To: Chairperson Kintner and Members of the Plan Commission

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

Date: September 16, 2024

Re: Plan Commission Case PC 24-05
Request for an amendment to a Special Use Permit to allow the expansion of an existing school at the property commonly known as 8601 Menard Avenue in Morton Grove, Illinois (PIN 10-20-212-019-0000, 10-20-216-010-0000, 10-20-216-011-0000) with variations from Section 12-4-2:D for setback and lot coverage, all within a R-2 Single Family Residence District pursuant to Section 12-4-4:E. The applicant is a+c architects LLC on behalf of MCC Academy.

STAFF REPORT

Public Notice

The Village provided Public Notice for the September 23, 2024, Plan Commission public hearing for PC 24-05 in accordance with the Unified Development Code. The Morton Grove Champion published a public notice on September 5, 2024. The Village notified surrounding property owners via mail and placed a public notice sign on the subject property on August 29, 2024.

Application Summary

a+c architects LLC ("applicant"), submitted a complete Special Use Application to the Department of Community and Economic Development for the expansion of the existing school (MCC Academy) at 8601 Menard Avenue. The proposed project consists of the expansion of the existing gymnasium primarily to the south and west, the installation of a track within the existing field in the northern portion of the property, and related landscaping.

Subject Property

The subject property consists of three (3) parcels occupied by the existing MCC Academy at 8601 Menard Avenue in Morton Grove, Illinois. The parcel is zoned R-2 Single Family Residence. All surrounding properties to the east, to the south across Theobald Road, and to the west across Menard Avenue, are zoned R-2 and improved with single-family residences. The adjacent property to the north is also zoned R-2 and is the location of the Julia S Molloy Education Center owned by Niles Township District for Special Education #807.

Project Overview

Muslim Community Center (MCC) Academy is proposing to expand its existing school located at 8601 Menard Avenue. The existing gymnasium would be expanded to include extending the western wall approximately 29.5 ft. west toward Menard Avenue, extending the southern wall approximately 10 ft. toward Theobald Road, and extending a portion of the northern wall approximately 14 ft. The height of the new gymnasium (including the footprint of the existing gymnasium) would increase from approximately 25.5 ft to 32.0 ft. No other portion of the existing building will be expanded or increased in height. A two-lane clay track is also proposed for the north field along with an ornamental fence and landscaping at the west side of the field along the Menard Avenue frontage.

As part of the interior remodel, the existing stage and storage areas in the southern portion of the existing gymnasium would be removed and a storage area and office would be constructed in a new area at the northern end of the expanded gymnasium. Two new team bench areas and a new seating area with capacity for 130 visitors would be installed along the new eastern and western walls respectively. Proposed hours of operation include school hours 8 am-4 pm, events in the gymnasium 4-7 pm, and after-school religious uses 6-8 pm.

No changes are proposed to existing parking or access to the site. Proposed lighting is limited to three (3) wall sconces, up lighting on the west façade, and four (4) light poles to illuminate the track. The building name and address sign will be updated to read “MCC Academy 8601 N Menard Ave” and located on the west wall adjacent the new entrance at the northwest corner of the expanded gymnasium.

Zoning Review

In 2004, the Village approved a Special Use Permit (Ord. 04-44) for 8601 Menard Avenue for use as a mosque and for expansion of an existing school. The Village and the MCC also entered into a Mediation Agreement, Resolution 04-32, which governs the site in conjunction with the approved ordinance. On June 26, 2018, the Village approved an amendment to the Special Use Permit (Ord. 18-09) for 8601 Menard Avenue to convert the existing Pre-K through Junior High School to a Junior High/High School. The school was a Kindergarten through 8th grade parochial school, developed prior to the special use process.

“Land Banked” Parking

There are currently 194 parking spaces on-site. As a condition of the Special Use Permit (Ord. 04-44), the 2018 school expansion plans included an area for 23 “land-banked” parking spaces in the northern portion of the subject property (highlighted in site plan below). Per the 2004 mediation agreement (Res. 04-32) between the Village and MCC, “The Village may require the future construction of some or all of the parking spaces on the land-banked area if MCC Friday patrons park more than 50 vehicles on-streets adjacent to the MEC, for four (4) consecutive Normal Fridays, confirmed by a joint count taken by the Parties.”

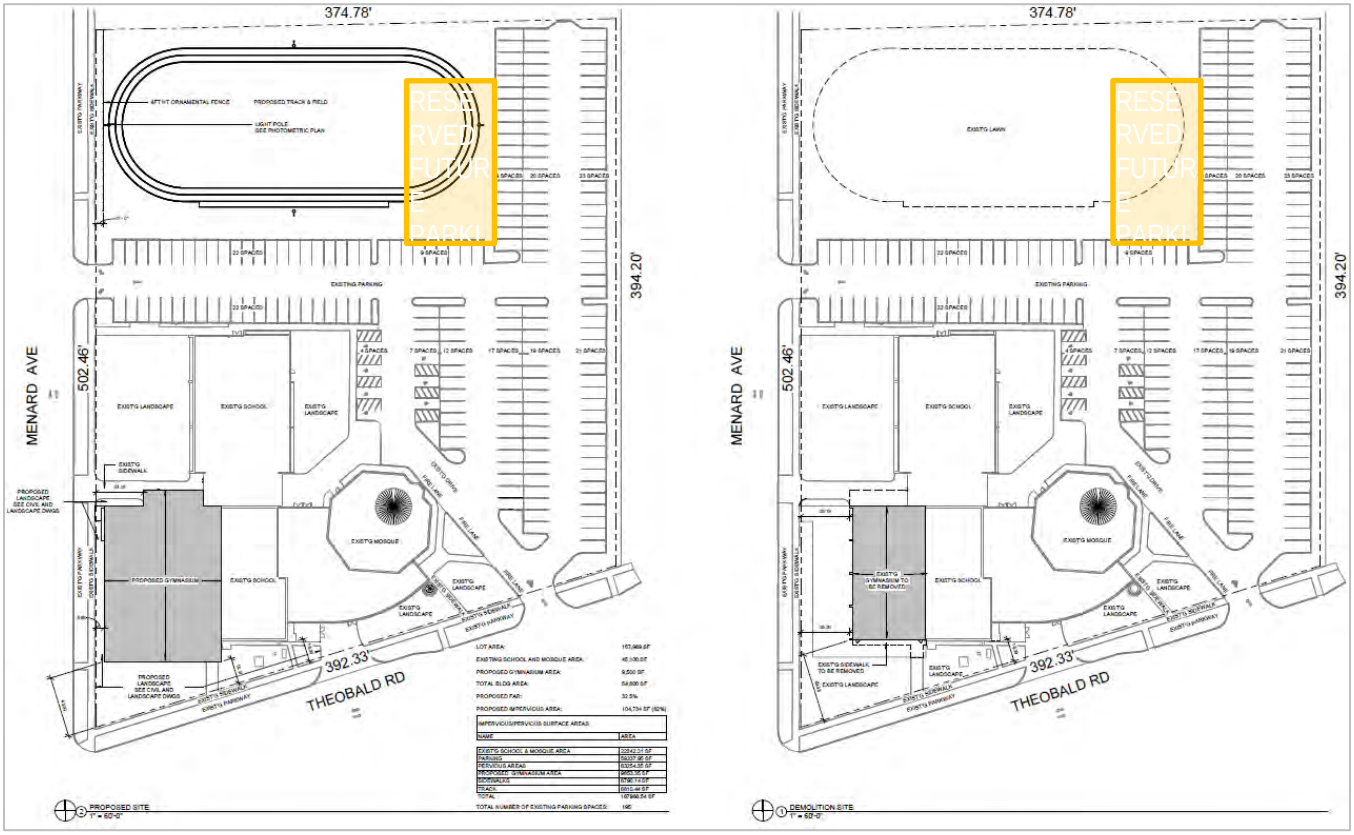
Traffic and Parking Impact

A traffic impact study was prepared by Gewalt Hamilton Associates (GHA) and is included in the hearing packet for Case PC 24-05. The study demonstrated that the proposed site plan has sufficient off-street parking to meet the demands of the expanded gymnasium and projected future traffic can be successfully accommodated on the surrounding roadway network. However, there are concerns regarding on-street parking volume related to operation of the MCC mosque.

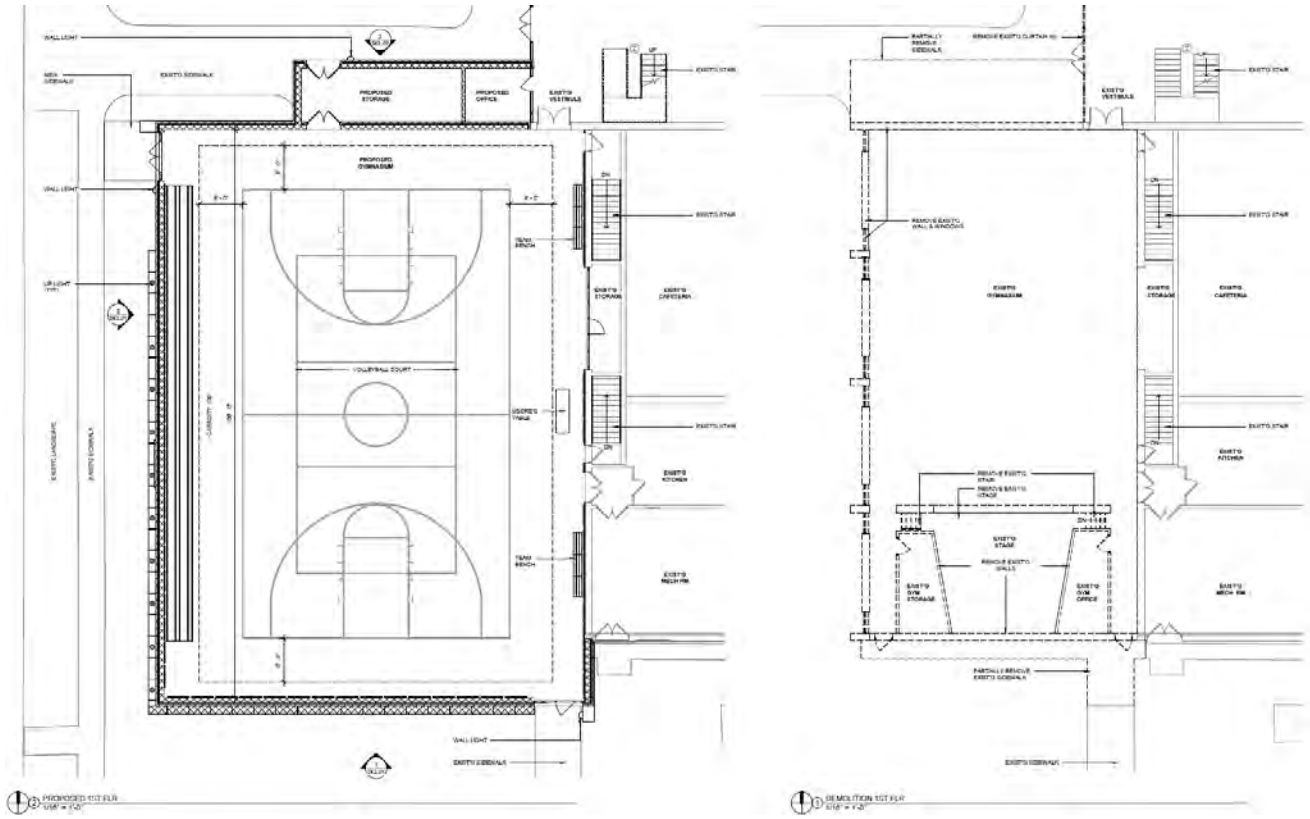
Gymnasium Traffic and Parking

Per the Traffic Impact Study, the traffic and parking to be generated by the proposed gymnasium expansion are not anticipated to add to congestion or parking concerns in the area. Gymnasium events will occur after school, do not overlap with Friday mosque services, which generate the highest parking demand across the mix of uses, and represent a less intense use than current school activities. As such, no modifications along Menard Avenue or Theobald Road, such as turn lanes or pavement striping modifications, are recommended. Staff agree that the expanded gymnasium use will not exacerbate traffic and parking issues, which is consistent with the Traffic Safety Commission’s recommendation of project approval with no comments.

With that said, as the MCC Academy is part of the larger MCC use that is permitted by the Special Use Permit, any expansion of the school represents an expansion of the Special Use. The use must be evaluated as a whole, which includes ensuring the MCC is compliant with the two Special Use Permit ordinances (Ord. 04-44 and Ord. 18-09) and the mediation agreement (Res. 04-32) guiding use of the site.



Proposed (Left) & Existing (Right) Site Plans with "land-banked" area for potential future parking spaces (per Ord. 04-44)



Proposed Gymnasium Expansion (Left) & Existing Gymnasium Footprint (Right)

Revised Traffic Impact Study Overview

As part of the public notice process, Staff received three letters in opposition to the application that included references to parking and congestion issues on surrounding streets. Staff also received a call from another individual who shared similar issues, but did not wish to provide written comments. In response to these complaints, Staff collected data to document the extent of any parking issues surrounding the MCC and requested that the applicant update their initial parking study to include observations related to on-street parking on surrounding public streets.

The Traffic Impact Study was revised to include observations for a Monday, Wednesday, and Friday prior to the end of the school year at the MCC Academy. Both off-street parking in the MCC lot and on-street parking on surrounding streets were observed between 2:00 p.m. and 8:00 p.m. by GHA. The parking study was also updated to project anticipated demand for the maximum enrollment of 350 students requested in the application. Public Works staff also collected parking observations for several days as a complement to data collected by the applicant.

Parking Study Area

The 2004 mediation agreement did not define how to establish a baseline for typical parking activity, or how to document increases in on-street parking. Staff used historical aerial imagery from 2018 to present and early morning site visits to document average on-street parking volume and establish a baseline measure.

The mediation agreement also did not define which streets should be evaluated. After initial field observations regarding the frequency of on-street parking in the general area, Staff chose to include the following streets in the analysis: Crain Street, Capulina Avenue, South Park Avenue, and Theobald Road between Major and Marmora Avenues; and Menard, Major, and Mango Avenues between Carol Avenue and Lee Street. GHA was directed to collect data for the same streets.

Public Works Field Observations – June 2024

- Staff observed on-street parking on June 6-7, June 11, and June 13-14 at 1:30 p.m. and 6:30 p.m. to correspond with posted religious services at the MCC.
- The average number of vehicles parked on-street during observed times was 200 vehicles.
- The highest counts observed were on Friday, June 7, with 450 on-street vehicles and Friday, June 14, with 463 on-street vehicles during the midday visit.

Gewalt Hamilton Observations – June 2024

- GHA observed on-street parking activity on Monday, June 3; Wednesday, June 5; and Friday, June 7. Parking was counted from 2:00 p.m. to 8:00 p.m. each day.
  (NOTE: GHA included several street segments not included in the aerial photo analysis and Public Works observations. Those street segments were removed from this summary to allow for as close to a one-for-one comparison as possible.)
- An average of 132 vehicles were observed across all times of day on Monday, June 3. The average for Wednesday, June 5, was 166 vehicles with a peak of 219 at 7:00 pm. Friday, June 7 witnessed an average of 185 cars with a peak of 367 vehicles at 2:00 p.m.
- On-street parking at 2:00 p.m. on Friday exceeded Monday and Wednesday by 221 vehicles and 243 vehicles respectively. That time slot represented the peak demand for the entire week and corresponded closely to midday service time at MCC.
- The GHA study notes that on-street parking never exceeded 40% of total capacity at any time, however, the on-street parking volume generated by MCC activity appears to exceed the 50-vehicle threshold specified in the 2004 Mediation Agreement.

Staff Findings

Overall, parking on the streets surrounding the MCC appears to have been steady between 2018 and 2022, but increased between 2022 and 2024 based on aerial imagery. While historical parking information is limited to aerials for 15 dates from the past 6 years, parking counts undertaken in June 2024 show a marked increase in on-street parking compared to available data.

According to counts by Public Works staff, non-peak on-street parking is typically 150 to 180 vehicles in the early morning and late morning. When accounting for that as a baseline, MCC activities appear to have contributed 270 and 283 vehicles on Friday, June 7, and Friday, June 14, respectively. Parking lot use documented by Public Works on those dates was near capacity (182-190 of 195 spaces).

Staff met with the applicant to discuss preliminary concerns regarding on-street parking and requested a parking management plan. In response, MCC Academy proposed the use of three parking attendants on Fridays from 12:00 to 2:30 p.m. to address on-street parking concerns (see "Attachment A"). Based on parking count findings, Staff expressed concerns that the parking attendants alone would not be sufficient to address increased use of on-street parking. In response to Staff comments and comments from the Traffic Safety Commission Chairperson, the applicant revised the proposed traffic and parking management plan and that expanded plan is summarized below.

The applicant should speak to on-street parking issues and be prepared to present an alternative design of the track and field that includes additional off-street parking in the land-banked area. *If the Plan Commission were to make a motion to approve the application, Staff recommends one of the following two conditions to address the MCC's current impact on on-street parking in the area and noncompliance with the mediation agreement:*

1) *The land-banked area must be improved to provide a minimum of 23 off-street parking spaces; or*
2) *The proposed track design must be modified to prevent any improvement of the land-banked area to allow for future off-street parking spaces, monitoring of on-street parking must continue, and parking management measures must be implemented by the MCC in coordination with staff until the MCC becomes and remains compliant with the mediation agreement.*

Summary On-Street Statistics

Aerial Image Counts – 2018-2024

Median	101	
Average	94	
Monday	104	
Tuesday	111	
Wednesday	60	
Thursday	67	
Friday	104	
Saturday	91	
Sunday	101	
Min	51	Wednesday, Sept. 28, 2022
Max	143	Friday, Sept. 15, 2023

Public Works Field Counts - June 2024

Median	142.5	
Average	200	
1:25 PM	257.8	
6:35 PM	143	
Tuesday	129.5	
Thursday	135	
Friday	301.25	
Min	118	Tuesday, June 11 - 1:25 PM
Max	463	Friday, June 14 - 1:25 PM

NOTE: No image dates occurred during Ramadan in any year

Gewalt Hamilton Associates – June 2024

Median	142	
Average	161	
2:00 PM	212	
7:00 PM	170	
Monday	132	
Wednesday	166	
Friday	185	
Min	115	Monday, June 3 - 5:00 PM
Max	367	Friday, June 7 - 2:00 PM

Parking Management Plan

Prior to the September 5 Traffic Safety Commission meeting, the applicant provided a Friday Prayer Parking Management Plan (PMP) (see "Attachment B"). The PMP calls for the formation of a task force comprising members of the community, a supervisor, and up to 10 MCC staff. Task force members will be trained, provided with standard procedures, and will use two-way radios to communicate to one another. Task Force members will be stationed in the parking lot to maximize use of off-street parking spaces:

1. Vehicular and pedestrian congregants will be directed to the on-site parking lot.
2. Parking lot staff will direct traffic to the rear of the lot to fully utilize tandem spots.
3. Once the tandem spots are filled, on-site staff will direct vehicles to the west stalls.
4. Pedestrians walking to the mosque will be directed by staff to ensure their safety.

To minimize issues related to on-street parking spaces, Task Force members will be posted at key intersections surrounding the MCC. Task Force members will monitor traffic and parking on adjacent streets. The MCC is also proposing to lengthen the time between afternoon services on Fridays to minimize the overlap between congregants coming to and leaving the two different services.

The PMP identifies the following targets and metrics to manage parking both off-street and on-street:

- Reduce parking search time by 20% within 3 months based on task force time trials.
- Achieve a 70% satisfaction rate among users within 3 months based on congregant surveys.

Staff agree that maximizing use of the MCC parking lot and reducing overlap between the busier afternoon services should help reduce on-street parking volumes to some degree. However, it is unclear at this time exactly how much of a reduction in on-street parking will result from implementation of the PMP and if it will be sufficient to avoid exceeding the additional 50 vehicles cited in the 2004 Mediation Agreement.

Student Enrollment

Per information reported in the parking study, the reported current enrollment at MCC Academy exceeds what is permitted by the current Special Use Permit (Ord. 18-09). Enrollment is reported at 306 students. Per Ordinance 18-09, approving the Special Use Permit for the MCC Academy transition to a High School, "the MCC shall limit overall enrollment to a maximum of 240 students and a maximum of 30 teachers." As MCC Academy is currently operating in violation of the ordinance, the request for an amendment to the existing Special Use Permit for a proposed gymnasium expansion and track cannot be approved without also addressing the attendance issue.

Approval of the application must include an amendment to Section 3 of Ord. 18-09 to increase the student enrollment limit. In response to Staff requests, the applicant has requested that the total student enrollment permitted be increased to 350 students (see "Attachment C").

Given that the requested student enrollment number would only impact operations and parking demand during school hours Monday through Thursday (school operates off-site on Fridays), and the MCC parking lot has demonstrated capacity during those hours, Staff are not opposed to the requested increase. The MCC Academy had been operating in excess of the limits stated in Ord. 18-09 for several years and, to Staff's knowledge, no issues were reported related to school operations during the 2023-24 school year. Concerns regarding MCC parking and traffic management have generally been related to Friday religious services.

The applicant should speak to the current and projected enrollment of the MCC Academy and experiences with operating at a volume greater than 240 students. *Approval of the requested increase in the student enrollment cap can be included as a condition of approval. If the Plan Commission does not support the requested increase in student enrollment, Staff recommend that the application be withdrawn until the MCC can provide proof that enrollment has been reduced to 250 students or fewer.*

Commission Review

Appearance Commission

On May 7, 2024, the Appearance Commission reviewed Case PC 24-05. At the conclusion of the discussion, the Appearance Commission voted unanimously (7-0) to recommend approval of the application. No additional comments were issued.

Traffic Safety Commission

On May 9, 2024, the Traffic Safety Commission (TSC) reviewed Case PC 24-05 and the first draft of the Traffic Impact Study. At the conclusion of the discussion, the TSC voted unanimously (8-0) to recommend approval of the application. No additional comments were issued at that time.

The revised Traffic Impact Study was delivered to the Traffic Safety Commission chairperson for review in July 2024. The TSC chairperson requested that a traffic management plan be provided that would reduce the amount of on-street parking demand generated by the MCC on Fridays on the neighboring streets (see "Attachment D"). In response to this comment, MCC provided an expanded traffic and parking management plan summarized above.

On September 5, 2024, the TSC reviewed the revised Traffic Impact Study as well as the updated traffic and parking management plan. MCC representatives presented the traffic and parking management plan and responded to various questions from the TSC. At the conclusion of the discussion, the TSC voted unanimously (7-0) to recommend approval of the application. If the Plan Commission approves the request to amend the Special Use Permit, the following conditions were recommended for inclusion by the TSC (see "Attachment D"):

- *The gym or sports grounds operations shall not include any school activities on Friday afternoons during prayer service. Any activities should be limited to a single game event on other days.*
- *Any track activities for school activities shall not host any special events that would generate additional traffic or parking demand.*
- *The Parking Management Program (PMP) developed by MCC Academy [should be implemented] in full force utilizing all possible parking on campus to alleviate any additional on-street parking on village streets.*

Departmental Review

The proposed project was reviewed by several department representatives with the Department of Public Works being the only department to provide comments (see "Attachment E").

- Building Department: No comments at this time.
- Fire Department: No comments at this time.
- Public Works Department/Engineering: In review of the proposed project, the Village Engineer issued several comments dated May 13, 2024, regarding:
    - Potential need for special event traffic control which is not discussed in the Traffic Impact Study
    - Agreement with parking need findings specifically tied to gymnasium activities.
    - Potential overlap between school events and gymnasium events that would reduce parking demand.
    - Recommendation to control the use of the field and track as a condition of approval to ensure that area does not generate unforeseen traffic and parking demand.

Standards for Review

The Standards for Special Uses are established in Section 12-16-4:C.5 of the Unified Development Code:

Standards For Special Uses: The following standards for evaluating special uses shall be applied in a reasonable manner, taking into consideration the restrictions and/or limitations which exist for the site being considered for development:

1. Preservation of Health, Safety, Morals, And Welfare: The establishment, maintenance and operation of the special use will not be detrimental to or endanger the public health, safety, morals or general welfare.
2. Adjacent Properties: The special use should not be injurious to the use and enjoyment of other property in the immediate vicinity for the uses permitted in the zoning district.
3. Orderly Development: The establishment of the special use will not impede normal and orderly development or

impede the utilization of surrounding property for uses permitted in the zoning district.

4. Adequate Facilities: Adequate utilities, access roads, drainage and other necessary facilities are in existence or are being provided.
5. Traffic Control: Adequate measures have been or will be taken to provide ingress and egress designed to minimize traffic congestion on the public streets. The proposed use of the subject site should not draw substantial amounts of traffic on local residential streets.
6. Adequate Buffering: Adequate fencing and/or screening shall be provided to ensure the right of enjoyment of surrounding properties to provide for the public safety or to screen parking areas and other visually incompatible uses.
7. Conformance To Other Regulations: The special use shall, in all other respects, conform to applicable provisions of this title or amendments thereto. Variation from provisions of this title as provided for in subsection 12-16-3A, "Variations", of this chapter, may be considered by the plan commission and the Village Board of Trustees as a part of the special use permit.

Recommendation

Should the Plan Commission recommend approval of this application, staff suggests the following motion and conditions:

Motion to recommend approval of Case PC 24-05, a request for approval of an amendment to a Special Use Permit (Ord. 18-09) to allow the expansion of an existing school with waivers from Section 12-4-2:D for setback and lot coverage, all within a R-2 Single Family Residence District at the property commonly known as 8601 Menard Avenue in Morton Grove, Illinois, subject to the following conditions:

1. *Prior to filing any Building Permit Application, the owner/applicant shall provide the Village with final 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 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. *Prior to filing any Building Permit Application, the owner/applicant shall provide the Village with a revised landscape plan that adheres to direction provided by the Appearance Commission, including the potential addition of shade trees, for review and approval by the Community Development Administrator and Appearance Commission Chairperson. If the landscape plan is deemed to be inconsistent with the approved plan, 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 provide the Village with a final photometric plan that meets the minimum requirements of Village Code for review and approval by the Community Development Administrator and Village Engineer.*

4. *Gymnasium operations at the subject property shall be limited to single-game events, single-day special events such as theater performances, training, and education on non-Fridays, and the hosting of tournaments shall be prohibited.*

5. *Use of the track and field shall be ancillary to school functions and the field area shall not host any special events that would generate additional traffic or parking demand.*

6. *Prior to the issuance of a building permit, the applicant shall submit a photometric analysis to document appropriate field lighting, subject to review and approval of the Community Development Administrator.*

7. *Prior to the issuance of a building permit, the applicant shall submit proof of an executed parking management agreement in keeping the parking management plan provided to the Village as part of the application materials for PC 24-05.*

8. *Section 3, Paragraph B of Ord. 18-09, which amends Section of Ordinance 04-44, shall be amended to state, "The MCC shall limit overall enrollment to a maximum of 350 students and a maximum of 30 teachers."*

9. *Prior to the issuance of a building permit, the applicant shall submit revised plans that include conversion of the land-banked area to off-street parking to include a minimum of 23 spaces and a reduced/relocated track and related lighting, subject to review and approval of the Community Development Administrator.*

   OR

   Prior to the issuance of a building permit, the applicant shall submit revised plans that include a reduced/relocated track and related lighting that does not overlap with the land-banked area, subject to review and approval of the Community Development Administrator. The applicant shall also submit a letter of understanding recognizing that the Mediation Agreement (Res. 04-32) remains in place and the amended Ordinance 18-09 does not relieve the burden of monitoring on-street parking impacts related to MCC activities, nor does it mitigate the potential that the MCC shall be required to install additional off-street parking on the subject property. Parking management measures must be implemented by the MCC in coordination with staff until the MCC becomes and remains compliant with the mediation agreement.

   OR

   Prior to the issuance of a building permit, the applicant shall submit a letter of understanding recognizing that the Mediation Agreement (Res. 04-32) remains in place and the amended Ordinance 18-09 does not relieve the burden of monitoring on-street parking impacts related to MCC activities, nor does it mitigate the potential that the MCC shall be required to install additional off-street parking on the subject property. Parking management measures must be implemented by the MCC in coordination with staff until the MCC becomes and remains compliant with the mediation agreement.

Attachments

- Attachment A – Memo from Applicant regarding a Parking Management Plan, dated July 31, 2024
- Attachment B – Memo from Applicant regarding an updated Parking Management Plan, dated September 2, 2024
- Attachment C – Memo from Applicant regarding student enrollment, received May 13, 2024
- Attachment D – Plan Review Comment Forms for PC 24-05, from the Traffic Safety Commission prepared by Chairperson Keith White, dated July 26, 2024 and September 6, 2024.
- Attachment E – Plan Review Comment Form for PC 24-05, prepared by Chris Tomich, Village Engineer dated May 13, 2024
- Attachment F – Communications from area property owners
- Attachment G – Plans and Supporting Documents for PC 24-05

Attachment A
Memo regarding a proposed Parking Management Plan,
Submitted by MCC,
Dated July 31, 2024

MCC ACADEMY
Building Character & Developing Minds
8601 N. Menard Ave, Morton Grove Il. 60053
9301 Gross Point Rd, Skokie, IL 60076
Phone: MG (847) 470-8801; Skokie (224) 534-7638

July 31, 2024,

To Whom It May Concern:

We have implemented a new traffic plan for Friday prayer services. This plan includes three parking attendants who will manage parking and traffic to ensure a smooth experience on Fridays from 12 p.m.-2:30 p.m.

One parking attendant will be stationed at the entrance of the mosque to manage the flow of people entering the building and ensure a steady pace. The other two attendants will be responsible for directing the flow of traffic in our parking lot and guiding people to available parking spots.

To ensure our congregants are aware of these changes, we will be sending out regular communications to remind everyone to:

- Carpool to Friday prayer services.
- Park their car starting from the far end of the parking lot, filling the further spots first.
- Note that the parking lot will open at 1:50 p.m. to allow time for cars from the first prayer service to exit. Cars arriving for the second prayer service will not be able to enter until 1:50 p.m. and must wait on Theobald Rd. until then.
- Our Muslim neighbors who are congregants will be asked to leave their cars at home or park in their own garages or driveways to allow more space for those commuting to the prayer services.
- Our congregants will be asked to refrain from dropping people off on the streets and instead use our parking lot to drop off those attending Friday prayer.

We intend for these measures to significantly contribute to maintaining a smooth flow of traffic at MEC Mosque during Friday prayer services. If you have anyways questions, please do not hesitate to contact us at (312) 952-1272.

Sincerely,

Mr. Habeeb Quadri,
Superintendent of MCC Academy

Mr. Mazhar Khan,
MEC Masjid Board

Attachment B
Memo regarding an updated Parking Management Plan,
Submitted by MCC,
Dated September 2, 2024

MCC ACADEMY

FRIDAY PRAYER PARKING MANAGEMENT PLAN [PMP]

OVERVIEW

INTRODUCTION

MCCA is developing a comprehensive traffic management plan for the Friday Prayer services with the goal to manage vehicular traffic. The goal of this Parking Management Plan [PMP] is to improve traffic flow, reduce congestion, and enhance the overall parking experience at MCCA Morton Grove alongside the adjacent street. This plan outlines the objectives, strategies, and metrics to effectively manage parking resources and demonstrate measurable improvements in traffic conditions.

KEY FACTORS FOR SUCCESS

- **Reduce Traffic Congestion**: Minimize traffic congestion caused by vehicles searching for parking.
- **Increase Parking Efficiency**: Optimize the usage of available parking spaces to reduce the need for new parking
- **Improve Access to Entry**: Ensure that high-demand areas have sufficient parking availability during peak times.
- **Enhance User Experience**: Make the parking experience more convenient and user-friendly.

EXPECTED OUTCOMES

- **Optimization:** Improved flow of vehicular traffic
- **Streamlined:** Reduced time spent searching for parking
- **Decreased Cars:** Reduced street parking by cars due to carpooling
- **Increased Efficiency**: Higher utilization rates of Tandem parking spaces.

TARGETS + METRICS

Target: Reduce parking search time by 20% within 3 months.

We plan to achieve this by having staff at designated intersections with 2 way communications to direct cars to immediate open parking spots. Community members and congregants will be carpooling in order to reduce the number of cars, resulting in decreased cars in the parking lot. By reducing the number of cars, we are also directly reducing the amount of street parking required. The Task Force will take time trials to understand the approximate time it takes to find parking to establish a baseline. Upon implementation, we will take another time trial to validate the quicker and efficient results.

Target: Achieve a 70% satisfaction rate among users within 3 months.

In order to achieve this, we will hand out survey's to congregants prior to the Plan Implementation to gather a baseline metric. We will conduct another survey after one month of implementation to gather metrics of congregant experience. We will conduct the survey again to continue our increase of congregant satisfaction and accountability to ensure the Implementation Plan is a success

PARKING EXPERIENCE + PROCESS

1. Vehicular and Pedestrian Congregants will be directed to the on-site parking lot

2. Parking lot Staff will direct traffic to the rear of the lot to fully utilize tandem spots

3. Once the Tandem spots are filled, on-site staff will direct vehicles to the west stalls

4. Pedestrians walking to the mosque will be directed by staff to ensure their safety

TASK FORCE IMPLEMENTATION PLAN

PARKING MANAGEMENT TASK FORCE

MCCA will form a **Parking Management Task Force** that will be charged with the task of managing on and off-site parking. The mandate of the task force will be to manage and reduce the impact of parking on the surrounding streets and maximize the efficiency of on-site parking.

The task force will be staffed by members of the community and will include a supervisor, and up to 10 staff. The task force will be given specific instruction on how to communicate with congregants and visitors, communicate internally with the use of two-way radio, and will be given safety instructions.

Staff will be trained to approach members with a prepared explanation and request the congregants + visitors to proceed to the on-site parking areas. The congregants and visitors will be informed that once they arrive at the site, they will be assisted with parking. The staff will undergo multiple trainings to emphasize the importance safety, traffic and avoid congestion

The task force members will be equipped with means of two-way communications to update all members with the activities and inform the on-site members regarding the direction and number of cars approaching the site.

Image 1 Staff observation stations

TASK FORCE STATIONS

The staff will be stationed at locations shown in image 1 on the left. They will observe parking activities on Fridays from Noon to 3:00pm. They will guide congregants and visitor activity to direct them to the onsite parking.

TASK FORCE IMPLEMENTATION PLAN

OBSERVATION AREAS

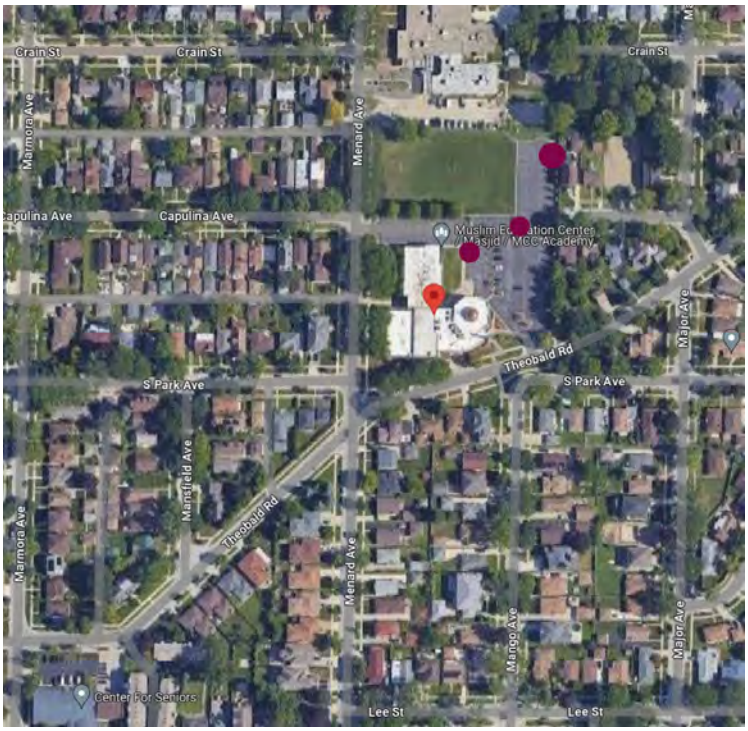
All staff will be appointed to monitor and observe all neighboring streets with clear eye sight and visibility. Each Staff will visually track both pedestrian and vehicular traffic, parking and flow to determine areas of mitigation. The station of staff is designed to provide for coverage of limited area with adequate of overlap of the observed area for efficiency.

ENTRY & EXIT POINTS

There will be staff stationed at each parking area entrance to provide directional information about the available parking spaces. These staff will be updated on available locations by the on-site staff.

Departure // On-site staff will direct the vehicle and pedestrian traffic from the parking lot and adjacent streets to assure a seamless flow of traffic and safety of pedestrian traffic. Staff will be diligent and remain on duty till the last car departs from the property, preventing cars from lingering, delayed traffic and reducing vehicle wait times

TASK FORCE IMPLEMENTATION PLAN



MEDIATION + GOVERNANCE

There will be staff stationed on site in the parking areas to monitor the parking activities on site and provide assistance to drivers to maximize efficiency and seamless flow of traffic. They will also be responsible for informing the staff stationed at the entry and exit points in regard to the location of available parking spaces. See image for the location of staff stations.

OUTCOME + IMPACT

All onsite and off-site activities will be monitored by the task force supervisor. The supervisor will provide guidance and support as needed.

There will be a monthly task force meeting to discuss the effectiveness of the plan. The necessary adjustments and improvements will be discussed and implemented.

The supervising member will be monitoring the communications and provide guidance or assistance as needed. As a result of the Parking Implementation Plan, we are targeting the following results:

- **OPTIMIZED VEHICULAR FLOW OF TRAFFICE**
- **REDUCED ILLEGAL PARKING**
- **REDUCED PARKING CONGESTION ON STREETS**
- **HIGHER UTILIZATION OF AVAILABLE PARKING SPACES**
- **SATISFACTORY USER EXPERIENCE**
- **POSITIVE NEIGHBOR ENGAGEMENT**

MCC ACADEMY

FRIDAY PRAYER PARKING MANAGEMENT PLAN [PMP]

Attachment C
Memo regarding Student Enrollment
Submitted by MCC,
Received May 13, 2024

To Whom it May Concern,

MCCA has submitted an application to the village for gym expansion. We were informed there was a stipulation on the number of students. This was a surprise for us. As our school enrollment at its peak was 480 students. Please note when our enrollment was at 480 students we had the same or less parking spaces. We are requesting the village to allow the occupancy of students to be increased to 350. Please see enrollment numbers for the school for previous years and future years. We anticipate that in 2024-2025, the enrollment will be 338 and in 2025-2026, the enrollment will be close to 350. There are 24 full time staff members.

2001-2002	180
2002-2003	220
2003-2004	235
2004-2005	261
2005-2006	281
2006-2007	272
2007-2008	269
2008-2009	279
2009-2010	365
2010-2011	409
2011-2012	434
2012-2013	480
2013-2014	476
2014-2015	480
2015-2016	150
2016-2017	182
2018-2019	204
2019-2020	211
2023-2024	306
2024-2025	338
2025-2026	345

We have two sections of middle school with a maximum of 28 students. In high school, we will have one section each with 28 students and a max of 30 students and Hifdh classes will have 50 students.
6th grade- 28 x 2=56
7th grade-28 x 2= 56
8th grade-28 x 2=56

9th grade 30
10th grade 30
11th grade 30
12th grade 30
Hifdh 50

338 total

Attachment D
Plan Review Comment Forms for PC 24-05,
Prepared by Keith White, Traffic Safety Commission Chair,
Dated July 26, 2024 and September 6, 2024

REVIEWING: **BUILDING** **FIRE** POLICE **PUBLIC WORKS/ENGINEERING** **TSC**

VILLAGE OF MORTON GROVE, ILLINOIS

PLAN REVIEW COMMENT FORM

DATE DISTRIBUTED: 4/12/2024

CASE NUMBER: PC 24-05

APPLICATION: Request for an amendment to a Special Use Permit to allow the expansion and modification of an existing school located in an R-2 Single Family Residence District in accordance with Section 12-4-2:C of the Village of Morton Grove Unified Development Code (Title 12), with variations to Section 12-4-2:D for setback and lot coverage requirements for the property commonly known as 8601 Menard Avenue in Morton Grove, Illinois (10-20-212-019-0000, 10-20-216-010-0000, 10-20-216-011-0000). The applicant is a+c architects LLC on behalf of MCC Academy.

A Special Permit Application has been submitted to the Plan Commission for action. Please return your review to the Department of Community and Economic Development by **Friday, May 10, 2024.**

Thank you,
Brandon Nolin, AICP
Community Development Administrator

COMMENTS OR CONCERNS

Revised Comments: July 26, 2024 from Traffic & Safety:

I have reviewed the correspondence along with the updated revised traffic study submitted on July 3, 2024. The occupancy survey was performed on Wednesday June 5, 2024 by Gewalt Hamilton Associates, Inc. It is my opinion that the survey should have been performed on a Friday which is the day of most concern with on-street parking with the residents in the general area around the MCC. This has been an issue for many years and we as the TSC are concerned with the expansion which will cause more issues for on-street parking in the neighborhood.

In summary, the TSC would like to see a reduction plan that would reduce the amount of on-street parking on Fridays on the neighboring streets around the MCC in order to support the expansion.

Keith White

Traffic & Safety Commission Chairman

These comments accurately represent existing Village regulations or policies.

Name (please print): Keith White

Signed: Chairman

Date: 7/26/24

REVIEWING: BUILDING FIRE POLICE PUBLIC WORKS/ENGINEERING TSC

VILLAGE OF MORTON GROVE, ILLINOIS

PLAN REVIEW COMMENT FORM

DATE DISTRIBUTED: 4/12/2024

CASE NUMBER: PC 24-05

APPLICATION: Request for an amendment to a Special Use Permit to allow the expansion and modification of an existing school located in an R-2 Single Family Residence District in accordance with Section 12-4-2:C of the Village of Morton Grove Unified Development Code (Title 12), with variations to Section 12-4-2:D for setback and lot coverage requirements for the property commonly known as 8601 Menard Avenue in Morton Grove, Illinois (10-20-212-019-0000, 10-20-216-010-0000, 10-20-216-011-0000). The applicant is a+c architects LLC on behalf of MCC Academy.

A Special Permit Application has been submitted to the Plan Commission for action. Please return your review to the Department of Community and Economic Development by **Friday, May 10, 2024.**

Thank you,
Brandon Nolin, AICP
Community Development Administrator

COMMENTS OR CONCERNS

The Parking Management Program developed and submitted after initial submittal of material to Traffic Safety Commission is accepted.

The application is approved as presented with the following conditions:

1. The gym or sports grounds operations shall not include any school activities on Friday afternoons during prayer service. Any activities should be limited to a single game event on other days.
2. Any track activities for school activities shall not host any special events that would generate additional traffic or parking demand.
3. The Parking Management Program (PMP) developed by MCC Academy be in full force with utilizing all possible parking on campus to alleviate any additional on-street parking on village streets.

These comments accurately represent existing Village regulations or policies.

Name (please print): Keith White Traffic Safety Commission Chairman

Signed:

Date: 09/09/2024

Attachment E
Plan Review Comment Form for PC 24-02
Prepared by Chris Tomich, Village Engineer
Dated March 11, 2024

Attachment F
Communications from area property owners,
Received various dates May-August, 2024

Opposing Variance at the MCC

[redacted]

Mon 5/6/2024 1:19 PM

To:Brandon Nolin <bnolin@mortongroveil.org>

Hi-

Below please find my letter opposing the variance at the MCC to be read on the May 21st meeting. Please reach out with any questions.

To Whom it May Concern:

My name is [redacted] and my family resides at [redacted]. We have lived at this residence since 2003 and the conditions of this area is deteriorating at a rapid speed. I am writing this letter in complete disagreement with the proposed variance of the MCC to expand the gymnasium so more events such as games to be held. This variance should not be considered until the traffic and parking issues are resolved in the neighborhood particularly on Capulina Ave between Menards and Marmora.

When the MCC hosts events, prayer services, Ramadan etc… this causes at huge problem down Capulina Ave such as no parking for tax paying residents, our cars are getting hit and damaged because the street is narrow yet cars are coming and going in both directions causing issues. Our cars in particular have gotten hit a few times and we've had to pay for the repairs. The MCC is not enforcing their traffic flow to exit either left or right from the parking lot instead cars are allowed to zoom down Capulina. Capulina Ave needs to either have permit parking on both sides of the street and the police to enforce this by writing tickets and/or making Capulina a one way street.

A traffic study MUST be completed before anymore additions are done at the MCC because with the current state, the MCC does not have enough parking to accommodate what is currently going on. This addition will only increase traffic in the residential neighborhood. Does the MCC even have a special use permit to host these types of events? Again, this is a residential neighborhood and the MCC is producing too much traffic/noise for what a residential neighborhood should have.

What is the parking/square footage ratio currently? This addition will take up the grassy area therefore how will this affect drainage to the nearby homes? A study needs to be conducted.

Why can't the MCC build a garage/parking to accommodate their increase in traffic currently on the grass they currently have?

Something needs to happen, something needs to change on Capulina Ave before this variance is even approved.

We STRONGLY oppose this request.

I have also included 3 pictures of recent incidents in direct result of the MCC events.

Thank you for your time,
The [redacted] Family

Our car getting sideswiped:

Garbage thrown on our street from a car parked there and went to MCC when Ramadan was over

2 cars crashed into each other when leaving the MCC after Ramadan prayer service:

Outlook

Comment regarding MG Plan commission Case #PC 24-05

From [redacted]
Date Sun 9/22/2024 12:00 AM
To Brandon Nolin <bnolin@mortongroveil.org>

Morton Grove Plan Commissioners,
My family is opposed to this request for an amendment to a Special Use permit to change the zoning and allow a larger footprint of the school.

The traffic study data provided was flawed because it was done during the summer, when both Niles West High School and the MCC were out of session.
As 32 year residents in this neighborhood, we have witnessed an exponential increase in the amount of traffic that has occurred due to previously approved zoning changes to this property. The parking in our neighborhood makes it almost impossible for family and guests to visit because of the massive number of MCC members using their facility at all hours of the day and night.
There have been dozens of instances when the Morton Grove Police have been notified to alert them of illegally parked vehicles ìncluding vehicles blocking driveways and fire hydrants. But in numerous instances and to our dismay, no tickets were issued.
Why should the Village continue to give additional preferential treatment to a private institution that has already been the recipient of several favorable zoning changes previously?

Please review when this property was originally sold to the MCC, as there was a village
Right of Way that ran through this property. This should have been used to benefit traffic egress in our village. The Morton Grove Park District was also interested in this land, but inexplicably the property was sold under very questionable circumstances with its' sale approved secretly by a former superintendent who is now long gone from the state. Unfortunately, due to ineptitude of previous Morton Grove village administrations, this right-of-way became property of the MCC.
There are many times where we experience tremendous difficulty exiting our driveway. This is largely due to the Village creating a pedestrian island on Theobald and closing off Mango to accommodate the MCC and as a result , Menard has become the primary north-south thoroughfare leading to the school and mosque.
It would be much wiser and advisable for the MCC to add on to their other school located on the major thoroughfare of Gross Point Road and a block north of Skokie Boulevard. They have ample land to do so there and it would be much fairer to the residents of our crowded neighborhood.
Why do we say crowded? The Village refuses to enforce occupancy restrictions and there are a number of single family homes containing three and four families in this neighborhood. How do we know this? Because there are between 6 -8 vehicles parked near these residences. I know of at least half a dozen houses in the area like this and I'm certain there are many more.
Please do NOT approve this zoning exception as it will create considerably more congestion and additional safety hazards. Hazards such as young drivers using the 2 block southbound stretch of Menard from the stop sign at Theobald to Lincoln as a racetrack. This ongoing danger could lead to serious injury or even death due to the density of children & adults in and around the MCC as there are vehicles that continue to drag race at speeds of 70 mph. This stretch of road leads directly to Niles West High School six blocks to the South. Directly north of the MCC property is Malloy School which serves disabled children and because of this, dozens of required buses travel daily on Menard Ave.
Please have consideration for long time neighborhood , resident, & tax paying Morton Grove property owners and deny this application for a Special Use Permit & zoning change based on the aforementioned reasons.

Thank you,

[redacted]
Morton Grove, IL 60053

[redacted]

Mr. Brandon Nolin, AICP
Community Development Administrator
Department of Community & Economic Development
Village of Morton Grove
6101 Capulina Avenue
Morton Grove, IL 60053

Re: Morton Grove Plan Commission Case No. PC-24-05(8601 Menard Avenue)

Dear Mr. Nolin:

We are against the expansion of the existing school property commonly known as 8601 Menard Avenue in Morton Grove. We are against this expansion since the current uses of the property already creates excess traffic and parking problems in the area. All previous projections about adequate parking and traffic in the area by so called "experts" have been wrong. In addition, the property is not following the current agreement with the village that requires tandem parking in their lot. Some members of MCC do not follow the parking restrictions in the area especially on Fridays and during Ramadan. It is a lot of fun when their patrons obstruct or park in our driveway. Check with the Morton Grove Police Department for the large number of citations they have written in the area.

An expansion of the building gymnasium will bring more games and traffic into the area that is already overcrowded. When the MCC first applied for the special use permit they said there would be no high school. Later they asked for a high school. Now they want an expansion and more congestion and traffic and more illegal parking and hindrance of residence rights. Currently the MCC creates parking and traffic problems on 52 Fridays, 30 evenings of Ramadan and various holidays and events. Now they want to add insult to injury. At least 25% of the time, the MCC is creating traffic and parking problems. An expansion will only worsen the problem and is not fair to the residents. Remember, originally when they were granted the special use permit, there was to be no high school.

If anything, the previous Special Use Permit should be withdrawn, because the parking lot is too small for the school and mosque, and the village was misled about the numbers of those that would be attending. One wonders if the building is adequately sized for the crowds attending and might be a fire hazard. In the alternative, turn down the expansion plans and limit street parking to residence only and MCC patrons must use only their parking lot and use tandem parking like they agreed to in their agreement with the village.

The site plan approved by the 2004 Special Use Permit included 201 on-site parking spaces, as well as an area for 23 more "land-banked" parking spaces. Per Resolution 04-32, "The Village may require the future construction of some or all of the parking spaces on the land-banked area if MCC's Friday patrons park more than 50 vehicles on streets adjacent to the MCC for four consecutive normal Fridays, confirmed by a joint count taken by the Parties." At the last request, there were only 194 parking spaces. The Village has done nothing and there are more than 50 cars parked on the streets each Friday. The Village and MCC should follow the current agreement and require the seven spaces be replaced and the 23 spaces added before even considering any expansion. The Village has ignored the fact that over 50 cars are parked on the streets each Friday and during Ramadan and at other times.

In addition, residents surrounding the MCC are discriminated against since there is the least restrictive parking restriction in the area. Residents surrounding the Molloy Education Center on Menard, right next to the MCC, have No Parking on their side of the Menard. Molly also has Zone 9 with "No Parking Any Time" and Zone 13 with "No Parking on School Days from 8:00 MA to 3:00 PM. Residents near the Jerusalem Lutheran Church and School have similar restrictions. Where parking at certain times is limited to a Zone 11 parking permit. Why do residents have only the restriction of having a Morton Grove parking sticker and some streets with no restrictions? Most of the time, residents must call the Morton Grove Police to enforce the parking regulations. The Morton Grove Police would park at police car outside of the MCC on Theobald Road during Friday worship. Worshippers at the Mosque would park behind the no parking sign in front of a police car with lights flashing.

For all the reasons listed above, the expansion plans should be denied and the MCC should live up to the agreement or its current exceptions be revoked by the Village of Morton Grove. Parking restrictions should increase in the area surrounding the MCC and enforcement improved, or have no parking allowed during Friday prayer and evenings during Ramadan.

Sincerely yours.

[redacted]

Outlook

Attachments to my comments

From [redacted]
Date Wed 9/18/2024 10:46 PM
To Brandon Nolin <bnolin@mortongroveil.org>
Cc [redacted]

5 attachments (23 MB)
Tickets in Morton Grove on Theobald Road.pdf; 20240202_134753.jpg; 20230707_132001.jpg; 20240830_132920.jpg; 20240913_132925.jpg;

Dear Mr. Nolin,
If it isn't too late, I would like to add the following attachments to my comments.
The first is a listing of parking tickets issued by the Morton Grove Police Department between April 2024 and June 2024 for the 5700 block of Theobald Road, Morton Grove, obtained through a Freedom of Information Act request.
The second, third and fourth are pictures of cars parking in front of our driveway. And the last or fifth attachment is of a car parked in the intersection with a police car stopping to give it a ticket.

Please let me know if these will be included.

Thank you.
[redacted]


POLICE

Ticket Number	Offender Name	Ticket Date/Time	Ticket Type	Officer	Location	Registration Number
EMG014735	Unknown Emg014735	6/29/2024 10:52	Ordinance	7580 - Rubio	5700 THEOBALD RD, Morton Grove	
EMG014734	Unknown Emg014734	6/29/2024 10:49	Ordinance	7580 - Rubio	5700 THEOBALD RD, Morton Grove	
MG6004749	Section 7 (1)(c)	6/28/2024 13:38	Complaint+Tickets		5731 THEOBALD RD, Morton Grove	
MG6004748	Section 7 (1)(c)	6/28/2024 13:11	Complaint+Tickets	7985 - Smith	5737 THEOBALD RD, Morton Grove	
MG6004747	Section 7 (1)(c)	6/21/2024 14:30	Complaint+Tickets	7985 - Smith	5737 THEOBALD RD, Morton Grove	
MG6004744	Section 7 (1)(c)	6/21/2024 13:30	Complaint+Tickets	7985 - Smith	5737 THEOBALD RD, Morton Grove	
EMG014241	Unknown Emg014241	6/21/2024 13:16	Ordinance	7985 - Smith	5737 THEOBALD RD, Morton Grove	
MG6004743	Section 7 (1)(c)	6/17/2024 9:38	Complaint+Tickets	7985 - Smith	5737 THEOBALD RD, Morton Grove	
MG6004742	Section 7 (1)(c)	6/17/2024 9:35	Complaint+Tickets	7985 - Smith	5737 THEOBALD RD, Morton Grove	
EMG014732	Unknown Emg014732	6/9/2024 12:14	Ordinance	5170 - LaPaglia	5731 THEOBALD RD, Morton Grove	
mg6004741	Section 7 (1)(c)	5/31/2024 14:30	Complaint+Tickets	7985 - Smith	5737 THEOBALD RD, Morton Grove	
MG6004740	Section 7 (1)(c)	5/31/2024 14:29	Complaint+Tickets	7985 - Smith	5737 THEOBALD RD, Morton Grove	Section 7(1)(b)
MG6004739	BAZCO ENTERPRISES	5/24/2024 14:33	Complaint+Tickets	7985 - Smith	5737 THEOBALD RD, Morton Grove	
MG6004737	Section 7 (1)(c)	5/24/2024 14:33	Complaint+Tickets	7985 - Smith	5737 THEOBALD RD, Morton Grove	
MG6004736	Section 7 (1)(c)	5/24/2024 14:33	Complaint+Tickets	7985 - Smith	5737 THEOBALD RD, Morton Grove	
MG6004738	Section 7 (1)(c)	5/24/2024 14:33	Complaint+Tickets	7985 - Smith	5737 THEOBALD RD, Morton Grove	
EMG014728	Unknown Emg014728	5/7/2024 16:58	Ordinance	6020 - Nguyen	5736 THEOBALD RD, Morton Grove	
MG6004733	Section 7 (1)(c)	5/6/2024 8:25	Complaint+Tickets	7985 - Smith	5743 THEOBALD RD, Morton Grove	
EMG009753	PERSON, UNKOWN	5/3/2024 14:31	Complaint+Tickets	6020 - Nguyen	5737 THEOBALD RD, Morton Grove	
EMG020504	Unknown Emg020504	4/19/2024 13:23	Ordinance	3525 - Hester	5731 THEOBALD RD, Morton Grove	
EMG020503	Unknown Emg020503	4/19/2024 13:20	Ordinance	3525 - Hester	5731 THEOBALD RD, Morton Grove	
EMG020502	Unknown Emg020502	4/19/2024 13:17	Ordinance	3525 - Hester	5737 THEOBALD RD, Morton Grove	
EMG009749	PERSON, UNKOWN	4/5/2024 1:12	Complaint+Tickets	6020 - Nguyen	5737 THEOBALD RD, Morton Grove	

MCC expansion plan

[redacted]

Mon 8/19/2024 12:15 PM

To:Brandon Nolin <bnolin@mortongroveil.org>

Dear Morton Grove Plan Commission Members,

As a current resident on the [redacted] block of [redacted], I am absolutely opposed to any expansion of any sort at the Muslim Community Center. There has been an ongoing problem for several years all the way down Capulina. At times, on a weekly basis, there is no available parking for us property tax paying residents, along with speeding cars up and down the street. While this issue has been reported to the Morton Grove Police Department many times, the issue still has not been addressed, nor have any solutions been offered. While there are restrictions on parking on one side of the street, they are rarely enforced. Also, it appears that existing right or left turn arrows out of MCC's parking lot as indicated, many still proceed to exit straight out, driving Westbound on Capulina, causing quite a bit of traffic for a residential street.

Until this overparked situation is concretely resolved, I oppose any modifications or additions to the Muslim Community Center located on Menard and would greatly appreciate real solutions in resolving this issue.

Cordially,
Resident on [redacted] Block of [redacted]

Sent from my iPhone

Mr & Mrs. Olen
8535 Menard Ave,
Morton Grove, IL 60053

NTDSE
Empowering All To Achieve

Niles Township District for Special Education #807
Cook County Districts 67, 68, 69, 70, 71, 72, 73, 73.5, 74

Christine Perry
Principal
cperry@ntdse.org

Dear Members of the Village Board,

We would like to express our support for the addition of a track around the field at the Muslim Community Center. This enhancement will not only benefit the students of the MCC, but it also presents a unique opportunity for collaboration and shared resources that will positively impact our entire community.

MCC has graciously offered to allow students from the Molloy Education Center to use the track, which would be an invaluable resource for our students' physical education and overall well-being. Importantly, the track will be designed to be fully accessible to all students, including those who use wheelchairs. This ensures that every student, regardless of mobility needs, will have the opportunity to participate in fitness activities.

The accessible track will provide a safe and dedicated space for our students to engage in activities such as walking, running, and training for events, including the Special Olympics. For our Special Olympics athletes, having a track designed with inclusivity in mind will enable them to train more effectively and safely for competitions.

Physical fitness is a critical component of a well-rounded education, and having access to this track will greatly enhance our ability to promote healthy habits among our students. Additionally, the track will be a significant asset for our Special Olympics program, giving our athletes a reliable space to train and prepare for competitions.

Thank you for your consideration and continued dedication to the Molloy Education Center and the MCC.

Sincerely,

Christine Perry

Attachment G

Plans and Supporting Documents for PC 24-05

1. Special Use Application, submitted by a+c architects, dated April 8, 2024
2. Letter granting a+c architects permission to submit on owner's behalf, submitted by a+c architects, dated March 22, 2024
3. Plat of Survey of 8601 Menard Avenue, prepared by Edward J Molloy and Assoc., dated February 8, 2024
4. Legal Description, submitted by a+c architects, received April 8, 2024
5. Preliminary Landscape Plan, prepared by Manhard Consulting, dated March 27, 2024
6. Preliminary Engineering Drawings, prepared by Manhard Consulting, dated March 19, 2024
7. Demolition & Proposed Site Plans, prepared by a+c architects, dated April 11, 2024
8. Demolition & Proposed Floor Plans, prepared by a+c architects, dated April 8, 2024
9. Proposed Elevations, prepared by a+c architects, dated April 8, 2024
10. Materials Submittal, prepared by a+c architects, dated April 8, 2024
11. Traffic Impact and Expanded Parking Study, prepared by Gewalt Hamilton Associates, Inc., dated July 3, 2024

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: 04.08.2024

APPLICANT INFORMATION

Applicant Name: Raffi Arzoumanian
Applicant Organization: a+c architects LLC
Applicant Address: 4840 Main Street
Applicant City / State / Zip Code: Skokie, IL 60077
Applicant Phone: 847-829-0801 ext 110
Applicant Email: info@acarchitects.net
Applicant Relationship to Property Owner: architect
Applicant Signature: 

PROPERTY OWNER INFORMATION (IF DIFFERENT FROM APPLICANT)

Owner Name: MCC Academy
Owner Address: 8601 Menard Ave
Owner City / State / Zip Code: Morton Grove, IL 60053
Owner Phone: 847-470-8801
Owner Email: habeeb.quadri@mccacademy.org , mazharmgpd@gmail.com
Owner Signature: _____

PROPERTY INFORMATION

Common Address of Property: 8601 Menard Ave
Property Identification Number (PIN): 10-20-212-019-0000, 12-20-216-010-0000, 10-20-216-011-0000
Property Square Footage: 167,989 sf (3.857 acres)
Legal Description (attach as necessary): attached
Property Zoning District: R-2

APPLICATION INFORMATION

Requested Special Use: amendment to existing special use
Purpose of Special Use (attach as necessary): to expand existing gymnasium

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 expansion is of existing use and it will have not be detrimental to, or endanger the public health, safety, morals,comfort, or 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.

The request for the expansion of the existing gym will not alter the character of the area; herefore, it will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, or substantially diminish and impair property values within the neighborhood

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.

There is a special use in place for this property. The expansion of the existing gym will not impeded the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

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

All adequate utilities, access roads, are existing and the drainage as impacted by the expansion is being addressed during the design and development.

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.

All necessary measures are being taken in this regard, including and updated parking analysis. The study is submitted as part of this application.

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

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.

Yes, we shall comply

MCC ACADEMY
BUILDING CHARACTER & DEVELOPING MINDS
8601 N. Menard Ave., Morton Grove, Il 60053
Phone: (847) 470-8801, Fax: (847) 470-8873
9303 Gross Point Road
Skokie, IL 60077
Phone: (224) 534-7638

Date: March 22, 2224

To Whom It May Concern,

RE: MCC Academy Special use application authorization letter

I, Habeeb Quadri the Superintendent and Mazhar Khan hereby give a+c architects to apply and accept conditions of approval regarding the project and the property.

Habeeb Quadri

Superintendent, MCC Academy

Mazhar Khan

EDWARD J. MOLLOY & ASSOCIATES

A DIVISION OF THOMAS A. MOLLOY, LTD. – PROFESSIONAL LAND SURVEYING
1236 MARK STREET, BENSENVILLE, ILLINOIS 60106 (630) 595–2600 Fax (630) 595–4700
e–mail: tmolloy@ejmolloy.com

PLAT OF SURVEY

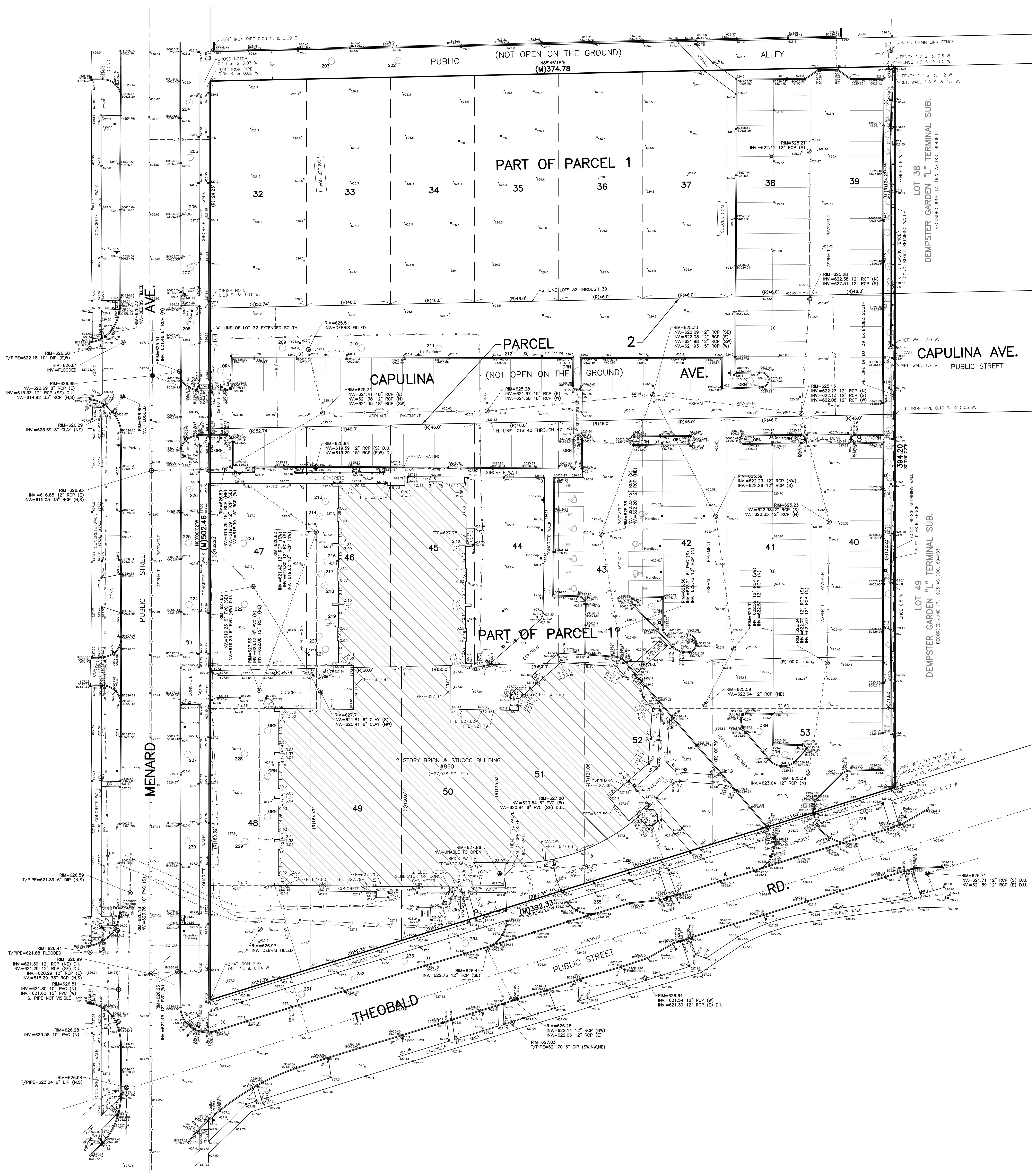
OF

PARCEL 1:
LOTS 32 TO 53 IN SHAPIRO'S SUBDIVISION OF LOT 2 IN CIRCUIT COURT PARTITION OF LOTS 2 AND 3 IN THE COUNTY CLERK'S DIVISION OF SECTION 20 AND THE EAST 1/2 OF THE NORTH EAST 1/4 OF SECTION 19, TOWNSHIP 41 NORTH, RANGE 13 EAST OF THE THIRD PRINCIPAL MERIDIAN IN COOK COUNTY, ILLINOIS.

PARCEL 2:
A PARCEL OF LAND BOUNDED BY THE NORTH ON THE SOUTH LINES OF LOTS 32 TO 39 OF PARCEL 1; ON THE SOUTH BY THE NORTH LINES OF LOTS 40 TO 47 OF PARCEL 1; ON THE EAST BY EAST LINE ON LOT 39 OF PARCEL 1 EXTENDED SOUTH; AND ON THE WEST BY WEST LINE OF LOT 32 OF PARCEL 1 EXTENDED SOUTH.

COMMONLY KNOWN AS: 8601 MENARD AVENUE, MORTON GROVE, ILLINOIS

N
1" = 20'
0 20' 40'
GRAPHIC SCALE



LEGEND:

- Sanitary Manhole
- Storm Manhole
- Manhole
- Water Valve Vault
- Storm Catch Basin/Inlet
- Fire Hydrant
- B–Box
- Light Pole
- Lamp or Spotlight
- Utility Pole W/Overhead Wire
- Traffic Sign
- Concrete Filled Post
- Electric Transformer
- Cable TV Vault
- Cable TV Pedestal
- Cleanout
- 202 Tree W/Tag Number
- Bush
- E Underground Electric Lines per paint markings observed in the process of conducting the fieldwork
- T Underground Telephone Lines per paint markings observed in the process of conducting the fieldwork
- G Underground Gas Lines per paint markings observed in the process of conducting the fieldwork
- C Underground Cable Lines per paint markings observed in the process of conducting the fieldwork
- Depressed Curb
- FFE Finished Floor Elevation
- (M) Measured
- (R) Record
- NP No Parking Area
- ADA ADA Tactile Dome
- ORN Ornamental Tree
- ×BCXXX.XX Back of Curb Elevation
- ×GXXX.XX Gutter Elevation
- ×XXX.XX Hard Surface Elevation
- ×XXX.X Ground Elevation
- ×TWXXX.XX Top of Wall Elevation

TAG NO.	SIZE	TYPE
202	12"	Deciduous
203	36"	Deciduous
204	30"	Deciduous
205	24"	Deciduous
206	27"	Deciduous
207	30"	Deciduous
208	27"	Deciduous
209	15"	Deciduous
210	18"	Deciduous
211	18"	Deciduous
212	15"	Deciduous
213	CLUMP (2-8")	Deciduous
214	CLUMP (3-6")	Deciduous
215	CLUMP (2-6")	Deciduous
216	10"	Deciduous
217	CLUMP (2-6")	Deciduous
218	CLUMP (3-6")	Deciduous
219	CLUMP (3-6")	Deciduous
220	8"	Deciduous
221	CLUMP (2-8")	Deciduous
222	36"	Deciduous
223	36"	Deciduous
224	18"	Deciduous
225	18"	Deciduous
226	24"	Deciduous
227	24"	Deciduous
228	36"	Deciduous
229	36"	Deciduous
230	18"	Deciduous
231	24"	Deciduous
232	18"	Deciduous
233	24"	Deciduous
234	24"	Deciduous
235	15"	Deciduous
236	18"	Deciduous

TAX PERMANENT INDEX NUMBER:
10–20–212–019–0000
10–20–216–010–0000
10–20–216–011–0000

TOTAL AREA OF PARCELS 1 AND 2 TAKEN TOGETHER AS A TRACT:
167,989 SQ. FT. OR 3.857 ACRES, MORE OR LESS

BASIS OF BEARINGS:
THE BEARINGS SHOWN HEREON ARE BASED ON AN ASSUMED DATUM AND DO NOT REFLECT ANY RECORD DRAWINGS.

COMPARE LEGAL DESCRIPTION AND MONUMENTS WITH THIS PLAT AND REPORT ANY DISCREPANCIES YOU MAY FIND TO THIS SURVEYOR AT ONCE.

BUILDING DIMENSIONS AND TIES ARE TO CORNERS OF BRICK UNLESS OTHERWISE NOTED.

NO DIMENSIONS TO BE ASSUMED FROM SCALING.

NO TITLE COMMITMENT PROVIDED TO THIS SURVEYOR TO AID IN THE PREPARATION OF THIS SURVEY. REFER TO TITLE POLICY FOR ITEMS OF RECORD, IF ANY, NOT SHOWN HEREON.

MONUMENT TIES SHOWN IN CARDINAL DIRECTIONS, UNLESS NOTED OTHERWISE.

STATE OF ILLINOIS)
)
COUNTY OF DUPAGE)

I, THOMAS A. MOLLOY, AN ILLINOIS PROFESSIONAL LAND SURVEYOR HEREBY CERTIFY THAT A SURVEY HAS BEEN MADE UNDER MY DIRECTION OF THE PROPERTY LEGALLY DESCRIBED HEREON AND THAT THE PLAT HEREON DRAWN IS A REPRESENTATION OF SAID SURVEY. DIMENSIONS ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

DATE OF LAST FIELD WORK: FEBRUARY 7, 2024.

SIGNED AT BENSENVILLE, ILLINOIS THIS 8TH DAY OF FEBRUARY , A.D. 2024

EDWARD J. MOLLOY AND ASSOCIATES, A DIVISION OF THOMAS A. MOLLOY, LTD.
AN ILLINOIS PROFESSIONAL DESIGN FIRM – LICENSE NO. 184–004840

THOMAS A. MOLLOY 35–3409 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS BENSENVILLE, ILLINOIS

VALID ONLY WITH EMBOSSED SEAL

THOMAS A. MOLLOY
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35–3409
(EXPIRES NOVEMBER 30, 2024 AND IS RENEWABLE)

DRAFTED BY: BJE
PAGE: 1 OF 1
ORDER NO.: 240006
FILE: 20–41–13
PROJECT NO.: 2822

REVISION DATE	ORDER NO.	REVISION
MAR. 20, 2024	240006	REVISE SCRIVENERS ERROR IN STREET NAME
FEB. 8, 2024	240006	BOUNDARY SURVEY WITH TOPOGRAPHY

CLIENT: MUSLIM COMMUNITY CENTER C/O A+C ARCHITECTS

LEGAL DESCRIPTION

PARCEL 1:

LOTS 32 TO 53 IN SHAPIRO'S SUBDIVISION OF LOT 2 IN CIRCUIT COURT PARTITION OF LOTS 2 AND 3 IN THE COUNTY CLERK'S DIVISION OF SECTION 20 AND THE EAST ½ OF THE NORTH EAST ¼ OF SECTION 19, TOWNSHIP 41 NORTH, RANGE 13 EAST OF THE THIRD PRINCIPAL MERIDIAN IN COOK COUNTY, ILLINOIS.

PARCEL 2:

A PARCEL OF LAND BOUNDED BY THE NORTH ON THE SOUTH LINES OF LOTS 32 TO 39 OF PARCEL 1; ON THE SOUTH BY THE NORTH LINES OF LOTS 40 TO 47 OF PARCEL 1; ON THE EAST BY EAST LINE ON LOT 39 OF PARCEL 1 EXTENDED SOUTH; AND ON THE WEST BY WEST LINE OF LOT 32 OF PARCEL 1 EXTENDED SOUTH.

COMMONLY KNOWN AS: 8601 MENARD AVENUE, MORTON GROVE, ILLINOISE

PRELIMINARY LANDSCAPE PLAN
for

MCCA GYM EXPANSION AND NEW TRACK AND FIELD
8601 MENARD AVE.
VILLAGE OF MORTON GROVE, ILLINOIS

CONCEPT PLANT SCHEDULE

EXISTING SHADE TREE	32
EXISTING EVERGREEN TREE	18
EXISTING ORNAMENTAL TREE	35
PROPOSED ORNAMENTAL TREE	6
EXISTING SHRUB- 3`	62
EXISTING SHRUB-5`	8
PROPOSED SHRUB- 3`	17
PROPOSED SHRUB - 5`	55
PROPOSED EVERGREEN SHRUB - 5`	15
PROPOSED ORNAMENTAL GRASS	28
EXISTING GROUNDCOVER	26 sf
PROPOSED GROUNDCOVER	276 sf
BIORETENTION AREA- NATIVE SEEDING	1,571 sf
TURF RESTORATION AS NEEDED	13,036 sf

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
L1	TITLE SHEET AND LANDSCAPE SUMMARY
L2	PRELIMINARY LANDSCAPE PLAN
L3	LANDSCAPE DETAILS
L4	LANDSCAPE SPECIFICATIONS

Village of Morton Grove Required Landscaping

OVERALL LANDSCAPE REQUIREMENT

Requirement: Commercial developments shall provide 5% of total site with landscaped or sodded areas.

On Plan - Total Property Exceeds Requirement

STREET TREE REQUIREMENT

Requirement: One canopy tree per 40 feet of street frontage in parkway, with sod. 2.5" Cal. DBH

On Plan - Existing street trees preserved. No additional trees required.

PARKING LOT PERIMETER LANDSCAPING

Requirement: Adjacent to public ROW, a 5' wide landscape yard containing year round dense opaque screen of landscaping 3' ht min. or a 3' berm. When adjacent to alleys, landscaping adjacent to public ROW is not required if screened by buildings, affront the alley and are within 30' of the screening building. Any other alley adjacent areas not screened by buildings require a 5' ht. screen of plantings or fence. Along accessways from alley, a 30" ht screen shall be provided.

Adjacent to other properties of residential use, all land shall be landscaped between the parking lot and property line. Min buffer yard of 5' wide containing a hedge or maintenance free barrier of min 5' ht. and max 6' ht. One tree per LF required. If use is non-residential, one tree per 80' Required

On Plan - No proposed parking expansion or changes. Existing landscaping meets code.

PARKING LOT INTERIOR LANDSCAPING

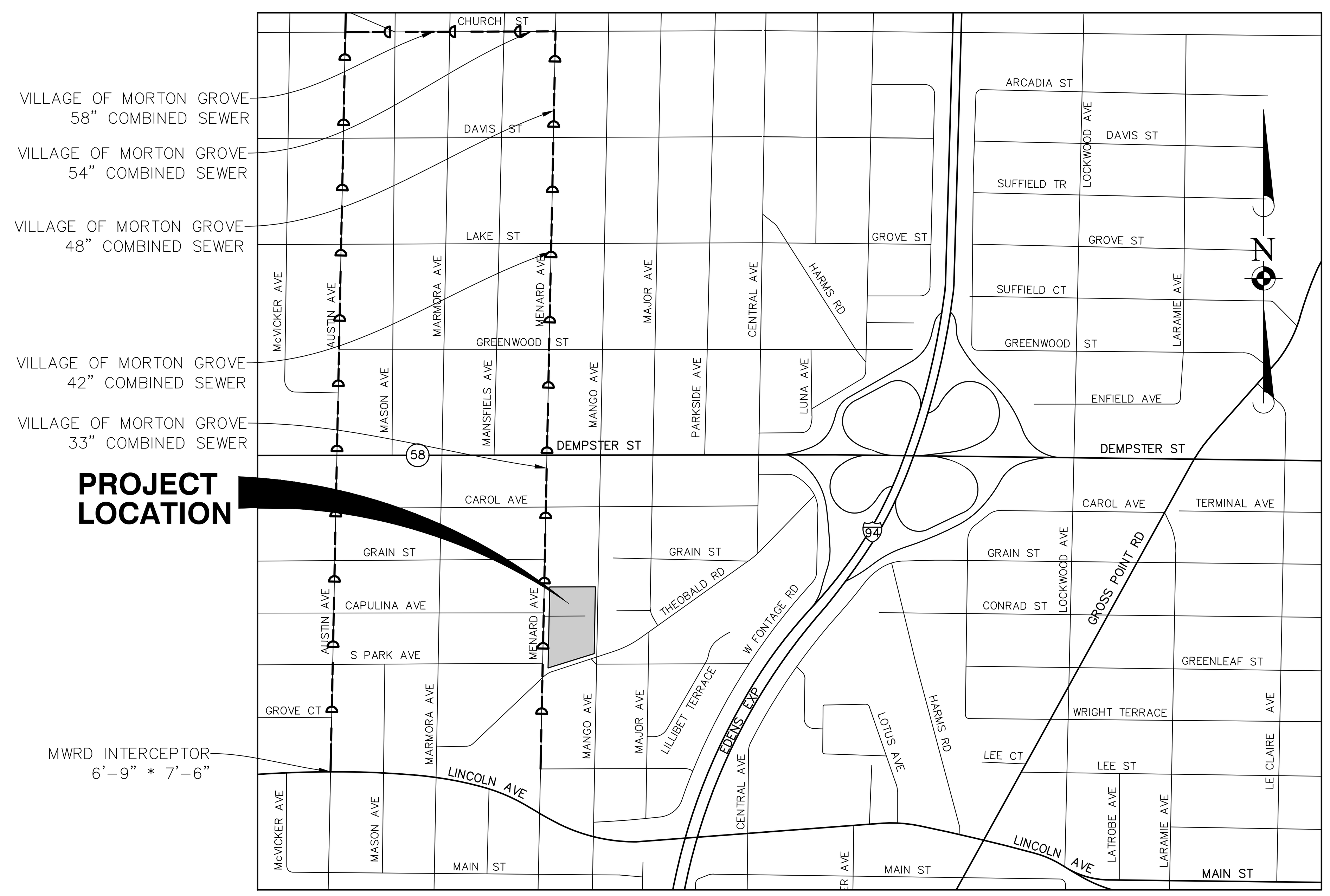
Requirement: All islands shall be a min. 40 sf. Min 5% of paved area provided internally. 7% if lot over 20,000 sf. Each separate landscape area shall contain one tree min. One tree per 100 sf. of interior landscaping.

On Plan - No proposed parking expansion or changes. Existing landscaping meets code.

OTHER PAVED AREAS LANDSCAPING

Requirement: Other paved ground surface areas over 5,000 sf shall have 2 sf of interior landscaping per 100 sf of paving. Each area shall have at least one tree and one tree per 100 sf of interior landscape area.

On Plan - No proposed paved area expansion expansion or changes. Existing landscaping meets code.



LOCATION MAP

Landscape Notes:

1. Seed/ Sod limit line is approximate. Seed/ Sod to limits of grading and disturbance. Contractor responsible for restoration of any unauthorized disruption outside of designated construction area.
2. Contractor responsible for erosion control in all seeded/ sodded areas.
3. Tree mulch rings in turf areas are 5' diameter. Contractor shall provide a mulch ring around all existing trees within the limits of work. Remove all existing grass from area to be mulched and provide a typical spade cut edge. Landscape Fabric shall not be installed under mulch.
4. Bedlines are to be spade cut to a minimum depth of 3". Curved bedlines are to be smooth and not segmented.

All planting, beds shall receive top dressing of mulch. Landscape fabric shall not be installed under mulch. Root flares shall be at or above grade, per specifications, and all rope/cord shall be removed from the base of tree trunks.

5. Do not locate plants within 10' of utility structures or within 5' horizontally of underground utility lines unless otherwise shown on plans. Consult with Landscape Architect if these conditions exist.
6. For Lump Sum Contracts, plants and other materials are quantified and summarized for the convenience of the Owner and jurisdictional agencies only. Confirm and install sufficient quantities to complete the work as drawn and specified. No additional payments will be made for materials required to complete the work as drawn and specified.
7. For Unit Price Contracts, payments will be made based on actual quantities installed as measured in place by the Owner's Representative.
8. It is the responsibility of the contractor to locate and provide plant material as specified on this plan. The contractor may submit a request to provide substitutions for the specified plant material under the following conditions:
   a. Any substitutions proposed shall be submitted to the project owner's representative within two weeks of the award of contract. Substitutions must meet equivalent design and functional goals of the original materials as determined by the owner's representative. Any changes must have the approval of the owner's representative,
   b. The request will be accompanied by at least three notices from plant material suppliers that the plant material specified is not available and will not be available prior to construction.
10. Verify site conditions and information on drawings. Promptly report any concealed conditions, mistakes, discrepancies or deviations from the information shown in the Contract Documents. The Owner is not responsible for unauthorized changes or extra work required to correct unreported discrepancies. Commencement of work shall constitute acceptance of conditions and responsibility for corrections
11. A minimum of two working days before performing any digging, call underground service alert for information on the location of natural gas lines, electric cables, telephone cables, etc. The contractor shall be responsible for location and protection of all utilities, and repair of any damage resulting from his work at no additional cost to the owner.
12. Contractor shall promptly repair all damages to existing site at no cost to owner.
13. Refer to landscape specifications for additional conditions, standards, and notes.

LICENSED LANDSCAPE ARCHITECT
JAMES MATTHEW NELSON
157-001644
STATE OF ILLINOIS

SEAL Date: XX/XX/XX

James Matthew Nelson, ASLA, PLA, LEED
Illinois Registered Landscape Architect
157-001644
Expires 08/31/2025

Call Before You Dig
JULIE ILLINOIS ONE-CALL SYSTEM
Simply Call 811

Manhard CONSULTING
One Overlook Point, Suite 290, Lincolnshire, IL 60069 ph:847.634.5550 fx:847.634.0095 manhard.com
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

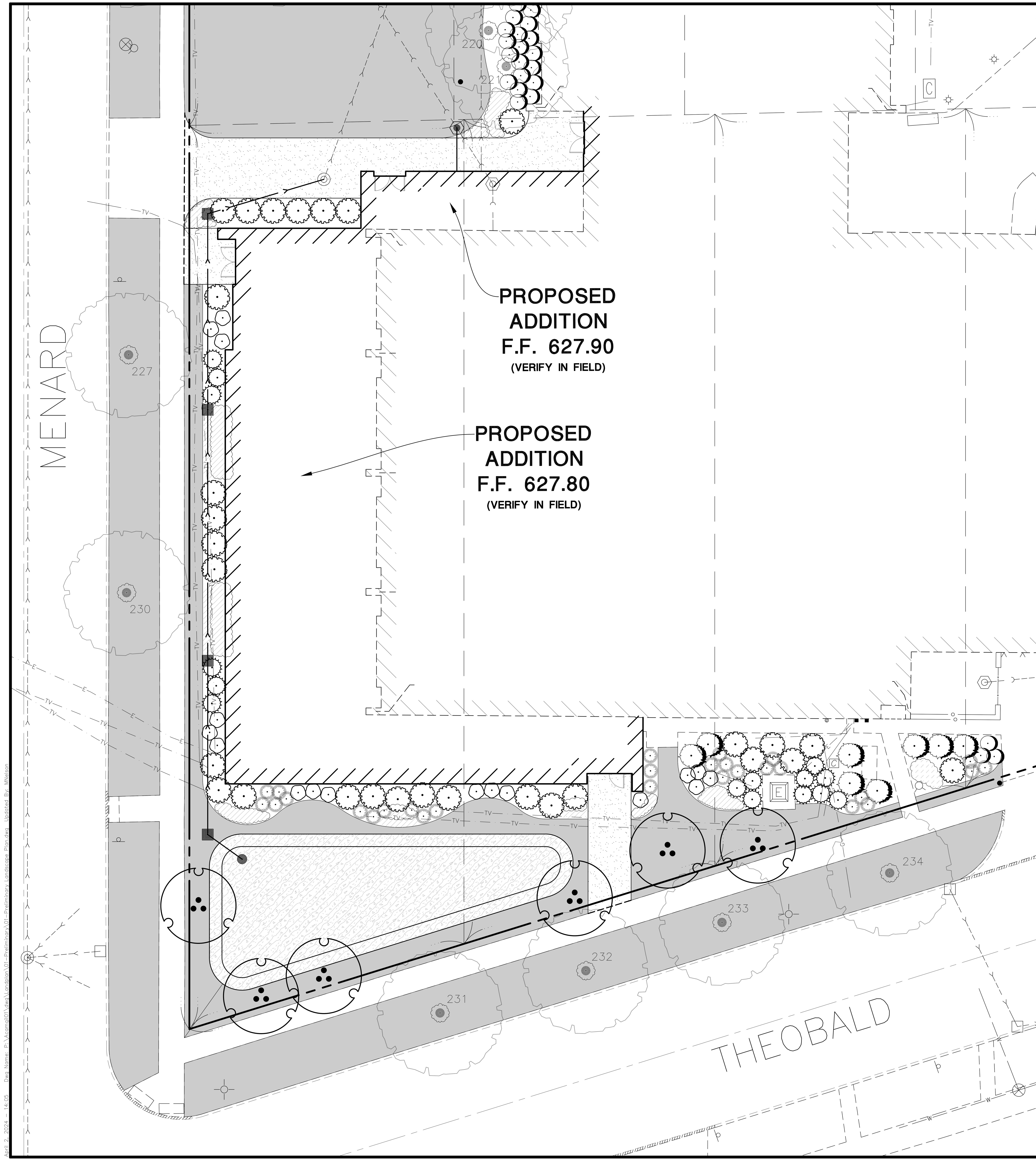
DATE | REVISIONS | DRAWN BY

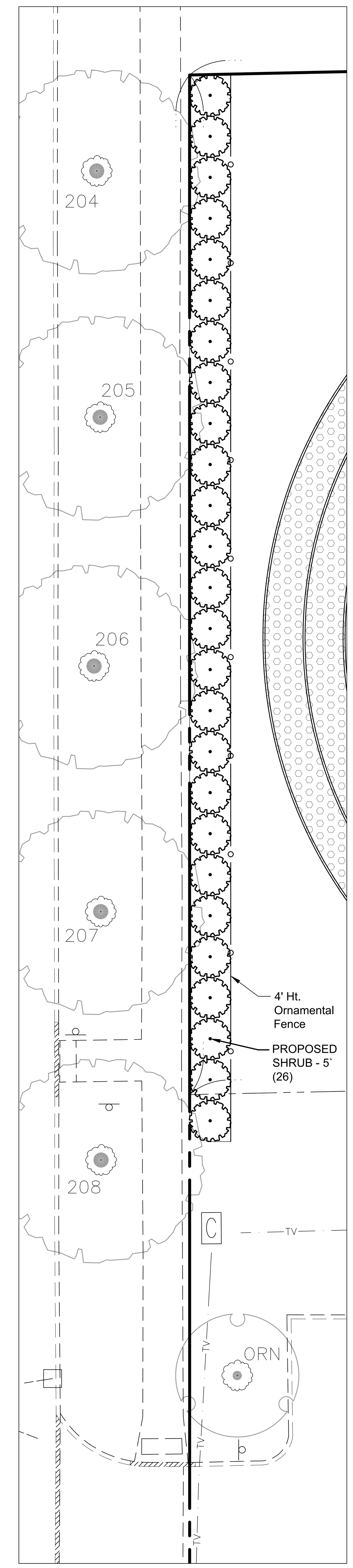
MCCA GYM EXPANSION AND NEW TRACK AND FIELD
VILLAGE OF MORTON GROVE, ILLINOIS
TITLE SHEET AND LANDSCAPE SUMMARY

PROJ. MGR.:	MDE
PROJ. ASSOC.:	ELR
DRAWN BY:	MN
DATE:	03/27/24
SCALE:	NTS

SHEET
L1 OF L4
ACA.MGIL01

©2024 MANHARD CONSULTING, ALL RIGHTS RESERVED





NORTHWEST FENCE LINE

CONCEPT PLANT SCHEDULE

EXISTING SHADE TREE	32
EXISTING EVERGREEN TREE	18
EXISTING ORNAMENTAL TREE	35
PROPOSED ORNAMENTAL TREE	6
EXISTING SHRUB- 3'	62
EXISTING SHRUB-5'	8
PROPOSED SHRUB- 3'	17
PROPOSED SHRUB - 5'	55
PROPOSED EVERGREEN SHRUB - 5'	15
PROPOSED ORNAMENTAL GRASS	28
EXISTING GROUNDCOVER	26 sf
PROPOSED GROUNDCOVER	276 sf
BIORETENTION AREA- NATIVE SEEDING	1,571 sf
TURF RESTORATION AS NEEDED	13,036 sf

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

NORTH

DATE
REVISIONS
DRAWN BY

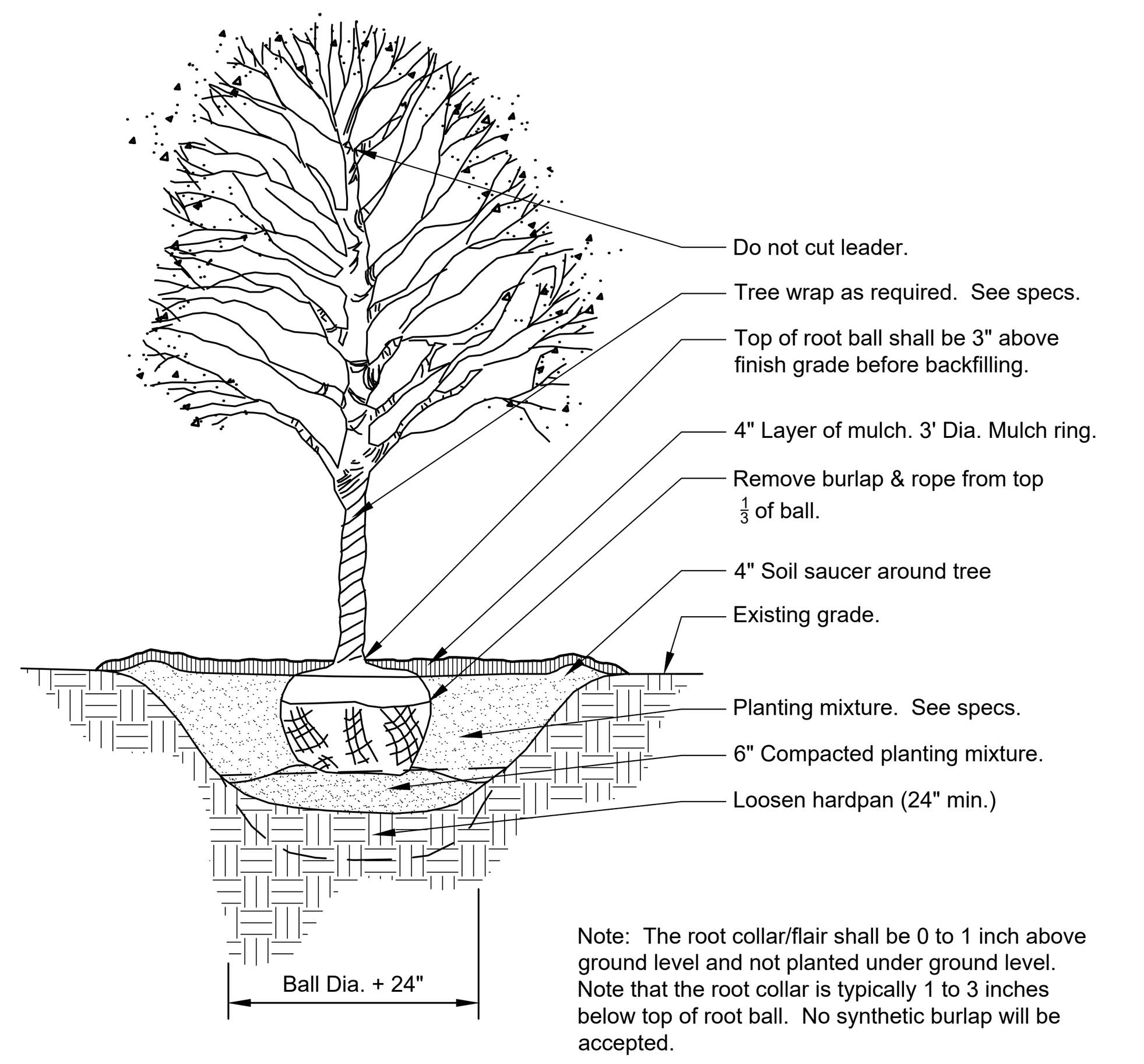
Manhard CONSULTING™
One Overlook Point, Suite 290, Lincolnshire, IL 60069 ph:847.634.5550 fx:847.634.0095 manhard.com
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

MCCA GYM EXPANSION AND NEW TRACK AND FIELD
VILLAGE OF MORTON GROVE, ILLINOIS
PRELIMINARY LANDSCAPE PLAN

PROJ. MGR.: MDE
PROJ. ASSOC.: ELR
DRAWN BY: MN
DATE: 03/27/24
SCALE: 1"=10'

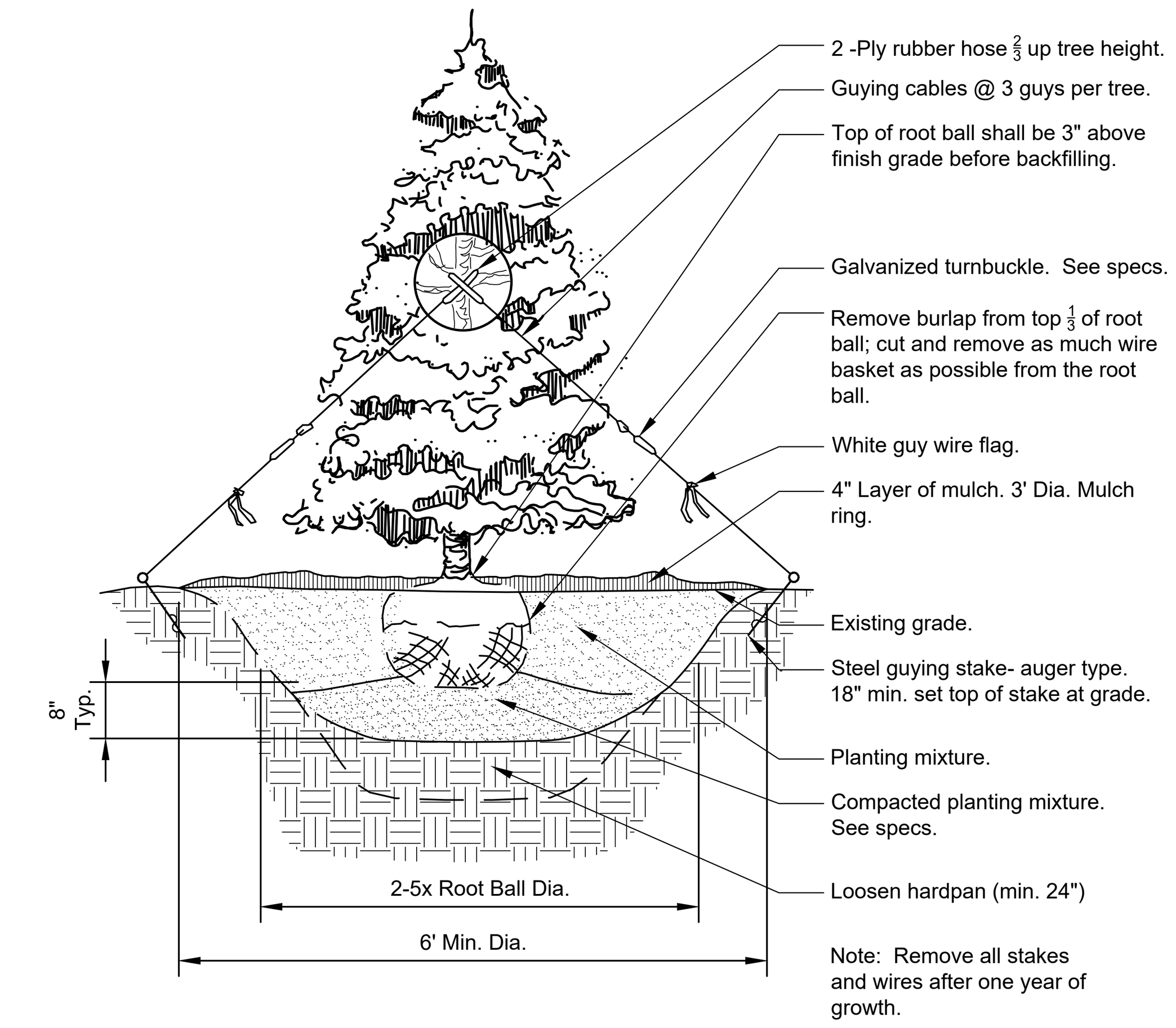
SHEET
L2 OF L4
ACA.MGIL01

© 2024 MANHARD CONSULTING, ALL RIGHTS RESERVED



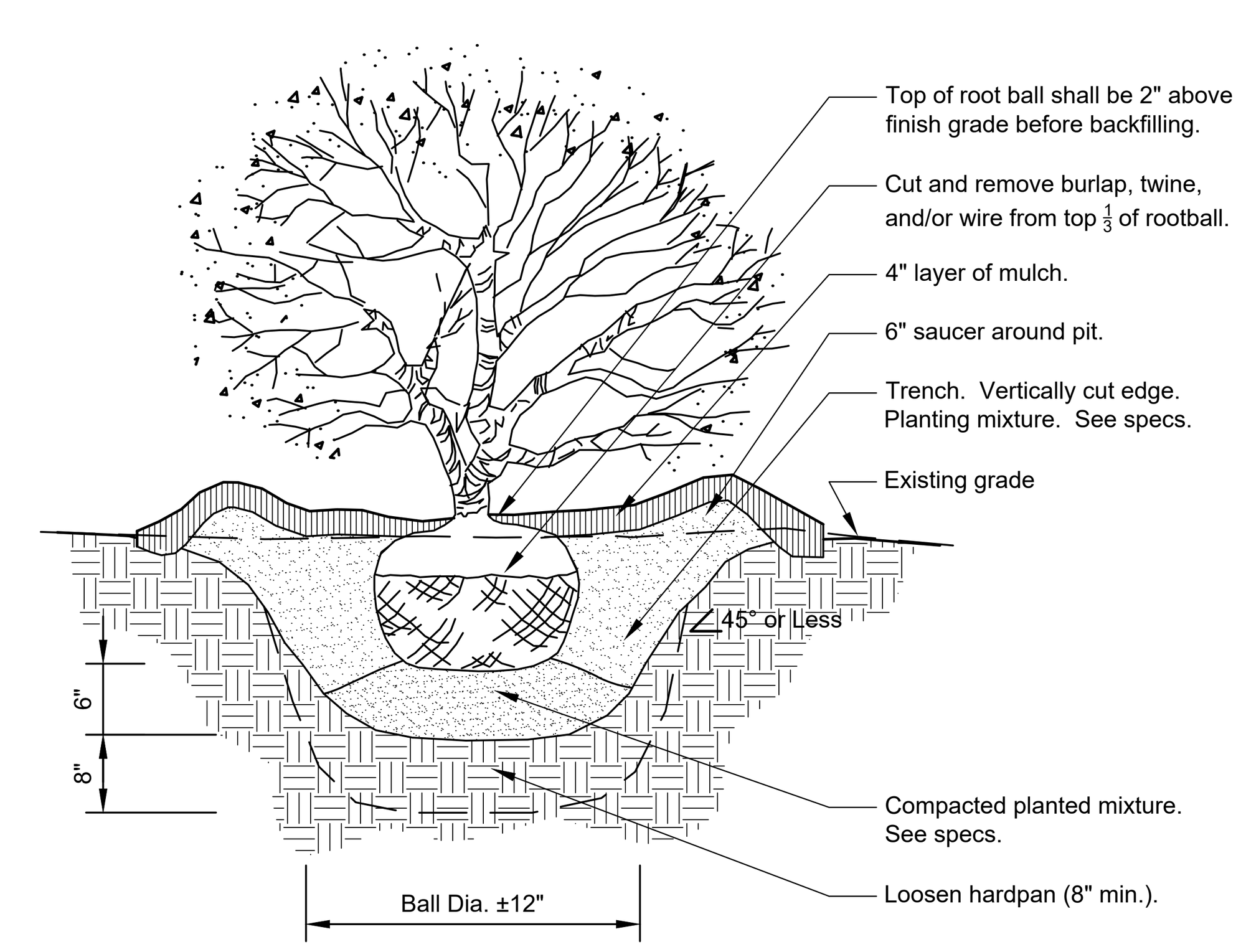
1 DECIDUOUS TREE PLANTING

1/4" = 1'-0" 32 9343.33-20



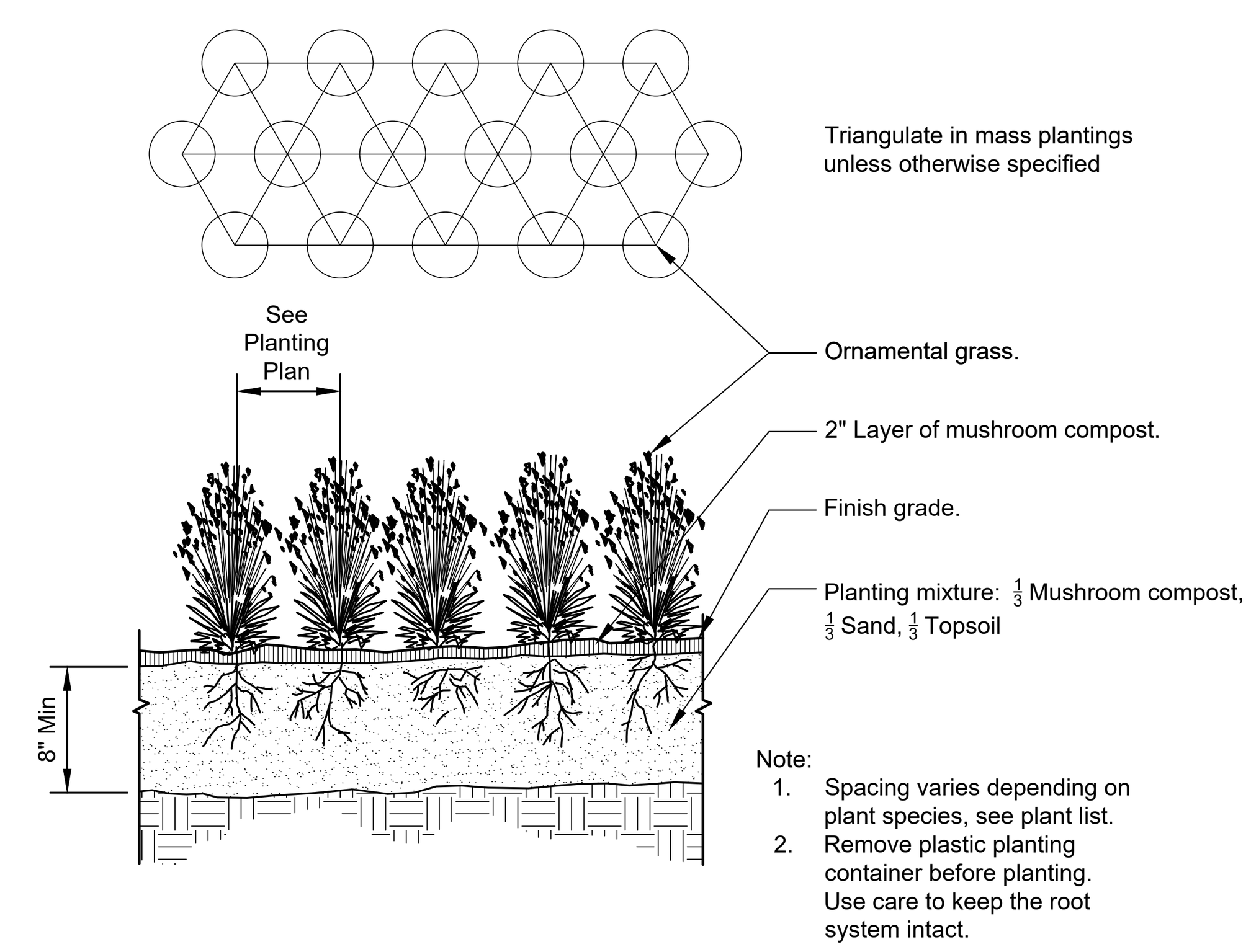
2 CONIFER TREE PLANTING

1/4" = 1'-0" 32 9343.46-01



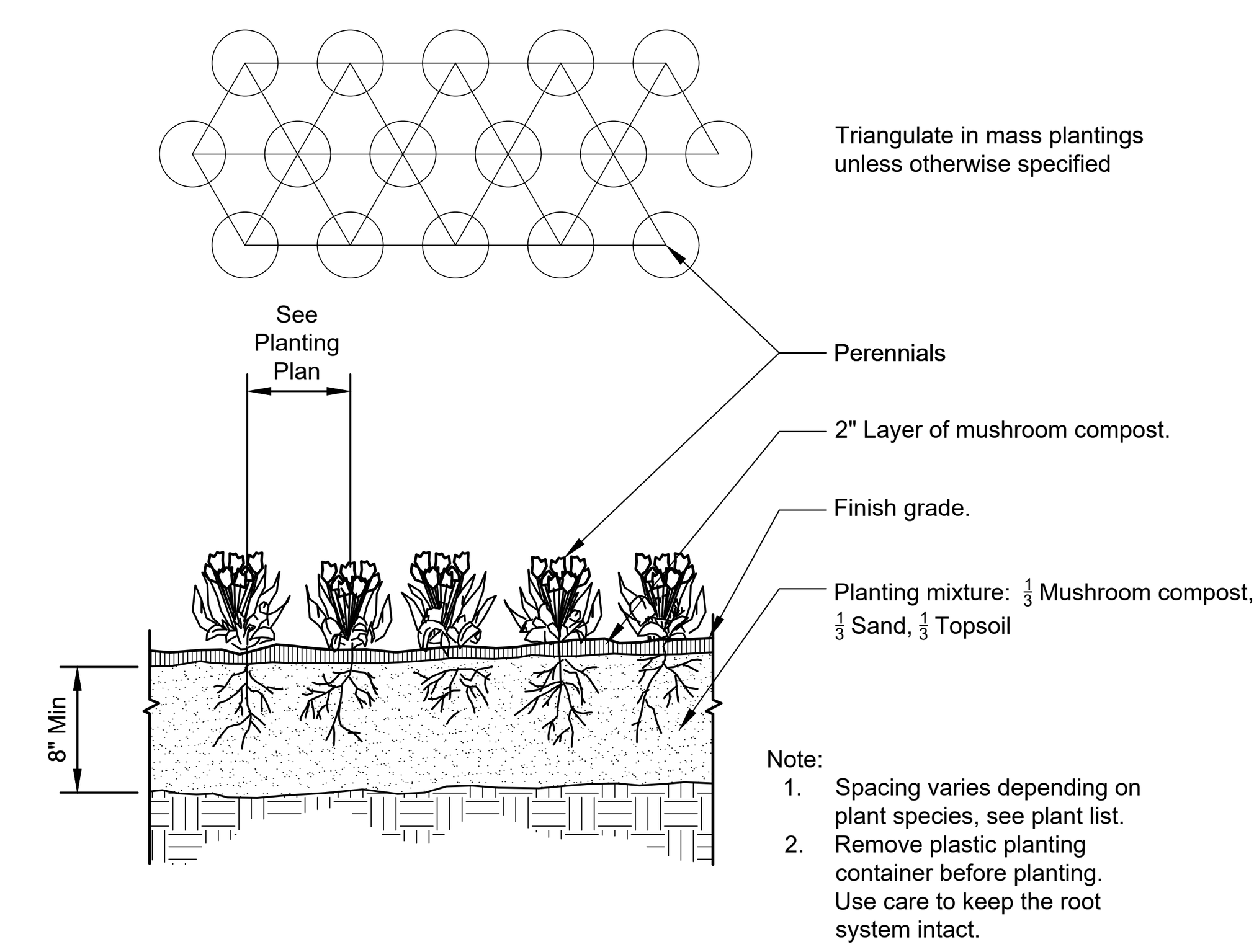
3 SHRUB PLANTING DETAIL

3/4" = 1'-0" 32 9333.16-05



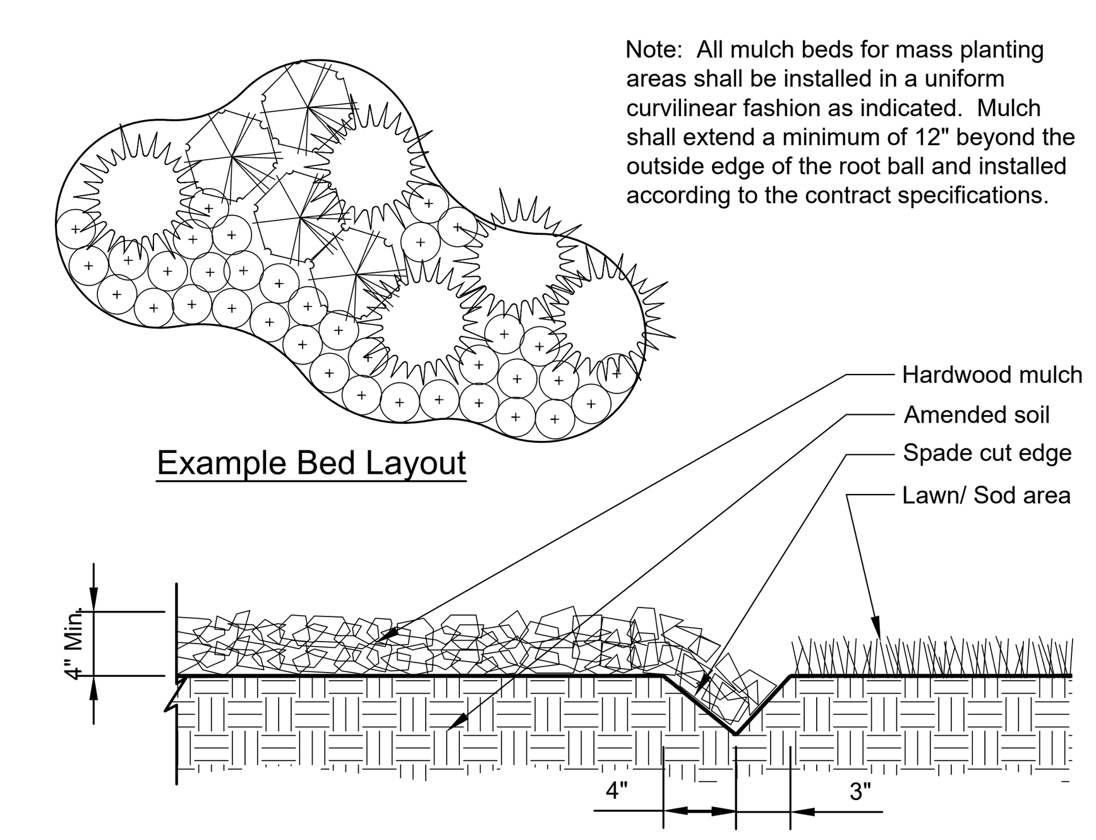
4 ORNAMENTAL GRASS PLANTING

1" = 1'-0" 32 9313-01



5 PERENNIAL / ANNUAL PLANTING

1" = 1'-0" 32 9313-02



6 CONTINUOUS MULCH EDGING

1" = 1'-0" 32 9113.26-01

DATE | REVISIONS | DRAWN BY

Manhard CONSULTING

One Overlook Point, Suite 290, Lincolnshire, IL 60069 ph:847.634.5550 fx:847.634.0095 manhard.com

Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers

Construction Managers • Environmental Scientists • Landscape Architects • Planners

MCCA GYM EXPANSION AND NEW TRACK AND FIELD

VILLAGE OF MORTON GROVE, ILLINOIS

LANDSCAPE DETAILS

PROJ. MGR.: MDE
PROJ. ASSOC.: ELR
DRAWN BY: MN
DATE: 03/27/24
SCALE: AS NOTED

SHEET L3 OF L4

ACA.MGIL01

©2024 MANHARD CONSULTING, ALL RIGHTS RESERVED

GENERAL PLANTING SPECIFICATIONS:

PART 1 - GENERAL

1-01 DESCRIPTION:

A. Provide trees, shrubs, perennials and groundcovers as shown and specified. This work includes:
   1. Spreading of topsoil or soil preparation
   2. Trees, shrubs, perennials and groundcovers
   3. Planting mixes
   4. Mulch and planting accessories
   5. Fertilizer and herbicide
   6. Maintenance
   7. Warranty of plant material

B. The Contractor shall verify all existing conditions and dimensions in the field prior to bidding and report any discrepancies to the Owner or his/her representative.

1-02 QUALITY ASSURANCE:

A. Comply with site work requirements

B. Plant names indicated must comply with 'Standardized Plant Names' as adopted by the latest edition of the American Joint Committee of Horticultural Nomenclature. Names of varieties which are not listed should conform with those generally accepted by the nursery trade. Stock should be legibly tagged.

C. All plant materials shall conform to the 'American Standards for Nursery Stock' (ASNS), latest edition, published by the American Association of Nurserymen, Washington, D.C.

D. All plant material shall be grown and supplied within a 50 mile radius of the project for a minimum of two full growing seasons.

E. Adhere to sizing requirements as listed in the plant list and/or bid form for the project. A plant shall be measured in its natural standing position.

F. Stock that is furnished shall be at least the minimum size shown. With permission of the landscape architect, substitution from the specified plant list will be accepted only when satisfactory evidence in writing is submitted to the landscape architect, showing that the plant specified is not available. Requests for approval of substitute plant material shall include common and botanical names and size of substitute material. Only those substitutions of at least equivalent size and character to that of the specified material will be approved. Stock which is larger than that which is specified is acceptable with permission of the landscape architect, providing there is no additional cost and that the larger plant material will not be cut down in order to conform to the size indicated.

G. All shrubs shall be dense in form. Shrub liners do not meet these specifications. Shrubs specified by height shall have a spread that is equal to the height measurement. Shrubs which are specified by spread shall exhibit the natural growth habit of the plant by having a greater spread than height.

H. All plant materials are subject to inspection and approval. The landscape architect and Owner reserve the right to select and tag all plant material at the nursery prior to planting. The landscape architect and Owner reserve the right to inspect plant material for size and condition of root systems, the presence of insects and diseases, injuries and latent defects (due to Contractor negligence or otherwise), and to reject unacceptable plant material at any time during progress of the project.

I. Container grown deciduous and/or evergreen shrubs will be acceptable in lieu of balled and burlapped shrubs subject to specified limitations for container grown stock. Size of container grown material must conform to size/height requirements of plant list.

1-03 DELIVERY, STORAGE & HANDLING:

A. Fertilizer shall be delivered in original, unopened and undamaged packaging. Containers shall display weight, analysis and manufacturer's name. Store fertilizer in a manner that will prevent wetting and deterioration.

B. Take all precautions customary concerning proper trade practice in preparing plants for transport. Plants shall be dug, packed and transported with care to ensure protection against injury. Inspection certificates required by law shall accompany each shipment invoice or order to stock and on arrival, the certificate shall be filed with the landscape architect . All plants must be protected from drying out. If plant material cannot be planted immediately upon delivery, said material should be properly protected in a manner that is acceptable to the landscape architect . Heeled-in plants must be watered daily. No plant shall be bound with rope or wire in a manner that could strip bark or break or shear branches.

C. Plant material transported on open vehicles should be covered with a protective covering to prevent wind burn.

D. Dry, loose topsoil shall be provided for planting bed mixes. Muddy or frozen topsoil is unacceptable as working with medium in this condition will destroy its structure, making root development more difficult.

1-04 PROJECT CONDITIONS:

A. Notify landscape architect at least seven (7) working days prior to installation of plant material.

B. It shall be the Contractor's responsibility to locate and protect all existing above and below ground utilities. Utilities can be located and marked (in Illinois) by calling J.U.L.I.E. at (800)892-0123.

C. The Contractor shall provide, at his/her own expense, protection against trespassing and damage to seeded areas, planted areas, and other construction areas until the preliminary acceptance. The Contractor shall provide barricades, temporary fencing, signs, and written warning or policing as may be required to protect such areas. The Contractor shall not be responsible for any damage caused by the Owner after such warning has been issued.

D. The Contractor shall be responsible for the protection of crowns, trunks and roots of existing trees, plus shrubs, lawns, paved areas and other landscaped areas that are to remain intact. Existing trees, which may be subject to construction damage, shall be boxed, fenced or otherwise protected before any work is started. The Owner desires to preserve those trees within and adjacent to the limits of construction except those specifically indicated to be removed on the Drawings. The contractor shall erect protective tree fencing and tree armor at locations indicated on the drawings and around all trees on site which are to be preserved. Protective fencing shall be erected between the limits of construction and any tree preservation areas shown on the Drawings.

E. A complete list of plants including a schedule of sizes, quantities and other requirements is shown on the Drawings and on the bid form. In the event that quantity discrepancies or material omissions occur in the plant materials list, the planting plans shall govern.

1-05 PRELIMINARY ACCEPTANCE:

A. All plantings shall be maintained by the Contractor for a period of 90 days after preliminary acceptance by the Owner or his/her representative. Maintenance shall include, but is not limited to: mowing and edging turf, pulling weeds, watering turf and plant material and annual flower maintenance.

1-06 WARRANTY:

A. All plant material (excluding annual color), shall be warranteed for one (1) year after the end of the 90 day maintenance period. The end of the maintenance period is marked by the final acceptance of the Contractor's work by the Owner or his/her representative. Plant materials will be warranteed against defects including death and unsatisfactory growth, except for defects resulting from abuse or damage by others, or unusual phenomena or incidents which are beyond the control of the Contractor. The warranty covers a maximum of one replacement per item.

PART 2 - PRODUCTS

2-01 PLANT MATERIALS:

A. Plants: Provide typical of their species or variety, with normal, densely developed branches and vigorous, fibrous root systems. Only sound, healthy, vigorous plants which are free from sunscald injuries, disfiguring knots, frost cracks, abrasions of the bark, plant diseases, insect eggs, borers, and all forms of infestation shall be provided. All plants shall have a fully developed form without voids and open patches.
   1. Balled and burlapped plants shall have a firm natural ball of earth of sufficient diameter and depth to encompass a root system necessary for a full recovery of the plant. Root ball sizes shall comply with the latest edition of the 'American Standards for Nursery Stock' (ASNS). Root balls that are cracked or mushroomed are unacceptable.
   2. Container grown stock should be grown for an amount of time that is of sufficient length for the root system to have developed enough to hold its soil togehter, firm and whole. Plants will not be loose in their containers, nor shall they be pot-bound and all container grown stock will comply with the sizes stated on the plant list.
   3. No evidence of wounds or pruning cuts shall be allowed unless approved by the Landscape Architect.
   4. Evergreen trees shall be branched to the ground. The height of evergreen trees are determined by measuring from the ground to the first lateral branch closest to the top. Height and/or width of other trees are measured by the mass of the plant not the very tip of the branches.
   5. Shrubs and small plants shall meet the requirements for spread and/or height indicated in the plant list. The height measurement shall be taken from ground level to the average height of the top of the plant, not the longest branch. Single stem or thin plants will not be accepted. Side branches shall be flushed with growth and have good form to the ground. Plants shall be in a moist, vigorous condition, free from dead wood, bruises or other root or branch injuries.

2-02 ACCESSORIES:

A. Topsoil:
   1. Topsoil shall be fertile, natural topsoil of a loamy character, without admixture of subsoil material. Topsoil shall be reasonably free from clay, lumps, coarse sand, stones, plants, roots, sticks and other foreign materials with a pH between 6.5 to 7.0.

B. Topsoil for seed areas shall be a minimum of 6".

C. Soil amendments shall be as follows:
   1. For trees and shrubs the plant pit will be backfilled with pulverized black dirt.
   2. For perennials and ornamental grasses the soil mixture will be as follows: CM-63 General Purpose Peat Based Mix as supplied by Midwest Trading. Top beds with 8" of CM-63 and till into existing beds to a depth of 8". Soil mixtures are available from Midwest Trading. Midwest Trading, St. Charles, IL 60174 (630) 365-1990

D. Fertilizer:
   1. For trees and shrubs use: 14-4-6 briquettes 17 g or equivalent available from Arthur Clesen, Inc. Follow manufacturer's recommendation for application. Arthur Clesen, Inc. 543 Diens Drive, Wheeling, IL 60090 (847)537-2177
   2. For turf areas use 6-24-16 Clesen Fairway with micronutrients with minor elements 3.0 % S, .02% B, .05% Cu, 1.0% Fe, .0006% Mo, .10% Mn available from Arthur Clesen or approved equal.

E. Herbicide:
   1. Round-Up or approved equal

F. Mulch:
   1. Bark mulch shall be finely shredded hardwood bark which has been screened and is free of any green foliage, twigs, rocks, sawdust, wood shavings, growth or germination inhibiting ingredients, or other foreign materials. Bark mulch is available from Midwest Trading.
   2. Mushroom compost as available from Midwest Trading.

G. Water:
   1. Water service will be available on the site, with the cost of water being paid by the Owner. Transporting of the water from the source to the work areas shall be the responsibility of the Landscape Contractor. All necessary hose, piping, tank truck, etc. shall be supplied by the Landscape Contractor.

H. Guying:
   1. Stakes: 5/8" x 40" steel eye anchor with 4" helix
   2. Cable:
      a. Trees under 5": flexible 1/8" galvanized aircraft cable, 7x7 strand or approved equal
      b. Trees 5" and over: flexible 3/16" galvanized aircraft cable, 7x7 strand or approved equal.
   3. Turnbuckles: 5/16", eye and eye, with 4" takeup.
   4. Hose: new two-ply reinforced rubber hose, minimum 1/2" I.D.

I. Tree wrap: Burlap tree wrap 4" wide.

J. Twine: Soft nursery jute.

PART 3 - INSTALLATION OF PLANT MATERIAL

3-01 FIELD VERIFICATION:

A. Examine proposed planting areas and conditions of installation. Do not start planting work until unsatisfactory conditions are corrected.

3-02 PREPARATION:

A. All planting techniques and methods shall be consistent with the latest edition of 'Horticulture Standards of Nurserymen, Inc.' and as detailed on these Drawings.

B. Planting shall be performed by experienced workmen familiar with planting procedures under the supervision of a qualified supervisor.

C. All underground utilities must be located and marked clearly.

D. Apply Round-Up or approved equivalent to kill any existing vegetation in all areas to be planted. Confirm length of waiting period between chemical application and plant installation with manufacturer. Do not begin planting operations until prescribed post-application waiting period has elapsed. Take extreme care to avoid chemical drift to adjoining properties of landscape plantings.

E. Prior to all planting, rototill all areas to be landscaped to prepare for plant installation to a minimum depth of 12". Eliminate uneven areas and low spots. Maintain lines, levels, profiles and contour. Changes in grade are to be gradual. Blend slopes into level areas. Remove all debris, weeds and undesirable plants and their roots from areas to be planted. Remove all concrete slag larger than 2" in diameter.

F. Topsoil shall be spread over the site at a minimum depth of 6". Those areas which are indicated as prairie or natural areas on the Drawings shall have a minimum topsoil depth of 18".

G. It shall be the responsibility of the landscape contractor to prepare all seeded areas by disking and raking prior to planting seed. Soil shall be loosened and scarified to a minimum depth of 6". Fine grading of all seeded areas is required. Maximum size of stone or topsoil lump is 1".

H. Locate all plant material as indicated or as approved in the field by the Landscape Architect. If obstructions are encountered which are not shown on the drawings, then do not proceed with planting operations until alternate plant locations have been selected.

I. Planting holes shall be constructed as shown on the planting details. Holes shall be hand dug or machine dug. Great care will be taken to not excavate the hole deeper than the root ball and the diameter shall be a minimum of two times the root ball width. Remove any materials encountered in excavation that may be injurious to plant growth, including stones larger than 2" in diameter or other debris. Soil to be used as backfill should be pulverized.

J. Provide pre-mixed planting mixture for use around root systems and root balls of the plants. The mixtures are outlined in section B of part 2-02.

K. Prior to planting, provide additional topsoil to all planting beds to bring the finish grade of the bed to 2" above lawn grade and to finish grade of adjacent hard surface grades.

L. Add 2" thickness of mushroom compost to all annual, perennial and groundcover beds. Finish grade bed and install plants.

3-03 PLANTING PROCEDURES:

A. Set plant material in the planting hole to proper grade and alignment. Set plants upright and plumb. Set plant material root flare 2" above the adjacent finish grade. Remove burlap from top 1/3 of root ball. Remove treated burlap (green). Cut and remove or cut and fold down upper half of wire basket, dependent upon tree size. Backfill hole by firmly tamping soil to avoid any air pockets or voids. All ropes/cords shall be removed from base of plant/top of root ball.

B. Set balled and burlapped plants in the planting hole and compact 8" of soil around the base of the ball. Backfill remaining space with planting mixture. Water plants immediately after planting to eliminate all voids and thoroughly soak the plant root ball.

C. Space groundcover plants according to dimensions given on the plans. Adjust spacing as necessary to evenly fill planting bed with indicated number of plants. Plant to within 18" of the trunks of trees and shrubs or at the edge of the plant ball, whichever is closest. Plant to within 12" of edge of bed.

D. Mulching:
   1. Install 4" depth of mulch around all tree and shrub beds as indicated on drawings or planting details. Mulch shrub planting areas as continuous beds. Do not place mulch directly against tree trunk; form mulch to create an inverted cone around trunk.
   2. Mulch perennial, groundcover and annual planting beds with 2" mushroom compost. Water mulched areas thoroughly after placing mulch.

E. Tree wrapping is not required, unless the Contractor feels it is necessary due to characteristics of a particular species or past experience with the species. The landscape architect will be notified as to which trees are to be wrapped and shall inspect the trunk(s) before wrapping. Tree wrap will not be used to cover damage or defects. When wrapping is done, trunks will be wrapped spirally with approved tree wrapping tape that is not less than 4" wide, and securely tied with suitable cord at the top, bottom and 2" intervals along the trunk. Wrap from ground to the height of the first branch.

F. Staking and guying of trees is optional. If the Contractor chooses to stake all or part of the trees, he/she shall use the method specified in the planting details. One (1) stake is to be used on trees of 1" caliper and under, or 4' height and under. Two (2) stakes are to be used on trees of 1" to 2 3/4" caliper. Guy trees of 3" caliper or larger at three (3) per tree. The root ball will not be pierced with a stake. Stakes are to be driven at least eighteen (18) inches into subsoil below the planting hole. Stakes and wire attachments shall be removed after three months for spring planted material and by the following May for fall planted stock by the Contractor. Staking and guying should be done immediately after lawn seeding or sodding operations.

G. Seeding of specified lawn areas on plans will be treated as follows:
   1. Topsoil shall be spread over all areas to be seeded to a minimum depth of 6" when compacted (to be performed by others).
   2. Seed mixture and application rate - use Premium seed mix as supplied by Arthur Clesen, Inc. Apply at a rate of 5 lbs./1000 s.f.
   3. Apply fertilizers and conditioners at the rate specified per soil test findings. In lieu of soil test results, apply two (2) tons of ground agricultural limestone and 1000 lbs. 10-10-10 or equivalent analysis fertilizer per acre. At least 40% of the fertilizer nitrogen shall be of an organic origin.
   4. Soil preparation areas where vehicular traffic has compacted the soil shall be loosened/scarified to a minimum depth of 6" before fertilizing and seeding. Fine grading of all seeded areas is required. Maximum size of stone or topsoil lump is 1".
   5. Watering seeded areas shall be done to ensure proper germination. Once seeds have germinated, watering may be decreased but the seedlings must never be allowed to dry out completely. Frequent watering should be continued approximately four (4) weeks after germination or until grass has become sufficiently established to warrant watering on an 'as needed' basis.
   6. Turf is being established on a variety of slope conditions. It shall be the Contractor's responsibility to determine and implement whatever procedures he/she deems necessary to establish the turf as part of his/her work. Seeded areas will be accepted when all areas show a uniform stand of the specified grass in healthy condition and at least 90 days have elapsed since the completion of this work. The Contractor shall submit with his/her bid a description of the methods and procedures he/she intends to use.

H. Erosion Control Blanket
   1. Erosion Control Blanket shall be installed per manufacturer's recommendation in all areas shown on the plan.
   2. Install S-75 Erosion Control Blanket as manufactured by North American Green or approved equal.
   3. Blanket should be premarked with staple pattern.
   4. Staples should be 8" wire staples, applied at two (2) per square yard minimum.
   5. Suitable erosion control practices shall be maintained by the CONTRACTOR in accordance with Illinois Urban Manual and all applicable Soil Erosion and Sedimentation Control ordinances and the PLANS.

I. Sodding of specified lawn areas on plans will be completed as follows:
   1. Rake soil surface to receive sod to completely remove any soil crust no more than one day prior to laying sod.
   2. Moisten prepared surface immediately prior to laying sod. Water thoroughly and allow surface moisture to dry before planting lawns. Do not create a muddy soil condition.
   3. Sod shall be laid within 24 hours from the time of stripping. Do not plant dormant sod or if the ground is frozen.
   4. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod strips; do not overlap. Stagger strips to offset joints in adjacent courses. Work from boards to avoid damage to subgrade or sod. Work sifted soil into minor cracks between pieces of sod; remove excess to avoid smothering of adjacent sod.
   5. Place top elevation of sod 1/2 inch below adjoining edging or paving.
   6. Water sod thoroughly with a fine spray immediately after planting.
   7. After sod and soil have dried, roll seeded areas to ensure a good bond between the sod and soil, and to remove minor depressions and irregularities.
   8. Sodded slopes 3:1 or greater shall be staked to prevent erosion and washout.
   9. Warranty sodding for a period of one (1) year from the end of the 90 day maintenance period. If sod fails or lacks vigor and full growth as determined by the Landscape Architect, the Contractor will repeat site preparation operations and re-sod affected areas at the Contractor's expense.
   10. Note: Sod shall be a premium Kentucky Bluegrass blend, and is required in all areas indicated on the plans as well as areas which have been affected by construction. Sod can be placed as long as water is available and the ground surface can be properly prepared. Sod shall not be laid on frozen or snow-covered ground. Sod shall be strongly rooted, not less than two (2) years old and free of weeds and undesirable native grasses. Sod should be machine cut to pad thickness of 3/4" (plus or minus 1/4"), excluding top growth and thatch. Provide only sod capable of vigorous growth and development when planted (viable, not dormant). Provide sod of uniform pad sizes with maximum 5% deviation in either length or width. Broken pads or pads with uneven ends will not be acceptable. Sod pads incapable of supporting their own weight when suspended vertically with a firm grasp on the upper 10% of pad will not be accepted.

J. Timing of plant material and seeding operations:
   1. Seeding of specified areas shall occur when the soil temperature is above 55° F. No seed shall be sown during periods of high winds, or when the ground is not in proper condition for seeding (see section 3-02 (G)). Seeding operations for the specified mixes shall occur in the spring time frame of April 15 through June 30 and in the summer time frame of August 15 through December 1. The mixes containing bluegrass and fescue seed must have six weeks to harden off for winter survival.
   2. Sod shall be installed when the ground is not frozen or snow covered and temperatures are less than 80° F. It shall not be placed during a period of extended drought.
   3. Herbaceous ornamental plants shall be planted between May 1 and June 15 or between August 15 and December 1.
   4. Spring planting of woody ornamental plants shall be performed from the time the soil can be easily worked until June 1, except that evergreen planting shall end on May 15. Oak, hawthorn and red maple species will only be planted during this spring planting period. Fall planting will begin August 15 and will continue until the ground cannot be worked satisfactorily, except that evergreen planting shall be performed between August 15 and December 1.

3-04 MAINTENANCE:

A. All plantings shall be maintained by the Contractor for a period of 90 days after preliminary acceptance by the Owner or his/her representative. Maintenance shall include but is not limited to: mowing and edging turf, pulling weeds, watering turf areas and plant material plus annual flower maintenance. The Contractor will reset settled plants to proper grade and position. Dead material will be removed. Stakes and guy wires will be tightened and repaired as required.

3-04 ACCEPTANCE:

A. All plant material (excluding annual color), shall be warranteed for one (1) year after the end of the 90 day maintenance period. The end of the maintenance period is marked by the final acceptance of the Contractor's work by the Owner or his/her representative.

3-06 SITE CLEAN-UP:

A. The Contractor shall protect the property of the Owner and the work of other contractors. The Contractor shall also be directly responsible for all damage caused by the activities and for the daily removal of all trash and debris from his/her work area to the satisfaction of the landscape architect .

DRAWN BY | REVISIONS | DATE

Manhard CONSULTING™
One Overlook Point, Suite 290, Lincolnshire, IL 60069 ph:847.634.5550 fx:847.634.0095 manhard.com
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

MCCA GYM EXPANSION AND NEW TRACK AND FIELD
VILLAGE OF MORTON GROVE, ILLINOIS
LANDSCAPE SPECIFICATIONS

PROJ. MGR.: MDE
PROJ. ASSOC.: ELR
DRAWN BY: MN
DATE: 03/27/24
SCALE: NTS

SHEET
L4 OF L4
ACA.MGIL01

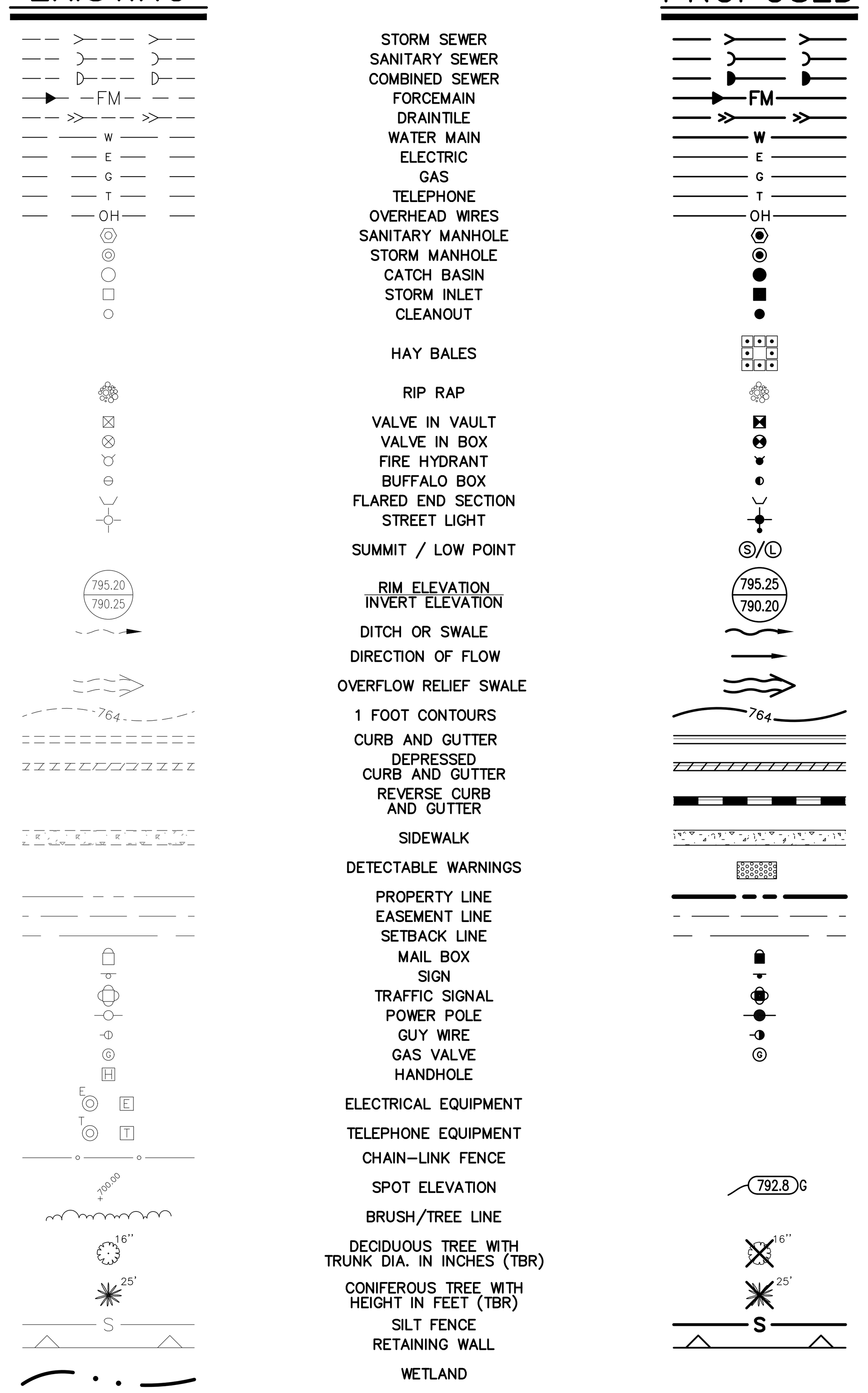
© 2024 MANHARD CONSULTING, ALL RIGHTS RESERVED

Preliminary Engineering
for

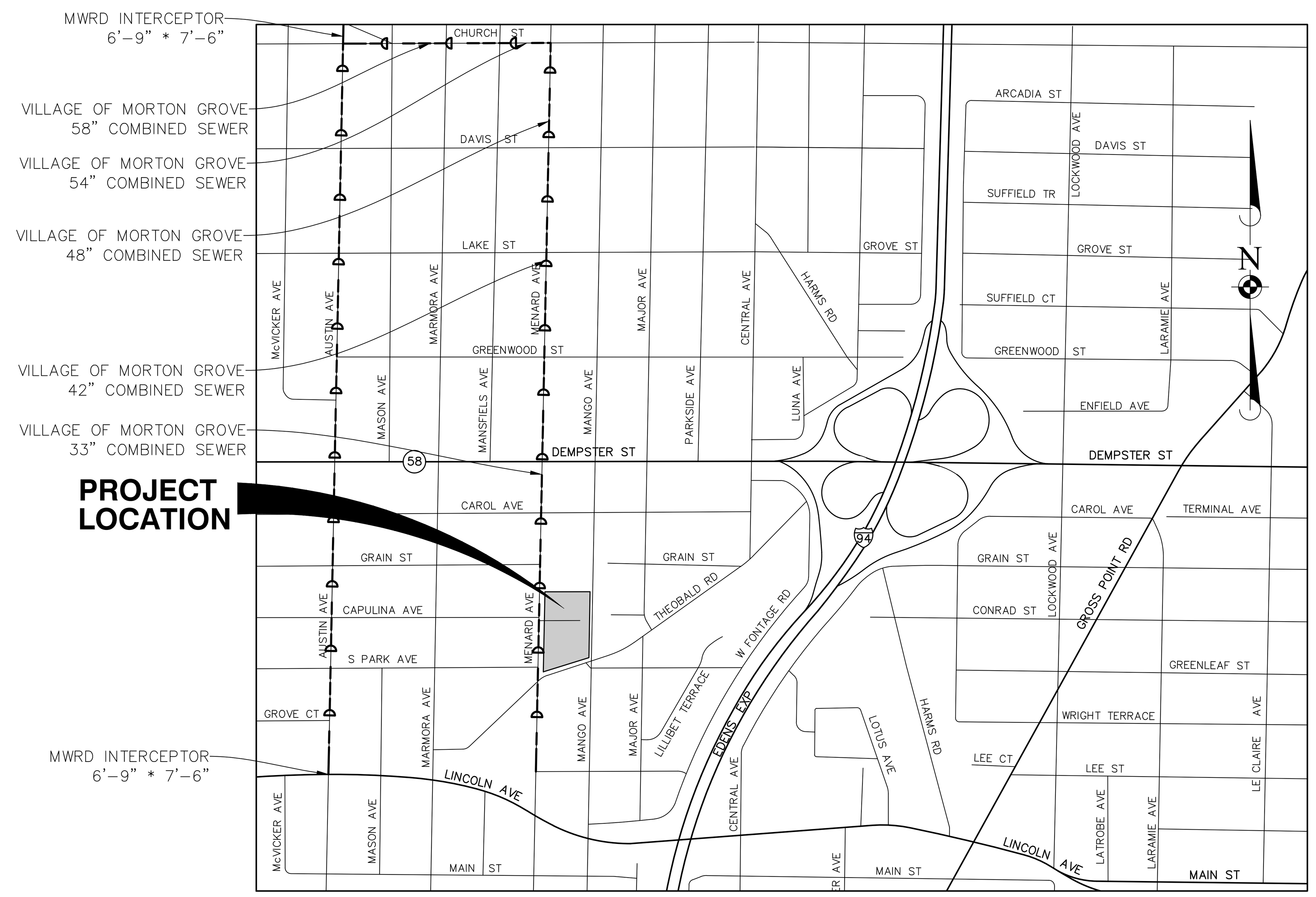
MCCA GYM EXPANSION AND NEW TRACK AND FIELD

8601 MENARD AVE
VILLAGE OF MORTON GROVE, ILLINOIS

STANDARD SYMBOLS



06-01-16
EXISTING
PROPOSED
STORM SEWER
SANITARY SEWER
COMBINED SEWER
FORCEMAIN
DRAINTILE
WATER MAIN
ELECTRIC
GAS
TELEPHONE
OVERHEAD WIRES
SANITARY MANHOLE
STORM MANHOLE
CATCH BASIN
STORM INLET
CLEANOUT
HAY BALES
RIP RAP
VALVE IN VAULT
VALVE IN BOX
FIRE HYDRANT
BUFFALO BOX
FLARED END SECTION
STREET LIGHT
SUMMIT / LOW POINT
RIM ELEVATION
INVERT ELEVATION
DITCH OR SWALE
DIRECTION OF FLOW
OVERFLOW RELIEF SWALE
1 FOOT CONTOURS
CURB AND GUTTER
DEPRESSED CURB AND GUTTER
REVERSE CURB AND GUTTER
SIDEWALK
DETECTABLE WARNINGS
PROPERTY LINE
EASEMENT LINE
SETBACK LINE
MAIL BOX
SIGN
TRAFFIC SIGNAL
POWER POLE
GUY WIRE
GAS VALVE
HANDHOLE
ELECTRICAL EQUIPMENT
TELEPHONE EQUIPMENT
CHAIN-LINK FENCE
SPOT ELEVATION
BRUSH/TREE LINE
DECIDUOUS TREE WITH TRUNK DIA. IN INCHES (TBR)
CONIFEROUS TREE WITH HEIGHT IN FEET (TBR)
SILT FENCE
RETAINING WALL
WETLAND



MWRD INTERCEPTOR 6'-9" * 7'-6"
VILLAGE OF MORTON GROVE 58" COMBINED SEWER
VILLAGE OF MORTON GROVE 54" COMBINED SEWER
VILLAGE OF MORTON GROVE 48" COMBINED SEWER
VILLAGE OF MORTON GROVE 42" COMBINED SEWER
VILLAGE OF MORTON GROVE 33" COMBINED SEWER
PROJECT LOCATION
MWRD INTERCEPTOR 6'-9" * 7'-6"
CHURCH ST
DAVIS ST
LAKE ST
GREENWOOD ST
DEMPSTER ST
CAROL AVE
GRAIN ST
CAPULINA AVE
S PARK AVE
GROVE CT
LINCOLN AVE
MAIN ST
McVICKER AVE
AUSTIN AVE
MASON AVE
MARMORA AVE
MANSFIELD AVE
MENARD AVE
MANGO AVE
MAJOR AVE
PARKSIDE AVE
CENTRAL AVE
LUNA AVE
HARMS RD
THEOBALD RD
W FONTAGE RD
LILLIBET TERRACE
EDENS EXP
ARCADIA ST
SUFFIELD TR
LOCKWOOD AVE
GROVE ST
SUFFIELD CT
LARAMIE AVE
ENFIELD AVE
TERMINAL AVE
CONRAD ST
GROSS POINT RD
GREENLEAF ST
WRIGHT TERRACE
LOTUS AVE
LEE CT
LEE ST
LATROBE AVE
LE CLAIRE AVE
N

LOCATION MAP
N.T.S.

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	EXISTING CONDITIONS AND DEMOLITION PLAN – NORTH
3	EXISTING CONDITIONS AND DEMOLITION PLAN – SOUTH
4	SITE DIMENSIONAL AND PAVING PLAN – NORTH
5	SITE DIMENSIONAL AND PAVING PLAN – SOUTH
6	GRADING PLAN – NORTH
7	GRADING PLAN – SOUTH
8	UTILITY PLAN – NORTH
9	UTILITY PLAN – SOUTH

NOTE:

THE BOUNDARY LINES AND TOPOGRAPHY FOR THIS PROJECT ARE BASED ON A SURVEY PREPARED BY EDWARD J. MOLLOY & ASSOCIATES DATED FEBRUARY, 2024. THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY MANHARD CONSULTING AND THE CLIENT IN WRITING OF ANY DIFFERING CONDITIONS. MANHARD CONSULTING HAS NOT VERIFIED THIS SURVEY AND IS NOT RESPONSIBLE FOR THE ACCURACY OF THE SURVEY BOUNDARY AND/OR TOPOGRAPHY.

CLIENT:
A+C ARCHITECTS
4840 MAIN STREET
SKOKIE, ILLINOIS 60077
(847) 829-0801

BENCHMARKS:

SOURCE BENCHMARK:
X
X
X
ELEVATION = XXX.XX

SITE BENCHMARK:
X
X
ELEVATION = XXX.XX

ABBREVIATIONS

06-01-16

ADJ	ADJUST	F/L	FLOW LINE	R.O.W.	RIGHT-OF-WAY
AGG.	AGGREGATE	FM	FORCE MAIN	RCP	REINFORCED CONCRETE PIPE
ARCH	ARCHITECT	G	GROUND	REM	REMOVAL
B.A.M.	BITUMINOUS AGGREGATE MIXTURE	G/F	GRADE AT FOUNDATION	REV	REVERSE
B-B	BACK TO BACK	GW	GUY WIRE	RR	RAILROAD
B/C	BACK OF CURB	HDWL	HEADWALL	RT	RIGHT
B/P	BOTTOM OF PIPE	HH	HANDHOLE	SAN	SANITARY
B/W	BACK OF WALK	HWL	HIGH WATER LEVEL	SF	SQUARE FOOT
B-BOX	BUFFALO BOX	HYD	HYDRANT	SHLD.	SHOULDER
BIT.	BITUMINOUS	INL	INLET	SL	STREET LIGHT
BM	BENCHMARK	INV	INVERT	SMH	SANITARY MANHOLE
B.O.	BY OTHERS	IP	IRON PIPE	ST	STORM
C.E.	COMMERCIAL ENTRANCE	LT	LEFT	STA.	STATION
CB	CATCH BASIN	MAX.	MAXIMUM	STD	STANDARD
℄	CENTERLINE	MB	MAILBOX	SW	SIDEWALK
CMP	CORRUGATED METAL PIPE	M/E	MEET EXISTING	SY	SQUARE YARDS
CNTRL	CONTROL	MH	MANHOLE	TBR	TO BE REMOVED
CO	CLEANOUT	MIN.	MINIMUM	T	TELEPHONE
CONC.	CONCRETE	NWL	NORMAL WATER LEVEL	T-A	TYPE A
CY	CUBIC YARD	P.E.	PRIVATE ENTRANCE	T/C	TOP OF CURB
D	DITCH	PC	POINT OF CURVATURE	T/F	TOP OF FOUNDATION
DIA.	DIAMETER	PCC	POINT OF COMPOUND CURVE	T/P	TOP OF PIPE
DIP	DUCTILE IRON PIPE	PGL	PROFILE GRADE LINE	T/W	TOP OF WALK
DIWM	DUCTILE IRON WATER MAIN	PI	POINT OF INTERSECTION	T/WALL	TOP OF WALL
DS	DOWNSPOUT	PL	PROPERTY LINE	TEMP	TEMPORARY
DT	DRAIN TILE	PP	POWER POLE	TRANS	TRANSFORMER
E	ELECTRIC	PROP.	PROPOSED	V.B.	VALVE BOX
E-E	EDGE TO EDGE	PT	POINT OF TANGENCY	VCP	VITRIFIED CLAY PIPE
ELEV.	ELEVATION	PVC	POLYVINYL CHLORIDE PIPE	V.V.	VALVE VAULT
E/P	EDGE OF PAVEMENT	PVC	POINT OF VERTICAL CURVATURE	WL	WATER LEVEL
EX.	EXISTING	PVI	POINT OF VERTICAL INTERSECTION	WM	WATER MAIN
F.O.	FIELD ENTRANCE	PVT	POINT OF VERTICAL TANGENCY		
F-F	FACE TO FACE	P	PAVEMENT		
F.F.	FINISHED FLOOR	P.U.D.E.	PUBLIC UTILITY & DRAINAGE EASEMENT		
FES	FLARED END SECTION	R	RADIUS		

MANHARD CONSULTING IS NOT RESPONSIBLE FOR THE SAFETY OF ANY PARTY AT OR ON THE CONSTRUCTION SITE. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND ANY OTHER PERSON OR ENTITY PERFORMING WORK OR SERVICES. NEITHER THE OWNER NOR ENGINEER ASSUMES ANY RESPONSIBILITY FOR THE JOB SITE SAFETY OF PERSONS ENGAGED IN THE WORK OR THE MEANS OR METHODS OF CONSTRUCTION.

Manhard CONSULTING™
1 East Wacker Drive, Suite 2700, Chicago, IL 60601 ph:312.824.3801 fx:847.634.0095 manhard.com
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

Call Before You Dig
JULIE ILLINOIS ONE-CALL SYSTEM
Simply Call 811

UTILITY CONTACTS

ELECTRIC	WATER
COMED 1500 FRANKLIN BLVD. LIBERTYVILLE, IL. 60048 (847) 204-2859 CONTACT: ROBERT KOLLAR	MORTON GROVE: PUBLIC WORKS WATER AND SEWER DIVISION 7840 NAGLE AVENUE MORTON GROVE, IL 60053 (847) 470-5235
GAS	**TELEPHONE**
NICOR (630) 317-1684 CONTACT: CHERYL DENTON	AT&T 2004 MINER STREET DES PLAINES, IL 60016 (847) 759-5521 CONTACT: RAHSAAN REINFORD
SEWER	**CABLE**
MORTON GROVE: PUBLIC WORKS WATER AND SEWER DIVISION 7840 NAGLE AVENUE MORTON GROVE, IL 60053 (847) 470-5235	COMCAST (630) 600-6352 CONTACT: MARTHA GIERAS

SEAL

DRAWN BY | REVISIONS | DATE

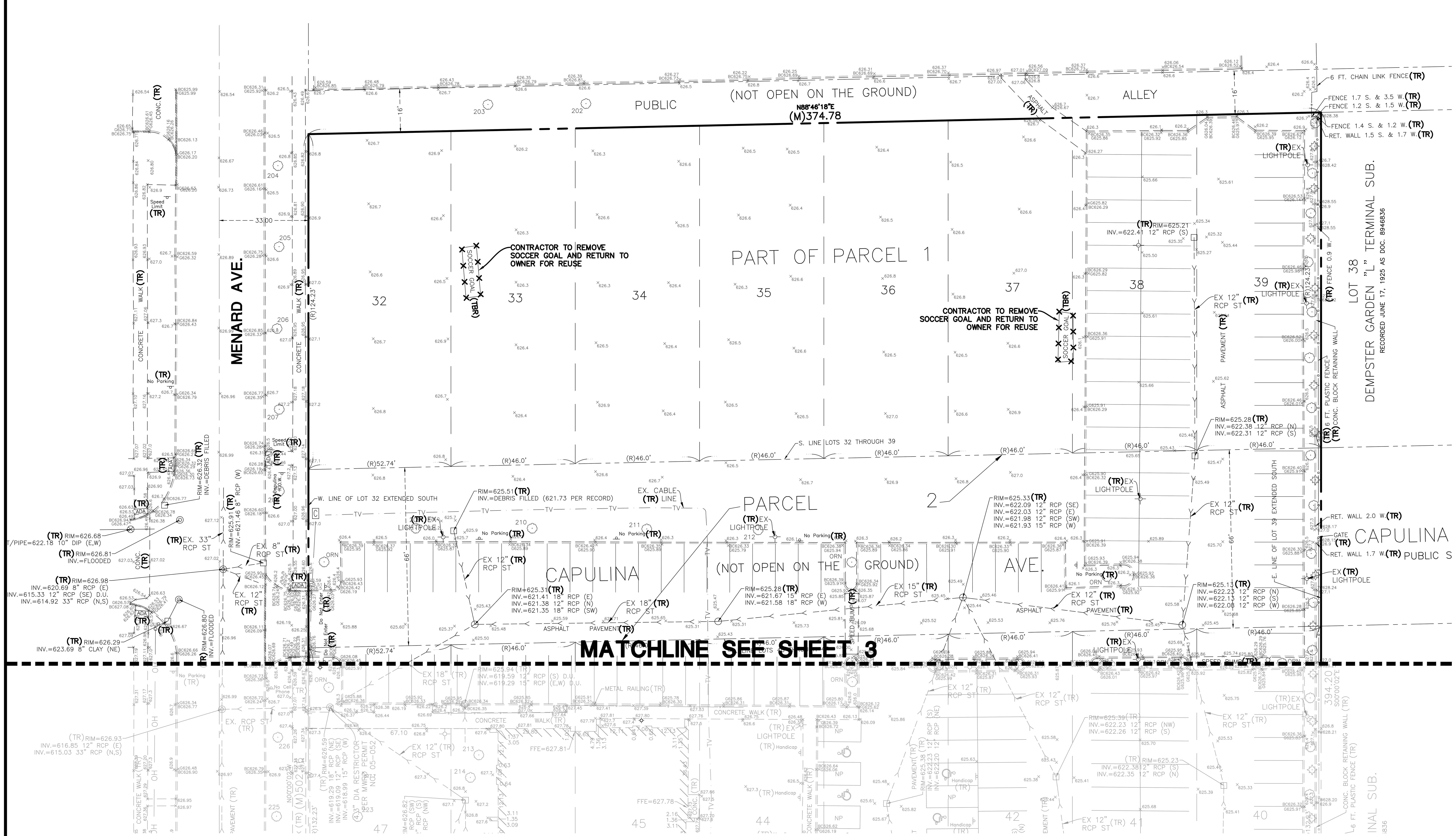
MCCA GYM EXPANSION AND NEW TRACK AND FIELD
VILLAGE OF MORTON GROVE, ILLINOIS
TITLE SHEET

PROJ. MGR.: MDE
PROJ. ASSOC.: ELR
DRAWN BY: BJA
DATE: 03-19-24
SCALE: N.T.S.

SHEET
1 OF 9
ACA.MGIL01

©2024 MANHARD CONSULTING, ALL RIGHTS RESERVED

NOT FOR CONSTRUCTION



SCALE: 1"=20'

DEMOLITION LEGEND

(hatch)	CONCRETE PAVEMENT AND BASE TO BE REMOVED
XXX	UTILITY STRUCTURE TO BE REMOVED
-///-///-	UTILITY LINE REMOVAL, FILL OR ABANDONMENT (REFER TO SPECIFICATIONS)
(tree symbol)	TREE TO BE REMOVED
(TBR)	TO BE REMOVED
(TR)	TO REMAIN

EXISTING CONDITIONS AND DEMOLITION NOTES:

1. EXISTING CONDITIONS AND DEMOLITION PLAN REPRESENT SITE CONDITIONS AS OF FEBRUARY 7, 2024. CONTRACTOR SHALL INSPECT SITE PRIOR TO BIDDING WORK TO VERIFY ACTUAL FIELD CONDITIONS AS PORTIONS OF THE DEMOLITION WORK MAY HAVE SINCE BEEN COMPLETED. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLETE ALL DEMOLITION WORK AS PER PLANS TO PREPARE THE SITE FOR CONSTRUCTION OF PROPOSED IMPROVEMENTS.

2. THE UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.

3. THE CONTRACTOR IS RESPONSIBLE FOR DEMOLITION, REMOVAL AND DISPOSAL (IN A LOCATION APPROVED BY ALL JURISDICTIONAL GOVERNING ENTITIES) OF ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, ROAD, PARKING LOTS, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THESE PLANS CAN BE CONSTRUCTED. ALL DEMOLITION WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.

4. THE LOCATION OF IRRIGATION LINES AND SPRINKLER HEADS ARE UNKNOWN. CONTRACTOR SHALL LOCATE IRRIGATION LINES AND SPRINKLER HEADS DISTURBED BY PROPOSED IMPROVEMENTS AND COORDINATE RELOCATION.

5. REFER TO SPECIFICATIONS SHEET FOR DEMOLITION NOTES.

Manhard CONSULTING

1 East Wacker Drive, Suite 2700, Chicago, IL 60601 ph:312.624.3801 fx:847.634.0095 manhard.com
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

MCCA GYM EXPANSION AND NEW TRACK AND FIELD

VILLAGE OF MORTON GROVE, ILLINOIS

EXISTING CONDITIONS AND DEMOLITION PLAN - NORTH

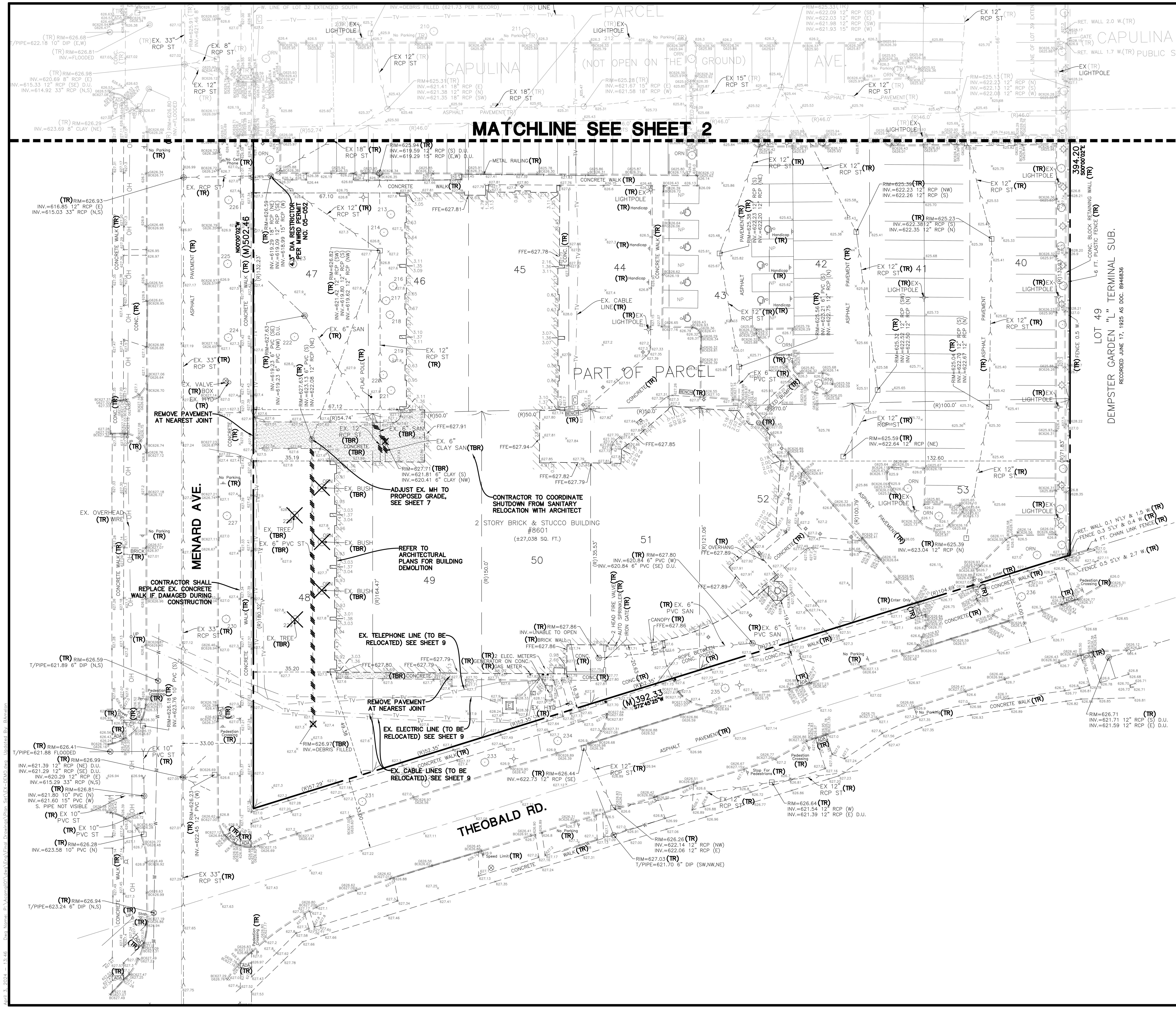
PROJ. MGR.:	MDE
PROJ. ASSOC.:	ELR
DRAWN BY:	BJA
DATE:	03-19-24
SCALE:	1"=20'

SHEET **2** OF **9**

ACA.MGIL01

NOT FOR CONSTRUCTION

© 2024 MANHARD CONSULTING, ALL RIGHTS RESERVED



DEMOLITION LEGEND

- CONCRETE PAVEMENT AND BASE TO BE REMOVED
- UTILITY STRUCTURE TO BE REMOVED
- UTILITY LINE REMOVAL, FILL OR ABANDONMENT (REFER TO SPECIFICATIONS)
- TREE TO BE REMOVED
- (TBR) TO BE REMOVED
- (TR) TO REMAIN

06-01-16

EXISTING CONDITIONS AND DEMOLITION NOTES:

1. EXISTING CONDITIONS AND DEMOLITION PLAN REPRESENT SITE CONDITIONS AS OF FEBRUARY 7, 2024. CONTRACTOR SHALL INSPECT SITE PRIOR TO BIDDING WORK TO VERIFY ACTUAL FIELD CONDITIONS AS PORTIONS OF THE DEMOLITION WORK MAY HAVE SINCE BEEN COMPLETED. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLETE ALL DEMOLITION WORK AS PER PLANS TO PREPARE THE SITE FOR CONSTRUCTION OF PROPOSED IMPROVEMENTS.
2. THE UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.
3. THE CONTRACTOR IS RESPONSIBLE FOR DEMOLITION, REMOVAL AND DISPOSAL (IN A LOCATION APPROVED BY ALL JURISDICTIONAL GOVERNING ENTITIES) OF ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, ROAD, PARKING LOTS, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THESE PLANS CAN BE CONSTRUCTED. ALL DEMOLITION WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.
4. THE LOCATION OF IRRIGATION LINES AND SPRINKLER HEADS ARE UNKNOWN. CONTRACTOR SHALL LOCATE IRRIGATION LINES AND SPRINKLER HEADS DISTURBED BY PROPOSED IMPROVEMENTS AND COORDINATE RELOCATION.
5. REFER TO SPECIFICATIONS SHEET FOR DEMOLITION NOTES.

DATE	REVISIONS	DRAWN BY

Manhard CONSULTING

1 East Wacker Drive, Suite 2700, Chicago, IL 60601 ph:312.824.3801 fx:847.634.0095 manhard.com
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

MCCA GYM EXPANSION AND NEW TRACK AND FIELD

VILLAGE OF MORTON GROVE, ILLINOIS

EXISTING CONDITIONS AND DEMOLITION PLAN - SOUTH

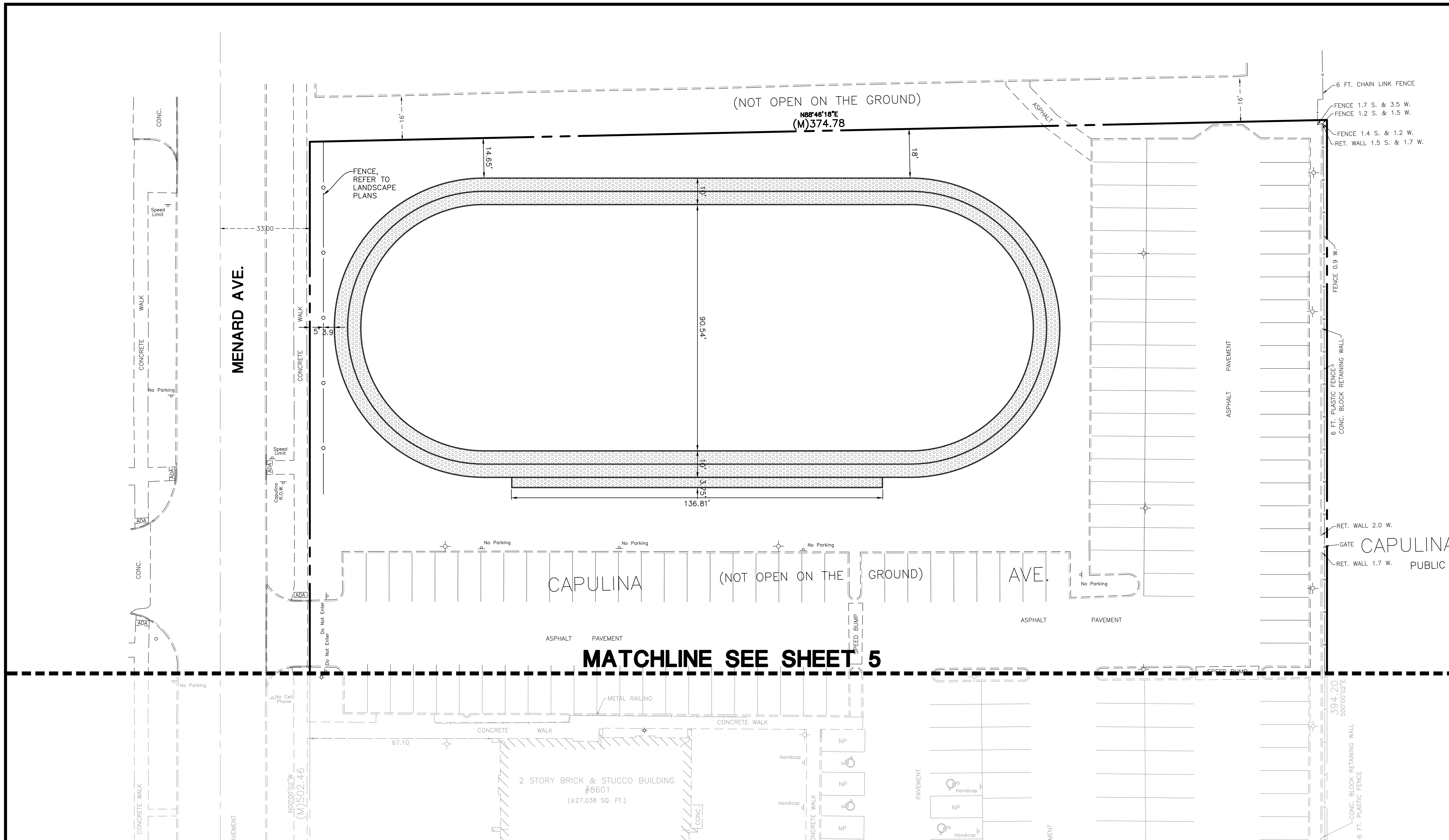
PROJ. MGR.:	MDE
PROJ. ASSOC.:	ELR
DRAWN BY:	BJA
DATE:	03-19-24
SCALE:	1"=20'

SHEET 3 OF 9

ACA.MGIL01

© 2024 MANHARD CONSULTING, ALL RIGHTS RESERVED

NOT FOR CONSTRUCTION



06-01-16

SITE DIMENSIONAL AND PAVING NOTES:

1. ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB OR BUILDING FOUNDATION UNLESS NOTED OTHERWISE.
2. ALL PROPOSED CURB AND GUTTER SHALL BE B6.12 UNLESS OTHERWISE NOTED.
3. ALL CURB RADII SHALL BE 3' MEASURED TO FACE OF CURB UNLESS NOTED OTHERWISE.
4. TIE ALL PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTER WITH 2–#6 BARS x 18" LONG DOWELED INTO EXISTING CURB.
5. BUILDING DIMENSIONS AND ADJACENT PARKING HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION CURRENT AT THE DATE OF THIS DRAWING. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST. THEREFORE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. BUILDING DIMENSIONS SHOWN SHOULD NOT BE USED FOR CONSTRUCTION LAYOUT OF BUILDING.
6. IMPROVEMENTS ADJACENT TO BUILDING, IF SHOWN, SUCH AS TRUCK DOCK, RETAINING WALLS, SIDEWALKS, CURBING, FENCES, CANOPIES, RAMPS, HANDICAP ACCESS, PLANTERS, DUMPSTERS, AND TRANSFORMERS ETC. HAVE BEEN SHOWN FOR APPROXIMATE LOCATION ONLY. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS, SPECIFICATIONS AND DETAILS.
7. LOCATION OF PRIVATE SIDEWALKS SHALL BE COORDINATED WITH PROPOSED DOORWAY. CONTRACTOR TO VERIFY ACTUAL BUILDING PLAN LOCATIONS WITH ARCHITECT/DEVELOPER PRIOR TO CONSTRUCTING THE SIDEWALKS.
8. ALL ROADWAY AND PARKING LOT SIGNAGE, STRIPING, SYMBOLS, ETC. SHALL BE IN ACCORDANCE WITH LATEST JURISDICTIONAL GOVERNMENTAL ENTITY DETAILS.
9. SOME EXISTING ITEMS TO BE REMOVED HAVE BEEN DELETED FROM THIS PLAN FOR CLARITY. SEE DEMOLITION PLAN FOR ITEMS DELETED.
10. PROVIDE DEPRESSED CURB AND RAMP AT ALL HANDICAP ACCESSIBLE SIDEWALK AND PATH LOCATIONS PER FEDERAL AND STATE STANDARDS.
11. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1–800–892–0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.

06-01-16

PAVEMENT LEGEND

CONCRETE SIDEWALK
5" PORTLAND CEMENT CONCRETE
4" COMPACTED AGGREGATE BASE COURSE, TYPE B

TRACK
REFER TO ARCHITECTURAL PLANS FOR SURFACE AND BASE DETAILS

01-01-16

SITE DATA

SITE AREA	3.86 ACRES
EXISTING PARKING PROVIDED	188 SPACES
EXISTING HANDICAP PROVIDED	7 SPACES
TOTAL EXISTING PARKING PROVIDED	195 SPACES

CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION OF SIDEWALKS, SIDEWALK SCORING, BENCHES, BIKE RACKS, FLAG POLES, ETC., DIMENSIONS OF VESTIBULE, RAMPS AND TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS

DATE	REVISIONS	DRAWN BY

Manhard CONSULTING
1 East Wacker Drive, Suite 2700, Chicago, IL 60601 ph:312.824.3801 fx:847.634.0095 manhard.com
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

MCCA GYM EXPANSION AND NEW TRACK AND FIELD

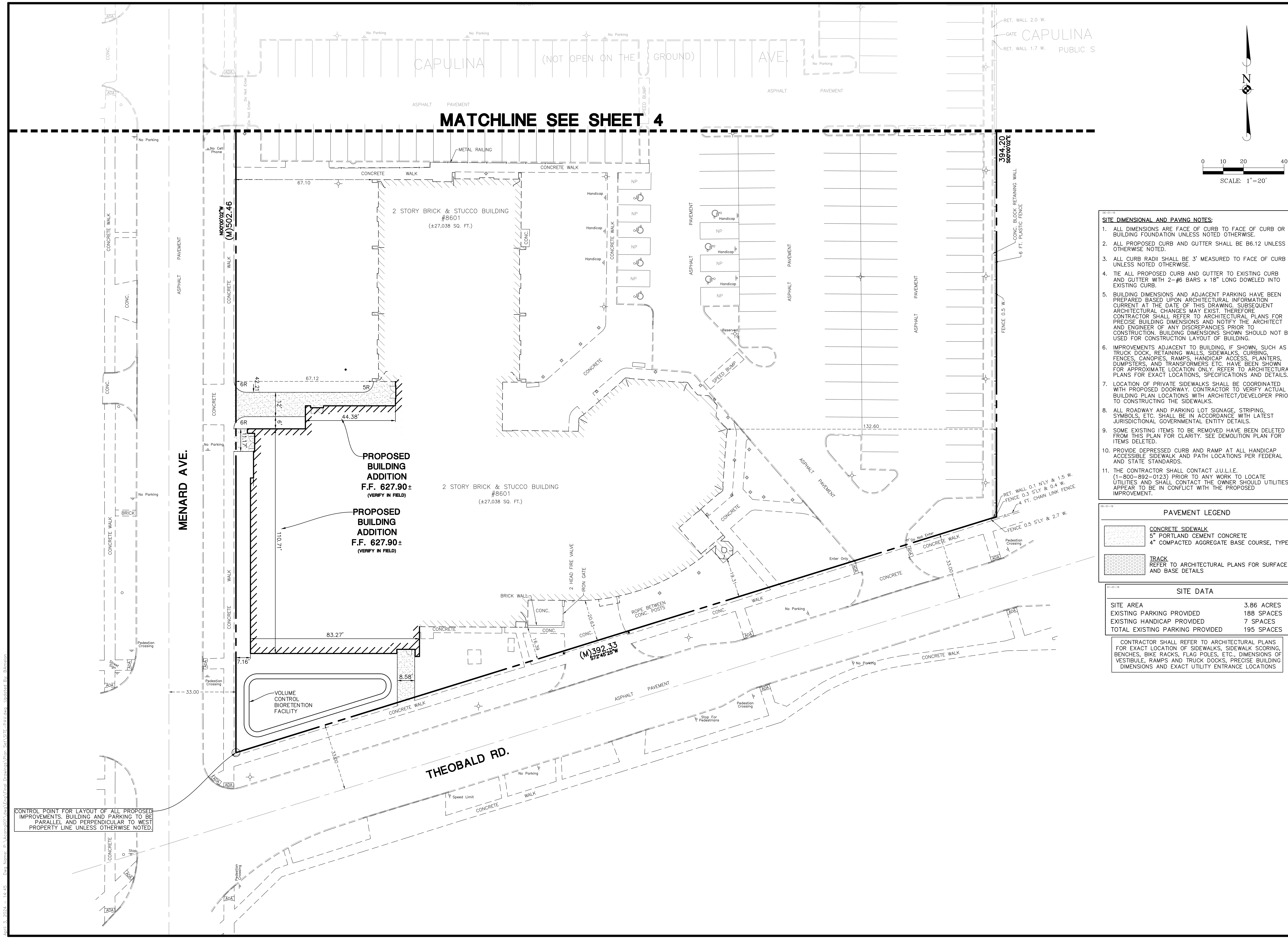
VILLAGE OF MORTON GROVE, ILLINOIS

SITE DIMENSIONAL AND PAVING PLAN - NORTH

© 2024 MANHARD CONSULTING, ALL RIGHTS RESERVED

PROJ. MGR.: MDE
PROJ. ASSOC.: ELR
DRAWN BY: BJA
DATE: 03-19-24
SCALE: 1"=20'

NOT FOR CONSTRUCTION



06-01-16

SITE DIMENSIONAL AND PAVING NOTES:

1. ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB OR BUILDING FOUNDATION UNLESS NOTED OTHERWISE.
2. ALL PROPOSED CURB AND GUTTER SHALL BE B6.12 UNLESS OTHERWISE NOTED.
3. ALL CURB RADII SHALL BE 3' MEASURED TO FACE OF CURB UNLESS NOTED OTHERWISE.
4. TIE ALL PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTER WITH 2-#6 BARS x 18" LONG DOWELED INTO EXISTING CURB.
5. BUILDING DIMENSIONS AND ADJACENT PARKING HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION CURRENT AT THE DATE OF THIS DRAWING. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST. THEREFORE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. BUILDING DIMENSIONS SHOWN SHOULD NOT BE USED FOR CONSTRUCTION LAYOUT OF BUILDING.
6. IMPROVEMENTS ADJACENT TO BUILDING, IF SHOWN, SUCH AS TRUCK DOCK, RETAINING WALLS, SIDEWALKS, CURBING, FENCES, CANOPIES, RAMPS, HANDICAP ACCESS, PLANTERS, DUMPSTERS, AND TRANSFORMERS ETC. HAVE BEEN SHOWN FOR APPROXIMATE LOCATION ONLY. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS, SPECIFICATIONS AND DETAILS.
7. LOCATION OF PRIVATE SIDEWALKS SHALL BE COORDINATED WITH PROPOSED DOORWAY. CONTRACTOR TO VERIFY ACTUAL BUILDING PLAN LOCATIONS WITH ARCHITECT/DEVELOPER PRIOR TO CONSTRUCTING THE SIDEWALKS.
8. ALL ROADWAY AND PARKING LOT SIGNAGE, STRIPING, SYMBOLS, ETC. SHALL BE IN ACCORDANCE WITH LATEST JURISDICTIONAL GOVERNMENTAL ENTITY DETAILS.
9. SOME EXISTING ITEMS TO BE REMOVED HAVE BEEN DELETED FROM THIS PLAN FOR CLARITY. SEE DEMOLITION PLAN FOR ITEMS DELETED.
10. PROVIDE DEPRESSED CURB AND RAMP AT ALL HANDICAP ACCESSIBLE SIDEWALK AND PATH LOCATIONS PER FEDERAL AND STATE STANDARDS.
11. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.

06-01-16

PAVEMENT LEGEND

CONCRETE SIDEWALK
5" PORTLAND CEMENT CONCRETE
4" COMPACTED AGGREGATE BASE COURSE, TYPE B

TRACK
REFER TO ARCHITECTURAL PLANS FOR SURFACE AND BASE DETAILS

01-01-16

SITE DATA

SITE AREA	3.86 ACRES
EXISTING PARKING PROVIDED	188 SPACES
EXISTING HANDICAP PROVIDED	7 SPACES
TOTAL EXISTING PARKING PROVIDED	195 SPACES

CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION OF SIDEWALKS, SIDEWALK SCORING, BENCHES, BIKE RACKS, FLAG POLES, ETC., DIMENSIONS OF VESTIBULE, RAMPS AND TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS

DRAWN BY | REVISIONS | DATE

Manhard CONSULTING
1 East Wacker Drive, Suite 2700, Chicago, IL 60601 ph:312.824.3801 fx:847.634.0095 manhard.com
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

MCCA GYM EXPANSION AND NEW TRACK AND FIELD

VILLAGE OF MORTON GROVE, ILLINOIS

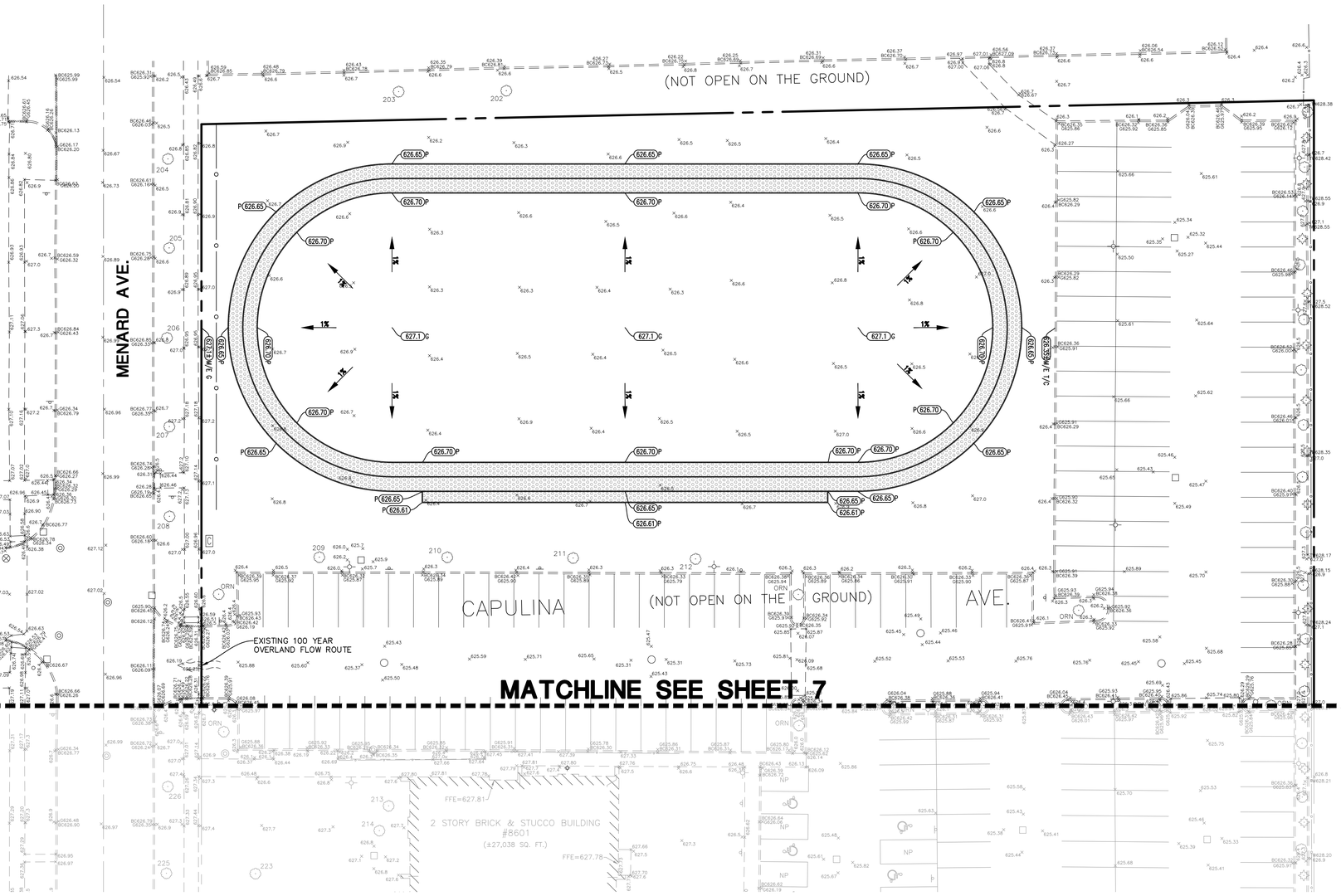
SITE DIMENSIONAL AND PAVING PLAN - SOUTH

PROJ. MGR.:	MDE
PROJ. ASSOC.:	ELR
DRAWN BY:	BJA
DATE:	03-19-24
SCALE:	1"=20'

SHEET
5 OF 9
ACA.MGIL01

NOT FOR CONSTRUCTION

©2024 MANHARD CONSULTING, ALL RIGHTS RESERVED



01-01-16

GRADING PLAN LEGEND

764	PROPOSED 1 FOOT CONTOURS
792.8 G	PROPOSED SPOT ELEVATION
F.F.	PROPOSED FINISHED FLOOR ELEVATION
G/F	PROPOSED GRADE AT FOUNDATION
P	PROPOSED PAVEMENT ELEVATION
T/C	PROPOSED TOP OF CURB
T/W	PROPOSED TOP OF WALK
M/E	MEET EXISTING
G	PROPOSED GROUND GRADE OR GROUND AT BASE OF RETAINING WALL
	PROPOSED DITCH OR SWALE
	PROPOSED DIRECTION OF FLOW
	OVERFLOW RELIEF SWALE
RIDGE	PROPOSED RIDGE LINE
0.5'	PROPOSED DEPTH OF PONDING

04-01-16

GRADING NOTES:

1. RETAINING WALL DESIGN TO BE PROVIDED BY OTHERS.
2. PAVEMENT SLOPES THROUGH HANDICAP ACCESSIBLE PARKING AREAS SHALL BE 2.00% MAXIMUM IN ANY DIRECTION.
3. ALL HANDICAP RAMPS SHALL BE CONSTRUCTED WITH A MAXIMUM CROSS SLOPE OF 2.00% OR LESS.
4. MEET EXISTING GRADE AT PROPERTY LIMITS UNLESS NOTED OTHERWISE.
5. CONTRACTOR SHALL REFER TO THE SOIL EROSION AND SEDIMENT CONTROL PLAN AND DETAILS FOR CONSTRUCTION SCHEDULING AND EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO BEGINNING GRADING OPERATIONS.
6. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
7. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
8. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITION OR BETTER.
9. ALL UNPAVED AREAS DISTURBED BY GRADING OPERATIONS SHALL RECEIVE 6 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED.
10. EXISTING TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS AS PREPARED BY EDWARD J. MOLLOY & ASSOCIATES ON FEBRUARY 7, 2024. CONTRACTOR SHALL FIELD CHECK EXISTING ELEVATIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.
11. TRANSITIONS FROM DEPRESSED CURB TO FULL HEIGHT CURB SHALL BE TAPERED AT 2H:1V UNLESS OTHERWISE NOTED.

DRAWN BY | REVISIONS | DATE

Manhard CONSULTING
1 East Wacker Drive, Suite 2700, Chicago, IL 60601
ph 312.894.3800 fax 847.694.0095 manhard.com
Civil Engineers • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

MCCA GYM EXPANSION AND NEW TRACK AND FIELD
VILLAGE OF MORTON GROVE, ILLINOIS
GRADING PLAN - NORTH

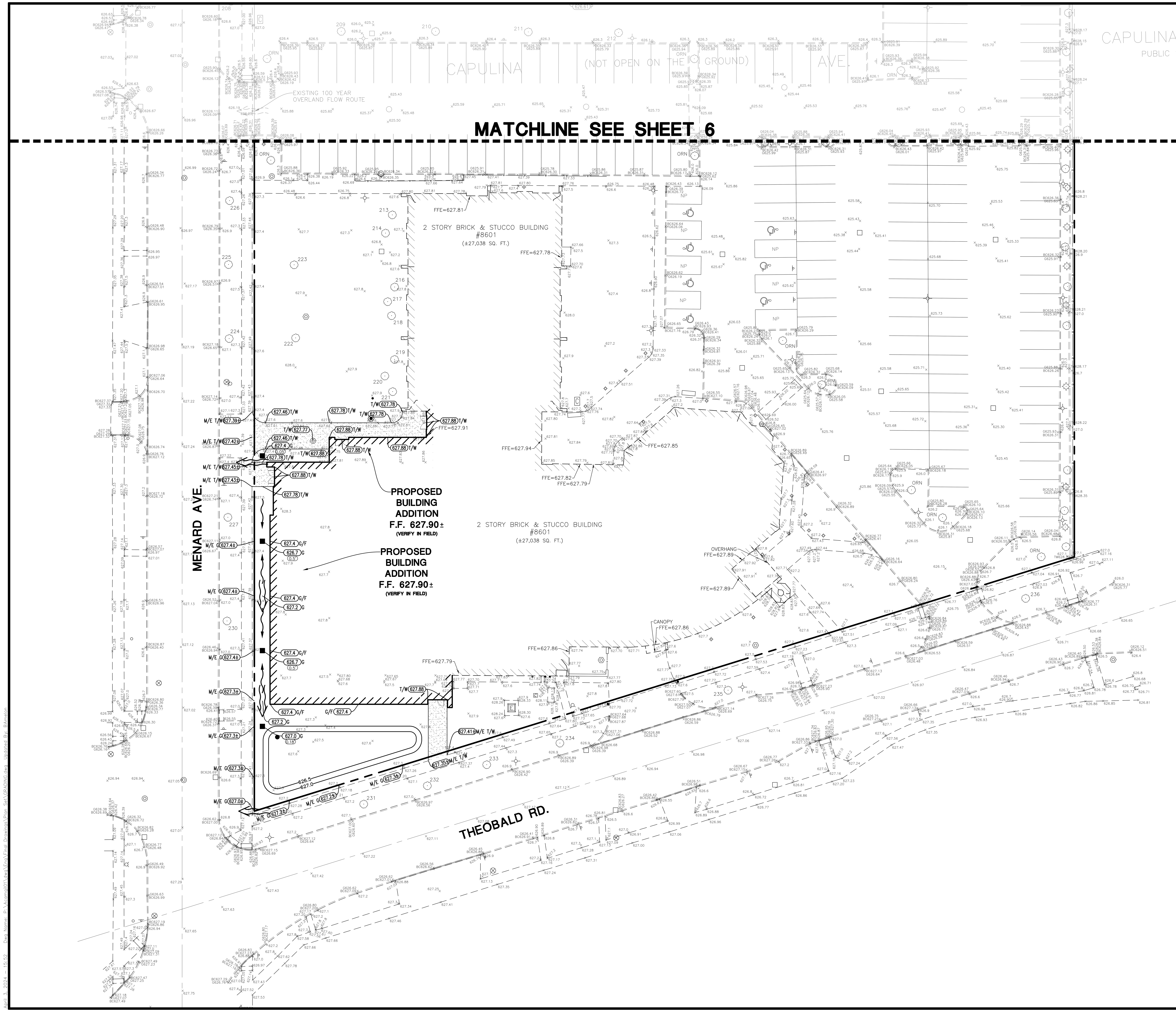
PROJ. MGR.: MDE
PROJ. ASSOC.: ELR
DRAWN BY: BJA
DATE: 03-19-24
SCALE: 1"=20'

SHEET 6 OF 9
ACA.MGIL01

NOT FOR CONSTRUCTION

©2024 MANHARD CONSULTING, ALL RIGHTS RESERVED

April 3, 2024 - 15:52 Dwg Name: P:\Acemgil01\Civil\Eng\Final Drawings\Plan Set\GRADING.dwg Updated By: BAmerson



N

0 10 20 40
SCALE: 1"=20'

01-01-16

GRADING PLAN LEGEND

764	PROPOSED 1 FOOT CONTOURS
(792.8) G	PROPOSED SPOT ELEVATION
F.F.	PROPOSED FINISHED FLOOR ELEVATION
G/F	PROPOSED GRADE AT FOUNDATION
P	PROPOSED PAVEMENT ELEVATION
T/C	PROPOSED TOP OF CURB
T/W	PROPOSED TOP OF WALK
M/E	MEET EXISTING
G	PROPOSED GROUND GRADE OR GROUND AT BASE OF RETAINING WALL
	PROPOSED DITCH OR SWALE
	PROPOSED DIRECTION OF FLOW
	OVERFLOW RELIEF SWALE
RIDGE	PROPOSED RIDGE LINE
(0.5')	PROPOSED DEPTH OF PONDING

06-01-16

GRADING NOTES:

1. RETAINING WALL DESIGN TO BE PROVIDED BY OTHERS.
2. PAVEMENT SLOPES THROUGH HANDICAP ACCESSIBLE PARKING AREAS SHALL BE 2.00% MAXIMUM IN ANY DIRECTION.
3. ALL HANDICAP RAMPS SHALL BE CONSTRUCTED WITH A MAXIMUM CROSS SLOPE OF 2.00% OR LESS.
4. MEET EXISTING GRADE AT PROPERTY LIMITS UNLESS NOTED OTHERWISE.
5. CONTRACTOR SHALL REFER TO THE SOIL EROSION AND SEDIMENT CONTROL PLAN AND DETAILS FOR CONSTRUCTION SCHEDULING AND EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO BEGINNING GRADING OPERATIONS.
6. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
7. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
8. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITION OR BETTER.
9. ALL UNPAVED AREAS DISTURBED BY GRADING OPERATIONS SHALL RECEIVE 6 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED.
10. EXISTING TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS AS PREPARED BY EDWARD J. MOLLOY & ASSOCIATES ON FEBRUARY 7, 2024. CONTRACTOR SHALL FIELD CHECK EXISTING ELEVATIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.
11. TRANSITIONS FROM DEPRESSED CURB TO FULL HEIGHT CURB SHALL BE TAPERED AT 2H:1V UNLESS OTHERWISE NOTED.

DATE	REVISIONS	DRAWN BY

Manhard™ CONSULTING
1 East Wacker Drive, Suite 2700, Chicago, IL 60601 ph:312.824.3801 fx:847.634.0095 manhard.com
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

MCCA GYM EXPANSION AND NEW TRACK AND FIELD

VILLAGE OF MORTON GROVE, ILLINOIS

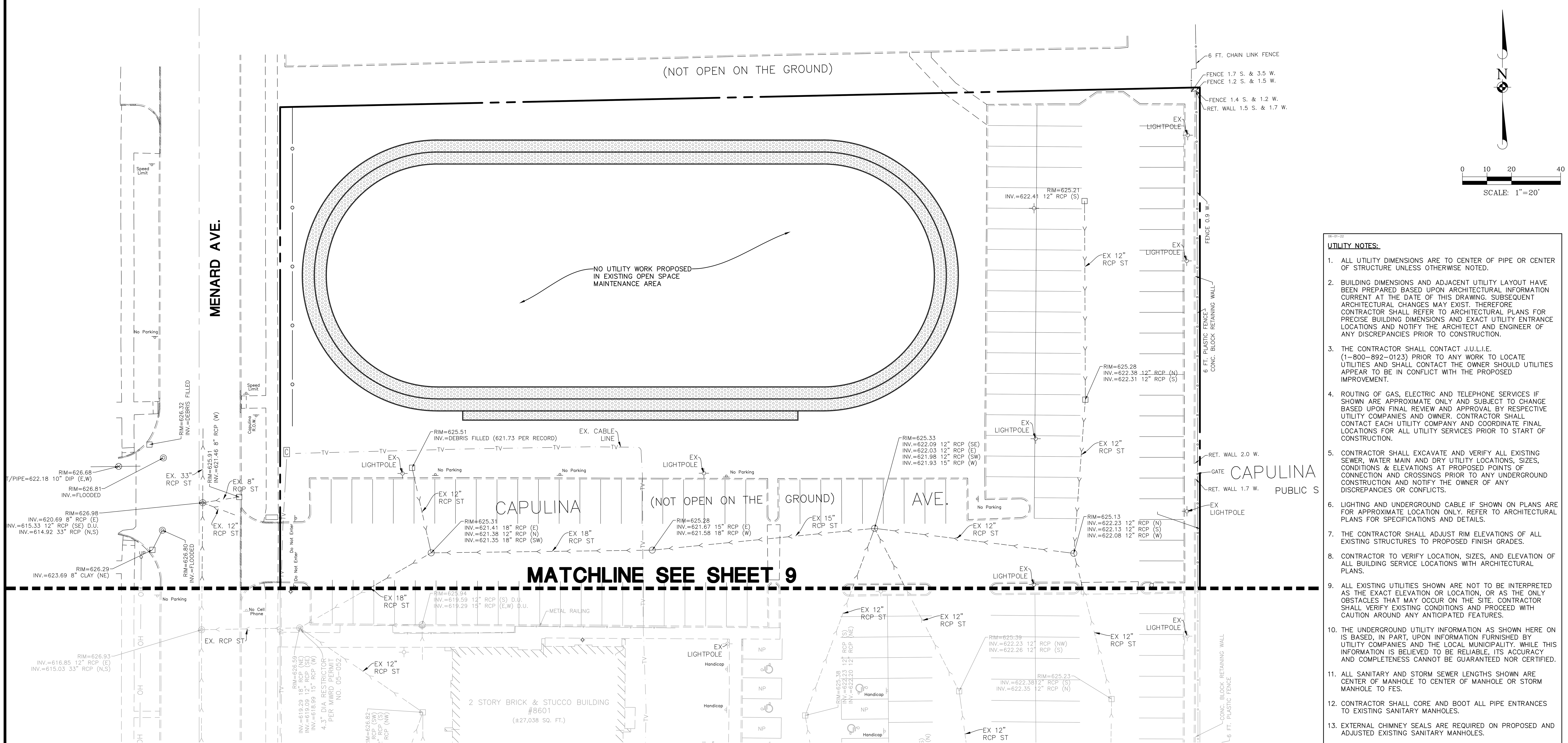
GRADING PLAN - SOUTH

PROJ. MGR.:	MDE
PROJ. ASSOC.:	ELR
DRAWN BY:	BJA
DATE:	03-19-24
SCALE:	1"=20'

SHEET
7 OF 9
ACA.MGIL01

© 2024 MANHARD CONSULTING, ALL RIGHTS RESERVED

NOT FOR CONSTRUCTION



06-01-22

UTILITY NOTES:

1. ALL UTILITY DIMENSIONS ARE TO CENTER OF PIPE OR CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.
2. BUILDING DIMENSIONS AND ADJACENT UTILITY LAYOUT HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION CURRENT AT THE DATE OF THIS DRAWING. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST. THEREFORE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
4. ROUTING OF GAS, ELECTRIC AND TELEPHONE SERVICES IF SHOWN ARE APPROXIMATE ONLY AND SUBJECT TO CHANGE BASED UPON FINAL REVIEW AND APPROVAL BY RESPECTIVE UTILITY COMPANIES AND OWNER. CONTRACTOR SHALL CONTACT EACH UTILITY COMPANY AND COORDINATE FINAL LOCATIONS FOR ALL UTILITY SERVICES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL EXCAVATE AND VERIFY ALL EXISTING SEWER, WATER MAIN AND DRY UTILITY LOCATIONS, SIZES, CONDITIONS & ELEVATIONS AT PROPOSED POINTS OF CONNECTION AND CROSSINGS PRIOR TO ANY UNDERGROUND CONSTRUCTION AND NOTIFY THE OWNER OF ANY DISCREPANCIES OR CONFLICTS.
6. LIGHTING AND UNDERGROUND CABLE IF SHOWN ON PLANS ARE FOR APPROXIMATE LOCATION ONLY. REFER TO ARCHITECTURAL PLANS FOR SPECIFICATIONS AND DETAILS.
7. THE CONTRACTOR SHALL ADJUST RIM ELEVATIONS OF ALL EXISTING STRUCTURES TO PROPOSED FINISH GRADES.
8. CONTRACTOR TO VERIFY LOCATION, SIZES, AND ELEVATION OF ALL BUILDING SERVICE LOCATIONS WITH ARCHITECTURAL PLANS.
9. ALL EXISTING UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT ELEVATION OR LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES.
10. THE UNDERGROUND UTILITY INFORMATION AS SHOWN HERE ON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED.
11. ALL SANITARY AND STORM SEWER LENGTHS SHOWN ARE CENTER OF MANHOLE TO CENTER OF MANHOLE OR STORM MANHOLE TO FES.
12. CONTRACTOR SHALL CORE AND BOOT ALL PIPE ENTRANCES TO EXISTING SANITARY MANHOLES.
13. EXTERNAL CHIMNEY SEALS ARE REQUIRED ON PROPOSED AND ADJUSTED EXISTING SANITARY MANHOLES.
14. SOME EXISTING ITEMS TO BE REMOVED HAVE BEEN DELETED FROM THIS PLAN FOR CLARITY. SEE DEMOLITION PLAN FOR ITEMS DELETED.

DRAWN BY | REVISIONS | DATE

Manhard CONSULTING
1 East Wacker Drive, Suite 2700, Chicago, IL 60601 ph:312.624.3801 fx:847.634.0095 manhard.com
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

MCCA GYM EXPANSION AND NEW TRACK AND FIELD

VILLAGE OF MORTON GROVE, ILLINOIS

UTILITY PLAN - NORTH

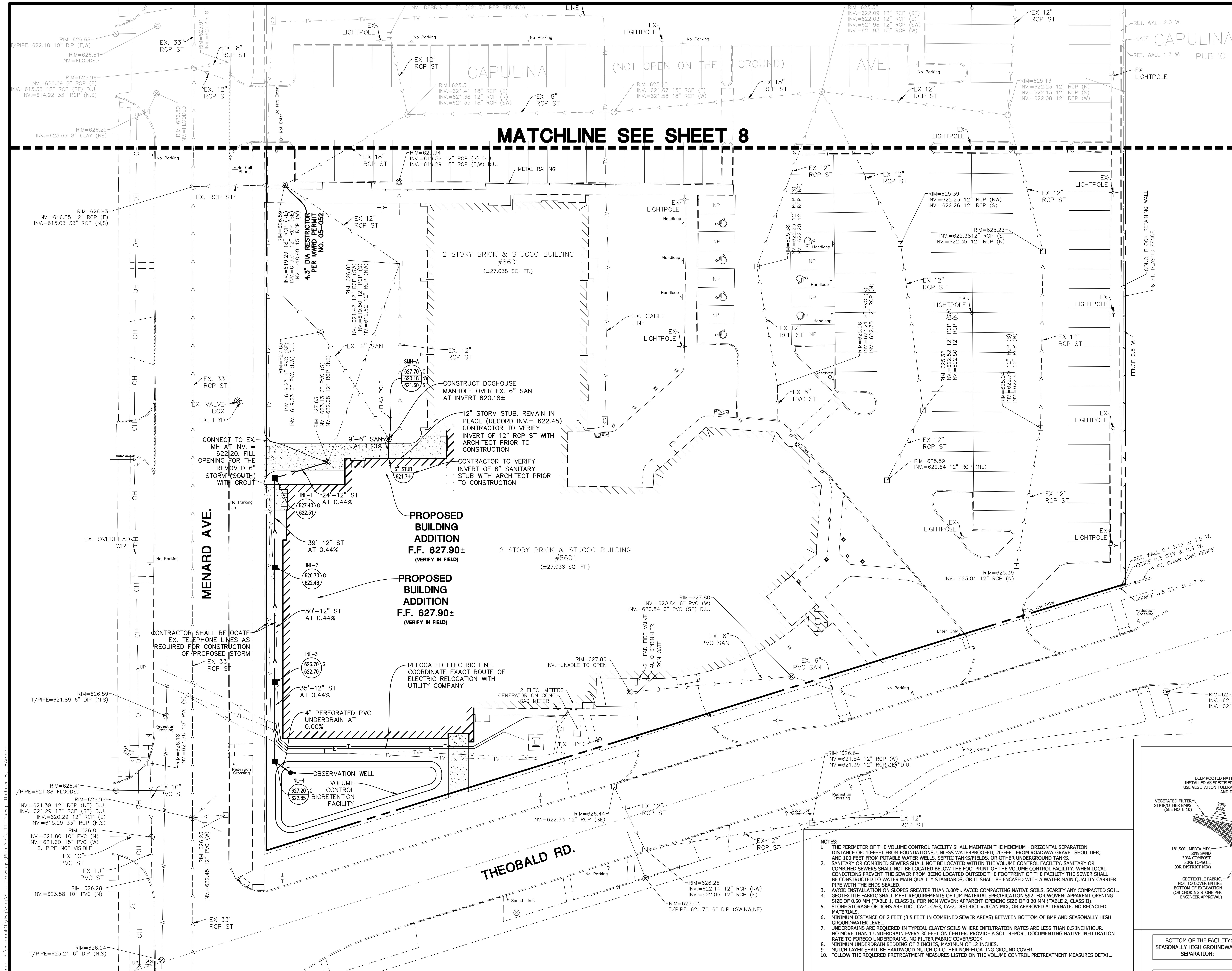
PROJ. MGR.:	MDE
PROJ. ASSOC.:	ELR
DRAWN BY:	BJA
DATE:	03-19-24
SCALE:	1"=20'

SHEET 8 OF 9

ACA.MGIL01

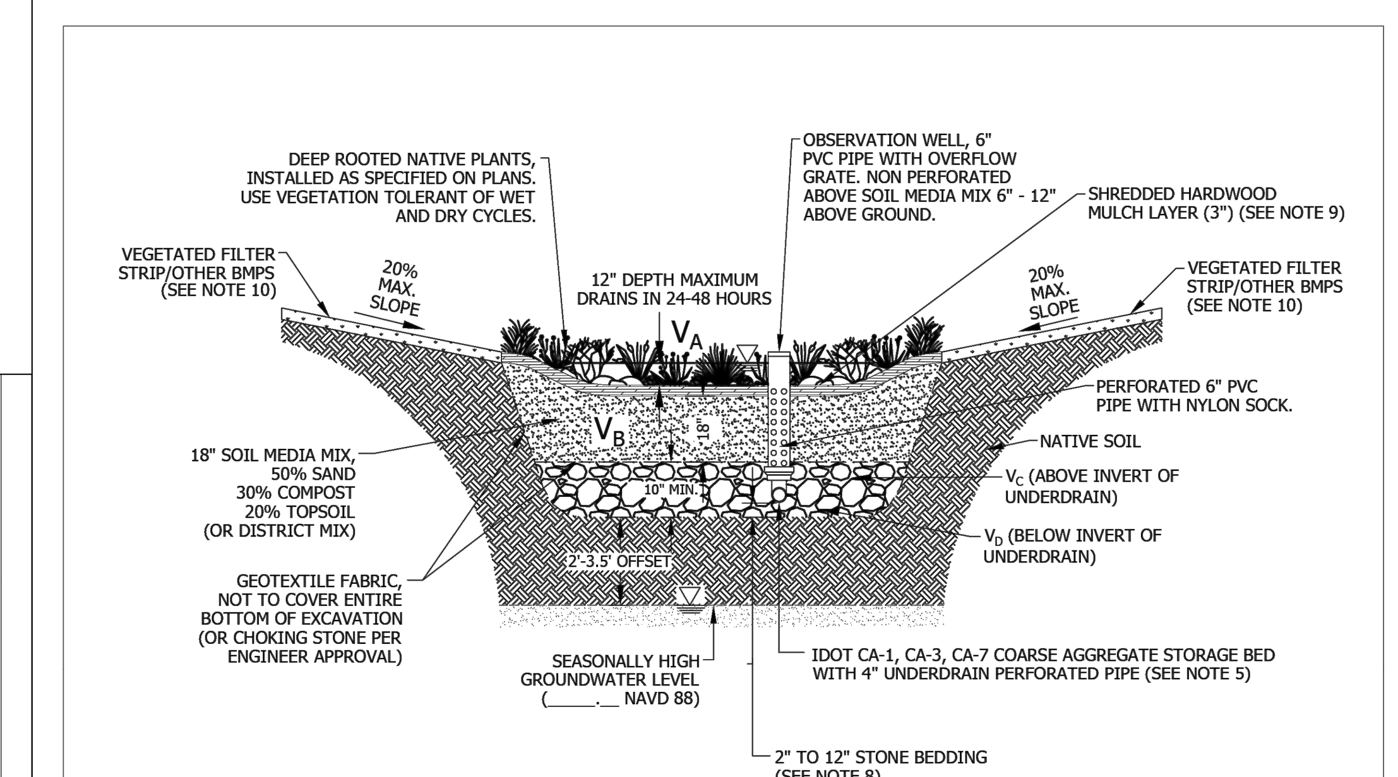
NOT FOR CONSTRUCTION

©2024 MANHARD CONSULTING, ALL RIGHTS RESERVED



UTILITY NOTES:

1. ALL UTILITY DIMENSIONS ARE TO CENTER OF PIPE OR CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.
2. BUILDING DIMENSIONS AND ADJACENT UTILITY LAYOUT HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION CURRENT AT THE DATE OF THIS DRAWING. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST. THEREFORE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
4. ROUTING OF GAS, ELECTRIC AND TELEPHONE SERVICES IF SHOWN ARE APPROXIMATE ONLY AND SUBJECT TO CHANGE BASED UPON FINAL REVIEW AND APPROVAL BY RESPECTIVE UTILITY COMPANIES AND OWNER. CONTRACTOR SHALL CONTACT EACH UTILITY COMPANY AND COORDINATE FINAL LOCATIONS FOR ALL UTILITY SERVICES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL EXCAVATE AND VERIFY ALL EXISTING SEWER, WATER MAIN AND DRY UTILITY LOCATIONS, SIZES, CONDITIONS & ELEVATIONS AT PROPOSED POINTS OF CONNECTION AND CROSSINGS PRIOR TO ANY UNDERGROUND CONSTRUCTION AND NOTIFY THE OWNER OF ANY DISCREPANCIES OR CONFLICTS.
6. LIGHTING AND UNDERGROUND CABLE IF SHOWN ON PLANS ARE FOR APPROXIMATE LOCATION ONLY. REFER TO ARCHITECTURAL PLANS FOR SPECIFICATIONS AND DETAILS.
7. THE CONTRACTOR SHALL ADJUST RIM ELEVATIONS OF ALL EXISTING STRUCTURES TO PROPOSED FINISH GRADES.
8. CONTRACTOR TO VERIFY LOCATION, SIZES, AND ELEVATION OF ALL BUILDING SERVICE LOCATIONS WITH ARCHITECTURAL PLANS.
9. ALL EXISTING UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT ELEVATION OR LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES.
10. THE UNDERGROUND UTILITY INFORMATION AS SHOWN HERE ON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED.
11. ALL SANITARY AND STORM SEWER LENGTHS SHOWN ARE CENTER OF MANHOLE TO CENTER OF MANHOLE OR STORM MANHOLE TO FES.
12. CONTRACTOR SHALL CORE AND BOOT ALL PIPE ENTRANCES TO EXISTING SANITARY MANHOLES.
13. EXTERNAL CHIMNEY SEALS ARE REQUIRED ON PROPOSED AND ADJUSTED EXISTING SANITARY MANHOLES.
14. SOME EXISTING ITEMS TO BE REMOVED HAVE BEEN DELETED FROM THIS PLAN FOR CLARITY. SEE DEMOLITION PLAN FOR ITEMS DELETED.



BOTTOM OF THE FACILITY:	ELEV. 623.0
SEASONALLY HIGH GROUNDWATER:	ELEV. TBD
SEPARATION:	FEET TBD

VOLUME TYPE	SURFACE AREA	DEPTH	POROSITY	STORAGE VOLUME	VOLUME PROVIDED
V_A : SURFACE STORAGE	1,570 SF	0.50'	1.00	1.00 X V_A	678 CF
V_B : SOIL MEDIA MIX	1,140 SF	0.25'	0.25	0.50 X 0.25 X V_B	214 CF
V_C : COARSE AGGREGATE (ABOVE INVERT)	1,140 SF	1.50'	0.36	0.50 X 0.36 X V_C	170 CF
V_D : COARSE AGGREGATE (BELOW INVERT)	1,140 SF	0.17'	0.36	0.36 X V_D	70 CF
				TOTAL	1,132 CF

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%. AVOID COMPACTING NATIVE SOILS. SCARIFY ANY COMPACTED SOIL.
4. 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).
5. STONE STORAGE OPTIONS ARE IDOT CA-1, CA-3, CA-7, DISTRICT VULCAN MIX, OR APPROVED ALTERNATE. NO RECYCLED MATERIALS.
6. MINIMUM DISTANCE OF 2 FEET (3.5 FEET IN COMBINED SEWER AREAS) BETWEEN BOTTOM OF BMP AND SEASONALLY HIGH GROUNDWATER LEVEL.
7. UNDERDRAINS ARE REQUIRED IN TYPICAL CLAYEY SOILS WHERE INFILTRATION RATES ARE LESS THAN 0.5 INCH/HOUR. NO MORE THAN 1 UNDERDRAIN EVERY 30 FEET ON CENTER. PROVIDE A SOIL REPORT DOCUMENTING NATIVE INFILTRATION RATE TO FOREGO UNDERDRAINS. NO FILTER FABRIC COVER/SOCK.
8. MINIMUM UNDERDRAIN BEDDING OF 2 INCHES, MAXIMUM OF 12 INCHES.
9. MULCH LAYER SHALL BE HARDWOOD MULCH OR OTHER NON-FLOATING GROUND COVER.
10. FOLLOW THE REQUIRED PRETREATMENT MEASURES LISTED ON THE VOLUME CONTROL PRETREATMENT MEASURES DETAIL.

NOT TO SCALE

TECHNICAL GUIDANCE MANUAL — 10/11/18
BIORETENTION FACILITY DETAIL

VOLUME CONTROL CALCULATIONS

PROPOSED ADDED IMPERVIOUS AREA	0.25 ACRES
VOLUME CONTROL PROVIDED	1,132 CF
VOLUME CONTROL REQUIRED	908 CF
=((0.25 AC * 43,560 SF/AC) / 12))	

Manhard CONSULTING
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

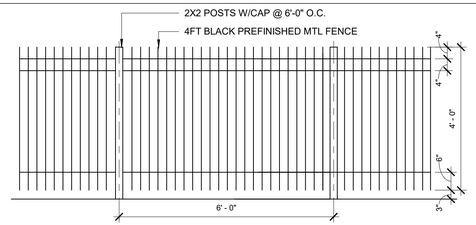
MCCA GYM EXPANSION AND NEW TRACK AND FIELD
VILLAGE OF MORTON GROVE, ILLINOIS
UTILITY PLAN - SOUTH

PROJ. MGR.:	MDE
PROJ. ASSOC.:	ELR
DRAWN BY:	BJA
DATE:	03-19-24
SCALE:	1"=20'

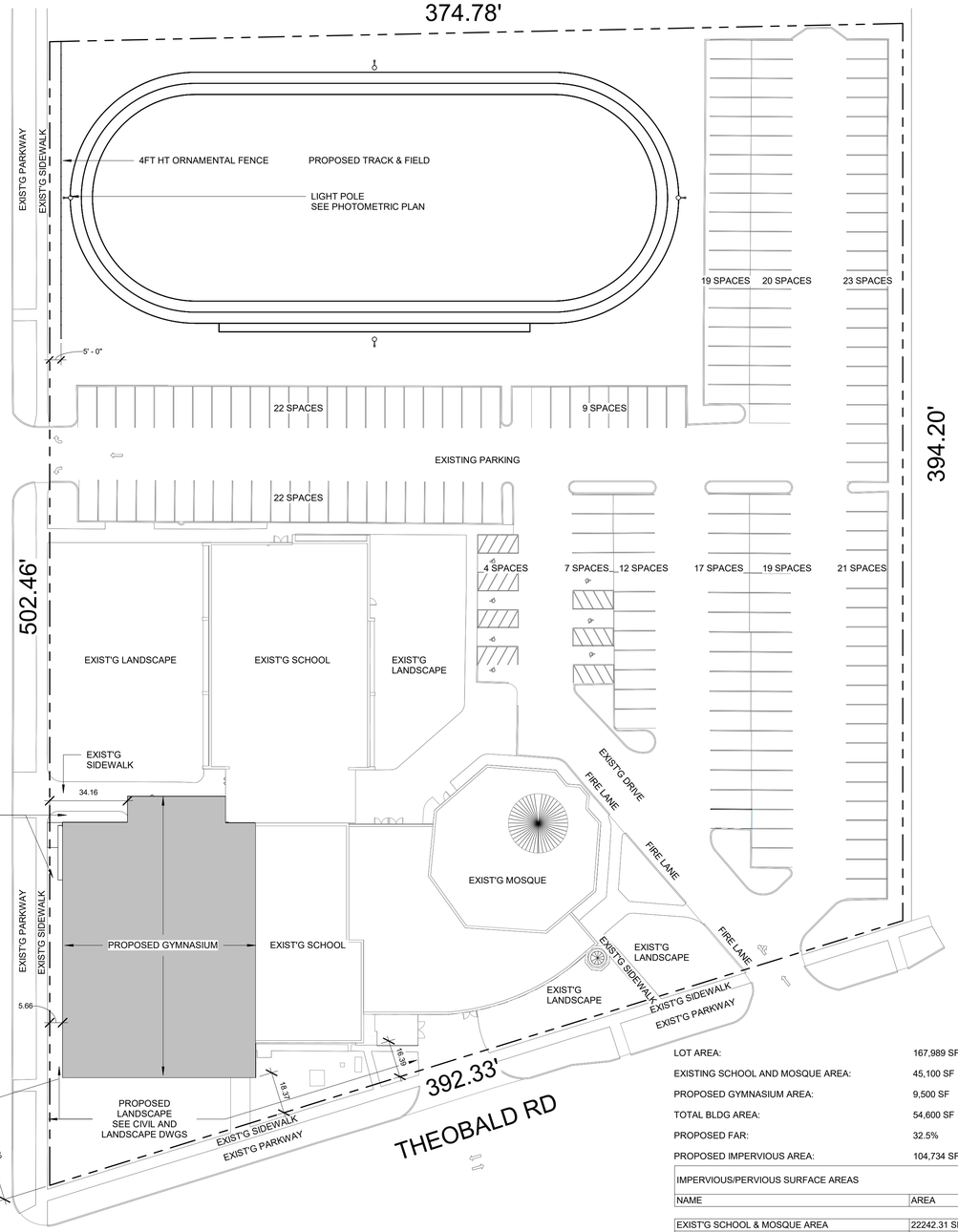
SHEET 9 OF 9
ACA.MGIL01

NOT FOR CONSTRUCTION

© 2024 MANHARD CONSULTING, ALL RIGHTS RESERVED



3 ORNAMENTAL FENCE ELEVATION
1/4" = 1'-0"

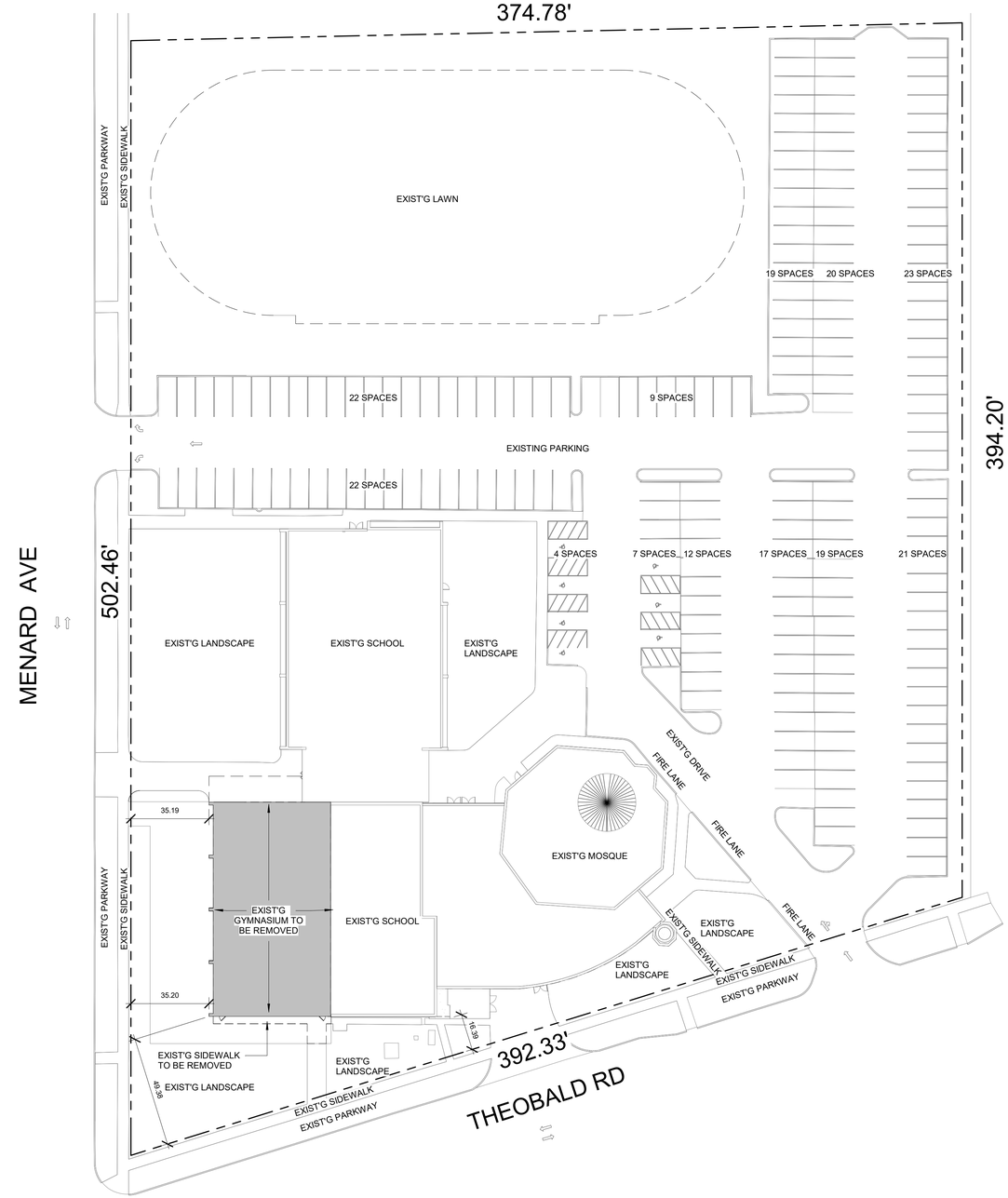


LOT AREA:	167,989 SF
EXISTING SCHOOL AND MOSQUE AREA:	45,100 SF
PROPOSED GYMNASIUM AREA:	9,500 SF
TOTAL BLDG AREA:	54,600 SF
PROPOSED FAR:	32.5%
PROPOSED IMPERVIOUS AREA:	104,734 SF (62%)

IMPERVIOUS/PERVIOUS SURFACE AREAS	
NAME	AREA
EXIST'G SCHOOL & MOSQUE AREA	22242.31 SF
PARKING	59237.95 SF
PERVIOUS AREAS	63254.35 SF
PROPOSED GYMNASIUM AREA	9653.35 SF
SIDEWALKS	6790.14 SF
TRACK	6810.44 SF
TOTAL :	167988.54 SF

TOTAL NUMBER OF EXISTING PARKING SPACES: 195

2 PROPOSED SITE
1" = 60'-0"



1 DEMOLITION SITE
1" = 60'-0"

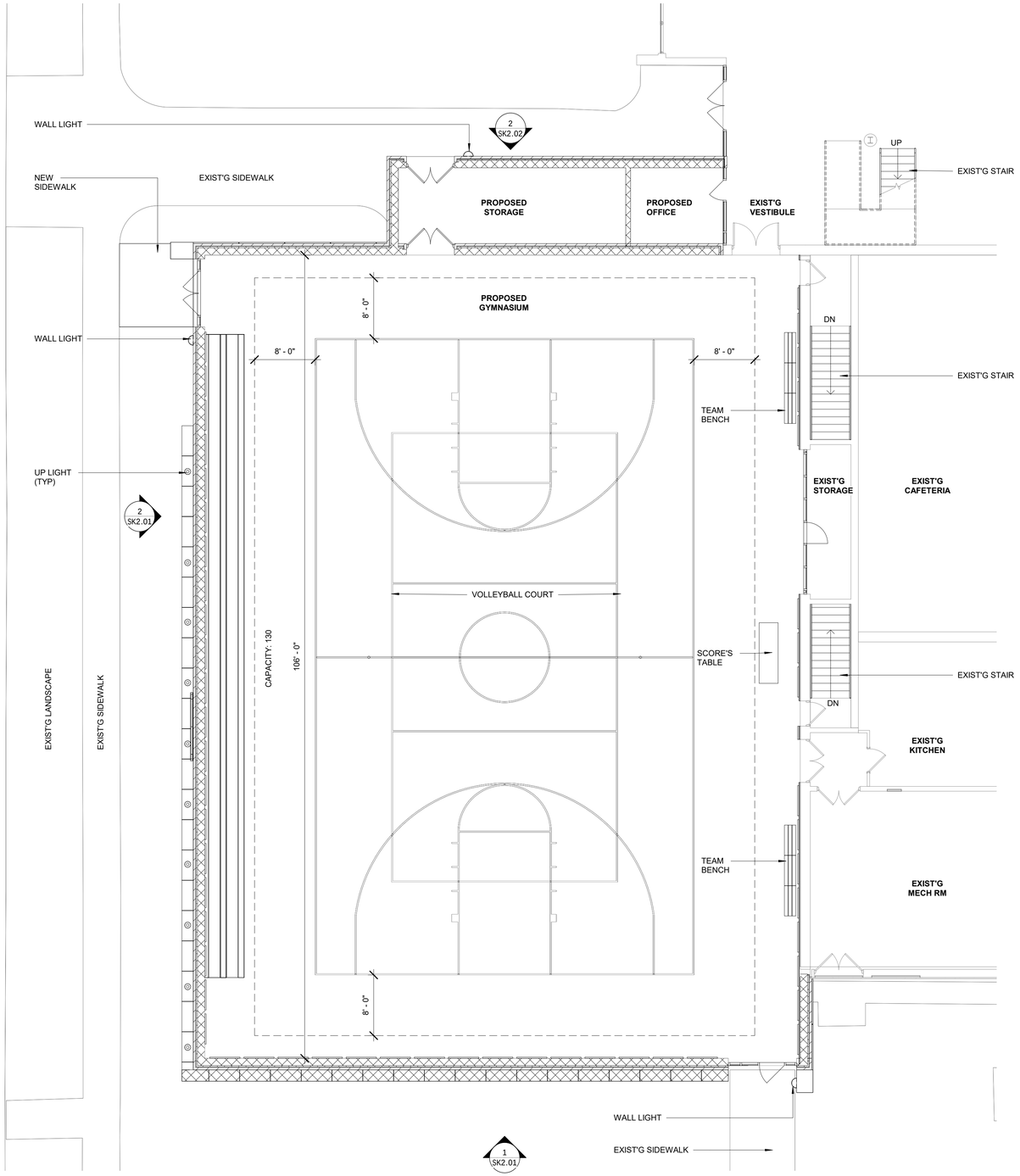
aic architects
4840 main street | skokie illinois 60077
office 847 . 829 . 0801 | fax 847 . 763 . 8708
info@acarchitects.net | www.acarchitects.net

DEMOLITION & PROPOSED SITE PLANS

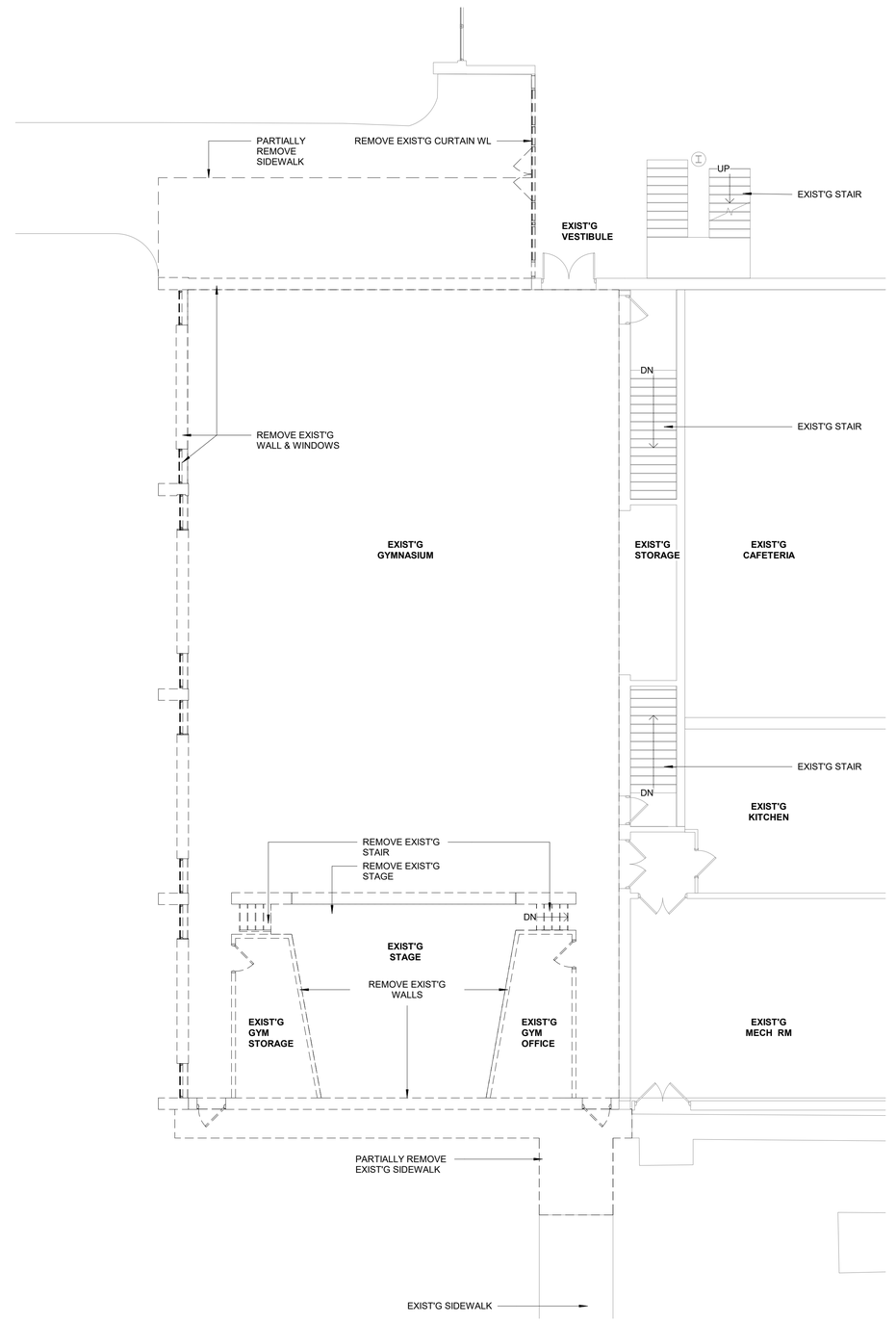
SK1.00

address: 8601 MENARD AVE, MORTON GROVE, IL 60053

project: 1117 date: 04.11.2024



2 PROPOSED 1ST FLR
1/16" = 1'-0"



1 DEMOLITION 1ST FLR
1/16" = 1'-0"

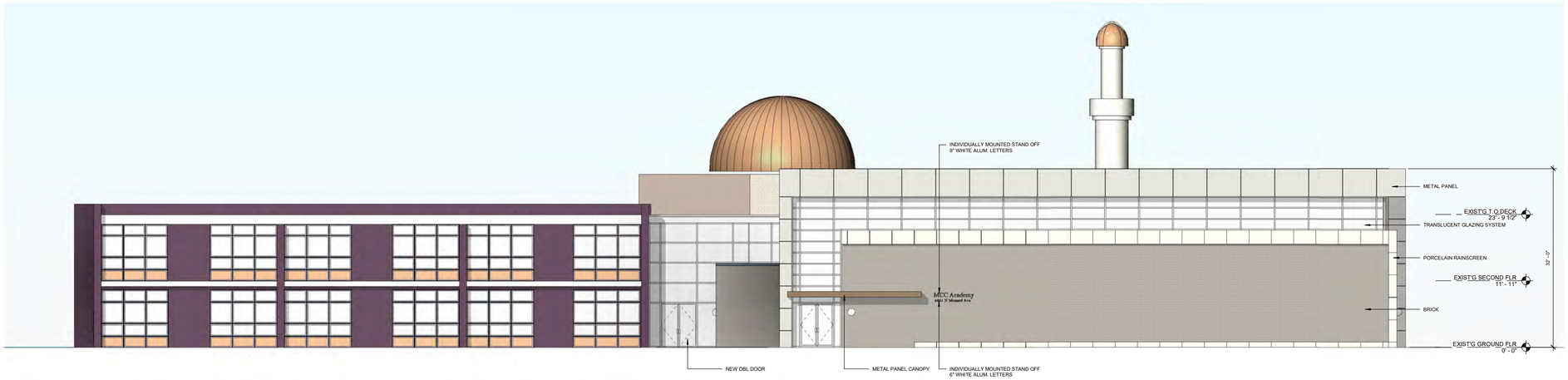
architects
4840 main street | skokie illinois 60077
office 847 . 829 . 0801 | fax 847 . 763 . 8708
info@acarchitects.net | www.acarchitects.net

**DEMOLITION &
PROPOSED FLR PLANS**

SK1.01

address: 8601 MENARD AVE,
MORTON GROVE, IL 60053

project: 1117 date: 04.08.2024



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

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

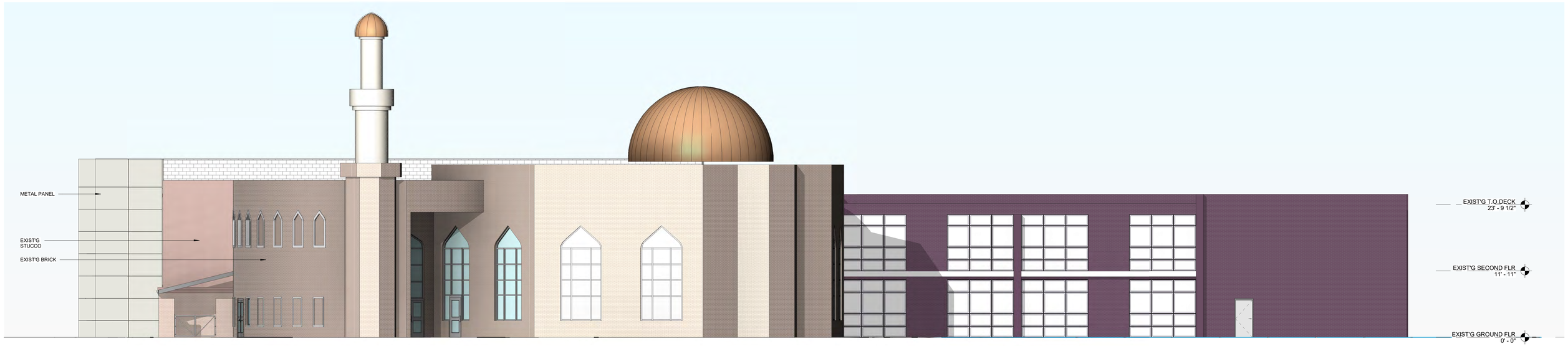
architects
4840 main street | skokie illinois 60077
office 847 . 829 . 0801 | fax 847 . 763 . 8708
info@acarchitects.net | www.acarchitects.net

PROPOSED ELEVATIONS

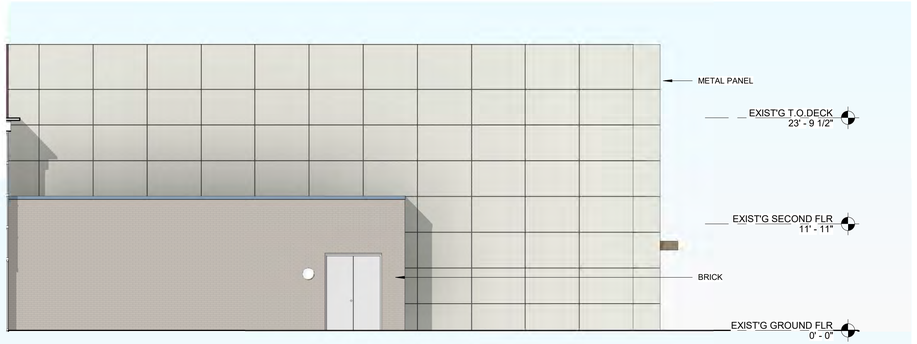
SK2.01

address: 8801 MENARD AVE.,
MORTON GROVE, IL 60053

project: 1117 date: 04.08.2024



3 PROPOSED EAST ELEVATION
1/16" = 1'-0"



2 PROPOSED PARTIAL NORTH ELEVATION
1/8" = 1'-0"

1 PROPOSED NORTH ELEVATION
1/16" = 1'-0"

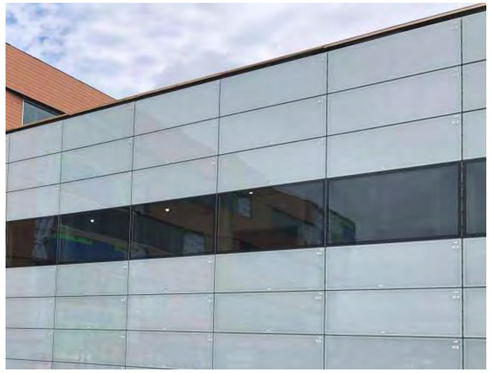
architects
4840 main street | skokie illinois 60077
office 847 . 829 . 0801 | fax 847 . 763 . 8708
info@acarchitects.net | www.acarchitects.net

PROPOSED ELEVATIONS

SK2.02

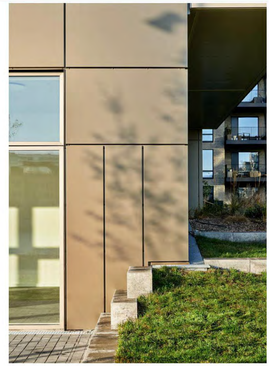
address: 8601 MENARD AVE, MORTON GROVE, IL 60053

project: 1117 date: 04.08.2024

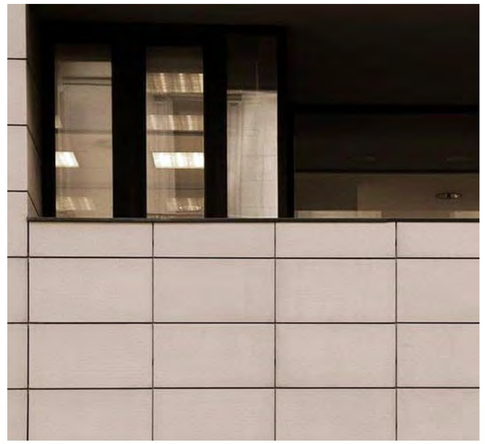


TRANSLUCENT GLAZING SYSTEM

BRICK



METAL PANEL



PORCELAIN FACADE SYSTEM

architects
4840 main street | skokie illinois 60077
office 847 . 829 . 0801 | fax 847 . 763 . 8708
info@acarchitects.net | www.acarchitects.net

MATERIALS SUBMITTAL

SK3.01

address: 8601 MENARD AVE, MORTON GROVE, IL 60053

project: 1117 date: 04.08.2024

aic
architects
4840 main street | skokie illinois 60077
office 847 . 829 . 0801 | fax 847 . 763 . 8708
info@acarchitects.net | www.acarchitects.net

RENDERING

SK3.02

address: 8601 MENARD AVE.,
MORTON GROVE, IL 60053

project: 1117 date: 04.08.2024

Traffic Impact and Expanded Parking Study

MCC Academy Gym Expansion
8601 Menard Avenue
Morton Grove, Illinois

July 3, 2024

Prepared for:

Prepared by:
Gewalt Hamilton Associates, Inc.

Part I. Introduction and Project Context

Gewalt Hamilton Associates, Inc. (GHA) has conducted a Traffic Impact Study (TIS) and expanded on the previously submitted Parking Study for the proposed gymnasium expansion for the Muslim Community Center Academy (MCCA) high school on behalf of A+C Architects, Inc. The property is located at 8601 Menard Avenue, at the northeast corner of Menard Avenue and Theobald Road, in Morton Grove, IL. The existing school serves grades 6 through 12 with an enrollment of 306 in the 2023-2024 school year. Access to the site is provided via one entrance only driveway on Theobald Road and one exit only driveway on Menard Avenue, opposite Capulina Avenue. There is no school bus service provided; all students arrive to the school via parent drop-off/pick-up, carpooling or walking/biking. A total of 194 spaces (including 19 tandem parking spaces and 7 accessible spaces) is provided on-site. The purpose of this study is to determine whether the impact of the traffic and parking at high school sporting events held in the expanded gymnasium will have adverse impacts on the surrounding roadway network.

The following summarizes our findings and provides various recommendations for your consideration. *Appendices* referenced are located in the Technical Addendum at the end of this document.

Part II. Background Information

Site Location Map and Roadway Inventory

Exhibit 1 provides a site location map. The existing traffic operations in the site area are illustrated on *Exhibit 2*. *Appendix A* provides a photo inventory of operations along the site frontage. Pertinent comments to the adjacent roadways include:

Area Land Use

Land uses surrounding the site are predominately residential. The Julia S. Molloy Education Center is located to the north of the site.

Menard Avenue

- Menard Avenue is a north-south local two-lane roadway (one travel lane in each direction) in the site vicinity.
- At its All-Way Stop-Control (AWSC) intersection with Theobald Road, a single approach lane with shared turning movements is provided in both the northbound and southbound directions.
- At its unsignalized intersections with Capulina Avenue / MCC Exit Only Access and Park Avenue, a single approach lane with shared turning movements is provided (Menard Avenue is free-flow condition, Capulina Avenue, MCC Exit and Park Avenue are under Stop sign control).
- Menard Avenue has a posted speed limit of 25 miles per hour (MPH) in the site vicinity and includes a posted school zone speed limit reduction to 20 MPH along the site frontage.

Theobald Road

- Theobald Road is an east-west local two-lane roadway (one travel lane in each direction) within the study area.
- At its All-Way Stop-Control (AWSC) intersection with Menard Avenue, a single approach lane with shared turning movements is provided in both the eastbound and westbound directions.
- At its unsignalized intersection with the MCC Enter Only Access, a single approach lane with shared turning movements is provided (Theobald Road is free-flow condition).

- Theobald Road has a posted speed limit of 25 miles per hour (MPH) in the site vicinity and includes a posted School Zone speed limit reduction to 20 MPH along the site frontage.
- On-Street parking is prohibited along Theobald Road on both sides of the road in the vicinity of the site.

Park Avenue

- Park Avenue is an east-west local roadway that intersects Menard Avenue across from the MCCA north exit.
- Park Avenue terminates temporarily at its intersection with Menard Avenue and provides one full access lane for right and left turns onto Menard Avenue.
- No speed limit is posted on Park Avenue, but the local typical limit of 25 MPH is anticipated to be in use.

Capulina Avenue

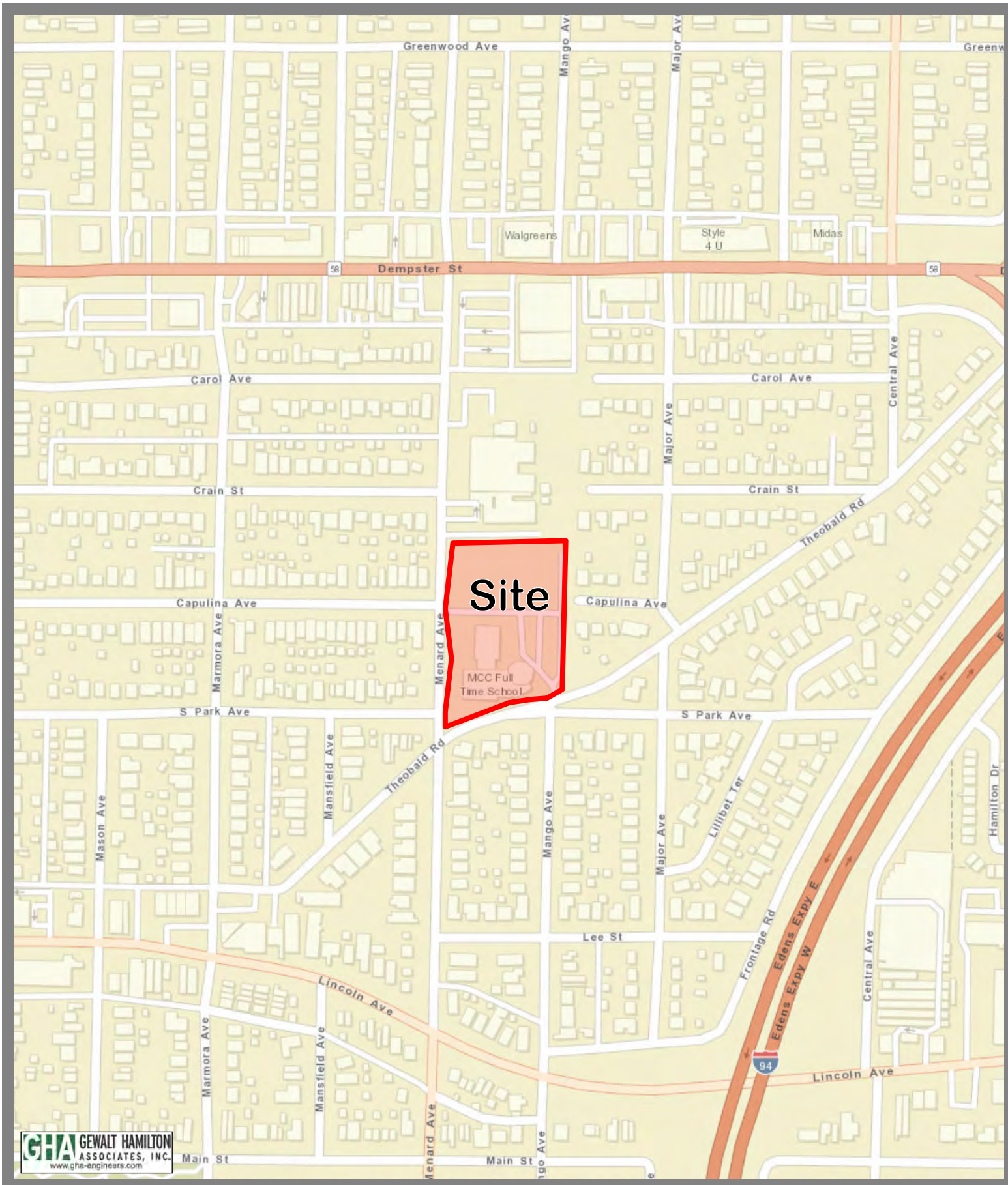
- Capulina Avenue is an east-west local roadway that intersects Menard Avenue at the MCC Exit drive.
- Capulina Avenue terminates at its intersection with Menard Avenue and provides one lane for right and left turns onto Menard Avenue.
- No speed limit is posted on Capulina Avenue, but the local typical limit of 25 MPH is anticipated to be in use.

Pedestrian Facilities

- Sidewalks are provided along both sides of all study area roadways.
- Crosswalks are striped on all four legs of the Theobald Road and Menard Avenue AWSC intersection. They are also provided on the north and west legs of the Menard Avenue intersection with Park Avenue and on Theobald Road east and west leg of the MCC Enter Only Access.
- There are “Stop Here for Pedestrians” signs at both of the Theobald Road crosswalks.
- There are no signed bicycle routes in the study area.

Transit

- There are no transit routes in the study area.



GHA GEWALT HAMILTON ASSOCIATES, INC.
www.gha-engineers.com

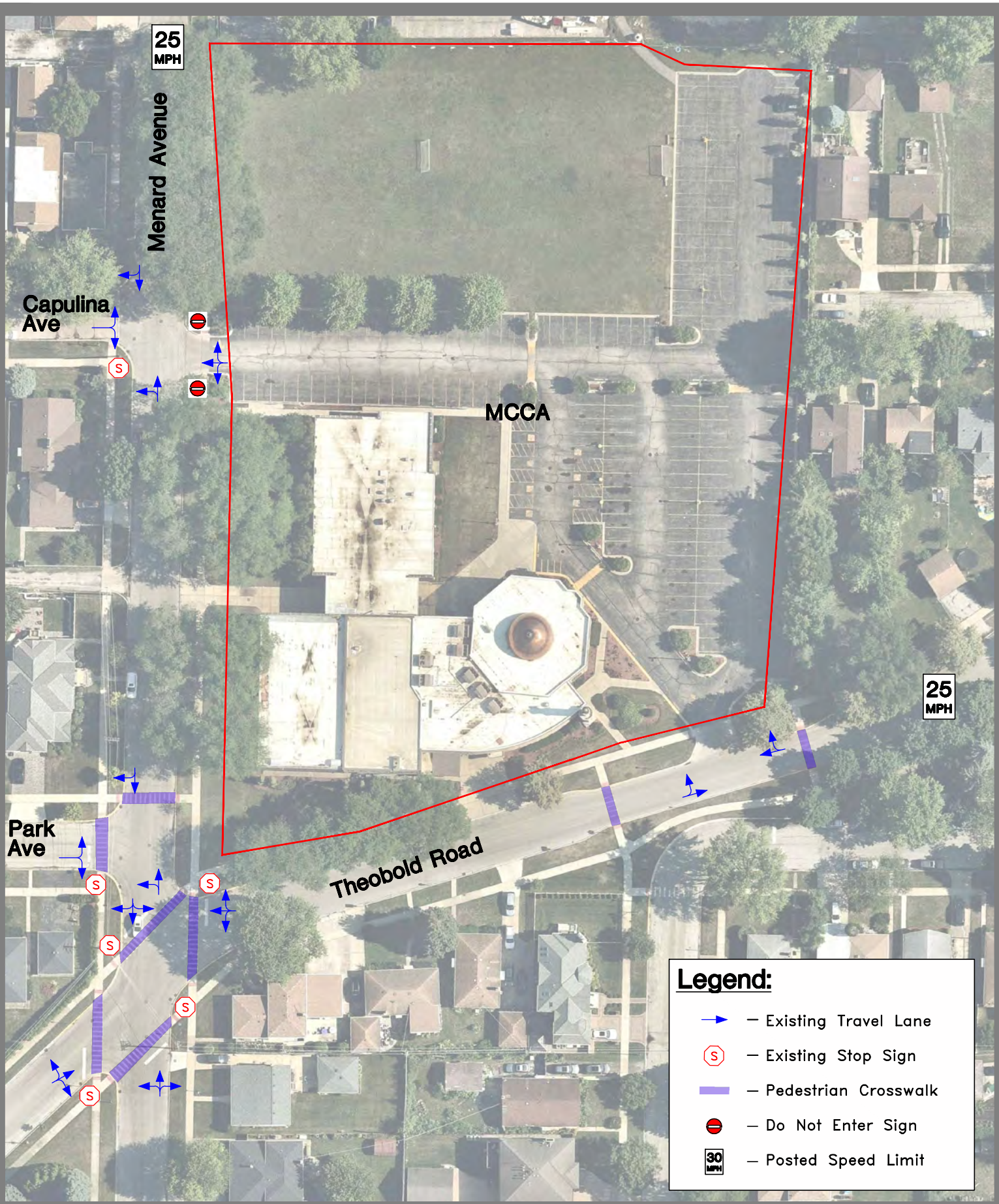
N

1 inch = 500 Feet

Exhibit 1 - Location Map

MCC Academy
8601 Menard Avenue, Morton Grove, IL

Map Center: 87.7708°W 42.03784°N



GHA GEWALT HAMILTON ASSOCIATES, INC.

N

Not to Scale

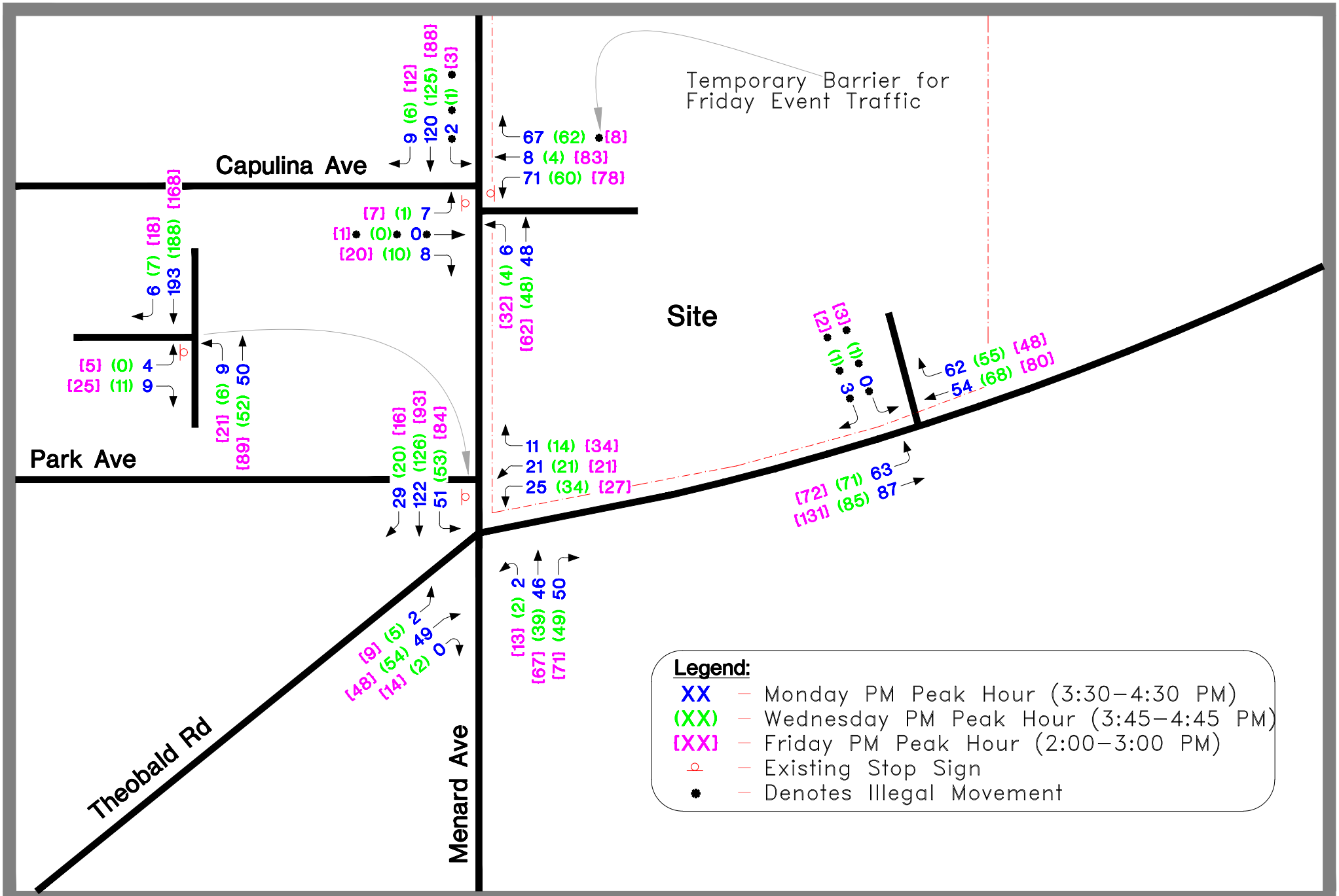
Exhibit 2
Existing On-Site Traffic Operations

Existing Traffic

Exhibit 3 summarizes the existing weekday afternoon and evening peak hour traffic volumes. Peak period traffic turning movement counts were conducted by GHA on Monday June 3, Wednesday June 5, and Friday June 7 at the Menard Road intersections with Theobald Avenue, Park Avenue, Capulina Avenue, and the Theobald Road intersection with the site. The observed weekday afternoon peak hours generally occurred from 3:30 to 4:30 PM on Monday, 3:45 to 4:45 PM on Wednesday, and 2:00 to 3:00 PM on Friday.

Summaries of the June 2024 existing traffic counts can be found in ***Appendix B***.

Traffic turning right exiting the site is prohibited by temporary barricades placed by Malloy Education Center to the north daily from 1:30 to 2:15, and vehicles are sent moving straight west along Capulina Avenue during this time. This impacted Friday peak traffic, which mostly occurred during that early portion of the 2:00 hour, and saw a majority of northbound exiting vehicles utilize Capulina Avenue. Additional illegal movements were observed entering the site exit and exiting the site entrance drive, and are shown on *Exhibit 3* denoted with an asterisk.



GHA GEWALT HAMILTON ASSOCIATES, INC.

N

Not to Scale

Exhibit 3
Existing Traffic

Sources: 1) GHA January 2024 2) IDOT 2022 AADT

Crash Analysis

Crash data was obtained from the IDOT Division of Transportation and Safety for the last five calendar years, 2018 through 2022. A summary of the crash data is provided in ***Table 1*** with the locations mapped on the exhibit contained in ***Appendix C***.

Table 1: Crash Summary (2018-2022) [A]

Location	No. Of Crashes	Severity [B]					Crash Type [D]				Percent During Wet/Icy Conditions
		PD	PI [C]			F	A	PD	PMV	SSD	
			A	B	C						
Intersections - Crashes within 50' of intersection											
Menard Ave at Capulina Ave / Site Drive	1	1	-	-	-	-	-	-	1	-	0%
Menard Ave at Park Ave	0	0	-	-	-	-	-	-	-	-	0%
Menard Ave at Theobald Ave	4	2	-	1	1	-	1	1	1	1	25%
Theobald Ave at Site Drive	0	0	-	-	-	-	-	-	-	-	0%
Total (2018-22)	5	3	0	1	1	0	1	1	2	1	20%

[A] Source: IDOT Division of Transportation Safety for the 2018-2022 calendar years.

[B] PD = property damage only; PI = personal injury; F = fatality.

[C] Type A (incapacitating injury); Type B (non-incapacitating injury); Type C (possible injury).

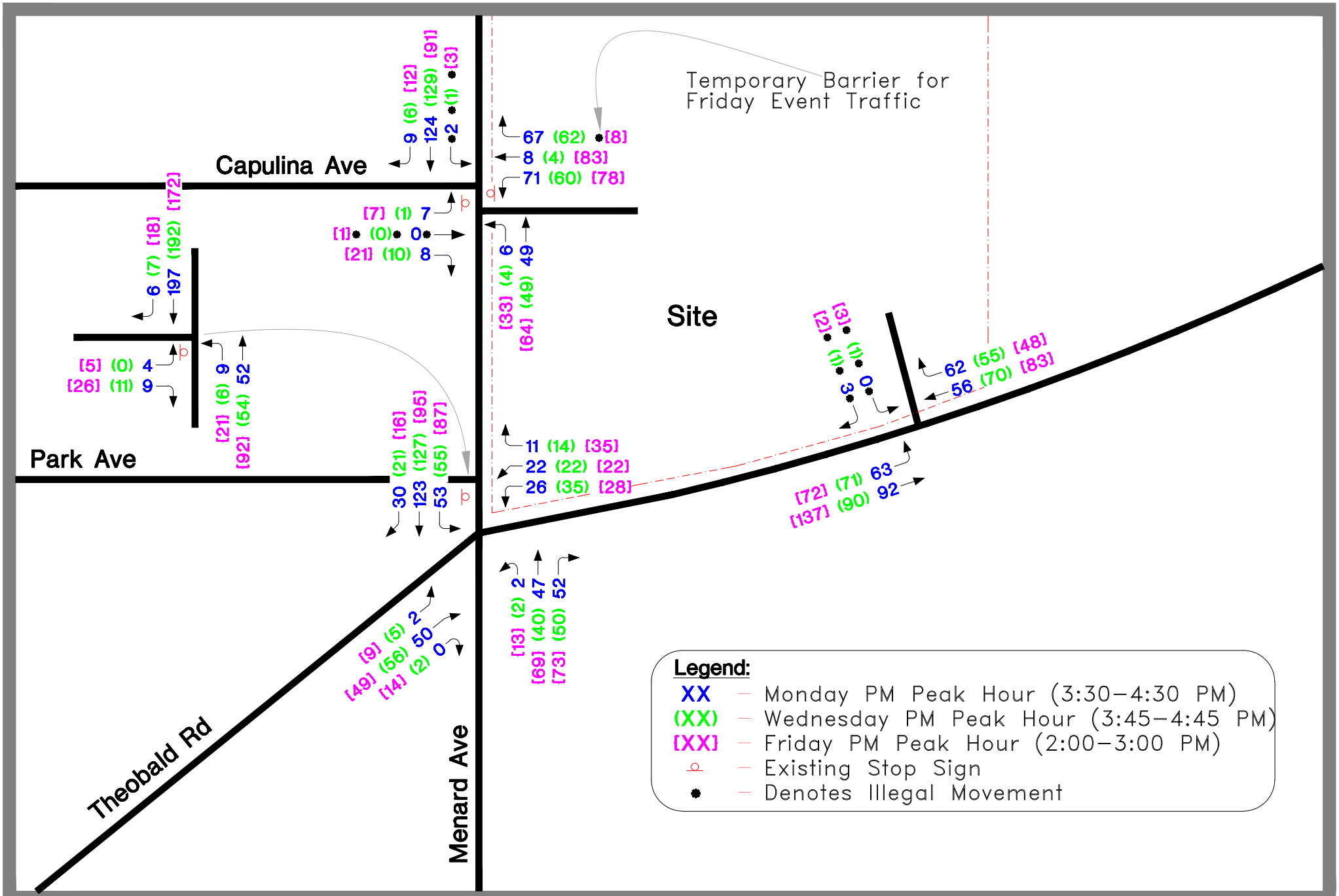
[D] A = Angle; PD = Pedestrian; PMV = Parked Motor Vehicle; SSD = Sideswipe, Same Direction

As shown in Table 1, the intersection of Menard Avenue and Theobald Road experienced the highest number of crashes within the study area over the five-year analysis period, with an average of nearly 1 crash per year. Approximately half of those crashes were property damage only (2 of 4) but one crash involved a Pedestrian at this intersection, resulting in a Type-B injury. This pedestrian crash occurred in 2022 under dark, clear conditions.

Additionally, a parked motor vehicle was struck along Capulina Avenue near the intersection with Menard Avenue. Only 5 crashes occurred in the site vicinity during the 5-year study period.

No-Build Traffic

Traffic growth in the area is a function of expected land development in the region. Future traffic volume conditions were developed for the year 2029, build-out year of the development (year 2024) plus five years. Based on a review of historical traffic volumes and the Chicago Metropolitan Agency for Planning (CMAP) 2050 projections (see ***Appendix D***), traffic volumes along the roadways surrounding the site are assumed to experience an overall annual compounded growth rate of 0.6% per year. Accordingly, the 2029 No-Build peak hour traffic volumes (see ***Exhibit 4***) were developed by applying the predicted growth rates to the existing traffic.



GEWALT HAMILTON ASSOCIATES, INC.

N

Not to Scale

Exhibit 4
Year 2029 No-Build Traffic

Part III. Traffic Evaluation

Future Site Characteristics

Proposed Development Plan

As illustrated on the A+C Architects, Inc Plan, MCCA proposes to demolish the existing gymnasium, which cannot host high-school sporting events such as basketball and volleyball, and replace it with a new facility that has a functional capacity of 100 seats. The high school sporting events are scheduled to take place during the week, on Tuesday and Thursday, per MCC Academy. The Proposed Site Plan, provided in ***Appendix E,*** indicates that there are no improvements to the site parking supply or traffic operations. The field to the north of the site will receive a recreational track, but this field is not planned to host any high school events.

In addition to the proposed high school events, MCC Academy hosts religious events in the weekday evenings, and a full prayer gathering on Friday evening at the on-site mosque. This traffic impact will be measured by this study, but is already occurring in the existing condition, and the proposed high-school events will not overlap the prayer gathering on Fridays, and Friday Total Traffic remains the same as the anticipated Year 2029 No-Build.

Trip Generation

Table 2 summarizes the traffic generation calculations for the proposed gymnasium. No standard trip generation rates were published within the Institution of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition for a high school gymnasium. Based on the nearest relatable parking requirements outlined in the Village of Morton Grove Municipal Code, 1 parking spot is required for every 3 seated occupants of a typical recreational center. For recreation centers, 1 space is also required for every 150 square feet of space, though this specific aspect of the recreation center may not be indicative of high-school gymnasium activity. To provide a conservative parking demand estimate for the gymnasium, and to plan for away-team visitors, GHA conservatively estimated demand at 1 parking spot for every 2 seated occupants, so 50 occupied spaces are expected during gymnasium events. Continuing the conservative approach, 50 entering and exiting trips were estimated to provide a conservative traffic estimate. This would represent a near worst case scenario in which a given short match or event that began and ended within one hour.

See *Appendix F* for excerpts of the Municipal Code.

Table 2: Trip Generation Calculations

Land Use	Village-Specified Peak Hours								
	Monday (3:30 - 4:30 PM)			Wednesday (3:45 - 4:45 PM)			Friday (2:00 - 3:00 PM)		
	In	Out	Sum	In	Out	Sum	In	Out	Sum
Proposed High School Gymnasium Added Trips									
Gymnasium Trips	50	50	100	50	50	100	0	0	0
Total New Trips:	50	50	100	50	50	100	0	0	0

Trip Distribution

Table 3 provides the anticipated distribution of site traffic over each of the measured days. This was based on existing site travel patterns, proposed access, and the operational characteristics of the adjacent street system, including the proximity to Dempster Street to the north of the site, and Lincoln Ave to the south, as well as the anticipated Friday traffic pattern change due to the temporary blockage along Menard Avenue.

Table 3: Trip Distribution

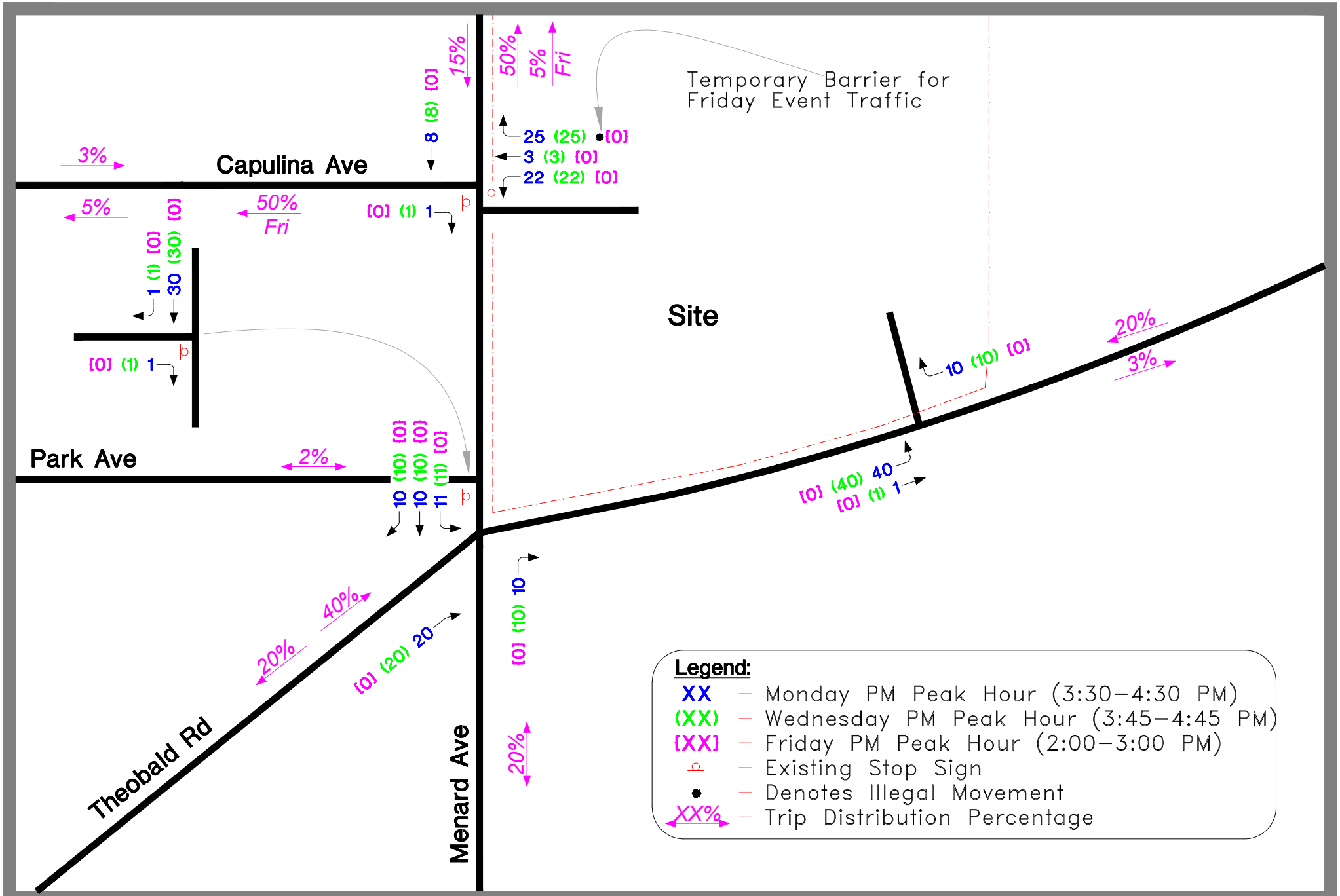
Route & Direction	Approach Site From	Mon/Wed Depart Site To	Fri Depart Site To
Menard Street			
North of Capulina Ave	15%	50%	5%
South of Theobald Ave	20%	20%	20%
Theobald Avenue		.	.
Southwest of Menard Ave	40%	20%	20%
Northeast of Site Entrance	20%	3%	3%
Capulina Avenue		.	.
West of Menard Ave	3%	5%	50%
Park Avenue		.	.
West of Menard Ave	2%	2%	2%
Totals =	*100%*	*100%*	*100%*

The trip distribution is also illustrated on ***Exhibit 5.***

Site and Total Traffic Assignments

Exhibits 5 illustrates the site traffic assignments for the new gymnasium's trips, which is based on the traffic characteristics summarized in *Tables 2 and 3* (trip generation and trip distribution) and assigned to the area roadways. As previously noted, the proposed development is anticipated to open for the 2024-2025 school year. Therefore, we have considered the total impacts of the complete development for the year 2029, or build year plus five years.

The site traffic (*Exhibit 5*) and 2029 No-Build traffic (*Exhibit 4*) were combined to produce the 2029 Total traffic, which is illustrated on ***Exhibit 6.***

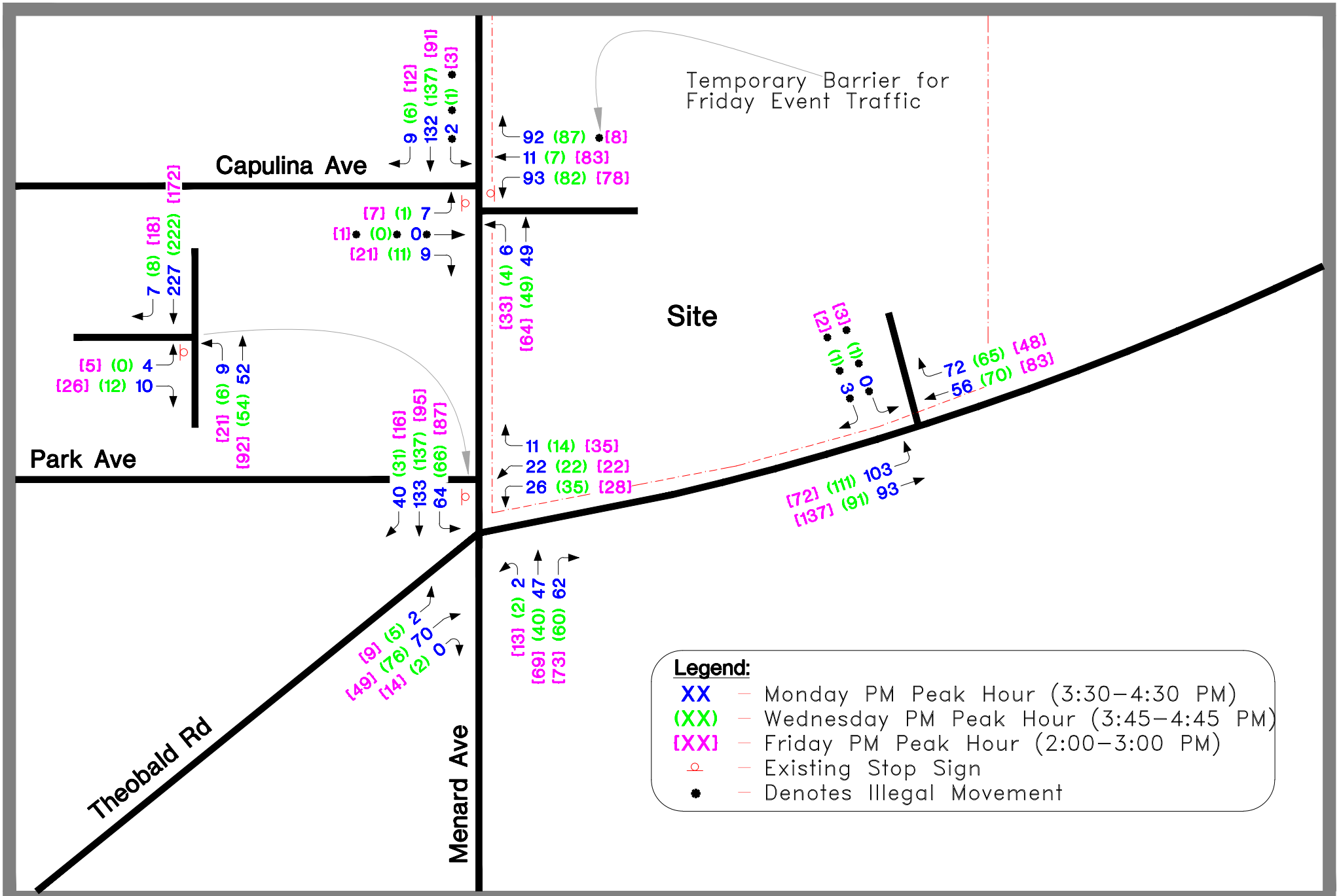


GHA GEWALT HAMILTON ASSOCIATES, INC.

N

Not to Scale

Exhibit 5
Gymnasium Expansion Traffic



GEWALT HAMILTON ASSOCIATES, INC.

N

Not to Scale

Exhibit 6
Year 2029 Total Traffic

Capacity Analysis

Capacity analyses are a standard measurement that identifies how an intersection operates. They are measured in terms of Level of Service (LOS). The concept of LOS is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. A level-of-service definition provides an index to quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety.

Six Levels of Service are defined for each type of facility. They are given letter designations from A to F, with LOS A representing the best operating conditions and LOS F the worst. LOS C is often considered acceptable for design purposes and LOS D is usually considered as providing the lower threshold of acceptable operations. Since the level of service is a function of the traffic flows placed upon it, the facility may operate at a wide range of levels of service, depending on the time of day, day of week or period of year. A description of the operating condition under each level of service, based on the analysis parameters as published in the Transportation Research Board's (TRB) Highway Capacity Manual (HCM), Seventh Edition, is provided in *Table 4*.

Table 4: Level of Service (LOS) Summary

LOS	Description	Delay (seconds / vehicle)	
		Traffic Signal	Stop Sign
A	Describes conditions with little to no delay to motorists.	<10	< 10
B	Represents a desirable level with relatively low delay to motorists.	>10 and < 20	>10 and < 15
C	Describes conditions with average delays to motorists.	>20 and < 35	>15 and < 25
D	Describes operations where the influence of congestion becomes more noticeable. Delays are still within an acceptable range.	>35 and < 55	>25 and < 35
E	Represents operating conditions with high delay values. This level is often considered within urban settings or for minor streets intersecting major arterial roadways to be the limit of acceptable delay.	>55 and < 80	>35 and < 50
F	Is unacceptable to most drivers with high delay values that often occur when arrival flow rates exceed the capacity of the intersection.	>80	>50

Capacity analyses were performed using the methodologies outlined in the HCM, for the following scenarios:

- *Existing Traffic* – Year 2024 Existing Traffic (*Exhibit 3)*
- *No-Build Traffic* – Future (non-site, year 2029) traffic with background growth (*Exhibit 4)*
- *Total Traffic* – Future No-Build traffic volumes (year 2029) plus the addition of the site generated traffic (*Exhibit 6)*.

Table 5 summarizes the intersection capacity and queue analysis results.

Table 5: Level-of-Service Summary

Intersection / Timeframe / Scenario	Roadway Conditions	LOS Per Movement By Approach > = Shared Lane - = Non Critical or not Allowed Movement												Intersection / Approach	
		Eastbound			Westbound			Northbound			Southbound			Delay (sec / veh)	LOS
		LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
1. Menard Ave at Theobald Ave	AWSC	Eastbound			Westbound			Northbound			Southbound			Intersection Delay	
A. Monday PM Peak Hour															
Existing Traffic (See Exhibit 3)	• Current	>	A	<	>	A	<	>	A	<	>	A	<	8.6	A
	• 95th Queue Length (ft)	-	8	-	-	8	-	-	13	-	-	30	-		
No-Build Traffic (See Exhibit 4)	• Current	>	A	<	>	A	<	>	A	<	>	A	<	8.7	A
	• 95th Queue Length (ft)	-	8	-	-	8	-	-	13	-	-	33	-		
Total Traffic (See Exhibit 6)	• Current	>	A	<	>	A	<	>	A	<	>	A	<	9.1	A
	• 95th Queue Length (ft)	-	10	-	-	8	-	-	15	-	-	40	-		
B. Wednesday PM Peak Hour															
Existing Traffic (See Exhibit 3)	• Current	>	A	<	>	A	<	>	A	<	>	A	<	8.5	A
	• 95th Queue Length (ft)	-	8	-	-	8	-	-	10	-	-	28	-		
No-Build Traffic (See Exhibit 4)	• Current	>	A	<	>	A	<	>	A	<	>	A	<	8.5	A
	• 95th Queue Length (ft)	-	8	-	-	8	-	-	10	-	-	28	-		
Total Traffic (See Exhibit 6)	• Current	>	A	<	>	A	<	>	A	<	>	A	<	8.9	A
	• 95th Queue Length (ft)	-	10	-	-	10	-	-	13	-	-	35	-		
C. Friday PM Peak Hour															
Existing Traffic (See Exhibit 3)	• Current	>	A	<	>	A	<	>	A	<	>	A	<	9.2	A
	• 95th Queue Length (ft)	-	10	-	-	13	-	-	23	-	-	35	-		
No-Build Traffic (See Exhibit 4)	• Current	>	A	<	>	A	<	>	A	<	>	A	<	9.3	A
	• 95th Queue Length (ft)	-	10	-	-	13	-	-	25	-	-	38	-		

Table 5: Level-of-Service Summary (cont.)

Intersection / Timeframe / Scenario	Roadway Conditions	LOS Per Movement By Approach > = Shared Lane - = Non Critical or not Allowed Movement												Intersection / Approach	
		Eastbound			Westbound			Northbound			Southbound			Delay (sec / veh)	LOS
		LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
2. Menard Ave at Park Ave	TWSC	Eastbound			Westbound			Northbound			Southbound			EB Leg Delay	
A. Monday PM Peak Hour															
Existing Traffic (See Exhibit 3)	• Current	>	A	<	-	-	-	A	-	-	-	-	-	9.9	A
	• 95th Queue Length (ft)	-	3	-	-	-	-	0	-	-	-	-	-		
No-Build Traffic (See Exhibit 4)	• Current	>	A	<	-	-	-	A	-	-	-	-	-	10.0	A
	• 95th Queue Length (ft)	-	3	-	-	-	-	0	-	-	-	-	-		
Total Traffic (See Exhibit 6)	• Current	>	A	<	-	-	-	A	-	-	-	-	-	10.2	B
	• 95th Queue Length (ft)	-	3	-	-	-	-	0	-	-	-	-	-		
B. Wednesday PM Peak Hour															
Existing Traffic (See Exhibit 3)	• Current	>	A	<	-	-	-	A	-	-	-	-	-	9.5	A
	• 95th Queue Length (ft)	-	0	-	-	-	-	0	-	-	-	-	-		
No-Build Traffic (See Exhibit 4)	• Current	>	A	<	-	-	-	A	-	-	-	-	-	9.5	A
	• 95th Queue Length (ft)	-	0	-	-	-	-	0	-	-	-	-	-		
Total Traffic (See Exhibit 6)	• Current	>	A	<	-	-	-	A	-	-	-	-	-	9.8	A
	• 95th Queue Length (ft)	-	3	-	-	-	-	0	-	-	-	-	-		
C. Friday PM Peak Hour															
Existing Traffic (See Exhibit 3)	• Current	>	B	<	-	-	-	A	-	-	-	-	-	10.1	B
	• 95th Queue Length (ft)	-	5	-	-	-	-	3	-	-	-	-	-		
No-Build Traffic (See Exhibit 4)	• Current	>	A	<	-	-	-	A	-	-	-	-	-	10.1	B
	• 95th Queue Length (ft)	-	5	-	-	-	-	3	-	-	-	-	-		

Table 5: Level-of-Service Summary (cont.)

Intersection / Timeframe / Scenario	Roadway Conditions	LOS Per Movement By Approach > = Shared Lane - = Non Critical or not Allowed Movement												Intersection / Approach	
		Eastbound			Westbound			Northbound			Southbound			Delay	
		LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	(sec / veh)	LOS
3. Menard Ave at Capulina Ave	TWSC	Eastbound			Westbound			Northbound			Southbound			WB Leg Delay	
A. Monday PM Peak Hour															
Existing Traffic (See Exhibit 3)	• Current	>	B	<	B	A	<	A	-	-	A	-	-	10.1	B
	• 95th Queue Length (ft)	-	3	-	13	8	-	0	-	-	0	-	-		
No-Build Traffic (See Exhibit 4)	• Current	>	B	<	B	A	<	A	-	-	A	-	-	10.1	B
	• 95th Queue Length (ft)	-	3	-	13	8	-	0	-	-	0	-	-		
Total Traffic (See Exhibit 6)	• Current	>	B	<	B	A	<	A	-	-	A	-	-	10.4	B
	• 95th Queue Length (ft)	-	3	-	18	13	-	0	-	-	0	-	-		
B. Wednesday PM Peak Hour															
Existing Traffic (See Exhibit 3)	• Current	>	A	<	B	A	<	A	-	-	A	-	-	9.8	A
	• 95th Queue Length (ft)	-	0	-	8	8	-	0	-	-	0	-	-		
No-Build Traffic (See Exhibit 4)	• Current	>	A	<	B	A	<	A	-	-	A	-	-	9.8	A
	• 95th Queue Length (ft)	-	0	-	8	8	-	0	-	-	0	-	-		
Total Traffic (See Exhibit 6)	• Current	>	A	<	B	A	<	A	-	-	A	-	-	11.0	B
	• 95th Queue Length (ft)	-	3	-	13	10	-	0	-	-	0	-	-		
C. Friday PM Peak Hour															
Existing Traffic (See Exhibit 3)	• Current	>	B	<	B	B	<	A	-	-	A	-	-	14.3	B
	• 95th Queue Length (ft)	-	5	-	25	30	-	3	-	-	0	-	-		
No-Build Traffic (See Exhibit 4)	• Current	>	B	<	B	B	<	A	-	-	A	-	-	14.5	B
	• 95th Queue Length (ft)	-	8	-	25	30	-	3	-	-	0	-	-		

Table 5: Level-of-Service Summary (cont.)

Intersection / Timeframe / Scenario	Roadway Conditions	LOS Per Movement By Approach > = Shared Lane - = Non Critical or not Allowed Movement												Intersection / Approach	
		Eastbound			Westbound			Northbound			Southbound			Delay (sec / veh)	LOS
		LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4. Theobald Ave at Site Drive	TWSC	Eastbound			Westbound			Northbound			Southbound			EB LT Delay	
A. Monday PM Peak Hour															
Existing Traffic (See Exhibit 3)	• Current	A	-	-	-	-	-	-	-	-	>	A	<	7.7	A
	• 95th Queue Length (ft)	5	-	-	-	-	-	-	-	-	-	0	-		
No-Build Traffic (See Exhibit 4)	• Current	A	-	-	-	-	-	-	-	-	>	A	<	7.7	A
	• 95th Queue Length (ft)	5	-	-	-	-	-	-	-	-	-	0	-		
Total Traffic (See Exhibit 6)	• Current	A	-	-	-	-	-	-	-	-	>	A	<	7.8	A
	• 95th Queue Length (ft)	8	-	-	-	-	-	-	-	-	-	0	-		
B. Wednesday PM Peak Hour															
Existing Traffic (See Exhibit 3)	• Current	A	-	-	-	-	-	-	-	-	>	B	<	7.6	A
	• 95th Queue Length (ft)	5	-	-	-	-	-	-	-	-	-	0	-		
No-Build Traffic (See Exhibit 4)	• Current	A	-	-	-	-	-	-	-	-	>	B	<	7.6	A
	• 95th Queue Length (ft)	5	-	-	-	-	-	-	-	-	-	0	-		
Total Traffic (See Exhibit 6)	• Current	A	-	-	-	-	-	-	-	-	>	B	<	7.8	A
	• 95th Queue Length (ft)	8	-	-	-	-	-	-	-	-	-	0	-		
C. Friday PM Peak Hour															
Existing Traffic (See Exhibit 3)	• Current	A	-	-	-	-	-	-	-	-	>	B	<	7.9	A
	• 95th Queue Length (ft)	8	-	-	-	-	-	-	-	-	-	3	-		
No-Build Traffic (See Exhibit 4)	• Current	A	-	-	-	-	-	-	-	-	>	B	<	7.9	A
	• 95th Queue Length (ft)	8	-	-	-	-	-	-	-	-	-	3	-		

The following summarizes the findings of the Capacity Analyses.

Menard Avenue at Theobald Road

In all Weekday afternoon and evening peak hours, existing, no-build, and future traffic, the All-Way stop controlled intersection of Menard Avenue and Theobald Road operates at LOS A. Park Avenue is located 35 feet to the north of the intersection, and the southbound queues during the peak hours related to the traffic at MCC Academy reach 35 feet on Fridays and are expected to reach 40 feet with the addition of the gymnasium traffic. However, due to low traffic volumes along Park Avenue, this conflict is not anticipated to result in additional delay.

Menard Avenue at Park Avenue

In all Weekday afternoon and evening peak hours, existing, no-build, and future traffic, the two-way stop-controlled intersection between Menard Avenue and Park Avenue operates at LOS A or B. The eastbound movements along Park Avenue have a maximum anticipated queue of 5 feet in all scenarios.

Menard Avenue at Capulina Avenue/Site Drive

In all Weekday afternoon and evening peak hours, existing, no-build, and future traffic, the two-way stop-controlled intersection between Menard Avenue and Capulina Avenue/Site Drive operates at LOS A or B. The westbound exit of the vehicles leaving MCC Academy would see an increase of 5 feet of queueing due to the additional site traffic from the gymnasium, but the overall impacts to the intersection would be minimal.

Theobald Road at Site Drive

This intersection is anticipated to operate at LOS A as vehicles enter the site. Some vehicles were observed exiting the site from this drive against signage and pavement striping, but these vehicles do not incur delay on the site. No additional impact is anticipated at this intersection as a result of the additional gymnasium traffic.

Part IV. Parking Evaluation

Parking Requirements

No standard parking requirement is published within the Village of Morton Grove Municipal Code or within the Institution of Transportation Engineers (ITE) Parking Generation Manual, 6th Edition for a typical high school gymnasium. Based on the nearest relatable parking requirements outlined in the Village of Morton Grove Municipal Code, 1 parking spot is required for every 3 seated occupants of a typical recreational center. For rec centers, 1 space is also required for every 150 square feet of space, though this specific aspect of the recreation center may not be indicative of high-school gymnasium activity. To provide a conservative parking estimate, and to plan for away-team visitors, GHA conservatively estimated demand at 1 parking spot for every 2 seated occupants, so 50 occupied spaces are expected during gymnasium events.

Parking Supply and Occupancy Survey – MCC Academy

A parking supply and occupancy survey of the parking serving MCC Academy was conducted on Monday, June 3rd, Wednesday June 5th, and Friday June 7th, per village request. The parking counts were performed hourly between the hours of 2:00 and 8:00 PM. On Monday and Wednesday, school let out by 4:00 PM and there was a prayer session between 6:00 and 8:00 PM where the parking lot was in use. On Friday, the evening prayer service occurred between 2:00 and5:00 PM. The results of the parking surveys are summarized in ***Appendix H***.

The findings of the parking occupancy survey are summarized below:

- A total of 195 parking spaces were surveyed on site.
- A total of 880 street parking spaces were surveyed by request of the village to ensure that excess parking in the surrounding neighborhoods is still sufficient for Friday's prayer service.
- The maximum parking total of the three measured days was taken to provide a conservative parking estimate for the addition of the vehicles due to the gymnasium expansion.
- Approximately 65 percent (127 of 195) of the total parking spaces surveyed were occupied at the building's peak occupancy, which occurred at 2:00 PM on Friday.
- Approximately 40 percent (350 of 880) of the available street parking spaces surveyed were occupied at the building's peak occupancy of 2:00 PM on Friday.
- Within the anticipated gymnasium usage timeframe, the maximum occupancy of the parking lot and street parking respectively was 54 percent (105 of 195) at 7:00 PM on Wednesday, and 26 percent (228 of 880) at 4:00 PM on Friday.

With the above observations considered, GHA added the conservative estimate of 50 additional parked vehicles to the site for the hours of 4:00 – 7:00 PM, and the results can be found in ***Exhibit 7***. The results are summarized below:

- Based on the maximum observed occupied parking spaces during potential gymnasium event hours of 4:00 to 7:00 PM on Wednesday (105) plus the additional calculated conservative estimate of vehicles at an event (50 occupied spaces), the total site maximum parking demand rises to 155 spaces of 195 total spaces for an occupied percentage of 79%.
- As a guideline, parking demand should not exceed 90% of the supply. Based on our observations and calculations the parking supply at 8601 Menard Avenue is sufficient to accommodate the proposed gymnasium activities, provided they occur between 4:00 and 7:00 PM on weekdays, as anticipated.

Exhibit 7
Weekday Peak Parking Calculations
MCC Academy, 8601 Menard Ave, Morton Grove, IL

1. Current Demand

A. On-Site Lot Parking

		2:00 PM [3]	3:00 PM [3]	4:00 PM [2]	5:00 PM [2]	6:00 PM [2]	7:00 PM [2]	8:00 PM [3]
Total (Max Occupancy) =	195	127	100	39	90	95	105	38
% Occupied		65%	51%	20%	46%	49%	54%	19%

B. Street Parking

		2:00 PM [3]	3:00 PM [3]	4:00 PM [3]	5:00 PM [3]	6:00 PM [3]	7:00 PM [3]	8:00 PM [1]
Total (Max Occupancy) =	880	350	239	228	216	226	221	231
% Occupied		40%	27%	26%	25%	26%	25%	26%

2. Gymnasium Parking

1 Space per 2 Occupants (Conservative)	195	0	0	50	50	50	50	0
% Occupied		0%	0%	26%	26%	26%	26%	0%

3. Future Demands

A. On-Site Lot Parking

		2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
Total =	195	127	100	89	140	145	155	38
% Occupied		65%	51%	46%	72%	74%	79%	19%

B. Street Parking

		2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
Total =	880	350	239	228	216	226	221	231
% Occupied		40%	27%	26%	25%	26%	25%	26%

Parking Occupancy Key

- ≤ 60% occupied
- ≤85% but >60% occupied
- >85% occupied

[1] = Monday Max
[2] = Wednesday Max
[3] = Friday Max

GHA GEWALT HAMILTON ASSOCIATES, INC.

Part IV. Recommendations and Conclusions

Analyses have been conducted under existing and future conditions to determine the impact from the proposed gymnasium development on the study area intersections. The capacity analysis results indicate that the increase in project site-generated traffic has little to no effect upon the Peak Hour operations of the area roadway network with the recommendations contained herein:

- Do not schedule gymnasium events on Fridays to avoid conflict with the Friday religious services.

Part V. Technical Addendum

The following Appendices were previously referenced. They provide technical support for our observations, findings and recommendations discussed in the text.

Appendices

A. Photo Inventory
B. 2024 Traffic Count Summaries
C. Crash Summary Map
D. CMAP Traffic Projections
E. Proposed Site Plan
F. Village of Morton Grove Zoning Code Excerpts
G. Capacity Analysis Worksheets
H. Parking Occupancy Summary

5357.903 MCCA Gym TIS and Expanded Parking Study.docx

TECHNICAL ADDENDUM

GHA GEWALT HAMILTON ASSOCIATES, INC.

APPENDIX A
Photo Inventory

Looking Southwest along Theobald Ave at Site Entrance

Looking South from Site Entrance at Theobald Ave

Looking northeast from Theobald Ave at Site Entrance

Looking northeast from Theobald Ave at Site Entrance

Looking Southwest at the Menard Ave/Theobald Ave Intersection

Looking South along Menard Ave at Theobald Ave Intersection

0

Looking Southwest at the Menard Ave/Theobald Ave Intersection

Looking Northeast at the Menard Ave/Theobald Ave Intersection

Looking South along Menard Ave at Park Ave

Looking East from Park Ave at Menard Ave

Looking North along Menard Ave at Park Ave

Looking South from Park Ave at Theobald Ave/Menard Ave

Looking East from Capulina Ave at Menard Ave/Site Exit

Looking South along Menard Ave at Site Exit/Capulina Ave

Looking North Along Menard Ave at Site Exit/Capulina Ave

Looking West from Site Exit at Menard Ave/Capulina Ave

Looking Southeast at the Harlem Avenue/Madison Street Intersection

Looking Northwest at the Harlem Avenue/Madison Street Intersection

Looking Northeast at the Harlem Avenue/Madison Street Intersection

Looking Northeast at the Harlem Avenue/Madison Street Intersection

APPENDIX B

2024 Traffic Count Summary Sheets

5743 Theobald Rd
5357.903 - MCCA TIS TMC
2 PM - 8 PM
GHA Mio

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: 5743 Theobald Rd
Site Code:
Start Date: 06/03/2024
Page No: 1

Turning Movement Data

Start Time	Menard Rd Southbound						Theobald Rd Westbound						Menard Rd Northbound						Theobald Rd Eastbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
2:00 PM	0	3	14	0	3	17	0	4	3	2	0	9	0	0	6	11	0	17	0	0	24	0	0	24	67
2:15 PM	0	5	10	0	1	15	0	2	0	3	1	5	0	0	9	8	0	17	0	0	5	1	0	6	43
2:30 PM	0	3	14	6	1	23	0	2	6	5	0	13	0	1	6	5	0	12	0	0	13	1	0	14	62
2:45 PM	0	5	12	2	1	19	0	2	3	2	0	7	0	1	13	0	0	14	0	0	7	0	0	7	47
Hourly Total	0	16	50	8	6	74	0	10	12	12	1	34	0	2	34	24	0	60	0	0	49	2	0	51	219
3:00 PM	0	4	17	1	0	22	0	4	3	3	2	10	0	0	9	1	0	10	0	0	12	0	0	12	54
3:15 PM	0	8	21	3	0	32	0	5	4	0	1	9	0	0	9	9	0	18	0	1	14	0	1	15	74
3:30 PM	0	13	17	4	1	34	0	6	9	4	0	19	0	1	13	13	0	27	0	0	14	0	0	14	94
3:45 PM	0	19	32	10	0	61	0	5	5	2	0	12	0	0	12	16	1	28	0	0	9	0	0	9	110
Hourly Total	0	44	87	18	1	149	0	20	21	9	3	50	0	1	43	39	1	83	0	1	49	0	1	50	332
4:00 PM	0	12	53	10	0	75	0	8	6	3	0	17	0	1	6	10	0	17	0	1	12	0	0	13	122
4:15 PM	0	7	20	5	0	32	0	6	4	2	0	12	0	0	15	9	0	24	0	1	7	0	2	8	76
4:30 PM	0	7	28	2	1	37	0	8	4	5	1	17	0	1	10	6	0	17	0	1	12	2	1	15	86
4:45 PM	0	5	21	4	3	30	0	5	4	5	0	14	0	0	17	8	0	25	0	2	13	1	0	16	85
Hourly Total	0	31	122	21	4	174	0	27	18	15	1	60	0	2	48	33	0	83	0	5	44	3	3	52	369
5:00 PM	0	1	24	3	0	28	0	5	8	2	0	15	0	0	14	4	1	18	0	0	15	0	0	15	76
5:15 PM	0	6	19	1	0	26	0	7	3	3	0	13	0	1	11	6	0	18	0	2	5	0	2	7	64
5:30 PM	0	3	18	7	2	28	0	7	3	2	2	12	0	1	10	10	0	21	0	0	10	0	0	10	71
5:45 PM	0	3	27	2	1	32	0	8	9	3	3	20	0	2	11	5	0	18	0	1	13	0	0	14	84
Hourly Total	0	13	88	13	3	114	0	27	23	10	5	60	0	4	46	25	1	75	0	3	43	0	2	46	295
6:00 PM	0	6	23	1	2	30	0	10	3	6	0	19	0	1	9	8	0	18	0	0	7	3	2	10	77
6:15 PM	0	10	25	1	3	36	0	8	3	1	4	12	0	2	7	8	0	17	0	1	13	3	0	17	82
6:30 PM	0	8	13	3	4	24	0	8	5	6	2	19	0	0	13	9	2	22	0	6	13	0	3	19	84
6:45 PM	0	7	23	10	0	40	0	7	2	2	0	11	0	0	8	5	0	13	0	0	4	0	2	4	68
Hourly Total	0	31	84	15	9	130	0	33	13	15	6	61	0	3	37	30	2	70	0	7	37	6	7	50	311
7:00 PM	0	5	14	2	0	21	0	5	1	1	0	7	0	0	5	6	0	11	0	1	4	0	0	5	44
7:15 PM	0	3	8	1	0	12	0	3	4	3	0	10	0	0	5	4	0	9	0	0	2	1	2	3	34
7:30 PM	0	5	8	0	0	13	0	0	2	2	2	4	0	0	9	5	0	14	0	0	3	1	1	4	35
7:45 PM	0	3	17	3	1	23	0	5	3	2	0	10	0	0	6	5	1	11	0	2	8	1	3	11	55
Hourly Total	0	16	47	6	1	69	0	13	10	8	2	31	0	0	25	20	1	45	0	3	17	3	6	23	168
Grand Total	0	151	478	81	24	710	0	130	97	69	18	296	0	12	233	171	5	416	0	19	239	14	19	272	1694
Approach %	0.0	21.3	67.3	11.4	-	-	0.0	43.9	32.8	23.3	-	-	0.0	2.9	56.0	41.1	-	-	0.0	7.0	87.9	5.1	-	-	-
Total %	0.0	8.9	28.2	4.8	-	41.9	0.0	7.7	5.7	4.1	-	17.5	0.0	0.7	13.8	10.1	-	24.6	0.0	1.1	14.1	0.8	-	16.1	-
Lights	0	150	472	81	-	703	0	127	97	69	-	293	0	12	231	171	-	414	0	19	236	13	-	268	1678
% Lights	-	99.3	98.7	100.0	-	99.0	-	97.7	100.0	100.0	-	99.0	-	100.0	99.1	100.0	-	99.5	-	100.0	98.7	92.9	-	98.5	99.1
Mediums	0	1	6	0	-	7	0	3	0	0	-	3	0	0	2	0	-	2	0	0	3	1	-	4	16
% Mediums	-	0.7	1.3	0.0	-	1.0	-	2.3	0.0	0.0	-	1.0	-	0.0	0.9	0.0	-	0.5	-	0.0	1.3	7.1	-	1.5	0.9
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0

% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	8	-	-	-	-	-	9	-	-	-	-	-	4	-	-	-	-	-	3	-	-
% Bicycles on Crosswalk	-	-	-	-	33.3	-	-	-	-	-	50.0	-	-	-	-	-	80.0	-	-	-	-	-	15.8	-	-
Pedestrians	-	-	-	-	16	-	-	-	-	-	9	-	-	-	-	-	1	-	-	-	-	-	16	-	-
% Pedestrians	-	-	-	-	66.7	-	-	-	-	-	50.0	-	-	-	-	-	20.0	-	-	-	-	-	84.2	-	-

5743 Theobald Rd
5357.903 - MCCA TIS TMC
2 PM - 8 PM
GHA Mio

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: 5743 Theobald Rd
Site Code:
Start Date: 06/05/2024
Page No: 1

Turning Movement Data

Start Time	Menard Rd Southbound						Theobald Rd Westbound						Menard Rd Northbound						Theobald Rd Eastbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
2:00 PM	0	6	20	4	1	30	0	5	2	4	1	11	0	0	12	6	0	18	0	0	20	1	1	21	80
2:15 PM	0	4	11	2	0	17	0	1	4	4	0	9	0	0	18	10	0	28	0	4	9	0	1	13	67
2:30 PM	0	9	7	0	0	16	0	5	6	2	0	13	0	1	18	5	0	24	0	0	9	0	1	9	62
2:45 PM	0	10	11	0	1	21	0	3	6	1	0	10	0	0	11	4	0	15	0	1	10	0	0	11	57
Hourly Total	0	29	49	6	2	84	0	14	18	11	1	43	0	1	59	25	0	85	0	5	48	1	3	54	266
3:00 PM	0	5	16	1	0	22	0	7	7	5	0	19	0	1	7	6	0	14	0	1	10	0	2	11	66
3:15 PM	0	4	30	5	1	39	0	6	4	0	2	10	0	1	8	9	0	18	0	1	9	3	0	13	80
3:30 PM	0	13	43	6	0	62	0	5	4	4	0	13	0	0	9	9	0	18	0	0	11	1	1	12	105
3:45 PM	0	18	33	7	0	58	0	7	6	1	0	14	0	0	9	10	0	19	0	0	15	0	0	15	106
Hourly Total	0	40	122	19	1	181	0	25	21	10	2	56	0	2	33	34	0	69	0	2	45	4	3	51	357
4:00 PM	0	12	24	3	0	39	0	9	6	7	0	22	0	1	7	9	0	17	0	1	7	1	1	9	87
4:15 PM	0	10	22	2	1	34	0	10	4	1	0	15	0	1	12	10	0	23	0	3	13	0	5	16	88
4:30 PM	0	13	23	3	0	39	0	8	6	5	0	19	0	0	11	20	0	31	0	1	19	1	2	21	110
4:45 PM	0	14	22	4	4	40	0	5	10	2	0	17	0	0	18	10	1	28	0	0	8	2	3	10	95
Hourly Total	0	49	91	12	5	152	0	32	26	15	0	73	0	2	48	49	1	99	0	5	47	4	11	56	380
5:00 PM	0	10	17	4	2	31	0	12	13	0	0	25	0	0	8	6	0	14	0	2	10	2	2	14	84
5:15 PM	0	11	24	3	2	38	0	10	10	1	3	21	0	0	10	4	2	14	0	0	10	1	0	11	84
5:30 PM	0	3	21	9	3	33	0	5	6	2	2	13	0	0	9	8	1	17	0	1	8	3	2	12	75
5:45 PM	0	4	22	2	1	28	0	9	11	6	0	26	0	0	8	9	0	17	0	0	10	3	2	13	84
Hourly Total	0	28	84	18	8	130	0	36	40	9	5	85	0	0	35	27	3	62	0	3	38	9	6	50	327
6:00 PM	0	12	33	4	0	49	0	6	8	4	2	18	0	0	16	9	2	25	0	2	10	0	0	12	104
6:15 PM	0	9	19	4	1	32	0	4	6	3	2	13	0	0	12	16	1	28	0	0	11	1	0	12	85
6:30 PM	0	6	8	3	5	17	0	3	4	2	0	9	0	1	9	13	1	23	0	1	9	3	1	13	62
6:45 PM	0	6	22	7	2	35	0	5	4	1	2	10	0	0	7	6	0	13	0	1	7	1	0	9	67
Hourly Total	0	33	82	18	8	133	0	18	22	10	6	50	0	1	44	44	4	89	0	4	37	5	1	46	318
7:00 PM	0	7	23	5	1	35	0	3	4	2	0	9	0	0	8	1	0	9	0	2	4	1	0	7	60
7:15 PM	0	10	13	8	0	31	0	1	8	4	5	13	0	0	12	2	1	14	0	1	7	1	1	9	67
7:30 PM	0	5	8	2	0	15	0	3	3	3	0	9	0	0	8	2	1	10	0	1	7	0	1	8	42
7:45 PM	0	2	18	4	3	24	0	0	2	4	3	6	0	0	8	4	1	12	0	2	4	1	3	7	49
Hourly Total	0	24	62	19	4	105	0	7	17	13	8	37	0	0	36	9	3	45	0	6	22	3	5	31	218
Grand Total	0	203	490	92	28	785	0	132	144	68	22	344	0	6	255	188	11	449	0	25	237	26	29	288	1866
Approach %	0.0	25.9	62.4	11.7	-	-	0.0	38.4	41.9	19.8	-	-	0.0	1.3	56.8	41.9	-	-	0.0	8.7	82.3	9.0	-	-	-
Total %	0.0	10.9	26.3	4.9	-	42.1	0.0	7.1	7.7	3.6	-	18.4	0.0	0.3	13.7	10.1	-	24.1	0.0	1.3	12.7	1.4	-	15.4	-
Lights	0	199	479	91	-	769	0	128	143	66	-	337	0	6	241	187	-	434	0	22	234	25	-	281	1821
% Lights	-	98.0	97.8	98.9	-	98.0	-	97.0	99.3	97.1	-	98.0	-	100.0	94.5	99.5	-	96.7	-	88.0	98.7	96.2	-	97.6	97.6
Mediums	0	4	11	0	-	15	0	4	1	2	-	7	0	0	14	1	-	15	0	3	3	1	-	7	44
% Mediums	-	2.0	2.2	0.0	-	1.9	-	3.0	0.7	2.9	-	2.0	-	0.0	5.5	0.5	-	3.3	-	12.0	1.3	3.8	-	2.4	2.4
Articulated Trucks	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1

% Articulated Trucks	-	0.0	0.0	1.1	-	0.1	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.1
Bicycles on Crosswalk	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	5	-	-
% Bicycles on Crosswalk	-	-	-	-	14.3	-	-	-	-	-	0.0	-	-	-	-	-	36.4	-	-	-	-	-	17.2	-	-
Pedestrians	-	-	-	-	24	-	-	-	-	-	22	-	-	-	-	-	7	-	-	-	-	-	24	-	-
% Pedestrians	-	-	-	-	85.7	-	-	-	-	-	100.0	-	-	-	-	-	63.6	-	-	-	-	-	82.8	-	-

5743 Theobald Rd
5357.903 - MCCA TIS TMC
2 PM - 8 PM
GHA Mio

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: 5743 Theobald Rd
Site Code:
Start Date: 06/07/2024
Page No: 1

Turning Movement Data

Start Time	Menard Rd Southbound						Theobald Rd Westbound						Menard Rd Northbound						Theobald Rd Eastbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
2:00 PM	1	34	19	4	17	58	0	3	3	5	4	11	0	4	12	31	5	47	0	5	24	6	0	35	151
2:15 PM	0	21	14	1	22	36	0	4	7	9	9	20	0	1	22	25	5	48	0	1	8	1	0	10	114
2:30 PM	0	11	13	2	24	26	0	3	2	5	11	10	0	1	23	9	3	33	0	2	5	1	0	8	77
2:45 PM	0	18	52	9	25	79	0	17	9	15	9	41	0	7	10	6	9	23	0	1	11	6	3	18	161
Hourly Total	1	84	98	16	88	199	0	27	21	34	33	82	0	13	67	71	22	151	0	9	48	14	3	71	503
3:00 PM	0	14	24	2	2	40	0	11	7	5	2	23	0	0	13	7	0	20	0	0	10	0	0	10	93
3:15 PM	0	5	35	2	0	42	0	7	3	4	3	14	0	0	4	7	0	11	0	1	14	0	0	15	82
3:30 PM	0	6	26	4	1	36	0	8	1	2	0	11	0	0	10	9	0	19	0	2	8	1	0	11	77
3:45 PM	0	9	21	11	0	41	0	10	7	4	0	21	0	0	16	1	0	17	0	1	10	0	0	11	90
Hourly Total	0	34	106	19	3	159	0	36	18	15	5	69	0	0	43	24	0	67	0	4	42	1	0	47	342
4:00 PM	0	10	27	2	1	39	0	11	12	4	0	27	0	0	6	6	0	12	0	2	8	0	1	10	88
4:15 PM	0	11	31	9	0	51	0	11	5	6	0	22	0	0	10	9	0	19	0	1	9	0	0	10	102
4:30 PM	0	3	19	3	0	25	0	9	9	6	0	24	0	0	8	9	1	17	0	2	11	1	3	14	80
4:45 PM	0	3	20	7	3	30	0	10	15	2	0	27	0	1	10	7	0	18	0	1	12	0	0	13	88
Hourly Total	0	27	97	21	4	145	0	41	41	18	0	100	0	1	34	31	1	66	0	6	40	1	4	47	358
5:00 PM	0	5	13	7	2	25	0	13	20	6	3	39	0	0	4	10	0	14	0	1	8	0	0	9	87
5:15 PM	0	4	17	5	0	26	0	6	16	7	1	29	0	0	10	11	0	21	0	0	11	0	0	11	87
5:30 PM	0	3	15	4	0	22	0	8	6	5	0	19	0	0	10	5	0	15	0	2	9	0	1	11	67
5:45 PM	0	7	18	1	0	26	0	7	9	2	0	18	0	0	15	6	0	21	0	2	11	0	0	13	78
Hourly Total	0	19	63	17	2	99	0	34	51	20	4	105	0	0	39	32	0	71	0	5	39	0	1	44	319
6:00 PM	0	8	16	2	0	26	0	6	6	1	0	13	0	0	6	11	0	17	0	1	17	1	0	19	75
6:15 PM	0	14	19	4	3	37	0	3	3	1	8	7	0	0	10	15	3	25	0	0	12	1	0	13	82
6:30 PM	0	4	18	2	4	24	0	5	4	3	0	12	0	1	11	14	5	26	0	1	4	1	2	6	68
6:45 PM	0	7	30	9	0	46	0	3	9	5	3	17	0	0	10	6	3	16	0	0	4	1	0	5	84
Hourly Total	0	33	83	17	7	133	0	17	22	10	11	49	0	1	37	46	11	84	0	2	37	4	2	43	309
7:00 PM	0	7	8	1	0	16	0	6	5	2	0	13	0	0	6	8	1	14	0	0	6	0	0	6	49
7:15 PM	0	5	21	2	2	28	0	4	3	4	0	11	0	0	5	6	2	11	0	1	5	0	0	6	56
7:30 PM	0	9	15	2	3	26	0	6	3	4	4	13	0	0	6	1	4	7	0	0	8	0	2	8	54
7:45 PM	0	2	9	1	1	12	0	5	5	2	0	12	0	0	6	4	1	10	0	1	6	2	1	9	43
Hourly Total	0	23	53	6	6	82	0	21	16	12	4	49	0	0	23	19	8	42	0	2	25	2	3	29	202
Grand Total	1	220	500	96	110	817	0	176	169	109	57	454	0	15	243	223	42	481	0	28	231	22	13	281	2033
Approach %	0.1	26.9	61.2	11.8	-	-	0.0	38.8	37.2	24.0	-	-	0.0	3.1	50.5	46.4	-	-	0.0	10.0	82.2	7.8	-	-	-
Total %	0.0	10.8	24.6	4.7	-	40.2	0.0	8.7	8.3	5.4	-	22.3	0.0	0.7	12.0	11.0	-	23.7	0.0	1.4	11.4	1.1	-	13.8	-
Lights	1	219	491	96	-	807	0	173	168	108	-	449	0	15	228	223	-	466	0	26	228	22	-	276	1998
% Lights	100.0	99.5	98.2	100.0	-	98.8	-	98.3	99.4	99.1	-	98.9	-	100.0	93.8	100.0	-	96.9	-	92.9	98.7	100.0	-	98.2	98.3
Mediums	0	1	9	0	-	10	0	3	0	1	-	4	0	0	15	0	-	15	0	2	3	0	-	5	34
% Mediums	0.0	0.5	1.8	0.0	-	1.2	-	1.7	0.0	0.9	-	0.9	-	0.0	6.2	0.0	-	3.1	-	7.1	1.3	0.0	-	1.8	1.7
Articulated Trucks	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1

% Articulated Trucks	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.6	0.0	-	0.2	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	10	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	5.3	-	-	-	-	-	23.8	-	-	-	-	-	7.7	-	-
Pedestrians	-	-	-	-	110	-	-	-	-	-	54	-	-	-	-	-	32	-	-	-	-	-	12	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	94.7	-	-	-	-	-	76.2	-	-	-	-	-	92.3	-	-

5800 S Park Ave
5357.903 - MCCA TIS TMC
2 PM - 8 PM
GHA Mio

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: 5800 S Park Ave
Site Code:
Start Date: 06/03/2024
Page No: 1

Turning Movement Data

Start Time	Menard Ave Southbound					Menard Ave Northbound					Park Ave Eastbound					
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
2:00 PM	0	14	1	0	15	0	1	7	3	8	0	1	3	0	4	27
2:15 PM	0	12	1	0	13	0	3	9	1	12	0	0	3	0	3	28
2:30 PM	0	20	2	0	22	0	4	7	0	11	0	1	3	0	4	37
2:45 PM	0	16	0	1	16	0	1	13	0	14	0	1	3	0	4	34
Hourly Total	0	62	4	1	66	0	9	36	4	45	0	3	12	0	15	126
3:00 PM	0	20	0	0	20	0	1	11	0	12	0	0	2	0	2	34
3:15 PM	0	27	1	0	28	0	1	9	0	10	0	0	5	3	5	43
3:30 PM	0	33	2	0	35	0	0	18	1	18	0	0	2	1	2	55
3:45 PM	0	57	1	1	58	0	2	11	0	13	0	1	4	1	5	76
Hourly Total	0	137	4	1	141	0	4	49	1	53	0	1	13	5	14	208
4:00 PM	0	72	2	0	74	0	0	10	0	10	0	0	3	0	3	87
4:15 PM	0	30	1	0	31	0	3	14	0	17	0	1	1	2	2	50
4:30 PM	0	36	2	1	38	0	4	14	1	18	0	2	1	2	3	59
4:45 PM	0	29	1	0	30	0	1	21	4	22	0	0	1	0	1	53
Hourly Total	0	167	6	1	173	0	8	59	5	67	0	3	6	4	9	249
5:00 PM	0	28	0	0	28	0	2	14	3	16	0	1	0	0	1	45
5:15 PM	0	22	1	0	23	0	2	14	0	16	0	0	4	3	4	43
5:30 PM	0	26	0	3	26	0	2	10	1	12	0	0	2	0	2	40
5:45 PM	0	30	0	0	30	0	2	13	1	15	0	0	2	0	2	47
Hourly Total	0	106	1	3	107	0	8	51	5	59	0	1	8	3	9	175
6:00 PM	0	31	0	0	31	0	4	11	0	15	0	1	1	2	2	48
6:15 PM	0	34	0	0	34	0	0	8	3	8	0	0	1	0	1	43
6:30 PM	0	23	1	0	24	0	2	24	4	26	0	1	2	1	3	53
6:45 PM	0	38	1	0	39	0	1	9	0	10	0	0	1	2	1	50
Hourly Total	0	126	2	0	128	0	7	52	7	59	0	2	5	5	7	194
7:00 PM	0	15	0	0	15	0	0	7	0	7	0	0	5	1	5	27
7:15 PM	0	11	0	0	11	0	4	5	0	9	0	0	2	2	2	22
7:30 PM	0	10	0	1	10	0	2	9	0	11	0	1	3	0	4	25
7:45 PM	0	22	2	2	24	0	0	10	1	10	0	0	1	3	1	35
Hourly Total	0	58	2	3	60	0	6	31	1	37	0	1	11	6	12	109
Grand Total	0	656	19	9	675	0	42	278	23	320	0	11	55	23	66	1061
Approach %	0.0	97.2	2.8	-	-	0.0	13.1	86.9	-	-	0.0	16.7	83.3	-	-	-
Total %	0.0	61.8	1.8	-	63.6	0.0	4.0	26.2	-	30.2	0.0	1.0	5.2	-	6.2	-
Lights	0	650	19	-	669	0	42	276	-	318	0	11	54	-	65	1052
% Lights	-	99.1	100.0	-	99.1	-	100.0	99.3	-	99.4	-	100.0	98.2	-	98.5	99.2
Mediums	0	6	0	-	6	0	0	2	-	2	0	0	1	-	1	9
% Mediums	-	0.9	0.0	-	0.9	-	0.0	0.7	-	0.6	-	0.0	1.8	-	1.5	0.8
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0

Bicycles on Crosswalk	-	-	-	0	-	-	-	-	6	-	-	-	-	3	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	26.1	-	-	-	-	13.0	-	-
Pedestrians	-	-	-	9	-	-	-	-	17	-	-	-	-	20	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	73.9	-	-	-	-	87.0	-	-

5800 S Park Ave
5357.903 - MCCA TIS TMC
2 PM - 8 PM
GHA Mio

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: 5800 S Park Ave
Site Code:
Start Date: 06/05/2024
Page No: 1

Turning Movement Data

Start Time	Menard Ave Southbound					Menard Ave Northbound					Park Ave Eastbound					
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
2:00 PM	0	27	1	0	28	0	3	13	0	16	0	0	3	0	3	47
2:15 PM	0	17	0	0	17	0	2	24	0	26	0	0	1	1	1	44
2:30 PM	0	7	0	0	7	0	1	17	0	18	0	0	9	1	9	34
2:45 PM	0	15	0	0	15	0	0	14	0	14	0	3	5	1	8	37
Hourly Total	0	66	1	0	67	0	6	68	0	74	0	3	18	3	21	162
3:00 PM	0	15	2	0	17	0	1	11	0	12	0	1	7	2	8	37
3:15 PM	0	36	0	0	36	0	0	9	1	9	0	0	3	0	3	48
3:30 PM	0	57	2	0	59	0	2	11	0	13	0	0	5	2	5	77
3:45 PM	0	56	2	0	58	0	1	9	0	10	0	0	2	0	2	70
Hourly Total	0	164	6	0	170	0	4	40	1	44	0	1	17	4	18	232
4:00 PM	0	38	2	0	40	0	1	14	0	15	0	0	1	1	1	56
4:15 PM	0	31	1	0	32	0	2	14	1	16	0	0	3	5	3	51
4:30 PM	0	36	3	0	39	0	4	13	0	17	0	0	3	1	3	59
4:45 PM	0	35	0	0	35	0	2	17	4	19	0	0	4	2	4	58
Hourly Total	0	140	6	0	146	0	9	58	5	67	0	0	11	9	11	224
5:00 PM	0	29	0	0	29	0	1	9	1	10	0	0	2	2	2	41
5:15 PM	0	37	1	0	38	0	3	8	0	11	0	0	2	2	2	51
5:30 PM	0	30	0	1	30	0	1	10	0	11	0	0	2	1	2	43
5:45 PM	0	26	1	0	27	0	4	10	0	14	0	3	1	2	4	45
Hourly Total	0	122	2	1	124	0	9	37	1	46	0	3	7	7	10	180
6:00 PM	0	44	1	3	45	0	2	20	0	22	0	1	3	0	4	71
6:15 PM	0	27	0	0	27	0	2	13	0	15	0	2	5	0	7	49
6:30 PM	0	15	0	0	15	0	0	12	4	12	0	1	3	4	4	31
6:45 PM	0	33	0	0	33	0	0	9	2	9	0	1	1	0	2	44
Hourly Total	0	119	1	3	120	0	4	54	6	58	0	5	12	4	17	195
7:00 PM	0	34	0	0	34	0	1	11	0	12	0	0	1	0	1	47
7:15 PM	0	29	1	0	30	0	3	14	0	17	0	3	2	1	5	52
7:30 PM	0	14	1	2	15	0	0	12	0	12	0	1	1	1	2	29
7:45 PM	0	24	1	1	25	0	4	10	2	14	0	0	0	2	0	39
Hourly Total	0	101	3	3	104	0	8	47	2	55	0	4	4	4	8	167
Grand Total	0	712	19	7	731	0	40	304	15	344	0	16	69	31	85	1160
Approach %	0.0	97.4	2.6	-	-	0.0	11.6	88.4	-	-	0.0	18.8	81.2	-	-	-
Total %	0.0	61.4	1.6	-	63.0	0.0	3.4	26.2	-	29.7	0.0	1.4	5.9	-	7.3	-
Lights	0	698	18	-	716	0	40	285	-	325	0	15	67	-	82	1123
% Lights	-	98.0	94.7	-	97.9	-	100.0	93.8	-	94.5	-	93.8	97.1	-	96.5	96.8
Mediums	0	13	1	-	14	0	0	19	-	19	0	1	2	-	3	36
% Mediums	-	1.8	5.3	-	1.9	-	0.0	6.3	-	5.5	-	6.3	2.9	-	3.5	3.1
Articulated Trucks	0	1	0	-	1	0	0	0	-	0	0	0	0	-	0	1
% Articulated Trucks	-	0.1	0.0	-	0.1	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.1

Bicycles on Crosswalk	-	-	-	0	-	-	-	-	1	-	-	-	-	-	5	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	6.7	-	-	-	-	-	16.1	-	-
Pedestrians	-	-	-	7	-	-	-	-	14	-	-	-	-	-	26	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	93.3	-	-	-	-	-	83.9	-	-

5800 S Park Ave
5357.903 - MCCA TIS TMC
2 PM - 8 PM
GHA Mio

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: 5800 S Park Ave
Site Code:
Start Date: 06/07/2024
Page No: 1

Turning Movement Data

Start Time	Menard Ave Southbound					Menard Ave Northbound					Park Ave Eastbound					
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
2:00 PM	0	56	4	7	60	0	3	22	16	25	0	1	4	0	5	90
2:15 PM	0	29	4	3	33	0	4	28	22	32	0	0	7	0	7	72
2:30 PM	0	17	4	9	21	0	8	24	24	32	0	0	8	1	8	61
2:45 PM	0	75	6	3	81	0	6	19	25	25	0	4	6	0	10	116
Hourly Total	0	177	18	22	195	0	21	93	87	114	0	5	25	1	30	339
3:00 PM	0	28	3	1	31	0	7	12	1	19	0	1	10	1	11	61
3:15 PM	0	38	1	1	39	0	0	9	0	9	0	1	3	0	4	52
3:30 PM	0	35	0	0	35	0	1	13	1	14	0	2	1	0	3	52
3:45 PM	0	38	0	0	38	0	5	16	0	21	0	0	2	0	2	61
Hourly Total	0	139	4	2	143	0	13	50	2	63	0	4	16	1	20	226
4:00 PM	0	36	3	0	39	0	1	11	1	12	0	3	3	1	6	57
4:15 PM	0	46	1	0	47	0	5	12	0	17	0	0	4	0	4	68
4:30 PM	0	23	1	1	24	0	5	12	0	17	0	3	2	3	5	46
4:45 PM	0	28	0	1	28	0	0	13	4	13	0	1	2	1	3	44
Hourly Total	0	133	5	2	138	0	11	48	5	59	0	7	11	5	18	215
5:00 PM	0	21	1	1	22	0	4	7	3	11	0	0	4	0	4	37
5:15 PM	0	24	1	0	25	0	4	13	0	17	0	0	2	2	2	44
5:30 PM	0	21	0	0	21	0	3	12	0	15	0	0	2	1	2	38
5:45 PM	0	22	0	0	22	0	3	16	0	19	0	1	3	0	4	45
Hourly Total	0	88	2	1	90	0	14	48	3	62	0	1	11	3	12	164
6:00 PM	0	23	2	2	25	0	1	7	0	8	0	0	3	0	3	36
6:15 PM	0	33	0	0	33	0	0	11	3	11	0	0	5	3	5	49
6:30 PM	0	24	1	0	25	0	2	13	4	15	0	0	0	1	0	40
6:45 PM	0	45	1	0	46	0	2	12	0	14	0	2	0	1	2	62
Hourly Total	0	125	4	2	129	0	5	43	7	48	0	2	8	5	10	187
7:00 PM	0	13	0	0	13	0	0	8	0	8	0	1	3	0	4	25
7:15 PM	0	27	0	0	27	0	0	10	2	10	0	0	1	0	1	38
7:30 PM	1	21	0	0	22	0	2	8	1	10	0	0	5	1	5	37
7:45 PM	0	11	0	2	11	0	1	9	0	10	0	1	2	1	3	24
Hourly Total	1	72	0	2	73	0	3	35	3	38	0	2	11	2	13	124
Grand Total	1	734	33	31	768	0	67	317	107	384	0	21	82	17	103	1255
Approach %	0.1	95.6	4.3	-	-	0.0	17.4	82.6	-	-	0.0	20.4	79.6	-	-	-
Total %	0.1	58.5	2.6	-	61.2	0.0	5.3	25.3	-	30.6	0.0	1.7	6.5	-	8.2	-
Lights	1	725	33	-	759	0	67	299	-	366	0	20	81	-	101	1226
% Lights	100.0	98.8	100.0	-	98.8	-	100.0	94.3	-	95.3	-	95.2	98.8	-	98.1	97.7
Mediums	0	9	0	-	9	0	0	18	-	18	0	1	1	-	2	29
% Mediums	0.0	1.2	0.0	-	1.2	-	0.0	5.7	-	4.7	-	4.8	1.2	-	1.9	2.3
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0

Bicycles on Crosswalk	-	-	-	2	-	-	-	-	0	-	-	-	-	4	-	-
% Bicycles on Crosswalk	-	-	-	6.5	-	-	-	-	0.0	-	-	-	-	23.5	-	-
Pedestrians	-	-	-	29	-	-	-	-	107	-	-	-	-	13	-	-
% Pedestrians	-	-	-	93.5	-	-	-	-	100.0	-	-	-	-	76.5	-	-

5803 Capulina Ave
5357.903 - MCCA TIS TMC
2 PM - 8 PM
GHA Mio

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: 5803 Capulina Ave
Site Code:
Start Date: 06/03/2024
Page No: 1

Turning Movement Data

Start Time	Menard Ave Southbound						Driveway Access Westbound						Menard Ave Northbound						Capulina Ave Eastbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
2:00 PM	0	0	12	3	0	15	0	3	0	2	0	5	0	4	5	0	0	9	0	0	0	0	0	0	29
2:15 PM	0	0	12	0	0	12	0	0	0	3	1	3	0	0	9	0	0	9	0	2	0	1	0	3	27
2:30 PM	0	0	17	1	0	18	0	2	0	2	0	4	0	0	8	0	0	8	0	2	0	2	0	4	34
2:45 PM	0	0	15	1	0	16	0	2	0	4	1	6	0	1	14	0	0	15	0	0	0	0	0	0	37
Hourly Total	0	0	56	5	0	61	0	7	0	11	2	18	0	5	36	0	0	41	0	4	0	3	0	7	127
3:00 PM	0	0	14	0	0	14	0	4	1	10	2	15	0	0	11	0	1	11	0	0	0	2	1	2	42
3:15 PM	0	0	26	2	1	28	0	0	0	6	1	6	0	0	10	0	0	10	0	0	0	1	1	1	45
3:30 PM	0	0	26	2	0	28	0	8	0	9	2	17	0	2	17	0	0	19	0	1	0	3	1	4	68
3:45 PM	0	0	26	2	0	28	0	34	2	37	0	73	0	1	10	0	2	11	0	3	0	0	0	3	115
Hourly Total	0	0	92	6	1	98	0	46	3	62	5	111	0	3	48	0	3	51	0	4	0	6	3	10	270
4:00 PM	0	0	47	3	0	50	0	22	1	16	2	39	0	0	11	0	0	11	0	1	0	3	0	4	104
4:15 PM	0	2	21	2	0	25	0	7	5	5	0	17	1	2	13	0	0	16	0	2	0	2	0	4	62
4:30 PM	0	0	31	3	0	34	0	4	1	4	1	9	0	5	10	0	2	15	0	1	0	1	2	2	60
4:45 PM	0	0	24	1	0	25	0	1	2	1	1	4	0	3	16	0	0	19	0	0	0	2	1	2	50
Hourly Total	0	2	123	9	0	134	0	34	9	26	4	69	1	10	50	0	2	61	0	4	0	8	3	12	276
5:00 PM	0	0	28	0	0	28	0	1	1	5	0	7	0	1	16	0	0	17	0	2	0	0	0	2	54
5:15 PM	0	0	23	1	0	24	0	0	1	5	0	6	0	0	13	0	0	13	0	4	0	0	3	4	47
5:30 PM	0	0	23	1	0	24	0	4	0	0	1	4	0	1	8	0	0	9	0	0	0	0	0	0	37
5:45 PM	0	0	27	2	3	29	0	1	0	0	3	1	0	2	12	0	0	14	1	0	0	1	0	2	46
Hourly Total	0	0	101	4	3	105	0	6	2	10	4	18	0	4	49	0	0	53	1	6	0	1	3	8	184
6:00 PM	0	0	31	3	1	34	0	1	0	4	2	5	0	0	12	0	0	12	0	1	0	1	5	2	53
6:15 PM	0	0	34	1	0	35	0	0	0	1	0	1	0	0	7	0	0	7	1	0	0	1	0	2	45
6:30 PM	0	0	17	0	0	17	0	6	2	15	1	23	0	0	25	0	0	25	0	0	0	1	1	1	66
6:45 PM	0	0	23	3	1	26	0	14	2	14	0	30	0	1	8	0	0	9	1	1	0	2	1	4	69
Hourly Total	0	0	105	7	2	112	0	21	4	34	3	59	0	1	52	0	0	53	2	2	0	5	7	9	233
7:00 PM	0	0	12	3	0	15	0	3	2	5	1	10	0	2	4	0	0	6	0	1	0	0	1	1	32
7:15 PM	0	0	10	1	0	11	0	1	0	1	3	2	0	0	6	0	0	6	0	2	0	0	2	2	21
7:30 PM	0	0	8	0	0	8	0	1	1	1	2	3	0	0	10	0	0	10	0	0	0	1	2	1	22
7:45 PM	0	3	21	1	2	25	0	2	0	3	2	5	0	0	10	0	0	10	0	1	0	2	2	3	43
Hourly Total	0	3	51	5	2	59	0	7	3	10	8	20	0	2	30	0	0	32	0	4	0	3	7	7	118
Grand Total	0	5	528	36	8	569	0	121	21	153	26	295	1	25	265	0	5	291	3	24	0	26	23	53	1208
Approach %	0.0	0.9	92.8	6.3	-	-	0.0	41.0	7.1	51.9	-	-	0.3	8.6	91.1	0.0	-	-	5.7	45.3	0.0	49.1	-	-	-
Total %	0.0	0.4	43.7	3.0	-	47.1	0.0	10.0	1.7	12.7	-	24.4	0.1	2.1	21.9	0.0	-	24.1	0.2	2.0	0.0	2.2	-	4.4	-
Lights	0	5	522	36	-	563	0	121	21	153	-	295	1	25	262	0	-	288	3	24	0	26	-	53	1199
% Lights	-	100.0	98.9	100.0	-	98.9	-	100.0	100.0	100.0	-	100.0	100.0	100.0	98.9	-	-	99.0	100.0	100.0	-	100.0	-	100.0	99.3
Mediums	0	0	6	0	-	6	0	0	0	0	-	0	0	0	3	0	-	3	0	0	0	0	-	0	9
% Mediums	-	0.0	1.1	0.0	-	1.1	-	0.0	0.0	0.0	-	0.0	0.0	0.0	1.1	-	-	1.0	0.0	0.0	-	0.0	-	0.0	0.7
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0

% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	2	-	-	-	-	-	6	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Bicycles on Crosswalk	-	-	-	-	25.0	-	-	-	-	-	23.1	-	-	-	-	-	0.0	-	-	-	-	-	8.7	-	-
Pedestrians	-	-	-	-	6	-	-	-	-	-	20	-	-	-	-	-	5	-	-	-	-	-	21	-	-
% Pedestrians	-	-	-	-	75.0	-	-	-	-	-	76.9	-	-	-	-	-	100.0	-	-	-	-	-	91.3	-	-

8601 Menard Ave
5357.903 - MCCA TIS TMC
2 PM - 8 PM
GHA Mio

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: 8601 Menard Ave
Site Code:
Start Date: 06/05/2024
Page No: 1

Turning Movement Data

Start Time	Menard Ave Southbound						Driveway Access Westbound						Menard Ave Northbound						Capulina Ave Eastbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
2:00 PM	0	0	20	0	1	20	0	5	0	3	2	8	0	0	13	0	0	13	0	2	0	2	0	4	45
2:15 PM	0	0	11	1	0	12	0	4	2	1	0	7	0	1	19	0	0	20	0	0	0	2	1	2	41
2:30 PM	0	0	6	1	3	7	0	0	0	3	2	3	0	7	9	0	1	16	0	1	0	1	2	2	28
2:45 PM	0	0	8	0	1	8	0	4	6	0	0	10	0	8	10	1	0	19	0	0	0	3	0	3	40
Hourly Total	0	0	45	2	5	47	0	13	8	7	4	28	0	16	51	1	1	68	0	3	0	8	3	11	154
3:00 PM	0	0	13	2	0	15	0	2	0	7	0	9	0	2	11	0	0	13	0	0	0	4	1	4	41
3:15 PM	0	0	31	0	0	31	0	2	1	5	2	8	0	0	10	0	0	10	0	2	0	2	0	4	53
3:30 PM	0	0	50	0	0	50	0	11	0	10	0	21	0	2	9	0	0	11	0	0	0	1	2	1	83
3:45 PM	0	1	30	2	0	33	0	25	2	39	1	66	0	0	9	0	1	9	0	1	0	5	0	6	114
Hourly Total	0	1	124	4	0	129	0	40	3	61	3	104	0	4	39	0	1	43	0	3	0	12	3	15	291
4:00 PM	0	0	21	2	0	23	0	16	0	9	0	25	0	0	13	0	1	13	0	0	0	3	1	3	64
4:15 PM	0	0	24	2	0	26	0	8	2	4	0	14	0	2	13	0	0	15	0	0	0	1	4	1	56
4:30 PM	0	0	33	2	0	35	0	5	0	4	0	9	0	1	12	0	0	13	0	0	0	1	1	1	58
4:45 PM	0	1	33	0	1	34	0	3	1	2	0	6	0	0	18	0	0	18	0	0	0	1	2	1	59
Hourly Total	0	1	111	6	1	118	0	32	3	19	0	54	0	3	56	0	1	59	0	0	0	6	8	6	237
5:00 PM	0	0	27	2	0	29	0	4	0	7	0	11	0	0	8	1	0	9	0	1	0	1	2	2	51
5:15 PM	0	0	33	2	0	35	0	2	0	5	4	7	0	1	8	0	0	9	0	3	0	2	0	5	56
5:30 PM	0	0	28	2	3	30	0	1	0	3	1	4	0	1	9	0	0	10	0	0	0	1	3	1	45
5:45 PM	0	1	26	0	2	27	0	1	0	3	1	4	0	1	12	0	0	13	0	1	0	1	3	2	46
Hourly Total	0	1	114	6	5	121	0	8	0	18	6	26	0	3	37	1	0	41	0	5	0	5	8	10	198
6:00 PM	0	0	39	2	0	41	0	3	0	3	0	6	0	1	20	0	1	21	0	0	0	3	3	3	71
6:15 PM	0	0	26	3	2	29	0	1	0	1	2	2	0	0	15	0	0	15	0	0	0	1	0	1	47
6:30 PM	0	1	9	1	1	11	0	7	1	11	1	19	0	1	12	0	0	13	0	2	0	0	4	2	45
6:45 PM	0	0	12	2	3	14	0	22	4	23	4	49	0	1	10	0	0	11	0	1	0	0	0	1	75
Hourly Total	0	1	86	8	6	95	0	33	5	38	7	76	0	3	57	0	1	60	0	3	0	4	7	7	238
7:00 PM	0	0	17	2	1	19	0	17	1	11	1	29	0	0	13	0	0	13	0	0	0	0	0	0	61
7:15 PM	0	0	10	2	0	12	0	21	0	25	4	46	0	0	16	0	0	16	0	2	0	0	4	2	76
7:30 PM	0	0	12	2	1	14	0	3	0	4	2	7	0	0	12	0	1	12	0	0	0	0	0	0	33
7:45 PM	0	1	26	0	0	27	0	1	0	4	3	5	0	1	9	0	0	10	0	1	0	0	3	1	43
Hourly Total	0	1	65	6	2	72	0	42	1	44	10	87	0	1	50	0	1	51	0	3	0	0	7	3	213
Grand Total	0	5	545	32	19	582	0	168	20	187	30	375	0	30	290	2	5	322	0	17	0	35	36	52	1331
Approach %	0.0	0.9	93.6	5.5	-	-	0.0	44.8	5.3	49.9	-	-	0.0	9.3	90.1	0.6	-	-	0.0	32.7	0.0	67.3	-	-	-
Total %	0.0	0.4	40.9	2.4	-	43.7	0.0	12.6	1.5	14.0	-	28.2	0.0	2.3	21.8	0.2	-	24.2	0.0	1.3	0.0	2.6	-	3.9	-
Lights	0	5	534	32	-	571	0	168	20	187	-	375	0	29	271	2	-	302	0	17	0	32	-	49	1297
% Lights	-	100.0	98.0	100.0	-	98.1	-	100.0	100.0	100.0	-	100.0	-	96.7	93.4	100.0	-	93.8	-	100.0	-	91.4	-	94.2	97.4
Mediums	0	0	11	0	-	11	0	0	0	0	-	0	0	1	19	0	-	20	0	0	0	2	-	2	33
% Mediums	-	0.0	2.0	0.0	-	1.9	-	0.0	0.0	0.0	-	0.0	-	3.3	6.6	0.0	-	6.2	-	0.0	-	5.7	-	3.8	2.5
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	1	-	1	1

% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	2.9	-	1.9	0.1
Bicycles on Crosswalk	-	-	-	-	4	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	5	-	-
% Bicycles on Crosswalk	-	-	-	-	21.1	-	-	-	-	-	10.0	-	-	-	-	-	0.0	-	-	-	-	-	13.9	-	-
Pedestrians	-	-	-	-	15	-	-	-	-	-	27	-	-	-	-	-	5	-	-	-	-	-	31	-	-
% Pedestrians	-	-	-	-	78.9	-	-	-	-	-	90.0	-	-	-	-	-	100.0	-	-	-	-	-	86.1	-	-

5803 Capulina Ave
5357.903 - MCCA TIS TMC
2 PM - 8 PM
GHA Mio

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: 5803 Capulina Ave
Site Code:
Start Date: 06/07/2024
Page No: 1

Turning Movement Data

Start Time	Menard Ave Southbound						Driveway Access Westbound						Menard Ave Northbound						Capulina Ave Eastbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
2:00 PM	0	3	48	3	8	54	0	8	2	5	5	15	0	4	18	0	21	22	0	3	0	3	12	6	97
2:15 PM	0	0	26	4	8	30	0	1	0	1	9	2	0	3	26	0	12	29	0	3	1	5	6	9	70
2:30 PM	0	0	5	3	0	8	0	8	19	1	8	28	0	9	7	0	15	16	0	1	0	6	2	7	59
2:45 PM	0	0	9	2	10	11	0	61	62	1	16	124	0	16	11	0	18	27	0	0	0	6	3	6	168
Hourly Total	0	3	88	12	26	103	0	78	83	8	38	169	0	32	62	0	66	94	0	7	1	20	23	28	394
3:00 PM	0	0	14	3	2	17	0	9	10	7	2	26	0	2	11	0	1	13	0	0	0	7	0	7	63
3:15 PM	0	1	38	3	0	42	0	2	3	6	0	11	0	0	12	0	0	12	0	2	0	1	0	3	68
3:30 PM	0	0	29	2	0	31	0	9	0	6	0	15	0	4	11	0	0	15	0	0	0	1	0	1	62
3:45 PM	0	0	25	1	0	26	0	12	0	9	1	21	0	2	13	0	0	15	0	0	0	2	0	2	64
Hourly Total	0	1	106	9	2	116	0	32	13	28	3	73	0	8	47	0	1	55	0	2	0	11	0	13	257
4:00 PM	0	0	31	2	1	33	0	0	1	6	0	7	0	0	12	0	3	12	0	1	0	2	0	3	55
4:15 PM	0	1	34	1	1	36	0	0	3	1	0	4	0	2	10	0	0	12	0	1	0	7	4	8	60
4:30 PM	0	0	20	0	6	20	0	0	3	2	0	5	0	1	14	0	0	15	0	0	0	2	2	2	42
4:45 PM	0	1	25	0	0	26	0	0	0	1	1	1	0	2	11	0	0	13	0	0	0	2	2	2	42
Hourly Total	0	2	110	3	8	115	0	0	7	10	1	17	0	5	47	0	3	52	0	2	0	13	8	15	199
5:00 PM	0	0	22	3	0	25	0	0	1	0	3	1	0	1	6	0	0	7	0	0	0	0	1	0	33
5:15 PM	0	1	22	2	3	25	0	1	0	0	1	1	0	0	11	0	0	11	0	1	0	2	0	3	40
5:30 PM	0	1	20	3	0	24	0	0	0	3	0	3	0	1	13	0	0	14	0	2	0	2	0	4	45
5:45 PM	0	1	20	1	2	22	0	1	0	2	0	3	0	0	17	0	0	17	0	1	0	1	1	2	44
Hourly Total	0	3	84	9	5	96	0	2	1	5	4	8	0	2	47	0	0	49	0	4	0	5	2	9	162
6:00 PM	0	0	22	0	0	22	0	1	0	1	1	2	0	0	7	0	0	7	0	0	0	3	3	3	34
6:15 PM	0	0	33	3	1	36	0	0	0	0	2	0	0	2	9	0	0	11	0	0	1	0	2	1	48
6:30 PM	0	1	20	1	1	22	0	5	0	4	2	9	0	0	13	0	0	13	0	0	0	1	1	1	45
6:45 PM	0	0	18	2	3	20	0	25	0	26	4	51	0	1	11	1	0	13	0	1	0	1	1	2	86
Hourly Total	0	1	93	6	5	100	0	31	0	31	9	62	0	3	40	1	0	44	0	1	1	5	7	7	213
7:00 PM	0	1	13	2	0	16	0	0	1	3	0	4	0	2	7	0	1	9	0	0	0	0	0	0	29
7:15 PM	0	0	18	3	0	21	0	9	1	10	0	20	0	1	7	0	0	8	0	0	0	2	0	2	51
7:30 PM	0	0	12	1	0	13	0	5	0	2	4	7	0	2	9	0	2	11	0	0	0	0	1	0	31
7:45 PM	0	0	12	2	4	14	0	0	1	3	0	4	0	0	11	0	0	11	0	0	0	1	2	1	30
Hourly Total	0	1	55	8	4	64	0	14	3	18	4	35	0	5	34	0	3	39	0	0	0	3	3	3	141
Grand Total	0	11	536	47	50	594	0	157	107	100	59	364	0	55	277	1	73	333	0	16	2	57	43	75	1366
Approach %	0.0	1.9	90.2	7.9	-	-	0.0	43.1	29.4	27.5	-	-	0.0	16.5	83.2	0.3	-	-	0.0	21.3	2.7	76.0	-	-	-
Total %	0.0	0.8	39.2	3.4	-	43.5	0.0	11.5	7.8	7.3	-	26.6	0.0	4.0	20.3	0.1	-	24.4	0.0	1.2	0.1	4.2	-	5.5	-
Lights	0	11	528	47	-	586	0	157	107	100	-	364	0	52	260	1	-	313	0	16	2	56	-	74	1337
% Lights	-	100.0	98.5	100.0	-	98.7	-	100.0	100.0	100.0	-	100.0	-	94.5	93.9	100.0	-	94.0	-	100.0	100.0	98.2	-	98.7	97.9
Mediums	0	0	8	0	-	8	0	0	0	0	-	0	0	2	17	0	-	19	0	0	0	1	-	1	28
% Mediums	-	0.0	1.5	0.0	-	1.3	-	0.0	0.0	0.0	-	0.0	-	3.6	6.1	0.0	-	5.7	-	0.0	0.0	1.8	-	1.3	2.0
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	1

% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	1.8	0.0	0.0	-	0.3	-	0.0	0.0	0.0	-	0.0	0.1
Bicycles on Crosswalk	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	5	-	-
% Bicycles on Crosswalk	-	-	-	-	6.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	11.6	-	-
Pedestrians	-	-	-	-	47	-	-	-	-	-	59	-	-	-	-	-	73	-	-	-	-	-	38	-	-
% Pedestrians	-	-	-	-	94.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	88.4	-	-

8543 Mango Ave
5357.903 - MCCA TIS TMC
2 PM - 8 PM
GHA Mio

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: 8543 Mango Ave
Site Code:
Start Date: 06/03/2024
Page No: 1

Turning Movement Data

Start Time	Driveway Access Southbound					Theobald Rd Westbound					Theobald Rd Eastbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
2:00 PM	0	0	0	0	0	0	9	2	0	11	0	7	32	0	39	50
2:15 PM	0	0	1	0	1	0	4	2	0	6	0	4	15	0	19	26
2:30 PM	0	0	0	0	0	0	13	1	0	14	0	2	20	0	22	36
2:45 PM	0	0	2	1	2	0	6	2	0	8	0	2	11	1	13	23
Hourly Total	0	0	3	1	3	0	32	7	0	39	0	15	78	1	93	135
3:00 PM	0	0	1	0	1	0	10	5	0	15	0	2	15	2	17	33
3:15 PM	0	0	0	0	0	0	10	3	0	13	0	7	25	0	32	45
3:30 PM	0	0	0	2	0	0	18	18	0	36	0	17	22	2	39	75
3:45 PM	0	0	0	2	0	0	11	34	0	45	0	27	18	0	45	90
Hourly Total	0	0	1	4	1	0	49	60	0	109	0	53	80	4	133	243
4:00 PM	0	0	3	1	3	0	15	7	0	22	0	12	22	3	34	59
4:15 PM	0	0	0	1	0	0	11	6	0	17	0	2	20	1	22	39
4:30 PM	0	0	0	0	0	0	16	0	0	16	0	5	20	0	25	41
4:45 PM	0	0	1	4	1	0	12	3	0	15	0	1	23	0	24	40
Hourly Total	0	0	4	6	4	0	54	16	0	70	0	20	85	4	105	179
5:00 PM	0	0	0	2	0	1	16	0	0	17	0	2	18	0	20	37
5:15 PM	0	2	0	0	2	1	12	1	0	14	0	4	13	1	17	33
5:30 PM	0	0	0	2	0	0	11	0	0	11	0	4	18	0	22	33
5:45 PM	0	0	1	0	1	0	19	3	0	22	0	3	18	0	21	44
Hourly Total	0	2	1	4	3	2	58	4	0	64	0	13	67	1	80	147
6:00 PM	0	0	1	2	1	0	18	4	1	22	0	11	10	3	21	44
6:15 PM	0	1	0	5	1	0	11	13	4	24	0	19	12	12	31	56
6:30 PM	0	0	0	4	0	0	19	5	4	24	0	13	16	21	29	53
6:45 PM	0	0	0	3	0	0	8	2	1	10	0	2	14	1	16	26
Hourly Total	0	1	1	14	2	0	56	24	10	80	0	45	52	37	97	179
7:00 PM	0	0	1	1	1	0	6	2	0	8	1	6	10	0	17	26
7:15 PM	0	0	0	0	0	0	10	3	0	13	0	2	7	0	9	22
7:30 PM	1	0	0	4	1	0	4	1	1	5	0	5	6	2	11	17
7:45 PM	0	1	0	0	1	0	10	1	0	11	0	6	10	2	16	28
Hourly Total	1	1	1	5	3	0	30	7	1	37	1	19	33	4	53	93
Grand Total	1	4	11	34	16	2	279	118	11	399	1	165	395	51	561	976
Approach %	6.3	25.0	68.8	-	-	0.5	69.9	29.6	-	-	0.2	29.4	70.4	-	-	-
Total %	0.1	0.4	1.1	-	1.6	0.2	28.6	12.1	-	40.9	0.1	16.9	40.5	-	57.5	-
Lights	0	4	11	-	15	2	277	118	-	397	1	165	391	-	557	969
% Lights	0.0	100.0	100.0	-	93.8	100.0	99.3	100.0	-	99.5	100.0	100.0	99.0	-	99.3	99.3
Mediums	1	0	0	-	1	0	2	0	-	2	0	0	4	-	4	7
% Mediums	100.0	0.0	0.0	-	6.3	0.0	0.7	0.0	-	0.5	0.0	0.0	1.0	-	0.7	0.7
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0

Bicycles on Crosswalk	-	-	-	6	-	-	-	-	0	-	-	-	-	8	-	-
% Bicycles on Crosswalk	-	-	-	17.6	-	-	-	-	0.0	-	-	-	-	15.7	-	-
Pedestrians	-	-	-	28	-	-	-	-	11	-	-	-	-	43	-	-
% Pedestrians	-	-	-	82.4	-	-	-	-	100.0	-	-	-	-	84.3	-	-

8543 Mango Ave
5357.903 - MCCA TIS TMC
2 PM - 8 PM
GHA Mio

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: 8543 Mango Ave
Site Code:
Start Date: 06/05/2024
Page No: 1

Turning Movement Data

Start Time	Driveway Access Southbound					Theobald Rd Westbound					Theobald Rd Eastbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
2:00 PM	0	0	0	0	0	0	11	0	0	11	0	4	28	0	32	43
2:15 PM	0	0	1	1	1	0	10	3	0	13	0	3	21	1	24	38
2:30 PM	0	0	0	2	0	0	11	3	0	14	0	5	17	0	22	36
2:45 PM	0	0	0	0	0	0	13	1	0	14	0	9	18	1	27	41
Hourly Total	0	0	1	3	1	0	45	7	0	52	0	21	84	2	105	158
3:00 PM	0	0	0	1	0	0	18	5	0	23	0	4	17	2	21	44
3:15 PM	0	1	0	2	1	0	9	9	0	18	0	6	16	0	22	41
3:30 PM	0	0	0	0	0	0	12	22	0	34	0	19	14	0	33	67
3:45 PM	0	0	1	1	1	0	14	19	1	33	0	19	23	0	42	76
Hourly Total	0	1	1	4	2	0	53	55	1	108	0	48	70	2	118	228
4:00 PM	0	0	0	2	0	0	21	12	1	33	0	12	19	2	31	64
4:15 PM	0	0	0	1	0	0	16	8	1	24	0	16	17	0	33	57
4:30 PM	0	1	0	0	1	0	17	16	0	33	0	24	26	0	50	84
4:45 PM	0	1	0	6	1	0	18	5	0	23	0	16	15	1	31	55
Hourly Total	0	2	0	9	2	0	72	41	2	113	0	68	77	3	145	260
5:00 PM	0	0	0	0	0	0	24	3	1	27	1	7	18	2	26	53
5:15 PM	0	0	1	0	1	0	20	2	0	22	0	11	15	0	26	49
5:30 PM	0	0	0	0	0	0	12	1	1	13	0	1	17	2	18	31
5:45 PM	0	0	0	2	0	0	25	1	0	26	0	4	19	1	23	49
Hourly Total	0	0	1	2	1	0	81	7	2	88	1	23	69	5	93	182
6:00 PM	0	0	0	0	0	0	19	3	0	22	0	9	23	5	32	54
6:15 PM	0	0	0	8	0	0	13	12	7	25	0	24	11	6	35	60
6:30 PM	0	0	0	11	0	0	10	5	3	15	0	12	16	23	28	43
6:45 PM	0	0	0	4	0	0	9	2	3	11	0	2	18	12	20	31
Hourly Total	0	0	0	23	0	0	51	22	13	73	0	47	68	46	115	188
7:00 PM	0	1	0	1	1	0	9	1	0	10	0	0	12	0	12	23
7:15 PM	0	0	0	4	0	0	14	1	0	15	0	4	15	1	19	34
7:30 PM	0	0	2	3	2	0	6	1	2	7	0	4	11	1	15	24
7:45 PM	0	0	0	0	0	0	6	0	0	6	0	3	6	2	9	15
Hourly Total	0	1	2	8	3	0	35	3	2	38	0	11	44	4	55	96
Grand Total	0	4	5	49	9	0	337	135	20	472	1	218	412	62	631	1112
Approach %	0.0	44.4	55.6	-	-	0.0	71.4	28.6	-	-	0.2	34.5	65.3	-	-	-
Total %	0.0	0.4	0.4	-	0.8	0.0	30.3	12.1	-	42.4	0.1	19.6	37.1	-	56.7	-
Lights	0	4	5	-	9	0	327	135	-	462	1	218	403	-	622	1093
% Lights	-	100.0	100.0	-	100.0	-	97.0	100.0	-	97.9	100.0	100.0	97.8	-	98.6	98.3
Mediums	0	0	0	-	0	0	8	0	-	8	0	0	9	-	9	17
% Mediums	-	0.0	0.0	-	0.0	-	2.4	0.0	-	1.7	0.0	0.0	2.2	-	1.4	1.5
Articulated Trucks	0	0	0	-	0	0	2	0	-	2	0	0	0	-	0	2
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.6	0.0	-	0.4	0.0	0.0	0.0	-	0.0	0.2

Bicycles on Crosswalk	-	-	-	2	-	-	-	-	1	-	-	-	-	-	5	-	-
% Bicycles on Crosswalk	-	-	-	4.1	-	-	-	-	5.0	-	-	-	-	-	8.1	-	-
Pedestrians	-	-	-	47	-	-	-	-	19	-	-	-	-	-	57	-	-
% Pedestrians	-	-	-	95.9	-	-	-	-	95.0	-	-	-	-	-	91.9	-	-

8543 Mango Ave
5357.903 - MCCA TIS TMC
2 PM - 8 PM
GHA Mio

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: 8543 Mango Ave
Site Code:
Start Date: 06/07/2024
Page No: 1

Turning Movement Data

Start Time	Driveway Access Southbound					Theobald Rd Westbound					Theobald Rd Eastbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
2:00 PM	0	0	1	20	1	0	12	42	12	54	0	57	31	52	88	143
2:15 PM	0	0	0	49	0	1	20	2	21	23	0	5	46	25	51	74
2:30 PM	0	1	0	69	1	0	11	1	23	12	0	7	19	57	26	39
2:45 PM	0	1	2	44	3	0	37	3	35	40	0	3	33	50	36	79
Hourly Total	0	2	3	182	5	1	80	48	91	129	0	72	129	184	201	335
3:00 PM	0	1	1	5	2	0	16	1	1	17	0	5	27	9	32	51
3:15 PM	0	0	0	2	0	0	15	3	1	18	0	5	20	3	25	43
3:30 PM	0	0	1	0	1	0	10	3	2	13	0	9	16	2	25	39
3:45 PM	0	0	0	1	0	0	21	13	1	34	0	5	15	0	20	54
Hourly Total	0	1	2	8	3	0	62	20	5	82	0	24	78	14	102	187
4:00 PM	0	1	0	2	1	0	26	6	0	32	0	5	19	2	24	57
4:15 PM	0	0	0	0	0	0	22	2	0	24	0	6	21	1	27	51
4:30 PM	0	0	0	1	0	0	26	3	1	29	0	3	20	0	23	52
4:45 PM	0	0	0	4	0	0	24	3	0	27	0	4	17	0	21	48
Hourly Total	0	1	0	7	1	0	98	14	1	112	0	18	77	3	95	208
5:00 PM	0	1	0	3	1	0	39	3	0	42	0	7	17	1	24	67
5:15 PM	0	1	0	0	1	0	29	0	0	29	0	8	19	0	27	57
5:30 PM	0	0	0	0	0	0	17	1	0	18	0	4	13	0	17	35
5:45 PM	0	0	0	0	0	0	17	0	0	17	0	5	18	0	23	40
Hourly Total	0	2	0	3	2	0	102	4	0	106	0	24	67	1	91	199
6:00 PM	0	0	0	2	0	0	13	6	1	19	0	9	27	2	36	55
6:15 PM	0	0	0	6	0	0	8	16	3	24	0	26	13	4	39	63
6:30 PM	0	1	0	10	1	0	11	4	3	15	0	13	10	16	23	39
6:45 PM	0	0	0	7	0	0	15	2	7	17	0	3	15	8	18	35
Hourly Total	0	1	0	25	1	0	47	28	14	75	0	51	65	30	116	192
7:00 PM	0	0	0	0	0	0	13	1	0	14	0	6	14	2	20	34
7:15 PM	0	0	1	3	1	0	9	2	1	11	0	4	11	3	15	27
7:30 PM	0	0	2	3	2	0	12	0	2	12	0	3	15	0	18	32
7:45 PM	0	1	2	0	3	0	10	3	0	13	1	4	7	0	12	28
Hourly Total	0	1	5	6	6	0	44	6	3	50	1	17	47	5	65	121
Grand Total	0	8	10	231	18	1	433	120	114	554	1	206	463	237	670	1242
Approach %	0.0	44.4	55.6	-	-	0.2	78.2	21.7	-	-	0.1	30.7	69.1	-	-	-
Total %	0.0	0.6	0.8	-	1.4	0.1	34.9	9.7	-	44.6	0.1	16.6	37.3	-	53.9	-
Lights	0	8	10	-	18	1	427	120	-	548	1	206	458	-	665	1231
% Lights	-	100.0	100.0	-	100.0	100.0	98.6	100.0	-	98.9	100.0	100.0	98.9	-	99.3	99.1
Mediums	0	0	0	-	0	0	4	0	-	4	0	0	5	-	5	9
% Mediums	-	0.0	0.0	-	0.0	0.0	0.9	0.0	-	0.7	0.0	0.0	1.1	-	0.7	0.7
Articulated Trucks	0	0	0	-	0	0	2	0	-	2	0	0	0	-	0	2
% Articulated Trucks	-	0.0	0.0	-	0.0	0.0	0.5	0.0	-	0.4	0.0	0.0	0.0	-	0.0	0.2

Bicycles on Crosswalk	-	-	-	1	-	-	-	-	3	-	-	-	-	-	5	-	-
% Bicycles on Crosswalk	-	-	-	0.4	-	-	-	-	2.6	-	-	-	-	-	2.1	-	-
Pedestrians	-	-	-	230	-	-	-	-	111	-	-	-	-	-	232	-	-
% Pedestrians	-	-	-	99.6	-	-	-	-	97.4	-	-	-	-	-	97.9	-	-

APPENDIX C
Crash Map

Appendix C - Crash Map

MCC Academy

8601 Menard Avenue, Morton Grove IL

Map Center: 87.77087°W 42.03753°N

APPENDIX D

CMAP Correspondence

Chicago Metropolitan Agency for Planning

433 West Van Buren Street, Suite 450
Chicago, IL 60607
cmap.illinois.gov | 312-454-0400

June 5, 2024

David Westergreen, E. I.
Traffic Engineer
Gewalt Hamilton Associates
625 Forest Edge Drive
Vernon Hills, IL 60061

Subject: MCC Academy
IDOT

Dear Mr. Westergreen:

In response to a request made on your behalf and dated 6/5/2024, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
Dempster St east of Menard Ave	34,900 (2023)	38,600
Dempster St west of Menard Ave	34,900 (2023)	38,600
Menard Ave b/w Dempster St and Lincoln Ave	No Data	1.06 (27-yr Growth Factor)
Theobald Ave b/w Menard Ave and Major Ave	No Data	1.06 (27-yr Growth Factor)

Traffic projections are developed using existing ADT data provided in the request letter and the results from the December 2023 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

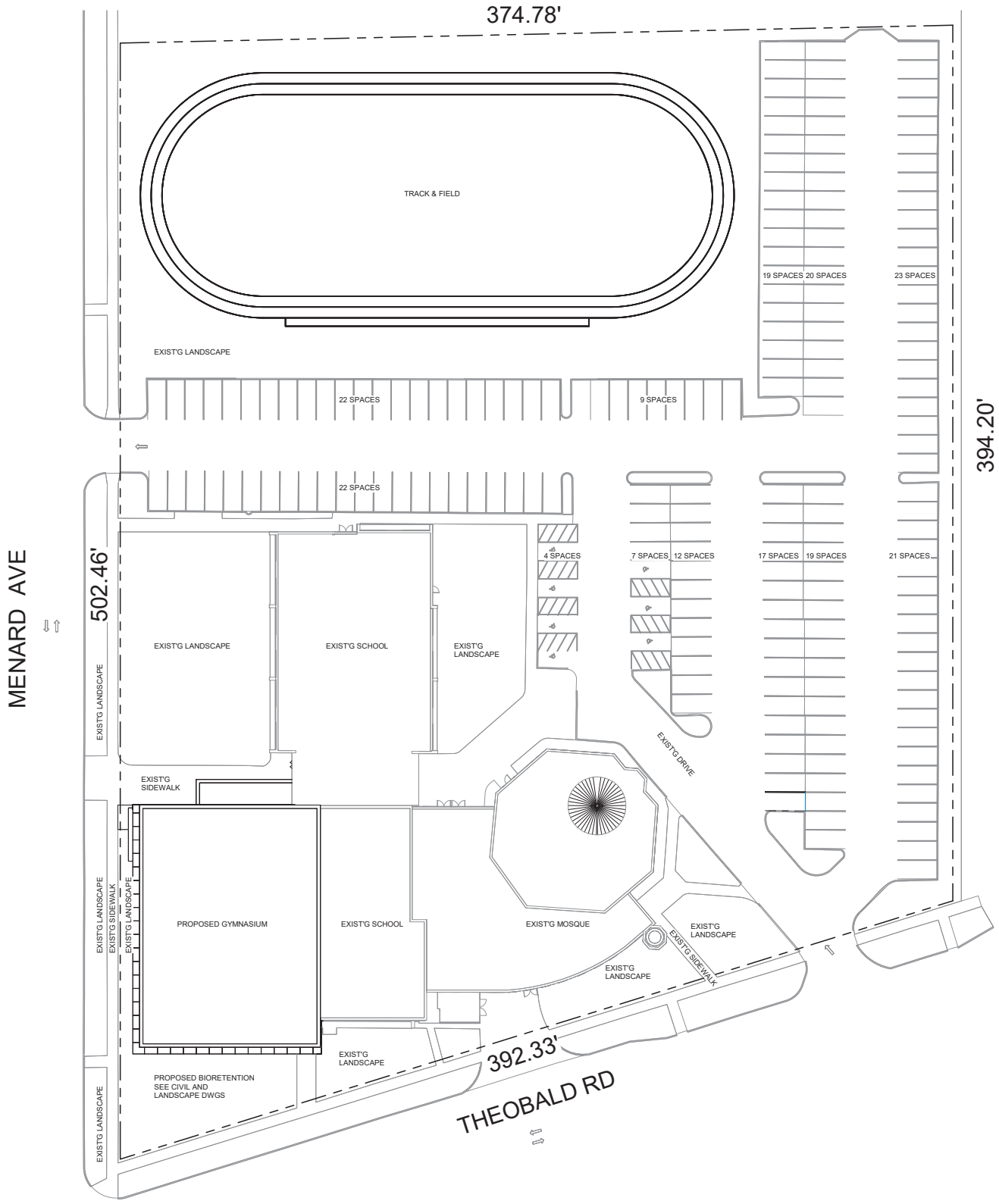
If you have any questions, please call me at (312) 386-8806 or email me at jrodriguez@cmap.illinois.gov

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

cc: Rios (IDOT)
2024_TrafficForecasts\MortonGrove\ck-68-24\ck-68-24.docx

APPENDIX E

Site Plan


374.78'
TRACK & FIELD
19 SPACES
20 SPACES
23 SPACES
EXIST'G LANDSCAPE
22 SPACES
9 SPACES
394.20'
22 SPACES
4 SPACES
7 SPACES
12 SPACES
17 SPACES
19 SPACES
21 SPACES
MENARD AVE
502.46'
EXIST'G LANDSCAPE
EXIST'G SCHOOL
EXIST'G LANDSCAPE
EXIST'G DRIVE
EXIST'G SIDEWALK
EXIST'G LANDSCAPE
EXIST'G SIDEWALK
EXIST'G LANDSCAPE
PROPOSED GYMNASIUM
EXIST'G SCHOOL
EXIST'G MOSQUE
EXIST'G LANDSCAPE
EXIST'G SIDEWALK
EXIST'G LANDSCAPE
EXIST'G LANDSCAPE
392.33'
PROPOSED BIORETENTION
SEE CIVIL AND
LANDSCAPE DWGS
EXIST'G LANDSCAPE
THEOBALD RD

APPENDIX F

Village of Morton Grove Zoning Code Excerpts

e. In the case of collective usage involving a school, grades K-12, and a religious institution affiliated with said school, when said school and religious institution are located on the same or adjacent lots, the minimum number of parking spaces required shall be the largest number required of the numbers required for each use computed separately

(Ord 13-04, 6-10-2013)

I. Required Spaces By Use: Off street parking spaces accessory to designated uses shall be required as identified below:

Residential:	
Attached dwellings (townhomes)	2.0 spaces per dwelling unit[1]
Housing for senior citizens	0.5 spaces per dwelling unit
Multi-family dwellings	1.75 spaces per dwelling unit[2]
Single-family dwellings	2.0 spaces per dwelling unit[3]
Two-family dwellings	2.0 spaces per dwelling unit[3]
Commercial uses:	
Commercial services	1.0 spaces per 300 square feet of gross floor area
Permitted and special uses in commercial zoning districts except for those uses specified below:	1.0 space per 250 square feet of gross floor area
Animal hospitals	1.5 spaces per examination/treatment room
Appliance sales and service	1.0 space per 500 square feet of gross floor area
Automobile minimart station	1.0 space per employee, not to exceed 5 spaces of which 2 spaces shall be for handicapped individuals
Automobile repair	1.0 space per employee plus 2.0 spaces per service stall
Automobile sales and service	1.0 space per 500 square feet of gross floor area
Automobile service station	1.0 space per employee plus 2.0 spaces per service stall (minimum of 2.0 spaces)
Automobile, truck and trailer rental	1.0 space per employee plus 1.0 space per maximum number of rental vehicles
Barber or beauty shops (hair stylist, manicurist, skin care)	1.0 space per 250 square feet of gross floor area
Bowling alleys	4.0 spaces per lane
Cannabis dispensing organizations	1.0 space per 150 square feet of gross floor area
Home improvement centers	1.0 space per 350 square feet of gross floor area, excluding outdoor storage areas
Hotels and motels	1.0 space per rental lodging room

Houses of worship	1.0 space per 3.0 occupants in the main meeting room or any other room that can be used simultaneously for group assembly purposes. The maximum occupancy load shall be authorized by the fire prevention code and standards adopted by the Village of Morton Grove fire department from time to time and incorporated herein by reference (title 9, chapter 1 of this code)
Clubs and lodges	1.0 space per 3.0 occupants in the main meeting room or any other room that can be used simultaneously for group assembly purposes. The maximum occupancy load shall be authorized by the fire prevention code and standards adopted by the Village of Morton Grove fire department from time to time and incorporated herein by reference (title 9, chapter 1 of this code)
Daycare centers	1.0 space per 300 square feet gross of floor area
Dry cleaning and laundry - self-service	1.0 space per 250 square feet of gross floor area
Furniture and upholstery stores	1.0 space per 700 square feet of gross floor area
Libraries and museums	1.0 space per 1,000 square feet of gross floor area, and for any group assembly meeting space or auditorium, 1.0 space per 3.0 occupants. The maximum occupancy load shall be authorized by the fire prevention code and standards adopted by the Village of Morton Grove fire department from time to time and incorporated herein by reference (title 9, chapter 1 of this code)
Lounges, bars, or taverns	1.0 space per 50 square feet of gross floor area
Nursing homes	1.0 spaces per 670 square feet gross floor area
Pharmacies	1.0 space per 300 square feet of gross floor area
Physical fitness and health service	1.0 space per 150 square feet of gross floor area
Restaurants	1.0 space per 150 square feet of gross floor area
Restaurants - drive-in or carryout	1.0 space per 100 square feet of gross floor area
Theaters	1.0 space per 3.0 seats
Undertaking establishments/funeral parlors	10.0 spaces per chapel or parlor plus 1.0 space per vehicle owned by the business
Manufacturing uses:	
Permitted and special uses in the manufacturing zoning district except for those uses specified below or where requirements have been set in other sections of this chapter	1.0 space per 250 square feet of gross floor area
Building material sales	1.0 space per 500 square feet of gross floor area

Cannabis cultivation centers	1.0 space per employee, plus 1.0 space per vehicle owned and used by the cultivation center only
Moving and storage facilities	1.0 space per employee plus 1.0 space for each vehicle owned or used in the business
Manufacturing uses	1.0 space for each 2.0 employees plus 1.0 parking space for each vehicle owned and used by the local plant only
Parcel and express services	1.0 space per 1,000 square feet of gross floor area or 1.0 space per employee whichever is greater
Public utility and public service use	1.0 space per each employee (minimum of 2.0 spaces)
Self-service storage or miniwarehouse facilities	1.0 space per 3,000 square feet of gross square feet of floor area
Warehouse and storage establishments	1.0 space per 1,000 square feet of gross floor area or 1.0 space per employee whichever is greater
Wholesale sales	1.0 space per 500 square feet of gross floor area plus 1.0 space for each vehicle owned or used in the business
Other uses:	
Public administrative offices	1.0 space per 500 square feet of gross floor area
Recreational centers	1.0 space per 250 square feet of gross floor area devoted to office space plus 1.0 space per 150 gross square feet of floor area devoted to recreational use, and for any meeting space or group assembly use, 1.0 space per 3.0 occupants. The maximum occupancy load shall be authorized by the prevention code and standards adopted by the Village of Morton Grove fire department from time to time and incorporated herein by reference (title 9, chapter 1 of this code)
Schools - business, commercial, trade or other	1.0 space per each faculty member and other full or part time employee plus 1.0 space per 4.0 students design seating capacity
Schools - nursery, elementary, or junior high	1.0 space for each faculty member and other full or part time employees
School, high	1.0 space for each faculty member and other full or part time employee plus 1.0 space for each 4.0 students design seating capacity
Miscellaneous uses, not specifically identified in any section of this title	1.0 space per 100 square feet of gross floor area, or otherwise determined by the Morton Grove plan commission

Notes:

[1] Guest Parking: A minimum of 0.2 additional off-street parking spaces/dwelling unit shall be provided as guest parking for all attached dwelling developments with ten (10) or more units.

[2] Guest Parking: A minimum of 0.15 additional off-street parking spaces/dwelling unit shall be provided as guest parking for all multi-family and mixed use developments with ten (10) or more units.

[3] Bed & Breakfast Parking: In addition to the minimum parking required for the principal single-family or two-family dwelling use, one additional on-site parking space shall be provided for

APPENDIX G

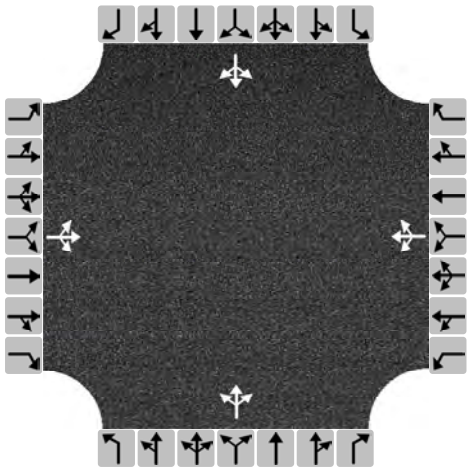
Capacity Analysis Worksheets

HCS All-Way Stop Control Report

General and Site Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2024
Analysis Time Period (hrs)	0.25
Time Analyzed	3:30-4:30 PM
Project Description	Mon PM Existing
Intersection	Menard Ave at Theobald Ave
Jurisdiction	City of Morton Grove
East/West Street	Theobald Ave
North/South Street	Menard Ave
Peak Hour Factor	0.82

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	2	49	0	25	21	11	2	46	50	51	122	29
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	62			70			120			246		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.055			0.062			0.106			0.219		
Final Departure Headway, h_d (s)	4.82			4.77			4.20			4.32		
Final Degree of Utilization, x	0.083			0.092			0.139			0.296		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.82			2.77			2.20			2.32		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	62			70			120			246		
Capacity (veh/h)	747			755			858			833		
95% Queue Length, Q_{95} (veh)	0.3			0.3			0.5			1.2		
95% Queue Length, Q_{95} (ft)	7.5			7.5			12.5			30.0		
Control Delay (s/veh)	8.3			8.3			7.9			9.1		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.3	A		8.3	A		7.9	A		9.1	A	
Intersection Delay (s/veh) | LOS	8.6						A					

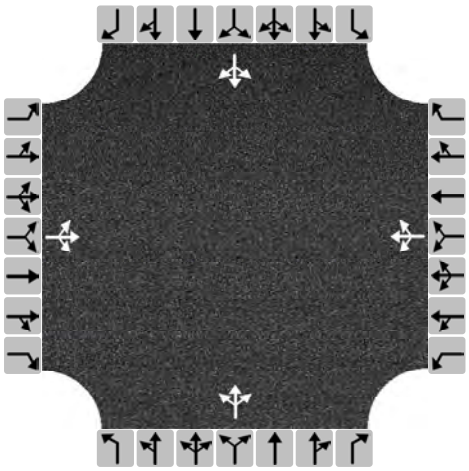
Copyright © 2024 University of Florida. All Rights Reserved.

HCS All-Way Stop Control Report

General and Site Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Analysis Time Period (hrs)	0.25
Time Analyzed	3:30-4:30 PM
Project Description	Mon PM No-Build
Intersection	Menard Ave at Theobald Ave
Jurisdiction	City of Morton Grove
East/West Street	Theobald Ave
North/South Street	Menard Ave
Peak Hour Factor	0.82

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	2	50	0	26	22	11	2	47	52	53	123	30
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	63			72			123			251		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.056			0.064			0.109			0.223		
Final Departure Headway, h_d (s)	4.84			4.80			4.21			4.34		
Final Degree of Utilization, x	0.085			0.096			0.144			0.303		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.84			2.80			2.21			2.34		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	63			72			123			251		
Capacity (veh/h)	743			750			855			830		
95% Queue Length, Q_{95} (veh)	0.3			0.3			0.5			1.3		
95% Queue Length, Q_{95} (ft)	7.5			7.5			12.5			32.5		
Control Delay (s/veh)	8.3			8.3			7.9			9.2		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.3	A		8.3	A		7.9	A		9.2	A	
Intersection Delay (s/veh) | LOS	8.7						A					

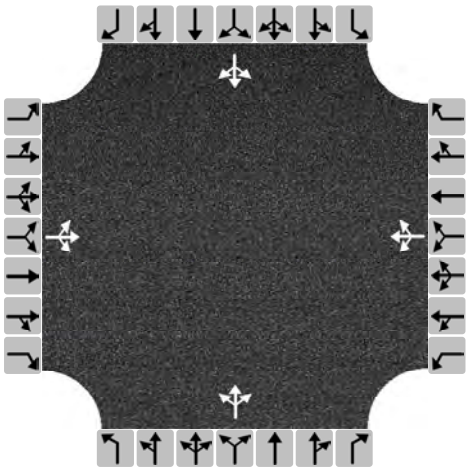
Copyright © 2024 University of Florida. All Rights Reserved.

HCS All-Way Stop Control Report

General and Site Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Analysis Time Period (hrs)	0.25
Time Analyzed	3:30-4:30 PM
Project Description	Mon PM Total
Intersection	Menard Ave at Theobald Ave
Jurisdiction	City of Morton Grove
East/West Street	Theobald Ave
North/South Street	Menard Ave
Peak Hour Factor	0.82

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	2	70	0	26	22	11	2	47	62	64	133	40
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	88			72			135			289		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.078			0.064			0.120			0.257		
Final Departure Headway, h_d (s)	4.97			4.97			4.31			4.42		
Final Degree of Utilization, x	0.121			0.099			0.162			0.355		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.97			2.97			2.31			2.42		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	88			72			135			289		
Capacity (veh/h)	724			725			835			815		
95% Queue Length, Q_{95} (veh)	0.4			0.3			0.6			1.6		
95% Queue Length, Q_{95} (ft)	10.0			7.5			15.0			40.0		
Control Delay (s/veh)	8.7			8.5			8.1			9.8		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.7	A		8.5	A		8.1	A		9.8	A	
Intersection Delay (s/veh) | LOS	9.1						A					

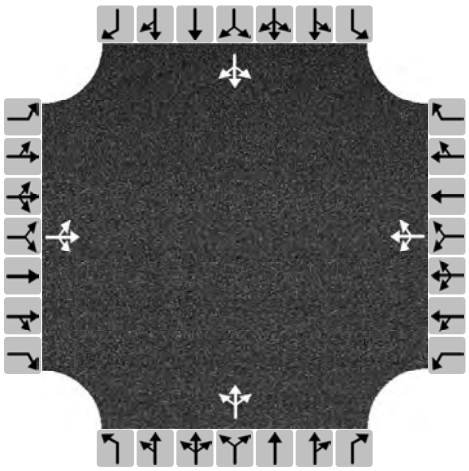
Copyright © 2024 University of Florida. All Rights Reserved.

HCS All-Way Stop Control Report

General and Site Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2024
Analysis Time Period (hrs)	0.25
Time Analyzed	3:45-4:45 PM
Project Description	Wed PM Existing
Intersection	Menard Ave at Theobald Ave
Jurisdiction	City of Morton Grove
East/West Street	Theobald Ave
North/South Street	Menard Ave
Peak Hour Factor	0.89

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	5	54	2	34	21	14	2	39	49	53	126	20
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	69			78			101			224		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.061			0.069			0.090			0.199		
Final Departure Headway, h_d (s)	4.73			4.70			4.19			4.36		
Final Degree of Utilization, x	0.090			0.101			0.118			0.271		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.73			2.70			2.19			2.36		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	69			78			101			224		
Capacity (veh/h)	761			766			860			825		
95% Queue Length, Q_{95} (veh)	0.3			0.3			0.4			1.1		
95% Queue Length, Q_{95} (ft)	7.5			7.5			10.0			27.5		
Control Delay (s/veh)	8.2			8.2			7.7			9.0		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.2	A		8.2	A		7.7	A		9.0	A	
Intersection Delay (s/veh) | LOS	8.5						A					

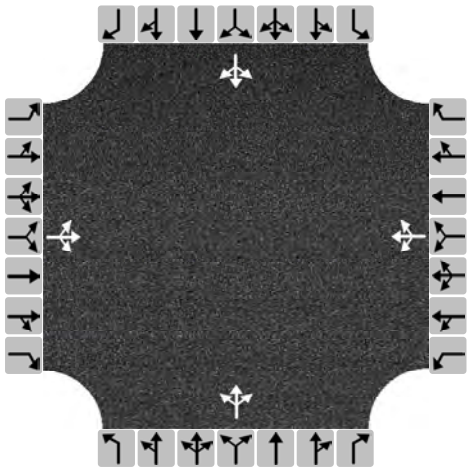
Copyright © 2024 University of Florida. All Rights Reserved.

HCS All-Way Stop Control Report

General and Site Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Analysis Time Period (hrs)	0.25
Time Analyzed	3:45-4:45 PM
Project Description	Wed PM No-Build
Intersection	Menard Ave at Theobald Ave
Jurisdiction	City of Morton Grove
East/West Street	Theobald Ave
North/South Street	Menard Ave
Peak Hour Factor	0.89

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	5	56	2	35	22	14	2	40	50	55	127	21
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	71			80			103			228		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.063			0.071			0.092			0.203		
Final Departure Headway, h_d (s)	4.75			4.72			4.21			4.38		
Final Degree of Utilization, x	0.093			0.105			0.121			0.277		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.75			2.72			2.21			2.38		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	71			80			103			228		
Capacity (veh/h)	758			762			856			822		
95% Queue Length, Q_{95} (veh)	0.3			0.3			0.4			1.1		
95% Queue Length, Q_{95} (ft)	7.5			7.5			10.0			27.5		
Control Delay (s/veh)	8.2			8.3			7.8			9.0		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.2	A		8.3	A		7.8	A		9.0	A	
Intersection Delay (s/veh) | LOS	8.5						A					

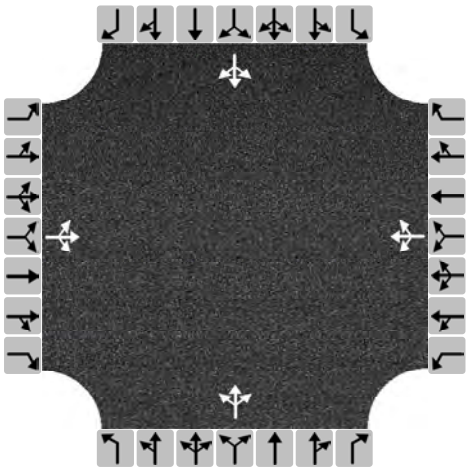
Copyright © 2024 University of Florida. All Rights Reserved.

HCS All-Way Stop Control Report

General and Site Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Analysis Time Period (hrs)	0.25
Time Analyzed	3:45-4:45 PM
Project Description	Wed PM Total
Intersection	Menard Ave at Theobald Ave
Jurisdiction	City of Morton Grove
East/West Street	Theobald Ave
North/South Street	Menard Ave
Peak Hour Factor	0.89

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	5	76	2	35	22	14	2	40	60	66	137	31
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	93			80			115			263		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.083			0.071			0.102			0.234		
Final Departure Headway, h_d (s)	4.87			4.87			4.29			4.45		
Final Degree of Utilization, x	0.126			0.108			0.137			0.325		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.87			2.87			2.29			2.45		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	93			80			115			263		
Capacity (veh/h)	739			739			838			810		
95% Queue Length, Q_{95} (veh)	0.4			0.4			0.5			1.4		
95% Queue Length, Q_{95} (ft)	10.0			10.0			12.5			35.0		
Control Delay (s/veh)	8.6			8.5			8.0			9.6		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.6	A		8.5	A		8.0	A		9.6	A	
Intersection Delay (s/veh) | LOS	8.9						A					

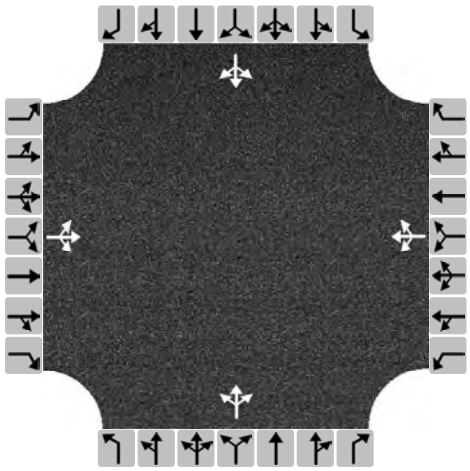
Copyright © 2024 University of Florida. All Rights Reserved.

HCS All-Way Stop Control Report

General and Site Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2024
Analysis Time Period (hrs)	0.25
Time Analyzed	2:00 - 3:00 PM
Project Description	Fri PM Existing
Intersection	Menard Ave at Theobald Ave
Jurisdiction	City of Morton Grove
East/West Street	Theobald Ave
North/South Street	Menard Ave
Peak Hour Factor	0.78

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	9	48	14	27	21	34	13	67	71	84	93	16
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	91			105			194			247		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.081			0.093			0.172			0.220		
Final Departure Headway, h_d (s)	4.99			4.88			4.44			4.67		
Final Degree of Utilization, x	0.126			0.143			0.239			0.321		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.99			2.88			2.44			2.67		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	91			105			194			247		
Capacity (veh/h)	721			737			810			771		
95% Queue Length, Q_{95} (veh)	0.4			0.5			0.9			1.4		
95% Queue Length, Q_{95} (ft)	10.0			12.5			22.5			35.0		
Control Delay (s/veh)	8.7			8.7			8.8			9.9		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.7	A		8.7	A		8.8	A		9.9	A	
Intersection Delay (s/veh) | LOS	9.2						A					

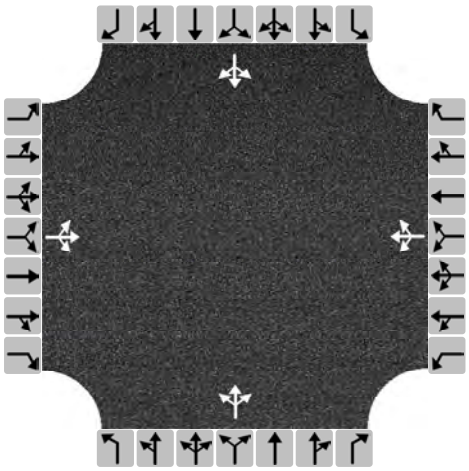
Copyright © 2024 University of Florida. All Rights Reserved.

HCS All-Way Stop Control Report

General and Site Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Analysis Time Period (hrs)	0.25
Time Analyzed	2:00 - 3:00 PM
Project Description	Fri PM No-Build/Future
Intersection	Menard Ave at Theobald Ave
Jurisdiction	City of Morton Grove
East/West Street	Theobald Ave
North/South Street	Menard Ave
Peak Hour Factor	0.78

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	9	49	14	28	22	35	13	69	73	87	95	16
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	92			109			199			254		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.082			0.097			0.177			0.226		
Final Departure Headway, h_d (s)	5.03			4.92			4.47			4.70		
Final Degree of Utilization, x	0.129			0.149			0.247			0.331		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	3.03			2.92			2.47			2.70		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	92			109			199			254		
Capacity (veh/h)	715			732			806			767		
95% Queue Length, Q_{95} (veh)	0.4			0.5			1.0			1.5		
95% Queue Length, Q_{95} (ft)	10.0			12.5			25.0			37.5		
Control Delay (s/veh)	8.8			8.8			8.9			10.0		
Level of Service, LOS	A			A			A			B		
Approach Delay (s/veh) | LOS	8.8	A		8.8	A		8.9	A		10.0	B	
Intersection Delay (s/veh) | LOS	9.3						A					

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

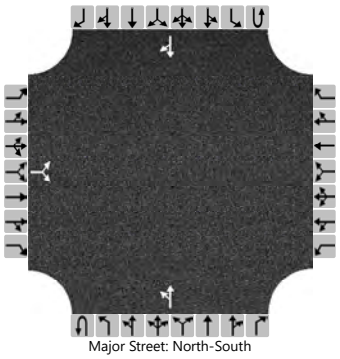
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2024
Time Analyzed	3:30 - 4:30 PM
Intersection Orientation	North-South
Project Description	PM Existing

Site Information

Intersection	Menard Ave at Park Ave
Jurisdiction	Village of Morton Grove
East/West Street	Park Ave
North/South Street	Menard Ave
Peak Hour Factor	0.78
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		4		9						9	50				193	6
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			17							12						
Capacity, c (veh/h)			744							1322						
v/c Ratio			0.02							0.01						
95% Queue Length, Q_{95} (veh)			0.1							0.0						
95% Queue Length, Q_{95} (ft)			2.5							0.0						
Control Delay (s/veh)			9.9							7.7	0.1					
Level of Service (LOS)			A							A	A					
Approach Delay (s/veh)		9.9								1.2						
Approach LOS		A								A						

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

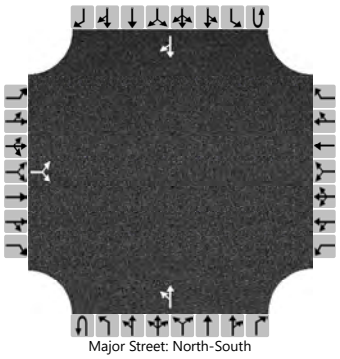
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2024
Time Analyzed	3:30 - 4:30 PM
Intersection Orientation	North-South
Project Description	PM No-Build

Site Information

Intersection	Menard Ave at Park Ave
Jurisdiction	Village of Morton Grove
East/West Street	Park Ave
North/South Street	Menard Ave
Peak Hour Factor	0.78
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		4		9						9	52				197	6
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			17							12						
Capacity, c (veh/h)			739							1316						
v/c Ratio			0.02							0.01						
95% Queue Length, Q_{95} (veh)			0.1							0.0						
95% Queue Length, Q_{95} (ft)			2.5							0.0						
Control Delay (s/veh)			10.0							7.8	0.1					
Level of Service (LOS)			A							A	A					
Approach Delay (s/veh)		10.0								1.2						
Approach LOS		A								A						

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

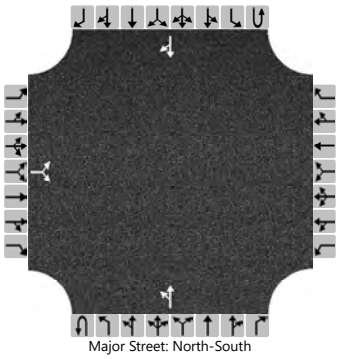
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Time Analyzed	3:30 - 4:30 PM
Intersection Orientation	North-South
Project Description	PM Total

Site Information

Intersection	Menard Ave at Park Ave
Jurisdiction	Village of Morton Grove
East/West Street	Park Ave
North/South Street	Menard Ave
Peak Hour Factor	0.78
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		4		10						9	52				227	7
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			18							12						
Capacity, c (veh/h)			705							1273						
v/c Ratio			0.03							0.01						
95% Queue Length, Q_{95} (veh)			0.1							0.0						
95% Queue Length, Q_{95} (ft)			2.5							0.0						
Control Delay (s/veh)			10.2							7.9	0.1					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		10.2								1.2						
Approach LOS		B								A						

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

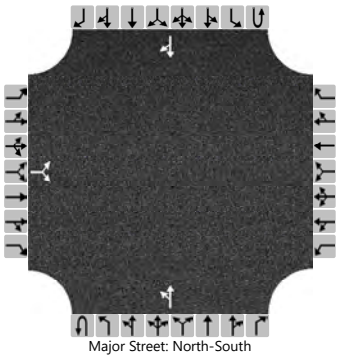
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2024
Time Analyzed	3:30 - 4:30 PM
Intersection Orientation	North-South
Project Description	Wednesday PM Existing

Site Information

Intersection	Menard Ave at Park Ave
Jurisdiction	Village of Morton Grove
East/West Street	Park Ave
North/South Street	Menard Ave
Peak Hour Factor	0.83
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		0		11						6	52				188	7
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			13							7						
Capacity, c (veh/h)			813							1344						
v/c Ratio			0.02							0.01						
95% Queue Length, Q_{95} (veh)			0.0							0.0						
95% Queue Length, Q_{95} (ft)			0.0							0.0						
Control Delay (s/veh)			9.5							7.7	0.0					
Level of Service (LOS)			A							A	A					
Approach Delay (s/veh)		9.5								0.8						
Approach LOS		A								A						

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

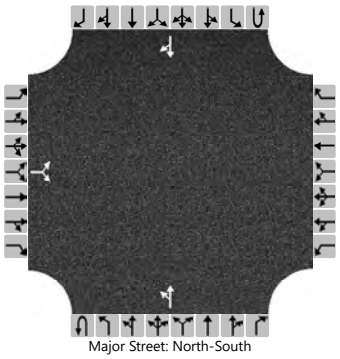
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Time Analyzed	3:30 - 4:30 PM
Intersection Orientation	North-South
Project Description	Wednesday PM No-Build

Site Information

Intersection	Menard Ave at Park Ave
Jurisdiction	Village of Morton Grove
East/West Street	Park Ave
North/South Street	Menard Ave
Peak Hour Factor	0.83
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		0		11						6	54				192	7
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			13							7						
Capacity, c (veh/h)			808							1339						
v/c Ratio			0.02							0.01						
95% Queue Length, Q_{95} (veh)			0.0							0.0						
95% Queue Length, Q_{95} (ft)			0.0							0.0						
Control Delay (s/veh)			9.5							7.7	0.0					
Level of Service (LOS)			A							A	A					
Approach Delay (s/veh)		9.5								0.8						
Approach LOS		A								A						

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

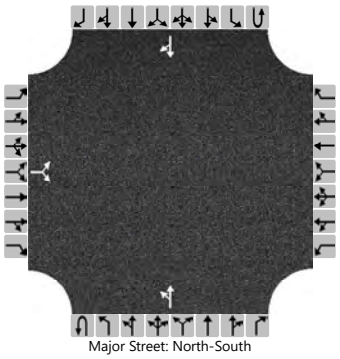
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Time Analyzed	3:30 - 4:30 PM
Intersection Orientation	North-South
Project Description	Wednesday PM Total

Site Information

Intersection	Menard Ave at Park Ave
Jurisdiction	Village of Morton Grove
East/West Street	Park Ave
North/South Street	Menard Ave
Peak Hour Factor	0.83
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		0		12						6	54				222	8
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			14							7						
Capacity, c (veh/h)			771							1297						
v/c Ratio			0.02							0.01						
95% Queue Length, Q_{95} (veh)			0.1							0.0						
95% Queue Length, Q_{95} (ft)			2.5							0.0						
Control Delay (s/veh)			9.8							7.8	0.0					
Level of Service (LOS)			A							A	A					
Approach Delay (s/veh)		9.8								0.8						
Approach LOS		A								A						

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

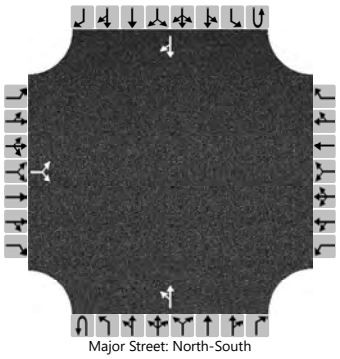
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2024
Time Analyzed	2:00 - 3:00 PM
Intersection Orientation	North-South
Project Description	Friday PM Existing

Site Information

Intersection	Menard Ave at Park Ave
Jurisdiction	Village of Morton Grove
East/West Street	Park Ave
North/South Street	Menard Ave
Peak Hour Factor	0.73
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		5		25						21	89				168	18
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			41							29						
Capacity, c (veh/h)			753							1322						
v/c Ratio			0.05							0.02						
95% Queue Length, Q_{95} (veh)			0.2							0.1						
95% Queue Length, Q_{95} (ft)			5.0							2.5						
Control Delay (s/veh)			10.1							7.8	0.2					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		10.1								1.6						
Approach LOS		B								A						

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

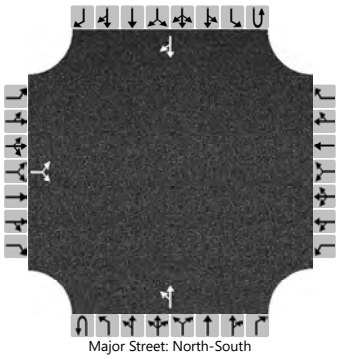
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Time Analyzed	2:00 - 3:00 PM
Intersection Orientation	North-South
Project Description	Friday PM No-Build/Total

Site Information

Intersection	Menard Ave at Park Ave
Jurisdiction	Village of Morton Grove
East/West Street	Park Ave
North/South Street	Menard Ave
Peak Hour Factor	0.73
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		5		26						21	92				172	18
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			42							29						
Capacity, c (veh/h)			748							1316						
v/c Ratio			0.06							0.02						
95% Queue Length, Q_{95} (veh)			0.2							0.1						
95% Queue Length, Q_{95} (ft)			5.0							2.5						
Control Delay (s/veh)			10.1							7.8	0.2					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		10.1								1.6						
Approach LOS		B								A						

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

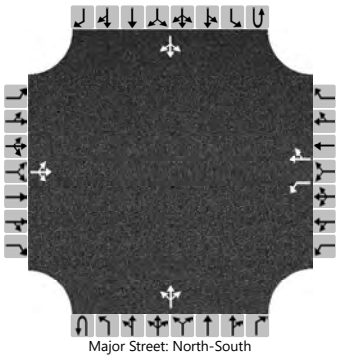
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2024
Time Analyzed	3:30 - 4:30 PM
Intersection Orientation	North-South
Project Description	Monday PM Existing

Site Information

Intersection	Menard Ave at Capulina Ave
Jurisdiction	Village of Morton Grove
East/West Street	Capulina Ave/Site Drive
North/South Street	Menard Ave
Peak Hour Factor	0.76
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	1	0	0	0	1	0	0	0	1	0
Configuration			LTR			L		TR			LTR				LTR	
Volume (veh/h)		7	0	8		71	8	67		6	48	0		2	120	9
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			20			93		99		8				3		
Capacity, c (veh/h)			716			690		951		1420				1552		
v/c Ratio			0.03			0.14		0.10		0.01				0.00		
95% Queue Length, Q_{95} (veh)			0.1			0.5		0.3		0.0				0.0		
95% Queue Length, Q_{95} (ft)			2.5			12.5		7.5								
Control Delay (s/veh)			10.2			11.0		9.2		7.5	0.0	0.0		7.3	0.0	0.0
Level of Service (LOS)			B			B		A		A	A	A		A	A	A
Approach Delay (s/veh)		10.2				10.1				0.9				0.1		
Approach LOS		B				B				A				A		

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

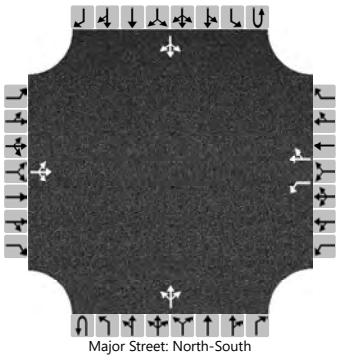
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Time Analyzed	3:30 - 4:30 PM
Intersection Orientation	North-South
Project Description	Monday PM No Build

Site Information

Intersection	Menard Ave at Capulina Ave
Jurisdiction	Village of Morton Grove
East/West Street	Capulina Ave/Site Drive
North/South Street	Menard Ave
Peak Hour Factor	0.76
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	1	0	0	0	1	0	0	0	1	0
Configuration			LTR			L		TR			LTR				LTR	
Volume (veh/h)		7	0	8		71	8	67		6	49	0		2	124	9
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			20			93		99		8				3		
Capacity, c (veh/h)			710			684		948		1414				1551		
v/c Ratio			0.03			0.14		0.10		0.01				0.00		
95% Queue Length, Q_{95} (veh)			0.1			0.5		0.3		0.0				0.0		
95% Queue Length, Q_{95} (ft)			2.5			12.5		7.5								
Control Delay (s/veh)			10.2			11.1		9.2		7.6	0.0	0.0		7.3	0.0	0.0
Level of Service (LOS)			B			B		A		A	A	A		A	A	A
Approach Delay (s/veh)		10.2				10.1				0.9				0.1		
Approach LOS		B				B				A				A		

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

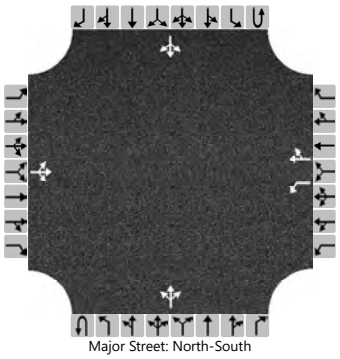
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Time Analyzed	3:30 - 4:30 PM
Intersection Orientation	North-South
Project Description	Monday PM Total

Site Information

Intersection	Menard Ave at Capulina Ave
Jurisdiction	Village of Morton Grove
East/West Street	Capulina Ave/Site Drive
North/South Street	Menard Ave
Peak Hour Factor	0.76
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	1	0	0	0	1	0	0	0	1	0
Configuration			LTR			L		TR			LTR				LTR	
Volume (veh/h)		7	0	9		93	11	92		6	49	0		2	132	9
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			21			122		136		8				3		
Capacity, c (veh/h)			681			671		946		1401				1551		
v/c Ratio			0.03			0.18		0.14		0.01				0.00		
95% Queue Length, Q_{95} (veh)			0.1			0.7		0.5		0.0				0.0		
95% Queue Length, Q_{95} (ft)			2.5			17.5		12.5								
Control Delay (s/veh)			10.5			11.6		9.4		7.6	0.0	0.0		7.3	0.0	0.0
Level of Service (LOS)			B			B		A		A	A	A		A	A	A
Approach Delay (s/veh)		10.5				10.4				0.9				0.1		
Approach LOS		B				B				A				A		

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

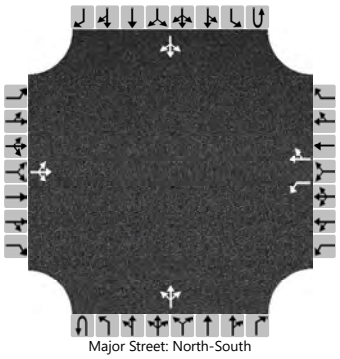
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2024
Time Analyzed	3:30 - 4:30 PM
Intersection Orientation	North-South
Project Description	Wednesday PM Existing

Site Information

Intersection	Menard Ave at Capulina Ave
Jurisdiction	Village of Morton Grove
East/West Street	Capulina Ave/Site Drive
North/South Street	Menard Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	1	0	0	0	1	0	0	0	1	0
Configuration			LTR			L		TR			LTR				LTR	
Volume (veh/h)		1	0	10		60	4	62		4	49	0		1	129	6
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			13			71		79		5				1		
Capacity, c (veh/h)			861			713		983		1431				1559		
v/c Ratio			0.02			0.10		0.08		0.00				0.00		
95% Queue Length, Q_{95} (veh)			0.0			0.3		0.3		0.0				0.0		
95% Queue Length, Q_{95} (ft)			0.0			7.5		7.5								
Control Delay (s/veh)			9.2			10.6		9.0		7.5	0.0	0.0		7.3	0.0	0.0
Level of Service (LOS)			A			B		A		A	A	A		A	A	A
Approach Delay (s/veh)		9.2				9.8				0.6				0.1		
Approach LOS		A				A				A				A		

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

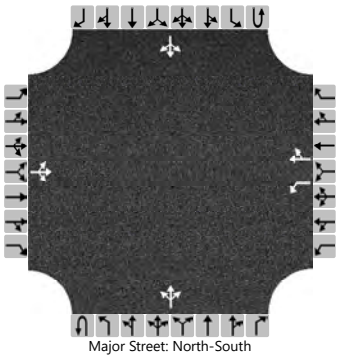
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Time Analyzed	3:45 - 4:45 PM
Intersection Orientation	North-South
Project Description	Wednesday PM No-Build

Site Information

Intersection	Menard Ave at Capulina Ave
Jurisdiction	Village of Morton Grove
East/West Street	Capulina Ave/Site Drive
North/South Street	Menard Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	1	0	0	0	1	0	0	0	1	0
Configuration			LTR			L		TR			LTR				LTR	
Volume (veh/h)		1	0	10		60	4	62		4	49	0		1	129	6
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			13			71		79		5				1		
Capacity, c (veh/h)			861			713		983		1431				1559		
v/c Ratio			0.02			0.10		0.08		0.00				0.00		
95% Queue Length, Q_{95} (veh)			0.0			0.3		0.3		0.0				0.0		
95% Queue Length, Q_{95} (ft)			0.0			7.5		7.5								
Control Delay (s/veh)			9.2			10.6		9.0		7.5	0.0	0.0		7.3	0.0	0.0
Level of Service (LOS)			A			B		A		A	A	A		A	A	A
Approach Delay (s/veh)	9.2				9.8				0.6				0.1			
Approach LOS	A				A				A				A			

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

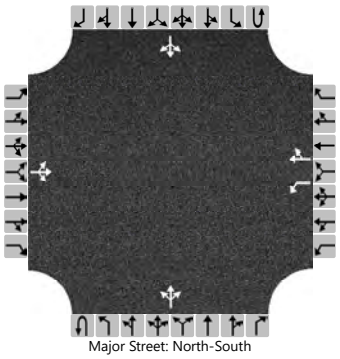
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Time Analyzed	3:45 - 4:45 PM
Intersection Orientation	North-South
Project Description	Wednesday PM Total

Site Information

Intersection	Menard Ave at Capulina Ave
Jurisdiction	Village of Morton Grove
East/West Street	Capulina Ave/Site Drive
North/South Street	Menard Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	1	0	0	0	1	0	0	0	1	0
Configuration			LTR			L		TR			LTR				LTR	
Volume (veh/h)		1	0	11		82	7	87		4	49	0		1	137	6
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			14			98		112		5				1		
Capacity, c (veh/h)			847			701		975		1419				1559		
v/c Ratio			0.02			0.14		0.11		0.00				0.00		
95% Queue Length, Q_{95} (veh)			0.1			0.5		0.4		0.0				0.0		
95% Queue Length, Q_{95} (ft)			2.5			12.5		10.0								
Control Delay (s/veh)			9.3			11.0		9.2		7.5	0.0	0.0		7.3	0.0	0.0
Level of Service (LOS)			A			B		A		A	A	A		A	A	A
Approach Delay (s/veh)		9.3				10.0				0.6				0.1		
Approach LOS		A				B				A				A		

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

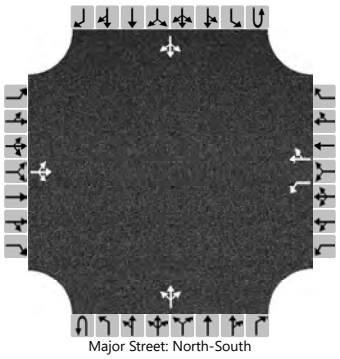
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2024
Time Analyzed	3:45 - 4:45 PM
Intersection Orientation	North-South
Project Description	Friday PM Existing

Site Information

Intersection	Menard Ave at Capulina Ave
Jurisdiction	Village of Morton Grove
East/West Street	Capulina Ave/Site Drive
North/South Street	Menard Ave
Peak Hour Factor	0.59
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	1	0	0	0	1	0	0	0	1	0
Configuration			LTR			L		TR			LTR				LTR	
Volume (veh/h)		7	1	20		78	83	8		32	62	0		3	88	12
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			47			132		154		54				5		
Capacity, c (veh/h)			638			516		544		1420				1499		
v/c Ratio			0.07			0.26		0.28		0.04				0.00		
95% Queue Length, Q_{95} (veh)			0.2			1.0		1.2		0.1				0.0		
95% Queue Length, Q_{95} (ft)			5.0			25.0		30.0								
Control Delay (s/veh)			11.1			14.4		14.2		7.6	0.3	0.3		7.4	0.0	0.0
Level of Service (LOS)			B			B		B		A	A	A		A	A	A
Approach Delay (s/veh)		11.1				14.3				2.8				0.2		
Approach LOS		B				B				A				A		

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

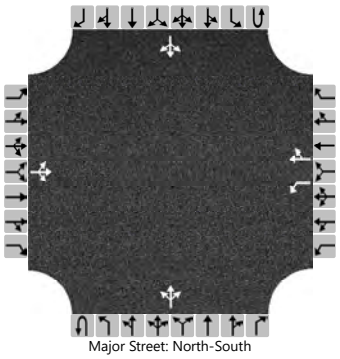
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Time Analyzed	3:45 - 4:45 PM
Intersection Orientation	North-South
Project Description	Friday PM No-build/Total

Site Information

Intersection	Menard Ave at Capulina Ave
Jurisdiction	Village of Morton Grove
East/West Street	Capulina Ave/Site Drive
North/South Street	Menard Ave
Peak Hour Factor	0.59
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	1	0	0	0	1	0	0	0	1	0
Configuration			LTR			L		TR			LTR				LTR	
Volume (veh/h)		7	1	21		78	83	8		33	64	0		3	91	12
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			49			132		154		56				5		
Capacity, c (veh/h)			635			505		535		1414				1495		
v/c Ratio			0.08			0.26		0.29		0.04				0.00		
95% Queue Length, Q_{95} (veh)			0.3			1.0		1.2		0.1				0.0		
95% Queue Length, Q_{95} (ft)			7.5			25.0		30.0								
Control Delay (s/veh)			11.1			14.6		14.4		7.7	0.3	0.3		7.4	0.0	0.0
Level of Service (LOS)			B			B		B		A	A	A		A	A	A
Approach Delay (s/veh)	11.1				14.5				2.8				0.2			
Approach LOS	B				B				A				A			

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

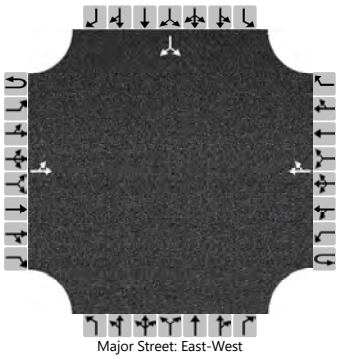
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2024
Time Analyzed	3:30 - 4:30 PM
Intersection Orientation	East-West
Project Description	Monday PM Existing

Site Information

Intersection	Theobald Ave at Site Drive
Jurisdiction	Village of Morton Grove
East/West Street	Theobald Avenue
North/South Street	Site Drive
Peak Hour Factor	0.75
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		63	87				54	62						0		3
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		84													4	
Capacity, c (veh/h)		1438													945	
v/c Ratio		0.06													0.00	
95% Queue Length, Q_{95} (veh)		0.2													0.0	
95% Queue Length, Q_{95} (ft)		5.0													0.0	
Control Delay (s/veh)		7.7	0.5												8.8	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	3.5												8.8			
Approach LOS	A												A			

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

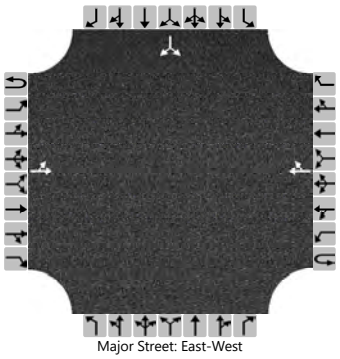
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Time Analyzed	3:30 - 4:30 PM
Intersection Orientation	East-West
Project Description	Monday PM No-Build

Site Information

Intersection	Theobald Ave at Site Drive
Jurisdiction	Village of Morton Grove
East/West Street	Theobald Avenue
North/South Street	Site Drive
Peak Hour Factor	0.75
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		63	92				56	62						0		3
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		84													4	
Capacity, c (veh/h)		1435													942	
v/c Ratio		0.06													0.00	
95% Queue Length, Q_{95} (veh)		0.2													0.0	
95% Queue Length, Q_{95} (ft)		5.0													0.0	
Control Delay (s/veh)		7.7	0.5												8.8	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	3.4												8.8			
Approach LOS	A												A			

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

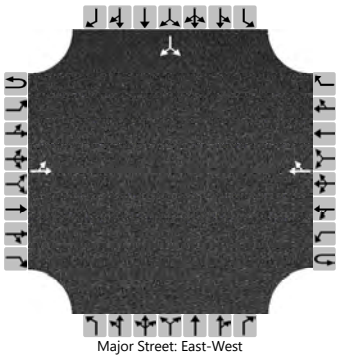
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Time Analyzed	3:30 - 4:30 PM
Intersection Orientation	East-West
Project Description	Monday PM Total

Site Information

Intersection	Theobald Ave at Site Drive
Jurisdiction	Village of Morton Grove
East/West Street	Theobald Avenue
North/South Street	Site Drive
Peak Hour Factor	0.75
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		103	93				56	72						0		3
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		137													4	
Capacity, c (veh/h)		1419													934	
v/c Ratio		0.10													0.00	
95% Queue Length, Q_{95} (veh)		0.3													0.0	
95% Queue Length, Q_{95} (ft)		7.5													0.0	
Control Delay (s/veh)		7.8	0.8												8.9	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	4.5												8.9			
Approach LOS	A												A			

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

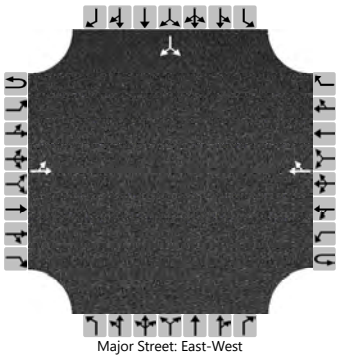
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2024
Time Analyzed	3:30 - 4:30 PM
Intersection Orientation	East-West
Project Description	Wednesday PM Existing

Site Information

Intersection	Theobald Ave at Site Drive
Jurisdiction	Village of Morton Grove
East/West Street	Theobald Avenue
North/South Street	Site Drive
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		71	85				68	55						1		1
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		85													2	
Capacity, c (veh/h)		1448													722	
v/c Ratio		0.06													0.00	
95% Queue Length, Q_{95} (veh)		0.2													0.0	
95% Queue Length, Q_{95} (ft)		5.0													0.0	
Control Delay (s/veh)		7.6	0.5												10.0	
Level of Service (LOS)		A	A												B	
Approach Delay (s/veh)	3.7												10.0			
Approach LOS	A												B			

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

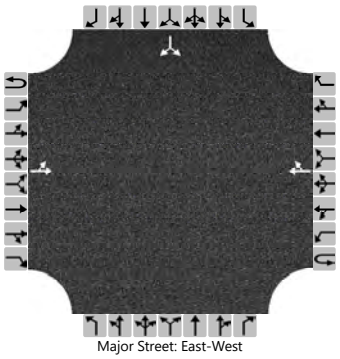
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2024
Time Analyzed	3:30 - 4:30 PM
Intersection Orientation	East-West
Project Description	Wednesday PM No-Build

Site Information

Intersection	Theobald Ave at Site Drive
Jurisdiction	Village of Morton Grove
East/West Street	Theobald Avenue
North/South Street	Site Drive
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		71	90				70	55						1		1
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		85													2	
Capacity, c (veh/h)		1445													716	
v/c Ratio		0.06													0.00	
95% Queue Length, Q_{95} (veh)		0.2													0.0	
95% Queue Length, Q_{95} (ft)		5.0													0.0	
Control Delay (s/veh)		7.6	0.5												10.0	
Level of Service (LOS)		A	A												B	
Approach Delay (s/veh)	3.6												10.0			
Approach LOS	A												B			

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

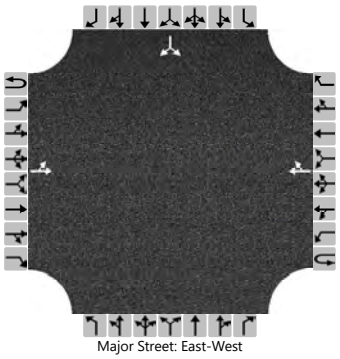
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Time Analyzed	3:30 - 4:30 PM
Intersection Orientation	East-West
Project Description	Wednesday PM Total

Site Information

Intersection	Theobald Ave at Site Drive
Jurisdiction	Village of Morton Grove
East/West Street	Theobald Avenue
North/South Street	Site Drive
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		111	91				70	65						1		1
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		132													2	
Capacity, c (veh/h)		1431													638	
v/c Ratio		0.09													0.00	
95% Queue Length, Q_{95} (veh)		0.3													0.0	
95% Queue Length, Q_{95} (ft)		7.5													0.0	
Control Delay (s/veh)		7.8	0.8												10.7	
Level of Service (LOS)		A	A												B	
Approach Delay (s/veh)		4.6												10.7		
Approach LOS		A												B		

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

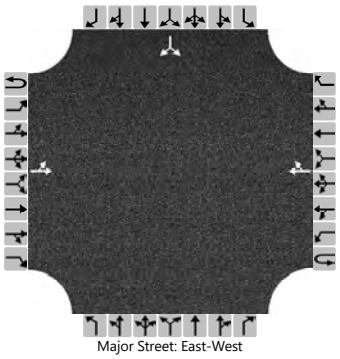
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2024
Time Analyzed	2:00 -3:00 PM
Intersection Orientation	East-West
Project Description	Friday PM Existing

Site Information

Intersection	Theobald Ave at Site Drive
Jurisdiction	Village of Morton Grove
East/West Street	Theobald Avenue
North/South Street	Site Drive
Peak Hour Factor	0.59
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		72	131				80	48						3		2
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		122													8	
Capacity, c (veh/h)		1365													507	
v/c Ratio		0.09													0.02	
95% Queue Length, Q_{95} (veh)		0.3													0.1	
95% Queue Length, Q_{95} (ft)		7.5													2.5	
Control Delay (s/veh)		7.9	0.8												12.2	
Level of Service (LOS)		A	A												B	
Approach Delay (s/veh)	3.3												12.2			
Approach LOS	A												B			

Copyright © 2024 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

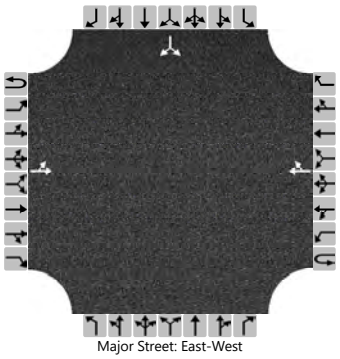
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	6/13/2024
Analysis Year	2029
Time Analyzed	2:00 -3:00 PM
Intersection Orientation	East-West
Project Description	Friday PM No-Build/Total

Site Information

Intersection	Theobald Ave at Site Drive
Jurisdiction	Village of Morton Grove
East/West Street	Theobald Avenue
North/South Street	Site Drive
Peak Hour Factor	0.59
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		72	137				83	48						3		2
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

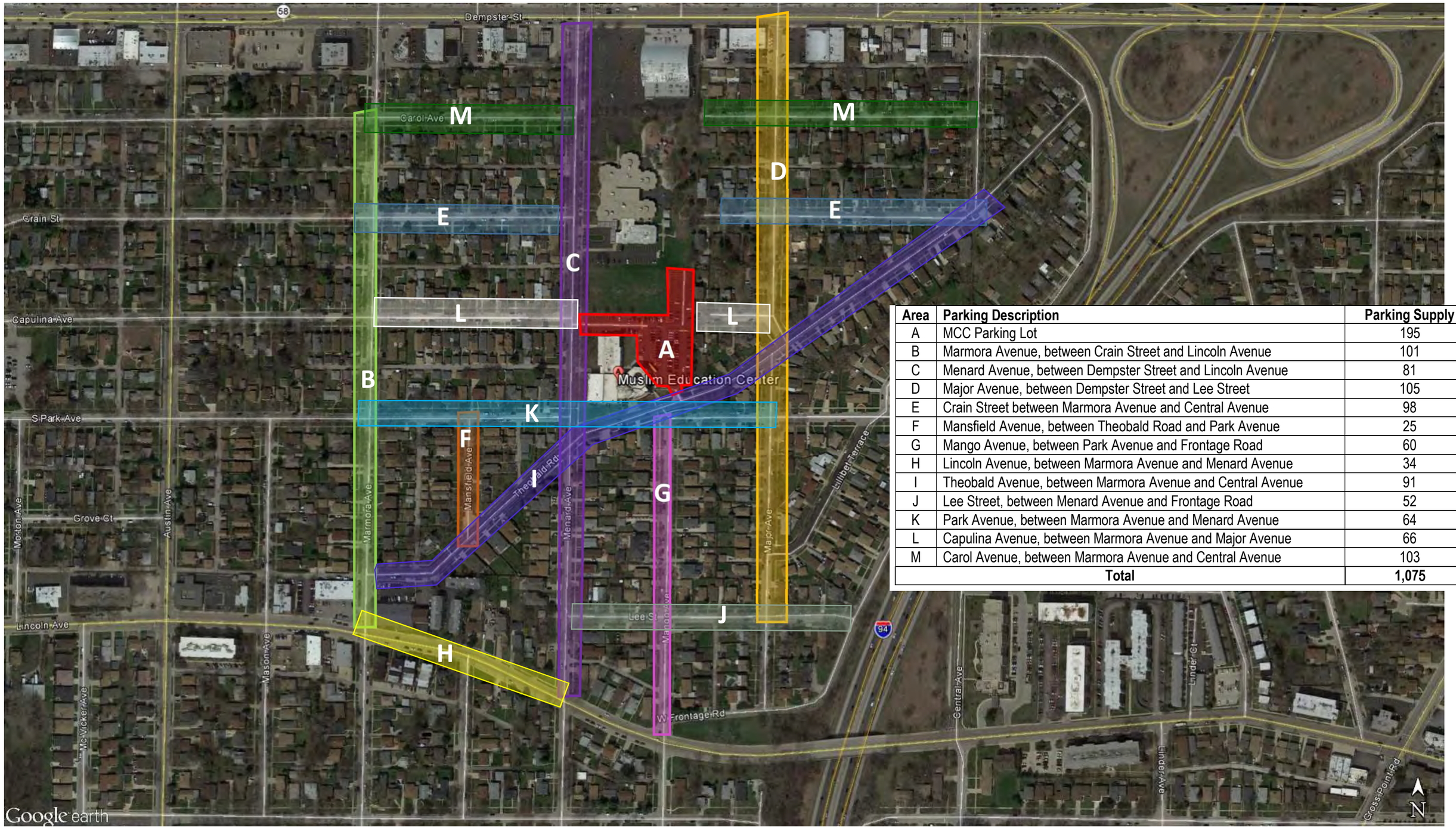
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		122													8	
Capacity, c (veh/h)		1359													498	
v/c Ratio		0.09													0.02	
95% Queue Length, Q_{95} (veh)		0.3													0.1	
95% Queue Length, Q_{95} (ft)		7.5													2.5	
Control Delay (s/veh)		7.9	0.8												12.4	
Level of Service (LOS)		A	A												B	
Approach Delay (s/veh)	3.3												12.4			
Approach LOS	A												B			

Copyright © 2024 University of Florida. All Rights Reserved.

APPENDIX H
Parking Occupancy Summary



Area	Parking Description	Parking Supply
A	MCC Parking Lot	195
B	Marmora Avenue, between Crain Street and Lincoln Avenue	101
C	Menard Avenue, between Dempster Street and Lincoln Avenue	81
D	Major Avenue, between Dempster Street and Lee Street	105
E	Crain Street between Marmora Avenue and Central Avenue	98
F	Mansfield Avenue, between Theobald Road and Park Avenue	25
G	Mango Avenue, between Park Avenue and Frontage Road	60
H	Lincoln Avenue, between Marmora Avenue and Menard Avenue	34
I	Theobald Avenue, between Marmora Avenue and Central Avenue	91
J	Lee Street, between Menard Avenue and Frontage Road	52
K	Park Avenue, between Marmora Avenue and Menard Avenue	64
L	Capulina Avenue, between Marmora Avenue and Major Avenue	66
M	Carol Avenue, between Marmora Avenue and Central Avenue	103
Total		**1,075**

GHA GEWALT HAMILTON ASSOCIATES, INC.

Appendix H
Parking Survey Map

Appendix H
MCC Academy Parking Occupancy Survey
Date: Monday June 3, 2024

Parking Description		Parking Type	Parking Supply	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
Parking Areas										
A. MCC Parking Lot		Parking Lot	195	42	45	36	12	10	18	20
B. Marmora Ave	Carol - Crain	West Side	11	1	0	0	1	0	0	0
		East Side	12	1	1	2	1	3	3	2
	Crain - Capulina	West Side	12	1	3	3	3	1	2	2
		East Side	12	3	1	3	3	2	2	2
	Capulina - S Park	West Side	10	0	0	0	1	0	0	0
		East Side	10	1	0	0	0	0	0	0
	S Park - Theobald	West Side	14	4	6	6	6	5	5	6
		East Side	20	5	6	6	9	5	4	7
C. Menard Ave	Dempster - Carol	West Side	X	X	X	X	X	X	X	X
		East Side	6	0	0	0	0	0	0	0
	Carol - Crain	West Side	8	2	1	0	1	1	0	0
		East Side	X	X	X	1	X	X	X	X
	Crain - Capulina	West Side	9	1	1	0	0	0	0	1
		East Side	X	X	X	1	X	X	X	X
	Capulina - S Park	West Side	10	0	0	0	0	0	0	1
		East Side	X	X	X	X	X	X	X	X
	S Park - Lee	West Side	16	2	1	1	0	1	2	2
		East Side	16	1	2	1	2	5	2	2
	Lee - Lincoln	West Side	8	0	0	1	0	0	1	2
		East Side	8	2	1	0	1	1	1	2
D. Major Ave	Dempster - Carol	West Side	8	0	0	0	0	0	0	0
		East Side	8	0	0	0	0	0	0	0
	Carol - Crain	West Side	8	1	4	3	3	3	4	2
		East Side	9	2	0	2	2	1	2	2
	Crain - Theobald	West Side	10	1	1	1	1	1	1	1
		East Side	12	1	0	0	1	1	0	1
	Thoebald - S Park	West Side	4	1	2	2	3	2	2	2
		East Side	5	2	1	1	0	0	0	0
	S Park - Lee	West Side	19	5	5	4	4	3	2	4
		East Side	22	3	2	2	2	2	3	2
E. Crain St	Mamora - Menard	North Side	22	7	7	9	10	7	9	10
		South Side	25	10	8	9	8	9	10	13
	Major - Dead End	North Side	8	3	3	3	4	3	6	4
		South Side	8	2	2	2	1	2	2	2
	Major - Theobald	North Side	18	2	3	3	4	4	3	4
		South Side	17	5	5	7	7	8	8	7
F. Mansfield Ave	Theobald - S Park	West Side	14	2	2	2	4	4	4	3
		East Side	11	3	4	4	5	3	3	2
G. Mango Ave	Lee - S Park	West Side	20	10	11	11	10	11	12	13
		East Side	20	2	2	2	3	3	4	5
	Lee - Lincoln	West Side	10	3	3	3	2	2	3	3
		East Side	10	0	0	0	0	0	0	0
H. Lincoln Ave	Mamora - Menard	North Side	19	3	4	5	5	6	7	6
		South Side	15	4	2	2	2	3	4	4
I. Theobald Ave	Mamora - Menard	North Side	X	X	X	X	X	X	X	X
		South Side	22	6	7	6	6	7	7	7
	S Park - Central	North Side	34	6	1	1	0	4	1	1
		South Side	35	3	1	0	0	3	0	1
J. Lee St	Menard - Major	North Side	18	1	2	2	1	1	1	1
		South Side	19	1	0	2	1	1	0	1
	Frontage - Major	North Side	8	4	4	4	4	4	4	4
		South Side	7	1	0	0	2	2	3	3
K. S Park Ave	Mamora - Mansfield	North Side	13	3	2	3	4	4	4	4
		South Side	11	1	1	1	2	2	2	2
	Mansfield - Menard	North Side	11	1	2	2	5	5	5	5
		South Side	11	1	1	1	1	2	2	2
	Mango - Major	North Side	11	8	9	9	10	10	9	9
		South Side	7	0	0	0	0	1	1	1
L. Capulina Ave	Major - Dead End	North Side	6	1	1	0	0	0	0	0
		South Side	7	1	1	2	1	1	1	1
	Mamora - Menard	North Side	26	8	8	9	8	9	8	10
		South Side	27	12	14	6	16	18	17	15
M. Carol Ave	Mamora - Menard	North Side	22	5	6	6	9	9	7	9
		South Side	25	10	7	8	8	9	8	9
	Major - Dead End	North Side	8	1	1	1	3	2	4	5
		South Side	7	1	1	1	0	0	3	3
	Major - Central	North Side	19	7	7	7	9	9	10	10
		South Side	22	4	4	6	5	6	7	9
Total Parking Spaces			1075	224	219	215	216	221	233	251
Percent Occupied			--	20.8%	20.4%	20.0%	20.1%	20.6%	21.7%	23.3%
Available Parking Spaces		Off-Street (Area A)		153	150	159	183	185	177	175
		On-Street (Areas B-M)		698	706	701	676	669	665	649
		Total		*851*	*856*	*860*	*859*	*854*	*842*	*824*

Key
100%-85% Occupied
85%-60% Occupied
60%-0% Occupied

Notes
X = Restricted or No Parking

GEWALT HAMILTON ASSOCIATES, INC.

Appendix H
MCC Academy Parking Occupancy Survey
Date: Wednesday June 5, 2024

Parking Description		Parking Type	Parking Supply		2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
Parking Areas											
A. MCC Parking Lot		Parking Lot	195		42	43	39	90	95	105	20
B. Marmora Ave	Carol - Crain	West Side	11		0	0	0	0	0	0	0
		East Side	12		1	1	2	3	4	5	3
	Crain - Capulina	West Side	12		1	1	1	2	2	2	2
		East Side	12		3	1	1	2	1	2	2
	Capulina - S Park	West Side	10		0	0	0	1	0	0	0
		East Side	10		1	1	1	1	1	0	1
	S Park - Theobald	West Side	14		3	3	4	6	7	6	7
		East Side	20		7	8	7	7	8	5	8
C. Menard Ave	Dempster - Carol	West Side	X		X	X	X	X	X	X	X
		East Side	6		0	0	0	0	0	0	0
	Carol - Crain	West Side	8		2	3	1	2	2	5	0
		East Side	X		X	X	X	X	X	X	X
	Crain - Capulina	West Side	9		1	0	0	1	0	1	1
		East Side	X		X	X	X	X	X	X	X
	Capulina - S Park	West Side	10		0	0	1	1	0	1	1
		East Side	X		X	X	X	X	X	X	X
	S Park - Lee	West Side	16		1	1	1	3	4	3	3
		East Side	16		0	1	1	1	1	1	2
	Lee - Lincoln	West Side	8		1	1	1	2	1	1	1
		East Side	8		0	0	0	0	1	1	2
D. Major Ave	Dempster - Carol	West Side	8		7	4	5	1	1	2	1
		East Side	8		6	7	6	1	2	1	2
	Carol - Crain	West Side	8		3	2	2	2	3	3	3
		East Side	9		2	2	2	3	3	2	4
	Crain - Theobald	West Side	10		1	1	1	1	1	1	1
		East Side	12		3	2	3	3	2	2	2
	Thoebald - S Park	West Side	4		2	2	2	2	2	2	2
		East Side	5		1	0	0	0	0	1	1
	S Park - Lee	West Side	19		5	6	5	5	5	5	4
		East Side	22		1	1	2	1	1	2	2
E. Crain St	Mamora - Menard	North Side	22		6	6	5	7	9	7	10
		South Side	25		6	9	10	8	12	12	13
	Major - Dead End	North Side	8		1	4	2	2	2	2	4
		South Side	8		2	2	2	1	1	1	2
	Major - Theobald	North Side	18		3	3	4	2	3	3	4
		South Side	17		6	7	7	7	6	6	7
F. Mansfield Ave	Theobald - S Park	West Side	14		5	5	5	4	3	3	5
		East Side	11		2	2	2	2	3	2	2
G. Mango Ave	Lee - S Park	West Side	20		8	9	11	11	11	10	10
		East Side	20		0	1	1	3	3	3	4
	Lee - Lincoln	West Side	10		4	4	4	4	4	4	4
		East Side	10		0	0	0	0	1	0	1
H. Lincoln Ave	Mamora - Menard	North Side	19		5	4	5	5	5	3	5
		South Side	15		4	4	4	5	5	5	5
I. Theobald Ave	Mamora - Menard	North Side	X		X	X	X	X	X	X	X
		South Side	22		1	2	4	3	4	3	7
	S Park - Central	North Side	34		5	5	5	4	4	4	3
		South Side	35		2	2	0	2	2	2	3
J. Lee St	Menard - Major	North Side	18		2	3	2	2	3	3	2
		South Side	19		1	1	1	1	1	2	2
	Frontage - Major	North Side	8		4	5	4	4	4	4	4
		South Side	7		1	1	1	0	2	2	2
K. S Park Ave	Mamora - Mansfield	North Side	13		4	4	5	5	4	4	4
		South Side	11		2	3	2	2	2	2	2
	Mansfield - Menard	North Side	11		3	1	3	5	6	4	5
		South Side	11		1	2	2	2	2	3	2
	Mango - Major	North Side	11		7	8	8	7	8	8	7
		South Side	7		0	0	1	0	0	0	1
L. Capulina Ave	Major - Dead End	North Side	6		3	2	2	2	2	3	1
		South Side	7		0	1	1	1	1	1	2
	Mamora - Menard	North Side	26		6	8	7	6	6	10	11
		South Side	27		8	15	11	14	11	11	14
M. Carol Ave	Mamora - Menard	North Side	22		5	10	7	8	6	6	8
		South Side	25		9	9	8	9	7	6	10
	Major - Dead End	North Side	8		1	2	1	2	3	4	5
		South Side	7		1	0	0	1	2	1	2
	Major - Central	North Side	19		8	5	6	9	8	8	8
		South Side	22		7	5	4	7	6	7	8
Total Parking Spaces			1075		227	245	235	298	309	318	250
Percent Occupied			--		21.1%	22.8%	21.9%	27.7%	28.7%	29.6%	23.2%
Available Parking Spaces		Off-Street (Area A)			153	152	156	105	100	90	175
		On-Street (Areas B-M)			695	678	684	672	666	667	651
		Total			*848*	*830*	*840*	*777*	*766*	*757*	*826*

Key
100%-85% Occupied
85%-60% Occupied
60%-0% Occupied

Notes
X = Restricted or No Parking

GEWALT HAMILTON ASSOCIATES, INC.

Appendix H
MCC Academy Parking Occupancy Survey
Date: Friday, June 7, 2024

Parking Description		Parking Type	Parking Supply		2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
Parking Areas											
A. MCC Parking Lot		Parking Lot	195		127	100	12	18	35	54	38
B. Marmora Ave	Carol - Crain	West Side	11		0	2	0	0	0	0	0
		East Side	12		1	2	2	4	4	3	4
	Crain - Capulina	West Side	12		2	1	3	1	2	2	1
		East Side	12		2	3	3	3	2	1	1
	Capulina - S Park	West Side	10		3	2	2	1	1	0	0
		East Side	10		1	2	2	1	1	1	1
	S Park - Theobald	West Side	14		6	6	6	7	7	9	8
		East Side	20		10	10	8	9	9	9	8
C. Menard Ave	Dempster - Carol	West Side	X		X	X	X	X	X	X	X
		East Side	6		0	0	0	0	0	0	0
	Carol - Crain	West Side	8		2	2	1	0	0	0	0
		East Side	X		X	X	X	X	X	X	X
	Crain - Capulina	West Side	9		4	1	0	0	0	0	0
		East Side	X		X	X	X	X	X	X	X
	Capulina - S Park	West Side	10		7	0	1	0	1	1	0
		East Side	X		X	X	X	X	X	X	X
	S Park - Lee	West Side	16		3	0	1	4	3	3	3
		East Side	16		6	1	2	3	5	3	2
	Lee - Lincoln	West Side	8		0	0	0	0	0	0	0
		East Side	8		1	2	2	2	2	2	2
D. Major Ave	Dempster - Carol	West Side	8		4	3	5	4	4	4	1
		East Side	8		5	6	6	2	0	1	3
	Carol - Crain	West Side	8		4	5	5	4	3	3	3
		East Side	9		5	6	5	4	4	5	5
	Crain - Theobald	West Side	10		6	2	1	1	2	1	1
		East Side	12		5	2	1	1	1	2	3
	Thoebald - S Park	West Side	4		5	2	2	2	2	2	2
		East Side	5		3	0	0	0	0	0	2
	S Park - Lee	West Side	19		6	4	3	4	4	4	3
		East Side	22		3	3	2	2	2	2	2
E. Crain St	Mamora - Menard	North Side	22		8	9	12	10	10	8	10
		South Side	25		13	8	11	8	11	10	13
	Major - Dead End	North Side	8		3	5	2	2	3	3	3
		South Side	8		4	3	3	3	3	2	2
	Major - Theobald	North Side	18		3	4	3	3	2	3	3
		South Side	17		6	2	4	5	6	5	6
F. Mansfield Ave	Theobald - S Park	West Side	14		6	4	7	7	6	5	6
		East Side	11		5	3	4	3	3	3	2
G. Mango Ave	Lee - S Park	West Side	20		17	9	8	7	7	8	7
		East Side	20		12	2	2	2	3	5	3
	Lee - Lincoln	West Side	10		5	4	4	4	4	5	4
		East Side	10		0	0	0	1	1	1	2
H. Lincoln Ave	Mamora - Menard	North Side	19		3	5	5	5	5	4	3
		South Side	15		2	2	3	5	6	7	6
I. Theobald Ave	Mamora - Menard	North Side	X		X	X	X	X	X	X	X
		South Side	22		10	7	7	7	6	6	6
	S Park - Central	North Side	34		23	6	5	2	3	3	4
		South Side	35		21	8	5	4	4	3	4
J. Lee St	Menard - Major	North Side	18		4	4	3	2	3	2	2
		South Side	19		1	1	0	1	3	1	3
	Frontage - Major	North Side	8		4	1	1	3	3	4	3
		South Side	7		1	1	1	1	1	1	1
K. S Park Ave	Mamora - Mansfield	North Side	13		3	4	3	2	3	2	3
		South Side	11		3	3	2	2	1	1	1
	Mansfield - Menard	North Side	11		6	4	4	4	4	4	4
		South Side	11		5	3	3	2	2	2	2
	Mango - Major	North Side	11		10	5	7	6	5	6	4
		South Side	7		7	1	0	0	0	1	1
L. Capulina Ave	Major - Dead End	North Side	6		10	3	3	3	4	2	2
		South Side	7		8	0	0	0	0	1	2
	Mamora - Menard	North Side	26		11	18	15	10	10	11	12
		South Side	27		16	10	8	11	10	12	13
M. Carol Ave	Mamora - Menard	North Side	22		4	5	5	6	8	7	7
		South Side	25		9	9	10	11	10	8	10
	Major - Dead End	North Side	8		1	1	1	2	3	3	5
		South Side	7		1	1	1	0	1	1	1
	Major - Central	North Side	19		5	8	7	8	6	6	6
		South Side	22		6	9	6	5	7	7	7
Total Parking Spaces			1075		477	339	240	234	261	275	266
Percent Occupied			--		44.4%	31.5%	22.3%	21.8%	24.3%	25.6%	24.7%
Available Parking Spaces		Off-Street (Area A)			68	95	183	177	160	141	157
		On-Street (Areas B-M)			530	641	652	664	654	659	652
		Total			*598*	*736*	*835*	*841*	*814*	*800*	*809*

Key
100%-85% Occupied
85%-60% Occupied
60%-0% Occupied

Notes
X = Restricted or No Parking

GEWALT HAMILTON ASSOCIATES, INC.