF FREMONT ELEMENTARY SCHOOL DISTRICT #79, MUNDELEIN CONS HIGH SCHOOL DISTRICT #120 AND COLLEGE OF LAKE COUNTY #532.

DATED THIS ___ DAY OF _____, A.D., 20__.

SIGNATURE

PLEASE TYPE/PRINT THE AUTHORIZED INDIVIDUAL'S NAME, TITLE, CORPORATION/COMPANY NAME, AND ADDRESS:

AFFIX CORPORATE SEAL IF APPROPRIATE

NOTARY CERTIFICATE

STATE OF _____)) SS
COUNTY OF _____)

I, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR THE AFORESAID COUNTY AND STATE, DO HEREBY CERTIFY THAT THE FOREGOING SIGNATOR OF THE OWNER'S CERTIFICATE IS PERSONALLY KNOWN TO ME TO BE THE SAME PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND THAT SAID INDIVIDUAL APPEARED AND DELIVERED SAID INSTRUMENT AS A FREE AND VOLUNTARY ACT OF THE CORPORATION AND THAT SAID INDIVIDUAL DID ALSO THEN AND THERE ACKNOWLEDGE THAT HE OR SHE IS A CUSTODIAN OF THE CORPORATE SEAL OF SAID CORPORATION AND DID AFFIX SAID SEAL OF SAID CORPORATION TO SAID INSTRUMENT AS HIS OR HER OWN FREE AND VOLUNTARY ACT AND AS THE FREE AND VOLUNTARY ACT OF SAID CORPORATION, AS OWNER, FOR THE USES AND PURPOSES THEREIN SET FORTH IN THE AFORESAID INSTRUMENT.

GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS ___ DAY OF

_____, A.D., 20__.

NOTARY

PLEASE TYPE/PRINT NAME

NOTARY'S SEAL

STORMWATER MANAGEMENT EASEMENT PROVISIONS

A STORMWATER MANAGEMENT EASEMENT IS HEREBY RESERVED FOR AND GRANTED TO THE VILLAGE OF MUNDELEIN, ILLINOIS WITHIN THE AREAS DESIGNATED ON THE PLAT AS STORMWATER MANAGEMENT EASEMENTS FOR THE COLLECTION CONVEYANCE AND STORAGE OF STORMWATER IN AREAS TO BE MAINTAINED BY THE OWNER OF THE LOT(S) OR OUTLOT(S) ON WHICH THE FACILITIES EXIST IN ACCORDANCE WITH VILLAGE ORDINANCES AND THE APPROVED FINAL ENGINEERING PLANS. ENCROACHMENTS OF ANY KIND INCLUDING LANDSCAPING, FENCES, SHEDS OR ACCESSORY STRUCTURES WITHIN SAID EASEMENT IS PROHIBITED UNLESS THE VILLAGE ENGINEER HAS DETERMINED SAID ENCROACHMENT WILL NOT INTERFERE WITH THE PROPER FUNCTION OF SAID FACILITIES. THE VILLAGE SHALL HAVE THE RIGHT TO ENTER WITH PERSONNEL AND EQUIPMENT UPON SAID EASEMENT AT ANY TIME FOR THE PURPOSES OF ACCESS TO AND INSPECTION OF THE STORMWATER MANAGEMENT FACILITIES LOCATED WITHIN SAID EASEMENT. IF THE OWNER FAILS TO MAINTAIN SAID FACILITIES AND, AFTER RECEIPT OF NOTICE FROM THE VILLAGE OF SAID FAILURE, THE OWNER FAILS TO MAKE REQUIRED REPAIRS IN A REASONABLE PERIOD OF TIME, THE VILLAGE MAY MAKE THE REQUIRED REPAIRS AND SEEK REIMBURSEMENT FROM THE OWNER FOR THE COSTS INCURRED BY THE VILLAGE TO MAKE THE REPAIR AND/OR FILE A LIEN ON THE PROPERTY.

VILLAGE UTILITY EASEMENT PROVISIONS

AN EXCLUSIVE EASEMENT IS HEREBY RESERVED FOR AND GRANTED TO THE VILLAGE OF MUNDELEIN, ILLINOIS AND ITS RESPECTIVE SUCCESSORS AND ASSIGNS, WITHIN THE AREAS SO DESIGNATED ON THE PLAT AND MARKED VILLAGE UTILITY EASEMENT (VUE) AND UPON THE GRANTOR'S PROPERTY IMMEDIATELY ADJACENT TO THE EASEMENT AREA AS MAY BE REASONABLY REQUIRED TO CONSTRUCT, INSTALL, RECONSTRUCT, REPAIR, REMOVE, REPLACE, INSPECT, MAINTAIN AND OPERATE UNDERGROUND TRANSMISSION AND DISTRIBUTION SYSTEMS AND LINES IN, UNDER, ACROSS, ALONG AND UPON THE SURFACE OF THE VILLAGE UTILITY EASEMENT INCLUDING WITHOUT LIMITATION WATER MAINS, STORM SEWERS, SANITARY SEWERS, FORCE MAINS, ELECTRIC LINES AND ALL NECESSARY FACILITIES APPURTENANT THERETO, TOGETHER WITH THE RIGHT OF ACCESS THERETO FOR THE PERSONNEL AND EQUIPMENT NECESSARY AND REQUIRED FOR SUCH USES AND PURPOSES, AND TOGETHER WITH THE RIGHT TO INSTALL REQUIRED SERVICE CONNECTIONS UNDER THE SURFACE OF EACH LOT TO SERVE IMPROVEMENTS THEREON; TOGETHER WITH THE RIGHT TO CUT, TRIM, OR REMOVE TREES, BUSHES AND ROOTS AS MAY BE REASONABLY REQUIRED INCIDENTAL TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE PROPERTY FOR ALL SUCH PURPOSES. OBSTRUCTIONS SHALL NOT BE PLACED OVER GRANTEE'S FACILITIES OR IN, UPON, OR OVER THE PROPERTY WITHIN SAID EASEMENT WITHOUT PRIOR WRITTEN CONSENT OF THE GRANTEE. SAID EASEMENT MAY BE USED FOR LANDSCAPING, GARDENS, DRIVEWAYS AND PARKING EXCEPT AS OTHERWISE DESIGNATED ON THE PLAT. THE GRADES OF THE SUBDIVIDED PROPERTY APPROVED BY THE VILLAGE ENGINEER SHALL NOT BE ALTERED IN ANY MANNER BY THE INSTALLATION OF ANY OF THE FACILITIES OF SAID GRANTEE SO AS TO INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THEREOF OR WITH THE SURFACE DRAINAGE THEREON.

UNAVOIDABLE PERPENDICULAR CROSSINGS OF THE VUE BY OTHER UTILITIES SHALL BE PERMITTED BY THE VILLAGE OF MUNDELEIN AND SHALL APPEAR ON ALL RECORD DRAWINGS.

SURFACE WATER DRAINAGE CERTIFICATE

STATE OF ILLINOIS)) SS
COUNTY OF KANE)

WE HEREBY CERTIFY THAT THE TOPOGRAPHICAL AND PROFILE STUDIES REQUIRED BY THE PLAT ACT, 765 ILCS ACT 205, AS NOW OR HEREAFTER AMENDED, HAVE BEEN FILED WITH THE VILLAGE OF MUNDELEIN, A MUNICIPAL CORPORATION IN LAKE COUNTY, ILLINOIS, AND THE CERTIFICATION AS TO DRAINAGE REQUIRED BY SAID ACT MADE THEREON.

DATED THIS ___ DAY OF _____, A.D., 20__.

REGISTERED PROFESSIONAL ENGINEER
LICENSE NO. _____

SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY THAT I, PAUL A. KUBICEK, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED, SUBDIVIDED AND PLATTED FOR THE OWNERS THEREOF THE FOLLOWING DESCRIBED PROPERTY:

THAT PART OF THE WEST 1/2 OF THE NORTHWEST 1/4 OF SECTION 23, TOWNSHIP 44 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS, TO-WIT:
COMMENCING AT THE SOUTHWEST CORNER OF SAID NORTHWEST 1/4 AND RUNNING THENCE NORTH 84 DEGREES 15 MINUTES EAST 3.81 CHAINS; THENCE NORTH 8 DEGREES 45 MINUTES EAST 23.21 CHAINS TO A POINT IN THE CENTER OF THE PUBLIC HIGHWAY; THENCE NORTH 17 DEGREES EAST ALONG THE CENTER OF SAID HIGHWAY, 4.50 CHAINS, WHICH IS THE PLACE OF BEGINNING OF THE PREMISES HEREBY DESCRIBED, AND RUNNING THENCE NORTH 73 DEGREES 6.75 CHAINS; THENCE NORTH 17 DEGREES EAST 7.50 CHAINS; THENCE SOUTH 73 DEGREES EAST 6.75 CHAINS TO THE CENTER OF SAID HIGHWAY; THENCE SOUTH 17 DEGREES 7.50 CHAINS TO THE PLACE OF BEGINNING, IN LAKE COUNTY, ILLINOIS.

CONTAINING 204,839 SQUARE FEET OR 4.7025 ACRES

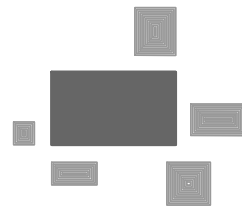
I FURTHER CERTIFY THAT IRON STAKES HAVE BEEN SET AT ALL LOT CORNERS, POINTS OF CURVATURE AND TANGENCY, EXCEPT WHERE CONCRETE MONUMENTS ARE INDICATED, AND THAT THE PLAT HERON DRAWN CORRECTLY REPRESENTS SAID SURVEY AND SUBDIVISION. ALL DIMENSIONS ARE GIVEN IN FEET AND DECIMAL PARTS THEREOF.

I FURTHER CERTIFY THAT THE FOREGOING PROPERTY FALLS WITHIN THE CORPORATE LIMITS OF THE VILLAGE OF MUNDELEIN, AND I FURTHER CERTIFY THAT NO PART OF SAID PROPERTY IS SITUATED WITHIN A FLOOD HAZARD AREA, AS PER NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 17097CO141K, EFFECTIVE DATE FEBRUARY 17, 2016.

DATED AT EAST DUNDEE, ILLINOIS, THIS 13th DAY OF JANUARY, 2025.

FOR REVIEW

PAUL A. KUBICEK, ILLINOIS PROFESSIONAL LAND SURVEYOR 035-003296
EXPIRES 11/30/2026
PINNACLE ENGINEERING GROUP, LLC #184006289-0010
EXPIRES 04/30/2025



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EAST DUNDEE, IL 60118
(847) 551-5300

CHICAGO | MILWAUKEE | NATIONWIDE

PRELIMINARY PLAT OF SUBDIVISION

REVISIONS

—	_____	_____
—	_____	_____
—	_____	_____
—	_____	_____

PEC JOB NO. 5897.00	B/D
PEC PM	DATE 1/30/2025
SCALE	DRAFTED BY: TJS

SHEET 2 of 2

SURVEY

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LEGEND OF LINES

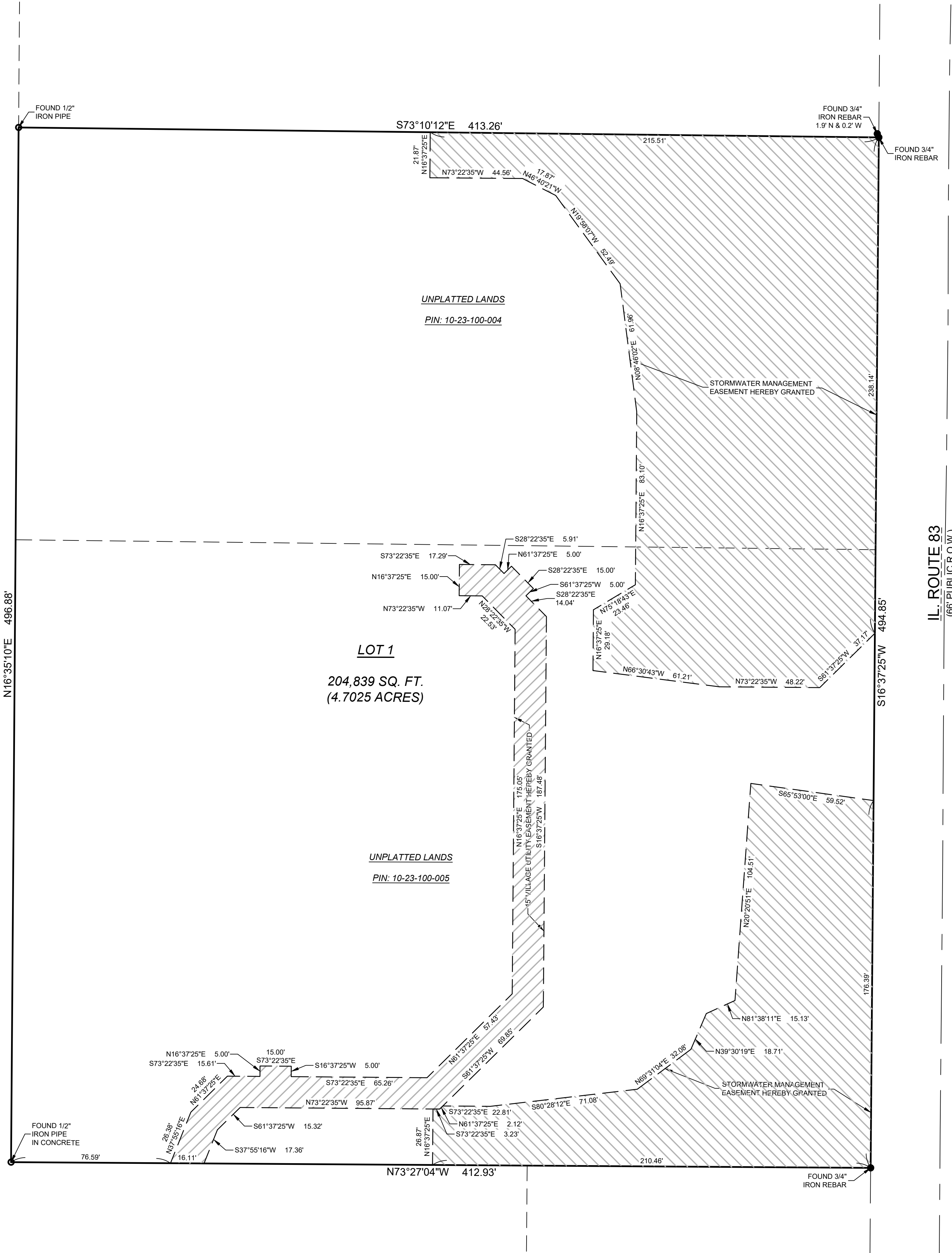
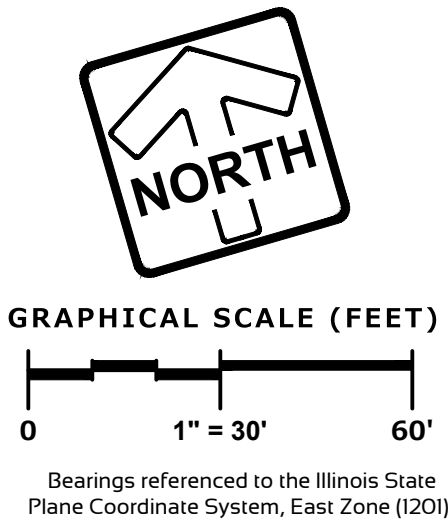
- PARCEL BOUNDARY
- RIGHT-OF-WAY
- CENTER OF RIGHT-OF-WAY
- ADJACENT BOUNDARY
- SECTION LINE
- BUILDING SETBACK
- PUBLIC UTILITY EASEMENT LINE
- (180.00')

RECORD DIMENSION
- 180.00'

MEASURED DIMENSION
- VILLAGE UTILITY EASEMENT
- STORMWATER MANAGEMENT EASEMENT

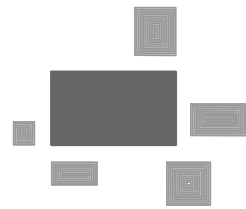
BOLT SUBDIVISION

BEING PART OF THE WEST 1/2 OF THE NORTHWEST 1/4 OF SECTION 23, TOWNSHIP 44 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, ILLINOIS.



GENERAL NOTES

- Survey prepared for: JFox Enterprises
- Field work completed on October 3, 2024
- No title or letter report was provided for this survey. Boundary based on field evidence.
- Land Area: 204,839 Square Feet (4.7025 Acres).



PLAN | DESIGN | DELIVER
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PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

ILLINOIS OFFICE:
1051 E. MAIN STREET - SUITE 217
EAST OUNDEE, IL 60118
(847) 551-5300
CHICAGO | MILWAUKEE | NATIONWIDE

FINAL PLAT OF
SUBDIVISION

REVISIONS

REG JOB No. **5897.00**
REG PM **BDJ**
DATE **12/05/24**
SCALE **1"=30'**
DRAFTED BY: **TLS**

SHEET
1
2

© COPYRIGHT 2024
SURVEY

BOLT SUBDIVISION

BEING PART OF THE WEST 1/2 OF THE NORTHWEST 1/4 OF SECTION 23, TOWNSHIP 44 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, ILLINOIS.

VILLAGE BOARD CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF LAKE)

APPROVED AND ACCEPTED BY THE VILLAGE BOARD OF TRUSTEES OF THE VILLAGE OF MUNDELEIN, LAKE COUNTY, ILLINOIS, THIS DAY OF , 20.

PRESIDENT

ATTEST

PLANNING COMMISSION CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF LAKE)

I, CHAIRMAN OF THE PLANNING COMMISSION OF THE VILLAGE OF MUNDELEIN, LAKE COUNTY, ILLINOIS, DO HEREBY CERTIFY THAT THE ANNEXED PLAT HAS BEEN EXAMINED BY THE SAID COMMISSION AND APPROVED AND ACCEPTED.

DATED THIS DAY OF , 20.

CHAIRMAN

VILLAGE ENGINEER CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF LAKE)

APPROVED BY THE VILLAGE ENGINEER OF MUNDELEIN, ILLINOIS, THIS DAY OF , 20.

VILLAGE ENGINEER

CERTIFICATE OF SPECIAL ASSESSMENTS

STATE OF ILLINOIS)
COUNTY OF LAKE)

I, VILLAGE TREASURER OF THE VILLAGE OF MUNDELEIN, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT OR UNPAID CURRENT OR FORFEITED SPECIAL ASSESSMENTS OR ANY DEFERRED INSTALLMENTS THEREOF THAT HAVE BEEN APPORTIONED AGAINST THE TRACT OF LAND INCLUDED ON THIS PLAT.

DATED THIS DAY OF , 20.

VILLAGE TREASURER

LAKE COUNTY CLERK CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF LAKE)

I, COUNTY CLERK OF LAKE COUNTY, ILLINOIS, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT GENERAL TAXES, NO UNPAID CURRENT TAXES OR SPECIAL ASSESSMENTS, NO UNPAID FORFEITED TAXES, AND NO REDEEMABLE TAX SALES AGAINST ANY OF THE LAND INCLUDED IN THIS PLAT. I FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THE PLAT.

GIVEN UNDER MY NAME AND SEAL THIS DAY OF , 20.

COUNTY CLERK

LAKE COUNTY RECORDER CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF LAKE)

THIS INSTRUMENT NO. WAS FILED FOR RECORD IN THE RECORDER'S OFFICE OF LAKE COUNTY, ILLINOIS, ON THE DAY OF , 20.

COUNTY RECORDER

ILLINOIS DEPARTMENT OF TRANSPORTATION CERTIFICATE

THIS PLAT HAS BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION WITH RESPECT TO ROADWAY ACCESS PURSUANT OF § 2 OF "AN ACT TO REVISE THE LAW IN RELATION TO PLATS" AS AMENDED. A PLAN THAT MEETS THE REQUIREMENTS CONTAINED IN THE DEPARTMENTS "POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS" WILL BE REQUIRED BY THE DEPARTMENT.

JOSE RIOS, P.E.
REGION ONE ENGINEER

OWNER'S CERTIFICATE

STATE OF)
COUNTY OF)

THIS IS TO CERTIFY THAT A CORPORATION, IS THE RECORD OWNER OF THE PROPERTY DESCRIBED IN THE SURVEYOR'S CERTIFICATE AFFIXED HEREON, AND DOES HEREBY CONSENT TO THE SUBDIVISION OF SAID PROPERTY, AND THE VARIOUS DEDICATIONS, GRANTS AND RESERVATIONS OF EASEMENT AND RIGHTS-OF-WAY DEPICTED HEREON.

ALSO, THIS IS TO CERTIFY THAT THE PROPERTY BEING SUBDIVIDED AFORESAID AND, TO THE BEST OF OWNER'S KNOWLEDGE AND BELIEF, SAID SUBDIVISION LIES ENTIRELY WITHIN THE LIMITS OF FREMONT ELEMENTARY SCHOOL DISTRICT #79, MUNDELEIN CONS HIGH SCHOOL DISTRICT #120 AND COLLEGE OF LAKE COUNTY #532.

DATED THIS DAY OF , A.D., 20.

SIGNATURE

PLEASE TYPE/PRINT THE AUTHORIZED INDIVIDUAL'S NAME, TITLE, CORPORATION/COMPANY NAME, AND ADDRESS:

AFFIX CORPORATE SEAL IF APPROPRIATE

NOTARY CERTIFICATE

STATE OF)
COUNTY OF)

I, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR THE AFORESAID COUNTY AND STATE, DO HEREBY CERTIFY THAT THE FOREGOING SIGNATOR OF THE OWNER'S CERTIFICATE IS PERSONALLY KNOWN TO ME TO BE THE SAME PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND THAT SAID INDIVIDUAL APPEARED AND DELIVERED SAID INSTRUMENT AS A FREE AND VOLUNTARY ACT OF THE CORPORATION AND THAT SAID INDIVIDUAL DID ALSO THEN AND THERE ACKNOWLEDGE THAT HE OR SHE IS A CUSTODIAN OF THE CORPORATE SEAL OF SAID CORPORATION AND DID AFFIX SAID SEAL OF SAID CORPORATION TO SAID INSTRUMENT AS HIS OR HER OWN FREE AND VOLUNTARY ACT AND AS THE FREE AND VOLUNTARY ACT OF SAID CORPORATION, AS OWNER, FOR THE USES AND PURPOSES THEREIN SET FORTH IN THE AFORESAID INSTRUMENT.

GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS DAY OF , A.D., 20.

NOTARY

PLEASE TYPE/PRINT NAME

NOTARY'S SEAL

STORMWATER MANAGEMENT EASEMENT PROVISIONS

A STORMWATER MANAGEMENT EASEMENT IS HEREBY RESERVED FOR AND GRANTED TO THE VILLAGE OF MUNDELEIN, ILLINOIS WITHIN THE AREAS DESIGNATED ON THE PLAT AS STORMWATER MANAGEMENT EASEMENTS FOR THE COLLECTION CONVEYANCE AND STORAGE OF STORMWATER IN AREAS TO BE MAINTAINED BY THE OWNER OF THE LOT(S) OR OUTLOT(S) ON WHICH THE FACILITIES EXIST IN ACCORDANCE WITH VILLAGE ORDINANCES AND THE APPROVED FINAL ENGINEERING PLANS. ENCROACHMENTS OF ANY KIND INCLUDING LANDSCAPING, FENCES, SHEDS OR ACCESSORY STRUCTURES WITHIN SAID EASEMENT IS PROHIBITED UNLESS THE VILLAGE ENGINEER HAS DETERMINED SAID ENCROACHMENT WILL NOT INTERFERE WITH THE PROPER FUNCTION OF SAID FACILITIES. THE VILLAGE SHALL HAVE THE RIGHT TO ENTER WITH PERSONNEL AND EQUIPMENT UPON SAID EASEMENT AT ANY TIME FOR THE PURPOSES OF ACCESS TO AND INSPECTION OF THE STORMWATER MANAGEMENT FACILITIES LOCATED WITHIN SAID EASEMENT. IF THE OWNER FAILS TO MAINTAIN SAID FACILITIES AND, AFTER RECEIPT OF NOTICE FROM THE VILLAGE OF SAID FAILURE, THE OWNER FAILS TO MAKE REQUIRED REPAIRS IN A REASONABLE PERIOD OF TIME, THE VILLAGE MAY MAKE THE REQUIRED REPAIRS AND SEEK REIMBURSEMENT FROM THE OWNER FOR THE COSTS INCURRED BY THE VILLAGE TO MAKE THE REPAIR AND/OR FILE A LIEN ON THE PROPERTY.

VILLAGE UTILITY EASEMENT PROVISIONS

AN EXCLUSIVE EASEMENT IS HEREBY RESERVED FOR AND GRANTED TO THE VILLAGE OF MUNDELEIN, ILLINOIS AND ITS RESPECTIVE SUCCESSORS AND ASSIGNS, WITHIN THE AREAS SO DESIGNATED ON THE PLAT AND MARKED VILLAGE UTILITY EASEMENT (VUE) AND UPON THE GRANTOR'S PROPERTY IMMEDIATELY ADJACENT TO THE EASEMENT AREA AS MAY BE REASONABLY REQUIRED TO CONSTRUCT, INSTALL, RECONSTRUCT, REPAIR, REMOVE, REPLACE, INSPECT, MAINTAIN AND OPERATE UNDERGROUND TRANSMISSION AND DISTRIBUTION SYSTEMS AND LINES IN, UNDER, ACROSS, ALONG AND UPON THE SURFACE OF THE VILLAGE UTILITY EASEMENT INCLUDING WITHOUT LIMITATION WATER MAINS, STORM SEWERS, SANITARY SEWERS, FORCE MAINS, ELECTRIC LINES AND ALL NECESSARY FACILITIES APPURTENANT THERETO, TOGETHER WITH THE RIGHT OF ACCESS THERETO FOR THE PERSONNEL AND EQUIPMENT NECESSARY AND REQUIRED FOR SUCH USES AND PURPOSES, AND TOGETHER WITH THE RIGHT TO INSTALL REQUIRED SERVICE CONNECTIONS UNDER THE SURFACE OF EACH LOT TO SERVE IMPROVEMENTS THEREON; TOGETHER WITH THE RIGHT TO CUT, TRIM, OR REMOVE TREES, BUSHES AND ROOTS AS MAY BE REASONABLY REQUIRED INCIDENTAL TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE PROPERTY FOR ALL SUCH PURPOSES. OBSTRUCTIONS SHALL NOT BE PLACED OVER GRANTEE'S FACILITIES OR IN, UPON, OR OVER THE PROPERTY WITHIN SAID EASEMENT WITHOUT PRIOR WRITTEN CONSENT OF THE GRANTEE. SAID EASEMENT MAY BE USED FOR LANDSCAPING, GARDENS, DRIVEWAYS AND PARKING EXCEPT AS OTHERWISE DESIGNATED ON THE PLAT. THE GRADES OF THE SUBDIVIDED PROPERTY APPROVED BY THE VILLAGE ENGINEER SHALL NOT BE ALTERED IN ANY MANNER BY THE INSTALLATION OF ANY OF THE FACILITIES OF SAID GRANTEE SO AS TO INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THEREOF OR WITH THE SURFACE DRAINAGE THEREON.

UNAVOIDABLE PERPENDICULAR CROSSINGS OF THE VUE BY OTHER UTILITIES SHALL BE PERMITTED BY THE VILLAGE OF MUNDELEIN AND SHALL APPEAR ON ALL RECORD DRAWINGS.

SURFACE WATER DRAINAGE CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF KANE)

WE HEREBY CERTIFY THAT THE TOPOGRAPHICAL AND PROFILE STUDIES REQUIRED BY THE PLAT ACT, 765 ILCS ACT 205, AS NOW OR HEREAFTER AMENDED, HAVE BEEN FILED WITH THE VILLAGE OF MUNDELEIN, A MUNICIPAL CORPORATION IN LAKE COUNTY, ILLINOIS, AND THE CERTIFICATION AS TO DRAINAGE REQUIRED BY SAID ACT MADE THEREON.

DATED THIS DAY OF , A.D., 20.

REGISTERED PROFESSIONAL ENGINEER
LICENSE NO.

SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY THAT I, PAUL A. KUBICEK, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED, SUBDIVIDED AND PLATTED FOR THE OWNERS THEREOF THE FOLLOWING DESCRIBED PROPERTY:

THAT PART OF THE WEST 1/2 OF THE NORTHWEST 1/4 OF SECTION 23, TOWNSHIP 44 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS, TO-WIT: COMMENCING AT THE SOUTHWEST CORNER OF SAID NORTHWEST 1/4 AND RUNNING THENCE NORTH 84 DEGREES 15 MINUTES EAST 3.81 CHAINS; THENCE NORTH 8 DEGREES 45 MINUTES EAST 23.21 CHAINS TO A POINT IN THE CENTER OF THE PUBLIC HIGHWAY; THENCE NORTH 17 DEGREES EAST ALONG THE CENTER OF SAID HIGHWAY, 4.50 CHAINS, WHICH IS THE PLACE OF BEGINNING OF THE PREMISES HEREBY DESCRIBED, AND RUNNING THENCE NORTH 73 DEGREES 6.75 CHAINS; THENCE NORTH 17 DEGREES EAST 7.50 CHAINS; THENCE SOUTH 73 DEGREES EAST 6.75 CHAINS TO THE CENTER OF SAID HIGHWAY; THENCE SOUTH 17 DEGREES 7.50 CHAINS TO THE PLACE OF BEGINNING, IN LAKE COUNTY, ILLINOIS.

CONTAINING 204,839 SQUARE FEET OR 4.7025 ACRES

I FURTHER CERTIFY THAT IRON STAKES HAVE BEEN SET AT ALL LOT CORNERS, POINTS OF CURVATURE AND TANGENCY, EXCEPT WHERE CONCRETE MONUMENTS ARE INDICATED, AND THAT THE PLAT HERON DRAWN CORRECTLY REPRESENTS SAID SURVEY AND SUBDIVISION. ALL DIMENSIONS ARE GIVEN IN FEET AND DECIMAL PARTS THEREOF.

I FURTHER CERTIFY THAT THE FOREGOING PROPERTY FALLS WITHIN THE CORPORATE LIMITS OF THE VILLAGE OF MUNDELEIN, AND I FURTHER CERTIFY THAT NO PART OF SAID PROPERTY IS SITUATED WITHIN A FLOOD HAZARD AREA, AS PER NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 17097CO141K, EFFECTIVE DATE FEBRUARY 17, 2016.

DATED AT EAST DUNDEE, ILLINOIS, THIS 13th DAY OF JANUARY, 2025.

FOR REVIEW

PAUL A. KUBICEK, ILLINOIS PROFESSIONAL LAND SURVEYOR 035-003296
EXPIRES 11/30/2026
PINNACLE ENGINEERING GROUP, LLC #184006289-0010
EXPIRES 04/30/2025



PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

ILLINOIS OFFICE:
1051 E. MAIN STREET - SUITE 217
EAST DUNDEE, IL 60118
(847) 551-5300

FINAL PLAT OF
SUBDIVISION

REVISIONS

Table with 3 columns for revision tracking.

Table with 4 columns: PEG JOB No., PEG PM, DATE, SCALE, DRAFTED BY, SHEET 2 of 2.

SURVEY

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Traffic Impact Study Baseball Training Facility

Mundelein, Illinois



Prepared For:

JFox Enterprises



December 12, 2024

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 the proposed baseball training facility to be located in Mundelein, Illinois. The site, which is currently vacant, is located on the west side of IL Route 83 between IL Route 60 and Fieldcrest Drive. As proposed, the initial indoor baseball training facility will have a total area of approximately 35,000 square feet with a future 17,500 square-foot expansion that will provide a total building size of 52,500 square feet. Access to the facility will be provided via a single access drive on IL Route 83.

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed facility 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 facility.

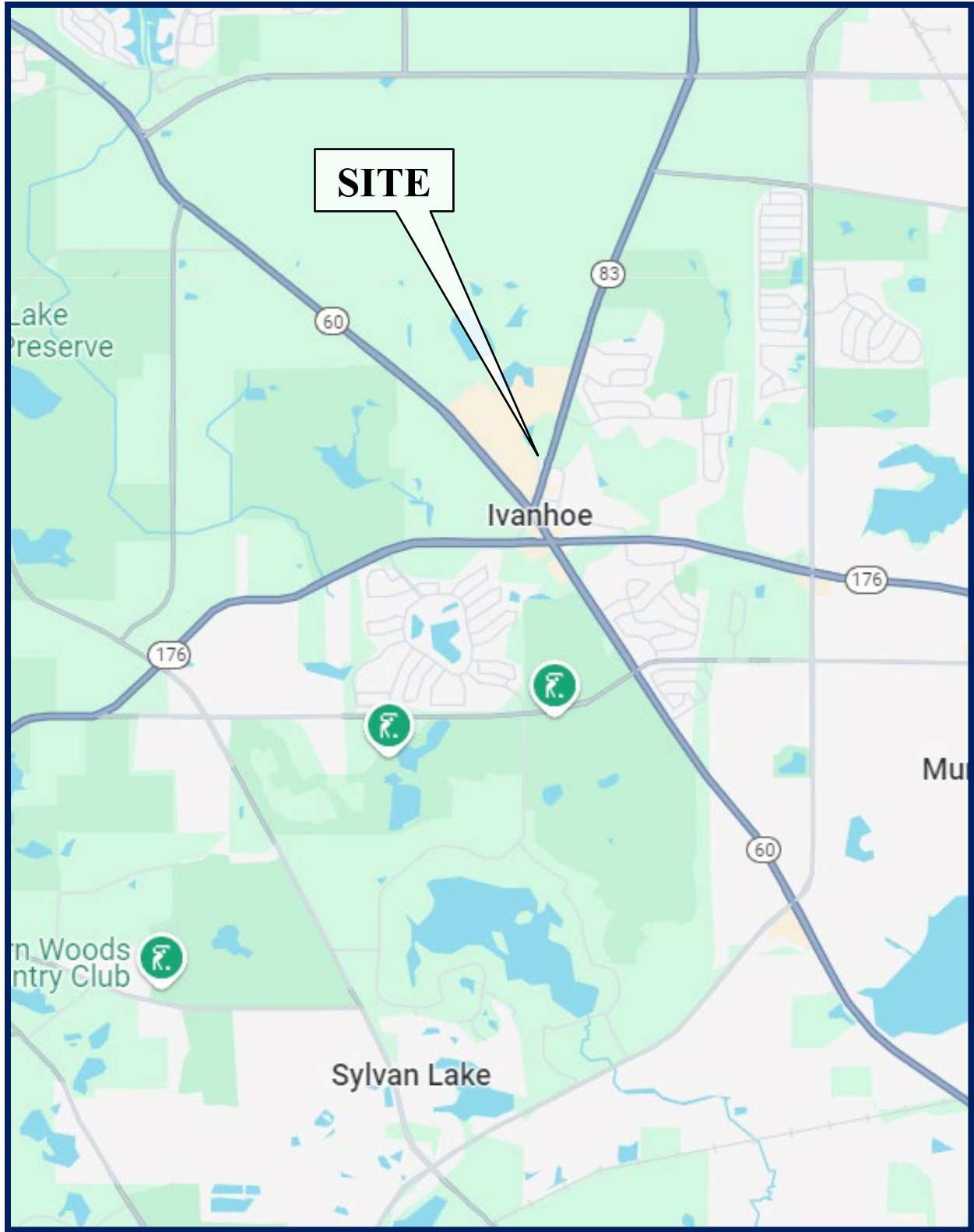
Figure 1 shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site.

The sections of this report present the following:

- Existing roadway conditions
- A description of the proposed facility
- Directional distribution of the facility traffic
- Vehicle trip generation for the facility
- Future traffic conditions including access to the facility
- Traffic analyses for the weekday evening and Saturday midday peak hours
- Recommendations with respect to adequacy of the site access and adjacent roadway system

Traffic capacity analyses were conducted for the weekday evening and Saturday midday peak hours for the following conditions:

1. Existing Conditions – Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes.
2. Year 2030 No-Build Conditions – Analyzes the capacity of the existing roadway system using the existing peak hour traffic volumes increased by an ambient area growth not attributable to any particular development.
3. Year 2030 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 traffic estimated to be generated by the proposed facility.



Site Location

Figure 1



Aerial View of Site

Figure 2

*Baseball Training Facility
Mundelein, Illinois*

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 located on the west side of IL Route 83 north of IL Route 60 and south of Fieldcrest Drive. Ivanhoe Baseball Field borders the site on the north. Land uses north, northwest, and east of the site are primarily residential. Mundelein Crossings shopping center borders the site to the south and west.

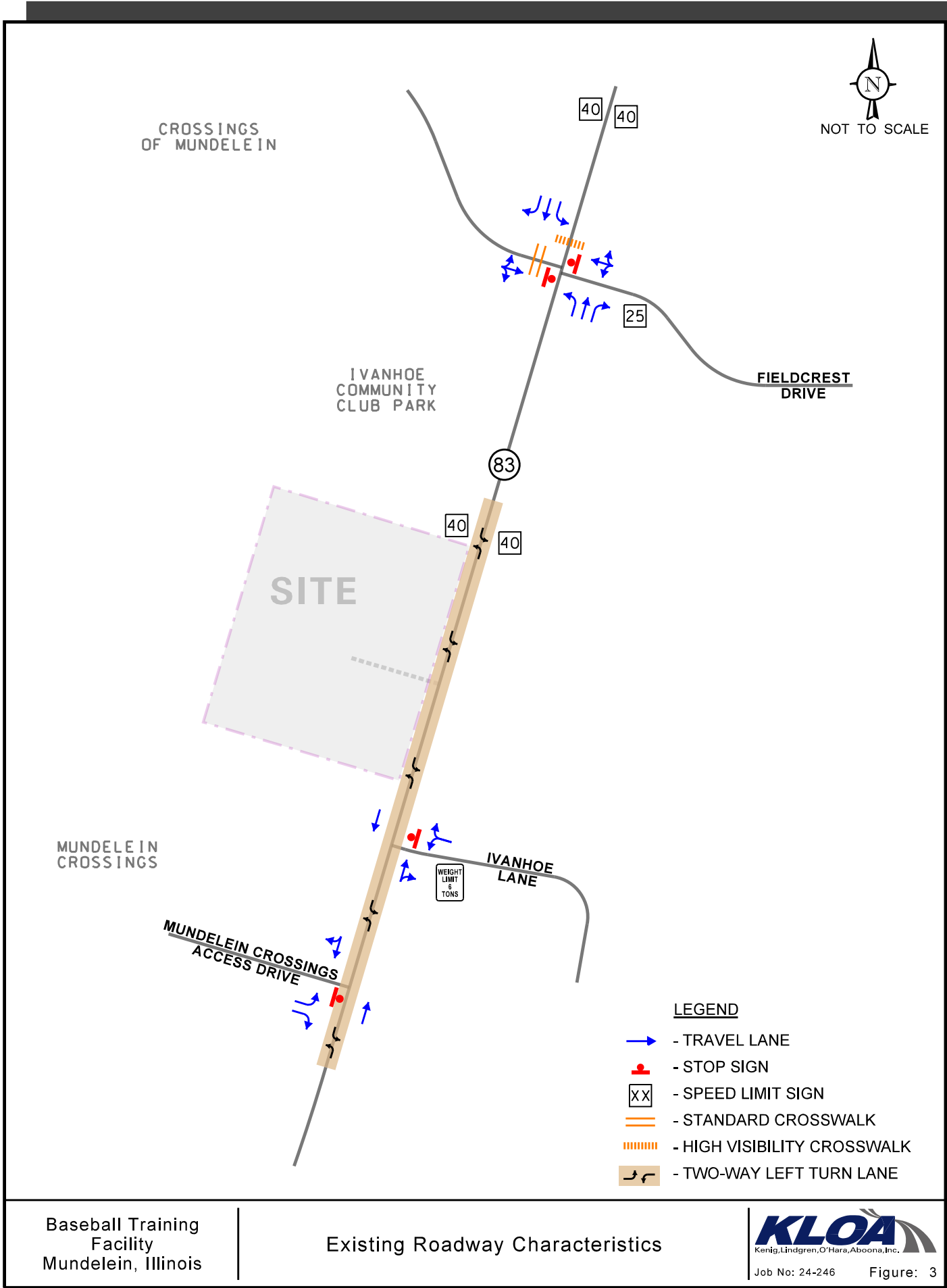
Existing Roadway System Characteristics

The characteristics of the existing roadways near the site are described below and illustrated in **Figure 3**.

IL Route 83 is a primarily a north-south, other principal arterial roadway that provides one lane in each direction in the vicinity of the site. At its unsignalized intersection with Fieldcrest Drive, IL Route 83 provides a left-turn lane, a through lane, and a right-turn lane on the northbound and southbound approaches. A high-visibility crosswalk is provided on the north leg of the intersection. At its unsignalized intersections with Ivanhoe Lane and the Mundelein Crossings access drive, IL Route 83 does not provide exclusive turn lanes, but does provide a two-way left turn lane. IL Route 83 carries an annual average daily traffic (AADT) volume of 12,200 vehicles (IDOT 2023), is under the jurisdiction of the Illinois Department of Transportation (IDOT), and has a posted speed limit of 40 miles per hour.

Fieldcrest Drive is generally an east-west, local roadway that provides one lane in each direction. At its intersection with IL Route 83, Fieldcrest Drive provides a combined left-turn/through/right-turn lane on the eastbound and westbound approaches which are under stop sign control. The west leg of the intersection has a landscaped median and provides a standard-style crosswalk. Fieldcrest Drive is under the jurisdiction of the Village of Mundelein and has a posted speed limit of 25 miles per hour.

Ivanhoe Lane is generally an east-west, local roadway that provides one lane in each direction and extends east from IL Route 83. At its T-intersection with IL Route 83, Ivanhoe Lane provides a combined left-turn/right-turn lane on the westbound approach that is under stop sign control. Ivanhoe Lane has a posted weight limit of 6 tons, carries an AADT volume of 250 vehicles (IDOT 2019), and is under the jurisdiction of Fremont Township.



The *Mundelein Crossings access drive* is an east-west access drive that provides one inbound lane and two outbound lanes extending west from IL Route 83 providing access to the Mundelein Crossings shopping center. At its unsignalized T-intersection with IL Route 83, the access drive provides a left-turn lane and a right-turn lane on the eastbound approach that are under stop sign control. This access drive is under private jurisdiction.

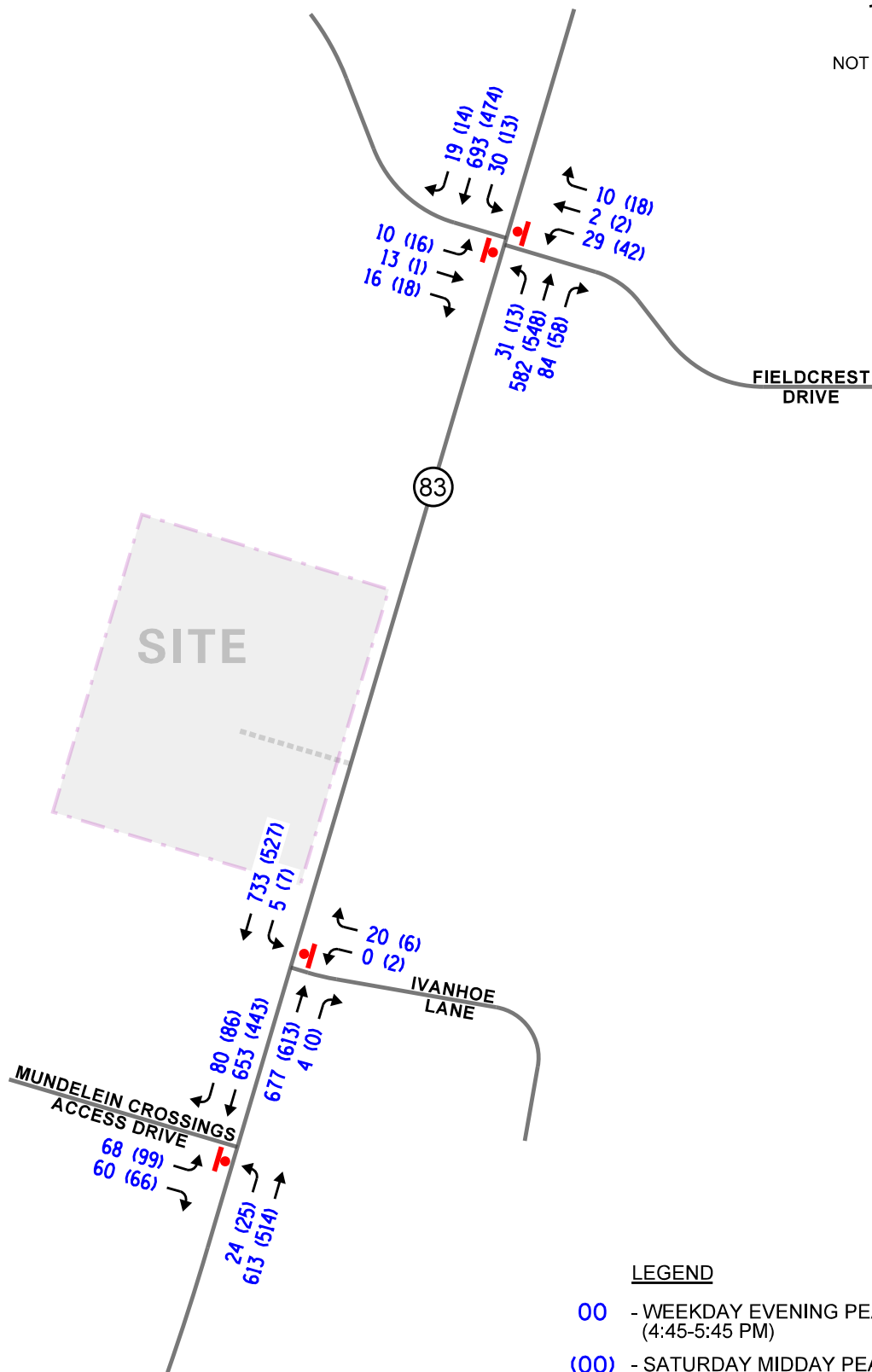
Existing Traffic Volumes

In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted peak period traffic counts utilizing Miovision Scout Video Collection Units on Tuesday, October 8, 2024 during the weekday evening (4:00 P.M. to 6:00 P.M.) peak period and on Saturday, October 5, 2024 during the Saturday midday (12:00 P.M. to 2:00 P.M.) peak period at the following intersections:

- IL Route 83 with Fieldcrest Drive
- IL Route 83 with Ivanhoe Lane
- IL Route 83 with Mundelein Crossings access drive

The traffic counts were conducted when area schools were in session. The results of the traffic counts indicated that the weekday evening peak hour of traffic occurs from 4:45 to 5:45 P.M., and the Saturday midday peak hour of traffic occurs from 12:45 P.M. to 1:45 P.M.

Figure 4 illustrates the existing peak hour traffic volumes. Copies of the traffic count summary sheets are included in the Appendix.



LEGEND

- 00** - WEEKDAY EVENING PEAK HOUR (4:45-5:45 PM)
- (00)** - SATURDAY MIDDAY PEAK HOUR (12:45-1:45 PM)

Baseball Training Facility
Mundelein, Illinois

Existing Traffic Volumes



Job No: 24-246

Figure: 4

Crash Data Summary

KLOA, Inc. obtained crash data¹ for the most recent available past five years (2019 to 2023) for the roadway intersections included in the study. No crashes were reported at the intersection of IL Route 83 with Ivanhoe Lane during the review period. The crash data for the intersection of IL Route 83 with Fieldcrest Drive is summarized in **Table 1**. A review of the crash data indicated that no fatalities were reported at the intersection during the review period.

Table 1
IL ROUTE 83 WITH FIELDCREST DRIVE – CRASH SUMMARY

Year	Type of Crash Frequency							
	Angle	Head On	Object	Rear End	Sideswipe	Turning	Other	Total
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	2	0	2
2022	1	0	0	0	0	0	0	1
2023	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	1	0	0	0	0	2	0	3
Average	<1.0	0.0	0.0	0.0	0.0	<1.0	0.0	<1.0

¹ IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. The author is responsible for any data analyses and conclusions drawn.

3. Traffic Characteristics of the Proposed Facility

In order to properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed facility, including the directional distribution and volumes of traffic that it will generate.

Proposed Site Plan

As proposed, the site will be developed with an indoor baseball training facility providing approximately 35,000 square feet of space. A possible future addition of 17,500 square feet would result in an eventual total building size of 52,500 square feet. The facility is proposed to include a practice field, batting cages, pitching lanes, locker rooms, a weight room, golf simulator, juice bar, and reception areas with waiting areas. Additionally, a small section of the facility will be reserved for occasional pickleball games.

The facility will be utilized from 2:00 P.M. to 9:00 P.M. Monday through Friday and 12:00 P.M. to 9:00 P.M. on Saturday and Sunday. Approximately six employees will be on site every day. During the weekday evenings, it is assumed that approximately a total of 50 players and guests will be on site.

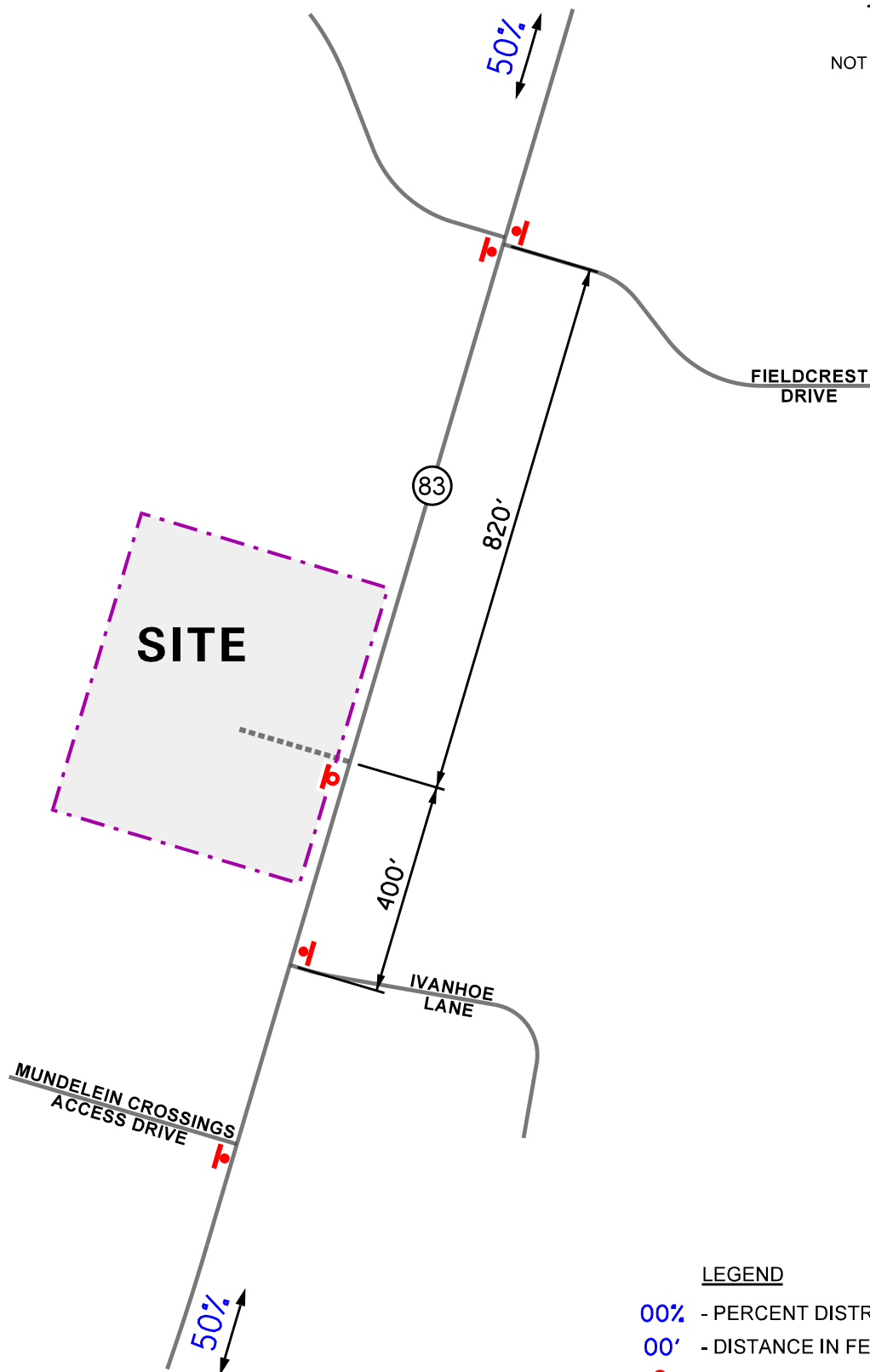
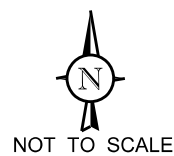
The proposed provided parking lot will provide approximately 60 parking spaces, with a possible future addition of 30 parking spaces for an eventual total parking supply of 90 parking spaces.

Access to the facility will be provided via an access drive located on the west side IL Route 83 approximately 400 feet north of Ivanhoe Lane. This access drive will provide one inbound lane and two outbound lanes, striped to provide a left-turn lane and a right-turn lane. Outbound movements will be under stop sign control. As part of the development, the existing two-way left-turn lane on IL Route 83 will be restriped to provide a 150-foot exclusive northbound left-turn lane with a 200-foot taper serving the site.

A copy of the proposed site plan and floor plan is included in the Appendix.

Directional Distribution

The directions from which vehicles 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 site-generated traffic.



- LEGEND**
- 00% - PERCENT DISTRIBUTION
 - 00' - DISTANCE IN FEET
 - P - PROPOSED STOP SIGN

Baseball Training
Facility
Mundelein, Illinois

Directional Distribution

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.
Job No: 24-246 Figure: 5

Peak Hour Traffic Volumes

The number of passenger vehicle peak hour trips estimated to be generated by the proposed facility was based on information provided by the operator and summarized below.

- The hours of operation for the facility will be 2:00 P.M. to 9:00 P.M. Monday through Friday and 12:00 P.M. to 9:00 P.M. Saturday and Sunday which overlap with the peak hours of the area roadway system.
- There will be approximately six employees on site per day.
- As the facility will not be opened during the weekday morning peak hour, the facility will generate limited, if any, trips during the commuter weekday morning peak period.
- It is assumed that many players and guests will carpool to/from the facility.

It should be noted that the peak occupancy of the facility is expected to occur on weekday evenings and Saturdays outside of peak evening commuting hours. **Table 2** summarizes the trips projected to be generated by the proposed facility.

Table 2
PROJECTED SITE-GENERATED TRAFFIC VOLUMES

Type/Size	Weekday Evening Peak Hour			Saturday Midday Peak Hour		
	In	Out	Total	In	Out	Total
Baseball Training Facility	30	30	60	40	40	80

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 facility.

Site Traffic Assignment

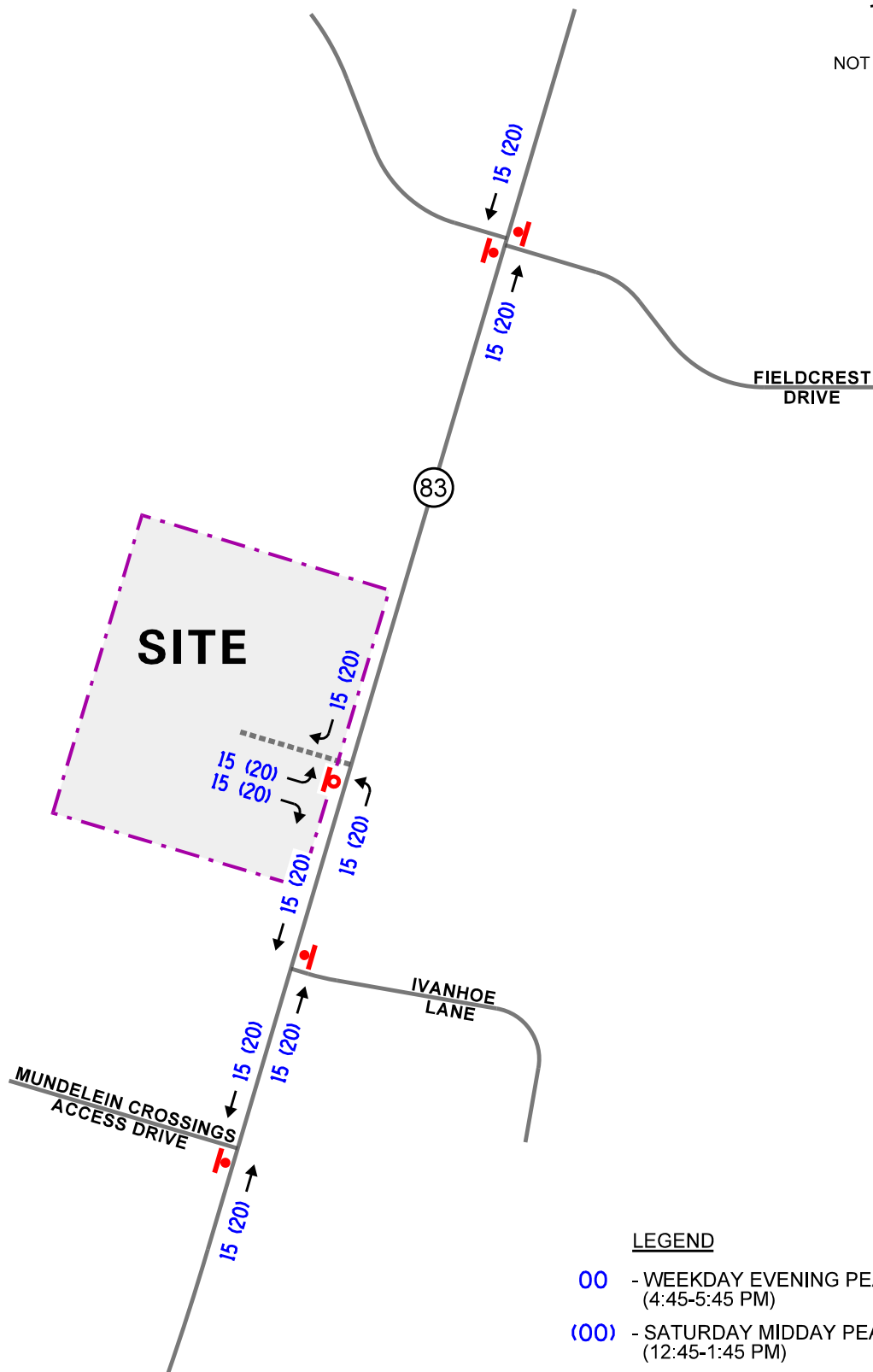
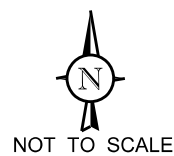
The estimated weekday evening and Saturday midday peak hour traffic volumes that will be generated by the proposed facility were assigned to the roadway system in accordance with the previously described directional distribution (Figure 5). **Figure 6** illustrates the traffic assignment of the new passenger vehicle traffic.

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 particular planned development). Based on AADT projections provided by the Chicago Metropolitan Agency for Planning (CMAP) in a letter dated September 24, 2024, the existing traffic volumes are projected to increase by an annual growth rate of 1.1 percent per year. As such, the existing traffic volumes were increased by seven percent (one year buildout plus five years) to project Year 2030 no-build conditions. **Figure 7** illustrates the Year 2030 no-build traffic conditions. A copy of the CMAP 2050 projections letter is included in the Appendix.

Total Projected Traffic Volumes

The facility-generated traffic (Figures 6 and 7) was added to the existing traffic volumes increased by a regional growth factor (Figure 8) to determine the Year 2030 total projected traffic volumes as illustrated in **Figure 8**.



LEGEND

- 00** - WEEKDAY EVENING PEAK HOUR
(4:45-5:45 PM)
- (00)** - SATURDAY MIDDAY PEAK HOUR
(12:45-1:45 PM)
- PROPOSED STOP SIGN

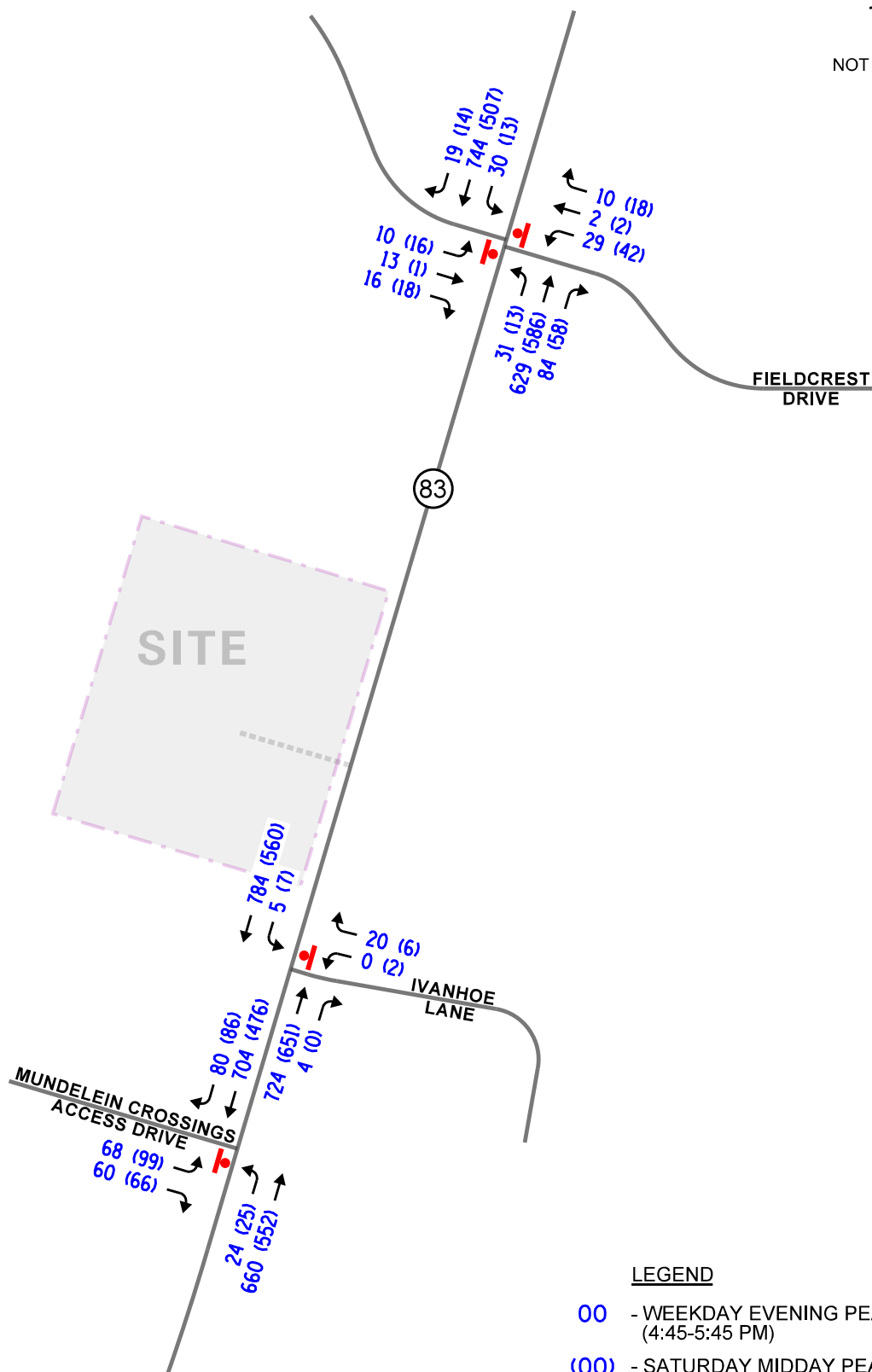
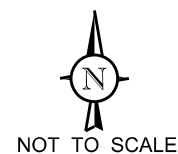
Baseball Training
Facility
Mundelein, Illinois

Site-Generated Traffic Volumes



Job No: 24-246

Figure: 6



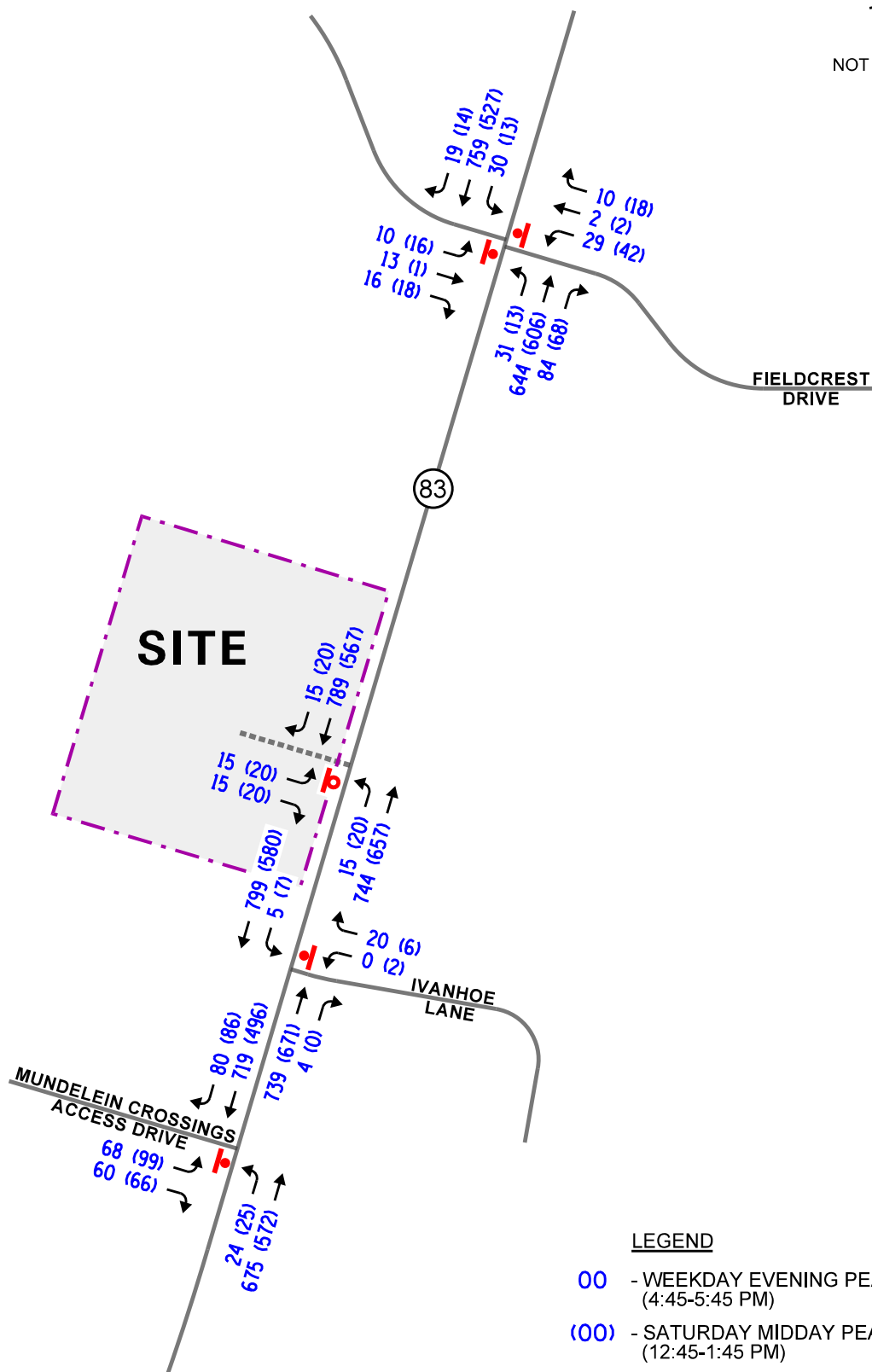
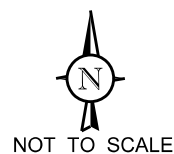
Baseball Training
Facility
Mundelein, Illinois

Year 2030 No-Build Traffic Volumes



Job No: 24-246

Figure: 7



LEGEND

- 00 - WEEKDAY EVENING PEAK HOUR (4:45-5:45 PM)
- (000) - SATURDAY MIDDAY PEAK HOUR (12:45-1:45 PM)
- PROPOSED STOP SIGN

Baseball Training
Facility
Mundelein, Illinois

Year 2030 Total Traffic Volumes



Job No: 24-246

Figure: 8

5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday evening and Saturday midday 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 evening and Saturday midday peak hours for the existing, Year 2030 no-build, and Year 2030 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 the Synchro/SimTraffic 11 software. The analysis for the traffic-signal controlled intersection to determine the average overall vehicle delay and levels of service were accomplished using utilizing actual cycle lengths and phasings.

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, overall intersection delay (measured in seconds), and 95th percentile queue length (measured in feet) for the existing, no-build, and total projected conditions are presented in **Tables 3** through **5**. A discussion of each intersection follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 3

UNSIGNALIZED – EXISTING CONDITIONS

Intersection	Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay
IL Route 83 with Fieldcrest Drive¹				
• Eastbound Approach	C	20.5	C	15.5
• Westbound Approach	C	23.1	C	18.5
• Northbound Left Turn	A	9.2	A	8.5
• Southbound Left Turn	A	9.1	A	9.0
IL Route 83 with Ivanhoe Lane¹				
• Westbound Approach	B	13.6	B	13.5
• Southbound Left Turn	A	9.0	A	8.8
IL Route 83 with Mundelein Crossings Access Drive¹				
• Eastbound Left Turn	C	21.7	C	20.3
• Eastbound Right Turn	B	14.9	B	12.8
• Northbound Left Turn	A	9.3	A	8.7
LOS = Level of Service Delay is measured in seconds.				
1 – Two-way stop control				

Table 4

UNSIGNALIZED – YEAR 2030 NO-BUILD CONDITIONS

Intersection	Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay
IL Route 83 with Fieldcrest Drive¹				
• Eastbound Approach	C	22.0	C	16.2
• Westbound Approach	D	25.1	C	19.6
• Northbound Left Turn	A	9.4	A	8.6
• Southbound Left Turn	A	9.3	A	9.2
IL Route 83 with Ivanhoe Lane¹				
• Westbound Approach	B	14.2	B	14.0
• Southbound Left Turn	A	9.2	A	9.0
IL Route 83 with Mundelein Crossings Access Drive¹				
• Eastbound Left Turn	C	23.5	C	21.8
• Eastbound Right Turn	C	15.8	B	13.2
• Northbound Left Turn	A	9.6	A	8.9
LOS = Level of Service Delay is measured in seconds.				
1 – Two-way stop control				

Table 5

UNSIGNALIZED – YEAR 2030 TOTAL CONDITIONS

Intersection	Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay
IL Route 83 with Fieldcrest Drive¹				
• Eastbound Approach	C	22.5	C	16.7
• Westbound Approach	D	25.8	C	20.3
• Northbound Left Turn	A	9.5	A	8.6
• Southbound Left Turn	A	9.4	A	9.3
IL Route 83 with Ivanhoe Lane¹				
• Westbound Approach	B	14.4	B	14.2
• Southbound Left Turn	A	9.3	A	9.0
IL Route 83 with Mundelein Crossings Access Drive¹				
• Eastbound Left Turn	C	24.2	C	22.7
• Eastbound Right Turn	C	16.0	B	13.5
• Northbound Left Turn	A	9.6	A	8.9
IL Route 83 with Proposed Site Access Drive¹				
• Eastbound Left Turn	C	20.8	C	17.7
• Eastbound Right Turn	C	15.2	B	12.5
• Northbound Left Turn	A	9.6	A	8.8
LOS = Level of Service Delay is measured in seconds.				
1 – Two-way stop control				

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 site-generated traffic.

IL Route 83 with Fieldcrest Drive

The results of the capacity analysis indicate that the eastbound and westbound approaches currently operate at a Level of Service (LOS) C during the weekday evening and Saturday midday peak hours. The northbound and southbound left-turn movements currently operate at LOS A during the peak hours. Under Year 2030 no-build and total projected conditions, the eastbound and westbound approaches are projected to continue operating at LOS C during the peak hours, except the westbound approach. During the weekday evening peak hour, the westbound approach is projected to operate on the threshold of a LOS C/D. The northbound and southbound left-turn movements are projected to continue to operate at LOS A during the peak hours. As such, this intersection has sufficient reserve capacity to accommodate the traffic estimated to be generated by the facility and no roadway improvements or traffic control modifications are required.

IL Route 83 with Ivanhoe Lane

The results of the capacity analysis indicate that the westbound approach from Ivanhoe Lane currently operates at LOS B during the weekday evening and Saturday midday peak hours. The southbound left-turn movement currently operates at LOS A during the peak hours. Under Year 2030 no-build and total projected conditions, the critical approaches and movements are projected to continue operating at the current levels of service during the peak hours. As such, this intersection has sufficient reserve capacity to accommodate the traffic estimated to be generated by the facility and no roadway improvements or traffic control modifications are required.

IL Route 83 with Mundelein Crossings Access Drive

The results of the capacity analysis indicate that the eastbound left-turn and right-turn movements from the shopping center currently operate at LOS C or better during the weekday evening and Saturday midday peak hours. The northbound left-turn movement into the shopping center currently operates at LOS A during the peak hours. Under Year 2030 no-build and total projected conditions, the critical movements are projected to continue operating at the current levels of service during the peak hours. As such, this intersection has sufficient reserve capacity to accommodate the traffic estimated to be generated by the facility and no roadway improvements or traffic control modifications are required.

IL Route 83 with Proposed Site Access Drive

Access to the facility will be provided via an access drive located on the west side IL Route 83 approximately 400 feet north of Ivanhoe Lane. This access drive will provide one inbound lane and two outbound lanes striped to provide a left-turn lane and a right-turn lane. Outbound movements will be under stop sign control. As part of the development, the existing two-way left-turn lane on IL Route 83 will be restriped to provide a 150-foot exclusive northbound left-turn lane with a 200-foot taper serving the site.

The results of the capacity analysis indicate that under Year 2030 total projected conditions, the eastbound left-turn movement from the facility is projected to operate at LOS C during the weekday evening and Saturday midday peak hours. The eastbound right-turn movement is projected to operate at LOS C during the weekday evening peak hour and at LOS B during the Saturday midday peak hour. 95th percentile queues for the eastbound lanes are projected to be one to two vehicles during the peak hours. The northbound left-turn movement is projected to operate at LOS A during the peak hours. The projected traffic volumes at this intersection were compared to the right-turn lane warrant found in Chapter 36 of the IDOT *Bureau of Design and Environment Manual*. The comparison showed that a southbound right-turn lane is not warranted at this access drive. As such, this intersection is projected to provide flexible and efficient access to the site and no additional traffic control or roadway improvements are required.

7. Conclusion

Based on the preceding analyses and recommendations, the following conclusions have been made:

- The site is proposed to be developed into a baseball training facility served by a surface parking lot.
- Access to the facility will be provided via an access drive located on the west side IL Route 83 approximately 400 feet north of Ivanhoe Lane. This access drive will provide one inbound lane and two outbound lanes striped to provide a left-turn lane and a right-turn lane. Outbound movements will be under stop sign control. As part of the development, the existing two-way left-turn lane on IL Route 83 will be restriped to provide a 150-foot exclusive northbound left-turn lane with a 200-foot taper serving the site.
- The proposed access drive will be adequate in accommodating site traffic and provide flexible and efficient access.
- The roadway system has adequate reserve capacity to accommodate the projected traffic volumes and no additional roadway improvements or traffic control modifications are required.

Appendix

Traffic Count Summary Sheets
Site Plan and Floor Plan
CMAP 2050 Projections Letter
Level of Service Criteria
Capacity Analysis Summary Sheets

Traffic Count Summary Sheets



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 kpachowicz@kloainc.com

Count Name: IL 83 with Fieldcrest Drive TMC
Site Code:
Start Date: 10/05/2024
Page No: 1

Turning Movement Data

Start Time	Fieldcrest Drive Eastbound						Fieldcrest Drive Westbound						IL 83 Northbound						IL 83 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	
12:00 PM	0	3	1	1	0	5	0	8	0	4	0	12	0	3	120	17	0	140	0	3	108	3	0	114	271
12:15 PM	0	3	0	5	1	8	0	10	1	6	0	17	0	2	144	12	0	158	0	3	113	1	1	117	300
12:30 PM	0	4	1	5	0	10	0	18	1	5	0	24	0	2	105	13	0	120	0	3	121	5	0	129	283
12:45 PM	0	7	0	6	0	13	0	17	0	1	0	18	0	1	152	12	0	165	0	1	131	1	0	133	329
Hourly Total	0	17	2	17	1	36	0	53	2	16	0	71	0	8	521	54	0	583	0	10	473	10	1	493	1183
1:00 PM	0	3	0	1	0	4	0	8	0	13	0	21	0	2	130	19	0	151	0	5	111	5	1	121	297
1:15 PM	0	5	1	6	0	12	0	7	2	1	0	10	0	7	134	13	0	154	0	5	115	2	0	122	298
1:30 PM	0	1	0	5	0	6	0	10	0	3	0	13	0	3	132	14	0	149	0	2	117	6	0	125	293
1:45 PM	0	3	2	6	0	11	0	5	1	3	0	9	0	3	127	7	0	137	0	1	124	3	1	128	285
Hourly Total	0	12	3	18	0	33	0	30	3	20	0	53	0	15	523	53	0	591	0	13	467	16	2	496	1173
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	5	2	5	1	12	0	11	0	3	0	14	0	2	131	10	0	143	0	5	186	4	1	195	364
4:15 PM	0	3	1	4	0	8	0	13	2	7	0	22	0	0	133	22	0	155	0	2	151	5	0	158	343
4:30 PM	0	5	4	1	0	10	0	19	0	8	0	27	0	5	136	8	0	149	0	1	148	2	0	151	337
4:45 PM	0	3	6	2	0	11	0	7	0	4	0	11	0	7	123	19	0	149	0	6	164	5	0	175	346
Hourly Total	0	16	13	12	1	41	0	50	2	22	0	74	0	14	523	59	0	596	0	14	649	16	1	679	1390
5:00 PM	0	3	5	6	0	14	0	8	1	1	0	10	0	9	127	20	0	156	0	4	182	6	0	192	372
5:15 PM	0	2	1	2	0	5	0	8	0	4	0	12	1	7	118	18	0	144	0	9	183	5	1	197	358
5:30 PM	0	2	1	6	0	9	0	6	1	1	0	8	0	7	156	27	0	190	0	11	142	3	0	156	363
5:45 PM	0	4	0	5	1	9	0	12	1	4	0	17	0	7	131	19	0	157	0	5	111	4	0	120	303
Hourly Total	0	11	7	19	1	37	0	34	3	10	0	47	1	30	532	84	0	647	0	29	618	18	1	665	1396
Grand Total	0	56	25	66	3	147	0	167	10	68	0	245	1	67	2099	250	0	2417	0	66	2207	60	5	2333	5142
Approach %	0.0	38.1	17.0	44.9	-	-	0.0	68.2	4.1	27.8	-	-	0.0	2.8	86.8	10.3	-	-	0.0	2.8	94.6	2.6	-	-	-
Total %	0.0	1.1	0.5	1.3	-	2.9	0.0	3.2	0.2	1.3	-	4.8	0.0	1.3	40.8	4.9	-	47.0	0.0	1.3	42.9	1.2	-	45.4	-
Lights	0	54	24	66	-	144	0	165	9	66	-	240	1	67	2031	249	-	2348	0	64	2175	59	-	2298	5030
% Lights	-	96.4	96.0	100.0	-	98.0	-	98.8	90.0	97.1	-	98.0	100.0	100.0	96.8	99.6	-	97.1	-	97.0	98.6	98.3	-	98.5	97.8
Buses	0	1	1	0	-	2	0	1	0	0	-	1	0	0	3	0	-	3	0	0	2	0	-	2	8
% Buses	-	1.8	4.0	0.0	-	1.4	-	0.6	0.0	0.0	-	0.4	0.0	0.0	0.1	0.0	-	0.1	-	0.0	0.1	0.0	-	0.1	0.2
Single-Unit Trucks	0	1	0	0	-	1	0	0	0	1	-	1	0	0	38	0	-	38	0	1	16	1	-	18	58
% Single-Unit Trucks	-	1.8	0.0	0.0	-	0.7	-	0.0	0.0	1.5	-	0.4	0.0	0.0	1.8	0.0	-	1.6	-	1.5	0.7	1.7	-	0.8	1.1
Articulated Trucks	0	0	0	0	-	0	0	1	0	1	-	2	0	0	27	1	-	28	0	1	14	0	-	15	45
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.6	0.0	1.5	-	0.8	0.0	0.0	1.3	0.4	-	1.2	-	1.5	0.6	0.0	-	0.6	0.9
Bicycles on Road	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1



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Count Name: IL 83 with Fieldcrest Drive TMC
Site Code:
Start Date: 10/05/2024
Page No: 3

Turning Movement Peak Hour Data (12:45 PM)

Start Time	Fieldcrest Drive							Fieldcrest Drive							IL 83						
	Eastbound				Westbound			Northbound				Southbound									
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total		
12:45 PM	0	7	0	6	0	13	0	17	0	1	0	18	0	1	152	12	0	165	329		
1:00 PM	0	3	0	1	0	4	0	8	0	13	0	21	0	2	130	19	0	151	297		
1:15 PM	0	5	1	6	0	12	0	7	2	1	0	10	0	7	134	13	0	154	298		
1:30 PM	0	1	0	5	0	6	0	10	0	3	0	13	0	3	132	14	0	149	293		
Total	0	16	1	18	0	35	0	42	2	18	0	62	0	13	548	58	0	619	1217		
Approach %	0.0	45.7	2.9	51.4	-	-	0.0	67.7	3.2	29.0	-	-	-	0.0	2.1	88.5	9.4	-	-		
Total %	0.0	1.3	0.1	1.5	-	2.9	0.0	3.5	0.2	1.5	-	5.1	0.0	1.1	45.0	4.8	-	50.9	-		
PHF	0.000	0.571	0.250	0.750	-	0.673	0.000	0.618	0.250	0.346	-	0.738	0.000	0.464	0.901	0.763	-	0.938	0.925		
Lights	0	16	1	18	-	35	0	42	2	18	-	62	0	13	540	58	-	611	1202		
% Lights	-	100.0	100.0	100.0	-	100.0	-	100.0	100.0	100.0	-	100.0	-	100.0	98.5	100.0	-	98.7	98.8		
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1		
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.1		
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	7	0	-	7	11		
% Single-Unit Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	1.3	0.0	-	1.1	0.9		
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	3		
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.2	0.0	-	0.4	0.2		
Bicycles on Road	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		
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-		
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-		



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Count Name: IL 83 with Fieldcrest Drive TMC
Site Code:
Start Date: 10/05/2024
Page No: 4

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Fieldcrest Drive							IL 83						
	Eastbound							Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total		U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
4:45 PM	0	3	6	2	0	11		0	6	164	5	0	175	346
5:00 PM	0	3	5	6	0	14		0	4	182	6	0	192	372
5:15 PM	0	2	1	2	0	5		0	9	183	5	1	197	358
5:30 PM	0	2	1	6	0	9		0	11	142	3	0	156	363
Total	0	10	13	16	0	39		0	30	671	19	1	720	1439
Approach %	0.0	25.6	33.3	41.0	-	-		0.0	4.2	93.2	2.6	-	-	-
Total %	0.0	0.7	0.9	1.1	-	2.7		0.0	2.1	46.6	1.3	-	50.0	-
PHF	0.000	0.833	0.542	0.667	-	0.696		0.000	0.682	0.917	0.792	-	0.914	0.967
Lights	0	9	13	16	-	38		0	29	660	19	-	708	1398
% Lights	-	90.0	100.0	100.0	-	97.4		-	96.7	98.4	100.0	-	98.3	97.2
Buses	0	0	0	0	-	0		0	0	0	0	-	0	1
% Buses	-	0.0	0.0	0.0	-	0.0		-	0.0	0.0	0.0	-	0.0	0.1
Single-Unit Trucks	0	1	0	0	-	1		0	1	4	0	-	5	19
% Single-Unit Trucks	-	10.0	0.0	0.0	-	2.6		-	3.3	0.6	0.0	-	0.7	1.3
Articulated Trucks	0	0	0	0	-	0		0	0	7	0	-	7	21
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0		-	0.0	1.0	0.0	-	1.0	1.5
Bicycles on Road	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
Pedestrians	-	-	-	-	0	-		-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-		-	-	-	-	100.0	-	-



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Count Name: IL 83 with Ivanhoe Lane TMC
Site Code:
Start Date: 10/05/2024
Page No: 1

Turning Movement Data

Start Time	Ivanhoe Lane Westbound					IL 83 Northbound					IL 83 Southbound				
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	Int. Total
12:00 PM	0	0	3	0	3	0	141	0	0	141	0	1	130	0	275
12:15 PM	0	0	0	0	0	0	154	0	0	154	0	0	131	0	285
12:30 PM	0	0	2	0	2	0	122	0	0	122	0	4	140	0	268
12:45 PM	0	0	1	0	1	0	152	0	0	152	0	3	145	0	301
Hourly Total	0	0	6	0	6	0	569	0	0	569	0	8	546	0	1129
1:00 PM	0	0	2	0	2	0	160	0	0	160	0	2	127	0	291
1:15 PM	0	1	0	0	1	0	159	0	0	159	0	1	119	0	280
1:30 PM	0	1	3	0	4	0	137	0	1	137	0	1	135	0	277
1:45 PM	0	1	3	0	4	0	149	0	0	149	0	4	134	0	291
Hourly Total	0	3	8	0	11	0	605	0	1	605	0	8	515	0	1139
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	2	0	2	0	131	0	0	131	0	3	177	0	313
4:15 PM	0	0	5	0	5	0	167	0	0	167	0	2	188	0	362
4:30 PM	0	0	0	0	0	0	154	0	0	154	0	3	170	0	327
4:45 PM	0	0	4	0	4	0	158	0	0	158	0	0	170	0	332
Hourly Total	0	0	11	0	11	0	610	0	0	610	0	8	705	0	1334
5:00 PM	0	0	9	0	9	0	168	2	0	170	0	1	196	0	376
5:15 PM	0	0	3	0	3	0	165	2	0	167	0	1	193	0	364
5:30 PM	0	0	4	0	4	0	186	0	0	186	0	3	174	0	367
5:45 PM	0	0	4	0	4	0	163	1	0	164	0	2	134	0	304
Hourly Total	0	0	20	0	20	0	682	5	0	687	0	7	697	0	1411
Grand Total	0	3	45	0	48	0	2466	5	1	2471	0	31	2463	0	2494
Approach %	0.0	6.3	93.8	-	-	0.0	99.8	0.2	-	-	0.0	1.2	98.8	-	-
Total %	0.0	0.1	0.9	-	1.0	0.0	49.2	0.1	-	49.3	0.0	0.6	49.1	-	49.8
Lights	0	3	45	-	48	0	2391	3	-	2394	0	31	2418	-	2449
% Lights	-	100.0	100.0	-	100.0	-	97.0	60.0	-	96.9	-	100.0	98.2	-	98.2
Buses	0	0	0	-	0	0	3	0	-	3	0	0	4	-	7
% Buses	-	0.0	0.0	-	0.0	-	0.1	0.0	-	0.1	-	0.0	0.2	-	0.1
Single-Unit Trucks	0	0	0	-	0	0	41	1	-	42	0	0	18	-	60
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	1.7	20.0	-	1.7	-	0.0	0.7	-	1.2
Articulated Trucks	0	0	0	-	0	0	31	1	-	32	0	0	23	-	23
% Articulated Trucks	-	0.0	0.0	-	0.0	-	1.3	20.0	-	1.3	-	0.0	0.9	-	55
Bicycles on Road	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
Pedestrians	-	-	-	0	-	-	-	-	1	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-



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Count Name: IL 83 with Ivanhoe Lane TMC
Site Code:
Start Date: 10/05/2024
Page No: 2

Turning Movement Peak Hour Data (12:45 PM)

Start Time	Ivanhoe Lane Westbound					IL 83 Northbound					IL 83 Southbound				
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	Int. Total
12:45 PM	0	0	1	0	1	0	152	0	0	152	0	3	145	0	301
1:00 PM	0	0	2	0	2	0	160	0	0	160	0	2	127	0	291
1:15 PM	0	1	0	0	1	0	159	0	0	159	0	1	119	0	280
1:30 PM	0	1	3	0	4	0	137	0	1	137	0	1	135	0	277
Total	0	2	6	0	8	0	608	0	1	608	0	7	526	0	1149
Approach %	0.0	25.0	75.0	-	-	0.0	100.0	0.0	-	-	0.0	1.3	98.7	-	-
Total %	0.0	0.2	0.5	-	0.7	0.0	52.9	0.0	-	52.9	0.0	0.6	45.8	-	46.4
PHF	0.000	0.500	0.500	-	0.500	0.000	0.950	0.000	-	0.950	0.000	0.583	0.907	-	0.900
Lights	0	2	6	-	8	0	601	0	-	601	0	7	520	-	527
% Lights	-	100.0	100.0	-	100.0	-	98.8	-	-	98.8	-	100.0	98.9	-	98.9
Buses	0	0	0	-	0	0	0	0	-	0	0	0	1	-	1
% Buses	-	0.0	0.0	-	0.0	-	0.0	-	-	0.0	-	0.0	0.2	-	0.2
Single-Unit Trucks	0	0	0	-	0	0	6	0	-	6	0	0	4	-	4
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	1.0	-	-	1.0	-	0.0	0.8	-	0.8
Articulated Trucks	0	0	0	-	0	0	1	0	-	1	0	0	1	-	2
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.2	-	-	0.2	-	0.0	0.2	-	0.2
Bicycles on Road	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
Pedestrians	-	-	-	0	-	-	-	-	1	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-



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Count Name: IL 83 with Ivanhoe Lane TMC
Site Code:
Start Date: 10/05/2024
Page No: 3

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Ivanhoe Lane Westbound					IL 83 Northbound					IL 83 Southbound				
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	Int. Total
4:45 PM	0	0	4	0	4	0	158	0	0	158	0	0	170	0	332
5:00 PM	0	0	9	0	9	0	168	2	0	170	0	1	196	0	376
5:15 PM	0	0	3	0	3	0	165	2	0	167	0	1	193	0	364
5:30 PM	0	0	4	0	4	0	186	0	0	186	0	3	174	0	367
Total	0	0	20	0	20	0	677	4	0	681	0	5	733	0	1439
Approach %	0.0	0.0	100.0	-	-	0.0	99.4	0.6	-	-	0.0	0.7	99.3	-	-
Total %	0.0	0.0	1.4	-	1.4	0.0	47.0	0.3	-	47.3	0.0	0.3	50.9	-	51.3
PHF	0.000	0.000	0.556	-	0.556	0.000	0.910	0.500	-	0.915	0.000	0.417	0.935	-	0.937
Lights	0	0	20	-	20	0	648	2	-	650	0	5	720	-	725
% Lights	-	-	100.0	-	100.0	-	95.7	50.0	-	95.4	-	100.0	98.2	-	98.2
Buses	0	0	0	-	0	0	1	0	-	1	0	0	1	-	1
% Buses	-	-	0.0	-	0.0	-	0.1	0.0	-	0.1	-	0.0	0.1	-	0.1
Single-Unit Trucks	0	0	0	-	0	0	12	1	-	13	0	0	4	-	4
% Single-Unit Trucks	-	-	0.0	-	0.0	-	1.8	25.0	-	1.9	-	0.0	0.5	-	0.5
Articulated Trucks	0	0	0	-	0	0	16	1	-	17	0	0	8	-	8
% Articulated Trucks	-	-	0.0	-	0.0	-	2.4	25.0	-	2.5	-	0.0	1.1	-	1.1
Bicycles on Road	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
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Count Name: IL 83 with Access Drive TMC
Site Code:
Start Date: 10/05/2024
Page No: 1

Turning Movement Data

Start Time	Eastbound Approach					Northbound					Southbound				
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	Int. Total
12:00 PM	0	23	11	0	34	0	7	118	0	125	0	107	16	0	282
12:15 PM	0	25	13	0	38	0	10	138	0	148	0	100	28	0	314
12:30 PM	0	13	14	0	27	0	6	100	0	106	0	116	22	0	271
12:45 PM	0	23	20	0	43	0	6	141	0	147	0	129	26	0	345
Hourly Total	0	84	58	0	142	0	29	497	0	526	0	452	92	0	1212
1:00 PM	0	24	11	0	35	0	8	129	0	137	0	95	23	0	290
1:15 PM	0	24	16	0	40	0	7	135	0	142	0	101	19	0	302
1:30 PM	0	28	19	0	47	0	4	113	0	117	0	113	18	0	295
1:45 PM	0	24	12	0	36	0	7	109	0	116	0	115	26	0	293
Hourly Total	0	100	58	0	158	0	26	486	0	512	0	424	86	0	1180
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	14	6	0	20	0	4	121	0	125	0	164	24	0	333
4:15 PM	0	17	10	0	27	0	10	148	0	158	0	171	13	0	369
4:30 PM	0	17	5	0	22	0	2	136	0	138	0	141	22	0	323
4:45 PM	0	14	12	0	26	0	4	145	0	149	0	156	21	0	352
Hourly Total	0	62	33	0	95	0	20	550	0	570	0	632	80	0	1377
5:00 PM	0	13	18	0	31	0	9	156	0	165	0	176	21	0	393
5:15 PM	0	22	18	0	40	0	7	146	0	153	0	167	24	0	384
5:30 PM	0	19	12	0	31	0	4	166	0	170	0	156	14	0	371
5:45 PM	0	16	15	0	31	0	4	149	0	153	0	117	16	0	317
Hourly Total	0	70	63	0	133	0	24	617	0	641	0	616	75	0	1465
Grand Total	0	316	212	0	528	0	99	2150	0	2249	0	2124	333	0	5234
Approach %	0.0	59.8	40.2	-	-	0.0	4.4	95.6	-	-	0.0	86.4	13.6	-	-
Total %	0.0	6.0	4.1	-	10.1	0.0	1.9	41.1	-	43.0	0.0	40.6	6.4	-	46.9
Lights	0	314	210	-	524	0	98	2069	-	2167	0	2082	332	-	2414
% Lights	-	99.4	99.1	-	99.2	-	99.0	96.2	-	96.4	-	98.0	99.7	-	98.2
Buses	0	1	0	-	1	0	0	2	-	2	0	4	0	-	4
% Buses	-	0.3	0.0	-	0.2	-	0.0	0.1	-	0.1	-	0.2	0.0	-	0.1
Single-Unit Trucks	0	1	2	-	3	0	1	50	-	51	0	19	0	-	19
% Single-Unit Trucks	-	0.3	0.9	-	0.6	-	1.0	2.3	-	2.3	-	0.9	0.0	-	0.8
Articulated Trucks	0	0	0	-	0	0	0	29	-	29	0	19	1	-	20
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	1.3	-	1.3	-	0.9	0.3	-	0.8
Bicycles on Road	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
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 kpachowicz@kloainc.com

Count Name: IL 83 with Access Drive TMC
Site Code:
Start Date: 10/05/2024
Page No: 2

Turning Movement Peak Hour Data (12:45 PM)

Start Time	Eastbound Approach					IL 83 Northbound					IL 83 Southbound				
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	Int. Total
12:45 PM	0	23	20	0	43	0	6	141	0	147	0	129	26	0	345
1:00 PM	0	24	11	0	35	0	8	129	0	137	0	95	23	0	290
1:15 PM	0	24	16	0	40	0	7	135	0	142	0	101	19	0	302
1:30 PM	0	28	19	0	47	0	4	113	0	117	0	113	18	0	295
Total	0	99	66	0	165	0	25	518	0	543	0	438	86	0	1232
Approach %	0.0	60.0	40.0	-	-	0.0	4.6	95.4	-	-	0.0	83.6	16.4	-	-
Total %	0.0	8.0	5.4	-	13.4	0.0	2.0	42.0	-	44.1	0.0	35.6	7.0	-	42.5
PHF	0.000	0.884	0.825	-	0.878	0.000	0.781	0.918	-	0.923	0.000	0.849	0.827	-	0.845
Lights	0	99	65	-	164	0	25	510	-	535	0	433	86	-	519
% Lights	-	100.0	98.5	-	99.4	-	100.0	98.5	-	98.5	-	98.9	100.0	-	99.0
Buses	0	0	0	-	0	0	0	0	-	0	0	1	0	-	1
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.2	0.0	-	0.2
Single-Unit Trucks	0	0	1	-	1	0	0	7	-	7	0	3	0	-	3
% Single-Unit Trucks	-	0.0	1.5	-	0.6	-	0.0	1.4	-	1.3	-	0.7	0.0	-	0.6
Articulated Trucks	0	0	0	-	0	0	0	1	-	1	0	1	0	-	1
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.2	-	0.2	-	0.2	0.0	-	0.2
Bicycles on Road	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
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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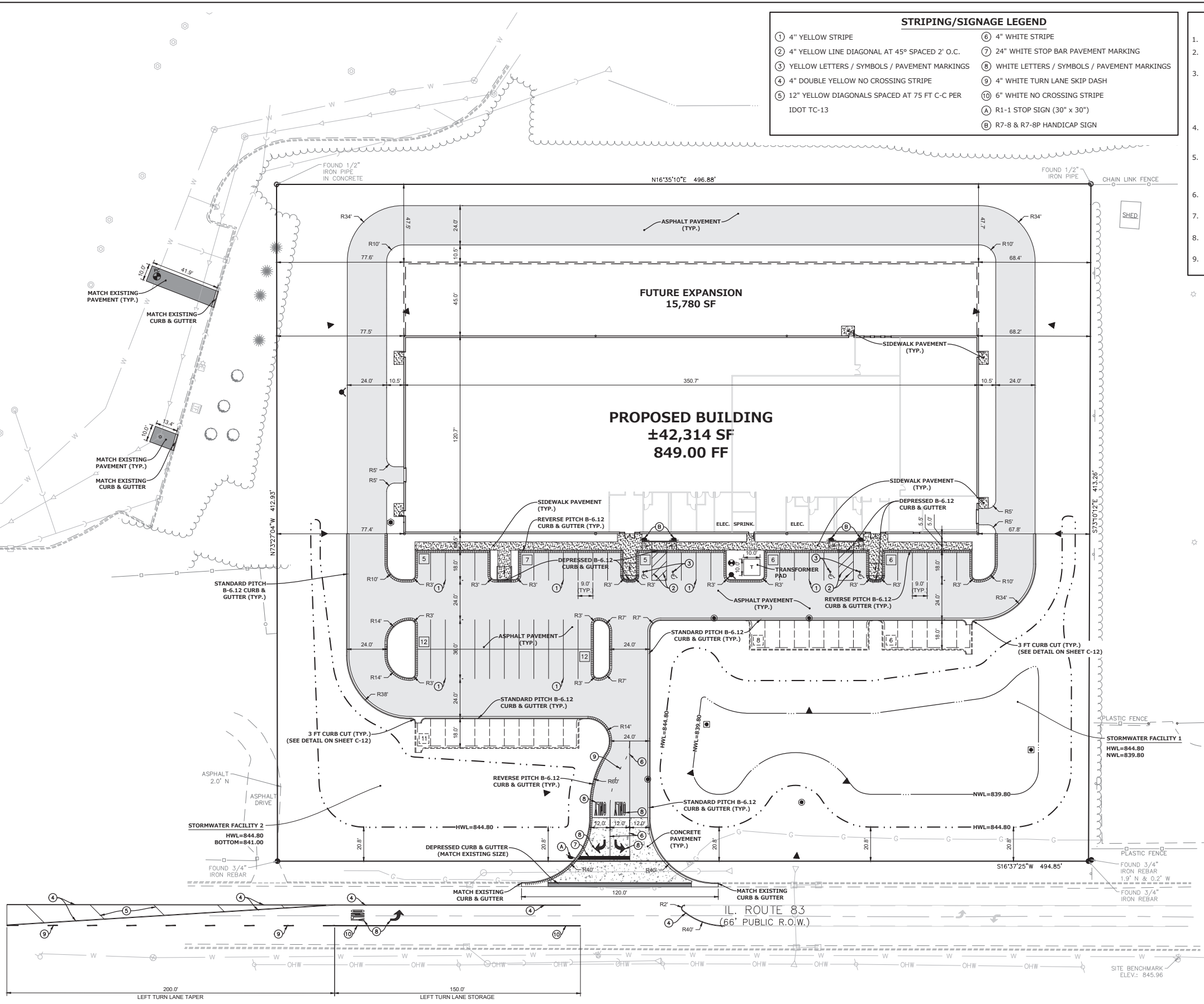
Count Name: IL 83 with Access Drive TMC
Site Code:
Start Date: 10/05/2024
Page No: 3

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Eastbound Approach						IL 83						IL 83					
	Eastbound						Northbound						Southbound					
	U-Turn	Left	Right	Peds	App. Total		U-Turn	Left	Thru	Peds	App. Total		U-Turn	Thru	Right	Peds	App. Total	Int. Total
4:45 PM	0	14	12	0	26		0	4	145	0	149		0	156	21	0	177	352
5:00 PM	0	13	18	0	31		0	9	156	0	165		0	176	21	0	197	393
5:15 PM	0	22	18	0	40		0	7	146	0	153		0	167	24	0	191	384
5:30 PM	0	19	12	0	31		0	4	166	0	170		0	156	14	0	170	371
Total	0	68	60	0	128		0	24	613	0	637		0	655	80	0	735	1500
Approach %	0.0	53.1	46.9	-	-		0.0	3.8	96.2	-	-		0.0	89.1	10.9	-	-	-
Total %	0.0	4.5	4.0	-	8.5		0.0	1.6	40.9	-	42.5		0.0	43.7	5.3	-	49.0	-
PHF	0.000	0.773	0.833	-	0.800		0.000	0.667	0.923	-	0.937		0.000	0.930	0.833	-	0.933	0.954
Lights	0	67	60	-	127		0	24	579	-	603		0	641	80	-	721	1451
% Lights	-	98.5	100.0	-	99.2		-	100.0	94.5	-	94.7		-	97.9	100.0	-	98.1	96.7
Buses	0	0	0	-	0		0	0	1	-	1		0	1	0	-	1	2
% Buses	-	0.0	0.0	-	0.0		-	0.0	0.2	-	0.2		-	0.2	0.0	-	0.1	0.1
Single-Unit Trucks	0	1	0	-	1		0	0	15	-	15		0	6	0	-	6	22
% Single-Unit Trucks	-	1.5	0.0	-	0.8		-	0.0	2.4	-	2.4		-	0.9	0.0	-	0.8	1.5
Articulated Trucks	0	0	0	-	0		0	0	18	-	18		0	7	0	-	7	25
% Articulated Trucks	-	0.0	0.0	-	0.0		-	0.0	2.9	-	2.8		-	1.1	0.0	-	1.0	1.7
Bicycles on Road	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
Pedestrians	-	-	-	0	-		-	-	-	0	-		-	-	-	0	-	-
% Pedestrians	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-	-

Site Plan and Floor Plan

12/6/2024 3:42 PM - E:\Projects\2024\5897.00-1\1000 - civil\sheet\SET-C-4 SITE DIMENSIONAL & PAVING PLAN.dwg
DESIGNED: SCS
REVIEWED: BDJ
DRAFTED: SCS
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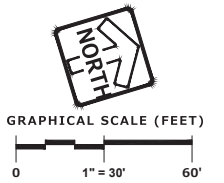


STRIPING/SIGNAGE LEGEND			
① 4" YELLOW STRIPE	⑥ 4" WHITE STRIPE	⑦ 24" WHITE STOP BAR PAVEMENT MARKING	⑧ WHITE LETTERS / SYMBOLS / PAVEMENT MARKINGS
② 4" YELLOW LINE DIAGONAL AT 45° SPACED 2' O.C.	⑨ 4" WHITE TURN LANE SKIP DASH	⑩ 6" WHITE NO CROSSING STRIPE	⑪ R1-1 STOP SIGN (30" x 30")
③ YELLOW LETTERS / SYMBOLS / PAVEMENT MARKINGS	⑫ 12" YELLOW DIAGONALS SPACED AT 75 FT C-C PER IDOT TC-13	⑬ R7-8 & R7-8P HANDICAP SIGN	

- SITE DIMENSIONAL AND PAVING NOTES**
- ALL PROPOSED CURB AND GUTTER SHALL BE B6.12 UNLESS OTHERWISE NOTED.
 - ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB OR BUILDING FACE UNLESS OTHERWISE NOTED.
 - BUILDING DIMENSIONS, GRADING, PARKING, AND UTILITY LAYOUT HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST AND CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION. IN CASE OF DISCREPANCIES BETWEEN ARCHITECTURAL PLANS AND CIVIL PLANS, THE CIVIL PLANS SHALL TAKE PRECEDENCE.
 - LOCATION OF PRIVATE SIDEWALKS SHALL BE COORDINATED WITH PROPOSED DOORWAYS. CONTRACTOR TO VERIFY ACTUAL BUILDING PLAN LOCATIONS WITH ARCHITECT/DEVELOPER PRIOR TO CONSTRUCTING THE SIDEWALKS.
 - REBAR / TIEBARS SHALL BE USED IN ALL LOCATIONS WHERE CONCRETE ABUTS OTHER CONCRETE FEATURES (ie. SIDEWALK ADJACENT TO FOUNDATION WALL AND SIDEWALK ADJACENT TO CURB & GUTTER). TIEBAR SIZE AND SPACING SHALL BE PER IDOT SPECIFICATIONS.
 - CONTRACTOR SHALL CONSTRUCT ALL HANDICAP ACCESSIBLE ROUTES IN ACCORDANCE WITH LOCAL AND STATE ADA REQUIREMENTS.
 - PAVEMENT SLOPES THROUGH HANDICAP ACCESSIBLE PARKING AREAS SHALL BE 2.00% MAXIMUM IN ANY DIRECTION.
 - REFER TO CONSTRUCTION DETAILS AND GRADING ENLARGEMENTS FOR SIDEWALK RAMPS AND HANDICAP STRIPING.
 - REFER TO PHOTOMETRICS PLAN (BY OTHERS) FOR LIGHT STANDARDS AND SPECIFICATIONS.

SITE DATA TABLE	
LOT AREA:	4.702 ACRES (204,838.8 SF)
BUILDING	
BUILDING AREA:	±42,314 SF
FUTURE BUILDING AREA:	15,780 SF
PARKING	
PARKING PROVIDED:	53 STALLS INCLUDING 4 ADA
FUTURE PARKING:	25 STALLS
STORMWATER FACILITIES	
STORMWATER FACILITY 1	
TOP OF BERM	= 845.80
EMERGENCY SPILLWAY ELEVATION	= 845.00
HWL	= 844.80
NWL	= 839.80
BOTTOM	= 839.70
PROVIDED DETENTION	= 1.872 AC-FT
STORMWATER FACILITY 2	
TOP OF BERM	= 846.00 (MIN.)
HWL	= 844.80
BOTTOM	= 841.00
PROVIDED DETENTION	= 0.397 AC-FT
STORMWATER DETENTION AND VOLUME CONTROL	
TOTAL REQUIRED DETENTION	= 2.224 AC-FT
TOTAL PROVIDED DETENTION	= 2.268 AC-FT
TOTAL VOLUME CONTROL REQUIRED	= 0.121 AC-FT
TOTAL VOLUME CONTROL PROVIDED	= 0.140 AC-FT
OUTLET CONTROL STRUCTURE (STM-2)	
RIM	= 846.40
INTERNAL WEIR WALL ELEVATION	= 844.80
100-YEAR ORIFICE ELEVATION	= 842.10
ORIFICE SIZE	= 3.20 INCHES
2-YEAR ORIFICE ELEVATION	= 839.00
ORIFICE SIZE	= 2.00 INCHES

LEGEND	
	CONCRETE PAVEMENT
8"	PORTLAND CEMENT CONCRETE
6"	COMP. CA-6 AGGREGATE BASE COURSE, TYPE B
	SIDEWALK
5"	PORTLAND CEMENT CONCRETE
4"	COMP. CA-6 AGGREGATE BASE COURSE, TYPE B
	ASPHALT PAVEMENT
1.5"	BIT. SURFACE COURSE, HMA, MIX D, N50, 9.5mm NOMINAL SIZE
2.5"	BIT. BINDER COURSE, HMA, IL-19, N50, 19.0mm NOMINAL SIZE
0.35 GAL/SY	BITUMINOUS PRIME COAT (MC-30)
10"	COMP. CA-6 AGGREGATE SUBBASE, TYPE B
	MATCH EXISTING ASPHALT PAVEMENT SECTION
TBD	
	B-6.12 CURB & GUTTER (UNLESS NOTED OTHERWISE)
	REVERSE PITCH B-6.12 CURB & GUTTER
	DEPRESSED PITCH B-6.12 CURB & GUTTER



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28884 N. ILLINOIS ROUTE 83
MUNDELEIN, IL

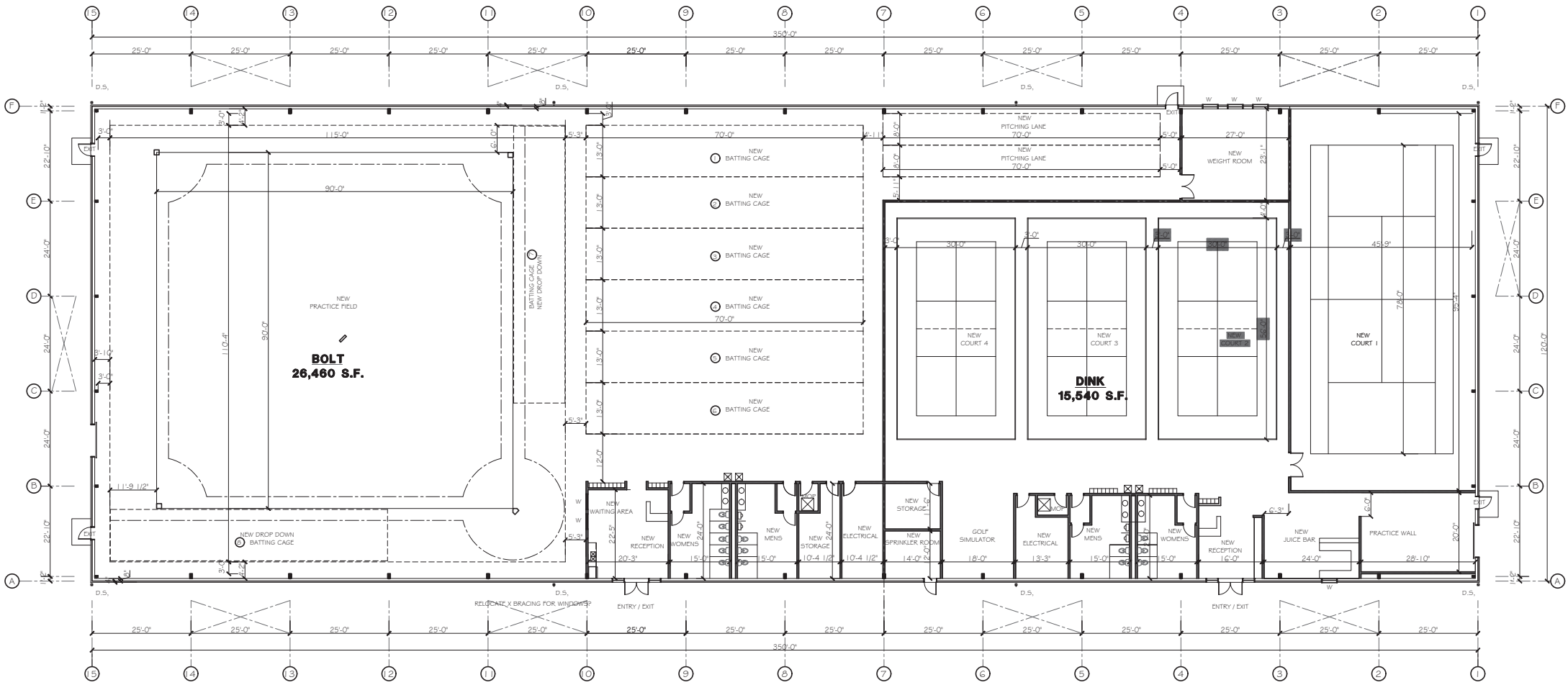
REVISIONS	

SITE DIMENSIONAL & PAVING PLAN

PEG JOB No. 5897.00-1L
PEG PM: BDJ
START DATE: 10/03/24
SCALE: 1" = 30'
SHEET
C-4
OF
C-12

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A NEW
PICKEL BALL AND
BASEBALL TRAINING FACILITY
MUNDELIEN, ILLINOIS



FLOOR PLAN **N**
1/16" = 1'-0"
42,000 S.F. GROSS AREA

250' MAX TRAVEL DISTANCE WITH SPRINKLER SYSTEM

ILLINOIS PLUMBING CODE

OCCUPANT LOAD FOR EXERCISE ROOMS = 1 PER 50 S.F. PER 201 & IBC / IL PLUMB CODE SIMILAR.

<u>PICKLE BALL FACILITY</u>	<u>BATTING CAGE FACILITY</u>
15,300 S.F.	26,000 S.F.
306 OCCUPANTS	520 OCCUPANTS
153M 153W	260M / 260W
REQUIRED FIXTURES	
MEN	WOMEN
2T	4T
2U	
1 LAV	1 LAV

MEN	WOMEN
3T	5T
3U	
2 LAV	2 LAV

JOB NO.	PAP			
	DRAWN BY:	PAP		
SHEET NO.	P-1			
	A NEW PICKEL BALL AND BASEBALL TRAINING FACILITY MUNDELIEN, ILLINOIS			
PSENKA ARCHITECTS Inc. ARCHITECTURE • PLANNING • DESIGN • BUILD 40 LANDOVER PARKWAY, SUITE 4 HAWTHORN WOODS, IL 60067 TEL 847796-4001 FAX 847796-4001				
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ISSUE DATES: DATE 11-22-24 FOR REVIEW				
REMARKS				

CMAP 2050 Projections Letter



September 24, 2024

Ryan May
Project Coordinator
Kenig, Lindgren, O'Hara and Aboona, Inc.
9575 West Higgins Road
Suite 400
Rosemont, IL 60018

Subject: IL 60 and IL 83
IDOT

Dear Ms. May:

In response to a request made on your behalf and dated September 23, 2024, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT (2023)	No-Build Year 2050 ADT	Build Ivanhoe Area Sts 2050 ADT
IL 60 north of IL 83	17,400	23,200	19,500
IL 60 south of IL 83	21,000	23,700	21,900
IL 83 east of IL 60	12,200	16,500	15,900
IL 83 west of IL 60	20,900	28,300	25,800

Traffic projections are developed using existing ADT data provided in the request letter and the results from the June 2024 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 or email me at jrodriguez@cmap.illinois.gov

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Rios (IDOT)
\\2024_TrafficForecasts\Mundelein\la-33-24\la-33-24.docx

Level of Service Criteria

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
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: <i>Highway Capacity Manual</i> , 6 th Edition.		

Capacity Analysis Summary Sheets
Existing Weekday Evening Peak Hour

HCM 6th TWSC
1: IL 83 & Fieldcrest Drive

12/06/2024

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↖	↗	↖	↖	↗
Traffic Vol, veh/h	10	13	16	29	2	10	31	582	84	30	693	19
Future Vol, veh/h	10	13	16	29	2	10	31	582	84	30	693	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	200	185	-	50
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	10	0	0	0	0	10	0	5	0	3	2	0
Mvmt Flow	10	13	16	30	2	10	32	600	87	31	714	20

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1490	1527	714	1465	1460	600	734	0	0	687	0	0
Stage 1	776	776	-	664	664	-	-	-	-	-	-	-
Stage 2	714	751	-	801	796	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.5	6.2	7.1	6.5	6.3	4.1	-	-	4.13	-	-
Critical Hdwy Stg 1	6.2	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4	3.3	3.5	4	3.39	2.2	-	-	2.227	-	-
Pot Cap-1 Maneuver	98	119	435	107	130	486	880	-	-	902	-	-
Stage 1	378	410	-	453	461	-	-	-	-	-	-	-
Stage 2	410	421	-	381	402	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	90	111	435	93	121	486	880	-	-	902	-	-
Mov Cap-2 Maneuver	205	226	-	206	235	-	-	-	-	-	-	-
Stage 1	364	396	-	437	444	-	-	-	-	-	-	-
Stage 2	385	406	-	342	388	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	20.5		23.1		0.4		0.4	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	880	-	-	273 241	902	-	-
HCM Lane V/C Ratio	0.036	-	-	0.147 0.175	0.034	-	-
HCM Control Delay (s)	9.2	-	-	20.5 23.1	9.1	-	-
HCM Lane LOS	A	-	-	C C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5 0.6	0.1	-	-

HCM 6th TWSC
2: IL 83 & Ivanhoe Lane

12/06/2024

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	20	677	4	5	733
Future Vol, veh/h	0	20	677	4	5	733
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	4	50	0	2
Mvmt Flow	0	21	705	4	5	764
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1481	707	0	0	709	0
Stage 1	707	-	-	-	-	-
Stage 2	774	-	-	-	-	-
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	139	439	-	-	899	-
Stage 1	493	-	-	-	-	-
Stage 2	458	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	138	439	-	-	899	-
Mov Cap-2 Maneuver	278	-	-	-	-	-
Stage 1	493	-	-	-	-	-
Stage 2	453	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	13.6	0		0.1		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	439	899	-	
HCM Lane V/C Ratio	-	-	0.047	0.006	-	
HCM Control Delay (s)	-	-	13.6	9	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

HCM 6th TWSC
3: IL 83 & Mundelein Crossing Access Drive

12/06/2024

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	68	60	24	613	653	80
Future Vol, veh/h	68	60	24	613	653	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	105	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	0	0	6	2	0
Mvmt Flow	72	63	25	645	687	84
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1424	729	771	0	-	0
Stage 1	729	-	-	-	-	-
Stage 2	695	-	-	-	-	-
Critical Hdwy	6.41	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	150	426	853	-	-	-
Stage 1	479	-	-	-	-	-
Stage 2	497	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	146	426	853	-	-	-
Mov Cap-2 Maneuver	286	-	-	-	-	-
Stage 1	465	-	-	-	-	-
Stage 2	497	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	18.5	0.4		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	853	-	286	426	-	-
HCM Lane V/C Ratio	0.03	-	0.25	0.148	-	-
HCM Control Delay (s)	9.3	-	21.7	14.9	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	1	0.5	-	-

Capacity Analysis Summary Sheets
Existing Saturday Midday Peak Hour

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↗	↗	↗	↗	↗
Traffic Vol, veh/h	16	1	18	42	2	18	13	548	58	13	474	14
Future Vol, veh/h	16	1	18	42	2	18	13	548	58	13	474	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	200	185	-	50
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	8	1	7
Mvmt Flow	17	1	19	45	2	19	14	589	62	14	510	15

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1197	1217	510	1173	1170	589	525	0	0	651	0	0
Stage 1	538	538	-	617	617	-	-	-	-	-	-	-
Stage 2	659	679	-	556	553	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.18	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.272	-	-
Pot Cap-1 Maneuver	164	182	567	171	195	512	1052	-	-	907	-	-
Stage 1	531	526	-	481	484	-	-	-	-	-	-	-
Stage 2	456	454	-	519	518	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	154	177	567	161	190	512	1052	-	-	907	-	-
Mov Cap-2 Maneuver	281	295	-	291	309	-	-	-	-	-	-	-
Stage 1	524	518	-	475	478	-	-	-	-	-	-	-
Stage 2	431	448	-	493	510	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	15.5		18.5		0.2		0.2	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1052	-	-	380	333	907	-
HCM Lane V/C Ratio	0.013	-	-	0.099	0.2	0.015	-
HCM Control Delay (s)	8.5	-	-	15.5	18.5	9	-
HCM Lane LOS	A	-	-	C	C	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.7	0	-

HCM 6th TWSC
2: IL 83 & Ivanhoe Lane

12/06/2024

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	6	613	0	7	527
Future Vol, veh/h	2	6	613	0	7	527
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	2	6	645	0	7	555
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1214	645	0	0	645	0
Stage 1	645	-	-	-	-	-
Stage 2	569	-	-	-	-	-
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	202	476	-	-	950	-
Stage 1	526	-	-	-	-	-
Stage 2	570	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	200	476	-	-	950	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	526	-	-	-	-	-
Stage 2	564	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	13.5	0		0.1		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 433		950	-	
HCM Lane V/C Ratio	-	- 0.019		0.008	-	
HCM Control Delay (s)	-	- 13.5		8.8	0	
HCM Lane LOS	-	- B		A	A	
HCM 95th %tile Q(veh)	-	- 0.1		0	-	

HCM 6th TWSC
3: IL 83 & Mundelein Crossing Access Drive

12/06/2024

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	99	66	25	514	443	86
Future Vol, veh/h	99	66	25	514	443	86
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	105	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	2	0	2	1	0
Mvmt Flow	111	74	28	578	498	97
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1181	547	595	0	-	0
Stage 1	547	-	-	-	-	-
Stage 2	634	-	-	-	-	-
Critical Hdwy	6.4	6.22	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.318	2.2	-	-	-
Pot Cap-1 Maneuver	212	537	991	-	-	-
Stage 1	584	-	-	-	-	-
Stage 2	532	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	206	537	991	-	-	-
Mov Cap-2 Maneuver	345	-	-	-	-	-
Stage 1	568	-	-	-	-	-
Stage 2	532	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	17.3	0.4		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	991	-	345	537	-	-
HCM Lane V/C Ratio	0.028	-	0.322	0.138	-	-
HCM Control Delay (s)	8.7	-	20.3	12.8	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	1.4	0.5	-	-

Capacity Analysis Summary Sheets
Year 2030 No-Build Weekday Evening Peak Hour

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↗	↗	↗	↗	↗
Traffic Vol, veh/h	10	13	16	29	2	10	31	629	84	30	744	19
Future Vol, veh/h	10	13	16	29	2	10	31	629	84	30	744	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	200	185	-	50
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	10	0	0	0	0	10	0	5	0	3	2	0
Mvmt Flow	10	13	16	30	2	10	32	648	87	31	767	20

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1591	1628	767	1566	1561	648	787	0	0	735	0	0
Stage 1	829	829	-	712	712	-	-	-	-	-	-	-
Stage 2	762	799	-	854	849	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.5	6.2	7.1	6.5	6.3	4.1	-	-	4.13	-	-
Critical Hdwy Stg 1	6.2	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4	3.3	3.5	4	3.39	2.2	-	-	2.227	-	-
Pot Cap-1 Maneuver	83	103	405	91	113	456	841	-	-	866	-	-
Stage 1	353	388	-	427	439	-	-	-	-	-	-	-
Stage 2	385	401	-	356	380	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	76	95	405	78	105	456	841	-	-	866	-	-
Mov Cap-2 Maneuver	187	210	-	188	217	-	-	-	-	-	-	-
Stage 1	340	374	-	411	422	-	-	-	-	-	-	-
Stage 2	360	386	-	317	366	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	22	25.1	0.4	0.4
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	841	-	-	252 221	866	-	-
HCM Lane V/C Ratio	0.038	-	-	0.16 0.191	0.036	-	-
HCM Control Delay (s)	9.4	-	-	22 25.1	9.3	-	-
HCM Lane LOS	A	-	-	C D	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6 0.7	0.1	-	-

HCM 6th TWSC
2: IL 83 & Ivanhoe Lane

12/06/2024

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	20	724	4	5	784
Future Vol, veh/h	0	20	724	4	5	784
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	4	50	0	2
Mvmt Flow	0	21	754	4	5	817

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1583	756	0	0	758
Stage 1	756	-	-	-	-
Stage 2	827	-	-	-	-
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	121	411	-	-	862
Stage 1	467	-	-	-	-
Stage 2	433	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	120	411	-	-	862
Mov Cap-2 Maneuver	258	-	-	-	-
Stage 1	467	-	-	-	-
Stage 2	428	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.2	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	411	862
HCM Lane V/C Ratio	-	-	0.051	0.006
HCM Control Delay (s)	-	-	14.2	9.2
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.2	0

HCM 6th TWSC
3: IL 83 & Mundelein Crossing Access Drive

12/06/2024

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	68	60	24	660	704	80
Future Vol, veh/h	68	60	24	660	704	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	105	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	0	0	6	2	0
Mvmt Flow	72	63	25	695	741	84
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1528	783	825	0	-	0
Stage 1	783	-	-	-	-	-
Stage 2	745	-	-	-	-	-
Critical Hdwy	6.41	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	130	397	814	-	-	-
Stage 1	452	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	126	397	814	-	-	-
Mov Cap-2 Maneuver	265	-	-	-	-	-
Stage 1	438	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	19.9	0.3		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	814	-	265	397	-	-
HCM Lane V/C Ratio	0.031	-	0.27	0.159	-	-
HCM Control Delay (s)	9.6	-	23.5	15.8	-	-
HCM Lane LOS	A	-	C	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.1	0.6	-	-

Capacity Analysis Summary Sheets
Year 2030 No-Build Saturday Midday Peak Hour

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↗	↖	↗	↖	↖	↗
Traffic Vol, veh/h	16	1	18	42	2	18	13	586	58	13	507	14
Future Vol, veh/h	16	1	18	42	2	18	13	586	58	13	507	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	200	185	-	50
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	8	1	7
Mvmt Flow	17	1	19	45	2	19	14	630	62	14	545	15

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1273	1293	545	1249	1246	630	560	0	0	692	0	0
Stage 1	573	573	-	658	658	-	-	-	-	-	-	-
Stage 2	700	720	-	591	588	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.18	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.272	-	-
Pot Cap-1 Maneuver	146	164	542	151	175	485	1021	-	-	876	-	-
Stage 1	508	507	-	457	464	-	-	-	-	-	-	-
Stage 2	433	435	-	497	499	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	136	159	542	142	170	485	1021	-	-	876	-	-
Mov Cap-2 Maneuver	262	278	-	272	291	-	-	-	-	-	-	-
Stage 1	501	499	-	451	458	-	-	-	-	-	-	-
Stage 2	408	429	-	471	491	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	16.2		19.6		0.2		0.2	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1021	-	-	358 313	876	-	-
HCM Lane V/C Ratio	0.014	-	-	0.105 0.213	0.016	-	-
HCM Control Delay (s)	8.6	-	-	16.2 19.6	9.2	-	-
HCM Lane LOS	A	-	-	C C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3 0.8	0	-	-

HCM 6th TWSC
2: IL 83 & Ivanhoe Lane

12/06/2024

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	6	651	0	7	560
Future Vol, veh/h	2	6	651	0	7	560
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	2	6	685	0	7	589

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1288	685	0	0	685	0
Stage 1	685	-	-	-	-	-
Stage 2	603	-	-	-	-	-
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	183	452	-	-	918	-
Stage 1	504	-	-	-	-	-
Stage 2	550	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	181	452	-	-	918	-
Mov Cap-2 Maneuver	321	-	-	-	-	-
Stage 1	504	-	-	-	-	-
Stage 2	544	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	410	918
HCM Lane V/C Ratio	-	-	0.021	0.008
HCM Control Delay (s)	-	-	14	9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

HCM 6th TWSC 3: IL 83 & Mundelein Crossing Access Drive

12/06/2024

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	99	66	25	552	476	86
Future Vol, veh/h	99	66	25	552	476	86
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	105	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	2	0	2	1	0
Mvmt Flow	111	74	28	620	535	97
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1260	584	632	0	-	0
Stage 1	584	-	-	-	-	-
Stage 2	676	-	-	-	-	-
Critical Hdwy	6.4	6.22	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.318	2.2	-	-	-
Pot Cap-1 Maneuver	190	512	960	-	-	-
Stage 1	561	-	-	-	-	-
Stage 2	509	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	184	512	960	-	-	-
Mov Cap-2 Maneuver	324	-	-	-	-	-
Stage 1	545	-	-	-	-	-
Stage 2	509	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	18.4	0.4		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	960	-	324	512	-	-
HCM Lane V/C Ratio	0.029	-	0.343	0.145	-	-
HCM Control Delay (s)	8.9	-	21.8	13.2	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	1.5	0.5	-	-

Capacity Analysis Summary Sheets
Year 2030 Total Projected Weekday Evening Peak Hour

HCM 6th TWSC
1: IL 83 & Fieldcrest Drive

12/11/2024

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↗	↗	↗	↗	↗
Traffic Vol, veh/h	10	13	16	29	2	10	31	644	84	30	759	19
Future Vol, veh/h	10	13	16	29	2	10	31	644	84	30	759	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	200	185	-	50
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	10	0	0	0	0	10	0	5	0	3	2	0
Mvmt Flow	10	13	16	30	2	10	32	664	87	31	782	20

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1622	1659	782	1597	1592	664	802	0	0	751	0	0
Stage 1	844	844	-	728	728	-	-	-	-	-	-	-
Stage 2	778	815	-	869	864	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.5	6.2	7.1	6.5	6.3	4.1	-	-	4.13	-	-
Critical Hdwy Stg 1	6.2	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4	3.3	3.5	4	3.39	2.2	-	-	2.227	-	-
Pot Cap-1 Maneuver	79	99	397	87	108	447	830	-	-	854	-	-
Stage 1	347	382	-	418	432	-	-	-	-	-	-	-
Stage 2	378	394	-	349	374	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	72	92	397	75	100	447	830	-	-	854	-	-
Mov Cap-2 Maneuver	182	205	-	183	212	-	-	-	-	-	-	-
Stage 1	333	368	-	402	415	-	-	-	-	-	-	-
Stage 2	353	379	-	311	361	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	22.5		25.8		0.4		0.3	
HCM LOS	C		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	830	-	-	246	215	854	-
HCM Lane V/C Ratio	0.039	-	-	0.163	0.197	0.036	-
HCM Control Delay (s)	9.5	-	-	22.5	25.8	9.4	-
HCM Lane LOS	A	-	-	C	D	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.7	0.1	-

HCM 6th TWSC
2: IL 83 & Ivanhoe Lane

12/11/2024

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	20	739	4	5	799
Future Vol, veh/h	0	20	739	4	5	799
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	4	50	0	2
Mvmt Flow	0	21	770	4	5	832
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1614	772	0	0	774	0
Stage 1	772	-	-	-	-	-
Stage 2	842	-	-	-	-	-
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	116	403	-	-	851	-
Stage 1	459	-	-	-	-	-
Stage 2	426	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	115	403	-	-	851	-
Mov Cap-2 Maneuver	253	-	-	-	-	-
Stage 1	459	-	-	-	-	-
Stage 2	421	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	14.4	0		0.1		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	403	851	-	
HCM Lane V/C Ratio	-	-	0.052	0.006	-	
HCM Control Delay (s)	-	-	14.4	9.3	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

HCM 6th TWSC 3: IL 83 & Mundelein Crossing Access Drive

12/11/2024

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	68	60	24	675	719	80
Future Vol, veh/h	68	60	24	675	719	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	105	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	0	0	6	2	0
Mvmt Flow	72	63	25	711	757	84

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1560	799	841	0	-	0
Stage 1	799	-	-	-	-	-
Stage 2	761	-	-	-	-	-
Critical Hdwy	6.41	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	124	389	803	-	-	-
Stage 1	444	-	-	-	-	-
Stage 2	463	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	120	389	803	-	-	-
Mov Cap-2 Maneuver	258	-	-	-	-	-
Stage 1	430	-	-	-	-	-
Stage 2	463	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.4	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	803	-	258	389	-	-
HCM Lane V/C Ratio	0.031	-	0.277	0.162	-	-
HCM Control Delay (s)	9.6	-	24.2	16	-	-
HCM Lane LOS	A	-	C	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.1	0.6	-	-

HCM 6th TWSC 4: IL 83 & Proposed Site Access Drive

12/11/2024

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	15	15	744	789	15
Future Vol, veh/h	15	15	15	744	789	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	30	0	150	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	4	2	0
Mvmt Flow	16	16	16	783	831	16
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1654	839	847	0	-	0
Stage 1	839	-	-	-	-	-
Stage 2	815	-	-	-	-	-
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	109	369	799	-	-	-
Stage 1	427	-	-	-	-	-
Stage 2	439	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	107	369	799	-	-	-
Mov Cap-2 Maneuver	244	-	-	-	-	-
Stage 1	418	-	-	-	-	-
Stage 2	439	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	18	0.2		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	799	-	244	369	-	-
HCM Lane V/C Ratio	0.02	-	0.065	0.043	-	-
HCM Control Delay (s)	9.6	-	20.8	15.2	-	-
HCM Lane LOS	A	-	C	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	0.1	-	-

Capacity Analysis Summary Sheets
Year 2030 Total Projected Saturday Midday Peak Hour

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↗	↖	↗	↗	↖	↗
Traffic Vol, veh/h	16	1	18	42	2	18	13	606	58	13	527	14
Future Vol, veh/h	16	1	18	42	2	18	13	606	58	13	527	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	200	185	-	50
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	8	1	7
Mvmt Flow	17	1	19	45	2	19	14	652	62	14	567	15

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1317	1337	567	1293	1290	652	582	0	0	714	0	0
Stage 1	595	595	-	680	680	-	-	-	-	-	-	-
Stage 2	722	742	-	613	610	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.18	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.272	-	-
Pot Cap-1 Maneuver	136	155	527	141	165	471	1002	-	-	859	-	-
Stage 1	494	496	-	444	454	-	-	-	-	-	-	-
Stage 2	421	425	-	483	488	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	127	150	527	132	160	471	1002	-	-	859	-	-
Mov Cap-2 Maneuver	252	270	-	261	281	-	-	-	-	-	-	-
Stage 1	487	488	-	438	448	-	-	-	-	-	-	-
Stage 2	396	419	-	457	480	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	16.7		20.3		0.2		0.2	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1002	-	-	345	301	859	-
HCM Lane V/C Ratio	0.014	-	-	0.109	0.221	0.016	-
HCM Control Delay (s)	8.6	-	-	16.7	20.3	9.3	-
HCM Lane LOS	A	-	-	C	C	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.8	0.1	-

HCM 6th TWSC
2: IL 83 & Ivanhoe Lane

12/11/2024

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	W	T			T
Traffic Vol, veh/h	2	6	671	0	7	580
Future Vol, veh/h	2	6	671	0	7	580
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	2	6	706	0	7	611
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1331	706	0	0	706	0
Stage 1	706	-	-	-	-	-
Stage 2	625	-	-	-	-	-
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	172	439	-	-	902	-
Stage 1	493	-	-	-	-	-
Stage 2	537	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	170	439	-	-	902	-
Mov Cap-2 Maneuver	311	-	-	-	-	-
Stage 1	493	-	-	-	-	-
Stage 2	531	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	14.2	0		0.1		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 398		902	-	
HCM Lane V/C Ratio	-	- 0.021		0.008	-	
HCM Control Delay (s)	-	- 14.2		9	0	
HCM Lane LOS	-	- B		A	A	
HCM 95th %tile Q(veh)	-	- 0.1		0	-	

HCM 6th TWSC
3: IL 83 & Mundelein Crossing Access Drive

12/11/2024

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	99	66	25	572	496	86
Future Vol, veh/h	99	66	25	572	496	86
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	105	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	2	0	2	1	0
Mvmt Flow	111	74	28	643	557	97
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1305	606	654	0	-	0
Stage 1	606	-	-	-	-	-
Stage 2	699	-	-	-	-	-
Critical Hdwy	6.4	6.22	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.318	2.2	-	-	-
Pot Cap-1 Maneuver	178	497	943	-	-	-
Stage 1	548	-	-	-	-	-
Stage 2	497	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	173	497	943	-	-	-
Mov Cap-2 Maneuver	313	-	-	-	-	-
Stage 1	532	-	-	-	-	-
Stage 2	497	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	19	0.4		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	943	-	313	497	-	-
HCM Lane V/C Ratio	0.03	-	0.355	0.149	-	-
HCM Control Delay (s)	8.9	-	22.7	13.5	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	1.6	0.5	-	-

HCM 6th TWSC 4: IL 83 & Proposed Site Access Drive

12/11/2024

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	20	20	657	567	20
Future Vol, veh/h	20	20	20	657	567	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	30	0	150	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	21	21	21	692	597	21

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1342	608	618	0	-	0
Stage 1	608	-	-	-	-	-
Stage 2	734	-	-	-	-	-
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	169	499	972	-	-	-
Stage 1	547	-	-	-	-	-
Stage 2	478	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	165	499	972	-	-	-
Mov Cap-2 Maneuver	305	-	-	-	-	-
Stage 1	535	-	-	-	-	-
Stage 2	478	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.1	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	972	-	305	499	-	-
HCM Lane V/C Ratio	0.022	-	0.069	0.042	-	-
HCM Control Delay (s)	8.8	-	17.7	12.5	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	0.1	-	-