

VILLAGE OF MORTON GROVE

Plan Commission Agenda

May 18, 2020 - 7:00 P.M.

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

I. <u>CALL TO ORDER</u>

II. APPROVAL OF MINUTES OF: December 16, 2019

III. <u>ITEMS TO BE CONTINUED</u>

None

IV. PUBLIC HEARINGS

CASE: PC 20-01

APPLICANT: Menard, Inc.

5101 Menard Drive Eau Claire, WI 54703

LOCATION: 6301 Oakton Street

Morton Grove, IL 60053

<u>PETITION:</u> Request for approval of an amendment to Special Use Permits (Ord. 01-06, 05-08,

13-14, and 18-06) to authorize the expansion of a home improvement center and

approve an associated parking waiver

CASE: PC 20-03*

APPLICANT: Village of Morton Grove

6101 Capulina Avenue Morton Grove, IL 60053

LOCATION: 6101 Capulina Avenue

Morton Grove, IL 60053

<u>PETITION:</u> Request for amendments to Sections 12-3-6 and 12-17-1 of the Morton Grove Unified

Development Code regarding the regulation of telecommunications antennas, support

structures, and ancillary equipment

* Staff requests a continuation of PC 20-03 to the next regularly scheduled meeting of the Plan Commission (June 15, 2020) to allow further review and preparation by

staff

V. OTHER BUSINESS

None

VI. <u>CLOSE MEETING</u>

In response to ongoing restrictions and recommendations in place due to the COVID-19 pandemic, and in accordance with Section 6 of State of Illinois Executive Order 2020-07, the Village is inviting Plan Commission and public participation through virtual attendance as an alternative to in-person attendance.

Attend PC Zoom Meeting Online: https://zoom.us/j/8479654100

Attend PC Zoom Meeting by Phone: Call: (312) 626-6799 Meeting ID: 847 965 4100

Note that all persons are still welcome to attend the public meeting in-person as regularly scheduled. Social distancing measures will be in place to ensure the safety of the public and Village staff. All persons attending the meeting in-person must wear a face covering. All persons in attendance, whether by phone, computer, or in-person, will have the opportunity to be heard during periods of public comment. All interested parties are invited to attend.

MINUTES OF THE DECEMBER 16, 2019 MEETING OF THE PLAN COMMISSION VILLAGE HALL 6101 CAPULINA, MORTON GROVE, IL 60053

Pursuant to proper notice in accordance with the Open Meetings Act, the regular meeting of the Plan Commission was called to order at 7:00 by Chairperson Blonz. Secretary Sheehan called the role.

Members of the Commission Present: Blonz, Kintner, Gillespie, Khan, Dorgan

Commission Absent: Mohr, Gabriel

Village Staff Present: Zoe Heidorn, Zoning and Land Use Planner,

Jim English, Manager Building and Inspectional

Services

Trustees Present: Thill, Minx, Grear

Chairperson Blonz described the procedures for the meeting. The Village and the applicant will present the case and the commission may ask questions of the applicant. Then anyone from the audience will be allowed to speak.

Chairperson Blonz proceeded to seek approval of the November 18, 2019 minutes. Commissioner Gillespie moved to approve the minutes of November 18, 2019 Commissioner Kintner seconded the motion.

Chairperson Blonz called for the vote.

Commissioner Khan voting abstain
Commissioner Dorgan voting abstain
Commissioner Kintner voting aye
Commissioner Gillespie voting aye
Chairperson Blonz voting aye

Minutes approved.

Chairperson Blonz called for the first case.

CASE PC 19-10

APPLICANT: Matthew Schubert, MTS Investments, LLC

1200 Shermer Road, Suite 300

Northbrook, IL 60062

LOCATION: 6100 Dempster Street
Morton Grove, IL 60053

PETITION: Request for a Special Use Permit for "automotive repair (oil change, tires, brakes, auto glass, other mechanical items only)" in the C-1 General Commercial District in accordance with Section 12-4-3:D of the Village of Morton Grove Unified Development Code.

Ms. Heidorn reviewed the application from MTS Investments, LLC requesting a special use permit for mechanical automotive repair at 6100 Dempster St which was formerly occupied by Merlin's Automotive repair shop. ProAuto is a new business with no existing locations and will be managed by H & S Enterprises, LLC. With the exception of minor interior and exterior cosmetic improvements and new signage, no physical changes are proposed to the property and as such no appearance commission review was required for this case. The applicant submitted a traffic and parking study and the Traffic Safety commission recommended approval on this case with conditions that have been accepted by the applicant. The recommendation is to reserve 19 of the 24 parking spaces for use by customers, employees and vehicles waiting repair or pick-up and parked for less than 24 hours. Based on the staff review, there are 12 recommendations of conditions that the applicant has agreed upon.

Chairperson Blonz asked for questions from the Commissioners.

Commissioner Kintner asked about the chemical storage on the property. Ms. Heidorn stated that would be part of the inspection process with building and fire and approval will be made thru the occupancy inspection. Mr. English confirmed this is enforced thru the ordinances not building codes.

The applicant's attorney Joan Berg presented the case for a special use for an auto shop for maintenance and is not an auto body shop. There are 5 bays for maintenance that will be conducted during business hours of 8:30am to 5pm with respect to the neighborhoods surrounding the business. There will be 4-5 cars worked on at one time and any waiting for maintenance will be in que parked within the stripped area parking in the lot. Any cars remaining overnight will be parked within the service bay. If a car should be towed to the shop it will not remain outside for no more than 24 hours. One of the concerns from staff was the curb cut which will be addressed based on the recommendations for approval.

Chairperson Blonz asked for questions from the commissioners.

Commissioner Dorgan asked what "other mechanical items" mean in the petition. Ms. Berg explained mechanical is preventative maintenance. Leroy Hardegree was sworn in and stated the maintenance includes: tires, alignment, suspension etc. There will be 3 employees and as the work progresses, they will add more staff.

Chairperson Blonz questioned the hours of operation. Mr. Hardegree stated the hours will be Monday thru Saturday 8-5:30 and closed on Sunday.

Chairperson Blonz referred to the traffic study on page 14 was the level of service based on previous or new business. Ms. Heidorn stated the Village Engineer reviewed the traffic study and based on previous ownership he said the traffic will be insignificant. Chairperson Blonz also asked if the hydraulic equipment will be used that creates a high volume of noise. Mr. Hardegree stated there will be air tools used daily but they are also using electric tools that are quieter. The shop will be open on hot summer days that face the north side.

Commissioner Dorgan asked if there will be a drop off service with a lock box. Mr. Hardegree stated yes there will be a lock box for cars that are dropped off before business hours.

Commissioner Khan asked if the increase of staff was considered with the parking availability. Mr. Hardegree stated the staff level could increase as business increases. Ideally there will be 3 technicians, service consultant and a receptionist within 3 years of operation. That would be the full capacity of 6 employees. There are 24 parking spaces, 19 would be reserved for use by customers, employees and vehicles awaiting repair or pick-up. No more than 5 spaces will be used for the longer term storage of vehicles associated with the repair business.

Chairperson Blonz asked if there was anyone present that wanted to be heard. There was no response.

Chairperson Blonz asked if the applicant is aware and in agreement of the 12 recommendations from staff for approval. Ms. Berg stated yes, the applicant is in full agreement.

Chairperson Blonz called for a motion to approve Case PC 19-10.

Commissioner Kintner moved to approve Case PC 19-10, a request for a Special Use Permit for "automotive repair (oil change, tires, brakes, auto glass, other mechanical items only)" in the C-1 General Commercial District in accordance with Section 12-4-3:D of the Village of Morton Grove Unified Development Code for the property commonly known as 6100 Dempster Street in Morton Grove, Illinois (10-17-316-054-0000), with the following conditions:

- 1. The site and building shall be developed and operated consistent with the plans and supporting documents in the application, identified in this report and/or presented at the public hearing, subject to any necessary modifications to accommodate conditions, Commission recommendations, or code compliance requirements, in accordance with reviews by the Plan Commission and Village staff.
- 2. Of the twenty-four (24) on-site parking spaces, nineteen (19) spaces shall be reserved for use by customers, employees, and vehicles awaiting repair or pick-up and parked for less than a twenty-four-hour (24) period. No more than five (5) spaces shall be used for the longer term storage of vehicles associated with the repair business.
- 3. No more than one (1) tow truck may be parked on the subject property at any given time. All vehicle off-loading activities shall occur within the subject property boundary and shall occur between the hours of 6:00 AM and 10:00 PM.

- 4. The outdoor storage of any vehicle with obvious signs of disrepair shall not exceed twenty-four (24) hours. No outdoor storage of materials, parts, or trailers is permitted
- 5. A parking lot plan that complies with Illinois Accessibility Code and Village Code requirements shall be prepared for review by the Village Engineer and Land Use Planner, and the parking lot shall be improved in accordance with the approved plan prior to July 1, 2020.
- 6. Prior to July 1, 2020, the driveway along Meade Avenue shall be reduced in width in accordance with Village Standards, or a design vehicle and turning analysis must be submitted that adequately demonstrates the non-conforming width is needed to accommodate the proposed traffic.
- 7. All repair operations shall be performed inside the building and all overhead garage doors shall remain closed during repair operations.
- 8. A solid fence measuring no less than six feet (6') in height shall be maintained along the north lot line.
- 9. All vehicle parking and storage shall occur within conforming and visibly striped parking stalls.
- 10. Use of the parking lot shall be limited to the parking and storage of vehicles accessory to the automotive repair business.
- 11. All parking and storage of vehicles relating to the principal use shall occur within the subject property boundary.
- 12. Prior to the issuance of a certificate of occupancy, the Applicant shall submit an updated traffic and parking study in accordance with Village requirements and standards, for review and approval by the Village Engineer, and have responded to all comments and complied with all recommendations suggested by the Village Engineer and Traffic Safety Commission in the Plan Review Comment Forms dated December 6, 2018.

Commissioner Dorgan seconded the motion.

Chairperson Blonz called for the vote.

Commissioner Khan voting aye
Commissioner Gillespie voting aye
Commissioner Dorgan voting aye
Commissioner Kintner voting aye
Chairperson Blonz voting aye

Chairperson Blonz asked for any other business or discussion. Hearing none, Commissioner Dorgan moved to adjourn the meeting and seconded by Commissioner Gillespie. The motion approved unanimously pursuant to a voice vote at 7:30 pm.



Community & Economic Development Department



Incredibly Close 🦑 Amazingly Open

To: Chairperson Blonz and Members of the Plan Commission

From: Zoe Heidorn, Land Use Planner

Date: March 11, 2020 (Revised May 12, 2020)

Re: <u>Plan Commission Case PC 20-01:</u> Menard, Inc., requesting approval of an

amendment to Special Use Permits (Ord. 01-06, 05-08, 13-14, and 18-06) to authorize the expansion of a home improvement center and approve an associated parking waiver. The parcel is located in the C1 General Commercial

District and is commonly known as 6301 Oakton Street.

STAFF REPORT

Public Notice

The Village of Morton Grove provided public notice for the March 16, 2020, Plan Commission public hearing for PC 20-01 in accordance with the Unified Development Code. The *Morton Grove Champion* published a public notice on February 27, 2020. The Village mailed letters on February 24, 2020, notifying surrounding property owners and placed a public notice sign on the subject property on February 24, 2020. When the March 16, 2020, and the April 20, 2020, meetings of the ZBA were cancelled due to the ongoing COVID-19 pandemic, the Village provided public notice that all agenda items are to be heard at the May 18, 2020, meeting of the ZBA. On May 8, 2020, the Village mailed letters notifying surrounding property owners of the opportunity to attend the May 18 public hearing for PC 20-01 by Zoom as an alternative to in-person attendance.

Background

The Subject Property

The subject property measures 23.38 acres in area and is located on the south side of Oakton Street, on the north side of Kirk Street, and between Nagle and Lehigh Avenues. A private roadway, River Drive, bisects the property and connects Oakton Street with Kirk Street. The overall site has the common property address of 6301 Oakton Street and is zoned in the C1 General Commercial District.



Subject Property

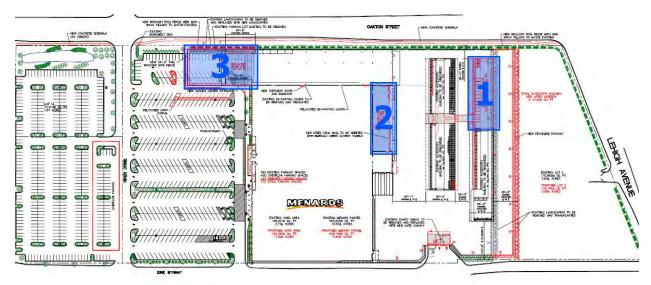
The Surrounding Area

Directly north of the subject property, across Oakton Street, is the Oakton Plaza Business Center, which features a mix of light industrial and office uses, and a manufacturing facility owned and operated by

John Crane. To the immediate west is International Spring Company, a spring manufacturer, and to the east, across Lehigh Avenue and two rail tracks, is Block Steel Corporation, a steel distributor located in Skokie. To the south of the subject property, across Kirk Street, is a mix of manufacturing, distribution, and automotive uses.

Overview of the Application

Menard, Inc., ("Applicant" and "Owner") submitted a complete application to the Department of Community and Economic Development requesting approval of an amendment to Special Use Permits approved under Ordinances 01-06, 05-08, 13-14, and 18-06. The requested amendment will authorize an expansion of the existing home improvement center. Menard, Inc., is seeking to expand three portions of the existing facility: (1) a 15,070-square-foot expansion of the eastern outdoor warehouse building, (2) an 8,092-square-foot addition of heated storage and pick-up space to the east of the principal structure, and (3) a 7,103-square foot expansion of the garden center to the west of the principal structure.



(1) Eastern Outdoor Warehouse Building: 15,070 square feet of additional roofed outdoor storage area will be added to the easternmost accessory outdoor storage building. The green steel exterior and white roof of the existing building will be carried through to the expansion. The existing and future accessory warehouse space will be screened from public view by solid wood screening and landscaping to the east, which is to be relocated approximately 68.7 feet east to accommodate an additional drive aisle and improve circulation around the warehouse buildings. New wrought iron fencing, brick pillars, and landscaping will also extend eastward along the north lot line to provide enclosure and screening of the yard area along Oakton Street.

(2) Pick-Up Area Enclosure: 8,092 square feet of heated storage area will be constructed as an addition to the principal structure and will serve as a pick-up area for customers. The area is currently under the **store's roof but is unenclosed.** The heated enclosure is intended to accommodate an increasing demand for online sales and in-store pick-up as Menards competes with online retailers. The expanded yard pick-up area will be supported by a new automated gate at the existing Kirk Street yard entrance that can be accessed with a scanned barcode. The existing guard shack, which currently provides public access to **Menards' yard area,** will be removed.

(3) Garden Center Addition: A 7,103-square-foot garden center addition is proposed to be constructed at the northwest corner of the principal structure. A garden center is currently located within the northeast corner of the existing building. An open plant storage area measuring approximately 100 feet in length and width will be installed directly west of the garden center addition to accommodate outdoor plant sales. The outdoor plant storage and sales area will be enclosed by new 14-foot wrought iron fencing, with brick pillars located along Oakton Street to match the existing.

<u>Parking</u>: The existing home improvement center has 382 dedicated off-street parking spaces, not including any of the stalls located west of River Drive. The proposed garden center addition and outdoor plant storage and sales area will cause a reduction of 57 parking spaces at the northeast corner of the parking lot. In order to offset the loss of stalls, the applicant is proposing to allocate 50 parking spaces **located west of River Drive for use by Menards employees and customers. The property owner's long**-term plan is to subdivide the property along River Drive to allow for the redevelopment of the western parking lot, at which point, the 50 parking spaces will be required to be dedicated to the home improvement center use through lot division or a shared parking agreement. In total, the applicant is proposing a total of 375 dedicated off-street parking spaces. A traffic and parking impact study was submitted by the applicant in order to substantiate the request for a parking variation, and will be discussed in the following sections.

Stormwater Management

Due to a proposed increase in impervious surface area, the applicant is required by the Village to provide additional on-site stormwater storage. The applicant submitted a narrative outlining the proposed stormwater management improvements, including new storm drains and additional storage volume within a detention basin located on the eastern outlot. The stormwater narrative prepared by C.M. Lavoie & Associates is provided in the hearing packet for PC 20-01.

Past Special Use Permit Ordinances

Ordinance 01-06 — In 2001, the Village rezoned 6301 Oakton Street from M2, General Manufacturing, to C2, Service Commercial District, to allow Menard, Inc., to construct and operate a home improvement center. The C2 District was later converted Village-wide to the C1 General Commercial District. In addition to the Map Amendment to rezone the property, the Village granted Menards a Special Use Permit to operate an outdoor sales and storage area under Ordinance 01-06. A staff report prepared in the case of PC 00-07 stated that the proposed home improvement center was required to provide a minimum of 324 parking spaces, based on a requirement of 1 space per 500 square feet for building material sales.

Ordinance 05-08 – In 2005, the Board of Trustees approved an amendment to the Special Use Permit authorized under Ordinance 01-06 to expand the outdoor sales area. The expansion resulted in a reduction of 412 to 406 parking spaces, well within the previously approved off-street parking requirement of 324 spaces.

Ordinance 13-14 — In 2013, Ordinance 13-14 was approved to allow the installation of a new propane filling station located within the southeast portion of the parking lot, to be used only by certified Menards employees. At the time, staff calculated that <u>385 parking spaces</u> were required to serve existing and proposed uses on the site, based on the off-street parking requirements for home improvement centers, warehouse space uses, and propane fill stations. However, Ordinance 13-14 authorized a reduction of required parking from 385 to 375 parking spaces. The reduction was requested as the result of the filling station's placement and in order to improve the safety of surrounding traffic circulation. Menard, Inc., supported the request by providing parking data collected by Menards staff on a weekend in May, which is one of the business's busiest times of year, according to the applicant. The following chart includes the 2013 data:

Data	Number of Parked Vehicles Observed					
Date	12:00 PM	1:00 PM	2:00 PM			
5/17/13 (Friday)	322	278	261			
5/18/13 (Saturday)	317	326	287			

With data demonstrating a peak parking demand of 326 parking spaces, the Plan Commission recommended and the Board of Trustees approved a reduced parking requirement of 375 parking spaces.

Ordinance 18-06 – In 2018, the Board of Trustees approved a minor amendment to previous ordinances to allow for a Public Utility and Public Service Use on the eastern portion of the subject property, an unimproved outlot measuring 5.7 acres in area. The outlot was to serve as a short-term

storage yard to support the construction of a new public water supply system for the Villages of Morton Grove and Niles. The applicant, DiMeo Brothers, was authorized to use the outlot between April 1, 2018, and March 31, 2019, at which time the site was to be restored to previously approved conditions upon termination of the public infrastructure improvement project.

While the new public water supply system is now completed and the Special Use Permit authorizing DiMeo's activities is now expired, the area continues to be used as a storage yard by DiMeo for projects unrelated to the water supply system. In order to ensure that the unauthorized activity comes to an end, staff recommends the following condition of approval: (1) All activity associated with Dimeo Construction Company occurring within the eastern outlot shall cease and a complete permit application to restore the site to previously approved conditions shall be submitted to the Village within sixty (60) days of the Plan Commission's recommendation of approval to the Board of Trustees. Site restoration shall commence no more than thirty (30) days from the date of permit issuance and shall be completed no more than ninety (90) days from the date of permit issuance. The Village Administrator may modify the terms of this requirement as deemed appropriate.

Traffic and Parking Impact

Per Section 12-7-3:B of the Unified Development Code, proposed parking standards identified in the code as "Required Spaces By Use" shall be advisory for Special Use Permit applications, as required parking will be reviewed and established as part of the Special Use Permit. The final number of required parking spaces for Special Use Permits is determined by the Village Board and is based on the submitted, independent traffic and parking impact study and any recommendations made by the Traffic Safety Commission, Plan Commission, and staff.

Menard, Inc., submitted a parking and traffic impact study in accordance with the Unified Development Code to demonstrate that the proposed off-street parking is sufficient to meet the peak demand of the existing and proposed activities occurring on the site. Engineering firm **Kenig, Lindgren, O'Hara, Aboona,** Inc. (KLOA), collected parking data on January 9 (Thursday), January 10 (Friday), and January 17 (Saturday) of 2020 and concluded that the peak parking occupancy was 255 vehicles. KLOA then provided three projections for increased demand associated with the proposed project, the greatest of which was an additional 24 required parking spaces. KLOA projected that the peak demand will be 279 vehicles (255 + 24 = 279), to occur at 3:00 PM on a Saturday.

Staff raised concerns with the methodology, noting that the collected data in January, 2020, indicated a peak demand of 255 vehicles, but that the data collected in May, 2013, indicated a peak demand of 326 vehicles. Menards and Village staff concluded that the data collected in January, 2020, is not representative of the peak demand in other months of the year due to seasonal variation. According to the applicant, in-store sales are highest for the two weeks around Mother's Day, usually in May, and on Black Friday in November. As such, KLOA revised the study to provide a more realistic peak parking demand of 350 parking spaces, based on the peak demand of 326 spaces counted in May, 2013, and the projected demand increase of 24 spaces resulting from the proposed expansion (326 + 24 = 350).

Menards is proposing a total of 325 parking stalls within the existing lot, and an additional 50 stalls within the parking lot to the west of River Drive, for a total of 375 off-street parking spaces dedicated to **Menards' sole use. While the submitted parking study establishes a peak demand of 350 parking spaces,** in order to ensure that demand does not exceed the availability of dedicated off-street parking, staff recommends increasing the parking requirement approved under the Special Use Permit to <u>375 parking spaces</u>, which will prohibit Menards from removing any additional stalls without prior review and approval by the Plan Commission and Board of Trustees.

Due to the lack of pedestrian accommodations located along River Drive, staff recommends the following condition of approval to ensure that when the 50 overflow parking spaces located west of River Drive may need to be used, the spaces closest to the principal structure are reserved for customer use: (2) Menards employees shall be directed to park west of River Drive on above-average peak parking demand days, as established in the submitted traffic and parking impact study.

Illegal Truck Parking Within Western Outlot

Menard, Inc., is currently leasing parking area in the parking lot located west of River Drive to truck drivers and owners as an activity unrelated to operation of the home improvement center. Staff determines the use occurring on the property to be a "truck parking area or yard," which is defined in Village Code Section 12-17-1 as follows:

TRUCK PARKING AREA OR YARD: Any land used or intended to be used for the storage or parking of trucks, tractors, truck trailers and including commercial vehicles, while not loading or unloading, and which exceed one and one-half (1½) tons in capacity.

A list of Permitted and Special Uses for the C1 District is established in Section 12-4-3:D. Per Village Code Section 12-2-3:B, "Prohibited Use Of Land Or Buildings: When a use is not specified as a permitted or special use, such use is hereby expressly prohibited." The use is identified and defined by Village Code, but not listed as a Permitted or Special Use in the C1 District, or in any zoning district. Therefore, the use is prohibited Village-wide. The use is not accessory to the principal use of "home improvement center" and has never been approved by the Plan Commission under the original or any amending Special Use ordinance. As such, staff is recommending the following condition of approval: (3) All truck parking activities not associated with the principal use and occurring on the property shall cease prior to the Board of Trustees' approval of the amending ordinance.

Pedestrian Access

Currently, no pedestrian facilities are located within the public right-of-way along the south side of Oakton Street, nor along Lehigh or Kirk. Sidewalk construction was not required as part of the original home improvement center development in 2000. However, public sidewalks may be required in the future at the time of subdivision of the western outlot.

In order to improve pedestrian and bicyclist accommodations in the area, the Village of Morton Grove and its municipal partners requested and were awarded approximately \$1.76 million in funding through the federal Congestion Mitigation and Air Quality (CMAQ) program in order to construct a 10-foot-wide multiuse path running along the south side of Oakton Street between Caldwell Avenue and Gross Point Road, and the east side of Caldwell between Howard and Oakton. The 2019 CMAQ grant is providing approximately 80% of funding for the multi-use path, with local municipalities responsible for the remaining 20%.

Approximately 1,500 linear feet of multi-use path are proposed to be constructed just north of the applicant's north property line, which will provide safe access for pedestrians and bicyclists, including Menards' customers and employees. Completion of the public improvement project may require a temporary easement and/or site work within Menards' private property. The applicant recognizes the benefit of the proposed path to the community and to its business, and has been fully cooperative with the Village as the project has progressed. As indicated in the stormwater management report, additional impervious area resulting from the proposed multi-use path has been included in Menards' stormwater computations in order to account for the future path installation.

In order to promote continued cooperation with the Village regarding implementation of the multi-use path project and to allow minor site and landscape plan modifications that may be needed to accommodate construction, staff recommends the following condition of approval: (4) The property owner shall cooperate with the Village in construction of the planned multi-use path located within the public right-of-way directly north of the subject property's north lot line. Slight modifications to the approved site plan intended to accommodate construction of the multi-use path may be approved by the Village Administrator.

Commission Review

<u>Traffic Safety Commission:</u> In accordance with Section 12-16-4 of the Unified Development Code, the applicant appeared before the Traffic Safety Commission (TSC) at their March 5, 2020, meeting. The applicant presented the proposed site plan as it relates to parking and traffic circulation, and responded to specific questions raised in the Village Engineer's staff report. At the conclusion of the discussion, the

TSC voted unanimously to support this project and forwarded the Village Engineer's comments to the Plan Commission. The comments relate to projected traffic patterns along Kirk Street, site ingress and egress, and requests for additional information and various modifications to the submitted materials to provide clarity. The TSC's comments are provided in the hearing packet for PC 20-01.

The Village Engineer provided supplemental comments discussing existing and projected traffic patterns, coordination with future pedestrian improvements within the public right-of-way, permitting procedures, turning movements, and requests for additional information and various modifications to the submitted study. The Village Engineer's comments are also provided in the hearing packet for PC 20-01.

To ensure that the proposed project has no negative impact on traffic and parking, all comments issued by the TSC and Village Engineer will need to be addressed in a revised impact study submitted to and approved by the Village Engineer prior to permitting. As such, staff recommends the following condition of approval: (5) The final traffic and parking impact study and final engineering plans shall comply with all recommendations, comments, questions, and requested information in the Traffic Safety Commission report dated March 7, 2020, and the Engineering comment form provided in the case of PC 20-01.

In response to comments issued by the TSC and Village Engineer, the applicant submitted a revised traffic and parking impact study, a letter from KLOA addressing comments, and a letter from Menard, Inc., addressing comments (all dated March 18, 2020). These materials are provided as attachments to the revised staff report for PC 20-01. Because the Village Engineer provided no further comment in response to the revised traffic and parking impact study, the revised study has been deemed acceptable and the outstanding comments have been deemed addressed.

Appearance Commission:

The applicant made a presentation on the proposed elevations and landscape plan to the Appearance Commission on March 2, 2020. The applicant discussed how the building additions have been designed to be consistent with the existing structure. Proposed materials include 4" utility face brick, emerald green accent panels, and clear polycarbonate panels, all of which match existing exterior materials.

The applicant also presented the proposed landscape plan and requested two waivers from the following sections of the Unified Development Code:

- <u>Section 12-11-1:B.4</u> A waiver to the requirement to plant trees in public parkways, areas, or rights of way adjacent to private property.
- <u>Section 12-11-3:B.3.C.2</u> A waiver of 41 trees to the minimum interior parking lot tree planting requirement to allow 54 trees for 9,500 square feet of required landscaping area.

While two waivers were requested to legalize the existing landscape areas, no landscaping on the site is proposed to be removed as a result of the proposed improvements. Rather, additional landscaping will be provided as a denser arborvitae and cranberrybush hedge is proposed to extend eastward and westward to buffer the storage yard and garden center expansions along the north lot line.

The requested waivers are discussed in detail in the staff report to the Appearance Commission, which is provided in the hearing packet for PC 20-01. After discussion, the Appearance Commission unanimously voted to recommend approval of the requested Appearance Certificate and waivers to the landscape requirements of Chapter 12-11.

<u>Departmental Review</u>

The application and all supporting materials were distributed to staff within the Village's Fire, Building, and Public Works (Engineering) Departments for their review. The comments received by staff are as follows:

- Fire:
 - o Design and construction shall comply with all locally adopted ordinances, codes, standards, and applicable policies. (VMG 9-1-1)

- o The fire alarm and sprinkler systems will need to be modified and extended to protect the new and remodeled structures. Shop drawings and all supporting information shall be submitted for permit approval prior to installation.
- o Emergency vehicle access will need to be maintained in and around the warehouse buildings. Emergency circulation will be evaluated once detailed site plans are submitted.
- <u>Building</u>: No issues identified at this time.
- Engineering: Comments prepared by Village Engineer Chris Tomich are provided as an attachment in the Plan Commission's hearing packet. It is recommended as a condition of approval that the applicant will address all comments at the public hearing and/or through staff review prior to permitting. These comments were satisfactorily addressed by a revised traffic and parking impact study and supporting response letters from the applicant and traffic study engineer, all provided as attachments to the revised staff report.

Standards for Special Use

The following Standards for Special Use, established in Section 12-16-4:C.5 of the Unified Development Code, are provided to assist the Commission's consideration of this request. The applicants provided responses to the following standards in their application.

- a. 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.
- b. 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.
- c. Orderly Development The establishment of the Special Use will not impede the orderly development and improvement of the surrounding properties for uses permitted in the District.
- d. Adequate Facilities Adequate utilities, access roads, drainage and other necessary facilities are in existence or are being provided.
- e. 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.
- f. 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.
- g. Conformance to Other Regulations The special use shall, in all other respects, conform to applicable provisions of this title or amendments thereto.

The applicant should be prepared to discuss how they believe the proposed Special Use Permit and project meet the above standards at the public hearing.

Recommendation

After review of the application, staff report, and as a result of the testimony, should the Commission recommend approval of this application, staff suggests the following initial motion and conditions:

Motion to recommend approval of an amendment to Special Use Permits (Ord. 01-06, 05-08, 13-14, and 18-06) to authorize the expansion of a home improvement center and approve an associated parking waiver for the property commonly known as 6301 Oakton Street (10-29-100-001-0000, 10-29-100-020-0000), subject to the following conditions:

- 1. The site and building must be developed and operated consistent with the plans and supporting documents in the application, amended, as necessary, to comply with conditions from the Traffic Safety Commission, Appearance Commission, Plan Commission, and Village staff, identified in this report and/or presented at the public hearing;
- 2. All activity associated with Dimeo Construction Company occurring within the eastern outlot shall cease and a complete permit application to restore the site to previously approved conditions shall be submitted to the Village within sixty (60) days of the Plan Commission's recommendation

- of approval to the Board of Trustees. Site restoration shall commence no more than thirty (30) days from the date of permit issuance and shall be completed no more than ninety (90) days from the date of permit issuance. The Village Administrator may modify the terms of this requirement as deemed appropriate.
- 3. Menards employees shall be directed to park west of River Drive on above-average peak parking demand days, as established in the submitted traffic and parking impact study.
- 4. All truck parking activities not associated with the principal use and occurring on the property shall cease prior to the Board of Trustees' approval.
- 5. The property owner shall cooperate with the Village in construction of the planned multi-use path located within the public right-of-way directly north of the subject property's north lot line. Slight modifications to the approved site plan intended to accommodate construction of the multi-use path may be approved by the Village Administrator.
- 6. Prior to the issuance of a building permit, the applicant shall submit a final traffic and parking impact study and final engineering plans in accordance with Village requirements and standards, for review and approval by the Village Engineer. The final traffic and parking impact study and final engineering plans shall comply with all recommendations, comments, questions, and requested information in the Traffic Safety Commission report dated March 7, 2020, and the Engineering comment form provided in the case of PC 20-01.
- 7. The Applicant shall advise the Department of Community and Economic Development of any proposed change in ownership or operation of the subject property, which may subject the owner, lessee, occupant, and user to additional conditions and may serve as the basis for further amendment to the Special Use Permits.



SPECIAL USE APPLICATION

Village of Morton Grove
Department of Community Development
6101 Capulina Avenue Morton Grove, Illinois 60053 (847)965-4162 (f) (847)470-5231 (p)

Applicant Name: TYLET Edwards - Real Estate REP
Applicant Organization: Menald, Inc.
Applicant Address: S/Ol Menard Pr.Ve
Applicant City / State / Zip Code: Eau Claire VI 54703
Applicant Phone: Work: (7/5) 876-2/43 Home: ()
Mobil / Other: ()
Applicant Fax: Work :() Home :()
Applicant Email: tedwards emenard-inc. com
Applicant Relationship to Property Owner:OWNEY
Applicant Signature: Res Estate Rep Menore, Inc.
PROPERTY OWNER INFORMATION (IF DIFFERENT FROM APPLICANT)
Owner Name: Same as applicant
Owner Name: Some as applicant Owner Address:
Owner City / State / Zip Code:
Owner City / State / Zip Code: Owner Phone: Work: () Home: ()
Owner Phone: Work: () Home: ()
Owner Phone: Work: () Home: () Mobil / Other: ()
Owner Phone: Work: () Home: () Mobil / Other: () Home : () Owner Fax: Work : () Home : ()
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Owner Phone: Work: ()
Owner Phone: Work: () Home: () Mobil / Other: () Owner Fax: Work :() Home :() Owner Email: Owner Signature:



Applicants Request

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.

This Special Use application is an amendment of the existing Special Use Permit and will match the use and features of the existing Menards store. The additional warehouse, yard, and garden center will allow Menards to better serve the home improvement needs of this region while maintaining a presence on this site. This project will not bring the store site any closer to the public roadway than the existing setbacks and there is no impact to the traffic flow.

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 surrounding properties have been around the existing Menards store for many years and there has not been any conflicts between those uses and the Menards use. This expansion will be a continuation of that existing use, but slightly larger. Property values will remain the same when the project is completed. Menards has enough room for the expansion on the existing property and enough parking for the changes being made to the parking lot.

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

The proposed development will occur on the property already owned by Menards and would not impact the development of any surrounding properties. The only property surrounding this site that is not developed today is the land east of the store that is owned by Menards.

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

The existing detention pond east of the store will be reconfigured as part of this project and expended to accommodate the additional stormwater runoff. All of the other existing roads and facilities will be maintained and kept as they are today.

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 of the existing access points to the site will remain as they are today. An additional entrance lane will be added to the yard gate for online order pickups. This will help get guests through the gate and into the yard faster than they do today when the gate guard lets them in. Menards has not caused congestion on the public roads today and will this alteration will not cause that to happen in the future.



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

The existing Menards site has fit within the zoning district and comprehensive plan since the store was constructed and the expansion will continue the same use but with additional storage and sales spaces onsite. Continuing to operate at this space and adapt to the retail market conditions is good for Menards and the village.

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

The Menards store expansion does fit within the regulations of the district as well as the existing Special Use Permit. This expansion will be a continuation of that site. However the changes being made do not reduce the setbacks look of the buildings onsite and the property will be almost the same condition it is in today when this project is finished.

Sincerely, Menard, Inc.

Tyler Edwards

Real Estate Representative

Menard, Inc. 5101 Menard Drive Eau Claire, WI 54703



December 3, 2019

RE: Menards Morton Grove Expansion Narrative

Dear Ms. Heidorn,

Menard, Inc. is submitting a Special Use Permit Amendment Application for the Morton Grove Menards store. Since this store first opened the retail environment has changed quite a bit. Menards has been working to update all of the store locations across the country to make sure all existing stores can offer the same features and products that the new stores offer. The proposed expansion will allow this store location to match all the other Menards locations and operate in this location long into the future.

There are three major parts to the expansion project. A 15,070 sq ft addition to the outdoor warehouse building and an additional .64 acres of yard are east of the warehouses. An expansion of the garden center to the west into the parking lot. The reconstruction of the yard gate to add an automated entrance lane for online order pickups.

The additional warehouse space will be an exact match to the existing warehouse buildings. 15,070 sq ft will be added onto the east warehouse building and that will be connected to the other warehouse buildings for a combined 57,654 sq ft of covered storage space within the yard area. The green steel exterior and white roof of the existing warehouse building will be used on the expansion. The additional warehouse building will be a drive through storage space just like the existing buildings. The exterior yard fence east of the warehouse buildings is being moved 68' further east to help with traffic circulation through the yard around the warehouse building. That expansion of the paved yard will be surrounded by a solid wood screening wall to match the wall already found onsite today.

With the increased competition from online sales Menards now has a buy online and pickup at the store program available to our guests. The yard gate is being reconfigured so it will now have an automated entrance lane for guests with online order. They can scan the barcode from the order and get into the yard without waiting for the gate guard to let them in. There will still be an entrance and exit lane operated by a gate guard that functions like the existing gate does today. The gate will become covered to protect the equipment and people under it and the elevations for the gate have been included in this submittal. On the site plan the area noted as new 8,092 sq ft of heated storage space will be space used to store and pickup those online order items. This area is already under the store's roof but it will be completely enclosed and heated with this project.

The typical Menards store has a plant sales space next to the garden center that is over 100 ft wide. The limited width between Oakton St and Kirk St eliminated that space when this store was built. This plan will expand the garden center to the west to make up some of this space. The actual building will be expanded 71 ft west and add 7,103 sq ft to the garden center building. That has been shown on the site plan and elevation page and will match the existing store. Next to that addition there will be additional outdoor plant storage space for plant sales at this store location. This project would reduce the parking at the store by 58 stalls to 331 total stalls which is more than needed on even busy days. However in the event overflow parking is needed Menards does own the adjacent parking lot to the west. The landscaping along the north side of the site has also been changed to match the existing store along with the elevations of the garden center exterior.



The interior of the store will also be remodeled as part of this project and once all the changes are made the store will have all the features of the new Menards stores. Menards will be able to be a part of the community long into the future with this investment in the store. If you have any questions has you review the plans please feel free to reach out to me. Thank you.

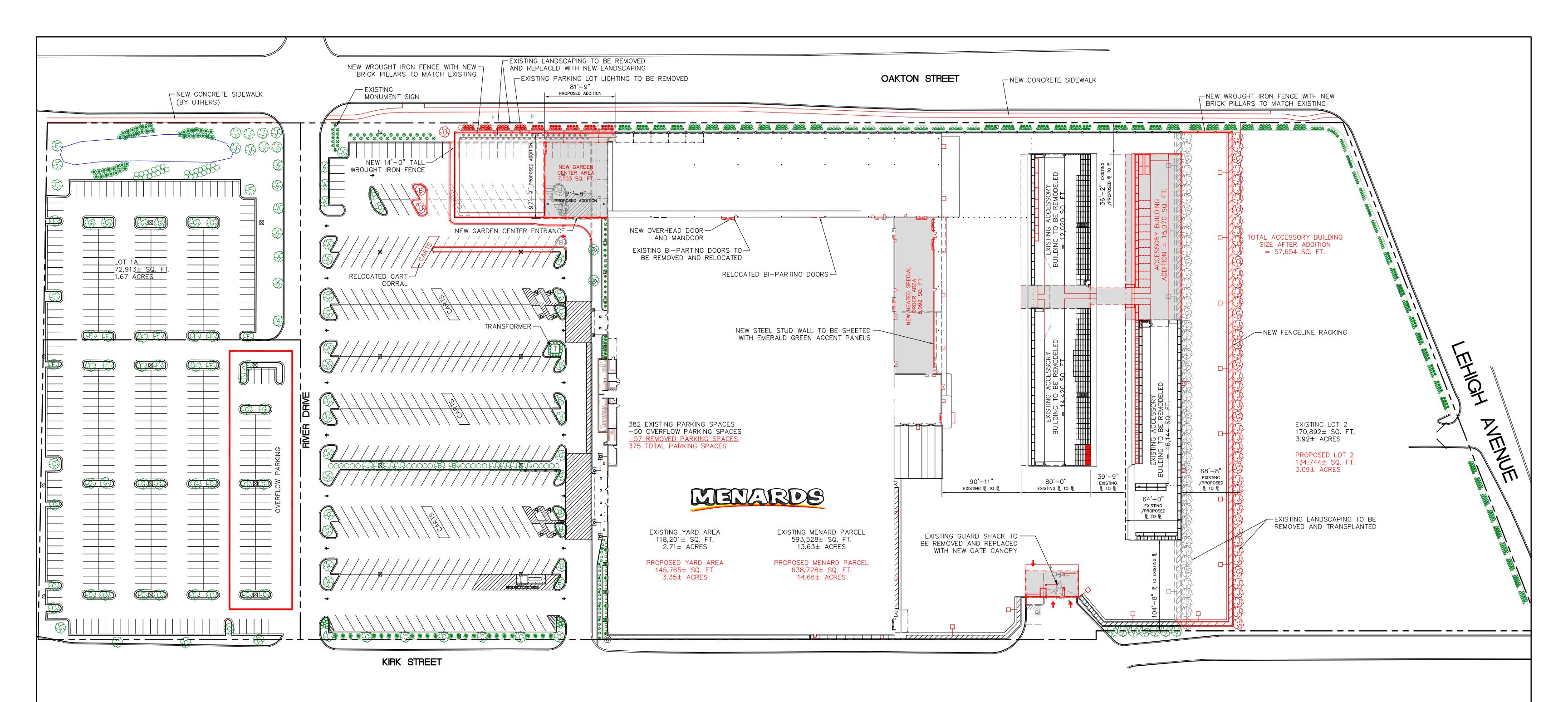
Sincerely, Menard, Inc.

Tyler Edwards

Real Estate Representative

Menard, Inc. 5101 Menard Drive Eau Claire, WI 54703

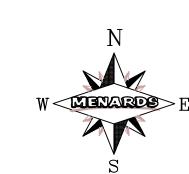
O: 715.876.2143 C: 715.579.6699 tedwards@menard-inc.com



	El	LECTRICAL LEGEND
	8	POLE MOUNTED SINGLE HEAD 1000W 277V M.H. TYPE R5 DISTRIBUTION, VERTICAL LAMP ORIENTATION, CONVEX GLASS LENS, DOUBLE FUSING. MANUFACTURER McGRAW-EDISON GLB91125AS-FF
	1	EXISTING 400 WATT 277 VOLT M.H. PARKING LOT LIGHTING, 30'-0" TALL TO BE REMOVED
	4	POLE MOUNTED SINGLE HEAD 1000W 277V M.H. TYPE R5 DISTRIBUTION, VERTICAL LAMP ORIENTATION, WITH HOUSE-SIDE SHIELDING, CONVEX GLASS LENS DOUBLE FUSING. MANUFACTURING McGRAW-EDISON GLB91125AS-FF-HS
	10	EXISTING 400W 277V M.H. CUTOFF LUMINAIRE TO REMAIN
[]	4	EXISTING 400W 277V M.H. CUTOFF LUMINAIRE YARD LIGHTS TO BE REMOVED
	12	200 WATT 277 VOLT LED CUTOFF LUMINAIRE LIGHTING MOUNTED ON BUILDING TO MATCH EXISTING LOCATIONS
—	12	200 WATT 277 VOLT LED CUTOFF LUMINAIRE YARD LIGHTS MOUNTED TO FENCELINE RACKING
	8	175W SOFFIT LIGHTS

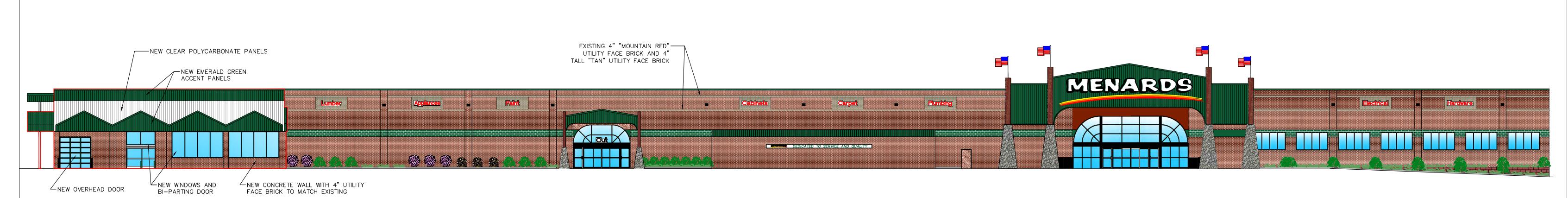
LANDSCAPE LEGEND								
SYMBOL	SCIENTIFIC, COMMON NAME	QUANTITY	SYMBOL	SCIENTIFIC, COMMON NAME	QUANTITY			
	GLEDITSIA TRIACANTHOS VAR. INERMIS 'SHADEMASTER', 'SHADEMASTER' THORNLESS HONEYLOCUST	22	0	CORNUS STOLONIFERA 'ISANTI', 'ISANTI' REDTWIG DOGWOOD	93			
(H)	EXISTING MALUS RED JEWEL, RED FLOWERING CRAB TO REMAIN	10		COTONEASTER APICULATUS, CRANBERRY COTONEASTER	85			
	EXISTING MALUS RED JEWEL, RED FLOWERING CRAB TO BE REMOVED AND TRANSPLANTED	3		EXISTING COTONEASTER APICULATUS, CRANBERRY COTONEASTER TO BE REMOVED	49			
(3)	CELTIA OCCIDENTALIS, HACKBERRY	24	*	JUNIPERUS CHINENSIS 'PFITZERIANA KALLAY', 'KALLAY' COMPACT PFITZER JUNIPER	28			
(F)	FRAXINUS AMERICANA, WHITE ASH	21		RIBES ALPINUM, ALPINE CURRENT	139			
(3)	TILIA AMERICANA, AMERICAN LINDEN	30		NEW 30" TALL RIBES ALPINUM, ALPINE CURRENT	16			
	EXISTING TILIA AMERICANA, AMERICAN LINDEN TO BE REMOVED AND TRANSPLANTED	10	\$	VIBURNUM TRILOBUM 'COMPACTA', COMPACT AMERICAN CRANBERRYBUSH	57			
(F)	VIBURNUM PRUNIFOLIUM, BLACKHAWK VIBURNUM	22		EXISTING 30" TALL VIBURNUM, CRANBERRYBUSH TO BE REMOVED AND TRANSPLANTED IF POSSIBLE	6			
	EXISTING VIBURNUM PRUNIFOLIUM, BLACKHAWK VIBURNUM TO BE REMOVED AND TRANSPLANTED	38	\$	NEW 30" TALL VIBURNUM TRILOBUM 'COMPACTA', COMPACT AMERICAN CRANBERRYBUSH	20			
	THUJA OCCIDENTALIS 'TECHNY', AMERICAN ARBORVITAE	335	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	JUNIPERUS HORIZONTALIS PLUMOSA COMPACTA, COMPACT ANDORA JUNIPER	76			
	NEW 6'-0" TALL THUJA OCCIDENTALIS 'TECHNY', AMERICAN ARBORVITAE	45						

Tyler Edwards
Real Estate Representative
Menard, Inc.
5101 Menard Drive
Eau Claire, Wisconsin 54703

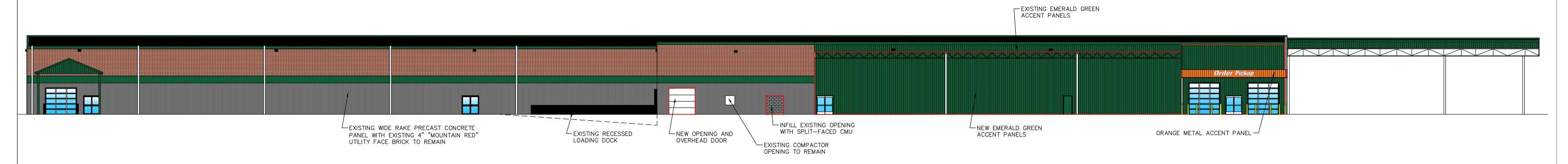


MENARDS

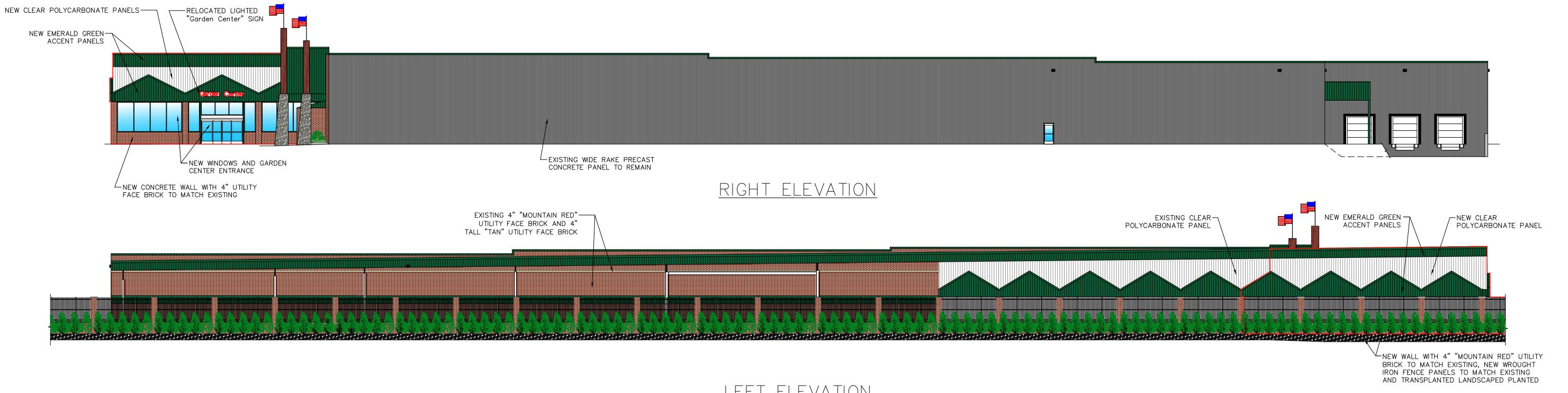
Morton Grove, Illinois Menards Site Plan February 10, 2020 Scale: 1" = 60'-0"



FRONT ELEVATION



REAR ELEVATION



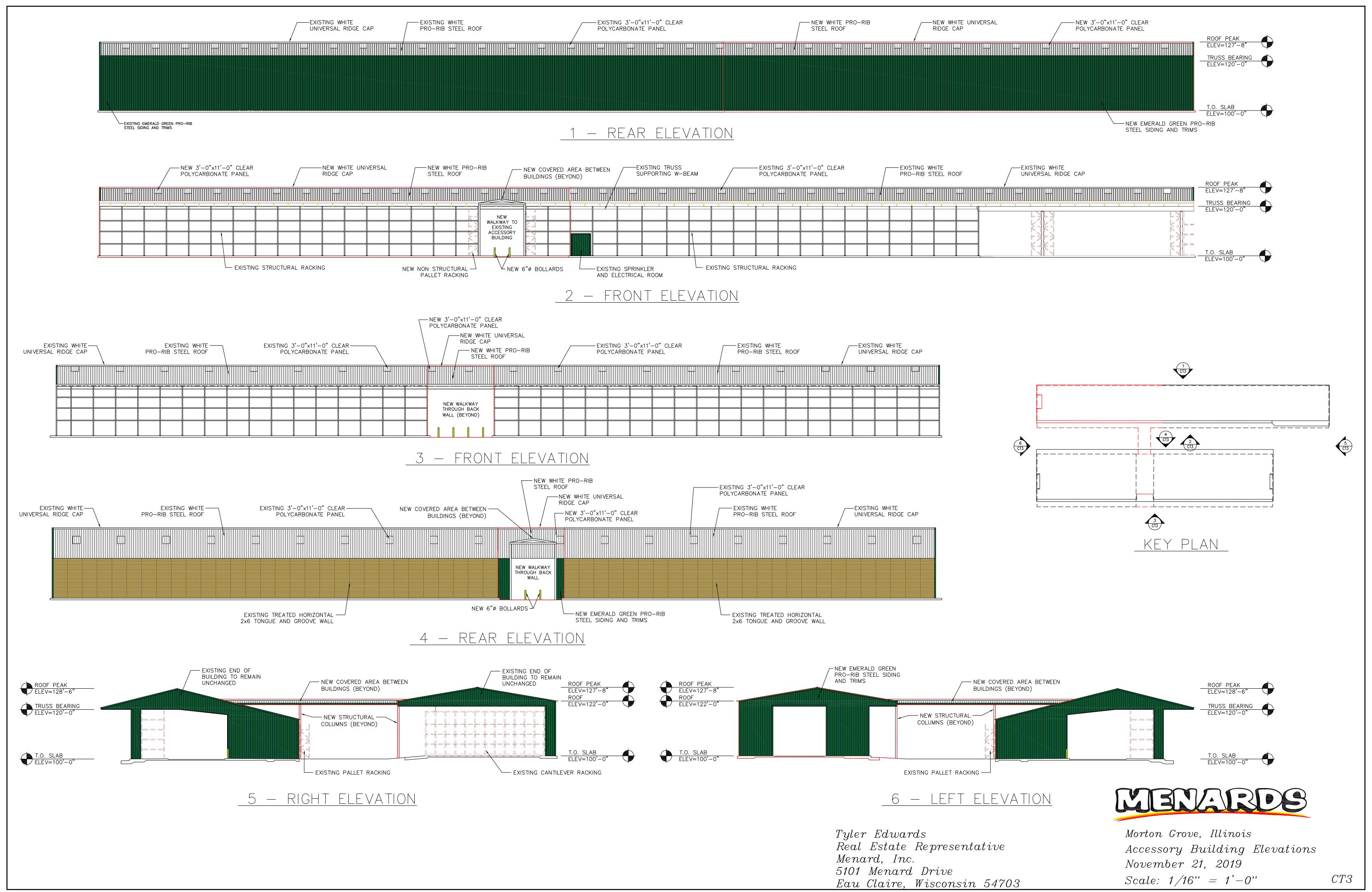
LEFT ELEVATION

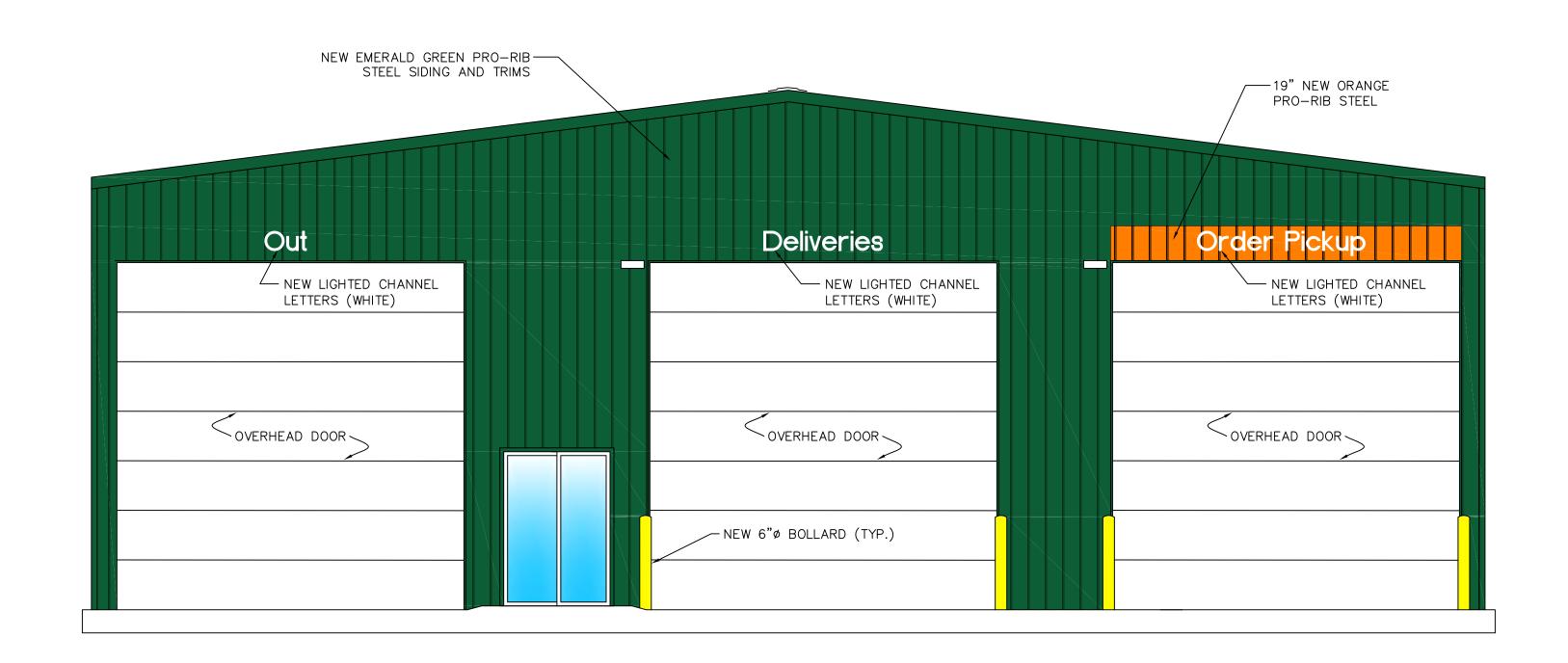


Tyler Edwards Real Estate Representative Menard, Inc. 5101 Menard Drive Eau Claire, Wisconsin 54703

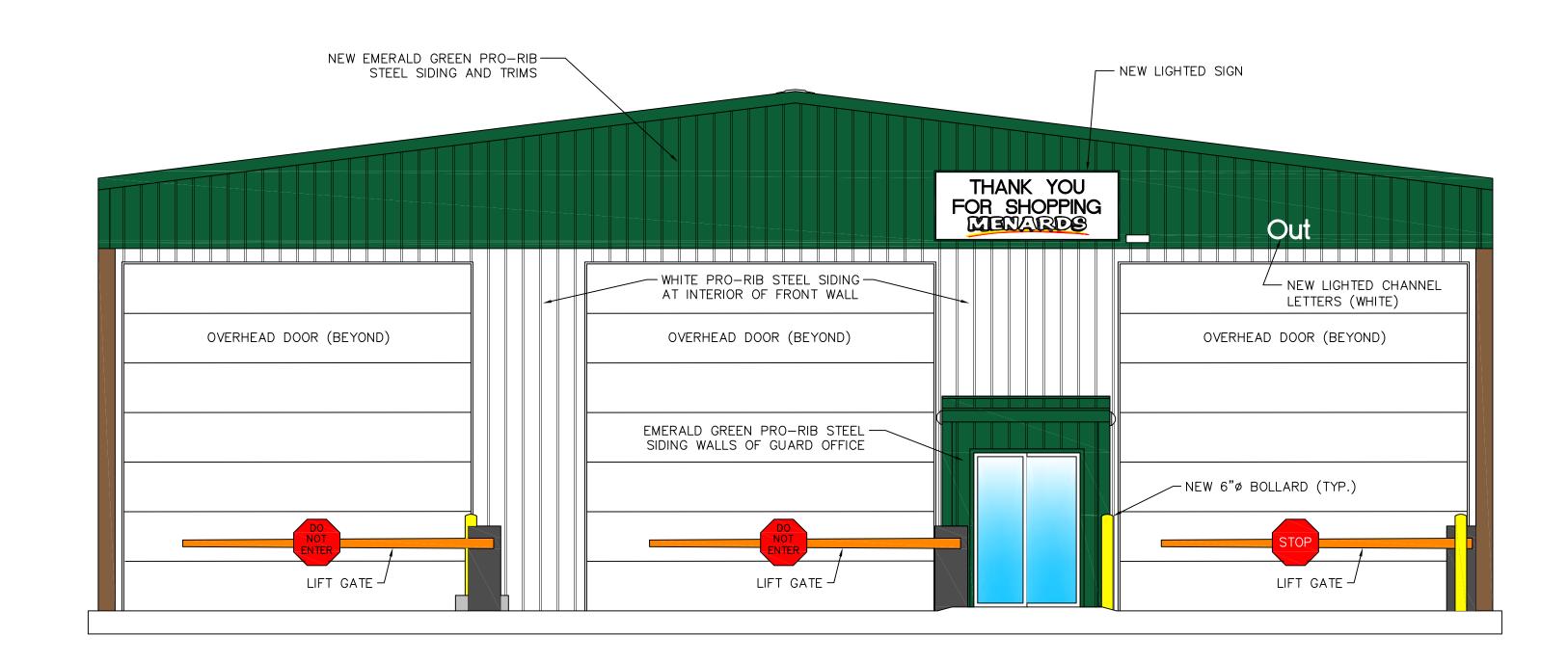
Morton Grove, Illinois Building Elevations November 21, 2019 Scale: no scale

CT2

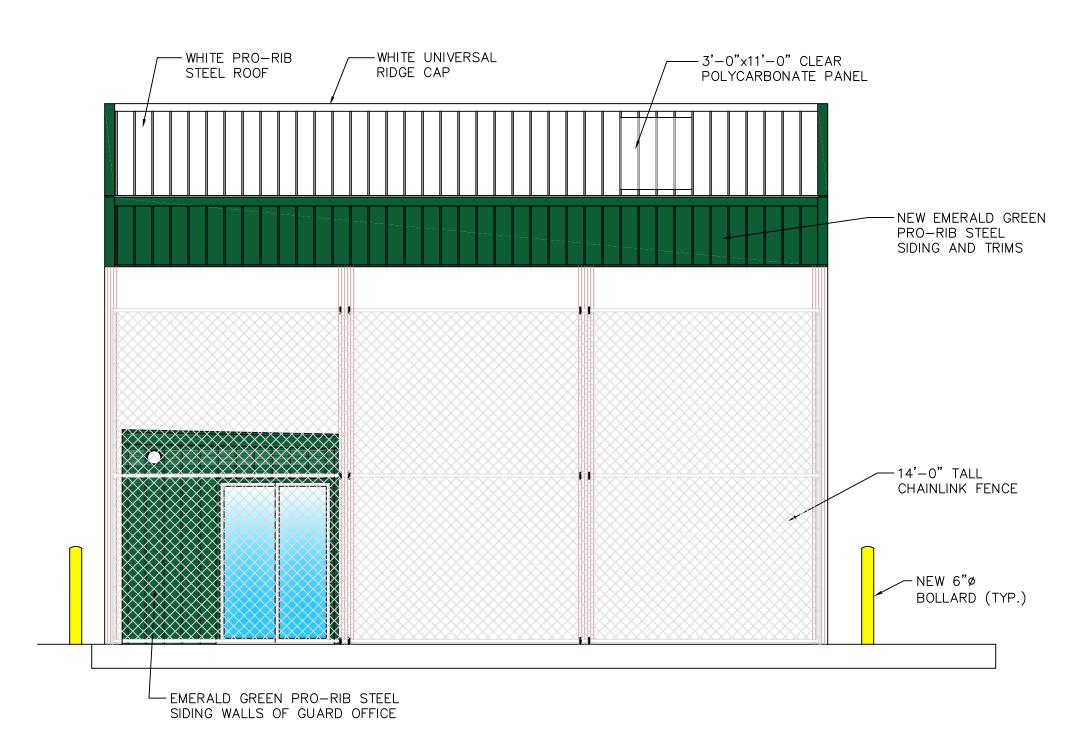




FRONT ELEVATION



REAR ELEVATION



SIDE ELEVATION



Tyler Edwards
Real Estate Representative
Menard, Inc.
5101 Menard Drive
Eau Claire, Wisconsin 54703

Morton Grove, Illinois

Gate Canopy Elevations

November 21, 2019

Scale: 1/4" = 1'-0"

CT4

PROPOSED SITE IMPROVEMENTS FOR

GARDEN CENTER AND STORAGE YARD EXPANSIONS

6301 OAKTON ST. MORTON GROVE, IL 60053

INDEX OF PLAN SHEETS

- 1. COVER
- 2. GENERAL NOTES
- 3. DETAILS
- 4. EXISTING CONDITIONS
- 5. SITE PLAN
- 6. DEMO PLAN
- 7. GRADING PLAN
- 8. UTILITY PLAN
- 9. LANDSCAPE PLAN

BENCHMARK

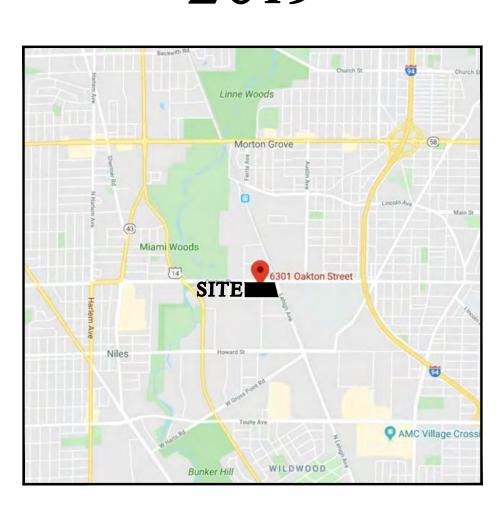
1. BENCHMARK

NW HEAD BOLT OF THE FIRST HYDRANT SOUTH OF OAKTON STREET ON THE WEST SIDE OF LEHIGH **ELEVATION=627.08**

LEGAL DESCRIPTION

ALL OF LOT 5, AND THAT PART OF LOTS 2, 3, AND 4 LYING WEST OF THE WESTERLY RIGHT OF WAY LINE OF THE CHICAGO MILWAUKEE AND ST. PAUL RAILROAD RIGHT OF WAY IN THE ASSESSOR'S DIVISION OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 41 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN (EXCEPT THAT PART TAKEN OR USED FOR OAKTON STREET AND LEHIGH AVENUE), IN COOK COUNTY, ILLINOIS.

2019



SITE LOCATION

PLANS PREPARED FOR:

MENARD, INC 4777 MENARD DRIVE **EAU CLAIRE, WISCONSIN 54703** REAL ESTATE REPRESENTATIVE TYLER EDWARDS P (715)876-2143 C (715)579-6699

PLANS PREPARED BY:



Consulting Civil Engineering Land Planning & Surveying 825 N. Cass Ave., Suite 106 Westmont, Illinois 60559 voice 630-381-0819

UTILITY CONTACTS & PHONE NUMBERS ELECTRIC-COMED (630)723-2311 GAS-NICOR (888) 642-6748 PHONE-ATT (630)620-3876

CITY CONTACTS & PHONE NUMBERS BLDG. DEPARTMENT(847)470-5214 PUBLIC WORKS (847)470-5235 FIRE DEPARTMENT (847)470-5226

LEGEND

EXISTING STORM MANHOLE PROPOSED INLET **EXISTING INLET** PROPOSED FIRE HYDRANT EXISTING FIRE HYDRANT PROPOSED VALVE AND VAULT EXISTING VALVE AND VAULT PROPOSED CATCH BASIN EXISTING CATCH BASIN PROPOSED SANITARY MANHOLE **EXISTING SANITARY MANHOLE** PROPOSED VALVE BOX **EXISTING VALVE BOX** PROPOSED WATERMAIN **EXISTING WATERMAIN** _____8"w|____ PROPOSED SANITARY SEWER **EXISTING SANITARY SEWER** PROPOSED STORM SEWER **EXISTING STORM SEWER** HIGH WATER LEVEL —— HWL ——— ____ NWL____ NORMAL WATER LEVEL **EXISTING CONTOUR** ____ 632 ----PROPOSED CONTOUR PROPOSED SILT FENCE **EMERGENCY FLOOD ROUTE**

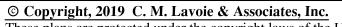
CURRENT REVISION DATE: DECEMBER 23, 2019



I, CHRISTOPHER M. LAVOIE, A REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS, HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED BY C.M. LAVOIE AND ASSOCIATES, INC. UNDER MY PERSONAL DIRECTION.

PROJECT NUMBER: 19-206

ILLINOIS PROFESSIONAL ENGINEER NO. 0062-049582



These plans are protected under the copyright laws of the United States and foreign countries, and are to be used only for the construction and/or repair of the Site Improvements as defined in the contract between the Engineer and the Owner. Any use of these plans, including details and specifications, to construct and/or repair additional items not described in these plans, constitutes a violation of the Engineer's copyright of these plans and is prohibited.



GENERAL NOTES

- 1. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IN ADDITION, THE CONTRACTOR MUST VERIFY THE LINE AND GRADES. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSION OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.
- 2. THE VILLAGE/CITY "STANDARD SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC IMPROVEMENTS AND PRIVATE SITE DEVELOPMENT" LATEST EDITION SHALL APPLY TO TO ALL
- 3. THE STANDARD SPECIFICATIONS, CONSTRUCTION PLANS, AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE TO BE CONSIDERED PART OF THE CONTRACT
- 4. THE CONTRACTORS FOR ALL CONTRACTS SHALL NOTIFY J.U.L.I.E., THE SANITARY DISTRICT, AND ANY APPLICABLE ENGINEERING OR BUILDING DEPARTMENTS TWO (2) WORKING DAYS MINIMUM PRIOR TO START OF WORK. AS REQUIRED, THE UTILITY COMPANIES WILL ESTABLISH ON THE GROUND THE LOCATION OF UNDERGROUND PIPES, CONDUITS OR CABLES ADJOINING OR CROSSING PROPOSED
- 5. IT IS THE CONTRACTOR'S RESPONSIBILITY THAT UNDERGROUND CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITION OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", AND APPLICABLE ORDINANCES OF THE VILLAGE / CITY.
- 6. ALL EXCAVATION WORK SHALL COMPLY WITH THE LATEST EDITION OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION "SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION."
- 7. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER, THE VILLAGE / CITY AND THEIR AGENTS FROM ALL LIABILITY INVOLVED IN THE CONSTRUCTION, INSTALLATION AND TESTING OF THE WORK ON THIS PROJECT.
- 8. WHEN A CONFLICT BETWEEN PLANS AND SPECIFICATIONS OR NOTES OCCURS, THE ENGINEER SHALL DECIDE WHICH GOVERNS. GENERALLY, THE MORE RESTRICTIVE, MORE SPECIFIC OR STRICTER PROVISION SHALL GOVERN.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL AREAS AFFECTED BY EQUIPMENT OR LABORERS TO EXISTING CONDITIONS. CONTRACTOR IS ALSO RESPONSIBLE FOR PROTECTING ALL NEW WORK UNTIL COMPLETION OR THIS CONTRACT.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ANY ROAD OR MATERIAL THAT IS FROM THE PROJECT. THE CONTRACTOR SHALL CLEAN THE STREETS ON A DAILY BASIS. THIS WILL BE DONE AT THE CLOSE OF EACH DAY OF WORK OR MORE FREQUENTLY AS MAY BE REQUIRED DUE TO
- 11. THE CONTRACTOR IS TO VERIFY ALL ELEVATIONS PRIOR TO THE START OF WORK AND, IF THERE ARE ANY DISCREPANCIES, IS TO NOTIFY THE DESIGN ENGINEER AT ONCE. NO WORK SHALL BE DONE UNTIL THE DISCREPANCIES ARE RESOLVED.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR THE TRAFFIC CONTROL AND PROTECTION OF ALL WORK CONDUCTED WITHIN PUBLIC RIGHT-OF-WAYS, SHALL BE IN ACCORDANCE WITH THE APPLICABLE ARTICLES OF SECTION 100 AND 700 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED APRIL 1, 2016, AND THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
- 13. WHENEVER DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THE LOOSE MATERIAL WILL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES, AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF CONSTRUCTION. ALL SAFETY REQUIREMENTS PROVIDED BY THE VILLAGE/CITY AND/OR OSHA SHALL BE ADHERED TO BY THE CONTRACTOR DURING CONSTRUCTION OPERATIONS.
- 15. DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHALL INSURE POSITIVE SITE DRAINAGE T THE CONCLUSION OF FACH DAY. SITE DRAINAGE MAY BE ACHIEVED BY DITCHING PLIMPING OR ANY OTHER METHOD ACCEPTABLE TO THE ENGINEER. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF.
- 16. ALL CONSTRUCTION WILL BE INSPECTED BY THE VILLAGE / CITY ENGINEER OR REPRESENTATIVE. SPECIFICALLY ALL TRENCHES AND SEWERS SHALL BE LEFT OPEN BUT SAFELY BARRICADED UNTIL INSPECTED AND APPROVED BY THE VILLAGE / CITY ENGINEER. PAVEMENT SUBBASE, BASE, AND SURFACE MUST EACH BE INSPECTED BY THE ENGINEER PRIOR TO THE NEXT PHASE OF WORK. PROOF ROLLING AND NUCLEAR DENSITY TESTING WILL BE UTILIZED.
- 17. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR HIS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BY OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- 18. THE CONTRACTOR IS TO VERIFY ALL FIELD CONDITIONS, PROPOSED IMPROVEMENTS, AND ELEVATIONS PRIOR TO THE START OF WORK AND, IF THERE ARE ANY DISCREPANCIES, IS TO NOTIFY THE DESIGN ENGINEER AT ONCE. NO WORK SHALL BE DONE UNTIL THE DISCREPANCIES ARE RESOLVED.
- 19. ALL SHRUBS, TOPSOIL, OR EXCAVATION MATERIAL AND ANY OTHER UNSUITABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF AT AN OFF-SITE LOCATION. AREAS WHICH ARE TO BE FILLED SHALL BE COMPACTED TO A MAXIMUM DENSITY OF 95% AS DETERMINED BY THE MODIFIED AASHTO COMPACTION TEST, T-180-74, (ASTM-D-1557) IN PAVED AREAS. THE OWNER'S SOILS ENGINEER SHALL EVALUATE AND APPROVE THE EXCAVATION, FILL PLACEMENT, AND COMPACTION PRIOR TO PAVEMENT CONSTRUCTION. THE CONTRACTOR SHALL GIVE THE GOVERNING AUTHORITIES HAVING JURISDICTION OVER THE WORK FORTY-EIGHT (48) HOURS NOTICE BEFORE WORK COMMENCES.
- 20. ANY WATER AND WASTEWATER UTILITIES AFFECTED BY CONSTRUCTION, INCLUDING GRADES, MUST BE BROUGHT TO CURRENT VILLAGE OR CITY STANDARDS AT THE CONTRACTOR'S EXPENSE.
- 21. EXISTING UTILITIES, TREES, STREETS, AND PRIVATE PROPERTY SHALL BE PROTECTED DURING CONSTRUCTION BY THE CONTRACTOR. ANY DAMAGES SHALL BE REPAIRED AT THE CONTRACTOR'S
- 22. THE CONTRACTOR SHALL PROVIDE EROSION AND SEDIMENTATION CONTROL AT AREAS DESIGNATED ON THE SITE PLAN. ADDITIONAL MEASURES SHALL BE PROVIDED AS DEEMED NECESSARY BY THE VILLAGE, CITY OR THE DESIGN ENGINEER AT CONTRACTOR'S EXPENSE.
- 23. ALL ACCESSIBILITY (HANDICAP) PROVISIONS SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE "AMERICAN DISABILITIES ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN" AND "ILLINOIS ACCESSIBILITY CODE (IAC)".
- 24. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINATION OF THE ENGINEERING PLANS AND SPECIFICATIONS AND THE EXISTING SITE CONDITIONS PRIOR TO SUBMITTING A BID, AND NOTIFYING THE ENGINEER AT ONCE OF ANY DISCREPANCIES.
- 25. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS NOT PREVIOUSLY APPLIED FOR BY THE OWNER AND POSTING OF THE NECESSARY BONDS.
- 26. THE CONTRACTOR IS RESPONSIBLE FOR THE NOTIFICATION OF THE START OF CONSTRUCTION TO ALL JURISDICTIONAL AGENCIES, UTILITY COMPANIES, AND THE ENGINEER, AT LEAST TWO (2) WORKING DAYS PRIOR TO SAID START. ALL EXISTING UTILITIES MUST BE STAKED PRIOR TO CONSTRUCTION. VILLAGE OR CITY ENGINEERING DIVISION SHALL BE NOTIFIED 48 HRS. IN ADVANCE.
- 27. THE CONTRACTOR IS RESPONSIBLE FOR CALLING ATTENTION TO THE OWNER OF ANY ERRORS OR DISCREPANCIES WHICH MAY BE SUSPECTED IN LINES AND GRADES WHICH ARE ESTABLISHED BY THE OWNER. THE CONTRACTOR SHALL NOT PROCEED WITH THE WORK UNTIL THE LINES AND GRADES, WHICH ARE BELIEVED TO BE IN ERROR, HAVE BEEN VERIFIED OR CORRECTED BY THE OWNER. ADDITIONAL STAKING THAT MAY BE REQUIRED DUE TO THE CONTRACTOR NEGLIGENCE SHALL BE PAID FOR BY THE CONTRACTOR.

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- 28. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND HEALTHFUL WORKING CONDITION THROUGHOUT THE PROSECUTION OF THE CONSTRUCTION WORK. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: THE REMOVAL OF DEBRIS. THE PROTECTING OF CONSTRUCTION BARRICADES, AND THE KEEPING OF PUBLIC STREET PAVEMENTS CLEAN OF CONSTRUCTION DIRT AND DEBRIS, SECURING OPEN EXCAVATIONS, AND FOLLOWING ALL SAFETY MEASURES REQUIRED BY THE GOVERNING AUTHORITIES.
- 29. THE CONTRACTOR IS RESPONSIBLE FOR THE RESTORATION TO THE ORIGINAL CONDITION OR BETTER OF ANY OFF SITE AREAS THAT ARE DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION. 30. THE CONTRACTOR IS RESPONSIBLE FOR THE TESTING OF MATERIALS, IF REQUIRED BY THE OWNER AND/OR THE JURISDICTIONAL AGENCIES.
- 31. THE CONTRACTOR IS RESPONSIBLE FOR THE GUARANTEE OF ALL MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR UPON FINAL ACCEPTANCE BY THE OWNER AND THE JURISDICTIONAL
- 32. ALL LANDSCAPE, SOD AND SEEDING AREAS SHALL RECEIVE A MINIMUM OF 4 INCHES OF TOPSOIL MWRD GENERAL NOTES (WHERE APPLICABLE) TO ACHIEVE THE FINAL GRADES SHOWN ON THE FINAL ENGINEERING PLANS.
- 33. UNSUITABLE MATERIAL SHALL BE CONSIDERED AS MATERIAL WHICH IS NOT SUITABLE FOR THE SUPPORT OF PAVEMENT, BUILDING, AND OR LOAD BEARING STRUCTURES AS DETERMINED BY THE SOILS DAYS PRIOR TO THE COMMENCEMENT OF WORK (CALL 708-588-4055). ENGINEER. THE DECISION TO REMOVE SAID MATERIAL, AND TO WHAT EXTENT, SHALL BE MADE BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.
- 34. THE QUANTITIES AS SHOWN IN THE ENGINEER'S "QUANTITY ESTIMATE" ARE THOSE ESTIMATED BY THE ENGINEER AND ARE PROVIDED SOLELY FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR BY CHOOSING TO UTILIZE THESE QUANTITIES IN THE PREPARATION OF HIS "LUMP SUM" BID, ALSO ACCEPTS THEIR ACCURACY. THE CONTRACTOR IS THEREFORE ENCOURAGED TO MAKE HIS OWN INDEPENDENT EARTHWORK CALCULATION, AND TO VISIT THE SITE PRIOR TO THE PREPARATION OF
- 35. CONDUIT TO BE PROVIDED UNDER PAVEMENT FOR ALL SERVICE UTILITIES SUCH AS, BUT NOT LIMITED TO GAS, ELECTRIC, TELEPHONE, AND CABLE AS DEEMED NECESSARY BY THE OWNER. ALL CONDUIT SHALL MEET UTILITY COMPANY SPECIFICATIONS. ALL SPECIFICATIONS SHALL BE CONFIRMED WITH THE UTILITY COMPANY PRIOR TO INSTALLATION, AND AS DEEMED NECESSARY BY THE OWNER. ALL CONDUIT SHALL MEET UTILITY COMPANY SPECIFICATIONS. CONDUIT SHOWN HEREON IS APPROXIMATE IN SIZE AND LOCATION. ALL SPECIFICATIONS SHALL BE CONFIRMED WITH THE UTILITY COMPANY PRIOR TO INSTALLATION.
- 36. GRADE AND RIM ADJUSTMENTS ARE ANTICIPATED TO OCCUR IN THE FIELD AND ARE CONSIDERED INCIDENTAL TO THE CONTRACT COST. ALL WORK AFFECTED BY GRADE ADJUSTMENTS SHALL STOP AND DESIGN ENGINEER NOTIFIED FOR ACCEPTABLE SOLUTION. GENERAL CONTACTOR TO ASSUME ALL LIABILITY FOR CONTINUING WORK PROGRESS.
- EARTHWORK IMPROVEMENTS

- 1. EXCAVATION OF TOPSOIL AND OTHER STRUCTURALLY UNSUITABLE MATERIALS WITHIN THOSE AREAS THAT WILL REQUIRE EARTH EXCAVATION OR COMPACTED EARTH FILL MATERIAL, IN ORDER TO ACHIEVE THE PLAN SUB GRADE ELEVATIONS.
- 2. PLACEMENT OF THE EXCAVATED MATERIAL IN OWNER DESIGNATED AREAS FOR FUTURE USE WITHIN AREAS TO BE LANDSCAPED, AND THOSE AREAS NOT REQUIRING STRUCTURAL FILL MATERIAL.
- 3. COMP ACTION OF THE EXCAVATED MATERIAL WHERE PLACED IN AREAS NOT REQUIRING STRUCTURAL FILL MATERIAL, SHALL BE MODERATE.
- 4. EXCESS MATERIALS IF NOT UTILIZED AS FILL OR IF NOT STOCKPILED FOR FUTURE LANDSCAPING, SHALL BE COMPLETELY REMOVED FROM THE CONSTRUCTION SITE AND DISPOSED OF BY THE

1. EXCAVATION OF EARTH AND OTHER MATERIALS ARE SUITABLE FOR USE AS STRUCTURAL FILL. THE EXCAVATION SHALL BE TO WITHIN THE TOLERANCE OF 0.3 FEET (+/-) OF THE PLAN SUBGRADE ELEVATIONS. THE (+/-) TOLERANCE WITHIN PAVEMENT AREAS SHALL BE SUCH THAT THE EARTH MATERIAL SHALL "BALANCE" AS PART OF THE FINE GRADING OPERATION.

2. PLACEMENT OF THE EARTH AND OTHER SUITABLE MATERIALS SHALL BE WITHIN THOSE AREAS REQUIRING STRUCTURAL FILL IN ORDER TO ACHIEVE THE PLAN SUBGRADE ELEVATIONS TO WITHIN A TOLERANCE OF 0.3 FEET (+/-). THE MATERIAL SHALL BE PLACED (8) INCHES IN THICKNESS, AND THE WATER CONTENT SHALL BE ADJUSTED IN ORDER TO ACHIEVE THE REQUIRED COMPACTION. EARTH MATERIAL MAY BE PLACED WITHIN THOSE PORTIONS OF THE BUILDING SITE NOT REQUIRING STRUCTURAL FILL. TO WITHIN SIX (6) INCHES OF THE PLAN FINISHED GRADE ELEVATION. IN AREAS REQUIRING STRUCTURAL FILL, HOWEVER, THE EARTH MATERIAL SHALL NOT BE PLACED OVER TOPSOIL TO OTHER UNSUITABLE MATERIALS UNLESS SPECIFICALLY DIRECTED BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.

- 3. COMPACTION OF THE EARTH AND OTHER SUITABLE MATERIALS, SHALL BE TO AT LEAST 95% OF THE STANDARD PROCTOR DRY DENSITY, ASTM 698 WITHIN PROPOSED PAVEMENT AND BUILDING AREAS. MODERATE COMPACTION IS REQUIRED ELSEWHERE.
- 4. EXCESS MATERIAL IF NOT UTILIZED AS FILL, SHALL BE COMPLETELY REMOVED FROM THE CONSTRUCTION SITE AND DISPOSED OF BY THE CONTRACTORS.

<u>GENERAL, THE EARTHWORK CONTRACTOR SHALL</u>

- 1. MAINTAIN PROPER SITE DRAINAGE AT ALL TIMES DURING THE COURSE OF CONSTRUCTION, AND PREVENT STORM WATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS.
- 2. SPREAD AND COMPACT UNIFORMLY TO THE DEGREE SPECIFIED ALL EXCESS TRENCH SPOIL AFTER COMPLETION OF THE UNDERGROUND IMPROVEMENTS.
- 3. SCARIFY AND COMPACT TO THE DEGREE SPECIFIED THE UPPER TWELVE (12) INCHES OF THE SUITABLE SUBGRADE MATERIAL, IN ALL AREAS THAT MAY BE SOFT DUE TO EXCESS MOISTURE CONTENT. THIS APPLIES TO CUT AREAS AS WELL AS FILL AREAS.
- 4. PROVIDE WATER TO ADD TO DRY MATERIAL IN ORDER TO ADJUST THE MOISTURE CONTENT FOR THE PURPOSE OF ACHIEVING THE SPECIFIED COMPACTION.
- 5. BE RESPONSIBLE FOR IMPLEMENTATION OF THE "STORMWATER POLLUTION PREVENTION PLAN" AS ASSIGNED TO THE EARTHWORK CONTRACTOR ON THE ENGINEERING PLAN.
- 6. GRADE PUBLIC UTILITY EASEMENTS TO MEET THE REQUIREMENTS OF THE LOCAL PUBLIC UTILITY
- 7. ALL FILL MATERIAL IMPORTED ON-SITE MUST MEET THE FOLLOWING REQUIREMENTS:
- 1.) FILL MUST BE IMPORTED FROM ONE LOCATION. 2.) CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE FOLLOWING DOCUMENTATION FOR EACH LOAD OF CLEAN CONSTRUCTION OR DEMOLITION DEBRIS (CCDD) OR UNCONTAMINATED
- SOIL RECEIVED: a) HAULER NAME, SITE OF ORIGIN, ADDRESS, OWNER OR OPERATOR OF THE SITE OF
- b) WEIGHT IN TONS OR VOLUME IN CUBIC YARDS:; AND c) DATE RECEIVED.
- 3.) CONTRACTOR IS RESPONSIBLE TO OBTAIN FOR ALL SOIL: a) CERTIFICATION FROM THE OWNER OR OPERATOR OF THE SITE OF ORIGIN THAT THE SITE HAS NEVER BEEN USED FOR COMMERCIAL OR INDUSTRIAL PURPOSES AND IS PRESUMED TO BE UNCONTAMINATED SOIL: OR
- b) CERTIFICATION FROM A LICENSED PROFESSIONAL ENGINEER THAT THE SOIL IS UNCONTAMINATED. 4.) CONTRACTOR IS RESPONSIBLE TO CONFIRM THAT THE CCDD OR UNCONTAMINATED SOIL WAS NOT REMOVED FROM A SITE AS PART OF A CLEAN-UP OR REMOVAL. 5.) CONTRACTOR IS RESPONSIBLE TO VISUALLY INSPECT AND SCREEN EACH LOAD OF SOIL
- WITH A DEVICE SUCH AS A PHOTO IONIZATION DETECTOR, FLAME IONIZATION DETECTOR OR ANOTHER DEVICE APPROVED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, BUREAU OF LAND, THAT DETECTS VOLATILE ORGANIC COMPOUNDS (ALREADY REQUIRED OF PERMITTED CCDD FILL OPERATIONS);
- 6.) CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL CHEMICAL ANALYSIS ACTIVITIES ASSOCIATED WITH TESTING OF THE CCDD OR UNCONTAMINATED SOIL, WHICH MUST INCLUDE, BUT IS NOT LIMITED TO: a) COPY OF THE LAB ANALYSIS;
 - b) LABORATORY ACCREDITATION STATUS: AND LABORATORY AUTHORIZED AGENT CERTIFICATION.

TESTING AND FINAL ACCEPTANCE

- 1. THE CONTRACTOR SHALL PROVIDE AS A MINIMUM, A FULLY LOADED SIX-WHEEL TRUCK (10 TON MIN.) FOR PROOF ROLLING THE PAVEMENT SUBGRADE PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND THE BASE MATERIAL.
- SPECIFIC COMPACTION TESTING MAY BE REQUIRED BY THE OWNER IN SELECTED FILL AREAS. THE CONTRACTOR SHALL BEAR THE COST OF ANY COMPACTION TESTING WHICH DOES NOT MEET SPECIFICATION AS WELL AS THE RESPONSIBILITY AND COST FOR THE NECESSARY CORRECTION(S).
- APPROVAL OF THE PAVEMENT SUBGRADE BY THE OWNER SHALL BE REQUIRED PRIOR TO THE PLACEMENT OF THE PAVEMENT MATERIALS.

AS-BUILT MEASUREMENTS OF EARTHWORK FOR THE PURPOSE OF PAYMENT SHALL NOT APPLY. THE QUANTITIES SHOWN IN THE ENGINEER'S "QUANTITY ESTIMATE" SHALL BE UTILIZED UNLESS SAID QUANTITIES ARE ADJUSTED BY MUTUAL CONSENT OR BY THE OWNER AND CONTRACTOR PRIOR TO THE

- SIGNING AND ACCEPTANCE OF THE CONTRACT. 2. THE QUANTITIES AS SHOWN IN THE ENGINEER'S "QUANTITY ESTIMATE" ARE THOSE ESTIMATED BY THE ENGINEER AND PROVIDED SOLELY FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR, BY CHOOSING TO UTILIZE THESE QUANTITIES IN THE PREPARATION OF HIS "LUMP SUM" BID, ALSO ACCEPTS THEIR ACCURACY. THE CONTRACTOR IS THEREFORE ENCOURAGED TO MAKE HIS OWN INDEPENDENT EARTHWORK CALCULATION, AND TO VISIT THE SITE PRIOR TO PREPARATION OF HIS
- PRIOR TO THE REMOVAL OF UNSUITABLE MATERIAL. THE CONTRACTOR SHALL NOTIFY OWNER FOR AUTHORIZATION. UPON AUTHORIZATION, THE UNSUITABLE MATERIAL SHALL BE FIELD MEASURED BY THE ENGINEER IN PLACE.

EROSION CONTROL

EROSION CONTROL MEASURES SHALL CONFORM TO THE "ILLNOIS URBAN MANUAL (IUM)" LATEST EDITION, AND FURTHER MEASURES AS DEEMED NECESSARY. TEMPORARY VEGETATION OR, WHEN APPROPRIATE, MULCHING OR OTHER NONVIABLE COVER SHALL BE USED TO PROTECT AREAS EXPOSED DURING DEVELOPMENT PERMANENT SEEDING AREAS SHALL RECEIVE 40 LBS/ACRE PERENNIAL RYEGRASS. 15 LBS/ACRE CREEPING RED FESCUE AND 70 LBS/ACRE KENTUCKY BLUEGRASS. STRAW EROSION CONTROL BLANKETS CONSISTING OF SINGLE STITCH NETTING SHALL BE INSTALLED IN ALL PERMANENT SEEDING AREAS. BLANKETS ARE TO BE SECURED USING WOOD ANCHOR STAKES. FERTILIZER SHOULD BE APPLIED AND INCORPORATED INTO THE SOIL PRIOR TO SEEDING AT THE FOLLOWING RATES:

130 LBS/ACRE NITROGEN 0 LBS/ACRE POTASSIUM 130 LBS/ACRE

THE PIPE WHEN USING PVC.

- 1. THE MWRD SEWER PERMIT SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING
- U.S.G.S. ELEVATION DATUM HAS BEEN USED FOR THIS PROJECT AND IS REFERENCED FROM EXISTING TOPOGRAPHICAL INFORMATION AND SHOWN ON THE COVER SHEET UNDER BENCHMARK
- 3. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER.
- 4. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER. 5. ALL SANITARY, AND STORM IN COMBINED SEWER AREAS, SEWER CONSTRUCTION REQUIRES STONE BEDDING 1/4" TO 1" IN SIZE, WITH A MINIMUM THICKNESS EQUAL TO 1/4 THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF
- 6. "BAND-SEAL" OR SIMILAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPE OF DISSIMILAR MATERIALS.
- 7. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED.
- A. CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUB-WYE SADDLE OR HUB-TEE SADDLE.
- B. REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION. C. WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR
- 8. WHEREVER A SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM

INSERTION OF PROPER FITTING, USING "BAND-SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN

- THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY SEWERS AND WATERMAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED ABOVE CANNOT BE MAINTAINED. OR THE SEWER CROSSES ABOVE A WATERMAIN, THE SEWER SHALL BE CONSTRUCTED TO WATERMAIN
- 9. ALL EXISTING SEPTIC SYSTEMS TO BE ABANDONED. ABANDONED TANKS TO BE FILLED OR
- 10. ALL SANITARY MANHOLES, AND STORM MANHOLES IN COMBINED SEWER AREAS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48", AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED

4" FORCE MAIN PIPE

MATERIAL SHALL CONFORM TO PVC AWWA C-900 JOINTS SHALL BE SOLVENT WELDED AND CONFORM TO ASTM D-3139.

MATERIAL SHALL CONFORM TO SDR 26 ASTM D-2241 JOINTS SHALL BE FLEXIBLE ELASTOMERIC SEALS AND CONFORM TO ASTM D-3139

4", 6", AND 8" PVC GRAVITY SEWER PIPE

THE MINIMUM SLOPE FOR 8" SANITARY SEWER IS 0.50%. THE MINIMUM SLOPE FOR 6" SANITARY SEWER IS 1.00%. THE MINIMUM SLOPE FOR 4" SANITARY SEWER IS 1.00%

PAVING IMPROVEMENTS

- I. FINE GRADING SHALL BE COMPLETED PRIOR TO THE CONSTRUCTION OF THE CURB AND GUTTER AND THE PLACEMENT OF THE BASE MATERIAL, THE STREETS SHALL BE FINE GRADED TO WITHIN 0.1 FEET +/- OF THE FINAL SUBGRADE ELEVATION, TO A POINT TWO (2) FEET BEYOND THE BACK OF THE
- 2. CURB AND GUTTER SHALL BE THE TYPE AS DETAILED ON THE ENGINEERING PLANS. THE CURB SHALL BE BACKFILLED AFTER THEIR CONSTRUCTION PRIOR TO THE PLACEMENT OF THE BASE COURSE.
- 3. PAVEMENT MATERIALS SHALL BE AS DETAILED ON THE ENGINEERING PLANS. THICKNESSES SPECIFIED SHALL BE CONSIDERED TO BE THE MINIMUM COMPACTED THICKNESS.
- 4. THE PAVING CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING: A. REPAIR ANY BASE COURSE AND BINDER COURSE FAILURES PRIOR TO THE INSTALLATION OF

THE FINAL BITUMINOUS CONCRETE SURFACE COURSE.

B. SWEEP CLEAN THE BINDER COURSE PRIOR TO THE INSTALLATION OF THE FINAL BITUMINOUS CONCRETE SURFACE COURSE. EXCESSIVE CLEANING OF THE BINDER COURSE THAT MAY BE REQUIRED, AND IS NOT THE FAULT OF THE PAVING CONTRACTOR, SHALL BE PAID FOR ON A TIME AND MATERIAL BASIS BY PRIOR AGREEMENT WITH THE OWNER.

TESTING AND FINAL ACCEPTANCE

- 1. PRIOR TO PLACEMENT OF THE BASE COURSE, THE SUBGRADE MUST BE APPROVED BY THE LOCAL JURISDICTIONAL AUTHORITY. (SEE "TESTING AND FINAL ACCEPTANCE FOR EARTHWORK").
- 2. PRIOR TO PLACEMENT OF THE BITUMINOUS CONCRETE SURFACE COURSE, THE CONTRACTOR, IF REQUESTED TO BY THE OWNER, SHALL OBTAIN SPECIMENS OF THE BINDER COURSE WITH A CORE DRILL WHERE DIRECTED BY THE ENGINEER, FOR THE PURPOSE OF THICKNESS VERIFICATION. CORING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF ART.406.16 OF THE STANDARD SPECIFICATION ENTITLED "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION". THE COST FOR OBTAINING CORES WHICH ARE LESS THAN THE MINIMUM THICKNESS SPECIFIED SHALL BE BORNE BY THE CONTRACTOR. THE COST FOR OBTAINING CORES WHICH MEET OR EXCEED THE SPECIFICATION SHALL BE BORNE BY THE OWNER.
- 3. DEFICIENCIES IN THE BITUMINOUS CONCRETE BINDER COURSE SHALL BE ADJUSTED FOR BY INCREASING THE PLAN THICKNESS OF THE SURFACE COURSE WITH NO ADDITIONAL COST TO THE
- 4. FINAL ACCEPTANCE OF THE TOTAL PAVEMENT INSTALLATION SHALL BE SUBJECT TO THE TESTING AND CHECKING REQUIREMENTS CITED ABOVE.
- 5. WALKS SHALL BE P.C. CONCRETE (3500 PSI) 5' WIDE OR AS SPECIFIED IN THE PLANS AND A THICKNESS NOT LESS THAN 5"; EXPANSION JOINTS AT 50' INTERVALS; W/ CONTRACTION JOINTS EVERY 5'. BEDDING SHALL BE CA-6 2" MINIMUM DEPTH. 2-#4 REBARS, 10' EITHER SIDE ALL

METHOD OF MEASUREMENT

- 1. CURB AND GUTTER, AND BASE COURSE SHALL BE MEASURED IN THE FIELD BY THE CONTRACTOR. THE QUANTITIES SHALL BE SUBMITTED TO THE ENGINEER FOR VERIFICATION.
- 2. WHEN REQUESTED, DOCUMENTATION FOR THE INSTALLED BASE COURSE, BITUMINOUS CONCRETE BINDER, AND SURFACE COURSE, SHALL BE SUBMITTED TO THE ENGINEER FOR VERIFICATION. DEFICIENCIES IN TOTAL BITUMINOUS CONCRETE PAVEMENT THICKNESS SHALL BE ADJUSTED FOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE JURISDICTIONAL AUTHORITY.

. CURB AND GUTTER SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE / LINEAL FOOT. PRIME COAT MATERIAL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER GALLON. 3. BASE COURSE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD. 4. BITUMINOUS CONCRETE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD.

SANITARY SEWER SYSTEM

- 1. ALL DEVELOPMENT, WHETHER PUBLIC OR PRIVATE, SHALL INCLUDE PROVISIONS FOR THE CONSTRUCTION OF SANITARY SEWERS AND APPURTENANCES DESIGNED IN ACCORDANCE WITH THIS SECTION DEVELOPERS SHALL USE EITHER THE PUBLIC SEWER SYSTEM OR AN ALTERNATIVE SEWER SYSTEM, CERTIFIED BY THE AGENCY OR MUNICIPALITY WITH JURISDICTION AUTHORITY, PROVIDED THAT THE DEVELOPMENT IS PROXIMATE TO A TRANSMISSION LINE THAT HAS ADEQUATE CAPACITY TO HANDLE SUCH PROPOSED DEVELOPMENT.
- 2. ALL SANITARY IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MATERIAL INSTALLATION AND TESTING REQUIREMENTS OF THE "STANDARD SPECIFICATION FOR THE WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS," LATEST EDITION, UNLESS OTHERWISE MODIFIED IN THIS

PROTECTION OF WATER MAINS

. WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH THE APPLICABLE ILLINOIS POLLUTION CONTROL BOARD REGULATION AND THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, DIVISION OF PUBLIC WATER SUPPLIES, TECHNICAL POLICY STATEMENTS. WHEREVER THE SANITARY SEWER MAIN, BUILDING SERVICE SEWER OR ANY STORM DRAIN CROSSES A WATER MAIN. A MINIMUM EIGHTEEN (18 INCHES VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN THE TOP OF THE LOWER PIPE AND THE BOTTOM OF THE UPPER PIPE. IF AN EIGHTEEN (18) INCH VERTICAL SEPARATION CANNOT BE MAINTAINED, THE SANITARY OR STORM SEWER SHALL BE CONSTRUCTED OF WATERMAIN QUALITY PIPE, FOR A MINIMUM DISTANCE OF TEN (10) FEET ON EACH SIDE OF THE WATER MAIN. IF STORM OR SANITARY SEWER CROSSES ABOVE A WATERMAIN AND AN EIGHTEEN (18) INCH CLEARANCE CANNOT BE MAINTAINED, BOTH SEWER AND WATER PIPES MUST BE OF THE SAME PIPE MATERIAL AS THE

TESTING REQUIRED BY THE SECTION.

- ALL REQUIRED TESTING AND CORRECTION OF ANY DEFECTS OF THE SANITARY SEWER SYSTEM SHALL BE COMPLETED BEFORE CURB AND GUTTER OR OTHER ROADWAY WORK BEGINS.
- ALL SEWERS AND APPURTENANCES SHALL BE HIGH PRESSURED CLEANED PRIOR TO INSPECTION AND
- ALL SANITARY SEWER PIPES SHALL BE LOW-PRESSURE AIR TESTED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN

ILLINOIS", EXCEPT THAT ALL SECTIONS OF SEWER MAIN SHALL BE TESTED.

- D. ALL NEWLY LAID FORCE MAIN SHALL BE SUBJECTED TO A HYDROSTATIC PRESSURE OF FIFTY (50) POUNDS PER SQUARE INCH. DURATION OF EACH TEST SHALL BE FOR A PERIOD OF NOT LESS THAN TWO (2) HOURS. EACH VALVED SECTION OF PIPE SHALL BE FILLED WITH WATER AND THE SPECIFIED TEST PRESSURE SHALL BE APPLIED BY MEANS OF A PUMP CONNECTED TO THE PIPE. BEFORE APPLYING THE SPECIFIED TEST PRESSURE, ALL AIR SHALL BE EXPELLED FROM THE PIPE. ALL LEAKS SHALL BE REPAIRED UNTIL TIGHT. ANY CRACKED OR DEFECTIVE PIPES DISCOVERED IN CONSEQUENCE OF THIS PRESSURE TEST SHALL BE REMOVED AND REPLACED AND THE TEST REPEATED UNTIL SATISFACTORY RESULTS ARE OBTAINED.
- ALL FLEXIBLE THERMOPLASTIC SEWER PIPE SHALL BE DEFLECTION TESTED BY PULLING A MANDREL THROUGH THE PIPE FROM MANHOLE TO MANHOLE. DEFLECTION TESTING SHALL BE PERFOMED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", EXCEPT THAT ALL SECTIONS OF SEWER MAIN SHALL BE TESTED.
- ALL SANITARY SEWER MAIN SHALL BE TELEVISED. TWO (2) COPIES OF THE WRITTEN REPORT AND VIDEOTAPE OF THE TELEVISED MAIN SHALL BE PROVIDED TO THE VILLAGE OR CITY.
- ANY PIPING WITH DIPS. CRACKS. IMPROPERLY SEALED JOINTS. OR VARIATIONS FROM THE APPROVED GRADES AND ALIGNMENT SHALL REPAIRED BY REMOVING AND REPLACING THE INVOLVED SECTIONS OF PIPE. THE REPAIRED SECTION OF PIPE SHALL THEN BE RE-TESTED. THE VILLAGE/CITY ENGINEER MAY ALSO REQUEST OTHER TYPES OF TESTING ON THE SANITARY SEWER INSTALLATION AS A CONDITION OF INITIAL ACCEPTANCE.
- 1. PRIOR TO FINAL ACCEPTANCE OF WORK "RECORD" DRAWINGS SHALL BE SUBMITTED TO THE VILLAGE OR CITY.
- 2. ONE MYLAR REPRODUCIBLE, FOUR (4) BLUELINE COPIES, AND .TIF FILE SHALL BE SUBMITTED. ALL CONSTRUCTION SHALL MEET THE REQUIREMENTS AND ACCEPTANCE BY METROPOLITAN WATER
- RECLAMATION DISTRICT OF GREATER CHICAGO OR PERMITTING AGENCY PRIOR TO THE ACCEPTANCE BY THE DIRECTOR OF ENGINEERING.

STORM SEWER AND STORM WATER DETENTION

SUCH PROPOSED DEVELOPMENT.

- 1. ALL DEVELOPMENT, WHETHER PUBLIC OR PRIVATE, SHALL INCLUDE PROVISIONS FOR THE CONSTRUCTION OF STORM SEWERS AND APPURTENANCES DESIGNED IN ACCORDANCE WITH THIS SECTION. DEVELOPERS SHALL USE EITHER THE PUBLIC SEWER SYSTEM OR AN ALTERNATIVE SEWER SYSTEM, CERTIFIED BY AN AGENCY OR MUNICIPALITY WITH JURISDICTIONAL AUTHORITY, PROVIDED THAT THE DEVELOPMENT IS PROXIMATE TO A TRANSMISSION LINE THAT HAS ADEQUATE CAPACITY TO HANDLE
- 2. ALL DEVELOPMENT DESIGNATED BY THE DIRECTOR OF ENGINEERING SHALL INCLUDE PROVISIONS FOR STORM WATER HOLDING FACILITIES DESIGNED IN ACCORDANCE WITH THIS SECTION. THE STORM WATER HOLDING FACILITIES SHOULD INCORPORATE MULTIPLE USES WHERE PRACTICABLE.
- THE DETENTION, RETENTION OR DEPRESSIONAL STORAGE AREAS THAT ARE TO BE USED AS PART OF THE DRAINAGE SYSTEM FOR A PROPERTY SHALL BE CONSTRUCTED AS THE FIRST ELEMENT OF THE INITIAL EARTHWORK PROGRAM. ANY ERODED SEDIMENT CAPTURED IN THESE FACILITIES SHALL BE REMOVED BY THE APPLICANT BEFORE PROJECT COMPLETION IN ORDER TO MAINTAIN THE DESIGN
- VOLUME OF THE FACILITIES. THE DETENTION AREA MUST BE SODDED PRIOR TO THE ISSUANCE OF THE FIRST BUILDING PERMIT.
- 3. STORM SEWER SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 600 OF THE "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION," AND "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS," LATEST EDITION, UNLESS OTHERWISE MODIFIED IN THE SECTION.
- 4. STORMWATER SYSTEM DESIGN SHOULD BE IN CONFORMANCE WITH ILLINOIS EPA STORMWATER PERMITTING REQUIREMENTS. IN PARTICULAR, A STATE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR CONSTRUCTION SITE ACTIVITIES IS REQUIRED FOR LAND DISTURBANCES OF ONE OR MORE ACRES. PERMIT REQUIREMENTS FOR A "STORMWATER POLLUTION PREVENTION PLAN" SPECIFICALLY REFERENCE THE NEED FOR STORMWATER DETENTION, VEGETATED SWALES AND NATURAL DEPRESSIONS, INFILTRATION MEASURES, AND VELOCITY DISSIPATION DEVICES TO CONTROL RUNOFF POLLUTANTS AND TO MAINTAIN PRE-DEVELPOPMENT HYDROLOGIC CONDITIONS

SEWER PIPE CLASS

INVERT FLOWLINES.

7. CRUSHED GRANULAR BEDDING:

- 1. SEWER PIPE CALL SHALL BE DETERMINED BASED UPON THE SPECIFICATION OF SECTION 603 OF
- THE "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION. ALL STORM SEWER SYSTEM ELEMENTS SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:
- REINFORCED CONCRETE PIPE (12" DIAMETER AND LARGER), CIRCULAR REINFORCEMENT, MINIMUM CLASS 3, WALL B, ASTM C-76. REINFORCED CONCRETE ARCH CULVERT PIPE-MINIMUM CLASS HE-III OR VE-III, ASTM C-507. PVC UNDERDRAIN PIPE (4", 6", AND 8") - ASTM D-3212, SDR26.
- PVC PIPE-ASTM D-3212, PUSH-ON TYPE, EXCEPT UNDERDRAIN PIPE WHICH SHALL HAVE SOLVENT WELDED JOINTS. REINFORCED CONCRETE PIPE-ASTM C-443. ("O" RING)
- REINFORCED ARCH OR ELLIPTICAL PIPE-ASTM C877 CASING PIPES FOR AUGURED SLEEVES:
- STEEL PIPE-ASTM A120, 3/8" MINIMUM THICKNESS 4. MANHOLES AND CATCH BASINS: PRECAST REINFORCED CONCRETE - ASTM C-478 AND ASTM C-443 SIZE: FOR SEWER 18" DIAMETER OR LESS, MANHOLE SHALL HAVE A 48" INSIDE DIAMETER. FOR SEWER 21" TO 36" DIAMETER, MANHOLE SHALL HAVE A 60" INSIDE DIAMETER FOR SEWER GREATER THAN 36" DIAMETER, MANHOLE SHALL HAVE AN OFFSET RISER PIPE OF 48"
- ADJUSTMENT" NO MORE THAN TWO (2) PRECAST CONCRETE ADJUSTING RINGS WITH SIX (6) INCH MAXIMUM HEIGHT ADJUSTMENT SHALL BE ALLOWED. PIPE AND FRAME SEALS: ALL PIPE CONNECTION OPENINGS SHALL BE PRECAST WITH PORTLAND CEMENT MORTAR, O-RING GASKETS OR MASTIC MATERIAL. BOTTOM SECTIONS: ALL BOTTOM SECTIONS SHALL BE MONOLITHICALLY PRECAST INCLUDING BASES AND INVERT FLOWLINES. MANHOLE STEPS - EAST JORDAN IRON WORKS, INC. #8518. STEPS SHALL BE INSTALLED IN ALL STRUCTURES (STORM / SANITARY / WATER) AT 16 INCH CENTERS, WHERE THE DEPTH BETWEEN THE
- PRECAST REINFORCES CONCRETE ASTM C478 AND ASTM C443 SIZE: INLETS SHALL HAVE 24" INSIDE DIAMETER AND A MAXIMUM DEPTH OF FOUR (4) FEET ADJUSTMENT: NO MORE THAN TWO (2) PRECAST CONCRETE ADJUSTING RINGS WITH SIX (6) INCH MAXIMUM HEIGHT ADJUSTMENT SHALL BE ALLOWED ONLY ONE (1) PIPE CONNECTION IS ALLOWED AND IT SHALL BE PRECAST WITH PORTLAND CEMENT MORTAR, O-RING GASKETS OR MASTIC MATERIAL.

RIM AND THE BOTTOM OF THE STRUCTURE EXCEEDS FOUR FEET IN HEIGHT.

- 6. CASTINGS UNLESS OTHERWISE NOTED ON THE PLANS, THE FOLLOWING SHALL BE USED: MANHOLE FRAME AND COVER - E.J.I.W. NO. 1058 OR NEENAH R-1550 EMBOSSED "STORM" WITH TYPE A HEAVY DUTY COVER SIX (6) INCH CURB & GUTTER INLET - E.J.I.W. NO. 7210 W/ TYPE M1 GRATE, NEENAH R-3281 A. ROLLED CURB AND GUTTER INLET - E.J.I.W. NO. 7525, NEENAH R-3501 P DEPRESSED CURB AND GUTTER - E.J.I.W. NO. 7210 WITH TYPE M3 GRATE YARD INLET - E.J.I.W. NO. 1020 WITH TYPE M2 FLAT GRATE, NEENAH R-4340 B
- BEDDING, HAUNCHING, AND COVER SHALL BE CA-7, CA-11 OR CA-13. THE VILLAGE/CITY BEDDING AND BACKFILL REQUIREMENTS SHALL SUPERSEDE AS APPLICABLE. 8. HEADWALLS AND PRECAST END SECTIONS:

ALL PIPES SHALL TERMINATE AT REINFORCED CONCRETE HEADWALLS OR PRECAST END SECTIONS.

- NSPECTION AND TESTING
- A. GENERAL ALL THE REQUIRED TESTING AND CORRECTION OF DEFECTS OF THE STORM SEWER SYSTEM SHALL BE COMPLETED BEFORE CURB AND GUTTER OR OTHER ROADWAY IMPROVEMENT WORK BEGINS.
- ALL SEWER AND APPURTENANCES SHALL BE CLEANED PRIOR TO INSPECTION AND TESTING REQUIRED BY THIS SECTION.
- ALL FLEXIBLE THERMOPLASTIC SEWER PIPE SHALL BE DEFLECTION TESTED BY PULLING A MANDREL THROUGH THE PIPE FROM MANHOLE TO MANHOLE. DEFLECTION TESTING SHALL BE PERFOMED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", EXCEPT THAT ALL SECTIONS OF SEWER MAIN SHALL BE TESTED.
- TELEVISING OF STORM SEWER SHALL BE PERFOMED AS REQUESTED BY THE VILLAGE. A WRITTEN REPORT AND VIDEOTAPE COPY OF THE TELEVISED SEWER SHALL BE PROVIDED TO THE VILLAGE.
- ANY PIPING WITH DIPS, CRACKS, IMPROPERLY SEALED JOINTS, OR VARIATIONS FROM THE APPROVED GRADES AND ALIGNMENT SHALL REPAIRED BY REMOVING AND REPLACING THE INVOLVED SECTIONS OF PIPE. THE REPAIRED SECTION OF PIPE SHALL THEN BE RE-TESTED. THE VILLAGE ENGINEER MAY ALSO REQUEST OTHER TYPES OF TESTING ON THE SANITARY SEWER INSTALLATION AS A CONDITION OF INITIAL ACCEPTANCE.
- G. RECORD DRAWINGS 1. PRIOR TO FINAL ACCEPTANCE OF WORK "RECORD" DRAWINGS SHALL BE SUBMITTED TO THE
- 2. ONE MYLAR REPRODUCIBLE, FOUR (4) SETS OF PRINTS, .TIF FILE SHALL BE SUBMITTED.

<u>WATERMAIN</u>

FITTINGS - ANSI 21.10 (AWWA C110)

- All DEVELOPMENT SHALL INCLUDE PROVISIONS FOR THE CONSTRUCTION OF WATER DISTRIBUTION FACILITIES COMPLETE WITH VALVES, FIRE HYDRANTS, AND OTHER APPURTENANCES DESIGNED IN ACCORDANCE WITH THIS SECTION AS A MINIMUM THE WATER DISTRIBUTION SYSTEM SHALL PROVIDE A SERVICE CONNECTION(S) AT THE APPROXIMATE MID-POINT OF THE PROPERTY LINE OF EACH INDIVIDUAL LOT OR PARCEL WITHIN THE DEVELOPMENT. WHERE MORE THAN ONE BUILDING IS LOCATED OR PLANNED ON ONE LOT OR PARCEL PER PROPERTY, OR WHEN WATER MAIN CONSTRUCTION IS REQUIRED ON THE PROPERTY FOR FIRE PROTECTION, THE PROPOSED CONSTRUCTION SHALL ALSO INCLUDE ALL WATER MAIN CONSTRUCTION AND APPURTENANCES WITHIN THE LOT OR PARCEL EXCEPT SERVICES
- 2. SPECIFICATION REFERENCES MADE HEREIN FOR MANUFACTURED MATERIALS SUCH AS PIPE, HYDRANTS. VALVES AND FITTINGS REFER TO DESIGNATION THE AMERICAN WATER WORKS ASSOCIATION (AWWA) OR OF THE AMERICAN NATIONAL STANDARD INSTITUTE (ANSI). WATER DISTRIBUTION SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS," LATEST EDITION, UNLESS OTHERWISE MODIFIED IN THIS
- MATERIAL SPECIFICATION AND DETAILS
- (ALL WATER DISTRIBUTION SYSTEM ELEMENTS SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:) DUCTION IRON PIPE PIPE CLASS THICKNESS - ANSI A21.50 (AWWA C150), MINIMUM THICKNESS, CLASS 52 PIPE - ANSI A21-51 (AWWA C151) PIPE LINING - ANSI A21.4 (AWWA C104)
- JOINTS MECHANICAL AND PUSH-ON, ANSI A21.11 (AWWA C111) POLY WRAP OF ALL WATERMAINS IS REQUIRED BY THE VILLAGE.
- TWELVE (12) INCH AND SMALLER IRON BODY, BRONZE MOUNTED, RESILIENT WEDGE VALVE, PARALLEL SEAT, NON-RISING STEM GATE VALVES, COUNTER CLOCKWISE TO OPEN, AWWA C500 FOURTEEN (14) INCH AND LARGER — IRON BODY, RUBBER SEAT, CLASS 150B, COUNTER CLOCKWISE TO OPEN, AWWA C504 JOINT END - MECHANICAL, AWWA C111
- FIRE HYDRANTS EAST JORDAN IRON WORKS, INC. #BR6, OR CLOW MEDALLION, PAINTED TNEMEC GLOSS SAFETY GREEN.
- VALVE SIZE, 5 ¼ INCH, COUNTER-CLOCKWISE TO OPEN. NOZZLES, TWO AT 2 ½ INCH AND ONE AT 4 ½, WITH THREADS CONFORMING TO NATIONAL STANDARD SPECIFICATIONS. FRANGIBLE SECTIONS (BREAKAWAY TAPE) WITH THE BREAK LINE FLANGE LOCATED A MINIMUM OF ONE (1) INCH ABOVE FINISHED GRADE. HYDRANT TO BE INSTALLED WITH MJ SWIVEL TEE WITH SWIVEL MJ GLAND. AUXILIARY TO BE FLANGED
- 4. HYDRANT VALVE BOX TYLER 664-S, VALVE SHALL MATCH SAME MANUFACTURER AS HYDRANT AND SHALL CONNECT TO THE
- FIRE HYDRANT WITH A FLANGE CONNECTION. LID EMBOSSED "WATER" AIR RELEASE VALVES APLO, TYPE 200A, 2-INCH OR VALVEMATIC

ATTACHMENT TO FIRE HYDRANT.

PRESSURE CONNECTION VALVES.

MAXIMUM HEIGHT ADJUSTMENT SHALL BE ALLOWED.

MANHOLE STEPS, EAST JORDAN IRON WORKS, INC. #8518.406.

- 6. CORPORATION STOPS
- MUELLER H1500 OR FORD F-600, 2 INCH MINIMUM, AWWA C800 SERVICE PIPE COPPER TUBE, 2 INCH SMALLER, ASTM B88, TYPE K (2" MINIMUM)
- DUCTILE IRON, LARGER THAN 2-INCH, CONFORM TO SECTION C(1) ABOVE.
- COPPER SERVICE, MUELLER H-15154 OR FORD B44-444 DUCTILE IRON SERVICE, CONFORM TO SECTIONS C(2)(A) AND C(2)(C) ABOVE. COPPER SERVICE. MUELLER H-10302 OR H-10304 OR FORD EA 26040
- DUCTILE IRON SERVICE, 4-INCH AND SMALLER, CONFORM TO SECTION C(4) ABOVE. DUCTILE IRON SERVICE, 6-INCH AND LARGER, CONFORM TO SECTION C(12) BELOW. 10. CONCRETE THRUST RESTRAINTS HORIZONTAL REACTION - THRUST AT ALL TREES, PLUGGED ENDS, HYDRANTS, AND BENDS BETWEEN 11
- DEGREES AND 90 DEGREES SHALL CONFORM TO EXHIBIT NO WM10 SPECI VERTICAL REACTION - THE ENGINEER SHALL SUBMIT INDIVIDUAL DESIGNS FOR EACH LOCATION AND COMPLY WITH AWWA C600, SECTION 3.8. MATERIAL - PRECAST OR POURED CLASS SI CONCRETE. WHERE UNDISTURBED EARTH IS NOT AVAILABLE OR NOT LIKELY TO BE AVAILABLE TO BACK UP PRESSURE TYPE CONCRETE THRUST BLOCKS, THE ENGINEER SHALL SPECIFY TIE ROD WITH OR WITHOUT

ANCHOR TYPE CONCERT THRUST BLOCKS AND SUBMIT DESIGN DATA FOR SUCH SPECIFICATION. CARE

SHALL BE TAKEN WHEN POURING CONCRETE SO THAT THE MIX WILL NOT INTERFERE WITH ACCESS TO

- JOINTS OR WITH HYDRANT DRAINAGE. ALL THRUST RESTRAINTS ARE TO BE CAST-IN PLACE CONCRETE, EXCEPT FOR HYDRANT RESTRAINTS. HYDRANT RESTRAINTS SHALL BE PRECAST BLOCKS.
- 2" WATER SERVICES -- PVC SCHEDULE 40 WITH A MINIMUM DIAMETER OF 4-INCHES 8" WATER MAIN -- 16" STEEL CASING PIPE WITH A MINIMUM THICKNESS OF 0.219'. 12. VALVE BOXES ALL VALVES SHALL BE INSTALLED IN VALVE BOXES, EXCEPT FOR VALVES 12 INCHES AND LARGER AND
- TYPE TYLER 664-S WITH LID EMBOSSED WITH "WATER" AND SHALL BE PROVIDED WITH STABILIZERS TWELVE (12) INCHES AND SMALLER - EPOXY COATED RESILIENT WEDGE VALVES WITH NON-RISING

STEM GATE VALVES, COUNTER-CLOCKWISE TO OPEN, AWWA C-509, CLOW, MUELLER OR EQUAL.

PRECAST REINFORCED CONCRETE - ASTM C478 AND ASTM C443. SIZE: FOR 12" DIAMETER VALVES, VALVE VAULTS SHALL HAVE A 48" INSIDE DIAMETER,; FOR PRESSURE CONNECTIONS AND VALVES 16" AND LARGER IN DIAMETER, VALVE VAULTS SHALL HAVE A 60" INCH DIAMETER.

ADJUSTMENTS: NO MORE THAN TWO (2) PRECAST CONCRETE ADJUSTING RINGS WITH SIX (6) INCH

- 15. CASTING MANHOLE FRAME AND COVER - EAST JORDAN IRON WORKS, INC. #1022, TY A EMBOSSED
- CRUSHED GRANULAR BEDDING HAUNCHING AND COVER SHALL BE CA-7, CA-11 OR CA-13. VILLAGE OR CITY DETAILS SHALL BOTTOM SECTIONS: ALL BOTTOM SECTIONS SHALL BE MONOLITHICALLY PRECAST INCLUDING BASES AND SUPERSEDE AS APPLICABLE.

ACCORDANCE WITH THIS SECTION

- 1. AS PART OF THE CONSTRUCTION, THE WATER MAINS SHALL BE PRESSURE TESTED IN
- 2. ALL NEWLY LAID PIPE SHALL BE SUBJECTED TO A HYDROSTATIC PRESSURE OF ONE HUNDRED FIFTY (150) POUNDS PER SQUARE INCH OR VILLAGE/CITY SPECIFICATIONS (WHICHEVER IS GREATER). DURATION OF EACH TEST SHALL BE FOR A PERIOD OF NOT LESS THAN TWO (2) HOURS. EACH VALVED SECTION OF PIPE SHALL BE FILLED WITH WATER AND THE SPECIFIED TEST PRESSURE SHALL BE APPLIED BY MEANS OF A PUMP CONNECTED TO THE PIPE. BEFORE APPLYING THE SPECIFIED TEST PRESSURE. ALL AIR SHALL BE EXPELLED FROM THE PIPE. ALL LEAKS SHALL BE REPAIRED UNTIL TIGHT. ANY CRACKED OR DEFECTIVE PIPES, FITTINGS, VALVES, OR HYDRANTS DISCOVERED IN CONSEQUENCE OF THIS PRESSURE TEST SHALL BE REMOVED AND REPLACED AND THE TEST REPEATED UNTIL SATISFACTORY RESULTS ARE OBTAINED.
- 3. PERFORM A "SYSTEM" TEST. A "SYSTEM" TEST SHALL CONSIST OF THE WATER MAIN ISOLATED AT SYSTEM PRESSURE FOR TWENTY-FOUR (24) HOURS PRIOR TO THE 150-PSI TEST. NO LEAKAGE ALLOWANCE IS PERMITTED.
- 4. ALL TESTING SHALL BE DONE BEFORE THE INSTALLATION OF SERVICE LINES. SUITABLE MEANS SHALL BE PROVIDED FOR DETERMINING THE QUANTITY OF WATER LOST BY LEAKAGE UNDER THE SPECIFIED TEST PRESSURE. ALLOWABLE LEAKAGE SHALL NOT BE GREATER THAN THAT COMPUTED AS FOLLOW:

- L= ALLOWABLE LEAKAGE IN GALLONS PER HOUR
- S= LENGTH OF PIPE TESTED, FEET D= NOMINAL DIAMETER OF THE PIPE IN INCHES

CONTROLLING THE FLOW INTO THE PIPELINE EXTENSION.

CHLORINE IN THE WATER LEFT IN THE LINE AFTER CHLORINATION.

P= AVERAGE TEST PRESSURE DURING LEAKAGE TEST IN POUNDS PER SQUARE INCH (GAUGE)

LEAKAGE IS DEFINED AS THE QUALITY OF WATER REQUIRED TO BE SUPPLIED TO THE NEWLY LAID PIPE NECESSARY TO MAINTAIN THE SPECIFIED LEAKAGE TEST PRESSURE.

PRIOR TO CHLORINATION, THE MAIN SHALL BE FLUSHED AS THOROUGHLY AS POSSIBLE WITH THE WATER PRESSURE AND OUTLETS AVAILABLE. FLUSHING SHALL BE DONE AFTER THE PRESSURE TEST IS MADE. BECAUSE SUCH FLUSHING REMOVES ONLY THE LIGHTER SOLIDS. IT CANNOT BE RELIED UPON TO REMOVE HEAVY MATERIAL ALLOWED TO GET INTO THE MAIN DURING LAYING. IF NO HYDRANT IS INSTALLED AT THE END OF THE MAIN, A TAP SHOULD BE PROVIDED LARGE ENOUGH TO AFFECT A VELOCITY IN THE MAIN OF AT LEAST TWO AND ONE-HALF (2 ½) FEET PER SECOND.

- THE PREFERRED POINT OF APPLICATION OF THE CHLORINATING AGENT SHALL BE AT THE BEGINNING OF THE PIPELINE EXTENSION OR ANY VALVED SECTION OF IT AND THROUGH A CORPORATION STOP IN THE TOP OF THE NEWLY LAID PIPE. THE INJECTOR FOR DELIVERING THE CHLORINE-GAS INTO THE PIPE SHOULD BE SUPPLIED FROM A TAP ON THE PRESSURE SIDE OF THE GATE VALVE
- 2. WATER FROM THE EXISTING DISTRIBUTION SYSTEM OR OTHER SOURCE OF SUPPLY SHALL BE CONTROLLED SO AS TO FLOW SLOWLY INTO THE NEWLY LAID PIPELINE DURING THE APPLICATION OF CHLORINE-GAS. THE RATE OF CHLORINE MIXTURE FLOW SHALL BE IN SUCH PROPORTION TO THE RATE OF WATER ENTERING THE PIPE THAT THE CHLORINE DOSE APPLIED TO THE WATER ENTERING THE NEWLY LAID PIPE SHALL BE AT LEAST FIFTY (50) PPM, OR ENOUGH TO MEET THE REQUIREMENTS DURING THE RETENTION PERIOD. THIS MAY REQUIRE AS MUCH AS ONE HUNDRED (100) PPM OF
- 3. VALVES SHALL BE MANIPULATED SO THAT THE STRONG CHLORINE SOLUTION IN THE LINE BEING TREATED SHALL NOT FLOW BACK INTO THE LINE SUPPLYING THE WATER.
- 4. TREATED WATER SHALL BE RETAINED IN THE PIPE LONG ENOUGH TO DESTROY ALL SPORE-FORMING BACTERIA. THIS RETENTION PERIOD SHALL BE AT LEAST TWENTY-FOUR (24) HOURS AFTER THE CHLORINE-TREATED WATER HAS BEEN RETAINED FOR THE REQUIRED TIME. THE CHLORINE RESIDUAL AT THE PIPE EXTREMITIES AND AT OTHER REPRESENTATIVE POINTS SHOULD BE AT LEAST 10
- 5. IN THE PROCESS OF CHLORINATING NEWLY LAID PIPE, ALL VALVES OR OTHER APPURTENANCES
- SHALL BE OPERATED WHILE THE PIPELINE IS FILLED WITH THE CHLORINATING AGENT. 6. ALL WATER MAINS SHALL BE DISINFECTED AND TESTED ACCORDING TO REQUIREMENTS OF THE "STANDARDS FOR DISINFECTING WATER MAINS," AWWA C601, AND AS REQUIRED BY THIS SECTION. ALL DISINFECTION. AS REQUIRED BY THIS SECTION. SHALL BE PERFORMED BY AN INDEPENDENT FIRM EXHIBITING EXPERIENCE IN THE METHODS AND TECHNIQUES OF THIS OPERATION, AND SHALL BE

APPROVED BY THE VILLAGE OR CITY ENGINEER.

FINAL FLUSH AND TESTING 1. FOLLOWING CHLORINATION, ALL TREATED WATER SHALL BE THOROUGHLY FLUSHED FROM THE NEWLY LAID PIPELINE AT ITS EXTREMITIES UNTIL THE REPLACEMENT WATER, THROUGHOUT ITS LENGTH SHALL, UPON TEST, BE APPROVED AS SAFE WATER BY THE VILLAGE/CITY ENGINEER. THIS QUALITY OF WATER DELIVERED BY THE NEW MAIN SHOULD CONTINUE FOR A PERIOD OF AT LEAST TWO (2) FULL DAYS AS DEMONSTRATED BY LABORATORY EXAMINATION OF SAMPLES TAKEN FROM A TAP LOCATED AND INSTALLED IN SUCH A WAY AS TO PREVENT OUTSIDE CONTAMINATION. SAMPLES SHOULD NEVER

BE TAKEN FROM AN UNSTERILIZED HOSE OR FROM A FIRE HYDRANT BECAUSE SUCH SAMPLES SELDOM

MEET CURRENT BACTERIOLOGICAL STANDARDS. 2. AFTER DISINFECTING AND FLUSHING, A MINIMUM OF TWO (2) WATER SAMPLES SHALL BE COLLECTED BY THE VILLAGE/CITY ENGINEER ON TWO SUCCESSIVE DAYS. BACTERIOLOGICAL SAMPLING AND ANALYSIS OF THE SAMPLES SHALL BE PERFORMED BY A LABORATORY APPROVED BY THE ILLINOIS DEPARTMENT OF PUBLIC HEALTH AND THE VILLAGE/CITY ENGINEER. THE VILLAGE ENGINEER WILL DELIVER TEST SAMPLES TO THE TEST LAB. THE DEVELOPER SHALL BE RESPONSIBLE FOR REIMBURSING THE VILLAGE/CITY FOR ALL COSTS INCURRED FOR LABORATORY TESTING. SHOULD THE INITIAL TREATMENT RESULT IN AN UNSATISFACTORY BACTERIAL TEST, THE PROCEDURE SHALL BE REPEATED UNTIL SATISFACTORY RESULTS ARE OBTAINED. THE CONTRACTOR OR DEVELOPER SHALL PAY FOR THE SAMPLING AND ANALYSIS RESULTS OF THE ANALYSIS SHALL BE TRANSMITTED BY THE LABORATORY DIRECTLY TO THE VILLAGE/CITY ENGINEER. TEST RESULTS SHALL INDICATE THE DATE THE SAMPLE WAS COLLECTED, THE DATE THE ANALYSIS WAS MADE, THE EXACT LOCATION AT WHICH SAMPLES WERE TAKEN. THE FIRM SUBMITTING THE SAMPLE. AND THE PROJECT AT WHICH THE SAMPLES WERE

COLLECTED. SUFFICIENT SAMPLES SHALL BE COLLECTED IN ORDER TO INSURE THAT THE SYSTEM IS BACTERIOLOGICALLY SAFE.

- STANDARD SPECIFICATIONS
- THE STANDARD SPECIFICATIONS WHICH APPLY TO THE CONSTRUCTION WORK AS SHOWN ON THE ENGINEERING PLANS, ARE CONTAINED IN THE FOLLOWING DOCUMENTS:

1. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS ADOPTED APRIL 1, 2016

- BY THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION AND ALL SUBSEQUENT REVISIONS. 2. STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS SEVENTH EDITION, AS ADOPTED IN 2013 BY THE ILLINOIS SOCIETY OF PROFESSIONAL ENGINEERS, ET AL., AND
- 3. STANDARD SPECIFICATIONS AS CURRENTLY IN EFFECT BY THE CITY/ VILLAGE, AND ALL 4. PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL IN
- IN THE EVENT OF A CONFLICT BETWEEN STATEMENTS WHICH APPLY TO THE CONSTRUCTION WORK, THE STATEMENT CONTAINED WITHIN THE DOCUMENT FIRST ENUMERATED BELOW SHALL GOVERN:

ALL SUBSEQUENT REVISIONS.

SPECIAL PROVISIONS

MORTON GROVE, IL

GENERAL NOTES

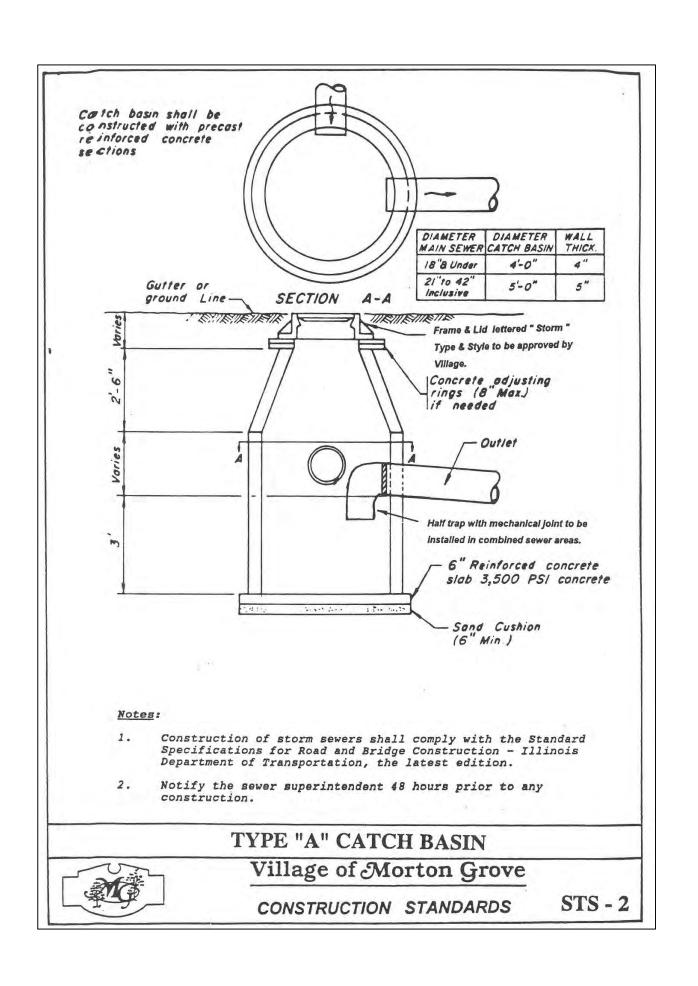
ILLINOIS, LATEST EDITION AND ALL SUBSEQUENT REVISIONS.

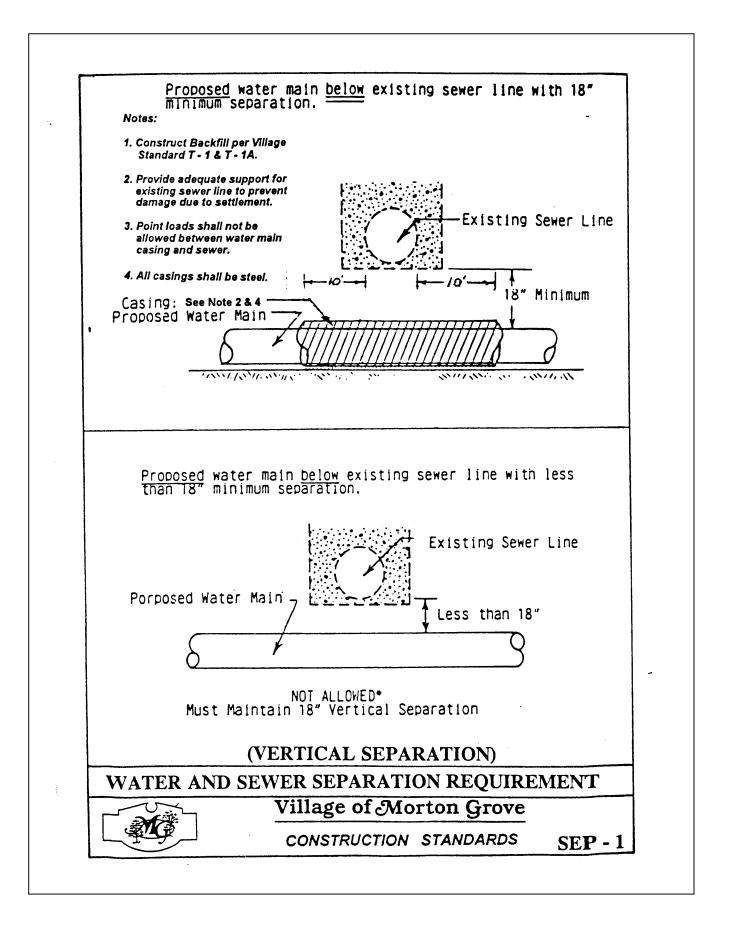
3. NOTES AND DETAILS ON THE ENGINEERING PLAN 4. STANDARD SPECIFICATIONS, AS DEFINED IN PARAGRAPH 1 ABOVE.

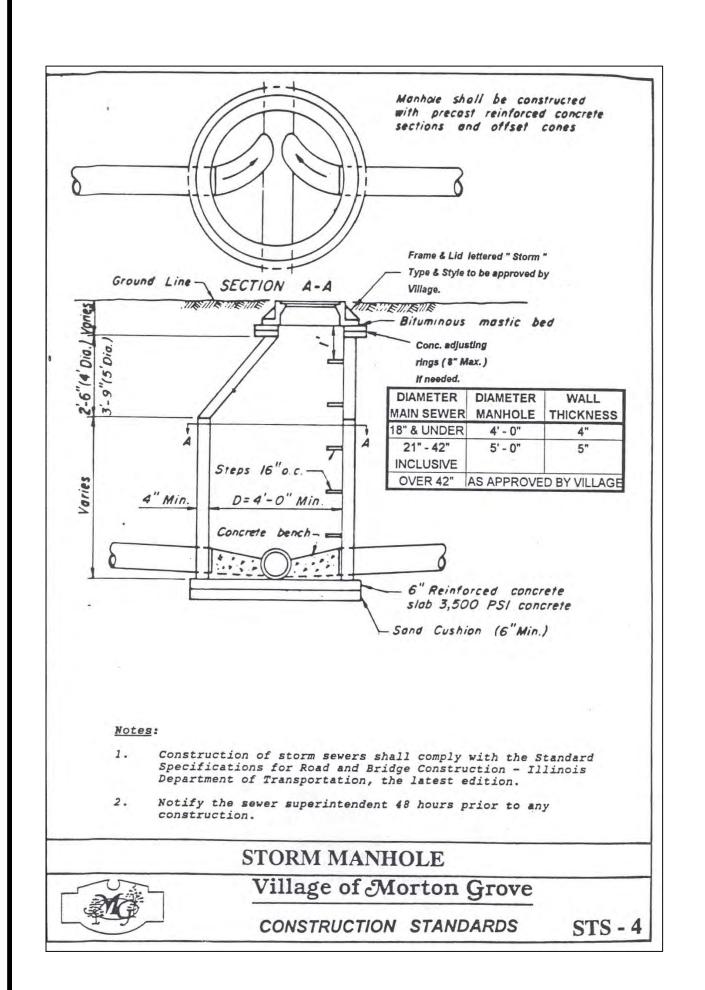
GARDEN CENTER AND STORAGE YARD EXPANSION 6301 OAKTON ST.

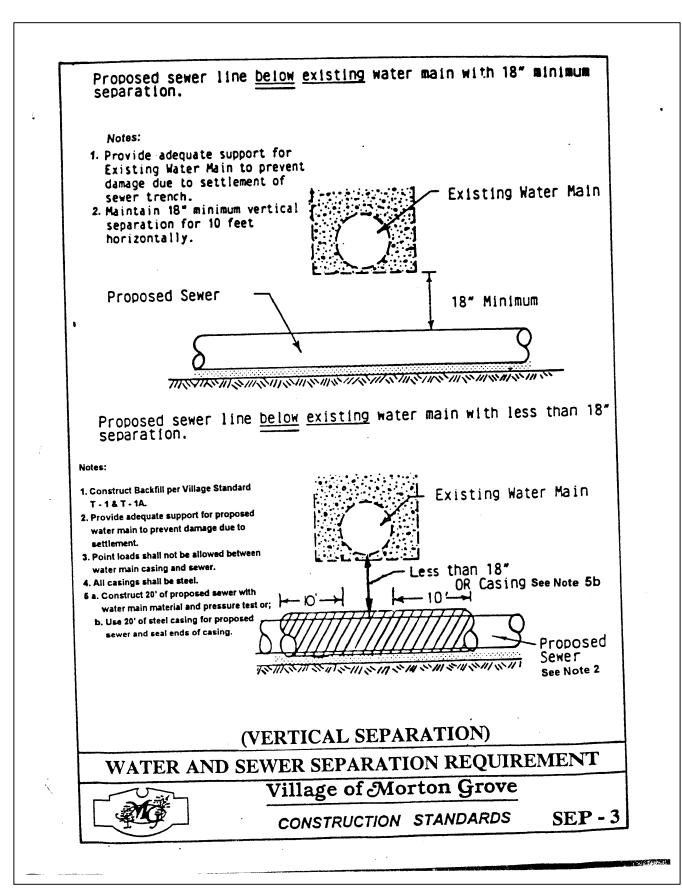
DATE: 12/06/19 IOB NUMBER: SHEET Consulting Civil Engineering Land Planning & Surveying # DATE DESCRIPTION 825 N. Cass Avenue, Suite 106 Westmont, Illinois 60559 phone: 630-381-0819 $\mathbb{C}.\mathbb{M}.$ Lavoi ϵ

DRAWN BY: SKB | CHECKED BY: CML **GENERAL NOTES**

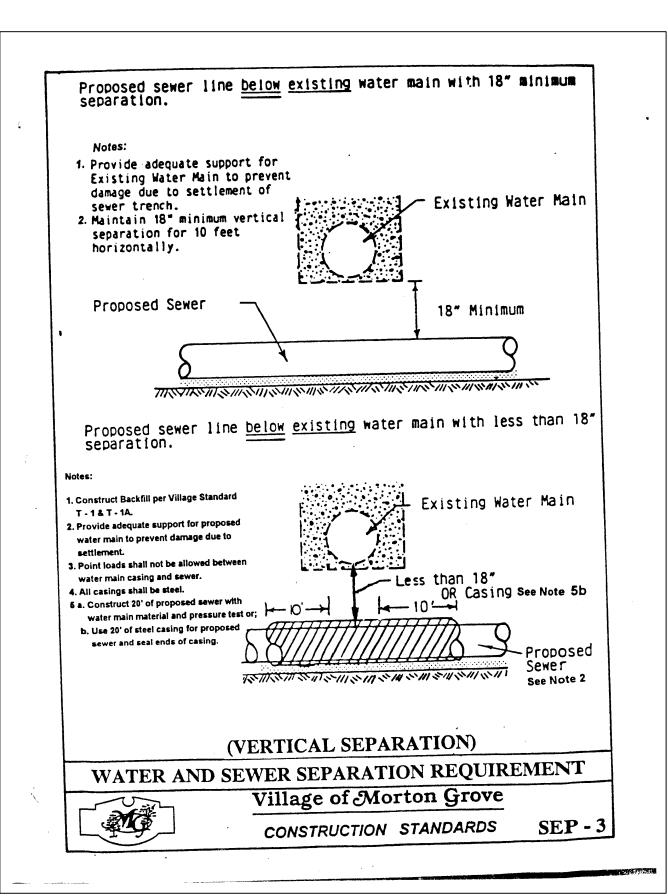


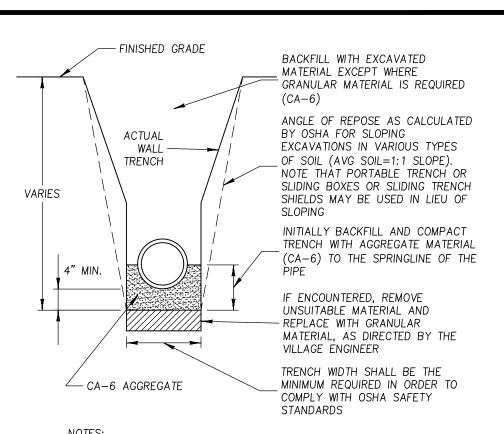






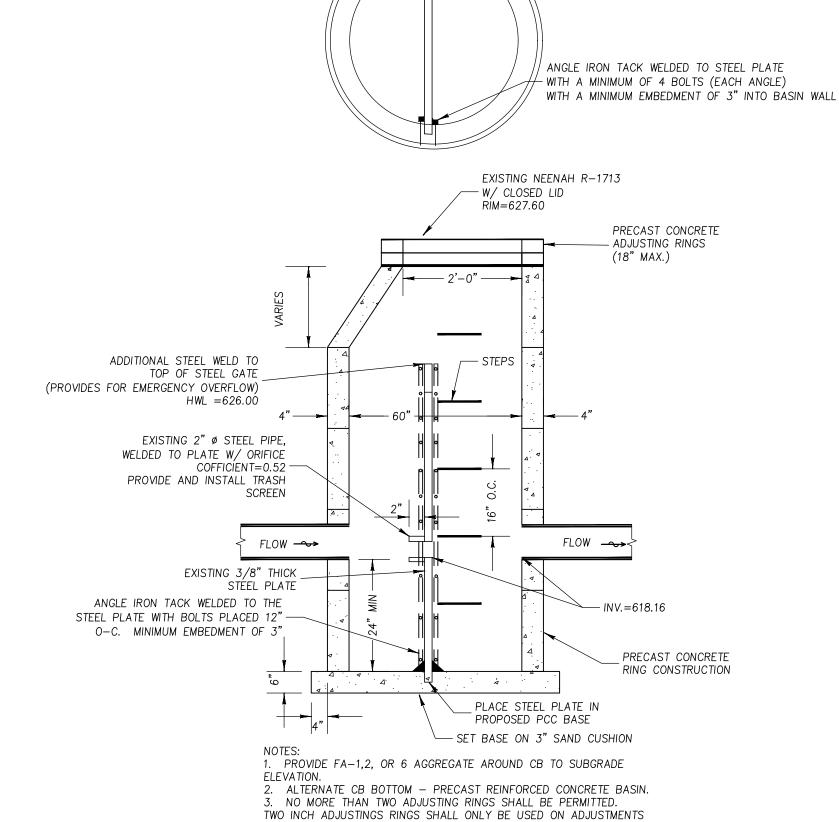
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1. IN PAVED AREAS, ALL TRENCHES SHALL BE JETTED IN CONFORMANCE WITH SECTION 550.07 (METHOD 3) OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2002.

TRENCH SECTION (STORM SEWER) N.T.S.



LESS THAN THREE INCHES.

ADJUSTING RINGS.

RESTRICTOR DETAIL-EAST POND, TS

4. CONCRETE FILLETS SHALL BE MADE WITH ADDITIONAL MORTAR TO

5. DRESS UP INTERIOR JOINTS WITH HYDRAULIC CEMENT. APPLY A

CONTINUOUS LAYER OF NONHARDENING PREFORMED MASTIC MATERIAL

6. STEEL PLATE MUST BE PERMANENTLY MOUNTED TO BASIN WITH

ANGLE IRON TACK WELDED TO THE PLATE AND A MINIMUM OF 4

BOLTS (EACH ANGLE) WITH A MINIMUM EMBEDMENT OF 3" INTO THE

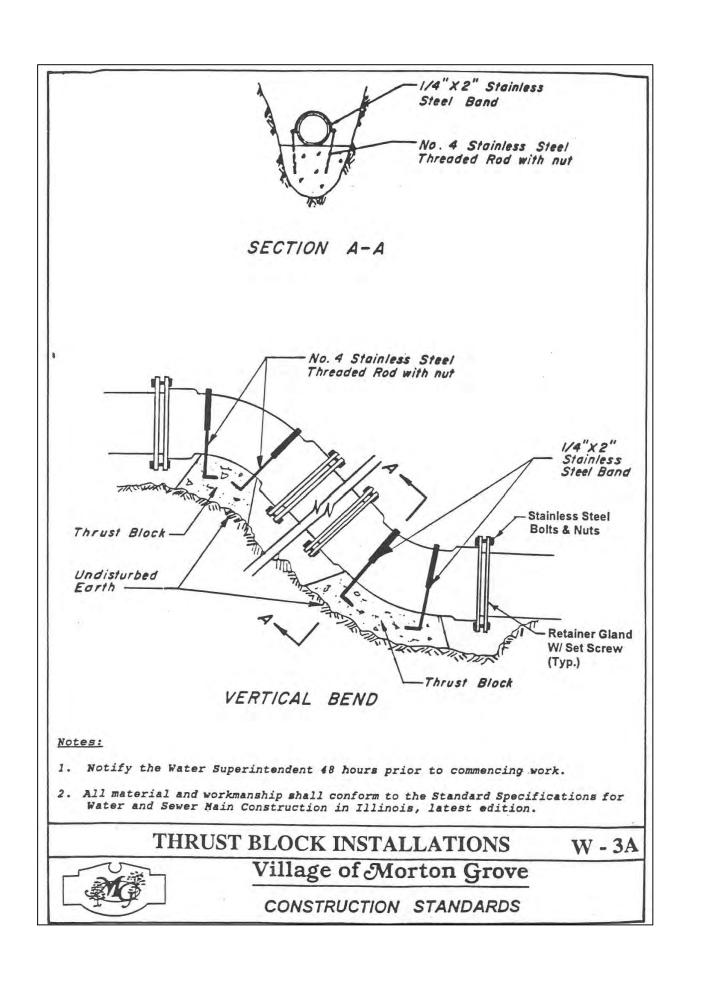
7. WATERTIGHT EPOXY SEALANT IS REQUIRED AROUND THE STEEL

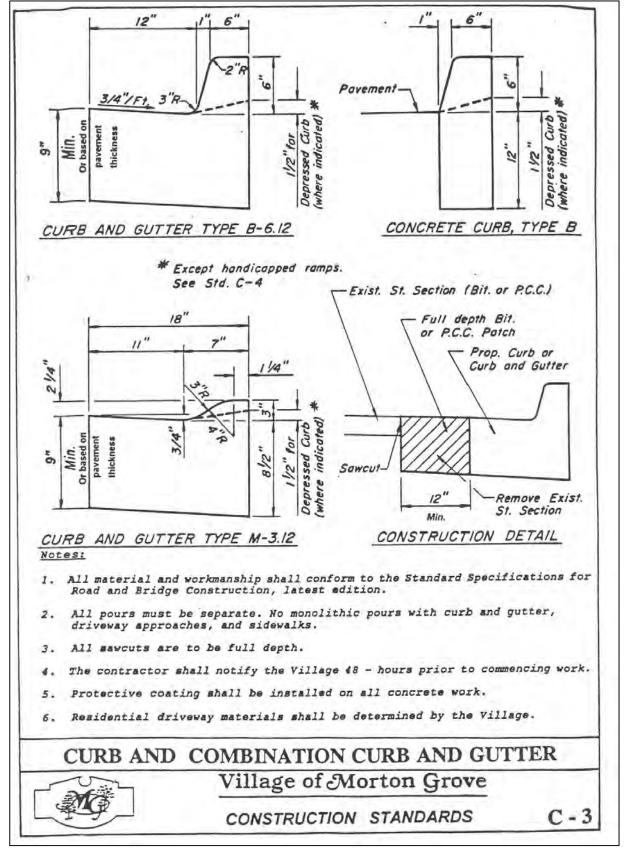
PROVIDE A SMOOTH TRANSITION BETWEEN THE CASTING AND THE

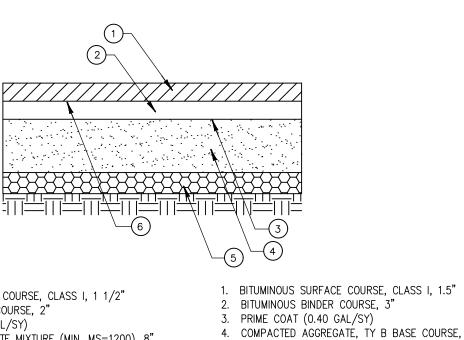
(RUB R NEK OR EZ STICK) TO PREVENT INFLOW.

GARDEN CENTER AND STORAGE YARD EXPANSION 6301 OAKTON ST. MORTON GROVE, IL

DETAILS			AWN BY: SI ALE: N.T.S.	CHECKED BY: CML DATE: 12/06/19
Consulting Civi			B NUMBER 19-206	SHEET: C 3.0
Land Planning 825 N. Cass Aver	nue, Suite 106	# 1	DATE	DESCRIPTION
	Illinois 60559 630-381-0819	3 4		
C.M. Lavoie		5		
& Associates, INC.		7 8		







1. BITUMINOUS SURFACE COURSE, CLASS I, 1 1/2" 2. BITUMINOUS BINDER COURSE, 2" 3. PRIME COAT (0.10 GAL/SY)

4. BITUMINOUS AGGREGATE MIXTURE (MIN. MS=1200), 8" 5. AGGREGATE, TYPE B BASE COURSE, 100% CRUSHED, 4" 6. PRIME COAT (0.10 GAL/SY)

(KIRK STREET)

4. COMPACTED AGGREGATE, TY B BASE COURSE, 12" (CA-6), 98% STANDARD PROCTOR 5. COMPACTED SUBGRADE, 98% STANDARD PROCTOR

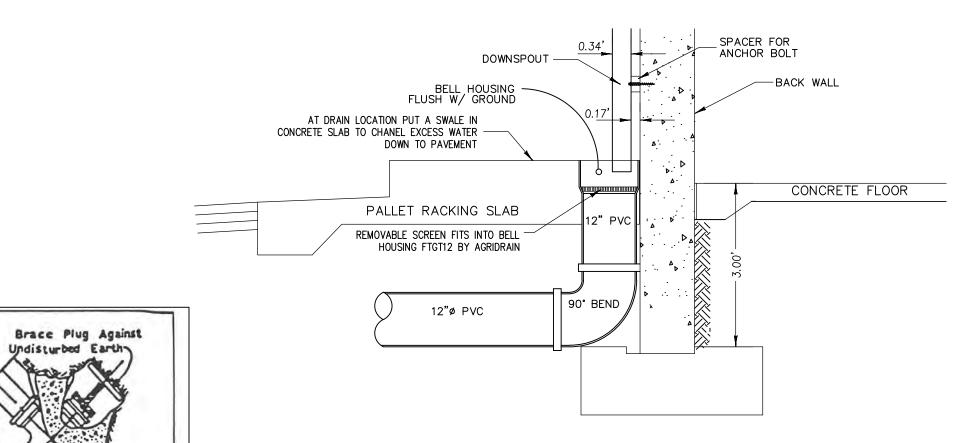
6. PRIME COAT (0.10 GAL/SY) (HEAVY DUTY)

1. SEE M.E.S. SOILS REPORT #2-03092 (DATED 11-29-00) FOR INFORMATION REGARDING PAVEMENT SECTION. IF SOILS REPORT IS MORE STRINGENT, USE THAT SECTION.

2. ALL COMPACTION SHALL BE 98% MAXIMUM DRY DENSITY, AS DETERMINED BY STANDARD PROCTOR TEST, ASTM D1557.

3. CONTRACTOR TO SPECIFY A MIX DESIGN EQUIVALENT TO MENARD DESIGN SPECIFIED IN THE CONTRACT DOCUMENT. THE CONTRACTOR SHALL SUBMIT THE MIX DESIGN TO MENARDS PROJECT MANAGER FOR

TYPICAL PAVEMENT SECTION

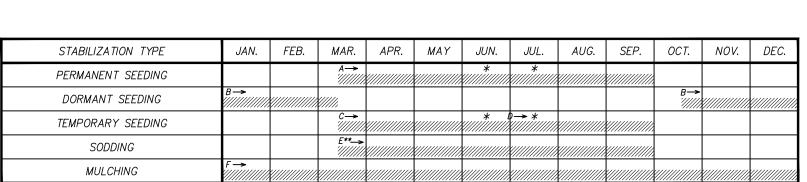


DOWNSPOUT LATERAL DETAIL

STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	ОСТ.	NOV.	DEC.
PERMANENT SEEDING			A→ '//////			* //////////	* //////////					
DORMANT SEEDING	B → ////////////////////////////////////		//////							B→ '/////		
TEMPORARY SEEDING			C →			* L	}→ * ////////////////////////////////////					
SODDING			E** <u>→</u> '//////									
MULCHING	F →											

- A. KENTUCKY BLUEGRASS 68 LBS/ACRE MIXED WITH CREEPING RED FESCUE 16 LBS/ACRE
- B. KENTUCKY BLUEGRASS 135 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 45 LBS/ACRE PLUS 2 TONS STRAW MULCH PER ACRE C. - SPRING OATS 100 LBS/ACRE
- WHEAT OF CEREAL RYE 150 LBS/ACRE
- F. STRAW MULCH 2 TONS/ACRE
- * IRRIGATION NEEDED DURING JUNE AND JULY ** IRRIGATION NEEDED FOR 2 TO 3 WEEKS AFTER APPLYING SOD

SOIL PROTECTION CHART



GARDEN CENTER AND STORAGE YARD EXPANSION 6301 OAKTON ST. MORTON GROVE, IL

CONTINUOUS LENGTH SYNTHETIC FILTER FABRIC, STAPLED OR WIRED TO THE MESH AND/OR POSTS, AT

1 1/8" X 1 1/8" OAK STAKE @

 \sim 7'-8" O.C. ALONG THE ENTIRE

LENGTH.

JOINTS, THE FABRIC MUST BE OVERLAPPED 6" MIN &

BE SECURELY SEALED TO

UPON COMPLETION, FILL

TRENCH W/ COMPACTED _

SOIL OVER THE FILTER

FOLLOWING:

DRIVE POST SECURELY

IN GROUND

1) 75% FILTERING EFFICIENCY

THE FILTER FABRIC SHALL BE A PERVIOUS SHEET OF NICOLON 70-06

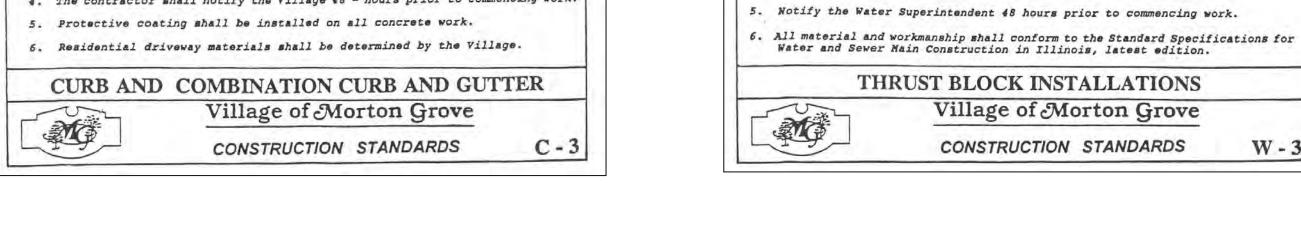
2) TENSILE STRENGTH OF 30 LB/LIN. INCH TENSILE STRENGTH (20%) 3) 0.30 GAL/SQFT MINIMUM FLOW RATE.

SILT FENCE DETAIL N.T.S.

FABRIC OR APPROVED EQUAL & SHALL BE CERTIFIED TO MEET THE

10/10-6X6 WWM X 2'8" WIDE, ATTACH TO POST W/ HEAVY DUTY WIRE STAPLES @ 6" O.C.

DETAILS	DRAWN BY: SKB			CHECKED BY: CML		
DETAILS	SCALE: N.T.S.			DATE: 12/06/19		
	Consulting Civil Engineering	JOI	B NUMBER 19-206	:	SHEET: C 3.1	
	Land Planning & Surveying	#	DATE		DESCRIPTION	
	825 N. Cass Avenue, Suite 106	1				
	Westmont, Illinois 60559	2				
	phone: 630-381-0819	3				
		4				
		5				
C.M. Lavoie	7	6				
& Associates, IN	\hat{c} .	7				



Brace Plug Against Undistubed Earth

All blocks must bear against undisturbed earth.

3. All thrust blocks are to be 3,000 PSI concrete.

2. Arrows indicate direction of thrust.

4. Keep joints clear of concrete blocking.

PLUGGED TEE

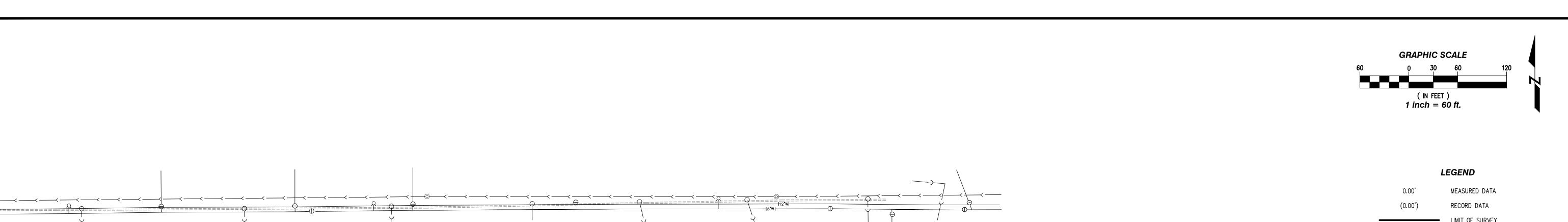
PLUGGED CROSS

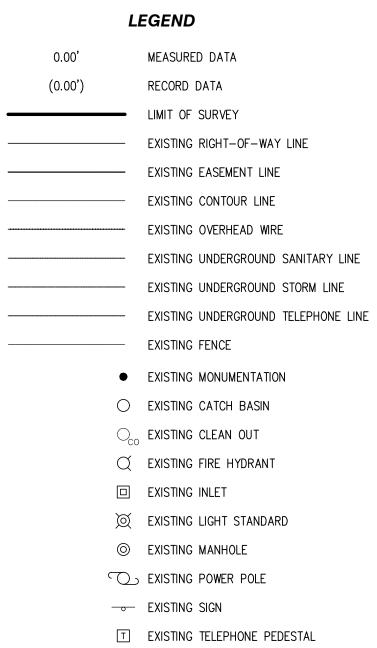
11 /4° BENDS OR GREATER

W-3

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EXISTING WATER VALVE

SURVEYOR'S NOTES

EXCAVATION.

- 1. DIMENSIONS SHOWN THUS: 50.25' ARE FEET AND DECIMAL PARTS THEREOF. ANGULAR DATA SHOWN THUS: 90°00'00" INDICATES DEGREES, MINUTES AND SECONDS.
- 2. NORTH ARROW AND BEARINGS BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM NAD83 ADJUSTMENT.
- 3. IMPROVEMENT LOCATIONS ARE BASED ON A FIELD SURVEY BY C.M. LAVOIE AND ASSOCIATES, INC. ON APRIL 12, 2013 AND FIELD VERIFIED ON DECEMBER 04, 2019.
- 4. COMPARE YOUR POINTS BEFORE USING SAME AND REPORT ANY DIFFERENCES IMMEDIATELY.
- 5. CHECK LEGAL DESCRIPTION WITH DEED OR TITLE POLICY AND REPORT ANY DISCREPANCY IMMEDIATELY. BUILDING LINES AND EASEMENTS, IF ANY, SHOWN HEREON ARE AS SHOWN ON THE RECORDED SUBDIVISION OR AS INDICATED.
- 6. THE LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND COMPLIED FROM FIELD SURFACE OBSERVATIONS, UTILITY MARKINGS LOCATED IN THE FIELD AND UTILITY ATLASES. SOME OF THE PROVIDED ATLASES INDICATE LOCATIONS BY GRAPHIC REPRESENTATION ONLY AND THESE ARE SHOWN TO THE BEST OF OUR ABILITY. UNDERGROUND UTILITIES SHOWN ARE FOR INFORMATIONAL PURPOSES ONLY. ANY CONTRACTOR CONTEMPLATING

WORK ON THIS SITE SHOULD CONFIRM THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF

7. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES WHICH MAY AFFECT THE USE OR DEVELOPMENT OF THIS PROPERTY.

GARDEN CENTER AND STORAGE YARD EXPANSION 6301 OAKTON ST. MORTON GROVE, IL

EXISTING CONDITIONS

DRAWN BY: SKB CHECKED BY: CML
SCALE: 1" = 60' DATE: 12/06/19

JOB NUMBER: 19-206 C 4.0

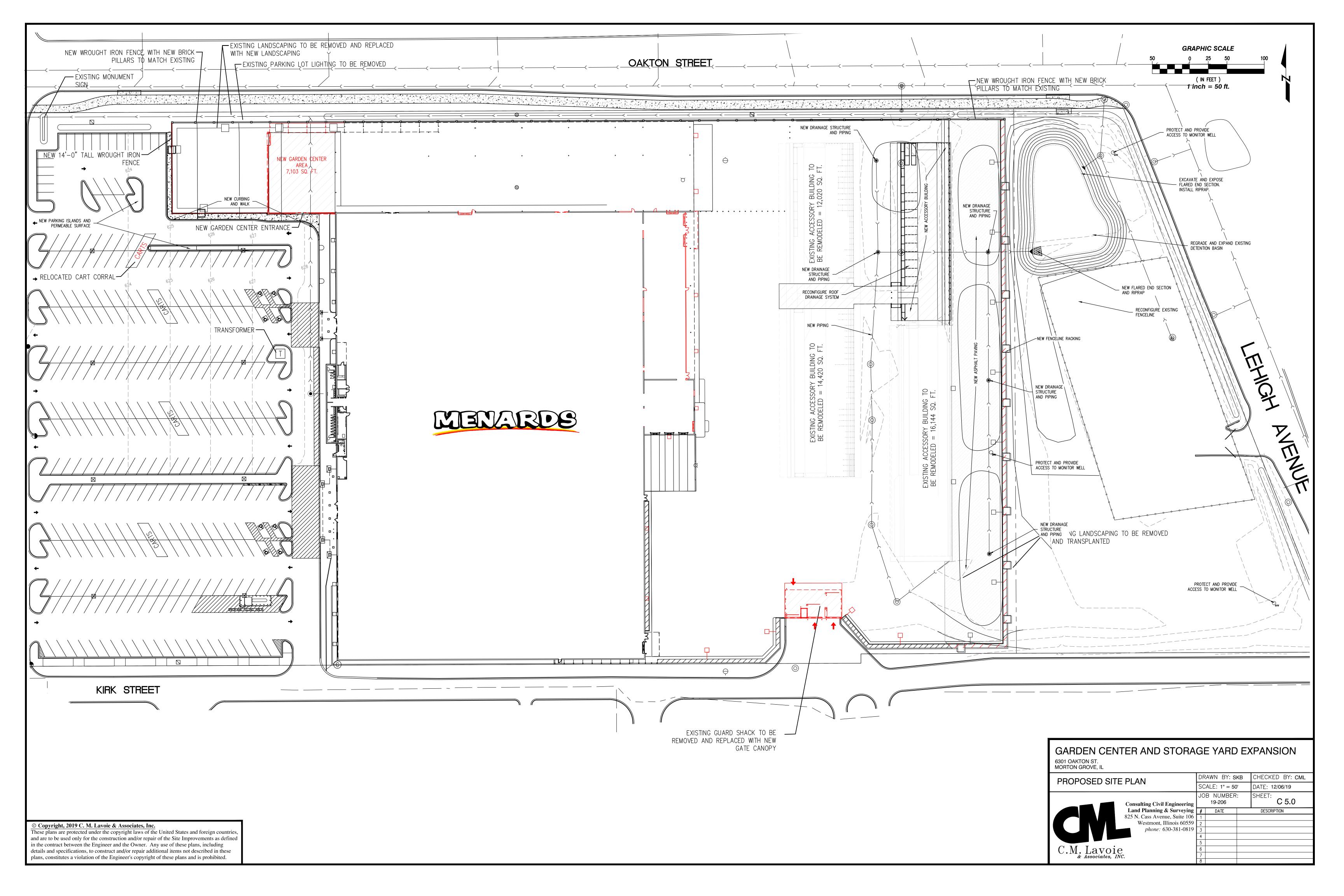
Westmont, Illinois 60559 phone: 630-381-0819

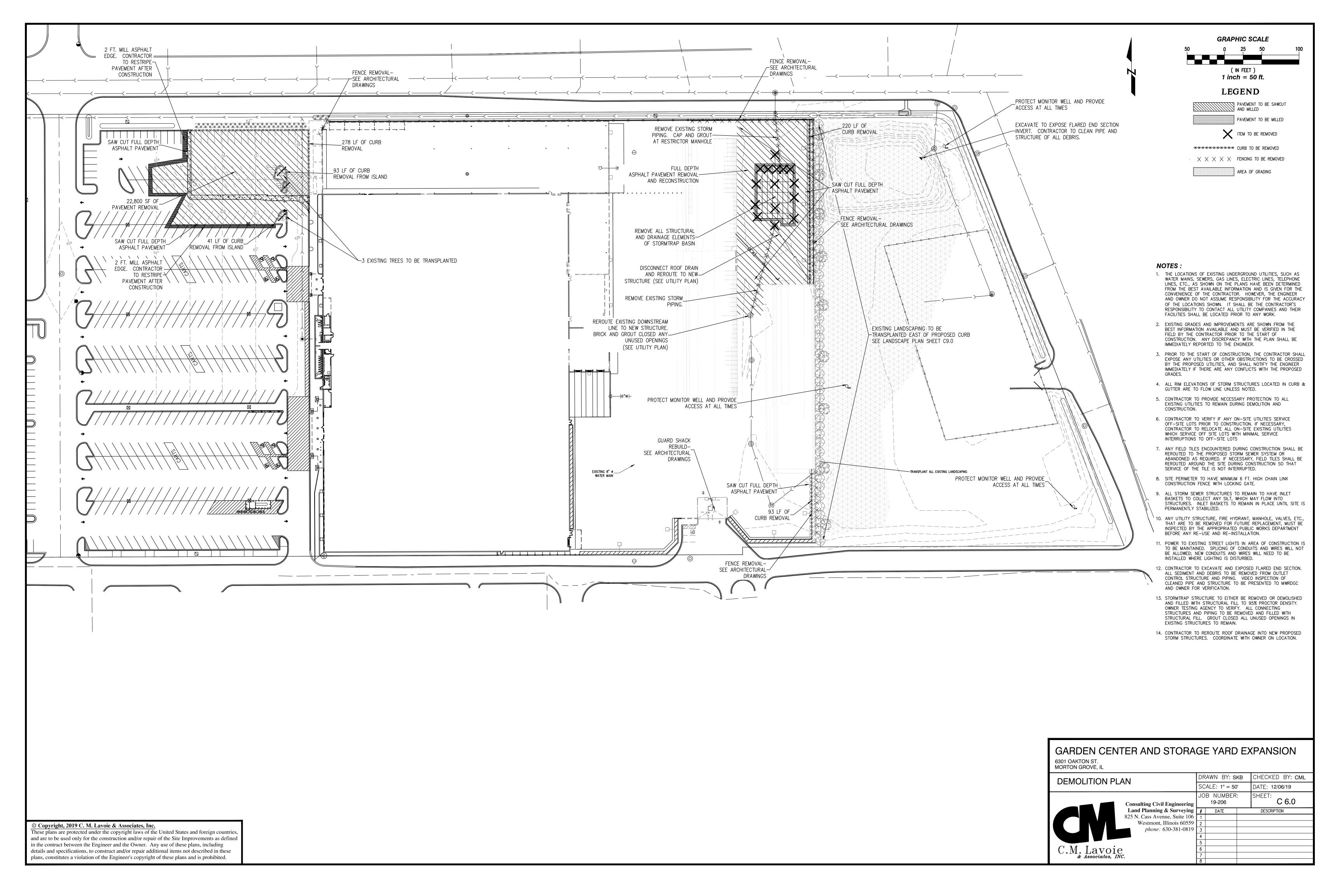
C.M. Lavoie
& Associates, INC.

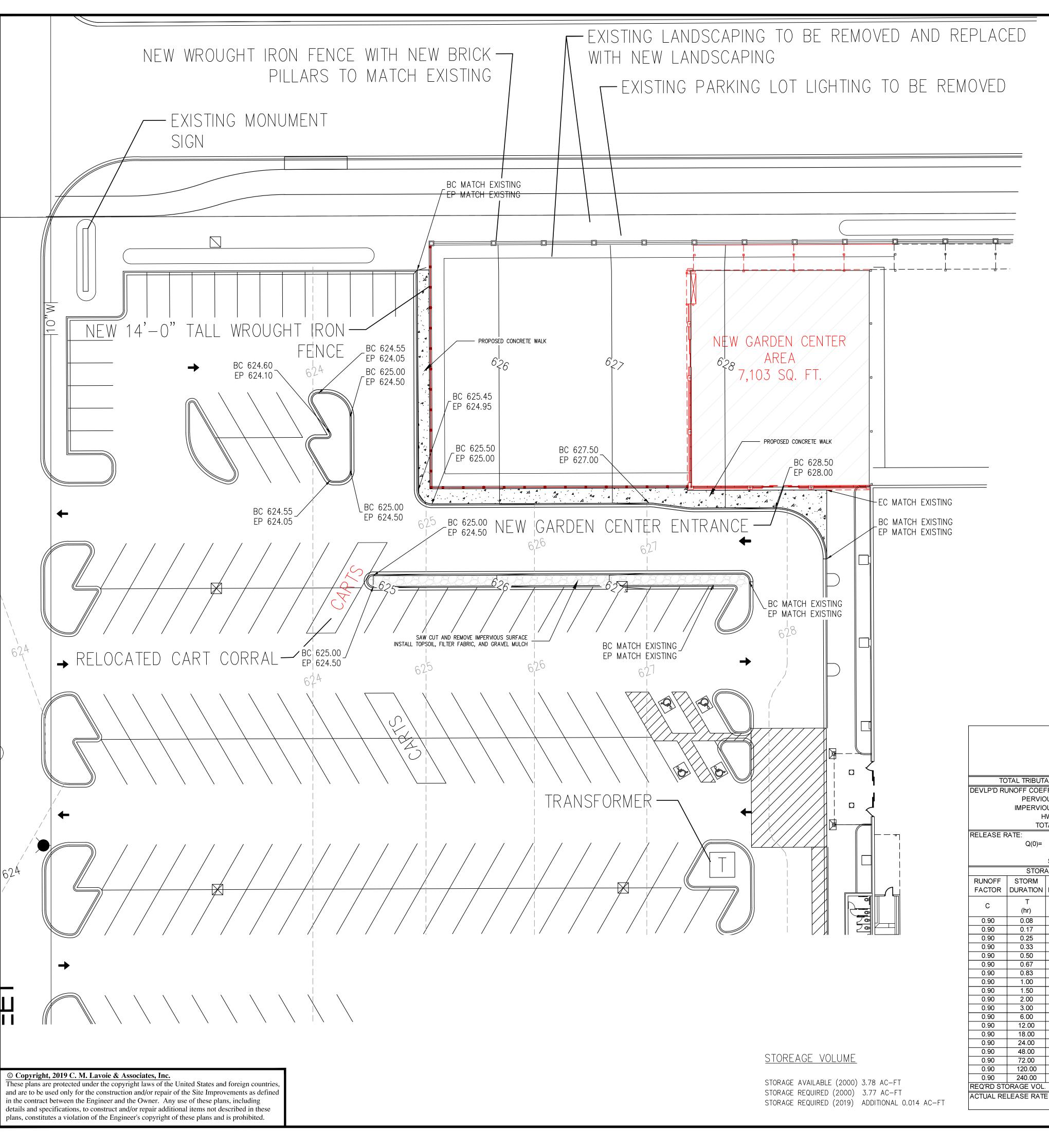
CHANAROS. CHANAROS. CHANAROS.	

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HISTORIC STORM DATA FROM 2000 SUBMITTAL

STORAGE CALCULATIONS:

REQUIRED STORAGE = 3.77 AC-FTPROVIDED STORAGE = 3.47 AC-FT + 0.26 AC-FT + 0.05 AC-FT TOTAL = 3.78 AC-FT

UNDERGROUND DETENTION BASIN: END UNITS (22 * 668 CF) = 14696 CFINT. UNITS (198 * 690 CF) = 136620 CFTOTAL = 151316 CF

(3.47 AC-FT)PIPES FLOWING FULL @ 100 YEAR EVENT: $8"\emptyset \otimes 375 LF = 0.349 SF * 375 LF = 131 CF$

12"ø @ 1312 LF = 0.785 SF * 1312 LF = 1030 CF 15"ø @ 592 LF = 1.227 SF * 592 LF = 726 CF 18"ø @ 378 LF = 1.767 SF * 378 LF = 668 CF 24"ø @ 732 LF = 3.142 SF * 732 LF = 2300 CF 30"ø @ 662 LF = 4.909 SF * 662 LF = 3250 CF 36"ø @ 475 LF = 7.069 SF * 475 LF = 3358 CF TOTAL = 11463 CF

CATCH BASIN STORAGE @ 100 YEAR EVENT: 29 (TY C) @ 1.6 FT DEEP (AVG) * 12.57 SF = 583 CF 17 (TY A) @ 5.0 FT DEEP (AVG) * 19.63 SF = 1669 CF TOTAL = 2252 CF

HIGH WATER LEVEL CALCULATIONS: (0.05 AC-FT)

(0.26 AC-FT)

PROPOSED HIGH WATER LEVEL (HWL) = 621.80 FT

DETENTION FACILITY WORKSHEET C.M. Lavoie & Associates, Inc. PROJECT: Menards Morton Grove - West Portion

JOB NO.: 19-206 DATE: 19-1127 ACRES 0.05

TOTAL TRIBUTARY AREA= DEVLP'D RUNOFF COEFFICIENT (C): CXAPERVIOUS AREA = 0.00 0.45 0.00 0.90 0.05 IMPERVIOUS AREA = 0.05 HWL AREA = 0.00 1.00 0.00 TOTAL AREA = 0.05 0.05 C = 0.900.3 cfs per acre

> Q(0)= 0.015 CFS SITE AREA

STORAGE VOLUME DETERMINATION

	STOR	AGE VOLUM	E DETERMINATION				
RUNOFF FACTOR	STORM DURATION	RAINFALL INTENSITY	DRAINAGE AREA	INFLOW RATE	RELEASE RATE	STORAGE RATE	STORAGE REQUIRED
С	T (hr)	l (100) (in/hr)	A (ac)	Q(1) (cfs)	Q(0) (cfs)	Q(1)-Q(0) (cfs)	(ac-ft)
0.90	0.08	10.92	0.05	0.49	0.02	0.48	0.003
0.90	0.17	10.02	0.05	0.45	0.02	0.44	0.006
0.90	0.25	8.20	0.05	0.37	0.02	0.35	0.007
0.90	0.33	7.08	0.05	0.32	0.02	0.30	0.008
0.90	0.50	5.60	0.05	0.25	0.02	0.24	0.010
0.90	0.67	4.67	0.05	0.21	0.02	0.20	0.011
0.90	0.83	4.13	0.05	0.19	0.02	0.17	0.012
0.90	1.00	3.56	0.05	0.16	0.02	0.15	0.012
0.90	1.50	2.68	0.05	0.12	0.02	0.11	0.013
0.90	2.00	2.24	0.05	0.10	0.02	0.09	0.014
0.90	3.00	1.62	0.05	0.07	0.02	0.06	0.014
0.90	6.00	0.95	0.05	0.04	0.02	0.03	0.014
0.90	12.00	0.55	0.05	0.02	0.02	0.01	0.010
0.90	18.00	0.39	0.05	0.02	0.02	0.00	0.004
0.90	24.00	0.32	0.05	0.01	0.02	0.00	-0.001
0.90	48.00	0.17	0.05	0.01	0.02	-0.01	-0.029
0.90	72.00	0.12	0.05	0.01	0.02	-0.01	-0.058
0.90	120.00	0.08	0.05	0.00	0.02	0.00	0.000
0.90	240.00	0.05	0.05	0.00	0.02	0.00	0.000
REQ'RD ST	ORAGE VOL	0.014	ACRE-FT	630	CUBIC FT	23	CUBIC YARDS
ACTUAL RE	LEASE RATE	≣:	ALLOWABLE=	0.02		BYPASS=	0.00 CFS

TOTAL FLOW=

0.015 CFS

LEGEND

ELEVATION TABLE TOP OF CURB

PROPOSED DRAINAGE ARROW

XXX.XX\

GRAPHIC SCALE (IN FEET) 1 inch = 20 ft.

EDGE OF PVMT = MATCH EXISTING ELEVATION **EXISTING** SPOT GRADES

PROPOSED XXX.X SPOT GRADES OVERLAND FLOW ARROW EXISTING DRAINAGE ARROW

PROPOSED CONTOUR

---- EXISTING CONTOUR

GENERAL GRADING NOTES:

- 1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, SUCH AS WATER MAINS, SEWERS, GAS LINES, ELECTRIC LINES, TELEPHONE LINES, ETC., AS SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION AND IS GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. HOWEVER, THE ENGINEER AND OWNER DO NOT ASSUME RESPONSIBILITY FOR THE ACCURACY OF THE LOCATIONS SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES AND THEIR FACILITIES SHALL BE LOCATED PRIOR TO ANY WORK.
- 2. EXISTING GRADES AND IMPROVEMENTS ARE SHOWN FROM THE BEST INFORMATION AVAILABLE AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCY WITH THE PLAN SHALL BE IMMEDIATELY
- 3. GRADE ADJUSTMENTS ARE ANTICIPATED TO OCCUR IN THE FIELD AND ARE CONSIDERED INCIDENTAL TO THE CONTRACT COST. ALL WORK AFFECTED BY GRADE ADJUSTMENTS SHALL STOP AND DESIGN ENGINEER NOTIFIED FOR ACCEPTABLE SOLUTION. GENERAL
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL EXPOSE ANY UTILITIES OR OTHER OBSTRUCTIONS TO BE CROSSED BY THE PROPOSED SEWER, AND SHALL NOTIFY THE ENGINEER IMMEDIATELY IF THERE ARE ANY CONFLICTS WITH THE PROPOSED
- 5. ACCESS TO THE SITE SHALL BE LIMITED TO THE DESIGNATED CONSTRUCTION ENTRANCE, UNLESS PRIOR APPROVAL FROM THE
- EROSION CONTROL MEASURES SHALL CONFORM TO "PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL IN ILLINOIS" LATEST EDITION, AND FURTHER MEASURES AS DEEMED NECESSARY. ALL EROSION CONTROL MEASURES WHICH ARE NECESSARY TO MEET THE REQUIREMENTS OF THE CITY/VILLAGE ORDINANCE SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SEDIMENT AND EROSION CONTROL MEASURES
- 7. TEMPORARY VEGETATION OR, WHEN APPROPRIATE, MULCHING OR OTHER NONVIABLE COVER SHALL BE USED TO PROTECT AREAS
- 8. PERMANENT SEEDING AREAS SHALL RECEIVE 65 LBS/ACRE PERENNIAL RYEGRASS AND 75 LBS/ACRE KENTUCKY BLUEGRASS.
- 9. EROSION CONTROL BLANKET TO BE INSTALLED IN ALL PERMANENT SEEDING AREAS.
- 10. FERTILIZER SHOULD BE APPLIED PRIOR TO LANDSCAPING AT THE FOLLOWING RATES; NITROGEN 130 LBS/ACRE

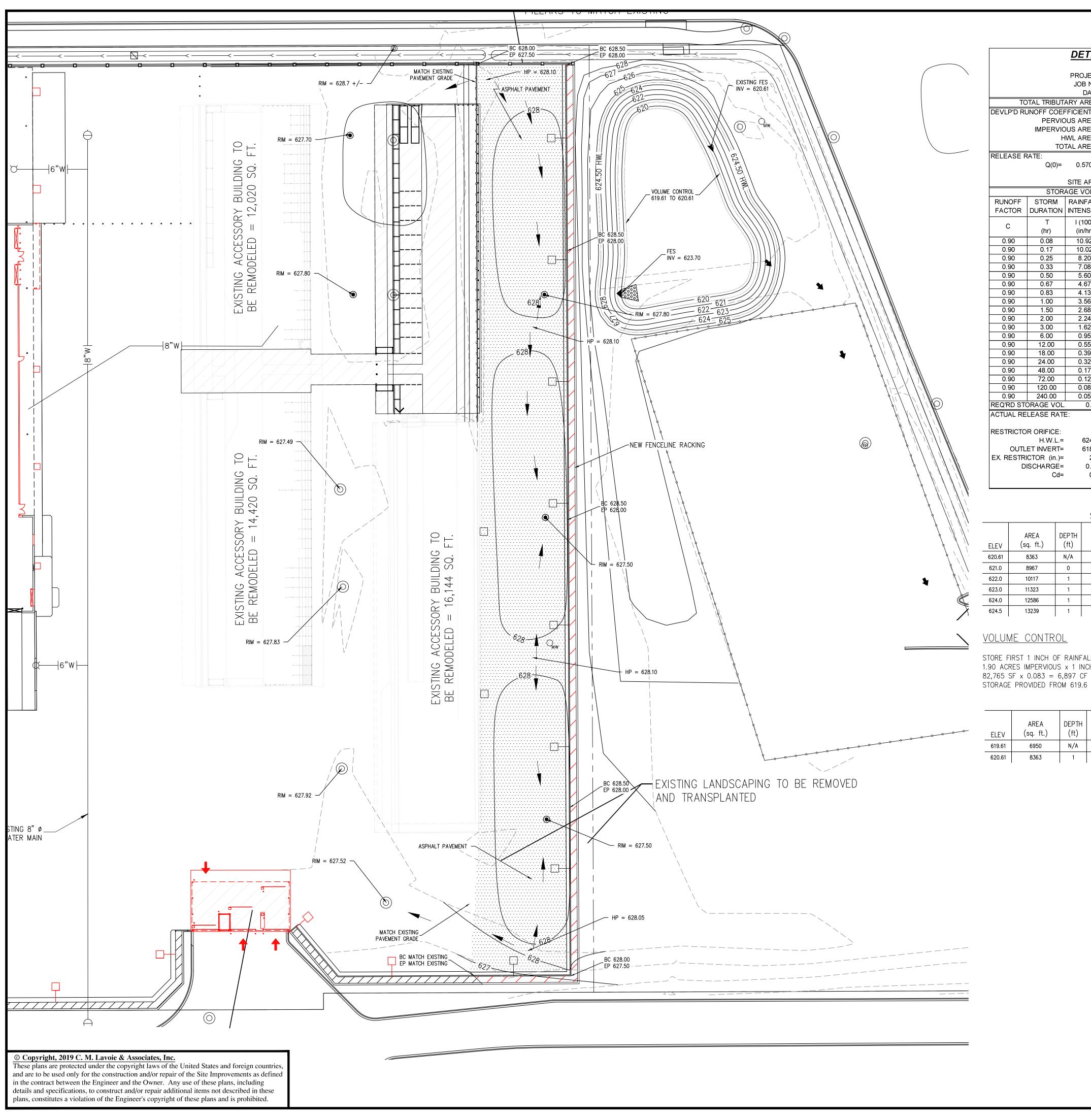
PHOSPHORUS O LBS/ACRE

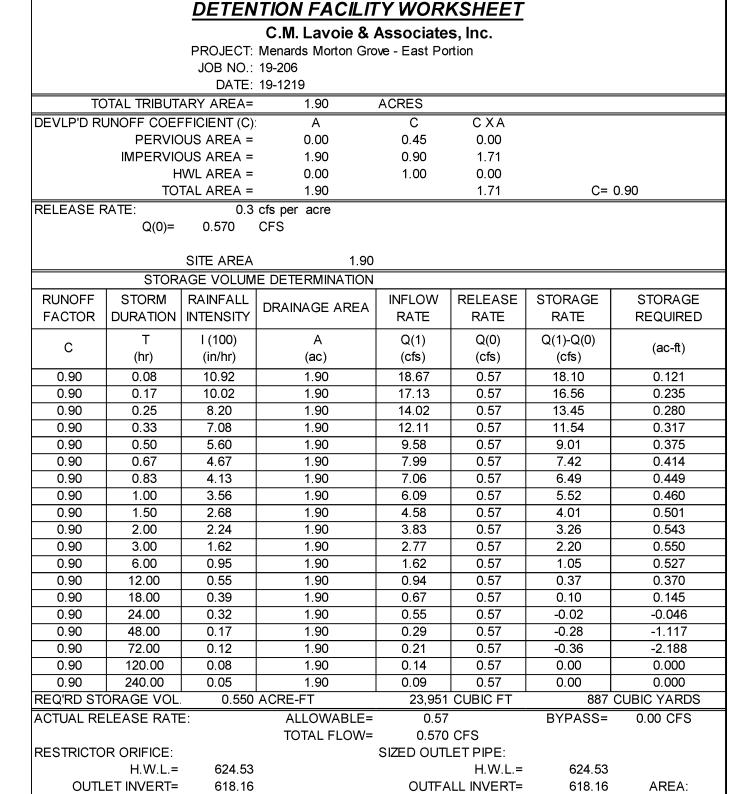
- 11. THE EROSION CONTROL PLAN SHOULD BE INTENDED ONLY FOR EROSION CONTROL. PLEASE REFER TO THE GRADING PLANS FOR DETAILED GRADING INFORMATION.
- 12. ALL PUBLIC AREAS BETWEEN THE CURB AND THE WALK ARE TO BE SODDED.
- 13. ALL PARKWAYS DISTURBED DURING CONSTRUCTION TO BE RESTORED TO CITY/VILLAGE SPECIFICATIONS.
- 14. SEDIMENT AND EROSION CONTROL DEVICES SHALL BE FUNCTIONAL BEFORE LAND IS OTHERWISE DISTURBED ON THE SITE. ALL SILT
- 15. ALL MAINTENANCE AND INSPECTION OF DESCRIBED EROSION CONTROL MEASURES SHOWN ON THIS PLAN SHALL BE IN ACCORDANCE WITH CHAPTER 6 OF "PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL IN ILLINOIS."
- 16. PLEASE REFER TO DETAILS FOR FURTHER SPECIFICATIONS AND DETAILS OF DESCRIBED EROSION CONTROL MEASURES.
- 17. IF A STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN THREE DAYS, THEN SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE PROVIDED FOR THE STOCKPILE.
- 18. GRAVELED ROADS, ACCESS DRIVES, PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH, AND VEHICLE WASH DOWN FACILITIES IF NECESSARY, SHALL BE PROVIDED TO PREVENT THE DEPOSIT OF SOIL FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SOIL REACHING A PUBLIC OR PRIVATE ROADWAY SHALL BE REMOVED BEFORE THE END OF EACH WORKDAY. CONTRACTOR TO CLEAN PUBLIC ROADWAYS DAILY OR AS DIRECTED BY ENGINEER OR CITY/VILLAGE.
- IF THE VOLUME, VELOCITY, SEDIMENT LOAD OR PEAK FLOW RATES OF STORMWATER RUNOFF ARE TEMPORARILY INCREASED DURING CONSTRUCTION, THEN THE PROPERTIES AND SPECIAL MANAGEMENT AREAS DOWNSTREAM FROM SUCH DEVELOPMENT SHALL BE
- 20. THE SURFACE OF STRIPPED AREAS SHALL BE PERMANENTLY OR TEMPORARILY PROTECTED FROM SOIL EROSION WITHIN FIFTEEN DAYS AFTER FINAL GRADE IS REACHED. STRIPPED AREAS THAT WILL REMAIN UNDISTURBED FOR MORE THAN FIFTEEN DAYS AFTER INITIAL DISTURBANCE SHALL BE PROTECTED FROM EROSION. TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE
- MAINTAINED CONTINUOUSLY UNTIL PERMANENT COVER IS ESTABLISHED. 21. WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION DEWATERING SHALL BE FILTERED.
- 22. ALL STORM SEWER STRUCTURES TO HAVE INLET BASKETS TO COLLECT ANY SILT WHICH MAY FLOW INTO STRUCTURES. INLET BASKETS TO REMAIN IN PLACE UNTIL SITE IS PERMANENTLY STABILIZED.
- 23. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, SUCH AS WATER MAINS, SEWERS, GAS LINES, ELECTRIC LINES, TELEPHONE LINES, ETC., AS SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION AND IS GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. HOWEVER, THE ENGINEER AND OWNER DO NOT ASSUME RESPONSIBILITY FOR THE ACCURACY OF THE LOCATIONS SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES AND THEIR FACILITIES SHALL BE LOCATED PRIOR TO ANY WORK.
- 24. EXISTING GRADES AND IMPROVEMENTS ARE SHOWN FROM THE BEST INFORMATION AVAILABLE AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCY WITH THE PLAN SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER.
- 25. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL EXPOSE ANY UTILITIES OR OTHER OBSTRUCTIONS TO BE CROSSED BY PROPOSED UTILITIES, AND SHALL NOTIFY THE ENGINEER IMMEDIATELY IF THERE ARE ANY CONFLICTS WITH THE PROPOSED GRADE.
- 26. ALL RIM ELEVATIONS OF STORM STRUCTURES LOCATED IN CURB & GUTTER ARE TO FLOW LINE UNLESS NOTED.
- 27. ADJUSTMENTS TO EXISTING UTILITY FRAMES AND GRATES MAY BE REQUIRED BY THE CONTRACTOR. CONTRACTOR TO FIELD VERIFY ALL FRAMES AND GRATES FOR EXISTING ELEVATIONS AND NOTE WHICH STRUCTURES WILL REQUIRE ADJUSTMENT. ALL ADJUSTMENTS ARE CONSIDERED INCIDENTAL TO THE CONTRACT.

GARDEN CENTER AND STORAGE YARD EXPANSION 6301 OAKTON ST. MORTON GROVE, IL

C.M. Lavoie & Associates, INC.

DRAWN BY: SKB CHECKED BY: CML GARDEN CENTER GRADING PLAN SCALE: 1" = 20' DATE: 12/06/19 C 7.0 **Consulting Civil Engineering** Land Planning & Surveying # DATE DESCRIPTION 825 N. Cass Avenue, Suite 106 Westmont, Illinois 60559 phone: 630-381-0819





STAGE STORAGE TABLE

2.00

0.61

Cd=

0.268 CFS

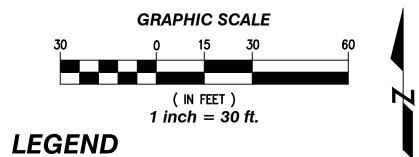
ELEV	AREA (sq. ft.)	DEPTH (ft)	AVG END INC. VOL. (cu. ft.)	AVG END TOTAL VOL. (cu. ft.)	CONIC INC. VOL. (cu. ft.)	CONIC TOTAL VOL. (cu. ft.)
620.61	8363	N/A	N/A	0	N/A	0
621.0	8967	0	3466	3466	3465	3465
622.0	10117	1	9542	13008	9536	13002
623.0	11323	1	10720	23728	10714	23716
624.0	12586	1	11955	35683	11949	35665
624.5	13239	1	6456	42139	6456	42121

VOLUME CONTROL

STORE FIRST 1 INCH OF RAINFALL 1.90 ACRES IMPERVIOUS x 1 INCH

STORAGE PROVIDED FROM 619.6 TO 620.61 = 7,646 CF

STAGE STORAGE TABLE							
ELEV	AREA (sq. ft.)	DEPTH (ft)	AVG END INC. VOL. (cu. ft.)	AVG END TOTAL VOL. (cu. ft.)	CONIC INC. VOL. (cu. ft.)	CONIC TOTAL VOL. (cu. ft.)	
619.61	6950	N/A	N/A	0	N/A	0	
620.61	8363	1	7656	7656	7646	7646	



ELEVATION TABLE TOP OF CURB XXX.XX\ EDGE OF PVMT

= MATCH EXISTING ELEVATION

EXISTING XXX.X SPOT GRADES PROPOSED XXX.X SPOT GRADES

OVERLAND FLOW ARROW EXISTING DRAINAGE ARROW PROPOSED DRAINAGE ARROW

PROPOSED CONTOUR ---- EXISTING CONTOUR

— — HIGH WATER LIMIT 624.53

GENERAL GRADING NOTES:

12.000 0.785 sq. ft.

15 0.250 ft.

21.32 CFS

0.013 HYD. RADIUS

PIPE SIZE (in.)=

LENGTH (ft.)=

DISCHARGE=

ROUGHNESS (n)=

- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, SUCH AS WATER MAINS, SEWERS, GAS LINES, ELECTRIC LINES, TELEPHONE LINES, ETC., AS SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION AND IS GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. HOWEVER, THE ENGINEER AND OWNER DO NOT ASSUME RESPONSIBILITY FOR THE ACCURACY OF THE LOCATIONS SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES AND THEIR FACILITIES SHALL BE LOCATED PRIOR TO ANY WORK.
- EXISTING GRADES AND IMPROVEMENTS ARE SHOWN FROM THE BEST INFORMATION AVAILABLE AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCY WITH THE PLAN SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER.
- GRADE ADJUSTMENTS ARE ANTICIPATED TO OCCUR IN THE FIELD AND ARE CONSIDERED INCIDENTAL TO THE CONTRACT COST. ALL WORK AFFECTED BY GRADE ADJUSTMENTS SHALL STOP AND DESIGN ENGINEER NOTIFIED FOR ACCEPTABLE SOLUTION. GENERAL CONTACTOR TO ASSUME ALL LIABILITY FOR CONTINUING WORK PROGRESS.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL EXPOSE ANY UTILITIES OR OTHER OBSTRUCTIONS TO BE CROSSED BY THE PROPOSED SEWER, AND SHALL NOTIFY THE ENGINEER IMMEDIATELY IF THERE ARE ANY CONFLICTS WITH THE PROPOSED SEWER GRADE.
- ACCESS TO THE SITE SHALL BE LIMITED TO THE DESIGNATED CONSTRUCTION ENTRANCE, UNLESS PRIOR APPROVAL FROM THE CITY/VILLAGE.
- EROSION CONTROL MEASURES SHALL CONFORM TO "PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL IN ILLINOIS" LATEST EDITION, AND FURTHER MEASURES AS DEEMED NECESSARY. ALL EROSION CONTROL MEASURES WHICH ARE NECESSARY TO MEET THE REQUIREMENTS OF THE CITY/VILLAGE ORDINANCE SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SEDIMENT AND EROSION CONTROL MEASURES ARE OPERATIONAL.
- TEMPORARY VEGETATION OR, WHEN APPROPRIATE, MULCHING OR OTHER NONVIABLE COVER SHALL BE USED TO PROTECT AREAS EXPOSED DURING DEVELOPMENT.
- 8. PERMANENT SEEDING AREAS SHALL RECEIVE 65 LBS/ACRE PERENNIAL RYEGRASS AND 75 LBS/ACRE KENTUCKY
- 9. EROSION CONTROL BLANKET TO BE INSTALLED IN ALL PERMANENT SEEDING AREAS.
- 10. FERTILIZER SHOULD BE APPLIED PRIOR TO LANDSCAPING AT THE FOLLOWING RATES;

NITROGEN 130 LBS/ACRE PHOSPHORUS 0 LBS/ACRE 130 LBS/ACRE POTASSIUM

- 11. THE EROSION CONTROL PLAN SHOULD BE INTENDED ONLY FOR EROSION CONTROL. PLEASE REFER TO THE GRADING PLANS FOR DETAILED GRADING INFORMATION.
- 12. IF A STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN THREE DAYS, THEN SEDIMENTATION AND EROSION CONTROL
- MEASURES SHALL BE PROVIDED FOR THE STOCKPILE. 13. GRAVELED ROADS, ACCESS DRIVES, PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH, AND VEHICLE WASH DOWN FACILITIES IF NECESSARY, SHALL BE PROVIDED TO PREVENT THE DEPOSIT OF SOIL FROM BEING TRACKED ONTO PUBLIC OR
- WORKDAY. CONTRACTOR TO CLEAN PUBLIC ROADWAYS DAILY OR AS DIRECTED BY ENGINEER OR CITY/VILLAGE. 14. IF THE VOLUME, VELOCITY, SEDIMENT LOAD OR PEAK FLOW RATES OF STORMWATER RUNOFF ARE TEMPORARILY INCREASED

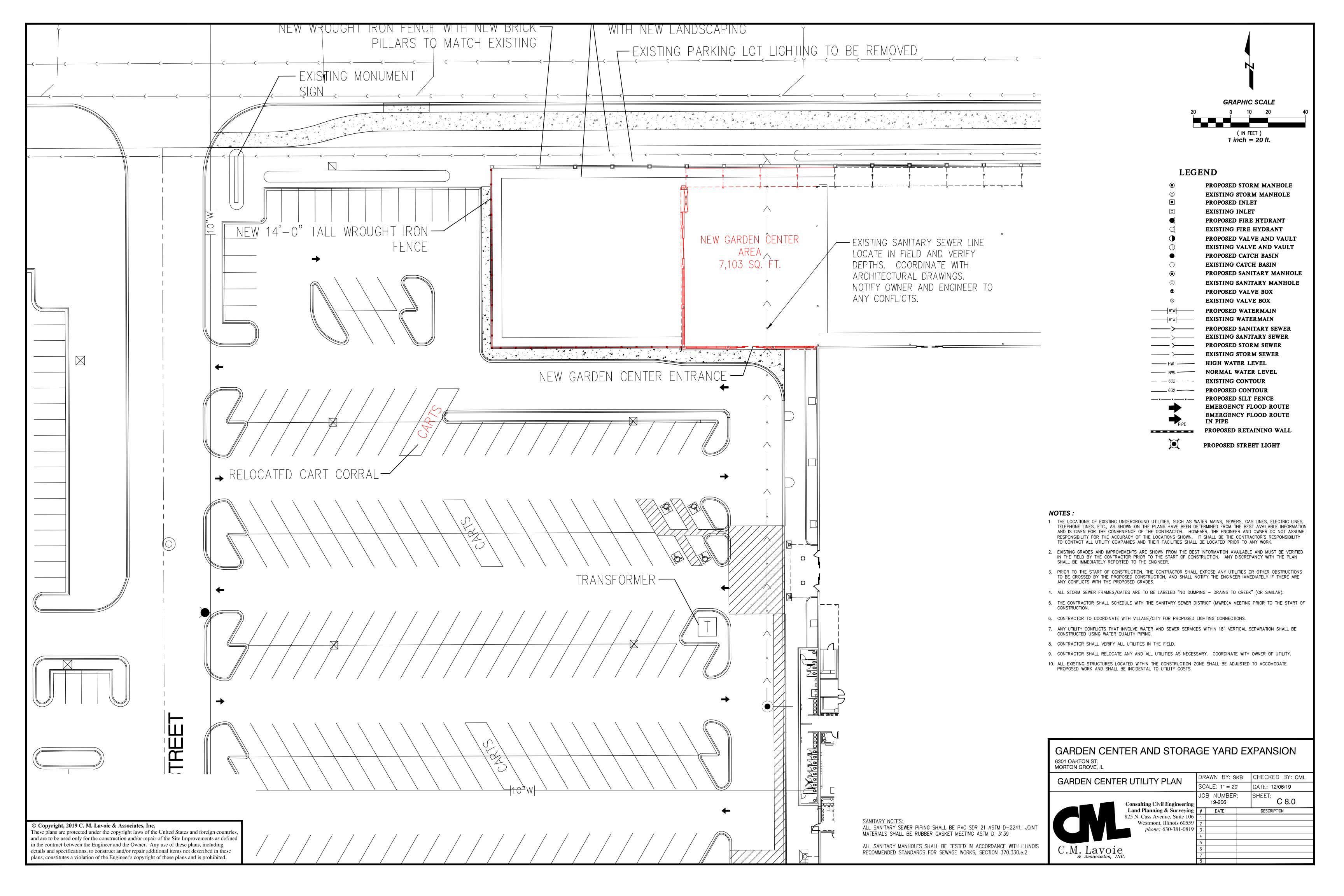
PRIVATE ROADWAYS. ANY SOIL REACHING A PUBLIC OR PRIVATE ROADWAY SHALL BE REMOVED BEFORE THE END OF EACH

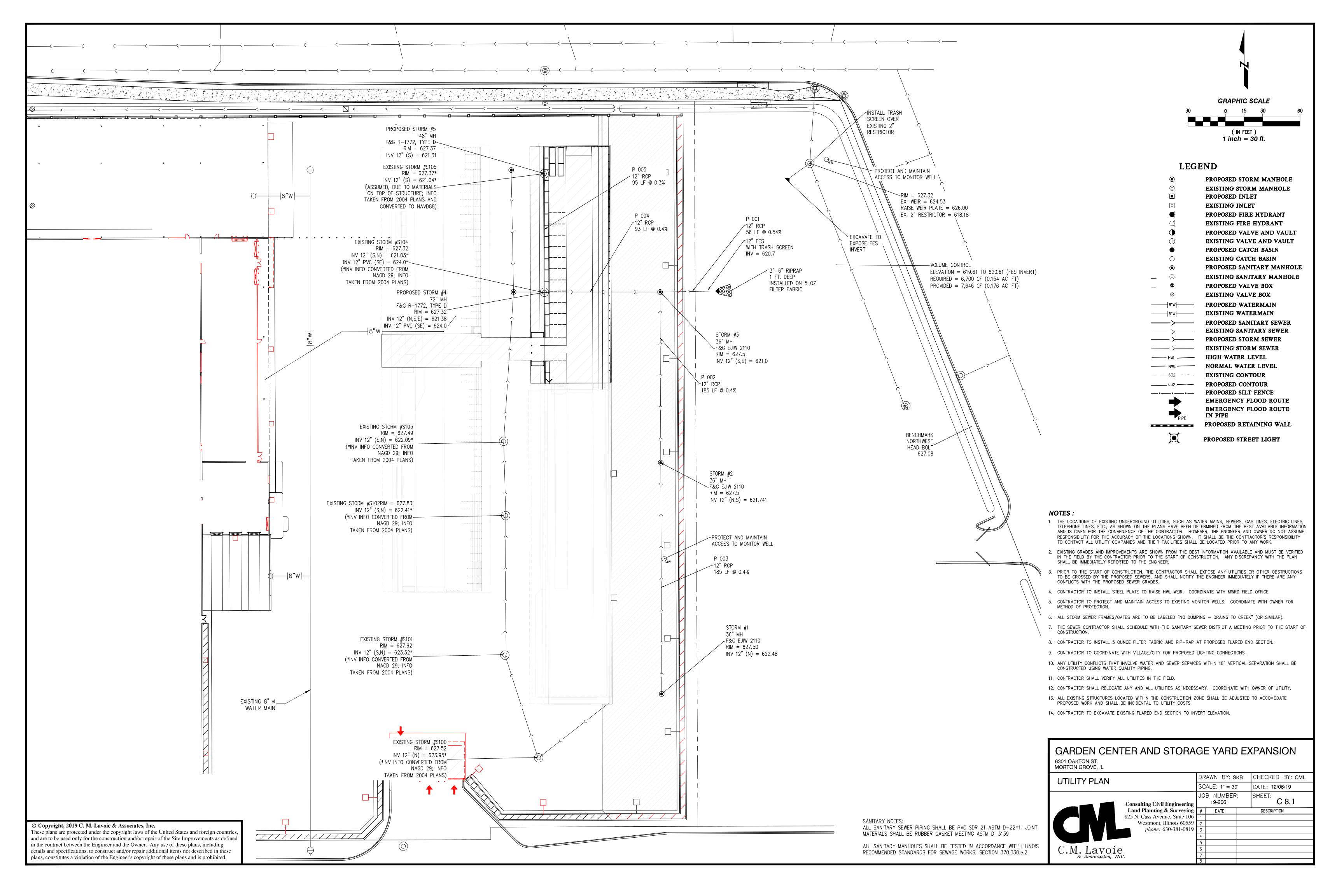
- DURING CONSTRUCTION, THEN THE PROPERTIES AND SPECIAL MANAGEMENT AREAS DOWNSTREAM FROM SUCH DEVELOPMENT SHALL BE PROTECTED FROM EROSION. 15. THE SURFACE OF STRIPPED AREAS SHALL BE PERMANENTLY OR TEMPORARILY PROTECTED FROM SOIL EROSION WITHIN
- FIFTEEN DAYS AFTER FINAL GRADE IS REACHED. STRIPPED AREAS THAT WILL REMAIN UNDISTURBED FOR MORE THAN FIFTEEN DAYS AFTER INITIAL DISTURBANCE SHALL BE PROTECTED FROM EROSION. TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED CONTINUOUSLY UNTIL PERMANENT COVER IS ESTABLISHED.
- 16. WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION DEWATERING SHALL BE FILTERED.
- 17. ALL STORM SEWER STRUCTURES TO HAVE INLET BASKETS TO COLLECT ANY SILT WHICH MAY FLOW INTO STRUCTURES. INLET BASKETS TO REMAIN IN PLACE UNTIL SITE IS PERMANENTLY STABILIZED.
- 18. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, SUCH AS WATER MAINS, SEWERS, GAS LINES, ELECTRIC LINES, TELEPHONE LINES, ETC., AS SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION AND IS GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. HOWEVER, THE ENGINEER AND OWNER DO NOT ASSUME RESPONSIBILITY FOR THE ACCURACY OF THE LOCATIONS SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES AND THEIR FACILITIES SHALL BE LOCATED PRIOR TO ANY WORK.
- 19. EXISTING GRADES AND IMPROVEMENTS ARE SHOWN FROM THE BEST INFORMATION AVAILABLE AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCY WITH THE PLAN SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER.
- 20. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL EXPOSE ANY UTILITIES OR OTHER OBSTRUCTIONS TO BE CROSSED BY PROPOSED UTILITIES, AND SHALL NOTIFY THE ENGINEER IMMEDIATELY IF THERE ARE ANY CONFLICTS WITH THE PROPOSED GRADE.
- 21. ALL RIM ELEVATIONS OF STORM STRUCTURES LOCATED IN CURB & GUTTER ARE TO FLOW LINE UNLESS
- 22. ADJUSTMENTS TO EXISTING UTILITY FRAMES AND GRATES MAY BE REQUIRED BY THE CONTRACTOR. CONTRACTOR TO FIELD VERIFY ALL FRAMES AND GRATES FOR EXISTING ELEVATIONS AND NOTE WHICH STRUCTURES WILL REQUIRE ADJUSTMENT. ALL ADJUSTMENTS ARE CONSIDERED INCIDENTAL TO THE

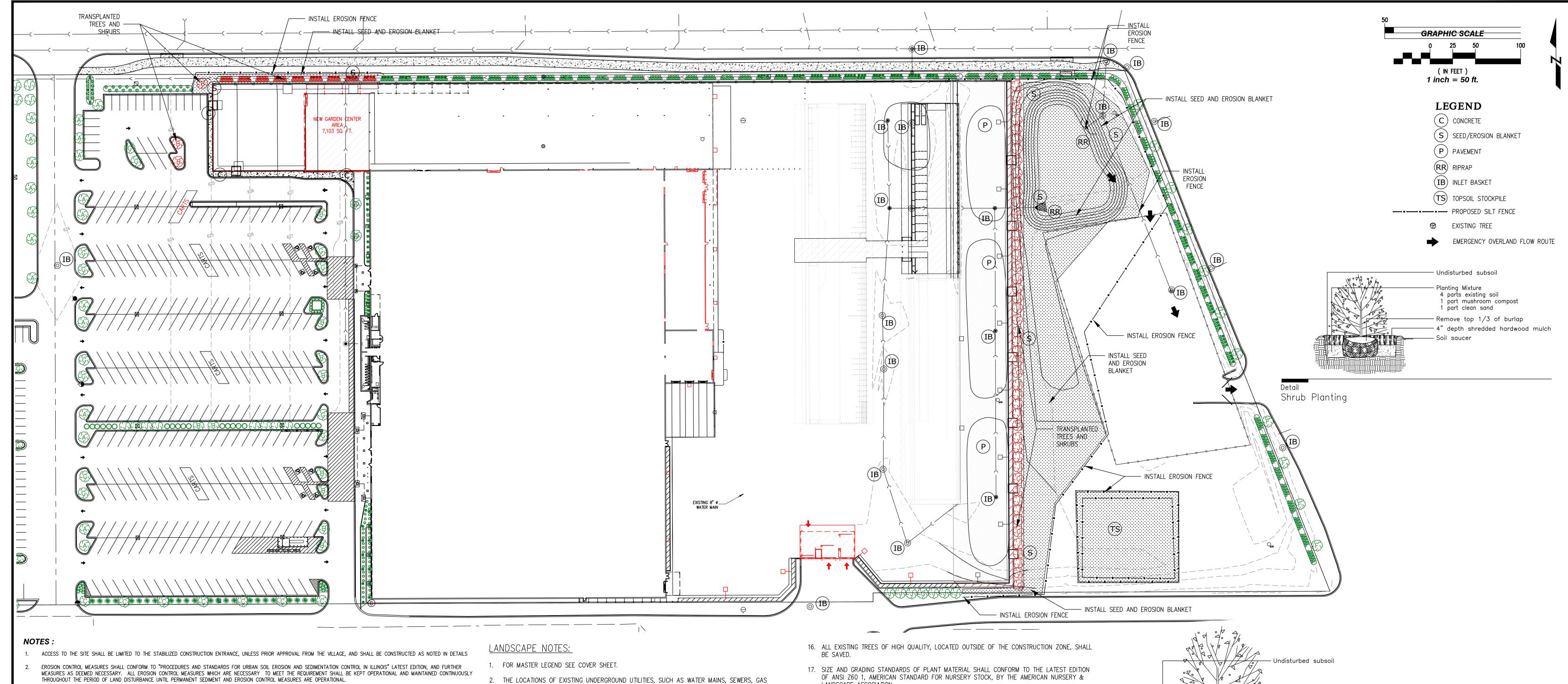
GARDEN CENTER AND STORAGE YARD EXPANSION 6301 OAKTON ST. MORTON GROVE, IL

DRAWN BY: SKB CHECKED BY: CML STORAGE YARD GRADING PLAN SCALE: 1" = 30' DATE: 12/06/19 JOB NUMBER: 19-206 ting Civil Engineering Planning & Surveying # DATE DESCRIPTION Cass Avenue, Suite 106 estmont, Illinois 60559 phone: 630-381-0819

		Consulti Land P 825 N. C We
C.M.	Lavoi Associates,	e INC.







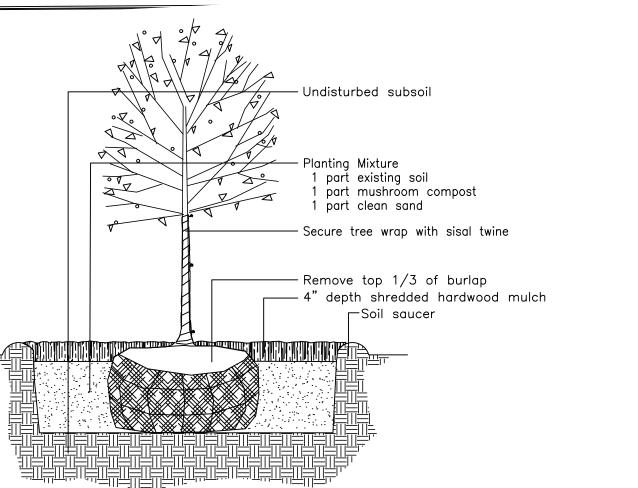
- TEMPORARY VEGETATION OR, WHEN APPROPRIATE, MULCHING OR OTHER NONVIABLE COVER SHALL BE USED TO PROTECT AREAS EXPOSED DURING DEVELOPMENT.
- THE EROSION CONTROL PLAN SHOULD BE INTENDED ONLY FOR EROSION CONTROL. PLEASE REFER TO THE GRADING PLANS FOR DETAILED GRADING INFORMATION.
- 5. ALL PARKWAYS DISTURBED DURING CONSTRUCTION TO BE RESTORED TO VILLAGE/CITY SPECIFICATIONS.
- SEDIMENT AND EROSION CONTROL DEVICES SHALL BE FUNCTIONAL BEFORE LAND IS OTHERWISE DISTURBED ON THE SITE. ALL SILT FENCE SHALL BE ERECTED, INSPECTED, AND APPROVED BY THE DESIGN ENGINEER OR VILLAGE/CITY PRIOR TO CONSTRUCTION.
- ALL MAINTENANCE AND INSPECTION OF DESCRIBED EROSION CONTROL MEASURES SHOWN ON THIS PLAN SHALL BE IN ACCORDANCE WITH CHAPTER 6 OF "PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL IN ILLINOIS."
- ANY SOIL REACHING A PUBLIC OR PRIVATE ROADWAY SHALL BE REMOVED BEFORE THE END OF EACH WORKDAY. CONTRACTOR TO CLEAN ROADS DAILY OR AS DIRECTED BY ENGINEER OR
- THE SURFACE OF STRIPPED AREAS SHALL BE PERMANENTLY OR TEMPORARILY PROTECTED FROM SOIL EROSION WITHIN FIFTEEN DAYS AFTER FINAL GRADE IS REACHED. STRIPPED AREAS THAT WILL REMAIN UNDISTURBED FOR MORE THAN FIFTEEN DAYS AFTER INITIAL DISTURBANCE SHALL BE PROTECTED FROM EROSION. TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED CONTINUOUSLY UNTIL PERMANENT COVER IS ESTABLISHED.
- 10. ALL STORM SEWER STRUCTURES TO HAVE INLET BASKETS TO COLLECT ANY SILT WHICH MAY FLOW INTO STRUCTURES. INLET BASKETS TO REMAIN IN PLACE UNTIL SITE IS PERMANENTLY STABILIZED.
- 11. STOCKPILES OF SOIL SHALL NOT BE LOCATED WITHIN ANY DRAINAGEWAYS, FLOODPLAINS, WETLANDS, BUFFERS OR DEPRESSION AREAS.
- 12. SEDIMENT AND EROSION CONTROL SHALL BE PROVIDED FOR ANY SOIL STOCKPILE IF IT IS TO REMAIN IN PLACE FOR MORE THAN THREE DAYS INCLUDING A DOUBLE ROW OF SILT FENCE OR
- 13. PROPERTIES DOWNSTREAM FROM THE SITE SHALL BE PROTECTED FROM EROSION IF THE VOLUME, VELOCITY, SEDIMENT LOAD, OR PEAK FLOW RATES OF STORMWATER RUNOFF ARE TEMPORARILY INCREASED DURING CONSTRUCTION.
- 14. WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION DEWATERING SHALL BE FILTERED THROUGH A SEDIMENT BAG OR SIMILAR, APPROVED METHOD.
- 15. ALL TEMPORARY EROSION CONTROL MEASURES NECESSARY TO MEET THE REQUIREMENTS OF THE VILLAGE OF LOMBARD AND SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SEDIMENT AND EROSION AND CONTROL MEASURES ARE OPERATIONAL.
- 16. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL STABILIZATION IS ACHIEVED. TRAPPED SEDIMENT AND OTHER DISTURBED SOILS RESULTING FROM TEMPORARY MEASURES SHALL BE PROPERLY DISPOSED OF PRIOR TO PERMANENT STABILIZATION.
- 17. ALL EXISTING TREES TO BE PROTECTED.
- 18. CONTRACTOR TO MONITOR AND RECORD SWPPP ACTIVITIES AND MAINTAIN ON-SITE DETAILED LOG OF TASKS AND INSPECTIONS.

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These plans are protected under the copyright laws of the United States and foreign countries, and are to be used only for the construction and/or repair of the Site Improvements as defined in the contract between the Engineer and the Owner. Any use of these plans, including details and specifications, to construct and/or repair additional items not described in these plans, constitutes a violation of the Engineer's copyright of these plans and is prohibited.

- LINES, ELECTRIC LINES, TELEPHONE LINES, ETC., AS SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION AND IS GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. HOWEVER, THE ENGINEER AND OWNER DO NOT ASSUME RESPONSIBILITY FOR THE ACCURACY OF THE LOCATIONS SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES AND THEIR FACILITIES SHALL BE LOCATED PRIOR TO ANY WORK.
- . NORTH ARROW AND BEARINGS BASED ON ILLINOIS STATE PLANE COORDINATES, NAD83 (2007), EAST ZONE.
- 4. ALL ALTERATIONS MUST BE APPROVED BY THE OWNER
- 5. CONTRACTOR MUST VERIFY ALL QUANTITIES AND OBTAIN ALL PROPER PERMITS AND LICENSES FROM THE PROPER AUTHORITIES.
- 6. ALL LANDSCAPE IMPROVEMENTS SHALL MEET MUNICIPALITY REQUIREMENTS AND GUIDELINES, WHICH SHALL BE VERIFIED BY MUNICIPAL AUTHORITIES.
- 7. ALL MATERIAL MUST MEET INDUSTRY STANDARDS AND THE OWNER HAS THE RIGHT TO REFUSE
- ANY POOR MATERIAL OR WORKMANSHIP. 8. ENGINEER IS NOT RESPONSIBLE FOR UNSEEN SITE CONDITIONS.
- 9. ALL PLANTING SHALL BE SPACED EQUAL DISTANT, BACKFILLED AND THE SOIL COMPACTED, WATERED, FERTILIZED, AND PRUNED.
- 10. TREES MAY BE STAKED AND GUYED, WILL HAVE A WATERING SAUCER AT BASE, AND WILL HAVE NURSERY TAGS WITH THE SPECIES NAME FOR FUTURE IDENTIFICATION.
- 11. ALL BEDS TO BE BERMED 12" TO 24" ABOVE GRADE AND MEET DRAINAGE REQUIREMENTS.
- 12. LAWN AND BED AREAS SHALL BE ROTOTILLED, RAKED FREE OF CLUMPS AND DEBRIS.
- 13. SOD SHALL BE ROLLED AFTER LAYING, WATERED IMMEDIATELY WHEN A LARGE ENOUGH AREA AVAILABLE, AND STAKED ON SLOPES GREATER THAN 4:1.
- 14. ALL BEDS SHALL BE SPADE EDGED, HAVE WEED PRE-EMERGENTS APPLIED AT THE RECOMMENDED RATE, AND SHREDDED HARDWOOD MULCH SPREAD AT MINIMUM OF 3" DEEP.
- 15. ALL DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.

- LANDSCAPE ASSOCIATION.
- 18. ALL PLANT MATERIALS SHALL BE NORTHERN ILLINOIS NURSERY GROWN STOCK AND SHALL BE FREE OF ANY DEFORMITIES, DISEASES OR INSECT DAMAGE. ANY MATERIALS WITH DAMAGED OR CROOKED DISFIGURED LEADERS, BARK ABRASION, SUNSCALD, INSECT DAMAGE, ETC. ARE NOT ACCEPTABLE AND WILL BE REJECTED.
- 19. TREES NOT EXHIBITING A CENTRAL (OR SINGLE) LEADER WILL BE REJECTED UNLESS CALLED OUT IN THE PLANT LIST AS MULTISTEM.
- 20. ALL TREES MUST BE UPRIGHT AND STRAIGHT AND FIRMLY ROOTED INTO THE ROOTBALL AT THE END OF THE WARRANTY PERIOD. IF STAKING IS USED, CONTRACTOR TO REMOVE AND DISPOSE OF STAKING MATERIALS.
- 21. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO ANY UTILITIES CAUSED BY HIS WORK ON THE SITE TO THE UTILITY OWNER SATISFACTION.
- 22. TREE PROTECTION SHALL MEET THE VILLAGE OF MORTON GROVE TREE PROTECTION STANDARDS.
- 23. ALL LANDSCAPE AND SOD AREAS TO BE FERTILIZED WITH 10-10-10 STARTER FERTILIZER AND ROTOTILLED INTO SOIL BEFORE PLANTING OPERATIONS.
- 24. BIOSWALES ARE TO BE SHAPED TO ALLOW FLOW TO FLARED END SECTION OR POND AREAS. SUBMIT PLANTING LIST TO DESIGN ENGINEER
- 25. LANDSCAPE CONTRACTOR TO PROVIDE WEEKLY MOWING, WEED CONTROL, FERTILIZING, WATERING, PRUNING, TRIMMING OF ALL INSTALLED LANDSCAPE AND SEED/SOD UNTIL PROVISIONAL ACCEPTANCE. PROVISIONAL ACCEPTANCE IS DETERMINED WHEN ALL LANDSCAPE, MULCHING, AND SOD INSTALLATION IS COMPLETE. LANDSCAPE CONTRACTOR IS TO INFORM GENERAL CONTRACTOR OF COMPLETION OF WORK. GENERAL CONTRACTOR TO VERIFY AND SIGN OFF THAT PROVISIONAL ACCEPTANCE IS ISSUED. ONCE GENERAL CONTRACTOR SIGNS OFF, THAT DATE IS THE FINAL ACCEPTANCE DATE. LANDSCAPE CONTRACTOR IS TO PROVIDE ALL LANDSCAPE MAINTENANCE FOR ONE COMPLETE SEASON. LANDSCAPE CONTRACTOR TO WARRANTY AND GUARANTEE ALL WORKMANSHIP AND MATERIALS FOR ONE COMPLETE GROWING SEASON BASED ON FINAL ACCEPTANCE DATE. AT THE END OF THE WARRANTY AND GUARANTEE PERIOD, ALL TREES SHALL BE PLUMB, NO SOD AREAS GREATER THAN 1 SQ. FOOT SHALL NOT BE THRIVING, NO MULCH AREAS SHALL BE BARE, WEEDS SHALL NOT BE PRESENT.



MORTON GROVE, IL

Detail Deciduous Tree Planting

GARDEN CENTER AND STORAGE YARD EXPANSION 6301 OAKTON ST.

C 9.0

DRAWN BY: SKB CHECKED BY: CML SWPP AND LANDSCAPE PLAN SCALE: 1" = 50' DATE: 12/06/19 JOB NUMBER: **Consulting Civil Engineering** Land Planning & Surveying # DATE DESCRIPTION 825 N. Cass Avenue, Suite 106 Westmont, Illinois 60559 phone: 630-381-0819 C.M. Lavoie

STORMWATER NARRATIVE

FOR

GARDEN CENTER AND STORAGE YARD EXPANSIONS

MENARD, INC. 6301 OAKTON ST. MORTON GROVE, IL 60053

PREPARED BY:

C.M. Lavoie & Associates, Inc. 825 N. Cass Avenue, Suite 106 Westmont, Illinois 60559 (630) 381-0819



PREPARED FOR: MENARD, INC.

Dated: February 11, 2020

I, Christopher M. Lavoie, a registered Professional Engineer in the State of Illinois, hereby certify this Hydrologic and Hydraulic Analysis was performed under my personal direction.

> Illinois Professional Engineer 062-049582 EXPIRES 11-30-2021

CML JOB# 19-206

Do Not Duplicate
C. M. Lavoie and Associates, Inc
Consulting Civil Engineering, Land Planning, & Surveying

NARRATIVE

NARRATIVE

C.M. Lavoie and Associates, Inc. (CML) is submitting this Stormwater Narrative on behalf of Menard, Inc. Menard, Inc. plans to build an addition onto their existing building, expand their outdoor garden center, and expand their building materials storage yard on a site in the Village of Morton Grove, Illinois.

The building materials area will be expanded to the east and a new retaining wall will be built. The expanded garden area will be paved asphalt. New storm drains are proposed in the building materials area to convey the stormwater to a proposed pond area on the northeast side of the site. In addition, the village is proposing to install a public sidewalk, just north of the north property line. This additional impervious area is added to the stormwater computations in order to account for the future sidewalk installation. This eastern side of the site currently utilizes an underground storage system. This stormtrap system will be removed and will be replaced with the construction of the pond.

The garden area will be expanded to the west, with removal of pavement, installation of concrete, and expand the garden center addition. The existing storm drainage is not altered and will continue to drain to the existing StormTrap system located at the west side of the parking lot. New, pervious areas are created, which helps balance the impervious areas created. The garden area will not be used for the outdoor storage of any fertilizers or other pollutants

The goal of the project is to provide an expanded garden area and building materials storage yard and meet the Village stormwater management requirements.

Storage Volume:

The existing design for the east side of the site utilizes an underground stormtrap system to provide 15,867 cubic feet of storage for detention. Since this underground system is being removed, this storage will have to be provided for in the proposed pond.

The total added impervious area on the east side of the site is 1.90 acres. With a maximum release rate of 0.3 cfs/acre, the allowable release rate for the site is 0.57 cfs (0.3cfs/acre x 1.90 acres). Using Bulletin 70 rainfall data for a 100 year storm, the required storage volume based on the 0.57 cfs release rate was found to be 0.55 acre-feet or 23,951 cubic feet.

Based on the removal of the existing underground storage as well as the new development of impervious areas, the total required storage for the east side of the site will have to be 39,818 cubic feet (15,867 cubic feet + 23,951 cubic feet).

One inch of rainfall is required to be retained over the new impervious area to provide volume control for the site. This required volume control is 6,897 cubic feet (1.90 acres x 1 inch).

The proposed pond design achieves both required detention volume of 23,951 cubic feet and the required retention volume of 6,897 cubic feet. The volume control is stored below the outlet flared end section invert of 620.61 and above the pond bottom of 619.61. This one foot area provides a total retention volume of 7,646 cubic feet as seen on the table below.

STAGE STORAGE TABLE

ELEV	AREA (sq. ft.)	DEPTH (ft)	AVG END INC. VOL. (cu. ft.)	AVG END TOTAL VOL. (cu. ft.)	CONIC INC. VOL. (cu. ft.)	CONIC TOTAL VOL. (cu. ft.)
619.61	6950	N/A	N/A	0	N/A	0
620.61	8363	1	7656	7656	7646	7646

The storage that is provided above the outlet invert of 620.61 and below the high water line elevation of 624.50 is a total of 42,121 cubic feet or 0.97 acre-feet. The provided 42,121 cubic feet is above the required detention volume of 39,818 cubic feet. The stage storage for the proposed pomd volume can be seen in the table below.

STAGE STORAGE TABLE

ELEV	AREA (sq. ft.)	DEPTH (ft)	AVG END INC. VOL. (cu. ft.)	AVG END TOTAL VOL. (cu. ft.)	CONIC INC. VOL. (cu. ft.)	CONIC TOTAL VOL. (cu. ft.)
620.61	8363	N/A	N/A	0	N/A	0
621.0	8967	0	3466	3466	3465	3465
622.0	10117	1	9542	13008	9536	13002
623.0	11323	1	10720	23728	10714	23716
624.0	12586	1	11955	35683	11949	35665
624.5	13239	1	6456	42139	6456	42121

The outlet of the proposed storage pond conveys water to the north where it enters the village stormwater system at a manhole in the Oakton Street Parkway R.O.W. The outlet structure is being looked at to be revised to maintain the required release rate.





MEMORANDUM TO: Tyler Edwards

Menard, Inc.

FROM: Brendan May, PE

Senior Consultant

Elise Purguette Consultant

Luay R. Aboona, PE, PTOE

Principal

DATE: February 14, 2020

SUBJECT: Parking Study

Proposed Menards Expansion

Morton Grove, Illinois

This memorandum summarizes the results and findings of a parking study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed expansion of the Menards store located at 6301 Oakton Street in Morton Grove, Illinois. The existing building is approximately 195,000 square feet in size and the site currently provides 382 parking spaces of which two spaces are located near the existing guard shack.

As proposed, the plans call for expanding the Menards store with an additional 7,103 square feet of building area resulting in the elimination of 57 parking spaces within the main parking field. As such, the expanded store will provide 325 parking spaces. It should be noted that 32 of the 57 parking spaces that are proposed to be eliminated are currently utilized for garden center sales each spring and therefore are not currently available all year along. Furthermore, to offset the loss of parking within the main parking field, an additional 50 overflow parking spaces will be provided within the parking lot located on the west side of River Drive. A copy of the site plan is included in the Appendix. **Figure 1** shows an aerial view of the site and illustrates the location of the existing garden center outdoor sales.

The purpose of this study was to assess the adequacy of the Menards store parking supply in accommodating current and future parking demand with the proposed expansion. In order to do that, the following tasks were undertaken:

- Parking occupancy surveys were conducted by KLOA, Inc. at the existing store on a Thursday, Friday, and Saturday in January 2020.
- The projected parking demand was generated for the proposed expansion.
- The adequacy of the available parking was evaluated to assess its ability to accommodate the estimated parking demand of the proposed expansion.

Aerial View of Site

Figure 1

Menards Parking Occupancy Surveys

Parking occupancy surveys were conducted at the main parking field serving the Menards store on Thursday, January 9, 2020, Friday, January 10, 2020, and Saturday, January 18, 2020. The counts were conducted by rows in half-hour intervals from 7:00 A.M. to 8:00 P.M, as illustrated in **Figure 2** (see Appendix). The parking occupancy surveys are summarized in **Tables 1, 2, and 3** for Thursday, Friday, and Saturday, respectively. (All tables are included in the Appendix.) The results of the parking occupancy surveys indicated the following:

- Peak occupancy on Thursday was 209 vehicles (55 percent), which is a parking ratio of 1.07 spaces per 1,000 square feet, occurring at 12:30 P.M., resulting in a surplus of 171 parking spaces.
- Peak occupancy on Friday was 227 vehicles (60 percent), which is a parking ratio of 1.16 spaces per 1,000 square feet, occurring at 12:00 P.M., resulting in a surplus of 153 parking spaces.
- Peak occupancy on Saturday was 255 vehicles (67 percent), which is a parking ratio of 1.31 spaces per 1,000 square feet, occurring at 3:00 P.M., resulting in a surplus of 125 parking spaces.

The results of these parking occupancy surveys will be used as the baseline for the projected parking demand of the expansion, as they represent the typical conditions of the store operations.

Projected Parking Demand of the Proposed Expansion

As previously indicated, the proposed expansion will be approximately 7,103 square feet in size and will result in the elimination of 57 parking spaces, reducing the overall supply to 325 parking spaces. For the purposes of this evaluation, the proposed accessory building that will be located within the product pickup area, was not included in the analysis because it is not a shopping area. Customers using the accessory building will need to purchase their products within the store in order to access the yard to pick them up, and as such, do not use the front parking lot.

In order to determine the total projected parking demand for the expanded Menards store, the parking demand was estimated based on the Village of Morton Grove parking code requirements, the results of the parking occupancy surveys, and parking rates published in the Institute of Transportation Engineers' (ITE) *Parking Generation Manual*, 5th Edition. Based on the three methodologies, the parking demand for the proposed expansion is as follows:

- Village of Morton Grove parking code requirements:
 - o 20 parking spaces (one space per 350 s.f. of gross floor area excluding outdoor storage areas)
- Parking occupancy surveys:
 - o Thursday: eight spaces (1.07 space per 1,000 s.f.)
 - o Friday: eight spaces (1.16 space per 1,000 s.f.)
 - o Saturday: nine spaces (1.31 space per 1,000 s.f.)

- ITE *Parking Generation Manual* (Land-Use Code 862 Home Improvement Superstore):
 - o Friday: 17 spaces (ratio of 2.42 spaces per 1,000 square feet)
 - o Saturday: 24 spaces (ratio of 3.36 spaces per 1,000 square feet)

The parking demands for these three methods were distributed on an hourly basis based on the results of the parking occupancy surveys. **Table 4** summarizes the projected hourly parking demand for the proposed expansion.

Parking Evaluation

In order to determine the projected peak parking demand of the expanded Menards store, the projected hourly parking demands for the proposed expansion (Table 4) were added to the existing observed peak parking demand (Tables 1, 2, and 3). **Table 5** shows the total projected hourly parking occupancy demand based on the Village of Morton Grove parking code requirements, the results of the parking occupancy surveys, and the rates published in the ITE *Parking Generation Manual*, 5th Edition. **Table 6** shows the projected surplus and deficit parking demand per hour. **Table 7** shows the total projected hourly parking percentage occupancy demand. The projected peak parking demands based on the three methodologies are as follows:

Village of Morton Grove Parking Code Requirements

- Peak parking demand on Thursday will be 229 vehicles (70 percent) occurring at 12:30 P.M, resulting in a surplus of 96 parking spaces.
- Peak parking demand on Friday will be 247 vehicles (76 percent) occurring at 12:00 P.M, resulting in a surplus of 78 parking spaces.
- Peak parking demand on Saturday will be 275 vehicles (85 percent) occurring at 3:00 P.M, resulting in a surplus of 50 parking spaces.

Parking Occupancy Surveys

- Peak parking demand on Thursday will be 217 vehicles (67 percent) occurring at 12:30 P.M, resulting in a surplus of 108 parking spaces.
- Peak parking demand on Friday will be 235 vehicles (72 percent) occurring at 12:00 P.M, resulting in a surplus of 90 parking spaces.
- Peak parking demand on Saturday will be 264 vehicles (81 percent) occurring at 3:00 P.M, resulting in a surplus of 61 parking spaces.

ITE Parking Generation Manual

- Peak parking demand on Thursday will be 226 vehicles (70 percent) occurring at 12:30 P.M, resulting in a surplus of 99 parking spaces.
- Peak parking demand on Friday will be 244 vehicles (75 percent) occurring at 12:00 P.M, resulting in a surplus of 81 parking spaces.
- Peak parking demand on Saturday will be 279 vehicles (86 percent) occurring at 3:00 P.M, resulting in a surplus of 46 parking spaces.

As can be seen from the above, the proposed 325 parking spaces will be adequate in accommodating the projected parking demand for Menards during a typical day at the store.

Seasonal Variation

It is important to note that a several times per year, Menards experiences an above average peak parking demand. These time periods generally occur in May, for the two weeks around Mother's Day, as these are generally the first two warm weeks of the year at the beginning of spring and the other is in November on Black Friday. Based on counts previously conducted at the store on a Friday and Saturday in May, the peak parking demand was observed to be 322 spaces and 326 spaces, respectively, with both peak parking demands occurring midday.

When the estimated parking demand to be generated by the proposed expansion is added to the previously observed peak parking demand in May, the projected peak parking demand based on the Village of Morton Grove parking code requirements, the results of the parking occupancy surveys, and parking rates published by ITE, will be 346, 335 and 350 parking spaces, respectively. These projected parking demands are projected to occur midday on Saturday and will result in a deficit of 21, 10 and 25 parking spaces, respectively.

As previously indicated, Menards will provide 50 overflow parking spaces, within the parking lot located on the west side of River Drive. These 50 overflow parking spaces will be able to accommodate the projected overflow parking generated by the store during periods of above average peak parking demand, which is projected to be up to 350 parking spaces. During times of above average peak parking demand, employees should be encouraged to park in the overflow parking areas to ensure parking within the main lot is available for customers.

Should any additional overflow parking be required, vehicles are able to park on the south side of Kirk Street which borders the south side of the site.

On-Site Circulation Evaluation

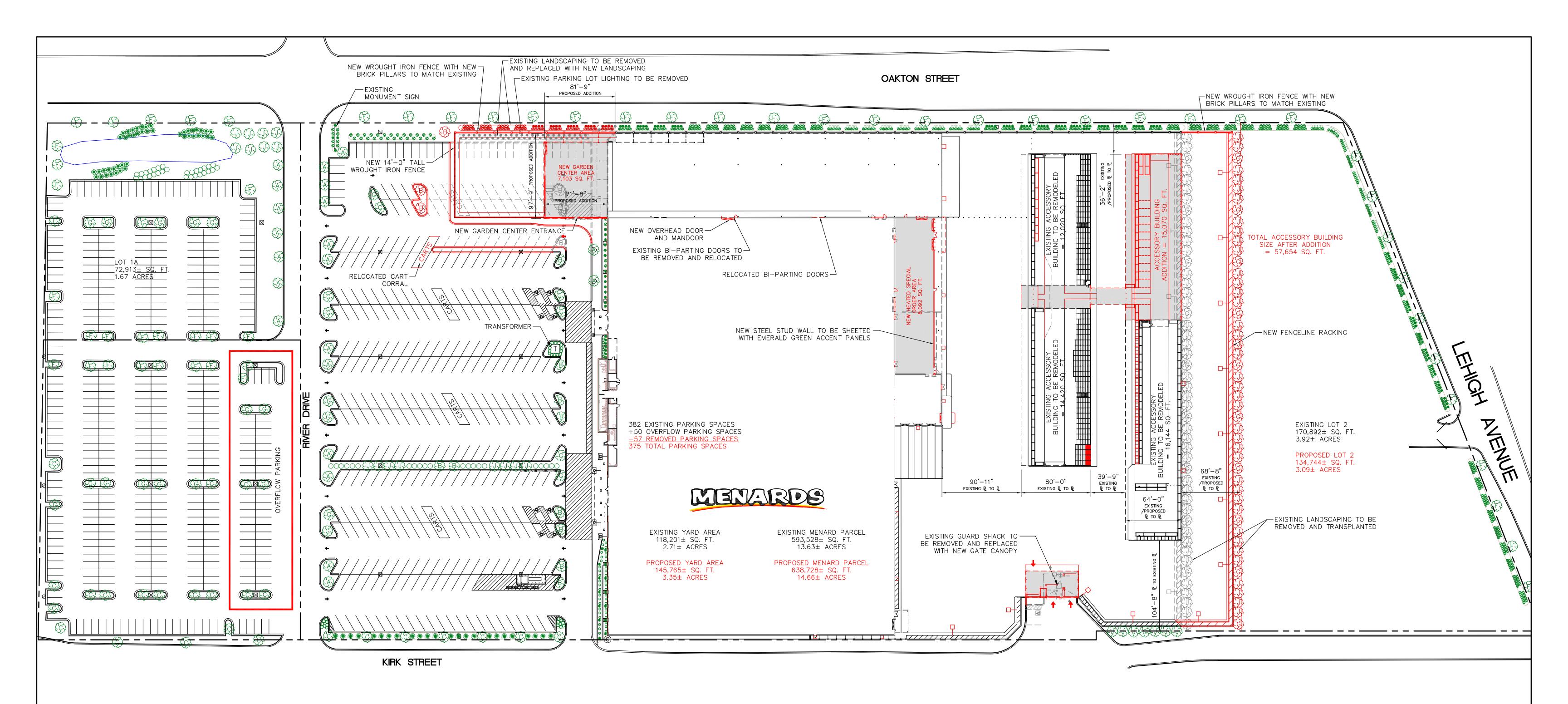
Under existing conditions, when the parking field is utilized for garden center sales, the northern aisle, located west of the garden center sales area, creates dead-end parking spaces via a one-way eastbound drive aisle, as can be seen in Figure 1. Based on a review of the site plan, the proposed garden center and modification to the parking lot will provide a southbound drive aisle west of the garden center sales via the construction of a landscaped island which will allow for the most northerly drive-aisle to operate efficiently. Furthermore, the drive aisle along with south side of the proposed expansion will be converted to two-way travel to allow vehicles of the northerly parking locations to access the drive aisle that runs along west side of the store so that vehicles do not need to turn onto River Drive to access the other parking locations. As such, the expansion will enhance the flow of traffic through the parking lot during garden center sales, will ensure no dead-end parking is provided, and will limit the number of vehicles using River Drive to circulate the parking field.

Conclusion

Based on the preceding evaluation, the following is concluded regarding the adequacy of the proposed parking supply in accommodating the expansion of the Menards store:

- Currently, the existing parking serving the Menards store is adequate for typical conditions at Menards. Based on the parking surveys, the parking occupancy did not exceed 67 percent.
- Under future conditions, the average projected parking occupancy for typical conditions based on the three methods will be 72 percent on a weekday and 84 percent on a Saturday.
- Under future conditions, the maximum projected parking occupancy, results in an 76 percent occupancy on a weekday occurring at 12:00 P.M. using the Village of Morton Grove parking code requirements and an 86 percent occupancy on a Saturday occurring at 3:00 P.M. on a Saturday calculated using the ITE *Parking Generation Manual*.
- Based on the results of the parking study, the proposed supply of 325 parking spaces will
 be adequate in accommodating the projected peak parking demand for typical conditions
 at the Menards store.
- During the few times per year in which Menards experiences an above average peak
 parking demand, the proposed 50 overflow parking will be adequate in accommodating
 any overflow parking demand. During these times, employees should be encouraged to
 park in the overflow parking areas to ensure parking within the main lot is available for
 customers.
- Based on a review of the site plan, the expansion and proposed modifications to the parking lot will enhance the flow of traffic through the parking lot during garden center sales and will ensure no dead-end parking is provided.

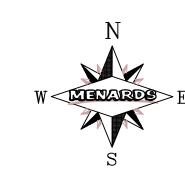
Appendix



	EL	LECTRICAL LEGEND
	8	POLE MOUNTED SINGLE HEAD 1000W 277V M.H. TYPE R5 DISTRIBUTION, VERTICAL LAMP ORIENTATION, CONVEX GLASS LENS, DOUBLE FUSING. MANUFACTURER McGRAW-EDISON GLB91125AS-FF
	1	EXISTING 400 WATT 277 VOLT M.H. PARKING LOT LIGHTING, 30'-0" TALL TO BE REMOVED
	4	POLE MOUNTED SINGLE HEAD 1000W 277V M.H. TYPE R5 DISTRIBUTION, VERTICAL LAMP ORIENTATION, WITH HOUSE-SIDE SHIELDING, CONVEX GLASS LENS DOUBLE FUSING. MANUFACTURING McGRAW-EDISON GLB91125AS-FF-HS
	10	EXISTING 400W 277V M.H. CUTOFF LUMINAIRE TO REMAIN
[]	4	EXISTING 400W 277V M.H. CUTOFF LUMINAIRE YARD LIGHTS TO BE REMOVED
	12	200 WATT 277 VOLT LED CUTOFF LUMINAIRE LIGHTING MOUNTED ON BUILDING TO MATCH EXISTING LOCATIONS
—	12	200 WATT 277 VOLT LED CUTOFF LUMINAIRE YARD LIGHTS MOUNTED TO FENCELINE RACKING
	8	175W SOFFIT LIGHTS

	LAN	NDSCAF	E LE(GEND	
SYMBOL	SCIENTIFIC, COMMON NAME	QUANTITY	SYMBOL	SCIENTIFIC, COMMON NAME	QUANTITY
(A)	GLEDITSIA TRIACANTHOS VAR. INERMIS 'SHADEMASTER', 'SHADEMASTER' THORNLESS HONEYLOCUST	22	0	CORNUS STOLONIFERA 'ISANTI', 'ISANTI' REDTWIG DOGWOOD	93
(B)	EXISTING MALUS RED JEWEL, RED FLOWERING CRAB TO REMAIN	10		COTONEASTER APICULATUS, CRANBERRY COTONEASTER	85
(B) (B)	EXISTING MALUS RED JEWEL, RED FLOWERING CRAB TO BE REMOVED AND TRANSPLANTED	3	- 202	EXISTING COTONEASTER APICULATUS, CRANBERRY COTONEASTER TO BE REMOVED	49
(5)	CELTIA OCCIDENTALIS, HACKBERRY	24	*	JUNIPERUS CHINENSIS 'PFITZERIANA KALLAY', 'KALLAY' COMPACT PFITZER JUNIPER	28
(F)	FRAXINUS AMERICANA, WHITE ASH	57	(3)	RIBES ALPINUM, ALPINE CURRENT	139
(5)	TILIA AMERICANA, AMERICAN LINDEN	30	(E)	NEW 30" TALL RIBES ALPINUM, ALPINE CURRENT	16
(F) (F)	EXISTING TILIA AMERICANA, AMERICAN LINDEN TO BE REMOVED AND TRANSPLANTED	10	\$	VIBURNUM TRILOBUM 'COMPACTA', COMPACT AMERICAN CRANBERRYBUSH	57
\$	VIBURNUM PRUNIFOLIUM, BLACKHAWK VIBURNUM	22		EXISTING 30" TALL VIBURNUM, CRANBERRYBUSH TO BE REMOVED AND TRANSPLANTED IF POSSIBLE	6
(F) (F)	EXISTING VIBURNUM PRUNIFOLIUM, BLACKHAWK VIBURNUM TO BE REMOVED AND TRANSPLANTED	38	\$	NEW 30" TALL VIBURNUM TRILOBUM 'COMPACTA', COMPACT AMERICAN CRANBERRYBUSH	20
	THUJA OCCIDENTALIS 'TECHNY', AMERICAN ARBORVITAE	335	3744 3744	JUNIPERUS HORIZONTALIS PLUMOSA COMPACTA, COMPACT ANDORA JUNIPER	76
	NEW 6'-0" TALL THUJA OCCIDENTALIS 'TECHNY', AMERICAN ARBORVITAE	45			

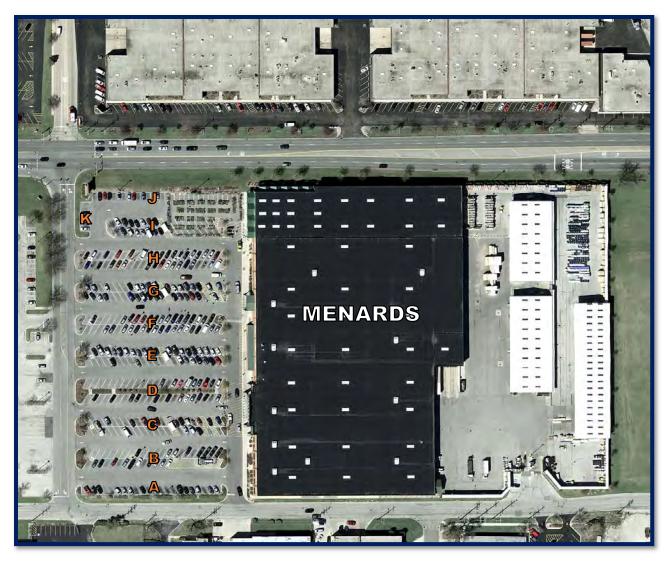
Tyler Edwards
Real Estate Representative
Menard, Inc.
5101 Menard Drive
Eau Claire, Wisconsin 54703



MERARDS

Morton Grove, Illinois Menards Site Plan February 10, 2020 Scale: 1" = 60'-0"

CT1



Parking Occupancy Surveys

Figure 2

Table 1A PARKING OCCUPANCY - THURSDAY, JANUARY 9, 2020

Total	1001	92	86	105	123	156	141	154	168	152	178	188	209	157	185	180	172	160	151	145	125	134	126	103	113	102	66	110	380
	K	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	2	2	1	1	1		-	П	1	1	9
	ſ	5	5	S	5	6	6	10	8	10	11	12	10	11	11	12	12	11	6	6	∞	∞	7	9	5	S	5	5	31
	I	15	17	19	18	18	16	7	14	13	15	16	12	10	10	11	13	15	13	11	11	6	6	∞	6	∞	6	6	32
	H	14	16	16	16	17	20	21	17	18	22	22	22	7	19	15	15	15	8	12	10	14	13	11	10	8	8	9	44
	G	7	6	11	6	18	14	16	20	20	19	21	22	17	22	20	18	16	16	17	15	15	14	11	111	7	9	7	40
Zone]	F	9	5	9	12	18	17	22	21	17	26	26	26	21	24	26	22	18	26	21	16	20	18	15	15	13	12	13	43
	田	9	9	5	11	15	15	17	18	15	20	23	28	20	22	19	18	17	21	14	18	18	15	13	14	12	12	17	42
	D	11	10	13	16	17	15	24	26	19	23	19	29	24	27	25	24	22	22	21	19	20	16	17	20	20	20	23	4
	C	2	2	2	7	11	111	11	15	15	17	19	22	15	17	19	18	17	12	15	10	6	111	5	111	12	10	13	40
	В	12	. 13	12	. 12	17	11	11	14	12	11	13	. 20	. 14	. 15	16	15	13	12	14	8	12	15	6	10	6	6	8	36
	A	11	12	13	14	13	10	12	. 12	10	10	13	14	14	14	13	13	12	10	6	6	~	7	7	7	7	7	8	22
	Time	7:00 AM	7:30 AM	8:00 AM	8:30 AM	9:00 AM	9:30 AM	10:00 AM	10:30 AM	11:00 AM	11:30 AM	12:00 PM	12:30 PM	1:00 PM	1:30 PM	$2.00 \mathrm{PM}$	2:30 PM	$3.00\mathrm{PM}$	3:30 PM	4:00 PM	4:30 PM	5:00 PM	5:30 PM	6:00 PM	6:30 PM	7:00 PM	7:30 PM	8:00 PM	Inventory

Table 1B PERCENT OCCUPIED - THURSDAY, JANUARY 9, 2020

						Zone 1						į
Time	\mathbf{A}	В	C	D	<u> </u>	Ŧ	G	H	Ι	ſ	K	1 0tai
7:00 AM	20%	33%	5%	25%	14%	14%	18%	32%	47%	16%	%0\$	24%
7:30 AM	55%	36%	5%	23%	14%	12%	23%	36%	53%	16%	%05	79%
8:00 AM	26%	33%	5%	30%	12%	14%	28%	36%	%65	16%	%0\$	28%
8:30 AM	64%	33%	18%	36%	76%	28%	23%	36%	%95	16%	20%	32%
9:00 AM	26%	47%	28%	39%	36%	45%	45%	39%	%95	767	%05	41%
9:30 AM	45%	31%	28%	34%	36%	40%	35%	45%	20%	29%	20%	37%
10:00 AM	55%	31%	28%	55%	40%	51%	40%	48%	22%	32%	%0\$	41%
10:30 AM	55%	39%	38%	%65	43%	46%	20%	39%	44%	79%	20%	44%
11:00 AM	45%	33%	38%	43%	36%	40%	%05	41%	41%	32%	%05	40%
11:30 AM	45%	31%	43%	52%	48%	%09	48%	20%	47%	35%	%29	47%
12:00 PM	26%	36%	48%	43%	25%	%09	53%	%0\$	%05	39%	%29	46%
12:30 PM	64%	%95	25%	%99	%29	%09	55%	20%	38%	32%	%29	25%
1:00 PM	64%	39%	38%	55%	48%	46%	43%	16%	31%	35%	%29	41%
1:30 PM	64%	45%	43%	61%	52%	26%	55%	43%	31%	35%	%29	49%
2:00 PM	26%	44%	48%	57%	45%	%09	%05	34%	34%	39%	%29	47%
2:30 PM	26%	45%	45%	55%	43%	51%	45%	34%	41%	39%	%29	45%
3:00 PM	55%	36%	43%	%05	40%	42%	40%	34%	47%	35%	%29	42%
3:30 PM	45%	33%	30%	20%	20%	%09	40%	18%	41%	29%	33%	40%
4:00 PM	41%	39%	38%	48%	33%	46%	43%	27%	34%	29%	33%	38%
4:30 PM	41%	22%	25%	43%	43%	37%	38%	23%	34%	79%	17%	33%
5:00 PM	36%	33%	23%	45%	43%	47%	38%	32%	28%	79%	17%	35%
5:30 PM	32%	45%	28%	36%	36%	42%	35%	30%	28%	23%	17%	33%
6:00 PM	32%	25%	13%	39%	31%	35%	28%	25%	25%	19%	17%	27%
6:30 PM	32%	28%	28%	45%	33%	35%	28%	23%	28%	16%	17%	30%
7:00 PM	32%	25%	30%	45%	78%	30%	18%	18%	25%	16%	17%	27%
7:30 PM	32%	25%	25%	45%	29%	28%	15%	18%	28%	16%	17%	79%
8:00 PM	36%	22%	33%	52%	40%	30%	18%	14%	28%	16%	17%	29%
Inventory	22	36	40	4	42	43	40	4	32	31	9	380

Table 2A PARKING OCCUPANCY - FRIDAY, JANUARY 10, 2020

						Zone 1						1070
Time	A	В	C	D	E	F	G	Н	I	J	K	10131
7:00 AM	10	6	4	8	9	7	8	11	14	7	3	87
7:30 AM	13	10	5	8	8	10	10	13	16	8	3	104
8:00 AM	15	10	5	7	8	12	12	12	17	6	3	110
8:30 AM	15	11	9	6	7	12	10	13	17	8	4	112
9:00 AM	14	14	8	12	12	15	16	16	17	11	4	139
9:30 AM	12	10	10	12	15	22	18	17	13	11	4	144
10:00 AM	12	11	17	19	21	22	22	22	15	11	4	176
10:30 AM	~	12	23	25	25	28	25	26	15	12	4	203
11:00 AM	10	6	26	24	25	27	24	23	13	13	4	198
11:30 AM	11	13	22	28	28	30	20	26	15	14	4	211
12:00 PM	13	12	22	34	27	32	26	30	12	15	4	227
12:30 PM	13	17	27	27	24	23	20	23	13	14	4	205
1:00 PM	14	18	18	79	22	24	21	26	13	14	4	200
1:30 PM	15	17	18	27	19	24	16	24	16	17	4	197
2:00 PM	15	20	20	26	21	23	19	22	12	16	4	198
2:30 PM	13	17	19	25	22	22	19	22	11	14	3	187
$3.00 \mathrm{PM}$	11	14	17	24	23	21	18	21	10	11	2	172
3:30 PM	11	13	14	22	22	22	16	17	10	8	2	157
4:00 PM	11	15	22	30	20	16	15	15	6	8	0	161
4:30 PM	11	13	20	21	21	18	13	16	7	8	1	149
5:00 PM	12	11	16	16	13	14	∞	19	7	7	1	124
5:30 PM	10	6	17	20	11	~	~	16	∞	9	1	114
$6:00 \mathrm{PM}$	10	15	13	23	12	13	12	16	6	9	-	130
6:30 PM	10	6	14	20	18	16	9	11	6	9	1	120
7:00 PM	10	9	12	15	19	18	6	∞	9	9		110
7:30 PM	11	5	6	14	12	10	7	9	7	9	1	88
8:00 PM	10	5	10	16	10	10	7	6	7	9	1	91
Inventory	22	36	40	4	42	43	40	4	32	31	9	380

Table 2B PERCENT OCCUPIED - FRIDAY, JANUARY 10, 2020

[LOCAL	23%	27%	29%	29%	37%	38%	46%	53%	52%	%95	%09	54%	53%	52%	52%	49%	45%	41%	42%	39%	33%	30%	34%	32%	29%	23%	24%	380
	K	20%	20%	20%	%29	%29	%29	%19	%29	%29	%29	%29	%19	%29	%19	%29	20%	33%	33%	%0	17%	17%	17%	17%	17%	17%	17%	17%	9
	ſ	23%	26%	29%	79%	35%	35%	35%	39%	42%	45%	48%	45%	45%	25%	52%	45%	35%	26%	26%	26%	23%	19%	19%	19%	19%	19%	19%	31
	Ι	44%	20%	53%	53%	53%	41%	47%	47%	41%	47%	38%	41%	41%	20%	38%	34%	31%	31%	28%	22%	22%	25%	28%	28%	19%	22%	22%	32
	Н	25%	30%	27%	30%	36%	39%	20%	26%	52%	26%	%89	52%	26%	55%	20%	20%	48%	39%	34%	36%	43%	36%	36%	25%	18%	14%	20%	44
	G	20%	25%	30%	25%	40%	45%	25%	63%	%09	20%	%59	20%	53%	40%	48%	48%	45%	40%	38%	33%	20%	20%	30%	15%	23%	18%	18%	40
Zone 1	F	16%	23%	28%	28%	35%	51%	51%	%59	63%	%02	74%	53%	%95	%95	53%	51%	46%	51%	37%	42%	33%	19%	30%	37%	45%	23%	23%	43
	丑	14%	19%	19%	17%	73%	36%	20%	%09	%09	%19	64%	21%	52%	45%	20%	52%	25%	52%	48%	20%	31%	79%	78%	43%	45%	29%	24%	42
	D	18%	18%	16%	20%	27%	27%	43%	27%	25%	64%	77%	61%	26%	61%	26%	21%	55%	20%	%89	48%	36%	45%	52%	45%	34%	32%	36%	44
	၁	10%	13%	13%	15%	70%	25%	43%	28%	%59	25%	25%	%89	45%	45%	20%	48%	43%	35%	25%	20%	40%	43%	33%	35%	30%	23%	25%	40
	В	25%	28%	28%	31%	39%	28%	31%	33%	25%	36%	33%	47%	20%	47%	%95	47%	39%	36%	42%	36%	31%	25%	42%	25%	17%	14%	14%	36
	A	45%	%65	%89	%89	64%	25%	25%	36%	45%	20%	26%	%65	64%	%89	%89	%65	%0\$	20%	20%	20%	25%	45%	45%	45%	45%	20%	45%	22
	Time	7:00 AM	7:30 AM	8:00 AM	8:30 AM	9:00 AM	9:30 AM	$10:00 \mathrm{AM}$	10:30 AM	11:00 AM	11:30 AM	12:00 PM	12:30 PM	1:00 PM	1:30 PM	2:00 PM	2:30 PM	3:00 PM	3:30 PM	4:00 PM	4:30 PM	5:00 PM	5:30 PM	6:00 PM	6:30 PM	7:00 PM	7:30 PM	8:00 PM	Inventory

Table 3A PARKING OCCUPANCY – SATURDAY, JANUARY 18, 2020

6 5 6 9 3 8 7 7 11 3 11 9 10 15 4 12 8 11 18 4 15 15 14 21 3 18 14 12 18 4 19 15 15 17 6 19 14 17 19 6 22 23 22 21 6 28 19 20 20 7 26 23 24 20 20 7 26 17 21 23 16 9 37 24 23 16 7 38 21 21 15 7 21 19 13 13 7 21 19 13 13 7 21 14 14 10 7 11 9 7 8 6 22 23 16	C		Q		E	Zone 1	5	H	1	J.	K	Total
7 5 9 7 8 7 7 11 3 9 5 11 9 7 8 7 7 11 3 10 6 12 11 12 8 11 18 4 14 6 10 12 15 15 14 21 18 4 10 10 18 17 19 15 14 21 18 4 10 10 18 17 19 15 15 17 6 11 10 18 17 19 15 17 19 16 18 17 19 16 19 19 14 17 19 6 17 19 16 19 19 14 17 19 6 22 22 22 22 22 22 23 24 23 16 3 24	9	<u>r</u> -	4	∞ (S	9	ν 1	9	6	m (<u>.</u>	09
6 11 11 12 8 11 18 4 6 10 12 11 12 8 11 18 4 7 14 16 18 14 12 18 5 10 18 17 19 15 15 14 21 3 14 24 19 19 15 15 17 6 18 25 26 29 28 15 22 21 6 20 32 27 28 19 20 20 7 26 35 33 35 27 28 19 20 7 27 31 22 27 21 22 18 6 29 32 32 32 26 17 21 20 9 21 22 27 21 16 7 21 28 27 21 16 7 21 28 27 21 16 7 21 28 27 21 16 7 21 28 27 21 19 11 14 10 7 14 21 12 14 19 11 14 9 7 15 19 14 19 11 9 7 16 9 10 8 8 7		7 0	v, v	6 1	٥ م	∞ =	٥ ر	7 01	11 5	w 4		72 44
14 6 10 12 15 15 14 21 3 8 7 14 16 18 14 12 18 5 10 10 18 17 19 15 15 17 6 10 10 18 17 19 15 17 6 6 13 14 24 19 19 14 17 19 6 18 18 25 26 22 23 22 21 6 6 17 23 26 29 28 15 20 20 10 7 20 26 33 33 35 27 28 19 6 7 20 26 34 34 32 26 23 16 6 7 20 24 34 33 32 24 20 16 7		10	9	12	11	12	∞ ∞	11	18	4		104
8 7 14 16 18 14 15 18 5 10 10 18 17 19 15 15 17 6 10 10 18 17 19 15 15 17 6 13 14 24 19 19 14 17 19 6 18 18 25 26 25 23 22 21 6 6 17 23 26 29 28 15 20 20 18 6 7 20 26 35 33 35 27 28 19 6 7 7 7 7 7 8 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 8 7 8 7 8 7 8 7 8 7 8		14	9	10	12	15	15	41	21	ε	1	123
10 10 18 17 19 15 15 17 6 13 14 24 19 19 14 17 19 6 18 18 25 26 22 23 22 21 6 17 23 26 29 28 15 20 20 7 15 20 32 27 28 19 6 7 20 26 35 33 35 27 28 19 6 21 27 31 22 27 28 19 6 7 20 24 34 29 26 23 21 16 7 25 29 32 26 17 21 20 9 26 31 34 33 32 21 23 16 9 27 33 36 34 37 <td></td> <td>8</td> <td>7</td> <td>14</td> <td>16</td> <td>18</td> <td>14</td> <td>12</td> <td>18</td> <td>S</td> <td>1</td> <td>124</td>		8	7	14	16	18	14	12	18	S	1	124
13 14 24 19 19 14 17 19 6 18 18 25 26 22 23 22 21 6 17 23 26 29 28 15 22 18 6 15 20 32 27 28 19 20 7 20 26 35 33 35 27 28 19 6 21 27 31 22 27 28 19 6 7 20 24 34 29 26 23 16 7 7 25 29 32 26 17 21 16 7 7 26 31 34 33 32 24 23 16 9 7 27 33 36 34 37 24 23 16 9 7 28 27 28 27 21 14 14 12 1 1 1 1	~1	10	10	18	17	19	15	15	17	9	_	140
18 18 25 26 22 23 22 21 6 17 23 26 29 28 15 22 18 6 15 20 32 27 28 19 20 7 20 26 35 33 35 27 28 19 6 21 27 31 22 27 28 19 6 20 24 34 29 26 23 16 7 20 24 34 29 26 23 16 7 25 29 32 26 17 21 16 7 26 31 34 33 32 24 23 16 9 27 33 36 34 37 24 23 16 7 28 27 28 27 21 14 14 17<	3	13	14	24	19	19	14	17	19	9	_	159
17 23 26 29 28 15 22 18 6 15 20 32 27 28 19 20 20 7 20 26 35 33 35 27 28 19 6 21 27 31 22 27 21 23 16 7 20 24 34 39 26 23 16 7 25 29 32 26 17 21 20 9 26 31 34 33 32 26 18 16 7 27 33 36 34 37 24 23 16 9 25 27 38 28 28 22 18 17 19 13 13 14 14 12 14 14 12 14 14 14 12 14 14 14 <td< td=""><td>4</td><td>18</td><td>18</td><td>25</td><td>26</td><td>22</td><td>23</td><td>22</td><td>21</td><td>9</td><td>_</td><td>196</td></td<>	4	18	18	25	26	22	23	22	21	9	_	196
15 20 32 27 28 19 20 20 7 20 26 35 33 35 27 28 19 6 21 27 31 22 27 21 23 16 7 20 24 34 29 26 23 21 16 7 25 29 32 26 17 21 20 9 26 31 34 33 32 21 21 20 9 26 31 34 33 32 21 21 20 18 9 27 33 36 34 37 24 20 16 7 19 21 27 27 21 19 14 14 17 17 18 17 23 25 21 14 14 20 14 10 17 14 14 20 14 10 17 14 11 14 11 <t< td=""><td>[3</td><td>17</td><td>23</td><td>26</td><td>29</td><td>28</td><td>15</td><td>22</td><td>18</td><td>9</td><td>-</td><td>198</td></t<>	[3	17	23	26	29	28	15	22	18	9	-	198
20 26 35 33 35 27 28 19 6 21 27 31 22 27 21 23 16 7 20 24 34 29 26 23 21 16 7 25 29 32 26 17 21 16 7 26 31 34 33 32 21 20 9 27 33 36 34 37 24 23 16 9 25 27 38 28 35 21 21 15 7 19 21 28 27 24 20 16 7 19 21 27 27 21 19 13 13 7 11 14 21 12 12 14 10 7 11 14 12 14 11 9 9 <td>91</td> <td>15</td> <td>20</td> <td>32</td> <td>27</td> <td>28</td> <td>19</td> <td>20</td> <td>20</td> <td>7</td> <td>1</td> <td>205</td>	91	15	20	32	27	28	19	20	20	7	1	205
21 27 31 22 27 21 23 16 7 20 24 34 29 26 23 21 16 7 25 29 32 26 17 21 16 7 26 31 34 33 32 21 22 18 9 27 33 36 34 37 24 23 16 9 25 27 38 28 35 21 21 15 7 19 21 22 24 20 16 7 19 27 27 21 19 13 13 7 18 17 23 25 21 14 14 12 7 14 15 16 18 11 14 9 7 8 6 13 17 12 14 11 9 9 7 6 11 11 16 9 10 8	4	20	26	35	33	35	27	28	19	9	_	244
20 24 34 29 26 23 21 16 7 25 29 32 26 17 21 20 9 26 31 34 33 26 17 21 20 9 27 33 36 34 37 24 23 16 9 25 27 38 28 35 21 21 15 17 15 17 16 9 16 7 7 16 16 7 7 16 14 14 11 14	18	21	27	31	22	27	21	23	16	7	-	214
25 29 32 32 26 17 21 20 9 26 31 34 33 32 21 22 18 9 27 33 34 37 24 23 16 9 25 27 38 28 35 21 21 15 7 22 21 28 27 24 20 16 7 19 21 27 27 21 19 13 13 7 18 17 12 14 10 7 7 17 14 23 16 18 11 14 9 7 14 15 19 14 19 12 11 8 7 11 11 16 12 14 19 9 9 7 11 11 16 12 11 9 9 7 6	16	20	24	34	29	26	23	21	16	7	_	217
26 31 34 33 32 21 22 18 9 27 33 36 34 37 24 23 16 9 25 27 38 28 35 21 21 15 16 7 22 21 28 27 32 24 20 16 7 19 21 27 27 21 19 13 13 7 18 17 23 25 21 14 10 7 17 14 23 16 18 11 14 9 7 14 15 19 14 19 12 11 8 7 13 17 12 14 11 9 9 9 7 11 11 16 9 10 8 8 7 6	16	25	29	32	32	26	17	21	20	6	_	228
27 33 36 34 37 24 23 16 9 25 27 38 28 35 21 21 15 7 22 21 28 27 32 24 20 16 7 19 21 27 27 21 19 13 13 7 18 17 23 25 21 14 14 10 7 12 14 21 17 12 14 10 7 17 14 23 16 18 11 14 9 7 13 13 17 12 14 19 12 11 8 7 11 11 16 12 14 11 9 9 7 6 9 10 16 9 10 8 8 7 6	16	26	31	34	33	32	21	22	18	6	-	243
25 27 38 28 35 21 15 7 22 21 28 27 32 24 20 16 7 19 21 27 27 21 19 13 13 7 18 17 23 25 21 14 14 12 7 17 14 21 17 12 14 10 7 14 15 19 14 19 12 11 8 7 13 17 12 14 19 12 11 8 7 11 11 16 12 14 19 7 8 6 11 11 16 9 10 8 8 7 6	15	27	33	36	34	37	24	23	16	6	-	255
22 21 28 27 32 24 20 16 7 19 21 27 27 21 19 13 13 7 18 17 23 25 21 14 14 12 7 17 14 21 12 14 10 7 14 15 19 14 19 12 11 8 7 13 17 12 14 11 9 9 7 8 6 11 11 16 9 10 8 8 7 6	17	25	27	38	28	35	21	21	15	7	_	235
19 21 27 27 21 19 13 13 7 18 17 23 25 21 14 14 12 7 12 14 21 12 14 10 7 17 14 23 16 18 11 14 9 7 14 15 19 14 19 12 11 8 7 13 17 12 14 11 9 9 7 11 11 16 12 11 9 9 7 9 10 16 9 10 8 8 7 6	14	22	21	28	27	32	24	20	16	7	1	212
18 17 23 25 21 14 14 12 7 12 14 21 12 14 10 7 17 14 23 16 18 11 14 9 7 14 15 19 14 19 12 11 8 7 13 13 17 12 14 11 9 7 8 6 11 11 16 9 10 8 8 7 6	14	19	21	27	27	21	19	13	13	7	0	181
12 14 21 12 17 12 14 10 7 17 14 23 16 18 11 14 9 7 14 15 19 14 19 12 11 8 7 13 17 12 14 11 9 9 7 11 11 16 9 10 8 8 7 6	11	18	17	23	25	21	14	14	12	7	0	162
17 14 23 16 18 11 14 9 7 14 15 19 14 19 12 11 8 7 13 13 17 12 14 11 9 9 7 11 11 16 9 10 8 8 7 6 9 10 16 9 10 8 8 7 6	12	12	14	21	12	17	12	14	10	7	0	131
14 15 19 14 19 12 11 8 7 13 13 17 12 14 11 9 9 7 11 11 16 12 11 9 7 8 6 9 10 16 9 10 8 8 7 6	11	17	14	23	16	18	11	14	6	7	0	140
13 13 17 12 14 11 9 9 7 11 11 16 12 11 9 7 8 6 9 10 16 9 10 8 8 7 6	11	14	15	19	14	19	12	111	8	7	0	130
11 11 16 12 11 9 7 8 6 9 10 16 9 10 8 8 7 6	11	13	13	17	12	14	11	6	6	7	0	116
9 10 16 9 10 8 8 7 6	10	11	11	16	12	11	6	7	8	9	0	101
20 40 41 40 41 33	8	6	10	16	6	10	8	8	7	9	0	91
36 40 44 42 43 40 44 32 31	22	36	40	44	42	43	40	4	32	31	9	380

Table 3B PARKING OCCUPANCY – SATURDAY, JANUARY 18, 2020

T. 4.01	I OUAL	16%	19%	25%	27%	32%	33%	37%	45%	52%	52%	54%	64%	%95	21%	%09	64%	%19	62%	%95	48%	43%	34%	37%	34%	31%	27%	24%	380
	K	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	%0	%0	%0	%0	%0	%0	%0	%0	9
	ſ	10%	10%	13%	13%	10%	16%	19%	19%	19%	19%	23%	19%	23%	23%	29%	29%	29%	23%	23%	23%	23%	23%	23%	23%	23%	19%	19%	31
	Ι	28%	34%	47%	26%	%99	26%	53%	26%	%99	26%	63%	26%	20%	20%	63%	26%	20%	47%	20%	41%	38%	31%	28%	25%	28%	25%	22%	32
	Н	14%	16%	23%	25%	32%	27%	34%	39%	20%	20%	45%	64%	52%	48%	48%	20%	52%	48%	45%	30%	32%	32%	32%	25%	20%	16%	18%	44
	G	13%	18%	23%	20%	38%	35%	38%	35%	28%	38%	48%	%89	53%	28%	43%	53%	%09	53%	%09	48%	35%	30%	28%	30%	28%	23%	20%	40
Zone 1	Ħ	14%	19%	76%	28%	35%	42%	44%	44%	51%	%59	%59	81%	63%	%09	%09	74%	%98	81%	74%	46%	46%	40%	42%	44%	33%	79%	23%	43
	田	12%	17%	21%	79%	78%	38%	40%	45%	62%	%69	64%	%62	52%	%69	%9 <i>L</i>	%62	81%	%29	64%	64%	%09	29%	38%	33%	78%	29%	21%	42
	D	18%	70%	25%	27%	23%	32%	41%	55%	27%	29%	73%	%08	%02	77%	73%	77%	82%	%98	64%	61%	52%	48%	52%	43%	39%	36%	36%	44
	၁	10%	13%	13%	15%	15%	18%	25%	35%	45%	28%	20%	985%	%89	%09	73%	78%	83%	%89	53%	53%	43%	35%	35%	38%	33%	28%	25%	40
	В	19%	19%	25%	28%	36%	22%	28%	36%	20%	47%	45%	%95	28%	%95	%69	72%	75%	%69	61%	53%	20%	33%	47%	39%	36%	31%	25%	36
	A	27%	32%	45%	20%	25%	20%	25%	26%	64%	%65	73%	64%	82%	73%	73%	73%	%89	77%	64%	64%	20%	25%	%05	20%	20%	45%	36%	22
	Time	7:00 AM	7:30 AM	8:00 AM	8:30 AM	9:00 AM	9:30 AM	10:00 AM	10:30 AM	11:00 AM	11:30 AM	12:00 PM	12:30 PM	1:00 PM	1:30 PM	2:00 PM	2:30 PM	3:00 PM	3:30 PM	4:00 PM	4:30 PM	5:00 PM	5:30 PM	$6:00 \mathrm{PM}$	6:30 PM	7:00 PM	7:30 PM	$8:00 \mathrm{PM}$	Inventory

Table 4
PROJECTED HOURLY PARKING DEMAND - EXPANSION

		Thursday			Friday			Saturday	
	Village of	Parking		Village of	Parking		Village of	Parking	
Time	Morton	Occupancy	IVVE	Morton	Occupancy	IND	Morton	Occupancy	211
7:00 AM	Grove Code	Surveys 4	~	Grove Code	Surveys 4	7	Grove Code	Surveys 3	9
7:30 AM	10	4	~	10	4	∞	9	3	7
8:00 AM	11	5	6	10	4	6	∞	4	6
8:30 AM	12	S	11	10	4	6	6	4	10
9:00 AM	15	9	13	13	S	11	10	S	12
9:30 AM	14	9	12	13	9	11	10	S	12
10:00 AM	15	9	13	16	7	14	11	5	14
10:30 AM	17	7	14	18	~	16	13	9	15
11:00 AM	15	9	13	18	7	15	16	7	19
11:30 AM	18	7	15	19	~	16	16	7	19
12:00 PM	18	8	16	20	8	17	17	8	20
12:30 PM	20	8	17	19	∞	16	20	6	23
1:00 PM	16	7	13	18	8	15	17	8	21
1:30 PM	18	∞	16	18	7	15	18	~	21
2:00 PM	18	7	15	18	7	15	18	6	22
2:30 PM	17	7	14	17	7	15	20	6	23
3:00 PM	16	7	14	16	7	13	20	6	24
3:30 PM	15	9	13	14	9	12	19	6	23
4:00 PM	14	9	12	15	9	13	17	8	20
4:30 PM	12	S	11	41	9	12	15	7	18
5:00 PM	13	9	11	11	5	10	13	9	16
5:30 PM	13	5	11	111	5	6	11	5	13
6:00 PM	10	4	6	12	5	10	11	5	14
6:30 PM	111	5	10	111	5	6	11	5	13
7:00 PM	10	4	6	10	4	6	10	5	11
7:30 PM	10	4	6	∞	4	7	∞	4	10
8:00 PM	11	5	6	6	4	7	8	4	6

Table 5 TOTAL PROJECTED HOURLY PARKING DEMAND - PARKING OCCUPANCY

		Thursday			Friday			Saturday	
	Village of	Parking		Village of	Parking		Village of	Parking	
Time	Morton Grove Code	Occupancy	ITE	Morton Grove Code	Occupancy	IME	Morton Grove Code	Occupancy	ITTE
7:00 AM	101	96	100	95	91	94	65	63	99
7:30 AM	108	102	106	114	108	112	78	75	79
8:00 AM	116	110	114	120	114	119	102	86	103
8:30 AM	135	128	134	122	116	121	113	108	114
9:00 AM	171	162	169	152	144	150	133	128	135
9:30 AM	155	147	153	157	150	155	134	129	136
$10:00 \mathrm{AM}$	169	160	167	192	183	190	151	145	154
10:30 AM	185	175	182	221	211	219	172	165	174
11:00 AM	167	158	165	216	205	213	212	203	215
11:30 AM	196	185	193	230	219	227	214	205	217
12:00 PM	206	196	204	247	235	244	222	213	225
12:30 PM	229	217	226	224	213	221	264	253	267
1:00 PM	173	164	170	218	208	215	231	222	235
1:30 PM	203	193	201	215	204	212	235	225	238
2:00 PM	198	187	195	216	205	213	246	237	250
2:30 PM	189	179	186	204	194	202	263	252	266
3:00 PM	176	167	174	188	179	185	275	264	279
3:30 PM	166	157	164	171	163	169	254	244	258
4:00 PM	159	151	157	176	167	174	229	220	232
4:30 PM	137	130	136	163	155	161	196	188	199
5:00 PM	147	140	145	135	129	134	175	168	178
5:30 PM	139	131	137	125	119	123	142	136	144
6:00 PM	113	107	112	142	135	140	151	145	154
6:30 PM	124	118	123	131	125	129	141	135	143
7:00 PM	112	106	1111	120	114	119	126	121	127
7:30 PM	109	103	108	96	92	95	109	105	111
8:00 PM	121	115	119	100	95	86	66	95	100

Table 6 TOTAL PROJECTED HOURLY SURPLUS PARKING

	Thur	Thursday			Friday			Saturday	
	T	J. 1.		Trelle	J. 1.		472112 T	J. 10	
Time	village of Morton	Farking Occupancy	ITE	village or Morton	Farking Occupancy	IND	Village of Morton	Parking Occupancy	IND
	Grove Code	Surveys		Grove Code	Surveys		Grove Code	Surveys	
7:00 AM	224	229	225	230	234	231	260	262	259
7:30 AM	217	223	219	211	217	213	247	250	246
8:00 AM	209	215	211	205	211	206	223	227	222
8:30 AM	190	197	191	203	209	204	212	217	211
9:00 AM	154	163	156	173	181	175	192	197	190
9:30 AM	170	178	172	168	175	170	191	196	189
10:00 AM	156	165	158	133	142	135	174	180	171
10:30 AM	140	150	143	104	114	106	153	160	151
11:00 AM	158	167	160	109	120	112	113	122	110
11:30 AM	129	140	132	95	106	86	1111	120	108
12:00 PM	119	129	121	78	06	81	103	112	100
12:30 PM	96	108	66	101	112	104	61	72	58
1:00 PM	152	161	155	107	117	110	94	103	06
1:30 PM	122	132	124	110	121	113	06	100	87
2:00 PM	127	138	130	109	120	112	79	88	75
2:30 PM	136	146	139	121	131	123	62	73	59
3:00 PM	149	158	151	137	146	140	50	61	46
3:30 PM	159	168	161	154	162	156	71	81	29
4:00 PM	166	174	168	149	158	151	96	105	93
4:30 PM	188	195	189	162	170	164	129	137	126
5:00 PM	178	185	180	190	196	191	150	157	147
5:30 PM	186	194	188	200	206	202	183	189	181
6:00 PM	212	218	213	183	190	185	174	180	171
6:30 PM	201	207	202	194	200	196	184	190	182
7:00 PM	213	219	214	205	211	206	199	204	198
7:30 PM	216	222	217	229	233	230	216	220	214
8:00 PM	204	210	206	225	230	227	226	230	225

Table 7

TOTAL PROJECTED HOURLY PARKING DEMAND - PERCENTAGE OCCUPANCY

		Thursday			Friday			Saturday	
	Village of	Parking		Village of	Parking		Village of	Parking	
Time	Morton Grove Code	Occupancy Surveys	ITE	Morton Grove Code	Occupancy Surveys	ITE	Morton Grove Code	Occupancy Surveys	INE
7:00 AM	31%	30%	31%	29%	28%	29%	20%	19%	20%
7:30 AM	33%	31%	33%	35%	33%	34%	24%	23%	24%
8:00 AM	36%	34%	35%	37%	35%	37%	31%	30%	32%
8:30 AM	42%	39%	41%	38%	36%	37%	35%	33%	35%
9:00 AM	53%	20%	52%	47%	44%	46%	41%	39%	42%
9:30 AM	48%	45%	47%	48%	46%	48%	41%	40%	42%
10:00 AM	52%	49%	51%	%65	26%	28%	46%	45%	47%
10:30 AM	57%	54%	26%	%89	%59	%29	53%	51%	54%
11:00 AM	51%	49%	51%	%99	63%	%99	65%	62%	%99
11:30 AM	%09	57%	%65	71%	%29	%02	%99	63%	%19
12:00 PM	63%	%09	63%	%9L	72%	75%	%89	%99	%69
12:30 PM	%02	%29	%02	%69	%99	%89	81%	78%	82%
1:00 PM	53%	20%	52%	%29	64%	%99	71%	%89	72%
1:30 PM	62%	%65	62%	%99	63%	%59	72%	%69	73%
2:00 PM	61%	28%	%09	%99	63%	%99	%92	73%	77%
2:30 PM	28%	55%	21%	63%	%09	62%	81%	78%	82%
3:00 PM	54%	51%	54%	28%	25%	57%	85%	81%	%98
3:30 PM	51%	48%	%0\$	53%	%05	52%	78%	75%	%62
4:00 PM	49%	46%	48%	54%	51%	54%	%02	%89	71%
4:30 PM	42%	40%	42%	%05	48%	%09	%09	28%	61%
5:00 PM	45%	43%	45%	42%	40%	41%	54%	52%	55%
5:30 PM	43%	40%	42%	38%	37%	38%	44%	42%	44%
6:00 PM	35%	33%	34%	44%	42%	43%	46%	45%	47%
6:30 PM	38%	36%	38%	40%	38%	40%	43%	42%	44%
7:00 PM	34%	33%	34%	37%	35%	37%	39%	37%	39%
7:30 PM	34%	32%	33%	30%	28%	29%	34%	32%	34%
8:00 PM	37%	35%	37%	31%	29%	30%	30%	29%	31%

VILLAGE OF MORTON GROVE, ILLINOIS PLAN REVIEW COMMENT FORM

DATE DISTRIBUTED: 2/24/2020

CASE NUMBER: PC 20-01

APPLICATION: Menard, Inc., is requesting an amendment to a Special Use Permit (Ord. 01-06, 05-08, 13-14, and 18-06) to authorize the expansion of a home improvement center and approve an associated parking waiver. The parcel is located in the C1 General Commercial District and is commonly known as 6301 Oakton Street.

A Special Use Application has been submitted for Plan Commission action. Please return your review to the Department of Community Development by **Monday, March 9, 2020**.

Thank you, Zoe Heidorn, Land Use Planner

COMMENTS OR CONCERNS

All 18 special traffic control and traffic movement questions raised by village staff regarding the traffic study, lot and plan dimensions, observing and evaluating traffic flows on Kirk St. and River Dr. providing an additional traffic study during peak business hours and future traffic congestion need to be satisifed.

CHAIRMAN TSC

These comments accurately represent existing Village regulations or policies.

Signed

Date: 3/7/2020

Department of Public Works

MORTON GROVE

7840 N. Nagle • Morton Grove, IL 60053

Incredibly Close & Amazingly Open

MEMORANDUM

To: Trustee Ramos

Traffic Safety Commission

From: Chris Tomich, Village Engineer

Date: February 28, 2020

Re: Traffic Safety Commission Meeting on January 9, 2020

1. PC20-01 - Menards Facility Expansion - 6301 Oakton Street.

Request

Review of a Special Use Permit Amendment Application to improve the existing facility to increase garden center retail and storage yard space, and to add facilities to accommodate on-line order pick ups from the storage yard area.

Background

Menard, Inc. store is located between Oakton Street, Kirk Street, River Road, and Lehigh Avenue at the south limits of Morton Grove. It was built between 2000 and 2002. A warehouse was added to the rear part of the property in 2006. A propane filling station was added in 2013. Please refer to the application materials including Menards Morton Grove Expansion Narrative dated December 3, 2009 and the Parking Impact Study memorandum dated February 14, 2020, from Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for background information.

It is important to be aware during this review of two aspects of the existing roadway network. River Drive south of Oakton Street is not a public street, but rather is owned and maintained by Menard, Inc. and also that it is the only access point for Menard's property from Oakton Street. Also, Kirk Street is narrower than normal village streets that allow parking and has more large, commercial vehicles that stop in the street before shipping or receiving goods from the manufacturing or retail sites.

Menard, Inc. characterizes three proposed changes in their submittal materials: additional outdoor warehouse building and yard space; garden center expansion; and reconstruction of the yard gate. The proposed expansion of the warehouse and yard would be located within existing green space. The proposed garden center expansion includes a building addition within the existing parking area. The existing entrance to warehouse yard is controlled by a security guard and manually operated gate. This is proposed to be changed to provide an automatic gate to accommodate increases in on-line retail sales and customer pick ups.

The building addition within the existing parking area would eliminate parking spaces, so the impact needs to be evaluated and has been addressed in the parking study. The reconfiguration of the parking



TSC - Staff Report March 5, 2020 Meeting Page 2 of 3

layout and aisles would also affect site circulation, especially for traffic entering and exiting at River Drive.

Warehousing expansion and yard gate reconstruction would likely have additional traffic impact on Kirk Street, but this and its parking impact have not been addressed in the submitted materials. Staff considers traffic patterns along Kirk Street to currently be tolerable, but is concerned about whether the proposed changes could have an adverse effect on safety and mobility of the short street segment between River Drive and the warehousing space. Staff believes this should be analyzed before the project is approved by the village.

Staff Comments

General

- The impact to traffic patterns on the short street segment between River Drive and the warehousing space should be provided for review including an evaluation of Kirk Street. Having an understanding of the forecasted traffic volumes and how waiting customers would be moved off of Kirk Street would be useful. Existing and proposed storage yard traffic volumes should be provided and discussed.
- 2. Areas of parking supplied or removed should be clearly delineated and numbered on plans for each parking zone.
- 3. Kirk Street has a narrower travel width than is desireable and has regular backups due to challenges moving truck traffic into and out of the manufacturing sites on the south side of Kirk Street and even to Menard's. Staff would be supportive of directing more Menard's customers only needing access to warehousing area to approach the warehousing entrance from the east or from the south. This traffic pattern should be observed and evaluated before directing additional Menard's customers to the warehousing area.
- 4. The on-line sales and pick up procedures with anticipated volumes should be described.
- 5. Staff often observes the northbound, left-turning vehicle queue at Oakton not fully clearing with each signal phase. This might be discussed for improvement, how it might get worse with increased traffic.
- 6. Consider eliminating some of the northern parking lot aisle access to River Drive in order to reduce "intersection" conflicts within the River Drive storage lanes.
- 7. It might be clarified whether any pedestrian accommodations will be provided for access to the auxiliary parking west of River Road which functions much like a local road with three travel lanes to cross.
- 8. It should be clarified if the seasonal outdoor garden area which takes up 32 spaces will be relocated to again take up 32 spaces in the future after the garden center addition is complete and the parking supply is reduced.

Plans

- 9. All lot dimensions should be shown on the plans.
- 10. The proposed two-way traffic aisle immediately south of the garden center addition should be clearly identified on the plans.

TSC - Staff Report March 5, 2020 Meeting Page 3 of 3

(Traffic and) Parking Impact Study

- 11. The peak daily and weekend business hours should be explicitly stated with supporting data.
- 12. The study should identify the amount of parking spaces required by the Special Use Permit and use it as a basis for calculating "Village of Morton Grove Parking Code Requirements".
- 13. The accessible parking space requirements should be added to identify the appropriate number is being provided.
- 14. It seems that the Parking Study was performed during a slower retail time following the busy holiday season and might not accurately represent a typical day. The weather conditions also might have affected customer attendance. The quality of the survey data is not described in the study. The applicant might be asked to address this.
- 15. It should be clarified whether any parking or standing zones will be needed or supplied for the online order pick up procedure, especially during peak times.
- 16. The village does not want vehicles to queue on Kirk Street at the warehousing yard entrance. It is not clear how many trips the on-line pick up center might generate and what amount of queuing could occur at the Kirk Street warehousing yard entrance.
- 17. It should be clarified how on-line order pick up customers would exit the site as efficiently as they might enter to prevent a traffic back up and congestion in the yard.
- 18. It should be clarified what would happen to the two parking spaces existing by the storage yard guard shack after the gate improvements are complete.

Cc: Mr. Ralph Czerwinski

Mr. Joe Dahm Ms. Zoe Heidorn

VILLAGE OF MORTON GROVE, ILLINOIS PLAN REVIEW COMMENT FORM

DATE DISTRIBUTED: 2/24/2020

CASE NUMBER: PC 20-01

<u>APPLICATION:</u> Menard, Inc., is requesting an amendment to a Special Use Permit (Ord. 01-06, 05-08, 13-14, and 18-06) to authorize the expansion of a home improvement center and approve an associated parking waiver. The parcel is located in the C1 General Commercial District and is commonly known as 6301 Oakton Street.

A Special Use Application has been submitted for Plan Commission action. Please return your review to the Department of Community Development by **Monday, March 9, 2020**.

Thank you, Zoe Heidorn, Land Use Planner

COMMENTS OR CONCERNS

General

- 1. A simple exhibit should be prepared showing that highlights the existing and proposed parking on the site with the number of parking spaces labeled to simplify verification.
- 2. The applicant should consider explicitly directing on-line order pick up customer traffic to access Kirk Street from Lehigh Avenue. It is desirable to reduce traffic thru the site or along Nagle Avenue which has an appreciable amount of large vehicle and commercial traffic and congestion. This would also reduce traffic conflicts through the western segment Kirk Street.
- 3. The proposed improvements should be fully coordinated with the village's proposed pedestrian improvements in the Oakton Street right-of-way adjacent to the Menard's property. As part of the grading improvements, the grade on the north side of the property should be lowered to be just above the Oakton Street top of curb. A mowable slope should be established from the new elevation at the right-of-way.
- 4. A permit from Metropolitan Water Reclamation District of Greater Chicago to amend the regulated site detention and incorporate additional impervious coverage will be required as part of the village's permitting process. Proposed site drainage patterns and storage facilities may require further refinement during that multi-jurisdictional permitting process.
- 5. A permit from Illinois Department of Transportation would be required if there would be any improvements within the Oakton Street right-of-way and will be required as part of the village's permitting process.
- 6. A permit from Illinois Department of Natural Resources will be required to control erosion and waterborne pollution directed away from the construction site and will be required as part of the village's permitting process
- 7. Additional permitting from other jurisdictions may be required that are not identified in these comments and will be the responsibility of the applicant to identify, notify and comply with requirements.

Plans

- 8. All lot dimensions should be shown on the plans.
- 9. The proposed two-way traffic aisle immediately south of the garden center addition should be clearly identified on the plans.
- 10. The curb radius of the northeast island by the garden center addition does not seem sufficient to allow an eastbound vehicle to turn right without encroaching into the north/west bound lane. This should be clarified.

(Traffic and) Parking Impact Study

- 11. Existing and proposed storage yard traffic volumes should be provided and discussed.
- 12. Kirk Street is approximately 28-30 feet wide edge-to-edge adjacent to Menard's property including the out lots. Parking is permitted on the south side of Kirk from Nagle to the Menard's storage yard entrance which reduces the passable width to 20-22 feet. Kirk widens to approximately 35 feet edge-to-edge at Nagle and parking is permitted on both sides reducing the passable width to approximately 19 feet. Kirk Street regularly has large commercial vehicle traffic due to the area's commercial/industrial nature. Staff often observes large commercial vehicles parking, stopping, or standing along Kirk, including the north, No Parking side, to unload cargo to local businesses. This further reduces the effective street width and causes traffic backups. The traffic study should include this as an existing condition and assess the impact on the post-development condition.
- 13. The on-line sales and pick up procedures with anticipated volumes should be described in the traffic study.
- 14. The automatic gate specifications should be described in more detail in the traffic study.
- 15. Staff has observed the northbound, left-turning vehicle queue at Oakton not fully clearing with each signal phase. The traffic study should include some assessment of the traffic signal at River Drive. Particular attention could be given to the parking aisle openings near Oakton Street where turning conflicts occur on a regular basis between drivers turning onto River Drive and drivers entering the Oakton Street intersection.
- 16. The traffic study should include a statement that the proposed 50 overflow parking spaces will need to remain available for Menard's parking in the event the outlot (that has been marked for sale) is developed for another use.
- 17. Design vehicles for the various locations on the site should be described. Turning movements will need to be accommodated in the final design.
- 18. The accessible parking space supply should be discussed including access to the new garden center entrance.
- 19. The peak daily and weekend business hours should be explicitly stated with supporting data.
- 20. It seems that the Parking Study was performed during a slower retail time following the busy holiday season and might not accurately represent a typical day. The weather conditions also might have affected the volume of business. The traffic study should make an assessment of the quality of the traffic data collected.
- 21. It should be clarified whether any parking or standing zones will be needed or supplied for the on-line order pick up procedure, especially during peak times.
- 22. Main lot and storage yard vehicle circulation routes and turning templates should be provided using appropriate design vehicles for the proposed on-line order pick up and all other existing uses.
- 23. It is not clear how many trips the on-line pick up center might generate and what amount of queuing storage will be required at the Kirk Street storage yard entrance to prevent vehicles backing up onto Kirk Street. Based upon on-line sales popularity, it is reasonable to assume there will be a considerable increase in traffic desiring to access this point and travelling along Kirk Street.
- 24. It should be clarified how on-line order pick up customers will exit the site as efficiently as they might enter to prevent a traffic back up and congestion in the yard.
- 25. There may need to be some design revision to establish the intended traffic pattern and prevent wrong-

way travel in the proposed one-way parking area next to the garden center addition.

- 26. It should be clarified what will happen to the two parking spaces existing by the storage yard guard shack after the gate improvements are complete.
- 27. Any effect the proposed changes will have upon site snow removal/storage procedures should be described in the traffic study.

These comments accurately represent existing Village regulations or policies.	
These comments accurately represent existing vinage regulations of policies.	
Signed:	
Date:	

Community & Economic Development Department



Incredibly Close & Amazingly Open

To: Chairperson Pietron and Members of the Appearance Commission

From: Zoe Heidorn, Land Use Planner

Date: February 25, 2020

Re: Appearance Commission Case AC 20-01: Menard, Inc. - Request for an Appearance

Certificate for site, landscape, building plans, and associated landscape waivers proposed under case PC 20-01, a request for amendment to a Special Use Permit for the expansion of a home improvement center for the property commonly known as 6301 Oakton Street in Morton Grove, Illinois (PIN 10-29-100-001-0000; 10-29-100-001-0000).

020-0000)

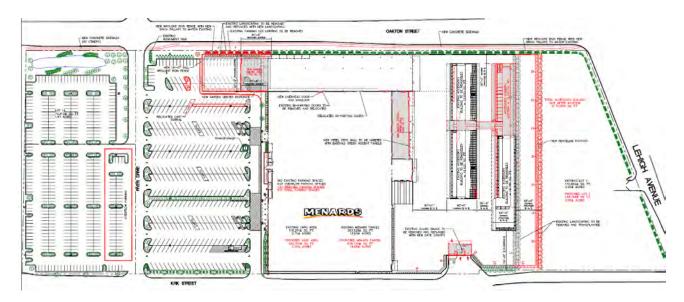
Project Overview

Menard, Inc., ("Applicant") has filed an application requesting approval of an amendment to a Special Use Permit approved under Ordinances 01-06, 05-08, 13-14, and 18-06. The requested amendment will authorize the expansion of an existing home improvement center. The subject property is zoned in the C1 General Commercial District, is located on the south side of Oakton Street, between Nagle and Lehigh Avenues, and is commonly known as 6301 Oakton Street.



Subject Property at 6301 Oakton Street

Menard, Inc., is seeking an amendment to an existing Special Use Permit to expand three portions of the existing home improvement center: (1) a 15,070-square-foot expansion of the eastern outdoor warehouse building, (2) an 8,092-square-foot addition of heated storage space to the east of the principal structure, and (3) a 7,103-square foot expansion of the garden center to the west of the principal structure. 50 additional parking spaces will be provided in the parking lot to the west of River Drive to offset the loss of parking area caused by the garden center expansion.



Proposed Site Improvements

Appearance Commission Responsibility

Per Section 12-16-2:C. of the Unified Development Code, an Appearance Certificate is required for landscaping (Chapter 12-11) and building design (Chapter 12-12) for all exterior modification to commercial development. The Unified Development Code also requires all Special Use applications to be distributed to the Appearance Commission for review (Sec. 12-16-4:A.2).

Comments, suggested changes, and recommended conditions from the Appearance Commission will be forwarded to the Plan Commission as part of the staff report on the proposed amendment to the Special Use Permit. The Plan Commission will hold a public hearing on the proposed amendment on March 16, 2020, and their recommendation will be forwarded to the Village Board for final action in April.

In accordance with the above requirements, the Applicants filed an Appearance Certificate Application to request the Appearance Commission's approval of site, landscape, and building plans.

Review of the Appearance Commission Application

Building Design

The 7,103-square-foot expansion of the garden center at the northwest corner of the principal structure will have the most significant impact on the appearance of the building from the public right-of-way. The addition is proposed to extend 71.67 feet from the existing west building line. A new outdoor plant storage space will be located west of the garden center addition and be enclosed with a 14-foot-high wrought iron fence with new brick pillars designed to match the existing fencing located along Oakton Street. The Applicant has designed the garden center addition to be consistent with the existing structure. Proposed materials include 4" utility face brick, emerald green accent panels, and clear polycarbonate panels, all of which match existing exterior materials. A comparison of the existing and proposed west elevation, north elevation, and south elevation (garden center addition only) is provided on the following page.



Existing Garden Center (Facing Southeast)



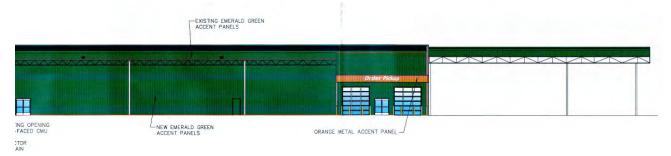
Existing and Proposed West Elevation



Existing and Proposed South Elevation (Garden Center Addition)



The new heated special order area measuring 8,092 square feet will barely be visible from public right-of-way, but has also been designed to incorporate the existing emerald green accent panels, as shown in the east elevation of the principal structure provided below.



Proposed elevations are also enclosed for the 15,070-square-foot addition to the accessory storage building located to the northeast of the subject property. The green steel exterior and white roof of the existing storage building will be carried through to the expansion. The accessory warehouse space is largely screened from public view by solid wood screening and landscaping, as shown in the image below. The existing solid wood screening and landscaping will be transplanted 68.67 feet to the east to accommodate a new drive aisle around the accessory structures. The solid wood screening will be extended south to the south lot line.



Landscape Plan

The Applicant submitted landscape plans that are incorporated into the overall site plans. The following table compares the proposed landscape plan with the Village's current landscaping requirements, established in Chapter 12-11 of the Unified Development Code. The landscape plan analysis is limited to the property located east River Drive, as no change is proposed to the property located west of River Drive, which is intended for future redevelopment.

LANDSCAPING CONTROL	ORDINANCE REQUIREMENT	PROPOSED	COMMENT		
General Landscaping	g Requirements				
Minimum Percentage Landscaping Requirement (Sec. 12-11-1:B.1)	Commercial: 5% of total site = 38,100 sq. ft.	> 94,500 sq. ft.	Compliant		
Trees in public parkways, areas or rights of way adjacent to private property (Sec. 12-11-1:B.4)	Placement of trees in adjacent public ROW required, with trees spaced not more than forty feet (40') apart	Oakton St.: No placement of trees in adjacent public ROW Lehigh Ave.: Existing trees Kirk St.: Insufficient public ROW for tree plantings	Walver requested Compliant Compliant		
Parking Lot Landscaping Requirements					
Landscaping adjacent to public	Landscaped yard at least five feet (5') in width containing a year round dense opaque screen of landscaping three feet	Landscape yard > 5 ft. planted with alpine currant	Compliant		

ROW (Sec. 12-11- 3:B.1.a)	(3') in height, or an earth berm at least three feet (3') in height	and juniper shrubs, and existing trees	
Tree planting along adjacent non-residential property (12-11-3:B.2.b)	1 tree per 80 linear ft. of common lot line, or fraction thereof, planted within buffer area = 8 trees required for 593 ft. future common lot line (along River Drive)	18 trees located along River Drive	Compliant
Parking lot islands (Sec. 12-11-3:B.2)	40 ft. minimum	Smallest contiguous parking lot planting area approx. 80 sq. ft.	Compliant
Internal landscaping as a % of paved parking lot area (Sec. 12-11-3:3.C.2)	7% of paved parking lots over 20,000 sq. ft. Approx. 135,700 sq. ft. of paved parking lot area = 9,500 sq. ft. of required landscaping	Approx. 13,400 sq. ft. (9.0%) of internal landscaping provided	Compliant
Parking lot islands (12-11-3:B.3.c.2)	Max. 20 parking stalls in an uninterrupted row	> 20 parking stalls in an uninterrupted row	Waiver previously approved under Ord. 01-06
Parking lot trees (Sec. 12-11- 3:B.3.C.2)	1 tree for every 100 sq. ft. of required interior landscaping 10,437 sq. ft. of required landscaping = 95 trees required	54 trees proposed within interior landscaping area	Waiver of 41 trees requested

As shown in the table on the previous page, the proposed landscape plan would require waivers to the following sections of the Unified Development Code:

- <u>Section 12-11-1:B.4</u> A waiver to the requirement to plant trees in public parkways, areas, or rights of way adjacent to private property.
- <u>Section 12-11-3:B.3.C.2</u> A waiver of 41 trees to the minimum interior parking lot tree planting requirement to allow 54 trees for 9,500 square feet of required landscaping area.

The original landscape plan included trees planted in the adjacent public right-of-way along Oakton Street. According to aerial imagery records, these trees were planted in accordance with the approved landscape plan, but were removed at some point between 2015 and 2017. Neither the Village's Public Works staff nor the Applicant have any record of authorizing or conducting the tree removal.

However, the Village is now planning to construct a ten-foot-wide multi-use path within public right-of-way along the south side of Oakton Street, just north of the subject property. The Village worked with Niles and Skokie to obtain \$1.76 million in federal funding to assist with the construction of the multijurisdictional path, which will run along the south side of Oakton Street between Caldwell Avenue and Gross Point Road, and the east side of Caldwell between Howard and Oakton. Planting of any trees within the public right-of-way along the south side of Oakton Street would conflict with engineering plans for the proposed path. Menards is cooperating with the Village on construction of the path.

Due to the planned multi-use path, Village staff is supportive of a waiver to the requirement for tree plantings within the adjacent public right-of-way along Oakton Street.

The original landscape plan for the Menards development was approved in 2001 and did not include 1 tree for every 100 square feet of interior landscaping. The requirement did not apply at that time, as the current regulation was not adopted until 2007. The Applicant's proposed alteration of the parking lot triggers the requirement for 41 additional tree plantings within the parking lot's interior, as the non-conformity is not protected under Chapter 12-15 "Nonconformities." However, because Ordinance 01-06 approved a waiver to allow parking bays longer than 20 stalls, few landscape islands were incorporated into the original design. As such, the areas within which trees can be planted in the parking lot interior are limited. The Applicant is requesting approval of the non-conformity and is not proposing to increase the non-conformity. In fact, the three trees that are being removed as a result of the building expansion are proposed to be replanted in nearby landscape areas.

Staff notes that Ordinance 01-06 did require that additional trees, no less than one tree for every 30 linear feet, be planted along the east elevation of the storage area, as shown in the image below. The requirement was above and beyond the Village's landscape requirements at the time, and serves to offset the lack of trees within the parking lot interior. The required tree and hedges along the fence line are proposed to be removed and transplanted 68.7 feet west.



Overall, no landscaping on the site will be removed as a result of the proposed improvements. Rather, additional landscaping will be provided as a denser arborvitae and cranberrybush hedge is proposed to extend westward to buffer the garden center expansion along the north lot line.

Appearance Commission Review

In accordance with Section 12-16-2:C.2, the Appearance Commission is charged with reviewing the exterior elevations, sketches, materials, and exhibits as to whether they are appropriate to or compatible with the character of the immediate neighborhood and whether the submitted plans comply with the provisions of the regulations and standards set forth in Chapter 11 "Landscaping and Trees" and Chapter 12 "Design Standards" of the Unified Development Code. The Design Standards (Sec. 12-12-1:D) established in the Code are as follows:

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

1. Evaluation Standards:

- a. Property Values: Where a substantial likelihood exists that a building will depreciate property values of adjacent properties or throughout the community, construction of that building should be barred.
- b. Inappropriateness: A building that is obviously incongruous with its surroundings or unsightly and grotesque can be inappropriate in light of the comprehensive plan goal of preserving the character of the municipality.
- c. Similarity/Dissimilarity: A builder should avoid excessively similar or excessively dissimilar adjacent buildings.
- d. Safety: A building whose design or color might, because of the building's location, be distracting to vehicular traffic may be deemed a safety hazard.

2. Design Criteria:

- a. Standards: Appearance standards as set forth in this chapter.
- b. Logic Of Design: Generally accepted principles, parameters and criteria of validity in the solution of design problems.
- c. Architectural Character: The composite or aggregate of the components of structure, form, materials and functions of a building or group of buildings and other architectural and site composing elements.
- d. Attractiveness: The relationship of compositional qualities of commonly accepted design parameters such as scale, mass, volume, texture, color and line, which are pleasing and interesting to the reasonable observer.
- e. Compatibility: The characteristics of different uses of activities that permit them to be located near each other in harmony and without conflict. Some elements affecting compatibility include intensity of occupancy as measured by dwelling units per acre; floor area ratio;

- pedestrian or vehicular traffic generated; parking required; volume of goods handled; and such environmental effects as noise, vibration, glare, air pollution, erosion, or radiation.
- f. Harmony: A quality which produces an aesthetically pleasing whole as in an arrangement of varied architectural and landscape elements.
- g. Material Selection: Material selection as it relates to the evaluation standards and ease and feasibility of future maintenance.
- h. Landscaping: All requirements set forth in chapter 11, "Landscaping And Trees", of this title. (Ord. 07-07, 3-26-2007)

The Landscape Design Standards (Sec. 12-16-2:C.2) established in the Code are as follows:

C. Landscape Design Standards:

- 1. Landscape elements included in these criteria are all forms of planting and vegetation, ground forms, rock groupings, water patterns and all visible construction, except buildings and utilitarian structures.
- 2. Where natural or existing topographic patterns contribute to beauty and utility of a development, they shall be preserved and enhanced. Modification to topography will be permitted where it contributes to good appearance and does not adversely affect adjacent properties.
- 3. Grades of walks, parking spaces, terraces and other paved areas shall provide an inviting and stable appearance for walking, and if seating is provided, for sitting.
- 4. Landscape treatment shall be provided to enhance architectural features, strengthen vistas and important axis.
- 5. Unity of design shall be achieved by repetition of certain plant varieties and other materials, and by correlation with adjacent developments.
- 6. Plant material shall be selected for interest in its structure, texture, color and for its ultimate growth. Plants that are indigenous to the area and others that will be hardy, harmonious to the design, and of good appearance shall be used.
- 7. In areas where general planting will not prosper, other materials such as fences, walls and pavings of wood, brick, stone, gravel and cobbles shall be used. Carefully selected plants as noted on the following lists shall be combined with such materials where possible.

Recommendation

If the Appearance Commission recommends approval of an Appearance Certificate for site, landscape, building plans, and associated landscape waivers proposed under case PC 20-01, a request for amendment to a Special Use Permit for the expansion of a home improvement center for the property commonly known as 6301 Oakton Street in Morton Grove, Illinois, staff recommends the following conditions to that approval:

- Prior to filing building permit applications, the Owner/Applicant shall provide the Village with any updated elevations for review and approval. Such updated elevations must be deemed to be consistent with the approval elevations, as determined by the Land Use Planner, Village Administrator, and Chairperson of the Appearance Commission. If such designs are deemed to be inconsistent with the approved plans, then the Owner/Applicant will be required to file an application for an amendment to their Appearance Certificate and/or Special Use application.
- 2. Prior to filing building permit applications, the Owner/Applicant shall provide the Village with any and all final material specifications and samples for review and approval by the Land Use Planner, Village Administrator, and Chairperson of the Appearance Commission. If such materials are deemed to be inconsistent and/or of a lower quality than the approved materials, the Owner/Applicants will be required to file an application for an amendment to their Appearance Certificate and/or Special Use application.