VILLAGE OF MORTON GROVE

# APPEARANCE COMMISSION

Flickinger Municipal Center
6101 Capulina Avenue, Morton Grove, IL 60053

## Tuesday, November 4, 2025 - 7:00 P.M.
## AGENDA

I. CALL TO ORDER

II. APPROVAL OF MINUTES
October 7, 2025, Meeting of the Appearance Commission

III. PUBLIC MEETING

| | |
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| CASE | AC 25-17 |
| APPLICANT | DLA Architects, Ltd. on behalf Golf School District 67 |
| LOCATION | 9000 Belleforte Avenue<br>Morton Grove, Illinois 60053 |
| PETITION | Request for approval of an Appearance Certificate for site, landscape, and building plans associated with Case PC 25-12, a request for a Special Use Permit to allow the expansion and modification of an existing school. |

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| CASE | AC 25-18 |
| APPLICANT | Village of Morton Grove |
| LOCATION | 6101 Capulina Avenue<br>Morton Grove, Illinois 60053 |
| PETITION | The Village Department of Community and Economic Development requests approval of a Text Amendment to Sections 7-2-1, 7-2-4, 7-2-11, and creation of a new Section 7-2-14, to modify and establish regulations relating to tree preservation and protection. |

IV. OTHER BUSINESS 2026 Appearance Awards Program Overview

V. CLOSE MEETING

Note that all persons are welcome to attend the public meeting in-person as regularly scheduled. All persons in attendance will have the opportunity to be heard during periods of public comment.

**MINUTES OF THE OCTOBER 7, 2025**
**MEETING OF THE MORTON GROVE APPEARANCE COMMISSION**
**MORTON GROVE VILLAGE HALL, 6101 CAPULINA AVENUE, MORTON GROVE, IL 60053**

Pursuant to proper notice in accordance with the Open Meetings Act, the regular meeting of the Appearance Commission was called to order at 7:00 p.m. by Chairperson Pietron. Anne Ryder Kirchner called the roll.

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| Commissioners Present: | Block, Dahlberg, Minx, Manno, Pietron, and Zimmer |
| Commissioners Absent: | Hedrick with notice |
| Village Staff Present: | Anne Ryder Kirchner, Planner/Zoning Administrator |
| Trustees Present: | Minx and Thill |

Chairperson Pietron proceeded to seek approval of the September 2, 2025 minutes.

Commissioner Minx moved to approve the minutes. Commissioner Dahlberg seconded the motion. Chairperson Pietron called for the vote.

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| Commissioner Block voting | aye |
| Commissioner Dahlberg voting | aye |
| Commissioner Minx voting | aye |
| Commissioner Manno voting | aye |
| Commissioner Zimmer voting | aye |
| Chairperson Pietron voting | aye |

Minutes approved (6-0)

Chairperson Pietron called for the first case.

**CASE**: **AC 25-13**

**APPLICANT**: Johnnie Jiron

**LOCATION**: 6222 Lincoln Avenue and 8503-09 Fernald Avenue
Morton Grove, Illinois 60053

**PETITION**: Request for approval of an Appearance Certificate

In the case of AC 25-13, the applicant is requesting an Appearance Certificate for site, building, and landscape plans for 4-dwelling unit mixed-use development proposed to be legalized and renovated under a Special Use Application (PC 25-10) for the property commonly known as 6222 Lincoln Avenue.

The existing site plan includes near-zero-foot setbacks along the Lincoln and Fernald Avenue frontages, which define the streetwall and help create a traditional neighborhood feel. The proposed parking area is located to the side of the buildings, which complies with established guidelines for C/R District development. Landscaping is limited to

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screening of the proposed parking area a waiver is required for façade transparency. Sign application would be required for future tenants, but Staff recommend some initial conditions in keeping with the intent of the C/R district.

The applicant obtained a Special Use Permit in 2022 with plans very similar to the plans included in the current application. A one-year extension was also granted in 2023 which has since expired. After making initial investments in window replacement, siding, and interior and structural improvements to the building, progress on the project stopped. The applicant partially completed work on the windows, capping, and siding installation in 2023, but work ceased and the exposed façade has been unfinished for approximately two years. The Special Use Permit has expired since the applicant failed to make substantive progress in bringing the property to code and implementing the improvements approved as part of the special use permit.

The applicants and the general contractor were present.

Chairman Pietron acknowledged the project has been in progress for some time, he said many residents of the Village ask him for a timeline on when the project will be completed.

Commissioner Zimmer said he is disappointed that the building does not add to the streetscape.

The applicant said they had a hard time getting a loan and working with the code requirements of the Village. The property was up for sale and a buyer was interested, the family did not continue with a closing as they now have secured a loan and want to keep the building. Conditions of the loan require the proper permitting from the Village.

The general contractor said they have done a lot of work and are continually responding to the building code requirements of the Village. He believes they are 3 months until completion.

Commissioner Minx moved to approve case AC 25-13, request for an Appearance Certificate for site, building, and landscape plans with associated waivers for a 4-dwelling unit mixed-use development proposed to be legalized and renovated under a Special Use Application (PC 25-10) for the property commonly known as 6222 Lincoln Avenue and 8503-09 Fernald Avenue in Morton Grove, Illinois, staff recommends the following conditions of approval:

1) Prior to filing any Building Permit Application, the owner/applicant shall provide the Village with final elevations, material specifications, and landscaping plan for review and approval. Final plans must be deemed consistent with the approved elevations, materials, and landscape plan as determined by the Community Development Administrator and Appearance Commission Chairperson. If such designs are deemed to be inconsistent with the approved plans or if materials are deemed to be of a lower quality than the approved materials, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.
2) Future sign colors shall blend with the building and storefront colors through use of complementary color ranges, or as otherwise approved by the Appearance Commission Chairperson.
3) Any portable signage shall be permitted pursuant to Section 10-10-8:E, except that the signage frame and base shall be constructed primarily of metal or wood, or as otherwise authorized by the Village Administrator.
4) Illuminated signage and other illuminating features on the property may not exceed 5,000K (degrees Kelvin).

The motion was seconded by Commissioner Manno.

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| Commissioner Block voting | aye |
| Commissioner Dahlberg voting | aye |
| Commissioner Minx voting | aye |
| Commissioner Manno voting | aye |

Commissioner Zimmer voting no
Chairman Pietron voting aye

Motion passed 5-1.

**CASE:** **AC 25-15**

**APPLICANTS:** Dr. Jeff Ruttencutter and Dr. Priscilla Chang

**LOCATION:** 9147 Waukegan Road
Morton Grove, Illinois 60053

**PETITION:** Request for approval of an Appearance Certificate to reface an existing pole sign that is nonconforming due to sign type, location, lack of landscape bed and inclusion of off premise signage

In the case of AC 25-15, Dr. Jeff Ruttencutter and Dr. Priscilla Chang of Uptown Dentistry (the applicant) is proposing to reface an existing pole sign on the subject property located along the Waukegan Road frontage within an existing parking lot island. Pole signs are a prohibited sign type and per Section 10-10-9, refacing an existing nonconforming pole sign requires approval by the Appearance Commission.

The sign also requires waivers for location as it will be located adjacent public right of way where a minimum setback of four feet, nine inches (4' 9") is required; and adjacent a side lot line where a minimum setback of eight feet (8') is required. A compliant landscape bed is also not provided at the base of the sign. The proposed sign would include advertising for the dentist office to be located on the subject property ("Uptown Dentistry") as well as an off premises sign for the dentist office on the adjacent property to the south at 9133 Waukegan Road ("Morton Grove Dental Associates"). Off premises signs are prohibited.

The applicant received an Appearance Certificate under case AC 23-09 wherein they received approval for two wall signs on the subject property as part of a renovation. At that time, the applicant did not wish to include the existing sign in their application and communicated intent to remove the nonconforming sign. Per comments made by the applicant's architect and included in the minutes for case AC 23-09, "*The new applicant does not wish to keep the pylon sign and will make that a landscaped area.*"

The applicant has indicated they have changed their mind regarding the need for an additional sign and the existing nonconforming sign previously planned for removal is now included in this request (AC 25-15).

The applicants presented the request to reface the sign and include the adjacent neighbor's sign information. It would be a hardship to remove the sign for both businesses.

Chairman Pietron said he would like to see more landscaping around the sign. Discussion ensued as to whether the sign would be illuminated at night. If it will be illuminated, it should not exceed 5,000 degrees Kelvin.

Commissioner Zimmer moved to approve case AC 25-15, a request for replacement of a panel in a nonconforming pole sign at 9147 Waukegan Road in Morton Grove, Illinois.

1. Prior to filing any Building Permit Application, the owner/applicant shall provide the Village with final site plans for review and approval including required setback dimensions. Final plans must be deemed consistent with the approved plans as determined by the Community Development Administrator. If

such designs are deemed to be inconsistent with the approved plans, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.

2. The Applicant shall file a final landscape plan for review and approval by the Community Development Administrator prior to issuance of a sign permit that demonstrates the landscape bed will be planted or maintained with shrubs at least three feet (3') in height at planting. The plan may also include perennials, turf, or other live ground cover in accordance with Section 10-10-7:G.5.
3. All landscaping shall be continually maintained in accordance with the approved landscape plan and all planting areas shall be kept free of weeds and debris.
4. Illuminated signage and other illuminating features on the property may not exceed 5,000K (degrees Kelvin).

The motion was seconded by Commissioner Minx.

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| Commissioner Block voting | aye |
| Commissioner Dahlberg voting | aye |
| Commissioner Minx voting | aye |
| Commissioner Manno voting | aye |
| Commissioner Zimmer voting | aye |
| Chairman Pietron voting | aye |

Motion passed 6-0.

**CASE**: **AC 25-16**

**APPLICANT**: Madina Gardens, LLC

**LOCATION**: 6037 Lincoln Avenue
Morton Grove, Illinois 60053

**PETITION**: Request for approval of an Appearance Certificate and approval of site, landscape, and building plans with select waivers associated with PC 25-11, a request for approval of a Subdivision and Planned Unit Development to develop four (4) attached single-family dwellings and five (5) single-family dwellings.

In the case of AC 25-16, Madina Gardens LLC is requesting approval of a preliminary plat of subdivision for the proposed 7-lot Medina Gardens Subdivision, under a Planned Unit Development application (PC 25-11). The project requires waivers to lot width, floor area ratio, impervious lot and rear yard coverage, driveway setback, lot standards, and accessway design to allow for the development of 5 detached single-family residences and 4 townhomes. Lots 1 through 5 will be improved with 5 single family residences that will be accessed by a cul-de-sac and extension of Elm Street westward. The cul-de-sac design includes a landscape island and 5-foot parkway. Lot 6 and Outlot A will be improved with 4 townhomes and common areas, including an access drive and 4 guest parking spaces.

The five (5) single-family lots are to be sold independently, with final architectural and landscaping designs to be determined by future buyers. To ensure the future single-family residences are designed to be compatible with the

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surrounding neighborhood, staff recommends that the Appearance Commission include a condition of approval in its issuance of an Appearance Certificate in the case of AC 25-16.

In the case of AC 25-16, the Appearance Commission may forward comments on the general appearance and compatibility of the overall development. However, the Appearance Certificate issued in the case of AC 25-16 will only approve the building and landscape plans for the townhome portion of the development.

Mr. Tibu, representing the general contractor, described the development layout for the townhomes and single-family lots. The materials and landscaping for the townhomes was presented.

Chairman Pietron asked for the burning bushes to be replaced with a non-invasive variety of shrub. He also asked if the waiver for lot coverage on lot six could be reduced. Mr. Tibu said they would consider a reduction.

Parking lot and landscape lighting will be LED. The lighting along the driveway will be on motion sensors and the bollard lighting will be less than 5000 degrees Kelvin.

Chairman Pietron said the new homes will be reviewed separately by the Appearance Commission.

Commissioner Block moved to approve case AC 25-16, request for an Appearance Certificate for site, building, and landscape plans with associated waivers associated with PC 25-11, a request for approval of Subdivision to develop four (4) attached single-family dwellings and five (5) single-family dwellings, for the property commonly known as 6037 Lincoln Avenue in Morton Grove, Illinois, staff recommends the following conditions of approval:

1) Prior to filing any Building Permit Application for the development of Lots 1 through 5, final elevations, materials, and a landscape plan must be reviewed and approved by the Appearance Commission.

2) Prior to filing any Building Permit Application, the Applicant must submit a revised landscape plan for Lot 6, Outlot A, and the landscape buffer screening the cul-de-sac paved ground surface area that replaces all "burning bush" plantings with a desirable species similar in height and character, subject to staff review and approval.

3) Prior to filing any Building Permit Application for the development of Lot 6 and Outlot A, the Owner/Applicant shall provide the Village with final landscape plans, elevations, and material specifications for review and approval. Final elevations and materials must be deemed consistent with the approved elevations and materials, as determined by the Land Use Planner and Chairperson of the Appearance Commission. If such designs are deemed to be inconsistent with the approved plans or if materials are deemed to be of a lower quality than the approved materials, then the Owner/Applicant will be required to file an application for an amendment to the Appearance Certificate.

The motion was seconded by Commissioner Manno.

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| Commissioner Block voting | aye |
| Commissioner Dahlberg voting | aye |
| Commissioner Minx voting | aye |
| Commissioner Manno voting | aye |
| Commissioner Zimmer voting | aye |
| Chairman Pietron voting | aye |

Motion passed 6-0.

Commissioner Zimmer asked whom is the Village Trustee liaison for the Appearance Commission. Trustee Kahn is the liaison.

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Hearing no further business, Chairman Pietron moved to adjourn the meeting. The motion was seconded by Commissioner Minx. The motion to adjourn the meeting was approved unanimously pursuant to a voice vote at 7:27 p.m.

Minutes by: Anne Ryder Kirchner

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To: Chairperson Pietron and Members of the Appearance Commission

From: Brandon Nolin, AICP, Community Development Administrator
Anne Ryder Kirchner, Planner/Zoning Administrator

Date: October 28, 2024

Re: Appearance Commission Case AC 25-17
Request for approval of an Appearance Certificate for site, landscape, and building plans associated with Case PC 25-12, a request for a Special Use Permit to allow the expansion and modification of an existing school at the property commonly known as 9000 Belleforte Avenue in Morton Grove, Illinois (PIN 10-18-309-023-0000), all within a R-2 Single Family Residence District pursuant to Section 12-4-2:C. The applicant is DLA Architects, Ltd. on behalf Golf School District 67.

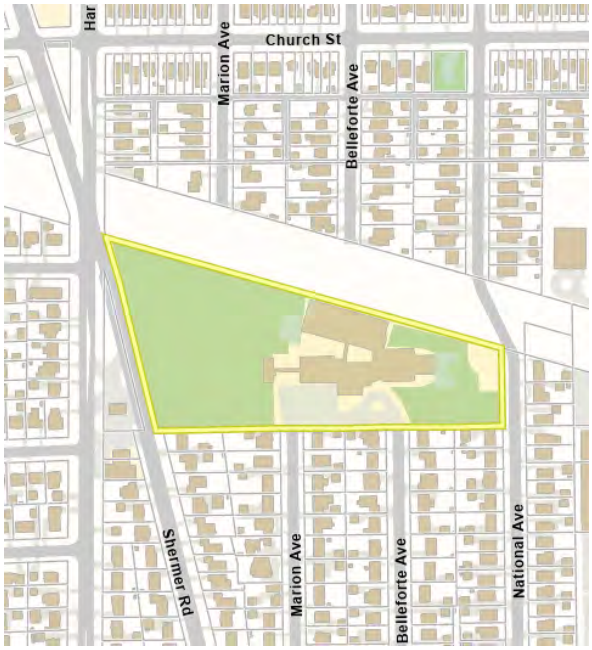
# STAFF REPORT

## Application Summary

DLA Architects, Ltd., on behalf of Golf School District 67 ("applicant"), submitted a complete Special Use Permit application to the Department of Community and Economic Development and an Appearance Certificate is requested for the expansion of the existing school (Hynes Elementary School) at 9000 Belleforte Avenue. The proposed project consists of two one-story additions and interior remodeling to establish a new media center and administration office. The new site design involves full-depth repavement, reconfigured parking lots, and new traffic patterns on the south side of the building as well as a new stormwater detention basin.

## Subject Property

The subject property consists of one (1) parcel occupied by the existing Hynes Elementary School at 9000 Belleforte Avenue in Morton Grove, Illinois. The parcel is approximately 398,057 sq. f.t and zoned R-2 Single Family Residence. The subject property is located to the south of ComEd right-of-way and east across Shermer Road from a commercial property zoned C-2. All surrounding properties to the south, east, and across the ComEd right-of-way to the north are zoned R-2 and improved with single-family residences.




*Subject Property Location Map*

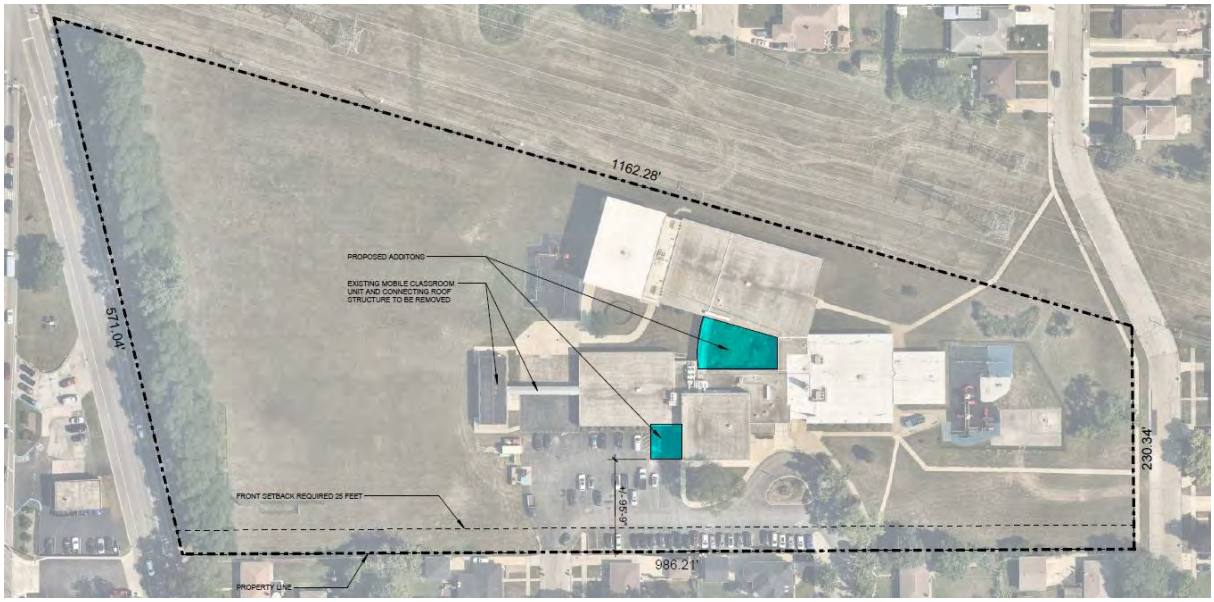
## Project Overview

Golf School District 67 is proposing to expand its existing school located at 9000 Belleforte Avenue. The school expansion would include the addition of a new administration office to the west of the current multi-purpose room and would form a new primary entrance to the school. A second addition that would serve as a new media center is proposed for a portion of the school currently consisting of interior courtyard. Several existing classrooms and hallways would be renovated as part of the project. A pair of classrooms currently housed in a temporary structure and connected via a walkway with plastic vestibule on the west side of the school would be removed as part of the project.

The proposed administration office addition is 1,680 sq. ft. and the proposed media center addition is 3,965 sq. ft., for a total 5,645 additional sq. ft. The floor area of the school would increase from 49,560 sq. ft. to 55,205 sq. ft., an increase from 12.5% to 13.7% total in lot coverage. The south wall of the proposed addition would align closely with the south wall of the multipurpose room located to the east, which represents the southernmost façade of the school building. The proposed addition would be located approximately two feet (2 ft.) farther south. The school building's new front setback would be 95.75 ft., which is well in excess of the minimum permitted front setback of 25 ft.

The adjoining parking lot to the south would be reconfigured for one-way circulation to create a parent drop-off lane that passes the new front entrance and a new parking area. The southwest parking lot would be reconfigured to accommodate bus circulation and drop-off with reduced parking. Lastly, a new parking lot would be established at the west entrance to the school. The reconfigured circulation and parking would provide for 10 additional parking spaces. Access via Belleforte Avenue would be restricted to northbound traffic only (no exit) while Marion Avenue would provide full access to the site.

Required stormwater management would be provided by a new detention basin to be located in the northeast corner of the subject property along the National Avenue frontage. No new building signage is proposed.




*Proposed Site Plan with Additions Highlighted in Blue*




*Proposed Additions and Remodeling Scope*

## Building Design

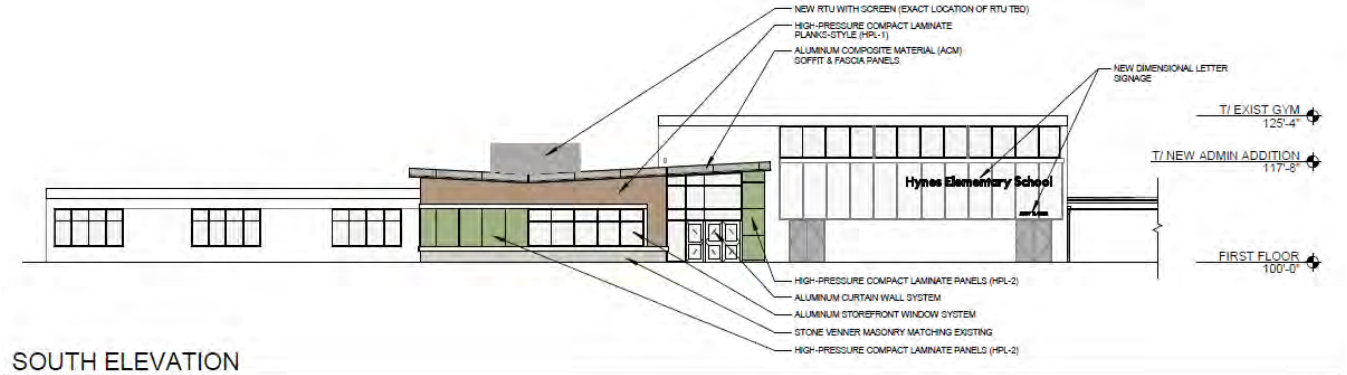
The applicant provided elevations and renderings of the proposed expansion. Sample imagery of the proposed façade materials are provided in the following pages.

Both additions would be one-story and feature flat roofs. The administration office addition (closest to residences to the south) would have a height of 17.7 ft. and would achieve a lower roofline than the adjacent multipurpose room to the east which is 25.3 ft. in height. The media center addition would be located within a portion of the school currently consisting of interior courtyard and would reach a height of 20.7 ft.

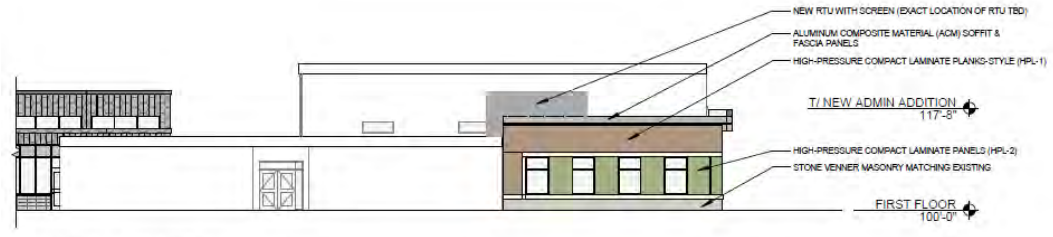
The administration office addition, which would modify the front façade of the school, would feature laminate architectural panels in "spring green" green and "French walnut" brown complemented by aluminum fascia and stone veneer. The media center addition would be primarily visible from the west parking lot that is interior to the site. That addition would utilize formed metal wall panels and a stone veneer base.

A new rooftop mechanical unit would be located on the roof of the administration office addition, but the exact location has not been determined. *The applicant should speak to the location and proposed screening of any rooftop mechanicals and potential sight lines from the south parking lot.*

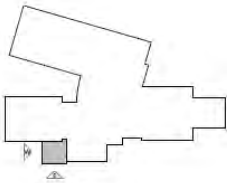
A new dumpster would be located on the western edge of the southwest parking lot and screened from view by a cedar fence and gate.




SOUTH ELEVATION
1/16" = 1'-0"



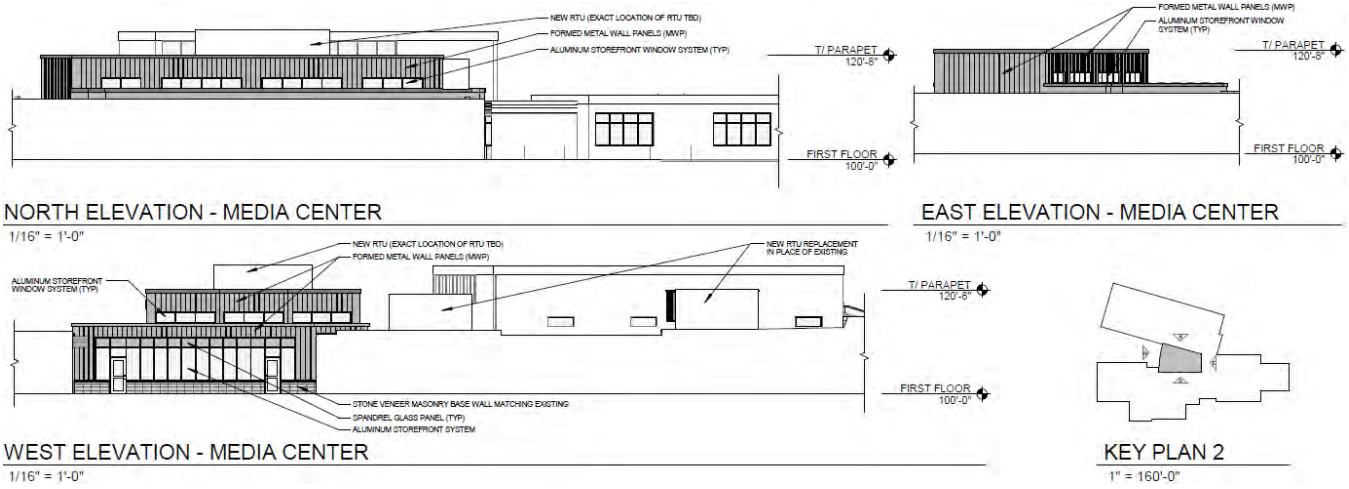

WEST ELEVATION
1/16" = 1'-0"



KEY PLAN
1" = 160'-0"




*Proposed Administration Addition - South (Top) and West (Middle) Elevations and Rendering (Bottom)*






Proposed Media Center Addition - North (Top) and West (Middle) Elevations and Rendering (Bottom)





**MATERIAL #1: HIGH-PRESSURE COMPACT LAMINATE PLANKS-STYLE (HPL-1)**

-MANUFACTURER: TRESPA
-MODEL: PURA EXTERIOR SIDING
-COLOR: FRENCH WALNUT
-FINISH: MATT
-TEXTURE: SMOOTH





**MATERIAL #4: FORMED METAL WALL PANELS (MWP)**

-MANUFACTURER: PAC-CLAD
-MODEL: FLUSH & REVEAL WALL PANELS
-COLOR: SLATE GRAY
-FINISH:
-TEXTURE: SMOOTH





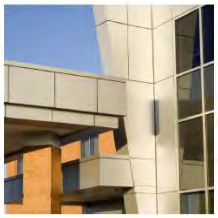
**MATERIAL #2: HIGH-PRESSURE COMPACT LAMINATE PANELS (HPL-2)**

-MANUFACTURER: TRESPA
-MODEL: METEON UNI COLOURS
-COLOR: SPRING GREEN
-FINISH: SATIN
-TEXTURE: SMOOTH



**MATERIAL #5: STONE VENEER MASONRY (MATCH EXISTING STONE VENEER)**

-MANUFACTURER: TBD
-MODEL: TBD
-COLOR:
-FINISH:
-TEXTURE: SMOOTH





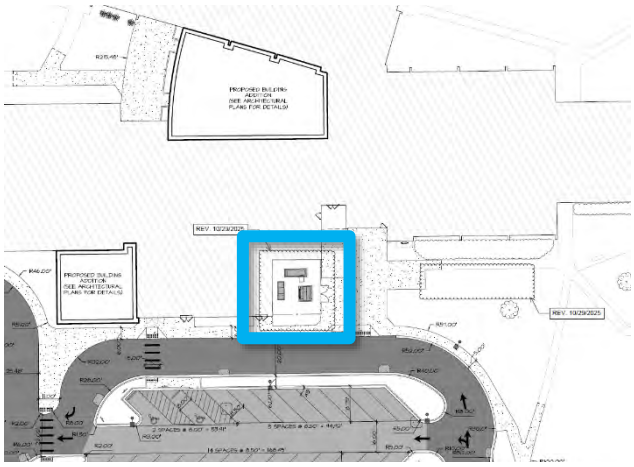
**MATERIAL #3: ALUMINUM COMPOSITE MATERIAL (ACM) PANELS**

-MANUFACTURER: PAC-CLAD
-MODEL: COMPOSITE WALL PANEL PAC-3000 RS
-COLOR: SLATE GRAY
-FINISH:
-TEXTURE: SMOOTH

*Proposed Façade Materials*

*Utility Screening*

The applicant is proposing to locate a transformer, switchboard, and generator near the current entrance to the multipurpose room entrance. The applicant has indicated they are considering either wood panel fencing or a brick wall to screen the utilities. Renderings of both options have been provided. To ensure an attractive and consistent façade, Staff recommends requiring the use of a matching brick façade which is included as a condition of approval. *The applicant should speak to the proposed utility screening and the proposed location.*



*Location of Proposed Utility Screening*







*Proposed Utility Screening Rendering – Wood Panels (TOP) and Brick (BOTTOM)*

## Landscape Design

The applicant submitted a landscape plan prepared by Gary R. Weber Associates, Inc. The reconfigured parking lot will be the location of the majority of proposed landscaping. Overall, the proposed landscape plan for the parking lot exceeds minimum greenspace requirements, but falls short of required tree plantings. The Village's applicable landscape requirements and requested waivers are outlined in the following table:

| R-2 DISTRICT DIMENSIONAL CONTROLS | REQUIREMENT | PROPOSED | COMPLIANCE |
|---|---|---|---|
| General Landscaping Requirements | | | |
| Interior Landscaping in Parking Lots (12-11-4:B.3) | 7% of the paved area not including buffer landscape areas (2,662.6 sq. ft.). | 9.5% interior greenspace (3,640.6 sq. ft.) | *Compliant* |
| Trees in Parking Lots (12-11-4:B.3) | Where practical, each separate landscaped area shall contain at least one tree, and a tree shall be planted for each one hundred (100) square feet of interior landscaping. …Each parking bay shall have a maximum of twenty (20) spaces in an uninterrupted row. (27 trees req.) | 15 trees;<br>Max. 14 cars per row | *Noncompliant – Waiver needed to allow 12 fewer shade trees.* |
| Parking Lot Screening Abutting Private Property (12-11-4:B.2) | Landscaping or structure required, min. 5-ft. buffer yard with berm, hedge, maintenance free barrier 5-6 ft. in height | 6.7 ft. landscape buffer | *Compliant* |
| Tree Preservation Requirements | | | |
| Trees Preservation (12-11-7:C) | Unless otherwise provided by this section, tree replacement or a fee-in-lieu shall be required for the removal as follows:<br>Replacement Tree(s) - 1 (one) Replacement Tree per Protected Tree(s) being removed must be planted on a privately owned property.<br>Fee-In-Lieu - Fee per Protected Tree(s) as provided for in Section 1-11-4. | Protected Trees Removed: 5<br>Replacement Trees: 6 | *Compliant* |

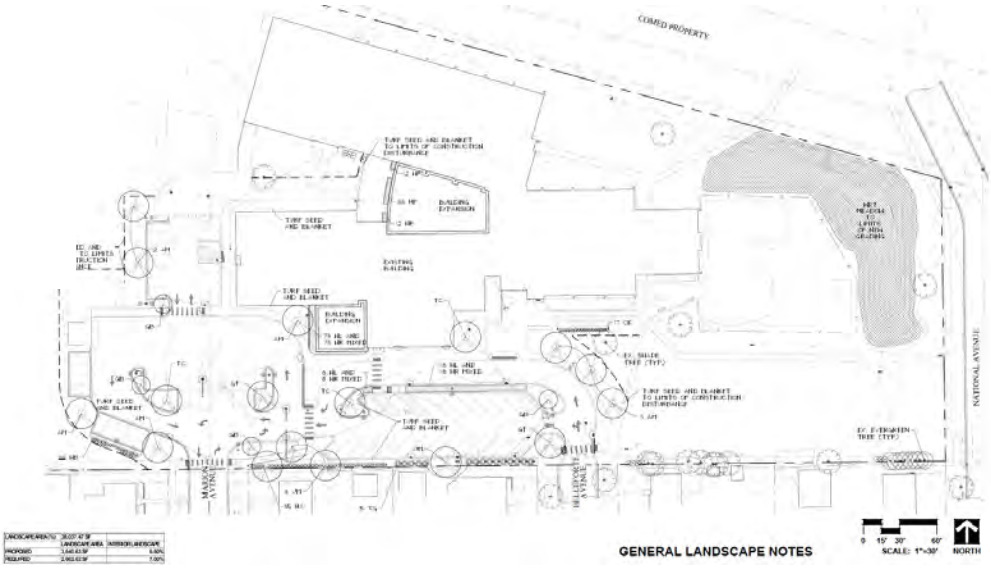
*Parking Lot Landscaping*

The proposed south parking lot is 38,038 sq. ft. in area. Per Section 12-11-4, a parking lot of that size requires the installation of interior greenspace equal to 7% of the paved areas including one (1) shade tree for every 100 square feet of greenspace provided. The proposed south parking lot requires 2,662.6 sq. ft. of greenspace and 27 shade trees. The applicant proposes sufficient interior greenspace, but is proposing only 15 shade trees which is slightly more than half (55.6%) of the total required. Given the size and location of the proposed interior parking islands, Staff agrees that the ability to include additional shade trees in those locations is limited. However, additional areas on the parking lot edge may be viable locations for shade trees. The applicant should speak to the limited number of shade trees proposed within the interior of the parking lot and the need for a waiver from this requirement.

*Tree Preservation*

Based on the demolition notes and landscape plan, a total of five (5) trees would be removed as part of the proposed project. All five (5) of the trees to be removed would qualify as protected trees per the Village's Tree Ordinance (Ord. 24-28). The applicant is proposing to install 21 shade trees comprising five (5) species (maple, ginkgo, honey locust, linden, and elm) that will be at least 2.5 inches in diameter. When accounting for the 15 trees proposed to meet required interior landscaping trees and located in parking lot landscape areas, the proposed landscape plan includes six (6) shade trees that could be considered replacement trees. The six (6) replacement trees consist of three (3) shade trees along the south property line as well as three (3) shade trees along the northeast edge of the parking lot adjacent the drop-off lane and close to the location where four (4) existing shade trees would be lost during construction. As such, Staff believe the proposed tree species and sizes meet the replacement tree requirements of the Tree Ordinance.

*NOTE: The required Tree Preservation Plan was not submitted with the initial application, however Staff was able to use the submitted site demolition notes and landscape plan to determine preserved tree locations. The applicant has indicated they will submit the required Tree Preservation Plan prior to the Appearance Commission meeting. Review and approval of a tree inventory and tree preservation plan consistent with Staff's interpretation as presented in this report is included as a condition of approval.*




*Proposed Landscape Plan*

## Lighting

The applicant proposes the use 10 light poles to be located in the parking lot to the south and west of the proposed additions. Numerous wall packs to be mounted at 12 ft. in height are also proposed along the exterior of the building to ensure adequate site lighting and entrance lighting.

The applicant submitted a photometric plan showing levels of illumination throughout the parking lots and along all lot lines. Per Section 12-12-3, for off-street parking areas, lighting must be directed away from adjacent property, streets, and other public rights-of-way. All lighting units must be of the full cutoff type, meaning luminaires may not emit any light above the source's horizontal plane. The International Dark-Sky Association (IDA) recommends full cutoff fixtures, which minimize glare and light trespass. The fixtures proposed in the submitted lighting plan can be configured as full cutoff fixtures and would be 18.5 ft. in height (which is 6.5 ft. less than the maximum height permitted).

The only property line within proximity to the proposed addition is shared with several single-family homes to the south. Light levels along the south lot line are between 0.1 and 0.6 foot-candles with a typical value of approximately 0.5 foot-candles. Per Section 12-4-3:B.5, lighting must be confined to the property boundary and reach as close to zero illumination at the property boundaries as possible. Glare may not be evident from surrounding properties or adjacent public rights of way. The applicant should speak to the types of lighting fixtures proposed in the photometric plan and address concerns regarding sufficient safety lighting and potential glare at the south property line.




*Proposed Light Pole Fixtures (Source: Lithonia)*

## Appearance Commission Review

In accordance with Unified Development Code Section 12-12-1:C, all site, landscape and building plans are to be reviewed by the Appearance Commission, and an Appearance Certificate by the Commission granted, prior to the issuance of a building permit. Further, per Section 12-16-2:C.2, the Appearance Commission is charged with reviewing the exterior elevations, sketches, and materials and other exhibits as to whether they are appropriate to or compatible with the character of the immediate neighborhood and whether the submitted plans comply with the provisions of the regulations and standards set forth in chapter, 12 "Design Standards," of this title.

*The Design Standards (Sec. 12-12-1:D) are as follows:*

D. Criteria and Evaluation Elements: The following factors and characteristics relating to a unit or development and which affect appearance, will govern the appearance review commission's evaluation of a design submission:

1. Evaluation Standards:
    a. Property Values: Where a substantial likelihood exists that a building will depreciate property values of adjacent properties or throughout the community, construction of that building should be barred.
    b. Inappropriateness: A building that is obviously incongruous with its surroundings or unsightly and grotesque can be inappropriate in light of the comprehensive plan goal of preserving the character of the municipality.
    c. Similarity/Dissimilarity: A builder should avoid excessively similar or excessively dissimilar adjacent buildings.
    d. Safety: A building whose design or color might, because of the building's location, be distracting to vehicular traffic may be deemed a safety hazard.
2. Design Criteria:
    a. Standards: Appearance standards as set forth in this chapter.
    b. Logic Of Design: Generally accepted principles, parameters and criteria of validity in the solution of design problems.
    c. Architectural Character: The composite or aggregate of the components of structure, form, materials and

functions of a building or group of buildings and other architectural and site composing elements.

d. Attractiveness: The relationship of compositional qualities of commonly accepted design parameters such as scale, mass, volume, texture, color and line, which are pleasing and interesting to the reasonable observer.
e. Compatibility: The characteristics of different uses of activities that permit them to be located near each other in harmony and without conflict. Some elements affecting compatibility include intensity of occupancy as measured by dwelling units per acre; floor area ratio; pedestrian or vehicular traffic generated; parking required; volume of goods handled; and such environmental effects as noise, vibration, glare, air pollution, erosion, or radiation.
f. Harmony: A quality which produces an aesthetically pleasing whole as in an arrangement of varied architectural and landscape elements.
g. Material Selection: Material selection as it relates to the evaluation standards and ease and feasibility of future maintenance.
h. Landscaping: All requirements set forth in chapter 11, "Landscaping and Trees", of this title. (Ord. 07-07, 3-26-2007)

## Recommendation

If the Appearance Commission approves the request for an Appearance Certificate for site, landscape, and building plans, for the expansion and modification of an existing school under Special Use Permit (PC 25-12) for the property commonly known as 9000 Belleforte Avenue in Morton Grove, Illinois, staff recommends the following conditions of approval:

1. *Prior to filing any Building Permit Application, the owner/applicant shall provide the Village with final plans, elevations and material specifications for review and approval. Final plans, elevations and materials must be deemed consistent with the approved materials, as determined by the Community Development Administrator and Appearance Commission Chairperson. This shall include brick screening for new ground-mounted utilities. If such designs are deemed to be inconsistent with the approved plans or if materials are deemed to be of a lower quality than the approved materials, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*

2. *Prior to filing any Building Permit Application, the owner/applicant shall submit a revised lighting plan that includes full cutoff fixtures along the south property line, and glare shields or other enhancements, so as to prevent light glare visible to adjacent properties. The final lighting plan will be subject to review and approval by the Community Development Administrator and must be deemed consistent with representations made to the Appearance Commission. If such plans are deemed to be inconsistent with the approved plans or if fixtures are deemed to be of a lower quality than the approved fixtures, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*

3. *Prior to filing any Building Permit Application, the owner/applicant shall submit a tree inventory and tree preservation plan subject to review and approval by the Community Development Administrator. If such plans are deemed to be inconsistent with representations made to the Appearance Commission, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*

# SPECIAL USE APPLICATION

Village of Morton Grove
Department of Community Development
6101 Capulina Avenue, Morton Grove, Illinois 60053
commdev@mortongroveil.org | 847-663-3063

Case Number: _____ Date Application Filed: _____

## APPLICANT INFORMATION

Applicant Name: Jae Yoo
Applicant Organization: DLA Architects, Ltd
Applicant Address: Two Pierce Place, Suite 1300
Applicant City / State / Zip Code: Itasca, IL 60143
Applicant Phone: [redacted]
Applicant Email: [redacted]
Applicant Relationship to Property Owner: Architect for Client
Applicant Signature: _____

## PROPERTY OWNER INFORMATION (IF DIFFERENT FROM APPLICANT)

Owner Name: _____
Owner Address: 9401 Waukegan Road
Owner City / State / Zip Code: Morton Grove, IL 60053
Owner Phone: [redacted]
Owner Email: _____
Owner Signature: _____

## PROPERTY INFORMATION

Common Address of Property: 9000 Belleforte Ave, Morton Grove, IL 60053
Property Identification Number (PIN): 10-18-309-023
Property Square Footage: 9.24 Acres (402,463 square feet)
Legal Description (attach as necessary): Hynes Elementary School
Property Zoning District: R-2 Single Family Residence

## APPLICATION INFORMATION

Requested Special Use: Building Additions and site work at Hynes Elementary School in R-2 Residential District
Purpose of Special Use (attach as necessary): _____

The project involves one-story additions (media center & admin suite) and interior remodeling as well as HVAC, plumbing, fire protection, electrical, and lighting replacements. The new site design involves full-depth repavement, reconfigured & new parking lots and new traffic patterns on the south side of the building.

## RESPONSES TO STANDARDS FOR SPECIAL USE

Provide responses to the seven (7) Standards for Special Use as listed in Section 12-16-4-C-5 of the Village of Morton Grove Unified Development Code. The applicant must present this information for the official record of the Planning Commission. The Special Use Standards are as follows:

a. The establishment, maintenance, or operation of the Special Use will not be detrimental to, or endanger the public health, safety, morals, comfort, or general welfare.

The proposed Special Use is an expansion and site work to the existing Hynes Elementary School. The project does not change any of the operations or amount of enrolled students. This project will not be detrimental or endanger the public health, safety, morals, comfort and general welfare.

b. The Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood.

Adequate buffering (no less than existing buffering) between the reconfigured parking lots and neighboring properties has been provided. The Special Use will not be injurious to the use and enjoyment of other neighboring properties nor diminish & impair property values of the neighboring properties.

c. The establishment of the Special Use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

The proposed expansion to the existing school will not impede the normal and orderly development and improvement of the neighboring properties. The existing mobile classroom unit to the west of the existing school will be removed as a part of the project.

d. Adequate utilities, access roads, drainage and/or necessary facilities have been or are being provided.

All new and modified utilities including MEPFP and site circulation/drainage are included in the engineering plans. All other utilities are existing to remain. Traffic patterns have been studied and the proposed layout was tailored in order to improve efficiency and reduce traffic backups within the neighborhood.

e. Adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.

The proposed site design attempts to improve the current traffic in Belleforte and Marion Ave during the bus drop-off and pick-up times. Refer to the engineering plans and traffic study.

f. The proposed Special Use is not contrary to the objectives of the current Comprehensive Plan for the Village of Morton Grove.

The proposed Special Use is not contrary to the objectives of the current MG comprehensive plan for the existing Hynes Elementary School.

g. The Special Use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may, in each instance, be modified pursuant to the recommendations of the Commission.

The proposed Special Use will conform to the applicable regulations of the district and will be modified pursuant to the recommendations of the Commission.

# HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
# GOLF SCHOOL DISTRICT 67
## 9000 BELLEFORTE AVENUE
## MORTON GROVE, IL 60053

| CIVIL DRAWING INDEX | | |
|---|---|---|
| **SHEET** | **DESCRIPTION** | **DATE** |
| T-1.0 | TITLE SHEET | 10-7-25 |
| C-1.0 - C-1.1 | SITE DEMOLITION PLAN | 10-7-25 |
| C-2.0 - C-2.1 | SITE GEOMETRIC PLAN | 10-7-25 |
| C-3.0 - C-3.1 | SITE DEVELOPMENT PLAN | 10-7-25 |
| C-3.2 - C-3.4 | SITE DEVELOPMENT DETAILS | 10-7-25 |
| C-4.0 - C-4.1 | SITE GRADING PLAN | 10-7-25 |
| C-5.0 - C-5.1 | SITE UTILITY PLAN | 10-7-25 |
| C-5.2 - C-5.3 | SITE UTILITY DETAILS | 10-7-25 |
| C-6.0 - C-6.1 | STORM WATER POLLUTION PREVENTION PLAN | 10-7-25 |
| C-6.2 | STORM WATER POLLUTION PREVENTION DETAILS | 10-7-25 |
| C-7.0 | PROJECT SPECIFICATIONS | 10-7-25 |
| C-7.1 | MWRD GENERAL NOTES | 10-7-25 |
| EX-MWRD | MWRD MAITENANCE EXHIBIT | 10-7-25 |
| CIR-1.0 - CIR-1.4 | SITE CIRCULATION PLAN | 10-7-25 |
| L1.0 | COVER SHEET | 10-7-25 |
| L1.1 | SITE LANDSCAPE PLAN | 10-7-25 |
| L1.2 | LANDSCAPE SPECIFICATIONS | 10-7-25 |
| 1 OF 2 - 2 OF 2 | HYNES PHOTOMETRICS | 10-7-25 |
| SUR-1 - SUR-4 | BOUNDARY AND TOPOGRAPHIC SURVEY (PREPARED BY WT GROUP) | 8-25-25 |

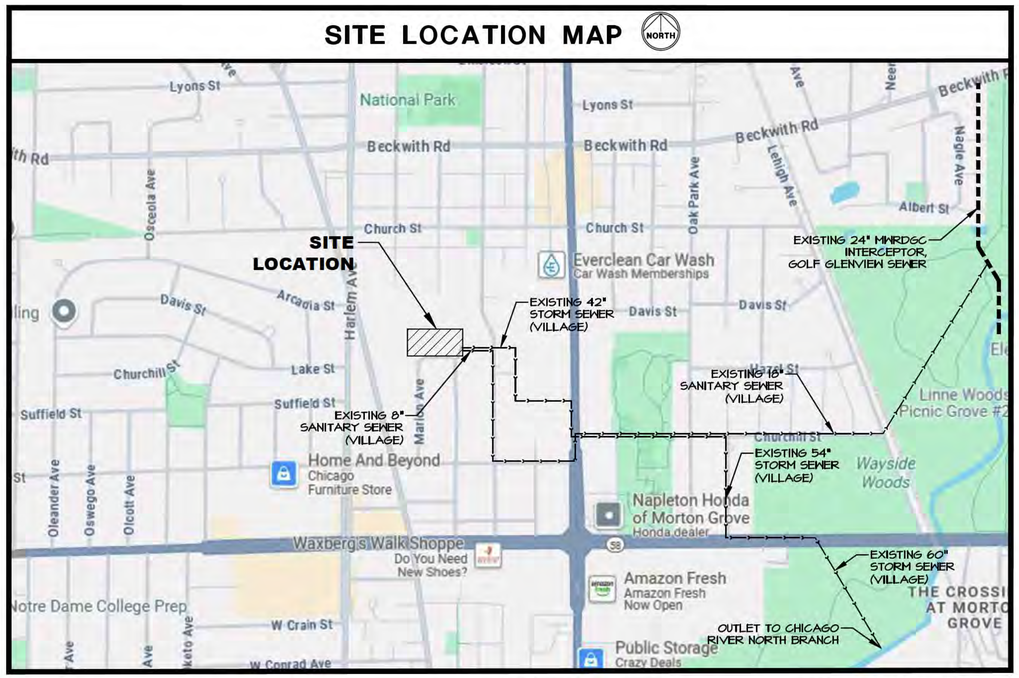
BENCHMARKS:

SITE BENCHMARK #1 - SET CROSS ON NORTHEAST BOLT OF HYDRANT LOCATED IN GRASS APPROXIMATELY 8.6' NNEST OF MARION AVENUE AND 37' SOUTH OF MH #11, AS SHOWN ON SHEET SUR-3.
ELEVATION=646.80' (NAVD88)

SITE BENCHMARK #2 - BURY BOLT ON HYDRANT ON THE EAST SIDE OF BELLEFORTE AVENUE, AT THE SE CORNER OF PARKING LOT ENTRANCE AS SHOWN ON SUR-2
ELEVATION=645.96' (NAVD88)

SITE BENCHMARK #3 - FLANGE BOLT ON HYDRANT ON THE EAST SIDE OF SHERMER ROAD, 43' SOUTHWEST OF THE SOUTHWEST FENCE CORNER OF NORTH DUGOUT AS SHOWN ON SHEET SUR-3.
ELEVATION=644.12' (NAVD88)

## SITE LOCATION MAP




SCALE 1"=600'

MAP DATA © 2025 GOOGLE

**SECTION 18**
**TOWNSHIP 41N**
**RANGE 13E**

**LEGEND**
- STORM SEWER
- SANITARY SEWER
- M.W.R.D. SEWERS

## CIVIL ENGINEERING STATEMENT AND SEAL

I, JASON E. GREEN, P.E., DULY LICENSED IN THE STATE OF ILLINOIS BY THE DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION, DO HEREBY STATE THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF DOES CONFORM TO THE APPLICABLE BUILDING CODES AND ORDINANCES, AND ARE IN COMPLIANCE WITH THE ENVIRONMENTAL BARRIERS ACT [410 ILCS 25] AND THE ILLINOIS ACCESSIBILITY CODE (71 ILL. ADM. CODE 400).

DATE: 10/7/25

JASON E. GREEN - P.E. # 062-059460
DATE OF EXPIRATION - NOVEMBER 30, 2025

NOTE: SIGNED AND SEALED FOR SHEETS T-1.0 THROUGH CIR-1.4

## DRAINAGE CERTIFICATE:

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE PROPOSED DEVELOPMENT. IF ANY DRAINAGE PATTERNS WILL BE CHANGED, REASONABLE PROVISIONS HAVE BEEN MADE FOR THE COLLECTION AND DIVERSION OF SUCH SURFACE WATERS INTO PUBLIC AREAS, OR DRAINS APPROVED FOR THE USE BY THE MUNICIPAL ENGINEER, AND THAT SUCH SURFACE WATERS ARE PLANNED FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES SO AS TO REDUCE THE LIKELIHOOD OF DAMAGES TO ADJOINING PROPERTIES.

DATED THIS 7TH DAY OF OCTOBER, A.D. 2025

062-059460 EXP. DATE 11/30/25
DESIGN ENGINEER- JASON GREEN, P.E.

NOTE: BEING THAT THIS PROJECT IS PERMITTED UNDER THE NEW WATERSHED MANAGEMENT ORDINANCE (NWO), THE MWRD REQUIRES 48 HOURS OF ADVANCE NOTIFICATION PRIOR TO ANY GROUND DISTURBANCE. THE MWRD WILL BE INSPECTING FOR APPLICABLE EROSION CONTROL AND SEDIMENT CONTROL MEASURES SUCH AS SILT FENCING, INLET PROTECTION, CONCRETE WASH, ETC., FOLLOWED BY SANITARY SEWER AND VOLUME CONTROL INSTALLATION INSPECTIONS. PLEASE REFER TO THE APPROVED PERMIT/PLANS AND HAVE THESE MEASURES IN PLACE IN ACCORDANCE WITH THE SPECIFICATIONS.

**Contact the Metropolitan Water Reclamation District of Greater Chicago 2 days before starting work.**
P (708) 588-4055
E WMOJobStart@mwrd.org

CALL JULIE
SIMPLY 811 OR TOLL FREE 1(800)892-0123
OPERATES 24 HOURS A DAY 365 DAYS A YEAR

WARNING
CALL BEFORE YOU DIG

CALL 1(800)892-0123
48 HOURS BEFORE YOU DIG

CONTRACTOR MUST LOCATE PRIVATE UTILITIES IN AREA OF CONSTRUCTION PRIOR TO PROCEEDING WITH WORK.

W-T JOB NUMBER-C2500035


WT Group
Engineering • Design • Consulting
WT GROUP
Structural | Mechanical/Electrical/Plumbing
Civil | Land Survey | Telecommunication| Aquatic
Accessibility Consulting | Design & Program Management
Engineering with Precision, Pace & Passion.
2000 Center Drive, Ste B411 | Hoffman Estates, IL 60192
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wtengineering.com
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HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

| DATE | MARK |
|---|---|
| | |

50% CD NOT FOR CONSTRUCTION

PROJECT No: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: **TITLE SHEET**
SHEET: **T-1.0**

## SITE GEOMETRIC NOTES:

A. EXISTING CONDITIONS AND TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS PER THE BOUNDARY AND TOPOGRAPHIC SURVEY LAST DATED 08-25-25, PREPARED BY THE WT GROUP, LLC. CONTRACTOR SHALL FIELD VERIFY EXISTING ELEVATIONS AND CONDITIONS (INCLUDING BUT NOT LIMITED TO VERIFICATION OF CONTROL AND ALL UTILITIES WHETHER DEPICTED OR NOT) PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
B. ALL DIMENSIONS SHOWN ARE MEASURED FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT OR FACE OF CURB UNLESS OTHERWISE NOTED.
C. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE ARCHITECTURAL PLANS.
D. SEE THE ARCHITECTURAL PLANS FOR THE DESIGN OF ALL BUILDING ENTRIES.
E. CONSTRUCTION SURVEY AND STAKEOUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
F. CONTRACTOR SHALL HIRE A PRIVATE UTILITY LOCATOR TO LOCATE UTILITIES PRIOR TO CONSTRUCTION AND SHALL CONTACT THE SITE ENGINEER IF A CONFLICT EXISTS.
G. CONTRACTOR SHALL CONTACT JULLIE (811 OR 1-800-892-0123) AND PRIVATE LOCATING SERVICE TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO STARTING ANY DEMOLITION AND/OR EXCAVATION. EXACT LOCATIONS OF ANY EXISTING ELECTRIC, GAS, TELEPHONE, ETC. LINES ARE UNKNOWN.
H. ASPHALT PAVEMENT MARKINGS SHALL BE MADE WITH HIGH QUALITY PAINT CONFORMING TO ARTICLE 1095.02 OF THE IDOT STANDARD SPECIFICATIONS.
I. ALL PAINTED CURB ON SITE TO BE REPAINTED FOLLOWING RESURFACING OF THE PARKING LOT. MATCH EXISTING COLOR, REPAINT WITH HIGH QUALITY PAINT.
J. THIS LAYOUT IS PARALLEL TO THE (DIRECTION) PROPERTY LINE (BEARING.)

## HATCH LEGEND

- NEW FULL DEPTH ASPHALT PAVEMENT
- NEW HEAVY DUTY ASPHALT PAVEMENT
- NEW CONCRETE SIDEWALK
- NEW HEAVY DUTY CONCRETE PAVEMENT

## PARKING MATRIX

| | ADA | STANDARD | TOTAL |
|---|---|---|---|
| PROPOSED | 3 | 62 | 65 |
| EXISTING | 2 | 53 | 55 |

## LANDSCAPE AREA (%)

| | IMPERVIOUS AREA | INTERIOR LANDSCAPE |
|---|---|---|
| PROPOSED | 3,640.63 SF | 9.5% |
| REQUIRED | 2,662.62 SF | 7.0% |



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HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

| DATE | MARK |
|---|---|

50% CD NOT FOR CONSTRUCTION

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: SITE GEOMETRIC PLAN
SHEET: C-2.0

W-T JOB NUMBER-C2500035

WT Group
Engineering • Design • Consulting
WT GROUP
Structural | Mechanical/Electrical/Plumbing
Civil | Land Survey | Telecommunication| Aquatic Accessibility Consulting | Design & Program Management
Engineering with Precision, Pace & Passion.
2000 Center Drive, Ste B411 | Hoffman Estates, IL 60192
P: 224.293.6333 | F: 224.293.6444
wtengineering.com
IL License No: 184.009574-0015 | Exp: 04.30.2027
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## EXISTING UTILITY DATA

RIM=643.72' (STORM)
48" CONCRETE STRUCTURE
INV=637.32' (12" RCP E)
INV=637.32' (12" RCP W)
EXISTING

RIM=643.89' (STORM)
72" METAL STRUCTURE
INV=635.79' (12" RCP N)
INV=630.40' (42" RCP E/W)

RIM=643.90' (WATER)
48" CONCRETE STRUCTURE
FULL OF WATER
639.30' AT WATER LEVEL
637.57' AT TOP OF DIP E/W
SIZE UNKNOWN

RIM=643.82' (WATER)
60" CONCRETE STRUCTURE
637.97' AT TOP OF 12" DIP N/S
637.97' AT TOP OF 8" DIP E

RIM=644.39' (STORM)
RIM ON PIPE
INV=637.93' (15" RCP N)
INV=630.08' (42" RCP E/W)

RIM=643.79' (SANITARY)
36" CONCRETE STRUCTURE
INV=635.55' (8" CLAY N/S)

RIM=643.82' (STORM)
36" BLOCK STRUCTURE
INV=639.63' (8" CLAY N/W)
INV=638.50' (15" RCP S/NW)

RIM=642.95' (STORM)
24" CONCRETE STRUCTURE
INV=640.17' (6" PVC S)

RIM=643.03' (STORM)
48" CONCRETE STRUCTURE
INV=639.60' (8" RCP SW)

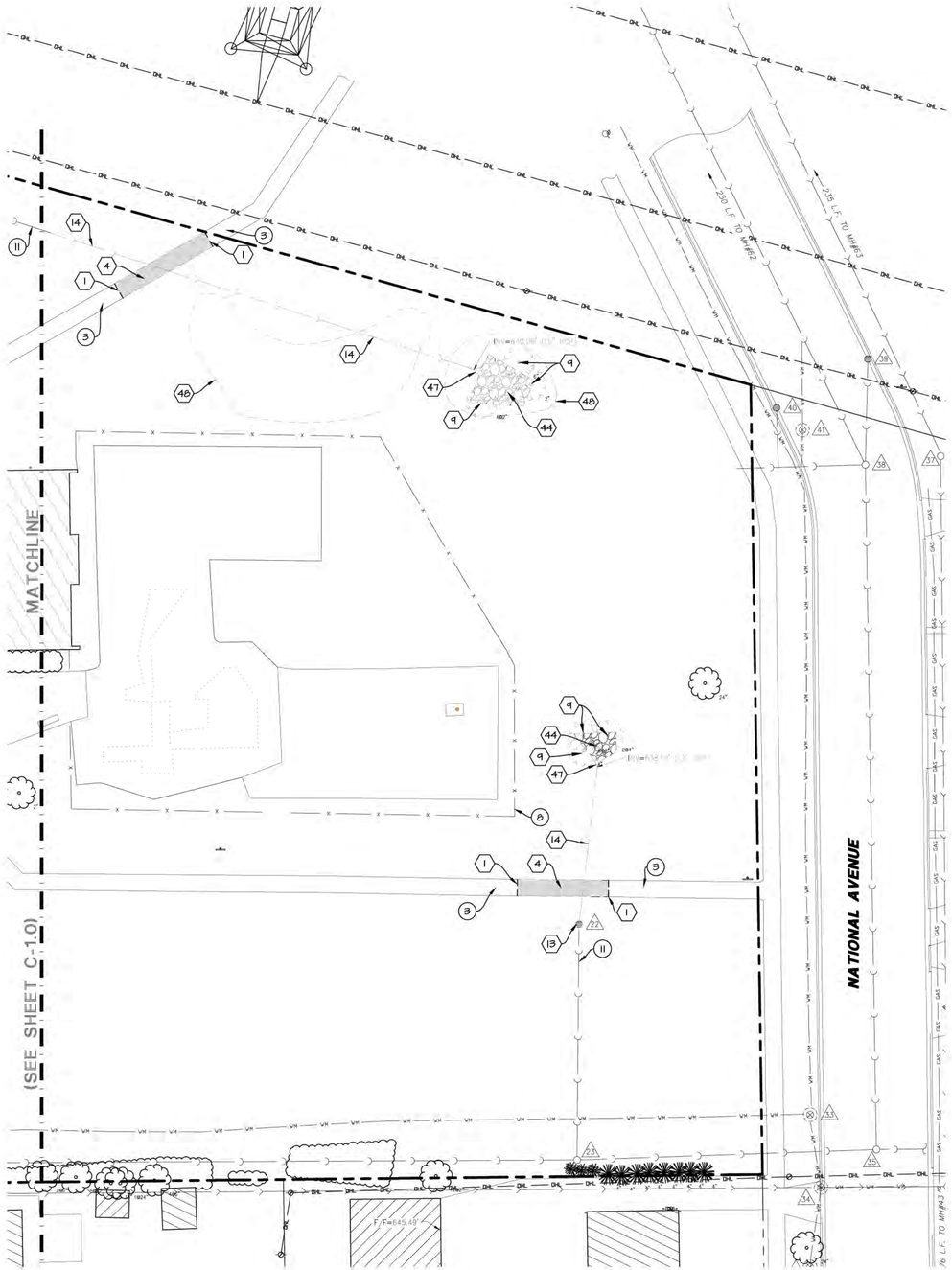
RIM=643.53' (WATER)
48" CONCRETE STRUCTURE
638.75' AT TOP OF 12" DIP N/S

## SITE DEMOLITION NOTES

1. NEW FULL DEPTH SAWCUT OF EXISTING CURB/CONCRETE TO PROVIDE CLEAN CONSTRUCTION BREAK.
2. NEW FULL DEPTH SAWCUT OF EXISTING ASPHALT PAVEMENT TO PROVIDE CLEAN CONSTRUCTION BREAK.
3. NEW 2" BUTT JOINT.
4. EXISTING CONCRETE TO BE REMOVED FULL DEPTH TO MEET THE BOTTOM OF THE NEW PAVEMENT CROSS SECTIONS (NEW SUBGRADE ELEVATION). SEE THE SITE GRADING PLAN FOR NEW FINISHED ELEVATIONS AND DETAIL SHEETS FOR NEW PAVEMENT CROSS SECTIONS.
5. EXISTING ASPHALT PAVEMENT TO BE REMOVED FULL DEPTH TO MEET THE BOTTOM OF THE NEW PAVEMENT CROSS SECTIONS (NEW SUBGRADE ELEVATION). SEE THE SITE GRADING PLAN FOR NEW FINISHED ELEVATIONS AND DETAIL SHEETS FOR NEW PAVEMENT CROSS SECTIONS.
6. EXISTING CONCRETE CURB TO BE REMOVED.
7. EXISTING CONCRETE CURB AND GUTTER TO BE REMOVED.
8. EXISTING DETECTABLE WARNING PLATE TO BE REMOVED.
9. EXISTING TREE TO BE REMOVED.
10. EXISTING SHRUB TO BE REMOVED.
11. EXISTING PORTABLE CLASSROOM AND FOOTINGS TO BE REMOVED.
12. EXISTING BREEZEWAY AND FOOTINGS TO BE REMOVED.
13. EXISTING STORM SEWER STRUCTURE TO BE REMOVED.
14. EXISTING STORM SEWER TO BE REMOVED.
15. EXISTING DOWNSPOUT TO BE REMOVED.
16. EXISTING SANITARY SEWER TO BE REMOVED.
17. EXISTING LANDSCAPE TIMBER TO BE REMOVED.
18. EXISTING FLAGPOLE TO BE REMOVED.
19. EXISTING SIGN TO BE REMOVED.
20. EXISTING STEPS TO BE REMOVED.
21. EXISTING PLATFORM TO BE REMOVED.
22. EXISTING BOLLARD TO BE REMOVED.
23. EXISTING BLOCK WALL TO BE REMOVED.
24. EXISTING HANDRAIL TO BE REMOVED.
25. LIMITS OF STORM SEWER REMOVAL.
26. CONTRACTOR SHALL TRACE UTILITY PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS.
27. EXISTING CLEANOUT TO BE REMOVED.
28. EXISTING GRAVEL TO BE REMOVED FULL DEPTH.
29. EXISTING AC UNIT TO BE REMOVED.
30. EXISTING WATER SERVICE TO BE REMOVED.
31. EXISTING B-BOX TO BE REMOVED.
32. EXISTING ELECTRIC PANEL TO BE REMOVED.
33. EXISTING HANDHOLE TO BE REMOVED.
34. EXISTING SHIPPING CONTAINER TO BE REMOVED AND RELOCATED.
35. EXISTING MULCH AREA TO BE REMOVED.
36. EXISTING UNDERGROUND ELECTRIC LINE TO BE REMOVED.
37. EXISTING FENCE TO BE REMOVED.
38. CONTRACTOR SHALL CLEAN STRUCTURE AND PIPES DURING CONSTRUCTION.
39. EXISTING SANITARY SEWER STRUCTURE TO BE REMOVED.
40. SEE PLUMBING PLANS FOR DETAILS ON REMOVAL OF EXISTING STORM SEWERS.
41. CONTRACTOR SHALL REMOVE ALL PIPES ASSOCIATED WITH STRUCTURE TO BE REMOVED. CONTRACTOR SHALL VERIFY DEPTHS AND SIZES OF ASSOCIATED PIPES IN FIELD PRIOR TO CONSTRUCTION.
42. EXISTING SANITARY SEWER TO REMAIN. CONTRACTOR SHALL REPAIR ANY DAMAGE TO PLUG SUSTAINED DURING CONSTRUCTION.
43. EXISTING UNDERGROUND ELECTRIC LINE TO BE REMOVED BY OTHERS.
44. EXISTING RIPRAP TO BE REMOVED.
45. EXISTING STORM STRUCTURE HOLE SHALL BE PLUGGED WITH NON-SHRINK CONCRETE MORTAR.
46. EXISTING STORM SEWER HOLE SHALL BE CAPPED WITH NON-SHRINK CONCRETE MORTAR.
47. EXISTING FLARED END SECTION TO BE REMOVED.
48. EXISTING BUSH LINE TO BE REMOVED.

## EXISTING SITE NOTES

1. EXISTING BUILDING TO REMAIN.
2. EXISTING ASPHALT PAVEMENT TO REMAIN.
3. EXISTING CONCRETE TO REMAIN.
4. EXISTING UTILITY POLE TO REMAIN.
5. EXISTING OVERHEAD LINES TO REMAIN.
6. EXISTING CONCRETE CURB AND GUTTER TO REMAIN.
7. EXISTING SIGN TO REMAIN.
8. EXISTING FENCE TO REMAIN.
9. EXISTING EQUIPMENT CABINET TO REMAIN.
10. EXISTING STORM SEWER STRUCTURE TO REMAIN.
11. EXISTING STORM SEWER TO REMAIN.
12. EXISTING DOWNSPOUT TO REMAIN.
13. EXISTING SANITARY SEWER STRUCTURE TO REMAIN.
14. EXISTING SANITARY SEWER TO REMAIN.
15. EXISTING CLEANOUT TO REMAIN.
16. NOT USED.
17. EXISTING WALL HYDRANT TO REMAIN.
18. EXISTING VALVE VAULT TO REMAIN.
19. EXISTING FIRE HYDRANT TO REMAIN.
20. EXISTING WATER SERVICE TO REMAIN.
21. EXISTING GAS METER TO REMAIN.
22. EXISTING GAS SERVICE TO REMAIN.
23. EXISTING UNDERGROUND TELCO LINE TO REMAIN.
24. EXISTING WATER MAIN TO REMAIN.
25. EXISTING SANITARY SEWER PER RECORD DOCUMENTS TO REMAIN.




## SITE DEMOLITION NOTES:

A. CONTRACTOR SHALL PERFORM ALL DEMOLITION WORK IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
B. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY DEMOLITION PERMITS AND COORDINATE ALL DEMOLITION WITH THE MUNICIPALITY AND OWNERS REPRESENTATIVE TO ENSURE PROTECTION AND MAINTENANCE OF SANITARY AND WATER UTILITIES AS NECESSARY AND TO PROVIDE STORM WATER CONVEYANCE UNTIL NEW FACILITIES ARE CONSTRUCTED, TESTED, AND PLACED IN OPERATION.
C. CONTRACTOR SHALL DEVELOP AND IMPLEMENT A DAILY PROGRAM OF DUST CONTROL PROCEDURES PRIOR TO DEMOLITION OF ANY STRUCTURES. MODIFICATION OF DUST CONTROL PROCEDURES SHALL BE PERFORMED BY THE CONTRACTOR TO THE SATISFACTION OF THE MUNICIPALITY AND COMPLY WITH THE NPDES II REQUIREMENTS OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY AND THE INDIVIDUAL STORM WATER POLLUTION PREVENTION PLAN FOR THIS PROJECT.
D. ALL EXISTING TREES, BRUSH AND MISCELLANEOUS VEGETATION TO BE REMOVED OR DEMOLISHED SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF BY THE CONTRACTOR.
E. VOIDS LEFT BY ANY ITEM REMOVED UNDER ANY PROPOSED BUILDING, PAVEMENT, OR WALK OR WITHIN 24" THEREOF SHALL BE BACKFILLED WITH ENGINEERED FILL ACCORDING TO THE GEOTECHNICAL REPORT.
F. ALL EXISTING BUILDINGS, FOUNDATIONS, CONCRETE OR ASPHALT PAVEMENT OR WALKS, CURB AND GUTTER AND MISCELLANEOUS STRUCTURES (INCLUDING, BUT NOT LIMITED TO FENCES, POLES, YARD LIGHTS, ELECTRICAL PANELS, AND MISCELLANEOUS DEBRIS) INDICATED TO BE DEMOLISHED SHALL BE REMOVED OR DEMOLISHED AND REMOVED FROM THE SITE AND DISPOSED OF LEGALLY BY THE CONTRACTOR.
G. CONTACT GAS COMPANY PRIOR TO DEMOLITION. LOCATION OF EXISTING GAS SERVICES ARE UNKNOWN.
H. ALL EXISTING TREES SHALL REMAIN UNLESS OTHERWISE NOTED.
I. ALL EXISTING UTILITIES SHALL REMAIN UNLESS OTHERWISE NOTED.
J. CONTRACTOR SHALL HIRE A PRIVATE UTILITY LOCATOR TO LOCATE UTILITIES PRIOR TO CONSTRUCTION AND SHALL CONTACT THE SITE ENGINEER IF A CONFLICT EXISTS.
K. CONTRACTOR SHALL PROVIDE REMOVAL AND REPLACEMENT AND SHORING AS NECESSARY TO MEET OSHA AND LOCAL CODE, AS WELL AS MANUFACTURER'S REQUIREMENTS.
L. ALL FOUNDATIONS FOR ALL FENCES, SIGNS, ETC. NOTED FOR REMOVAL SHALL BE REMOVED AND LEGALLY DISPOSED OF OFFSITE.
M. PROOF-ROLLING SHALL BE PERFORMED FOR ALL SUBGRADE PRIOR TO CONSTRUCTION OF NEW PAVEMENT. ALL SUBGRADE PROOF-ROLLING SHALL BE WITNESSED AND APPROVED BY A MATERIALS TESTING AGENCY TO BE HIRED BY THE OWNER. CONTRACTOR TO COORDINATE ALL PROOF-ROLLING WITH THE MATERIALS TESTING AGENCY. CONTACT THE ENGINEER AND MATERIAL TESTING AGENCY SO THAT THEY MAY WITNESS THE PROOF ROLL. PROOF ROLL SHALL BE PROVIDED FOR ALL PAVEMENT AREAS SPECIFIED FOR FULL DEPTH REMOVAL AND REPLACEMENT.
N. EXISTING CONDITIONS AND TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS PER THE BOUNDARY AND TOPOGRAPHIC SURVEY LAST DATED 08-25-25, PREPARED BY THE NT GROUP, LLC. CONTRACTOR SHALL FIELD VERIFY EXISTING ELEVATIONS AND CONDITIONS (INCLUDING BUT NOT LIMITED TO VERIFICATION OF CONTROL AND ALL UTILITIES WHETHER DEPICTED OR NOT) PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
O. SEE SHEET SUR-1 BOUNDARY AND TOPOGRAPHIC SURVEY FOR ALL EXISTING LOCATED UTILITY DATA.
P. CLEAR SITE AS NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS.
Q. ALL ITEMS MARK "EXISTING OR EXISTING TO REMAIN" TO BE PROTECTED FROM DAMAGE FOR THE DURATION OF CONSTRUCTION.
R. CONTRACTOR TO PROVIDE SOIL TESTING SERVICES FOR COMPLETION OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S LPC-662 AND/OR LPC-663 FORMS AS PART OF THEIR CONTRACT.
S. ALL EXISTING UTILITIES TO BE ABANDONED IN PLACE SHALL BE CAPPED WITH 2' LONG (MIN.) NON-SHRINK CONCRETE MORTAR PLUGS AT BOTH ENDS.
T. EXISTING PAVEMENT AGGREGATE BASE COURSE SHALL NOT BE RE-USED AS AGGREGATE BASE COURSE FOR THE NEW PAVEMENT SECTION.

## DEMOLITION LEGEND

- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATER MAIN
- EXISTING WATER SERVICE
- EXISTING GAS LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING UNDERGROUND TELCO LINE
- EXISTING OVERHEAD LINES
- EXISTING CLOSED MANHOLE
- EXISTING OPEN GRATE MANHOLE
- EXISTING BEEHIVE GRATE MANHOLE
- EXISTING CURB INLET
- EXISTING FIRE HYDRANT
- EXISTING VALVE VAULT
- EXISTING B-BOX
- EXISTING GAS METER
- SOIL BORING LOCATION

## HATCH LEGEND

- EXISTING CONCRETE PAVEMENT TO BE REMOVED FULL DEPTH
- EXISTING ASPHALT PAVEMENT TO BE REMOVED FULL DEPTH

NORTH
1" = 20'
00 10 20 40 80

W-T JOB NUMBER-C2500035


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HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

| DATE | MARK |
|---|---|
| | |

50% CD NOT FOR CONSTRUCTION

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: SITE DEMOLITION PLAN
SHEET: C-1.1

## SITE GEOMETRIC NOTES:

A. EXISTING CONDITIONS AND TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS PER THE BOUNDARY AND TOPOGRAPHIC SURVEY LAST DATED 08-25-25, PREPARED BY THE WT GROUP, LLC. CONTRACTOR SHALL FIELD VERIFY EXISTING ELEVATIONS AND CONDITIONS (INCLUDING BUT NOT LIMITED TO VERIFICATION OF CONTROL AND ALL UTILITIES WHETHER DEPICTED OR NOT) PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
B. ALL DIMENSIONS SHOWN ARE MEASURED FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT OR FACE OF CURB UNLESS OTHERWISE NOTED.
C. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE ARCHITECTURAL PLANS.
D. SEE THE ARCHITECTURAL PLANS FOR THE DESIGN OF ALL BUILDING ENTRIES.
E. CONSTRUCTION SURVEY AND STAKEOUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
F. CONTRACTOR SHALL HIRE A PRIVATE UTILITY LOCATOR TO LOCATE UTILITIES PRIOR TO CONSTRUCTION AND SHALL CONTACT THE SITE ENGINEER IF A CONFLICT EXISTS.
G. CONTRACTOR SHALL CONTACT JULLIE (811 OR 1-800-892-0123) AND PRIVATE LOCATING SERVICE TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO STARTING ANY DEMOLITION AND/OR EXCAVATION. EXACT LOCATIONS OF ANY EXISTING ELECTRIC, GAS, TELEPHONE, ETC. LINES ARE UNKNOWN.
H. ASPHALT PAVEMENT MARKINGS SHALL BE MADE WITH HIGH QUALITY PAINT CONFORMING TO ARTICLE 1095.02 OF THE IDOT STANDARD SPECIFICATIONS.
I. ALL PAINTED CURB ON SITE TO BE REPAINTED FOLLOWING RESURFACING OF THE PARKING LOT. MATCH EXISTING COLOR, REPAINT WITH HIGH QUALITY PAINT.
J. THIS LAYOUT IS PARALLEL TO THE (DIRECTION) PROPERTY LINE (BEARING.)

## HATCH LEGEND

- NEW FULL DEPTH ASPHALT PAVEMENT
- NEW HEAVY DUTY ASPHALT PAVEMENT
- NEW CONCRETE SIDEWALK
- NEW HEAVY DUTY CONCRETE PAVEMENT

## PARKING MATRIX

| | ADA | STANDARD | TOTAL |
|---|---|---|---|
| PROPOSED | 3 | 62 | 65 |
| EXISTING | 2 | 53 | 55 |

## LANDSCAPE AREA (%)

| | IMPERVIOUS AREA | INTERIOR LANDSCAPE |
|---|---|---|
| PROPOSED | 3,640.63 SF | 9.5% |
| REQUIRED | 2,662.62 SF | 7.0% |



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9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

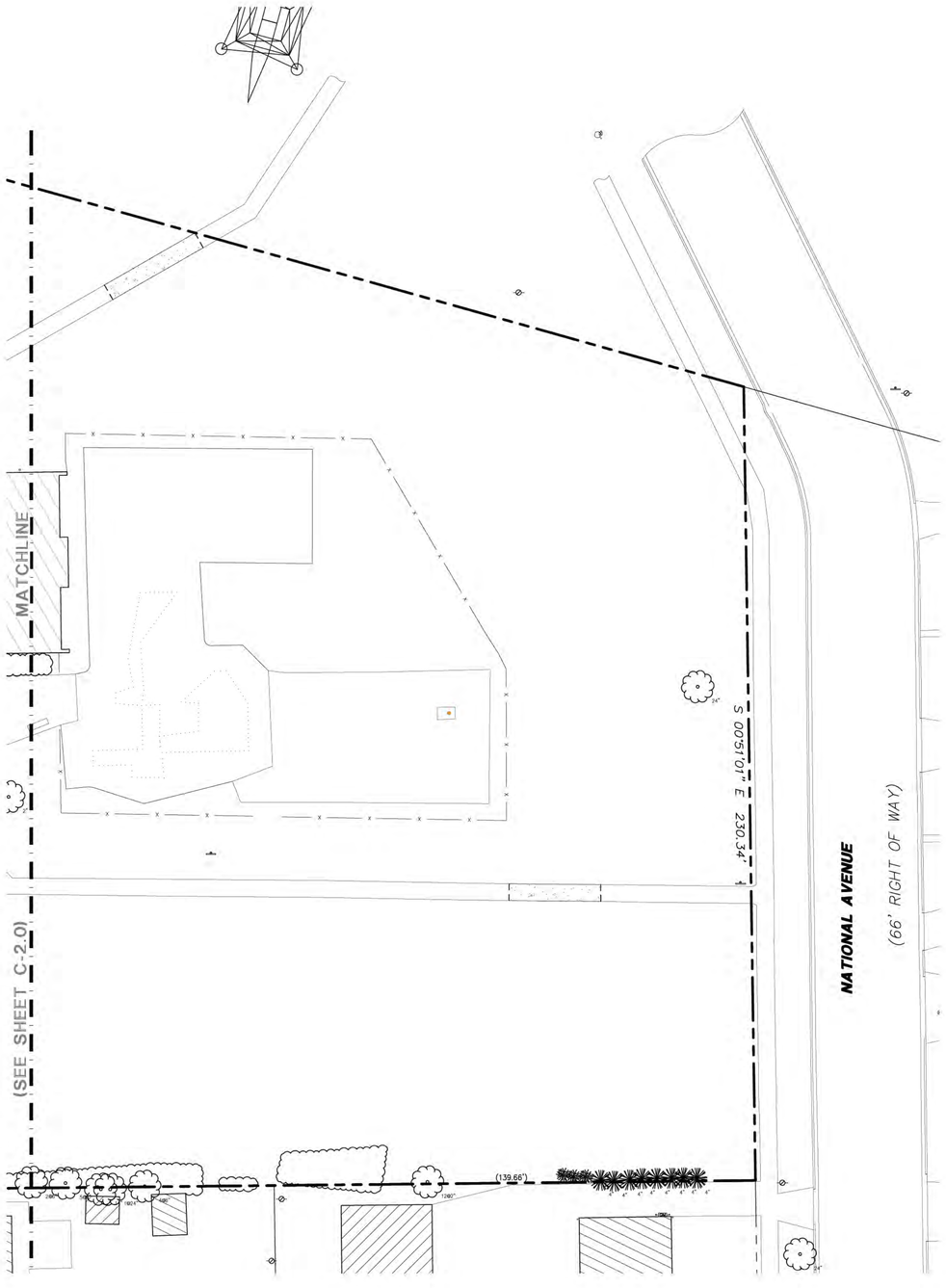
| DATE | MARK |
|---|---|

50% CD NOT FOR CONSTRUCTION

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: SITE GEOMETRIC PLAN
SHEET: C-2.0

W-T JOB NUMBER-C2500035

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## SITE GEOMETRIC NOTES:

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B. ALL DIMENSIONS SHOWN ARE MEASURED FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT OR FACE OF CURB UNLESS OTHERWISE NOTED.
C. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE ARCHITECTURAL PLANS.
D. SEE THE ARCHITECTURAL PLANS FOR THE DESIGN OF ALL BUILDING ENTRIES.
E. CONSTRUCTION SURVEY AND STAKEOUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
F. CONTRACTOR SHALL HIRE A PRIVATE UTILITY LOCATOR TO LOCATE UTILITIES PRIOR TO CONSTRUCTION AND SHALL CONTACT THE SITE ENGINEER IF A CONFLICT EXISTS.
G. CONTRACTOR SHALL CONTACT J.U.L.I.E. (811 OR 1-800-892-0123) AND PRIVATE LOCATING SERVICE TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO STARTING ANY DEMOLITION AND/OR EXCAVATION. EXACT LOCATIONS OF ANY EXISTING ELECTRIC, GAS, TELEPHONE, ETC. LINES ARE UNKNOWN.
H. ASPHALT PAVEMENT MARKINGS SHALL BE MADE WITH HIGH QUALITY PAINT CONFORMING TO ARTICLE 1095.02 OF THE IDOT STANDARD SPECIFICATIONS.
I. ALL PAINTED CURB ON SITE TO BE REPAINTED FOLLOWING RESURFACING OF THE PARKING LOT. MATCH EXISTING COLOR, REPAINT WITH HIGH QUALITY PAINT.
J. THIS LAYOUT IS PARALLEL TO THE (DIRECTION) PROPERTY LINE (BEARING.)

## HATCH LEGEND

- NEW FULL DEPTH ASPHALT PAVEMENT
- NEW HEAVY DUTY ASPHALT PAVEMENT
- NEW CONCRETE SIDEWALK
- NEW HEAVY DUTY CONCRETE PAVEMENT

NORTH

1" = 20'

0 0 10 20 40 80

W-T JOB NUMBER-C2500035

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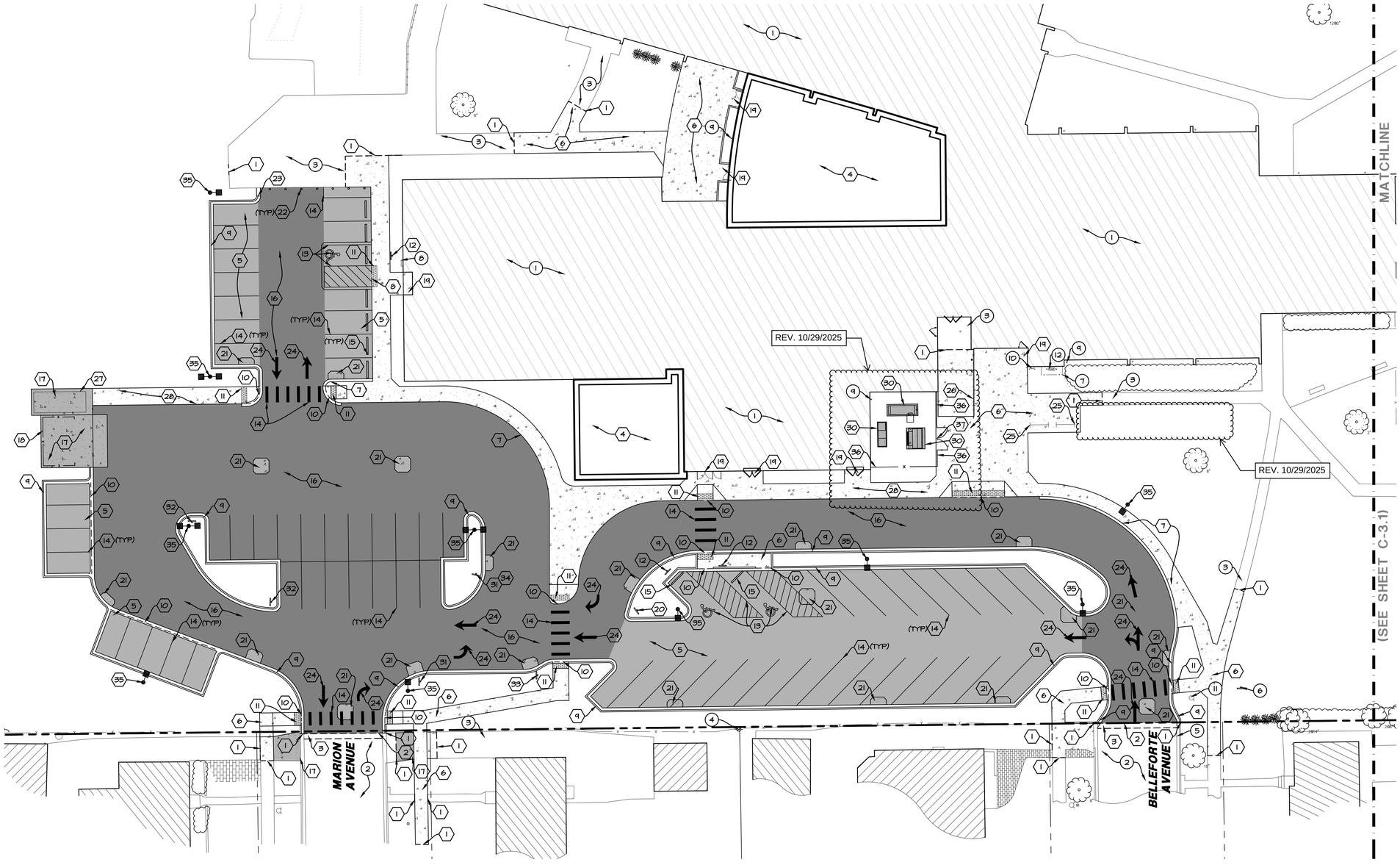
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GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

| DATE | MARK |
|---|---|
| | 50% CD NOT FOR CONSTRUCTION |

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: SITE GEOMETRIC PLAN
SHEET: C-2.1




## SITE DEVELOPMENT NOTES:

A. EXISTING CONDITIONS AND TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS PER THE BOUNDARY AND TOPOGRAPHIC SURVEY LAST DATED 08-25-25, PREPARED BY THE MT GROUP, LLC. CONTRACTOR SHALL FIELD VERIFY EXISTING ELEVATIONS AND CONDITIONS (INCLUDING BUT NOT LIMITED TO VERIFICATION OF CONTROL AND ALL UTILITIES WHETHER DEPICTED OR NOT) PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
B. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE ARCHITECTURAL PLANS.
C. SEE THE ARCHITECTURAL PLANS FOR THE DESIGN OF ALL BUILDING ENTRIES.
D. CONTRACTOR SHALL COORDINATE ALL LANDSCAPING IMPROVEMENTS WITH LANDSCAPE PLANS.
E. CONSTRUCTION SURVEY AND STAKEOUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
F. ALL EXISTING TREES SHOWN ARE TO REMAIN UNLESS OTHERWISE NOTED.
G. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS TO ORIGINAL CONDITION OR BETTER.
H. ASPHALT PAVEMENT MARKINGS SHALL BE MADE WITH HIGH QUALITY PAINT CONFORMING TO ARTICLE 1095.02 OF THE IDOT STANDARD SPECIFICATIONS.
I. CONTRACTOR SHALL RESTORE ALL DISTURBED GREEN SPACES WITH 6" OF TOPSOIL, SEED, AND EROSION CONTROL BLANKET.
J. CONTRACTOR SHALL REPAIR AT HIS EXPENSE ANY DAMAGE TO EXISTING ASPHALT, CONCRETE, CURBS, SIDEWALKS, ETC. RESULTING FROM CONSTRUCTION TRAFFIC AND/OR OPERATIONS. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
K. CONTRACTOR SHALL RE-STRIPE ALL STRIPING DISTURBED WITHIN THE EXISTING ROADWAYS/PARKING LOT TO MATCH EXISTING.
L. CONTRACTOR SHALL HIRE A PRIVATE UTILITY LOCATOR TO LOCATE UTILITIES PRIOR TO CONSTRUCTION AND SHALL CONTACT THE SITE ENGINEER IF A CONFLICT EXISTS.
M. ALL ITEMS MARKED "EXISTING" TO BE PROTECTED FROM DAMAGE FOR THE DURATION OF CONSTRUCTION.
N. ALL EXISTING SUBGRADE TO BE SCARIFIED (DISKED) TO A DEPTH OF 12" AND RE-COMPACTED, AND THEN TESTED USING A DYNAMIC CONE PENETROMETER. SEE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
O. EXISTING PAVEMENT AGGREGATE BASE COURSE SHALL NOT BE RE-USED AS AGGREGATE BASE COURSE FOR THE NEW PAVEMENT SECTION.

## HATCH LEGEND

- NEW FULL DEPTH ASPHALT PAVEMENT
- NEW HEAVY DUTY ASPHALT PAVEMENT
- NEW CONCRETE SIDEWALK
- NEW HEAVY DUTY CONCRETE PAVEMENT

## ⬡ SITE DEVELOPMENT NOTES:

1. NEW FULL DEPTH SAWCUT OF EXISTING CURB/CONCRETE TO PROVIDE CLEAN CONSTRUCTION BREAK.
2. NEW FULL DEPTH SAWCUT OF EXISTING ASPHALT PAVEMENT TO PROVIDE CLEAN CONSTRUCTION BREAK.
3. NEW 2' BUTT JOINT.
4. NEW BUILDING ADDITION. (SEE ARCHITECTURAL PLANS FOR DETAILS)
5. NEW FULL DEPTH ASPHALT PAVEMENT.
6. NEW CONCRETE SIDEWALK.
7. NEW MONOLITHIC CURB GUTTER AND SIDEWALK.
8. NEW MONOLITHIC DEPRESSED CURB GUTTER AND SIDEWALK.
9. NEW B-6.12 CURB AND GUTTER.
10. NEW DEPRESSED CURB AND GUTTER MEETING ALL ADA REQUIREMENTS.
11. NEW DETECTABLE WARNING PLATE.
12. NEW ADA PARKING SIGN.
13. NEW ADA PARKING SYMBOL AND STRIPED ACCESS AISLE.
14. NEW PAVEMENT STRIPING.
15. NEW CONCRETE WHEEL STOP.
16. NEW HEAVY DUTY ASPHALT PAVEMENT.
17. NEW HEAVY DUTY CONCRETE PAVEMENT.
18. NEW FENCE. (SEE ARCHITECTURAL PLANS FOR DETAILS)
19. NEW CONCRETE STOOP WITH FROSTWALL. (SEE ARCHITECTURAL PLANS FOR DETAILS)
20. NEW "DO NOT ENTER" SIGN.
21. NEW CONCRETE COLLAR.
22. NEW REMOVABLE SAFETY BOLLARDS.
23. NEW BULL NOSE.
24. NEW YELLOW TRAFFIC ARROW PAVEMENT MARKING.
25. NEW BIKE RACK. (SEE ARCHITECTURAL PLANS FOR DETAILS)
26. NEW HANDRAIL. (SEE ARCHITECTURAL PLANS FOR DETAILS)
27. EXISTING SHIPPING CONTAINER TO BE RELOCATED. CONTRACTOR SHALL COORDINATE RELOCATION WITH SCHOOL DISTRICT.
28. NEW MONOLITHIC CURB AND SIDEWALK.
29. NEW "STOP" SIGN.
30. NEW UTILITY PAD. (SEE ELECTRICAL PLANS FOR DETAILS)
31. NEW "BUS DROP OFF" SIGN.
32. NEW "EXIT TO MARION AVENUE" SIGN.
33. NEW "DO NOT ENTER" SIGN.
34. NEW "ONE WAY" SIGN.
35. NEW AREA LIGHT. (SEE SITE LIGHTING AND ELECTRICAL PLANS FOR DETAILS)
36. NEW FENCE. (SEE ARCHITECTURAL PLANS FOR DETAILS)
37. NEW FENCE GATE. (SEE ARCHITECTURAL PLANS FOR DETAILS)

## ◯ EXISTING SITE NOTES:

1. EXISTING BUILDING TO REMAIN.
2. EXISTING ASPHALT PAVEMENT TO REMAIN.
3. EXISTING CONCRETE TO REMAIN.
4. EXISTING UTILITY POLE TO REMAIN.
5. EXISTING CONCRETE CURB AND GUTTER TO REMAIN.
6. EXISTING SIGN TO REMAIN.
7. EXISTING FENCE TO REMAIN.
8. EXISTING EQUIPMENT CABINET TO REMAIN.
9. EXISTING DOWNSPOUT TO REMAIN.
10. EXISTING WALL HYDRANT TO REMAIN.
11. EXISTING FIRE HYDRANT TO REMAIN.
12. EXISTING GAS METER TO REMAIN.

W-T JOB NUMBER-C2500035

NORTH

1" = 20'

00 10 20 40 80


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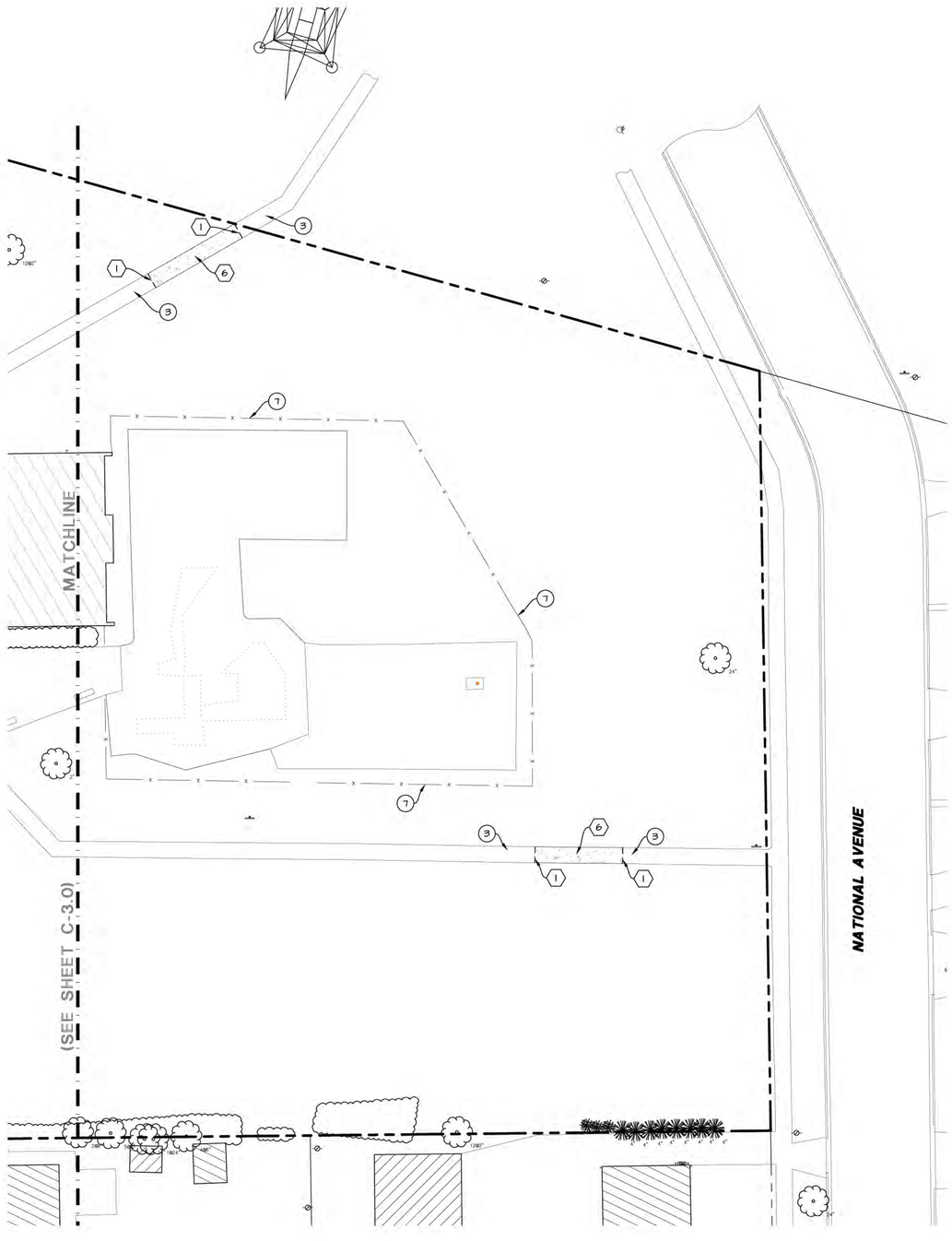

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# HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

| DATE | MARK |
|---|---|
| | 50% CD NOT FOR CONSTRUCTION |

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: **SITE DEVELOPMENT PLAN**
SHEET: **C-3.0**




## SITE DEVELOPMENT NOTES:

A. EXISTING CONDITIONS AND TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS PER THE BOUNDARY AND TOPOGRAPHIC SURVEY LAST DATED 08-25-25, PREPARED BY THE WT GROUP, LLC. CONTRACTOR SHALL FIELD VERIFY EXISTING ELEVATIONS AND CONDITIONS (INCLUDING BUT NOT LIMITED TO VERIFICATION OF CONTROL AND ALL UTILITIES WHETHER DEPICTED OR NOT) PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
B. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE ARCHITECTURAL PLANS.
C. SEE THE ARCHITECTURAL PLANS FOR THE DESIGN OF ALL BUILDING ENTRIES.
D. CONTRACTOR SHALL COORDINATE ALL LANDSCAPING IMPROVEMENTS WITH LANDSCAPE PLANS.
E. CONSTRUCTION SURVEY AND STAKEOUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
F. ALL EXISTING TREES SHOWN ARE TO REMAIN UNLESS OTHERWISE NOTED.
G. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS TO ORIGINAL CONDITION OR BETTER.
H. ASPHALT PAVEMENT MARKINGS SHALL BE MADE WITH HIGH QUALITY PAINT CONFORMING TO ARTICLE 1095.02 OF THE IDOT STANDARD SPECIFICATIONS.
I. CONTRACTOR SHALL RESTORE ALL DISTURBED GREEN SPACES WITH 6" OF TOPSOIL, SEED, AND EROSION CONTROL BLANKET.
J. CONTRACTOR SHALL REPAIR AT HIS EXPENSE ANY DAMAGE TO EXISTING ASPHALT, CONCRETE, CURBS, SIDEWALKS, ETC. RESULTING FROM CONSTRUCTION TRAFFIC AND/OR OPERATIONS. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
K. CONTRACTOR SHALL RE-STRIPE ALL STRIPING DISTURBED WITHIN THE EXISTING ROADWAYS/PARKING LOT TO MATCH EXISTING.
L. CONTRACTOR SHALL HIRE A PRIVATE UTILITY LOCATOR TO LOCATE UTILITIES PRIOR TO CONSTRUCTION AND SHALL CONTACT THE SITE ENGINEER IF A CONFLICT EXISTS.
M. ALL ITEMS MARKED "EXISTING" TO BE PROTECTED FROM DAMAGE FOR THE DURATION OF CONSTRUCTION.
N. ALL EXISTING SUBGRADE TO BE SCARIFIED (DISKED) TO A DEPTH OF 12" AND RE-COMPACTED, AND THEN TESTED USING A DYNAMIC CONE PENETROMETER. SEE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
O. EXISTING PAVEMENT AGGREGATE BASE COURSE SHALL NOT BE RE-USED AS AGGREGATE BASE COURSE FOR THE NEW PAVEMENT SECTION.

## HATCH LEGEND

- NEW FULL DEPTH ASPHALT PAVEMENT
- NEW HEAVY DUTY ASPHALT PAVEMENT
- NEW CONCRETE SIDEWALK
- NEW HEAVY DUTY CONCRETE PAVEMENT

## ⬡ SITE DEVELOPMENT NOTES:

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34. NEW "ONE WAY" SIGN.
35. NEW AREA LIGHT. (SEE SITE LIGHTING AND ELECTRICAL PLANS FOR DETAILS)

## ◯ EXISTING SITE NOTES:

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10. EXISTING WALL HYDRANT TO REMAIN.
11. EXISTING FIRE HYDRANT TO REMAIN.
12. EXISTING GAS METER TO REMAIN.

NORTH

1" = 20'

0 0 10 20 40 80

W-T JOB NUMBER-C2500035

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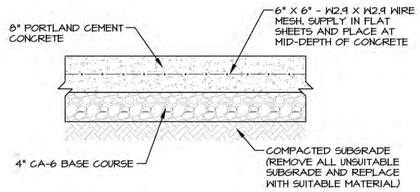
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HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

| DATE | MARK |
|---|---|
| | 50% CD NOT FOR CONSTRUCTION |

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: **SITE DEVELOPMENT PLAN**
SHEET: **C-3.1**

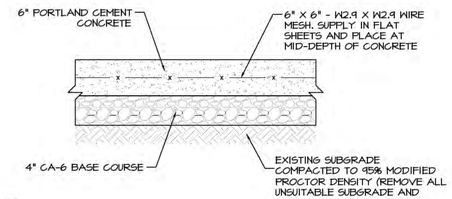



NOTES:

1. EXISTING AGGREGATE BASE COURSE SHALL NOT BE USED AS THE BASE COURSE FOR THE NEW PAVEMENT SECTION.
2. INSTALL THREE (3) CONTINUOUS NO. 4 STEEL REBAR PERPENDICULAR TO AND CENTERED OVER ALL UTILITY TRENCH CROSSINGS SO BARS EXTEND A MINIMUM OF FIVE (5) FEET BEYOND THE TRENCH.
3. CONTRACTOR TO PROVIDE SUPPORT CHAIRS AS REQUIRED TO ENSURE PLACEMENT OF W.W.M. "PULLING UP" W.W.M. INTO POSITION DURING POUR IS NOT ACCEPTABLE.

## DETAIL - HEAVY DUTY CONCRETE PAVEMENT

NOT TO SCALE

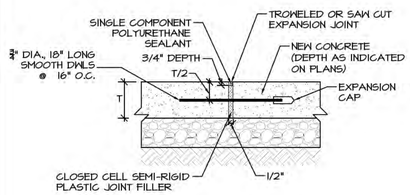



NOTES:

1. INSTALL THREE (3) CONTINUOUS NO. 4 STEEL REBAR PERPENDICULAR TO AND CENTERED OVER ALL UTILITY TRENCH CROSSINGS SO BARS EXTEND A MINIMUM OF FIVE (5) FEET BEYOND THE TRENCH.
2. EXISTING AGGREGATE BASE COURSE SHALL NOT BE USED AS THE BASE COURSE FOR THE NEW PAVEMENT SECTION.
3. CONTRACTOR TO PROVIDE SUPPORT CHAIRS AS REQUIRED TO ENSURE PLACEMENT OF W.W.M. "PULLING UP" W.W.M. INTO POSITION DURING POUR IS NOT ACCEPTABLE.
4. EXISTING AGGREGATE BASE COURSE SHALL NOT BE USED AS THE BASE COURSE FOR THE NEW PAVEMENT SECTION.

## DETAIL - CONCRETE SIDEWALK

NOT TO SCALE

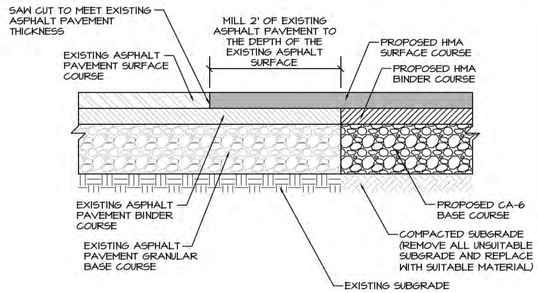



NOTES:

1. EXPANSION JOINTS TO BE INSTALLED AT EDGES OF ALL CASTINGS ADJACENT TO CONCRETE.
2. T = CONCRETE THICKNESS

## DETAIL - CONCRETE EXPANSION JOINT

NOT TO SCALE

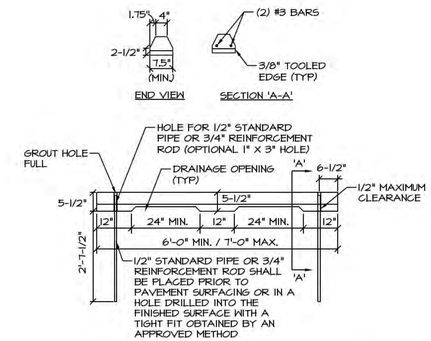



NOTES:

1. EXISTING PAVEMENT SECTION IS SHOWN FOR REFERENCE ONLY.
2. ALL ASPHALT PAVEMENT MILLINGS SHALL BE DISPOSED OF BY THE CONTRACTOR.
3. BITUMINOUS TACK COAT SHALL BE APPLIED AT A RATE OF 0.1 GALLONS PER SQUARE YARD TO BOTH THE EXISTING AND PROPOSED ASPHALT BINDER COURSE PRIOR TO NEW HMA SURFACE COURSE INSTALLATION.

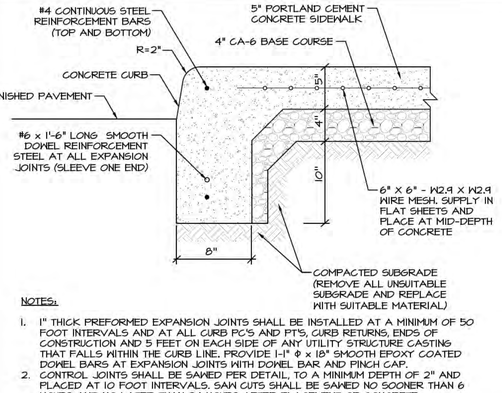
## DETAIL - BUTT JOINT

NOT TO SCALE




## DETAIL - CONCRETE WHEEL STOP

NOT TO SCALE

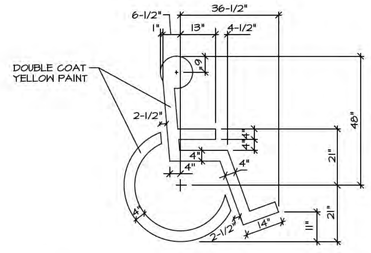



NOTES:

1. 1" THICK PREFORMED EXPANSION JOINTS SHALL BE INSTALLED AT A MINIMUM OF 50 FOOT INTERVALS AND AT ALL CURB PC'S AND PT'S, CURB RETURNS, ENDS OF CONSTRUCTION AND 5 FEET ON EACH SIDE OF ANY UTILITY STRUCTURE CASTING THAT FALLS WITHIN THE CURB LINE. PROVIDE 1-1" Φ x 18" SMOOTH EPOXY COATED DOWEL BARS AT EXPANSION JOINTS WITH DOWEL BAR AND FINCH CAP.
2. CONTROL JOINTS SHALL BE SAWED PER DETAIL, TO A MINIMUM DEPTH OF 2" AND PLACED AT 10 FOOT INTERVALS. SAW CUTS SHALL BE SAWED NO SOONER THAN 6 HOURS AND NO LATER THAN 24 HOURS AFTER PLACEMENT OF CONCRETE.
3. 2 CONTINUOUS NO. 4 BARS SHALL BE INSTALLED AND CENTERED OVER ALL TRENCH CROSSINGS SO BARS EXTEND 5 FEET BEYOND THE TRENCH ON ALL SIDES.
4. DOWEL BARS AT EXPANSION JOINTS MUST BE DRILLED AND NOT PUSHED THRU EXPANSION MATERIAL.
5. CONTRACTOR TO PROVIDE SUPPORT CHAIRS AS REQUIRED TO ENSURE PLACEMENT OF W.W.M. "PULLING UP" W.W.M. INTO POSITION DURING POUR IS NOT ACCEPTABLE.

## DETAIL - MONOLITHIC CURB AND SIDEWALK

NOT TO SCALE




NOTES:

1. SYMBOL TO BE CENTERED ON WIDTH OF PARKING STALL.

## DETAIL - ACCESSIBLE SYMBOL

NOT TO SCALE

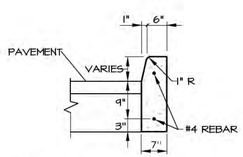



NOTES:

1. CENTER SIGN IN PARKING STALL AND INSTALL MINIMUM OF 5' ABOVE FINISHED PAVEMENT ELEVATION.
2. CONTRACTOR SHALL VERIFY FINE AMOUNT WITH MUNICIPALITY PRIOR TO INSTALLATION.

## DETAIL - ACCESSIBLE PARKING SIGN

NOT TO SCALE

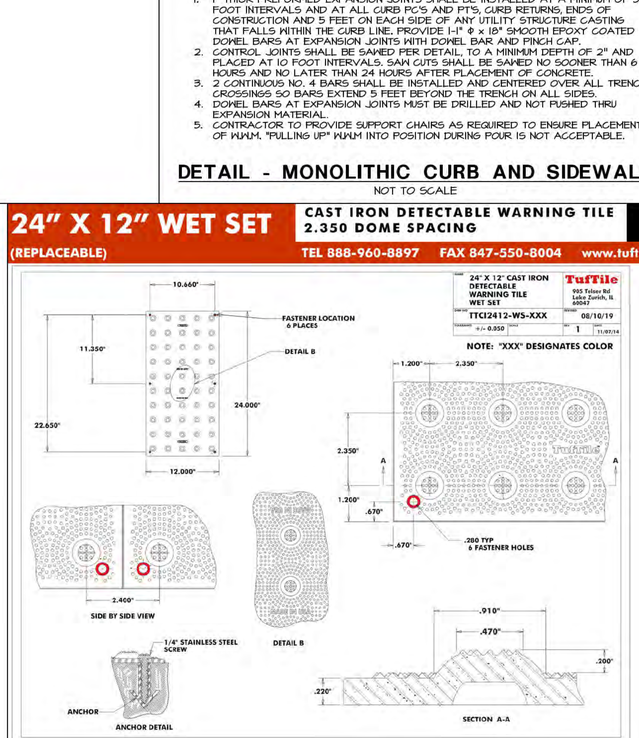


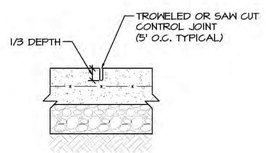

NOTES:

1. BARRIER CURB SHALL BE CONCRETE..
2. CONTRACTION JOINTS: 1/4" WIDE x 1" DEEP, SHALL BE LOCATED AT RADII TANGENTS
3. BASE MATERIAL SHALL MEET THE STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR GRADATION AND OTHER SPECIFIED MATERIAL REQUIREMENTS.

## DETAIL - BARRIER CURB

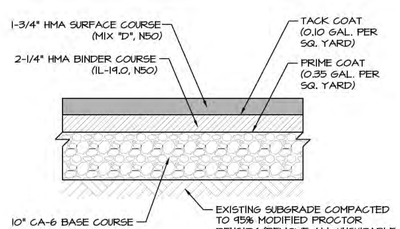
NOT TO SCALE




## DETAIL - CONCRETE CONTROL JOINT

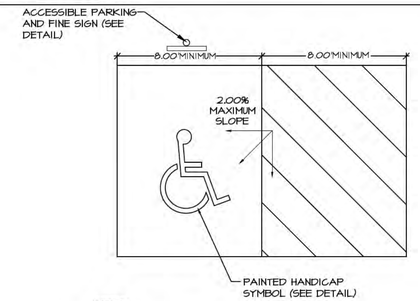
NOT TO SCALE




NOTE: EXISTING AGGREGATE BASE COURSE SHALL NOT BE USED AS THE BASE COURSE FOR THE NEW PAVEMENT SECTION.

## DETAIL - FULL DEPTH ASPHALT PAVEMENT

NOT TO SCALE




NOTES:

1. ALL PAVEMENT STRIPING SHALL BE YELLOW.
2. MAXIMUM SLOPE WITHIN ALL HANDICAP PARKING STALLS SHALL NOT EXCEED 2.00% IN ANY DIRECTION.

## DETAIL - ACCESSIBLE PARKING STALL

NOT TO SCALE

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MORTON GROVE, IL 60053

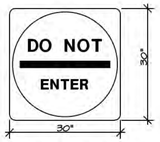
LEARNING TODAY... LEADING TOMORROW 67

| DATE: | MARK |
|---|---|
| | 50% CD NOT FOR CONSTRUCTION |

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: SITE DEVELOPMENT DETAILS
SHEET: C-3.2

W-T JOB NUMBER-C2500035

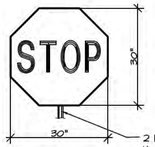
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MUTCD R5-1

## DETAIL - DO NOT ENTER SIGN

NOT TO SCALE

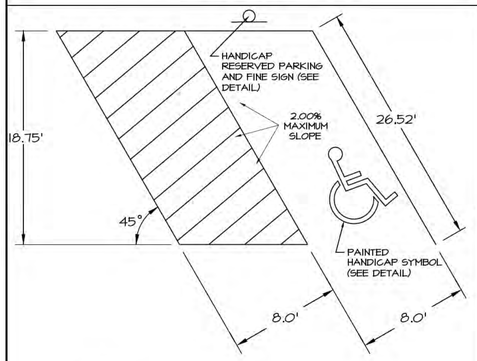



MUTCD R1-1

2 LBS/FT GALVANIZED U-CHANNEL POST (EXTEND INTO CONCRETE FILLED PIPE 2'-0" WHEN REQUIRED)

## DETAIL - STOP SIGN

NOT TO SCALE

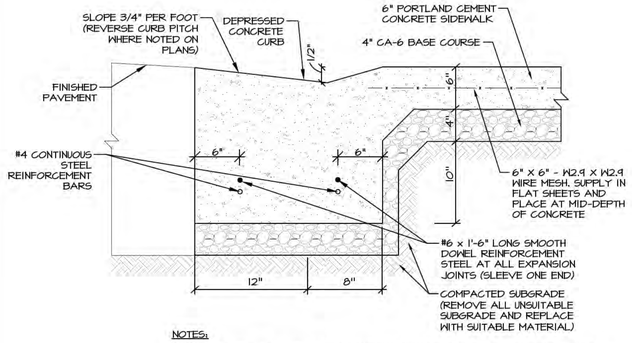



NOTES:

1. ALL PAVEMENT STRIPING SHALL BE YELLOW.
2. MAXIMUM SLOPE WITHIN ALL HANDICAP PARKING STALLS SHALL NOT EXCEED 2.00% IN ANY DIRECTION.

## DETAIL - ACCESSIBLE PARKING STALL

NOT TO SCALE

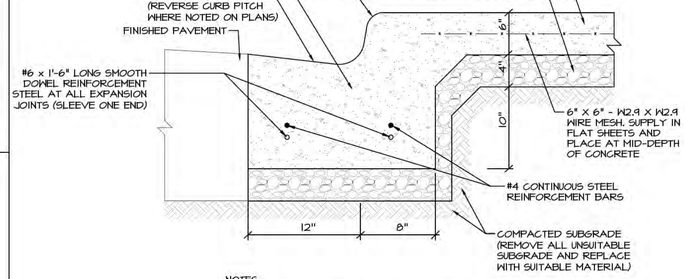



NOTES:

1. WHERE B-6.18 OR B-6.24 COMBINATION CONCRETE CURB AND GUTTER IS SHOWN ON THE PLANS, THE TYPICAL SECTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD DETAIL 606001.
2. 1" THICK PREFORMED EXPANSION JOINTS SHALL BE INSTALLED AT A MINIMUM OF 50 FOOT INTERVALS AND AT ALL CURB PC'S AND PT'S, CURB RETURNS, ENDS OF CONSTRUCTION AND 5 FEET ON EACH SIDE OF ANY UTILITY STRUCTURE CASTING THAT FALLS WITHIN THE CURB LINE. PROVIDE 1-1" Φ x 18" SMOOTH EPOXY COATED DOWEL BARS AT EXPANSION JOINTS WITH DOWEL BAR AND PINCH CAP.
3. CONTROL JOINTS SHALL BE SAWED PER DETAIL, TO A MINIMUM DEPTH OF 2" AND PLACED AT 10 FOOT INTERVALS. SAW CUTS SHALL BE SAWED NO SOONER THAN 6 HOURS AND NO LATER THAN 24 HOURS AFTER PLACEMENT OF CONCRETE.
4. 2 CONTINUOUS NO. 4 BARS SHALL BE INSTALLED AND CENTERED OVER ALL TRENCH CROSSINGS SO BARS EXTEND 5 FEET BEYOND THE TRENCH ON ALL SIDES.
5. DOWEL BARS AT EXPANSION JOINTS MUST BE DRILLED AND NOT PUSHED THRU EXPANSION MATERIAL.
6. CONTRACTOR TO PROVIDE SUPPORT CHAIRS AS REQUIRED TO ENSURE PLACEMENT OF W.W.M. "PULLING UP" W.W.M. INTO POSITION DURING POUR IS NOT ACCEPTABLE.

## DETAIL - MONOLITHIC DEPRESSED CURB GUTTER AND SIDEWALK

NOT TO SCALE




NOTES:

1. WHERE B-6.18 OR B-6.24 COMBINATION CONCRETE CURB AND GUTTER IS SHOWN ON THE PLANS, THE TYPICAL SECTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD DETAIL 606001.
2. 1" THICK PREFORMED EXPANSION JOINTS SHALL BE INSTALLED AT A MINIMUM OF 50 FOOT INTERVALS AND AT ALL CURB PC'S AND PT'S, CURB RETURNS, ENDS OF CONSTRUCTION AND 5 FEET ON EACH SIDE OF ANY UTILITY STRUCTURE CASTING THAT FALLS WITHIN THE CURB LINE. PROVIDE 1-1" Φ x 18" SMOOTH EPOXY COATED DOWEL BARS AT EXPANSION JOINTS WITH DOWEL BAR AND PINCH CAP.
3. CONTROL JOINTS SHALL BE SAWED PER DETAIL, TO A MINIMUM DEPTH OF 2" AND PLACED AT 10 FOOT INTERVALS. SAW CUTS SHALL BE SAWED NO SOONER THAN 6 HOURS AND NO LATER THAN 24 HOURS AFTER PLACEMENT OF CONCRETE.
4. 2 CONTINUOUS NO. 4 BARS SHALL BE INSTALLED AND CENTERED OVER ALL TRENCH CROSSINGS SO BARS EXTEND 5 FEET BEYOND THE TRENCH ON ALL SIDES.
5. DOWEL BARS AT EXPANSION JOINTS MUST BE DRILLED AND NOT PUSHED THRU EXPANSION MATERIAL.
6. CONTRACTOR TO PROVIDE SUPPORT CHAIRS AS REQUIRED TO ENSURE PLACEMENT OF W.W.M. "PULLING UP" W.W.M. INTO POSITION DURING POUR IS NOT ACCEPTABLE.

## DETAIL - MONOLITHIC CURB GUTTER AND SIDEWALK

NOT TO SCALE

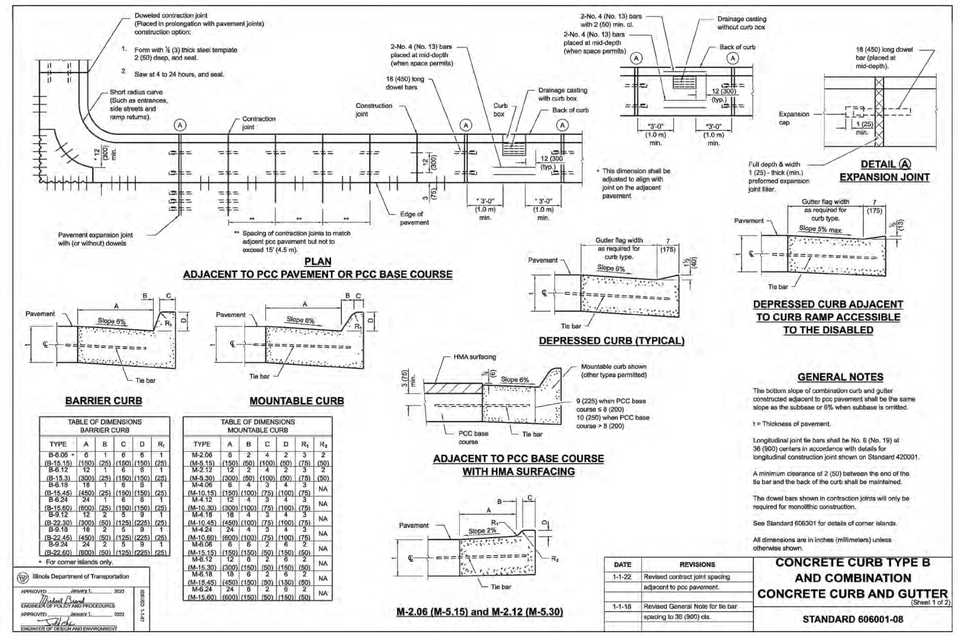



TABLE OF DIMENSIONS BARRIER CURB

| TYPE | A | B | C | D | $R_1$ |
|---|---|---|---|---|---|
| B-6.06 * | 6 (150) | 1 (25) | 9 (150) | 6 (150) | 1 (25) |
| B-6.12 | 12 (300) | 1 (25) | 9 (150) | 6 (150) | 1 (25) |
| (B-15.3) | (300) | (25) | (150) | (150) | (25) |
| B-6.18 | 18 (450) | 1 (25) | 9 (150) | 6 (150) | 1 (25) |
| (B-15.45) | (450) | (25) | (150) | (150) | (25) |
| B-6.24 | 24 (600) | 1 (25) | 9 (150) | 6 (150) | 1 (25) |
| (B-15.60) | (600) | (25) | (150) | (150) | (25) |
| B-8.12 | 12 (300) | 2 (50) | 5 (125) | 8 (225) | 1 (25) |
| (B-22.30) | (300) | (50) | (125) | (225) | (25) |
| B-8.18 | 18 (450) | 2 (50) | 5 (125) | 8 (225) | 1 (25) |
| (B-22.45) | (450) | (50) | (125) | (225) | (25) |
| B-8.24 | 24 (600) | 2 (50) | 5 (125) | 8 (225) | 1 (25) |
| (B-22.60) | (600) | (50) | (125) | (225) | (25) |

* For corner islands only.

TABLE OF DIMENSIONS MOUNTABLE CURB

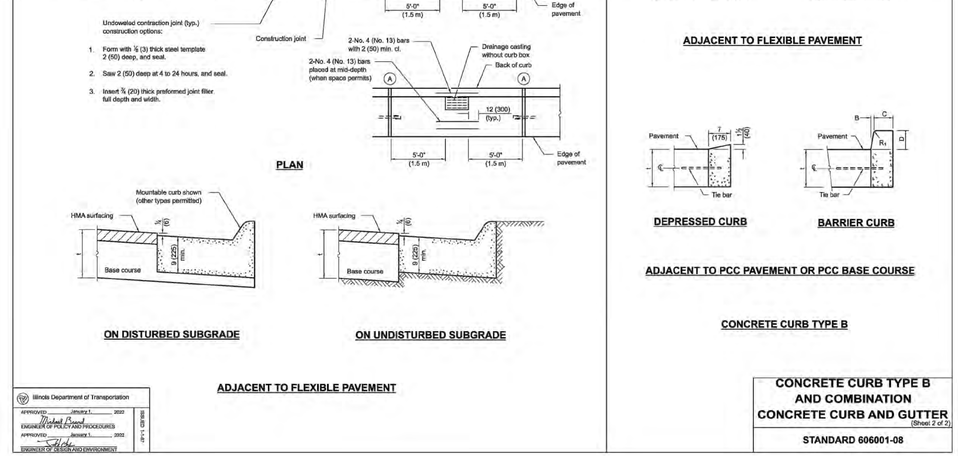
| TYPE | A | B | C | D | $R_1$ | $R_2$ |
|---|---|---|---|---|---|---|
| M-2.06 | 6 | 2 | 4 | 2 | 3 | 2 |
| (M-5.15) | (150) | (50) | (100) | (50) | (75) | (50) |
| M-2.12 | 12 | 2 | 4 | 2 | 3 | 2 |
| (M-5.30) | (300) | (50) | (100) | (50) | (75) | (50) |
| M-4.06 | 6 | 4 | 3 | 2 | 3 | NA |
| (M-10.15) | (150) | (100) | (75) | (50) | (75) | |
| M-4.12 | 12 | 4 | 3 | 2 | 3 | NA |
| (M-10.30) | (300) | (100) | (75) | (50) | (75) | |
| M-4.18 | 18 | 4 | 3 | 2 | 3 | NA |
| (M-10.45) | (450) | (100) | (75) | (50) | (75) | |
| M-4.24 | 24 | 4 | 3 | 2 | 3 | NA |
| (M-10.60) | (600) | (100) | (75) | (50) | (75) | |
| M-6.06 | 6 | 6 | 2 | 6 | 2 | NA |
| (M-15.15) | (150) | (150) | (50) | (150) | (50) | |
| M-6.12 | 12 | 6 | 2 | 6 | 2 | NA |
| (M-15.30) | (300) | (150) | (50) | (150) | (50) | |
| M-6.18 | 18 | 6 | 2 | 6 | 2 | NA |
| (M-15.45) | (450) | (150) | (50) | (150) | (50) | |
| M-6.24 | 24 | 6 | 2 | 6 | 2 | NA |
| (M-15.60) | (600) | (150) | (50) | (150) | (50) | |

Illinois Department of Transportation
APPROVED: _____ January 1, 2022
Michael Powell
ENGINEER OF POLICY AND PROCEDURES
APPROVED: _____ January 1, 2022
ENGINEER OF DESIGN AND ENVIRONMENT
07-15-22 BSED

| DATE | REVISIONS |
|---|---|
| 1-1-22 | Revised controct joint spacing. |
| | adjacent to pcc pavement. |
| 1-1-18 | Revised General Note for tie bar |
| | spacing to 30 (900) cts. |

**CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER** (Sheet 1 of 2)

**STANDARD 606001-08**




Illinois Department of Transportation
APPROVED: _____ January 1, 2022
Michael Powell
ENGINEER OF POLICY AND PROCEDURES
APPROVED: _____ January 1, 2022
ENGINEER OF DESIGN AND ENVIRONMENT
07-15-22 BSED

**CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER** (Sheet 2 of 2)

**STANDARD 606001-08**

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HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

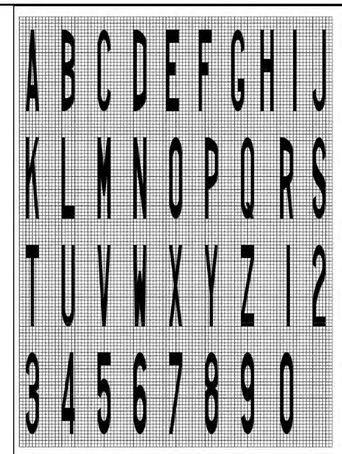
LEARNING TODAY, LEADING TOMORROW 67

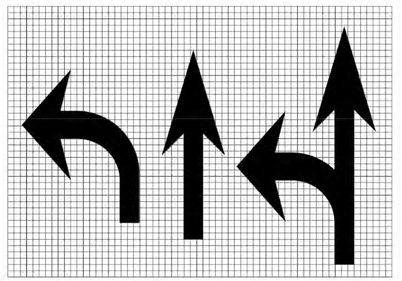
| DATE | MARK |
|---|---|
| | 50% CD NOT FOR CONSTRUCTION |

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: **SITE DEVELOPMENT DETAILS**
SHEET: **C-3.3**

W-T JOB NUMBER-C2500035

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| Legend Height | Arrow Size | a |
|---|---|---|
| 6" (1.8 m) | Small | 2.9 (74) |
| 8" (2.4 m) | Large | 3.8 (96) |

The space between adjacent letters or numerals should be approximately 3 (76) for 6" (1.8 m) legend and 4 (100) for 8" (2.4 m) legend.

**LETTER AND ARROW GRID SCALE**

Illinois Department of Transportation

APPROVED _____ January 1, 2010
GEOMETRICS ENGINEER

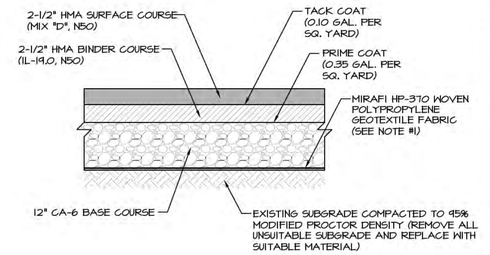
APPROVED _____ January 1, 2010
BUREAU CHIEF OF DESIGN AND ENVIRONMENT

SHEET 2 OF 3 SHEETS

**TYPICAL PAVEMENT MARKINGS**

(Sheet 2 of 3)

**STANDARD 780001-05**




NOTES:

1. INSTALL GEOTEXTILE FABRIC ROLLS PARALLEL TO VEHICULAR TRAVEL DIRECTION. FABRIC INSTALLATION PROCEDURES, INCLUDING RECOMMENDED SEAM OVERLAP WIDTH FOR ADJACENT ROLLS, SHALL BE IN ACCORDANCE WITH MANUFACTURER GUIDELINES.
2. EXISTING AGGREGATE BASE COURSE SHALL NOT BE USED AS THE BASE COURSE FOR THE NEW PAVEMENT SECTION.

**DETAIL - HEAVY-DUTY ASPHALT PAVEMENT**

NOT TO SCALE

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HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW

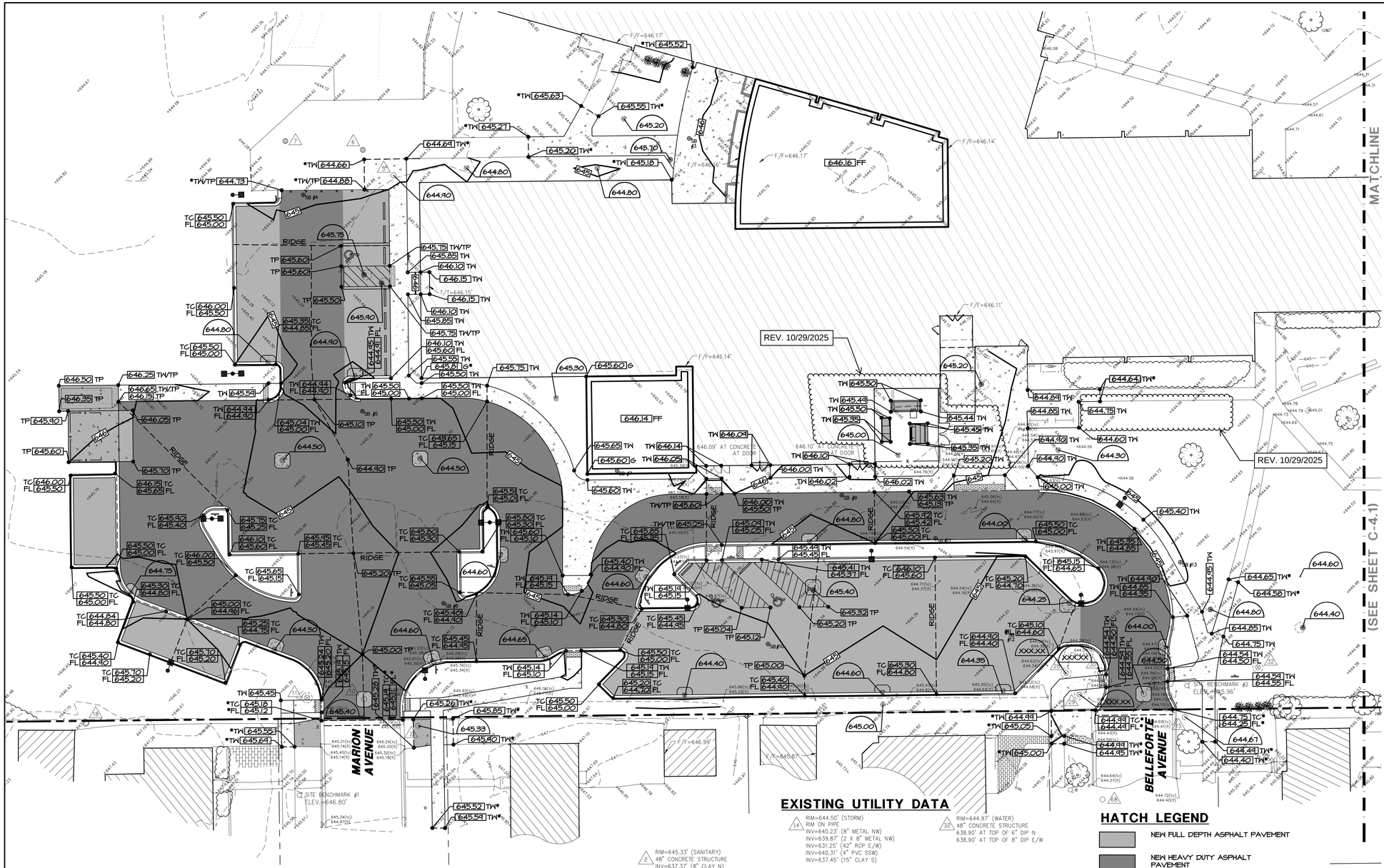
| DATE | MARK |
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50% CD NOT FOR CONSTRUCTION

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: **SITE DEVELOPMENT DETAILS**
SHEET: **C-3.4**

W-T JOB NUMBER-C2500035

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Engineering • Design • Consulting
WT GROUP
Structural | Mechanical/Electrical/Plumbing
Civil | Land Survey | Telecommunication| Aquatic
Accessibility Consulting | Design & Program Management
Engineering with Precision, Pace & Passion.
2000 Center Drive, Ste B411 | Hoffman Estates, IL 60192
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wtengineering.com
IL License No: 184.007570-0015 | Exp: 04.30.2027
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## EXISTING UTILITY DATA

2 RIM=645.33' (SANITARY)
48" CONCRETE STRUCTURE
INV=637.37' (8" CLAY N)
INV=637.34' (8" CLAY W)
INV=638.02' (2 X 12" CLAY W)
INV=637.46' (8" CLAY S)
INV=637.18' (8" CLAY E)

5 RIM=644.89' (SANITARY)
48" CONCRETE STRUCTURE
INV=641.04' (6" CLAY NE/S)

6 RIM=644.57' (STORM)
CONCRETE STRUCTURE
INV=640.93' (BOTTOM OF 6" VERTICAL CPP) ACCORDING TO THE DIRECTOR OF BUILDINGS THIS STRUCTURE IS A DRY WELL

7 RIM=644.16' (STORM)
24" CONCRETE STRUCTURE
INV=642.79' (6" CPP NW)
FULL OF WATER AND ICE ACCORDING TO THE DIRECTOR OF BUILDINGS THERE IS ONLY ONE PIPE IN THIS STRUCTURE

10 RIM=645.40' (STORM)
RIM ON PIPE
INV=635.57' (NNW)
INV=633.21' (42" RCP E/W)
INV=639.76' (12" RCP S)

11 RIM=645.32' (WATER)
48" CONCRETE STRUCTURE
TOP OF PIPE=639.80' (8" DIP N/S)

14 RIM=644.50' (STORM)
RIM ON PIPE
INV=640.23' (8" METAL NW)
INV=639.87' (2 X 8" METAL NW)
INV=631.25' (42" RCP E/W)
INV=640.31' (4" PVC SSW)
INV=637.45' (15" CLAY S)

15 RIM=644.67' (SANITARY)
36" CONCRETE STRUCTURE
INV=635.95' (8" CLAY NW)
INV=635.95' (8" CLAY W/S/E)

28 RIM=644.66' (WATER)
36" CONCRETE STRUCTURE
638.92' AT TOP OF 8" DIP E/W

29 RIM=644.72' (WATER)
48" CONCRETE STRUCTURE
638.42' AT TOP OF 6" DIP N/E

30 RIM=644.47' (WATER)
48" CONCRETE STRUCTURE
638.99' AT TOP OF 8" DIP E/W

32 RIM=644.97' (WATER)
48" CONCRETE STRUCTURE
638.90' AT TOP OF 6" DIP N
638.90' AT TOP OF 8" DIP E/W

## HATCH LEGEND

- NEW FULL DEPTH ASPHALT PAVEMENT
- NEW HEAVY DUTY ASPHALT PAVEMENT
- NEW CONCRETE SIDEWALK
- NEW HEAVY DUTY CONCRETE PAVEMENT

## SITE GRADING NOTES:

A. EXISTING CONDITIONS AND TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS PER THE BOUNDARY AND TOPOGRAPHIC SURVEY LAST DATED 08-25-25, PREPARED BY THE WT GROUP, LLC. CONTRACTOR SHALL FIELD VERIFY EXISTING ELEVATIONS AND CONDITIONS (INCLUDING BUT NOT LIMITED TO VERIFICATION OF CONTROL AND ALL UTILITIES WHETHER DEPICTED OR NOT) PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
B. ALL PROPOSED GRADES ARE GIVEN TO FINISHED GRADE, I.E. TOP OF PROPOSED ASPHALT, CONCRETE, TOP OF PROPOSED CURB, ETC. SEE DETAILS FOR PAVEMENT THICKNESS.
C. CONTRACTOR SHALL CONTACT J.U.L.I.E. (811 OR 1-800-892-0123) AND PRIVATE LOCATING SERVICE TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO STARTING ANY DEMOLITION AND/OR EXCAVATION. EXACT LOCATIONS OF ANY EXISTING ELECTRIC, GAS, TELEPHONE, ETC. LINES ARE UNKNOWN.
D. CONTRACTOR SHALL ENSURE POSITIVE SITE DRAINAGE AT THE END OF EACH WORKING DAY DURING CONSTRUCTION OPERATIONS. FAILURE TO PROVIDE ADEQUATE DRAINAGE WILL PRECLUDE THE CONTRACTOR FROM ANY POSSIBLE COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT.
E. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS TO ORIGINAL CONDITION OR BETTER.
F. CONTRACTOR SHALL REPAIR AT HIS EXPENSE ANY DAMAGE TO EXISTING ASPHALT, CONCRETE, SIDEWALKS, ETC. RESULTING FROM CONSTRUCTION TRAFFIC AND/OR OPERATIONS. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
G. CONTRACTOR TO UTILIZE CARE WHEN WORKING NEAR EXISTING UTILITIES TO REMAIN. ANY DAMAGE TO EXISTING UTILITIES NOT NOTED TO BE REMOVED SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
H. ALL EXISTING TREES SHOWN ARE TO REMAIN UNLESS OTHERWISE NOTED.
I. ALL HANDICAP ACCESSIBLE ROUTES (SIDEWALKS, WALKWAYS, PAVEMENTS, ETC.) SHALL MAINTAIN A MAXIMUM CROSS SLOPE OF 2.00% AND A MAXIMUM LONGITUDINAL SLOPE OF 5.00%. ACCESSIBLE PARKING STALLS SHALL MAINTAIN A MAXIMUM SLOPE OF 2.00% IN ALL DIRECTIONS.
J. VOIDS LEFT BY ANY ITEM REMOVED UNDER ANY PROPOSED BUILDING, PAVEMENT, OR WALK OR WITHIN 24" THEREOF SHALL BE BACKFILLED WITH ENGINEERED FILL ACCORDING TO THE GEOTECHNICAL REPORT.
K. ALL FIRE ACCESS LANES WITHIN THE PROJECT AREA SHALL REMAIN IN SERVICE, CLEAN OF DEBRIS, AND ACCESSIBLE FOR USE BY EMERGENCY VEHICLES.
L. CONSTRUCTION ACCESS POINTS TO THE SITE SHALL BE PROTECTED IN SUCH A WAY AS TO PREVENT TRACKING OF MUD OR SOIL ONTO PUBLIC THOROUGHFARES. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
M. ALL EXISTING SUBGRADE TO BE SCARIFIED (DISKED) TO A DEPTH OF 12" AND RE-COMPACTED, AND THEN TESTED USING A DYNAMIC CONE PENETROMETER. SEE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
N. ALL EXCESS SOILS THAT CANNOT BE USED AS SUITABLE FILL SHALL BE HAULED FROM THE SITE AND LEGALLY DISPOSED OF.
O. CONTRACTOR TO PROVIDE SOIL TESTING SERVICES FOR COMPLETION OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S LPC-662 AND/OR LPC-663 FORMS AS PART OF THEIR CONTRACT.
P. PREPARE SUBGRADE AS SPECIFIED WITHIN THE GEOTECHNICAL ENGINEERING REPORT DATED SEPTEMBER 2ND, 2025 PREPARED BY GEOCON PROFESSIONAL SERVICES, LLC.
Q. ALL TOPSOIL BENEATH PROPOSED STRUCTURES AND PAVEMENT SHALL BE REMOVED. REFER TO THE GEOTECHNICAL ENGINEERING REPORT DATED SEPTEMBER 2ND, 2025 PREPARED BY GEOCON PROFESSIONAL SERVICES, INC., FOR EXISTING TOPSOIL DEPTHS.
R. EXISTING PAVEMENT AGGREGATE BASE COURSE SHALL NOT BE RE-USED AS AGGREGATE BASE COURSE FOR THE NEW PAVEMENT SECTION.

## GRADING LEGEND

- +000.00 — EXISTING SPOT GRADE
- 000.00 — PROPOSED SPOT GRADE
- *000.00 — INTERPOLATED SPOT GRADE
- 000.00 — PROPOSED RIM ELEVATION
- EXISTING CONTOUR LINE
- 000 — PROPOSED CONTOUR LINE
- OVERLAND FLOW ARROW
- 100 YEAR OVERLAND FLOW ROUTE
- EMERGENCY OVERFLOW ARROW
- TP — TOP OF PAVEMENT ELEVATION
- TW — TOP OF SIDEWALK ELEVATION
- G — FINISHED GRADE ELEVATION
- FF — FINISHED FLOOR ELEVATION
- TC — TOP OF CURB ELEVATION
- FL — FLOW LINE ELEVATION
- ADJUST — ADJUST EXISTING RIM ELEVATION
- EXISTING CLOSED MANHOLE
- EXISTING OPEN GRATE MANHOLE
- EXISTING BEEHIVE GRATE MANHOLE
- EXISTING CURB INLET
- EXISTING FIRE HYDRANT
- EXISTING VALVE VAULT
- EXISTING B-BOX
- PROPOSED INLET
- PROPOSED OPEN LID MANHOLE / CATCH BASIN
- PROPOSED CLOSED LID MANHOLE
- PROPOSED NYLOPLAST DRAIN BASIN
- PROPOSED INLET WITH SOLID LID
- SB # — SOIL BORING LOCATION

NORTH
1" = 20'
00 10 20 40 80

W-T JOB NUMBER-C2500035


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Two Pierce Place | Suite 1300 | Itasca | 60143 | 847.742.4063
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# HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

| DATE | MARK |
|---|---|
| | 50% CD NOT FOR CONSTRUCTION |

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: SITE GRADING PLAN
SHEET: C-4.0

## EXISTING UTILITY DATA

23 RIM=643.89' (STORM)
72" METAL STRUCTURE
INV=635.79' (12" RCP N)
INV=630.40' (42" RCP E/W)

33 RIM=643.90' (WATER)
48" CONCRETE STRUCTURE
FULL OF WATER
639.30' AT WATER LEVEL
637.57' AT TOP OF DIP E/W
SIZE UNKNOWN

34 RIM=643.82' (WATER)
60" CONCRETE STRUCTURE
637.97' AT TOP OF 12" DIP N/S
637.97' AT TOP OF 8" DIP E

35 RIM=644.39' (STORM)
RIM ON PIPE
INV=637.93' (15" RCP N)
INV=630.08' (42" RCP E/W)

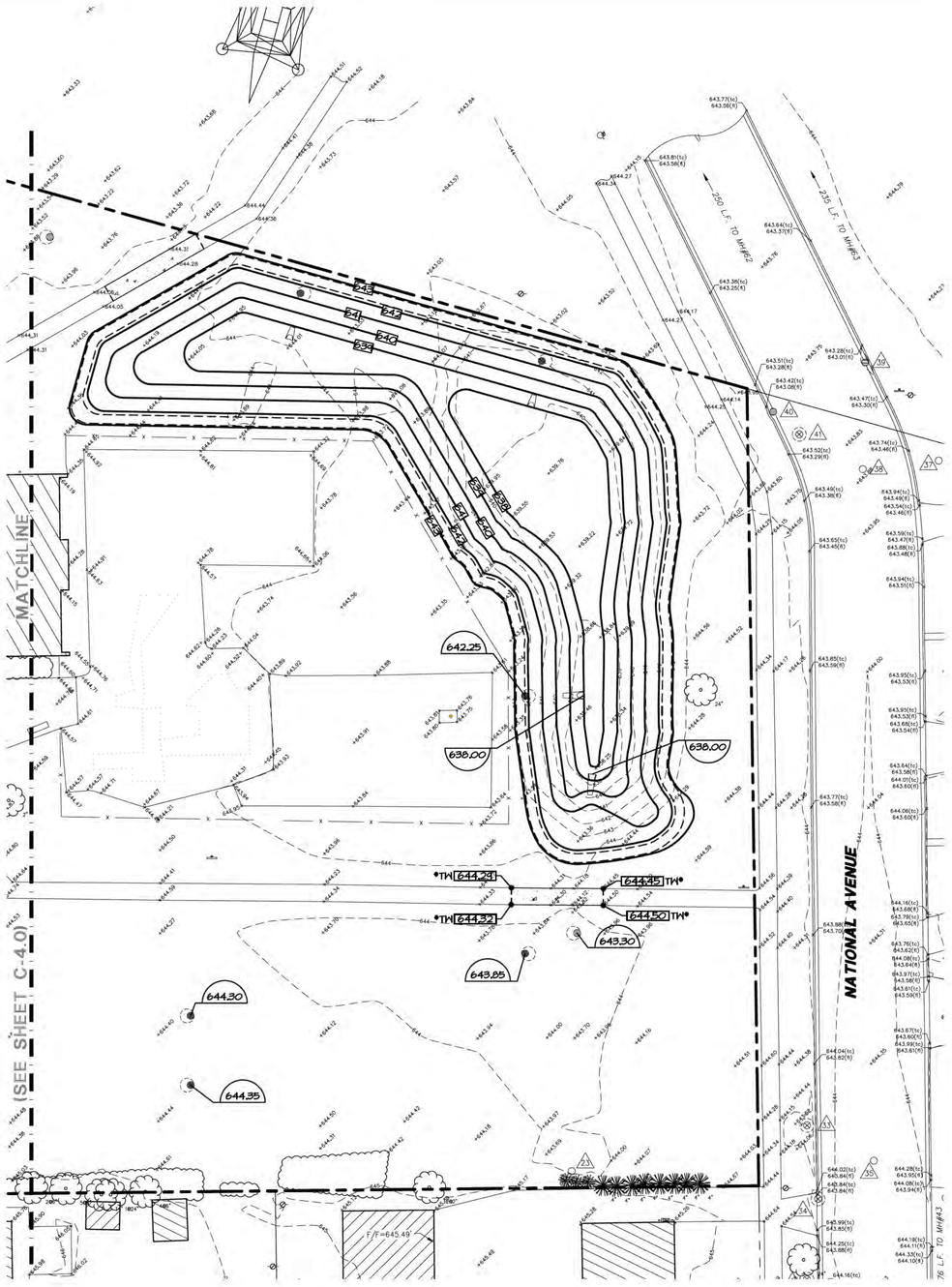
37 RIM=643.79' (SANITARY)
36" CONCRETE STRUCTURE
INV=635.55' (8" CLAY N/S)

38 RIM=643.82' (STORM)
36" BLOCK STRUCTURE
INV=639.63' (8" CLAY N/W)
INV=638.50' (15" RCP S/NW)

39 RIM=642.95' (STORM)
24" CONCRETE STRUCTURE
INV=640.17' (6" PVC S)

40 RIM=643.03' (STORM)
48" CONCRETE STRUCTURE
INV=639.60' (8" RCP SW)

41 RIM=643.53' (WATER)
48" CONCRETE STRUCTURE
638.75' AT TOP OF 12" DIP N/S




## SITE GRADING NOTES:

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B. ALL PROPOSED GRADES ARE GIVEN TO FINISHED GRADE, I.E. TOP OF PROPOSED ASPHALT, CONCRETE, TOP OF PROPOSED CURB, ETC. SEE DETAILS FOR PAVEMENT THICKNESS.
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M. ALL EXISTING SUBGRADE TO BE SCARIFIED (DISKED) TO A DEPTH OF 12" AND RE-COMPACTED, AND THEN TESTED USING A DYNAMIC CONE PENETROMETER. SEE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
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## GRADING LEGEND

| | |
|---|---|
| +000.00 | EXISTING SPOT GRADE |
| 000.00 | PROPOSED SPOT GRADE |
| • 000.00 | INTERPOLATED SPOT GRADE |
| 000.00 | PROPOSED RIM ELEVATION |
| ---000--- | EXISTING CONTOUR LINE |
| 000 | PROPOSED CONTOUR LINE |
| | OVERLAND FLOW ARROW |
| | 100 YEAR OVERLAND FLOW ROUTE |
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| TP | TOP OF PAVEMENT ELEVATION |
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| FL | FLOW LINE ELEVATION |
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| | EXISTING CLOSED MANHOLE |
| | EXISTING OPEN GRATE MANHOLE |
| | EXISTING BEEHIVE GRATE MANHOLE |
| | EXISTING CURB INLET |
| | EXISTING FIRE HYDRANT |
| | EXISTING VALVE VAULT |
| | EXISTING B-BOX |
| | PROPOSED INLET |
| | PROPOSED OPEN LID MANHOLE / CATCH BASIN |
| | PROPOSED CLOSED LID MANHOLE |
| | PROPOSED NYLOPLAST DRAIN BASIN |
| | PROPOSED INLET WITH SOLID LID |
| SB # | SOIL BORING LOCATION |

## HATCH LEGEND

- NEW FULL DEPTH ASPHALT PAVEMENT
- NEW HEAVY DUTY ASPHALT PAVEMENT
- NEW CONCRETE SIDEWALK
- NEW HEAVY DUTY CONCRETE PAVEMENT

NORTH
1" = 20'
00 10 20 40 80

W-T JOB NUMBER-C2500035


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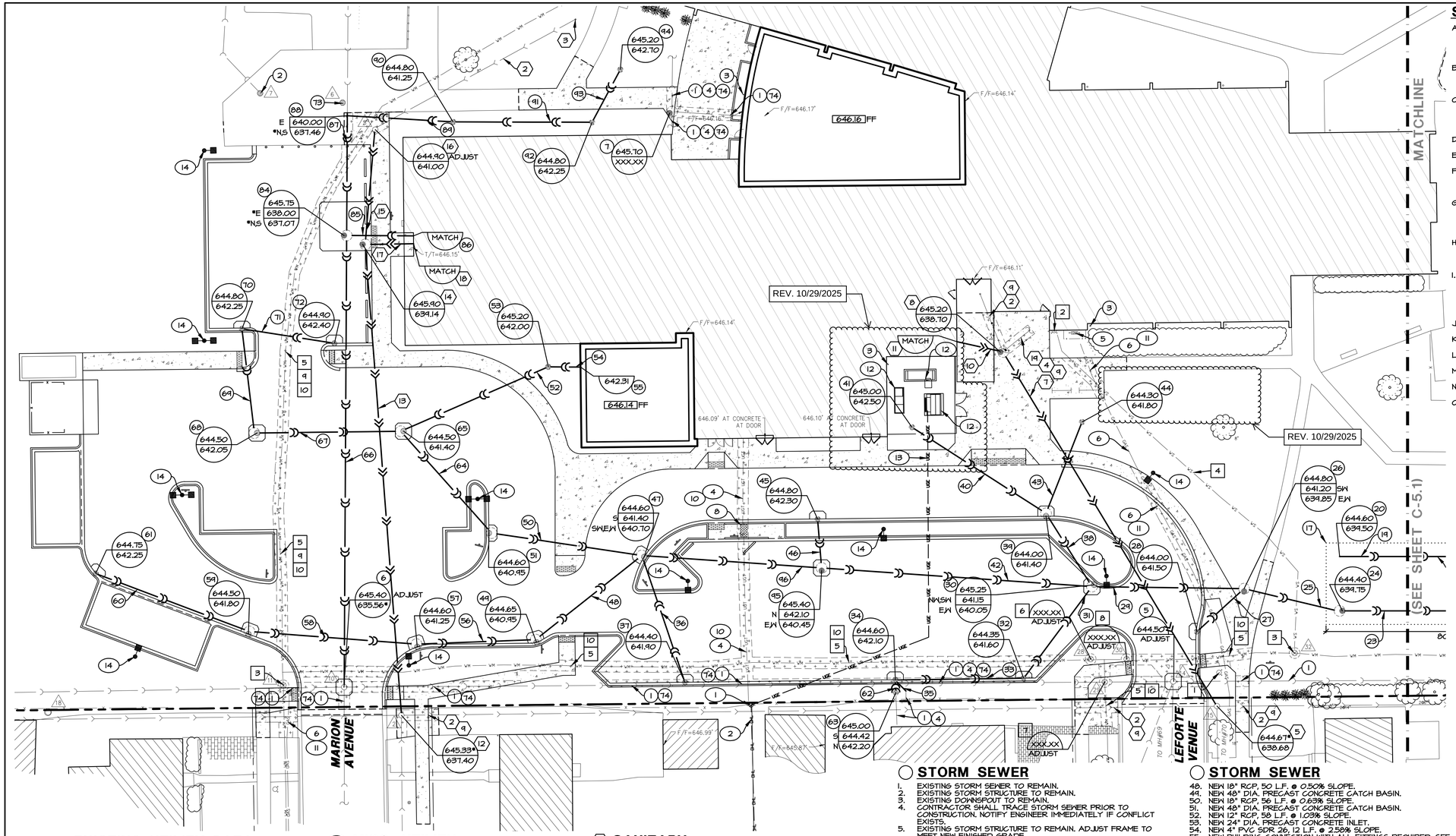
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# HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW

| DATE: | MARK |
|---|---|
| | 50% CD NOT FOR CONSTRUCTION |

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: **SITE GRADING PLAN**
SHEET: **C-4.1**




## SITE UTILITY NOTES:

A. CONTRACTOR SHALL CONTACT JULI.I.E. (811 OR 1-800-892-0123) AND PRIVATE LOCATING SERVICE TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO STARTING ANY DEMOLITION AND/OR EXCAVATION. EXACT LOCATIONS OF ANY EXISTING ELECTRIC, GAS, TELEPHONE, ETC. LINES ARE UNKNOWN.
B. CONTRACTOR TO UTILIZE CARE WHEN WORKING NEAR EXISTING UTILITIES TO REMAIN. ANY DAMAGE TO EXISTING UTILITIES NOT NOTED TO BE REMOVED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
C. CONTRACTOR SHALL EXCAVATE AND VERIFY IN FIELD ALL EXISTING UTILITY LOCATIONS, SIZES, CONDITIONS AND ELEVATIONS AT PROPOSED POINTS OF CONNECTION PRIOR TO ANY UNDERGROUND CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO PROCEEDING WITH CONSTRUCTION.
D. REFER TO THE GENERAL NOTES AND SPECIFICATION SHEETS FOR ALL PIPE MATERIAL AND JOINT SPECIFICATIONS.
E. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS TO ORIGINAL CONDITION OR BETTER.
F. CONTRACTOR SHALL VERIFY IN FIELD EXACT SIZE, MATERIAL, INVERT, PIPE ROUTING, AND SLOPE OF ALL EXISTING UTILITIES AND NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO CONSTRUCTION.
G. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF UTILITY TRENCHES DURING CONSTRUCTION AND SHALL PROVIDE TEMPORARY SHORING AND BRACING AS NECESSARY TO MAINTAIN STABILITY UNTIL CONSTRUCTION OF THE UTILITY IS COMPLETE IN ORDER TO MEET OSHA AND LOCAL CODES, AS WELL AS MANUFACTURER'S REQUIREMENTS.
H. ALL RCP STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE, CLASS IV, PER ASTM C-76 WITH FLEXIBLE (O-RING) GASKET JOINTS IN CONFORMANCE WITH ASTM C-443 AND SECTION 31-1.08 OF THE "STANDARD SPECIFICATIONS".
I. TRENCH BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR DENSITY (ASTM D-1557) OVER ALL UNDERGROUND UTILITIES WHICH ARE CONSTRUCTED UNDER OR WITHIN 2 FEET OF ANY PROPOSED OR EXISTING PAVEMENT OR SIDEWALKS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
J. ADJUST RIM ELEVATIONS OF EXISTING STRUCTURES IN PAVEMENT AS NECESSARY TO MEET PROPOSED FINISHED GRADE.
K. CONTRACTOR TO COORDINATE ALL CONNECTIONS TO CITY UTILITIES AND STORM SEWERS WITH THE PUBLIC WORKS DEPARTMENT.
L. CONTRACTOR TO USE CAUTION WHEN EXCAVATING AT EXISTING UTILITY LINES.
M. ALL STORM MANHOLES SHALL HAVE OPEN LIDS UNLESS OTHERWISE SPECIFIED.
N. PROVIDE RUBBER MISSION COUPLING OR SIMILAR CONNECTION BETWEEN PIPES OF DISSIMILAR SIZE OR MATERIAL.
O. ALL EXISTING UTILITIES TO BE ABANDONED IN PLACE SHALL BE CAPPED WITH 2' LONG (MIN) NON-SHRINK CONCRETE MORTAR PLUGS AT BOTH ENDS.

## UTILITY LEGEND

- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- EXISTING WATER MAIN
- EXISTING WATER SERVICE
- EXISTING GAS LINE
- EXISTING OVERHEAD LINES
- EXISTING UNDERGROUND ELECTRIC LINE
- PROPOSED UNDERGROUND ELECTRIC LINE
- EXISTING UNDERGROUND TELCO LINE
- 000.00 / 000.00 — PROPOSED RIM ELEVATION / PROPOSED INVERT ELEVATION
- FF — FINISHED FLOOR ELEVATION
- ADJUST — ADJUST EXISTING RIM ELEVATION
- VIF — VERIFY IN FIELD
- EXISTING CLOSED MANHOLE
- EXISTING OPEN GRATE MANHOLE
- EXISTING BEEHIVE GRATE MANHOLE
- EXISTING CURB INLET
- EXISTING FIRE HYDRANT
- EXISTING VALVE VAULT
- PROPOSED INLET
- PROPOSED OPEN LID MANHOLE / CATCH BASIN
- PROPOSED CLOSED LID MANHOLE
- PROPOSED NYLOPLAST DRAIN BASIN
- PROPOSED INLET WITH SOLID LID
- PROPOSED TRENCH BACKFILL ABOVE EXISTING UTILITY

## EXISTING UTILITY DATA

2 — RIM=645.33' (SANITARY)
48" CONCRETE STRUCTURE
INV=637.37' (8" CLAY N)
INV=637.34' (8" CLAY W)
INV=638.02' (2 X 12" CLAY W)
INV=637.46' (8" CLAY S)
INV=637.18' (8" CLAY E)

5 — RIM=644.89' (SANITARY)
48" CONCRETE STRUCTURE
INV=641.04' (6" CLAY NE/S)

6 — RIM=644.57' (STORM)
CONCRETE STRUCTURE
INV=640.93' (BOTTOM OF 6" VERTICAL OPP) ACCORDING TO THE DIRECTOR OF BUILDINGS THIS STRUCTURE IS A DRY WELL

7 — RIM=644.16' (STORM)
24" CONCRETE STRUCTURE
INV=642.79' (6" CPP NW)
FULL OF WATER AND ICE ACCORDING TO THE DIRECTOR OF BUILDINGS THERE IS ONLY ONE PIPE IN THIS STRUCTURE

10 — RIM=645.40' (STORM)
RIM ON PIPE
INV=635.57' (NNW)
INV=633.21' (42" RCP E/W)
INV=639.76' (12" RCP S)

11 — RIM=645.32' (WATER)
48" CONCRETE STRUCTURE
TOP OF PIPE=639.80' (8" DIP N/S)

14 — RIM=644.50' (STORM)
RIM ON PIPE
INV=640.23' (8" METAL NW)
INV=639.83' (2 X 8" METAL NW)
INV=631.25' (42" RCP E/W)
INV=640.31' (4" PVC SSW)
INV=637.45' (15" CLAY S)

15 — RIM=644.67' (SANITARY)
36" CONCRETE STRUCTURE
INV=635.95' (8" CLAY NW)
INV=635.95' (8" CLAY W/S/E)

28 — RIM=644.66' (WATER)
36" CONCRETE STRUCTURE
638.92' AT TOP OF 8" DIP E/W

29 — RIM=644.72' (WATER)
48" CONCRETE STRUCTURE
638.42' AT TOP OF 6" DIP N/E

30 — RIM=644.47' (WATER)
48" CONCRETE STRUCTURE
638.99' AT TOP OF 8" DIP E/W

32 — RIM=644.97' (WATER)
48" CONCRETE STRUCTURE
638.90' AT TOP OF 6" DIP N
638.90' AT TOP OF 8" DIP E/W

## MISC. UTILITY

1. EXISTING UTILITY POLE TO REMAIN.
2. EXISTING OVERHEAD LINES TO REMAIN.
3. EXISTING UNDERGROUND ELECTRIC LINE TO REMAIN.
4. EXISTING EXISTING UNDERGROUND TELCO LINE TO REMAIN.
5. EXISTING GAS METER TO REMAIN.
6. EXISTING GAS SERVICE TO REMAIN.
7. CONTRACTOR SHALL TRACE UNDERGROUND ELECTRIC LINE PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS.
8. NEW HANDHOLE. CONTRACTOR SHALL CONNECT EXISTING TELCO LINE TO HANDHOLE WITH ALL FITTINGS REQUIRED. (SEE ELECTRICAL PLANS FOR DETAILS)
9. EXCAVATE TO EXISTING UNDERGROUND ELECTRIC LINE AND BACKFILL TRENCH AS SPECIFIED ON THE TRENCH DETAIL, FOR THE LOCATIONS WHICH PAVEMENT CROSSES OVER THE EXISTING UNDERGROUND ELECTRIC LINE. PROTECT THE UNDERGROUND ELECTRIC LINE DURING CONSTRUCTION.
10. EXCAVATE TO EXISTING UNDERGROUND TELCO LINE AND BACKFILL TRENCH AS SPECIFIED ON THE TRENCH DETAIL, FOR THE LOCATIONS WHICH PAVEMENT CROSSES OVER THE EXISTING UNDERGROUND TELCO LINE. PROTECT THE UNDERGROUND TELCO LINE DURING CONSTRUCTION.
11. EXCAVATE TO EXISTING GAS SERVICE AND BACKFILL TRENCH AS SPECIFIED ON THE TRENCH DETAIL, FOR THE LOCATIONS WHICH PAVEMENT CROSSES OVER THE EXISTING GAS SERVICE. PROTECT THE GAS SERVICE DURING CONSTRUCTION.
12. NEW ELECTRICAL EQUIPMENT. (SEE SITE ELECTRICAL PLANS FOR DETAILS)
13. NEW UNDERGROUND ELECTRIC LINE, 153 L.F.
14. NEW AREA LIGHT. (SEE SITE LIGHTING AND ELECTRICAL PLANS FOR DETAILS)

## SANITARY

1. EXISTING SANITARY STRUCTURE TO REMAIN.
2. EXISTING SANITARY SEWER TO REMAIN.
3. EXISTING CLEANOUT TO REMAIN.
4. CONTRACTOR SHALL TRACE SANITARY SEWER PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS.
5. EXISTING SANITARY STRUCTURE TO REMAIN. CORE DRILL AND CONNECT NEW PIPE WITH ALL FITTINGS REQUIRED.
6. EXISTING SANITARY SEWER PER AS-BUILT DOCUMENTS TO REMAIN.
7. NEW 6" PVC SDR 26, 152 L.F. @ 1.00% SLOPE.
8. NEW 48" DIA. PRECAST CONCRETE MANHOLE WITH SOLID LID. CONNECT EXISTING SANITARY SEWERS WITH ALL FITTINGS REQUIRED.
9. EXCAVATE TO EXISTING SANITARY SEWER AND BACKFILL TRENCH AS SPECIFIED ON THE TRENCH DETAIL, FOR THE LOCATIONS WHICH PAVEMENT CROSSES OVER THE EXISTING SANITARY SEWER. PROTECT THE SANITARY SEWER DURING CONSTRUCTION.
10. NEW 6" PVC SDR 26, 17 L.F. @ MIN. 1.00% SLOPE.
11. NEW BUILDING CONNECTION WITH ALL FITTINGS REQUIRED. SEE PLUMBING PLANS FOR CONTINUATION.
12. EXISTING SANITARY STRUCTURE TO REMAIN. CORE DRILL AND CONNECT NEW PIPE WITH ALL FITTINGS REQUIRED.
13. NEW 6" PVC C900, 174 L.F. @ 1.00% SLOPE.
14. NEW 48" DIA. PRECAST CONCRETE MANHOLE WITH SOLID LID.
15. NEW 6" PVC SDR 26, 42 L.F. @ 4.83% SLOPE.
16. EXISTING SANITARY STRUCTURE TO REMAIN. ADJUST FRAME TO MEET FINISHED GRADE. CORE DRILL AND CONNECT NEW PIPE WITH ALL FITTINGS REQUIRED.
17. NEW 6" PVC SDR 26, 18 L.F. @ MIN. 1.00% SLOPE.
18. NEW BUILDING CONNECTION WITH ALL FITTINGS REQUIRED. SEE PLUMBING PLANS FOR CONTINUATION.
19. EXISTING SANITARY SEWER TO REMAIN. CONTRACTOR SHALL REPAIR ANY DAMAGE SUSTAINED TO CAP DURING CONSTRUCTION.

## STORM SEWER

1. EXISTING STORM SEWER TO REMAIN.
2. EXISTING STORM STRUCTURE TO REMAIN.
3. EXISTING DOWNSPOUT TO REMAIN.
4. CONTRACTOR SHALL TRACE STORM SEWER PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS.
5. EXISTING STORM STRUCTURE TO REMAIN. ADJUST FRAME TO MEET NEW FINISHED GRADE.
6. EXISTING STORM STRUCTURE TO REMAIN. ADJUST FRAME TO MEET NEW FINISHED GRADE. CORE DRILL AND CONNECT NEW STORM SEWER WITH ALL FITTINGS REQUIRED.
7. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN WITH CLOSED LID AND HOOD. CONNECT EXISTING STORM SEWERS WITH ALL FITTINGS REQUIRED.
8. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN WITH RESTRICTOR. CONNECT EXISTING STORM SEWER TO CATCH BASIN WITH ALL FITTINGS REQUIRED.
9. NEW 12" RCP, 40 L.F. @ 0.25% SLOPE.
10. NEW 12" FLARED END SECTION WITH TRASH GRATE.
11. NEW 12" FLARED END SECTION WITH TRASH GRATE.
12. NEW 12" PVC SDR 26, 10 L.F. @ 1.00% SLOPE.
13. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN WITH CLOSED LID.
14. NEW 12" PVC SDR 26, 74 L.F. @ 0.68% SLOPE.
15. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN WITH CLOSED LID.
16. NEW 12" CLASS 52 PVC, 100 L.F. @ 0.90% SLOPE.
17. NEW GRAVEL INFILTRATION TRENCH.
18. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN WITH CLOSED LID.
19. NEW 4" PERFORATED PVC SDR 26, 70 L.F. @ 0.00% SLOPE.
20. NEW MONITORING WELL.
21. NEW 12" DIP, 20 L.F. @ 1.25% SLOPE.
22. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN WITH PVC OVERFLOW STANDPIPE AND CLOSED LID.
23. NEW 12" PERFORATED PVC SDR 26, 70 L.F. @ 0.00% SLOPE.
24. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN WITH CLOSED LID.
25. NEW 24" PVC C900, 35 L.F. @ 0.29% SLOPE.
26. NEW 48" DIA. PRECAST CONCRETE MANHOLE WITH CLOSED LID.
27. NEW 12" RCP, 23 L.F. @ 1.30% SLOPE.
28. NEW 24" DIA. PRECAST CONCRETE INLET.
29. NEW 21" RCP, 55 L.F. @ 0.36% SLOPE.
30. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.
31. NEW 12" PVC C900, 49 L.F. @ 1.02% SLOPE.
32. NEW 24" DIA. PRECAST CONCRETE INLET.
33. NEW 12" PVC C900, 47 L.F. @ 1.06% SLOPE.
34. NEW 24" DIA. PRECAST CONCRETE INLET.
35. NEW 21" PVC SDR 26, 6 L.F. @ 1.00% MIN. SLOPE. CONTRACTOR SHALL CONNECT NEW STORM SEWER TO EXISTING STORM SEWER WITH ALL FITTINGS REQUIRED.
36. NEW 12" PVC C900, 44 L.F. @ 1.02% SLOPE.
37. NEW 24" DIA. PRECAST CONCRETE INLET.
38. NEW 12" RCP, 32 L.F. @ 0.78% SLOPE.
39. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.
40. NEW 12" RCP, 58 L.F. @ 1.40% SLOPE.
41. NEW 24" DIA. PRECAST CONCRETE INLET.
42. NEW 21" RCP, 100 L.F. @ 0.40% SLOPE.
43. NEW 12" RCP, 36 L.F. @ 1.11% SLOPE.
44. NEW 24" DIA. PRECAST CONCRETE INLET.
45. NEW 24" DIA. PRECAST CONCRETE INLET.
46. NEW 12" RCP, 18 L.F. @ 1.11% SLOPE.
47. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.

## STORM SEWER

48. NEW 18" RCP, 50 L.F. @ 0.50% SLOPE.
49. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.
50. NEW 18" RCP, 56 L.F. @ 0.63% SLOPE.
51. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.
52. NEW 12" RCP, 59 L.F. @ 1.03% SLOPE.
53. NEW 24" DIA. PRECAST CONCRETE INLET.
54. NEW 4" PVC SDR 26, 12 L.F. @ 2.58% SLOPE.
55. NEW BUILDING CONNECTION WITH ALL FITTINGS REQUIRED. SEE PLUMBING PLANS FOR DETAILS.
56. NEW 18" PVC C900, 43 L.F. @ 0.70% SLOPE.
57. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.
58. NEW 12" PVC C900, 61 L.F. @ 0.90% SLOPE.
59. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.
60. NEW 12" RCP, 60 L.F. @ 0.75% SLOPE.
61. NEW 24" DIA. PRECAST CONCRETE INLET.
62. NEW 6" PVC SDR 26, 5 L.F. @ 2.00% SLOPE.
63. NEW 24" DIA. PRECAST CONCRETE INLET. CONNECT EXISTING STORM SEWER TO INLET WITH ALL FITTINGS REQUIRED.
64. NEW 15" RCP, 50 L.F. @ 0.90% SLOPE.
65. NEW 24" DIA. PRECAST CONCRETE INLET.
66. NEW 8" PVC SDR 26, 166 L.F. @ 0.91% SLOPE. CONTRACTOR SHALL CONNECT NEW STORM SEWER TO EXISTING STORM SEWER WITH ALL FITTINGS REQUIRED.
67. NEW 12" PVC C900, 53 L.F. @ 0.94% SLOPE.
68. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.
69. NEW 12" RCP, 34 L.F. @ 0.51% SLOPE.
70. NEW 24" DIA. PRECAST CONCRETE INLET.
71. NEW 12" PVC C900, 34 L.F. @ 0.44% SLOPE.
72. NEW 24" DIA. PRECAST CONCRETE INLET.
73. EXISTING TREE TO REMAIN. CONTRACTOR SHALL CLEAN OUT DRYWELL DURING CONSTRUCTION.
74. EXCAVATE TO EXISTING STORM SEWER AND BACKFILL TRENCH AS SPECIFIED ON THE TRENCH DETAIL, FOR THE LOCATIONS WHICH PAVEMENT CROSSES OVER THE EXISTING STORM SEWER. PROTECT THE STORM SEWER DURING CONSTRUCTION.
75. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN. CONNECT EXISTING STORM SEWER TO CATCH BASIN WITH ALL FITTINGS REQUIRED.
76. NEW 18" RCP, 77 L.F. @ XX% SLOPE.
77. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
78. NEW 12" RCP, 12 L.F. @ XX% SLOPE.
79. NEW 12" FLARED END SECTION.
80. NEW 15" RCP, 72 L.F. @ XX% SLOPE.
81. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
82. NEW 12" RCP, 12 L.F. @ XX% SLOPE.
83. NEW 12" FLARED END SECTION.
84. NEW 48" DIA. PRECAST CONCRETE MANHOLE WITH SOLID LID.
85. NEW 8" PVC SDR 26, 24 L.F. @ MINIMUM 1.00% SLOPE. CONTRACTOR TO VERIFY EXISTING INVERT AT FACE OF BUILDING.
86. NEW BUILDING CONNECTION. SEE PLUMBING PLANS FOR CONTINUATION.
87. NEW 8" PVC SDR 26, 45 L.F. @ 0.91% SLOPE. MAKE CONNECTION TO EXISTING SEWER WITH ALL FITTINGS REQUIRED.
88. NEW 8" PVC SDR 26 WYE CONNECTION.
89. NEW 8" PVC SDR 26, 34 L.F. @ 3.21% SLOPE.
90. NEW 24" DIA. PRECAST CONCRETE INLET.
91. NEW 8" PVC SDR 26, 50 L.F. @ 2.00% SLOPE.
92. NEW 24" DIA. PRECAST CONCRETE INLET.
93. NEW 8" PVC SDR 26, 22 L.F. @ 2.05% SLOPE.
94. NEW 24" DIA. PRECAST CONCRETE INLET WITH BEEHIVE GRATE.
95. NEW 48" DIA. PRECAST CONCRETE MANHOLE WITH SOLID LID.
96. NEW 21" RCP, 66 L.F. @ 0.38% SLOPE.

## WATER

GENERAL WATER NOTES:
- ALL FITTINGS SHALL HAVE MECHANICAL JOINTS RESTRAINED BY MEGALUG GLANDS.
- CONTRACTOR SHALL COORDINATE WATER TAPS WITH THE VILLAGE PUBLIC WORKS DEPARTMENT PRIOR TO CONSTRUCTION.

1. EXISTING FIRE HYDRANT TO REMAIN.
2. EXISTING WALL HYDRANT TO REMAIN.
3. EXISTING VALVE VAULT TO REMAIN.
4. EXISTING WATER SERVICE TO REMAIN.
5. EXISTING WATER MAIN TO REMAIN.
6. EXISTING VALVE VAULT TO REMAIN. ADJUST FRAME TO MEET NEW FINISHED GRADE.
7. EXISTING VALVE VAULT TO REMAIN. ADJUST FRAME TO MEET NEW FINISHED GRADE.
8. EXISTING VALVE VAULT TO REMAIN. ADJUST FRAME TO MEET NEW FINISHED GRADE.
9. CONTRACTOR SHALL TRACE WATER SERVICE/WATER MAIN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS.
10. EXCAVATE TO EXISTING WATER SERVICE/WATER MAIN AND BACKFILL TRENCH AS SPECIFIED ON THE TRENCH DETAIL, FOR THE LOCATIONS WHICH PAVEMENT CROSSES OVER THE EXISTING WATER SERVICE/WATER MAIN. PROTECT THE WATER SERVICE/WATER MAIN DURING CONSTRUCTION.

NORTH
1" = 20'
00 10 20 40 80

W-T JOB NUMBER-C2500035


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Structural | Mechanical/Electrical/Plumbing
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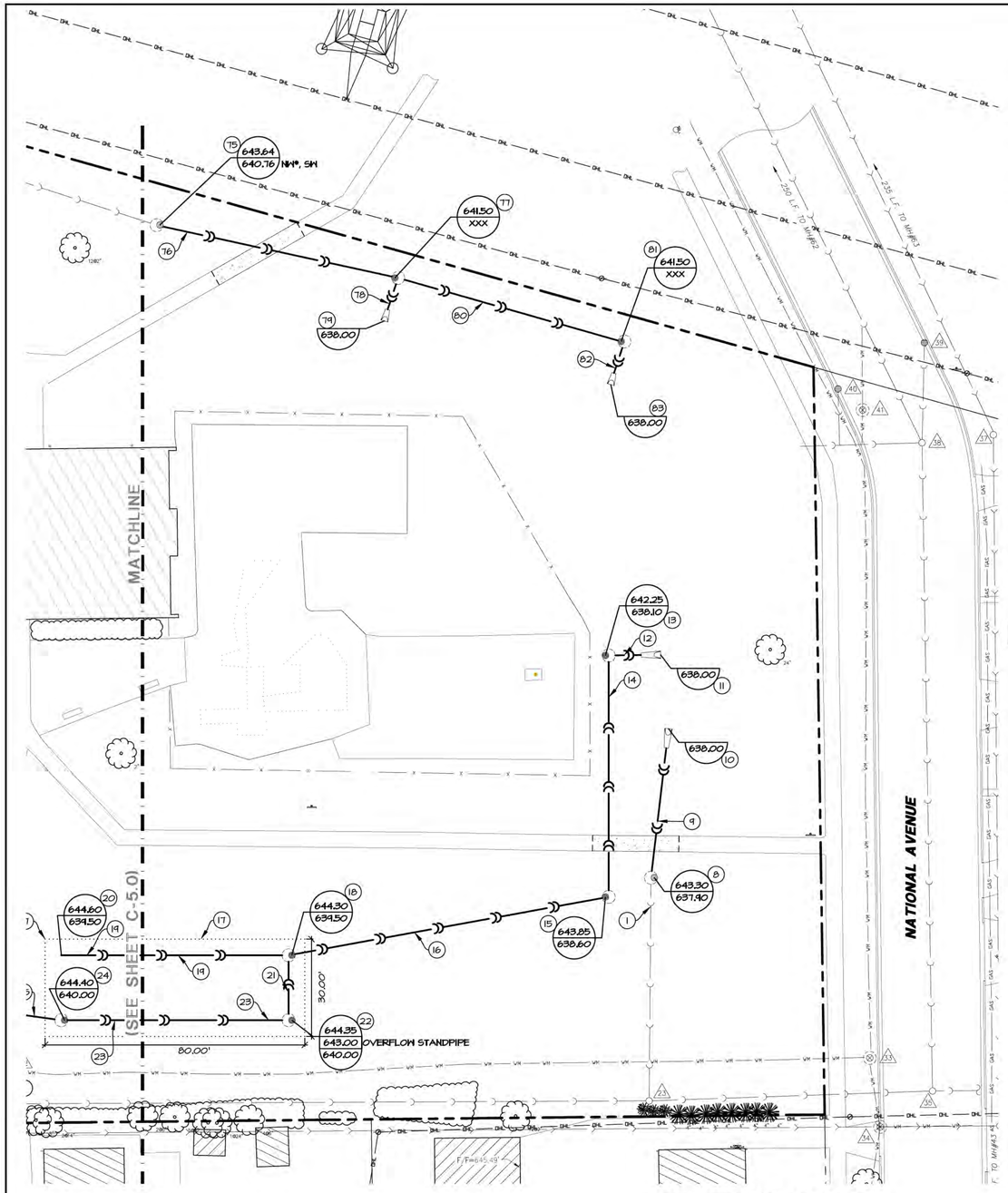

# HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

| DATE | MARK |
|---|---|

50% CD NOT FOR CONSTRUCTION

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: SITE UTILITY PLAN
SHEET: C-5.0




## UTILITY LEGEND

- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATER MAIN
- EXISTING WATER SERVICE
- EXISTING GAS LINE
- EXISTING OVERHEAD LINES
- EXISTING UNDERGROUND ELECTRIC LINE
- PROPOSED UNDERGROUND ELECTRIC LINE
- EXISTING UNDERGROUND TELCO LINE
- 000.00 / 000.00 — PROPOSED RIM ELEVATION / PROPOSED INVERT ELEVATION
- FF — FINISHED FLOOR ELEVATION
- ADJUST — ADJUST EXISTING RIM ELEVATION
- VIF — VERIFY IN FIELD
- EXISTING CLOSED MANHOLE
- EXISTING OPEN GRATE MANHOLE
- EXISTING BEEHIVE GRATE MANHOLE
- EXISTING CURB INLET
- EXISTING FIRE HYDRANT
- EXISTING VALVE VAULT
- EXISTING B-BOX
- PROPOSED INLET
- PROPOSED OPEN LID CATCH BASIN
- PROPOSED CLOSED LID MANHOLE
- PROPOSED NYLOPLAST DRAIN BASIN
- PROPOSED INLET WITH SOLID LID
- PROPOSED TRENCH BACKFILL ABOVE EXISTING UTILITY

## WATER

GENERAL WATER NOTES:
- ALL FITTINGS SHALL HAVE MECHANICAL JOINTS RESTRAINED BY MEGALUG GLANDS.
- CONTRACTOR SHALL COORDINATE WATER TAPS WITH THE VILLAGE PUBLIC WORKS DEPARTMENT PRIOR TO CONSTRUCTION.

1. EXISTING FIRE HYDRANT TO REMAIN.
2. EXISTING WALL HYDRANT TO REMAIN.
3. EXISTING VALVE VAULT TO REMAIN.
4. EXISTING WATER SERVICE TO REMAIN.
5. EXISTING WATER MAIN TO REMAIN.
6. EXISTING VALVE VAULT TO REMAIN. ADJUST FRAME TO MEET NEW FINISHED GRADE.
7. EXISTING VALVE VAULT TO REMAIN. ADJUST FRAME TO MEET NEW FINISHED GRADE.
8. EXISTING VALVE VAULT TO REMAIN. ADJUST FRAME TO MEET NEW FINISHED GRADE.
9. CONTRACTOR SHALL TRACE WATER SERVICE/WATER MAIN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS.
10. EXCAVATE TO EXISTING WATER SERVICE/WATER MAIN AND BACKFILL TRENCH AS SPECIFIED ON THE TRENCH DETAIL, FOR THE LOCATIONS WHICH PAVEMENT CROSSES OVER THE EXISTING WATER SERVICE/WATER MAIN. PROTECT THE WATER SERVICE/WATER MAIN DURING CONSTRUCTION.

## STORM SEWER

1. EXISTING STORM SEWER TO REMAIN.
2. EXISTING STORM STRUCTURE TO REMAIN.
3. EXISTING DOWNSPOUT TO REMAIN.
4. CONTRACTOR SHALL TRACE STORM SEWER PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS.
5. EXISTING STORM STRUCTURE TO REMAIN. ADJUST FRAME TO MEET NEW FINISHED GRADE.
6. EXISTING STORM STRUCTURE TO REMAIN. ADJUST FRAME TO MEET NEW FINISHED GRADE.
7. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN WITH CLOSED LID AND HOOD. CONNECT EXISTING STORM SEWERS WITH ALL FITTINGS REQUIRED.
8. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN WITH RESTRICTOR. CONNECT EXISTING STORM SEWER TO CATCH BASIN WITH ALL FITTINGS REQUIRED.
9. NEW 12" RCP, 40 L.F. @ 0.25% SLOPE.
10. NEW 12" FLARED END SECTION WITH TRASH GRATE.
11. NEW 12" FLARED END SECTION WITH TRASH GRATE.
12. NEW 12" PVC SDR 26, 10 L.F. @ 1.00% SLOPE.
13. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN WITH CLOSED LID.
14. NEW 12" PVC SDR 26, 74 L.F. @ 0.68% SLOPE.
15. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN WITH CLOSED LID.
16. NEW 12" CLASS 52 PVC, 100 L.F. @ 0.90% SLOPE.
17. NEW GRAVEL INFILTRATION TRENCH.
18. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN WITH CLOSED LID.
19. NEW 4" PERFORATED PVC SDR 26, 70 L.F. @ 0.00% SLOPE.
20. NEW MONITORING WELL.
21. NEW 12" DIP, 20 L.F. @ 2.50% SLOPE.
22. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN WITH PVC OVERFLOW STANDPIPE AND CLOSED LID.
23. NEW 12" PERFORATED PVC SDR 26, 70 L.F. @ 0.00% SLOPE.
24. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN WITH CLOSED LID.
25. NEW 24" RCP, 66 L.F. @ 0.23% SLOPE.
26. NEW 48" DIA. PRECAST CONCRETE MANHOLE WITH CLOSED LID.
27. NEW 12" RCP, 21 L.F. @ 0.24% SLOPE.
28. NEW 24" DIA. PRECAST CONCRETE INLET.
29. NEW 18" RCP, 26 L.F. @ 1.19% SLOPE.
30. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.
31. NEW 12" RCP, 42 L.F. @ 0.48% SLOPE.
32. NEW 24" DIA. PRECAST CONCRETE INLET.
33. NEW 12" RCP, 41 L.F. @ 0.53% SLOPE.
34. NEW 24" DIA. PRECAST CONCRETE INLET WITH SOLID LID.
35. NEW 2" PVC SDR 26, 6 L.F. @ 1.00% MIN. SLOPE. CONTRACTOR SHALL CONNECT NEW STORM SEWER TO EXISTING STORM SEWER WITH ALL FITTINGS REQUIRED.
36. NEW 12" RCP, 44 L.F. @ 0.61% SLOPE.
37. NEW 24" DIA. PRECAST CONCRETE INLET.
38. NEW 12" RCP, 42 L.F. @ 0.48% SLOPE.
39. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.
40. NEW 12" RCP, 52 L.F. @ 0.48% SLOPE.
41. NEW 24" DIA. PRECAST CONCRETE INLET.
42. NEW 12" RCP, 45 L.F. @ 0.44% SLOPE.
43. NEW 24" DIA. PRECAST CONCRETE INLET.
44. NEW 12" RCP, 45 L.F. @ 0.21% SLOPE.
45. NEW 24" DIA. PRECAST CONCRETE INLET.
46. NEW 18" RCP, 161 L.F. @ 0.51% SLOPE.
47. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.
48. NEW 18" RCP, 58 L.F. @ 0.34% SLOPE.
49. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.
50. NEW 12" RCP, 66 L.F. @ 0.45% SLOPE.
51. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.
52. NEW 12" RCP, 34 L.F. @ 0.44% SLOPE.
53. NEW 24" DIA. PRECAST CONCRETE INLET.
54. NEW 6" PVC SDR 26, 12 L.F. @ 1.00% SLOPE.
55. NEW BUILDING CONNECTION WITH ALL FITTINGS REQUIRED. SEE PLUMBING PLANS FOR DETAILS.
56. NEW 18" RCP, 64 L.F. @ 0.31% SLOPE.
57. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.
58. NEW 12" RCP, 60 L.F. @ 0.44% SLOPE.
59. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.
60. NEW 12" RCP, 36 L.F. @ 0.56% SLOPE.
61. NEW 24" DIA. PRECAST CONCRETE INLET.
62. NEW 6" PVC SDR 26, 5 L.F. @ XX% SLOPE.
63. NEW 24" DIA. PRECAST CONCRETE INLET. CONNECT EXISTING STORM SEWER TO INLET WITH ALL FITTINGS REQUIRED.
64. NEW 12" RCP, 52 L.F. @ 1.06% SLOPE.
65. NEW 24" DIA. PRECAST CONCRETE INLET.
66. NEW 6" PVC SDR 26, 211 L.F. @ XXX% SLOPE. CONTRACTOR SHALL CONNECT NEW STORM SEWER TO EXISTING STORM SEWER WITH ALL FITTINGS REQUIRED.
67. NEW 12" RCP, 60 L.F. @ 1.08% SLOPE.
68. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.
69. NEW 12" RCP, 46 L.F. @ 0.43% SLOPE.
70. NEW 24" DIA. PRECAST CONCRETE INLET.
71. NEW 12" RCP, 34 L.F. @ 0.15% SLOPE.
72. NEW 24" DIA. PRECAST CONCRETE INLET.
73. EXISTING DRYWELL TO REMAIN. CONTRACTOR SHALL CLEAN OUT DRYWELL DURING CONSTRUCTION.
74. EXCAVATE TO EXISTING STORM SEWER AND BACKFILL TRENCH AS SPECIFIED ON THE TRENCH DETAIL, FOR THE LOCATIONS WHICH PAVEMENT CROSSES OVER THE EXISTING STORM SEWER. PROTECT THE STORM SEWER DURING CONSTRUCTION.
75. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN. CONNECT EXISTING STORM SEWER TO CATCH BASIN WITH ALL FITTINGS REQUIRED.
76. NEW 15" RCP, 77 L.F. @ XX% SLOPE.
77. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
78. NEW 12" RCP, 12 L.F. @ XX% SLOPE.
79. NEW 12" FLARED END SECTION.
80. NEW 15" RCP, 72 L.F. @ XX% SLOPE.
81. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
82. NEW 12" RCP, 12 L.F. @ XX% SLOPE.
83. NEW 12" FLARED END SECTION.

## SITE UTILITY NOTES:

A. CONTRACTOR SHALL CONTACT J.U.L.I.E. (811 OR 1-800-892-0123) AND PRIVATE LOCATING SERVICE TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO STARTING ANY DEMOLITION AND/OR EXCAVATION. EXACT LOCATIONS OF ANY EXISTING ELECTRIC, GAS, TELEPHONE, ETC. LINES ARE UNKNOWN.
B. CONTRACTOR TO UTILIZE CARE WHEN WORKING NEAR EXISTING UTILITIES TO REMAIN. ANY DAMAGE TO EXISTING UTILITIES NOT NOTED TO BE REMOVED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
C. CONTRACTOR SHALL EXCAVATE AND VERIFY IN FIELD ALL EXISTING UTILITY LOCATIONS, SIZES, CONDITIONS AND ELEVATIONS AT PROPOSED POINTS OF CONNECTION PRIOR TO ANY UNDERGROUND CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO PROCEEDING WITH CONSTRUCTION.
D. REFER TO THE GENERAL NOTES AND SPECIFICATION SHEETS FOR ALL PIPE MATERIAL AND JOINT SPECIFICATIONS.
E. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS TO ORIGINAL CONDITION OR BETTER.
F. CONTRACTOR SHALL VERIFY IN FIELD EXACT SIZE, MATERIAL, INVERT, PIPE ROUTING, AND SLOPE OF ALL EXISTING UTILITIES AND NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO CONSTRUCTION.
G. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF UTILITY TRENCHES DURING CONSTRUCTION AND SHALL PROVIDE TEMPORARY SHORING AND BRACING AS NECESSARY TO MAINTAIN STABILITY UNTIL CONSTRUCTION OF THE UTILITY IS COMPLETE IN ORDER TO MEET OSHA AND LOCAL CODES, AS WELL AS MANUFACTURER'S REQUIREMENTS.
H. ALL RCP STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE, CLASS IV, PER ASTM C-76 WITH FLEXIBLE (O-RING) GASKET JOINTS IN CONFORMANCE WITH ASTM C-443 AND SECTION 31-1.08 OF THE "STANDARD SPECIFICATIONS".
I. TRENCH BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR DENSITY (ASTM D-1557) OVER ALL UNDERGROUND UTILITIES WHICH ARE CONSTRUCTED UNDER OR WITHIN 2 FEET OF ANY PROPOSED OR EXISTING PAVEMENT OR SIDEWALKS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
J. ADJUST RIM ELEVATIONS OF EXISTING STRUCTURES IN PAVEMENT AS NECESSARY TO MEET PROPOSED FINISHED GRADE.
K. CONTRACTOR TO COORDINATE ALL CONNECTIONS TO CITY UTILITIES AND STORM SEWERS WITH THE PUBLIC WORKS DEPARTMENT.
L. CONTRACTOR TO USE CAUTION WHEN EXCAVATING AT EXISTING UTILITY LINES.
M. ALL STORM MANHOLES SHALL HAVE OPEN LIDS UNLESS OTHERWISE SPECIFIED.
N. PROVIDE RUBBER MISSION COUPLING OR SIMILAR CONNECTION BETWEEN PIPES OF DISSIMILAR SIZE OR MATERIAL.
O. ALL EXISTING UTILITIES TO BE ABANDONED IN PLACE SHALL BE CAPPED WITH 2' LONG (MIN.) NON-SHRINK CONCRETE MORTAR PLUGS AT BOTH ENDS.

## MISC. UTILITY

1. EXISTING UTILITY POLE TO REMAIN.
2. EXISTING OVERHEAD LINES TO REMAIN.
3. EXISTING UNDERGROUND ELECTRIC LINE TO REMAIN.
4. EXISTING EXISTING UNDERGROUND TELCO LINE TO REMAIN.
5. EXISTING GAS METER TO REMAIN.
6. EXISTING GAS SERVICE TO REMAIN.
7. CONTRACTOR SHALL TRACE UNDERGROUND ELECTRIC LINE PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS.
8. NEW HANDHOLE. CONTRACTOR SHALL CONNECT EXISTING TELCO LINE TO HANDHOLE WITH ALL FITTINGS REQUIRED. (SEE ELECTRICAL PLANS FOR DETAILS)
9. EXCAVATE TO EXISTING UNDERGROUND ELECTRIC LINE AND BACKFILL TRENCH AS SPECIFIED ON THE TRENCH DETAIL, FOR THE LOCATIONS WHICH PAVEMENT CROSSES OVER THE EXISTING UNDERGROUND ELECTRIC LINE. PROTECT THE UNDERGROUND ELECTRIC LINE DURING CONSTRUCTION.
10. EXCAVATE TO EXISTING UNDERGROUND TELCO LINE AND BACKFILL TRENCH AS SPECIFIED ON THE TRENCH DETAIL, FOR THE LOCATIONS WHICH PAVEMENT CROSSES OVER THE EXISTING UNDERGROUND TELCO LINE. PROTECT THE UNDERGROUND TELCO LINE DURING CONSTRUCTION.
11. EXCAVATE TO EXISTING GAS SERVICE AND BACKFILL TRENCH AS SPECIFIED ON THE TRENCH DETAIL, FOR THE LOCATIONS WHICH PAVEMENT CROSSES OVER THE EXISTING GAS SERVICE. PROTECT THE GAS SERVICE DURING CONSTRUCTION.
12. NEW ELECTRICAL EQUIPMENT. (SEE SITE ELECTRICAL PLANS FOR DETAILS)
13. NEW UNDERGROUND ELECTRIC LINE, 206 L.F.
14. NEW AREA LIGHT. (SEE SITE LIGHTING AND ELECTRICAL PLANS FOR DETAILS)

## SANITARY

1. EXISTING SANITARY STRUCTURE TO REMAIN.
2. EXISTING SANITARY SEWER TO REMAIN.
3. EXISTING CLEANOUT TO REMAIN.
4. CONTRACTOR SHALL TRACE SANITARY SEWER PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS.
5. EXISTING SANITARY STRUCTURE TO REMAIN. CORE DRILL AND CONNECT NEW PIPE WITH ALL FITTINGS REQUIRED.
6. EXISTING SANITARY SEWER PER RECORD DOCUMENTS TO REMAIN.
7. NEW 6" PVC SDR 26, 152 L.F. @ 1.00% SLOPE.
8. NEW 48" DIA. PRECAST CONCRETE MANHOLE WITH SOLID LID. CONNECT EXISTING SANITARY SEWERS WITH ALL FITTINGS REQUIRED.
9. EXISTING CLEANOUT TO REMAIN. ADJUST FRAME TO MEET FINISHED GRADE.
10. EXCAVATE TO EXISTING SANITARY SEWER AND BACKFILL TRENCH AS SPECIFIED ON THE TRENCH DETAIL, FOR THE LOCATIONS WHICH PAVEMENT CROSSES OVER THE EXISTING SANITARY SEWER. PROTECT THE SANITARY SEWER DURING CONSTRUCTION.
11. NEW 6" PVC SDR 26, 17 L.F. @ MIN. 1.00% SLOPE.
12. NEW BUILDING CONNECTION WITH ALL FITTINGS REQUIRED. SEE PLUMBING PLANS FOR CONTINUATION.
13. EXISTING SANITARY STRUCTURE TO REMAIN. CORE DRILL AND CONNECT NEW PIPE WITH ALL FITTINGS REQUIRED.
14. NEW 6" PVC C900, 174 L.F. @ 1.00% SLOPE.
15. NEW 48" DIA. PRECAST CONCRETE MANHOLE WITH SOLID LID.
16. NEW 6" PVC SDR 26, 42 L.F. @ 4.43% SLOPE.
17. EXISTING SANITARY STRUCTURE TO REMAIN. ADJUST FRAME TO MEET FINISHED GRADE. CORE DRILL AND CONNECT NEW PIPE WITH ALL FITTINGS REQUIRED.
18. NEW 6" PVC SDR 26, 18 L.F. @ MIN. 1.00% SLOPE.
19. NEW BUILDING CONNECTION WITH ALL FITTINGS REQUIRED. SEE PLUMBING PLANS FOR CONTINUATION.
20. EXISTING SANITARY SEWER TO REMAIN. CONTRACTOR SHALL REPAIR ANY DAMAGE SUSTAINED TO CAP DURING CONSTRUCTION.

## EXISTING UTILITY DATA

63 — RIM=643.89' (STORM)
72" METAL STRUCTURE
INV=635.79' (12" RCP N)
INV=630.40' (42" RCP E/W)

33 — RIM=643.90' (WATER)
48" CONCRETE STRUCTURE
FULL OF WATER
639.30' AT WATER LEVEL
637.57' AT TOP OF DIP E/W
SIZE UNKNOWN

34 — RIM=643.82' (WATER)
60" CONCRETE STRUCTURE
637.97' AT TOP OF 12" DIP N/S
637.97' AT TOP OF 8" DIP E

35 — RIM=644.39' (STORM)
RIM ON PIPE
INV=637.93' (15" RCP N)
INV=630.08' (42" RCP E/W)

37 — RIM=643.79' (SANITARY)
36" CONCRETE STRUCTURE
INV=635.55' (8" CLAY N/S)

38 — RIM=643.82' (STORM)
36" BLOCK STRUCTURE
INV=639.63' (8" CLAY N/W)
INV=638.50' (15" RCP S/NW)

39 — RIM=642.95' (STORM)
24" CONCRETE STRUCTURE
INV=640.17' (6" PVC S)

40 — RIM=643.03' (STORM)
48" CONCRETE STRUCTURE
INV=639.60' (8" RCP SW)

41 — RIM=643.53' (WATER)
48" CONCRETE STRUCTURE
638.75' AT TOP OF 12" DIP N/S

NORTH

1" = 20'
00 10 20 40 80

W-T JOB NUMBER-C2500035

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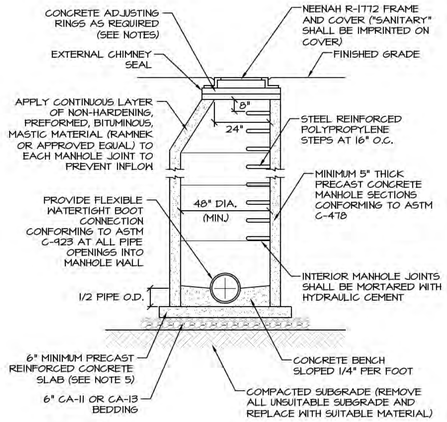
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# HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

| DATE | MARK |
|---|---|
| | 50% CD NOT FOR CONSTRUCTION |

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: SITE UTILITY PLAN
SHEET: C-5.1

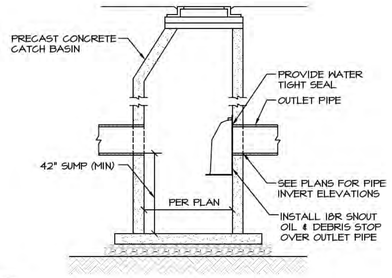



NOTES:

1. REINFORCED PRECAST CONCRETE CONE SECTION AND ADJUSTING RINGS SHALL CONFORM TO ASTM C-34 (COMPRESSIVE STRENGTH TEST).
2. MAXIMUM ALLOWABLE HEIGHT FOR CONCRETE ADJUSTING RINGS SHALL BE 8".
3. SANITARY MANHOLE FRAME AND ANY ADJUSTING RINGS SHALL HAVE AN EXTERNAL CHIMNEY SEAL (GRETEX OR APPROVED EQUAL).
4. WATERTIGHT BOOT CONFORMING TO ASTM C-923 SHALL BE PROVIDED AT ALL PIPE TO MANHOLE CONNECTIONS.
5. PRECAST REINFORCED MONOLITHIC CONCRETE MANHOLE BOTTOM WITH INTEGRAL SIDEWALLS CAN BE SUBSTITUTED IN PLACE OF THE CONCRETE BOTTOM SLAB DESIGN SHOWN.
6. MANHOLE BARREL SECTIONS SHALL BE TONGUE AND GROOVE TYPE.
7. SEE PLANS FOR MANHOLE DIAMETER SIZES, RIM ELEVATIONS AND PIPE INVERT ELEVATIONS AND LOCATIONS.

## DETAIL - SANITARY MANHOLE

NOT TO SCALE

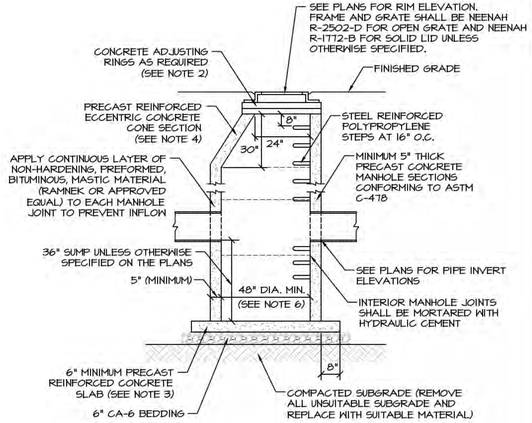



NOTES:

1. SEE "DETAIL - CATCH BASIN" FOR STRUCTURE INFORMATION.

## DETAIL - CATCH BASIN W/ SNOUT

NOT TO SCALE

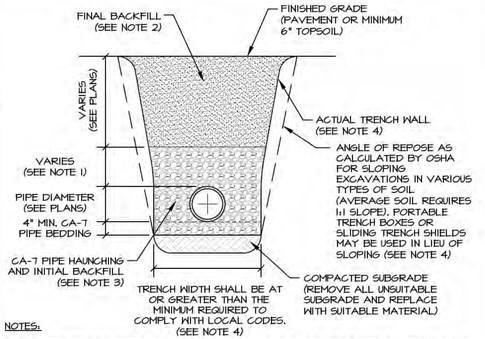



NOTES:

1. PRECAST REINFORCED CONCRETE CONE SECTION AND ADJUSTING RINGS SHALL CONFORM TO ASTM C-34 (COMPRESSIVE STRENGTH TEST).
2. MAXIMUM ALLOWABLE HEIGHT FOR CONCRETE ADJUSTING RINGS SHALL BE 8".
3. PRECAST REINFORCED MONOLITHIC CONCRETE MANHOLE BOTTOM WITH INTEGRAL SIDEWALLS CAN BE SUBSTITUTED IN PLACE OF THE CONCRETE BOTTOM SLAB DESIGN SHOWN.
4. FLAT-TOP SLABS SHALL BE PROVIDED FOR SHALLOW CATCH BASIN INSTALLATIONS ONLY AND SHALL BE DESIGNED FOR HS-20 TRAFFIC LOADING WHEN LOCATED IN PAVED AREAS.
5. MANHOLE BARREL SECTIONS SHALL BE TONGUE AND GROOVE TYPE.
6. MANHOLE WALL THICKNESSES AND CONE SECTION HEIGHT DIMENSIONS SHOWN ARE THE MINIMUM REQUIRED FOR 48" DIA. PRECAST REINFORCED CONCRETE STORM CATCH BASINS. DIMENSIONS FOR LARGER CATCH BASIN DIAMETERS SHALL BE IN ACCORDANCE WITH THE 'STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS,' LATEST EDITION.
7. SEE PLANS FOR CATCH BASIN DIAMETER SIZES, RIM ELEVATIONS AND PIPE INVERT ELEVATIONS AND LOCATIONS.

## DETAIL - CATCH BASIN

NOT TO SCALE

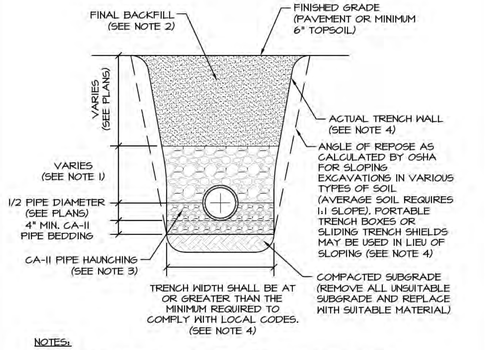



NOTES:

1. 12" MINIMUM CA-7 INITIAL BACKFILL REQUIRED FOR PIPES UP TO AND INCLUDING 48" IN DIAMETER. 18" MINIMUM CA-7 INITIAL BACKFILL REQUIRED FOR PIPES GREATER THAN 48" IN DIAMETER.
2. BACKFILL TRENCH WITH INORGANIC EXCAVATED MATERIAL EXCEPT WHERE UNDER OR WITHIN 2' OF PAVEMENT WHERE CA-7 GRANULAR MATERIAL IS REQUIRED. THE TOP 12" OF BACKFILL BENEATH PAVEMENT SHALL BE CA-6.
3. ALL BACKFILL MATERIALS SHALL BE PROPERLY COMPACTED ACCORDING TO THE "STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN ILLINOIS," SECTION 20-4.06.
4. ALL TRENCH EXCAVATIONS SHALL BE PROTECTED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS, LAWS AND RULES. AT A MINIMUM, THEY SHALL NOT BE LESS THAN THE STANDARDS AND REGULATIONS ESTABLISHED BY OSHA IN 29 CFR PART 1926.
5. ALL STORM SEWER AND WATER MAIN SHALL BE BACKFILLED WITH CA-7. ALL SANITARY SEWER TRENCHES SHALL BE BACKFILLED WITH CA-11 OR CA-13 IN LIEU OF CA-7.

## DETAIL - FLEXIBLE PIPE TRENCH

NOT TO SCALE

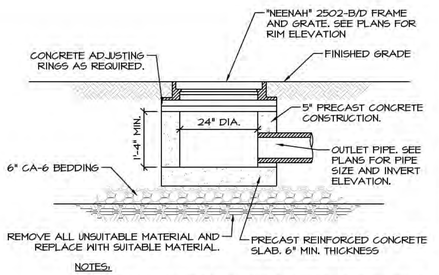



NOTES:

1. 12" MINIMUM CA-11 INITIAL BACKFILL REQUIRED OVER TOP OF PIPE.
2. BACKFILL TRENCH WITH INORGANIC EXCAVATED MATERIAL EXCEPT WHERE UNDER OR WITHIN 2' OF PAVEMENT WHERE CA-11 GRANULAR MATERIAL IS REQUIRED.
3. ALL BACKFILL MATERIALS SHALL BE PROPERLY COMPACTED ACCORDING TO THE "STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN ILLINOIS," SECTION 20-4.06.
4. ALL TRENCH EXCAVATIONS SHALL BE PROTECTED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS, LAWS AND RULES. AT A MINIMUM, THEY SHALL NOT BE LESS THAN THE STANDARDS AND REGULATIONS ESTABLISHED BY OSHA IN 29 CFR PART 1926.

## DETAIL - RIGID PIPE TRENCH

NOT TO SCALE

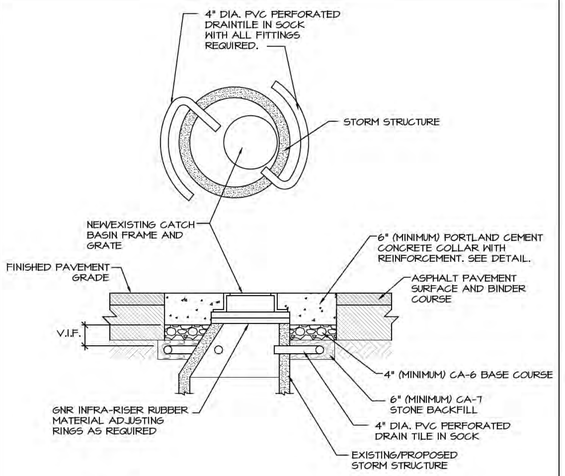



NOTES:

1. MAXIMUM ALLOWABLE HEIGHT FOR CONCRETE ADJUSTING RINGS SHALL BE 8".

## DETAIL - INLET

NOT TO SCALE

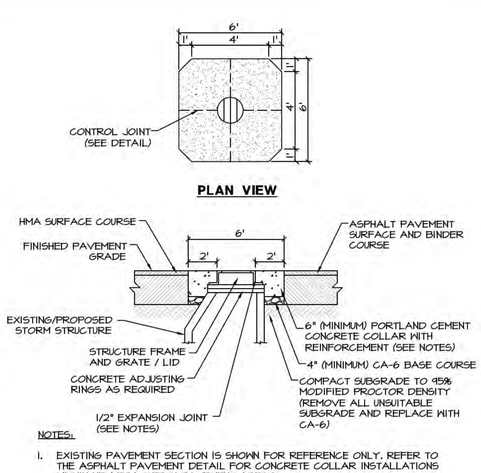



NOTES:

1. NEW PAVEMENT SECTION IS SHOWN FOR REFERENCE ONLY. REFER TO THE ASPHALT PAVEMENT DETAIL.
2. NEW 6" CA-7 STONE BACKFILL REQUIRED BELOW AGGREGATE BASE COURSE FOR 4" DIA. PERFORATED DRAINTILE IN SOCK THAT WRAPS AROUND STRUCTURE WITH ALL FITTINGS REQUIRED. APPROX. 14 L.F.
3. CONTRACTOR TO VERIFY INVERT OF NEW UNDERDRAIN ENTERING STRUCTURE PRIOR TO INSTALLATION.

## DETAIL - DRAINTILE FOR ALL STRUCTURES IN FULL DEPTH PAVEMENT SECTIONS

NOT TO SCALE

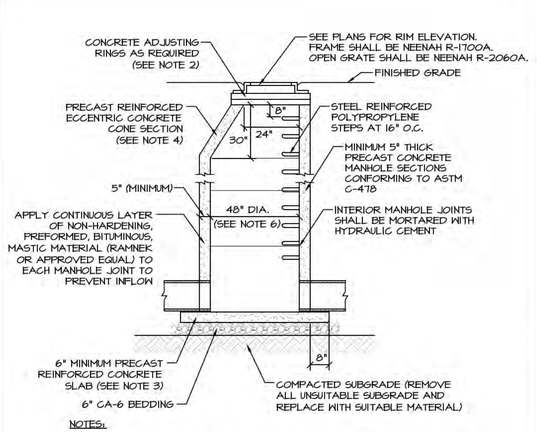



NOTES:

1. EXISTING PAVEMENT SECTION IS SHOWN FOR REFERENCE ONLY. REFER TO THE ASPHALT PAVEMENT DETAIL FOR CONCRETE COLLAR INSTALLATIONS WITHIN NEW FULL DEPTH PAVEMENT AREAS.
2. CONCRETE COLLAR SHALL EXTEND TO A MINIMUM OF 2" BELOW EXISTING OR NEW CONCRETE ADJUSTING RINGS.
3. PROVIDE CONTINUOUS 1/2" EXPANSION JOINT AND SEALANT BETWEEN STRUCTURE FRAME / ADJUSTING RINGS AND NEW CONCRETE COLLAR.
4. PROVIDE 6" X 6" - W2.9 X W2.9 WIRE MESH REINFORCEMENT. SUPPLY IN FLAT SHEETS AND PLACE AT MID-DEPTH OF CONCRETE.
5. EXISTING SUBGRADE BELOW NEW CONCRETE COLLAR SHALL BE KEPT FREE OF ALL UNSUITABLE MATERIALS AND SHALL BE COMPACTED TO NOT LESS THAN 95% OF THE MODIFIED PROCTOR DENSITY PRIOR TO INSTALLATION OF NEW AGGREGATE, CONCRETE AND HMA ASPHALT SURFACE COURSE LAYERS. COMPACTION TESTING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND ALL TEST RESULTS SHALL BE SUBMITTED TO THE OWNER AND ENGINEER.
6. PROVIDE 6'X6' CONCRETE COLLAR WITH 1' CHAMFERED CORNERS.

## DETAIL - STRUCTURE CONCRETE COLLAR

NOT TO SCALE




NOTES:

1. PRECAST REINFORCED CONCRETE CONE SECTION AND ADJUSTING RINGS SHALL CONFORM TO ASTM C-34 (COMPRESSIVE STRENGTH TEST).
2. MAXIMUM ALLOWABLE HEIGHT FOR CONCRETE ADJUSTING RINGS SHALL BE 8".
3. PRECAST REINFORCED MONOLITHIC CONCRETE MANHOLE BOTTOM WITH INTEGRAL SIDEWALLS CAN BE SUBSTITUTED IN PLACE OF THE CONCRETE BOTTOM SLAB DESIGN SHOWN.
4. FLAT-TOP SLABS SHALL BE PROVIDED FOR SHALLOW MANHOLE INSTALLATIONS ONLY AND SHALL BE DESIGNED FOR HS-20 TRAFFIC LOADING WHEN LOCATED IN PAVED AREAS.
5. MANHOLE BARREL SECTIONS SHALL BE TONGUE AND GROOVE TYPE.
6. MANHOLE WALL THICKNESSES AND CONE SECTION HEIGHT DIMENSIONS SHOWN ARE THE MINIMUM REQUIRED FOR 48" DIA. PRECAST REINFORCED CONCRETE STORM MANHOLES. DIMENSIONS FOR LARGER MANHOLE DIAMETERS SHALL BE IN ACCORDANCE WITH THE 'STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS,' LATEST EDITION.
7. SEE PLANS FOR MANHOLE DIAMETER SIZES, RIM ELEVATIONS AND PIPE INVERT ELEVATIONS AND LOCATIONS.

## DETAIL - STORM MANHOLE

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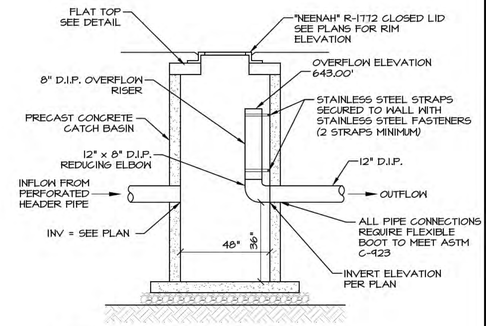
LEARNING TODAY... LEADING TOMORROW 67

| DATE | MARK |
|---|---|
| | 50% CD NOT FOR CONSTRUCTION |

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: SITE UTILITY DETAILS
SHEET: C-5.2

W-T JOB NUMBER-C2500035

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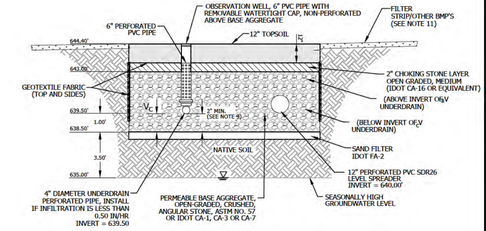



NOTES:

1. SEE "DETAIL - CATCH BASIN" FOR ADDITIONAL STRUCTURE INFORMATION.

**DETAIL - 48" DIA. PRECAST CONCRETE CATCH BASIN WITH OVERFLOW RISER (STORM STRUCTURE #22)**

NOT TO SCALE




| | | |
|---|---|---|
| BOTTOM OF THE FACILITY: | ELEV. | 638.50 |
| SEASONALLY HIGH GROUNDWATER: | ELEV. | 635.00 |
| SEPARATION: | FEET | 3.5 |

| VOLUME TYPE | SURFACE AREA | DEPTH | POROSITY | STORAGE VOLUME | VOLUME PROVIDED |
|---|---|---|---|---|---|
| ~~$V_A$ : FOA GRAVEL~~ | ——— | ——— | 0.25 | 0.50 X 0.25 X $V_A$ | ——— |
| $V_B$ : COARSE AGGREGATE (ABOVE INVERT) | 2400.0 | 3.50 | 0.36 | 0.50 X 0.36 X $V_B$ | 1512.0 |
| $V_C$ : COARSE AGGREGATE (BELOW INVERT) | 2400.0 | 1.00 | 0.36 | 0.36 X $V_C$ | 864.0 |
| | | | | TOTAL | 2376.0 |

NOTES:

1. THE PERIMETER OF THE VOLUME CONTROL FACILITY SHALL MAINTAIN THE MINIMUM HORIZONTAL SEPARATION DISTANCE OF: 10-FEET FROM FOUNDATIONS, UNLESS WATERPROOFED; 20-FEET FROM ROADWAY GRAVEL SHOULDER; AND 100-FEET FROM POTABLE WATER WELLS, SEPTIC TANKS/FIELDS, OR OTHER UNDERGROUND TANKS.
2. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED WITHIN THE VOLUME CONTROL FACILITY. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED BELOW THE FOOTPRINT OF THE VOLUME CONTROL FACILITY. WHEN LOCAL CONDITIONS PREVENT THE SEWER FROM BEING LOCATED OUTSIDE THE FOOTPRINT OF THE FACILITY THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN QUALITY STANDARDS, OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.
3. AVOID INSTALLATION ON SLOPES GREATER THAN 3.00%.
4. AVOID COMPACTING NATIVE SOILS. SCARIFY COMPACTED FILL.
5. GEOTEXTILE FABRIC SHALL MEET REQUIREMENTS OF IUM MATERIAL SPECIFICATION 592. FOR WOVEN: APPARENT OPENING SIZE OF 0.50 MM (TABLE 1, CLASS I). FOR NON WOVEN: APPARENT OPENING SIZE OF 0.30 MM (TABLE 2, CLASS II).
6. STONE STORAGE OPTIONS ARE IDOT CA-1, IDOT CA-7, DISTRICT VULCAN MIX, OR APPROVED ALTERNATE. NO RECYCLED MATERIALS.
7. MINIMUM DISTANCE OF 2 FEET (3.5 FEET IN COMBINED SEWER AREAS) BETWEEN BOTTOM OF BMP AND SEASONALLY HIGH GROUNDWATER LEVEL.
8. UNDERDRAINS ARE REQUIRED IN TYPICAL CLAYEY SOILS WHERE INFILTRATION RATES ARE LESS THAN 0.5 INCH/HOUR. MAXIMUM OF 1 UNDERDRAIN PER 30 FEET. PROVIDE A SOIL REPORT DOCUMENTING NATIVE INFILTRATION RATE TO FOREGO UNDERDRAINS.
9. MINIMUM UNDERDRAIN BEDDING OF TWO INCHES, MAXIMUM OF 12 INCHES.
10. ONE OBSERVATION WELL REQUIRED PER 6,000 SQUARE FEET OF SURFACE AREA.
11. FOLLOW THE REQUIRED PRETREATMENT MEASURES LISTED ON THE VOLUME CONTROL PRETREATMENT MEASURES DETAIL. NOT TO SCALE

| | |
|---|---|
| TECHNICAL GUIDANCE MANUAL | 10/4/18 |
| INFILTRATION TRENCH DETAIL | STD. DWG. NO.8 |
| | PAGE NO. 7 |

NOT TO SCALE

W-T JOB NUMBER-C2500035


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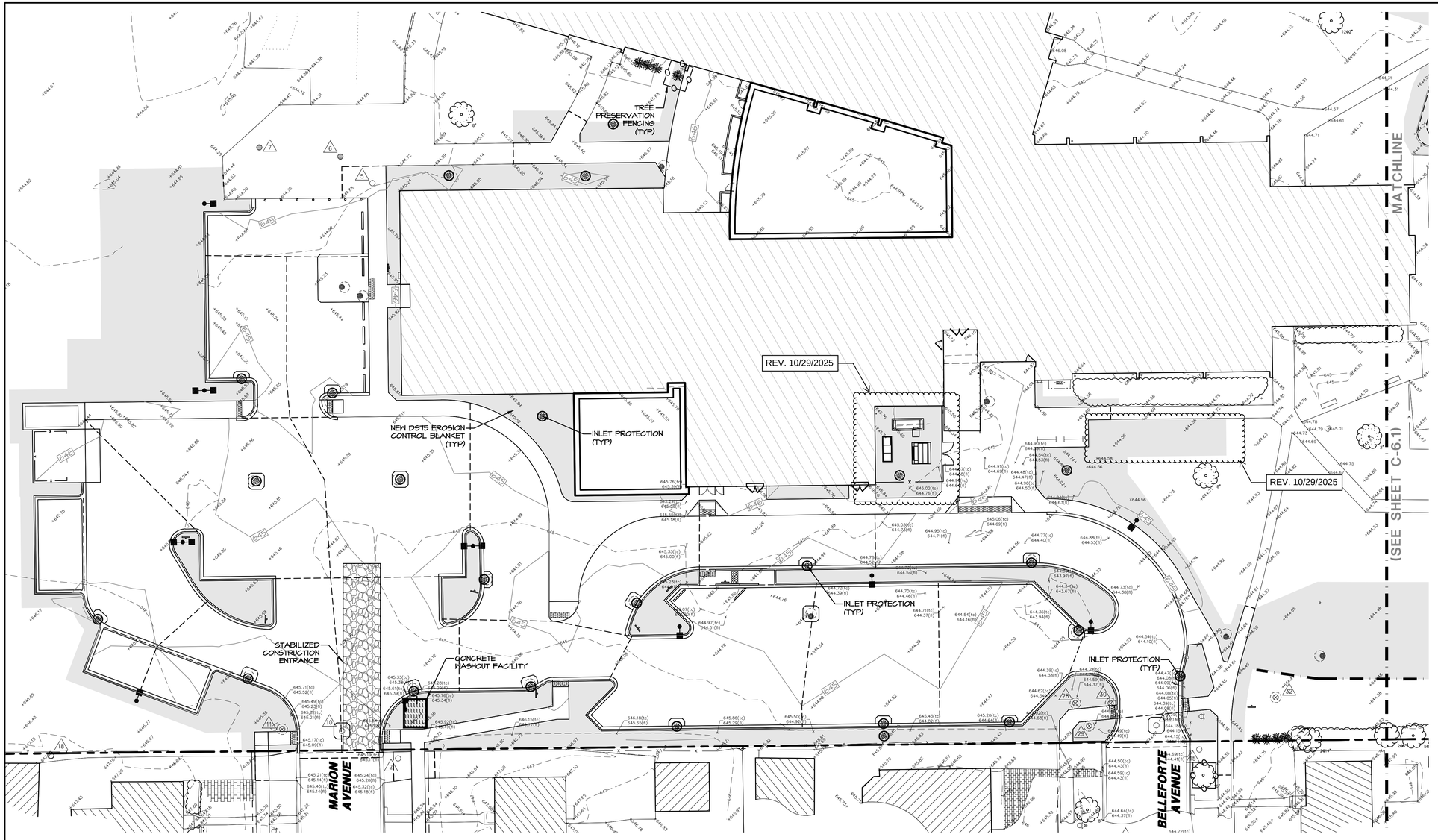
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| | |

50% CD NOT FOR CONSTRUCTION

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025

SHEET TITLE:
**SITE UTILITY DETAILS**

SHEET:
**C-5.3**




## SWPPP NOTES:

A. ALL DISTURBED GREEN SPACES ON THE SITE SHALL BE RESTORED ACCORDING TO THE SEED BED PREPARATION SPECIFICATIONS BELOW AND BLANKETED OR MATTED AS SHOWN ON THE PLANS.
B. TEMPORARY OR PERMANENT STABILIZATION SHALL OCCUR IMMEDIATELY WHENEVER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE. TEMPORARY STABILIZATION SHALL CONSIST OF THE INSTALLATION OF TEMPORARY SEEDING.
C. CONTRACTOR TO INSTALL TEMPORARY CONSTRUCTION ENTRANCES AS NECESSARY TO EXCAVATE AREAS AND HAUL SOILS ON-SITE. TRACKING OF DEBRIS ON SITE WILL NOT BE TOLERATED. ANY DEBRIS LEFT OUTSIDE OF THE PROJECT LIMITS MUST BE CLEANED IMMEDIATELY.
D. EROSION CONTROL BLANKETS AND TURF REINFORCEMENT MATS SHALL BE INSTALLED USING 6" BIO-STAKES AS MANUFACTURED BY NORTH AMERICAN GREEN. METAL STAKES AND STAPLES ARE PROHIBITED.
E. CONTRACTOR SHALL PROVIDE ALL NECESSARY MAINTENANCE FOR THE SEDIMENT AND EROSION CONTROL MEASURES FOR THE DURATION OF THE PROJECT.
F. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) INSPECTIONS, INSPECTION REPORTS, CORRECTIVE ACTION FORMS, SWPPP AMENDMENT LOGS, SUBCONTRACTOR CERTIFICATIONS/AGREEMENTS, GRADING AND STABILIZATION ACTIVITIES LOGS, SWPPP TRAINING LOGS, AND DELEGATION OF AUTHORITY FORMS FOR THE DURATION OF THE PROJECT.
G. CONTRACTOR SHALL PROVIDE COPIES OF ALL SWPPP REPORTS, FORMS, AND LOGS TO THE WT GROUP ONCE THE SITE HAS BEEN STABILIZED. THE CONTRACTOR SHALL MAINTAIN THESE DOCUMENTS FOR A PERIOD OF 3 YEARS FROM THE FINAL STABILIZATION OF THE SITE.
H. FOLLOWING THE REMOVAL OF THE SILT FENCE, THE CONTRACTOR SHALL RESTORE THE SILT FENCE TRENCH WITH SOD.
I. CONTRACTOR SHALL INITIATE STABILIZATION OF ALL DISTURBED AREAS WITHIN ONE CALENDAR DAY.
J. SEED BED PREPARATION.
J.A. ALL STONES, ROCKS, DEBRIS LARGER THAN 1" IN DIAMETER SHALL BE REMOVED.
J.B. DISK OR TILL TOPSOIL TO A DEPTH OF 3" AND REDUCE ALL SOIL PARTICLES TO NO LARGER THAN 2". THE SURFACE SHALL BE FREE OF WEEDS, STONES, ROCKS, STICKS, GULLIES, CLODS, AND DEBRIS.
J.C. THE AREA SHALL BE FINE GRADED.
J.D. THE SEED SHALL BE PLACED INTO THE SOIL WITH A MACHINE THAT MECHANICALLY PLACES THE SEED IN DIRECT CONTACT WITH THE SOIL AND COVERS THE SEED WITH THE SOIL.
J.E. BROADCAST AND HYDROSEED WILL NOT BE ALLOWED.
J.F. SEEDED AREAS SHALL BE COVERED WITH THE EROSION BLANKET RIGHT AFTER THE SEED HAS BEEN SOWN.
J.G. ANY SOIL AMENDMENTS NEEDED TO ACHIEVE A 90% HEALTHY STAND OF VEGETATION WILL BE ADDED TO THE SOIL AT NO EXTRA CHARGE TO THE OWNER. THE STAND OF VEGETATION WILL NEED TO BE ACCEPTED BY THE ENGINEER.
J.H. THE SEED MIX SHALL BE KENTUCKY BLUEGRASS 100LBS/ACRE, REVENGE PERENNIAL RYEGRASS 60 LBS/ACRE, ANNUAL RYE 40 LBS/ACRE AND CREEPING RED FESCUE 40 LBS/ACRE TOTAL.

## SWPPP LEGEND

- EXISTING SPOT GRADE
- EXISTING CONTOUR LINE
- PROPOSED CONTOUR LINE
- OVERLAND FLOW ARROW
- 100 YEAR OVERLAND FLOW ROUTE
- EMERGENCY OVERFLOW ARROW
- ADJUST EXISTING RIM ELEVATION
- EXISTING CLOSED MANHOLE
- EXISTING OPEN GRATE MANHOLE
- EXISTING BEEHIVE GRATE MANHOLE
- EXISTING CURB INLET
- EXISTING FIRE HYDRANT
- EXISTING VALVE VAULT
- EXISTING B-BOX
- PROPOSED INLET
- PROPOSED OPEN LID MANHOLE / CATCH BASIN
- PROPOSED CLOSED LID MANHOLE
- PROPOSED NYLOPLAST DRAIN BASIN
- PROPOSED INLET WITH SOLID LID
- SILT FENCE
- FLEXSTORM CATCH-IT INLET PROTECTION
- SILT FENCE INLET PROTECTION WITH STONE COLLAR
- RIP RAP
- FINE GRADE, FERTILIZE, AND SEED. INSTALL DS75 EROSION CONTROL BLANKET WITH 6" BIO-STAKES AS MANUFACTURED BY NORTH AMERICAN GREEN. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- TEMPORARY CONCRETE WASHOUT FACILITY
- STABILIZED CONSTRUCTION ENTRANCE
- TREE PRESERVATION FENCING

NORTH
1" = 20'
00 10 20 40 80

W-T JOB NUMBER-C2500035


WT Group
Engineering • Design • Consulting

WT GROUP
Structural | Mechanical/Electrical/Plumbing
Civil | Land Survey | Telecommunication| Aquatic
Accessibility Consulting | Design & Program Management
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2000 Center Drive, Ste B411 | Hoffman Estates, IL 60192
P: 224.293.6333 | F: 224.293.6444
wtengineering.com
IL License No: 184.009674-0015 | Exp: 04.30.2027

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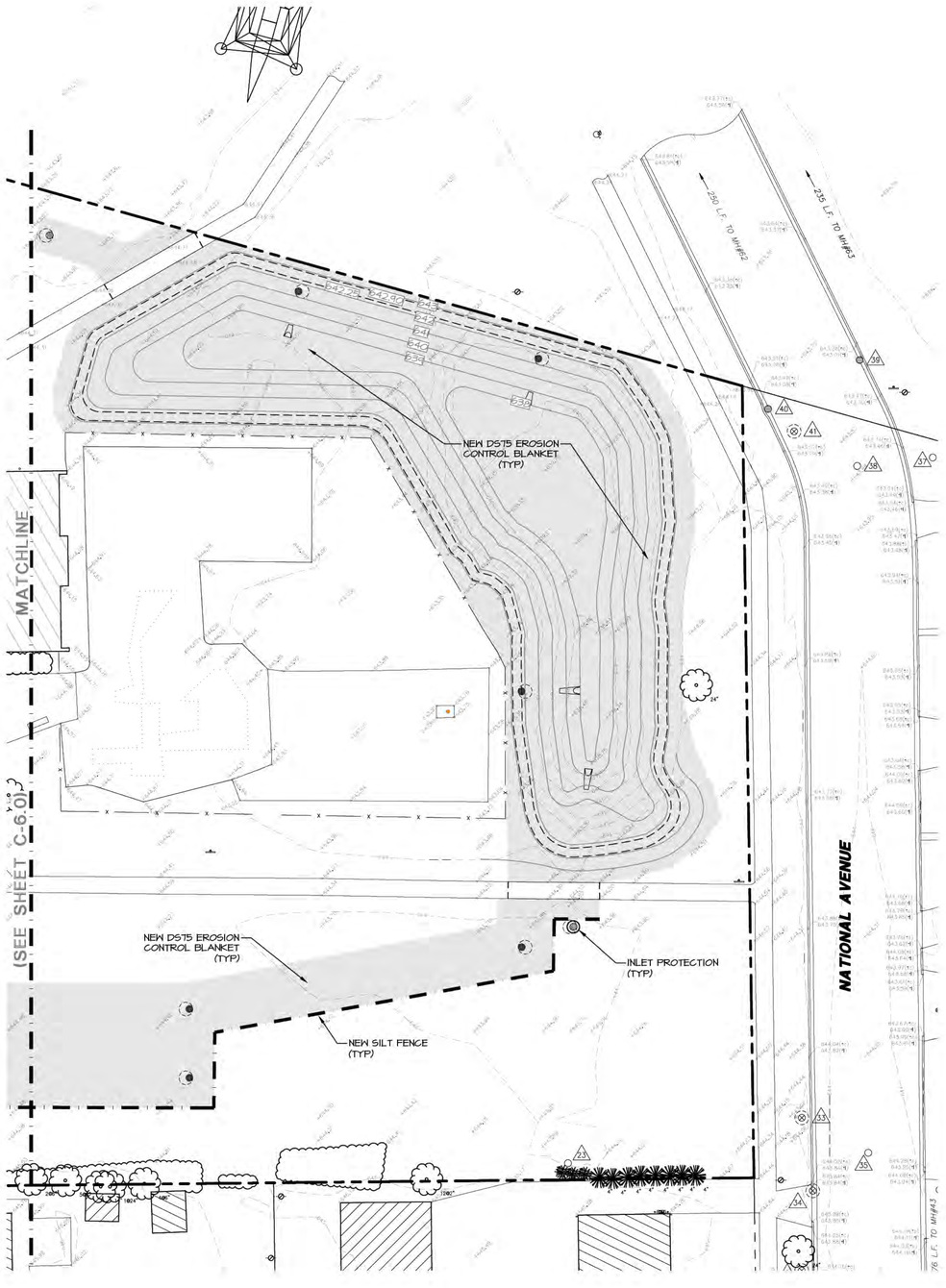

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# HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

| DATE | MARK |
|---|---|
| | 50% CD NOT FOR CONSTRUCTION |

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: **STORMWATER POLLUTION PREVENTION PLAN**
SHEET: **C-6.0**




## SWPPP NOTES:

A. ALL DISTURBED GREEN SPACES ON THE SITE SHALL BE RESTORED ACCORDING TO THE SEED BED PREPARATION SPECIFICATIONS BELOW AND BLANKETED OR MATTED AS SHOWN ON THE PLANS.
B. TEMPORARY OR PERMANENT STABILIZATION SHALL OCCUR IMMEDIATELY WHENEVER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE. TEMPORARY STABILIZATION SHALL CONSIST OF THE INSTALLATION OF TEMPORARY SEEDING.
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  JA. ALL STONES, ROCKS, DEBRIS LARGER THAN 1" IN DIAMETER SHALL BE REMOVED.
  JB. DISK OR TILL TOPSOIL TO A DEPTH OF 3" AND REDUCE ALL SOIL PARTICLES TO NO LARGER THAN 2". THE SURFACE SHALL BE FREE OF WEEDS, STONES, ROCKS, STICKS, GULLIES, CLODS, AND DEBRIS.
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  JE. BROADCAST AND HYDROSEED WILL NOT BE ALLOWED.
  JF. SEEDED AREAS SHALL BE COVERED WITH THE EROSION BLANKET RIGHT AFTER THE SEED HAS BEEN SOWN.
  JG. ANY SOIL AMENDMENTS NEEDED TO ACHIEVE A 90% HEALTHY STAND OF VEGETATION WILL BE ADDED TO THE SOIL AT NO EXTRA CHARGE TO THE OWNER. THE STAND OF VEGETATION WILL NEED TO BE ACCEPTED BY THE ENGINEER.
  JH. THE SEED MIX SHALL BE KENTUCKY BLUEGRASS 100LBS/ACRE, REVENGE PERENNIAL RYEGRASS 60 LBS/ACRE, ANNUAL RYE 40 LBS/ACRE AND CREEPING RED FESCUE 40 LBS/ACRE TOTAL.

## SWPPP LEGEND

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- PROPOSED CONTOUR LINE
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- EMERGENCY OVERFLOW ARROW
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NORTH
1" = 20'
00 10 20 40 80

W-T JOB NUMBER-C2500035


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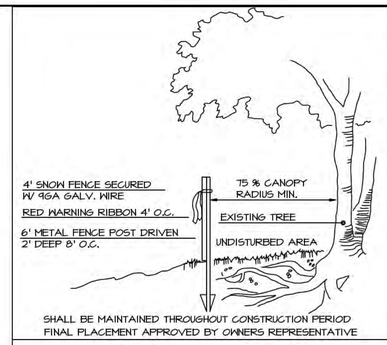
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GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
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LEARNING TODAY... LEADING TOMORROW
67

| DATE | MARK |
|---|---|
| | 50% CD NOT FOR CONSTRUCTION |

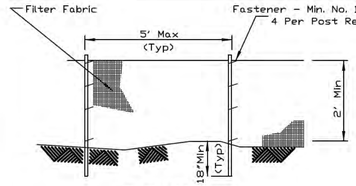
PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: **STORMWATER POLLUTION PREVENTION PLAN**
SHEET: **C-6.1**



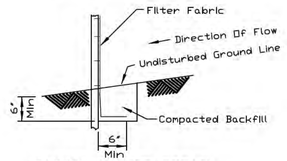

## DETAIL - ROOT ZONE PROTECTION FENCE

NOT TO SCALE

## SILT FENCE PLAN




ELEVATION




FABRIC ANCHOR DETAIL

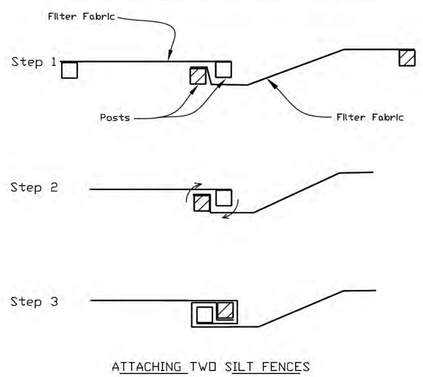
NOTES:
1. Temporary sediment fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
2. Filter fabric shall meet the requirements of material specification 592 Geotextile Table 1 or 2, Class I with equivalent opening size of at least 30 for nonwoven and 40 for woven.
3. Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 3.0 sq. in.

| REFERENCE | | STANDARD DWG. NO. | |
|---|---|---|---|
| Project | | IUM-620A | |
| Designed ____ Date ____ | | SHEET 1 OF 2 | |
| Checked ____ Date ____ | | DATE 3-16-12 | |
| Approved ____ Date ____ | | | |

## DETAIL - SILT FENCE

NOT TO SCALE

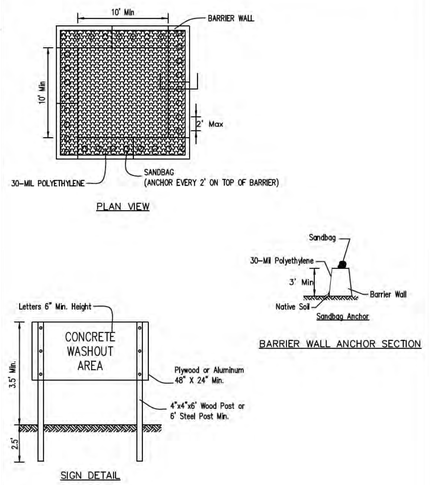
## SILT FENCE - SPLICING TWO FENCES




ATTACHING TWO SILT FENCES

Place the end post of the second fence inside the end post of the first fence.
Rotate both posts at least 180 degrees in a clockwise direction to create a tight seal with the fabric material.
Cut the fabric near the bottom of the stakes to accomodate the 6" flap.
Drive both posts a minimum of 18 inches into the ground and bury the flap.
Compact backfill (particularly at splices) completely to prevent stormwater piping.

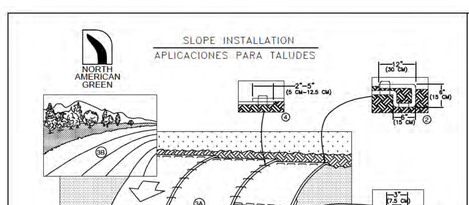
| REFERENCE | | STANDARD DWG. NO. | |
|---|---|---|---|
| Project | | IUM-620B(W) | |
| Designed ____ Date ____ | | SHEET 1 OF 1 | |
| Checked ____ Date ____ | | DATE 2-06-2012 | |
| Approved ____ Date ____ | | | |




NOTES:
1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and/or slurry and returning the facilities to a functional condition.
2. Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.

TEMPORARY CONCRETE WASHOUT FACILITY – BARRIER WALL

## CONCRETE WASHOUT FACILITY

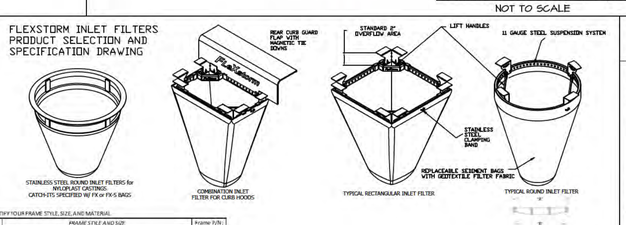



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" – 5" (5 CM – 12.5 CM) OVERLAP DEPENDING ON BLANKET TYPE.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE BLANKET WIDTH.
NOTE:
*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

## DETAIL - EROSION CONTROL BLANKET

NOT TO SCALE

FLEXSTORM INLET FILTERS
PRODUCT SELECTION AND
SPECIFICATION DRAWING




1. INDENTIFY YOUR FRAME STYLE, SIZE, AND MATERIAL

| STYLE | FRAME STYLE AND SIZE | Frame P/N |
|---|---|---|
| ROUND | Small Round (up to 20.0" dia grates (A) dia) | 62650 |
| | Med Round (20.1" - 26.0" dia grates (A) up to 25" dia openings (B)) | 62MRD |
| | Large Round (26.1" - 32.0" dia grates (A) up to 30" openings (B)) | 62LRD |
| | XL Round (32.1" dia - 38" dia grates (A) up to 37" dia openings (B)) | 62XLRD |
| RECT / SQUARE | Small Rect / Square (up to 30" (B) x 36" (D) openings or 66" perimeter) | 62SSQ |
| | Med Rect / Square (up to 24" (B) x 24" (D) openings or 96" perimeter) | 62MSQ |
| | Large Rect / Square (up to 30" (B) x 36" (D) openings or 120" perimeter) | 62LSQ |
| CONRAC | XL Rect / Square (side by side 2 pc set to fit up to 48" (B) x 36" (D) openings) | 62XLSQ |
| | Small Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps) | 62SCR |
| | Med Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps) | 62MCR |
| | Large Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps) | 62LCR |
| | XL Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps) | 62XLCR |
| NYLOPLAST | 12" diameter Nyloplast castings (Stainless Steel Framing standard) | 62SDRV |
| | 15" diameter Nyloplast castings (Stainless Steel Framing standard) | 62SDDV |
| | 18" diameter Nyloplast castings (Stainless Steel Framing standard) | 62SBRV |
| | 24" diameter Nyloplast castings (Stainless Steel Framing standard) | 62ERRV |
| | 30" diameter Nyloplast castings (Stainless Steel Framing standard) | 62ERRV |
| WALL MOUNT | Open Throat Gutters - Curb Opening Size | |
| | Up to 6" (1 Filter and Mounting Hardware) | 62WML |
| | Between 6" and 9" (2 Filters and Mounting Hardware) | 62WMD |
| | Between 9" and 12" (3 Filters and Mounting Hardware) | 62WMM |
| | Between 12" and 16" (4 Filters and Mounting Hardware) | 62WMA |
| | UPGRADED DRAWING NAVEGAL OPTIONS (STANDARD IS ZINC PLATED) | SUFFIX |
| | CHROME PLATED FRAMING FOR HIGH SALT EXPOSURE | CHR |
| | STAINLESS STEEL FRAMING FOR HIGH SALT AND/OR CHEMICAL EXPOSURE | SS |

2. SELECT YOUR FILTER BAG PART NUMBER

| FLEXSTORM FILTER BAGS | (22" Depth) STD Bag P/N | (12" depth) Short bag P/N | Clean Water Flow Rate (GPM/SqFt) | Mín A.O.S. (US Sieve) |
|---|---|---|---|---|
| FX: Standard Woven Bag | FX | FX-S | 200 | 40 |
| FXW: Woven w/ MaCelh | FXW | FXW-S | 200 | 40 |
| FXO: Woven w/ Oil Boom | FXO | FXO-S | 200 | 40 |
| PC: Post Construction Bag | PC | PC-S | 137 | 140 |
| PCF: PC Bag w/ MaCelh | PCF | PCW-S | 137 | 140 |
| LI: Litter and Leaf Bag | LI | LI-S | High | 3.5 |
| IL: IDOT Non-Woven Bag | IL | IL-S | 145 | 70 |

INSTALLATION
1. REMOVE GRATE
2. DROP FLEXSTORM INLET FILTER INTO LUG HEADING UP OF CASTING OR CONCRETE STRUCTURE
3. REPLACE GRATE

SPECIFICATIONS FOR STANDARD BAGS BY NOMINAL SIZE

| Nominal Bag Size | Solids Storage (Cuft) | Filtered Flow Rate at 50% Max Capacity FX (Woven) | PC (Post Constr) | IL (Non-Woven) | * PC Oil Retent (Oz.) | **PCF Oil Retent (Oz) |
|---|---|---|---|---|---|---|
| Small | 1.6 | 3.2 | 0.8 | 0.3 | 66 | 155 |
| Medium | 2.1 | 1.8 | 1.2 | 1.3 | 96 | 185 |
| Large | 3.8 | 2.2 | 1.3 | 1.8 | 120 | 209 |
| XL | 4.2 | 3.6 | 2.4 | 2.8 | 160 | 375 |

* PC Filter bag at 50% max adsorption capacity
** PC filter bag at 50% capacity and MaCelx silvmtrar at 100% capacity

3. CREATE YOUR FLEXSTORM INLET FILTER PART NUMBER:

Frame P/N from Step 1. | Filter Bag P/N from Step 2. | - | Framing Material

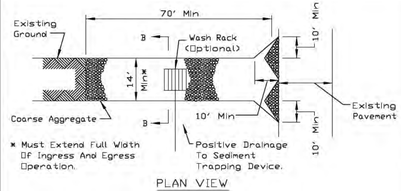
ALL PRODUCTS MANUFACTURED BY INLET & PIPE PROTECTION, INC DISTRIBUTED BY ADS
WWW.INLETFILTERS.COM
(866) 287-8655 PH
(630) 355-3477 FX
INFO@INLETFILTERS.COM

| SIZE | DRAWING | REV |
|---|---|---|
| C | IPP Flexstorm Specifications | |
| SCALE | SHEET 1 OF 1 | |

## DETAIL - FLEXSTORM INLET PROTECTION

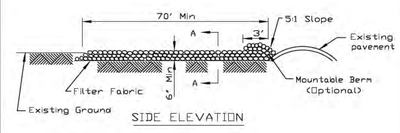
NOT TO SCALE

## STABILIZED CONSTRUCTION ENTRANCE PLAN




* Must Extend Full Width Of Ingress And Egress Operation.

PLAN VIEW

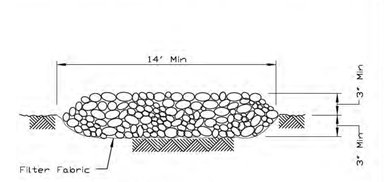



SIDE ELEVATION

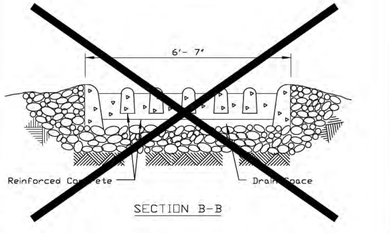
NOTES:
1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table I or 2, Class I, II or IV and shall be placed over the cleared area prior to the placing of rock.
2. Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
3. Any drainage facilities required because of washing shall be constructed according to manufacturers specifications.
4. If wash racks are used they shall be installed according to the manufactures specifications.

| REFERENCE | | U.S. DEPARTMENT OF AGRICULTURE | STANDARD DWG. NO. |
|---|---|---|---|
| Project | | SOIL CONSERVATION SERVICE | IL-630 |
| Designed ____ Date ____ | | ILLINOIS | SHEET 1 OF 2 |
| Checked ____ Date ____ | | | DATE 4-18-94 |
| Approved ____ Date ____ | | | |

## STABILIZED CONSTRUCTION ENTRANCE PLAN




SECTION A-A




SECTION B-B

| REFERENCE | | U.S. DEPARTMENT OF AGRICULTURE | STANDARD DWG. NO. |
|---|---|---|---|
| Project | | SOIL CONSERVATION SERVICE | IL-630 |
| Designed ____ Date ____ | | ILLINOIS | SHEET 2 OF 2 |
| Checked ____ Date ____ | | | DATE 4-18-94 |
| Approved ____ Date ____ | | | |

## DETAIL - STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

DLA Ltd. ARCHITECTS
form follows learning
Two Pierce Place | Suite 1300 | Itasca | 60143 | 847.742.4063 | www.dla-ltd.com

HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW
67

| DATE | MARK |
|---|---|

50% CD NOT FOR CONSTRUCTION

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: STORMWATER POLLUTION PREVENTION DETAILS
SHEET: C-6.2

W-T JOB NUMBER-C2500035

WT Group
Engineering • Design • Consulting
WT GROUP
Structural | Mechanical/Electrical/Plumbing
Civil | Land Survey | Telecommunication| Aquatic
Accessibility Consulting | Design & Program Management
Engineering with Precision, Pace & Passion.
2000 Center Drive, Ste B411 | Hoffman Estates, IL 60192
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wtengineering.com
IL License No: 184.007575-0015 | Exp: 04 30 2027
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# GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING:
   - 1.1. ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST EDITION.
   - 1.2. "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS" LATEST EDITION.
   - 1.3. "ILLINOIS URBAN MANUAL," LATEST EDITION.
   - 1.4. BUILDING CODES AND ORDINANCES OF THE LOCAL GOVERNING AUTHORITIES.
   - 1.5. UNITED STATES DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS, 29 CFR PART 1926, "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION."
   - 1.6. ILLINOIS DRAINAGE LAW.
   - 1.7. ILLINOIS ENVIRONMENTAL BARRIERS ACT.
   - 1.8. ILLINOIS ACCESSIBILITY CODE.
   - 1.9. ILLINOIS ENVIRONMENTAL PROTECTION AGENCY REQUIREMENTS.
   - 1.10. TITLE 35 OF THE ILLINOIS ADMINISTRATIVE CODE.
2. ALL REQUIRED PERMITS FROM THE APPROPRIATE GOVERNING AGENCY(S) SHALL BE OBTAINED FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHEETING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE ALL NECESSARY REPAIRS AT HIS EXPENSE AND TO THE SATISFACTION OF THE GOVERNING AGENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNAGE AND TRAFFIC CONTROL DEVICES TO INFORM AND PROTECT THE PUBLIC.
3. CONTRACTOR SHALL NOTIFY THE LOCAL ENGINEERING OR PUBLIC WORKS DEPARTMENT AND/OR OTHER GOVERNING AUTHORITY(S) 48 HOURS PRIOR TO COMMENCING CONSTRUCTION ON EACH MAJOR CATEGORY OF WORK, INCLUDING BUT NOT LIMITED TO, ANY PUBLIC IMPROVEMENTS, ROADWAY CLOSURES OR UTILITY INSTALLATIONS. 72 HOUR NOTICE SHALL BE GIVEN FOR ANY WORK ITEM THAT REQUIRES INSPECTION AND TESTING SUCH AS SANITARY SEWER OR WATER MAIN INSTALLATION.
4. BEING THAT THIS PROJECT IS PERMITTED UNDER THE NEW WATERSHED MANAGEMENT ORDINANCE (NMO), THE MWRD REQUIRES 48 HOURS OF ADVANCE NOTIFICATION PRIOR TO ANY GROUND DISTURBANCE. THE MWRD WILL BE INSPECTING FOR APPLICABLE EROSION CONTROL AND SEDIMENT CONTROL MEASURES SUCH AS SILT FENCING, INLET PROTECTION, CONCRETE WASH, ETC., FOLLOWED BY SANITARY SEWER AND VOLUME CONTROL INSTALLATION INSPECTIONS. PLEASE REFER TO THE APPROVED PERMIT/PLANS AND HAVE THESE MEASURES IN PLACE IN ACCORDANCE WITH THE SPECIFICATIONS.
5. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES (GAS, ELECTRIC, TELEPHONE, CABLE, ETC.) AND THE LOCAL MUNICIPALITY TO DETERMINE THE LOCATION OF UNDERGROUND UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION IN ORDER TO AVOID POTENTIAL CONFLICTS. CONTRACTOR SHALL CALL THE JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (J.U.L.I.E.) AT 1-800-892-0123 OR BY DIALING 811. IT IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER INDICATED ON THE PLANS OR NOT AND TO HAVE THESE UTILITIES STAKED PRIOR TO CONSTRUCTION.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL PRIVATE AND PUBLIC UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE UTILITY OWNER.
7. ALL EASEMENTS FOR EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS PREPARED BY THE ENGINEER ACCORDING TO INFORMATION AVAILABLE FROM PUBLIC RECORDS OR VISIBLE FIELD MARKINGS. THE CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND FOR THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SO THE CONFLICT MAY BE RESOLVED.
8. ALL UTILITY CONNECTIONS TO EXISTING LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RULES AND REGULATIONS AND TO THE SATISFACTION OF THE APPLICABLE UTILITY OWNER(S).
9. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, COORDINATES AND ELEVATIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES SO THE CONFLICT MAY BE RESOLVED.
10. ALL PROPERTY MARKERS AND REFERENCE MARKERS SHALL BE CAREFULLY PRESERVED DURING CONSTRUCTION UNTIL THEIR LOCATION HAS BEEN WITNESSED OR OTHERWISE TIED IN BY AN AUTHORIZED AGENT OR PROFESSIONALLY LICENSED SURVEYOR.
11. THE SAFE AND ORDERLY PASSAGE OF TRAFFIC AND PEDESTRIANS SHALL BE PROVIDED WHERE CONSTRUCTION OPERATIONS ABUT PUBLIC THROUGH-FARES AND ADJACENT PROPERTY.
12. ALL AREAS DISTURBED BY THE GENERAL CONTRACTOR OR SUB-CONTRACTORS SHALL BE RETURNED TO THE ORIGINAL CONDITIONS OR BETTER, EXCEPT WHERE PROPOSED CONSTRUCTION IS INDICATED ON THE PLANS.
13. NO BURNING OR INCINERATION OF RUBBISH WILL BE PERMITTED ON SITE.
14. PRIOR TO INITIAL ACCEPTANCE BY THE OWNER(S) AND/OR GOVERNING AUTHORITY, ALL WORK SHALL BE INSPECTED AND APPROVED BY THE OWNER AND MUNICIPALITY ENGINEER OR HIS REPRESENTATIVE(S). THE CONTRACTOR SHALL GUARANTEE HIS WORK FOR A PERIOD OF 18 (EIGHTEEN) MONTHS FROM THE DATE OF SUBSTANTIAL COMPLETION AND SHALL BE HELD RESPONSIBLE FOR ANY DEFECTS IN MATERIAL OR WORKMANSHIP OF THIS WORK DURING THAT PERIOD AND UNTIL FINAL ACCEPTANCE IS MADE.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE AND ADEQUATE WORKING CONDITIONS THROUGHOUT THE DURATION OF CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
16. CONTRACTOR SHALL KEEP THE PUBLIC STREET PAVEMENTS CLEAN OF DIRT AND DEBRIS AND, WHEN NECESSARY, CLEAN PAVEMENTS AT THE END OF EACH WORKING DAY.
17. ALL CONSTRUCTION STAKING, SCHEDULING AND PAYMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.
18. THREE (3) ORIGINAL COPIES OF ALL SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR (BUT NOT LIMITED TO) THE FOLLOWING ITEMS:
   - 18.1. ASPHALT PAVEMENT MIX DESIGN
   - 18.2. CONCRETE MIX DESIGN
   - 18.3. GRANULAR MATERIAL GRADATION
   - 18.4. PRECAST CONCRETE STRUCTURES (MANHOLES, INLETS, CATCH BASINS, VAULTS, ETC.)
   - 18.5. WATER MAIN MATERIALS (VALVES, FIRE HYDRANTS, ETC.)
19. AFTER COMPLETION OF THE PROPOSED IMPROVEMENTS, CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH AS-BUILT AND/OR RECORD DRAWINGS, SIGNED AND SEALED BY A PROFESSIONALLY LICENSED ENGINEER OR SURVEYOR AND SHALL INCLUDE AT A MINIMUM (WHERE APPLICABLE TO THE SCOPE OF WORK) THE FOLLOWING ITEMS:
   - 19.1 TOPOGRAPHY AND SPOT GRADE ELEVATIONS OF ALL PROPOSED PERMANENT SITE FEATURES INCLUDING ANY STORM WATER FACILITIES OR MODIFICATIONS TO EXISTING STORM WATER FACILITIES.
   - 19.2 HORIZONTAL AND VERTICAL LOCATION AND ALIGNMENT OF ALL PROPOSED ROADWAYS, PARKING LOTS, UTILITIES, BUILDINGS OR OTHER PERMANENT SITE FEATURES.
   - 19.3 RIM AND INVERT AND/OR TOP OF PIPE ELEVATIONS FOR ALL PROPOSED UTILITIES.
   - 19.4 AS-BUILT AND/OR RECORD DRAWING INFORMATION SHALL BE SHOWN ON THE APPROVED ENGINEERING PLANS ISSUED FOR CONSTRUCTION. ANY AND ALL DEVIATIONS FROM THESE APPROVED PLANS SHALL BE SHOWN BY MEANS OF STRIKING THROUGH THE PROPOSED INFORMATION AND CLEARLY INDICATING THE AS-BUILT LOCATIONS AND ELEVATIONS ON THE APPLICABLE PLAN SHEET.

# SITE GRADING AND PAVING

1. ALL SITE WORK, GRADING, AND PAVING OPERATIONS WITHIN THE LIMITS OF THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST EDITION ("STANDARD SPECIFICATIONS"), ANY SPECIAL PROVISIONS, THE NOTES IN THE PLANS AND IN ACCORDANCE WITH THE CODES AND ORDINANCES OF THE GOVERNING AUTHORITIES. IN CASE OF CONFLICT, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE.
2. EARTH EXCAVATION SHALL INCLUDE CLEARING, STRIPPING AND STOCKPILING TOPSOIL, REMOVING UNSUITABLE MATERIALS, CONSTRUCTION OF EMBANKMENTS, NON-STRUCTURAL FILLS, FINAL SHAPING AND TRIMMING TO THE LINES, GRADES AND CROSS SECTIONS SHOWN ON THE PLANS. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 200 OF THE "STANDARD SPECIFICATIONS." ALL UNSUITABLE OR EXCESS MATERIAL SHALL BE DISPOSED OF OFF-SITE OR AS DIRECTED BY THE PROJECT REPRESENTATIVE IN THE FIELD.
3. EXCAVATED TOPSOIL SHALL BE STOCKPILED ON THE SITE IN AREAS DESIGNATED BY THE PROJECT ENGINEER UNTIL SUCH TIME THAT THIS TOPSOIL CAN BE USED FOR FINAL GRADING. UNLESS OTHERWISE NOTED ON THE PLANS, A MINIMUM OF 6" TOPSOIL RE-SPREAD AND SEEDING FOR ALL DISTURBED AREAS IS REQUIRED.
4. THE SOILS INVESTIGATION REPORT FOR THE SITE AND ALL ADDENDA THERETO ARE SUPPORTING DOCUMENTS FOR THIS PROJECT. THE RECOMMENDATIONS AS STATED IN SAID REPORTS ARE HEREBY INCORPORATED INTO THESE CONSTRUCTION NOTES BY REFERENCE AND SHALL BE FOLLOWED BY ALL CONTRACTORS. THE GRADING OPERATIONS ARE TO BE CLOSELY SUPERVISED AND INSPECTED, PARTICULARLY DURING THE REMOVAL OF UNSUITABLE MATERIAL AND THE CONSTRUCTION OF EMBANKMENTS OR BUILDING PADS, BY A SOILS ENGINEER OR HIS REPRESENTATIVE. FURTHER CONSTRUCTION OPERATIONS WILL NOT BE PERMITTED UNTIL THE SOILS ENGINEER ISSUES A WRITTEN STATEMENT THAT THE AREA IN QUESTION HAS BEEN SATISFACTORILY PREPARED AND IS READY FOR CONSTRUCTION.
5. ALL TESTING, INSPECTION AND SUPERVISION OF SOIL QUALITY, UNSUITABLE SOIL REMOVAL AND ITS REPLACEMENT AND OTHER SOILS RELATED OPERATIONS SHALL BE ENTIRELY THE RESPONSIBILITY OF THE CONTRACTOR.
6. THE CONTRACTOR SHALL USE CARE IN GRADING NEAR TREES, SHRUBS, AND BUSHES WHICH ARE NOT NOTED TO BE REMOVED SO AS NOT TO CAUSE INJURY TO ROOTS OR TRUNKS.
7. THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS WHICH ARE NOT INDICATED TO BE REMOVED. ANY DAMAGE DONE TO THESE EXISTING ITEMS BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT HIS OWN EXPENSE.
8. REMOVED DRIVEWAY PAVEMENT, SIDEWALK, CURBS, TREES AND STUMPS SHALL BE DISPOSED OF LEGALLY OFF-SITE AT LOCATIONS DETERMINED BY THE CONTRACTOR.
9. ON AND OFF SITE PAVING AND CURBS TO REMAIN SHALL BE PROTECTED FROM DAMAGE, AND, IF DAMAGED, SHALL BE REPLACED PROMPTLY TO MEET STATE AND LOCAL STANDARD SPECIFICATIONS IN MATERIALS AND WORKMANSHIP.
10. PROPOSED ELEVATIONS INDICATE FINISHED GRADE CONDITIONS. FOR ROUGH GRADING ELEVATIONS ALLOW FOR THE THICKNESS OF THE PROPOSED PAVING (ROADS, WALKS, DRIVE, ETC.) SECTION OR TOPSOIL AS INDICATED ON THE PLANS.
11. CONTRACTOR SHALL PROVIDE SMOOTH VERTICAL CURVES THROUGH THE HIGH AND LOW POINTS INDICATED BY SPOT ELEVATIONS ON THE PLANS. CONTRACTOR SHALL PROVIDE UNIFORM SLOPES BETWEEN NEW AND EXISTING GRADES AND AVOID ANY RIDGES AND/OR DEPRESSIONS.
12. ALL PROPOSED GRADING, PAVEMENT, APRONS, CURBS, WALKS, ETC. SHALL MATCH EXISTING GRADES FLUSH.
13. ALL EXISTING AND PROPOSED TOP OF FRAME ELEVATIONS FOR STORM, SANITARY, WATER AND OTHER UTILITY STRUCTURES SHALL BE ADJUSTED TO MEET FINISHED GRADE WITHIN THE PROJECT LIMITS.
14. ALL CONCRETE POURED SHALL BE:
   - 14.1. MINIMUM COMPRESSIVE STRENGTH:
     - 14.1.1. 3,500 P.S.I. AT 14 DAYS (PER I.D.O.T.)
     - 14.1.2. 4,500 P.S.I. AT 28 DAYS (PER A.C.I.)
   - 14.2. MAX WATER-CEMENTITIOUS MATERIALS RATIO: 0.44 (AIR-ENTRAINED)
   - 14.3. AIR CONTENT: 6%, +/- 1.5% AT POINT OF DELIVERY FOR EXPOSED CONCRETE
15. WHEN FIBER MESH REINFORCEMENT IS SPECIFIED, IT SHALL CONSIST OF FIBRILLATED POLYPROPYLENE FIBERS ENGINEERED AND DESIGNED FOR USE IN CONCRETE PAVEMENT, COMPLYING WITH ASTM C 1116, TYPE III, ½ TO ¾ INCHES LONG. FIBERS SHALL BE UNIFORMLY DISPERSED IN THE CONCRETE MIXTURE AT THE MANUFACTURER'S RECOMMENDED RATE, BUT NOT LESS THAN 1.5 LBS / CU. YD.
16. THE GRADING AND CONSTRUCTION OF THE PROPOSED PAVEMENT IMPROVEMENTS SHALL NOT CAUSE PONDING OF STORM WATER. ALL AREAS ADJACENT TO THESE IMPROVEMENTS SHALL BE GRADED TO ALLOW POSITIVE DRAINAGE AND MATCH EXISTING GRADES FLUSH.
17. CONTRACTOR SHALL ENSURE POSITIVE SITE DRAINAGE AT THE END OF EACH WORKING DAY DURING CONSTRUCTION OPERATIONS. FAILURE TO PROVIDE ADEQUATE DRAINAGE WILL PRECLUDE THE CONTRACTOR FROM ANY POSSIBLE COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT.
18. DRIVEWAYS SHALL BE CONSTRUCTED SO AS NOT TO IMPEDE THE SURFACE DRAINAGE SYSTEM.
19. TRAFFIC CONTROL DEVICES SHALL BE IN CONFORMANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARDS AND SHALL BE INSTALLED AND PROVIDED WHENEVER CONSTRUCTION FOR UTILITIES ARE WITHIN STREET AREAS. APPLICABLE ORDINANCES OF THE MUNICIPALITY, COUNTY OR STATE SHALL ALSO GOVERN THE TRAFFIC CONTROL REQUIREMENTS.
20. EXISTING PAVEMENT AGGREGATE BASE COURSE SHALL NOT BE RE-USED AS AGGREGATE BASE COURSE FOR THE NEW PAVEMENT SECTION.

# STORMWATER POLLUTION PREVENTION NOTES

1. COPIES OF THE APPROVED STORM WATER POLLUTION PREVENTION PLANS SHALL BE MAINTAINED ON THE SITE AT ALL TIMES ALONG WITH THE PERMIT, INCIDENT OF NON-COMPLIANCE (I.O.N.) FORM AND INSPECTION FORMS.
2. CONTRACTOR SHALL PROVIDE COPIES OF ALL SWPPP REPORTS, FORMS, AND LOGS TO THE WT GROUP ONCE THE SITE HAS BEEN STABILIZED. THE CONTRACTOR SHALL MAINTAIN THESE DOCUMENTS FOR A PERIOD OF 3 YEARS FROM THE FINAL STABILIZATION OF THE SITE.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) INSPECTIONS, INSPECTION REPORTS, CORRECTIVE ACTION FORMS, SWPPP AMENDMENT LOGS, SUBCONTRACTOR CERTIFICATIONS/AGREEMENTS, GRADING AND STABILIZATION ACTIVITIES LOGS, SWPPP TRAINING LOGS, AND DELEGATION OF AUTHORITY FORMS FOR THE DURATION OF THE PROJECT.
   - 3.1. ILLINOIS QUALIFIED PERSONNEL SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A RAINFALL EVENT THAT IS 0.5 INCH OR GREATER (OR EQUIVALENT SNOWFALL). REQUIRED REPAIRS SHOULD BE COMPLETED WITHIN FORTY-EIGHT (48) HOURS OF THE INSPECTION.
   - 3.2. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO INFORM ANY SUBCONTRACTOR(S) WHO MAY PERFORM WORK ON THIS PROJECT, OF THE REQUIREMENTS IN IMPLEMENTING AND MAINTAINING THESE EROSION CONTROL PLANS AND THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS SET FORTH BY THE ILLINOIS EPA.
4. ALL EROSION AND SEDIMENTATION CONTROL MEASURES AND DEVICES SHALL BE INSTALLED AND FUNCTIONAL BEFORE THE SITE IS OTHERWISE DISTURBED. THEY SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SITE STABILIZATION HAS BEEN ACHIEVED.
5. PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAT INDICATED ON THESE PLANS (INCLUDING BUT LIMITED TO, ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS) A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED FOR REVIEW.
6. THE GOVERNING AUTHORITIES HAVING JURISDICTION OVER THE PROJECT SITE MUST BE NOTIFIED ONE (1) WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE (1) WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE (1) WEEK PRIOR TO THE FINAL INSPECTION.
7. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE GOVERNING AUTHORITY.
8. IF AFTER REPEATED FAILURE ON THE PART OF THE CONTRACTOR TO PROPERLY CONTROL EROSION, POLLUTION, AND/OR SILTATION, THE GOVERNING AUTHORITIES RESERVE THE RIGHT TO EFFECT NECESSARY CORRECTIVE MEASURES AND CHARGE ANY COSTS TO THE CONTRACTOR.
9. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL LATEST EDITION.
10. INLET PROTECTION SHALL BE INSTALLED AROUND EACH INLET OR CATCH BASIN. THESE SHALL BE MAINTAINED UNTIL THE TRIBUTARY DRAINAGE AREAS HAVE ADEQUATE GRASS COVER OR APPROPRIATE GROUND STABILIZATION.
11. ALL STREETS ADJACENT TO THE SITE SHALL BE KEPT FREE OF DIRT, MUD AND DEBRIS.
12. CONTRACTORS SHALL MINIMIZE BARE EARTH SURFACES DURING CONSTRUCTION.
13. ALL DISTURBED AREAS SHOULD BE SEEDED OR SODDED WITHIN THREE (3) DAYS OF FINAL DISTURBANCE.
14. WHENEVER DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIALS ARE DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, OR DITCHES SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THIS LOOSE MATERIAL SHALL BE REMOVED.
15. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY EXISTING STORM DRAINAGE SYSTEMS BY THE USE OF INLET PROTECTION OR OTHER APPROVED FUNCTIONAL METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT RESULTING FROM CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT.
16. CONSTRUCTION ACCESS POINTS TO THE SITE SHALL BE PROTECTED IN SUCH A WAY AS TO PREVENT TRACKING OF MUD OR SOIL ONTO PUBLIC THOROUGHFARES. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
17. ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT THE SITE FROM THE PROPOSED CONSTRUCTION ENTRANCE. THE USE OF ANY OTHER ACCESSES IS PROHIBITED.
18. DURING DEWATERING OPERATIONS, WATER SHALL BE PUMPED OR OTHERWISE DISCHARGED FROM THE SITE INTO SEDIMENT BASINS, SILT TRAPS, DEWATERING BAGS OR POLYMER MIXING SHALE. DEWATERING DIRECTLY INTO FIELD TILES, WETLANDS, ADJACENT PROPERTIES, PUBLIC RIGHTS-OF-WAY, STREAMS, LAKES, PONDS, RIVERS, OR STORMWATER SYSTEMS IS PROHIBITED.
19. ALL STOCKPILES SHOULD BE STABILIZED WITHIN THREE (3) DAYS OF FORMING THE STOCKPILE.
20. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED AS FOLLOWS:
   - 20.1. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES ON A PORTION OF THE SITE IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
   - 20.2. WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 14 DAYS FROM WHEN ACTIVITIES CEASED, (I.E. THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN 14 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASES.
21. EROSION CONTROL BLANKETS SHALL BE USED IN AREAS OF 6:1 SLOPE OR STEEPER AND AS SHOWN ON THE PLANS.
22. ALL DISTURBED GREEN SPACES WITHIN THE R.O.W. SHALL BE RESTORED WITH 6" OF TOPSOIL AND CLASS 2A SEEDING.
23. THE CONDITION OF THE CONSTRUCTION SITE FOR WINTER SHUTDOWN SHALL BE ADDRESSED EARLY IN THE FALL GROWING SEASON SO THAT THE SLOPES AND OTHER BARE EARTH AREAS MAY BE STABILIZED WITH TEMPORARY AND/OR PERMANENT VEGETATIVE COVER FOR PROPER EROSION AND SEDIMENT CONTROL. ALL OPEN AREAS THAT ARE TO REMAIN IDLE THROUGHOUT THE WINTER SHALL RECEIVE TEMPORARY EROSION CONTROL MEASURES INCLUDING TEMPORARY SEEDING, MULCHING AND/OR EROSION CONTROL BLANKET PRIOR TO THE END OF THE FALL GROWING SEASON. THE AREAS TO BE WORKED BEYOND THE END OF THE GROWING SEASON MUST INCORPORATE SOIL STABILIZATION MEASURES THAT DO NOT RELY ON VEGETATIVE COVER SUCH AS EROSION CONTROL BLANKET AND HEAVY MULCHING.
24. ONCE ALL UPSTREAM AREAS ARE STABILIZED WITH SEED AND BLANKET OR SOD AS SHOWN IN THE PLANS, SILT FENCING SHALL BE REMOVED AND THE TRENCH SHALL BE RESTORED WITH TOPSOIL, SEED, FERTILIZER AND BLANKETING. RESTORATION SHALL OCCUR IMMEDIATELY FOLLOWING THE REMOVAL OF THE SILT FENCE. RESTORATION SHALL BE COMPLETED THE SAME WORKING DAY AS ANY SILT FENCING REMOVAL AND AT LEAST 2 HOURS BEFORE ANY FORECASTED PRECIPITATION.
25. ALL TEMPORARY EROSION CONTROL AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE PROPERLY STABILIZED OR DISPOSED OF BY THE CONTRACTOR.

# SOIL EROSION AND SEDIMENT CONTROL CONSTRUCTION SCHEDULE

1. OBTAIN NPDES AND OTHER APPLICABLE SITE PERMITS AND REVIEW PROJECT'S STORMWATER POLLUTION PREVENTION PLAN (SWPPP). CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND UPDATING THE SWPPP THROUGHOUT THE DURATION OF CONSTRUCTION AS NECESSARY UNTIL FINAL SITE STABILIZATION IS ACHIEVED.
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
3. INSTALL PERIMETER SEDIMENT CONTROL MEASURES (E.G. SILT FENCE).
4. INSTALL PROTECTION DEVICES FOR EXISTING DRAINAGE INLET AND OUTLET STRUCTURES, IF APPLICABLE.
5. PERFORM STORMWATER POLLUTION PREVENTION SITE INSPECTIONS ON A WEEKLY BASIS AND WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A RAINFALL EVENT THAT IS 0.5 INCH OR GREATER (OR EQUIVALENT SNOWFALL). AT A MINIMUM, THE INSPECTIONS SHALL INCLUDE THE DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, ALL STRUCTURAL CONTROL MEASURES, LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND ANY ADDITIONAL BEST MANAGEMENT PRACTICES IDENTIFIED IN THE SWPPP.
   - 5.1. ALL SITE EROSION AND SEDIMENT CONTROL MEASURES AND BEST MANAGEMENT PRACTICES SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND SHALL BE CONTINUOUSLY MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION (SEE THE STORMWATER POLLUTION PREVENTION NOTES AND STORMWATER POLLUTION PREVENTION MAINTENANCE SCHEDULE FOR ADDITIONAL INFORMATION). CONTRACTOR SHALL MAKE AND COMPLETE THE REQUIRED REPAIRS WITHIN FORTY-EIGHT (48) HOURS OF THE INSPECTION.
   - 5.2. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL STRUCTURAL CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE SITE INSPECTIONS.
   - 5.3. PERFORM STREET CLEANING OPERATIONS AND OTHER BEST MANAGEMENT PRACTICES AS NEEDED.
6. PERFORM SITE CLEARING AND GRUBBING AND REMOVE EXISTING VEGETATION AS NEEDED FOR INITIAL SITE GRADING OPERATIONS. VEGETATED SITE AREAS THAT ARE NOT INCLUDED WITH THE INITIAL GRADING SHALL REMAIN UNDISTURBED. ALL TOPSOIL STOCKPILES SHALL BE SURROUNDED WITH SILT FENCE AND STABILIZED WITHIN THREE (3) DAYS OF FORMING THE STOCKPILE.
7. REMOVE ALL ITEMS NOTED FOR REMOVAL IN THE DEMOLITION PLAN.
8. PERFORM ROUGH GRADING OPERATIONS, CONSTRUCT OVERFLOW ROUTES, AND STABILIZE ALL DISTURBED AREAS, INCLUDING BUT NOT LIMITED TO STEEP SLOPES, DRAINAGE CHANNELS AND SWALES (I.E. TEMPORARY AND PERMANENT SEEDING, EROSION CONTROL BLANKETS, RIP-RAP, CHECK DAMS, TEMPORARY DRAINAGE DIVERSIONS, ETC.).
9. INSTALL TEMPORARY CONCRETE WASHOUT FACILITY.
10. INSTALL BUILDING FOUNDATIONS AND BEGIN BUILDING CONSTRUCTION.
11. INSTALL DETENTION SYSTEMS, STORM SEWERS AND OTHER SITE UTILITIES AND IMMEDIATELY INSTALL DRAINAGE INLET AND OUTLET PROTECTION DEVICES AS INDICATED ON THE PLANS.
12. PROVIDE TEMPORARY SEEDING AND/OR MULCHING FOR ALL DISTURBED SITE AREAS THAT WILL NOT BE WORKED ON FOR MORE THAN FOURTEEN (14) DAYS.
13. INSTALL CURBS AND BEGIN SITE PAVING OPERATIONS (I.E. DRIVEWAYS, SIDEWALKS, ETC.).
14. COMPLETE BUILDING CONSTRUCTION AND REMAINING SITE IMPROVEMENTS.
15. REMOVE TEMPORARY SITE EROSION AND SEDIMENT CONTROL MEASURES WITHIN THIRTY (30) DAYS OF FINAL SITE STABILIZATION.
16. SUBMIT A NOTICE OF TERMINATION (N.O.T.) TO THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY UPON COMPLETION OF ALL SITE CONSTRUCTION AND FINAL SITE STABILIZATION (I.E. OVER 70% VEGETATIVE COVER).


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67

| DATE | MARK |
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PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025

SHEET TITLE:
**PROJECT SPECIFICATIONS**

SHEET:
**C-7.0**

W-T JOB NUMBER-C2500035


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A. REFERENCED SPECIFICATIONS

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:
   * STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
   * STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION;
   * VILLAGE OF MORTON GROVE MUNICIPAL CODE;
   * THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL;
   * IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

B. NOTIFICATIONS

1. THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055 OR SEND EMAIL NOTIFICATION WITH PROJECT NAME, LOCATION AND PERMIT NUMBER TO WMOJOBSTART@MWRD.ORG).
2. THE VILLAGE OF MORTON GROVE ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.
3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

C. GENERAL NOTES

1. ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). CONVERSION FACTOR IS 0.00 FT.
2. MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.
3. THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.
4. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.
5. THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.
6. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
7. MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.
8. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.
9. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.
10. RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.

D. SANITARY SEWER

1. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.
2. A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.
3. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY OR MWRD.
4. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).
5. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.
6. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
7. ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:

| PIPE MATERIAL | PIPE SPECIFICATIONS | JOINT SPECIFICATIONS |
|---|---|---|
| VITRIFIED CLAY PIPE | ASTM C-700 | ASTM C-425 |
| REINFORCED CONCRETE SEWER PIPE | ASTM C-76 | ASTM C-443 |
| CAST IRON SOIL PIPE | ASTM A-74 | ASTM C-564 |
| DUCTILE IRON PIPE | ANSI A21.51 | ANSI A21.11 |
| POLYVINYL CHLORIDE (PVC) PIPE<br>6-INCH TO 15-INCH DIAMETER SDR 26<br>18-INCH TO 27-INCH DIAMETER F/DY=46 | <br>ASTM D-3034<br>ASTM F-679 | <br>ASTM D-3212<br>ASTM D-3212 |
| HIGH DENSITY POLYETHYLENE (HDPE) | ASTM D-3350<br>ASTM D-3035 | ASTM D-3261,F-2620 (HEAT FUSION)<br>ASTM D-3212,F-477 (GASKETED) |
| WATER MAIN QUALITY PVC<br>4-INCH TO 36-INCH<br>4-INCH TO 12-INCH<br>14-INCH TO 48-INCH | <br>ASTM D-2241<br>AWWA C900<br>AWWA C905 | <br>ASTM D-3139<br>ASTM D-3139<br>ASTM D-3139 |

THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE.

| PIPE MATERIAL | PIPE SPECIFICATIONS | JOINT SPECIFICATIONS |
|---|---|---|
| POLYPROPYLENE (PP) PIPE | | |
| 12-INCH TO 24-INCH DOUBLE WALL | ASTM F-2736 | D-3212, F-477 |
| 30-INCH TO 60-INCH TRIPLE WALL | ASTM F-2764 | D3212, F-477 |

8. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE ¼ " TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO ¼ THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.
9. NON-SHEAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS.
10. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICKHOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID.
11. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:
    a) A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SHEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUBWYE SADDLE OR HUB-TEE SADDLE.
    b) REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION.
    c) WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.
12. WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.
13. ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.
14. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE.
15. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRECAST "RUBBER BOOTS" THAT CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRECAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS.
16. ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG.
17. EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES ASSOCIATED WITH VOLUME CONTROL FACILITIES, DRAIN TILES/FIELD TILES/UNDERDRAINS/PERFORATED PIPES ARE NOT ALLOWED TO BE CONNECTED TO OR TRIBUTARY TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS IN COMBINED SEWER AREAS. CONSTRUCTION OF NEW FACILITIES OF THIS TYPE IS PROHIBITED; AND ALL EXISTING DRAIN TILES AND PERFORATED PIPES ENCOUNTERED WITHIN THE PROJECT AREA SHALL BE PLUGGED OR REMOVED, AND SHALL NOT BE CONNECTED TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS.
18. A BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

E. EROSION AND SEDIMENT CONTROL

1. THE CONTRACTOR SHALL INSTALL THE EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
2. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE.
3. ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.
4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
5. INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:
   a) UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE.
   b) ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.
6. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE CO-PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
7. A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
8. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE.
9. MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION TO CONCRETE WASHOUT FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONSTRUCTION ACTIVITIES.
10. TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN. VOLUME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.
11. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.
12. ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT).
13. VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
14. SOIL STOCKPILES SHALL, AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS.
15. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL BLANKET.
16. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.
17. THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COMBINED SEWER AREA FOR GREEN INFRASTRUCTURE PRACTICES.
18. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.
19. THE CONTRCTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMAINS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATERS SHALL NOT BE DISCHARGE TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.
20. ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.
21. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIODS OF CONSTRUCTION SHUTDOWN UNTIL PERMANENT STABILIZATION IS ACHIEVED.
22. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.
23. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, SITE INSPECTOR, OR MWRD.

TECHNICAL GUIDANCE MANUAL

10/13/2022

MWRD GENERAL NOTES

STD. DWG. NO.18

PAGE NO. 19

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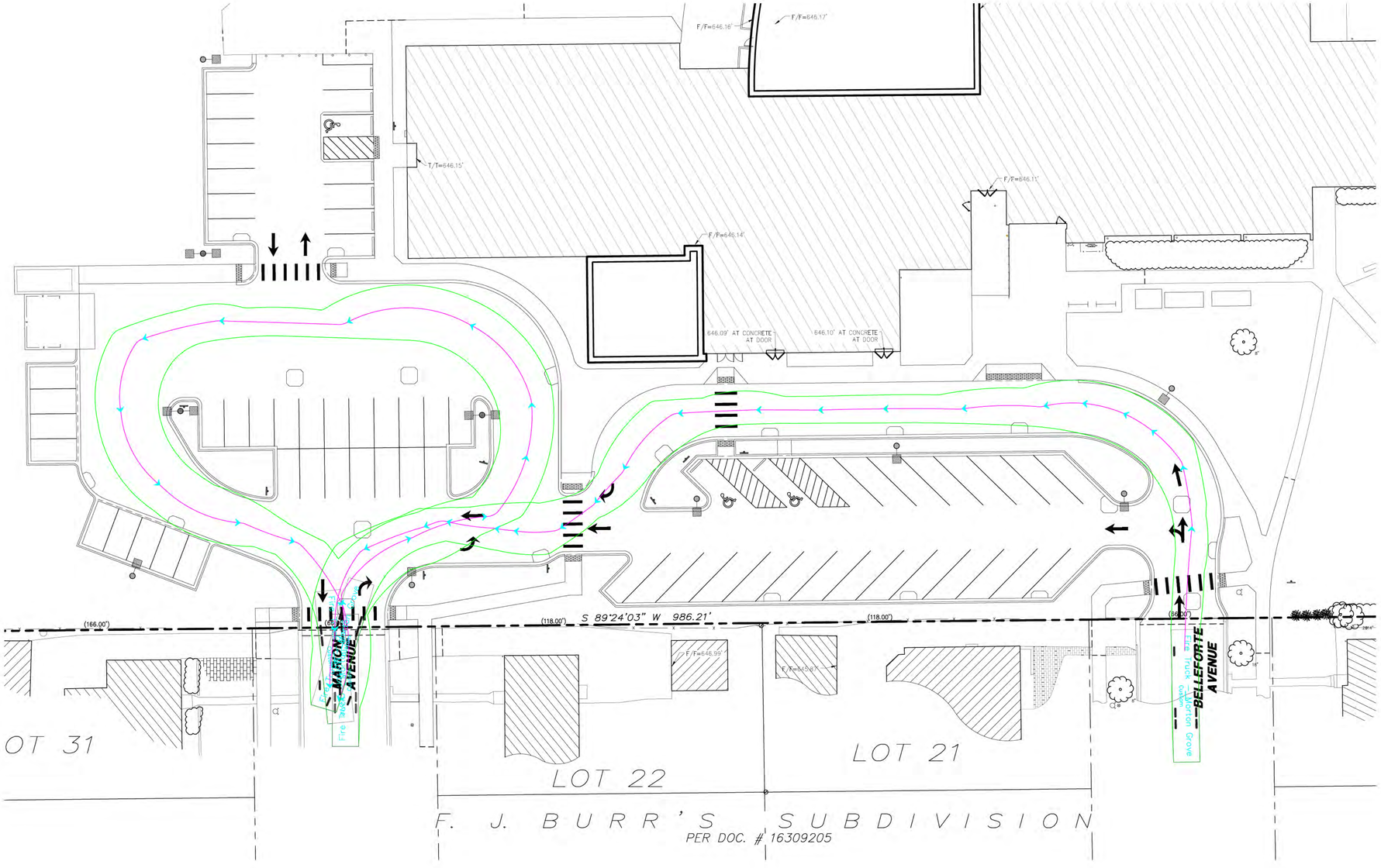
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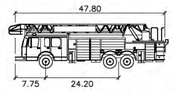
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PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: MWRD GENERAL NOTES
SHEET: C-7.1

W-T JOB NUMBER-C2500035

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Fire Truck – Morton Grove

| | feet |
|---|---|
| Width | : 9.50 |
| Track | : 8.36 |
| Lock to Lock Time | : 6.0 |
| Steering Angle | : 45.0 |

NORTH

1" = 20'

00 10 20 40 80

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# HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
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9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

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| DATE | MARK |
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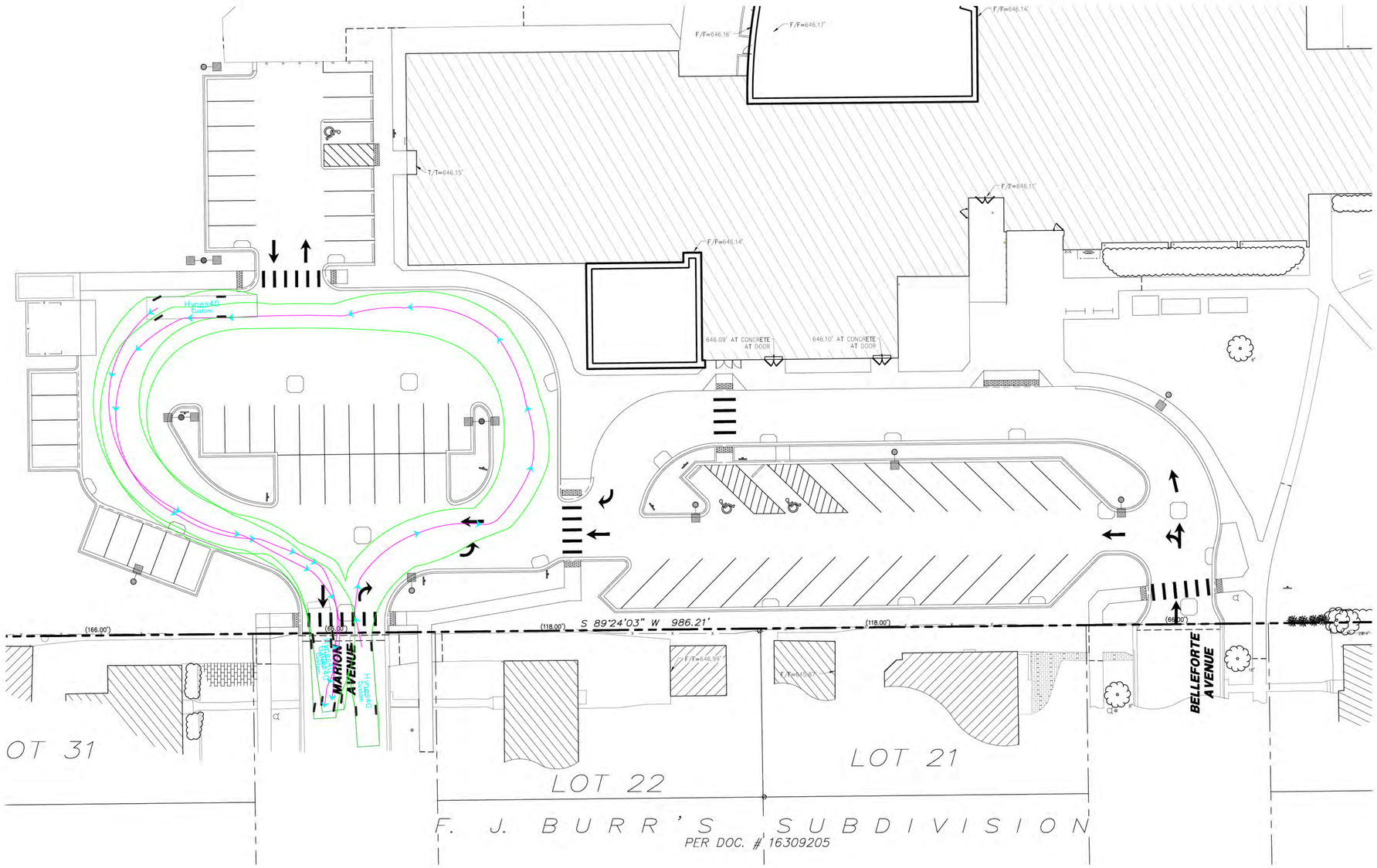
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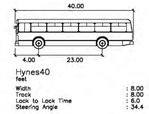
SHEET TITLE:

**SITE CIRCULATION PLAN**

SHEET:

**CIR-1.0**




NORTH

1" = 20'

00 10 20 40 80

W-T JOB NUMBER-C2500035

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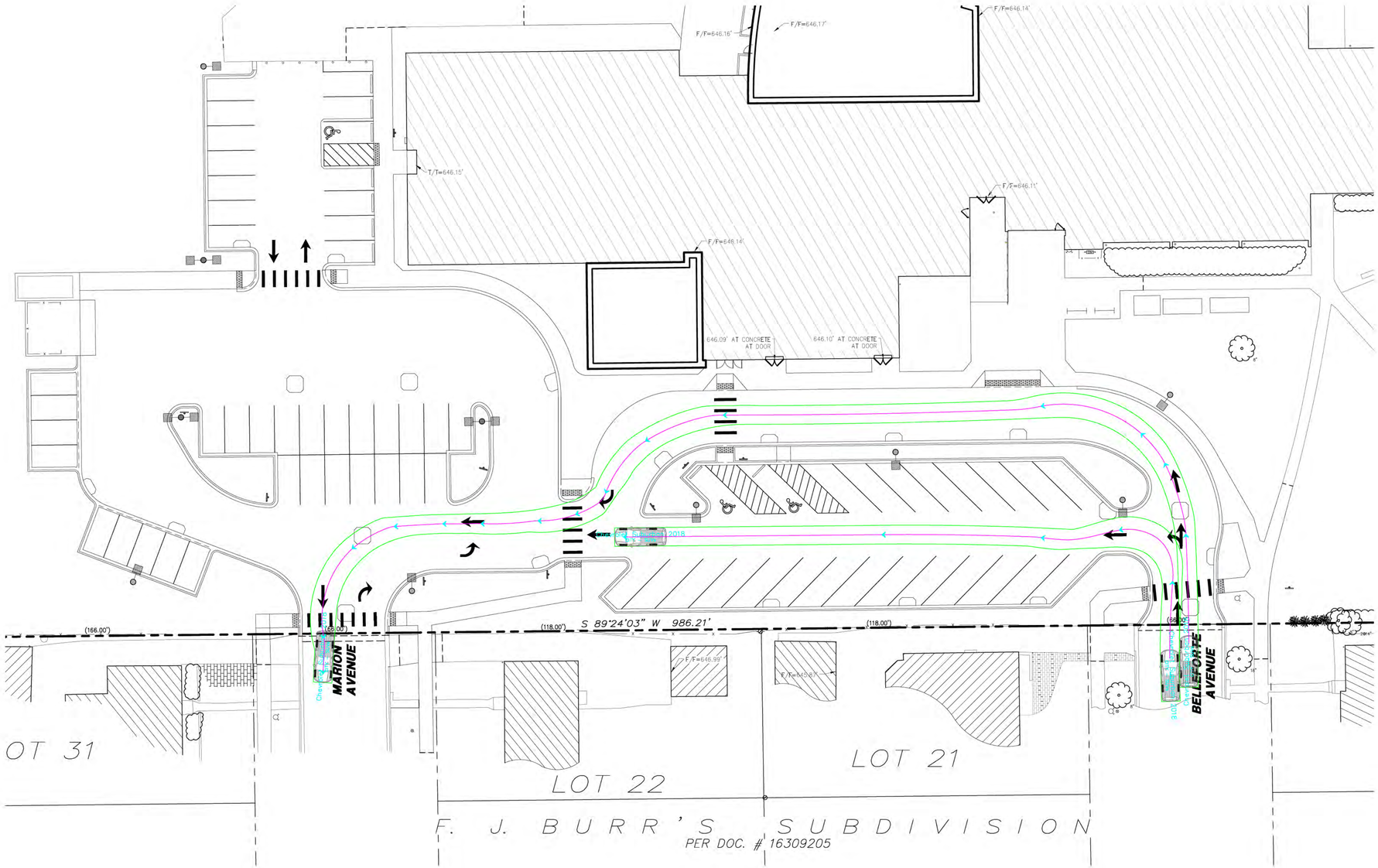
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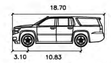
# HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

| DATE | MARK |
|---|---|
| | 50% CD NOT FOR CONSTRUCTION |

PROJECT No: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: **SITE CIRCULATION PLAN**
SHEET: **CIR-1.1**




Chevrolet Suburban 2018

| | feet |
|---|---|
| Width | : 6.71 |
| Track | : 6.63 |
| Lock to Lock Time | : 6.0 |
| Steering Angle | : 35.4 |

NORTH

1" = 20'

0 0 10 20 40 80

W-T JOB NUMBER-C2500035

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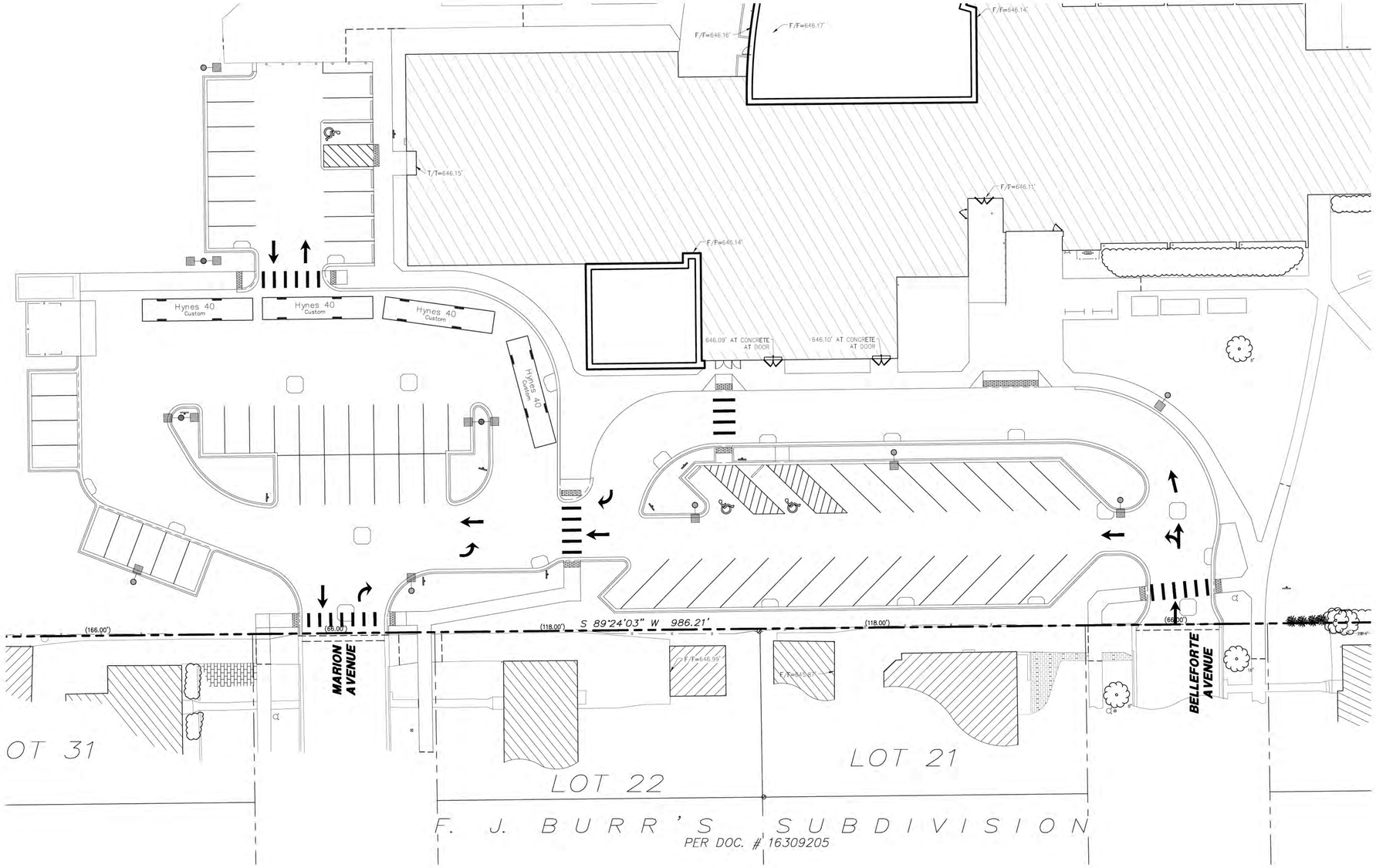
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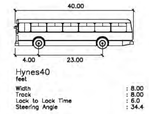
# HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

| DATE | MARK |
|---|---|
| | 50% CD NOT FOR CONSTRUCTION |

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: **SITE CIRCULATION PLAN**
SHEET: **CIR-1.2**







W-T JOB NUMBER-C2500035

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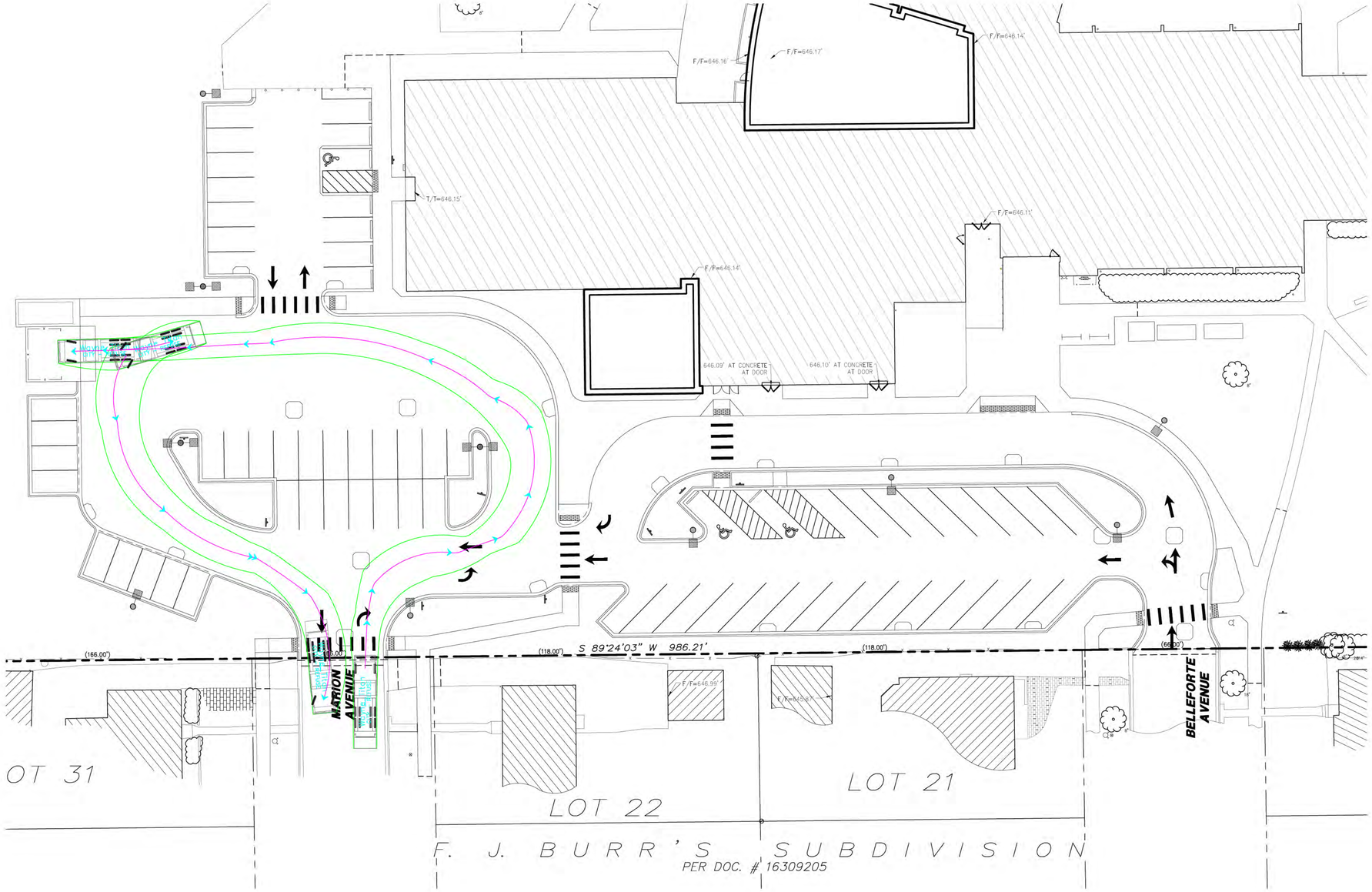
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HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

| DATE | MARK |
|---|---|
| | 50% CD NOT FOR CONSTRUCTION |

PROJECT No: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: SITE CIRCULATION PLAN
SHEET: CIR-1.3




NORTH

1" = 20'

00 10 20 40 80

W-T JOB NUMBER-C2500035


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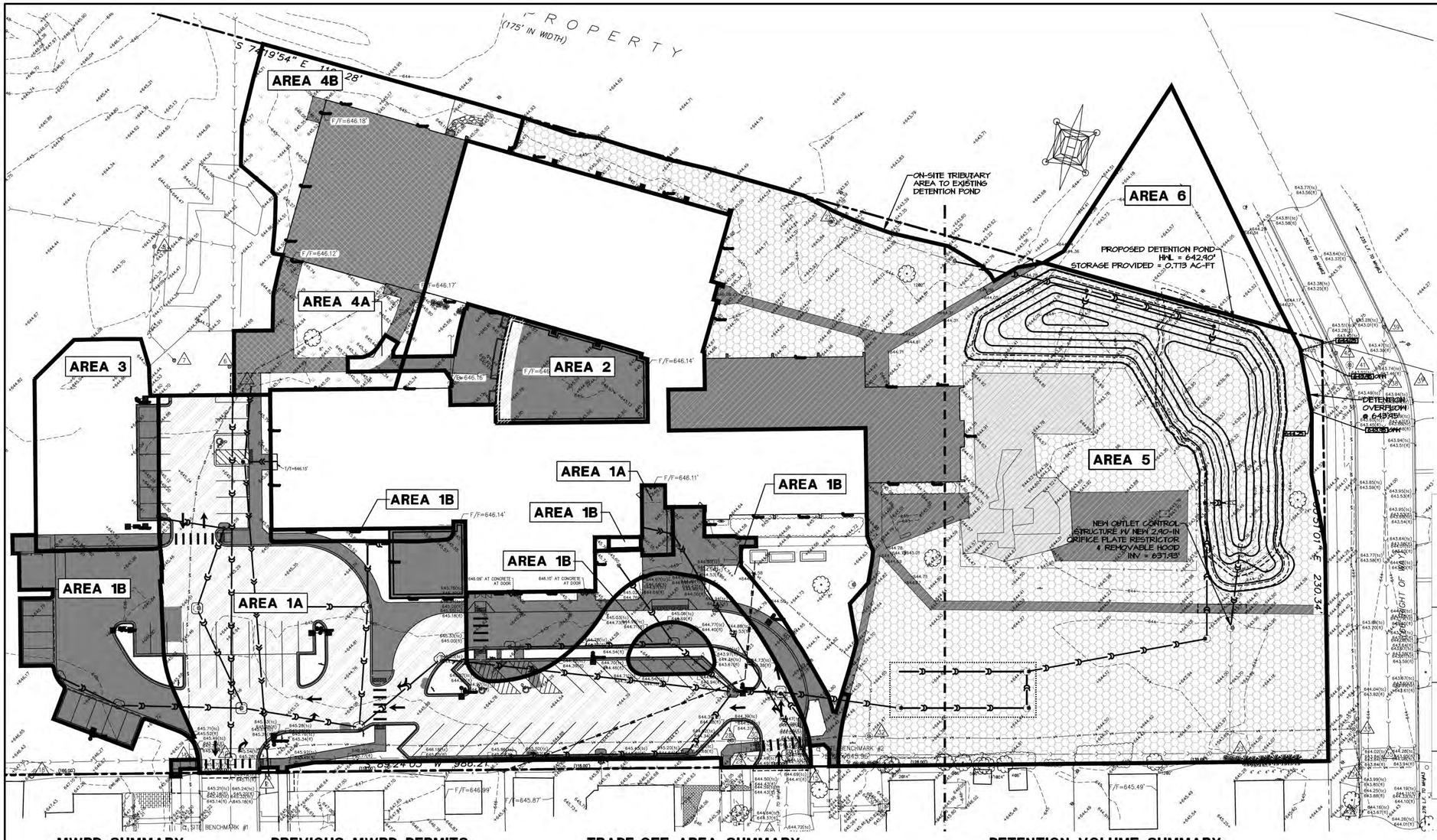
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HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

| DATE | MARK |
|---|---|
| | 50% CD NOT FOR CONSTRUCTION |

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025
SHEET TITLE: SITE CIRCULATION PLAN
SHEET: CIR-1.4




| AREA | |
|---|---|
| NEW IMPERVIOUS | |
| NEW PERVIOUS | |
| MAINTENANCE | |
| IMPERVIOUS (UNDETAINED) | |
| PERVIOUS (UNDETAINED) | |
| EX. IMPERVIOUS (TRADE OFF) | |
| EX. PERVIOUS (TRADE OFF) | |
| EX. PLAYGROUND (TRADE OFF) | |

Required Volume Control Storage Calculation

$V_c = Std_c \times Unit\ Conversion \times A_{IMPV}$

Where: $V_c$ = Volume Control Storage (Cubic Feet)
$Std_c$ = Control Standard = 1.00 in.
Unit Conversion = 1 ft / 12 in
$A_{IMPV}$ = Proposed Impervious Area Increase ($ft^2$) = 27191 $ft^2$ / 0.624 ac

Storage = 1.25in x 1ft / 12in x 27191.2 $ft^2$ = Required VC Storage = 2266 $ft^3$ / 0.052 ac-ft

Provided VC Storage

Coarse Agg Above Inv.

| ELEVATION | AREA | INCR. STORAGE | VOLUME |
|---|---|---|---|
| 643.00 | 2,400.00 SQ. FT. | | |
| 639.50 | 2,400.00 SQ. FT. | 8,400 CU. FT. | 8,400 CU.FT. OR 0.193 AC-FT |

TOTAL STONE VOLUME ABOVE INV. ($V_A$) = 8,400 $ft^3$ OR 0.193 ac-ft

Coarse Agg Below Inv.

| ELEVATION | AREA | INCR. STORAGE | VOLUME |
|---|---|---|---|
| 639.50 | 2,400.00 SQ. FT. | | |
| 638.50 | 2,400.00 SQ. FT. | 2,400 CU. FT. | 2,400 CU.FT. OR 0.055 AC-FT |

TOTAL STONE VOLUME ABOVE INV. ($V_B$) = 2,400 $ft^3$ OR 0.055 ac-ft

SUMMARY:

| | VOLUME (CF) | | STORAGE |
|---|---|---|---|
| 3.5F Stone layer above | $V_{C+}$ | 8400 VOLNO 39= | 1512 $ft^3$ |
| 1.0F Stone layer below | $V_{B-}$ | 2400 @ 30= | 864 $ft^3$ |
| | TOTAL PROVIDED: | | 2376 $ft^3$ |
| | TOTAL PROVIDED: | | 0.055 ac-ft |

## MWRD SUMMARY

## PROJECT SITE SUMMARY

PROPERTY ADDRESS: 9000 BELLEFORTE AVE., MORTON GROVE, ILLINOIS 60053
PROPERTY INDEX NUMBERS: 10-18-309-023-0000
TOTAL CONTIGUOUS OWNERSHIP: 9.294-ACRES
TOTAL DEVELOPMENT AREA: 0.781-ACRES

## AREA SUMMARY

- DISTURBED ON-SITE REDEVELOPMENT AREA: 0.874-ACRES
  - PROPOSED IMPERVIOUS AREA = 0.172-ACRES
  - PROPOSED PERVIOUS AREA = 0.045-ACRES
  - PROPOSED MAINTENANCE AREA = 0.601-ACRES
- DISTURBED ON-SITE NEW DEVELOPMENT AREA: 0.525-ACRES
  - PROPOSED IMPERVIOUS AREA = 0.452-ACRES
  - PROPOSED PERVIOUS AREA 0.062-ACRES
  - PROPOSED MAINTENANCE AREA = 0.011-ACRES

## CN CALCULATIONS

- AREA-1A CN = 96.05
- AREA-1B CN = 94.98
- AREA-2 CN = 98.00
- AREA-3 CN =98.00
- AREA-4A CN = 85.75
- AREA-4B CN = 84.33
- AREA-5 CN = 83.76

## TC CALCULATIONS

- ON-SITE TC TRIBUTARY TO DETENTION POND = 10 MINUTES
- UNRESTRICTED TC = 5 MINUTES

## PREVIOUS MWRD PERMITS

- PERMIT 13-063/RL 13-026 (AREA-1A)
  - PROJECT AREA = 2.11 ACRES
  - IMPERVIOUS AREA = 0.61 ACRES
  - PERVIOUS AREA = 1.50 ACRES
  - COMPOSITE RUNOFF COEFFICIENT = 0.58
  - GROSS ALLOWABLE RELEASE RATE = 0.53 CFS
  - NET ALLOWABLE RELEASE RATE = 0.53 CFS
  - TRADE-OFF AREA SUMMARY:
    - PERMITTED UNRESTRICTED AREA = 46,654 S.F. OR 1.08 ACRES
      - IMPERVIOUS = 39,193 S.F. OR 0.90 ACRES
      - PERVIOUS = 7,666 S.F. OR 0.18 ACRES
    - PERMITTED TRADE OFF AREA = 69,024 S.F.OR 1.58 ACRES
      - IMPERVIOUS = 19,312 S.F. OR 0.44 ACRES
      - PERVIOUS = 49,652 S.F. OR 1.14 ACRES
  - REQUIRED DETENTION CAPACITY:
    - 0.27 AC-FT @ MWRD HWL = 642.25'
    - 0.31 AC-FT @ MORTON GROVE HWL = 642.90'
  - PROVIDED DETENTION CAPACITY:
    - 0.30 AC-FT @ MWRD HWL = 642.25'
    - 0.40 AC-FT @ MORTON GROVE HWL = 642.90'
    - 0.42 AC-FT @ OVERALL HWL = 643.00'
  - ACTUAL RELEASE RATE = 0.50 @ MWRD HWL = 642.25'
    - 3.15-IN RESTRICTOR, SHORT PIPE, INV = 637.23', Cd = 0.82
- PERMIT 14-133 (AREA-3)
  - PROJECT AREA = 0.154 ACRES
  - IMPERVIOUS AREA = 0.065 ACRES
    - LESS THAN 0.10 ACRES, VOLUME CONTROL NOT REQUIRED
  - PERVIOUS AREA = 0.089 ACRES
  - DESIGN 100-YR PEAK FLOW RATE = 1.19 CFS
  - OVERLAND CONVEYANCE CAPACITY = 1.19 CFS
  - AGGREGATE DEVELOPMENT = 0.154-ACRES

## TRADE-OFF AREA SUMMARY

- PROPOSED UNRESTRICTED REDEVELOPMENT AREA = 0.478-ACRES
  - IMPERVIOUS = 0.244-ACRES
  - PERVIOUS = 0.234-ACRES
  - CN = 84.19
  - RUNOFF VOLUME = 0.24 AC-FT
- PROPOSED UNRESTRICTED NEW DEVELOPMENT AREA = 0.125-ACRES
  - IMPERVIOUS = 0.125-ACRES
  - CN = 98.00
  - RUNOFF VOLUME = 0.04 AC-FT
- PROPOSED TRADE OFF AREA (AREA-5) = 1.836-ACRES
  - IMPERVIOUS = 0.307-ACRES
  - PERVIOUS = 1.404-ACRES
  - PLAYGROUND = 0.125-ACRES
  - CN = 83.76
  - RUNOFF VOLUME = 1.01 AC-FT > 0.38 AC-FT

## RELEASE RATE CALCULATION

PROPOSED REVELOPMENT AREA = 0.261-ACRES (12.65%)
- DOES NOT INCLUDE 0.606-ACRES OF MAINTENANCE AREA

REMAINING DETENTION SERVICE AREA = 1.843-ACRES (87.35%)
PROPOSED NEW DEVELOPMENT AREA = 0.514-ACRES
- DOES NOT INCLUDE 0.011-ACRES OF MAINTENANCE AREA

RELEASE RATE FOR REDEVELOPMENT AREA = 0.261-ACRES x 0.237 CFS/ACRE = 0.063 CFS
- PERMITTED ACTUAL RELEASE RATE = 0.50 CFS
- DETENTION SERVICE AREA = 2.11-ACRES
- RELEASE RATE / DETENTION SERVICE AREA = 0.237 CFS/ACREE

RELEASE RATE FOR REMAINING AREA = 1.843-ACRES x 0.237 CFS/ACRE = 0.437 CFS

RELEASE RATE FOR NEW DEVELOPMENT AREA = 0.514-ACRES x 0.30 CFS/ACRE = 0.154 CFS

TOTAL GROSS ALLOWABLE RELEASE RATE = 0.063 CFS + 0.437 CFS + 0.154 CFS = 0.654 CFS

TOTAL NET ALLOWABLE RELEASE RATE = 0.654 CFS

## DETENTION VOLUME SUMMARY

- REDEVELOPMENT AREA (AREA-1A & 4A) = 0.267 ACRES
  - *DOES NOT INCLUDE MAINTENANCE AREAS
  - PROPOSED IMPERVIOUS AREA = 0.172 ACRES
  - PROPOSED PERVIOUS AREA = 0.095 ACRES
  - EXISTING REQUIRED DETENTION (TP-40 RAINFALL) = 0.058 AC-FT
  - PROPOSED REQUIRED DETENTION (B-75 RAINFALL) = 0.081 AC-FT
  - INCREMENTAL REQUIRED DETENTION = 0.081 - 0.058 = 0.023 AC-FT
  - PREVIOUSLY REQUIRED DETENTION (PERMIT 13-063/RL 13-026) = 0.210 AC-FT
  - NEW REQUIRED DETENTION = 0.210 + 0.023 = 0.233 AC-FT
- NEW DEVELOPMENT AREA (AREA-1B, 2, 3) = 0.514 ACRES
  - *DOES NOT INCLUDE MAINTENANCE AREAS
  - *APPROXIMATELY 0.111 ACRES OF AGGREGATE AREA FROM AREA-3 WILL BE CONVERTED TO PREDEVELOPMENT CONDITIONS AND IS NOT INCLUDED IN AGGREGATE AREA
  - PROPOSED IMPERVIOUS AREA = 0.452 ACRES
  - PROPOSED PERVIOUS AREA = 0.062 ACRES
  - RELEASE RATE REQUIREMENTS = 0.154 CFS
    - NORTH BRANCH WATERSHED AREA = 0.30 CFS/ACRE x 0.514 ACRES
  - PROPOSED CN = 95.83
  - PROPOSED REQUIRED DETENTION (B-75 RAINFALL) = 0.190 AC-FT
- TOTAL REQUIRED DETENTION = 0.233 AC-FT + 0.190 AC-FT = 0.423 AC-FT
- TOTAL PROVIDED DETENTION VOLUME = 0.773 AC-FT
  - HWL = 642.90'
  - NEW RESTRICTOR = 2.90-INCH ORIFICE PLATE RESTRICTOR W/ REMOVABLE HOOD
  - RELEASE RATE @ 642.90' = 0.494 CFS

## VOLUME CONTROL SUMMARY

- TOTAL REQUIRED VOLUME CONTROL = 0.052 AC-FT
  - 1-INCH x (1-FT/12-IN) x IMPERVIOUS AREA
  - 1 x (1/12) x 0.624 ACRES
- PROVIDED VOLUME CONTROL = 0.055 AC-FT
  - T/STONE ELEVATION =643.00'
  - UNDERDRAIN INV. = 639.50'
  - B/STONE ELEVATION = 638.50'
  - GROUNDWATER ELEVATION = 635.00'
  - SEPARATION = 3.5-FT > 2-FT (SEPARATE SEWER AREA)
  - VOLUME ABOVE INV. = 0.035 AC-FT
  - VOLUME BELOW INV. = 0.020 AC-FT

## PROPOSED DETENTION POND-1 STORAGE VOLUME

| ELEVATION | AREA | | | INCR. STORAGE VOLUME | CUMULATIVE STORAGE VOLUME | | DISCHARGE |
|---|---|---|---|---|---|---|---|
| 642.90 | 12,405 SQ. FT. | OR | 0.2848 AC. | | | | 0.494 CFS |
| | | | | 7,562 CU. FT. | 33,692 CU. FT. OR | 0.773 AC-FT | |
| 642.25 | 10,862 SQ. FT. | OR | 0.2494 AC. | | | | 0.460 CFS |
| | | | | 2,643 CU. FT. | 26,130 CU. FT. OR | 0.600 AC-FT | |
| 642.00 | 10,262 SQ. FT. | OR | 0.2360 AC. | | | | 0.446 CFS |
| | | | | 9,095 CU. FT. | 23,487 CU. FT. OR | 0.539 AC. FT | |
| 641.00 | 7,888 SQ. FT. | OR | 0.1811 AC. | | | | 0.396 CFS |
| | | | | 6,805 CU. FT. | 14,402 CU. FT. OR | 0.331 AC-FT | |
| 640.00 | 5,722 SQ. FT. | OR | 0.1314 AC. | | | | 0.313 CFS |
| | | | | 4,731 CU. FT. | 7,597 CU. FT. OR | 0.175 AC-FT | |
| 639.00 | 3,739 SQ. FT. | OR | 0.0858 AC. | | | | 0.219 CFS |
| | | | | 2,866 CU. FT. | 2,866 CU. FT. OR | 0.066 AC-FT | |
| 638.00 | 1,993 SQ. FT. | OR | 0.0458 AC. | | | | 0.000 CFS |

TOTAL POND $V_{642.90}$ PROVIDED = 0.773 AC-FT

## CIVIL ENGINEERING STATEMENT AND SEAL

I, JASON E. GREEN, P.E., DULY LICENSED IN THE STATE OF ILLINOIS BY THE DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION, DO HEREBY STATE THAT THIS DOCUMENT HAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF DOES CONFORM TO THE APPLICABLE BUILDING CODES AND ORDINANCES, AND ARE IN COMPLIANCE WITH THE ENVIRONMENTAL BARRIERS ACT (410 ILCS 25) AND THE ILLINOIS ACCESSIBILITY CODE (71 ILL. ADM. CODE 400).

JASON E. GREEN - P.E. # 062-059460
DATE OF EXPIRATION - NOVEMBER 30, 2025

DATE: 10/1/25

LICENSED PROFESSIONAL ENGINEER JASON E. GREEN 062.059460 OF ILLINOIS

NORTH
1" = 30'
00 15 30 60 120

W-T JOB NUMBER-C2500035

WT GROUP
Structural | Mechanical/Electrical/Plumbing
Civil | Land Survey | Telecommunication| Aquatic Accessibility Consulting | Design & Program Management
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GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

| DATE: | MARK |
|---|---|
| | |

50% CD NOT FOR CONSTRUCTION

PROJECT No.: 2025.036
DATE: OCTOBER 7, 2025

SHEET TITLE: MWRD DRAINAGE EXHIBIT

SHEET: MWRD-1

# Final Landscape Plan

# Hynes Elementary

## Morton Grove, Illinois

October 29, 2025

## CONSULTANTS:


LANDSCAPE ARCHITECT:

GARY R. WEBER ASSOCIATES, INC
402 W. LIBERTY DRIVE
WHEATON, ILLINOIS 60187

CIVIL ENGINEER:

WT GROUP
2000 CENTER DRIVE, SUITE B411
HOFFMAN ESTATES, ILLINOIS 60192





LOCATION MAP

SCALE: 1"=200'

## INDEX OF PLAN SHEETS


| SHEET NO. | DESCRIPTION |
|---|---|
| L1.0 | COVER SHEET |
| L1.1 | LANDSCAPE PLAN |
| L1.2 | TREE PRESERVATION PLAN |
| L1.3 | LANDSCAPE SPECIFICATIONS |

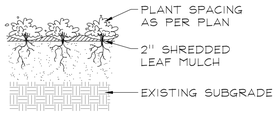
# PLANT LIST

| Key | Qty | Botanical/Common Name | Size | Remarks |
|---|---|---|---|---|
| | | SHADE TREES | | |
| AM | 8 | Acer miyabei 'Morton'<br>STATE STREET MAPLE | 2 1/2" Cal. | |
| GB | 5 | Ginkgo biloba 'Princeton Sentry'<br>PRINCETON SENTRY GINKGO | 2 1/2" Cal. | COLUMNAR<br>MALE ONLY |
| GT | 2 | Gleditsia triacanthos var. inermis 'Skycole'<br>SKYLINE HONEYLOCUST | 2 1/2" Cal. | |
| TC | 2 | Tilia cordata 'Greenspire'<br>GREENSPIRE LITTLELEAF LINDEN | 2 1/2" Cal. | |
| UM | 4 | Ulmus 'Morton Glossy'<br>TRIUMPH ELM | 2 1/2" Cal. | |
| | | DECIDUOUS SHRUBS | | |
| HA | 35 | Hydrangea paniculata 'SMHPLQF'<br>LITTLE QUICK FIRE HYDRANGEA | 24" Tall | 3' O.C. |
| HB | 22 | Hydrangea paniculata 'Bobo'<br>BOBO HYDRANGEA | 24" Tall | 3' O.C. |
| | | EVERGREEN TREES | | |
| TG | 15 | Thuja 'Green Giant'<br>GREEN GIANT ARBORVITAE | 8' Ht. | 6' O.C. |
| | | ORNAMENTAL GRASSES | | |
| CK | 11 | Calamagrostis x acutiflora 'Karl Foerster'<br>FEATHER REED GRASS | #1 | 30" O.C. |
| | | PERENNIALS | | |
| HP | 60 | Hemerocallis 'Happy Returns'<br>HAPPY RETURNS DAYLILY | #1 | 18" O.C. |
| HL | 199 | Hemerocallis 'Little Wine Cup'<br>LITTLE WINE CUP DAYLILY | #1 | 18" O.C. |
| HR | 199 | Hemerocallis 'Rosy Returns'<br>ROSY RETURNS DAYLILY | #1 | 18" O.C. |
| | | MISC. MATERIALS | | |
| | 13 | SHREDDED HARDWOOD MULCH | C.Y. | |
| | 9 | SHREDDED LEAF MULCH | C.Y. | |
| | .48 | TURF SEED & EROSION CONTROL BLANKET | AC. | |

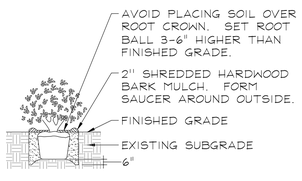
# NATIVE AREA QUANTITIES

| Key | Qty | Description |
|---|---|---|
| | 0.3 | WET MEADOW SEED & BLANKET |

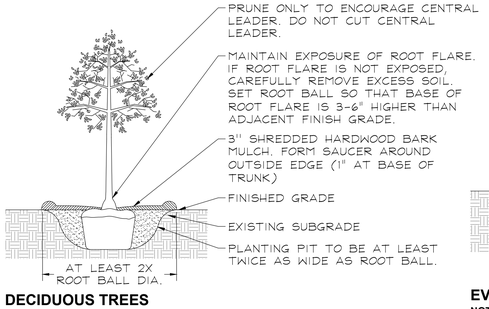
# PLANTING DETAILS



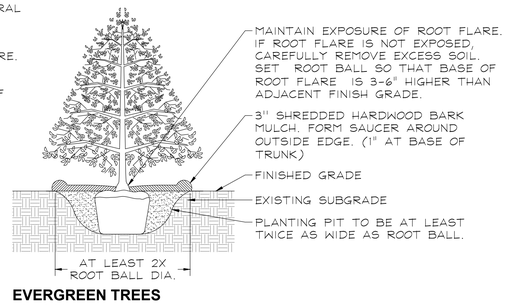

**PERENNIALS AND GROUNDCOVERS**
**NOT TO SCALE**



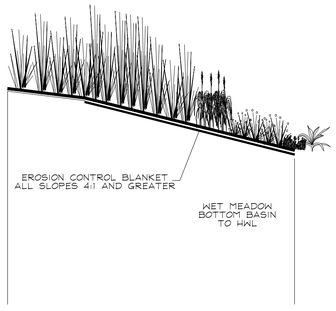

**DECIDUOUS AND EVERGREEN SHRUBS**
**NOT TO SCALE**



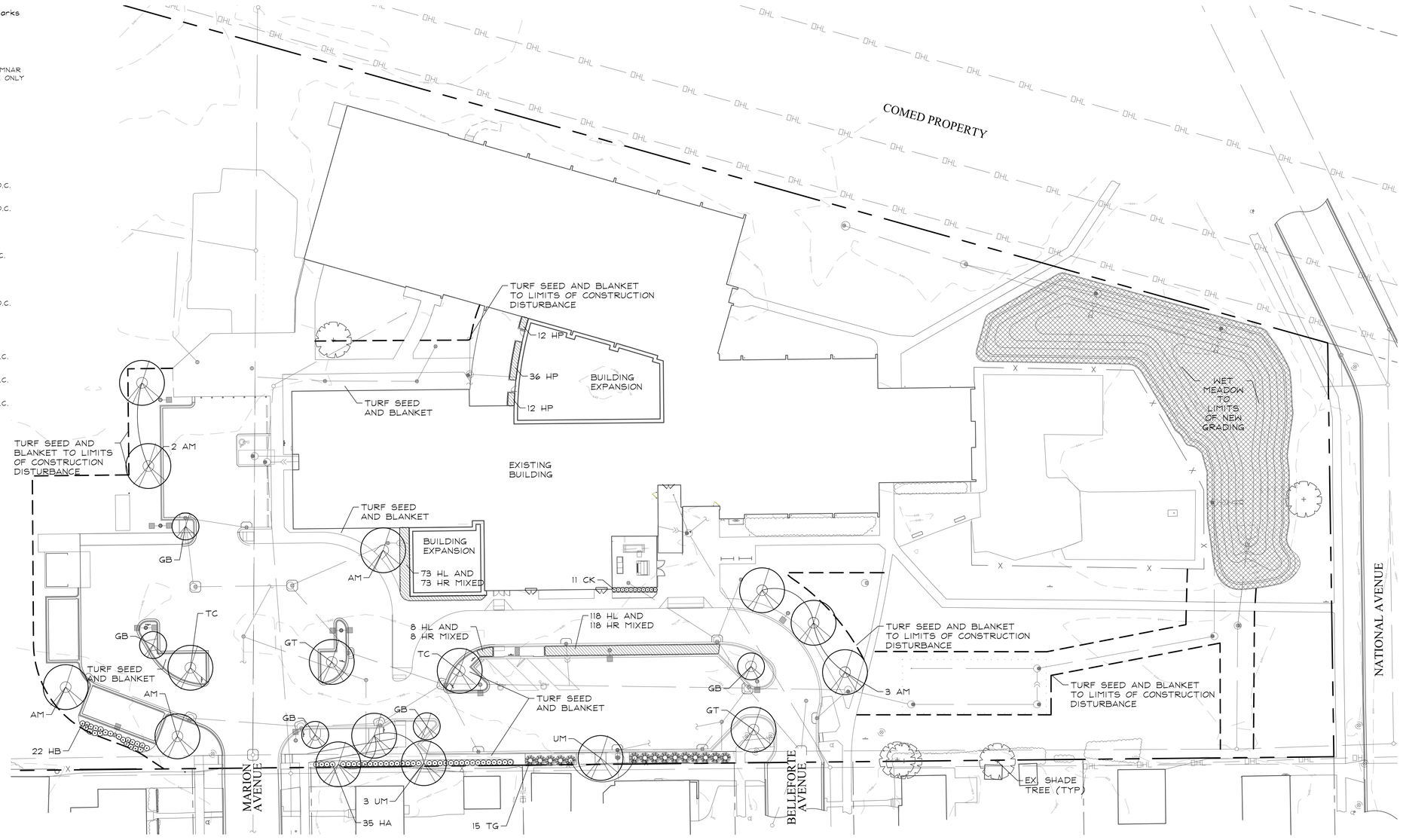

**DECIDUOUS TREES**
**NOT TO SCALE**




**EVERGREEN TREES**
**NOT TO SCALE**




**NATURALIZED STORMWATER BASIN SECTION**
**NOT TO SCALE**




0 15' 30' 60'
SCALE: 1"=30'
NORTH

| LANDSCAPE AREA (%) | 38,037.47 SF | |
|---|---|---|
| | LANDSCAPE AREA | INTERIOR LANDSCAPE |
| PROPOSED | 3,640.63 SF | 9.50% |
| REQUIRED | 2,662.62 SF | 7.00% |

# GENERAL LANDSCAPE NOTES

1. Contractor shall verify underground utility lines and is responsible for any damage.
2. Contractor shall verify all existing conditions in the field prior to construction and shall notify landscape architect of any variance.
3. Material quantities shown are for contractors convenience only. The Contractor must verify all material and supply sufficient materials to complete the job per plan.
4. The landscape architect reserves the right to inspect trees and shrubs either at place of growth or at site before planting, for compliance with requirements of variety, size and quality.
5. Work shall conform to American Standard for Nursery Stock, State of Illinois Horticultural Standards, and Local Municipal requirements.
6. Contractor shall secure and pay for all permits, fees, and inspections necessary for the proper execution of this work and comply with all codes applicable to this work.
7. Contractor shall monitor landscape throughout the installation process and ensure regular manual watering of all plants and turf areas is sufficient for normal establishment.
8. See General Conditions and Specifications for landscape work for additional requirements.

W-T JOB NUMBER-C2500035


WT Group
Engineering • Design • Consulting

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Structural | Mechanical/Electrical/Plumbing
Civil | Land Survey | Telecommunication| Aquatic
Accessibility Consulting | Design & Program Management
Engineering with Precision, Pace & Passion.
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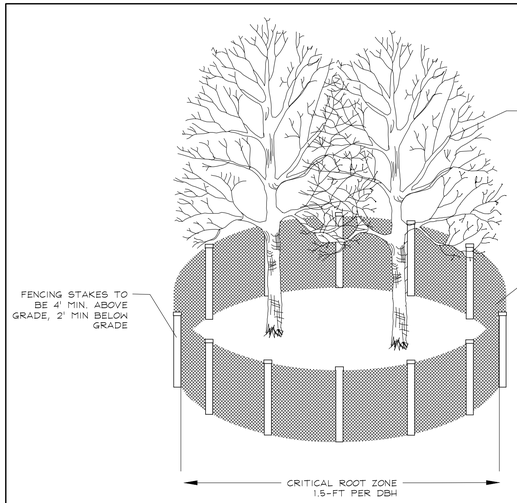

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HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

| DATE: | MARK |
|---|---|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | 75% CD NOT FOR CONSTRUCTION |

PROJECT No.: 2025.036
DATE: OCTOBER 29, 2025
SHEET TITLE: SITE LANDSCAPE PLAN
SHEET: L1.1

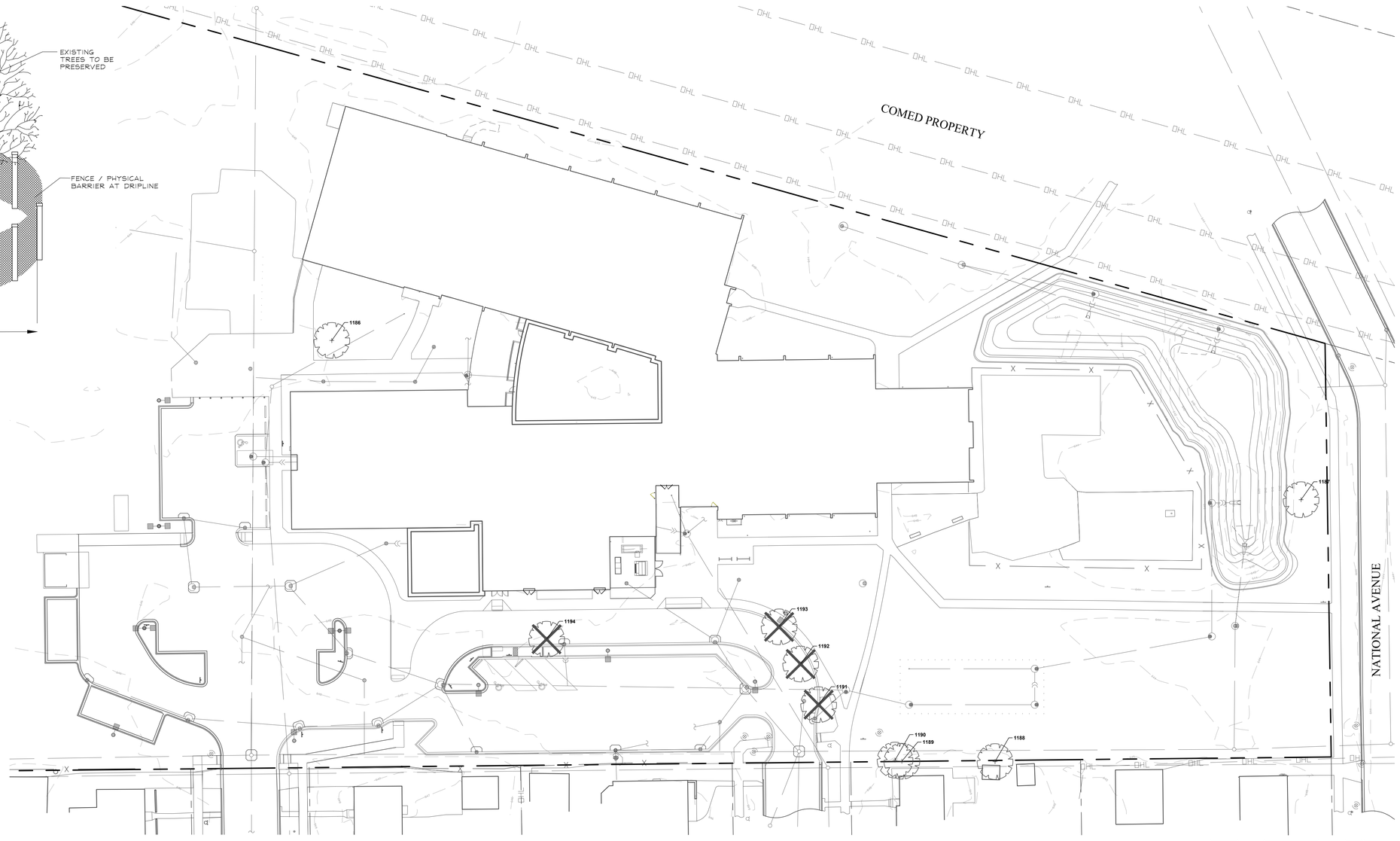



## TREE PRESERVATION DETAIL

**(NOT TO SCALE)**
**SEE NOTES**

## TREE PRESERVATION NOTES

1. Property line shall be located and staked by a professional land surveyor prior to tree removal.
2. 48" high snow fence or wood barriers shall extend to the dripline of the tree or tree mass whenever possible, shall be installed before construction begins, and should not be removed until the completion of construction.
3. Contractor shall take extreme care to protect the root system of existing trees. Should root pruning be necessary it shall not exceed 25% of the tree's root system and shall be done in accordance with recognized horticulture practices under the supervision of a professional arborists, Landscape Architect or Horticulturist.
4. All accidental damage to existing trees that are to be preserved shall be promptly treated as required in accordance with recognized horticultural practices and the instructions of the professional Arborist, Landscape Architect or Horticulturist.
5. Broken or badly bruised branches shall be removed with a clean cut. If recommended by the professional Arborist, Landscape Architect or Horticulturist.
6. Care shall be exercised by the contractors to protect all overhead limbs and branches from damage by contact with material, machinery or equipment and by damage from engine exhaust.
7. Contractors shall protect trees and vegetation against spills or discharge of fuels, lubricating oils, hydraulic fluids, anti-freeze and coolants, calcium chloride, lime and all other similar hydrocarbons, organic chemicals, and other materials which can be harmful.
8. When underground utilities are proposed within 5' of a preserved tree trunk, they must be augered if possible.




### TREE INVENTORY

**Hynes Elementary School - 900 Belleforte Avenue**
**WT Group**
**Inventory fieldwork date: 10/27/2025**
**Completed by: AM**

**RATING AND SURVEY CRITERIA**

1) Trees measured at 4.5 ft above the ground - DBH (diameter Breast Height)
2) All trees 6" DBH and above tagged per the **Morton Grove** ordinance
3) Dead trees and invasive shrubs were not tagged
4) Health Rating:

| Rating | Description | Criteria |
|---|---|---|
| 1 | Excellent | Less than 10% dead wood, typical growth for species, no observed defects |
| 2 | Good | Less than 20% dead wood, minor defects, sound structure, no decay |
| 3 | Fair | Less than 30% dead wood, minor crown die-back, minor trunk damage or cavities |
| 4 | Fair to Poor | Approximately 30-50% dead wood, lacking full crown, minor disease evidence, trunk damage |
| 5 | Poor | Over 50% dead wood, lacking full crown, disease or decay evident, structural damage/cavities |
| 6 | Dead | Less than 10% living wood, greater than 50% missing bark, adventitious growth only, decay |

| TAG NO. | SCIENTIFIC NAME | COMMON NAME | DBH (inches) | CONDITION | STRUCTURE | HEALTH | PROPOSED ACTION | LOCATION |
|---|---|---|---|---|---|---|---|---|
| 1186 | *Gleditsia triacanthos* | Honey Locust | 8 | 2 - Good | | | PRESERVE | |
| 1187 | *Ulmus pumila* | Siberian Elm | 32 | 3 - Fair | Crown Lean | Trunk Scar | PRESERVE | |
| 1188 | *Morus alba* | White Mulberry | 24,15,13 | 5 - Poor | V-shaped joint, Multi Leader, Split Risk, Crown Lean | Cavity, Trunk Scar | PRESERVE | Landscape Buffer |
| 1189 | *Acer spp.* | Maple Cultivar | 15,14,7 | 5 - Poor | V-shaped joint, Multi Leader, Split Risk | | PRESERVE | Landscape Buffer |
| 1190 | *Morus alba* | White Mulberry | 10,5 | 5 - Poor | V-shaped joint, Double Leader, Split Risk, Lean, Crown Lean, Crowded | Trunk Scar | PRESSERVE | Landscape Buffer |
| 1191 | *Acer spp.* | Maple Cultivar | 34 | 3 - Fair | | | REMOVE | |
| 1192 | *Gleditsia triacanthos* | Honey Locust | 7 | 2 - Good | | Trunk Scar | REMOVE | |
| 1193 | *Acer spp.* | Maple Cultivar | 28 | 3 - Fair | Unbalanced | | REMOVE | |
| 1194 | *Gleditsia triacanthos* | Honey Locust | 36 | 2 - Good | | Trunk Scar | REMOVE | |

## LEGEND

1234 EXISTING TREE TO BE PRESERVED

1234 EXISTING TREE TO BE REMOVED

1234 EXISTING TREE TO BE PRESERVED

1234 EXISTING TREE TO BE REMOVED

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# HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS

GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW 67

| DATE | MARK |
|---|---|
| | 75% CD NOT FOR CONSTRUCTION |

PROJECT No.: 2025.036
DATE: OCTOBER 29, 2025
SHEET TITLE: **TREE PRESERVATION PLAN**
SHEET: **L1.2**

W-T JOB NUMBER-C2500035

WT Group
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Structural | Mechanical/Electrical/Plumbing
Civil | Land Survey | Telecommunication| Aquatic
Accessibility Consulting | Design & Program Management
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LANDSCAPE WORK PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

The work shall consist of furnishing, transporting and installing all seeds, plants and other materials required for:

1. The establishment of trees, shrubs, perennial, annual and lawn areas as shown on Landscape Plan;
2. The provision of post-planting management as specified herein;
3. Any remedial operations necessary in conformance with the plans as specified in this document;
4. The design, furnishing and installation of a complete underground sprinkler system; and
5. Permits which may be required.

1.2 QUALITY ASSURANCE

A. Work shall conform to State of Illinois Horticultural Standards and local municipal requirements.

B. Quality Control Procedures:

1. Ship landscape materials with certificates of inspection as required by governmental authorities. Comply with governing regulations applicable to landscape materials.

2. Do not make substitutions. If specified landscape material is not obtainable, submit to Landscape Architect proof of non-availability and proposal for use of equivalent material.

3. Analysis and Standards: Package standard products with manufacturers certified analysis.

C. Insect Control

1. For areas containing standing water less than 3-ft that persist for greater than 7 days, mosquito control may be necessary. Mosquito control should be limited to larvicides applications such as Natular or Vectolex FG, per the EPA and CDC guidance. Larvicide application should be provided by a qualified professional. Contract the North Shore Mosquito Abatement District for service.

1.3 SUBMITTALS

A. Planting Schedule

Submit three (3) copies of the proposed planting schedule showing dates for each type of planting

B. Maintenance Instruction - Landscape Work

Submit two (2) copies of typewritten instructions recommending procedures to be established by the Owner for the maintenance of landscape work for one full year. Submit prior to expiration of required maintenance periods.

Instructions shall include: watering, fertilizing, spraying, mulching and pruning for plant material and trimming groundcover. Instructions for watering, fertilizing and mowing grass areas shall be provided ten (10) days prior to request for inspection for final acceptance. Landscape Architect shall receive copies of all instructions when issued.

C. Submit two (2) copies of soil test of existing topsoil with recommendations for soil additive requirement to Landscape Architect for review and written approval.

D. Submit two (2) samples of shredded hardwood bark mulch, erosion control blankets, and all other products and materials as specified on plans to Landscape Architect for review and written approval.

E. Nursery packing lists indicating the species and quantities of material installed must be provided to the Owner and/or City upon request.

1.4 JOB CONDITIONS

A. Examine and evaluate grades, soils and water levels. Observe the conditions under which work is to be performed and notify Landscape Architect of unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.

B. Utilities: Review underground utility location maps and plans; notify local utility location service; demonstrate an awareness of utility locations; and certify acceptance of liability for the protection of utilities during course of work. Contractor shall be responsible for any damage to utilities or property.

C. Excavation: When conditions detrimental to plant growth are encountered such as rubble fill, adverse drainage conditions or obstructions, notify Landscape Architect before planting.

1.5 GUARANTEES

A. Guarantee seeded and sodded areas through the specified maintenance period and until final inspection.

B. Guarantee trees, shrubs, groundcover and perennials for a period of one year after date of acceptance against defects including death and unsatisfactory growth, except for defects resulting from neglect by Owner, abuse or damage by others or unusual phenomena or incidents which are beyond Landscape Installer's control.

C. Native Planting Area Performance Criteria

1st Full Growing Season: 90% of cover crop shall be established. There shall be no bare areas greater than two (2) square feet in seeded areas. At least 25% of vegetation coverage shall be native, non-invasive species. At least 50% of the emergent species, if planted as plugs shall be alive and apparent.

2nd Full Growing Season: All areas with the exception of emergent zones shall exhibit full vegetative cover. At least 50% of the vegetation coverage shall be native, non-invasive species.

3rd Full Growing Season: At least 75% of vegetation coverage shall be native, non-invasive species. Non-native species shall constitute no more than 25% relative aerial coverage of the planted area. Invasive species for this project shall include the following: Ambrosia artemisiifolia & trifida (Common & Giant Ragweed), Cirsium arvense (Canada Thistle), Dipsacus laciniatus (Cut-leaved Teasel), Dipsacus sylvestris (Common Teasel), Lythrum salicaria (Purple Loosestrife), Melilotus sp. (Sweet Clover), Phalaris arundinacea (Reed Canary Grass), Phragmites australis (Giant Reed), Fallopia japonica (Japanese Knotweed), Rhamnus cathartica & frangula (Common & Glossy Buckthorn), Typha sp. (Broadleaf, Narrowleaf, and Hybrid Cattail).

LANDSCAPE WORK PART 2 - PLANT MATERIALS

2.1 LAWN SEED MIXTURE

Grass Seed: Provide fresh, clean, new crop seed complying with the tolerance for purity and germination established by the Official Seed Analysts of North America. Provide seed of the grass species, proportions and maximum percentage of weed seed, as specified.

A. Lawn Seed Mixture - 5 lbs. / 1,000 sq. ft.
50% Kentucky Bluegrass (98/85)
15% Cutler Perennial Ryegrass
10% Spartan Hard Fescue
10% Edge Perennial Ryegrass
10% Express Perennial Ryegrass
5% Pennlawn Creeping Red Fescue

B. Temporary Lawn Seed Mixture - 5 lbs. / 1,000 sq. ft.
40% Kentucky Bluegrass (98/85)
40% Perennial Ryegrass
20% Annual Ryegrass

C. Highlands Fescue Seed Mixture - Mixture-7 lbs. / 1,000 sq. ft.
25% Discovery Hard Fescue
25% Tiffany Chewings Fescue
25% Florentine Creeping Red Fescue
25% Bighorn Sheeps Fescue

D. Detention Seed Mixture - 7 lbs. / 1000 sq. ft.
70% Kentucky 31 Tall Fescue
30% Perennial Ryegrass

2.2 NATIVE PLANTING MIXTURES

Provide fresh, clean, new crop of the species and proportions as specified. Native seed and live plant material shall be obtained from a reputable supplier (approved by Landscape Architect) that has collected from sources east of the Mississippi River within the same EPA Level III Ecoregion as the project site (Central Corn Belt Plains). Any material sourced from outside this ecoregion must be approved by the Landscape Architect prior to installation.

For each species, the amount of seed indicated on the specifications shall mean the total amount of pure live seed (PLS) per acre. Seed tags and PLS testing information shall be provided to the Landscape Architect prior to seeding.

It is the sole responsibility of the Native Landscape Contractor to provide approved seed that meets industry-standard PLS requirements.

2.3 GROUNDCOVERS, PERENNIALS AND ANNUALS

Provide plants established and well-rooted in removable containers or integral peat pots and with not less than the minimum number and length of runners required by ANSI Z60.1 for the pot size shown or listed.

2.4 TREES AND SHRUBS

A. Name and Variety: Provide nursery grown plant material true to name and variety.

B. Quality: Provide trees, shrubs and other plants complying with the recommendations and requirements of ANSI Z60.1 "Standard for Nursery Stock" and as further specified.

C. Deciduous Trees: Provide trees of height and caliper listed or shown and with branching configuration recommended by ANSI Z60.1 for type and species required. Provide single stem trees except where special forms are shown or listed. Provide balled and burlapped (B&B) deciduous trees.

D. Deciduous Shrubs: Provide shrubs of the height shown or listed and with not less than the minimum number of canes required by ANSI Z60.1 for the type and height of shrub required. Provide balled and burlapped (B&B) deciduous shrubs.

E. Coniferous Evergreen: Provide evergreens of the sizes shown or listed. Dimensions indicate minimum spread for spreading and semi-spreading type evergreens and height for other types. Provide quality evergreens with well-balanced form complying with requirements for other size relationships to the primary dimension shown. Provide balled and burlapped (B&B) evergreen trees and containerized shrubs.

F. Inspection: All plants shall be subject to inspection and review at the place of growth or upon delivery and conformity to specification requirements as to quality, right of inspection and rejection upon delivery at the site or during the progress of the work for size and condition of balls or roots, diseases, insects and latent defects or injuries. Rejected plants shall be removed immediately from the site.

2.5 PLANTING SOIL MIXTURE

Provide planting soil mixture consisting of clean uncompacted topsoil (stockpiled at site) for all planting pits, perennial, annual and groundcover areas. Topsoil shall be conditioned based on any recommendations resulting from the soil test in 1.3.C.

2.6 EROSION CONTROL

A. Lawn Seed Areas Erosion Control Blanket: North American Green DS75, or equivalent approved equal.

B. Native Areas Erosion Control Blanket: North American Green S150, or equivalent approved equal.

C. Shoreline Areas: Erosion Control Blanket: North American Green SC150, or equivalent approved equal. To be installed per manufacturer's recommendations three feet above and below NWL.

D. Refer to latest Engineering & Erosion Control Plans for any areas to receive permanent or long-term blanket installation.

E. Hydroseed Mulch: Conweb 2000 wood fiber mulch with tackifier. Other mulches may be used subject to approval of Landscape Architect.

2.7 MULCH

Provide mulch consisting of premium shredded hardwood bark. Provide sample to Landscape Architect for approval prior to ordering materials.

LANDSCAPE WORK PART 3 - EXECUTION

3.1 PLANTING SCHEDULE

At least thirty (30) days prior to the beginning of work in each area, submit a planting schedule for approval by the Landscape Architect.

3.2 PLANTINGS

A. Seeding New Lawns

1. Remove existing grass, vegetation and turf. Dispose of such material legally off-site. Do not turn over into soil being prepared for lawns.

2. Till to a depth of not less than 6"; apply soil amendments; remove high areas and fill in depressions; till soil to a homogenous mixture of fine texture, remove lumps, clods, stones over 1" diameter, roots and other extraneous matter. Dispose of such material legally off-site.

3. Seeded lawn areas shall receive an application of commercial fertilizer at the rate of 5 lbs. per 1,000 sq. ft. and shall be 6-24-24. Fertilizer shall be uniformly spread and mixed into the soil to a depth of 1" inches.

4. Do not use wet seed or seed which is moldy or otherwise damaged in transit or storage.

5. Sow seed using a spreader or seeding machine. Do not seed when wind velocity exceeds five (5) miles per hour. Distribute seed evenly over entire area by sowing equal quantity in two directions at right angles to each other.

6. Sow not less than specified rate.

7. Rake lawn seed lightly into top 1" of soil, roll lightly and water with a fine spray.

8. After the seeding operation is completed, spray a wood fiber mulch (Conweb 2000 with tackifier or approved equal) over the entire grassed area at the rate of 2,000 lbs. per acre. Use a mechanical spray unit to insure uniform coverage. Exercise care to protect buildings, automobiles and people during the application of the mulch.

9. DO NOT MOW HIGHLANDS FESCUE SEED MIXTURE.

B. Seeding Native Areas

1. The period for planting prairie seed shall be from April 1 to May 15 or November 1 to just before the first frost. Seeding outside of these timeframes must be approved by the landscape architect. Native seed planted outside of specified timeframes must have at least 60 days of growth prior to frost. Dormant seeding in winter is possible if soil conditions allow.

2. The General Contractor and Native Landscape Contractor shall be responsible for performing all work necessary to achieve and maintain an acceptable seedbed prior to seeding. All areas must be properly prepared before seeding begins. Equipment having low unit pressure ground contact shall be utilized within the planting areas.

3. If present, compacted soils shall be disked or raked prior to seeding. Remedial measures for the access area may, at the direction of the Wetland Consultant, involve ripping from 12 to 18 inches of the soil horizon prior to disking.

4. Prior to seeding, planting areas shall have at least twelve inches of clean un-compacted topsoil. Clumps, clods, stones over 2" diameter, roots and other extraneous matter shall be removed and disposed of legally off-site.

5. Granular mycorrhizal inoculants shall be installed with the seed mix at a rate of 40lbs/ acre. Inoculant can be banded under seed, worked into seed or added into spray tanks. Native areas shall not receive fertilizer.

6. Contractor shall be solely responsible for the proper handling and storage of the seed according to the best seed handling and storage practices, including fungicide treatments and stratification considerations. Owner shall make no compensation for damage to the seed because of improper storage, cleaning, threshing, or screening operations.

7. Except where site conditions preclude their use, seeding shall be performed using a Truax drill, Truax Trillion seeder, or comparable equipment designed specifically for installation of native seed. For areas where site conditions preclude the use of specialized equipment, seed may be installed through hand broadcasting and followed by light raking. Hand broadcast seed shall be spread at twice the specified rate. Other methods of seed installation may be used with prior approval from the Landscape Architect.

8. Prior to starting work, all seeding equipment shall be calibrated and adjusted to sow seeds at the proper seeding rate. In general, the optimum seeding depth is 0.25 inch below the soil surface. Areas where the seed has not been incorporated into the soil to the proper depths will not be accepted, and no compensation for materials or labor for the rejected work will be made by the Owner.

9. Seeding and soil tracking/firming shall not be done during periods of rain, severe drought, high winds, excessive moisture, frozen ground, or other conditions that preclude satisfactory results.

10. Wet mesic and emergent areas shall be planted, and seed allowed to germinate (if possible), prior to flooding with significant amounts of water. Any areas of significant permanent water located within the planting area will receive live plugs in lieu of seed.

11. After the seeding operation is completed, install erosion control blanket per manufacturer's specifications.

12. Emergent plugs shall be planted in natural groupings within designed areas containing saturated soils or shallow inundation. Plants within groupings shall be planted at 2 foot centers.

13. Emergent plugs shall not be planted less than the specified rate and shall be protected with goose exclosures surrounding all natural groupings of plugs.

E. Groundcover and Perennial Beds

Groundcover, perennials, and annuals shall be planted in continuous beds of planting soil mixture a minimum of 8" deep. Install per spacing indicated on plan.

F. Trees and Shrubs

1. Set balled and burlapped (B&B) stock plumb and in center of pit or trench with top of ball at an elevation that will keep the root flare exposed upon backfill and mulching. Remove burlap from top and sides of balls; retain on bottoms. When set, place additional topsoil backfill around base and sides of ball and work each layer to settle backfill and eliminate voids and air pockets. When excavation is approximately 2/3 full, water thoroughly before placing remainder of backfill. Repeat watering until no more is absorbed. Water again after placing final layer of backfill.

2. Dish top of backfill to allow for mulching. Provide additional backfill berm around edge of excavations to form shallow saucer to collect water.

3. Mulch pits, trenches and planted areas. Provide not less than 3" thickness of mulch and work into top of backfill and finish level with adjacent finish grades. Maintain exposed root flare at all times.

4. Prune only injured or dead branches from flowering trees, if any. Protect central leader of tree during shipping and pruning operations. Prune shrubs to retain natural character in accordance with standard horticultural practices.

5. Remove and replace excessively pruned or ill-formed stock resulting from improper pruning.

6. The Contractor shall be wholly responsible for assuring that all trees are planted in a vertical and plumb position and remain so throughout the life of this contract and guarantee period. Trees may or may not be staked and guyed depending upon the individual preference of the Contractor; however, any bracing procedure(s) must be approved by the Owner prior to its installation.

3.3 INITIAL MAINTENANCE

A. Begin maintenance immediately after planting, continuing until final acceptance. A minimum of thirty (30) days.

B. Maintain planted and seeded areas by watering, rolling/regrading, replanting and implementing erosion control as required to establish vegetation free of eroded or bare areas.

C. Highlands Fescue and Native Planting areas are to be mowed only once per spring during the initial three year establishment period.

3.4 NATIVE LANDSCAPED AREAS
CONTINUED MONITORING & MAINTENANCE

A. Monitoring

The Owner shall notify the Village of Morton Grove upon completion of plantings. The Owner's Environmental Specialist shall inspect the plantings and provide the Village of Morton Grove with a copy of the planting locations, species, and quantities for verification by the Village of Morton Grove.

The Owner's Environmental Specialist shall inspect the plantings at least twice per year during the three-year term of the Establishment and Maintenance Cash Bond or Letter of Credit, to determine compliance with the minimum annual performance criteria (See 1.5C Guarantees). A monitoring report will be provided to the Village of Morton Grove by January 31st following each inspection.

B. Maintenance:

First Season

With the exception of the emergent area, native seeding areas should be mowed to a height of 6" to control annual nonnative and invasive species early in the growing season. Mowing, including weed whipping, should be conducted during prior to weed seed production. Mowing height and timing may need to be adjusted per target species. Small quantities of undesirable plant species, shall be controlled by hand pulling prior to the development and maturity of the plant. Hand removal shall include the removal of all above-ground and below-ground stems, roots and flower masses prior to development of seeds. Herbicide should be applied as necessary by a trained and licensed operator that is competent in the identification of native and nonnative herbaceous plants. Debris and litter shall be removed from the native areas and storm structures shall be inspected and maintained as necessary.

Second Season

Control of undesirable plant species during the second growing season shall consist primarily of precise herbicide application. Mowing and weed whipping shall be conducted as needed during the early growing season and as needed to a height of 6 to 8 inches to prevent annual weeds from producing seed. Debris and litter shall be removed from the native areas and storm structures shall be inspected and maintained as necessary.

Third, Fourth, and Fifth Years:

Seasonal mowing and herbicide will continue as above but should be reduced over time.

Debris and litter shall be removed from the native areas and storm structures shall be inspected and maintained as necessary. At the completion of the third growing season (dependent on fuel availability; dominance of graminoid species; and favorable weather conditions), fire may be introduced to the planted areas as a management tool.

State and local permits shall be required prior to controlled burning. Burning shall be conducted by trained professionals experienced in managing smoke in urban environments. Prior to a controlled burn, surrounding property owners as well as local fire and police departments shall be notified. A burn plan detailing preferred wind direction and speed, location of fire breaks, and necessary personnel and equipment shall be prepared and utilized in planning and burn implementation.

The initial burn shall be dependent on fuel availability which is directly related to the quantity and quality of grasses contained within the plant matrix. Timing of the burn shall be determined based on results of the annual monitoring indicating species composition of the management area and other analysis of management goals. Generally, burns shall be scheduled from spring to fall on a rotational basis. Burn frequency shall also be dependent on the species composition within the management area. Generally, a new prairie restoration area shall be burned annually for two years after the second or third growing season after planting and then every 2-3 years thereafter, burning 50-75% of the area.

C. Long Term Wetland and Prairie Management/Maintenance

A final compliance report and Long-Term Operation and Maintenance Plan shall be submitted by the Developer/Owner's Environmental Specialist no less than 60 days prior to the expiration of any landscape Cash Bond or Letter of Credit posted for the native areas. Final acceptance and release shall be determined by the Village of Morton Grove upon inspection of the site to verify compliance.

The Long -Term Operation and Maintenance Plan shall be written to include guidelines and schedules for burning, mowing, application of herbicide, debris/litter removal and inspection schedule for storm structures and sediment removal.

3.5 CLEAN UP AND PROTECTION

A. During landscape work, store materials and equipment where directed. Keep pavements clean and work areas and adjoining areas in an orderly condition.

B. Protect landscape work and materials from damage due to landscape operations, operations by other trades and trespassers. Maintain protection during installation and maintenance periods. Treat, repair or replace damaged landscape work as directed by Landscape Architect.

3.6 INSPECTION AND ACCEPTANCE

A. The Landscape Architect reserves the right to inspect seeds, plants, trees and shrubs either at place of growth or at site before planting for compliance with requirements for name, variety, size, quantity, quality and mix proportion.

B. Supply written affidavit certifying composition of seed mixtures and integrity of plant materials with respect to species, variety and source.

C. Notify the Landscape Architect within five (5) days after completing initial and/or supplemental plantings in each area.

D. When the landscape work is completed, including maintenance, the Landscape Architect will, upon request, make a final inspection to determine acceptability. After final acceptance, the Owner will be responsible for maintenance.

**NATIVE SEED MIXTURES**

**Temporary Cover Crop**

Cover crops shall be installed in all planting areas containing dry mesic, mesic, and wet mesic soils to, stabilize soils, and combat weed pressure during the germination and establishement of the native seeding area.

| Botanical Name | Common Name | lbs / AC |
|---|---|---|
| **Cover Crop** | | |
| *Avena sativa* | Seed Oats | 40.000 |

**Wet Meadow Seed Mixture**

| Botanical Name | Common Name | lbs / AC |
|---|---|---|
| **Grasses / Sedges** | | |
| *Carex bebbii* | Bebbs Oval Sedge | 0.250 |
| *Carex bicknellii* | Bicknells Sedge | 0.125 |
| *Carex brevior* | Plains Oval Sedge | 0.250 |
| *Carex cristatella* | Crested Oval Sedge | 0.060 |
| *Carex molesta* | Field Oval Sedge | 0.250 |
| *Carex normalis* | Spreading Oval Sedge | 0.015 |
| *Carex scorparia* | Pointed Broom Sedge | 0.190 |
| *Carex stipata* | Common Fox Sedge | 0.060 |
| *Carex vulpinoidea* | Brown Fox Sedge | 0.250 |
| *Elymus virginicus* | Virginia Wild Rye | 3.000 |
| *Glyceria striata* | Fowl Manna Grass | 0.130 |
| *Juncus dudleyi* | Dudleys Rush | 0.020 |
| *Juncus torreyi* | Torreys Rush | 0.031 |
| *Panicum virgatum* | Switch Grass | 3.000 |
| *Scirpus atrovirens* | Dark Green Bulrush | 0.060 |
| *Scirpus cyperinus* | Wool Grass | 0.030 |
| | **Total Grasses / Sedges** | **7.721** |
| **Wildflowers/Broadleaves** | | |
| *Asclepias incarnata* | Swamp Milkweed | 0.125 |
| *Bidens cernua* | Nodding Bur Marigold | 0.190 |
| *Boltonia asteroids* | False Aster | 0.031 |
| *Eupatorium perfoliatum* | Common Boneset | 0.015 |
| *Euthamia grammifolia* | Grassleaved Goldenrod | 0.300 |
| *Helenium autumnale* | Sneezeweed | 0.063 |
| *Hibiscus laevis* | Halberd-leaved Rose Mallow | 0.380 |
| *Iris virginica shrevei* | Blue Flag Iris | 1.000 |
| *Lobelia siphilitica* | Great Blue Lobelia | 0.031 |
| *Mimulus ringens* | Monkey Flower | 0.031 |
| *Physostegia virginiana* | Obedient Plant | 0.031 |
| *Pycnanthemum virginianum* | Common Mountain Mint | 0.063 |
| *Solidago rigida* | Stiff Goldenrod | 0.125 |
| *Symphyotrichium novae-angliae* | New England Aster | 0.250 |
| *Vernonia fasciculata* | Common Ironweed | 0.380 |
| *Verbena hastata* | Blue Vervain | 0.380 |
| *Zizia aurea* | Golden Alexanders | 0.500 |
| | **Total Forbs** | **3.895** |
| | **Total Wet Meadow Seed Mix** | **11.616** |

W-T JOB NUMBER-C2500035


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Structural | Mechanical/Electrical/Plumbing
Civil | Land Survey | Telecommunication| Aquatic
Accessibility Consulting | Design & Program Management
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HYNES ELEMENTARY SCHOOL BUILDING ADDITIONS
GOLF SCHOOL DISTRICT 67
9000 BELLEFORTE AVENUE
MORTON GROVE, IL 60053

LEARNING TODAY... LEADING TOMORROW
67

| DATE: | MARK |
|---|---|

75% CD NOT FOR CONSTRUCTION

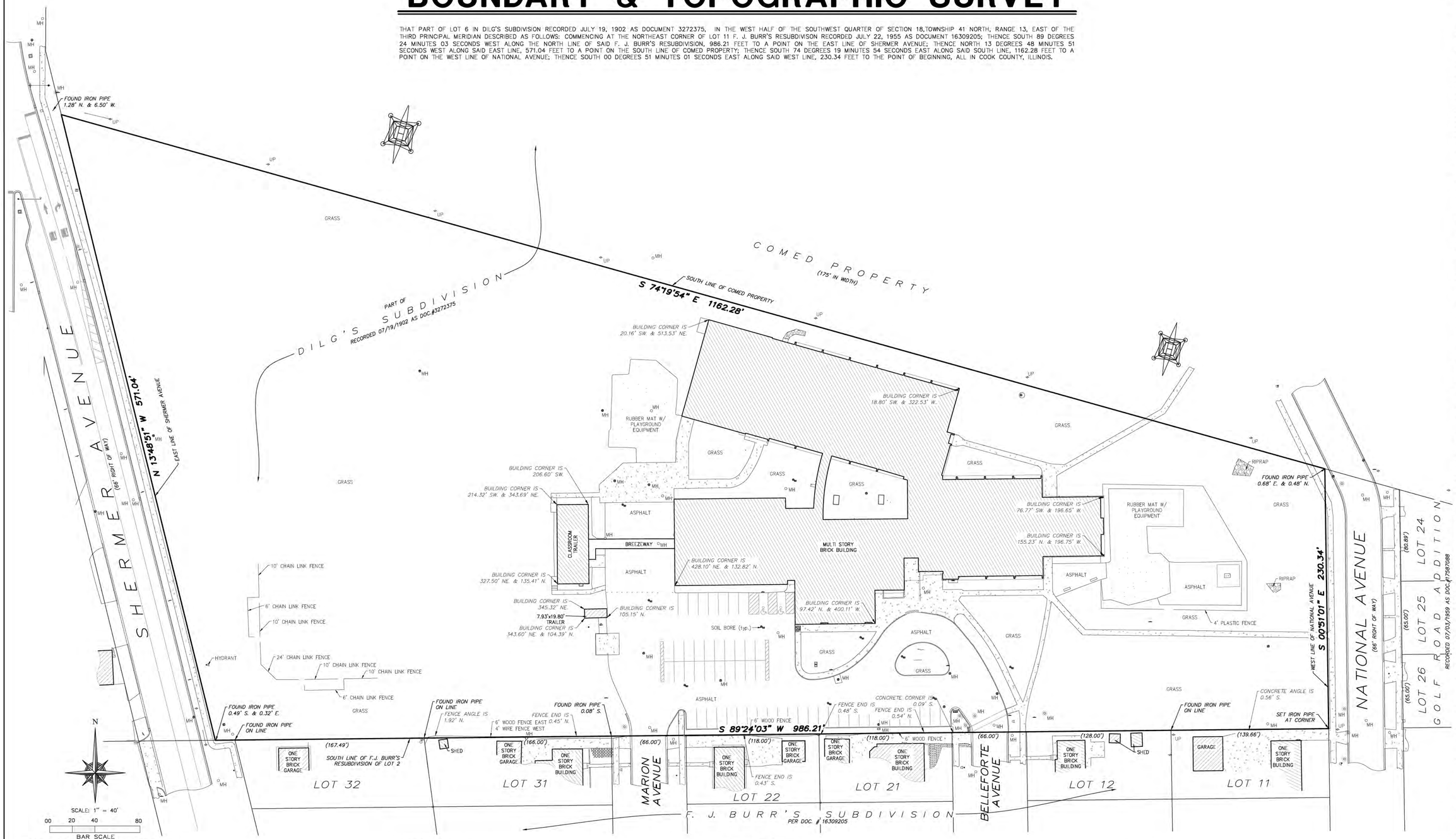
PROJECT No: 2025.036
DATE: OCTOBER 29, 2025

SHEET TITLE:
**LANDSCAPE SPECIFICATIONS**

SHEET:
**L1.3**

# BOUNDARY & TOPOGRAPHIC SURVEY

THAT PART OF LOT 6 IN DILG'S SUBDIVISION RECORDED JULY 19, 1902 AS DOCUMENT 3272375, IN THE WEST HALF OF THE SOUTHWEST QUARTER OF SECTION 18,TOWNSHIP 41 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF LOT 11 F. J. BURR'S RESUBDIVSON RECORDED JULY 22, 1955 AS DOCUMENT 16309205; THENCE SOUTH 89 DEGREES 24 MINUTES 03 SECONDS WEST ALONG THE NORTH LINE OF SAID F. J. BURR'S RESUBDIVISION, 986.21 FEET TO A POINT ON THE EAST LINE OF SHERMER AVENUE; THENCE NORTH 13 DEGREES 48 MINUTES 51 SECONDS WEST ALONG SAID EAST LINE, 571.04 FEET TO A POINT ON THE SOUTH LINE OF COMED PROPERTY; THENCE SOUTH 74 DEGREES 19 MINUTES 54 SECONDS EAST ALONG SAID SOUTH LINE, 1162.28 FEET TO A POINT ON THE WEST LINE OF NATIONAL AVENUE; THENCE SOUTH 00 DEGREES 51 MINUTES 01 SECONDS EAST ALONG SAID WEST LINE, 230.34 FEET TO THE POINT OF BEGINNING, ALL IN COOK COUNTY, ILLINOIS.




BASIS OF BEARINGS IS TRUE NORTH BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM, ILLINOIS EAST 1201 ZONE.

## LEGEND

| | | | |
|---|---|---|---|
| PROPERTY LINE | UTILITY POLE | SOIL BORING | |
| CENTER LINE | TYPICAL SIGN | TELCO/ELEC MANHOLE | |
| EASEMENT LINE | MAILBOX | HANDRAIL | |
| BUILDING SETBACK | CLOSED MANHOLE | GUARDRAIL | |
| SECTION LINE | OPEN GRATE MANHOLE | GUY WIRE ANCHOR | |
| (XXX') RECORD DATA | BEEHIVE GRATE MANHOLE | CONTOUR LINE | |
| XX.XX TOP OF CURB/WALL ETC.) XX.XX SPOT GRADE XX.XX BOTTOM OF CURB/WALL GUTTER,ETC.) | GUTTER FRAME MANHOLE | EDGE GRAVEL/STONE | |
| CONCRETE | VALVE VAULT | FENCE LINE | |
| | FIRE HYDRANT | FLARED END SECTION | |
| | B-BOX / SERVICE VALVE | STORM SEWER | |
| EVERGREEN/DECIDUOUS WITH SIZE IN INCHES | POST LIGHT\GROUND LIGHT | SANITARY SEWER | |
| | AREA LIGHT\LIGHT POLE | COMBO SEWER | |
| SHRUB/SHRUB LINE | STREET LIGHT | WATER SERVICE LINE | |
| | TRAFFIC SIGNAL | WATER MAIN | |
| MONITOR WELL | MAST ARM SIGNAL | OVERHEAD LINE | |
| GAS VALVE | HANDHOLE (electric\traffic) | FIBER OPTIC LINE | |
| UTILITY MARKINGS (cable,elec,fiber) (tel,water,gas) | GAS METER | GAS LINE | |
| | ELECTRIC METER | U.G. TELCO LINE | |
| | PEDESTAL(telco,elec,cable) | U.G. ELECTRIC LINE | |

**SURVEY NOTES:**

1. SITE BENCHMARK #1 – SET CROSS ON NORTHEAST BOLT OF HYDRANT LOCATED IN GRASS APPROXIMATELY 8.6' WEST OF MARION AVENUE AND 37' SOUTH OF MH #11, AS SHOWN ON SHEET SUR-3. ELEVATION=646.80' (NAVD88)

SITE BENCHMARK #2 – BURY BOLT ON HYDRANT ON THE EAST SIDE OF BELLEFORTE AVENUE, AT THE SE CORNER OF PARKING LOT ENTRANCE AS SHOWN ON SUR-2. ELEVATION=645.96' (NAVD88)

SITE BENCHMARK #3 – FLANGE BOLT ON HYDRANT ON THE EAST SIDE OF SHERMER ROAD, 43' SOUTHWEST OF THE SOUTHWEST FENCE CORNER OF NORTH DUGOUT AS SHOWN ON SHEET SUR-3. ELEVATION=649.12'

2. PERMANENT INDEX NUMBER (P.I.N. #):10-18-309-023

3. THE LOCATION OF UNDERGROUND UTILITIES WAS DETERMINED BY FIELD OBSERVATION, VISIBLE MARKINGS AND UTILITY LOCATED BY UNDERGROUND DETECTIVE WORK ORDER NUMBER 00224010

4. PROPERTY AREA: 402,463 SQUARE FEET (9.24 ACRES)

**SURVEY NOTES CON'T:**

5. FIELD WORK COMPLETED ON 5/30/2025

6. SURVEY PREPARED FOR: GOLF SCHOOL DISTRICT 67

7. BUILDING TIES & DIMENSIONS SHOWN ARE MEASURED FROM THE OUTSIDE FACE OF THE BUILDING

8. BASIS OF BEARINGS IS TRUE NORTH BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM, ILLINOIS EAST 1201 ZONE.

9. ANY DISCREPANCIES FOUND WITHIN THIS DOCUMENT NEED TO BE REPORTED TO THE SURVEYOR AS SOON AS POSSIBLE.

10. SURVEY PREPARED WITHOUT THE AID OF A TITLE REPORT, REFER TO A CURRENT TITLE REPORT, DEED AND LOCAL CODES FOR ANY EASEMENT, BUILDING SETBACKS AND OTHER LOCAL RESTRICTIONS NOT SHOWN HERON. SURVEYOR CREATED PROPERTY DESCRIPTION AS IT WAS NOT PROVIDED.

STATE OF ILLINOIS )
) SS
COUNTY OF COOK )

WE THE WT GROUP DO HEREBY DECLARE THAT WE HAVE SURVEYED THE ABOVE DESCRIBED PROPERTY AND THAT THIS PLAT IS A CORRECT REPRESENTATION OF SAID SURVEY. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY AND TOPOGRAPHIC SURVEY.

GIVEN UNDER OUR HAND AND SEAL THIS 25TH DAY OF AUGUST A.D., 2025 AT HOFFMAN ESTATES, ILLINOIS.

THE WT GROUP, LLC

FRANJO I. MATICIC – PLS #035-003556 EXPIRES 11/30/2026
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184.007570-0015

FRANJO I. MATICIC 035-003556 HOFFMAN ESTATES ILLINOIS PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS

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9000 BELLEFORTE AVENUE
MORTON GROVE, ILLINOIS

ISSUE

| TO | DATE |
|---|---|
| CLIENT | 6/4/25 |
| CLIENT | 6/5/25 |
| CLIENT | 6/12/25 |
| CLIENT | 8/25/25 |

CHECK:FIM
DRAWN:REM
JOB: C2500034

**SUR-1**
SHEET 1 OF 4
BOUNDARY & TOPOGRAPHIC SURVEY

# BOUNDARY & TOPOGRAPHIC SURVEY

**SEE SHEET SUR-4 FOR RIM AND INVERT INFORMATION**

LEGEND

| | | |
|---|---|---|
| PROPERTY LINE | UTILITY POLE | SOIL BORING |
| CENTER LINE | TYPICAL SIGN | TELCO/ELEC MANHOLE |
| EASEMENT LINE | MAILBOX | HANDRAIL |
| BUILDING SETBACK | CLOSED MANHOLE | GUARDRAIL |
| SECTION LINE | OPEN GRATE MANHOLE | GUY WIRE ANCHOR |
| (XXX') RECORD DATA | BEEHIVE GRATE MANHOLE | CONTOUR LINE |
| TOP OF CURB/WALL ETC.) SPOT GRADE BOTTOM OF GROUND, GUTTER,ETC.) | GUTTER FRAME MANHOLE | EDGE GRAVEL/STONE |
| | VALVE VAULT | FENCE LINE |
| CONCRETE | FIRE HYDRANT | FLARED END SECTION |
| | B-BOX / SERVICE VALVE | STORM SEWER |
| EVERGREEN/DECIDUOUS WITH SIZE IN INCHES | POST LIGHT\GROUND LIGHT | SANITARY SEWER |
| | AREA LIGHT\LIGHT POLE | COMBO SEWER |
| SHRUB/SHRUB LINE | STREET LIGHT | WATER SERVICE LINE |
| | TRAFFIC SIGNAL | WATER MAIN |
| MONITOR WELL | MAST ARM SIGNAL | OVERHEAD LINE |
| GAS VALVE | HANDHOLE (electric\traffic) | FIBER OPTIC LINE |
| UTILITY MARKINGS (cable,elec,fiber) (tel,water,gas) | GAS METER | GAS LINE |
| | ELECTRIC METER | U.G. TELCO LINE |
| | PEDESTAL(telco,elec,cable) | U.G. ELECTRIC LINE |

N

SCALE: 1" = 20'

00 10 20 40

BAR SCALE

BASIS OF BEARINGS IS TRUE NORTH BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM, ILLINOIS EAST 1201 ZONE.

S 89°24'03" W 986.21'

S 00°51'01" E 230.34'

NATIONAL AVENUE

BELLEFORTE AVENUE

SEE SHEET SUR-3

SEE SHEET SUR-2


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MORTON GROVE, ILLINOIS

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| CLIENT | 6/4/25 |
| CLIENT | 6/5/25 |
| CLIENT | 6/12/25 |
| CLIENT | 8/25/25 |

CHECK:FIM
DRAWN:REM
JOB: C2500034

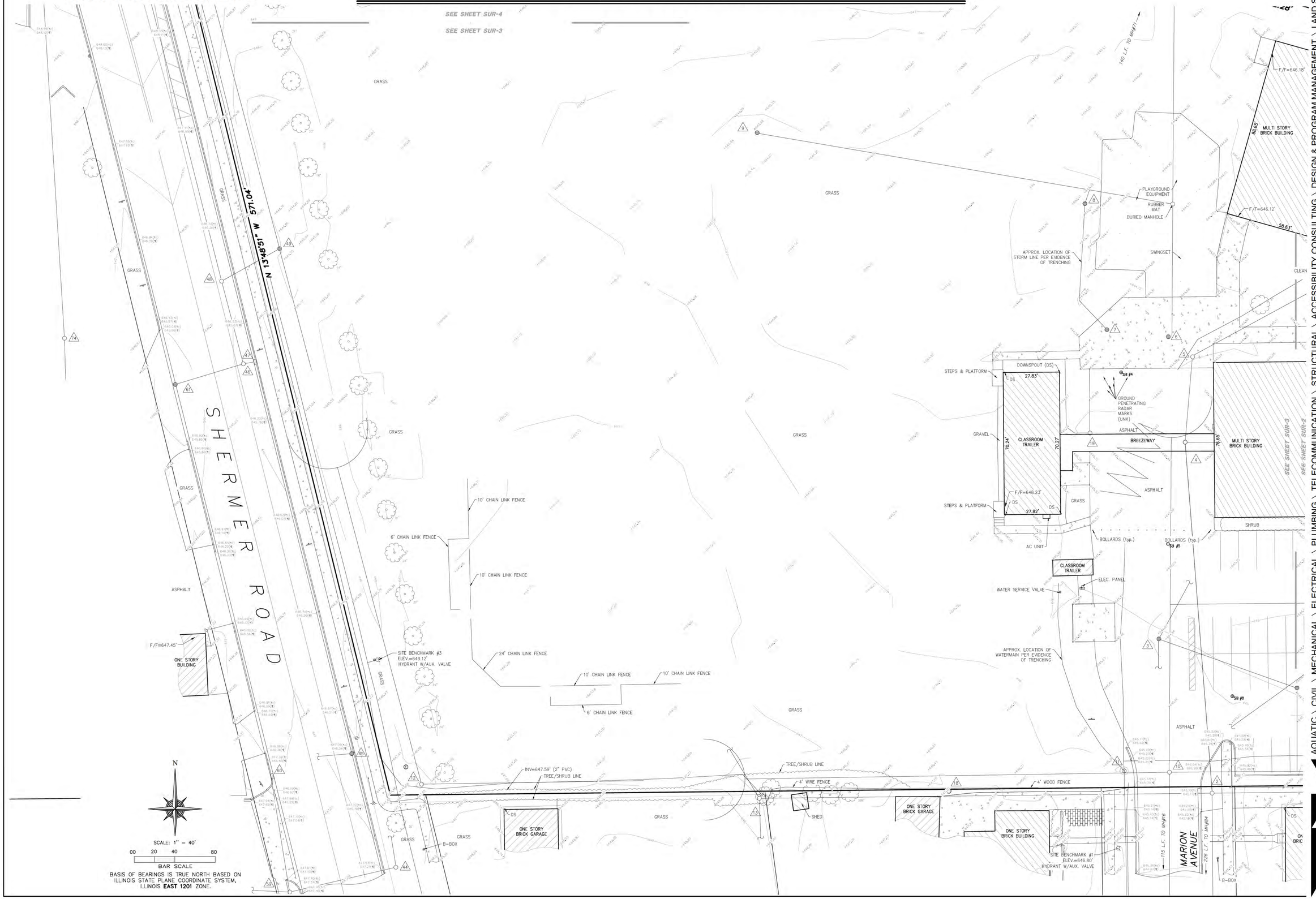
**SUR-2**

SHEET 2 OF 4

BOUNDARY & TOPOGRAPHIC SURVEY

**SEE SHEET SUR-4 FOR RIM AND INVERT INFORMATION**

# BOUNDARY & TOPOGRAPHIC SURVEY





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| CLIENT | 8/25/25 |

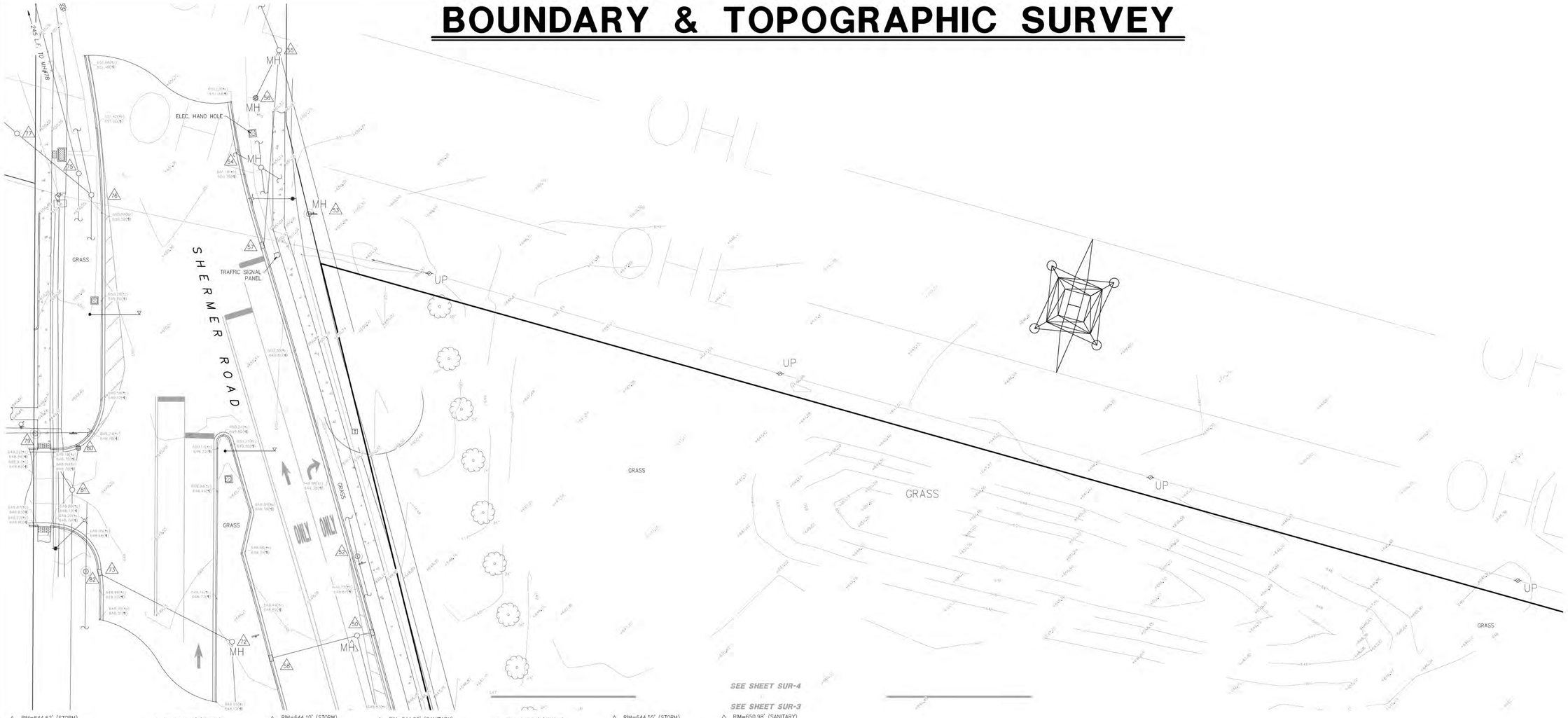
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JOB: C2500034

**SUR-3**

SHEET 3 OF 4

BOUNDARY & TOPOGRAPHIC SURVEY

# BOUNDARY & TOPOGRAPHIC SURVEY




1. RIM=644.62' (STORM)
36" CONCRETE STRUCTURE
INV=640.37' (6" PVC WNW)
INV=640.31' (6" PVC S)

2. RIM=645.33' (SANITARY)
48" CONCRETE STRUCTURE
INV=637.37' (8" CLAY N)
INV=637.34' (8" CLAY W)
INV=638.02' (2 X 12" CLAY W)
INV=637.46' (8" CLAY S)
INV=637.18' (8" CLAY E)

3. RIM=644.89' (STORM)
24" CONCRETE STRUCTURE
INV=643.12' (4" PVC NNE)
INV=642.90' (6" PVC ESE)
INV=643.10' (4" PVC S)

4. RIM=645.56' (SANITARY)
48" CONCRETE STRUCTURE
INV=641.25' (6" CLAY N)
INV=639.19' (8" CLAY E)
INV=639.17' (8" CLAY S)

5. RIM=644.89' (SANITARY)
48" CONCRETE STRUCTURE
INV=641.04' (6" CLAY NE/S)

6. RIM=644.57' (STORM)
CONCRETE STRUCTURE
INV=640.93' (BOTTOM OF 6" VERTICAL CPP)
ACCORDING TO THE DIRECTOR OF BUILDINGS THIS STRUCTURE IS A DRY WELL

7. RIM=644.16' (STORM)
24" CONCRETE STRUCTURE
INV=642.79' (6" CPP NW)
FULL OF WATER AND ICE ACCORDING TO THE DIRECTOR OF BUILDINGS THERE IS ONLY ONE PIPE IN THIS STRUCTURE

8. RIM=643.10' (STORM)
48" CONCRETE STRUCTURE
INV=638.75' (8" CLAY NE)
INV=641.10' (6" CPP S)

9. RIM=644.11' (STORM)
48" CONCRETE STRUCTURE
INV=641.38' (8" CLAY ESE)

10. RIM=645.40' (STORM)
RIM ON PIPE
INV=635.57' (NNW)
INV=633.21' (42" RCP E/W)
INV=639.78' (12" RCP S)

11. RIM=645.32' (WATER)
48" CONCRETE STRUCTURE
TOP OF PIPE=639.80' (8" DIP N/S)

12. RIM=648.14' (STORM)
RIM ON PIPE
INV=635.60' (42" RCP N)
INV=635.60' (12" RCP E)

13. RIM=647.10' (SANITARY)
36" CONCRETE STRUCTURE
INV=639.24' (9" CLAY NNW/E/S)

14. RIM=644.50' (STORM)
RIM ON PIPE
INV=640.23' (8" METAL NW)
INV=639.87' (2 X 8" METAL NW)
INV=631.25' (42" RCP E/W)
INV=640.31' (4" PVC SSW)
INV=637.45' (15" CLAY S)

15. RIM=644.67' (SANITARY)
36" CONCRETE STRUCTURE
INV=635.95' (8" CLAY NW)
INV=635.95' (8" CLAY W/S/E)
16

16. RIM=645.15' (STORM)
36" CONCRETE STRUCTURE INV=640.
RCP N) INV=640.53' (8" CLAY E/W)
INV=640.35' (12" CLAY S)
18

17. RIM=647.27'
UNABLE TO OPEN PROPERTY OWNER IS FULL OF DEBRIS

18. RIM=645.22' (SANITARY)
UNABLE TO OPEN

19. RIM=645.56' (STORM)
48" CONCRETE STRUCTURE
INV=638.12' (10" CLAY N/S)
INV=638.64' (6" CLAY E)

20. RIM=643.65' (STORM)
48" CONCRETE STRUCTURE
INV=641.11' (15" RCP E)

21. RIM=643.21' (STORM)
48" CONCRETE STRUCTURE
INV=637.93' (12" RCP N)
INV=637.93' (3.15" RESTRICTOR S)

22. RIM=643.89' (STORM)
72" METAL STRUCTURE
INV=635.79' (12" RCP N)
INV=630.40' (42" RCP E/W)

23. RIM=644.10' (STORM)
36" CONCRETE STRUCTURE
INV=641.56' (4" PVC E)
INV=639.44' (6" PVC SW)

24. RIM=644.62' (STORM)
24" CONCRETE STRUCTURE
INV=643.65' (4" PVC E)
INV=643.59' (4" PVC S)

25. RIM=645.15' (STORM)
12"x12" PLASTIC STRUCTURE
INV=644.42' (4" PVC N/S)

26. RIM=644.08' (STORM)
36" CONCRETE STRUCTURE
INV=639.24' (6" PVC S)
INV=641.89' (4" PVC W)

27. RIM=644.66' (WATER)
36" CONCRETE STRUCTURE
638.92' AT TOP OF 8" DIP E/W

28. RIM=644.72' (WATER)
48" CONCRETE STRUCTURE
638.42' AT TOP OF 6" DIP N/E

29. RIM=644.47' (WATER)
48" CONCRETE STRUCTURE
638.99' AT TOP OF 8" DIP E/W

30. RIM=644.04' (STORM)
36" CONCRETE STRUCTURE
INV=640.75' (6" PVC SW)

31. RIM=644.97' (WATER)
48" CONCRETE STRUCTURE
638.90' AT TOP OF 6" DIP N
638.90' AT TOP OF 8" DIP E/W

32. RIM=643.90' (WATER)
48" CONCRETE STRUCTURE
FULL OF WATER
639.30' AT WATER LEVEL
637.57' AT TOP OF DIP E/W
SIZE UNKNOWN

33. RIM=643.82' (WATER)
60" CONCRETE STRUCTURE
637.97' AT TOP OF 12" DIP N/S
637.97' AT TOP OF 8" DIP E

34. RIM=644.39' (STORM)
RIM ON PIPE
INV=637.93' (15" RCP N)
INV=630.08' (42" RCP E/W)

35. RIM=644.26' (SANITARY)
36" BLOCK STRUCTURE
INV=634.66' (10" CLAY N/S)
INV=634.66' (8" CLAY W)

36. RIM=643.79' (SANITARY)
36" CONCRETE STRUCTURE
INV=635.55' (8" CLAY N/S)

37. RIM=643.82' (STORM)
36" BLOCK STRUCTURE
INV=639.63' (8" CLAY N/W)
INV=638.50' (15" RCP S/NW)

38. RIM=642.95' (STORM)
24" CONCRETE STRUCTURE
INV=640.17' (6" PVC S)

39. RIM=643.03' (STORM)
48" CONCRETE STRUCTURE
INV=639.60' (8" RCP SW)

40. RIM=643.53' (WATER)
48" CONCRETE STRUCTURE
638.75' AT TOP OF 12" DIP N/S

41. RIM=644.23' (WATER)
42" CONCRETE STRUCTURE
639.65' (8" DIP N/S)

42. RIM=643.76' (SANITARY)
36" CONCRETE STRUCTURE
INV=634.01' (10" RCP N/S)

43. RIM=647.71' (STORM)
36" CONCRETE STRUCTURE
INV=642.93' (8" CLAY N CAPPED)
INV=642.87' (8" CLAY W)

44. RIM=646.57' (STORM)
24" CONCRETE STRUCTURE
INV=644.72' (12" RCP SW)

45. RIM=645.90' (STORM)
24" CONCRETE STRUCTURE
INV=642.34' (12" RCP WN)
INV=642.46' (12" RCP NE)
INV=641.72' (12" RCP SW)

46. RIM=645.62' (STORM)
48" CONCRETE STRUCTURE
INV=642.60' (12" RCP NE)

47. RIM=646.28' (STORM)
48" CONCRETE STRUCTURE
INV=642.12' (12" RCP NW/NE)
INV=642.21' (12" RCP SE)

48. RIM=645.04' (STORM)
RIM ON PIPE
INV=637.46' (42" RCP NW/SE)
INV=642.19' (12" RCP SW)

49. RIM=648.69' (STORM)
48" CONCRETE STRUCTURE
INV=645.24' (12" RCP SW)

50. RIM=648.89' (STORM)
48" CONCRETE STRUCTURE
INV=645.07' (12" RCP NE/SW)
INV=644.69' (12" RCP SE)

51. RIM=649.45' (WATER)
48" CONCRETE STRUCTURE
644.17' AT TOP OF 12" DIP NW/SE

52. RIM=650.96' (WATER)
60" CONCRETE STRUCTURE
645.93 AT TOP OF 18" DIP SE/NW

53. RIM=651.29' (UNKNOWN)
RIM ON PIPE
631.19' AT BOTTOM OF STRUCTURE
LINES NNW/SE/SSE/NW
SIZE AND MATERIAL UNKNOWN

54. RIM=651.67' (STORM)
RIM ON PIPE
INV=640.19' (42" RCP NW/SE)
INV=646.89' (12" RCP S/SW)

55. RIM=650.79' (STORM)
24" CONCRETE STRUCTURE
INV=647.66' (12" RCP NE)

56. RIM=650.38' (STORM)
24" CONCRETE STRUCTURE
INV=647.33' (12" RCP N)

57. RIM=648.66' (STORM)
24" CONCRETE STRUCTURE
INV=645.96' (12" RCP NE)

58. RIM=647.77' (STORM)
48" CONCRETE STRUCTURE
INV=640.77' (8" CLAY NE)
INV=637.12' (42" RCP SE)
INV=637.12' (36" RCP W)
INV=641.59' (12" CAPPED LINE NW)
INV=643.74' (12" RCP NW)

59. RIM=646.80' (STORM)
24" CONCRETE STRUCTURE
INV=644.80' (12" RCP SE)

60. RIM=645.73' (STORM)
24" CONCRETE STRUCTURE
INV=643.33' (12" RCP NE)

61. RIM=644.55' (STORM)
36" CONCRETE STRUCTURE
INV=639.60' (8" CLAY NW/NE)
INV=639.15' (15" RCP SE/NNW)

62. RIM=644.30' (SANITARY)
36" BLOCK STRUCTURE
INV=636.44' (8" CLAY NW/SE/NN

63. RIM=645.37' (STORM)
48" CONCRETE STRUCTURE
INV=638.10' (12" CLAY N/W)

64. RIM=644.81' (SANITARY)
36" CONCRETE STRUCTURE
INV=638.73' (6" CLAY CAPPED NE
INV=638.73' (6" CLAY SE)
INV=639.09' (6" CLAY WNW)
INV=638.73' (8" PVC NW)

65. RIM=643.60' (STORM)
36" CONCRETE STRUCTURE
INV=640.90' (8" RCP SE)

66. RIM=644.79' (STORM)
36" CONCRETE STRUCTURE
INV=641.84' (6" CLAY SW)

67. RIM=644.40' (STORM)
36" CONCRETE STRUCTURE
INV=640.76' (6" PVC N)

68. RIM=644.75' (STORM)
36" CONCRETE STRUCTURE
INV=639.04' (12" RCP N)
INV=638.35' (8" CLAY E)
INV=638.24' (12" RCP S)
INV=638.35' (6" CLAY W)

69. RIM=644.96' (SANITARY)
36" CONCRETE STRUCTURE
INV=637.14' (10" PVC N/S)

70. RIM=643.01' (STORM)
48" CONCRETE STRUCTURE
INV=639.34' (8" CLAY S)

71. RIM=649.04' (STORM)
72" CONCRETE STRUCTURE
INV=637.37' (36" RCP S)
INV=644.72' (12" RCP NW)

72. RIM=648.53' (STORM)
24" CONCRETE STRUCTURE
INV=645.38' (12" RCP SE)

73. RIM=646.83' (STORM)
72" CONCRETE STRUCTURE
INV=636.96' (36" RCP N/S)

74. RIM=650.98' (SANITARY)
36" CONCRETE STRUCTURE
INV=636.05' (10" CLAY NW/S)

75. RIM=651.09' (STORM)
48" CONCRETE STRUCTURE
INV=647.94' (10" RCP NNW)
INV=645.79' (10" RCP S)
INV=646.59' (8" CLAY NW)

76. RIM=650.73' (STORM)
48" CONCRETE STRUCTURE
INV=647.50' (8" CLAY SE/NW)
POSSIBLY ABANDONED

77. RIM=653.60' (SANITARY)
36" CONCRETE STRUCTURE
INV=636.87' (10" CLAY SE/NW)

78. RIM=649.23' (WATER)
48" CONCRETE STRUCTURE
642.88' AT TOP OF 8" DIP E/W
643.48' AT WATER LEVEL

79. RIM=648.60' (STORM)
48" CONCRETE STRUCTURE
INV=645.15' (6" PVC S)

80. RIM=649.04' (STORM)
36" CONCRETE STRUCTURE
INV=642.79' (8" CLAY NNE)
INV=644.26' (10" CLAY NE)
INV=642.79' (10" CLAY S)
INV=642.89' (10" CLAY NW)
POSSIBLY ABANDONED

81. RIM=648.93' (WATER)
48" CONCRETE STRUCTURE
642.98' AT TOP OF 8" DIP N/S

82. RIM=648.65' (SANITARY)
36" CONCRETE STRUCTURE
INV=635.50' (10" CLAY N/S)

**SURVEY NOTES:**

1. SITE BENCHMARK #1 – SET CROSS ON NORTHEAST BOLT OF HYDRANT LOCATED IN GRASS APPROXIMATELY 8.6' WEST OF MARION AVENUE AND 37' SOUTH OF MH #11, AS SHOWN ON SHEET SUR-3. ELEVATION=646.80' (NAVD88)

SITE BENCHMARK #2 – BURY BOLT ON HYDRANT ON THE EAST SIDE OF BELLEFORTE AVENUE, AT THE SE CORNER OF PARKING LOT ENTRANCE AS SHOWN ON SUR-2. ELEVATION=645.96' (NAVD88)

SITE BENCHMARK #3 – FLANGE BOLT ON HYDRANT ON THE EAST SIDE OF SHERMER ROAD, 43' SOUTHWEST OF THE SOUTHWEST FENCE CORNER OF NORTH DUGOUT AS SHOWN ON SHEET SUR-3. ELEVATION=649.12'

2. THE LOCATION OF UNDERGROUND UTILITIES WAS DETERMINED BY FIELD OBSERVATION, VISIBLE MARKINGS AND UTILITY LOCATED BY UNDERGROUND DETECTIVE WORK ORDER NUMBER 00224010

3. FIELD WORK COMPLETED ON 5/30/2025

4. SURVEY PREPARED FOR: GOLF SCHOOL DISTRICT 67

5. BASIS OF BEARINGS IS TRUE NORTH BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM, ILLINOIS EAST 1201 ZONE.

6. ANY DISCREPANCIES FOUND WITHIN THIS DOCUMENT NEED TO BE REPORTED TO THE SURVEYOR AS SOON AS POSSIBLE.

N

SCALE: 1" = 40'

00 20 40 80

BAR SCALE

BASIS OF BEARINGS IS TRUE NORTH BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM, ILLINOIS EAST 1201 ZONE.

## LEGEND

- PROPERTY LINE
- CENTER LINE
- EASEMENT LINE
- BUILDING SETBACK
- SECTION LINE
- (xxx') RECORD DATA
- TOP OF CURB (SMALL ETC.) SPOT GRADE BOTTOM OF CURB (GUTTER ETC.)
- CONCRETE
- EVERGREEN/DECIDUOUS WITH SIZE IN INCHES
- SHRUB/SHRUB LINE
- MONITOR WELL
- GAS VALVE
- UTILITY MARKINGS (cable,elec,fiber) (tel,water,gas)
- UTILITY POLE
- TYPICAL SIGN
- MAILBOX
- CLOSED MANHOLE
- OPEN GRATE MANHOLE
- BEEHIVE GRATE MANHOLE
- GUTTER FRAME MANHOLE
- VALVE VAULT
- FIRE HYDRANT
- B-BOX / SERVICE VALVE
- POST LIGHT/GROUND LIGHT
- AREA LIGHT\LIGHT POLE
- STREET LIGHT
- TRAFFIC SIGNAL
- MAST ARM SIGNAL
- HANDHOLE (electric\traffic)
- GAS METER
- ELECTRIC METER
- PEDESTAL(telco,elec,cable)
- SOIL BORING
- TELCO/ELEC MANHOLE
- HANDRAIL
- GUARDRAIL
- GUY WIRE ANCHOR
- CONTOUR LINE
- EDGE GRAVEL/STONE
- FENCE LINE
- FLARED END SECTION
- STORM SEWER
- SANITARY SEWER
- COMBO SEWER
- WATER SERVICE LINE
- WATER MAIN
- OVERHEAD LINE
- FIBER OPTIC LINE
- G GAS LINE
- UGT U.G. TELCO LINE
- UGE U.G. ELECTRIC LINE

AQUATIC \ CIVIL \ MECHANICAL \ ELECTRICAL \ PLUMBING \ TELECOMMUNICATION \ STRUCTURAL \ ACCESSIBILITY CONSULTING \ DESIGN & PROGRAM MANAGEMENT \ LAND SURVEY


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HYNES ELEMENTARY SCHOOL
9000 BELLEFORTE AVENUE
MORTON GROVE, ILLINOIS

ISSUE

| TO | DATE |
|---|---|
| CLIENT | 6/4/25 |
| CLIENT | 6/5/25 |
| CLIENT | 6/12/25 |
| CLIENT | 8/25/25 |

CHECK:FIM
DRAWN:REM
JOB: C2500034

**SUR-4**
SHEET 4 OF 4
BOUNDARY & TOPOGRAPHIC SURVEY

| Statistics | | | | | | |
|---|---|---|---|---|---|---|
| Description | Symbol | Avg | Max | Min | Max/Min | Avg/Min |
| PARKING / DRIVES | | 2.4 fc | 6.0 fc | 1.0 fc | 6.0:1 | 2.4:1 |
| PROPERTY | | 0.09 fc | 0.63 fc | 0.00 fc | N/A | N/A |
| SITE | | 0.5 fc | 5.8 fc | 0.0 fc | N/A | N/A |
| SITE | | 0.2 fc | 3.0 fc | 0.0 fc | N/A | N/A |

EXISTING EXTERIOR CANOPY CAN LIGHTS NOT INCLUDED IN CALCULATION

EXISTING EXTERIOR CANOPY CAN LIGHTS NOT INCLUDED IN CALCULATION

W1-T2 @ 9.5'
W1-T4 @ 9.5'
W1-T2 @ 8.5'
W1-T4 @ 8.5'
W1-T4 @ 8.75'
W1-T4 @ 12'
W2 @ 19.5'
S1-T4M @ 18.5'
S2-T4M @ 18.5'
S1-T4M-HS @ 18.5'
S1-T3M @ 18.5'
S1-T3M-HS @ 18.5'
S1-T2M @ 18.5'

LOT 21

Plan View

HYNES PHOTOMETRICS

Designer
JAF
Date
10/7/2025
Scale
1" = 20'-0"
Drawing No.

Summary



# D-Series Size 0
## LED Area Luminaire

d^series

Catalog Number

Notes

Type

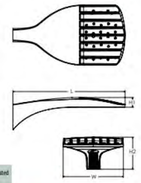
### Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications, with typical energy savings of 70% and expected service life of over 100,000 hours.

### Specifications

**EPA:** 0.44 ft² (0.04 m²)
**Length:** 26.18" (66.5 cm)
**Width:** 14.06" (35.7 cm)
**Height H1:** 2.26" (5.7 cm)
**Height H2:** 7.46" (18.9 cm)
**Weight:** 23 lbs (10.4 kg)




ds design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

ds Design Select options indicated by this color background.

## Ordering Information

**EXAMPLE:** DSX0 LED P6 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

**DSX0 LED**

| Series | LEDs | Color temperature[2] | Color Rendering Index[3] | Distribution | Voltage[4] | Mounting |
|---|---|---|---|---|---|---|
| DSX0 LED | **Forward optics**<br>P1 P5<br>P2 P6<br>P3 P7<br>P4<br>**Rotated optics**<br>P10[1] P12[1]<br>P11[1] P13[1] | (this section 70CRI only)<br>30K 3000K<br>40K 4000K<br>50K 5000K<br>27K 2700K<br>30K 3000K<br>35K 3500K<br>40K 4000K<br>50K 5000K | 70CRI<br>70CRI<br>70CRI<br>80CRI<br>80CRI<br>80CRI<br>80CRI<br>80CRI | AFR Automotive front row<br>T1S Type I short<br>T2M Type II medium<br>T3M Type III medium<br>T3LG Type III low glare[1]<br>T4M Type IV medium<br>T4LG Type IV low glare[1]<br>TFTM Forward throw medium<br>T5M Type V medium<br>T5LG Type V low glare<br>T5W Type V wide<br>BLC3 Type III backlight control[1]<br>BLC4 Type IV backlight control[1]<br>LCCO Left corner cutoff[1]<br>RCCO Right corner cutoff[1] | MVOLT (120V-277V)[5,6]<br>HVOLT (347V-480V)[5,6]<br>XVOLT (277V-480V)[5,6]<br>120[10,14]<br>208[10,14]<br>240[10,14]<br>277[10,14]<br>347[10,14]<br>480[10,14] | **Shipped included**<br>SPA Square pole mounting (4ft drilling, 3.5" min. SQ pole)<br>RPA Round pole mounting (4ft drilling, 3" min. RND pole)<br>SPA5 Square pole mounting (4ft drilling, 3" min. SQ pole)[1]<br>RPA5 Round pole mounting (4ft drilling, 3" min. RND pole)[1]<br>SPABN Square narrow pole mounting (4ft drilling, 3" min. SQ pole)<br>WBA Wall bracket[16]<br>MA Mast arm adapter (crosscuts on 2 3/8" OD horizontal tenon)[1] |

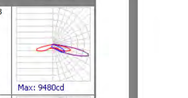
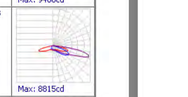
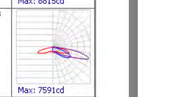
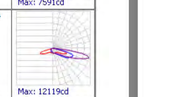
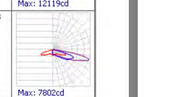
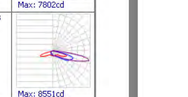
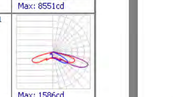
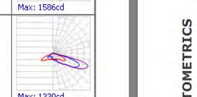
| Control options | | Other options | | Finish (required) |
|---|---|---|---|---|
| **Shipped installed**<br>NLTAIR2 PIRHN nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8–40' mounting height, ambient sensor enabled at 2fc.[11,12,13,14]<br>PIR High/low, motion/ambient sensor, 8–40' mounting height, ambient sensor enabled at 2fc.[11,14,15]<br>PER NEMA twist-lock receptacle only (controls ordered separately).[7]<br>PERS Five-pin receptacle only (controls ordered separately).[14,15] | PER7 Seven-pin receptacle only (controls ordered separately).[14,15]<br>FAO Field adjustable output.[14,15]<br>BL30 Bi-level switched dimming, 30%.[14,15]<br>BL50 Bi-level switched dimming, 50%.[14,15]<br>SMG 0–10V dimming wires pulled outside fixture (for use with an external control, ordered separately).[17] | **Shipped installed**<br>HS Houseside shield (black finish standard).[18]<br>L90 Left rotated optics[1]<br>R90 Right rotated optics[1]<br>CCE Coastal Construction[17]<br>HA 50°C ambient operation[17]<br>BAA Buy American Act and/or Build America Buy America Qualified<br>SF Single fuse (120, 277, 347V)[19]<br>DF Double fuse (208, 240, 480V)[19]<br>**Shipped separately**<br>EGSR External Glare Shield (reversible, field install required, matches housing finish)<br>BSDB Bird Spikes (field install required) | DDBXD Dark Bronze<br>DBLBD Black<br>DNAXD Natural Aluminum<br>DWHXD White<br>DDBTXD Textured dark bronze<br>DBLBXD Textured black<br>DNATXD Textured natural aluminum<br>DWHGXD Textured white |

LITHONIA LIGHTING
COMMERCIAL OUTDOOR

1 Acuity Way • Decatur, Georgia 30035 • Phone: 1-800-705-SERV (7378) •
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**Schedule**

| Symbol | Label | Image | QTY | Manufacturer | Catalog Number | Description | Number Lamps | Filename | Lumens per Lamp | LLF | Wattage | Efficiency | Distribution | Polar Plot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S1-T2M |  | 2 | Lithonia Lighting | DSX0 LED P5 30K 80CRI T2M | D-Series Size 0 Area Luminaire P5 Performance Package 3000K CCT 80 CRI Type 2 Medium | 1 | DSX0_LED_P5_30K_80CRI_T2M.ies | 10411 | 0.9 | 90.12 | 100% | TYPE III, MEDIUM, BUG RATING: B2 - U0 - G3 |  Max: 9480cd |
| | S1-T3M |  | 1 | Lithonia Lighting | DSX0 LED P5 30K 80CRI T3M | D-Series Size 0 Area Luminaire P5 Performance Package 3000K CCT 80 CRI Type 3 Medium | 1 | DSX0_LED_P5_30K_80CRI_T3M.ies | 10532 | 0.9 | 90.12 | 100% | TYPE IV, MEDIUM, BUG RATING: B2 - U0 - G3 |  Max: 8815cd |
| | S1-T3M-HS |  | 1 | Lithonia Lighting | DSX0 LED P5 30K 80CRI T3M HS | D-Series Size 0 Area Luminaire P5 Performance Package 3000K CCT 80 CRI Type 3 Medium Houseside Shield | 1 | DSX0_LED_P5_30K_80CRI_T3M_HS.ies | 9129 | 0.9 | 90.12 | 100% | TYPE IV, MEDIUM, BUG RATING: B1 - U0 - G3 |  Max: 7591cd |
| | S1-T4M |  | 2 | Lithonia Lighting | DSX0 LED P6 30K 80CRI T4M | D-Series Size 0 Area Luminaire P6 Performance Package 3000K CCT 80 CRI Type 4 Medium | 1 | DSX0_LED_P6_30K_80CRI_T4M.ies | 15148 | 0.9 | 137 | 100% | TYPE IV, MEDIUM, BUG RATING: B2 - U0 - G4 |  Max: 12119cd |
| | S1-T4M-HS |  | 1 | Lithonia Lighting | DSX0 LED P5 30K 80CRI T4M HS | D-Series Size 0 Area Luminaire P5 Performance Package 3000K CCT 80 CRI Type 4 Medium Houseside Shield | 1 | DSX0_LED_P5_30K_80CRI_T4M_HS.ies | 9195 | 0.9 | 90.12 | 100% | TYPE IV, MEDIUM, BUG RATING: B1 - U0 - G3 |  Max: 7802cd |
| | S2-T4M |  | 3 | Lithonia Lighting | DSX0 LED P5 30K 80CRI T4M | D-Series Size 0 Area Luminaire P5 Performance Package 3000K CCT 80 CRI Type 4 Medium | 1 | DSX0_LED_P5_30K_80CRI_T4M.ies | 10689 | 0.9 | 180.24 | 100% | TYPE IV, MEDIUM, BUG RATING: B2 - U0 - G3 |  Max: 8551cd |
| | W1-T2 |  | 4 | Lithonia Lighting | WDGE2 LED P2 30K 80CRI T2M | WDGE2 LED WITH P2 - PERFORMANCE PACKAGE, 3000K, 80CRI, TYPE 2 MEDIUM OPTIC | 1 | WDGE2_LED_P2_30K_80CRI_T2M.ies | 1963 | 0.9 | 18.9815 | 100% | TYPE III, MEDIUM, BUG RATING: B1 - U0 - G1 |  Max: 1586cd |
| | W1-T4 |  | 32 | Lithonia Lighting | WDGE2 LED P2 30K 80CRI TFTM | WDGE2 LED WITH P2 - PERFORMANCE PACKAGE, 3000K, 80CRI, TYPE FORWARD THROW MEDIUM OPTIC | 1 | WDGE2_LED_P2_30K_80CRI_TFTM.ies | 1934 | 0.9 | 18.9815 | 100% | TYPE IV, SHORT, BUG RATING: B1 - U0 - G1 |  Max: 1330cd |
| | W2 |  | 1 | Lithonia Lighting | WDGE3 LED P3 70CRI R3 30K | WDGE3 LED WITH P3 - PERFORMANCE PACKAGE, 3000K, 70CRI, TYPE 3 OPTIC | 1 | WDGE3_LED_P3_70CRI_R3_30K.ies | 9265 | 0.9 | 71.6952 | 100% | TYPE III, SHORT, BUG RATING: B2 - U0 - G2 |  Max: 6427cd |

HYNES PHOTOMETRICS

LITHONIA LIGHTING

## FEATURES & SPECIFICATIONS

**INTENDED USE — These specifications are for USA standards only.** Square Straight Aluminum is a general purpose light pole for up to 35-foot mounting heights. This pole provides a lighter and naturally corrosion-resistant option for mounting area light fixtures and floodlights.

**CONSTRUCTION —**

**Pole Shaft:** The pole shaft is of uniform wall thickness and is made of extruded 6000 series aluminum alloy tubing that is heat treated to a T6 temper to provide maximum strength. The shaft is uniformly square in cross-section with flat sides, small corner radii and excellent torsional qualities. Available shaft widths are 4", 5", 6" and 6.75".

**Pole Top:** Options include 4" tall tenon top, drilled for side mount fixture, tenon with drilling (includes extra handhole) and open top. A removable cast aluminum top cap with set screws is provided for all poles that will receive drilling patterns for side-mount luminaire arm assemblies or when ordered with open top (PT) option. The top cap resists intrusion of moisture and environmental contaminants.

**Handhole:** A handhole opening with grounding provision is provided near the base. Standard positioning varies with shaft width as follows: 4" shaft, handhole at 12"; 5" shaft, handhole at 14"; 6" and 6.75" shaft, handhole at 18". Positioning the handhole lower than standard may not be possible and requires engineering review; consult Tech Support-Outdoor for further information. The handhole for a pole specified with a 4" or 5" shaft width has a nominal dimension of 2.63" x 5". Standard and extra handholes come with cover and attachment hardware.

**Bolt Caps/Base Cover:** Pole base plate utilizes cast aluminum A365 nut cover discs to cover anchor bolt and nut assembly. 2 piece, spun aluminum base cover available as an option.

**Anchor Base/Bolts:** Anchor base is cast from A356 alloy aluminum. Anchor bolts are manufactured to ASTM F1554 Standards Grade 55, (55 KSI minimum yield strength and tensile strength of 75-95 KSI). Upper portion of anchor bolt is galvanized per ASTM A-153; bolts have an "L" bend on bottom end and are galvanized a minimum of 12" on the threaded end.

**HARDWARE** — All structural and non-structural fasteners are stainless-steel.

**FINISH** — Extra durable painted finish is coated with TGIC (Triglycidyl Isocyanurate) Polyester powder that meets SA and SB classifications of ASTM D3359. Standard powder-coat finishes include Dark Bronze, White, Black, and Natural Aluminum colors. Other finishes include Brushed Aluminum, and Anodized Dark Bronze, Anodized Natural Aluminum and Anodized Black. Architectural Colors and Special Finishes are available by quote and include, but are not limited to RAL Colors, Custom Colors and Extended Warranty Finishes.

**GROUNDING:** Grounding provision is located in handhole near the base. Grounding hardware is not included (provided by others).

**INSTALLATION — Do not** erect poles without having fixtures installed. Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates. If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage. Lithonia Lighting is not responsible for the foundation design.

**WARRANTY** — 1-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

**NOTE:** Actual performance may differ as a result of end-user environment and application.
Specifications subject to change without notice.

Catalog Number

Notes

Type

Anchor Base Poles

# SSA

SQUARE STRAIGHT ALUMINUM

## SSA Square Straight Aluminum Poles

**ORDERING INFORMATION** Lead times will vary depending on options selected. Consult with your sales representative. **Example:** SSA 20 4C DM29ESX BA

| SSA Series | Nominal fixture mounting height | Nominal shaft base size/wall thickness[1] | Mounting[2] | Options | Finish |
|---|---|---|---|---|---|
| SSA | 8'-35'<br>(for 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.)<br>(See technical information table for complete ordering information.) | 4C 4" (0.125")<br>4G 4" (0.188")<br>5G 5" (0.188")<br>6G 6" (0.188")<br>6I 6" (0.250")<br>7I 7" (0.250")<br>(See technical information table for complete ordering information.) | **Tenon mounting**<br>PT Open top<br>T20 2-3/8" O.D. (2" NPS)<br>T25 2-7/8" O.D. (2-1/2" NPS)<br>T30 3-1/2" O.D. (3" NPS)[3]<br>T35 4" O.D. (3-1/2" NPS)[3]<br>**RSX/RCS/OMERO™ Drill mounting**[4]<br>DM19AS 1 at 90°<br>DM28AS 2 at 180°<br>DM28AS PL 2 at 180° with one side plugged<br>DM29AS 2 at 90°<br>DM39AS 3 at 90°<br>DM49AS 4 at 90°<br>**RAD Drill mounting**[4]<br>DM19RAD 1 at 90°<br>DM28RAD 2 at 180°<br>DM29RAD 2 at 90°<br>DM39RAD 3 at 90°<br>DM49RAD 4 at 90°<br>**ESX Drill mounting**[4]<br>DM19ESX 1 at 90°<br>DM28ESX 2 at 180°<br>DM29ESX 2 at 90°<br>DM39ESX 3 at 90°<br>DM49ESX 4 at 90°<br>**Arm Drill mounting**<br>To be added as series + drill orientations<br>**Ex:** SAM239 for SAM, arm drilling 1 at 90° | L/AB Less anchor bolts (Include when anchor bolts are not needed)<br>VD Vibration dampers[5]<br>TP Tamper proof<br>JHey J-hook for cable strain relief[6]<br>HAxy Horizontal arm bracket (1 fixture)[6,7]<br>FDLxy Festoon outlet less electrical[6,8]<br>FDLGFCIxy Festoon with GFCI outlet and in-use cover[6,8]<br>CPL12/xy 1/2" I.D. coupling[9]<br>CPL34/xy 3/4" I.D. coupling[9]<br>CPL1/xy 1" I.D. coupling[9]<br>NPL12/xy 1/2" O.D. threaded nipple[9]<br>NPL34/xy 3/4" O.D. threaded nipple[9]<br>NPL1/xy 1" O.D. threaded nipple[9]<br>EHHxy Extra handhole[6,10]<br>BAA Buy American Act Compliant[11]<br>UL UL listed with label (Includes NEC compliant cover)<br>NEC NEC 410.30 compliant gasketed handhole (Not UL Labeled)<br>FBC Full-base cover (spun aluminum)<br>VM Match pole to prior order or project[12] | **Super durable paint colors**<br>DDBXD Dark bronze<br>DBLXD Black<br>DNAXD Natural aluminum<br>DWHXD White<br>DDBTXD Textured dark bronze<br>DBLBXD Textured black<br>DNATXD Textured natural aluminum<br>DWHGXD Textured white<br>**Brushed finish**<br>BA Brushed aluminum<br>**Class 1 architectural anodized**<br>ABL Black<br>ADB Dark bronze<br>ANA Natural<br>**Architectural colors and special finishes**[13]<br>VP33A 3 year warranty extension<br>VP55A 5 year warranty extension<br>RAL#### Use designated Lithonia Lighting nomenclature in brochure<br>Custom color Nomenclature assigned through Customer Care "Custom Color Process" |

**Accessories:** *Order as separate catalog number.*

| | |
|---|---|
| PL DT20 | Plugs for ESX drillings. |
| PL DT8 | Plugs for DMxxAS drillings. |

**NOTES:**
1. Wall thickness will be signified with a "C", "G" or a "I" in nomenclature. "C" - 0.125 | "G" - 0.188 | "I" - 0.250.
2. PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, specify as drilling option/tenon option. The combination includes a required extra handhole. *Example:* DM28/T20.
3. 3-1/2" and 4" O.D. tenons available on 5" and 6" shafts only.
4. Refer to the fixture spec sheet for the correct drilling template pattern and orientation compatibility.
5. On 4" and 5" poles, VD cannot be installed if provisions (EHH, FDL, NPL, CPL) are located higher than 2/3 of the pole's total height. *Example: Pole height is 25ft. A provision cannot be placed above 16ft.*
6. Specify location and orientation when ordering option. **For "x":** Specify the height above the base of pole in feet or feet and inches; separate feet and inches with a "-". *Example: 10 = 5 and 20ft 3in = 20-3* **For "y":** Specify orientation from handhole (A,B,C,D) Refer to the Handhole orientation diagram below. *Example: 1/2" coupling at 7'8", orientation C = CPL12/5-8C*
7. Horizontal arm is 18" x 2-3/8" O.D. tenon standard, with radius curve providing 12" rise and 2-3/8" O.D. If ordering two horizontal arm at the same height, specify with HAxy. *Example: HA2DB0*
8. FDL does not come with GFCI outlet or handhole cover. These must be supplied by contractor or electrician.
9. Festoon option that comes with GFCI and weather tight, steel, in-use cover. GFCI and in-use cover ship separately from pole.
10. Combination of tenon-top and drill mount includes extra handhole. EHH includes cover.
11. Use when mill certifications are required. Some configurations may be excluded, consult factory. N/A for 6" poles.
12. Must add original order number. Not for replacement parts or post sales issues, contact tech support or post sales teams. VM is used to ensure poles match in appearance exactly from order to order, on a single project site. A common use case would be a multi-phase project with multiple orders.
13. Must be quoted through ADD. Finishes do not require RFA. RAL colors available are shown in "Architectural Colors brochure". Lead times may be extended up to 2 weeks due to paint procurement.

LITHONIA LIGHTING


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## WDGE2 LED
### Architectural Wall Sconce
### Precision Refractive Optic

DLC DLC PREMIUM DLC DLC FLEXIBLE ida UPLT 20

ds BAA BABA

Catalog Number

Notes

Type

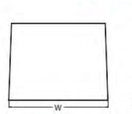
### Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance.

WDGE2 with industry leading precision refractive optics provides great uniform distribution and optical control. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WDGE2 becomes the ideal wall-mounted lighting solution for pedestrian scale applications in any environment.

### Specifications

**Depth (D1):** 7"
**Depth (D2):** 1.5"
**Height:** 9"
**Width:** 11.5"
**Weight (without options):** 13.5 lbs




ds design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

### WDGE LED Family Overview

| Luminaire | Optics | Standard EM, 0°C | Cold EM, -20°C | Sensor | Approximate Lumens (4000K, 80CRI) P0 | P1 | P2 | P3 | P4 | P5 | P6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WDGE1 LED | Visual Comfort | 4W | | -- | 750 | 1,200 | 2,000 | -- | -- | -- | -- |
| WDGE2 LED | Visual Comfort | 10W | 18W | Standalone / nLight | -- | 1,200 | 2,000 | 3,000 | 4,500 | 6,000 | -- |
| WDGE2 LED | Precision Refractive | 10W | 18W | Standalone / nLight | 700 | 1,200 | 2,000 | 3,200 | 4,200 | -- | -- |
| WDGE3 LED | Precision Refractive | 15W | 18W | Standalone / nLight | 6,000 | 7,500 | 8,500 | 10,000 | 12,000 | -- | -- |
| WDGE4 LED | Precision Refractive | | | Standalone / nLight | -- | 12,000 | 16,000 | 18,000 | 20,000 | 22,000 | 25,000 |

### Ordering Information

**EXAMPLE:** WDGE2 LED P3 40K 80CRI T3M MVOLT SRM DDBXD

| Series | Package | Color Temperature | CRI | Distribution | Voltage | Mounting |
|---|---|---|---|---|---|---|
| WDGE2 LED | P0[1]<br>P1[1]<br>P2[1]<br>P3[1]<br>P4[1] | 27K 2700K<br>30K 3000K<br>35K 3500K<br>40K 4000K<br>50K 5000K<br>AMB[2] Amber | 70CRI<br>80CRI<br>LW[3] Limited Wavelength | T1S Type I Short<br>T2M Type II Medium<br>T3M Type III Medium<br>T4M Type IV Medium<br>TFTM Forward Throw Medium | MVOLT<br>347[4]<br>480[4] | **Shipped included**<br>SRM Surface mounting bracket<br>ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only)[5]<br>**Shipped separately**<br>AWS 3/8inch Architectural wall spacer[5]<br>PBBW Surface-mounted back box (top, left, right conduit entry). Use when there is no junction box available[5] |

| Options | | Finish |
|---|---|---|
| E10WH Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 5°C min)<br>E20WC Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, -20°C min)<br>PE Photocell, Button Type[6]<br>DMG 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)[7]<br>BCE Button-combi entry for back box (PBBW). Total of 4 entry points.<br>CCE Coastal Construction[7] | **Standalone Sensors/Controls**<br>PIR Bi-level (100/35%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dusk to dawn switching.<br>PIRH Bi-level (100/35%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dusk to dawn switching.<br>PIR1FC3V Bi-level (100/35%) motion sensor for 8-15' mounting heights with photocell pre-programmed for dusk to dawn operation.<br>PIRH1FC3V Bi-level (100/35%) motion sensor for 15-30' mounting heights with photocell pre-programmed for dusk to dawn operation.<br>**Networked Sensors/Controls**<br>NLTAIR2 PIR Embedded wireless controls by nLight with Passive Infrared Occ sensor and on/off photocell for 8-15' mounting heights.<br>NLTAIR2 PIRH Embedded wireless controls by nLight with Passive Infrared Occ sensor and on/off photocell for 15-30' mounting heights.<br>NLTAIREM2 PIR Embedded wireless controls by nLight with UL924 listed emergency operation, Passive Infrared Occ sensor and on/off photocell for 8-15' mounting heights.<br>NLTAIREM2 PIRH Embedded wireless controls by nLight with UL924 listed emergency operation, Passive Infrared Occ sensor and on/off photocell for 15-30' mounting heights.<br>See page 4 for out of box functionality | DDBXD Dark Bronze<br>DBLBD Black<br>DNAXD Natural aluminum<br>DWHXD White<br>DSSXD Sandstone<br>DDBTXD Textured dark bronze<br>DBLBXD Textured black<br>DNATXD Textured natural aluminum<br>DWHGXD Textured white<br>DSSTXD Textured sandstone |

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## WDGE3 LED
### Architectural Wall Sconce

DLC DLC PREMIUM DLC DLC FLEXIBLE ida UPLT 20

ds BAA BABA

Catalog Number

Notes

Type

### Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance.

WDGE3 has been designed to deliver up to 12,000 lumens through a precision refractive lens with wide distribution, perfect for augmenting the lighting from pole mounted luminaires.

### Specifications

**Depth (D1):** 8"
**Depth (D2):** 1.5"
**Height:** 9"
**Width:** 18"
**Weight (without options):** 19.5 lbs




ds design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

### WDGE LED Family Overview

| Luminaire | Optics | Standard EM, 0°C | Cold EM, -20°C | Sensor | Approximate Lumens (4000K, 80CRI) P0 | P1 | P2 | P3 | P4 | P5 | P6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WDGE1 LED | Visual Comfort | 4W | | -- | 750 | 1,200 | 2,000 | -- | -- | -- | -- |
| WDGE2 LED | Visual Comfort | 10W | 18W | Standalone / nLight | -- | 1,200 | 2,000 | 3,000 | 4,500 | 6,000 | -- |
| WDGE2 LED | Precision Refractive | 10W | 18W | Standalone / nLight | 700 | 1,200 | 2,000 | 3,200 | 4,200 | -- | -- |
| WDGE3 LED | Precision Refractive | 15W | 18W | Standalone / nLight | 6,000 | 7,500 | 8,500 | 10,000 | 12,000 | -- | -- |
| WDGE4 LED | Precision Refractive | | | Standalone / nLight | -- | 12,000 | 16,000 | 18,000 | 20,000 | 22,000 | 25,000 |

### Ordering Information

**EXAMPLE:** WDGE3 LED P3 40K 70CRI R3 MVOLT SRM DDBXD

| Series | Package | Color Temperature | CRI | Distribution | Voltage | Mounting |
|---|---|---|---|---|---|---|
| WDGE3 LED | P0<br>P1<br>P2<br>P3<br>P4 | 30K 3000K<br>40K 4000K<br>50K 5000K | 70CRI<br>80CRI | R2 Type 2<br>R3 Type 3<br>R4 Type 4<br>RF1 Forward Throw | MVOLT<br>347[1]<br>480[1] | **Shipped included**<br>SRM Surface mounting bracket<br>ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only)[2]<br>**Shipped separately**<br>AWS 3/8inch Architectural wall spacer[2]<br>PBBW Surface-mounted back box (top, left, right conduit entry). Use when there is no junction box available[2] |

| Options | | Finish |
|---|---|---|
| E10WH Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 5°C min)<br>E20WC Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, -20°C min)<br>PE Photocell, Button Type[3]<br>DMG 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)[4]<br>BCE Button-combi entry for back box (PBBW). Total of 4 entry points.<br>SPD10KV 10kV Surge pack[5]<br>CCE Coastal Construction[4] | **Standalone Sensors/Controls**<br>PIR Bi-level (100/35%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dusk to dawn switching.<br>PIRH Bi-level (100/35%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dusk to dawn switching.<br>PIR1FC3V Bi-level (100/35%) motion sensor for 8-15' mounting heights with photocell pre-programmed for dusk to dawn operation.<br>PIRH1FC3V Bi-level (100/35%) motion sensor for 15-30' mounting heights with photocell pre-programmed for dusk to dawn operation.<br>PE Photocell, Button Type[3]<br>**Networked Sensors/Controls**<br>NLTAIR2 PIR Embedded wireless controls by nLight with Passive Infrared Occ sensor and on/off photocell for 8-15' mounting heights.<br>NLTAIR2 PIRH Embedded wireless controls by nLight with Passive Infrared Occ sensor and on/off photocell for 15-30' mounting heights.<br>NLTAIREM2 PIR Embedded wireless controls by nLight with UL924 listed emergency operation, Passive Infrared Occ sensor and on/off photocell for 8-15' mounting heights.<br>NLTAIREM2 PIRH Embedded wireless controls by nLight with UL924 listed emergency operation, Passive Infrared Occ sensor and on/off photocell for 15-30' mounting heights.<br>See page 4 for out of box functionality | DDBXD Dark Bronze<br>DBLBD Black<br>DNAXD Natural aluminum<br>DWHXD White<br>DSSXD Sandstone<br>DDBTXD Textured dark bronze<br>DBLBXD Textured black<br>DNATXD Textured natural aluminum<br>DWHGXD Textured white<br>DSSTXD Textured sandstone |

**Accessories** *Ordered and shipped separately.*

| | |
|---|---|
| WDGAMS DDBXD | WDGE 3.98inch Architectural Wall Spacer (specify finish) |
| WDGEPBBW DDBXD U | WDGE3 surface-mounted back box (specify finish) |

**NOTES**
1. 347V and 480V not available with E15WH and E20WC.
2. Not qualified for DLC. Not available with emergency battery backup or sensors/controls.
3. For PBBW and AWS with CCE option, require an RFA.
4. PE not available in 480V and with sensors/controls.
5. DMG option not available with sensors/controls.
6. Not available with E20WC option.
7. Available with MVOLT only and only rated to 25C ambient.

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Designer
JAF
Date
10/7/2025
Scale
NTS
Drawing No.

Summary

# ADDITION AND RENOVATION PROJECT

HYNES ELEMENTARY SCHOOL

OCTOBER 07, 2025

DLA Ltd.
ARCHITECTS

form follows learning™




AERIAL MAP

1" = 80'-0"

# ADDITION AND RENOVATION PROJECT

**HYNES ELEMENTARY/ GOLF MIDDLE SCHOOL**

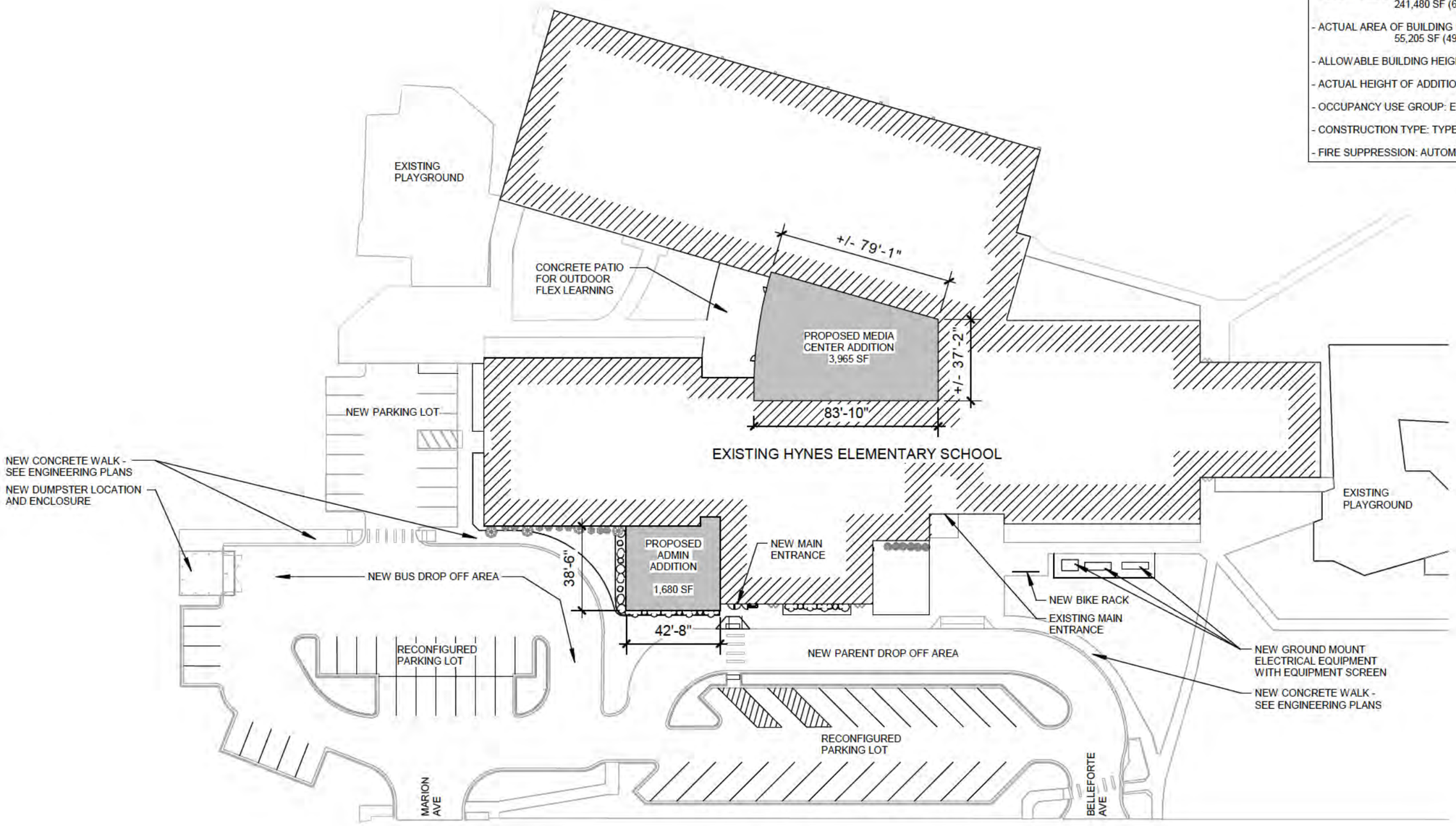
OCTOBER 07, 2025

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BUILDING DATA:

- ZONING DISTRICT: R-2
- ALLOWABLE BUILDING AREAS:
  241,480 SF (60% OF THE LOT PER UNIFIED DEVELOPMENT CODE CH.12)
- ACTUAL AREA OF BUILDING INCLUDING NEW ADDITIONS:
  55,205 SF (49,560 EXISTING + 5,645 SF ADDITIONS)
- ALLOWABLE BUILDING HEIGHT: 35'-0" MAX (UNIFIED DEVELOPMENT CODE CH.12)
- ACTUAL HEIGHT OF ADDITION: 20'-8" TO T/ PARAPET OF MEDIA CENTER ADDITION
- OCCUPANCY USE GROUP: E (2018 IBC)
- CONSTRUCTION TYPE: TYPE IIB (2018 IBC)
- FIRE SUPPRESSION: AUTOMATIC SPRINKLER SYSTEM



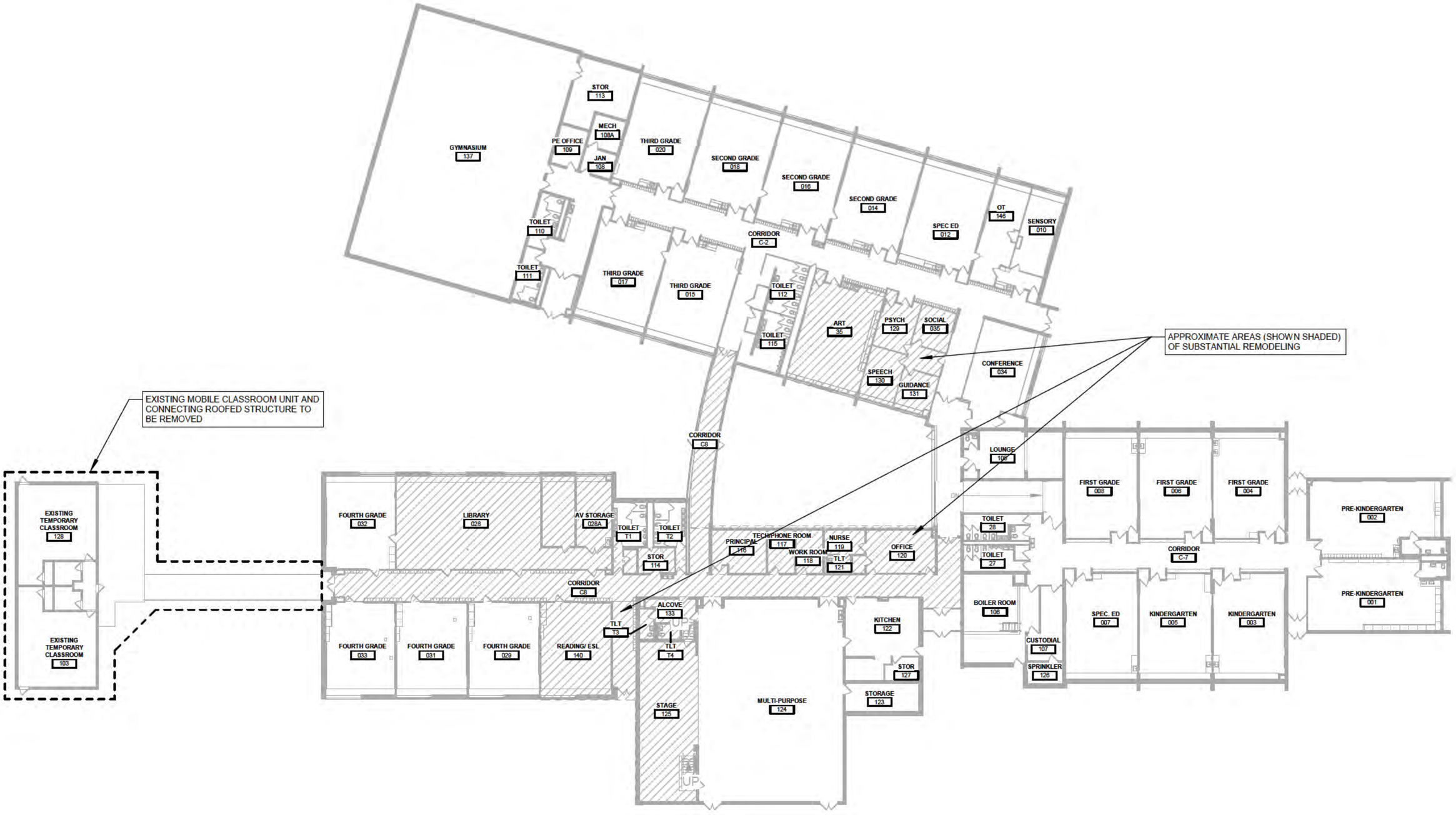

PROPOSED SITE PLAN
1" = 50'-0"

# ADDITION AND RENOVATION PROJECT

**HYNES ELEMENTARY/ GOLF MIDDLE SCHOOL**

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EXISTING FIRST FLOOR PLAN
1/32" = 1'-0"

# ADDITION AND RENOVATION PROJECT

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PROPOSED FIRST FLOOR PLAN
1/32" = 1'-0"

# ADDITION AND RENOVATION PROJECT

**HYNES ELEMENTARY/ GOLF MIDDLE SCHOOL**

OCTOBER 07, 2025

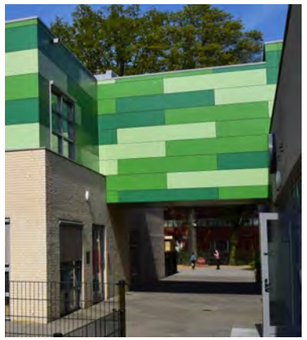
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**MATERIAL #1: HIGH-PRESSURE COMPACT LAMINATE PLANKS-STYLE (HPL-1)**

-MANUFACTURER: TRESPA
-MODEL: PURA EXTERIOR SIDING
-COLOR: FRENCH WALNUT
-FINISH: MATT
-TEXTURE: SMOOTH

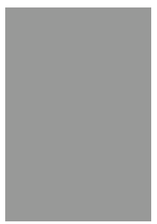




**MATERIAL #2: HIGH-PRESSURE COMPACT LAMINATE PANELS (HPL-2)**

-MANUFACTURER: TRESPA
-MODEL: METEON UNI COLOURS
-COLOR: SPRING GREEN
-FINISH: SATIN
-TEXTURE: SMOOTH





**MATERIAL #3: ALUMINUM COMPOSITE MATERIAL (ACM) PANELS**

-MANUFACTURER: PAC-CLAD
-MODEL: COMPOSITE WALL PANEL PAC-3000 RS
-COLOR: SLATE GRAY
-FINISH:
-TEXTURE: SMOOTH






**MATERIAL #4: FORMED METAL WALL PANELS (MWP)**

-MANUFACTURER: PAC-CLAD
-MODEL: FLUSH & REVEAL WALL PANELS
-COLOR: SLATE GRAY
-FINISH:
-TEXTURE: SMOOTH




**MATERIAL #5: STONE VENEER MASONRY (MATCH EXISTING STONE VENEER)**

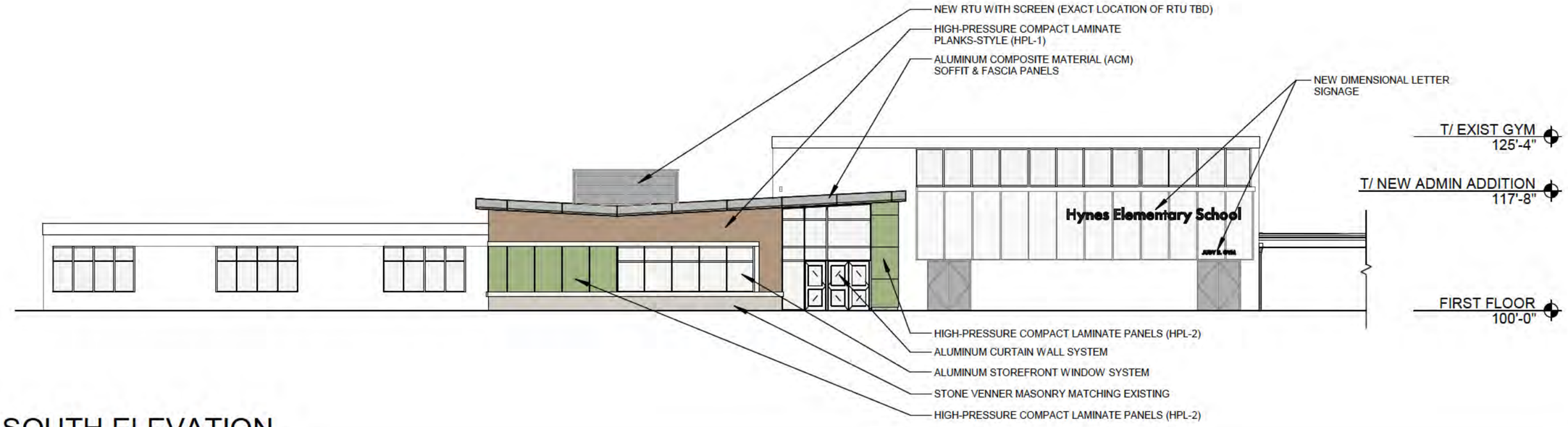
-MANUFACTURER: TBD
-MODEL: TBD
-COLOR:
-FINISH:
-TEXTURE: SMOOTH

# ADDITION AND RENOVATION PROJECT

**HYNES ELEMENTARY/ GOLF MIDDLE SCHOOL**

OCTOBER 07, 2025

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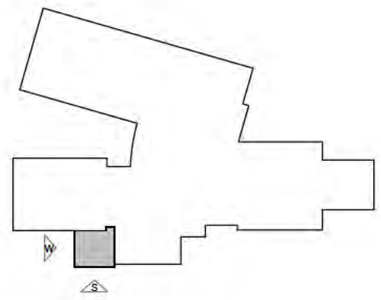

## SOUTH ELEVATION

1/16" = 1'-0"




## WEST ELEVATION

1/16" = 1'-0"



## KEY PLAN

1" = 160'-0"

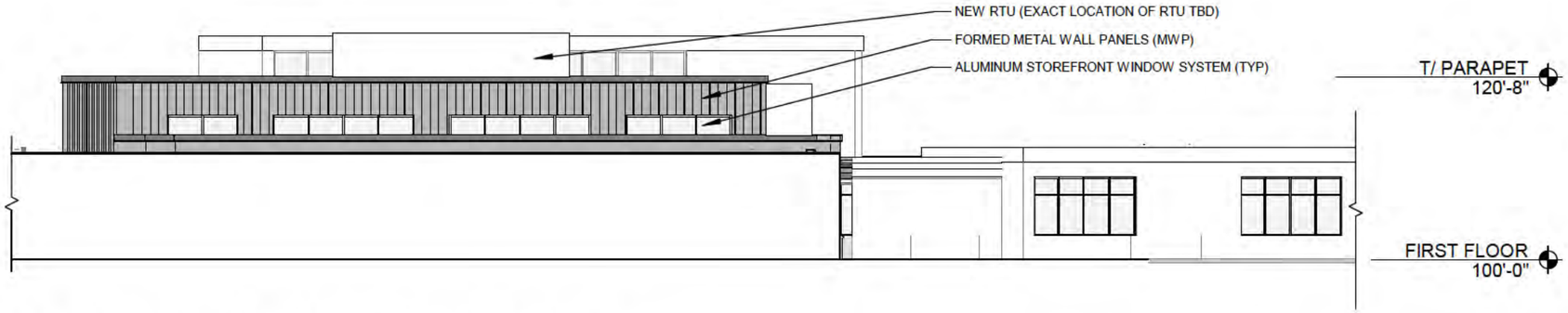
# ADDITION AND RENOVATION PROJECT

**HYNES ELEMENTARY/ GOLF MIDDLE SCHOOL**

OCTOBER 07, 2025

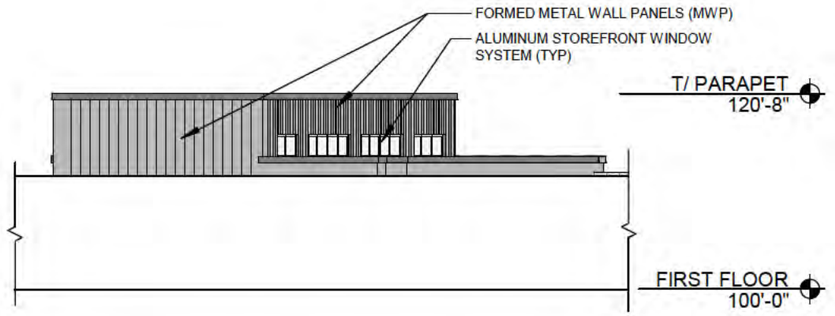
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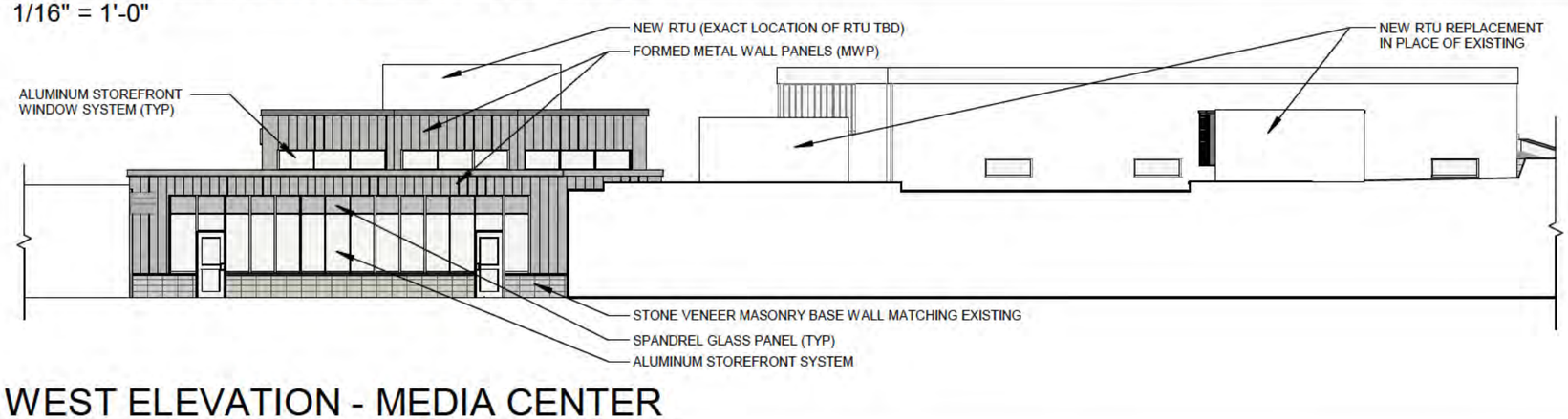

## NORTH ELEVATION - MEDIA CENTER

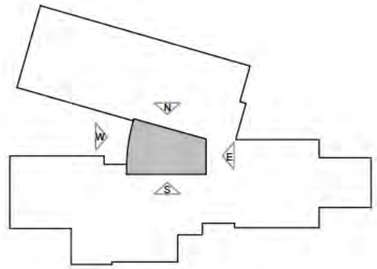
1/16" = 1'-0"




## EAST ELEVATION - MEDIA CENTER

1/16" = 1'-0"



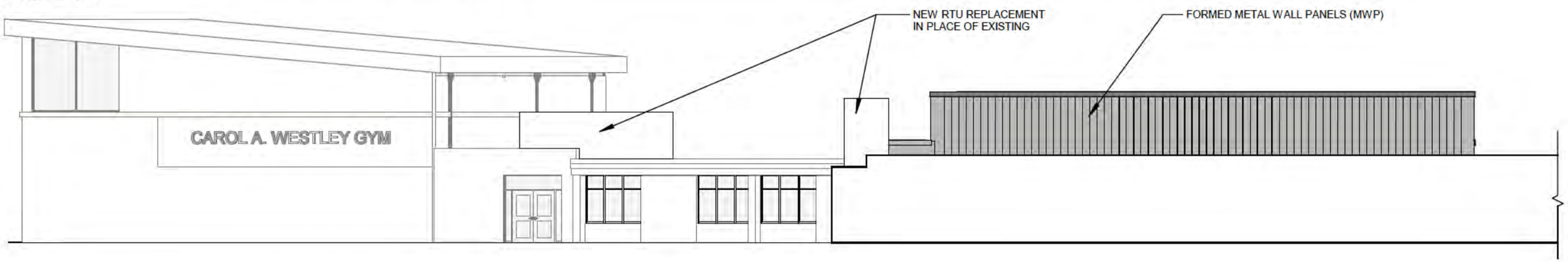




## KEY PLAN 2

1" = 160'-0"

## WEST ELEVATION - MEDIA CENTER

1/16" = 1'-0"




## SOUTH ELEVATION - MEDIA CENTER

1/16" = 1'-0"

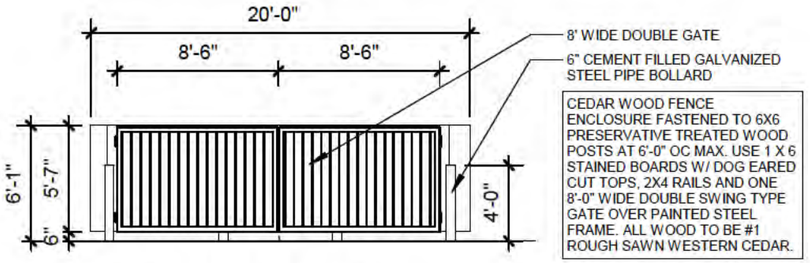
# ADDITION AND RENOVATION PROJECT

**HYNES ELEMENTARY/ GOLF MIDDLE SCHOOL**

OCTOBER 07, 2025

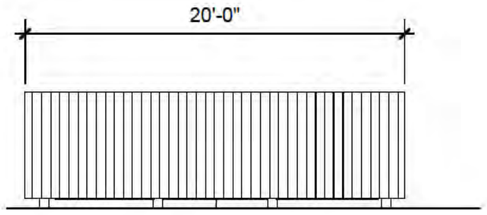
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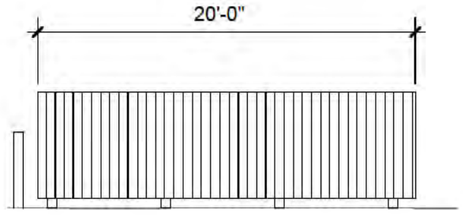

## DUMSPTER EAST

1/8" = 1'-0"



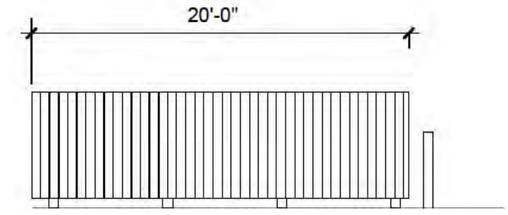

## DUMPSTER WEST

1/8" = 1'-0"



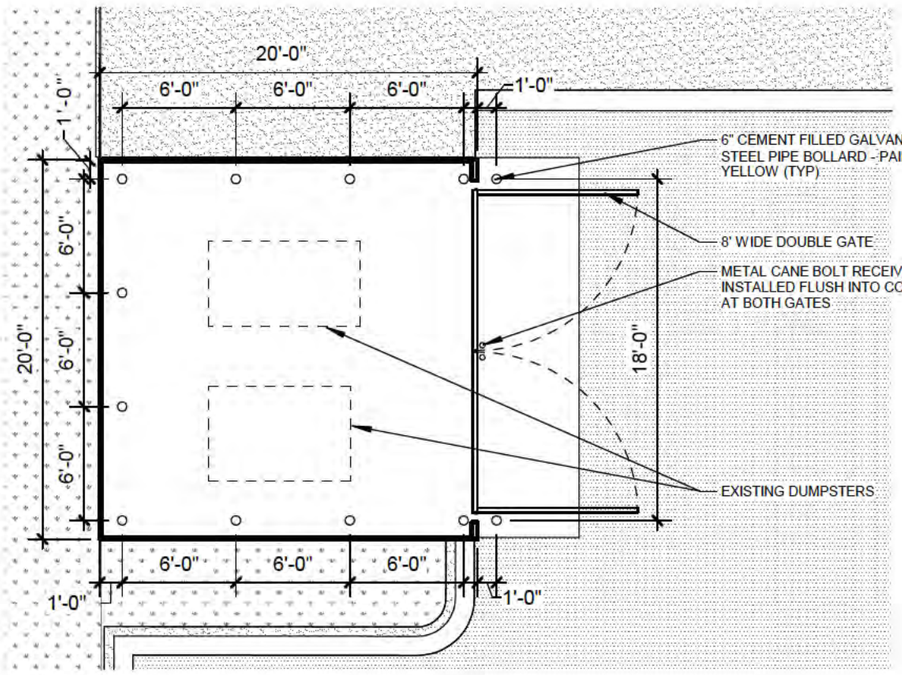

## DUMPSTER NORTH

1/8" = 1'-0"



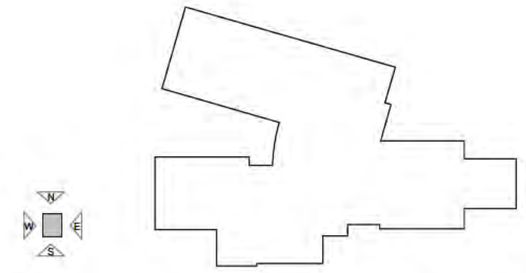

## DUMPSTER SOUTH

1/8" = 1'-0"




## ENLARGED DUMPSTER PLAN

1/8" = 1'-0"




## DUMPSTER ENCLOSURE KEY PLAN

1" = 160'-0"

# ADDITION AND RENOVATION PROJECT

**HYNES ELEMENTARY/ GOLF MIDDLE SCHOOL**

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MAIN ENTRANCE - EXTERIOR SOUTH ELEVATION

# ADDITION AND RENOVATION PROJECT

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ADMIN ADDITION - EXTERIOR SOUTHWEST

# ADDITION AND RENOVATION PROJECT

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MEDIA CENTER - EXTERIOR WEST ELEVATION

# ADDITION AND RENOVATION PROJECT

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MEDIA CENTER ADDITION - AERIAL VIEW

# ADDITION AND RENOVATION PROJECT

**HYNES ELEMENTARY/ GOLF MIDDLE SCHOOL**

OCTOBER 07, 2025

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WT Group
Engineering • Design • Consulting

# Stormwater Management Report
# Cook County, IL



Map Data © 2025 Nearmap

## Hynes Elementary School Building Additions

9000 Belleforte Avenue,
Morton Grove, IL 60053
WT Group Project #C2500035

October 7, 2025

_____

Jason E. Green, P.E.
Illinois P.E. License No. 062-059460
Expires: 11-30-2025

# MWRD Stormwater Management Submittal

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- Watershed Management Permit Submittal
- Soil Erosion and Sediment Control Submittal
- Stormwater Management Submittal
- Floodplain Submittal
- Maps, Exhibit, and Plan Sheets Submittal
- Maintenance and Monitoring Plan Submittal
- Appendix

# Project Narrative

**Project Scope of Work:**

The Golf School District 67 is seeking to build new additions to the existing Hynes Elementary School located at 9000 Belleforte Avenue, Morton Grove, IL. The proposed renovations include new building additions, parking lot reconfigurations, and new sidewalks. Stormwater management improvements such as storm sewers and underground gravel trench will also be constructed. New sanitary sewers associated with the new additions will be installed. No new water services are proposed.

The total area that will be disturbed is approximately 1.344-acres.

**Existing Conditions:**

Total contiguous property area is approximately 9.239-acres. The site is an existing school lot with an asphalt parking lot, sidewalks, playground with a synthetic rubber surface, open field, and an existing stormwater detention basin. The site is located in a separate sewer area. Per the U.S. Fish and Wildlife Service National Wetlands Inventory map, there are no known wetlands on site. Per FEMA FIRMette map, there are no floodplains within 100-feet of the site. Per NRCS soil survey data, the site classified as hydrologic soil group D. The site is bounded by Sherman Avenue to the west, residential building to the south, National Avenue to the east, and a 175-ft wide ComEd property to the north.

The site was permitted for a new gym addition, sidewalks, parking lot configuration, new sanitary and water services, and a stormwater detention pond under the Sewer Permit Ordinance (SPO) Permit 13-063. The site was further revised to reconfigure the proposed stormwater detention pond to save two large trees under revision RL 13-026. The site area was 2.11 acres and approximately 0.27 acre-feet (ac-ft) of detention storage was required. Approximately 0.30 ac-ft of storage was provided in the detention pond at high-water level (HWL) 642.25', with a 3.15"-diameter orifice plate restrictor. The net allowable release rate was 0.53 cubic feet per second (cfs) and the actual release rate was 0.50 cfs. Approximately 0.53-acres of disturbed area was proposed to flow unrestricted. Approximately 1.58-acres of undisturbed upstream tributary area was used to trade off the unrestricted area.

The site was permitted for a mobile classroom, new sidewalks and new sanitary and water services under Watershed Management Ordinance (WMO) Permit 19-133. The site area was approximately 0.15-acres, with approximately 0.06-ares of impervious areas. No volume control facilities were required since the impervious areas were less than 0.10-acres. Stormwater detention was required for the property since the total contiguous property is greater than 3.0-acres, but since the development area was less than 0.50-acres, the required detention was deferred until the aggregate development is greater than 0.50-acres. The aggregate development from this permit is included in the new proposed development. Further discussion of the proposed aggregate development area is included under section *Proposed Conditions* below.

Thirteen (13) soil borings, 7.5 to 15-ft deep, were taken during a geotechnical investigation performed in August 2025 by Geocon Professional Services, LLC. Per the geotechnical report dated September 2nd, 2025, provided as part of the MWRD submittal, the estimated seasonal high groundwater elevation is estimated to be between 632.5' to 635.0'. As a conservative measure, the seasonal high groundwater elevation for the project will be assumed to be 635.00'.

Under existing conditions Area-1A consists of the unrestricted parking lot area from SPO Permit RL 13-026. Area-1B consist of the remaining parking lot areas that will be disturbed as part of the proposed development. Area-2 consists of a courtyard and grass area that will be disturbed for a new building addition and pavement. Area-3 is the aggregate development from WMO Permit 19-133, which is included as part of the proposed development. Area-4A consists of the unrestricted development area from SPO RL Permit 13-026 that will be disturbed as part of the proposed improvements. Area-4B is the remaining unrestricted areas from SPO Permit RL 13-026 that will not be disturbed as part of the proposed development. Area-5 is the existing trade off area that was used to trade off the unrestricted areas under SPO Permit RL 13-026. A summary of the areas is provided in the table below.

| Area | Impervious (acres) | Pervious (acres) | Maintenance (acres) | Gravel (acres) | Playground (acres) | Total (acres) |
|---|---|---|---|---|---|---|
| 1A | 0.261 | 0.003 | 0.602 | 0.000 | 0.000 | 0.866 |
| 1B | 0.095 | 0.265 | 0.000 | 0.009 | 0.000 | 0.369 |
| 2 | 0.000 | 0.114 | 0.011 | 0.000 | 0.000 | 0.125 |
| 3 | 0.065 | 0.074 | 0.000 | 0.015 | 0.000 | 0.154 |
| 4A | 0.001 | 0.002 | 0.005 | 0.000 | 0.000 | 0.008 |
| 4B | 0.210 | 0.195 | 0.000 | 0.000 | 0.000 | 0.405 |
| 5 | 0.307 | 1.404 | 0.000 | 0.000 | 0.125 | 1.836 |
| Total | 0.939 | 2.057 | 0.618 | 0.024 | 0.125 | 3.763 |

In addition, there is approximately 0.174-acres (Area-6) of offsite tributary area to the detention basin. This area consists of only pervious area.

Under existing conditions, the NRCS Curve Number (CN) for the original unrestricted areas (Area-1A, 4A, and 4B), is 95.19. The CN for the tradeoff area (Area-5) is 83.76. The corresponding runoff volume for the unrestricted areas is 0.85 ac-ft and 1.01 ac-ft for the tradeoff area.

**Proposed Conditions:**

Under proposed conditions, Area-1A will be considered redevelopment area for the parking lot configuration. Area-1B will be considered new development for the parking lot configuration. Area-2 will be the area for the new building addition and pavement area. Area-3 is the aggregate area that is included as part of the proposed development. Note that the existing mobile classroom and gravel areas will be demolished and restored to the pervious predevelopment condition. Therefore, the aggregate development area only consist of the new impervious areas. Area-4 is the remaining unrestricted areas from SPO Permit RL 13-026 that will not be disturbed as part of the proposed development. Area-5 is the existing trade off area. A summary of the areas is provided in the table below.

| Area | Impervious (acres) | Pervious (acres) | Maintenance (acres) | Playground (acres) | Total (acres) |
|---|---|---|---|---|---|
| 1A | 0.170 | 0.094 | 0.602 | 0.000 | 0.866 |
| 1B | 0.307 | 0.062 | 0.000 | 0.000 | 0.369 |
| 2 | 0.114 | 0.000 | 0.011 | 0.000 | 0.125 |
| 3 | 0.031 | 0.000 | 0.000 | 0.000 | 0.031 |
| 4A | 0.002 | 0.001 | 0.005 | 0.000 | 0.008 |
| 4B | 0.210 | 0.195 | 0.000 | 0.000 | 0.405 |
| 5 | 0.154 | 1.404 | 0.000 | 0.125 | 1.836 |
| Total | 1.141 | 1.756 | 0.618 | 0.125 | 3.640 |

Per the proposed improvements, approximately 0.801-acres of Area-1A will be restricted and 0.065-acres will be unrestricted. Area 4A and 4B will also be unrestricted. The total unrestricted redevelopment area is 0.478-acres and the corresponding CN is 89.19. The corresponding runoff volume for the unrestricted redevelopment areas is 0.29 ac-ft. Area-2 from the new development will also flow unrestricted. The total unrestricted new development is 0.125-acres and the corresponding CN is 98.00. The corresponding runoff volume for the unrestricted new development is 0.09 ac-ft. The CN for the tradeoff area (Area-5) is 83.76. The corresponding runoff volume for the tradeoff area is 1.01 ac-ft. The total runoff volume for the unrestricted areas is 0.38 ac-ft, therefore the tradeoff area will account for the existing and new unrestricted areas, and will not affect the allowable release rates.

**Stormwater Volume Control Requirements (MWRD):**

Per section 503 of the Watershed Management Ordinance (WMO), stormwater volume control will be required since the impervious area is greater than 0.10-acres and the property holdings are greater than 0.50-acres. Per section 5.1.2 of the Technical Guidance Manual (TGM) stormwater management activities do not apply to maintenance activities. Therefore, the impervious area for the proposed development is approximately 0.624-acres, or 27,191 s.f. Storage is required for the impervious area over a 1-inch rainfall. The corresponding required volume control storage for the proposed impervious area is 2,266 cubic feet (c.f.) or 0.052 ac-ft.

The volume control storage will be provided in a 30’x80’x4.5’ gravel infiltration trench. The total volume control storage provided is approximately 0.055 ac-ft.

**Stormwater Detention Requirements (MWRD)**

Per Article 5, section 5.5.3.1 of the TGM, since the site was originally permitted and approved under an SPO permit, the Modified Rational Method will be used to calculate the required detention volume for the redevelopment area (Area-1A and 4A). The allowable release rate for the redevelopment is calculated using the lesser of the watershed specific release rate or the existing gross allowable release rate. The proposed development is located in the North Branch watershed area, with a corresponding release rate of 0.30 cfs/acre. The gross allowable release rate from SPO Permit RL 13-026 is 0.50 cfs (actual release rate) over 2.11 acres (area of site), which corresponds to a release rate of 0.237 cfs/acre. Therefore, the allowable release rate for the redevelopment will use a rate of 0.237 cfs/acre.

In order to determine the new required detention storage for the redevelopment, first the existing required detention storage for the redevelopment area will need to be determined using TP-40 rainfall data. For the 0.874-acre area, the 0.607-acre maintenance area is not included in the stormwater management calculations per section 5.1.2 of the TGM. The resulting redevelopment area not including maintenance area is 0.267-acres. For the 0.267-acre redevelopment area, the allowable release rate is 0.063 cfs and the existing runoff coefficient is 0.89. Per WMO calculators, the existing required detention is 0.058 ac-ft. Next, the proposed required detention will be determined using the Modified Rational Method and Bulletin 75 rainfall data. For the 0.267-acre redevelopment area, the allowable release rate is 0.063 cfs and the proposed runoff coefficient is 0.78. Per WMO calculators, the proposed required detention is 0.081 ac-ft. The incremental detention volume for the redevelopment is found by subtracting the existing required detention storage from the proposed required detention storage. The incremental detention for the redevelopment is 0.023 ac-ft. This incremental storage is added to the previously required detention volume of 0.270 ac-ft, resulting in a new required detention storage volume of 0.293 ac-ft.

For the 0.514-acre of new development (Areas 1B, 2 and 3), the Nomograph method using Bulletin 75 rainfall data and the watershed specific release rate is used to determine the required detention storage for the new development. For the 0.514-acre area, the gross allowable release rate is 0.154 cfs and the CN is 95.83. Per WMO calculators, the required detention storage for the new development at a release rate of 0.154 is 0.232 ac-ft.

The total required detention storage for the redevelopment and new development areas is 0.525 ac-ft. The existing detention system was initially established under SPO Permit RL 13-026. Under existing conditions, the provided detention at the permitted 642.25’ HWL was found to be 0.288 ac-ft and will not provide sufficient storage. The existing detention pond will be expanded and the HWL will be raised to 642.90’, resulting in approximately 0.773 ac-ft of detention storage.

The net allowable release rate for the redevelopment and new development is 0.606 cfs. The existing restrictor structure will be modified to provide the net allowable release rate at the HWL of 642.90. A 2.90-inch plate restrictor at existing invert 637.93 results in a release rate of 0.494 cfs at the proposed HWL. Since the restrictor is less than 4-inches, a removable hood will be provided to prevent clogging. On-site stormwater runoff will drain into detention basin before overflowing to the east towards National Ave.

**Emergency Overflow Weir**

Per section 502.9 and 504.14.D of the WMO, the proposed detention facility shall provide an overflow structure designed to convey the total runoff to the detention system, including offsite tributary flows, using a critical duration analysis. A TR20 was prepared to determine the overflow weir capacity discharge rate. Per the TR20 model, the required discharge rate to be conveyed by the overflow weir is 7.84 cfs. In order to meet the required discharge rate, the existing overflow weir will be removed and replaced with a 32-ft wide, 0.30-ft deep overflow at elevation 643.95'. The required discharge will be conveyed at a depth of 0.19-ft at elevation 644.14'. A summary of the overflow weir elevations is provided in the table below.

| Storm Event | Discharge Rate (cfs) | Depth (ft) | Elevation |
|---|---|---|---|
| 100-yr, 1-hr | 7.84 | 0.19 | 644.14' |

**Storm Sewer Calculations**

All new storm sewers tributary to the infiltration basin and detention pond are designed to pass the 100-year storm event.

**Temporary Best Management Practices:**

During construction, several erosion control devices and features will be used to minimize sediment from leaving the site. These include a gravel construction entrance, silt fence, flexstorm catch-it inlet protection devices, and seeding and erosion control blankets

**Conclusion:**

The proposed improvements will meet both MWRD and Village of Morton Grove stormwater management and floodplain requirements.

# Statement of Opinion

There is no presence of flood protection areas on the project site or within 100-feet beyond the area of development.

_____

**Jason E. Green, P.E.**
**Illinois Registered Professional Engineer**
**No. 062-059460 - Expires 11-30-25**

# Soil Erosion and Sediment Control Submittal
# Soil Erosion Control Narrative

a. The following is a description of the construction activity which is the subject of this plan:

1. WT Group (on behalf of Golf School District 67) proposes the design of a new building additions, parking lot reconfigurations, and new sidewalks at the Hynes Elementary located at 9000 Belleforte Ave. in Morton Grove, IL.

b. The following is a description of the intended construction sequence for the project:

1. Installation of the inlet protection devices – prior to any earth moving operations. The temporary perimeter controls and inlet protection devices will not be removed until all construction activities at the site are complete and soils have been permanently stabilized.
2. Water pumped or otherwise discharged from the site during construction dewatering shall be filtered.
3. Removal of the existing pavement and all other items to be removed as shown in the construction plans.
4. Stripping and stockpiling of topsoil and rough grading. Temporary stabilization shall be applied immediately once grading operations have temporarily or permanently stopped.
5. Rough grading
6. Installation of new underground infiltration basin.
7. Installation of proposed underground utilities. Install new inlet protection devices on new storm inlets. Areas around rims should be excavated to raise rim above ground surface.
8. Construction of site improvements.
9. Remove soil stockpile and dispose excess soil off-site.
10. Final grading and landscaping installation.
    a. Permanent landscape installation or temporary stabilization shall be provided immediately following final grading.
11. Remove sediment from detention basin.
12. Erosion and sedimentation control measures shall be the responsibility of the general contractor, and shall be continually maintained as follows:
    a. The entrance shall be maintained in a condition, which will prevent tracking or flowing of sediment onto public Rights-of-Way. This may require repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public Rights-of-Way shall be cleaned immediately.
    b. Temporary cover shall be continuously maintained until permanent cover is established. (Landscaping/grass seed is considered temporary until it is capable of surviving severe weather conditions.)
    c. Inlets and drainage ways shall be inspected and cleaned periodically and before maintenance responsibility expires.

## 2. CONTROLS

This section of the plan addresses the various controls that will be implemented during the construction process (see section b. above for reference). It is the responsibility of the General Contractor for the implementation of all control measures.

a. Erosion and Sediment Controls

i) Stabilization Practices – includes temporary seeding and permanent seeding. A description of each is provided below. Except where provided in paragraph (A) below, stabilization measures shall be initiated immediately in portions of the site where construction activities have temporarily or permanently ceased as follows:

- Temporary Seeding – General grass seed will be applied to the topsoil stockpile or the rest of the site immediately in areas where grading activities have temporarily ceased.

- Permanent Seeding – Class 1 seeding and erosion control blanket will be applied to all disturbed green spaces after immediately completion of final grading.

(A) A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated must be kept on the form in SWPPP.

ii) Structural Practices. Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices include – temporary perimeter erosion fence, temporary inlet protection, temporary erosion control blanket, permanent turf reinforcement mat and stone riprap. The installation of these devices may be subject to section 404 of the Clean Water Act.

- Temporary Inlet Protection – Catch all and silt fence inlet protection devices will be utilized in order to reduce the amount of silt entering the storm sewer and will be used on all existing and proposed flared end sections and storm sewer inlets where runoff from disturbed areas is collected

b. Storm Water Management

Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been complete. The installation of these devices may be subject to Section 404 of the Clean Water Act.

i) Such practices include: flow attenuation by use of open vegetated swales, catch basins and natural depressions; infiltration of runoff on the site. The practices selected for implementation were determined on the basis of the technical guidance in Section 10-300 (Design Considerations) in Chapter 10 (Erosion and Sedimentation Control) of the “Illinois Department of Transportation Drainage Manual” and the Illinois Environmental Protection Agency’s “Illinois Urban Manual”, 2002.

c. Other Controls

i. **Waste Disposal** - No Solid materials, including building materials, shall be discharged into waters of the state, except as authorized by a Section 404 permit.

ii. The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.

iii. **Storage of Hazardous or Toxic Materials** - Toxic or hazardous materials must be stored in a controlled area using best management practices to minimize potential for soil or storm water contamination. All materials shall be stored in an area that is not accessible to the public such as locked boxes, locked vehicles, inside buildings under construction or in fenced area. No toxic or hazardous materials shall be stored up gradient of any storm drainage structure unless spill containment controls such as sandbags are in place. The contractor shall report any spillage or leak to appropriate agencies and site remediation shall be performed to remove all contamination from the site.

iv. **Portable Toilets** - The contractor shall provide and maintain temporary bathroom facilities during construction to accommodate all workers. These facilities shall be self-contained with no discharge. Waste removed from these facilities shall be disposed of properly offsite.

v. **Vehicle maintenance and Storage** - If maintenance must occur onsite, the contractor will use designated areas located away from drainage courses to prevent the run on of storm water and the runoff of spills. The contractor shall use secondary containment, such as drip pans or drop cloths to catch spills or leaks. Onsite vehicles and equipment will be inspected regularly and repaired immediately.

vi. **Vehicle and Equipment Cleaning (Concrete washout area)** - Use off-site commercial washing businesses as much as possible. If washing of vehicles and equipment must occur onsite, use designated bermed wash areas to prevent wash water contact with receiving waters. Area to be clearly marked as “Concrete wash out area”. The wash area can be sloped for wash water collection and subsequent infiltration into the ground. The contractor shall use phosphate-free biodegradable soaps. The contractor shall educate employees and subcontractors on pollution prevention measures. Steam cleaning will not be permitted onsite. Use siphon system to pump out water.

vii. **Vehicle and Equipment Fueling** - Use off-site fuelling station as much as possible. If fueling of vehicles and equipment must occur onsite, use designated areas, located away from drainage course, to prevent the run-on of storm water and the runoff of spills. “Topping off” fuel tanks will be discouraged. The contractor shall use secondary containment. (Double lined tanks are considered secondary containment.)

viii. **Topsoil Stockpiling** - Stockpiling is the salvaging, storing, protecting, and use of topsoil to enhance final site stabilization and support selected vegetation. Location for a stabilized stockpile that will not erode, block drainage, or interfere with work on the site. Topsoil stockpiles should be located on flat ground if possible, and protected by a silt fence or other sediment barrier on the down gradient sides. Topsoil that will not be used for more than 3 days should be seeded as noted in section 2.a.i above.

ix. **Subcontractor Equipment** - All subcontractors shall be notified regarding the SWPPP and shall be advised as to how it pertains to their activities on the site. Specifically, all vehicles shall be required to utilize the stabilized site entrance and parking and to use the controlled wash down area. All supplies that pose a threat to storm water quality shall be kept in vehicles or inside structures under construction. All waste material is to be disposed of properly.

d. Approved State or local Plans

(i) The management practices, controls and other provisions contained in the storm water pollution prevention plan must be at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual, 2002. Facilities which discharge storm water associated with construction site activities muse include in the storm water pollution prevention plan procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials. Requirements specified in sediment and erosion site plans or site permits or storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI to be authorized to discharge under this permit, incorporated by reference and are enforceable under this permit. The plans shall include all requirements of this permit and include more stringent standards required by any local approval. This provision does not apply to provisions of master plans, comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit that is issued to the construction site.

(ii) Dischargers seeking alternative permit requirements are not authorized by this permit and shall submit an individual permit application in accordance with 40 CFR 122.26 at the address below, along with a description of why requirements in approved local plans of permits should not be applicable as a condition of an NPDES permit.

Illinois Environmental Protection Agency
Division of Water Pollution Control, Mail Code #15
Attention: Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

## 3. MAINTENANCE

The following is a description of procedures that will be used to maintain, in good and effective operating conditions, vegetation, erosion and sediment control measures and other protective measures identified in this plan.

During construction the contractor shall:

- Clean up and grade the work area to eliminate concentration of runoff.
- Cover the open ends of pipes in trenches at the close of each working day.
- Inspect, maintain or replace (at inspector's discretion) erosion and sediment control items.

Prior to any landscaping/restoration work, the contractor shall:

- All maintenance of erosion control systems will be the responsibility of the contractor. All locations where vehicles enter and exit the construction site and all other areas subject to erosion should also be inspected periodically. Inspection of these areas shall be conducted at least once every seven days and within 24 hours of the end of each 0.50 inches or greater or rainfall, or equivalent snowfall.
- The contractor shall follow inspection procedures as outlined in 4.a-d below.

Following construction

- Regular inspections and routine maintenance of general areas shall be performed on a monthly or as-needed basis. Specific items of concern included:
    - Litter and debris shall be controlled.
    - Landscaped areas shall be maintained with regular mowing and restored with appropriate seeding/vegetation as necessary.
    - Accumulated sediment shall be disposed of properly, along with any wastes generated during maintenance operations.
    - Rip-rap areas shall be repaired with the addition of new rip-rap, as necessary, of similar size and shape.
    - Roads shall be swept, vacuumed and/or washed on a regular basis.

- All erosion control measures shall be inspected and maintained after each 0.50 inches of rainfall and/or once a week and all impervious road surfaces shall be cleaned prior to the end of each working day.

- Cut the grass on slopes in open space: weekly during growing season.

- Stormwater Detention Basin:
    a. Cut the turf grass areas outside of the native planting areas: weekly during growing season.
    b. Inspect stormwater detention facility to ensure that the constructed volume for detention is maintained. Specific locations in the stormwater management system, designed to accumulate sediment, shall be dredged as necessary to prevent sediment from reaching the invert of any gravity outlet pipe: monthly.
    c. Debris removal. Trash, brush, grass clippings, sediment, and other debris should be removed from the detention facility to maintain the designed storage volume. To prevent clogging, the outlet control structure should also be inspected and all debris should be removed: monthly.
    d. Restoration of eroded areas. For areas where there is evidence of erosion, or in areas where future erosion is likely, protection should be provided to prevent further damage. All bare areas should be seeded and restored. Areas located along the side slopes of the detention facility will require seeding in conjunction with an erosion control blanket: monthly.
    e. Restore rip-rap as necessary.

- Minor Stormwater System:
    a. Debris removal. Trash, wood chips, grass clippings, sediment, and other debris should be removed from the catch basins, inlets, outfalls, and storm sewers to prevent clogging. Cleaning should be done in such a way that the debris is not discharged back into the stormwater system: every two weeks.
    b. Reset covers/lids on as-needed basis.
    c. Remove accumulated sediment from manhole bottom when 50% of sump is filled.
    d. Visually inspect pipes by removing manhole lids, make repairs as necessary.
    e. Storm sewers shall be checked for siltation deposits at inlets, outlets, and within the conduit, clean out as necessary.
    f. Replant and reseed any eroded areas.
    g. Removal of obstructions. Inspections should be performed to ensure that all overland flow routes are free from obstructions. If an obstruction has been placed in an overland flow route, it should be removed immediately: every two weeks.

- Overflow weir:
    a. Removal of obstructions. Inspections should be performed to ensure that the overflow weir is free from obstructions. If an obstruction has been placed in the overflow weir, it should be removed immediately: every two weeks.
    b. Regrade to provide positive drainage as necessary.
    c. Regular mowing to control vegetation.

## 4. INSPECTIONS

Qualified personnel (provided by the contractor) shall inspect disturbed areas of the construction site that have not been finally stabilized, structural control measures, and location where vehicles enter or exit the site at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.50 inches or greater or equivalent snowfall. Qualified personnel means a person knowledgeable in the principles and practices of erosion and sediment control measures, such as a licensed Professional Engineer (P.E.) and a Certified Professional in Erosion and Sediment Control (CPESC), a Certified Erosion Sediment and Storm Water Inspector (CESSWI) or other knowledgeable person who possesses the skills to assess conditions at the construction site that should impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activities.

a. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ensure that they are operating correctly. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.

b. Based on the results of the inspection, the description of potential pollutant sources identified in section 1 above and pollution measures identified in section 2 above shall be revised as appropriate as soon as practicable after such inspection. Any changes to this plan resulting from the required inspections shall be implemented within 7 calendar days following the inspection.

c. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of this storm water pollution prevention plan, and actions taken in accordance with section 4.b. shall be made and retained as part of the plan for at least three (3) years after the date of the inspection. The report shall be signed in accordance with Part 4.d of this permit.

d. Signatory Requirements. All Notices of Intent, storm water pollution prevention plans, reports, certifications or information either submitted to the Agency or the operator of a large or medium municipal separate storm sewer system, or that this permit requires be maintained by the permittee, shall be signed.
All Notices on Intent shall be signed as follows:

    - For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy decision-making functions for the corporation: or (2) any person authorized to sign documents that has been assigned or delegated said authority in accordance with corporate procedures;

- For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

- For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations or a principal geographic unit of the agency.

All reports required by the permit and other information requested by the Agency shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- The authorization is made in writing by a person described above and submitted to the Agency.

- The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility of activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).

- Changes to Authorization. If an authorization under Part I.C (Authorization) is no longer accurate because a different individual or position has responsibility for the overall operation of the construction site, a new authorization satisfying the requirements of Part I.C must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by authorized representative.

- Certification. Any person signing documents under this Part shall make the following certification:

  > “I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

e. The contractor shall notify the appropriate Agency Field Operation Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax within 24 hours of any incidence of noncompliance for any violation of the storm water pollution prevention plan observed during any inspection conducted or for violations of any condition of this permit. The permittee shall complete and submit within 5 days an "Incidence of Noncompliance" (ION) report for any violation of the storm water pollution prevention plan observed during any inspection conducted, or for violations of any condition of this permit. Submission shall be on forms provided by the Agency and include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. A copy shall also be mailed to the following address:

W-T GROUP, LLC, CIVIL ENGINEERING DIVISION
ATTN: JASON E. GREEN, PE, CPESC, PRINCIPAL & PARTNER
2000 CENTER DRIVE, SUITE B411
HOFFMAN ESTATES, ILLINOIS 60192

f. All reports of noncompliance shall be signed by a responsible authority as defined in Part VI.G (Signatory Requirements) of this permit.

## 5. NON-STORM WATER DISCHARGES

*Except for flows from firefighting activities, sources of non-storm water that is combined with storm water discharges associated with the industrial activity addressed in this plan are described below. Appropriate pollution prevention measures, as described below, will be implemented for the non-storm water component(s) of the discharge.*
Landscape Watering – Water used for new seed and landscape installation will be applied at a rate that will be absorbed into the soil, and not create surface runoff. If runoff occurs, the silt fences and inlet protection fabric will remove sedimentation.

Dust Control Watering - Water used for the purpose of controlling airborne dust as necessary shall be pumped and filtered before it is allowed to leave the site.

Vehicle and Equipment Cleaning - Use off-site commercial washing businesses as much as possible. If washing of vehicles and equipment must occur onsite, use designated bermed wash areas to prevent wash water contact with receiving waters, with the area to be clearly marked as "Concrete wash out area". The wash area can be sloped for wash water collection and subsequent infiltration into the ground. The contractor shall use phosphate-free biodegradable soaps. The contractor shall educate employees and subcontractors on pollution prevention measures. Steam cleaning will not be permitted onsite. Use siphon system to pump out water.

# Stormwater Management Submittal

- Existing Condition Calculations
- Proposed Condition Calculations
- Storm Sewer Calculations
- Best Management Practice

# Existing Condition Calculations

- Existing Curve Number Calculation
- Existing Trade off Calculation
- Restrictor Discharge Calculation
- Existing Detention Pond Volume Calculation

# COMPOSITE RUNOFF CURVE NUMBER (*CN*)

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 8/29/2025

**TYPE OF AREA (SELECT WITH DROP-DOWN)**

___ DETAINED AREA

___ UNRESTRICTED AREA

___ UPSTREAM AREA

___ MAJOR STORMWATER SYSTEM

X OTHER: AREA-1A

**CONDITION (SELECT WITH DROP-DOWN)**

___ PROPOSED CONDITION

X EXISTING CONDITION

**RUNOFF CURVE NUMBER**

| Surface Description | Hydrologic Soil Group (HSG) | CN | Area (acres) | Product (CN)(Area) |
|---|---|---|---|---|
| IMPERVIOUS | D | 98 | 0.32 | 31.07 |
| PERVIOUS | D | 80 | 0.00 | 0.08 |
| MAINTENANCE | D | 98 | 0.55 | 53.51 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TOTALS: | | | 0.86 | 84.65 |

**COMPOSITE RUNOFF CURVE NUMBER**

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{84.65}{0.86} \rightarrow \textbf{Composite CN} = \textbf{97.98}$$

# COMPOSITE RUNOFF CURVE NUMBER (*CN*)

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 8/29/2025

**TYPE OF AREA (SELECT WITH DROP-DOWN)**

___ DETAINED AREA

___ UNRESTRICTED AREA

___ UPSTREAM AREA

___ MAJOR STORMWATER SYSTEM

X OTHER: AREA-1B

**CONDITION (SELECT WITH DROP-DOWN)**

___ PROPOSED CONDITION

X EXISTING CONDITION

**RUNOFF CURVE NUMBER**

| Surface Description | Hydrologic Soil Group (HSG) | CN | Area (acres) | Product (CN)(Area) |
|---|---|---|---|---|
| IMPERVIOUS | D | 98 | 0.10 | 9.31 |
| PERVIOUS | D | 80 | 0.22 | 17.52 |
| GRAVEL | D | 91 | 0.01 | 0.82 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TOTALS: | | | 0.32 | 27.65 |

**COMPOSITE RUNOFF CURVE NUMBER**

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{27.65}{0.32} \rightarrow \textbf{Composite CN} = \textbf{85.60}$$

# COMPOSITE RUNOFF CURVE NUMBER (*CN*)

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 8/29/2025

**TYPE OF AREA (SELECT WITH DROP-DOWN)**

___ DETAINED AREA

___ UNRESTRICTED AREA

___ UPSTREAM AREA

___ MAJOR STORMWATER SYSTEM

X OTHER: AREA-2

**CONDITION (SELECT WITH DROP-DOWN)**

___ PROPOSED CONDITION

X EXISTING CONDITION

**RUNOFF CURVE NUMBER**

| Surface Description | Hydrologic Soil Group (HSG) | CN | Area (acres) | Product (CN)(Area) |
|---|---|---|---|---|
| PERVIOUS | D | 80 | 0.11 | 9.12 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TOTALS: | | | 0.11 | 9.12 |

**COMPOSITE RUNOFF CURVE NUMBER**

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{9.12}{0.11} \rightarrow \textbf{Composite CN} = \textbf{80.00}$$

# COMPOSITE RUNOFF CURVE NUMBER (*CN*)

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 8/29/2025

**TYPE OF AREA (SELECT WITH DROP-DOWN)**

___ DETAINED AREA

___ UNRESTRICTED AREA

___ UPSTREAM AREA

___ MAJOR STORMWATER SYSTEM

X OTHER: AREA-3

**CONDITION (SELECT WITH DROP-DOWN)**

___ PROPOSED CONDITION

X EXISTING CONDITION

**RUNOFF CURVE NUMBER**

| Surface Description | Hydrologic Soil Group (HSG) | CN | Area (acres) | Product (CN)(Area) |
|---|---|---|---|---|
| IMPERVIOUS | D | 98 | 0.07 | 6.37 |
| PERVIOUS | D | 80 | 0.07 | 5.92 |
| GRAVEL | D | 91 | 0.02 | 1.37 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TOTALS: | | | 0.15 | 13.66 |

**COMPOSITE RUNOFF CURVE NUMBER**

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{13.66}{0.15} \rightarrow \textbf{Composite CN} = \textbf{88.67}$$

# COMPOSITE RUNOFF CURVE NUMBER (*CN*)

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 8/29/2025

**TYPE OF AREA (SELECT WITH DROP-DOWN)**

___ DETAINED AREA

___ UNRESTRICTED AREA

___ UPSTREAM AREA

___ MAJOR STORMWATER SYSTEM

X OTHER: AREA-4

**CONDITION (SELECT WITH DROP-DOWN)**

___ PROPOSED CONDITION

X EXISTING CONDITION

**RUNOFF CURVE NUMBER**

| Surface Description | Hydrologic Soil Group (HSG) | CN | Area (acres) | Product (CN)(Area) |
|---|---|---|---|---|
| IMPERVIOUS | D | 98 | 0.21 | 20.68 |
| PERVIOUS | D | 80 | 0.20 | 15.76 |
| MAINTENANCE | D | 98 | 0.01 | 0.49 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TOTALS: | | | 0.41 | 36.93 |

**COMPOSITE RUNOFF CURVE NUMBER**

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{36.93}{0.41} \rightarrow \textbf{Composite CN} = \textbf{89.41}$$

# COMPOSITE RUNOFF CURVE NUMBER (*CN*)

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 8/29/2025

**TYPE OF AREA (SELECT WITH DROP-DOWN)**

___ DETAINED AREA

___ UNRESTRICTED AREA

X UPSTREAM AREA

___ MAJOR STORMWATER SYSTEM

X OTHER: AREA-5

**CONDITION (SELECT WITH DROP-DOWN)**

___ PROPOSED CONDITION

X EXISTING CONDITION

**RUNOFF CURVE NUMBER**

| Surface Description | Hydrologic Soil Group (HSG) | CN | Area (acres) | Product (CN)(Area) |
|---|---|---|---|---|
| IMPERVIOUS | D | 98 | 0.31 | 30.09 |
| PERVIOUS | D | 80 | 1.40 | 112.32 |
| PLAYGROUND | D | 91 | 0.13 | 11.38 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TOTALS: | | | 1.84 | 153.78 |

**COMPOSITE RUNOFF CURVE NUMBER**

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{153.78}{1.84} \rightarrow \textbf{Composite CN} = \textbf{83.76}$$

# COMPOSITE RUNOFF CURVE NUMBER (*CN* )

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 8/29/2025

**TYPE OF AREA (SELECT WITH DROP-DOWN)**

___ DETAINED AREA

___ MAJOR STORMWATER SYSTEM

X UNRESTRICTED AREA

X OTHER: AREA-1A & 4

___ UPSTREAM AREA

**CONDITION (SELECT WITH DROP-DOWN)**

___ PROPOSED CONDITION

X EXISTING CONDITION

**RUNOFF CURVE NUMBER**

| Surface Description | Hydrologic Soil Group (HSG) | CN | Area (acres) | Product (CN)(Area) |
|---|---|---|---|---|
| IMPERVIOUS | D | 98 | 0.53 | 51.74 |
| PERVIOUS | D | 80 | 0.20 | 15.84 |
| MAITENANCE | D | 98 | 0.55 | 54.00 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TOTALS: | | | 1.28 | 121.58 |

**COMPOSITE RUNOFF CURVE NUMBER**

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{121.58}{1.28} \rightarrow \textbf{Composite CN} = \textbf{95.21}$$

# RUNOFF VOLUME

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 8/29/2025

## DEVELOPMENT INFORMTION

| | | | |
|---|---|---|---|
| 1. | Area, *A* (AREA 1A & 4) | 1.277 | acres |
| 2. | Curve Number, *CN* | 95.21 | |
| 3. | 100-year, 24-hr Rainfall Depth, *P* | 8.57 | inches |

## RUNOFF DEPTH (NRCS RUNOFF EQUATIONS)

| | | | | |
|---|---|---|---|---|
| 4. | Maximum Retention, *S* | $S = \frac{1000}{CN} - 10$ | 0.50 | inches |
| 5. | Runoff Depth, $Q_D$ | $Q_D = \frac{(P - 0.2S)^2}{(P + 0.8S)}$ | 7.99 | inches |

## RUNOFF VOLUME

| | | | | |
|---|---|---|---|---|
| 6. | Runoff Volume, $V_R$ | $V_R = Q_D A \left(\frac{1}{12\frac{in}{ft}}\right)$ | **0.85** | ac-ft |

# RUNOFF VOLUME

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 8/29/2025

## DEVELOPMENT INFORMTION

| | | | |
|---|---|---|---|
| 1. | Area, *A* (AREA-5) | 1.836 | acres |
| 2. | Curve Number, *CN* | 83.76 | |
| 3. | 100-year, 24-hr Rainfall Depth, *P* | 8.57 | inches |

## RUNOFF DEPTH (NRCS RUNOFF EQUATIONS)

| | | | |
|---|---|---|---|
| 4. | Maximum Retention, *S* | 1.94 | inches |
| 5. | Runoff Depth, $Q_D$ | 6.61 | inches |

## RUNOFF VOLUME

| | | | |
|---|---|---|---|
| 6. | Runoff Volume, $V_R$ | **1.01** | ac-ft |

CIVIL ENGINEERING
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**PROJECT NAME:** Hynes Elementary
**PROJECT NUMBER:** C2500035
**LOCATION:** Morton Grove, IL
**DATE:** 8/29/2025
**BY:** OC

## RESTRICTOR RELEASE RATE (EXISTING):

$$Q. = (DIA/2)^2 \times C \times 3.14 \sqrt{2 \times G \times H}$$

| | | |
|---|---|---|
| G = | 32.2 | FT/S |
| DIA. = | 3.15 | IN |
| C = | 0.82 | (SHORT PIPE) |
| OUTLET ELEVATION= | 637.93 | FEET |
| OVERFLOW ELEVATION= | 642.25 | FEET |
| HEAD= | 4.19 | FEET |
| **$Q_{(OVERFLOW\ ELEVATION)}$ =** | **0.729** | **CFS** |

| | WATER ELEVATION | HEAD | 3" RESTRICTOR DISCHARGE (CFS) |
|---|---|---|---|
| | 643.00 | 4.94 | **0.791** |
| | 642.90 | 4.84 | **0.783** |
| **HWL** | 642.25 | 4.19 | **0.729** |
| | 642.00 | 3.94 | **0.707** |
| | 641.00 | 2.94 | **0.611** |
| | 640.00 | 1.94 | **0.496** |
| | 639.00 | 0.94 | **0.345** |
| | 638.00 | 0.00 | **0.000** |
| **RESTRICTOR INVERT** | 637.93 | 0.00 | **0.000** |

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PROJECT NAME: Hynes Elementary
PROJECT NUMBER: C2500035
LOCATION: Morton Grove, IL
DATE: 8/29/2025
BY: OC

# EXISTING POND STORAGE VOLUME

| ELEVATION | AREA | | | INCR. STORAGE VOLUME | CUMULATIVE STORAGE VOLUME | | DISCHARGE |
|---|---|---|---|---|---|---|---|
| 643.00 | 8,048 SQ. FT. | OR | 0.1848 AC. | | | | 0.791 CFS |
| | | | | 789 CU. FT. | 17,970 CU. FT. **OR** | 0.413 AC-FT | |
| 642.90 | 7,741 SQ. FT. | OR | 0.1777 AC. | | | | 0.783 CFS |
| | | | | 4,644 CU. FT. | 17,180 CU. FT. **OR** | 0.394 AC-FT | |
| 642.25 | 6,549 SQ. FT. | OR | 0.1504 AC. | | | | 0.729 CFS |
| | | | | 1,587 CU. FT. | 12,536 CU. FT. **OR** | 0.288 AC-FT | |
| 642.00 | 6,150 SQ. FT. | OR | 0.1412 AC. | | | | 0.707 CFS |
| | | | | 5,390 CU. FT. | 10,948 CU. FT. **OR** | 0.251 AC-FT | |
| 641.00 | 4,629 SQ. FT. | OR | 0.1063 AC. | | | | 0.611 CFS |
| | | | | 3,662 CU. FT. | 5,559 CU. FT. **OR** | 0.128 AC-FT | |
| 640.00 | 2,696 SQ. FT. | OR | 0.0619 AC. | | | | 0.496 CFS |
| | | | | 1,649 CU. FT. | 1,896 CU. FT. **OR** | 0.044 AC-FT | |
| 639.00 | 602 SQ. FT. | OR | 0.0138 AC. | | | | 0.345 CFS |
| | | | | 248 CU. FT. | 248 CU. FT. **OR** | 0.006 AC-FT | |
| 638.18 | 2 SQ. FT. | OR | 0.0000 AC. | | | | 0.123 CFS |

**TOTAL POND $V_{643.00}$ PROVIDED = 0.413 AC-FT**

# Proposed Condition Calculations

- Proposed Curve Number Calculation
- Proposed Runoff Coefficient Calculation
- Proposed Trade off Calculation
- Proposed Volume Control Calculation
- Allowable Release Rate Calculation
- Modified Rational Method: TP-40 Rainfall
- Modified Rational Method: Bulletin 75 Rainfall
- Nomograph Method: Bulletin 75 Rainfall
- Required Detention Volume Summary
- Proposed Restrictor Release Rate
- Proposed Detention Pond Volume Calculation
- Overflow Weir Calculation

# COMPOSITE RUNOFF CURVE NUMBER (*CN* )

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 10/7/2025

**TYPE OF AREA (SELECT WITH DROP-DOWN)**

___ DETAINED AREA

___ UNRESTRICTED AREA

___ UPSTREAM AREA

___ MAJOR STORMWATER SYSTEM

X OTHER: AREA-1A

**CONDITION (SELECT WITH DROP-DOWN)**

X PROPOSED CONDITION

___ EXISTING CONDITION

**RUNOFF CURVE NUMBER**

| Surface Description | Hydrologic Soil Group (HSG) | CN | Area (acres) | Product (CN)(Area) |
|---|---|---|---|---|
| IMPERVIOUS | D | 98 | 0.17 | 16.66 |
| PERVIOUS | D | 80 | 0.09 | 7.52 |
| MAINTENANCE | D | 98 | 0.60 | 59.00 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TOTALS: | | | 0.87 | 83.18 |

**COMPOSITE RUNOFF CURVE NUMBER**

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{83.18}{0.87} \rightarrow \textbf{Composite CN} = \textbf{96.05}$$

# COMPOSITE RUNOFF CURVE NUMBER (*CN*)

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 10/7/2025

**TYPE OF AREA (SELECT WITH DROP-DOWN)**

___ DETAINED AREA

___ UNRESTRICTED AREA

___ UPSTREAM AREA

___ MAJOR STORMWATER SYSTEM

X OTHER: AREA-1B

**CONDITION (SELECT WITH DROP-DOWN)**

X PROPOSED CONDITION

___ EXISTING CONDITION

**RUNOFF CURVE NUMBER**

| Surface Description | Hydrologic Soil Group (HSG) | CN | Area (acres) | Product (CN)(Area) |
|---|---|---|---|---|
| IMPERVIOUS | D | 98 | 0.31 | 30.09 |
| PERVIOUS | D | 80 | 0.06 | 4.96 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TOTALS: | | | 0.37 | 35.05 |

**COMPOSITE RUNOFF CURVE NUMBER**

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{35.05}{0.37} \rightarrow \textbf{Composite CN} = \textbf{94.98}$$

# COMPOSITE RUNOFF CURVE NUMBER (*CN*)

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 10/7/2025

**TYPE OF AREA (SELECT WITH DROP-DOWN)**

___ DETAINED AREA

___ UNRESTRICTED AREA

___ UPSTREAM AREA

___ MAJOR STORMWATER SYSTEM

X OTHER: AREA-2

**CONDITION (SELECT WITH DROP-DOWN)**

X PROPOSED CONDITION

___ EXISTING CONDITION

**RUNOFF CURVE NUMBER**

| Surface Description | Hydrologic Soil Group (HSG) | CN | Area (acres) | Product (CN)(Area) |
|---|---|---|---|---|
| IMPERVIOUS | D | 98 | 0.11 | 11.17 |
| MAINTENANCE | D | 98 | 0.01 | 1.08 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TOTALS: | | | 0.13 | 12.25 |

**COMPOSITE RUNOFF CURVE NUMBER**

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{12.25}{0.13} \rightarrow \textbf{Composite CN} = \textbf{98.00}$$

# COMPOSITE RUNOFF CURVE NUMBER (*CN*)

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 10/7/2025

**TYPE OF AREA (SELECT WITH DROP-DOWN)**

___ DETAINED AREA

___ UNRESTRICTED AREA

___ UPSTREAM AREA

___ MAJOR STORMWATER SYSTEM

X OTHER: AREA-3

**CONDITION (SELECT WITH DROP-DOWN)**

X PROPOSED CONDITION

___ EXISTING CONDITION

**RUNOFF CURVE NUMBER**

| Surface Description | Hydrologic Soil Group (HSG) | CN | Area (acres) | Product (CN)(Area) |
|---|---|---|---|---|
| IMPERVIOUS | D | 98 | 0.03 | 3.04 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TOTALS: | | | 0.03 | 3.04 |

**COMPOSITE RUNOFF CURVE NUMBER**

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{3.04}{0.03} \rightarrow \textbf{Composite CN} = \textbf{98.00}$$

# COMPOSITE RUNOFF CURVE NUMBER (*CN*)

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 10/7/2025

**TYPE OF AREA (SELECT WITH DROP-DOWN)**

| | | | |
|---|---|---|---|
| ___ | DETAINED AREA | ___ | MAJOR STORMWATER SYSTEM |
| ___ | UNRESTRICTED AREA | X | OTHER: AREA-4A |
| ___ | UPSTREAM AREA | | |

**CONDITION (SELECT WITH DROP-DOWN)**

| | | | |
|---|---|---|---|
| X | PROPOSED CONDITION | ___ | EXISTING CONDITION |

**RUNOFF CURVE NUMBER**

| Surface Description | Hydrologic Soil Group (HSG) | CN | Area (acres) | Product (CN)(Area) |
|---|---|---|---|---|
| IMPERVIOUS | D | 98 | 0.00 | 0.20 |
| PERVIOUS | D | 80 | 0.00 | 0.08 |
| MAINTENANCE | D | 98 | 0.01 | 0.49 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TOTALS: | | | 0.01 | 0.77 |

**COMPOSITE RUNOFF CURVE NUMBER**

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{0.77}{0.01} \rightarrow \textbf{Composite CN} = \textbf{95.75}$$

# COMPOSITE RUNOFF CURVE NUMBER (*CN*)

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 10/7/2025

## TYPE OF AREA (SELECT WITH DROP-DOWN)

___ DETAINED AREA

___ UNRESTRICTED AREA

___ UPSTREAM AREA

___ MAJOR STORMWATER SYSTEM

X OTHER: AREA-4B

## CONDITION (SELECT WITH DROP-DOWN)

X PROPOSED CONDITION

___ EXISTING CONDITION

## RUNOFF CURVE NUMBER

| Surface Description | Hydrologic Soil Group (HSG) | CN | Area (acres) | Product (CN)(Area) |
|---|---|---|---|---|
| IMPERVIOUS | D | 98 | 0.21 | 20.58 |
| PERVIOUS | D | 80 | 0.20 | 15.60 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TOTALS: | | | 0.41 | 36.18 |

## COMPOSITE RUNOFF CURVE NUMBER

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{36.18}{0.41} \rightarrow \textbf{Composite CN} = \textbf{89.33}$$

# COMPOSITE RUNOFF CURVE NUMBER (*CN* )

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 10/7/2025

**TYPE OF AREA (SELECT WITH DROP-DOWN)**

___ DETAINED AREA

___ MAJOR STORMWATER SYSTEM

X UNRESTRICTED AREA

___ OTHER: UNRESTRICTED REDEVELOPMENT

___ UPSTREAM AREA

**CONDITION (SELECT WITH DROP-DOWN)**

X PROPOSED CONDITION

___ EXISTING CONDITION

**RUNOFF CURVE NUMBER**

| Surface Description | Hydrologic Soil Group (HSG) | CN | Area (acres) | Product (CN)(Area) |
|---|---|---|---|---|
| IMPERVIOUS | D | 98 | 0.24 | 23.42 |
| PERVIOUS | D | 80 | 0.23 | 18.72 |
| MAITENANCE | D | 98 | 0.01 | 0.49 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | TOTALS: | 0.48 | 42.63 |

**COMPOSITE RUNOFF CURVE NUMBER**

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{42.63}{0.48} \rightarrow \textbf{Composite CN} = \textbf{89.19}$$

# COMPOSITE RUNOFF CURVE NUMBER (*CN* )

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 10/7/2025

**TYPE OF AREA (SELECT WITH DROP-DOWN)**

| | | | |
|---|---|---|---|
| | DETAINED AREA | | MAJOR STORMWATER SYSTEM |
| X | UNRESTRICTED AREA | X | OTHER: UNRESTRICTED NEW DEVELOPMEI |
| | UPSTREAM AREA | | |

**CONDITION (SELECT WITH DROP-DOWN)**

| | | | |
|---|---|---|---|
| X | PROPOSED CONDITION | | EXISTING CONDITION |

**RUNOFF CURVE NUMBER**

| Surface Description | Hydrologic Soil Group (HSG) | CN | Area (acres) | Product (CN)(Area) |
|---|---|---|---|---|
| IMPERVIOUS | D | 98 | 0.11 | 11.17 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TOTALS: | | | 0.11 | 11.17 |

**COMPOSITE RUNOFF CURVE NUMBER**

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{11.17}{0.11} \rightarrow \textbf{Composite CN} = \textbf{98.00}$$

# COMPOSITE RUNOFF COEFFICIENT (*C*)

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 10/7/2025

**TYPE OF AREA (SELECT WITH DROP-DOWN)**

| | | | |
|---|---|---|---|
| ___ | DETAINED AREA | ___ | MAJOR STORMWATER SYSTEM |
| ___ | UNRESTRICTED AREA | X | OTHER: AREA 1A & 4A (REDEVELOPMENT) |
| ___ | UPSTREAM AREA | | |

**CONDITION (SELECT WITH DROP-DOWN)**

| | | | |
|---|---|---|---|
| X | PROPOSED CONDITION | ___ | EXISTING CONDITION |

**RUNOFF COEFFICIENT**

| Surface Description | C | Area (acres) | Product (C)(Area) |
|---|---|---|---|
| IMPERVIOUS | 0.90 | 0.17 | 0.15 |
| PERVIOUS | 0.45 | 0.10 | 0.04 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| TOTALS: | | 0.27 | 0.20 |

**COMPOSITE RUNOFF COEFFICIENT**

$$\text{Composite C} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{0.20}{0.27} \rightarrow \text{Composite C} = \mathbf{0.74}$$

# RUNOFF VOLUME

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 9/4/2025

## DEVELOPMENT INFORMTION

| | | | |
|---|---|---|---|
| 1. | Area, $A$ | 1.836 | acres |
| 2. | Curve Number, $CN$ | 83.76 | |
| 3. | 100-year, 24-hr Rainfall Depth, $P$ | 8.57 | inches |

## RUNOFF DEPTH (NRCS RUNOFF EQUATIONS)

| | | | | |
|---|---|---|---|---|
| 4. | Maximum Retention, $S$ | $S = \frac{1000}{CN} - 10$ | 1.94 | inches |
| 5. | Runoff Depth, $Q_D$ | $Q_D = \frac{(P - 0.2S)^2}{(P + 0.8S)}$ | 6.61 | inches |

## RUNOFF VOLUME

| | | | | |
|---|---|---|---|---|
| 6. | Runoff Volume, $V_R$ | $V_R = Q_D A \left(\frac{1}{12\frac{in}{ft}}\right)$ | **1.01** | ac-ft |

# RUNOFF VOLUME

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 10/7/2025

## DEVELOPMENT INFORMTION

| | | | |
|---|---|---|---|
| 1. | Area, *A* | 0.478 | acres |
| 2. | Curve Number, *CN* | 89.19 | |
| 3. | 100-year, 24-hr Rainfall Depth, *P* | 8.57 | inches |

## RUNOFF DEPTH (NRCS RUNOFF EQUATIONS)

| | | | | |
|---|---|---|---|---|
| 4. | Maximum Retention, *S* | $S = \frac{1000}{CN} - 10$ | 1.21 | inches |
| 5. | Runoff Depth, $Q_D$ | $Q_D = \frac{(P - 0.2S)^2}{(P + 0.8S)}$ | 7.27 | inches |

## RUNOFF VOLUME

| | | | | |
|---|---|---|---|---|
| 6. | Runoff Volume, $V_R$ | $V_R = Q_D A \left(\frac{1}{12\frac{in}{ft}}\right)$ | **0.29** | ac-ft |

# RUNOFF VOLUME

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 10/7/2025

## DEVELOPMENT INFORMTION

| | | | |
|---|---|---|---|
| 1. | Area, *A* | 0.125 | acres |
| 2. | Curve Number, *CN* | 98.00 | |
| 3. | 100-year, 24-hr Rainfall Depth, *P* | 8.57 | inches |

## RUNOFF DEPTH (NRCS RUNOFF EQUATIONS)

| | | | | |
|---|---|---|---|---|
| 4. | Maximum Retention, *S* | $S = \frac{1000}{CN} - 10$ | 0.20 | inches |
| 5. | Runoff Depth, $Q_D$ | $Q_D = \frac{(P - 0.2S)^2}{(P + 0.8S)}$ | 8.33 | inches |

## RUNOFF VOLUME

| | | | | |
|---|---|---|---|---|
| 6. | Runoff Volume, $V_R$ | $V_R = Q_D A \left(\frac{1}{12\frac{in}{ft}}\right)$ | **0.09** | ac-ft |

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PROJECT NAME: Hynes Elementary
PROJECT NUMBER: C2500035
LOCATION: Morton Grove, IL
DATE: 10/7/2025
BY: OC

## Required Volume Control Storage Calculation

$V_c = Std_c \times \text{Unit Conversion} \times A_{IMPV}$

Where:
$V_c$ = Volume Control Storage (Cubic Feet)
$Std_c$ = Control Standard = 1.00 in.
Unit Conversion = 1 ft / 12 in.
$A_{IMPV}$ = Proposed Impervious Area Increase ($ft^2$) = 27191 $ft^2$
0.624 ac

Storage = 1.25in x 1ft / 12in x 27191.19 $ft^2$ = Required VC Storage = 2266 $ft^3$
0.052 ac-ft

## Provided VC Storage

| Coarse Agg Above Inv. ELEVATION | AREA | INCR. STORAGE | VOLUME |
|---|---|---|---|
| 643.00 | 2,400.00 SQ. FT. | 8,400 CU. FT. | 8,400 CU. FT. **OR** 0.193 AC-FT |
| 639.50 | 2,400.00 SQ. FT. | | |

TOTAL STONE VOLUME ABOVE INV. ($V_C$) = 8,400 $ft^3$
OR 0.193 ac-ft

| Coarse Agg Below Inv. ELEVATION | AREA | INCR. STORAGE | VOLUME |
|---|---|---|---|
| 639.50 | 2,400.00 SQ. FT. | 2,400 CU. FT. | 2,400 CU. FT. **OR** 0.055 AC-FT |
| 638.50 | 2,400.00 SQ. FT. | | |

TOTAL STONE VOLUME ABOVE INV. ($V_D$) = 2,400 $ft^3$
OR 0.055 ac-ft

| SUMMARY: | | VOLUME (CF) | STORAGE |
|---|---|---|---|
| 3.50' Stone layer above | $V_{C=}$ | 8400 x0.50x0.36= | 1512 $ft^3$ |
| 1.00' Stone layer below | $V_{D=}$ | 2400 x0.36= | 864 $ft^3$ |
| | | TOTAL PROVIDED: | 2376 $ft^3$ |
| | | TOTAL PROVIDED: | 0.055 ac-ft |

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**PROJECT NAME:** Hynes Elementary
**PROJECT NUMBER:** C2500035
**LOCATION:** Morton Grove, IL
**DATE:** 10/7/2025
**BY:** OC

## RELEASE RATE CALCULATIONS (REDEVELOPED AREA)

| | | |
|---|---|---|
| 100-Year Allowable Release Rate = | 0.30 | CFS / Acre Disturbed (MWRD) |
| Actual Release Rate = | 0.50 | CFS (SPO Permit RL 13-026 |
| Detention Service Area = | 2.11 | Acres |
| Gross Allowable Release Rate = | 0.237 | CFS/Acre |
| | | |
| Redevelopment Area = | 0.267 | Acres |
| Gross Allowable Release Rate = | 0.063 | CFS(MWRD) |

## RELEASE RATE CALCULATIONS (REMAINING AREA)

| | | |
|---|---|---|
| 100-Year Allowable Release Rate = | 0.237 | CFS/Acre |
| Remaining Detention Service Area = | 1.843 | Acres |
| Gross Allowable Release Rate = | 0.437 | CFS(MWRD) |

## RELEASE RATE CALCULATIONS (NEW DEVELOPED AREA)

| | | |
|---|---|---|
| 100-Year Allowable Release Rate = | 0.300 | CFS / Acre Disturbed (MWRD) |
| New Development Area = | 0.514 | Acres |
| Gross Allowable Release Rate = | 0.154 | CFS(MWRD) |

| | | |
|---|---|---|
| **New Gross Allowable Release Rate =** | **0.654** | **CFS** |
| | | |
| **New Net Allowable Release Rate =** | **0.654** | **CFS** |

# MODIFIED RATIONAL METHOD: TP-40 RAINFALL DATA

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 9/29/2025

## DEVELOPMENT INFORMTION

| | | |
|---|---|---|
| 1. Detained Area | 0.267 | acres |
| 2. Runoff Coefficient | 0.890 | |
| 3. Actual Release Rate | 0.063 | cfs |

## REQUIRED DETENTION VOLUME

| | | |
|---|---|---|
| 4. Required Detention Volume | **0.058** | ac-ft |

## CALCULATION TABLE

| Storm Duration | Rainfall Intensity (in/hr) | Inflow Rate (cfs) | Stored Rate (cfs) | Required Storage (ac-ft) | |
|---|---|---|---|---|---|
| 10 min | 7.60 | 1.81 | 1.74 | 0.024 | |
| 20 min | 5.50 | 1.31 | 1.24 | 0.034 | |
| 30 min | 4.40 | 1.05 | 0.98 | 0.041 | |
| 40 min | 3.70 | 0.88 | 0.82 | 0.045 | |
| 50 min | 3.20 | 0.76 | 0.70 | 0.048 | |
| 1 hr | 2.80 | 0.67 | 0.60 | 0.050 | |
| 1.5 hr | 2.10 | 0.50 | 0.44 | 0.054 | |
| 2 hr | 1.70 | 0.40 | 0.34 | 0.056 | |
| 3 hr | 1.20 | 0.29 | 0.22 | 0.055 | |
| 4 hr | 1.00 | 0.24 | 0.17 | 0.058 | ← |
| 5 hr | 0.84 | 0.20 | 0.14 | 0.056 | |
| 6 hr | 0.73 | 0.17 | 0.11 | 0.055 | |
| 7 hr | 0.65 | 0.15 | 0.09 | 0.053 | |
| 8 hr | 0.58 | 0.14 | 0.07 | 0.049 | |
| 9 hr | 0.53 | 0.13 | 0.06 | 0.047 | |
| 10 hr | 0.49 | 0.12 | 0.05 | 0.044 | |
| 11 hr | 0.46 | 0.11 | 0.05 | 0.042 | |
| 12 hr | 0.43 | 0.10 | 0.04 | 0.039 | |
| 13 hr | 0.40 | 0.10 | 0.03 | 0.034 | |
| 14 hr | 0.38 | 0.09 | 0.03 | 0.031 | |
| 15 hr | 0.36 | 0.09 | 0.02 | 0.028 | |
| 16 hr | 0.34 | 0.08 | 0.02 | 0.023 | |
| 17 hr | 0.33 | 0.08 | 0.02 | 0.021 | |
| 18 hr | 0.31 | 0.07 | 0.01 | 0.015 | |
| 19 hr | 0.30 | 0.07 | 0.01 | 0.013 | |
| 20 hr | 0.29 | 0.07 | 0.01 | 0.009 | |
| 21 hr | 0.28 | 0.07 | 0.00 | 0.006 | |
| 22 hr | 0.27 | 0.06 | 0.00 | 0.002 | |
| 23 hr | 0.26 | 0.06 | 0.00 | -0.003 | |
| 24 hr | 0.25 | 0.06 | 0.00 | -0.008 | |

# MODIFIED RATIONAL METHOD: BULLETIN 75 RAINFALL DATA

**PROJECT:** Hynes Elementary **PERMIT NUMBER:**

**LOCATION:** Morton Grove, IL **DATE:** 10/7/2025

## DEVELOPMENT INFORMTION

| | | |
|---|---|---|
| 1. Detained Area | 0.267 | acres |
| 2. Composite Runoff Coefficient | 0.780 | |
| 3. Actual Release Rate | 0.063 | cfs |

## REQUIRED DETENTION VOLUME

| | | |
|---|---|---|
| 4. Required Detention Volume | **0.081** | ac-ft |

## CALCULATION TABLE

| Storm Duration | Rainfall Intensity (in/hr) | Inflow Rate (cfs) | Stored Rate (cfs) | Required Storage (ac-ft) | |
|---|---|---|---|---|---|
| 5 min | 12.36 | 2.57 | 2.51 | 0.017 | |
| 10 min | 10.80 | 2.25 | 2.19 | 0.030 | |
| 15 min | 9.28 | 1.93 | 1.87 | 0.039 | |
| 20 min | 8.04 | 1.67 | 1.61 | 0.044 | |
| 30 min | 6.34 | 1.32 | 1.26 | 0.052 | |
| 40 min | 5.28 | 1.10 | 1.04 | 0.057 | |
| 50 min | 4.55 | 0.95 | 0.88 | 0.061 | |
| 1 hr | 4.03 | 0.84 | 0.78 | 0.064 | |
| 1.5 hr | 3.03 | 0.63 | 0.57 | 0.070 | |
| 2 hr | 2.49 | 0.52 | 0.46 | 0.075 | |
| 3 hr | 1.83 | 0.38 | 0.32 | 0.079 | |
| 4 hr | 1.48 | 0.31 | 0.24 | 0.081 | |
| 5 hr | 1.25 | 0.26 | 0.20 | 0.081 | ← |
| 6 hr | 1.07 | 0.22 | 0.16 | 0.079 | |
| 7 hr | 0.96 | 0.20 | 0.14 | 0.079 | |
| 8 hr | 0.86 | 0.18 | 0.12 | 0.077 | |
| 9 hr | 0.79 | 0.16 | 0.10 | 0.075 | |
| 10 hr | 0.72 | 0.15 | 0.09 | 0.072 | |
| 11 hr | 0.67 | 0.14 | 0.08 | 0.069 | |
| 12 hr | 0.62 | 0.13 | 0.07 | 0.066 | |
| 18 hr | 0.45 | 0.09 | 0.03 | 0.045 | |
| 24 hr | 0.36 | 0.07 | 0.01 | 0.022 | |

# NOMOGRAPH: BULLETIN 75 RAINFALL DATA

**PROJECT:** Hynes **PERMIT NUMBER:**

**LOCATION:** Morton Grove **DATE:** 10/7/2025

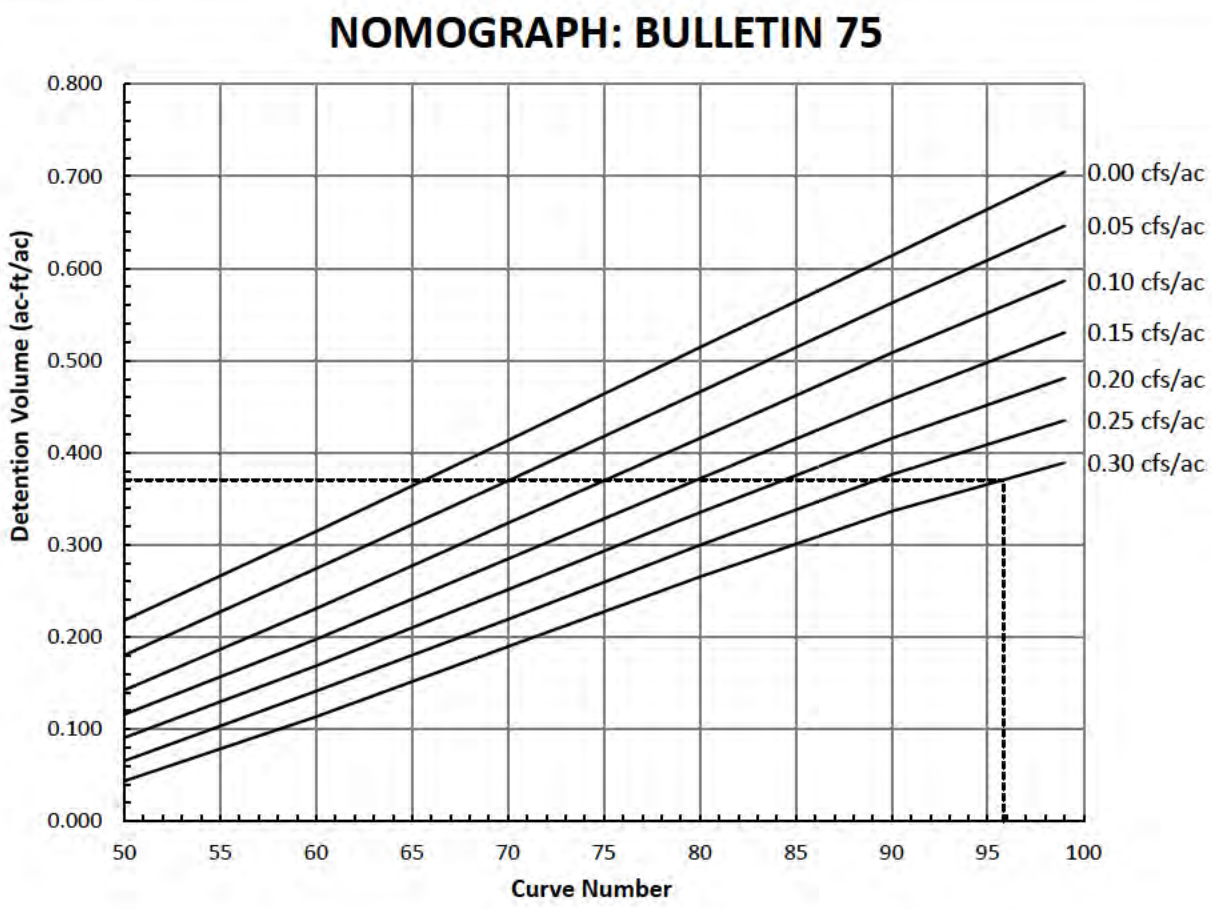
## DEVELOPMENT INFORMATION

| | | |
|---|---|---|
| 1. Detained Area | 0.514 | acres |
| 2. Curve Number | 95.83 | |
| 3. Actual Release Rate | **0.154** | cfs |

## REQUIRED DETENTION VOLUME

| | | |
|---|---|---|
| 4. Required Detention Volume | **0.190** | ac-ft |

## NOMOGRAPH



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**PROJECT NAME: Hynes Elementary**
**PROJECT NUMBER: C2500035**
**LOCATION: Morton Grove, IL**
**DATE: 10/7/2025**
**BY: OC**

## TOTAL REQUIRED DETENTION CALCULATION

| | | | |
|---|---|---|---|
| Previously Required Detention Storage = | 0.270 | ac-ft | (SPO Permit RL 13-026) |
| Redevelopment Area = | 0.267 | Acres | |
| Existing Required Detention = | 0.058 | ac-ft | (Modified Ration Method, TP40) |
| Proposed Required Detention = | 0.081 | ac-ft | (Modified Ration Method, B-75 |
| Incremental Required Detention = | 0.023 | ac-ft | |
| New Development Area = | 0.514 | acres | |
| Proposed Required Detention | 0.190 | ac-ft | (Nomograph Method, B-75) |
| **Total Required Detention Storage =** | **0.483** | **ac-ft** | (Previously Required + Incremental Required (Redevelopment) + Proposed Required (New Development)) |

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**PROJECT NAME: Hynes Elementary**
**PROJECT NUMBER: C2500035**
**LOCATION: Morton Grove, IL**
**DATE: 10/6/2025**
**BY: OC**

## RESTRICTOR RELEASE RATE (PROPOSED):

$$Q. = (DIA/2)^2 \times C \times 3.14 \sqrt{2 \times G \times H}$$

| | | |
|---|---|---|
| G = | 32.2 | FT/S |
| DIA. = | 2.90 | IN |
| C = | 0.61 | (ORIFICE PLATE) |
| OUTLET ELEVATION= | 637.93 | FEET |
| OVERFLOW ELEVATION= | 642.90 | FEET |
| HEAD= | 4.85 | FEET |
| **$Q_{(OVERFLOW\ ELEVATION)}$ =** | **0.494** | **CFS** |

| | WATER ELEVATION | HEAD | 2.9" RESTRICTOR DISCHARGE (CFS) |
|---|---|---|---|
| | 643.00 | 4.95 | **0.500** |
| **HWL** | 642.90 | 4.85 | **0.494** |
| | 642.25 | 4.20 | **0.460** |
| | 642.00 | 3.95 | **0.446** |
| | 641.00 | 2.95 | **0.386** |
| | 640.00 | 1.95 | **0.313** |
| | 639.00 | 0.95 | **0.219** |
| | 638.00 | 0.00 | **0.000** |
| **RESTRICTOR INVERT** | 637.93 | 0.00 | **0.000** |

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PROJECT NAME: Hynes Elementary
PROJECT NUMBER: C2500035
LOCATION: Morton Grove, IL
DATE: 10/7/2025
BY: OC

# PROPOSED DETENTION POND-1 STORAGE VOLUME

| ELEVATION | AREA | | | INCR. STORAGE VOLUME | CUMULATIVE STORAGE VOLUME | | DISCHARGE |
|---|---|---|---|---|---|---|---|
| 642.90 | 12,405 SQ. FT. | OR | 0.2848 AC. | | | | 0.494 CFS |
| | | | | **7,562 CU. FT.** | **33,692 CU. FT. OR** | **0.773 AC-FT** | |
| 642.25 | 10,862 SQ. FT. | OR | 0.2494 AC. | | | | 0.460 CFS |
| | | | | 2,643 CU. FT. | 26,130 CU. FT. OR | 0.600 AC-FT | |
| 642.00 | 10,282 SQ. FT. | OR | 0.2360 AC. | | | | 0.446 CFS |
| | | | | 9,085 CU. FT. | 23,487 CU. FT. **OR** | 0.539 AC-FT | |
| 641.00 | 7,888 SQ. FT. | OR | 0.1811 AC. | | | | 0.386 CFS |
| | | | | 6,805 CU. FT. | 14,402 CU. FT. **OR** | 0.331 AC-FT | |
| 640.00 | 5,722 SQ. FT. | OR | 0.1314 AC. | | | | 0.313 CFS |
| | | | | 4,731 CU. FT. | 7,597 CU. FT. **OR** | 0.175 AC-FT | |
| 639.00 | 3,739 SQ. FT. | OR | 0.0858 AC. | | | | 0.219 CFS |
| | | | | 2,866 CU. FT. | 2,866 CU. FT. **OR** | 0.066 AC-FT | |
| 638.00 | 1,993 SQ. FT. | OR | 0.0458 AC. | | | | 0.000 CFS |

**TOTAL POND $V_{642.90}$ PROVIDED = 0.773 AC-FT**

```
WinTR-20 Printed Page File      Beginning of Input Data List
C:\Users\OCruz\Desktop\TR-20 Files\Overflow.inp

WinTR-20: Version 1.11                  0         0         .01       0
Hynes Elementary School Building Additions - Overflow Discharge
Morton Grove, IL

SUB-AREA:
          AREA-5    OUTLET              0.002869  83.76     0.317     YN NN
          OFFSITE   OUTLET              0.000272  80.       0.10      YN NN



STORM ANALYSIS:
          100Y48H                       9.28      48 Hour   2
          100Y24H                       8.57      24 Hour   2
          100Y12H                       7.46      12 Hour   2
          100Y6H                        6.43      6 Hour    2
          100Y3H                        5.49      3 Hour    2
          100Y2H                        4.97      2 Hours   2
          100Y1H                        4.03      1 Hour    2




RAINFALL DISTRIBUTION:
          48 Hour             2.
                    0.        .0231     .0479     .0712     .0978
                    .1253     .1523     .1791     .2033     .2283
                    .2541     .2835     .3125     .3390     .3633
                    .3861     .4124     .4508     .5129     .5931
                    .6919     .8005     .8971     .9604     1.00
          24 Hour             1.
                    0.        .0205     .0431     .0667     .0912
                    .1171     .1436     .1691     .1964     .2278
                    .2633     .3093     .3635     .4392     .5211
                    .6102     .6989     .7819     .8492     .8974
                    .9311     .9534     .9706     .9856     1.00
          12 Hour             0.5
                    0.        .0229     .0482     .0778     .1133
                    .1579     .2139     .2841     .3644     .4529
                    .5435     .6238     .6976     .7548     .8038
                    .8470     .8781     .9022     .9217     .9381
                    .9529     .9657     .9774     .9884     1.00
          6 Hour              0.25
                    0.        .0836     .1773     .2811     .3833
                    .4745     .5550     .6225     .6722     .7082
                    .7417     .7697     .7981     .8255     .8518
                    .8740     .8947     .9117     .9270     .9403
                    .9536     .9656     .9774     .9885     1.00
          3 Hour              0.125
                    0.        .0836     .1773     .2811     .3833
                    .4745     .5550     .6225     .6722     .7082
                    .7417     .7697     .7981     .8255     .8518
                    .8740     .8947     .9117     .9270     .9403
                    .9536     .9656     .9774     .9885     1.00
          2 Hours             0.083
                    0.        .0836     .1773     .2811     .3833
                    .4745     .5550     .6225     .6722     .7082
                    .7417     .7697     .7981     .8255     .8518
                    .8740     .8947     .9117     .9270     .9403
                    .9536     .9656     .9774     .9885     1.00
          1 Hour              0.0417
                    0.        .0836     .1773     .2811     .3833
                    .4745     .5550     .6225     .6722     .7082
                    .7417     .7697     .7981     .8255     .8518
                    .8740     .8947     .9117     .9270     .9403
                    .9536     .9656     .9774     .9885     1.00


GLOBAL OUTPUT:
          2         .01       0.1       YNNNN     YNNNNN


VERIFICATION:
```

```
          DATA PREP                      Y Y                               Y Y
          PROCESSING          Y   Y      Y
```

WinTR-20 Printed Page File  End of Input Data List

Hynes Elementary School Building Additions - Overflow Discharge
Morton Grove, IL

Name of printed page file:
C:\Users\OCruz\Desktop\TR-20 Files\Overflow.out

**STORM 100Y48H**

| Area or Reach Identifier | Drainage Area (sq mi) | Rain Gage ID or Location | Runoff Amount (in) | Peak Flow Elevation (ft) | Peak Flow Time (hr) | Peak Flow Rate (cfs) | Peak Flow Rate (csm) |
|---|---|---|---|---|---|---|---|
| AREA-5 | 0.003 | | 7.299 | | 42.01 | 0.89 | 309.57 |
| OFFSITE | 0.272E-03 | | 6.601 | | 42.00 | 0.08 | 302.12 |
| OUTLET | 0.003 | | 7.238 | | 42.00 | 0.97 | 308.93 |

**STORM 100Y24H**

| Area or Reach Identifier | Drainage Area (sq mi) | Rain Gage ID or Location | Runoff Amount (in) | Peak Flow Elevation (ft) | Peak Flow Time (hr) | Peak Flow Rate (cfs) | Peak Flow Rate (csm) |
|---|---|---|---|---|---|---|---|
| AREA-5 | 0.003 | | 6.614 | | 16.03 | 1.31 | 456.47 |
| OFFSITE | 0.272E-03 | | 6.104 | | 16.00 | 0.12 | 441.79 |
| OUTLET | 0.003 | | 6.569 | | 16.01 | 1.43 | 455.17 |

**STORM 100Y12H**

| Area or Reach Identifier | Drainage Area (sq mi) | Rain Gage ID or Location | Runoff Amount (in) | Peak Flow Elevation (ft) | Peak Flow Time (hr) | Peak Flow Rate (cfs) | Peak Flow Rate (csm) |
|---|---|---|---|---|---|---|---|
| AREA-5 | 0.003 | | 5.550 | | 5.05 | 2.17 | 754.75 |
| OFFSITE | 0.272E-03 | | 5.110 | | 5.01 | 0.20 | 718.46 |
| OUTLET | 0.003 | | 5.512 | | 5.03 | 2.36 | 750.91 |

**STORM 100Y6H**

| Area or Reach Identifier | Drainage Area (sq mi) | Rain Gage ID or Location | Runoff Amount (in) | Peak Flow Elevation (ft) | Peak Flow Time (hr) | Peak Flow Rate (cfs) | Peak Flow Rate (csm) |
|---|---|---|---|---|---|---|---|
| AREA-5 | 0.003 | | 4.574 | | 1.30 | 3.46 | 1205.01 |
| OFFSITE | 0.272E-03 | | 4.169 | | 1.03 | 0.31 | 1122.38 |
| OUTLET | 0.003 | | 4.539 | | 1.27 | 3.76 | 1197.10 |

**STORM 100Y3H**

| Area or Reach Identifier | Drainage Area (sq mi) | Rain Gage ID or Location | Runoff Amount (in) | Peak Flow Elevation (ft) | Peak Flow Time (hr) | Peak Flow Rate (cfs) | Peak Flow Rate (csm) |
|---|---|---|---|---|---|---|---|
| AREA-5 | 0.003 | | 3.697 | | 0.81 | 5.26 | 1834.79 |
| OFFSITE | 0.272E-03 | | 3.322 | | 0.65 | 0.47 | 1744.63 |
| OUTLET | 0.003 | | 3.664 | | 0.79 | 5.71 | 1818.41 |

**STORM 100Y2H**

Hynes Elementary School Building Additions - Overflow Discharge
Morton Grove, IL

| Area or Reach Identifier | Drainage Area (sq mi) | Rain Gage ID or Location | Runoff Amount (in) | Peak Flow Elevation (ft) | Peak Flow Time (hr) | Peak Flow Rate (cfs) | Peak Flow Rate (csm) |
|---|---|---|---|---|---|---|---|
| AREA-5 | 0.003 | | 3.219 | | 0.62 | 6.40 | 2232.42 |
| OFFSITE | 0.272E-03 | | 2.865 | | 0.46 | 0.60 | 2214.12 |
| OUTLET | 0.003 | | 3.189 | | 0.62 | 6.93 | 2205.07 |

STORM 100Y1H

| Area or Reach Identifier | Drainage Area (sq mi) | Rain Gage ID or Location | Runoff Amount (in) | Peak Flow Elevation (ft) | Peak Flow Time (hr) | Peak Flow Rate (cfs) | Peak Flow Rate (csm) |
|---|---|---|---|---|---|---|---|
| AREA-5 | 0.003 | | 2.377 | | 0.43 | 7.34 | 2560.01 |
| OFFSITE | 0.272E-03 | | 2.064 | | 0.29 | 0.81 | 2987.18 |
| OUTLET | 0.003 | | 2.349 | | 0.43 | 7.84 | 2495.21 |

Hynes Elementary School Building Additions - Overflow Discharge
Morton Grove, IL

| Area or Reach Identifier | Drainage Area (sq mi) | Alternate | Peak Flow by Storm 100Y48H (cfs) | 100Y24H (cfs) | 100Y12H (cfs) | 100Y6H (cfs) | 100Y3H (cfs) |
|---|---|---|---|---|---|---|---|
| AREA-5 | 0.003 | | 0.89 | 1.31 | 2.17 | 3.46 | 5.26 |
| OFFSITE | 0.272E-03 | | 0.08 | 0.12 | 0.20 | 0.31 | 0.47 |
| OUTLET | 0.003 | | 0.97 | 1.43 | 2.36 | 3.76 | 5.71 |

| Area or Reach Identifier | Drainage Area (sq mi) | Alternate | Peak Flow by Storm 100Y2H (cfs) | 100Y1H (cfs) | (cfs) | (cfs) | (cfs) |
|---|---|---|---|---|---|---|---|
| AREA-5 | 0.003 | | 6.40 | 7.34 | | | |
| OFFSITE | 0.272E-03 | | 0.60 | 0.81 | | | |
| OUTLET | 0.003 | | 6.93 | 7.84 | | | |

# Weir Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Sep 10 2025

## Proposed Overflow Weir

**Trapezoidal Weir**

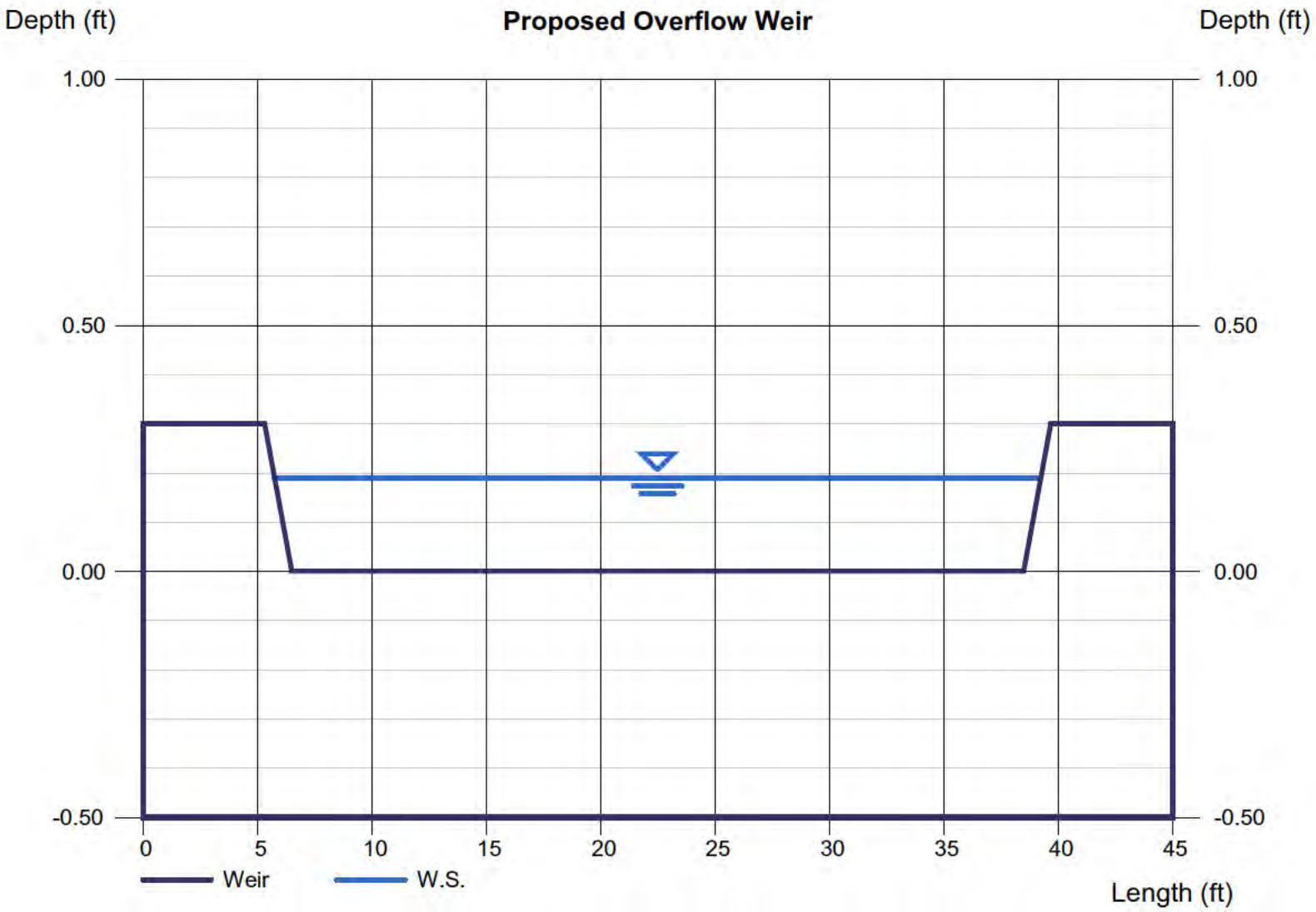
| | |
|---|---|
| Crest | = Sharp |
| Bottom Length (ft) | = 32.00 |
| Total Depth (ft) | = 0.30 |
| Side Slope (z:1) | = 4.00 |

**Calculations**

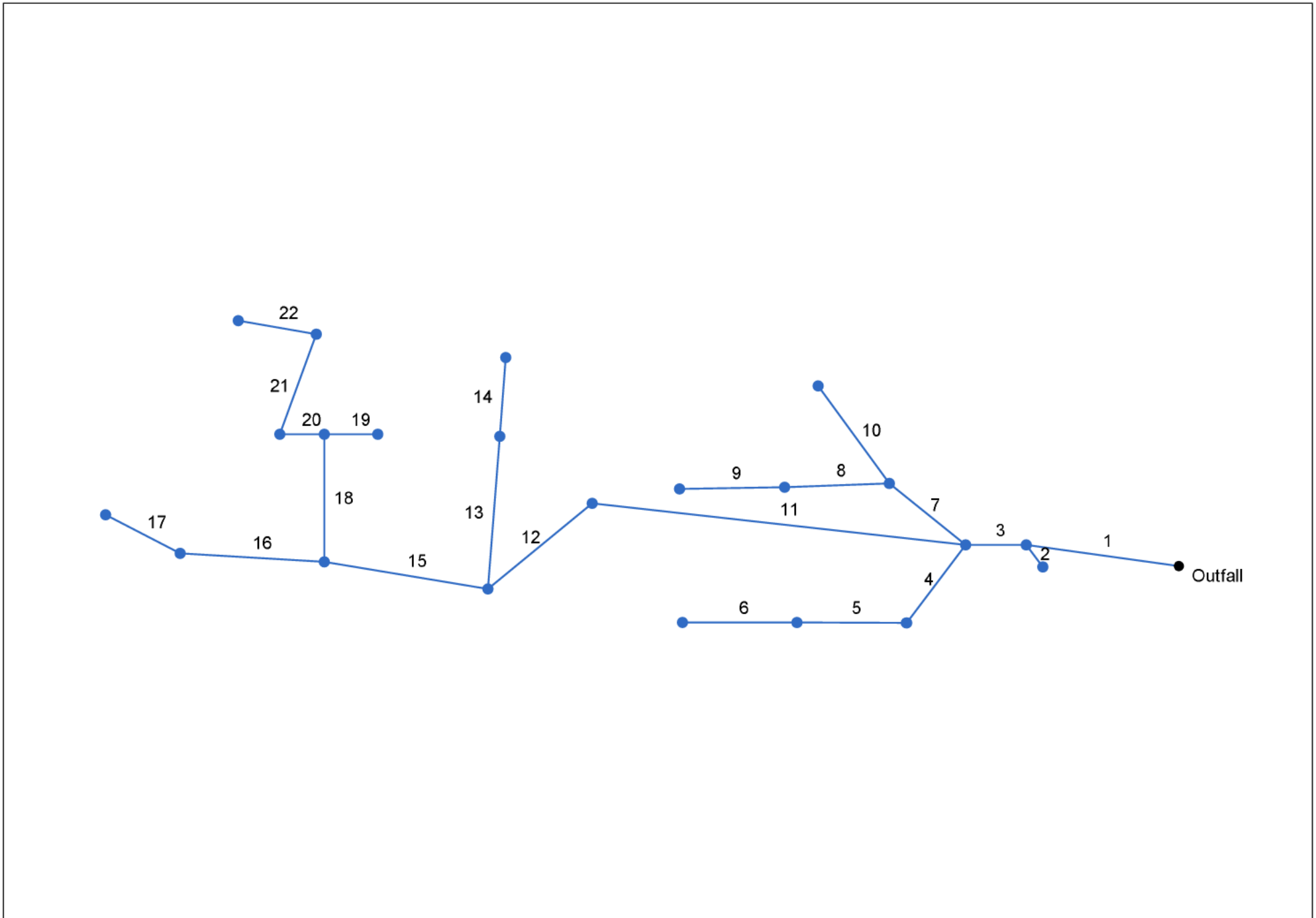
| | |
|---|---|
| Weir Coeff. Cw | = 3.10 |
| Compute by: | Known Q |
| Known Q (cfs) | = 7.84 |

**Highlighted**

| | |
|---|---|
| Depth (ft) | = 0.19 |
| Q (cfs) | = 7.840 |
| Area (sqft) | = 6.22 |
| Velocity (ft/s) | = 1.26 |
| Top Width (ft) | = 33.52 |



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan




| Project File: Hynes.stm | Number of lines: 22 | Date: 10/7/2025 |
|---|---|---|

# IDOT

| Line No. | Line ID | Line Length (ft) | Drng Area (ac) | Runoff Coeff (C) | Incr CxA | Tc (min) | Pipe Travel (min) | i Inlet (in/hr) | Flow Rate (cfs) | Line Rise (in) | Line Span (in) | n-val Pipe | Capac Full (cfs) | i Sys (in/hr) | DnStm Ln No | Gnd/Rim El Up (ft) | Gnd/Rim El Dn (ft) | HGL Up (ft) | HGL Dn (ft) | Known Q (cfs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - 25 | 66.000 | 0.00 | 0.00 | 0.00 | 16.8 | 0.33 | 0.00 | 10.78 | 24 | 24 | 0.013 | 10.78 | 8.64 | Outfall | 644.45 | 644.40 | 641.65 | 641.18 | 0.00 |
| 2 | Pipe - 27 | 11.878 | 0.19 | 0.78 | 0.15 | 5.0 | 0.08 | 12.36 | 1.83 | 12 | 12 | 0.013 | 2.31 | 12.36 | 1 | 645.15 | 644.45 | 641.96 | 641.93 | 0.00 |
| 3 | Pipe - 29 | 26.000 | 0.00 | 0.00 | 0.00 | 16.7 | 0.08 | 0.00 | 9.52 | 18 | 18 | 0.013 | 11.28 | 8.66 | 1 | 645.25 | 644.45 | 642.15 | 641.93 | 0.00 |
| 4 | Pipe - 31 | 42.000 | 0.00 | 0.90 | 0.00 | 5.8 | 0.34 | 0.00 | 1.61 | 12 | 12 | 0.013 | 2.46 | 12.03 | 3 | 644.45 | 645.25 | 642.61 | 642.52 | 0.00 |
| 5 | Pipe - 33 | 47.000 | 0.00 | 0.00 | 0.00 | 5.4 | 0.38 | 0.00 | 1.63 | 12 | 12 | 0.013 | 2.60 | 12.19 | 4 | 644.80 | 644.45 | 642.76 | 642.66 | 0.00 |
| 6 | Pipe - 36 | 49.000 | 0.15 | 0.89 | 0.13 | 5.0 | 0.39 | 12.36 | 1.65 | 12 | 12 | 0.013 | 2.79 | 12.36 | 5 | 644.35 | 644.80 | 642.87 | 642.77 | 0.00 |
| 7 | Pipe - 38 | 42.000 | 0.08 | 0.86 | 0.07 | 8.3 | 0.32 | 12.36 | 1.58 | 12 | 12 | 0.013 | 2.46 | 11.05 | 3 | 644.80 | 645.25 | 642.60 | 642.52 | 0.00 |
| 8 | Pipe - 42 | 45.000 | 0.03 | 0.82 | 0.02 | 6.4 | 0.83 | 12.36 | 0.68 | 12 | 12 | 0.013 | 2.37 | 11.76 | 7 | 644.80 | 644.80 | 642.66 | 642.65 | 0.00 |
| 9 | Pipe - 44 | 45.000 | 0.04 | 0.83 | 0.03 | 5.0 | 1.44 | 12.36 | 0.41 | 12 | 12 | 0.013 | 2.37 | 12.36 | 8 | 644.80 | 644.80 | 642.67 | 642.67 | 0.00 |
| 10 | Pipe - 40 | 52.000 | 0.03 | 0.55 | 0.02 | 5.0 | 3.34 | 12.36 | 0.20 | 12 | 12 | 0.013 | 2.47 | 12.36 | 7 | 645.00 | 644.80 | 642.65 | 642.65 | 0.00 |
| 11 | Pipe - 46 | 161.000 | 0.06 | 0.85 | 0.05 | 16.0 | 0.66 | 12.36 | 7.26 | 18 | 18 | 0.013 | 8.07 | 8.81 | 3 | 644.75 | 645.25 | 643.29 | 642.52 | 0.00 |
| 12 | Pipe - 48 | 58.000 | 0.04 | 0.90 | 0.04 | 15.8 | 0.25 | 12.36 | 6.85 | 18 | 18 | 0.013 | 6.17 | 8.87 | 11 | 644.70 | 644.75 | 643.74 | 643.49 | 0.00 |
| 13 | Pipe - 50 | 66.000 | 0.06 | 0.86 | 0.05 | 5.9 | 0.78 | 12.36 | 1.08 | 12 | 12 | 0.013 | 2.40 | 11.96 | 12 | 644.40 | 644.70 | 644.03 | 643.97 | 0.00 |
| 14 | Pipe - 52 | 34.000 | 0.05 | 0.77 | 0.04 | 5.0 | 0.94 | 12.36 | 0.48 | 12 | 12 | 0.013 | 2.37 | 12.36 | 13 | 645.20 | 644.40 | 644.04 | 644.03 | 0.00 |
| 15 | Pipe - 56 | 71.000 | 0.06 | 0.83 | 0.05 | 15.4 | 0.36 | 12.36 | 5.79 | 18 | 18 | 0.013 | 5.57 | 8.96 | 12 | 644.50 | 644.70 | 644.19 | 643.97 | 0.00 |
| 16 | Pipe - 58 | 62.000 | 0.09 | 0.76 | 0.07 | 15.2 | 0.24 | 12.36 | 3.40 | 12 | 12 | 0.013 | 2.48 | 9.02 | 15 | 644.50 | 644.50 | 644.92 | 644.35 | 0.00 |
| 17 | Pipe - 60 | 36.000 | 0.55 | 0.56 | 0.31 | 15.0 | 0.17 | 9.06 | 2.79 | 12 | 12 | 0.013 | 2.65 | 9.06 | 16 | 644.50 | 644.50 | 645.27 | 645.05 | 0.00 |
| 18 | Pipe - 62 | 55.000 | 0.00 | 0.00 | 0.00 | 8.0 | 0.27 | 0.00 | 2.45 | 12 | 12 | 0.013 | 2.40 | 11.16 | 15 | 644.65 | 644.50 | 644.61 | 644.35 | 0.00 |
| 19 | Pipe - 64 | 23.000 | 0.07 | 0.88 | 0.06 | 5.0 | 0.40 | 12.36 | 0.76 | 12 | 12 | 0.013 | 2.35 | 12.36 | 18 | 644.50 | 644.65 | 644.77 | 644.76 | 0.00 |
| 20 | Pipe - 67 | 19.000 | 0.10 | 0.90 | 0.09 | 7.9 | 0.13 | 12.36 | 1.77 | 12 | 12 | 0.013 | 2.58 | 11.21 | 18 | 644.35 | 644.65 | 644.81 | 644.76 | 0.00 |
| 21 | Pipe - 69 | 46.000 | 0.06 | 0.86 | 0.05 | 7.2 | 0.72 | 12.36 | 0.78 | 12 | 12 | 0.013 | 2.35 | 11.48 | 20 | 644.00 | 644.35 | 644.91 | 644.89 | 0.00 |
| 22 | Pipe - 71 | 34.000 | 0.02 | 0.83 | 0.02 | 5.0 | 2.17 | 12.36 | 0.21 | 12 | 12 | 0.013 | 1.37 | 12.36 | 21 | 644.75 | 644.00 | 644.93 | 644.93 | 0.00 |

Project File: Hynes.stm | Number of lines: 22 | Date: 10/7/2025

NOTES: Intensity = 1167.83 / (Inlet time + 31.10) ^ 1.27 -- Return period = 100 Yrs. ; ** Critical depth

# Hydraulic Grade Line Computations



| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev (ft) | HGL elev (ft) | Depth (ft) | Area (sqft) | Vel (ft/s) | Vel head (ft) | EGL elev (ft) | Sf (%) | | Invert elev (ft) | HGL elev (ft) | Depth (ft) | Area (sqft) | Vel (ft/s) | Vel head (ft) | EGL elev (ft) | Sf (%) | Ave Sf (%) | Enrgy loss (ft) | | |
| (1) | (in) (2) | (cfs) (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (ft) (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) | (K) (23) | (ft) (24) |
| 1 | 24 | 10.78 | 640.00 | 641.18 | 1.18 | 1.93 | 5.59 | 0.49 | 641.67 | 0.530 | 66.000 | 640.15 | 641.65 | 1.50 | 2.53 | 4.27 | 0.28 | 641.93 | 0.274 | 0.402 | 0.265 | 1.00 | 0.28 |
| 2 | 12 | 1.83 | 640.15 | 641.93 | 1.00 | 0.79 | 2.33 | 0.08 | 642.02 | 0.265 | 11.878 | 640.20 | 641.96 | 1.00 | 0.79 | 2.33 | 0.08 | 642.05 | 0.264 | 0.265 | 0.031 | 1.00 | 0.08 |
| 3 | 18 | 9.52 | 640.15 | 641.93 | 1.50 | 1.77 | 5.39 | 0.45 | 642.38 | 0.823 | 26.000 | 640.45 | 642.15 | 1.50 | 1.77 | 5.39 | 0.45 | 642.60 | 0.823 | 0.823 | 0.214 | 0.83 | 0.37 |
| 4 | 12 | 1.61 | 640.45 | 642.52 | 1.00 | 0.79 | 2.05 | 0.07 | 642.59 | 0.204 | 42.000 | 640.65 | 642.61 | 1.00 | 0.79 | 2.05 | 0.07 | 642.67 | 0.203 | 0.204 | 0.085 | 0.83 | 0.05 |
| 5 | 12 | 1.63 | 640.65 | 642.66 | 1.00 | 0.79 | 2.07 | 0.07 | 642.73 | 0.209 | 47.000 | 640.90 | 642.76 | 1.00 | 0.79 | 2.07 | 0.07 | 642.83 | 0.209 | 0.209 | 0.098 | 0.15 | 0.01 |
| 6 | 12 | 1.65 | 640.90 | 642.77 | 1.00 | 0.79 | 2.10 | 0.07 | 642.84 | 0.215 | 49.000 | 641.20 | 642.87 | 1.00 | 0.79 | 2.10 | 0.07 | 642.94 | 0.215 | 0.215 | 0.105 | 1.00 | 0.07 |
| 7 | 12 | 1.58 | 640.45 | 642.52 | 1.00 | 0.79 | 2.01 | 0.06 | 642.58 | 0.197 | 42.000 | 640.65 | 642.60 | 1.00 | 0.79 | 2.01 | 0.06 | 642.67 | 0.197 | 0.197 | 0.083 | 0.70 | 0.04 |
| 8 | 12 | 0.68 | 640.65 | 642.65 | 1.00 | 0.79 | 0.87 | 0.01 | 642.66 | 0.036 | 45.000 | 640.85 | 642.66 | 1.00 | 0.79 | 0.87 | 0.01 | 642.68 | 0.036 | 0.036 | 0.016 | 0.15 | 0.00 |
| 9 | 12 | 0.41 | 640.85 | 642.67 | 1.00 | 0.79 | 0.52 | 0.00 | 642.67 | 0.013 | 45.000 | 641.05 | 642.67 | 1.00 | 0.79 | 0.52 | 0.00 | 642.68 | 0.013 | 0.013 | 0.006 | 1.00 | 0.00 |
| 10 | 12 | 0.20 | 640.65 | 642.65 | 1.00 | 0.79 | 0.26 | 0.00 | 642.65 | 0.003 | 52.000 | 640.90 | 642.65 | 1.00 | 0.79 | 0.26 | 0.00 | 642.65 | 0.003 | 0.003 | 0.002 | 1.00 | 0.00 |
| 11 | 18 | 7.26 | 640.45 | 642.52 | 1.50 | 1.77 | 4.11 | 0.26 | 642.78 | 0.478 | 161.000 | 641.40 | 643.29 | 1.50 | 1.77 | 4.11 | 0.26 | 643.55 | 0.477 | 0.477 | 0.769 | 0.76 | 0.20 |
| 12 | 18 | 6.85 | 641.40 | 643.49 | 1.50 | 1.77 | 3.88 | 0.23 | 643.72 | 0.426 | 58.000 | 641.60 | 643.74 | 1.50 | 1.77 | 3.88 | 0.23 | 643.97 | 0.426 | 0.426 | 0.247 | 1.00 | 0.23 |
| 13 | 12 | 1.08 | 641.60 | 643.97 | 1.00 | 0.79 | 1.37 | 0.03 | 644.00 | 0.092 | 66.000 | 641.90 | 644.03 | 1.00 | 0.79 | 1.37 | 0.03 | 644.06 | 0.092 | 0.092 | 0.060 | 0.15 | 0.00 |
| 14 | 12 | 0.48 | 641.90 | 644.03 | 1.00 | 0.79 | 0.61 | 0.01 | 644.04 | 0.018 | 34.000 | 642.05 | 644.04 | 1.00 | 0.79 | 0.61 | 0.01 | 644.05 | 0.018 | 0.018 | 0.006 | 1.00 | 0.01 |
| 15 | 18 | 5.79 | 641.60 | 643.97 | 1.50 | 1.77 | 3.28 | 0.17 | 644.14 | 0.304 | 71.000 | 641.80 | 644.19 | 1.50 | 1.77 | 3.28 | 0.17 | 644.35 | 0.304 | 0.304 | 0.216 | 0.99 | 0.17 |
| 16 | 12 | 3.40 | 641.80 | 644.35 | 1.00 | 0.79 | 4.32 | 0.29 | 644.64 | 0.909 | 62.000 | 642.10 | 644.92 | 1.00 | 0.79 | 4.32 | 0.29 | 645.21 | 0.909 | 0.909 | 0.564 | 0.46 | 0.13 |
| 17 | 12 | 2.79 | 642.10 | 645.05 | 1.00 | 0.79 | 3.55 | 0.20 | 645.25 | 0.615 | 36.000 | 642.30 | 645.27 | 1.00 | 0.79 | 3.55 | 0.20 | 645.47 | 0.614 | 0.614 | 0.221 | 1.00 | 0.20 |
| 18 | 12 | 2.45 | 642.10 | 644.35 | 1.00 | 0.79 | 3.12 | 0.15 | 644.50 | 0.475 | 55.000 | 642.35 | 644.61 | 1.00 | 0.79 | 3.12 | 0.15 | 644.76 | 0.475 | 0.475 | 0.261 | 1.00 | 0.15 |
| 19 | 12 | 0.76 | 642.35 | 644.76 | 1.00 | 0.79 | 0.97 | 0.01 | 644.78 | 0.046 | 23.000 | 642.45 | 644.77 | 1.00 | 0.79 | 0.97 | 0.01 | 644.79 | 0.046 | 0.046 | 0.011 | 1.00 | 0.01 |
| 20 | 12 | 1.77 | 642.35 | 644.76 | 1.00 | 0.79 | 2.26 | 0.08 | 644.84 | 0.248 | 19.000 | 642.45 | 644.81 | 1.00 | 0.79 | 2.26 | 0.08 | 644.89 | 0.248 | 0.248 | 0.047 | 1.00 | 0.08 |
| 21 | 12 | 0.78 | 642.45 | 644.89 | 1.00 | 0.79 | 1.00 | 0.02 | 644.91 | 0.048 | 46.000 | 642.65 | 644.91 | 1.00 | 0.79 | 1.00 | 0.02 | 644.93 | 0.048 | 0.048 | 0.022 | 1.00 | 0.02 |

Project File: Hynes.stm | Number of lines: 22 | Run Date: 10/7/2025

; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev (ft) | HGL elev (ft) | Depth (ft) | Area (sqft) | Vel (ft/s) | Vel head (ft) | EGL elev (ft) | Sf (%) | | Invert elev (ft) | HGL elev (ft) | Depth (ft) | Area (sqft) | Vel (ft/s) | Vel head (ft) | EGL elev (ft) | Sf (%) | Ave Sf (%) | Enrgy loss (ft) | | |
| (1) | (in) (2) | (cfs) (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (ft) (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) | (K) (23) | (ft) (24) |
| 22 | 12 | 0.21 | 642.65 | 644.93 | 1.00 | 0.79 | 0.26 | 0.00 | 644.93 | 0.003 | 34.000 | 642.70 | 644.93 | 1.00 | 0.79 | 0.26 | 0.00 | 644.93 | 0.003 | 0.003 | 0.001 | 1.00 | 0.00 |

Project File: Hynes.stm | Number of lines: 22 | Run Date: 10/7/2025

; c = cir e = ellip b = box

# Hydraflow HGL Computation Procedure



## General Procedure:

Hydraflow computes the HGL using the Bernoulli energy equation. Manning's equation is used to determine energy losses due to pipe friction. In a standard step, iterative procedure, Hydraflow assumes upstream HGLs until the energy equation balances. If the energy equation cannot balance, supercritical flow exists and critical depth is temporarily assumed at the upstream end. A supercritical flow Profile is then computed using the same procedure in a downstream direction using momentum principles.

Col. 1 The line number being computed. Calculations begin at Line 1 and proceed upstream.

Col. 2 The line size. In the case of non-circular pipes, the line rise is printed above the span.

Col. 3 Total flow rate in the line.

Col. 4 The elevation of the downstream invert.

Col. 5 Elevation of the hydraulic grade line at the downstream end. This is computed as the upstream HGL + Minor loss of this line's downstream line.

Col. 6 The downstream depth of flow inside the pipe (HGL - Invert elevation) but not greater than the line size.

Col. 7 Cross-sectional area of the flow at the downstream end.

Col. 8 The velocity of the flow at the downstream end, (Col. 3 / Col. 7).

Col. 9 Velocity head (Velocity squared / 2g).

Col. 10 The elevation of the energy grade line at the downstream end, HGL + Velocity head, (Col. 5 + Col. 9).

Col. 11 The friction slope at the downstream end (the S or Slope term in Manning's equation).

Col. 12 The line length.

Col. 13 The elevation of the upstream invert.

Col. 14 Elevation of the hydraulic grade line at the upstream end.

Col. 15 The upstream depth of flow inside the pipe (HGL - Invert elevation) but not greater than the line size.

Col. 16 Cross-sectional area of the flow at the upstream end.

Col. 17 The velocity of the flow at the upstream end, (Col. 3 / Col. 16).

Col. 18 Velocity head (Velocity squared / 2g).

Col. 19 The elevation of the energy grade line at the upstream end, HGL + Velocity head, (Col. 14 + Col. 18) .

Col. 20 The friction slope at the upstream end (the S or Slope term in Manning's equation).

Col. 21 The average of the downstream and upstream friction slopes.

Col. 22 Energy loss. Average Sf/100 x Line Length (Col. 21/100 x Col. 12). Equals (EGL upstream - EGL downstream) +/- tolerance.

Col. 23 The junction loss coefficient (K).

Col. 24 Minor loss. (Col. 23 x Col. 18). Is added to upstream HGL and used as the starting HGL for the next upstream line(s).

# Best Management Practices

During construction operations for the proposed Cook County site improvements, temporary Best Management Practices (BMPs) are to be provided as shown on the Storm Water Pollution Prevention Plan. The temporary BMP practices for the site include a construction entrance, silt fence, inlet protection and use of fertilizer, seed and erosion blanket on all disturbed green spaces. The permanent BMP practices for the site include structures and one underground infiltration basin.

Golf School District 67 shall be responsible for maintaining the proposed BMPs.

# Floodplain Submittal

As shown on the Flood Map included under the Watershed Management Permit Submittal, the project is not located within 100-ft of a FEMA floodplain.

# Wetland-Buffer-Riparian Environmental Submittal

As shown on the National Wetlands Inventory Map included under the Watershed Management Permit Submittal, there are no known wetlands on site.

# Maps, Exhibits and Plan Sheets Submittal

Refer to the provided latest set of engineering plans prepared by WT Group for the additional requirements of the Maps submittal.

# Maintenance and Monitoring Plan Submittal

The following Maintenance tasks shall be performed by Golf School District 67 at the required frequency as described below:

- Regular inspections and routine maintenance of general areas shall be performed on a monthly or as-needed basis. Specific items of concern included:
    - Litter and debris shall be controlled.
    - Landscaped areas shall be maintained with regular mowing and restored with appropriate seeding/vegetation as necessary.
    - Accumulated sediment shall be disposed of properly, along with any wastes generated during maintenance operations.
    - Rip-rap areas shall be repaired with the addition of new rip-rap, as necessary, of similar size and shape.
    - Roads shall be swept, vacuumed and/or washed on a regular basis.

- All erosion control measures shall be inspected and maintained after each 0.50 inches of rainfall and/or once a week and all impervious road surfaces shall be cleaned prior to the end of each working day.

- Cut the grass on slopes in open space: weekly during growing season.

- Minor Stormwater System:
    h. Debris removal. Trash, wood chips, grass clippings, sediment, and other debris should be removed from the catch basins, inlets, outfalls, and storm sewers to prevent clogging. Cleaning should be done in such a way that the debris is not discharged back into the stormwater system: every two weeks.
    i. Reset covers/lids on as-needed basis.
    j. Remove accumulated sediment from manhole bottom when 50% of sump is filled.
    k. Visually inspect pipes by removing manhole lids, make repairs as necessary.
    l. Storm sewers shall be checked for siltation deposits at inlets, outlets, and within the conduit, clean out as necessary.
    m. Replant and reseed any eroded areas.
    n. Removal of obstructions. Inspections should be performed to ensure that all overland flow routes are free from obstructions. If an obstruction has been placed in an overland flow route, it should be removed immediately: every two weeks.

- Overflow weir:
    d. Removal of obstructions. Inspections should be performed to ensure that the overflow weir is free from obstructions. If an obstruction has been placed in the overflow weir, it should be removed immediately: every two weeks.
    e. Regrade to provide positive drainage as necessary.
    f. Regular mowing to control vegetation.

# Appendix

- Geotechnical Investigation Report by Geocon Professional Services (Dated September 2nd, 2025)

GEOCON
PROFESSIONAL SERVICES

September 2nd, 2025

Mr. Jae Yoo, AIA
Architect
DLA Architects, Ltd.
Two Pierce Place – Suite 1300
Itasca, IL 60143

Subject: Geotechnical Engineering Report
Hynes Elementary School – Golf School District 67
Additions & Renovations
9000 Belleforte Avenue
GEOCON Project No. 25-G1033

Dear Mr. Yoo:

Pursuant to our proposal for geotechnical engineering services, we have completed a subsurface exploration and geotechnical analyses for the above referenced project. w

GEOCON Professional Services, Inc. (GEOCON) appreciates the opportunity to be of service during this phase of the project. If there are any questions or comments you may have regarding the contents of this report, or if we may be of any further service, please contact us at your convenience.

Sincerely,

**GEOCON Professional Services, LLC.**

Benjamin Skolek, EIT
Geotechnical Engineer




Kenneth K. Rippy, PE
Senior Geotechnical Engineer

# GEOTECHNICAL ENGINEERING REPORT

**Hynes Elementary School – Golf School District 67**
**Additions & Renovations**
**9000 Belleforte Avenue**
**Morton Grove, IL 60053**

**Mr. Jae Yoo, AIA**
**Architect**
**DLA Architects, Ltd.**
**Two Pierce Place – Suite 1300**
**Itasca, IL 60143**

**Prepared by:**
**GEOCON Professional Services, LLC.**
**22774 Citation Road, Unit A**
**Frankfort, Illinois 60423**

**September 2nd, 2025**

**GEOCON Project No. 25-G1033**

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Site Plan
Boring Location Diagram
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**GEOTECHNICAL ENGINEERING REPORT**

**Hynes Elementary School – Golf School District 67**
**Additions & Renovations**
**9000 Belleforte Avenue**
**Morton Grove, IL 60053**

## INTRODUCTION

This report presents the results of a subsurface exploration for the proposed additions and site renovations located at the above referenced address in Morton Grove, Illinois. The purpose of this report was to determine and evaluate the subsurface conditions existing at the subject site, and to establish related geotechnical parameters to be utilized for the economical design and construction of the foundations, parking lot, and stormwater detention areas for this project.

Authorization to perform this subsurface exploration and analysis was provided in the form of an acceptance of GEOCON Proposal No 25-P763, dated July 31st, 2025. The above referenced document described the project scope and contained general conditions for performance of the work.

## SITE AND PROJECT DESCRIPTION

The project is located at the above address and is developed with the existing school. The school has an open-air courtyard and associated asphalt and concrete pavement throughout the property.

It is understood that the proposed project will consist of constructing two (2) building additions with the first addition located within the open-air courtyard, and the second addition located on the southern face of the school. It is anticipated that the new additions will be supported by spread footings. The finished floor elevations (FFE) of the additions will match the existing building at El. 646.14 feet.

Sitework will consist of reconfiguring the existing parking lot to the south of the school, expanding the stormwater detention area to the east of the school and an underground stormwater detention system to the west of the school. Existing surface elevations across the site range from El. 638 feet at the bottom of the existing stormwater detention pond, to El. 648 feet. Additionally, existing grades within the building addition areas are at approximately El. 645 feet, indicating minimal cuts and fills are to be anticipated within the building footprint areas.

## SUBSURFACE EXPLORATION

Thirteen (13) borings were performed for the project as described below:

| No. of Borings | Boring Labels | Depth of Borings (ft.) | Development |
|---|---|---|---|
| 2 | B-1 & B-6 | 15 | Stormwater Detention Areas |
| 1 | B-2 | 6 (Hand Auger) | Courtyard Building Addition |
| 1 | B-7 | 20 | Southern Building Addition |
| 10 | B-3 thru B-6, B-8 thru B-13 | 7.5 | Pavement Reconfiguration |

The boring locations were marked in the field by Geocon prior to drilling, and surface elevations noted on the logs were estimated from a topographical map provided by the client. After completion of the borings, the holes were backfilled with soil cuttings and patched with like materials as encountered at the boring.

For safety reasons, the boreholes were not allowed to remain open and precluded the collection of delayed water readings.

Drilling and Sampling Procedures

The soil borings were performed with an ATV-drill rig equipped with a rotary head. Conventional, continuous flight, hollow-stem augers were used to advance the borings with representative samples obtained in each boring employing split-barrel sampling techniques in accordance with ASTM Procedure D-1586. Soil samples were secured at 2.5-foot intervals to a depth of 15 feet, followed by a 5-foot interval to the termination depth of 20 feet where applicable.

The Standard Penetration Test (SPT) is defined as the number of blows required to advance a 2-inch O.D., split-barrel sampler a distance of one foot by a 140-pound hammer falling 30 inches, commonly described as the N-value. These sampler resistances provide a useful indication of the consistency or relative density of most soil deposits and are reported on the boring logs presented in the Appendix. Samples of cohesive soils obtained from the borings were tested with a calibrated hand penetrometer to aid in evaluating the soil strength characteristics. The results from this testing are tabulated on the boring logs.

Five (5) pavement cores were collected from within the asphalt pavement areas. The cores were advanced using conventional hot mixed asphalt (HMA) rotary coring equipment. During the coring operations, the thicknesses of the HMA and aggregate base were recorded. Field DCP testing was performed on the subgrade below the aggregate base. Results of the DCP tests were converted to Immediate Bearing Values (IBVs).

Boring B-2, located within the central, open-air courtyard, was inaccessible for SPT sample collection. Therefore, hand auger equipment was employed and extended to a maximum depth of 6 feet below grade.

Water level observations were made during drilling operations and upon completion and of the borings. This data is noted on the boring logs and within the *Groundwater Conditions* section.

It should be noted that it is difficult to determine the stratigraphy of the upper 2 to 3 feet of the profile from soil borings due to the size of the bore hole, about 6 inches in diameter, and intermittent sample intervals. Further, the split spoon sampler tends to push through softer soils such as fill or topsoil, resulting in little or no sample recovery from these soils. It is recommended that shallow test pits be excavated to better define the exact depth of topsoil or fill if such information is required prior to construction.

Laboratory Tests

Additional characteristics of the foundation materials were determined in the laboratory to provide data on which to classify and estimate the engineering properties of the subsurface soil deposits encountered in the borings. All samples were visually classified by the geotechnical engineer according to the Unified Soil Classification System (ASTM D-2488). An explanation of the symbols used in this system is included in the Appendix.

Representative samples were tested in the laboratory to determine the natural moisture content of the soils. All moisture contents are expressed as a percentage of the dry weight of soil. Representative samples of the cohesive soils encountered in the borings were tested in the laboratory with a calibrated RIMAC spring tester to determine the approximate unconfined compressive strength of the soil samples.

The laboratory testing program selected for this project is intended to assist with determination of soil classification as well as strength and deformation characteristics of the subsurface soil deposits that will provide foundation support for the proposed structures. All laboratory testing was performed in general

accordance with the respective ASTM Methods, as applicable, and the results are included on the boring logs included in the Appendix. Unless notified to the contrary, all samples will be disposed of after one month.

**SOIL CONDITIONS**

Pavement Cores

Five (5) pavement cores were collected at the boring locations shown on the attached Boring Location Diagram. The data from the pavement profile and the near-surface subgrade are tabulated below:

**Table 1: Pavement Core and Near-Surface Subgrade Data**

| Boring Label | HMA Pavement Thickness (in.) | Aggregate Thickness (in.) | Immediate Bearing Value | Subgrade Type | Subgrade Moisture (%) |
|---|---|---|---|---|---|
| B-5[a] | 4.25 | 4 | 13.2 | CF | 18.6 |
| B-7 | 4.0 | 30 | 13.2 | GF | 4.4 |
| B-8 | 6.25 | 4 | 13.2 | CF | 16.3 |
| B-10 | 5.0 | 4 | 13.2 | CF | 13.9 |
| B-12 | 5.0 | 3 | 13.2 | GF | 16.2 |

CF= Clay Fill, GF = Gravel Fill

Notes: [a] – Mat or fabric encountered within pavement core

The near-surface subgrade below the asphalt and concrete pavement consisted of very stiff to hard lean clay or loose gravel fill with moisture contents ranging from 4.4 to 18.6 percent and IBVs of 13.2.

Soil Borings

The types of materials encountered at the test boring locations are described on the Soil Boring Logs. The lines delineating the changes in strata on the logs represent an approximate boundary between the various soil classifications. It must be recognized that the soil descriptions are considered representative for the specific test hole location, but the variations may occur between the sampling intervals and boring locations. A summary of the major soil profile components is described in the following paragraphs. A more detailed description and supporting data for each boring location can be found on the individual boring logs.

The surface conditions at the boring locations performed in the grass areas consisted of 6 to 8 inches of topsoil. Additionally, the borings performed in the asphalt pavement consisted of 2 to 6 inches of asphalt underlain by 1 to 4 inches of aggregate base, with exception to B-7 which encountered approximately 30 inches of gravel fill.

Black, brown, and gray clay fill was encountered in all borings extending to depths ranging from 3.5 to 7.5 feet below grade. The clay fill was described as stiff to hard with unconfined compressive strengths ranging from 1.0 to 4.5+ tsf and moisture contents ranging from 13.0 to 30.9 percent. Additionally, brown sand and gravel fill was encountered at boring B-12 extending to a depth of approximately 3.5 feet below grade. The granular fill was described as loose with an SPT N-value of 9 blows per foot (bpf) and a moisture content of 16.2 percent. Based on the strength and moisture content it appears the fill was placed under density control, although no documentation was available to confirm this.

Beneath the clay and granular fill, native black, brown, and gray lean clay was encountered in borings B-1 through B-8 and B-10 through B-12, extending to depths ranging from 6 to 13.5 feet below grade. The

lean clay was described as stiff to hard with unconfined compressive strengths ranging from 1.5 to 8.8 tsf and moisture contents ranging from 15.6 to 32.4 percent.

Beneath the black, brown, and gray lean clay, gray lean clay was encountered in borings B-1, B-6, and B-7 at depths of approximately 11 to 13.5 feet and extended to the termination depths of the three (3) borings. The clay was described as stiff to hard with unconfined compressive strengths ranging from 1.8 to 9.9 tsf and moisture contents ranging from 16.3 to 24.0 percent.

Further information regarding the soil conditions can be found on the boring logs included in the Appendix.

**GROUNDWATER CONDITIONS**

Borehole groundwater was not encountered during drilling operations. However, it should be noted that due to the relatively limited stabilization times under which the water levels measurements were made, these observed groundwater level readings may not indicate the long-term groundwater level for the site, or whether groundwater will be encountered at the time of construction. In addition, groundwater levels fluctuate over time and are influenced by seasonal precipitation and varying permeability characteristics of the subsurface soils.

Estimated Seasonal High Water Table

The estimated seasonal high-water table (ESHWT) is the subsurface drainage, or the highest level at which the soil is saturated with water. Saturated soils often have decreased strength and are not suitable for infiltration practices. Borings B-1 and B-6, intended for the proposed detention area developments, were evaluated for this determination. The seasonal high groundwater level was estimated to be at an elevation of **El. 632.5 and 635 feet**, respectively.

**ENGINEERING RECOMMENDATIONS**

Site Preparation and Mass Grading

All thirteen (13) borings encountered clay fill soils at the surface. It is possible that areas of unsuitable subgrade soil will be encountered during mass grading. Close inspection of the subgrade to remove unsuitable soil prior to placing new fill is recommended and will reduce the extent of the undercuts during foundation construction.

All existing structures or other below ground objects encountered during demolition should be completely removed from within the new building addition footprint. If trenches are created after removal of existing structures, they must be backfilled as described under *Controlled Compacted Fill*. All demolition trenches must be cleared of debris and loose unsuitable soils that are not adequate for foundation, floor slab, or pavement support.

In order to evaluate the subgrade within the building addition and pavement area footprints, it is recommended that any unsuitable surficial topsoil or other materials be stripped. The subgrade soils should then be proof rolled to identify any weak or unsuitable areas at or just below the subgrade elevation. Proofrolling may be accomplished with a fully loaded single axle dump truck or other pneumatic tire equipment which provides a similar subgrade loading. Due to the variable nature of undocumented fill, some surficial remediation should be anticipated. However, based on the compressive strengths and moisture contents determined from laboratory testing, it is our opinion that the fill was placed in a controlled, compacted manner. Areas that experience rutting or pumping under the proof roll load should be improved by subgrade improvement methods such as disking and drying,

chemical modification, or removal and replacement. Disking, drying, and recompaction must be carried out during suitable weather conditions which allows for drying of the subgrade prior to recompaction.

Although not as economical as moisture conditioning mentioned above, chemical modification such as lime stabilization has the advantage of allowing work to proceed under adverse weather conditions. The removal and replacement method involves undercutting the excessively wet or soft soils and replacing with IDOT CA-1 crushed limestone aggregate or equivalent. The CA-1 aggregate can be supplemented with geogrid, placed, and compacted in minimum lifts of 1 foot and capped off with a minimum of 6 inches of CA-6 aggregate or equivalent to reduce surface water to infiltrate the subgrade. After the subgrade soils are stabilized and determined to be suitable for the support of new site grading fill or the floor slab, low areas may then be raised to the planned grades with properly compacted fill as described in the following section.

The existing subgrade soils will be susceptible to disturbance from precipitation, construction traffic, and vibrations. Care should be taken to avoid disturbance of the subgrade soil and construction traffic over prepared subgrades should be avoided. If the subgrade soils become disturbed during construction, they should be scarified and recompacted or removed and replaced prior to placing new site grading fill or granular subbase material.

Mass grading and earthwork operations should be observed and evaluated by a representative of the geotechnical engineer.

Controlled Compacted Fill

It is recommended that fill materials used for structural support in the building areas consist of well-graded granular soils or lean clay, free of organic matter or other deleterious material. All structural fill should be placed on firm subgrades, and the fill should be placed in lifts and properly compacted. All newly placed fill should be placed in 9-inch or less loose lifts and compacted to at least 95 percent of the maximum dry density as determined by ASTM D-1557 (Modified Proctor) method of test. The fill should be placed within +/- 2 percent of the optimum moisture content value determined by laboratory Proctor testing.

Backfill placed in utility excavations or against foundation walls should consist of a granular material such IDOT CA-6 or CA-7 crushed limestone aggregate. Proper placement and compaction of backfill in these areas is considered essential in order to reduce the potential for distress of overlying pavements, floor slabs, and footings. The placement of backfill against unsupported walls may induce movement, particularly where the backfill is placed on one side of the wall to a higher elevation than the backfill on the other side. Small, hand-operated compactors should be used in confined areas.

The site should be graded to promote runoff of surface water in order to minimize ponding of precipitation on the prepared subgrades, or in excavations. If the subgrade becomes saturated, or becomes deteriorated from repeated construction traffic, the affected material should be removed, and these materials should be disked and recompacted or undercut and replaced with suitable fill prior to further construction in those areas.

GEOCON recommends that the evaluation of the subgrade and selection of fill materials for various applications should be done in consultation with the geotechnical engineer, and placement of fill for structural applications be monitored and tested by a representative of the geotechnical engineer.

Foundations

Based on the soil conditions encountered during the subsurface investigation and laboratory test results, spread footings may be used to support the planned building additions and underground stormwater detention system. Spread footings bearing on suitable clay fill or underlying native lean clay can be designed for a net allowable bearing pressure of 3,000 psf. The net allowable soil bearing pressure is the pressure in excess of the minimum surrounding overburden pressure at the footing base elevation.

For the purposes of resisting lateral loads, the coefficient of friction can be taken as 0.35 where spread footings are supported on the clayey subgrade. Also note that passive resistance in the frost zone is typically neglected due to potential strength loss during freeze thaw cycles. The capacities provided above are ultimate values, and it is recommended that an appropriate factor of safety be used to arrive at allowable values of lateral resistances.

Inspection and testing of the foundation subgrade soil should be performed by a representative of the geotechnical engineer to verify the type of material type and confirm that any soft or otherwise disturbed soil has been removed from the excavation. At a minimum, the foundation observation and testing program should include visual inspection of the foundation excavations prior to concrete placement, to verify suitable footing subgrade soils and confirm that any loose or otherwise disturbed soil has been removed from the excavation. The soil present below foundation grade should be probed with the Dynamic Cone Penetrometer (DCP) to verify the granular bearing soils are suitable for foundation support.

Unsuitable or lower strength bearing soils present within the influence zone of the foundation systems should be removed and replaced with select granular material, consisting of IDOT CA-1 crushed limestone aggregate capped off with a minimum of 6 inches of CA-6 or equivalent. Fill materials placed below the foundations should extend a minimum of 6 inches beyond the edge of the footings for each foot of fill placed.

It is recommended that footings be placed at a minimum depth of 48 inches below the finished grade for frost protection purposes. All footings should be protected from the effects of frost if construction is carried out during winter months unless surface is covered. If the proposed construction will extend into the influence zone of the existing foundations, a shoring or underpinning system may be required to protect or support the adjacent structures.

To avoid disproportionately small footing sizes, it is recommended that continuous footings have a minimum dimension of 18 inches and isolated footings have a minimum dimension of 24 inches. A one-third increase in allowable design bearing pressure could be used in designing footings for added temporary live loads such as those due to wind gusts or seismic activity.

Foundation Settlement

The results of the field and laboratory testing were used to estimate settlement of the proposed foundations. Correlations between physical soil index properties such as moisture content, Standard Penetration N-values, and compressibility parameters, were used in the analyses. It is our opinion that foundation settlement will be within tolerable limits (less than 1 inch) provided the recommended design and construction criteria are followed. It is recommended that the construction of foundations be monitored and tested by a representative of the geotechnical engineer.

## Seismic Considerations

Based on seismic testing performed previously as well as data obtained from the borings, a Seismic Site Classification of "D" is applicable for this site in accordance with the 2021 Edition of the IBC. The following tables contain Site Coefficients and Seismic Design Parameters for the project:

**Table 2. Values for Short Time Periods**

| Site Class | $S_s$ | $F_a$ | $S_{MS}$ | $S_{DS}$ |
|---|---|---|---|---|
| D | 0.11g | 1.6 | 0.176g | 0.117g |

$S_s$: The maximum considered earthquake ground motion for a short time period at the project area is 11% (0.11g) based on Figure 1613.2.1(2) from the IBC code.
$F_a$: The site coefficient for short time periods from Table 1613.2.3(1) from the IBC code.
$S_{MS}$: Maximum considered earthquake spectral response accelerations for short time periods.
$S_{DS}$: Five percent damped design spectral response accelerations for short time periods.

**Table 3. Values for 1-Second Periods**

| Site Class | $S_1$ | $F_v$ | $S_{M1}$ | $S_{D1}$ |
|---|---|---|---|---|
| D | 0.06g | 2.4 | 0.144g | 0.096g |

$S_1$: The maximum considered earthquake ground motion for a 1-second time period at the project area is 6% (0.06g) based on Figure 1613.2.1(4) from the IBC code.
$F_V$: The site coefficient for 1-second time periods from Table 1613.2.3(2) from the IBC code.
$S_{M1}$: Maximum considered earthquake spectral response accelerations for 1-second time periods.
$S_{D1}$: Five percent damped design spectral response accelerations for 1-second time periods.

## Slabs-on-Grade

Floor slab subgrades should be prepared during mass grading in accordance with the recommendations presented in previous sections of this report. It is anticipated that some amount of time will pass between mass grading and final preparation of the floor slab subgrade, any areas that experience deterioration from weather or repeated construction traffic should be repaired by disking and recompaction, or by undercutting and replacement with CA-1 capped off with CA-6.

Beneath slab-on-grade areas, a minimum of 6 inches of aggregate is recommended to facilitate fine grading and provide a capillary cut-off. The floor slab subgrade and aggregate base materials should be placed and compacted to a minimum of 95 percent of the Modified Proctor test (ASTM D-1557) maximum dry density. Floor slabs can be designed using a vertical modulus of subgrade reaction of 100 pounds per cubic inch (pci).

Floor slabs should be isolated from walls and foundations to minimize the risk of cracking due to differential movements between the walls and the floor slab. Slabs should be at least nominally reinforced with steel welded wire mesh to help reduce cracking and maintain the structural integrity of the slab. Slab reinforcement, joint layout and concrete slab thickness design should be performed by a qualified structural engineer with consideration given to the expected loading and environment, drainage, and subgrade conditions.

## Pavement Recommendations

Similar to the slab-on-grades, it is anticipated that pavement subgrades will be prepared during mass grading in accordance with the recommendations presented in previous sections of this report. Any

areas that experience deterioration over time from weather or repeated construction traffic should be repaired by disking and recompaction, or by undercutting and replacement with CA-1 crushed limestone aggregate.

Aggregate base may be placed after the subgrade has been properly compacted, fine graded and proof rolled. The proofrolling and backfilling operations should be inspected by a representative of GEOCON to assure sufficient remediation of unsuitable materials and proper placement of backfill in accordance with the recommendations in the previous, applicable sections of this report. For the design of the paved areas, it is recommended that an IBR/CBR value of 3 be employed.

It is recommended that the aggregate base be compacted to a minimum of 95 percent of the Modified Proctor test (ASTM D-1557) maximum dry density. The hot mix asphalt should be compacted to a minimum of 93 percent of the maximum theoretical density value.

Pavements should be sloped to promptly remove surface water. Ponding of water on pavement sections and saturation of subgrades is a common cause of premature asphalt pavement deterioration. Routine maintenance consisting of repairing damaged areas is helpful in maintaining pavement life and serviceability. Asphalt pavement specifications should reference the Illinois Department of Transportation (IDOT) Standard Specifications.

**CONSTRUCTION CONSIDERATIONS**

Groundwater Control

Groundwater was not encountered in the open boreholes during drilling operations. However, short term groundwater measurements obtained from bore holes at the time of drilling may not be indicative of long-term groundwater levels that may be encountered during construction.

If excavations encounter groundwater present at the time of construction, the contractor should be prepared to provide adequate means of dewatering so the excavation operations can be performed under dry conditions. The dewatering system design is the responsibility of the excavation contractor or an experienced dewater subcontractor. All sumps should be properly filtered to avoid pumping soil fines.

When designing site drainage patterns, site runoff should be diverted away from the foundations and directed towards on-site detention areas, or storm sewer systems. Such measures reduce the potential for softening and possible erosion of the foundation and pavement subgrade soils. It is especially important that water not be allowed to collect next to the building foundations.

Excavations

All excavations should comply with the requirements of OSHA 29CFR, Part 1926, Subpart P, “Excavations,” regarding excavation and trench safety, as well as other applicable codes. This document states that excavation safety is the sole responsibility of the contractor and accordingly reference to this OSHA requirement should be included in the project specifications. Excavation slopes shall in no case be steeper than those specified by OSHA, and all excavations should be monitored by a competent person, as defined by the OSHA standard. Appropriate shoring or sloping techniques should be used to prevent cave-ins.

Excavations near existing foundations, pavements or utilities should be made with caution as disturbance within foundation influence zones that support adjacent structures could result in excessive

settlement. If the proposed construction will extend into the influence zone of the existing foundations, a shoring or underpinning system may be required to protect or support the adjacent structures.

**GENERAL COMMENTS**

This geotechnical exploration and foundation analysis has been conducted to aid in the evaluation of the foundation conditions on the subject site. The recommendations presented herein are based on the available soil information obtained and the design information provided. Any changes in the soil conditions encountered during construction, design, or building locations should be brought to the attention of the soils engineer to determine if modifications in the recommendations are required. The final design plans and specifications should also be reviewed by the soils engineer to determine that the recommendations presented herein have been interpreted and implemented as intended. It is recommended that the earthwork and foundation operations be monitored by the Geotechnical Engineer, to test and evaluate the bearing capacities, and the selection, placement, and compaction of controlled fills.

This geotechnical study has been conducted in a manner consistent with that level of care ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. The findings, recommendations, and opinions contained herein have been promulgated in accordance with generally accepted practice in the fields of foundation engineering, soils mechanics, and engineering geology. No other representations expressed or implied, and no warranty or guarantee is included or intended in this report.

**APPENDIX**

**Boring Location Diagram**
**Soil Boring Logs**
**General Notes**
**Pavement Core Photologs**




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Frankfort, IL 60423
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**BORING LOCATION DIAGRAM**
Hynes Elementary School – Golf School District 67
Additions & Renovations
9000 Belleforte Avenue
Morton Grove, IL 60053

**PROJECT NO. 25-G1033**

**DATE:** September 2025

GEOCON PROFESSIONAL SERVICES

**CLIENT** DLA Architects, Ltd. **PROJECT NAME** Hynes Elementary School – Golf School District 67

**PROJECT NUMBER** 25-G1033 **PROJECT LOCATION** 9000 Belleforte Avenue, Morton Grove, IL 60053

**DATE COMPLETED** 8/6/25 **LOGGED BY** RB/DH **DRILLING METHOD** 3.25 in. HSA

| DEPTH (ft) | ELEVATION (ft.) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | IBV VALUE | POCKET PEN. (Qp) (tsf) | UNC. STRENGTH (Qu) (tsf) | MOISTURE CONTENT (%) | DRY UNIT WT. (pcf) | ORGANIC CONTENT (%) | ATTERBERG LIMITS: LIQUID LIMIT | ATTERBERG LIMITS: PLASTIC LIMIT | ATTERBERG LIMITS: PLASTICITY INDEX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 642.8 | | 8" TOPSOIL | | | | | | | | | | | | |
| | | | brown & gray CLAY (FILL)<br>hard | SS 1 | 44 | 6-6-5 (11) | | 4.5+ | | 18.2 | | | | | |
| | 640.0 | | brown & gray LEAN CLAY<br>hard | | | | | | | | | | | | |
| 5 | | | | SS 2 | 56 | 6-7-8 (15) | | 4.5+ | | 18.5 | | | | | |
| | | | | SS 3 | 78 | 7-8-8 (16) | | 4.5+ | | 18.3 | | | | | |
| 10 | | | | SS 4 | 100 | 10-8-12 (20) | | 4.5+ | 8.7 | 17.9 | | | | | |
| | 632.5 | | gray LEAN CLAY<br>hard | SS 5 | 100 | 6-8-10 (18) | | 4.5+ | 9.9 | 16.3 | | | | | |
| 15 | 628.5 | | | SS 6 | 100 | 4-7-8 (15) | | 4.5+ | 6.7 | 16.9 | | | | | |

Bottom of borehole at 15.0 feet.

**COMPLETION DEPTH** 15 ft **GROUND ELEVATION** 643.5 ft

**CAVE DEPTH** ft **BACKFILL** Soil Cuttings

**GROUND WATER LEVELS:**

**AT TIME OF DRILLING** — None

**AT END OF DRILLING** — Dry upon completion

**AFTER DRILLING** —

**NOTES**

Groundwater levels were recorded at the time of drilling and may not represent the groundwater conditions at the time of construction.

Lines of Demarcation represent an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes.

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GPS PAVEMENT LOG - OZ STD DATA TEMPLATE.GDT - 8/28/25 17:10 - K:\2 GEOTECHNICAL\2025\25-G1033 GEO HYNES ELEMENTARY SCHOOL - GOLF SCHOOL DISTRICT 67 - ADDITIONS AND RENOVATIONS, MORTON GROVE, IL\LAB & DRILLING\25-G 1033 HY

GPS PAVEMENT LOG - OZ STD DATA TEMPLATE.GDT - 8/28/25 17:10 - K:\2 GEOTECHNICAL\2025\25-G1033 GEO HYNES ELEMENTARY SCHOOL - GOLF SCHOOL DISTRICT 67 - ADDITIONS AND RENOVATIONS, MORTON GROVE, IL\LAB & DRILLING\25-G 1033 HY

GEOCON PROFESSIONAL SERVICES

# BORING NO. B-2



**CLIENT** DLA Architects, Ltd. **PROJECT NAME** Hynes Elementary School – Golf School District 67

**PROJECT NUMBER** 25-G1033 **PROJECT LOCATION** 9000 Belleforte Avenue, Morton Grove, IL 60053

**DATE COMPLETED** 8/7/25 **LOGGED BY** _____ **DRILLING METHOD** Hand Auger

| DEPTH (ft) | ELEVATION (ft.) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | IBV VALUE | POCKET PEN. (Qp) (tsf) | UNC. STRENGTH (Qu) (tsf) | MOISTURE CONTENT (%) | DRY UNIT WT. (pcf) | ORGANIC CONTENT (%) | ATTERBERG LIMITS: LIQUID LIMIT | ATTERBERG LIMITS: PLASTIC LIMIT | ATTERBERG LIMITS: PLASTICITY INDEX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 644.5 | | 6" TOPSOIL | | | | | | | | | | | | |
| | | | black, brown, and gray CLAY (FILL)<br>trace gravel<br>stiff to hard | HA 1 | 100 | | | 2.0 | | 15.2 | | | | | |
| | | | | HA 2 | 92 | | | 1.0 | | 17.2 | | | | | |
| 2.5 | | | | HA 3 | 100 | | | 3.75 | | 16.9 | | | | | |
| | | | | HA 4 | 100 | | | 4.25 | | 18.2 | | | | | |
| | 641.0 | | dark brown & brown LEAN CLAY<br>very stiff to hard | | | | | | | | | | | | |
| 5.0 | | | | HA 5 | 83 | | | 3.25 | | 21.1 | | | | | |
| | | | | HA 6 | 100 | | | 4.5 | | 22.0 | | | | | |
| | 639.0 | | | | | | | | | | | | | | |

Bottom of borehole at 6.0 feet.

**COMPLETION DEPTH** 6 ft **GROUND ELEVATION** 645 ft

**CAVE DEPTH** ft **BACKFILL** Soil Cuttings

**GROUND WATER LEVELS:**

**AT TIME OF DRILLING** — None

**AT END OF DRILLING** — Dry upon completion

**AFTER DRILLING** —

**NOTES**

Groundwater levels were recorded at the time of drilling and may not represent the groundwater conditions at the time of construction.

Lines of Demarcation represent an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes.

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GEOCON PROFESSIONAL SERVICES

# BORING NO. B-3



**CLIENT** DLA Architects, Ltd. **PROJECT NAME** Hynes Elementary School – Golf School District 67

**PROJECT NUMBER** 25-G1033 **PROJECT LOCATION** 9000 Belleforte Avenue, Morton Grove, IL 60053

**DATE COMPLETED** 8/6/25 **LOGGED BY** RB/DH **DRILLING METHOD** 3.25 in. HSA

| DEPTH (ft) | ELEVATION (ft.) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | IBV VALUE | POCKET PEN. (Qp) (tsf) | UNC. STRENGTH (Qu) (tsf) | MOISTURE CONTENT (%) | DRY UNIT WT. (pcf) | ORGANIC CONTENT (%) | ATTERBERG LIMITS: LIQUID LIMIT | ATTERBERG LIMITS: PLASTIC LIMIT | ATTERBERG LIMITS: PLASTICITY INDEX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 644.9 | | 7" TOPSOIL | | | | | | | | | | | | |
| | | | black, brown, and gray CLAY (FILL)<br>trace gravel<br>hard | SS 1 | 28 | 5-5-6 (11) | | 4.5+ | | 15.4 | | | | | |
| 2.5 | 642.0 | | black, brown, and gray LEAN CLAY<br>very stiff | SS 2 | 33 | 2-3-3 (6) | | 3.25 | | 22.3 | | | | | |
| 5.0 | | | | SS 3 | 44 | 2-3-3 (6) | | 3.5 | | 20.2 | | | | | |
| 7.5 | 638.0 | | Bottom of borehole at 7.5 feet. | | | | | | | | | | | | |

**COMPLETION DEPTH** 7.5 ft **GROUND ELEVATION** 645.5 ft

**CAVE DEPTH** ft **BACKFILL** Soil Cuttings

**GROUND WATER LEVELS:**

**AT TIME OF DRILLING** — None

**AT END OF DRILLING** — Dry upon completion

**AFTER DRILLING** —

**NOTES**

Groundwater levels were recorded at the time of drilling and may not represent the groundwater conditions at the time of construction.

Lines of Demarcation represent an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes.

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GEOCON PROFESSIONAL SERVICES

# BORING NO. B-4



**CLIENT** DLA Architects, Ltd. **PROJECT NAME** Hynes Elementary School – Golf School District 67

**PROJECT NUMBER** 25-G1033 **PROJECT LOCATION** 9000 Belleforte Avenue, Morton Grove, IL 60053

**DATE COMPLETED** 8/6/25 **LOGGED BY** RB/DH **DRILLING METHOD** 3.25 in. HSA

| DEPTH (ft) | ELEVATION (ft.) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | IBV VALUE | POCKET PEN. (Qp) (tsf) | UNC. STRENGTH (Qu) (tsf) | MOISTURE CONTENT (%) | DRY UNIT WT. (pcf) | ORGANIC CONTENT (%) | ATTERBERG LIMITS: LIQUID LIMIT | ATTERBERG LIMITS: PLASTIC LIMIT | ATTERBERG LIMITS: PLASTICITY INDEX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 644.8 | | 2" ASPHALT | | | | | | | | | | | | |
| | 644.8 | | 1" STONE | | | | | | | | | | | | |
| | | | black & brown CLAY (FILL) stiff | | | | | | | | | | | | |
| | | | | SS 1 | 33 | 2-2-2 (4) | | 1.75 | | 20.6 | | | | | |
| 2.5 | 641.5 | | brown & gray LEAN CLAY very stiff | | | | | | | | | | | | |
| | | | | SS 2 | 28 | 2-2-3 (5) | | 2.5 | 2.5 | 28.6 | | | | | |
| 5.0 | | | | | | | | | | | | | | | |
| | | | | SS 3 | 33 | 1-2-2 (4) | | 2.0 | | 28.9 | | | | | |
| 7.5 | 637.5 | | Bottom of borehole at 7.5 feet. | | | | | | | | | | | | |

**COMPLETION DEPTH** 7.5 ft **GROUND ELEVATION** 645 ft

**CAVE DEPTH** ft **BACKFILL** Soil Cuttings

**GROUND WATER LEVELS:**

**AT TIME OF DRILLING** — None

**AT END OF DRILLING** — Dry upon completion

**AFTER DRILLING** —

**NOTES**

Groundwater levels were recorded at the time of drilling and may not represent the groundwater conditions at the time of construction.

Lines of Demarcation represent an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes.

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GEOCON PROFESSIONAL SERVICES

# BORING NO. B-5



**CLIENT** DLA Architects, Ltd. **PROJECT NAME** Hynes Elementary School – Golf School District 67

**PROJECT NUMBER** 25-G1033 **PROJECT LOCATION** 9000 Belleforte Avenue, Morton Grove, IL 60053

**DATE COMPLETED** 8/6/25 **LOGGED BY** RB/DH **DRILLING METHOD** 3.25 in. HSA

| DEPTH (ft) | ELEVATION (ft.) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | IBV VALUE | POCKET PEN. (Qp) (tsf) | UNC. STRENGTH (Qu) (tsf) | MOISTURE CONTENT (%) | DRY UNIT WT. (pcf) | ORGANIC CONTENT (%) | ATTERBERG LIMITS: LIQUID LIMIT | ATTERBERG LIMITS: PLASTIC LIMIT | ATTERBERG LIMITS: PLASTICITY INDEX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 645.2 | | 4.25" ASPHALT | | | | | | | | | | | | |
| | 644.8 | | 4" STONE | | | | | | | | | | | | |
| | | | black, dark brown, and gray LEAN CLAY (FILL)<br>trace gravel<br>hard | SS 1 | 56 | 2-3-3 (6) | 13.2 | 4.5 | | 18.6 | | | | | |
| 2.5 | 642.0 | | brown & gray LEAN CLAY<br>trace gravel<br>hard | SS 2 | 89 | 3-3-6 (9) | | 4.0 | 3.9 | 18.5 | | | | | |
| 5.0 | | | | SS 3 | 78 | 2-3-5 (8) | | 4.5+ | 4.8 | 19.7 | | | | | |
| 7.5 | 638.0 | | Bottom of borehole at 7.5 feet. | | | | | | | | | | | | |

**COMPLETION DEPTH** 7.5 ft **GROUND ELEVATION** 645.5 ft

**CAVE DEPTH** ft **BACKFILL** Soil Cuttings

**GROUND WATER LEVELS:**

**AT TIME OF DRILLING** — None

**AT END OF DRILLING** — Dry upon completion

**AFTER DRILLING** —

**NOTES**

Groundwater levels were recorded at the time of drilling and may not represent the groundwater conditions at the time of construction.

Lines of Demarcation represent an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes.

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GEOCON PROFESSIONAL SERVICES

# BORING NO. B-6



**CLIENT** DLA Architects, Ltd. **PROJECT NAME** Hynes Elementary School – Golf School District 67

**PROJECT NUMBER** 25-G1033 **PROJECT LOCATION** 9000 Belleforte Avenue, Morton Grove, IL 60053

**DATE COMPLETED** 8/6/25 **LOGGED BY** RB/DH **DRILLING METHOD** 3.25 in. HSA

| DEPTH (ft) | ELEVATION (ft.) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | IBV VALUE | POCKET PEN. (Qp) (tsf) | UNC. STRENGTH (Qu) (tsf) | MOISTURE CONTENT (%) | DRY UNIT WT. (pcf) | ORGANIC CONTENT (%) | ATTERBERG LIMITS: LIQUID LIMIT | ATTERBERG LIMITS: PLASTIC LIMIT | ATTERBERG LIMITS: PLASTICITY INDEX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 645.5 | | 6" TOPSOIL | | | | | | | | | | | | |
| | | | brown & gray CLAY (FILL)<br>hard | SS 1 | 56 | 5-7-7 (14) | | 4.5+ | | 13.0 | | | | | |
| | 642.5 | | black, brown, and gray LEAN CLAY<br>very stiff | SS 2 | 56 | 3-4-4 (8) | | 3.0 | 2.9 | 21.4 | | | | | |
| 5 | 640.0 | | brown & gray LEAN CLAY<br>hard | SS 3 | 89 | 3-4-7 (11) | | 4.0 | 4.0 | 17.3 | | | | | |
| | | | | SS 4 | 100 | 4-6-8 (14) | | 4.5+ | 6.4 | 20.9 | | | | | |
| 10 | 635.0 | | gray LEAN CLAY<br>very stiff to hard | SS 5 | 100 | 5-5-7 (12) | | 4.25 | 4.2 | 19.2 | | | | | |
| | | | | SS 6 | 100 | 2-5-7 (12) | | 2.75 | 2.8 | 20.5 | | | | | |
| 15 | 631.0 | | Bottom of borehole at 15.0 feet. | | | | | | | | | | | | |

**COMPLETION DEPTH** 15 ft **GROUND ELEVATION** 646 ft

**CAVE DEPTH** ft **BACKFILL** Soil Cuttings

**GROUND WATER LEVELS:**

**AT TIME OF DRILLING** — None

**AT END OF DRILLING** — Dry upon completion

**AFTER DRILLING** —

**NOTES**

Groundwater levels were recorded at the time of drilling and may not represent the groundwater conditions at the time of construction.

Lines of Demarcation represent an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes.

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GEOCON PROFESSIONAL SERVICES

# BORING NO. B-7



**CLIENT** DLA Architects, Ltd. **PROJECT NAME** Hynes Elementary School – Golf School District 67

**PROJECT NUMBER** 25-G1033 **PROJECT LOCATION** 9000 Belleforte Avenue, Morton Grove, IL 60053

**DATE COMPLETED** 8/6/25 **LOGGED BY** RB/DH **DRILLING METHOD** 3.25 in. HSA

| DEPTH (ft) | ELEVATION (ft.) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | IBV VALUE | POCKET PEN. (Qp) (tsf) | UNC. STRENGTH (Qu) (tsf) | MOISTURE CONTENT (%) | DRY UNIT WT. (pcf) | ORGANIC CONTENT (%) | ATTERBERG LIMITS: LIQUID LIMIT | ATTERBERG LIMITS: PLASTIC LIMIT | ATTERBERG LIMITS: PLASTICITY INDEX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 645.2 | | 4" ASPHALT | | | | | | | | | | | | |
| | | | 30" STONE<br>dense | SS 1 | 100 | 20-22-12 (34) | 13.2 | | | 4.4 | | | | | |
| | 642.7 | | black CLAY (FILL)<br>stiff | SS 2 | 78 | 2-2-2 (4) | | 1.75 | 1.8 | 30.9 | | | | | |
| 5 | 639.5 | | brown & gray LEAN CLAY<br>trace gravel<br>trace roots in SS3<br>stiff to hard | SS 3 | 89 | 2-2-2 (4) | | 1.5 | 1.5 | 25.5 | | | | | |
| | | | | SS 4 | 100 | 3-3-5 (8) | | 4.5+ | 8.8 | 19.6 | | | | | |
| 10 | | | | SS 5 | 100 | 5-8-11 (19) | | 4.5+ | 8.0 | 17.1 | | | | | |
| | 632.0 | | gray LEAN CLAY<br>stiff to very stiff | SS 6 | 100 | 4-4-7 (11) | | 2.25 | 2.3 | 24.0 | | | | | |
| 15 | | | | | | | | | | | | | | | |
| | | | | SS 7 | 100 | 2-3-5 (8) | | 1.75 | 1.8 | 23.1 | | | | | |
| 20 | 625.5 | | | | | | | | | | | | | | |

Bottom of borehole at 20.0 feet.

**COMPLETION DEPTH** 20 ft **GROUND ELEVATION** 645.5 ft

**CAVE DEPTH** ft **BACKFILL** Soil Cuttings

**GROUND WATER LEVELS:**

**AT TIME OF DRILLING** — None

**AT END OF DRILLING** — Dry upon completion

**AFTER DRILLING** —

**NOTES**

Groundwater levels were recorded at the time of drilling and may not represent the groundwater conditions at the time of construction.

Lines of Demarcation represent an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes.

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GEOCON PROFESSIONAL SERVICES

# BORING NO. B-8



**CLIENT** DLA Architects, Ltd. **PROJECT NAME** Hynes Elementary School – Golf School District 67

**PROJECT NUMBER** 25-G1033 **PROJECT LOCATION** 9000 Belleforte Avenue, Morton Grove, IL 60053

**DATE COMPLETED** 8/6/25 **LOGGED BY** RB/DH **DRILLING METHOD** 3.25 in. HSA

| DEPTH (ft) | ELEVATION (ft.) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | IBV VALUE | POCKET PEN. (Qp) (tsf) | UNC. STRENGTH (Qu) (tsf) | MOISTURE CONTENT (%) | DRY UNIT WT. (pcf) | ORGANIC CONTENT (%) | ATTERBERG LIMITS: LIQUID LIMIT | ATTERBERG LIMITS: PLASTIC LIMIT | ATTERBERG LIMITS: PLASTICITY INDEX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 644.5 | | 6.25" ASPHALT | | | | | | | | | | | | |
| | 644.2 | | 4" STONE | | | | | | | | | | | | |
| | | | brown & gray CLAY (FILL)<br>hard | SS 1 | 67 | 5-5-6 (11) | 13.2 | 4.5+ | | 16.3 | | | | | |
| 2.5 | 641.5 | | brown & gray LEAN CLAY<br>hard | SS 2 | 78 | 9-9-9 (18) | | 4.5+ | 8.8 | 15.6 | | | | | |
| 5.0 | | | trace gravel at 6' | SS 3 | 67 | 2-4-10 (14) | | 4.5+ | 7.4 | 16.3 | | | | | |
| 7.5 | 637.5 | | Bottom of borehole at 7.5 feet. | | | | | | | | | | | | |

**COMPLETION DEPTH** 7.5 ft **GROUND ELEVATION** 645 ft

**CAVE DEPTH** ft **BACKFILL** Soil Cuttings

**GROUND WATER LEVELS:**

**AT TIME OF DRILLING** — None

**AT END OF DRILLING** — Dry upon completion

**AFTER DRILLING** —

**NOTES**

Groundwater levels were recorded at the time of drilling and may not represent the groundwater conditions at the time of construction.

Lines of Demarcation represent an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes.

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GEOCON PROFESSIONAL SERVICES

# BORING NO. B-9



**CLIENT** DLA Architects, Ltd. **PROJECT NAME** Hynes Elementary School – Golf School District 67

**PROJECT NUMBER** 25-G1033 **PROJECT LOCATION** 9000 Belleforte Avenue, Morton Grove, IL 60053

**DATE COMPLETED** 8/6/25 **LOGGED BY** RB/DH **DRILLING METHOD** 3.25 in. HSA

| DEPTH (ft) | ELEVATION (ft.) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | IBV VALUE | POCKET PEN. (Qp) (tsf) | UNC. STRENGTH (Qu) (tsf) | MOISTURE CONTENT (%) | DRY UNIT WT. (pcf) | ORGANIC CONTENT (%) | ATTERBERG LIMITS: LIQUID LIMIT | ATTERBERG LIMITS: PLASTIC LIMIT | ATTERBERG LIMITS: PLASTICITY INDEX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 644.5 | | 6" TOPSOIL | | | | | | | | | | | | |
| | | | black & brown CLAY (FILL)<br>hard | SS 1 | 67 | 6-8-10 (18) | | 4.5+ | | 15.3 | | | | | |
| 2.5 | | | | | | | | | | | | | | | |
| | | | | SS 2 | 56 | 6-5-5 (10) | | 4.5+ | | 17.6 | | | | | |
| 5.0 | | | | | | | | | | | | | | | |
| | | | trace gravel in SS3 | SS 3 | 33 | 2-4-5 (9) | | 4.5+ | | 21.5 | | | | | |
| 7.5 | 637.5 | | Bottom of borehole at 7.5 feet. | | | | | | | | | | | | |

**COMPLETION DEPTH** 7.5 ft **GROUND ELEVATION** 645 ft

**CAVE DEPTH** ft **BACKFILL** Soil Cuttings

**GROUND WATER LEVELS:**

**AT TIME OF DRILLING** — None

**AT END OF DRILLING** — Dry upon completion

**AFTER DRILLING** —

**NOTES**

Groundwater levels were recorded at the time of drilling and may not represent the groundwater conditions at the time of construction.

Lines of Demarcation represent an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes.

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GEOCON PROFESSIONAL SERVICES

# BORING NO. B-10



**CLIENT** DLA Architects, Ltd. **PROJECT NAME** Hynes Elementary School – Golf School District 67

**PROJECT NUMBER** 25-G1033 **PROJECT LOCATION** 9000 Belleforte Avenue, Morton Grove, IL 60053

**DATE COMPLETED** 8/6/25 **LOGGED BY** RB/DH **DRILLING METHOD** 3.25 in. HSA

| DEPTH (ft) | ELEVATION (ft.) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | IBV VALUE | POCKET PEN. (Qp) (tsf) | UNC. STRENGTH (Qu) (tsf) | MOISTURE CONTENT (%) | DRY UNIT WT. (pcf) | ORGANIC CONTENT (%) | ATTERBERG LIMITS: LIQUID LIMIT | ATTERBERG LIMITS: PLASTIC LIMIT | ATTERBERG LIMITS: PLASTICITY INDEX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 644.1 | | 5" ASPHALT | | | | | | | | | | | | |
| | 643.8 | | 4" STONE | | | | | | | | | | | | |
| | | | black, brown, and gray CLAY (FILL)<br>hard | SS 1 | 78 | 3-4-5 (9) | 13.2 | 4.5+ | 4.8 | 13.9 | | | | | |
| 2.5 | 641.0 | | black LEAN CLAY<br>very stiff | SS 2 | 56 | 3-2-2 (4) | | 3.75 | | 27.2 | | | | | |
| 5.0 | 638.5 | | brown & gray LEAN CLAY<br>very stiff | SS 3 | 56 | 1-2-4 (6) | | 2.75 | | 26.0 | | | | | |
| 7.5 | 637.0 | | Bottom of borehole at 7.5 feet. | | | | | | | | | | | | |

**COMPLETION DEPTH** 7.5 ft **GROUND ELEVATION** 644.5 ft

**CAVE DEPTH** ft **BACKFILL** Soil Cuttings

**GROUND WATER LEVELS:**

**AT TIME OF DRILLING** — None

**AT END OF DRILLING** — Dry upon completion

**AFTER DRILLING** —

**NOTES**

Groundwater levels were recorded at the time of drilling and may not represent the groundwater conditions at the time of construction.

Lines of Demarcation represent an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes.

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GEOCON PROFESSIONAL SERVICES

# BORING NO. B-11



**CLIENT** DLA Architects, Ltd. **PROJECT NAME** Hynes Elementary School – Golf School District 67

**PROJECT NUMBER** 25-G1033 **PROJECT LOCATION** 9000 Belleforte Avenue, Morton Grove, IL 60053

**DATE COMPLETED** 8/6/25 **LOGGED BY** RB/DH **DRILLING METHOD** 3.25 in. HSA

| DEPTH (ft) | ELEVATION (ft.) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | IBV VALUE | POCKET PEN. (Qp) (tsf) | UNC. STRENGTH (Qu) (tsf) | MOISTURE CONTENT (%) | DRY UNIT WT. (pcf) | ORGANIC CONTENT (%) | ATTERBERG LIMITS: LIQUID LIMIT | ATTERBERG LIMITS: PLASTIC LIMIT | ATTERBERG LIMITS: PLASTICITY INDEX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 644.0 | | 6" TOPSOIL | | | | | | | | | | | | |
| | | | black, brown, and gray CLAY (FILL) very stiff | SS 1 | 67 | 2-3-4 (7) | | 2.75 | 2.8 | 20.2 | | | | | |
| 2.5 | 641.0 | | brown & gray CLAY (FILL) hard | SS 2 | 56 | 2-2-4 (6) | | 4.0 | | 16.7 | | | | | |
| 5.0 | 638.5 | | black, brown, and gray LEAN CLAY very stiff | SS 3 | 56 | 1-2-3 (5) | | 2.0 | | 32.4 | | | | | |
| 7.5 | 637.0 | | Bottom of borehole at 7.5 feet. | | | | | | | | | | | | |

**COMPLETION DEPTH** 7.5 ft **GROUND ELEVATION** 644.5 ft

**CAVE DEPTH** ft **BACKFILL** Soil Cuttings

**GROUND WATER LEVELS:**

**AT TIME OF DRILLING** — None

**AT END OF DRILLING** — Dry upon completion

**AFTER DRILLING** —

**NOTES**

Groundwater levels were recorded at the time of drilling and may not represent the groundwater conditions at the time of construction.

Lines of Demarcation represent an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes.

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GEOCON PROFESSIONAL SERVICES

# BORING NO. B-12



**CLIENT** DLA Architects, Ltd. **PROJECT NAME** Hynes Elementary School – Golf School District 67

**PROJECT NUMBER** 25-G1033 **PROJECT LOCATION** 9000 Belleforte Avenue, Morton Grove, IL 60053

**DATE COMPLETED** 8/6/25 **LOGGED BY** RB/DH **DRILLING METHOD** 3.25 in. HSA

| DEPTH (ft) | ELEVATION (ft.) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | IBV VALUE | POCKET PEN. (Qp) (tsf) | UNC. STRENGTH (Qu) (tsf) | MOISTURE CONTENT (%) | DRY UNIT WT. (pcf) | ORGANIC CONTENT (%) | ATTERBERG LIMITS: LIQUID LIMIT | ATTERBERG LIMITS: PLASTIC LIMIT | ATTERBERG LIMITS: PLASTICITY INDEX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 643.6 | | 5" ASPHALT | | | | | | | | | | | | |
| | 643.3 | | 3" STONE | | | | | | | | | | | | |
| | | | brown SAND & GRAVEL (FILL) with clay loose | SS 1 | 33 | 6-4-5 (9) | 13.2 | | | 16.2 | | | | | |
| 2.5 | 640.5 | | black, brown, and gray LEAN CLAY very stiff | SS 2 | 44 | 2-3-2 (5) | | 3.0 | | 29.2 | | | | | |
| 5.0 | | | | SS 3 | 44 | 1-2-2 (4) | | 2.5 | | 30.2 | | | | | |
| 7.5 | 636.5 | | Bottom of borehole at 7.5 feet. | | | | | | | | | | | | |

**COMPLETION DEPTH** 7.5 ft **GROUND ELEVATION** 644 ft

**CAVE DEPTH** ft **BACKFILL** Soil Cuttings

**GROUND WATER LEVELS:**

**AT TIME OF DRILLING** — None

**AT END OF DRILLING** — Dry upon completion

**AFTER DRILLING** —

**NOTES**

Groundwater levels were recorded at the time of drilling and may not represent the groundwater conditions at the time of construction.

Lines of Demarcation represent an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes.

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GEOCON PROFESSIONAL SERVICES

# BORING NO. B-13



**CLIENT** DLA Architects, Ltd. **PROJECT NAME** Hynes Elementary School – Golf School District 67

**PROJECT NUMBER** 25-G1033 **PROJECT LOCATION** 9000 Belleforte Avenue, Morton Grove, IL 60053

**DATE COMPLETED** 8/6/25 **LOGGED BY** RB/DH **DRILLING METHOD** 3.25 in. HSA

| DEPTH (ft) | ELEVATION (ft.) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | IBV VALUE | POCKET PEN. (Qp) (tsf) | UNC. STRENGTH (Qu) (tsf) | MOISTURE CONTENT (%) | DRY UNIT WT. (pcf) | ORGANIC CONTENT (%) | ATTERBERG LIMITS: LIQUID LIMIT | ATTERBERG LIMITS: PLASTIC LIMIT | ATTERBERG LIMITS: PLASTICITY INDEX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 644.0 | | 6" TOPSOIL | | | | | | | | | | | | |
| | | | black, brown, and gray CLAY (FILL)<br>trace gravel<br>hard | SS 1 | 44 | 7-6-6 (12) | | 4.5+ | | 16.3 | | | | | |
| 2.5 | | | | | | | | | | | | | | | |
| | | | | SS 2 | 33 | 5-5-6 (11) | | 4.0 | | 19.1 | | | | | |
| 5.0 | | | | | | | | | | | | | | | |
| | | | | SS 3 | 33 | 5-7-8 (15) | | 4.5+ | | 18.5 | | | | | |
| 7.5 | 637.0 | | Bottom of borehole at 7.5 feet. | | | | | | | | | | | | |

**COMPLETION DEPTH** 7.5 ft **GROUND ELEVATION** 644.5 ft

**CAVE DEPTH** ft **BACKFILL** Soil Cuttings

**GROUND WATER LEVELS:**

**AT TIME OF DRILLING** — None

**AT END OF DRILLING** — Dry upon completion

**AFTER DRILLING** —

**NOTES**

Groundwater levels were recorded at the time of drilling and may not represent the groundwater conditions at the time of construction.

Lines of Demarcation represent an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes.

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GPS GEO GENERAL NOTES - OZ STD DATA TEMPLATE.GDT - 8/26/25 11:35 - K:\2 GEOTECHNICAL\2025\25-G1033 GEO HYNES ELEMENTARY SCHOOL - GOLF SCHOOL DISTRICT 67 - ADDITIONS AND RENOVATIONS, MORTON GROVE, IL\LAB & DRILLING\25-G10

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# GENERAL NOTES

**CLIENT** DLA Architects, Ltd. **PROJECT NAME** Hynes Elementary School – Golf School District 67

**PROJECT NUMBER** 25-G1033 **PROJECT LOCATION** 9000 Belleforte Avenue, Morton Grove, IL 60053

## SAMPLE IDENTIFICATION

Visual soil classifications are made in general accordance with the United Soil Classification System (USCS) on the basis of textural and particle size categorization, and various soil behavior characteristics. Visual classifications should be substantiated by appropriate laboratory testing when a more exact soil identification is required to satisfy specific project applications criteria.

## UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D-2487-98)

| MATERIAL TYPES | CRITERIA FOR ASSIGNING SOIL GROUP NAMES | | | GROUP SYMBOL | SOIL GROUP NAMES & LEGEND |
|---|---|---|---|---|---|
| COARSE-GRAINED SOILS >50% RETAINED ON NO. 200 SIEVE | GRAVELS >50% OF COARSE FRACTION RETAINED ON NO 4. SIEVE | CLEAN GRAVELS <5% FINES | $C_u \geq 4$ AND $1 \leq C_c \leq 3$ | GW | WELL-GRADED GRAVEL |
| | | | $C_u \geq 4$ AND/OR $1 \geq C_c \geq 3$ | GP | POORLY-GRADED GRAVEL |
| | | GRAVELS WITH FINES >12% FINES | FINES CLASSIFY AS ML OR CL | GM | SILTY GRAVEL |
| | | | FINES CLASSIFY AS CL OR CH | GC | CLAYEY GRAVEL |
| | SANDS >50% OF COARSE FRACTION PASSES ON NO 4. SIEVE | CLEAN SANDS <5% FINES | $C_u \geq 6$ AND $1 \leq C_c \leq 3$ | SW | WELL-GRADED SAND |
| | | | $C_u \geq 6$ AND/OR $1 \geq Cc \geq 3$ | SP | POORLY-GRADED SAND |
| | | SANDS AND FINES >12% FINES | FINES CLASSIFY AS ML OR MH | SM | SILTY SAND |
| | | | FINES CLASSIFY AS CL OR CH | SC | CLAYEY SAND |
| FINE-GRAINED SOILS >50% PASSES NO. 200 SIEVE | SILTS AND CLAYS LIQUID LIMIT<50 | INORGANIC | PI>7 AND PLOTS>"A" LINE | CL | LEAN CLAY |
| | | | PI>4 AND PLOTS<"A" LINE | ML | SILT |
| | | ORGANIC | LL (oven dried)/LL (not dried)<0.75 | OL | ORGANIC CLAY OR SILT |
| | SILTS AND CLAYS LIQUID LIMIT>50 | INORGANIC | PI PLOTS >"A" LINE | CH | FAT CLAY |
| | | | PI PLOTS <"A" LINE | MH | ELASTIC SILT |
| | | ORGANIC | LL (oven dried)/LL (not dried)<0.75 | OH | ORGANIC CLAY OR SILT |
| HIGHLY ORGANIC SOILS | | PRIMARILY ORGANIC MATTER, DARK IN COLOR, AND ORGANIC ODOR | | PT | PEAT |

## PROJECT LITHOLOGIC SYMBOLS (USCS)

ASPHALT: Asphalt

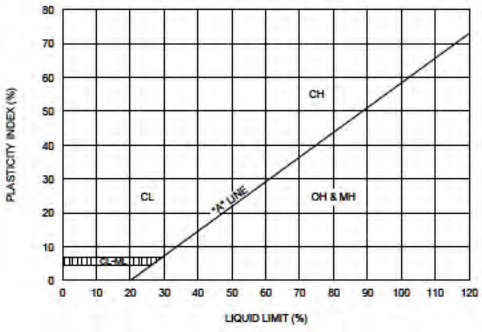
GRAVEL FILL: Gravel Fill

CL: USCS Low Plasticity Clay

TOPSOIL: Topsoil

FILL: Fill (made ground)

## PLASTICITY CHART




## PROJECT SAMPLE TYPES

Hand Auger (HA)

Split Spoon (SS)

## SOIL RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

| NON-COHESIVE SOILS | | COHESIVE SOILS | | |
|---|---|---|---|---|
| RELATIVE DENSITY | N-VALUE* | CONSISTENCY | N-VALUE* | COMPRESSIVE STRENGTH (TSF) |
| VERY LOOSE | 0 - 4 | VERY SOFT | 0 - 2 | 0 - 0.25 |
| LOOSE | 4 - 10 | SOFT | 2 - 5 | 0.25 - 0.50 |
| MEDIUM DENSE | 10 - 30 | MEDIUM STIFF | 5 - 10 | 0.50 - 1.0 |
| DENSE | 30 - 50 | STIFF | 10 - 14 | 1.0 - 2.0 |
| VERY DENSE | OVER 50 | VERY STIFF | 14 - 32 | 2.0 - 4.0 |
| | | HARD | OVER 32 | OVER 4.0 |

* N-VALUE: NUMBER OF BLOWS OF 140 LB HAMMER FALLING 30 INCHES TO DRIVE A 2 INCH O.D. (1-3/8 INCH I.D.) SPLIT-BARREL SAMPLER THE LAST 12 INCHES OF AN 18-INCH DRIVE (ASTM-1586 STANDARD PENETRATION TEST).

## ABBREVIATIONS

| | | | | | |
|---|---|---|---|---|---|
| SS | - | SPLIT-SPOON SAMPLE | LL | - | LIQUID LIMIT (%) |
| ST | - | SHELBY TUBE SAMPLE | PL | - | PLASTIC LIMT (%) |
| AU | - | AUGER SAMPLE | PI | - | PLASTIC INDEX (%) |
| MC | - | MOISTURE CONTENT (%) | NP | - | NON PLASTIC |
| -200 | - | PERCENT PASSING NO. 200 SIEVE | DD | - | DRY DENSITY (PCF) |
| Qp | - | POCKET PENETROMETER (TSF) | DCP | - | DYNAMIC CONE PENETROMETER |
| Qu | - | UNCONFINED STRENGTH (TSF) | IBV | - | IMMEDIATE BEARING VALUE |

PAVEMENT STRUCTURE
Field Measurement: 4.25”
Recovered Measurement: 4.0”
Petro Mat at 2.5”
AGGREGATE BASE: 4”

B-5




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**Pavement Core Photo Logs**
Hynes Elementary School
Parking Lot
Morton Grove, Illinois

**PROJECT NUMBER:** 25-G1033

**DATE:** September 2025

PAVEMENT STRUCTURE
Field Measurement: 4.0”
Recovered Measurement: 3.75”
AGGREGATE BASE: 30”

B-7




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**Pavement Core Photo Logs**
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Parking Lot
Morton Grove, Illinois

**PROJECT NUMBER:** 25-G1033

**DATE:** September 2025

PAVEMENT STRUCTURE
Field Measurement: 6.25”
Recovered Measurement: 6.25”
AGGREGATE BASE: 4”

B-8




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**Pavement Core Photo Logs**
Hynes Elementary School
Parking Lot
Morton Grove, Illinois

**PROJECT NUMBER:** 25-G1033

**DATE:** September 2025

PAVEMENT STRUCTURE
Field Measurement: 5.0”
Recovered Measurement: 5.0”
AGGREGATE BASE: 4”

B-10




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**Pavement Core Photo Logs**
Hynes Elementary School
Parking Lot
Morton Grove, Illinois

**PROJECT NUMBER:** 25-G1033

**DATE:** September 2025

PAVEMENT STRUCTURE
Field Measurement: 5.0”
Recovered Measurement: 5.0”
AGGREGATE BASE: 3”

B-12

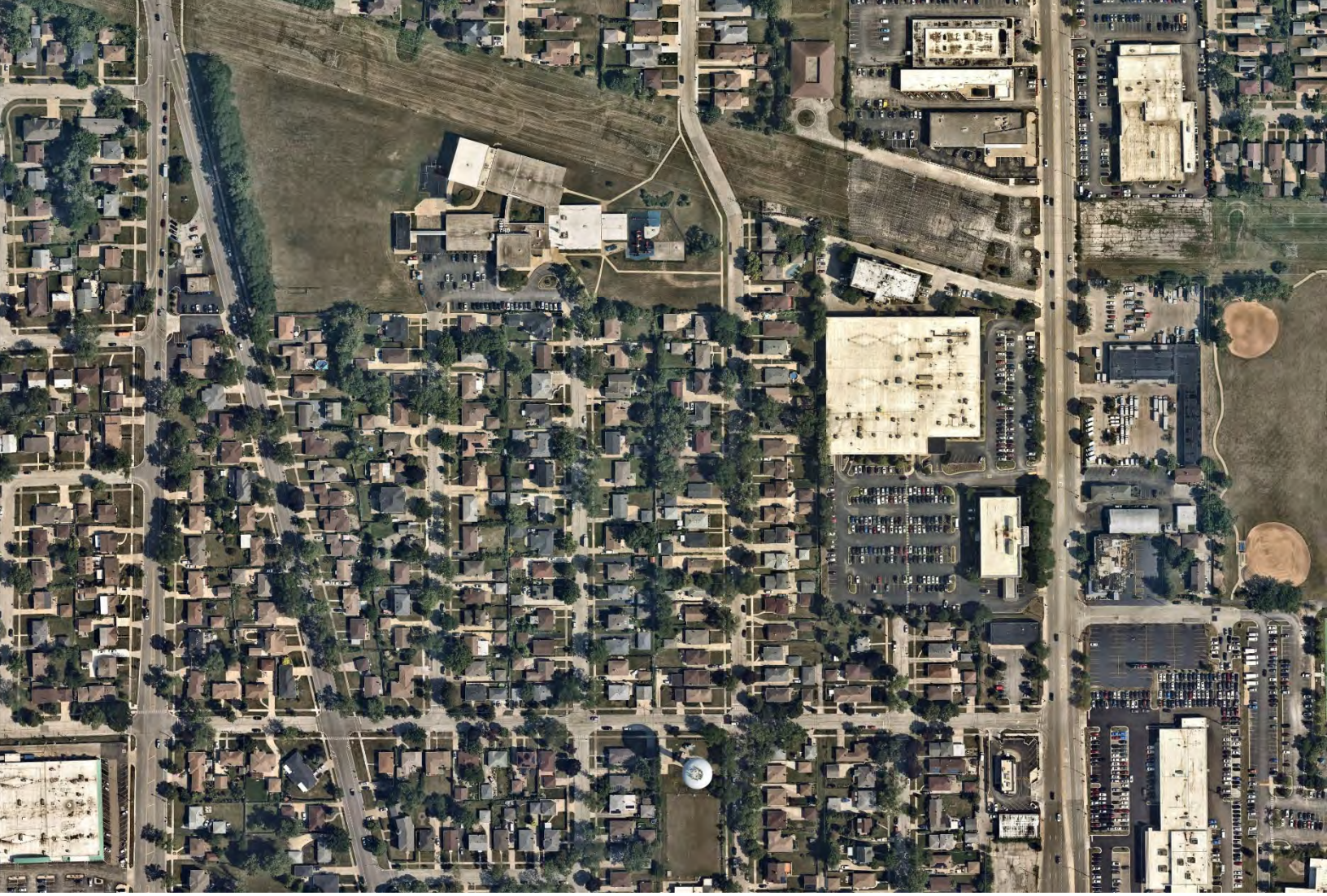



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**Pavement Core Photo Logs**
Hynes Elementary School
Parking Lot
Morton Grove, Illinois

**PROJECT NUMBER:** 25-G1033

**DATE:** September 2025



Traffic Impact & Parking Study

# Hynes Elementary School

October 7, 2025
DLA Architects, Ltd.

TYLin

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# 01.Introduction

TYLin was retained by DLA Architects, Ltd. to conduct a traffic and parking study for planned improvements at Hynes Elementary School in Morton Grove, Illinois. The school is generally located west of National Avenue and one block north of Greenwood Avenue. Access is currently provided via Marion Avenue and Belleforte Avenue, which each extend north of Greenwood Avenue and terminate at the school's surface parking lot. The Marion Avenue and Belleforte Avenue access points are referred to as West Access and East Access, respectively, for the purposes of this study. An aerial view of the study area can be seen on ***Figure 1.***

The school is in the process of planning a capital improvement project that would include a suite of renovations and upgrades. According to school officials, the proposed projects are not expected to increase student enrollment or staffing numbers and instead focus on improving the quality of experience for students and staff. The program would include upgrades to classroom and administrative spaces and a new media center.

As a part of the program and recommendations made by TYLin during the site planning process, several modifications are proposed to the on-site surface parking lot that would alter the traffic characteristics of the site, including:

- Lengthening and widening the school's existing pick-up/drop-off lane
- Reconfiguration of the east side of the lot to provide angled parking and one-way westbound travel
- Reconfiguration of bus loading/unloading space, including the relocation of all bus traffic to the Marion Avenue access
- Expansion of the parking lot to provide additional parking spaces
- Tightening of curb radii to encourage slow vehicular speeds and reduce crossing distances for pedestrians
- New sidewalk connections to school property from Marion Avenue

A concept site plan detailing these proposed changes is included in the Appendix. The following report documents TYLin's methodology regarding data collection, traffic forecasting, and analyses performed for this study. Recommended modifications are documented to mitigate anticipated traffic and parking-related impacts and to improve the functionality of school circulation and the local transportation system.




TYLin

**Figure 1**
**Study Area**

# 02. Existing Conditions

TYLin conducted a field visit to collect relevant information pertaining to the elementary school, the surrounding street network, traffic volumes, traffic controls, lane geometry, and infrastructure at the study intersections. Based on these characteristics, existing intersection and parking capacity was evaluated to establish operational conditions for the study area, as described in the following sections.

## 2.1. Area Land Use & Connectivity

Hynes Elementary School is generally located west of National Avenue one block north of Greenwood Avenue. The school is surrounded by primarily residential land uses, characterized by single family homes and neighborhood streets.

The campus provides two accesses: West Access, which connects to Marion Avenue, and East Access, which connects to Belleforte Avenue. Although the school does not have direct access to major arterials, it is situated approximately one quarter mile north of Dempster Street (US Route 14) and approximately one quarter mile east of Waukegan Road (Illinois Route 58), which offer regional east-west and north-south connectivity, respectively. The school is also located approximately 500 feet east of Harlem Avenue, which serves as District 67's western boundary.

## 2.2. Existing Street Characteristics

Field data collection was performed along the primary study roadways, including Marion Avenue, Belleforte Avenue, Greenwood Avenue, and National Avenue. All roadways are designated as Local Streets and are under the jurisdiction of the Village of Morton Grove within the study area. In addition to the posted speed limits listed below, additional signage indicating reduced 20 MPH speed limits on school days when children are present are posted on all these streets throughout the study area.

**Marion Avenue** is a two-lane, north-south street that extends north of Greenwood Avenue and terminates at the school's West Access. At its "T" intersection with Greenwood Avenue, Marion Avenue provides a single shared left/right-turn lane and operates under minor-leg stop control. A high-visibility crosswalk is provided on the north leg of the intersection. Marion Avenue has no posted speed limit apart from the school zone signage and was assumed to have a 25 MPH speed limit outside of school hours based on its residential character. Marion Avenue has an approximate edge-of-pavement to edge-of-pavement width of 30 feet and allows parallel on-street parking on both sides of the street.

**Belleforte Avenue** is a two-lane, north-south street that extends north of Greenwood Avenue and terminates at the school's East Access. At its all-way stop-controlled intersection with Greenwood Avenue, Belleforte Avenue provides a single approach lane in each direction. High-visibility crosswalks are provided on each leg of this intersection. Belleforte Avenue has no posted speed limit apart from the school zone signage and was assumed to have a 25 MPH speed limit outside of school hours based on its residential character. Belleforte Avenue has an approximate edge-of-pavement to edge-of-pavement width of 30 feet and allows parallel on-street parking on both

sides of the street.

**Greenwood Avenue** is a two-lane, east-west street that runs approximately 850 feet south of the school campus. Throughout the study area, Greenwood Avenue provides a single approach lane at each of its intersections with Marion Avenue, Belleforte Avenue, and National Avenue. Within the study area, Greenwood Avenue has a posted speed limit of 25 MPH, has an approximate edge-of-pavement to edge-of-pavement width of 30 feet, and allows parallel on-street parking on both sides of the street.

**National Avenue** is a north-south, two-lane street that runs approximately 330 feet east of Belleforte Avenue. At its all-way stop-controlled intersection with Greenwood Avenue, it provides a single approach lane in each direction. High-visibility crosswalks are provided on each leg of the intersection. National Avenue has a posted speed limit of 25 MPH, has an approximate edge-of-pavement to edge-of-pavement width of 30 feet, and allows parallel on-street parking on both sides of the street.

## 2.3. Arrival/Dismissal Observations

As a part of the field visit, observations were performed on Tuesday, August 26, 2025, during arrival and dismissal periods with a typical bell schedule at the elementary school. Conditions on the observation date were clear and dry. A summary of arrival and dismissal period activity is shown in ***Figure 2***.

**Arrival Period**

Arrival observations began at approximately 8:00AM, leading up to the school's scheduled start time of 8:30AM. During observations, student drop-offs were seen as early as 8:15AM, when the school's doors were opened. Most drop-offs occurred in the circular drive directly south of the school's main entrance. Cones were placed parallel to and along the circular drive to create a single drive lane immediately adjacent to the curb, therefore preventing vehicles at the back of the line from bypassing vehicles still unloading. The east-west drive aisle south of the circular drive was coned off at the east end during arrival peak, forcing all vehicles to exit to the west on Marion Avenue. A maximum of three to four vehicles were observed in the drop-off area at one time, and the queue was never observed to extend out onto Belleforte Avenue. Drop-offs were completed by 8:30AM.



*Student and Parent/Guardian Navigate Parking Lot (Arrival Peak)*

A portion of drop-offs were observed to occur with parents/guardians parking their vehicles, exiting, and walking their students to the door. Parking locations included empty spaces in the school parking lot, on-street spaces on Marion Avenue to the west, and on-street spaces on National Avenue to the east. Students traveled on foot to the main entrance either through the parking lot or using the existing sidewalk connection to National Avenue. It should be noted that sidewalk on Marion Avenue does not currently extend into the site, and that the parking lot does not currently provide any marked crosswalks apart from across Belleforte Avenue at the east end of the property.

Bus drop-offs were observed to occur simultaneously with personal vehicle drop-offs in the western portion of the school's parking lot. Inbound buses arrived via Belleforte Avenue and were directed to bypass the circular drive by a traffic attendant who removed cones accordingly. After unloading, buses departed via Marion Avenue. A total of four buses were observed, all arriving between 8:15-8:30AM.

**Dismissal Period**

Afternoon observations began at approximately 2:15PM. In the afternoon, Hynes Elementary School typically dismisses class at 2:55PM according to the school website. During observations, students were observed leaving the school building as early as 2:50PM. Unlike in the morning peak, no cones were set up in the east-west drive aisle near the East Access, allowing for some outbound traffic to Belleforte Avenue. Cones in the circular drive were maintained, allowing for single-file pick-up without a bypass lane. Several school staff were observed assisting with loading in the circular drive, matching students with vehicles and instructing vehicles to move up in the queue as far as possible.

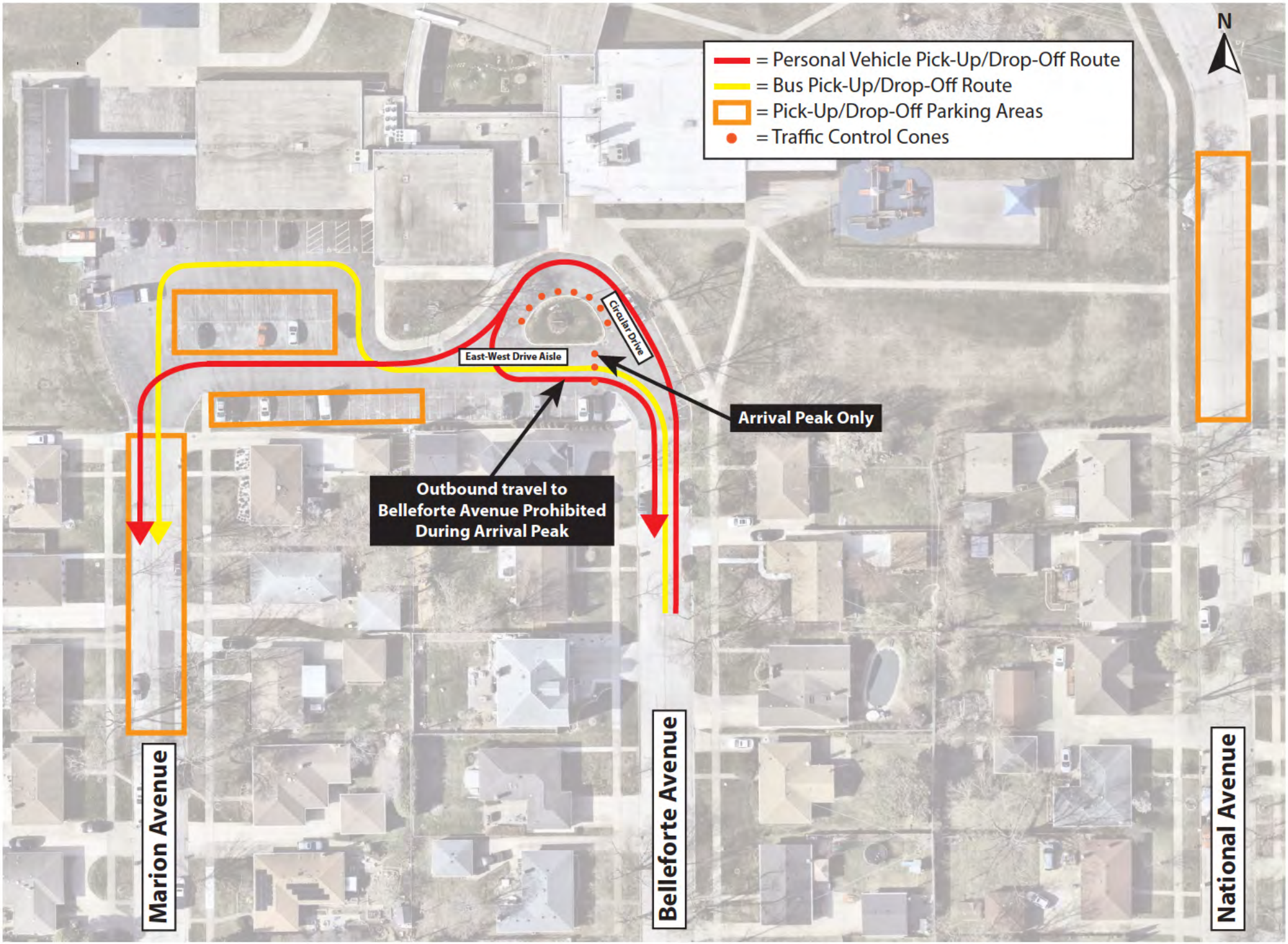


*Queuing & Narrow Travel Width on Belleforte Avenue*

At 2:30PM, four personal vehicles were observed queued in the circular drive waiting for dismissal. The circular drive was observed to have a maximum queuing capacity of roughly six vehicles, with room for an additional two to three vehicles in the parking lot before extending onto Belleforte Avenue. Queued vehicles began in the circular drive and extended to the south on Belleforte Avenue. At its longest, this queue was observed to extend to a point approximately 250 feet north of Greenwood Avenue. As noted previously, Belleforte Avenue provides an approximate width of 30 feet. As such, during times when the queue extended onto Belleforte Avenue (approximately 2:50-3:05PM), two-way navigation of Belleforte Avenue was feasible but difficult where on-street parking was utilized on both sides of the street. The pick-up queue was observed to dissipate at approximately 3:05PM, approximately 15 minutes after dismissal.

As in the arrival peak period, some parents/guardians were observed to park their vehicles and pick up students on foot before returning to their vehicles. Parked vehicles were observed in the school's parking lot, on Marion Avenue, and on National Avenue.

Buses were observed to arrive at the school as early as 2:20PM, but initially queued on-street along the curb lane on Belleforte Avenue. At 2:40PM, all four buses entered the site and queued in the western portion of the parking lot waiting for dismissal. At this time, the circular drive queue had not yet extended to Belleforte Avenue, allowing buses to travel in the northbound lane. Buses were loaded immediately following dismissal and departed the lot between 2:55-3:00PM.




TYLin

**Figure 2**
**Existing Circulation Diagram**

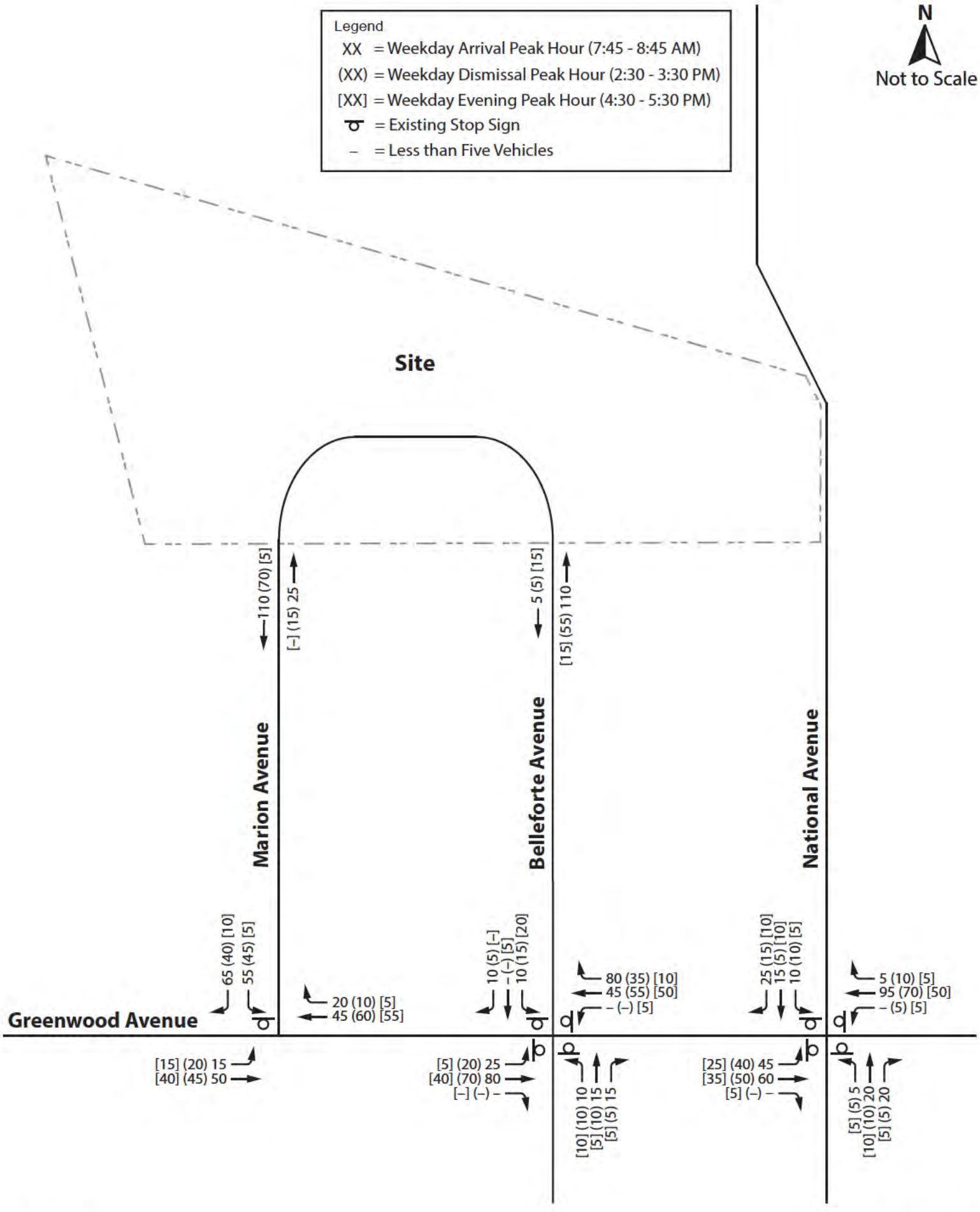
## 2.4. EXISTING TRAFFIC VOLUMES

TYLin conducted intersection turning movement counts (TMCs) in August 2025 at the following locations in order to identify existing volumes:

- Greenwood Avenue & Marion Avenue
- Greenwood Avenue & Belleforte Avenue
- Greenwood Avenue & National Avenue

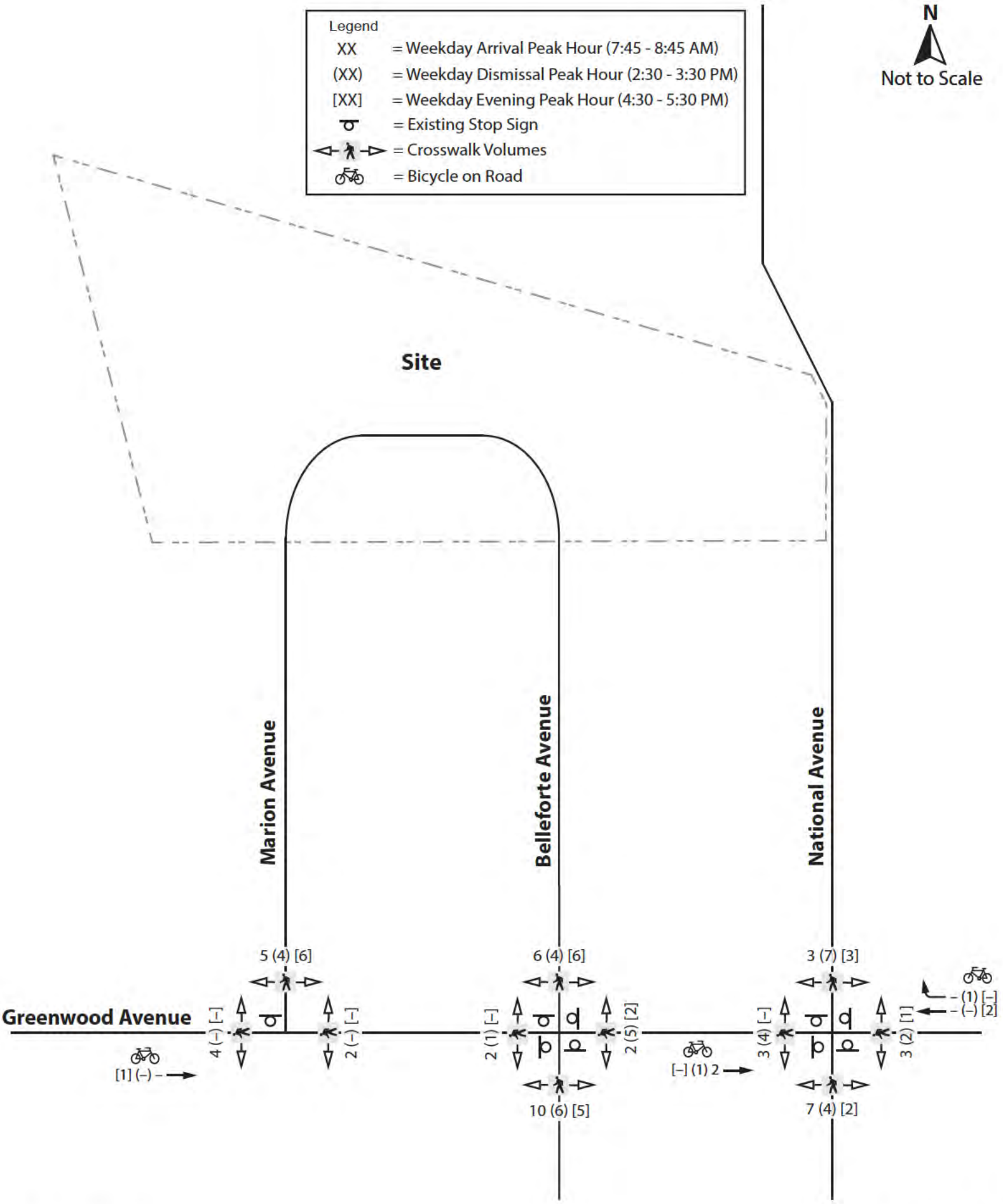
Bidirectional driveway counts were also performed at the school's West Access and East Access. All counts were performed during Tuesday weekday morning and afternoon periods (7:00-9:00AM and 2:00-6:00PM) to coincide with the peak activity of the school and on the area roadway network. Based on the resulting count data, peak hours occurred from 7:45-8:45AM during the morning arrival period, from 2:30-3:30PM during the afternoon dismissal period, and from 4:30-5:30PM during the evening peak period, respectively.

The resulting traffic volumes were summarized and balanced where applicable throughout the study area for each of the peak hours, establishing an Existing Year 2025 volume network. The resulting traffic volumes at each intersection during the morning, midday, and evening peak hours are illustrated on ***Figure 3***. Bicycle and pedestrian counts at the subject intersections are shown on ***Figure 4***. Summaries of the raw counts are contained in the Appendix.




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**Figure 3**
**Existing (Year 2025) Traffic Volumes**




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**Figure 4**
**Existing (Year 2025) Bicycle & Pedestrian Volumes**

## 2.5. Existing Intersection Operations

The operational effectiveness of transportation facilities is measured in terms of Level of Service (LOS). LOS ranges from LOS A to LOS F, with LOS A reflecting the lowest level of vehicular delay and LOS F being the highest. LOS A represents free-flow conditions where motorists experience a high level of comfort and convenience. LOS E represents saturated or at-capacity conditions, and LOS F represents oversaturated conditions.

For unsignalized intersections, total delay is defined as the total elapsed time from the moment a vehicle stops at the back of the queue until the vehicle departs from the stop bar on the stop-sign controlled approach. This includes the time required for the vehicle to travel from the last-in-queue to the first-in-queue position.

Capacity analysis was performed to analyze the study intersections for the weekday peak hours using Synchro 12 capacity analysis software. The Highway Capacity Manual, 7th Edition report was used to evaluate intersection capacity at all study intersections. Based on this analysis, all three study intersections currently operate with low levels of delay, with the vast majority of approaches operating at LOS A, and no approach operating at worse than LOS B. A more detailed summary of LOS criteria, results, and the accompanying Synchro worksheets are included in the Appendix.

## 2.6. Existing Parking Conditions

Hynes Elementary School is served by an on-campus surface parking lot located on the south side of the school building. The Lot has a total of 55 parking spaces provided, including 2 ADA spaces and 53 standard spaces. General spaces were not marked and were observed to be utilized by both staff and visitors. Additional on-street parking supply is provided on the nearby streets of Marion Avenue, Belleforte Avenue, and National Avenue, which allow parallel on-street parking on both sides of the street.

Parking occupancy counts were conducted in the school's parking lot, on Marion Avenue, and on Belleforte Avenue on the same Tuesday as the observations and data collection described in the preceding sections. Counts were performed at approximately 8:00AM (pre-arrival), 8:45AM (post-arrival), 2:30PM (pre-dismissal), and 3:15PM (post-dismissal). A tabular summary of each area's parking capacity and demand is shown below in ***Table 1***.

**Table 1. Existing Parking Utilization**

| Location | Parking | | AM Hours | | PM Hours | |
|---|---|---|---|---|---|---|
| | Type | Supply | Pre-Arrival | Post-Arrival | Pre-Dismissal | Post-Dismissal |
| School Lot | General | 53 | 28 | 34 | 38 | 28 |
| | ADA | 2 | 0 | 0 | 0 | 0 |
| | *Total* | *55* | *28* | *34* | *38* | *28* |
| | *Percent Occupancy* | | *51%* | *62%* | *69%* | *51%* |
| Marion Avenue | West | 27 | 7 | 8 | 6 | 6 |
| | East | 26 | 5 | 7 | 8 | 8 |
| | *Subtotal** | *53* | *12* | *15* | *14* | *14* |
| Belleforte Avenue | West | 21 | 4 | 3 | 5 | 10 |
| | East | 30 | 8 | 6 | 8 | 7 |
| | *Subtotal** | *51* | *12* | *9* | *13* | *17* |
| *On-Street Total* | | *104* | *24* | *24* | *27* | *31* |
| *On-Street Percent Occupancy* | | | *23%* | *23%* | *26%* | *30%* |

*On-street parking supply totals estimated based on available curb space

As shown, the on-site parking lot reached a peak occupancy of 38 cars (69%) during the pre-dismissal period, with 17 empty spaces available. This figure is based on a count performed well in advance of the dismissal bell and is therefore representative of peak staff parking demand excluding additional pick-up demand. As shown, additional parking supply within the surface parking lot and on nearby streets is currently available for parents/guardians who wish to park during pick-up/drop-off activity.

# 03. Future Conditions

In order to evaluate future area traffic operations after the completion of the proposed school improvements, traffic volumes were forecasted for a horizon year after the completion of the proposed project. With the understanding that the proposed school expansion is not expected to include an increase in enrollment, future traffic forecasting was based on the redistribution of existing school trips as a result of parking lot reconfigurations and the resulting changes to circulation. Based on the resulting projections, capacity analyses were prepared to evaluate future operational conditions. The findings and resulting recommendations are discussed in this section of the report.

## 3.1. Site Development Plan

Under the proposed capital improvement plan, Hynes Elementary School would undergo a suite of upgrades focused on building renovations and the reconfiguration of the on-site parking lot. The proposed projects are not expected to increase enrollment or staffing at the school and instead focus on improving the quality of experience for students and staff. As a part of the program and recommendations made by TYLin during the site planning process, several modifications are proposed that would alter the traffic characteristics of the site. A concept site plan showing the proposed reconfigurations is included in the Appendix.

**Circulation Modifications**

As shown previously on Figure 2 in Section 2.3. (Arrival/Dismissal Observations), the existing surface parking lot is generally utilized as one-way westbound, with vehicles entering via Belleforte Avenue and exiting via Marion Avenue. However, the east-west drive aisle through the lot does allow two-way traffic, and therefore allows entry via Marion Avenue and exit via Belleforte Avenue. As noted previously, outbound movements to Belleforte Avenue are prohibited via cones during the morning arrival period.

As a part of the proposed changes, the eastern portion of the east-west drive aisle would be narrowed and converted to one-way westbound travel. The circular drive would be reconfigured to provide additional queuing space (room for approximately eight vehicles within the drive itself) and be widened to allow vehicles to bypass staging vehicles. As such, the East Access connecting to Belleforte Avenue would become one-way inbound only. This conversion would be expected to improve off-site operations on Belleforte Avenue by reducing congestion during school arrival and dismissal periods. The reduction in two-way traffic would be particularly relevant given the narrow width of Belleforte Avenue.

Lastly, the western portion of the site would be reconfigured to allow buses to enter via Marion Avenue, circulate, and exit again via Marion Avenue. This western portion of the parking lot would still allow two-way personal vehicle travel in order to access the site's perpendicular parking.

**Parking Modifications**

As noted in Section 2.6. (Existing Parking Conditions), the Hynes Elementary School surface parking lot currently provides 55 spaces, including two accessible spaces. These spaces are primarily clustered near the west end of the lot south of the building. A row of perpendicular parking is also currently provided along the lot's southern boundary between the West Access and East Access.

Based on the concept site plan, the existing surface parking lot would be reconfigured to increase the number of spaces to 65 total, including 3 ADA spaces. This total would include 24 angled parking spaces near the east end of the site, 14 spaces in a new parking section immediately west of the school building, and 27 perpendicular spaces in the western portion of the lot.

**Pedestrian Modifications**

As a part of the proposed modifications, several new marked crosswalks would be installed in the school parking lot. High-visibility crosswalk locations would be installed at the West Access across Marion Avenue, in the middle of the parking lot across the east-west drive aisle, and across the circular drive near the school's main access. At the internal crosswalk across the east-west drive aisle and at the existing crosswalk at the East Access, curb extensions are planned to be implemented to encourage slow driving speeds and reduce pedestrian crossing distances. These crosswalk installations would be expected to increase pedestrian comfort but would likely not alter pedestrian routing decisions.

Additionally, new sidewalk would be constructed extending north of the existing sidewalk on either side of Marion Avenue. The new sidewalk extensions would provide pedestrian access to the site from the west, and would connect to the proposed crosswalks across the West Access and across the east-west drive aisle, creating formal locations for pedestrians to traverse the parking lot.

## 3.2. Future Parking Utilization

As noted in the preceding section, the school's on-site parking lot is expected to be expanded to include a total of 65 spaces, including 3 ADA spaces. Based on the assumption that no student body or staff growth is anticipated, this future total would be expected to be sufficient given the existing peak demand of 38 vehicles, which would represent a future peak occupancy of approximately 58 percent. This level of occupancy would be expected to allow for additional student body or staff growth in the future or support additional parking demand during school events.

Approximately 14 of the newly constructed spaces would be located north of the proposed bus loading/unloading area in the western portion of the lot. To minimize the number of parking spaces temporarily blocked by bus staging, , this area should be signed as "Staff Only". As staff were not observed entering/leaving the parking lot at the same time as buses, blocking conflicts would be expected to be minimal.

## 3.3. Future Vehicle Staging & Circulation

Based on proposed modifications to the parking lot detailed in Section 3.1. (Site Development Plan), changes to vehicle circulation are detailed below. A map of proposed site circulation is shown on ***Figure 5***.

**Bus Redistribution**

Currently, buses enter the site via Belleforte Avenue, load and unload in the western portion of the parking lot, and exit via Marion Avenue. After completion of the proposed project, buses are expected to enter the site via Marion Avenue to minimize interaction with personal vehicles entering via Belleforte Avenue. Buses would continue to load and unload in roughly the same space as today and continue to exit via Marion Avenue.

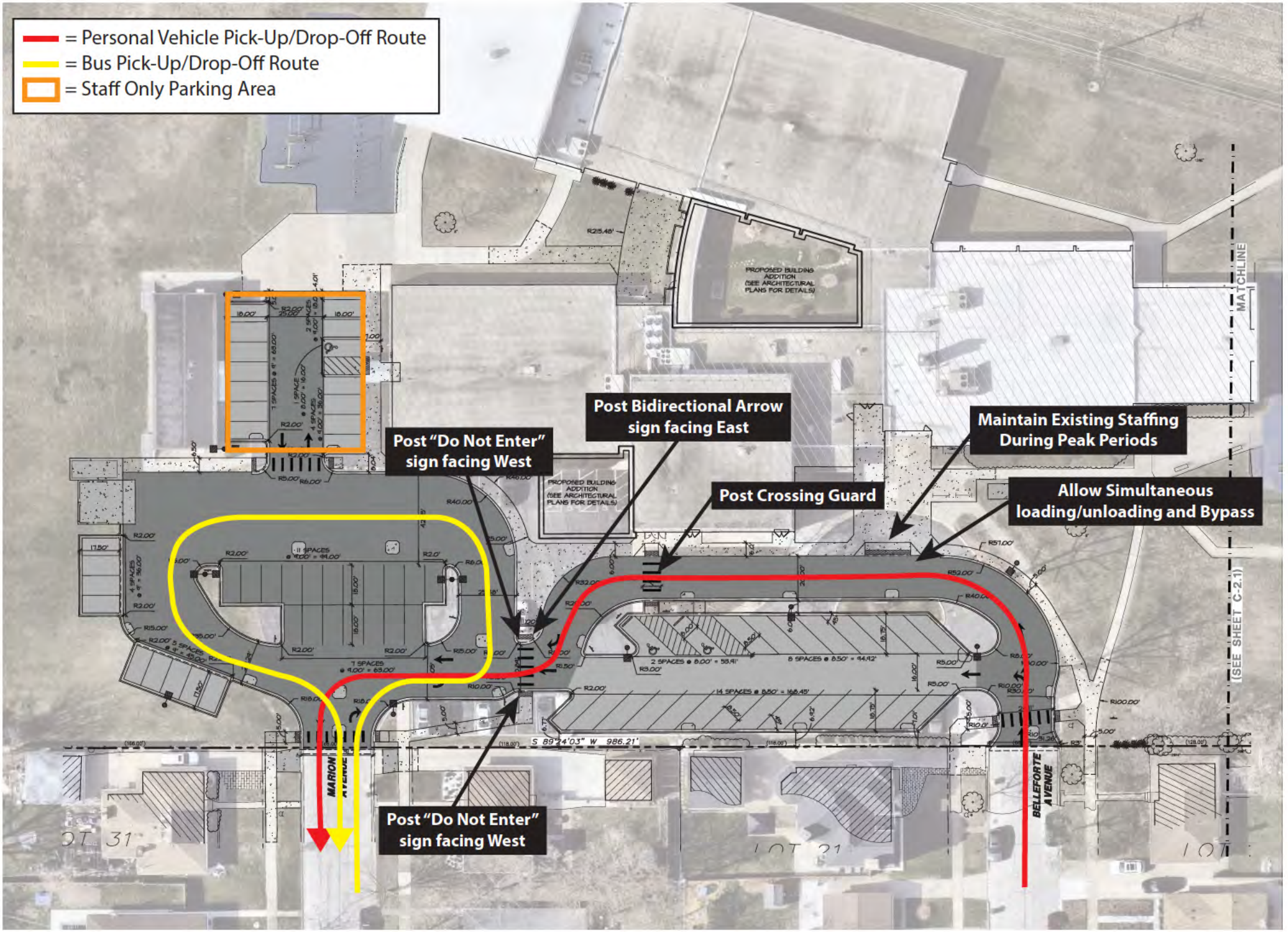
**Personal Vehicle Redistribution**

Under future conditions, personal vehicles would be prohibited from exiting to Belleforte Avenue due to the one-way orientation of the drive aisle and circular drive. All exiting traffic is assumed to utilize Marion Avenue in the future. As such, pick-up/drop-off circulation would be expected to remain similar to today, except without vehicles departing via Belleforte Avenue.

It should be noted that today, every parking space within the lot can be accessed regardless of entrance point. Under future conditions, angled parking would only be accessed via Belleforte Avenue. Given the projected availability of parking within the lot, this is not expected to appreciably alter arrival patterns.

To reinforce the one-way drive aisle and alert drivers to changes in directionality, additional signage should be placed within the parking lot. Signage should include two "Do Not Enter" (Manual on Uniform Traffic Control Devices [MUTCD] R5-1) signs facing west at the west end of the one-way drive aisle and a bidirectional arrow sign (MUTCD W6-3) facing east in the same location.






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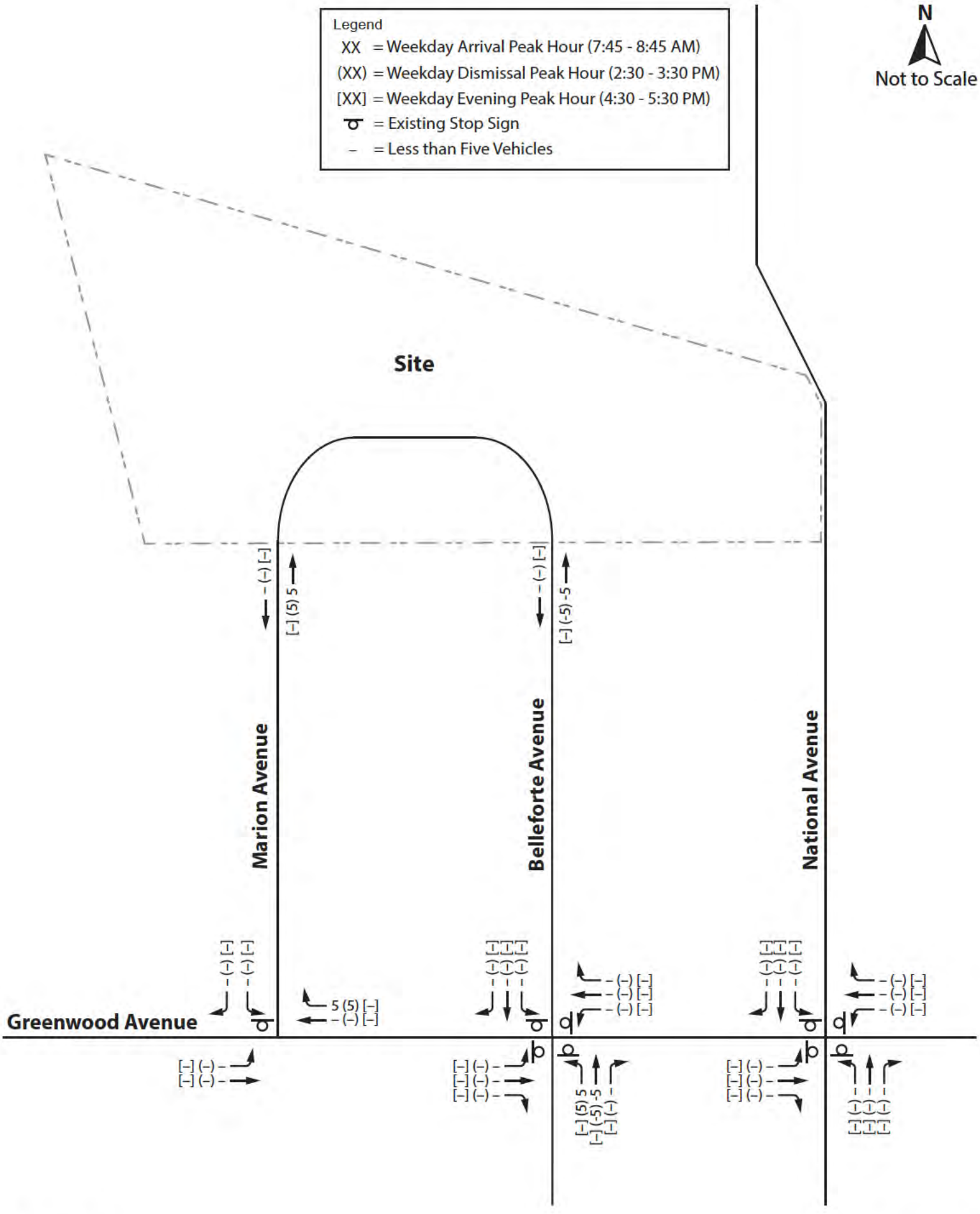
**Figure 5**

**Proposed Circulation and Recommendations Diagram**

## 3.4. Future Traffic Projections

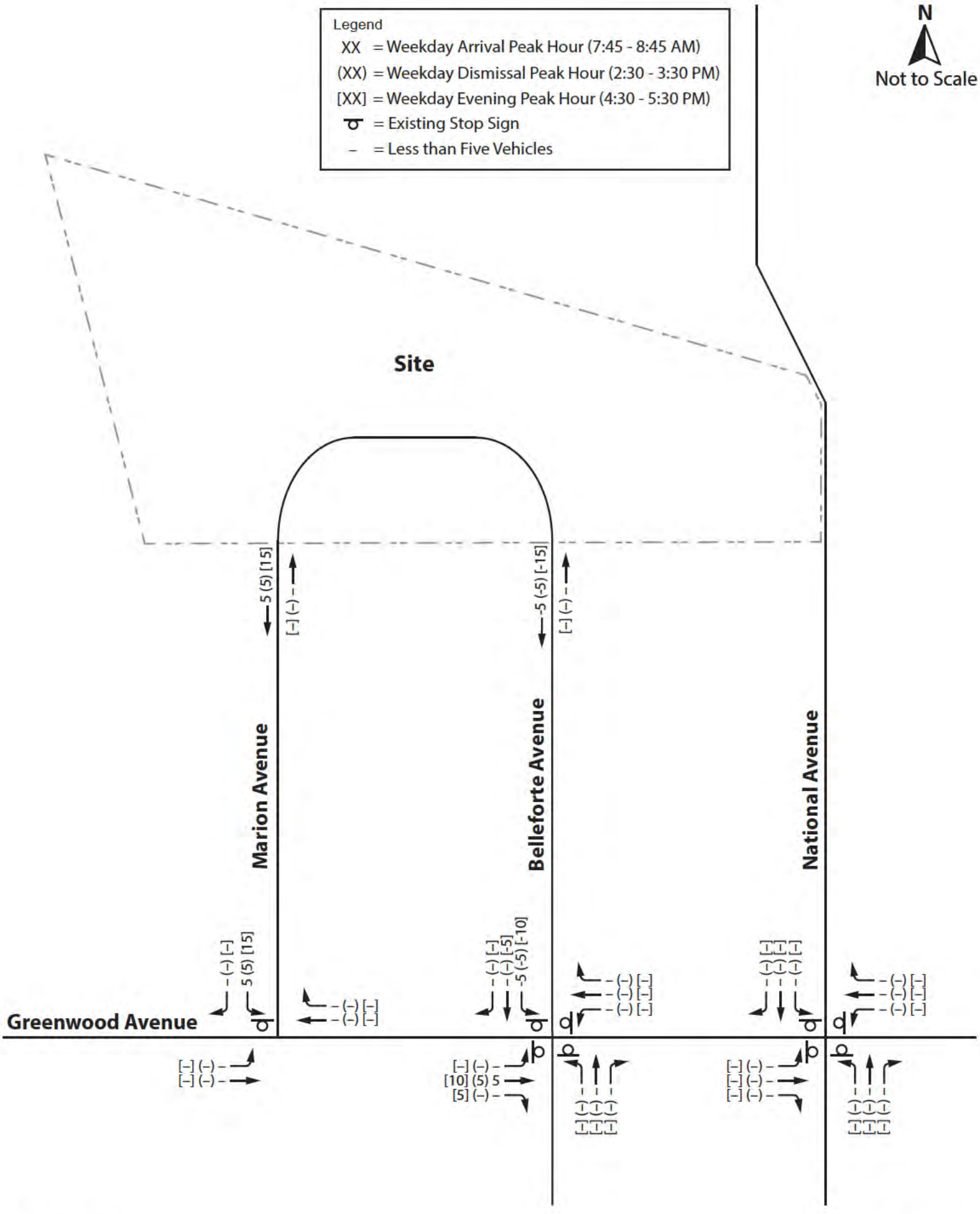
Based on the routing assumptions detailed in the preceding section, TYLin redistributed existing bus and personal vehicle traffic during the three assessed peak hours. Given the expectation that no student or staff growth is expected as a part of the proposed project, traffic volumes were not increased. Bus and personal vehicle redistributions are detailed in ***Figure 6*** and ***Figure 7***, respectively. It should be noted that while only four buses were observed on-site, the redistribution rounded up to five buses, given that all other site traffic figures are rounded to the nearest multiple of five.

Based on the limited connectivity and residential nature of the study area streets, no background traffic growth was added during the studied peak hours. To estimate total future traffic volumes at the study intersections, the redistributions detailed in Figure 6 and Figure 7 were added to existing volumes, yielding the Future volumes summarized on ***Figure 8***.



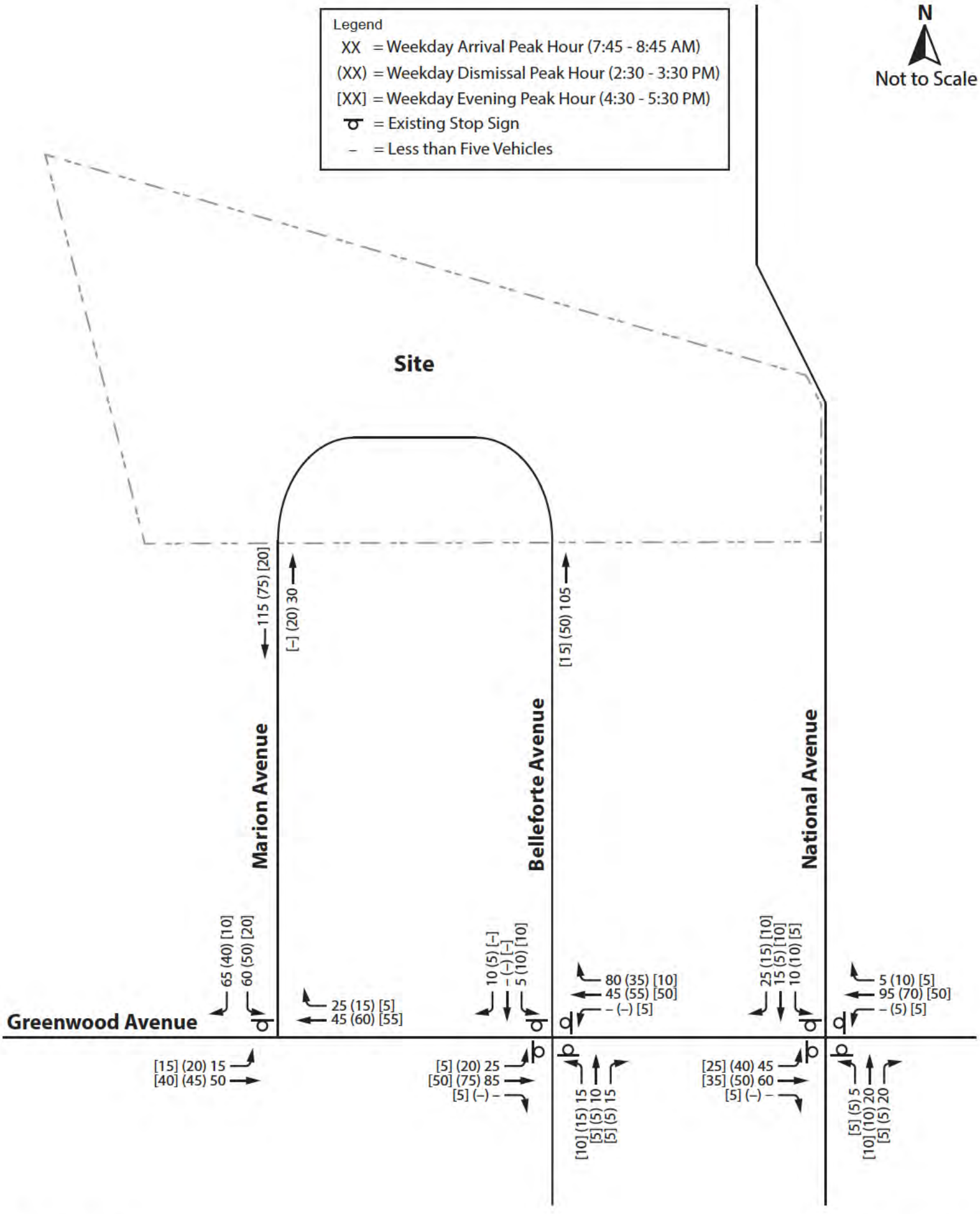

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**Figure 6**
**Bus Traffic Redistribution**




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**Figure 7**
**Personal Vehicle Redistribution**




TYLin

**Figure 8**
**Future Traffic Projections**

## 3.5. Future Traffic Operations

**Intersection Operations**

To assess the impact of the proposed school modifications on the traffic operations within the study area, capacity analyses were performed for future conditions. No modifications to the study intersections on Greenwood Avenue are anticipated as a result of the proposed project. Based on the above assumptions, intersection operations at the study intersections are expected to remain very similar to existing conditions, with no intersection approach operating at worse than LOS B. A more detailed summary of Level of Service results and the accompanying Synchro worksheets are included in the Appendix.

**Pick-Up/Drop-Off Operations**

As noted previously, pick-up/drop-off circulation for personal vehicles would not be expected to differ substantially from existing conditions, with most vehicles entering via Belleforte Avenue and exiting via Marion Avenue. With the conversion of the east-west drive aisle to one-way westbound, no outbound traffic would be permitted to Belleforte Avenue (which is permitted during all times outside of the arrival peak today). The proposed site plan also includes a circular drive aisle wide enough to accommodate bypassing, which would allow upstream vehicles to exit around still loading/unloading vehicles. This differs from the current circular drive, which is coned to allow only single-file travel. This operational change would be expected to decrease the amount of time required for dismissal peak, and therefore decrease the number of queued vehicles extending onto Belleforte Avenue.

However, the introduction of a bypass lane introduces the potential for multi-threat crashes. A multi-threat crash refers to a situation when a crosswalk crosses two lanes of vehicle travel, where a parked vehicle in the near lane can block a driver's view of a pedestrian from the far lane. To mitigate this potential, a crossing guard should be posted at the high-visibility crosswalk during the entirety of the arrival and dismissal periods directing pedestrians to cross at that location and stopping vehicular traffic to facilitate crossings. While it is anticipated that the parking spaces immediately south of this crosswalk would primarily be utilized by staff (as they are today), parents/guardians should also be encouraged to utilize the designated pick-up/drop-off area through advanced communication to minimize the number of crossings during peak periods. The school should also maintain staff assisting with pick-up/drop-off activity as they do today, encouraging efficient use of curb space and matching students with parents/guardians.

# 04. Recommendations & Conclusions

Based on the analyses detailed in this report, the proposed school renovations and upgrades and associated impacts to circulation and parking are expected to have minimal impact on area traffic operations. Additionally, the school's proposed parking supply is expected to accommodate existing demand with room for additional potential growth.

Several modifications already included in the site plan are expected to improve area circulation and pedestrian accessibility. The conversion of the East Access to entrance-only would be expected to decrease congestion on Belleforte Avenue, which can be difficult to navigate in two directions when vehicles are parked on both sides of the street. The addition of connective sidewalk from Marion Avenue, the provision of additional high-visibility crosswalks on site, and the tightening of curb radii would all be expected to contribute towards safer and more comfortable pedestrian experiences near the school.

The following recommendations were identified to facilitate efficient and safe operations within the site and at nearby intersections for vehicles and pedestrians.

- The portion of the parking lot located north of the bus staging area should be signed as "Staff Only" to minimize conflicts with bus loading/unloading.
- Within the parking lot, post signage to warn drivers of changes in travel direction, including:
  - Two "Do Not Enter" signs at the west end of the one-way drive aisle facing west.
  - Bidirectional arrow signage at the west end of the one-way drive aisle facing east.
- During arrival and dismissal periods:
  - Post a crossing guard at the pedestrian crossing across the pick-up/drop-off circular drive. The crossing guard should encourage crossings to occur at that location and stop bypassing vehicles as necessary to support safe passage of pedestrians.
  - Maintain the existing staff support currently used today during arrival/dismissal periods to encourage efficient use of curb space and matching students with queued vehicles.

As with many school sites, some delay and vehicle queuing is expected due to the condensed nature of school-related traffic patterns. However, with these modifications in place, this period is expected to decrease in length relative to existing conditions and reduce vehicular queuing onto Belleforte Avenue.

# Appendix

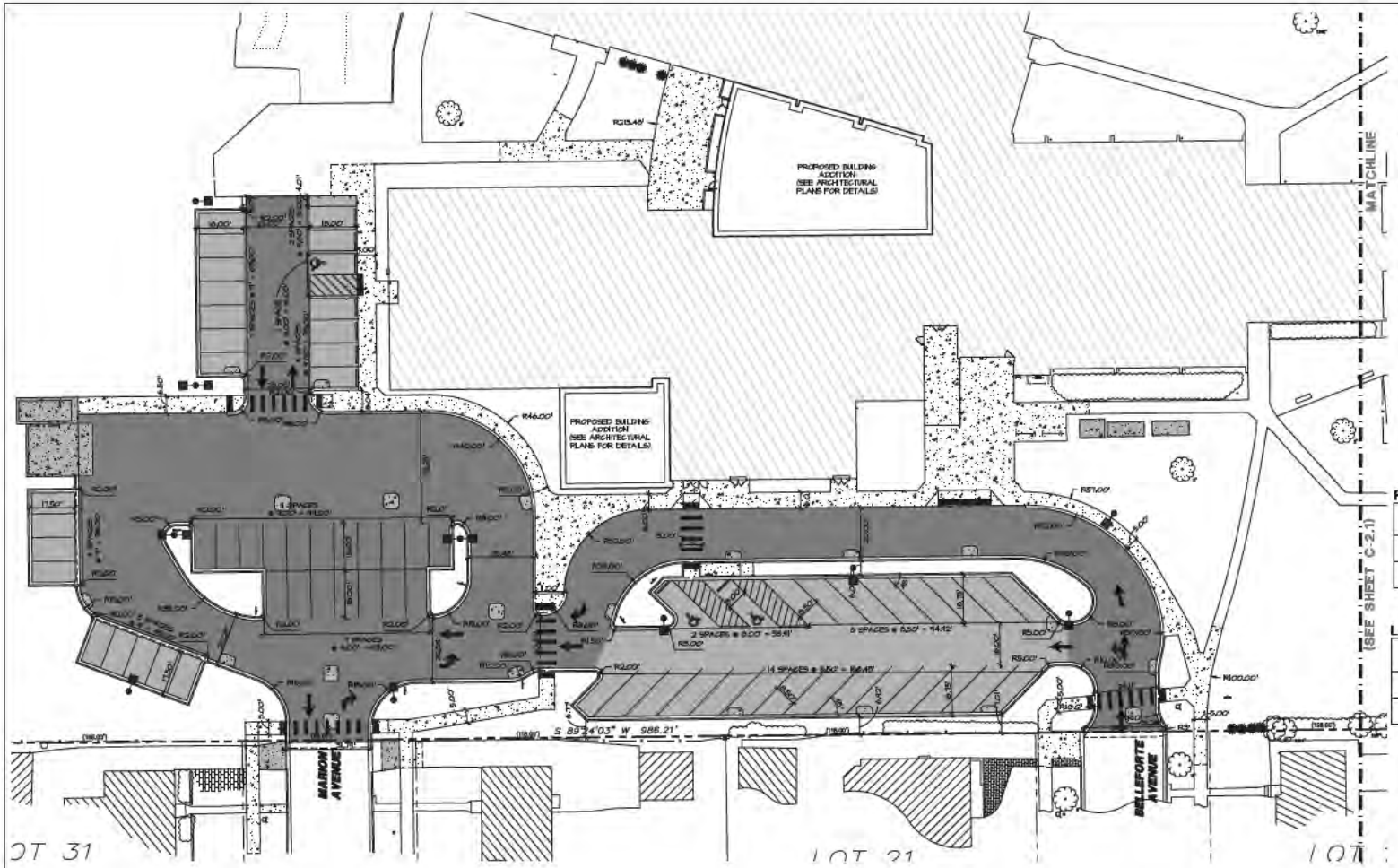
CONCEPT SITE PLAN

LEVEL OF SERVICE TABLES

CAPACITY ANALYSIS RESULTS

RAW TRAFFIC DATA

# CONCEPT SITE PLAN




## SITE GEOMETRIC NOTES:

A. EXISTING CONDITIONS AND TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS PER THE BOUNDARY AND TOPOGRAPHIC SURVEY LAST DATED 08-25-25, PREPARED BY THE MT GROUP, LLC. CONTRACTOR SHALL FIELD VERIFY EXISTING ELEVATIONS AND CONDITIONS (INCLUDING BUT NOT LIMITED TO VERIFICATION OF CONTROL AND ALL UTILITIES WHETHER DEPICTED OR NOT) PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
B. ALL DIMENSIONS SHOWN ARE MEASURED FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT OR FACE OF CURB UNLESS OTHERWISE NOTED.
C. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE ARCHITECTURAL PLANS.
D. SEE THE ARCHITECTURAL PLANS FOR THE DESIGN OF ALL BUILDING ENTRIES.
E. CONSTRUCTION SURVEY AND STAKEOUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
F. CONTRACTOR SHALL HIRE A PRIVATE UTILITY LOCATOR TO LOCATE UTILITIES PRIOR TO CONSTRUCTION AND SHALL CONTACT THE SITE ENGINEER IF A CONFLICT EXISTS.
G. CONTRACTOR SHALL CONTACT J.U.L.I.E. (811 OR 1-800-892-0123) AND PRIVATE LOCATING SERVICE TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO STARTING ANY DEMOLITION AND/OR EXCAVATION. EXACT LOCATIONS OF ANY EXISTING ELECTRIC, GAS, TELEPHONE, ETC. LINES ARE UNKNOWN.
H. ASPHALT PAVEMENT MARKINGS SHALL BE MADE WITH HIGH QUALITY PAINT CONFORMING TO ARTICLE 1095.02 OF THE IDOT STANDARD SPECIFICATIONS.
I. ALL PAINTED CURB ON SITE TO BE REPAINTED FOLLOWING RESURFACING OF THE PARKING LOT. MATCH EXISTING COLOR. REPAINT WITH HIGH QUALITY PAINT.
J. THIS LAYOUT IS PARALLEL TO THE (DIRECTION) PROPERTY LINE (BEARING)

## HATCH LEGEND

- NEW FULL DEPTH ASPHALT PAVEMENT
- NEW HEAVY DUTY ASPHALT PAVEMENT
- NEW CONCRETE SIDEWALK
- NEW HEAVY DUTY CONCRETE PAVEMENT

## PARKING MATRIX

| | ADA | STANDARD | TOTAL |
|---|---|---|---|
| PROPOSED | 3 | 62 | 65 |
| EXISTING | 2 | 53 | 55 |

## LANDSCAPE AREA (%)

| | IMPERVIOUS AREA | INTERIOR LANDSCAPE |
|---|---|---|
| PROPOSED | x | x |
| REQUIRED | x | x |

NORTH

1" = 20'

0 10 20 40 80

W-T JOB NUMBER-C2500035

WT Group

WT GROUP

Engineering with Precision, Place & Passion

DLA

form follows learning

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MORTON GROVE, IL 60053

67

DATE | MARK

SIGNS DO NOT FOR CONSTRUCTION

PROJECT No. 2025008

DATE AUGUST 28, 2025

SHEET TITLE: SITE GEOMETRIC PLAN

SHEET: C-2.0

# LEVEL OF SERVICE TABLES

The LOS thresholds for unsignalized intersections, as defined in the Highway Capacity Manual, Seventh Edition (HCM), are provided in ***Table A1.***

**Table A1. LOS Criteria for Unsignalized Intersections**

| Level of Service (LOS)[1] | Average Delay |
|---|---|
| A | ≤ 10.0 seconds |
| B | > 10.0 and ≤ 15.0 seconds |
| C | > 15.0 and ≤ 25.0 seconds |
| D | > 25.0 and ≤ 35.0 seconds |
| E | > 35.0 and ≤ 50.0 seconds |
| F | > 50.0 seconds |

Transportation Research Board. Highway Capacity Manual, Seventh Edition.
[1]LOS grades assume volume-to-capacity (v/c) ratio <1; LOS F is triggered when v/c ≥1

**Table A2. Existing (Year 2025) Levels of Service**

| Intersection | Morning Peak | | Midday Peak | | Evening Peak | |
|---|---|---|---|---|---|---|
| | Delay (s/veh) | LOS | Delay (s/veh) | LOS | Delay (s/veh) | LOS |
| **Greenwood Avenue & Marion Avenue[1]** | | | | | | |
| Southbound | 11.1 | B | 9.9 | A | 9.1 | A |
| Eastbound(Left) | 7.5 | A | 7.5 | A | 7.6 | A |
| **Greenwood Avenue & Belleforte Avenue[2]** | | | | | | |
| Eastbound | 8.9 | A | 7.7 | A | 7.4 | A |
| Westbound | 8.3 | A | 7.4 | A | 7.4 | A |
| Northbound | 8.2 | A | 7.5 | A | 7.3 | A |
| Southbound | 8.0 | A | 7.5 | A | 7.5 | A |
| *Intersection* | *8.5* | *A* | *7.5* | *A* | *7.4* | *A* |
| **Greenwood Avenue & National Avenue[2]** | | | | | | |
| Eastbound | 8.9 | A | 8.0 | A | 7.6 | A |
| Westbound | 8.6 | A | 7.7 | A | 7.4 | A |
| Northbound | 8.0 | A | 7.5 | A | 7.2 | A |
| Southbound | 8.3 | A | 7.4 | A | 7.2 | A |
| *Intersection* | *8.6* | *A* | *7.8* | *A* | *7.4* | *A* |

[1]Minor-Leg Stop Controlled Intersection
[2]All-Way Stop-Controlled Intersection

**Table A3. Future Build Levels of Service**

| Intersection | Morning Peak | | Midday Peak | | Evening Peak | |
|---|---|---|---|---|---|---|
| | Delay (s/veh) | LOS | Delay (s/veh) | LOS | Delay (s/veh) | LOS |
| **Greenwood Avenue & Marion Avenue[1]** | | | | | | |
| Southbound | 11.3 | B | 10.0 | A | 9.3 | A |
| Eastbound (Left) | 7.6 | A | 7.5 | A | 7.6 | A |
| **Greenwood Avenue & Belleforte Avenue[2]** | | | | | | |
| Eastbound | 8.8 | A | 7.8 | A | 7.4 | A |
| Westbound | 8.3 | A | 7.4 | A | 7.3 | A |
| Northbound | 8.3 | A | 8.0 | A | 7.3 | A |
| Southbound | 7.8 | A | 7.4 | A | 7.4 | A |
| *Intersection* | *8.5* | *A* | *7.6* | *A* | *7.3* | *A* |
| **Greenwood Avenue & National Avenue[2]** | | | | | | |
| Eastbound | 8.9 | A | 8.0 | A | 7.6 | A |
| Westbound | 8.6 | A | 7.7 | A | 7.4 | A |
| Northbound | 8.0 | A | 7.5 | A | 7.2 | A |
| Southbound | 8.3 | A | 7.4 | A | 7.2 | A |
| *Intersection* | *8.6* | *A* | *7.8* | *A* | *7.4* | *A* |

[1]Minor-Leg Stop Controlled Intersection
[2]All-Way Stop-Controlled Intersection

# CAPACITY ANALYSIS RESULTS

| Intersection | |
|---|---|
| Int Delay, s/veh | 5.8 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 15 | 50 | 45 | 20 | 55 | 65 |
| Future Vol, veh/h | 15 | 50 | 45 | 20 | 55 | 65 |
| Conflicting Peds, #/hr | 5 | 0 | 0 | 5 | 2 | 4 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 54 | 54 | 54 | 54 | 54 | 54 |
| Heavy Vehicles, % | 0 | 8 | 7 | 11 | 2 | 5 |
| Mvmt Flow | 28 | 93 | 83 | 37 | 102 | 120 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 125 | 0 | - | 0 | 257 | 111 |
| Stage 1 | - | - | - | - | 107 | - |
| Stage 2 | - | - | - | - | 150 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.42 | 6.25 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.518 | 3.345 |
| Pot Cap-1 Maneuver | 1474 | - | - | - | 732 | 934 |
| Stage 1 | - | - | - | - | 918 | - |
| Stage 2 | - | - | - | - | 878 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1465 | - | - | - | 709 | 924 |
| Mov Cap-2 Maneuver | - | - | - | - | 709 | - |
| Stage 1 | - | - | - | - | 894 | - |
| Stage 2 | - | - | - | - | 872 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Ctrl Dly, s/v | 1.73 | 0 | 11.11 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 415 | - | - | - | 811 |
| HCM Lane V/C Ratio | 0.019 | - | - | - | 0.274 |
| HCM Ctrl Dly (s/v) | 7.5 | 0 | - | - | 11.1 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 1.1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.5 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 25 | 80 | 2 | 1 | 45 | 80 | 10 | 15 | 15 | 10 | 1 | 10 |
| Future Vol, veh/h | 25 | 80 | 2 | 1 | 45 | 80 | 10 | 15 | 15 | 10 | 1 | 10 |
| Peak Hour Factor | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 |
| Heavy Vehicles, % | 4 | 3 | 0 | 0 | 4 | 1 | 0 | 6 | 15 | 0 | 0 | 0 |
| Mvmt Flow | 45 | 143 | 4 | 2 | 80 | 143 | 18 | 27 | 27 | 18 | 2 | 18 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay, s/veh | 8.9 | 8.3 | 8.2 | 8 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 25% | 23% | 1% | 48% |
| Vol Thru, % | 38% | 75% | 36% | 5% |
| Vol Right, % | 38% | 2% | 63% | 48% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 40 | 107 | 126 | 21 |
| LT Vol | 10 | 25 | 1 | 10 |
| Through Vol | 15 | 80 | 45 | 1 |
| RT Vol | 15 | 2 | 80 | 10 |
| Lane Flow Rate | 71 | 191 | 225 | 37 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.093 | 0.238 | 0.249 | 0.049 |
| Departure Headway (Hd) | 4.663 | 4.482 | 3.988 | 4.692 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 769 | 803 | 902 | 763 |
| Service Time | 2.691 | 2.503 | 2.008 | 2.724 |
| HCM Lane V/C Ratio | 0.092 | 0.238 | 0.249 | 0.048 |
| HCM Control Delay, s/veh | 8.2 | 8.9 | 8.3 | 8 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.3 | 0.9 | 1 | 0.2 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.6 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 45 | 60 | 1 | 2 | 95 | 5 | 5 | 20 | 20 | 10 | 15 | 25 |
| Future Vol, veh/h | 45 | 60 | 1 | 2 | 95 | 5 | 5 | 20 | 20 | 10 | 15 | 25 |
| Peak Hour Factor | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 |
| Heavy Vehicles, % | 4 | 4 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 10 | 8 | 4 |
| Mvmt Flow | 74 | 98 | 2 | 3 | 156 | 8 | 8 | 33 | 33 | 16 | 25 | 41 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay, s/veh | 8.9 | 8.6 | 8 | 8.3 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 11% | 42% | 2% | 20% |
| Vol Thru, % | 44% | 57% | 93% | 30% |
| Vol Right, % | 44% | 1% | 5% | 50% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 45 | 106 | 102 | 50 |
| LT Vol | 5 | 45 | 2 | 10 |
| Through Vol | 20 | 60 | 95 | 15 |
| RT Vol | 20 | 1 | 5 | 25 |
| Lane Flow Rate | 74 | 174 | 167 | 82 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.093 | 0.222 | 0.206 | 0.107 |
| Departure Headway (Hd) | 4.542 | 4.596 | 4.437 | 4.684 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 788 | 780 | 809 | 765 |
| Service Time | 2.575 | 2.625 | 2.466 | 2.715 |
| HCM Lane V/C Ratio | 0.094 | 0.223 | 0.206 | 0.107 |
| HCM Control Delay, s/veh | 8 | 8.9 | 8.6 | 8.3 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.3 | 0.8 | 0.8 | 0.4 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 20 | 45 | 60 | 10 | 45 | 40 |
| Future Vol, veh/h | 20 | 45 | 60 | 10 | 45 | 40 |
| Conflicting Peds, #/hr | 4 | 0 | 0 | 4 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 80 | 80 | 80 | 80 | 80 | 80 |
| Heavy Vehicles, % | 5 | 2 | 4 | 0 | 4 | 12 |
| Mvmt Flow | 25 | 56 | 75 | 13 | 56 | 50 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 92 | 0 | - | 0 | 192 | 85 |
| Stage 1 | - | - | - | - | 85 | - |
| Stage 2 | - | - | - | - | 106 | - |
| Critical Hdwy | 4.15 | - | - | - | 6.44 | 6.32 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.44 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.44 | - |
| Follow-up Hdwy | 2.245 | - | - | - | 3.536 | 3.408 |
| Pot Cap-1 Maneuver | 1485 | - | - | - | 793 | 947 |
| Stage 1 | - | - | - | - | 933 | - |
| Stage 2 | - | - | - | - | 913 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1478 | - | - | - | 772 | 942 |
| Mov Cap-2 Maneuver | - | - | - | - | 772 | - |
| Stage 1 | - | - | - | - | 912 | - |
| Stage 2 | - | - | - | - | 909 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Ctrl Dly, s/v | 2.3 | 0 | 9.88 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 554 | - | - | - | 843 |
| HCM Lane V/C Ratio | 0.017 | - | - | - | 0.126 |
| HCM Ctrl Dly (s/v) | 7.5 | 0 | - | - | 9.9 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.4 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.5 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 20 | 70 | 1 | 2 | 55 | 35 | 10 | 10 | 5 | 15 | 2 | 5 |
| Future Vol, veh/h | 20 | 70 | 1 | 2 | 55 | 35 | 10 | 10 | 5 | 15 | 2 | 5 |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, % | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 8 | 20 | 0 | 0 | 0 |
| Mvmt Flow | 23 | 80 | 1 | 2 | 63 | 40 | 11 | 11 | 6 | 17 | 2 | 6 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay, s/veh | 7.7 | 7.4 | 7.5 | 7.5 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 40% | 22% | 2% | 68% |
| Vol Thru, % | 40% | 77% | 60% | 9% |
| Vol Right, % | 20% | 1% | 38% | 23% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 25 | 91 | 92 | 22 |
| LT Vol | 10 | 20 | 2 | 15 |
| Through Vol | 10 | 70 | 55 | 2 |
| RT Vol | 5 | 1 | 35 | 5 |
| Lane Flow Rate | 29 | 105 | 106 | 25 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.034 | 0.119 | 0.113 | 0.03 |
| Departure Headway (Hd) | 4.241 | 4.111 | 3.849 | 4.284 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 831 | 867 | 924 | 823 |
| Service Time | 2.334 | 2.159 | 1.903 | 2.378 |
| HCM Lane V/C Ratio | 0.035 | 0.121 | 0.115 | 0.03 |
| HCM Control Delay, s/veh | 7.5 | 7.7 | 7.4 | 7.5 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.1 | 0.4 | 0.4 | 0.1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.8 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 40 | 50 | 1 | 5 | 70 | 10 | 5 | 10 | 5 | 10 | 5 | 15 |
| Future Vol, veh/h | 40 | 50 | 1 | 5 | 70 | 10 | 5 | 10 | 5 | 10 | 5 | 15 |
| Peak Hour Factor | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Heavy Vehicles, % | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 40 | 8 |
| Mvmt Flow | 51 | 64 | 1 | 6 | 90 | 13 | 6 | 13 | 6 | 13 | 6 | 19 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay, s/veh | 8 | 7.7 | 7.5 | 7.4 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 25% | 44% | 6% | 33% |
| Vol Thru, % | 50% | 55% | 82% | 17% |
| Vol Right, % | 25% | 1% | 12% | 50% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 20 | 91 | 85 | 30 |
| LT Vol | 5 | 40 | 5 | 10 |
| Through Vol | 10 | 50 | 70 | 5 |
| RT Vol | 5 | 1 | 10 | 15 |
| Lane Flow Rate | 26 | 117 | 109 | 38 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.031 | 0.137 | 0.122 | 0.045 |
| Departure Headway (Hd) | 4.338 | 4.227 | 4.041 | 4.19 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 830 | 841 | 878 | 860 |
| Service Time | 2.339 | 2.286 | 2.108 | 2.191 |
| HCM Lane V/C Ratio | 0.031 | 0.139 | 0.124 | 0.044 |
| HCM Control Delay, s/veh | 7.5 | 8 | 7.7 | 7.4 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.1 | 0.5 | 0.4 | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.9 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 15 | 40 | 55 | 5 | 5 | 10 |
| Future Vol, veh/h | 15 | 40 | 55 | 5 | 5 | 10 |
| Conflicting Peds, #/hr | 6 | 0 | 0 | 6 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 23 | 0 | 2 | 25 | 14 | 10 |
| Mvmt Flow | 16 | 43 | 59 | 5 | 5 | 11 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 71 | 0 | - | 0 | 143 | 68 |
| Stage 1 | - | - | - | - | 68 | - |
| Stage 2 | - | - | - | - | 75 | - |
| Critical Hdwy | 4.33 | - | - | - | 6.54 | 6.3 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.54 | - |
| Follow-up Hdwy | 2.407 | - | - | - | 3.626 | 3.39 |
| Pot Cap-1 Maneuver | 1407 | - | - | - | 822 | 974 |
| Stage 1 | - | - | - | - | 925 | - |
| Stage 2 | - | - | - | - | 918 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1397 | - | - | - | 801 | 967 |
| Mov Cap-2 Maneuver | - | - | - | - | 801 | - |
| Stage 1 | - | - | - | - | 908 | - |
| Stage 2 | - | - | - | - | 912 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Ctrl Dly, s/v | 2.07 | 0 | 9.05 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 491 | - | - | - | 904 |
| HCM Lane V/C Ratio | 0.012 | - | - | - | 0.018 |
| HCM Ctrl Dly (s/v) | 7.6 | 0 | - | - | 9.1 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.4 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 5 | 40 | 1 | 5 | 50 | 10 | 10 | 5 | 5 | 20 | 5 | 2 |
| Future Vol, veh/h | 5 | 40 | 1 | 5 | 50 | 10 | 10 | 5 | 5 | 20 | 5 | 2 |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 |
| Mvmt Flow | 6 | 47 | 1 | 6 | 58 | 12 | 12 | 6 | 6 | 23 | 6 | 2 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay, s/veh | 7.4 | 7.4 | 7.3 | 7.5 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 50% | 11% | 8% | 74% |
| Vol Thru, % | 25% | 87% | 77% | 19% |
| Vol Right, % | 25% | 2% | 15% | 7% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 20 | 46 | 65 | 27 |
| LT Vol | 10 | 5 | 5 | 20 |
| Through Vol | 5 | 40 | 50 | 5 |
| RT Vol | 5 | 1 | 10 | 2 |
| Lane Flow Rate | 23 | 53 | 76 | 31 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.026 | 0.06 | 0.083 | 0.037 |
| Departure Headway (Hd) | 4.098 | 4.062 | 3.96 | 4.246 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 866 | 878 | 902 | 837 |
| Service Time | 2.16 | 2.103 | 1.997 | 2.304 |
| HCM Lane V/C Ratio | 0.027 | 0.06 | 0.084 | 0.037 |
| HCM Control Delay, s/veh | 7.3 | 7.4 | 7.4 | 7.5 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.1 | 0.2 | 0.3 | 0.1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.4 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 25 | 35 | 5 | 5 | 50 | 5 | 5 | 10 | 5 | 5 | 10 | 10 |
| Future Vol, veh/h | 25 | 35 | 5 | 5 | 50 | 5 | 5 | 10 | 5 | 5 | 10 | 10 |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Heavy Vehicles, % | 4 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 13 | 0 |
| Mvmt Flow | 28 | 39 | 6 | 6 | 56 | 6 | 6 | 11 | 6 | 6 | 11 | 11 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay, s/veh | 7.6 | 7.4 | 7.2 | 7.2 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 25% | 38% | 8% | 20% |
| Vol Thru, % | 50% | 54% | 83% | 40% |
| Vol Right, % | 25% | 8% | 8% | 40% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 20 | 65 | 60 | 25 |
| LT Vol | 5 | 25 | 5 | 5 |
| Through Vol | 10 | 35 | 50 | 10 |
| RT Vol | 5 | 5 | 5 | 10 |
| Lane Flow Rate | 22 | 73 | 67 | 28 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.025 | 0.084 | 0.075 | 0.031 |
| Departure Headway (Hd) | 4.064 | 4.138 | 4.01 | 3.96 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 871 | 864 | 891 | 894 |
| Service Time | 2.135 | 2.172 | 2.048 | 2.029 |
| HCM Lane V/C Ratio | 0.025 | 0.084 | 0.075 | 0.031 |
| HCM Control Delay, s/veh | 7.2 | 7.6 | 7.4 | 7.2 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.1 | 0.3 | 0.2 | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 5.9 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 15 | 50 | 45 | 25 | 60 | 65 |
| Future Vol, veh/h | 15 | 50 | 45 | 25 | 60 | 65 |
| Conflicting Peds, #/hr | 5 | 0 | 0 | 5 | 2 | 4 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 54 | 54 | 54 | 54 | 54 | 54 |
| Heavy Vehicles, % | 7 | 6 | 7 | 16 | 2 | 5 |
| Mvmt Flow | 28 | 93 | 83 | 46 | 111 | 120 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 135 | 0 | - | 0 | 262 | 115 |
| Stage 1 | - | - | - | - | 111 | - |
| Stage 2 | - | - | - | - | 150 | - |
| Critical Hdwy | 4.17 | - | - | - | 6.42 | 6.25 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.263 | - | - | - | 3.518 | 3.345 |
| Pot Cap-1 Maneuver | 1420 | - | - | - | 727 | 929 |
| Stage 1 | - | - | - | - | 913 | - |
| Stage 2 | - | - | - | - | 878 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1411 | - | - | - | 704 | 919 |
| Mov Cap-2 Maneuver | - | - | - | - | 704 | - |
| Stage 1 | - | - | - | - | 889 | - |
| Stage 2 | - | - | - | - | 872 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Ctrl Dly, s/v | 1.75 | 0 | 11.31 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 415 | - | - | - | 801 |
| HCM Lane V/C Ratio | 0.02 | - | - | - | 0.289 |
| HCM Ctrl Dly (s/v) | 7.6 | 0 | - | - | 11.3 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 1.2 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.5 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 25 | 85 | 2 | 1 | 45 | 80 | 15 | 10 | 15 | 5 | 1 | 10 |
| Future Vol, veh/h | 25 | 85 | 2 | 1 | 45 | 80 | 15 | 10 | 15 | 5 | 1 | 10 |
| Peak Hour Factor | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 |
| Heavy Vehicles, % | 0 | 2 | 0 | 0 | 7 | 0 | 7 | 0 | 13 | 0 | 0 | 0 |
| Mvmt Flow | 45 | 152 | 4 | 2 | 80 | 143 | 27 | 18 | 27 | 9 | 2 | 18 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay, s/veh | 8.8 | 8.3 | 8.3 | 7.8 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 38% | 22% | 1% | 31% |
| Vol Thru, % | 25% | 76% | 36% | 6% |
| Vol Right, % | 38% | 2% | 63% | 63% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 40 | 112 | 126 | 16 |
| LT Vol | 15 | 25 | 1 | 5 |
| Through Vol | 10 | 85 | 45 | 1 |
| RT Vol | 15 | 2 | 80 | 10 |
| Lane Flow Rate | 71 | 200 | 225 | 29 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.095 | 0.244 | 0.248 | 0.036 |
| Departure Headway (Hd) | 4.805 | 4.393 | 3.976 | 4.582 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 746 | 820 | 904 | 781 |
| Service Time | 2.831 | 2.41 | 1.991 | 2.612 |
| HCM Lane V/C Ratio | 0.095 | 0.244 | 0.249 | 0.037 |
| HCM Control Delay, s/veh | 8.3 | 8.8 | 8.3 | 7.8 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.3 | 1 | 1 | 0.1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.6 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 45 | 60 | 1 | 2 | 95 | 5 | 5 | 20 | 20 | 10 | 15 | 25 |
| Future Vol, veh/h | 45 | 60 | 1 | 2 | 95 | 5 | 5 | 20 | 20 | 10 | 15 | 25 |
| Peak Hour Factor | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 |
| Heavy Vehicles, % | 4 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 10 | 7 | 4 |
| Mvmt Flow | 74 | 98 | 2 | 3 | 156 | 8 | 8 | 33 | 33 | 16 | 25 | 41 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay, s/veh | 8.9 | 8.6 | 8 | 8.3 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 11% | 42% | 2% | 20% |
| Vol Thru, % | 44% | 57% | 93% | 30% |
| Vol Right, % | 44% | 1% | 5% | 50% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 45 | 106 | 102 | 50 |
| LT Vol | 5 | 45 | 2 | 10 |
| Through Vol | 20 | 60 | 95 | 15 |
| RT Vol | 20 | 1 | 5 | 25 |
| Lane Flow Rate | 74 | 174 | 167 | 82 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.093 | 0.222 | 0.206 | 0.107 |
| Departure Headway (Hd) | 4.542 | 4.596 | 4.437 | 4.684 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 788 | 780 | 809 | 765 |
| Service Time | 2.575 | 2.625 | 2.466 | 2.715 |
| HCM Lane V/C Ratio | 0.094 | 0.223 | 0.206 | 0.107 |
| HCM Control Delay, s/veh | 8 | 8.9 | 8.6 | 8.3 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.3 | 0.8 | 0.8 | 0.4 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.6 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 20 | 45 | 60 | 15 | 50 | 40 |
| Future Vol, veh/h | 20 | 45 | 60 | 15 | 50 | 40 |
| Conflicting Peds, #/hr | 4 | 0 | 0 | 4 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 80 | 80 | 80 | 80 | 80 | 80 |
| Heavy Vehicles, % | 5 | 2 | 3 | 27 | 4 | 13 |
| Mvmt Flow | 25 | 56 | 75 | 19 | 63 | 50 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 98 | 0 | - | 0 | 195 | 88 |
| Stage 1 | - | - | - | - | 88 | - |
| Stage 2 | - | - | - | - | 106 | - |
| Critical Hdwy | 4.15 | - | - | - | 6.44 | 6.33 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.44 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.44 | - |
| Follow-up Hdwy | 2.245 | - | - | - | 3.536 | 3.417 |
| Pot Cap-1 Maneuver | 1477 | - | - | - | 790 | 940 |
| Stage 1 | - | - | - | - | 930 | - |
| Stage 2 | - | - | - | - | 913 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1470 | - | - | - | 768 | 936 |
| Mov Cap-2 Maneuver | - | - | - | - | 768 | - |
| Stage 1 | - | - | - | - | 909 | - |
| Stage 2 | - | - | - | - | 909 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Ctrl Dly, s/v | 2.31 | 0 | 9.98 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 554 | - | - | - | 835 |
| HCM Lane V/C Ratio | 0.017 | - | - | - | 0.135 |
| HCM Ctrl Dly (s/v) | 7.5 | 0 | - | - | 10 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.5 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.6 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 20 | 75 | 1 | 2 | 55 | 35 | 15 | 5 | 5 | 10 | 2 | 5 |
| Future Vol, veh/h | 20 | 75 | 1 | 2 | 55 | 35 | 15 | 5 | 5 | 10 | 2 | 5 |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, % | 0 | 1 | 0 | 0 | 2 | 0 | 27 | 0 | 20 | 0 | 0 | 0 |
| Mvmt Flow | 23 | 86 | 1 | 2 | 63 | 40 | 17 | 6 | 6 | 11 | 2 | 6 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay, s/veh | 7.8 | 7.4 | 8 | 7.4 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 60% | 21% | 2% | 59% |
| Vol Thru, % | 20% | 78% | 60% | 12% |
| Vol Right, % | 20% | 1% | 38% | 29% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 25 | 96 | 92 | 17 |
| LT Vol | 15 | 20 | 2 | 10 |
| Through Vol | 5 | 75 | 55 | 2 |
| RT Vol | 5 | 1 | 35 | 5 |
| Lane Flow Rate | 29 | 110 | 106 | 20 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.038 | 0.126 | 0.113 | 0.024 |
| Departure Headway (Hd) | 4.746 | 4.099 | 3.843 | 4.336 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 744 | 868 | 923 | 830 |
| Service Time | 2.842 | 2.154 | 1.905 | 2.336 |
| HCM Lane V/C Ratio | 0.039 | 0.127 | 0.115 | 0.024 |
| HCM Control Delay, s/veh | 8 | 7.8 | 7.4 | 7.4 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.1 | 0.4 | 0.4 | 0.1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.8 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 40 | 50 | 1 | 5 | 70 | 10 | 5 | 10 | 5 | 10 | 5 | 15 |
| Future Vol, veh/h | 40 | 50 | 1 | 5 | 70 | 10 | 5 | 10 | 5 | 10 | 5 | 15 |
| Peak Hour Factor | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Heavy Vehicles, % | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 40 | 7 |
| Mvmt Flow | 51 | 64 | 1 | 6 | 90 | 13 | 6 | 13 | 6 | 13 | 6 | 19 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay, s/veh | 8 | 7.7 | 7.5 | 7.4 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 25% | 44% | 6% | 33% |
| Vol Thru, % | 50% | 55% | 82% | 17% |
| Vol Right, % | 25% | 1% | 12% | 50% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 20 | 91 | 85 | 30 |
| LT Vol | 5 | 40 | 5 | 10 |
| Through Vol | 10 | 50 | 70 | 5 |
| RT Vol | 5 | 1 | 10 | 15 |
| Lane Flow Rate | 26 | 117 | 109 | 38 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.031 | 0.137 | 0.122 | 0.045 |
| Departure Headway (Hd) | 4.338 | 4.227 | 4.041 | 4.19 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 830 | 841 | 878 | 860 |
| Service Time | 2.339 | 2.286 | 2.108 | 2.191 |
| HCM Lane V/C Ratio | 0.031 | 0.139 | 0.124 | 0.044 |
| HCM Control Delay, s/veh | 7.5 | 8 | 7.7 | 7.4 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.1 | 0.5 | 0.4 | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.7 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 15 | 40 | 55 | 5 | 20 | 10 |
| Future Vol, veh/h | 15 | 40 | 55 | 5 | 20 | 10 |
| Conflicting Peds, #/hr | 6 | 0 | 0 | 6 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 20 | 0 | 1 | 20 | 5 | 10 |
| Mvmt Flow | 16 | 43 | 59 | 5 | 22 | 11 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 71 | 0 | - | 0 | 143 | 68 |
| Stage 1 | - | - | - | - | 68 | - |
| Stage 2 | - | - | - | - | 75 | - |
| Critical Hdwy | 4.3 | - | - | - | 6.45 | 6.3 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.45 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.45 | - |
| Follow-up Hdwy | 2.38 | - | - | - | 3.545 | 3.39 |
| Pot Cap-1 Maneuver | 1423 | - | - | - | 843 | 974 |
| Stage 1 | - | - | - | - | 947 | - |
| Stage 2 | - | - | - | - | 940 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1413 | - | - | - | 821 | 967 |
| Mov Cap-2 Maneuver | - | - | - | - | 821 | - |
| Stage 1 | - | - | - | - | 930 | - |
| Stage 2 | - | - | - | - | 933 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Ctrl Dly, s/v | 2.07 | 0 | 9.33 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 491 | - | - | - | 864 |
| HCM Lane V/C Ratio | 0.011 | - | - | - | 0.037 |
| HCM Ctrl Dly (s/v) | 7.6 | 0 | - | - | 9.3 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.3 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 5 | 50 | 5 | 5 | 50 | 10 | 10 | 5 | 5 | 10 | 1 | 2 |
| Future Vol, veh/h | 5 | 50 | 5 | 5 | 50 | 10 | 10 | 5 | 5 | 10 | 1 | 2 |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 6 | 58 | 6 | 6 | 58 | 12 | 12 | 6 | 6 | 12 | 1 | 2 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay, s/veh | 7.4 | 7.3 | 7.3 | 7.4 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 50% | 8% | 8% | 77% |
| Vol Thru, % | 25% | 83% | 77% | 8% |
| Vol Right, % | 25% | 8% | 15% | 15% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 20 | 60 | 65 | 13 |
| LT Vol | 10 | 5 | 5 | 10 |
| Through Vol | 5 | 50 | 50 | 1 |
| RT Vol | 5 | 5 | 10 | 2 |
| Lane Flow Rate | 23 | 70 | 76 | 15 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.027 | 0.077 | 0.083 | 0.018 |
| Departure Headway (Hd) | 4.111 | 3.99 | 3.942 | 4.23 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 863 | 895 | 906 | 838 |
| Service Time | 2.175 | 2.025 | 1.976 | 2.295 |
| HCM Lane V/C Ratio | 0.027 | 0.078 | 0.084 | 0.018 |
| HCM Control Delay, s/veh | 7.3 | 7.4 | 7.3 | 7.4 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.1 | 0.2 | 0.3 | 0.1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.4 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 25 | 35 | 5 | 5 | 50 | 5 | 5 | 10 | 5 | 5 | 10 | 10 |
| Future Vol, veh/h | 25 | 35 | 5 | 5 | 50 | 5 | 5 | 10 | 5 | 5 | 10 | 10 |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Heavy Vehicles, % | 4 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 10 | 0 |
| Mvmt Flow | 28 | 39 | 6 | 6 | 56 | 6 | 6 | 11 | 6 | 6 | 11 | 11 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay, s/veh | 7.6 | 7.4 | 7.2 | 7.2 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 25% | 38% | 8% | 20% |
| Vol Thru, % | 50% | 54% | 83% | 40% |
| Vol Right, % | 25% | 8% | 8% | 40% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 20 | 65 | 60 | 25 |
| LT Vol | 5 | 25 | 5 | 5 |
| Through Vol | 10 | 35 | 50 | 10 |
| RT Vol | 5 | 5 | 5 | 10 |
| Lane Flow Rate | 22 | 73 | 67 | 28 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.025 | 0.084 | 0.075 | 0.031 |
| Departure Headway (Hd) | 4.064 | 4.138 | 4.01 | 3.96 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 871 | 864 | 891 | 894 |
| Service Time | 2.135 | 2.172 | 2.048 | 2.029 |
| HCM Lane V/C Ratio | 0.025 | 0.084 | 0.075 | 0.031 |
| HCM Control Delay, s/veh | 7.2 | 7.6 | 7.4 | 7.2 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.1 | 0.3 | 0.2 | 0.1 |

# RAW TRAFFIC DATA

Study Name Marion Ave.@School Access
Start Date 08/26/2025
Start Time 7:00 AM
Site Code

| Channel | Direction | Direction |
|---|---|---|
| Direction | Southbound | Northbound |
| | | |
| 7:00 AM | 2 | 1 |
| 7:15 AM | 0 | 0 |
| 7:30 AM | 0 | 3 |
| 7:45 AM | 1 | 6 |
| 8:00 AM | 16 | 12 |
| 8:15 AM | 72 | 4 |
| 8:30 AM | 23 | 1 |
| 8:45 AM | 0 | 0 |
| 9:00 AM | 0 | 0 |
| 2:00 PM | 1 | 3 |
| 2:15 PM | 0 | 2 |
| 2:30 PM | 4 | 8 |
| 2:45 PM | 29 | 3 |
| 3:00 PM | 33 | 3 |
| 3:15 PM | 5 | 0 |
| 3:30 PM | 15 | 2 |
| 3:45 PM | 6 | 1 |
| 4:00 PM | 3 | 1 |
| 4:15 PM | 2 | 0 |
| 4:30 PM | 2 | 1 |
| 4:45 PM | 0 | 0 |
| 5:00 PM | 1 | 1 |
| 5:15 PM | 0 | 0 |
| 5:30 PM | 0 | 0 |
| 5:45 PM | 2 | 1 |
| 6:00 PM | 1 | 0 |

| | |
|---|---|
| Study Name | Belleforte Ave.@School Access |
| Start Date | 08/26/2025 |
| Start Time | 7:00 AM |
| Site Code | |

| Channel | Direction | Direction |
|---|---|---|
| Direction | Southbound | Northbound |
| | | |
| 7:00 AM | 1 | 4 |
| 7:15 AM | 2 | 4 |
| 7:30 AM | 0 | 3 |
| 7:45 AM | 4 | 8 |
| 8:00 AM | 0 | 16 |
| 8:15 AM | 0 | 70 |
| 8:30 AM | 0 | 15 |
| 8:45 AM | 0 | 0 |
| 9:00 AM | 0 | 0 |
| 2:00 PM | 2 | 2 |
| 2:15 PM | 1 | 6 |
| 2:30 PM | 0 | 10 |
| 2:45 PM | 0 | 18 |
| 3:00 PM | 3 | 25 |
| 3:15 PM | 3 | 1 |
| 3:30 PM | 5 | 3 |
| 3:45 PM | 3 | 5 |
| 4:00 PM | 2 | 4 |
| 4:15 PM | 4 | 1 |
| 4:30 PM | 4 | 5 |
| 4:45 PM | 7 | 5 |
| 5:00 PM | 2 | 2 |
| 5:15 PM | 2 | 2 |
| 5:30 PM | 3 | 4 |
| 5:45 PM | 1 | 1 |
| 6:00 PM | 0 | 0 |

| | |
|---|---|
| Study Name | Marion Ave & Greenwood St |
| Start Date | 08/26/2025 |
| Start Time | 7:00 AM |
| Site Code | |
| Project | |

| Leg | Marion Ave | | | | | | Greenwood St | | | | | | Greenwood St | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Direction | Southbound | | | | | | Westbound | | | | | | Eastbound | | | | | |
| Start Time | Right | Thru | Left | U-Turn | Peds CW | Peds CCW | Right | Thru | Left | U-Turn | Peds CW | Peds CCW | Right | Thru | Left | U-Turn | Peds CW | Peds CCW |
| 2025-08-26 07:00:00 | 3 | 0 | 1 | 0 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 2025-08-26 07:15:00 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 |
| 2025-08-26 07:30:00 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 5 | 4 | 0 | 0 | 0 |
| 2025-08-26 07:45:00 | 2 | 0 | 5 | 0 | 0 | 0 | 5 | 6 | 0 | 0 | 0 | 0 | 0 | 9 | 4 | 0 | 0 | 0 |
| 2025-08-26 08:00:00 | 9 | 0 | 9 | 0 | 0 | 0 | 5 | 9 | 0 | 0 | 0 | 0 | 0 | 9 | 6 | 0 | 0 | 0 |
| 2025-08-26 08:15:00 | 38 | 0 | 27 | 0 | 0 | 0 | 4 | 19 | 0 | 0 | 0 | 0 | 0 | 18 | 2 | 0 | 0 | 0 |
| 2025-08-26 08:30:00 | 13 | 0 | 12 | 0 | 0 | 0 | 3 | 9 | 0 | 0 | 0 | 0 | 0 | 13 | 1 | 0 | 0 | 0 |
| 2025-08-26 08:45:00 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 |
| 2025-08-26 14:00:00 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 10 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 |
| 2025-08-26 14:15:00 | 1 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 14 | 1 | 0 | 0 | 0 |
| 2025-08-26 14:30:00 | 1 | 0 | 2 | 0 | 0 | 0 | 7 | 15 | 0 | 0 | 0 | 0 | 0 | 18 | 9 | 0 | 0 | 0 |
| 2025-08-26 14:45:00 | 19 | 0 | 14 | 0 | 0 | 0 | 2 | 10 | 0 | 0 | 0 | 0 | 0 | 13 | 8 | 0 | 0 | 0 |
| 2025-08-26 15:00:00 | 16 | 0 | 21 | 0 | 0 | 0 | 1 | 15 | 0 | 0 | 0 | 0 | 0 | 9 | 2 | 0 | 0 | 0 |
| 2025-08-26 15:15:00 | 3 | 0 | 7 | 0 | 0 | 0 | 2 | 15 | 0 | 0 | 0 | 0 | 0 | 6 | 2 | 0 | 0 | 0 |
| 2025-08-26 15:30:00 | 14 | 0 | 1 | 0 | 0 | 0 | 4 | 19 | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 0 |
| 2025-08-26 15:45:00 | 6 | 0 | 3 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 0 |
| 2025-08-26 16:00:00 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 13 | 0 | 0 | 0 | 0 | 0 | 9 | 1 | 0 | 0 | 0 |
| 2025-08-26 16:15:00 | 3 | 0 | 2 | 0 | 0 | 0 | 1 | 12 | 0 | 0 | 0 | 0 | 0 | 6 | 4 | 0 | 0 | 0 |
| 2025-08-26 16:30:00 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 8 | 3 | 0 | 0 | 0 |
| 2025-08-26 16:45:00 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 9 | 2 | 0 | 0 | 0 |
| 2025-08-26 17:00:00 | 2 | 0 | 1 | 0 | 0 | 0 | 2 | 13 | 0 | 0 | 0 | 0 | 0 | 13 | 4 | 0 | 0 | 0 |
| 2025-08-26 17:15:00 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 11 | 0 | 0 | 0 | 0 | 0 | 8 | 4 | 0 | 0 | 0 |
| 2025-08-26 17:30:00 | 3 | 0 | 2 | 0 | 0 | 0 | 1 | 17 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 |
| 2025-08-26 17:45:00 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 11 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 |

Study Name Greenwood & Belleforte Ave.
Start Date **8/26/2025**
Start Time **7:00:00 AM**
Site Code

| | GREENWOOD ST. From West | | | | GREENWOOD ST. From East | | | | BELLEFORTE AVE. From South | | | | BELLEFORTE AVE. From North | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds |
| 7:00:00 AM | 0 | 2 | 0 | 0 | 0 | 4 | 5 | 2 | 0 | 0 | 1 | 1 | 3 | 0 | 1 | 2 |
| 7:15:00 AM | 0 | 6 | 0 | 2 | 0 | 2 | 3 | 0 | 1 | 2 | 2 | 1 | 3 | 1 | 0 | 2 |
| 7:30:00 AM | 0 | 7 | 0 | 0 | 0 | 4 | 2 | 0 | 1 | 0 | 4 | 2 | 1 | 0 | 1 | 1 |
| 7:45:00 AM | 3 | 10 | 0 | 2 | 0 | 9 | 3 | 0 | 3 | 4 | 4 | 3 | 5 | 0 | 1 | 1 |
| 8:00:00 AM | 3 | 17 | 0 | 0 | 0 | 12 | 25 | 0 | 0 | 2 | 5 | 5 | 3 | 0 | 3 | 2 |
| 8:15:00 AM | 15 | 30 | 1 | 0 | 1 | 16 | 48 | 0 | 3 | 6 | 3 | 1 | 3 | 0 | 4 | 2 |
| 8:30:00 AM | 3 | 22 | 1 | 0 | 0 | 9 | 2 | 2 | 4 | 5 | 1 | 1 | 1 | 0 | 0 | 1 |
| 8:45:00 AM | 1 | 8 | 0 | 0 | 0 | 3 | 0 | 1 | 1 | 0 | 2 | 1 | 3 | 0 | 1 | 2 |
| 9:00:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:00:00 PM | 0 | 5 | 1 | 1 | 0 | 9 | 0 | 0 | 2 | 1 | 1 | 0 | 2 | 1 | 0 | 1 |
| 2:15:00 PM | 3 | 10 | 0 | 0 | 0 | 8 | 3 | 0 | 1 | 4 | 0 | 0 | 1 | 0 | 0 | 3 |
| 2:30:00 PM | 10 | 12 | 0 | 1 | 2 | 17 | 9 | 0 | 4 | 5 | 1 | 2 | 0 | 1 | 1 | 0 |
| 2:45:00 PM | 6 | 19 | 0 | 0 | 0 | 10 | 20 | 4 | 1 | 3 | 0 | 1 | 2 | 1 | 2 | 4 |
| 3:00:00 PM | 5 | 27 | 0 | 0 | 0 | 15 | 3 | 1 | 2 | 4 | 2 | 2 | 6 | 0 | 1 | 0 |
| 3:15:00 PM | 1 | 10 | 1 | 0 | 0 | 12 | 1 | 0 | 2 | 0 | 2 | 1 | 6 | 0 | 1 | 0 |
| 3:30:00 PM | 2 | 5 | 2 | 4 | 1 | 18 | 1 | 0 | 4 | 3 | 0 | 1 | 5 | 0 | 1 | 2 |
| 3:45:00 PM | 3 | 8 | 0 | 0 | 0 | 12 | 3 | 3 | 0 | 1 | 1 | 5 | 1 | 3 | 1 | 0 |
| 4:00:00 PM | 2 | 6 | 0 | 0 | 1 | 12 | 2 | 0 | 0 | 1 | 0 | 1 | 3 | 1 | 0 | 1 |
| 4:15:00 PM | 3 | 5 | 0 | 1 | 0 | 9 | 1 | 0 | 2 | 0 | 2 | 1 | 3 | 1 | 2 | 0 |
| 4:30:00 PM | 0 | 11 | 0 | 0 | 1 | 12 | 3 | 0 | 3 | 1 | 1 | 1 | 6 | 1 | 0 | 1 |
| 4:45:00 PM | 1 | 10 | 0 | 0 | 1 | 16 | 4 | 0 | 1 | 2 | 2 | 0 | 7 | 0 | 0 | 2 |
| 5:00:00 PM | 2 | 9 | 0 | 0 | 0 | 13 | 2 | 0 | 4 | 0 | 0 | 0 | 2 | 3 | 2 | 2 |
| 5:15:00 PM | 0 | 10 | 0 | 0 | 1 | 8 | 3 | 2 | 2 | 0 | 2 | 4 | 5 | 1 | 0 | 1 |
| 5:30:00 PM | 2 | 4 | 0 | 0 | 1 | 17 | 5 | 0 | 2 | 1 | 0 | 3 | 3 | 0 | 0 | 1 |
| 5:45:00 PM | 0 | 10 | 0 | 1 | 0 | 12 | 2 | 0 | 2 | 0 | 1 | 1 | 2 | 0 | 2 | 2 |

Study Name Greenwood St.@National Ave.
Start Date 08/26/2025
Start Time 7:00 AM
Site Code
Project

Type Road
Classification Totals

| | National Ave. | | | | Greenwood St. | | | | National Ave. | | | | Greenwood St. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | |
| Start Time | Right | Thru | Left | U-Turn | Right | Thru | Left | U-Turn | Right | Thru | Left | U-Turn | Right | Thru | Left | U-Turn |
| 7:00 AM | 3 | 6 | 1 | 0 | 1 | 4 | 0 | 0 | 4 | 0 | 1 | 0 | 1 | 1 | 1 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 0 | 7 | 2 | 0 | 0 | 0 | 8 | 1 | 0 |
| 7:30 AM | 2 | 2 | 1 | 0 | 0 | 4 | 0 | 0 | 6 | 5 | 0 | 0 | 0 | 11 | 2 | 0 |
| 7:45 AM | 2 | 1 | 0 | 0 | 0 | 9 | 1 | 0 | 7 | 4 | 1 | 0 | 0 | 10 | 8 | 0 |
| 8:00 AM | 7 | 5 | 3 | 0 | 5 | 27 | 1 | 0 | 5 | 9 | 3 | 0 | 0 | 9 | 15 | 0 |
| 8:15 AM | 17 | 7 | 4 | 0 | 2 | 46 | 0 | 0 | 5 | 4 | 1 | 0 | 1 | 22 | 13 | 0 |
| 8:30 AM | 1 | 0 | 3 | 0 | 0 | 8 | 0 | 0 | 4 | 4 | 2 | 0 | 0 | 17 | 9 | 0 |
| 8:45 AM | 0 | 1 | 1 | 0 | 1 | 3 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 9 | 2 | 0 |
| 9:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:00 PM | 1 | 2 | 0 | 0 | 2 | 9 | 1 | 0 | 2 | 2 | 0 | 0 | 0 | 4 | 3 | 0 |
| 2:15 PM | 3 | 1 | 2 | 1 | 4 | 6 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 8 | 3 | 0 |
| 2:30 PM | 1 | 0 | 3 | 0 | 3 | 23 | 0 | 0 | 3 | 1 | 2 | 0 | 1 | 4 | 8 | 0 |
| 2:45 PM | 6 | 1 | 4 | 0 | 8 | 21 | 1 | 0 | 1 | 5 | 2 | 0 | 0 | 12 | 8 | 0 |
| 3:00 PM | 3 | 2 | 2 | 0 | 0 | 13 | 2 | 0 | 1 | 1 | 1 | 0 | 0 | 22 | 11 | 0 |
| 3:15 PM | 3 | 2 | 0 | 0 | 2 | 11 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 6 | 11 | 0 |
| 3:30 PM | 6 | 0 | 3 | 0 | 4 | 12 | 1 | 1 | 2 | 2 | 0 | 0 | 1 | 10 | 4 | 0 |
| 3:45 PM | 5 | 1 | 0 | 0 | 2 | 11 | 1 | 0 | 1 | 5 | 3 | 0 | 0 | 5 | 5 | 0 |
| 4:00 PM | 3 | 1 | 0 | 0 | 2 | 12 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 5 | 5 | 0 |
| 4:15 PM | 3 | 0 | 1 | 0 | 3 | 6 | 1 | 0 | 3 | 5 | 0 | 0 | 0 | 6 | 5 | 0 |
| 4:30 PM | 2 | 2 | 2 | 0 | 0 | 16 | 1 | 1 | 1 | 3 | 0 | 0 | 0 | 10 | 7 | 0 |
| 4:45 PM | 3 | 3 | 1 | 0 | 3 | 15 | 1 | 0 | 0 | 5 | 3 | 0 | 1 | 8 | 7 | 0 |
| 5:00 PM | 2 | 1 | 2 | 0 | 1 | 13 | 2 | 0 | 3 | 2 | 0 | 0 | 2 | 5 | 5 | 0 |
| 5:15 PM | 2 | 2 | 2 | 0 | 2 | 9 | 2 | 0 | 1 | 1 | 1 | 0 | 1 | 11 | 5 | 0 |
| 5:30 PM | 3 | 2 | 1 | 0 | 4 | 20 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 9 | 3 | 0 |
| 5:45 PM | 3 | 1 | 2 | 0 | 1 | 12 | 1 | 0 | 2 | 4 | 1 | 0 | 1 | 6 | 4 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

To: Chairperson Pietron and Members of the Appearance Commission

From: Brandon Nolin, AICP, Community Development Administrator
Anne Ryder Kirchner, Planner/Zoning Administrator

Date: October 28, 2025

Re: Appearance Commission Case AC 25-18
The Village**'s** Department of Community and Economic Development requests approval of a Text Amendment to Municipal Code Sections 7-2-1, 7-2-4, 7-2-11, and creation of a new Section 7-2-14, to modify and establish regulations relating to tree preservation and protection.

## STAFF REPORT

### Introduction

The Village of Morton Grove ("applicant") is proposing amendments to Chapter 7-2 of the Municipal Code to make minor revisions to the Tree Ordinance (Ord. 24-28) to help preserve and protect the Village's tree canopy. Staff is seeking the Appearance Commission's review and recommendation of approval of the proposed amendment prior to consideration by the Village Board of Trustees. The proposed amendment has been provided in Attachment A with proposed additions in red text and deletions are ~~red strikethrough text~~.

In March 2025, the Village was awarded a grant to assist with street tree plantings throughout the community from the Chicago Region Trees Initiative at the Morton Arboretum. In accepting the grant, the Village agreed to subject our Tree Ordinance to review by the Morton Arboretum and make needed revisions to meet the organization's requirements. While much of the Village's recent Tree Ordinance were aligned with the Morton Arboretum's goals and addressed desired components, some revisions were needed to meet grant requirements.

After receiving initial guidance from the Morton Arboretum, Village Staff submitted revisions to meet grant requirements. The five text changes to the Municipal Code summarized below are procedural in nature, have been approved by the Morton Arboretum, and serve to further strengthen the Village's ordinance.

7-2-1: CONSTRUCTION

- Includes an opening statement regarding the importance of trees based on existing language already contained in Chapter 12.
- Affirms that the Director of Public Works is the authority regarding matters of tree management.

7-2-4: QUALIFIED CONTRACTORS

- Strengthens language requiring the use of qualified contractors and a certified arborist.

7-2-11: TREE TECHNICAL MANUAL

- Affirms that the tree technical manual maintained by the Department of Public Works includes an approved species list.

7-2-14: APPEAL

- Establishes an appeal process for property owners regarding tree management and tree ordinance enforcement decisions made by the Director of Public Works.

*Recommendation*

If the Appearance Commission makes a motion to approve Case AC 25-18, staff recommends the following motion:

> *Motion to approve Case AC 25-18, a request by the Department of Community and Economic Development for approval of a Text Amendment to Sections 7-2-1, 7-2-4, 7-2-11, and creation of a new Section 7-2-14, to modify and establish regulations relating to tree preservation and protection, as presented in the staff report for Case AC 25-18 dated October 28, 2025.*
>
> *[or as modified by recommendation of the Appearance Commission]*

Attached A

Revised Draft Tree Ordinance

# ORDINANCE 25-XX

## APPROVING A TEXT AMENDMENT TO MODIFY AND ESTABLISH REGULATIONS RELATING TO TREE PRESERVATION AND PROTECTION

WHEREAS, the Village of Morton Grove (the Village), located in Cook County, Illinois, is a home rule unit of government under the provisions of Article 7 of the 1970 Constitution of the State of Illinois, can exercise any power and perform any function pertaining to its government affairs, including but not limited to the power to tax and incur debt; and

WHEREAS, the Morton Grove Municipal Code ("Village Code") establishes certain regulations relating to tree preservation on public property and tree protection during construction on public and private property; and

WHEREAS, the Village continuously reviews and, as it deems necessary, updates existing Municipal Codes to assure they are kept current and relevant; and

WHEREAS, the Village reviewed its tree preservation and protection regulations with assistance from the Morton Arboretum and has determined that minor amendments are needed to the regulations to codify best practices already undertaken by the Village on a regular basis;

WHEREAS, the Village recognizes the services and function that trees provide as a collective asset to the Morton Grove community and seeks to enhance regulations applying to trees on public and private property to better preserve and protect the urban forest as critical infrastructure; and

WHEREAS, pursuant to Section 12-10-2:E of the Village Code, the Appearance Review Commission is provided the authority to review and make recommendations to the Village Board of Trustees regarding amendments to Title 12, Chapter 11, entitled "Landscaping And Trees"; and

WHEREAS, the Village ("Applicant"), filed a complete Text Amendment Application to the Village's Appearance Review Commission under Case AC 25-18 ("Application") requesting approval of a Text Amendment to modify and establish regulations relating to tree preservation and protection; and

WHEREAS, Village staff recommends that the Text Amendment includes modifications to Title 7, Chapter 2, entitled "Tree Preservation," to codify language regarding the value of trees as infrastructure, clarify contractor requirements, explicitly establish the authority of the director of public works over plantings on public property, clarify the location of the approved species list, and establish an appeal process for decisions made by the director of public works, which were made part of the Application; and

WHEREAS, the Morton Grove Appearance Commission held a public hearing relative to the above referenced case on November 18, 2025, and at said public hearing, all concerned parties were given the opportunity to be present and express their views for consideration by the Plan Commission; and

WHEREAS, as a result of said public hearing, the Appearance Commission considered all the evidence and testimony presented to it, discussed the merits of the Application, and made certain recommendations through a report dated _____, 2025, a copy of which is attached hereto and made a part hereof and marked as "**Exhibit A**"; and

WHEREAS, the Corporate Authorities have considered this matter at a Public Meeting and find the Text Amendment, when evaluated in the context of the whole Village, serves the public good; and

WHEREAS, the Village is desirous of assuring all policies are kept current and relevant.

**NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF MORTON GROVE, COOK COUNTY, ILLINOIS, AS FOLLOWS:**

SECTION 1: The Corporate Authorities do hereby incorporate the foregoing WHEREAS clauses into this Ordinance, as though fully set forth herein, thereby making the findings as hereinabove set forth.

SECTION 2: Title 7, Chapter 2, Section 1, entitled "Construction," is hereby amended as follows:

**7-2-1: CONSTRUCTION**

The Village recognizes the services and function that trees provide as a collective asset to the Morton Grove community and seeks to enhance regulations applying to trees on public and private property to better preserve and protect the urban forest as critical infrastructure. This chapter shall be liberally construed so trees on public places including public rights of way and parkways within the Village of Morton Grove are maintained and protected to the greatest extent possible. Nothing in this chapter shall be construed to supersede the laws and regulations of the state of Illinois regarding the protection of trees except, to the extent allowed by the Illinois constitution, where the regulations in this chapter are more restrictive than those in such state laws and regulations; the regulations in this chapter shall be controlling, except in those instances where state laws have been preempted by this chapter, enforcement of such state laws and this chapter shall be concurrent. The director of public works shall have the authority to make decisions regarding matters of tree management and the enforcement of this chapter and will consult with a certified arborist. (Ord. 07-02, 2-12-2007)

SECTION 3: Title 7, Chapter 2, Section 4, entitled "Qualified Contractors," is hereby amended as follows:

**7-2-4: QUALIFIED CONTRACTORS**

It shall be unlawful for any person other than an authorized Village of Morton Grove employee to plant, remove, trim, spray, or otherwise treat any tree on Village owned property including public rights of way and parkways unless such person is deemed qualified by the director of public works or his designee. Contractors authorized to perform tree work in the Village shall adhere to current business licensing requirements including meeting liability insurance and surety bond requirements. All contractors performing any work on publicly owned trees must ensure that a certified arborist is contributing to the performance of the work in some way, including but not limited to having a certified arborist perform the work itself, having an employee or employees perform the work under the supervision (direct or indirect) of a certified arborist, or engaging in consultation with a certified arborist about the work. (Ord. 07-02, 2-12-2007)

SECTION 4: Title 7, Chapter 2, Section 11, entitled "Tree Technical Manual," is hereby amended as follows:

**7-2-11: TREE TECHNICAL MANUAL**

The director of public works, with the assistance and consultation of the natural resources commission, shall issue regulations for implementation of this chapter, which shall be known as the "Tree Technical Manual". The "Tree Technical Manual" will be made readily available to the public and shall include, but need not be limited to, standards and specifications regarding:

A. Replacement of trees allowed to be removed pursuant to this chapter.
B. Fees in lieu of the replacement of trees.
C. Exemptions with respect to the replacement of trees.
D. Testing criteria for determining whether a tree is a nuisance or dangerous within the meaning of this chapter.
E. Qualifications for persons who are permitted to remove, trim, plant, spray or maintain trees on public property.
F. Planting, removing, trimming, spraying, or otherwise treating or maintaining any tree on any Village owned property.
G. Protection of trees during construction. (Ord. 07-02, 2-12-2007)
H. An approved species list.

SECTION 5: A new Title 7, Chapter 2, Section 14, entitled "Appeal," is hereby inserted as follows:

**7-2-14: APPEAL**

The property owner may appeal in writing to the building commissioner any decision made by the director of public works under the provisions of this article within thirty (30) days of the decision rendered. If not satisfied with the decision made by the building commissioner, the property owner may appeal in writing to the Village Board of Trustees within thirty (30) days of the decision being rendered by the building commissioner.

SECTION 6: The terms and conditions of this ordinance shall be severable and if any section, term, provision, or condition is found to be invalid or unenforceable for any reason by a court of competent jurisdiction, the remaining sections, terms, provisions, and conditions shall remain in full force and effect.

SECTION 7: Except as to code amendments set forth in this ordinance, all chapters and sections of the Morton Grove Village Code shall remain in full force and effect.

SECTION 8: This ordinance shall be effective from and after its adoption, approval, and publication as provided by law.

PASSED this _____ day of _____ 2025.

Trustee Khan _____
Trustee Minx _____
Trustee Shiba _____
Trustee Thill _____
Trustee Travis _____
Trustee White _____

ATTESTED by me this _____ day of _____ 2025.

_____
Janine Witko, Village President
Village of Morton Grove
Cook County, Illinois

ATTESTED and FILED in my office this _____ day of _____ 2025.

_____
Eileen Scanlon-Harford, Village Clerk
Village of Morton Grove
Cook County, Illinois

**EXHIBIT A**

Appearance Commission Report for AC 25-XX

*Dated* _____

To: Chairperson Pietron and Members of the Appearance Commission

From: Brandon Nolin, AICP, Community Development Administrator
Anne Ryder Kirchner, Planner/Zoning Administrator

Date: October 28, 2025

Re: Appearance Awards 2026 Program

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Chairperson Pietron and Commissioner Zimmer requested that Staff develop a 2026 Appearance Awards program for consideration by the Appearance Commission. Historically, the Appearance Commission oversaw an Appearance Awards program that recognized property owners for maintaining quality front yards and facades that improved the appearance of the Morton Grove community. It has been several years since such a program existed and Staff researched examples in surrounding communities to develop a proposed program for 2026. Numerous communities throughout the Chicago region have programs designed to recognize the efforts of residents and business owners that contribute positively to the local community's image. Communities surveyed by Staff include, but are not limited to Mt. Prospect, Oak Park, Palatine, Park Forest, Park Ridge, Romeoville, and Skokie.

## Program Description

As proposed, Morton Grove's 2026 Appearance Awards program is intended to recognize properties for quality upkeep and/or new improvements that enhance the Village's curb appeal. Improvements recognized by the program could vary widely from new gardens and planters to updated façades or signage, or gateway improvements made by a subdivision. Residents and business owners may nominate their own property or any home, subdivision/HOA improvement, or local business they feel improves the Village's overall image. Staff also recommend an emphasis on use of native plantings in promotional materials for the award program given the Appearance Commission's emphasis on that policy during case review.

## Award Categories

Staff proposes to accept award nominations for residential properties as well as businesses. For residential properties, Staff recommends having a broad definition that includes single-family homes as well as multifamily developments, and entry/common area improvements to subdivisions/homeowner associations visible from public streets. For businesses, it is also recommended that community organizations such as schools, religious institutions, and entities like the Morton Grove Park District be included.

## Application Form

Staff has prepared a program description and simple one-page application form (See "Attachment A") that can be completed by a property owner or a neighbor. The form includes an email address to which 3-5 recent images must be provided. The form also includes an authorization signature requirement to ensure the Village is free to use the required images and the owner is made aware of their nomination. A webpage will be created for the program once Staff has received Appearance Commission feedback.

Timing and Judging Process

Staff recommends an application deadline at the end of June 2026 to allow plantings to be in full bloom and green. Appearance Commission members would then have the month of July to visit nominated properties before voting on the nominations at the August 2026 meeting. Award winners could then be recognized at the Village Board meeting in September 2026. Staff are in the process of evaluating whether a plaque could be provided to award winners, or if a certificate would need to be provided similar to the Greener Morton Grove award winners.

In judging the nominations, it is recommended that the program be restricted to improvements/facades in the front yard or street side yard, or otherwise visible from the street. Furthermore, while general areas of emphasis such as design, maintenance, and plant choice and diversity can be considered in judging a nomination, Staff does not recommend establishing strict ranking or scoring criteria for the 2026 program year. Some communities include points systems attached to specific scoring criteria, but such criteria are still often quite subjective despite having numeric scores assigned to them. The results of the 2026 program year could be reviewed and scoring criteria could then be introduced for the 2027 program year if desired by the Appearance Commission.

Attachments

- Attachment A – Draft 2026 Appearance Awards Program Description and Application, prepared by Brandon Nolin, AICP, Community Development Administrator, dated October 28, 2025

Attachment A
Draft 2026 Appearance Awards Program Description and Application
Prepared by Brandon Nolin, AICP, Community Development Administrator
Dated October 28, 2025




# APPEARANCE AWARDS

The Village of Morton Grove Appearance Commission is seeking nominations for the Village's annual Appearance Awards Program. The program recognizes properties for quality upkeep and/or new improvements, from new gardens and planters (with an emphasis on use of native plantings), to updated façades or signage, that enhance the Village's curb appeal. Residents and business owners may nominate their own property or any home, subdivision/HOA improvement, or local business they feel improves the Village's overall image. To nominate a property, complete the one-page application form and email 3-5 recent images.

NOTE: The Appearance Commission will consider only improvements to the front or street side of a property. Not all nominees may be awarded.

**www.mortongroveil.org/appearance-awards**

Deadline: June 30, 2026
Awardees will be notified in August

# VILLAGE OF MORTON GROVE
# APPEARANCE AWARDS

www.mortongroveil.org/appearance-awards

Property Address: _____

Category: ☐ Residential (incl. subdivision/HOA improvements)

☐ Business (incl. community organizations)

Property Owner/Business Name: _____

Brief Description of Improvement/Reason for Nomination:

Nominator Contact Information

Name (if different from property owner): _____

Phone: _____ Email: _____

Email 3-5 photos to commdev@mortongroveil.org

Deadline: June 30, 2026

## Owner Authorization:

I grant permission to the Village of Morton Grove Appearance Commission to use the images and text submitted with this application for the purpose of entering the Good Neighbor Award Program. All images submitted become the property of the Village of Morton Grove. I also release these images to be used for promotion and publicity of the Village of Morton Grove in print, online, and social media.

Signature of Property Owner: _____

Print Name: _____ Date: _____

***Questions?*** *Please contact the Appearance Commission Staff Liaison at (847) 663-3063 or email commdev@mortongroveil.org*