

## Riley Purgatory Bluff Creek Watershed District Permit Application Review

**Permit No:** 2023-017

**Considered at Board of Managers Meeting:** September 13, 2023

**Received complete:** August 23, 2023

**Applicant:** Crew Carwash; Katheine Rayner

**Representative:** Kimley-Horn; Jared Jones

**Project:** The applicant proposes the redevelopment of a former Burger King restaurant and associated onsite parking areas into a Crew Carwash facility with association stormwater management in Eden Prairie, Minnesota.

**Location:** 16345 Terrey Pine Dr, Eden Prairie, Minnesota 55344

**Reviewer:** Scott Sobiech, PE; Barr Engineering Co.

### Proposed Board Action

Manager \_\_\_\_\_ moved and Manager \_\_\_\_\_ seconded adoption of the following resolutions based on the permit report that follows and the presentation of the matter at the September 13, 2023 meeting of the managers:

Resolved that the application for Permit 2023-017 is approved, subject to the conditions and stipulations set forth in the Recommendations section of the attached report;

Resolved that on determination by the RPBCWD administrator that the conditions of approval of the permit have been affirmatively resolved, the RPBCWD president or administrator is authorized and directed to sign and deliver Permit 2023-017 to the applicant on behalf of RPBCWD.

Upon vote, the resolutions were adopted, \_\_\_\_\_ [VOTE TALLY].

### Applicable Rule Conformance Summary

Rule	Issue	Conforms to RBPCWD Rules?	Comments	
C	Erosion Control Plan	See comment	See rule-specific permit condition C1 related to identifying erosion prevention on the erosion control plan.	
J	Stormwater Management	Rate	Yes	
		Volume	See Comment	See stipulation 5 related to verifying the infiltration capacity of the soils and that the volume control capacity is calculated using the measured infiltration rate at the BMP location
		Water Quality	Yes	

Rule	Issue	Conforms to RBPCWD Rules?	Comments
	Low Floor Elev.	Yes	
	Maintenance	See Comment	See rule-specific permit condition J1 related to recordation of stormwater facilities maintenance declaration.
	Chloride Management	See Comment	See stipulation 4.
	Wetland Protection	Yes	
<b>L</b>	<b>Permit Fee Deposit</b>	Yes	\$3,000 deposit fee received April 25, 2023. The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. As of August 31, 2023, the amount due is \$2,318.
<b>M</b>	<b>Financial Assurance</b>	See Comment	The financial assurance is calculated at \$101,852.

**Background**

The applicant proposes to redevelop an existing Burger King restaurant site and associated onsite parking areas in Eden Prairie for a car wash. The proposed redevelopment will include two new buildings with associated pavement as well as underground utilities and a stormwater management facility. The stormwater management system includes the construction an underground stormwater management facility with elevated draitile to promote infiltration to provide water quality treatment, rate control, and volume abstraction. The treated runoff leaving the site from the subsurface stormwater management system is conveyed via storm sewer directly to an off-site protected wetland.

The project site information is summarized in Table 1.

**Table 1. Project site information**

Site Information	Project Area
Total Site Area (acres)	1.43
Existing Site Impervious Area (acres)	0.95
Post Construction Site Impervious (acres)	0.76
Reduction (decrease) in Site Impervious Area (acres)	0.19
Percent decrease in Impervious Surface	20%
Disturbed Site Impervious Area (acres)	0.95
Percent Disturbance of Existing Impervious Surface	100%
Total Disturbed Area (acres)	1.43

Exhibits:

1. Permit application dated April 6, 2023 (Notified applicant on April 19, 2023 that submittal was incomplete, revised materials completing the application received August 23, 2023)
2. Project Plan set (17 sheets) dated March 27, 2023 (revised August 23, 2023)
3. Stormwater Report dated March 27, 2023 (revised August 14, 2023)
4. Existing and Proposed HydroCAD Models received August 23, 2023
5. Phase 1 Environmental Site Assessment dated March 31, 2023
6. Geotechnical Evaluation Report dated March 31, 2023
7. Crew's Winter Event Guidelines & Vendor Expectations received August 23, 2023

**Rule Specific Permit Conditions**

**Rule C: Erosion Prevention and Sediment Control**

Because the project will involve the alteration of 1.43 acres of land-surface area, the project must conform to the erosion prevention and sediment control requirements established in Rule C.

The erosion control plan prepared by Kimley-Horn includes installation of perimeter control (silt fence and sediment control logs), a stabilized rock construction entrance, inlet protection, daily inspection, staging areas, placement of a minimum of 6 inches of topsoil (at 5% organic matter), decompaction of areas compacted during construction, and retention of native topsoil onsite to the greatest extent possible. To conform to RPBCWD Rule C requirements, the following revisions are needed:

- C1. The Applicant must provide the name, address and phone number of the individual who will remain liable to the District for performance under this rule and maintenance of erosion and sediment-control measures from the time the permitted activities commence until vegetative cover is established.

**Rule J: Stormwater Management**

Because the project will disturb 1.43 acres of land-surface area, the project must meet the criteria of RPBCWD's Stormwater Management rule (Rule J, Subsection 2.1). The criteria listed in Subsection 3.1 will apply to the entire site because the project will disturb more than 50% of the existing impervious surface on the parcel (Rule J, Subsection 2.3).

The applicant is proposing construction of an underground stormwater management facility with elevated draintile to promote infiltration to provide the rate control, volume abstraction and water quality management for the disturbed and replaced impervious area. Pretreatment for runoff entering the underground stormwater management facility with elevated draintile to promote infiltration is being provided by a sump manhole and an isolator row (a chamber row in the underground stormwater facility dedicated to pretreatment).

**Rate Control**

In order to meet the rate control criteria listed in Subsection 3.1.a, the 2-, 10-, and 100-year post development peak runoff rates must be equal to or less than the existing discharge rates at all locations where stormwater leaves the site. The applicant used a HydroCAD hydrologic model to simulate runoff rates for pre- and post-development conditions for the 2-, 10-, and 100-year frequency storm events using a nested rainfall distribution, and a 100-year frequency, 10-day snowmelt event. The existing and proposed 2-, 10-, and 100-year frequency discharges from the site are summarized in Table 2 below. The proposed project is in conformance with RPBCWD Rule J, Subsection 3.1.a.

**Table 2. Existing and Proposed Peak Runoff Rates**

Modeled Discharge Location	2-Year Discharge (cfs)		10-Year Discharge (cfs)		100-Year Discharge (cfs)		10-Day Snowmelt (cfs)	
	Ex	Prop	Ex	Prop	Ex	Prop	Ex	Prop
1	2.6	0.2	3.9	2.5	7.2	7.0	0.5	0.5
2	0.8	0	1.2	0	2.2	0.1	0.1	<0.1
3	<0.1	<0.1	0.1	0.1	0.2	0.1	<0.1	<0.1
4	0	0	0	0	0.1	<0.1	<0.1	<0.1

**Volume Abstraction**

Subsection 3.1.b of Rule J requires the abstraction onsite of 1.1 inches of runoff from the regulated impervious surface of the site. An abstraction volume of 3,030 cubic feet is required from the 0.76 acres of regulated impervious area. Pretreatment of runoff entering the underground stormwater facility is provided with sump manhole and isolator row to conform to Rule J, Subsection 3.1.b.1. The soil borings and two double-ring infiltrometer tests performed by Braun Intertec show that soils in the project area are primarily Poorly Graded Sand. Groundwater was not observed at the closest soil boring located at the proposed stormwater management facility, which terminated at elevation 871.9. Because the bottom of the proposed stormwater management facility is at elevation 875.9, adequate groundwater separation will be provided between the bottom of the underground stormwater management facility with elevated draitile to promote infiltration and the groundwater table, thus conforming with Rule J, Subsection 3.1.b.2.a.

Double-ring infiltrometer testing conducted by Braun Intertec measured an infiltration rate of 1.7 -2.0 inches per hour (in/hr) at the site. The engineer concurs with the applicant’s design infiltration rate of 0.8 in/hr. The proposed stormwater facility provides adequate surface area (1,598 SF) to drawdown the abstraction volumes within the required 48-hour period, thus conforming with Rule J, Subsection 3.1.b.3. While the applicant provide site specific infiltration test result at location near the proposed stormwater facility, Rule J, Subsection 3.1.b.2.c requires measured infiltration capacity of the soils at the bottom of the infiltration systems. The applicant must submit documentation verifying the infiltration capacity of the soils

and that the volume control capacity is calculated using the measured infiltration rate. If infiltration capacity is less than needed to conform with the volume abstraction requirement in subsection 3.1b or there is inadequate separation to groundwater, design modifications to achieve compliance with RPBCWD requirements will need to be submitted (in the form of an application for a permit modification or new permit).

The table below summarizes the volume abstraction for the site based on the design infiltration capacity of the underground infiltration system. With the conditions noted above regarding verification of subsurface conditions, the engineer concurs with the submitted information and finds that the proposed project will conform with Rule J, Subsection 3.1.b.

Required Abstraction Depth (inches)	Required Abstraction Volume (cubic feet)	Provided Abstraction Depth (inches)	Provided Abstraction Volume (cubic feet)
1.1	3,030	1.24	3,418

**Water Quality Management**

Subsection 3.1.c of Rule J requires the Applicant provide volume abstraction in accordance with 3.1b or least 60 percent annual removal efficiency for total phosphorus (TP), and at least 90 percent annual removal efficiency for total suspended solids (TSS) from site runoff, and no net increase in TSS or TP loading leaving the site from existing conditions. Because the underground stormwater management facility with elevated draitile to promote infiltration proposed by the applicant provides more volume abstraction than is required by 3.1b and the engineer concurs with the modeling, the engineer finds that the proposed project is in conformance with Rule J, Subsection 3.1.c.

**Low floor Elevation**

All new buildings must be constructed such that the lowest floor is at least two feet above the 100-year high-water elevation or one foot above the emergency overflow of a stormwater-management facility according to Rule J, Subsection 3.6a. In addition, a stormwater-management facility must be constructed at an elevation that ensures that no adjacent habitable building will be brought into noncompliance with this requirement according to Rule J, Subsection 3.6b. The low floor elevation of the lowest structure is summarized below and shows proposed project is in conformance with Rule J, Subsection 3.6a.

Because the proposed stormwater management facility has a 100-year flood elevation less than 2 feet below the low floor of Starbucks (Permit 2020-065), the alternative low floor framework in Rule J, Appendix J.1 – Low-Floor Elevation Assessment. According to *Plot 1: Minimum Depth to Water Table for No Further Analysis*, was used to determine that the minimum permissible depth to water table based on the stormwater facility horizontal separation to the adjacent habitable structure is 8.5 feet (see below table). Groundwater was not observed in the closest boring location which demonstrates that groundwater must

be below the elevation where the boring was stopped (~El 871.9 feet). Because the provided separation is greater than the minimum permissible, the location and elevation of the proposed underground stormwater management facility with elevated draintile to promote infiltration results in the lowest floor elevation on the adjacent parcel meeting the requirement in Rule J, Subsection 3.6.b (ii).

Structure	Low Floor Elevation of Building (feet)	Adjacent Stormwater Facility	100-year Event Flood Elevation of Adjacent Stormwater Facility (feet)	Freeboard to 100-year Event (feet)	Distance from Building to Adjacent Facility (feet)	Water Table Elevation (feet)	Minimum Permissible Depth to Water Table <sup>1</sup> (feet)	Provided Depth from Low Floor Elevation to Water Table (feet)
XIC Building	884.5	Underground stormwater management facility	880.0	4.5	-	-	-	-
Starbucks Coffee	881.45	Underground stormwater management facility	880.0	1.45	54	871.9	6.5	9.95

**Maintenance**

Subsection 3.7 of Rule J requires the submission of maintenance plan. All stormwater management structures and facilities must be designed for maintenance access and properly maintained in perpetuity to assure that they continue to function as designed. While the applicant provided a draft post construction operation and maintenance plan for review, the following revisions are needed:

- J1. Permit applicant must provide a maintenance and inspection declaration. A maintenance declaration template is available on the permits page of the RPBCWD website. (<http://www.rpbcwd.org/permits/>). A draft declaration must be provided for District review prior to recording.

**Chloride Management**

Subsection 3.8 of Rule J requires the submission of chloride management plan that designates the individual authorized to implement the chloride management plan and the MPCA-certified salt applicator engaged in implementing the plan. To close out the permit and release the \$5,000 in financial assurance held for the purpose of chloride management, the permit applicant must provide a chloride management plan that designates the individual authorized to implement the chloride management plan and the MPCA-certified salt applicator engaged in implementing the plan at the site.

**Wetland Protection**

Because runoff from the redeveloped site is tributary to a downstream, high value wetland, the project must comply with RPBCWD’s wetland protection criteria in Rule J, subsection 3.10. In accordance with Rule J, subsection 3.10a, the proposed land-disturbing activities will not increase the bounce in water level, duration of inundation, or change the runout elevation in the subwatershed, for the receiving wetland.

Because the applicant’s HydroCAD model results demonstrate, and the engineer concurs, that the proposed flow rate and volumes flowing towards the off-site wetland are less than the under existing conditions, the bounce and inundation will not increase, thus the project meets the Bounce and Inundation criterion.

Rule J, Subsection 3.10b requires that treatment of runoff to high value wetlands achieve 90 percent total suspended solids removal and 75 percent total phosphorus removal. MIDS modeling results show the proposed underground infiltration system provides 94% TSS and 94% TP removals, thus the engineer finds that the proposed project is in conformance with Rule J, Subsection 3.10b.

**Rule L: Permit Fee**

The RPBCWD permit fee schedule requires permit applicants to submit a permit-fee deposit of \$3,000 to be held in escrow and applied to reimburse RPBCWD for the permit-application processing fee and permit review and inspection-related costs. When a permit application is approved, the deposit must be replenished to the applicable deposit amount by the applicant before the permit will be issued to cover actual costs incurred to monitor compliance with permit conditions and the RPBCWD Rules. A permit fee deposit of \$3,000 was received on behalf of Crew Carwash on April 25, 2023. The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. Subsequently, if the costs of review, administration, inspections and closeout-related or other regulatory activities exceed the fee deposit amount, the applicant will be required to replenish the deposit to the original amount or such lesser amount as the RPBCWD administrator deems sufficient within 30 days of receiving notice that such deposit is due. The administrator will close out the relevant application or permit and revoke prior approvals, if any, if the permit-fee deposit is not timely replenished.

- L1. The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. The amount needed to replenish the permit fee deposit is \$2,318 as of August 31, 2023.

**Rule M: Financial Assurance**

	Unit	Unit Cost	# of Units	Total
Rules C: Silt fence:	LF	\$2.50	927	\$2,318
Inlet protection	EA	\$100	14	\$1,400
Rock Entrance	EA	\$250	1	\$250
Restoration	Ac	\$2,500	1.43	\$3,575
Rules J: Chloride Management	LS	\$5,000	1	\$5,000
Rules J: Stormwater Management: 125% of engineer’s opinion of cost	EA	125% OPC	1	\$83,625
Contingency (10%)		10%		\$9,259
<b>Total Financial Assurance</b>				<b>\$101,852</b>

**Applicable General Requirements:**

- 1. The RPBCWD Administrator and Engineer shall be notified at least three days prior to commencement of work.

2. Construction shall be consistent with the plans and specifications approved by the District as a part of the permitting process. The date of the approved plans and specifications is listed on the permit.
3. Construction must be consistent with the plans, specifications, and models that were submitted by the applicant that were the basis of permit approval. The date(s) of the approved plans, specifications, and modeling are listed on the permit. The grant of the permit does not in any way relieve the permittee, its engineer, or other professional consultants of responsibility for the permitted work.
4. The grant of the permit does not relieve the permittee of any responsibility to obtain approval of any other regulatory body with authority.
5. The issuance of this permit does not convey any rights to either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
6. In all cases where the doing by the permittee of anything authorized by this permit involves the taking, using or damaging of any property, rights or interests of any other person or persons, or of any publicly owned lands or improvements or interests, the permittee, before proceeding therewith, must acquire all necessary property rights and interest.
7. RPBCWD's determination to issue this permit was made in reliance on the information provided by the applicant. Any substantive change in the work affecting the nature and extent of applicability of RPBCWD regulatory requirements or substantive changes in the methods or means of compliance with RPBCWD regulatory requirements must be the subject of an application for a permit modification to the RPBCWD.
8. If the conditions herein are met and the permit is issued by RPBCWD, the applicant, by accepting the permit, grants access to the site of the work at all reasonable times during and after construction to authorized representatives of the RPBCWD for inspection of the work.

### **Findings**

1. The proposed project includes the information necessary, plan sheets and erosion control plan for review.
2. The proposed project will conform to Rules C and J if the Rule Specific Permit Conditions listed above are met.

### **Recommendation:**

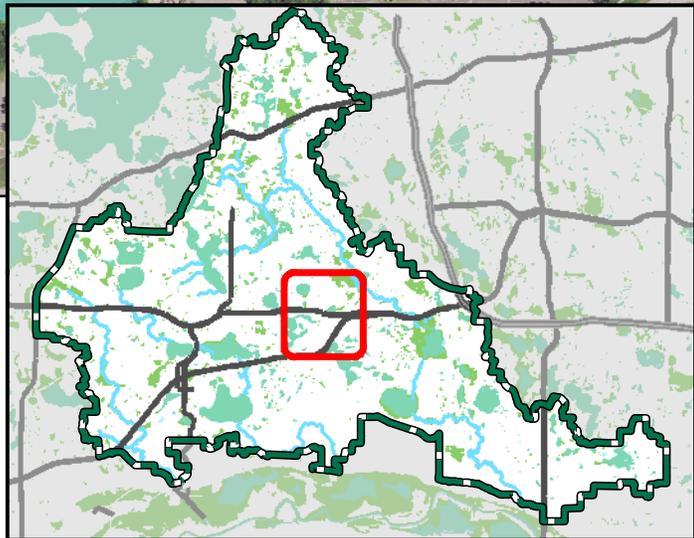
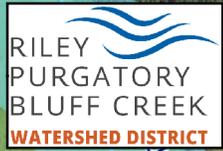
Approval of the permit contingent upon:

1. Financial Assurance in the amount of \$101,852.
2. Permit applicant must provide the name and contact information of the general contractor responsible for the site. RPBCWD must be notified if the responsible party changes during the permit term.

3. Permit applicant must submit a draft maintenance and inspection declaration to incorporate the facilities proposed under this application, including the appropriate permit number, pre-treatment facilities, and underground stormwater management facility. The draft declaration must be reviewed and approved by RPBCWD prior to execution as a condition of issuance of the permit. Proof of recordation with the county must be provided to RPBCWD.
4. The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. The amount needed to replenish the permit fee deposit is \$2,318 as of August 31, 2023.

By accepting the permit, when issued, the applicant agrees to the following stipulations:

1. Continued compliance with General Requirements.
2. Per Rule J Subsection 4.5, upon completion of the site work, the permittee must submit as-built drawings demonstrating that at the time of final stabilization the stormwater management facility conforms to design specifications and functions as intended and approved by the District. As-built/record drawings must be signed by a professional engineer licensed in Minnesota and include, but not limited to:
  - a) the surveyed bottom elevations, water levels, and general topography of all facilities;
  - b) the size, type, and surveyed invert elevations of all stormwater facility inlets and outlets;
  - c) the surveyed elevations of all emergency overflows including stormwater facility, street, and other;
  - d) other important features to show that the project was constructed as approved by the Managers and protects the public health, welfare, and safety.
3. Providing the following additional close-out materials:
  - a) Documentation that constructed infiltration facilities perform as designed. This may include infiltration testing, flood testing, or other with prior approval from RPBCWD
  - b) Documentation that disturbed pervious areas remaining pervious have been decompacted per Rule C.2c criteria
4. To close out the permit and release the \$5,000 in financial assurance held for the purpose of the chloride management, the permit applicant must provide a chloride management plan that designates the individual authorized to implement the chloride management plan and the MPCA-certified salt applicator engaged in implementing the plan at the site.
5. Per Rule J, Subsection 3.1.b.ii measured infiltration capacity of the soils at the bottom of the infiltration system must be provided. The applicant must submit documentation verifying the infiltration capacity of the soils and that the volume control capacity is calculated using the measured infiltration rate. In addition, subsurface soil investigation is needed to verify adequate separation to groundwater (Rule J subsection 3.1.b.2). If infiltration capacity is less than needed to conform with the volume abstraction requirement in subsection 3.1b or there is inadequate separation to groundwater, design modifications to achieve compliance with RPBCWD requirements will need to be submitted (in the form of an application for a permit modification or new permit).



Permit Location Map

CREW CARWASH EDEN PRAIRIE  
**Permit 2023-017**  
Riley Purgatory Bluff Creek  
Watershed District



Feet



K:\TWC\_LDEV\Crew\_Carwash\Eden\_Prairie\3 Design\CAD\PlanSheets\CO-COVER SHEET.dwg August 23, 2023 - 5:20pm

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

# SITE DEVELOPMENT PLANS FOR

# CREW CARWASH EDEN PRAIRIE

16345 TERREY PINE DRIVE  
EDEN PRAIRIE, COUNTY, MN

**PROJECT TEAM:**

ENGINEER & LANDSCAPE ARCHITECT  
KIMLEY-HORN AND ASSOCIATES, INC.



PREPARED BY: JARED F. JONES, P.E.  
RYAN A. HYLLESTED, PLA  
767 EUSTIS STREET, SUITE 100  
ST. PAUL, MN 55114  
TELEPHONE (651) 645-4197

ARCHITECT  
CRIPE  
3939 PRIORITY WAY SOUTH DRIVE  
INDIANAPOLIS, INDIANA 46240  
CONTACT: (765) 860-5679

OWNER / DEVELOPER  
CREW CARWASH



11700 EXIT 5 PARKWAY  
FISHERS, INDIANA 46037  
TELEPHONE: (317) 572-9250



VICINITY  
N.T.S.



SITE

Sheet List Table	
Sheet Number	Sheet Title
C000	COVER SHEET
C100	GENERAL NOTES
V100	ALTA - NSPS LAND TITLE SURVEY
C300	DEMOLITION AND EROSION CONTROL PHASE 1 PLAN
C301	EROSION AND SEDIMENT CONTROL PHASE 2 PLAN
C302	EROSION AND SEDIMENT CONTROL DETAILS
C400	SITE PLAN
C401	SITE DETAILS
C500	GRADING AND DRAINAGE PLAN
C600	UTILITY PLAN
C601	UTILITY DETAILS
C602	UTILITY DETAILS
L100	LANDSCAPE PLAN
L101	LANDSCAPE DETAILS
L200	IRRIGATION PLAN
L201	IRRIGATION DETAILS

**NOTES:**

1. CONTRACTOR SHALL CONFIRM THAT THE EXISTING CONDITIONS FOR THE SITE MATCH WHAT IS SHOWN ON THE DRAWINGS INCLUDED PRIOR TO CONSTRUCTION.
2. IF REPRODUCED, THE SCALES SHOWN ON THESE PLANS ARE BASED ON A 22x34 SHEET.
3. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICES COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.
4. ALL GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS.



PRELIMINARY - NOT FOR CONSTRUCTION

CREW CARWASH  
EDEN PRAIRIE  
PREPARED FOR  
CREW CARWASH  
EDEN PRAIRIE

COVER SHEET

SHEET NUMBER  
C000

KHA PROJECT 161033000	DATE 08/23/2023	SCALE AS SHOWN	DESIGNED BY MS/CE	DRAWN BY MS/CE	CHECKED BY JF-J
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**Kimley-Horn**  
2023 KIMLEY-HORN AND ASSOCIATES, INC.  
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114  
PHONE: 651-645-4197  
WWW.KIMLEY-HORN.COM

No.	REVISIONS	DATE	BY
1	CITY COMMENTS	08/14/23	JF-J

GENERAL CONSTRUCTION NOTES

- 1. THE CONTRACTOR AND SUBCONTRACTORS SHALL OBTAIN A COPY OF THE STATE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" (LATEST EDITION) AND BECOME FAMILIAR WITH THE CONTENTS PRIOR TO COMMENCING WORK. UNLESS OTHERWISE NOTED, ALL WORK SHALL CONFORM AS APPLICABLE TO THESE STANDARDS AND SPECIFICATIONS.
3. PERFORM ALL WORK IN COMPLIANCE WITH APPLICABLE CITY REGULATIONS, STATE CODES, AND O.S.H.A. STANDARDS. THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING THE NECESSARY MATERIALS & LABOR TO CONSTRUCT AND MAINTAIN THE SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS, AND IN ACCORDANCE WITH THE SPECIFICATIONS AND REQUIREMENTS OF THE APPROPRIATE APPROVING AUTHORITIES.
4. CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.
5. THE EXISTING SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS QUALITY LEVEL "D" UNLESS OTHERWISE NOTED. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CIACSE 38/02, ENTITLED STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF SUBSURFACE QUALITY DATA BY THE FHA. EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE COMMENCING ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 48 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION.
8. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, GEOTECHNICAL REPORT AND SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
9. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER.
10. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE OWNER DIRECTLY FROM THE TESTING AGENCY.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED BY THE CONTRACTOR.
12. ANY WELLS DISCOVERED ON SITE THAT WILL HAVE NO USE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS REQUIRED.
13. ANY WELL DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES WITHIN 24 HOURS AFTER DISCOVERY IS MADE.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK THAT WOULD BE AFFECTED. FAILURE TO NOTIFY OWNER OF AN IDENTIFIABLE CONFLICT PRIOR TO PROCEEDING WITH INSTALLATION RELIEVES OWNER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.
15. SHOULD CONTRACTOR ENCOUNTER ANY DEBRIS LADEN SOIL, STRUCTURES NOT IDENTIFIED IN THE DOCUMENTS, OR OTHER SOURCE OF POTENTIAL CONTAMINATION, THEY SHALL IMMEDIATELY CONTACT THE ENGINEER AND OWNER.
16. CONTRACTOR SHALL NOTIFY OWNER AND/OR ENGINEER 48 HOURS IN ADVANCE OF THE FOLLOWING ACTIVITIES: PRE-CONSTRUCTION MEETING, SUBGRADE PREPARATION, BASE INSTALLATION, ASPHALT INSTALLATION, UNDERGROUND PIPING AND UTILITIES INSTALLATION, INSTALLATION OF STRUCTURES, CHECK VALVES, HYDRANTS, METERS, ETC., SIDEWALK INSTALLATION, CONNECTIONS TO WATER AND SEWER MAINS, TESTS OF UTILITIES.

THIRD PARTY SUPPLEMENTAL INFORMATION

KIMLEY-HORN ASSUMES NO LIABILITY FOR ANY ERRORS, INACCURACIES, OR OMISSIONS CONTAINED WITHIN SUPPLEMENTAL INFORMATION PROVIDED BY THIRD PARTY CONSULTANTS.

- 1. BOUNDARY & TOPOGRAPHIC SURVEY PERFORMED BY: EGAN, FIELD & NOWAK ADDRESS: 475 OLD HWY 8 NW, SUITE 200 NEW BRIGHTON, MN 55112 PHONE: (612) 466-3300 DATED: 02/07/2023
2. GEOTECHNICAL EVALUATION REPORT & PHASE 1 ESA PERFORMED BY: BRAUN INTERTEC ADDRESS: 11001 HAMPSHIRE AVE S BLOOMINGTON, MN 55438 PHONE: (952) 995-2000 DATED: 03/27/2023
3. CONSTRUCTION TESTING TEST REPORTS REQUIRED FOR CLOSE OUT INCLUDE, BUT ARE NOT LIMITED TO: DENSITY TEST REPORTS BACTERIOLOGICAL TESTS OF WATER SYSTEM PRESSURE TEST OF WATER/SEWER LEAK TESTS ON SEWER SYSTEM AND GREASE TRAPS ANY OTHER TESTING REQUIRED BY THE AGENCY/MUNICIPALITY

EROSION CONTROL NOTES

- 1. THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THE EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN THE SPECIFICATIONS OF THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY OR OWNER.
4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION, AND SHALL MAINTAIN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS FOR THE DURATION OF CONSTRUCTION.
5. THE CONTRACTOR SHALL FIELD ADJUST AND/OR PROVIDE ADDITIONAL EROSION CONTROL BMP'S AS NEEDED TO PREVENT EROSION AND OFF-SITE SEDIMENT DISCHARGE FROM THE CONSTRUCTION SITE. LOG AND RECORD ANY ADJUSTMENTS AND DEVIATIONS FROM THE APPROVED EROSION CONTROL PLANS WITHIN THE SWPPP DOCUMENTS STORED IN THE JOB SITE TRAILER.
6. BMP'S SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION AS REQUIRED BY ALL JURISDICTIONS UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A CERTIFIED PERSON AT LEAST ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5-INCH OR GREATER RAINFALL EVENT.
7. EROSION & SEDIMENT CONTROL BMP'S SHALL BE MAINTAINED IN ACCORDANCE WITH THE FOLLOWING:
7.1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
7.2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO VERIFY THAT A HEALTHY STAND OF VEGETATION IS MAINTAINED. SEEDED AREAS SHOULD BE FERTILIZED, WATERED AND RE-SEEDED AS NEEDED. REFER TO THE LANDSCAPE PLAN AND PROJECT SPECIFICATIONS.
7.3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-THIRD THE HEIGHT OF THE SILT FENCE.
7.4. THE ROCK CONSTRUCTION ENTRANCE(S) SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC ADDITIONS OF ROCK TOP DRESSING AS CONDITIONS DEMAND.
7.5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC ADDITIONS OF TOP DRESSING IF THE TEMPORARY PARKING CONDITIONS DEMAND.
7.6. PERFORM ALL MAINTENANCE OPERATIONS IN A TIMELY MANNER BUT IN NO CASE LATER THAN 2 CALENDAR DAYS FOLLOWING THE INSPECTION.

PAVING AND STRIPING NOTES

- 1. ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN JURISDICTION'S RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH LOCAL OR COUNTY SPECIFICATIONS AND STANDARDS (LATEST EDITION) OR STATE DOT SPECIFICATIONS AND STANDARDS (LATEST EDITION) IF NOT COVERED BY LOCAL OR COUNTY REGULATIONS.
2. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D) AND CITY STANDARDS.
3. CONTRACTOR SHALL FURNISH ALL PAVEMENT MARKINGS FOR FIRE LANES, ROADWAY LANES, PARKING STALLS, ACCESSIBLE PARKING SYMBOLS, ACCESS AISLES, STOP BARS AND SIGNS, AND MISCELLANEOUS STRIPING WITHIN THE PARKING LOT AS SHOWN ON THE PLANS.
4. ALL EXPANSION JOINTS SHALL EXTEND THROUGH THE CURB.
5. THE MINIMUM LENGTH OF OFFSET JOINTS AT RADIUS POINTS SHALL BE 2 FEET.
6. ALL JOINTS, INCLUDING EXPANSION JOINTS WITH REMOVABLE TACK STRIPS, SHALL BE SEALED WITH JOINT SEALANT.
7. THE MATERIALS AND PROPERTIES OF ALL CONCRETE SHALL MEET THE APPLICABLE REQUIREMENTS IN THE A.C.I. (AMERICAN CONCRETE INSTITUTE) MANUAL OF CONCRETE PRACTICE.
8. CONTRACTOR SHALL APPLY A SECOND COATING OVER ALL PAVEMENT MARKINGS PRIOR TO ACCEPTANCE BY OWNER FOLLOWED BY A COAT OF GLASS BEADS AS APPLICABLE PER THE PROJECT DOCUMENTS.
9. ANY EXISTING PAVEMENT, CURBS AND/OR SIDEWALKS DAMAGED OR REMOVED WILL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE TO THE SATISFACTION OF THE ENGINEER AND OWNER.
10. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY SUITABLE ACCESSIBLE ROUTES (PER A.D.A). GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATE/NATIONAL STANDARDS. IN NO CASE SHALL ACCESSIBLE RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2%. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5%. IN NO CASE SHALL ACCESSIBLE PARKING STALLS OR AISLES EXCEED 2% (1.5% TARGET) IN ALL DIRECTIONS. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS AND GATES SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION PRIOR TO PAVING. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A COMPLIANCE ISSUES.
11. MAXIMUM JOINT SPACING IS TWICE THE DEPTH OF THE CONCRETE PAVEMENT IN FEET.

GRADING AND DRAINAGE NOTES

- 1. GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE START OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
2. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL ADJUST BMP'S AS NECESSARY AND REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.
3. CONTRACTOR SHALL ENSURE THERE IS POSITIVE DRAINAGE FROM THE PROPOSED BUILDINGS SO THAT SURFACE RUNOFF WILL DRAIN BY GRAVITY TO NEW OR EXISTING DRAINAGE OUTLETS. CONTRACTOR SHALL ENSURE NO PONDING OCCURS IN PAVED AREAS AND SHALL NOTIFY ENGINEER IF ANY GRADING DISCREPANCIES ARE FOUND IN THE EXISTING AND PROPOSED GRADES PRIOR TO PLACEMENT OF PAVEMENT OR UTILITIES.
4. CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS, VALVE COVERS, VAULT LIDS, FIRE HYDRANTS, POWER POLES, GUY WIRES, AND TELEPHONE BOXES THAT ARE TO REMAIN IN PLACE AND UNDISTURBED DURING CONSTRUCTION. EXISTING CASTINGS AND STRUCTURES TO REMAIN SHALL BE ADJUSTED TO MATCH THE PROPOSED FINISHED GRADES.
5. BACKFILL FOR UTILITY LINES SHALL BE PLACED PER DETAILS, STANDARDS, AND SPECIFICATIONS SO THAT THE UTILITY WILL BE STABLE. WHERE UTILITY LINES CROSS THE PARKING LOT, THE TOP 6 INCHES SHALL BE COMPACTED SIMILARLY TO THE REMAINDER OF THE LOT. UTILITY DITCHES SHALL BE VISUALLY INSPECTED DURING THE EXCAVATION PROCESS TO ENSURE THAT UNDESIRABLE FILL IS NOT USED.
6. CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF 6-INCHES OF TOPSOIL AT COMPLETION OF WORK. ALL UNPAVED AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION SHALL BE REGRADED AND SODDED.
7. AFTER PLACEMENT OF SUBGRADE AND PRIOR TO PLACEMENT OF PAVEMENT, CONTRACTOR SHALL TEST AND OBSERVE PAVEMENT AREAS FOR EVIDENCE OF PONDING. ALL AREAS SHALL ADEQUATELY DRAIN TOWARDS THE INTENDED STRUCTURE TO CONVEY STORM RUNOFF. CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER AND ENGINEER IF ANY DISCREPANCIES ARE DISCOVERED.
8. WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW CUT FULL DEPTH FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE PAVEMENT WITH THE SAME TYPE AND DEPTH OF MATERIAL AS EXISTING OR AS INDICATED.
9. THE CONTRACTOR SHALL INSTALL PROTECTION OVER ALL DRAINAGE STRUCTURES FOR THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.
10. IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER AND THE DESIGN ENGINEER PRIOR TO ANY EXCAVATION.
11. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL AGENCY OR TO STATE DOT STANDARDS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
12. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE SODDED OR SEEDED AS SPECIFIED IN THE PLANS, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE SODDED OR SEEDED AND MULCHED AS SHOWN ON THE LANDSCAPING PLAN.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
14. SOD, WHERE CALLED FOR, MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETING FINAL GRADING, AND AT ANY OTHER TIME AS NECESSARY, TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.
15. THE CONTRACTOR SHALL ENSURE THAT LANDSCAPE ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.
16. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING PER MANUFACTURER'S RECOMMENDATIONS AND STATE DOT SPECIFICATIONS.
17. PAVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATION OF THE SITE SPECIFIC GEOTECHNICAL EVALUATION REPORT AND CITY & STATE DOT SPECIFICATIONS.
18. SPOT ELEVATIONS REPRESENT THE FINISHED SURFACE GRADE OR FLOWLINE OF CURB UNLESS OTHERWISE NOTED.
19. LIMITS OF CONSTRUCTION ARE TO THE PROPERTY LINE UNLESS OTHERWISE SPECIFIED ON THE PLAN.
20. IMMEDIATELY REPORT TO THE OWNER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS.
21. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING EXISTING UTILITIES, AND SHALL REPAIR ALL DAMAGE TO EXISTING UTILITIES THAT OCCUR DURING CONSTRUCTION WITHOUT COMPENSATION.
22. BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
23. ALL PROPOSED GRADES ONSITE SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE INDICATED ON THE PLANS. ANY SLOPES STEEPER THAN 4:1 REQUIRE EROSION AND SEDIMENT CONTROL BLANKET.
24. ADHERE TO ALL TERMS AND CONDITIONS AS NECESSARY IN THE GENERAL N.P.D.E.S. PERMIT AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
25. ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.

WATER STORM SEWER & SANITARY SEWER NOTES

- 1. THE CONTRACTOR SHALL CONSTRUCT GRAVITY SEWER LATERALS, MANHOLES, GRAVITY SEWER LINES, AND DOMESTIC WATER AND FIRE PROTECTION SYSTEM AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS, EQUIPMENT, MACHINERY, TOOLS, MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND COMPLETE ACCORDANCE WITH THE SHOWN, DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
2. ALL EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR UTILITY LOCATION AND COORDINATION IN ACCORDANCE WITH THE NOTES CONTAINED IN THE GENERAL CONSTRUCTION SECTION OF THIS SHEET.
3. THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATION IN KIND, UNLESS SHOWN OTHERWISE.
4. DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS. SECURELY CLOSE ALL OPEN ENDS OF PIPE AND FITTINGS WITH A WATERTIGHT PLUG WHEN WORK IS NOT IN PROGRESS. THE INTERIOR OF ALL PIPES SHALL BE CLEAN AND JOINT SURFACES WIPED CLEAN AND DRY AFTER THE PIPE HAS BEEN LOWERED INTO THE TRENCH. VALVES SHALL BE PLUMB AND LOCATED ACCORDING TO THE PLANS.
5. ALL PIPE AND FITTINGS SHALL BE CAREFULLY STORED FOLLOWING MANUFACTURER'S RECOMMENDATIONS. CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE COATING OR LINING IN ANY D.I. PIPE FITTINGS. ANY PIPE OR FITTING WHICH IS DAMAGED OR WHICH HAS FLAWS OR IMPERFECTIONS WHICH, IN THE OPINION OF THE ENGINEER OR OWNER, RENDERS IT UNFIT FOR USE, SHALL NOT BE USED. ANY PIPE NOT SATISFACTORY FOR USE SHALL BE CLEARLY MARKED AND IMMEDIATELY REMOVED FROM THE JOB SITE, AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
6. WATER FOR FIRE FIGHTING SHALL BE MADE AVAILABLE FOR USE BY THE CONTRACTOR PRIOR TO COMBUSTIBLES BEING BROUGHT ON SITE.
7. ALL UTILITY AND STORM DRAIN TRENCHES LOCATED UNDER AREAS TO RECEIVE PAVING SHALL BE COMPLETELY BACK FILLED IN ACCORDANCE WITH THE GOVERNING JURISDICTIONAL AGENCY'S SPECIFICATIONS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
8. UNDERGROUND UTILITY LINES SHALL BE SURVEYED BY A STATE LICENSED PROFESSIONAL LAND SURVEYOR PRIOR TO BACK FILLING.
9. CONTRACTOR SHALL PERFORM, AT THEIR OWN EXPENSE, ANY AND ALL TESTS REQUIRED BY THE SPECIFICATIONS AND/OR ANY AGENCY HAVING JURISDICTION. THESE TESTS MAY INCLUDE, BUT MAY NOT BE LIMITED TO, INFILTRATION AND EXFILTRATION, TELEVISION INSPECTION AND A MANDREL TEST ON GRAVITY SEWER. A COPY OF THE TEST RESULTS SHALL BE PROVIDED TO THE UTILITY PROVIDER, OWNER AND JURISDICTIONAL AGENCY AS REQUIRED.
10. BETWEEN WATER AND SEWER MANHOLES AND PIPES, CONTRACTOR SHALL PROVIDE FOR A MINIMUM HORIZONTAL CLEARANCE OF 10-FEET AND A MINIMUM VERTICAL SEPARATION OF 18-INCHES.
11. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
12. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUDED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT UNLESS OTHERWISE STATED BY CITY AND STATE DESIGN STANDARDS AND SPECIFICATIONS.
13. UNLESS OTHERWISE STATED IN CITY AND STATE DESIGN STANDARDS AND SPECIFICATIONS, ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER". EXISTING CASTINGS AND STRUCTURES WITHIN PROJECT LIMITS SHALL BE ADJUSTED TO MEET THESE CONDITIONS AND THE PROPOSED FINISHED GRADE.
14. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY LAND SURVEYORS. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.
15. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
16. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM Poured MORTAR FROM INVERT IN TO INVERT OUT.
17. ROOF DRAINS SHALL BE CONNECTED TO STORM SEWER BY PREFABRICATED WYES OR AT STORM STRUCTURES. ROOF DRAINS AND TRUCK WELL DRAIN SHALL RUN AT A MINIMUM 1% SLOPE, UNLESS NOTED OTHERWISE, AND TIE IN AT THE CENTERLINE OF THE STORM MAIN.
18. PROVIDE INSULATION OF UNDERGROUND ROOF DRAINS AND SANITARY SEWER SERVICES IF ADEQUATE FROST DEPTH CANNOT BE PROVIDED.
19. THE CONTRACTOR SHALL PROTECT EXISTING UNDERGROUND UTILITIES AND APPURTENANCES THAT ARE TO REMAIN FROM DAMAGE DURING CONSTRUCTION OPERATIONS.
20. THE LOCATION OF EXISTING UTILITIES, STORM DRAINAGE STRUCTURES AND OTHER ABOVE AND BELOW-GRADE IMPROVEMENTS ARE APPROXIMATE AS SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION, SIZE AND INVERT ELEVATIONS OF EACH PRIOR TO THE START OF CONSTRUCTION.
21. A MINIMUM SEPARATION OF 5-FEET IS REQUIRED BETWEEN UNDERGROUND UTILITIES AND TREES UNLESS A ROOT BARRIER IS UTILIZED.
22. GAS, PHONE AND ELECTRIC SERVICES SHOWN FOR INFORMATIONAL PURPOSES ONLY. DRY UTILITY COMPANIES MAY ALTER THE DESIGN LAYOUT DURING THEIR REVIEW. CONTRACTOR TO COORDINATE FINAL DESIGN AND INSTALLATION WITH UTILITY COMPANIES.
23. COORDINATE UTILITY INSTALLATION WITH IRRIGATION DESIGN AND INSTALLATION.
24. ALL DIMENSIONS ARE TO FLOW LINE OF CURB UNLESS OTHERWISE NOTED. PERIMETER WALL DIMENSIONS ARE TO INSIDE WALL FACE. REFERENCE ARCHITECTURAL PLANS FOR EXACT WALL WIDTH AND SPECIFICATIONS.
25. REFERENCE ARCHITECTURAL PLANS (BY OTHERS) FOR EXACT BUILDING DIMENSIONS, MATERIALS SPECIFICATIONS.
26. REFERENCE M.E.P. PLANS (BY OTHERS) FOR MECHANICAL EQUIPMENT DIMENSIONS AND SPECIFICATIONS.
27. CONTRACTOR SHALL REFERENCE STRUCTURAL PLANS (BY OTHERS) FOR FOOTING AND FOUNDATION PAD PREPARATION SPECIFICATIONS.
28. CONTRACTOR SHALL REFERENCE M.E.P PLANS (BY OTHERS) FOR ROUTING OF PROPOSED ELECTRICAL & COMMUNICATIONS SERVICES AND SITE LIGHTING LAYOUT.

PRELIMINARY - NOT FOR CONSTRUCTION

CREW CARWASH EDEN PRAIRIE PREPARED FOR CREW CARWASH EDEN PRAIRIE

SHEET NUMBER C100

Kimley Horn logo

2023 KIMLEY-HORN AND ASSOCIATES, INC. 767 EUBANK STREET, SUITE 100, ST. PAUL, MN 55114 PHONE: 651-452-4197 WWW.KIMLEY-HORN.COM

THIS CERTIFICATE IS VALID FOR AN EXPIRES DATE: 08/23/2023. I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. JARED F. JONES MN LIC. NO. 46810 DATE: 03/27/2023

KHA PROJECT 161033000 DATE 08/23/2023 SCALE AS SHOWN DESIGNED BY M3/CE DRAWN BY M3/CE CHECKED BY JF/J

GENERAL NOTES

REVISIONS table with columns for No., CITY COMMENTS, REVISIONS, DATE

# ALTA/NSPS LAND TITLE SURVEY FOR: Kimley Horn & Associates, Inc.

## LEGAL DESCRIPTION:

Lot 1, Block 1, Burger King Eden Prairie Addition, Hennepin County, Minnesota.

## GENERAL SURVEY NOTES:

- The orientation of this bearing system is based on the Hennepin County coordinate grid (NAD 83-2011 Adj.).
- The legal description and easement information used in the preparation of this survey is based on the Commitment for Title Insurance prepared by Knight Barry Title United LLC, Commitment No. 2194270 dated January 12, 2023 at 8:00 AM.
- The angular rotation measured clockwise from record bearings depicted on the plat of Burger King Eden Prairie Addition to this survey is 01 degrees 19 minutes 54 seconds.
- The surveyed property has direct access to Terrey Pine Drive, a public right of way.
- This survey shows only those improvements visible during the field survey, some structures and improvements covered by ice and snow, or underground may not be shown.

## OPTIONAL TABLE A ITEMS:

- Monuments have been placed at all major corners of the surveyed property described herein, unless already marked or referenced by existing monuments or witnesses in close proximity to the corner.
- The address of the property described herein is 16345 Terrey Pine Drive, Eden Prairie, Minnesota 55344.
- The property described herein lies within Flood Zone "X" (areas of minimal flood hazard) per Federal Insurance Rate Map No. 27053C 0430 F, dated November 4, 2016.
- The total area of the property described herein is 58,811 square feet or 1.35011 acres.
- The contours depicted hereon are per elevation data collected while conducting the fieldwork. The contour interval is 1 foot.  
BENCHMARK: Top of Minnesota Department of Transportation Geodetic Monument Fuller  
Elevation = 865.03 feet. (NAVD88)  
SITE BENCHMARK: Top of 5/8 inch rebar in southwest corner of surveyed property.  
Elevation = 891.77 feet. (NAVD88)
- No zoning report or letter was received from the insurer pursuant to Optional Table A Item 6(a), as set forth in the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys.
- No buildings were observed in the process of conducting the fieldwork.
- No buildings were observed in the process of conducting the fieldwork.
- No buildings were observed in the process of conducting the fieldwork.
- Substantial features observed in the process of conducting the fieldwork are depicted hereon.
- As of the date of this survey the property described hereon contains a total of 60 parking spaces of which 60 are standard spaces and 0 are handicapped spaces.
- Existing utilities, services and underground structures shown hereon were located either physically, from existing records made available to us, by resident testimony, or by locations provided by Gopher State One Call, per Ticket No. 223470525. However, lacking excavation, the exact location of underground features cannot be accurately, completely and reliably depicted. Where additional or more detailed information is required, the client is advised that excavation may be necessary. Other utilities and services may be present and verification and location of all utilities and services should be obtained from the owners of the respective utilities prior to any design, planning or excavation.
- The names of adjoining owners according to current tax records are depicted hereon.
- The intersection is Eden Prairie Road and West 78th Street, both being public right of ways, lies at the Northwest corner of the surveyed property.
- As of the date of this survey there is no observable evidence of current earth moving work, building construction or building additions on the property described hereon.
- The surveyor is unaware of any completed or proposed changes in street right-of-way lines. As of the date of this survey there is no observable evidence of recent street or sidewalk construction or repairs that affect the property described hereon.
- The plottable offsite easements or servitudes disclosed in documents provided to the surveyor are depicted hereon.
- Professional Liability Insurance policy obtained by the surveyor to be in effect throughout the contract term.

## GOPHER STATE ONE CALL NOTE:

List of utilities notified per Gopher State One Call Ticket No. 223470525.

ARVIG	MCI
COMCAST	CENTERPOINT ENERGY
CITY OF EDEN PRAIRIE WATER	MNDOT
CITY OF EDEN PRAIRIE STREET	LEVEL 3
CITY OF EDEN PRAIRIE PARKS	XCEL ENERGY
CENTURYLINK-CTLOL	ZAYO BANDWIDTH
EDEN PRAIRIE SCHOOLS ISD 272	

## SURVEY ITEMS PER SCHEDULE B:

- ITEM 10: Easement awarded to the State of Minnesota for highway purposes and other matters contained in the instrument recorded October 9, 1957 as Document No. 3087392.  
Said easement is embraced within Highway 5 Right-of-Way. The area subject to access restriction is depicted hereon.
- ITEM 11: Easement awarded to Hennepin County for highway purposes and other matters contained in the instrument recorded May 3, 1965 as Document No. 3538643.  
Said easement is embraced within CSAH 4 (Eden Prairie Road) Right-of-Way.
- ITEM 12: Easements, restrictions and other matters shown on the plat of Burger King Eden Prairie Addition. Said easements affect the surveyed property and are depicted hereon.
- ITEM 13: Easement for access purposes and other matters contained in the instrument recorded April 13, 1989 as Document No. 5524063.  
Said easement affects the surveyed property and is depicted hereon.

## CERTIFICATION:

To CA Property Acquisitions LLC; Knight Barry Title United LLC; and Kimley Horn & Associates, Inc.

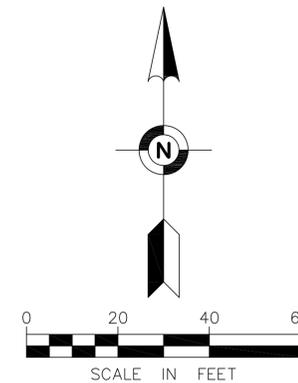
This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 6(a), 7(a), 7(b)(1), 7(c), 8, 9, 11(a), 13, 14, 16, 17, 18 and 19 of Table A thereof. The fieldwork was completed on January 10th, 2023.

Date of Plat or Map: February 7, 2023

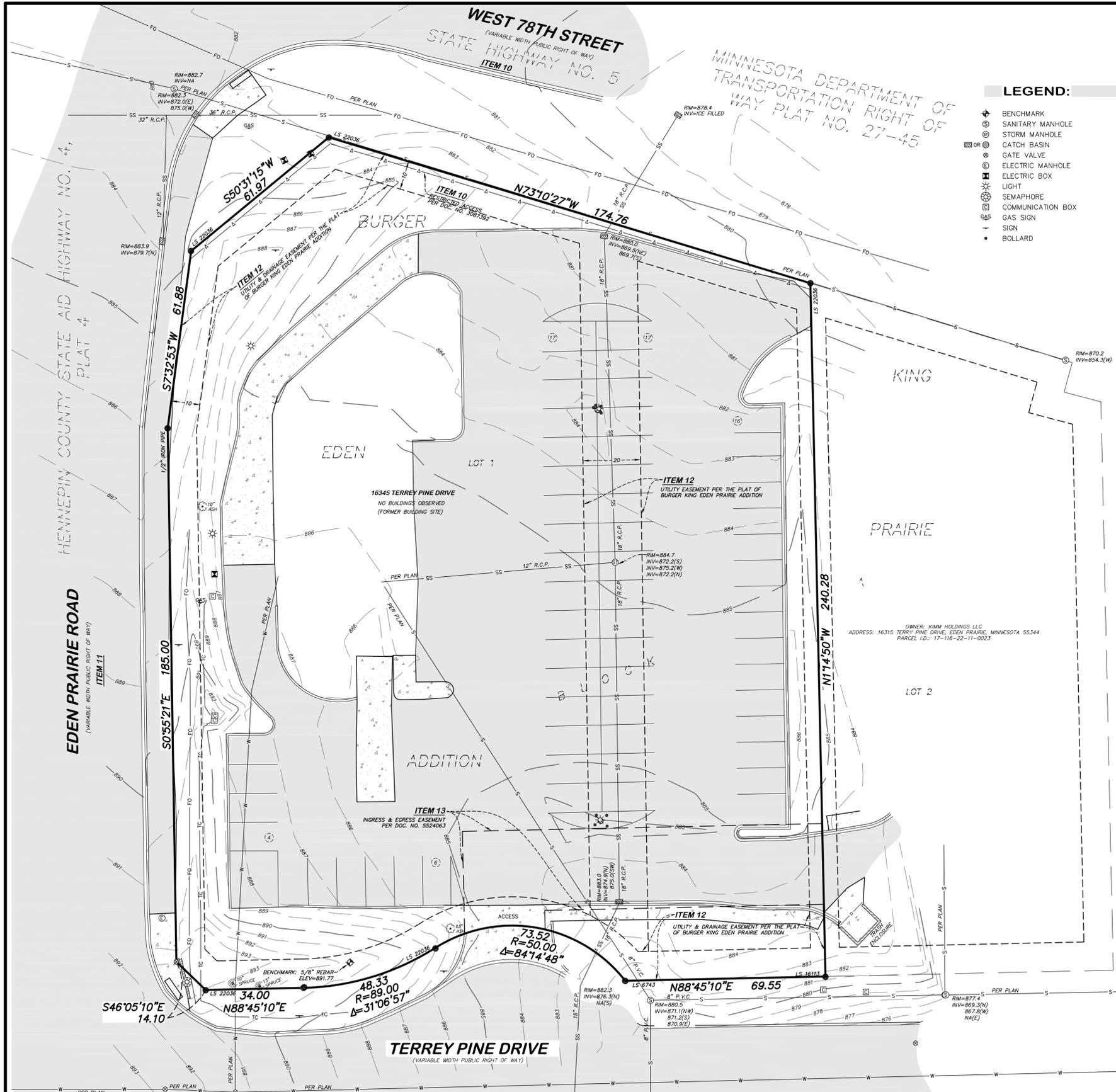
  
Eric A. Roeser  
Minnesota License No. 47476  
eroeser@fnsurvey.com

## LEGEND:

- |   |                   |   |                               |
|---|-------------------|---|-------------------------------|
|  | BENCHMARK         |  | SANITARY SEWER                |
|  | SANITARY MANHOLE  |  | STORM SEWER                   |
|  | STORM MANHOLE     |  | WATERMAIN                     |
|  | CATCH BASIN       |  | UNDERGROUND TELECOMMUNICATION |
|  | GATE VALVE        |  | UNDERGROUND FIBER OPTIC       |
|  | ELECTRIC MANHOLE  |  | LIMITED ACCESS                |
|  | ELECTRIC BOX      |  | EXISTING CONTOUR LINE         |
|  | LIGHT             |  | TREE                          |
|  | SEMAPHORE         |  | BITUMINOUS SURFACE            |
|  | COMMUNICATION BOX |  | CONCRETE SURFACE              |
|  | GAS SIGN          |   |                               |
|  | SIGN              |   |                               |
|  | BOLLARD           |   |                               |



- FOUND IRON MONUMENT
- FOUND PK NAIL
- ⊙ SET IRON MONUMENT MARKED WITH LICENSE NUMBER 46467



FIELD BOOK	PAGE	FIELDWORK CHIEF:	REVISIONS	
DRAWN BY:			NO.	DATE
DAV			1	2023/05/02
CHECKED BY:				
EAR				

# ALTA/NSPS LAND TITLE SURVEY

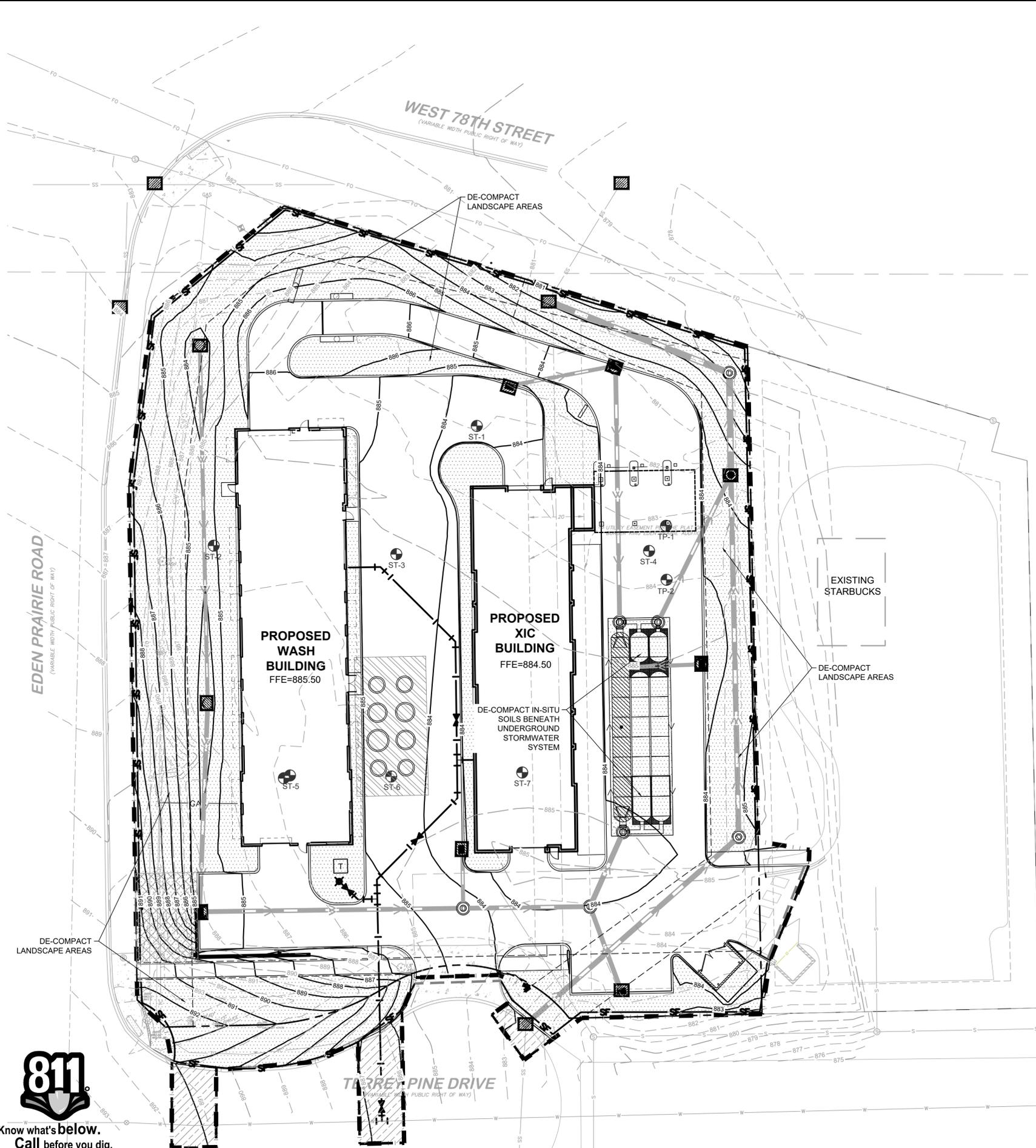
SURVEY FOR:  
**Kimley Horn & Associates, Inc.**

PROPERTY ADDRESS:  
**16345 Terrey Pine Drive  
Eden Prairie, Minnesota 55344**



**Egan, Field & Nowak, Inc.**  
475 Old Highway 8 NW, Suite 200  
New Brighton, Minnesota 55112  
PHONE: (612) 466-3300  
WWW.EFNSURVEY.COM  
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land surveyors since 1872





**LEGEND**

	ROCK ENTRANCE
	EROSION CONTROL BLANKET
	SOIL DECOMPACTION
	INLET PROTECTION
	SILT FENCE, OFFSET 2' OUTSIDE FOR CLARITY
	LIMITS OF DISTURBANCE

**EROSION CONTROL PLAN NOTES**

1. THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THE EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN THE SPECIFICATIONS OF THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH LAND DISTURBING ACTIVITIES SHALL OBTAIN A COPY OF THE SWPPP AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT, AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE AND LOCAL REQUIREMENTS, AS APPLICABLE. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY, ENGINEER OR OWNER.
4. SITE ENTRY AND EXIT LOCATIONS SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT THE TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO A PUBLIC ROADWAY FROM THE CONSTRUCTION SITE MUST BE REMOVED AS SOON AS PRACTICABLE. WHEN WASHING IS REQUIRED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN. ANY FINES IMPOSED FOR DISCHARGING SEDIMENT ONTO A PUBLIC RIGHT OF WAY SHALL BE PAID BY THE CONTRACTOR.
5. TEMPORARY SEEDING OR OTHER APPROVED METHODS OF STABILIZATION SHALL BE INITIATED WITHIN 7 DAYS OF THE LAST DISTURBANCE ON ANY AREA OF THE SITE.
6. THE CONTRACTOR SHALL MINIMIZE LAND DISTURBANCE AND CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
7. CONTRACTOR SHALL DENOTE ON THE PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
8. ALL WASH WATER FROM THE CONSTRUCTION SITE (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED BEFORE DISPOSAL.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ON SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
12. STAGING AREAS, STOCKPILES, SPOILS, ETC. SHALL BE LOCATED OUTSIDE OF DRAINAGE WAYS SUCH THAT STORM WATER RUNOFF WILL NOT BE ADVERSELY AFFECTED. PROVIDE STABILIZATION MEASURES SUCH AS PERIMETER EROSION CONTROL BMP'S, SEEDING, OR OTHER COVERING AS NECESSARY TO PREVENT EROSION.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR RE-ESTABLISHING ANY EROSION CONTROL BMP DISTURBED DURING CONSTRUCTION OPERATIONS. NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DEFICIENCIES IN THE ESTABLISHED EROSION CONTROL MEASURES THAT MAY LEAD TO UNAUTHORIZED DISCHARGE OF STORM WATER POLLUTANTS. UNAUTHORIZED POLLUTANTS INCLUDE (BUT ARE NOT LIMITED TO) EXCESS CONCRETE DUMPING, CONCRETE RESIDUE, PAINTS, SOLVENTS, GREASES, FUELS, LUBRICANT OILS, PESTICIDES, AND SOLID WASTE MATERIALS.
14. EROSION CONTROL BMP'S SHOWN ON THESE PLANS SHALL BE INSTALLED PRIOR TO THE START OF LAND-DISTURBING ACTIVITIES ON THE PROJECT, AND INITIATED AS SOON AS PRACTICABLE.
15. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION, AND SHALL MAINTAIN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS FOR THE DURATION OF CONSTRUCTION.
16. THE CONTRACTOR SHALL FIELD ADJUST AND/OR PROVIDE ADDITIONAL EROSION CONTROL BMP'S AS NEEDED TO PREVENT EROSION AND OFF-SITE SEDIMENT DISCHARGE FROM THE CONSTRUCTION SITE. LOCAL REGULATIONS AND DEVIATIONS FROM THE APPROVED EROSION CONTROL PLANS WITHIN THE SWPPP DOCUMENTS STORED IN THE JOB SITE TRAILER.

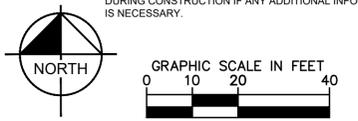
**SWPPP UPDATES & AMENDMENTS**

THE CONTRACTOR MUST UPDATE THE SWPPP BY NOTING ON THE SITE MAPS IN THE JOB SITE BINDER TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO THE PROJECT SITE FOR THE DURATION OF LAND DISTURBING ACTIVITIES. AT A MINIMUM, UPDATES SHALL BE MADE DAILY TO TRACK CONSTRUCTION PROGRESS DESCRIBED IN THE SEQUENCE OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR NOTING THE LOCATION OF THE JOB SITE TRAILER, TEMPORARY PARKING & LAYDOWN AREAS, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL & MATERIAL STORAGE, SOLID WASTE CONTAINERS, AND OTHER CONSTRUCTION RELATED FACILITIES THAT MAY IMPACT STORMWATER RUNOFF.

**PHASE 2 SEQUENCE OF CONSTRUCTION**

1. TEMPORARILY SEED, THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE.
2. CONSTRUCT UNDERGROUND SITE UTILITIES AND STORM SEWER, INCLUDING UNDERGROUND STORMWATER MANAGEMENT SYSTEM.
3. INSTALL APPROPRIATE INLET PROTECTION AT ANY NEW STORM SEWER STRUCTURES AS EACH STRUCTURE IS CONSTRUCTED.
4. COMPLETE SITE GRADING AND PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
5. PLACE PAVEMENT BASE MATERIAL.
6. CONSTRUCT PAVEMENTS, CURB & GUTTER, AND SIDEWALKS.
7. AS APPROPRIATE, REPLACE & MAINTAIN INLET PROTECTION DEVICES WITHIN PAVED AREAS AS WORK PROGRESSES.
8. COMPLETE FINAL GRADING AND INSTALL OF PERMANENT STABILIZATION (SEEDING, SODDING, ETC.) WITHIN LANDSCAPED AREAS.
9. WHEN THE SITE HAS ACHIEVED FINAL STABILIZATION AS DEFINED BY THE APPLICABLE EROSION CONTROL PERMITS, REMOVE ALL REMAINING TEMPORARY EROSION & SEDIMENT CONTROL BMP'S AND RE-STABILIZE ANY AREAS DISTURBED BY THE REMOVAL.

NOTE: THE SEQUENCE OF CONSTRUCTION IS INTENDED TO CONVEY THE GENERAL CONCEPTS OF THE EROSION CONTROL DESIGN AND SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETAILED PHASING AND CONSTRUCTION SEQUENCING NECESSARY TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING IMMEDIATELY, PRIOR TO AND/OR DURING CONSTRUCTION IF ANY ADDITIONAL INFORMATION ON THE CONSTRUCTION SEQUENCE IS NECESSARY.



**PRELIMINARY - NOT FOR CONSTRUCTION**

**EROSION AND SEDIMENT CONTROL PHASE 2 PLAN**

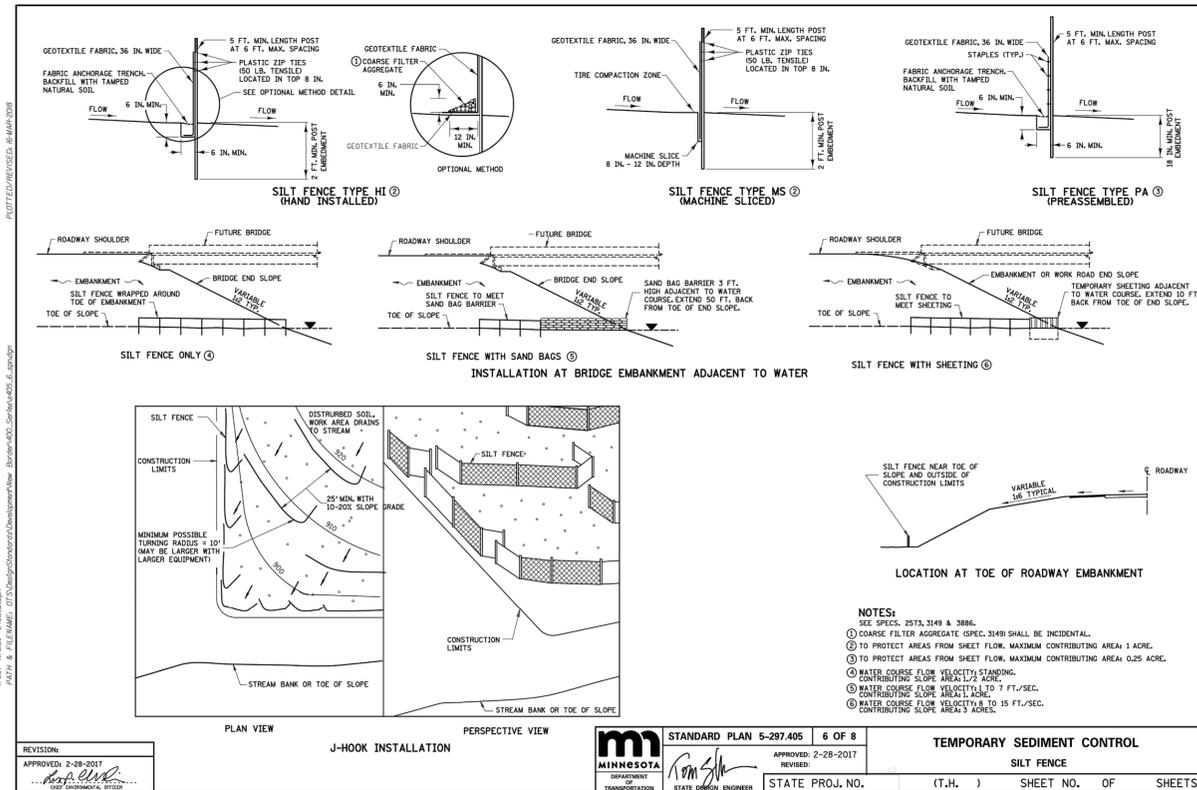
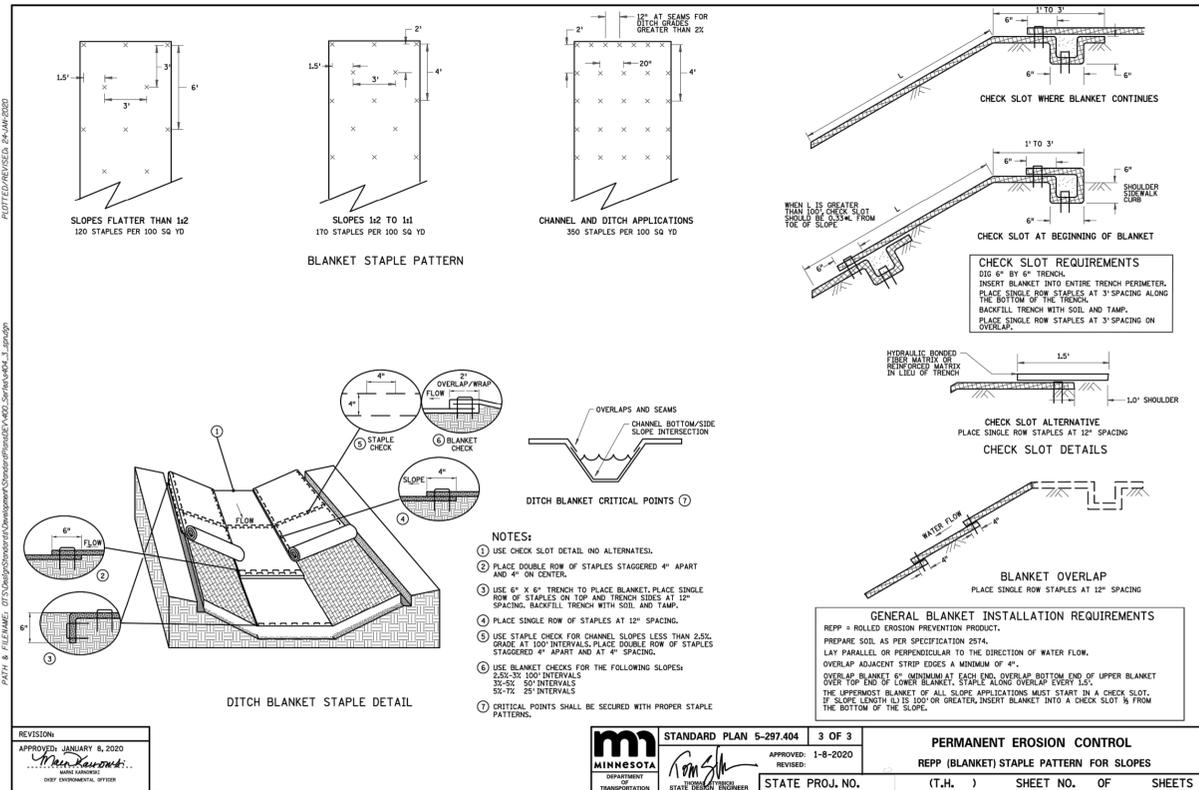
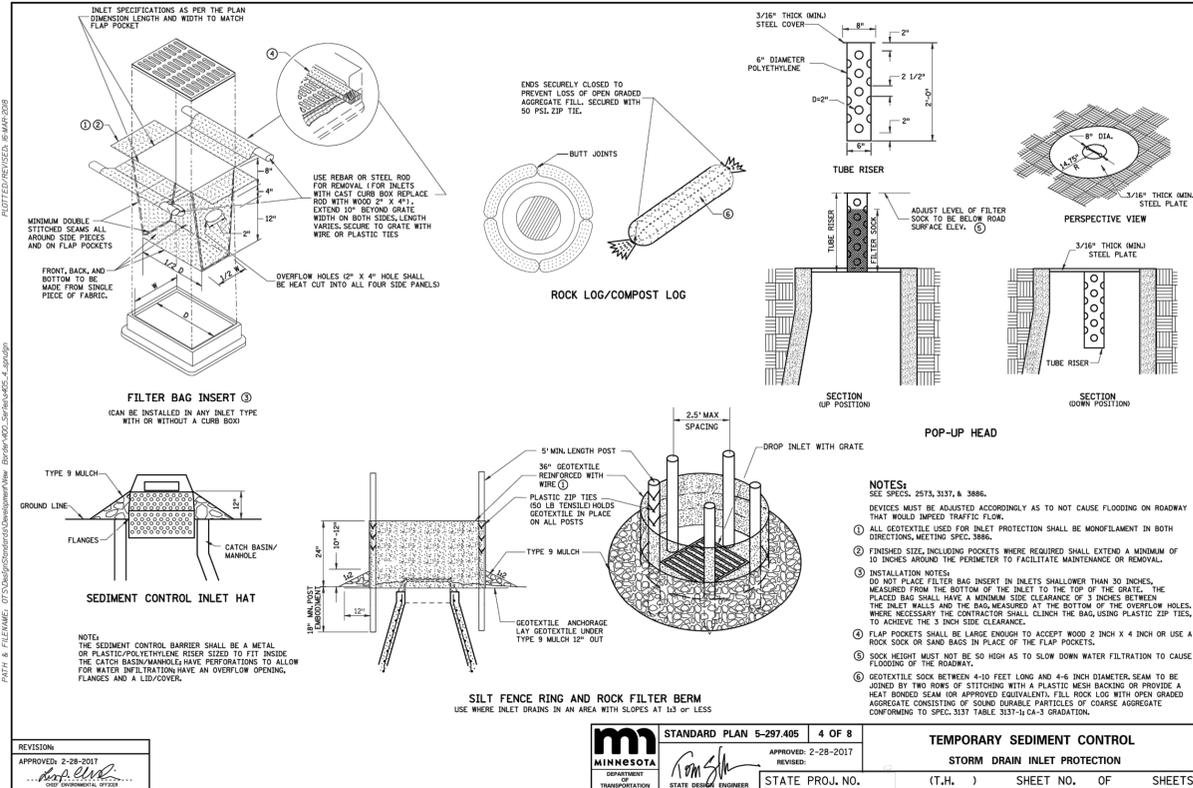
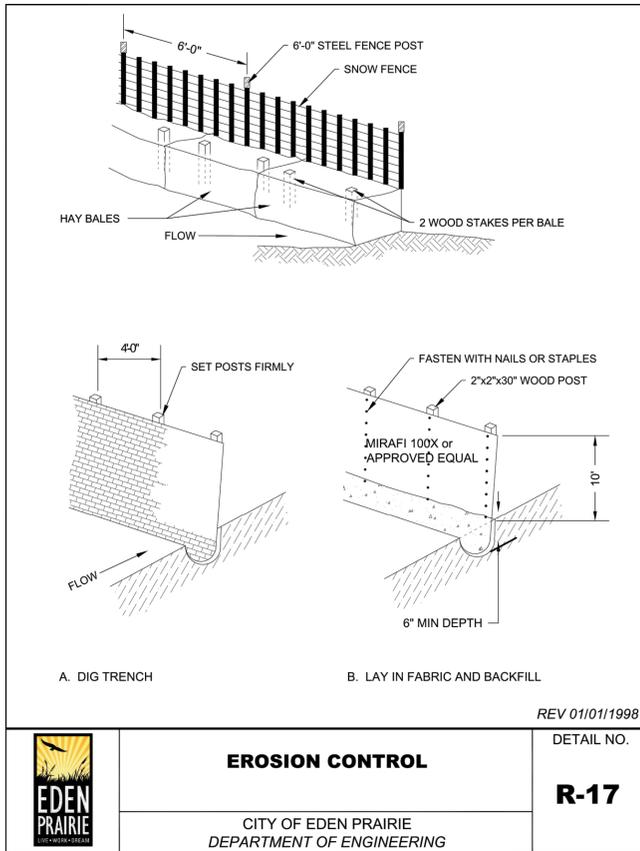
EDEN PRAIRIE

**CREW CARWASH EDEN PRAIRIE PREPARED FOR CREW CARWASH EDEN PRAIRIE**

MINN.

KHA PROJECT #161033000	DATE 08/23/2023	SCALE #####	DESIGNED BY MSC/CE	DRAWN BY MSC/CE	CHECKED BY JF-J
<p>LIBRARY CENTER: THIS PLAN IS AN INSTRUMENT OF SERVICE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.</p> <p style="text-align: right;">JARED F. JONES MINN. LIC. NO. 46610</p>					
<p><b>Kimley»Horn</b></p> <p>2023 KIMLEY-HORN AND ASSOCIATES, INC. 767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114 PHONE: 651-454-1877 WWW.KIMLEY-HORN.COM</p>					
CITY COMMENTS			REVISIONS		
No.	DATE	BY			
	08/14/23	JF-J			
SHEET NUMBER <b>C301</b>					

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CREW CARWASH  
EDEN PRAIRIE  
PREPARED FOR  
CREW CARWASH  
EDEN PRAIRIE

EROSION AND  
SEDIMENT  
CONTROL DETAILS

KHA PROJECT  
161033000

DATE  
08/23/2023

SCALE  
AS SHOWN

DESIGNED BY  
M/S/C E

DRAWN BY  
M/S/C E

CHECKED BY  
J/F/J

LITERARY CREDIT: THIS PLAN IS AN  
SPECIFICATION OR REPORT WAS PREPARED BY  
ME OR UNDER MY DIRECT SUPERVISION AND  
THAT I AM A DULY LICENSED PROFESSIONAL  
ENGINEER UNDER THE LAWS OF THE STATE OF  
MINNESOTA.

JARED F. JONES  
M/N  
LIC. NO. 48610

DATE:  
03/27/2023

REVISIONS

No.

DATE

**Kimley»Horn**

2023 KIMLEY-HORN AND ASSOCIATES, INC.

767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114

PHONE: 651-454-1197  
WWW.KIMLEY-HORN.COM

08/14/23 JF/J

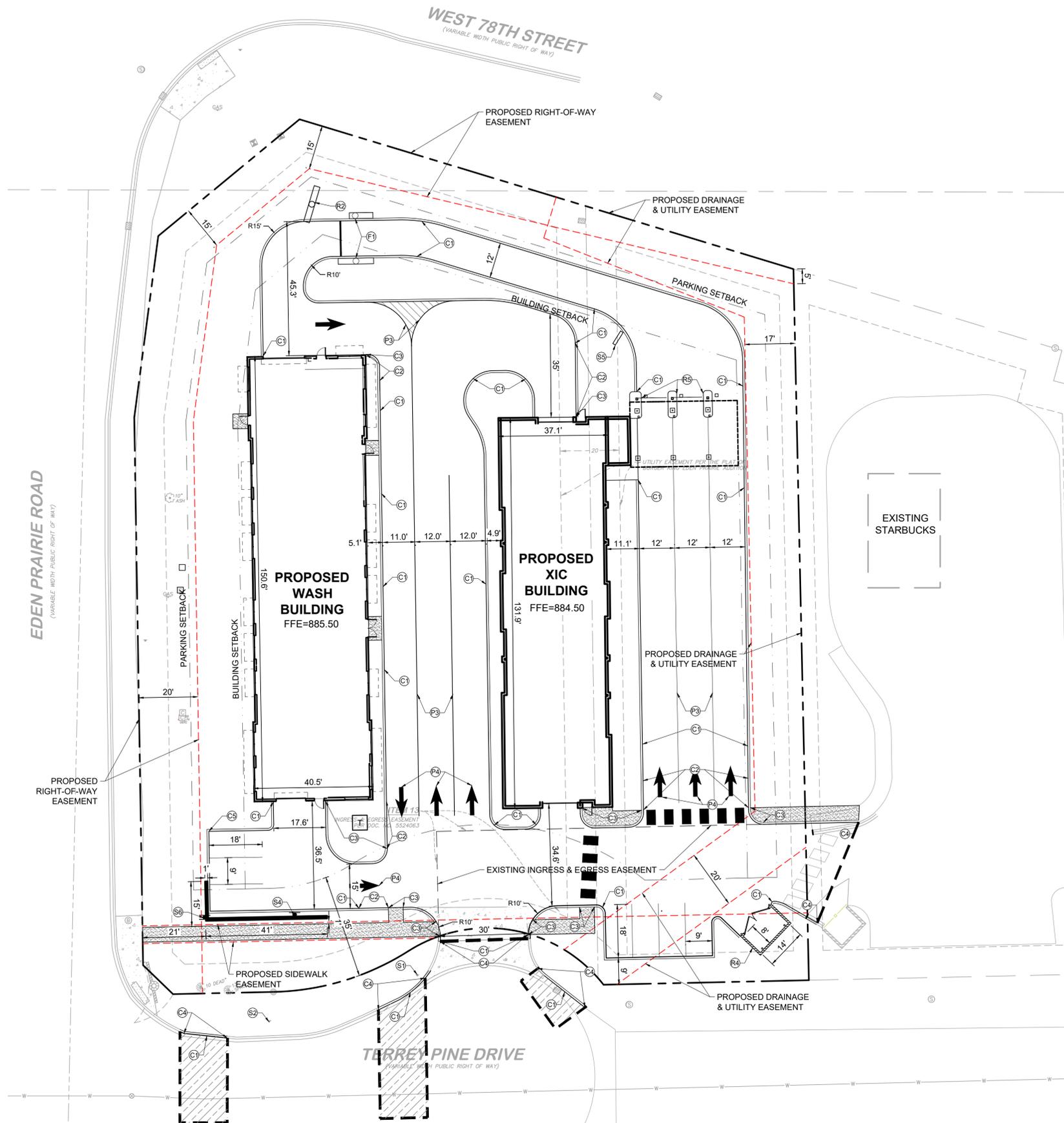
DATE

REVISIONS

No.

DATE

SHEET NUMBER  
**C302**



PROPERTY SUMMARY	
TOTAL PROPERTY AREA	1.35 AC / 58,811 SF
DISTURBED AREA	1.43 AC / 62,270 SF
EXISTING IMPERVIOUS AREA	0.87 AC / 64%
EXISTING PERVIOUS AREA	0.48 AC / 36%
PROPOSED IMPERVIOUS AREA	0.76 AC / 56%
PROPOSED PERVIOUS AREA	0.59 AC / 44%
NET INCREASE IN IMPERVIOUS AREA	-0.11 AC

SITE DATA	
EXISTING ZONING	C-HWY HIGHWAY COMMERCIAL
PROPOSED ZONING	C-HWY HIGHWAY COMMERCIAL
PARKING SETBACKS	SIDE/REAR = 10' RIGHT OF WAY = 17.5'
BUILDING SETBACKS	SIDE = 20' RIGHT OF WAY = 35'
SHORELAND ZONING RESTRICTIONS:	30% MAXIMUM IMPERVIOUS COVER

BUILDING DATA SUMMARY	
AREAS	
CAR WASH BUILDING	5,858 SF
XIC BUILDING & CASHIER	6,193 SF
TOTAL BUILDING AREA	12,051 SF
BASE / FLOOR AREA RATIO (BAR/FAR)	0.20
PARKING	
TOTAL PROPOSED PARKING	7 SPACES

**LEGEND**

- PROPERTY LINE
- PARKING SETBACK LINE
- BUILDING SETBACK LINE
- PROPOSED EASEMENT
- PROPOSED CURB AND GUTTER
- PROPOSED RETAINING WALL W/ GUARDRAIL. SEE GRADING PLAN
- CONCRETE PAVEMENT SEE DETAILS FOR SECTION
- CONCRETE SIDEWALK SEE DETAILS FOR SECTION

- SITE PLAN NOTES**
- REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF STOOPS, TRASH ENCLOSURES & PRECISE BUILDING DIMENSIONS. REFER TO THE SITE ELECTRICAL PLAN FOR LOCATIONS OF PROPOSED LIGHT POLES, CONDUITS, AND ELECTRICAL EQUIPMENT.
  - REFER TO CERTIFIED SITE SURVEY OR PLAT FOR EXACT LOCATION OF EXISTING EASEMENTS, PROPERTY BOUNDARY DIMENSIONS, AND ADJACENT RIGHT-OF-WAY & PARCEL INFORMATION.
  - DIMENSIONS AND RADI ARE DRAWN TO THE FACE OF CURB, UNLESS OTHERWISE NOTED. DIMENSIONS ARE ROUNDED TO THE NEAREST TENTH FOOT, AND AREAS ARE ROUNDED TO THE NEAREST SQUARE FOOT.
  - UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATING EXISTING SITE IMPROVEMENTS THAT CONFLICT WITH THE PROPOSED WORK, INCLUDING BUT NOT LIMITED TO TRAFFIC SIGNS, LIGHT POLES, ABOVEGROUND UTILITIES, ETC. PERFORM WORK IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND PROJECT SITE WORK SPECIFICATIONS. COST SHALL BE INCLUDED IN BASE BID.
  - TYPICAL PARKING STALL DIMENSIONS SHALL BE 9.0-FEET IN WIDTH AND 18-FEET IN LENGTH UNLESS OTHERWISE INDICATED.
  - MONUMENT/PYLON SIGN(S) ARE DETAILED ON THE ARCHITECTURAL PLANS AND ARE SHOWN FOR GRAPHICAL & INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO VERIFY SIGN DIMENSIONS, LOCATION AND REQUIRED PERMITS WITH THE OWNER.

- KEYNOTE LEGEND**
- CURB AND PAVING**
- (C1) 6" CONCRETE CURB & GUTTER (TYP.) (SEE DETAIL)
  - (C2) CURB TRANSITION FROM 6" TO FLUSH (SEE GRADING PLAN)
  - (C3) FLUSH CURB AND WALK (SEE DETAIL)
  - (C4) MATCH EXISTING EDGE OF PAVEMENT/ CURB & GUTTER
  - (C5) CURB CUT - 1' ON BOTH SIDES
- SITE FURNITURE**
- (F1) BUG GATE (BY OWNER)
  - (F2) NOT USED
  - (F3) 6" CONCRETE FILLED PIPE BOLLARD (SEE DETAIL)
  - (F4) FLAG POLE W/ UPLIGHTING (BY OWNER)
- PAVEMENT MARKINGS**
- (P1) NOT USED
  - (P2) NOT USED
  - (P3) 4" WIDE PAINTED WHITE SOLID LINE, TYP.
  - (P4) PAINTED DIRECTIONAL ARROW
- SIGNAGE**
- (S1) EXISTING STOP SIGN
  - (S2) EXISTING TRAFFIC SIGN
  - (S3) ADA PARKING SIGN (TYP)
  - (S4) VACUUM DIRECTIONAL SIGN (REFER TO ARCH PLANS)
  - (S5) DIGITAL MENU BOARD SIGN (REFER TO ARCH PLANS)
  - (S6) ENTER/OPEN DIRECTIONAL SIGN (REFER TO ARCH PLANS)
- REFERENCE NOTES**
- (R1) AT-GRADE BUILDING ENTRY & STOOP (REFER TO ARCH & STRUCTURAL PLANS)
  - (R2) PROPOSED PYLON SIGN (REFER TO ARCH PLANS)
  - (R3) LIGHT POLES (REFER TO ELECTRICAL SITE PLAN)
  - (R4) CONCRETE BLOCK TRASH ENCLOSURE & STORAGE AREA WITH GATES (REFER TO ARCH PLANS)
  - (R5) CONCRETE ISLAND & GATE ARMS (BY OWNER)
  - (R6) TRANSFORMER PAD (REFER TO ELECTRICAL / STRUCTURAL)
  - (R7) CANOPY, REFER TO ARCH PLANS

**811**  
Know what's below.  
Call before you dig.

**PRELIMINARY - NOT FOR CONSTRUCTION**

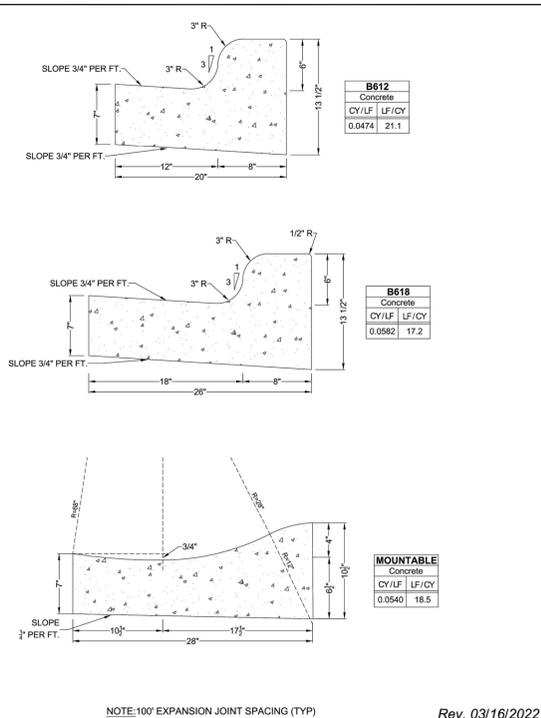
**CREW CARWASH EDEN PRAIRIE PREPARED FOR CREW CARWASH EDEN PRAIRIE MN**

**SITE PLAN**

SHEET NUMBER **C400**

DATE	08/14/23
BY	JFJ
REVISIONS	
CITY COMMENTS	

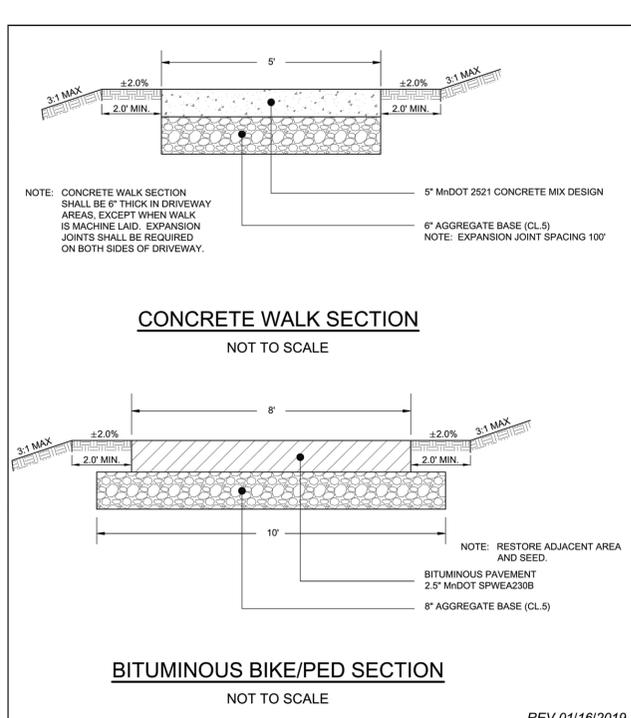
KIMLEY-HORN AND ASSOCIATES, INC.  
787 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114  
PHONE: 651-454-1977  
WWW.KIMLEY-HORN.COM



**B612, B618 & MOUNTABLE CURB & GUTTER**

CITY OF EDEN PRAIRIE  
DEPARTMENT OF ENGINEERING

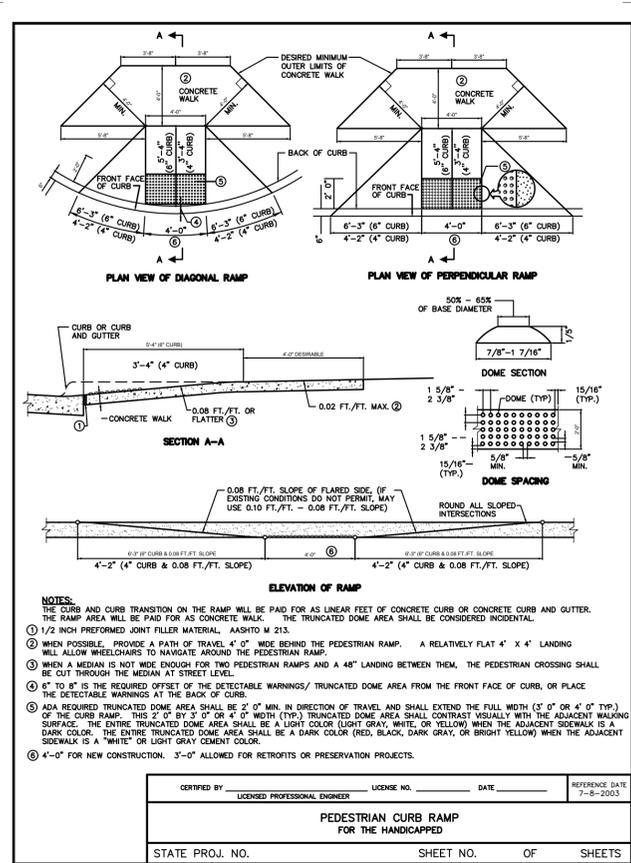
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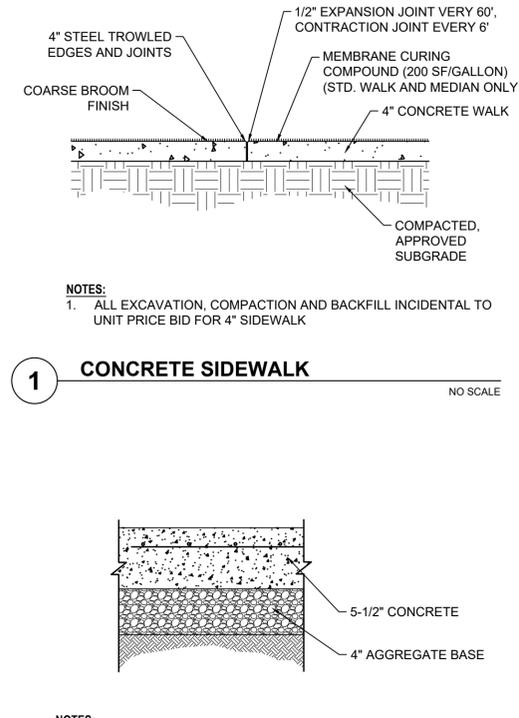
**TYPICAL WALKWAY SECTION**

CITY OF EDEN PRAIRIE  
DEPARTMENT OF ENGINEERING

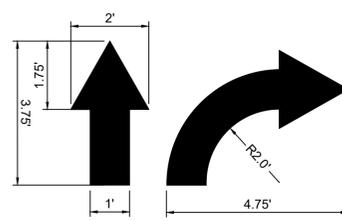
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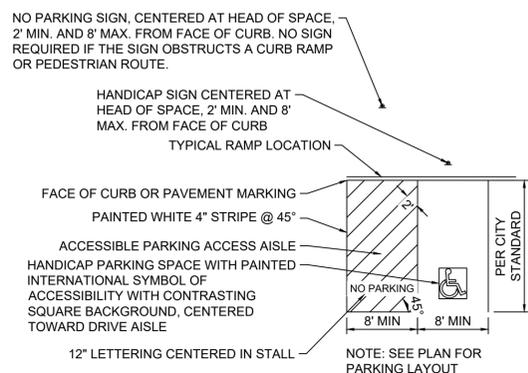
CERTIFIED BY _____	LICENSE NO. _____	DATE _____	REFERENCE DATE 7-8-2003
<b>PEDESTRIAN CURB RAMP FOR THE HANDICAPPED</b>			
STATE PROJ. NO. _____	SHEET NO. _____	OF _____	SHEETS



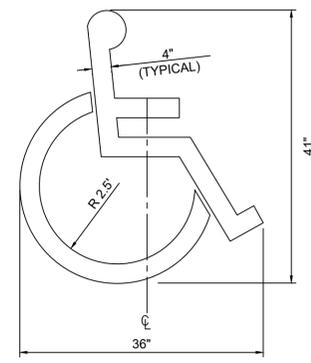
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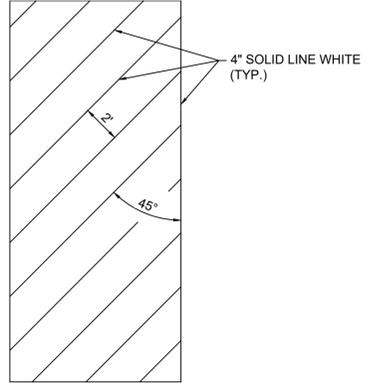
**ACCESSIBLE PARKING STRIPING & SIGNAGE**  
NO SCALE



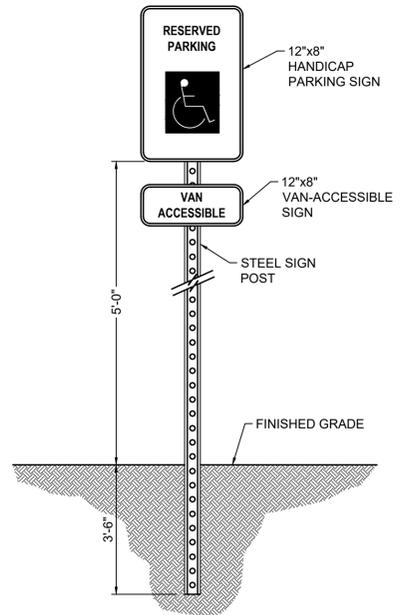
**ACCESSIBLE PARKING SYMBOL**  
NO SCALE



**TYPICAL CROSS HATCHING MARKINGS**  
NO SCALE



**ACCESSIBLE PARKING SIGN**  
NO SCALE



PRELIMINARY - NOT FOR CONSTRUCTION

**CREW CARWASH EDEN PRAIRIE**  
PREPARED FOR  
**CREW CARWASH EDEN PRAIRIE**

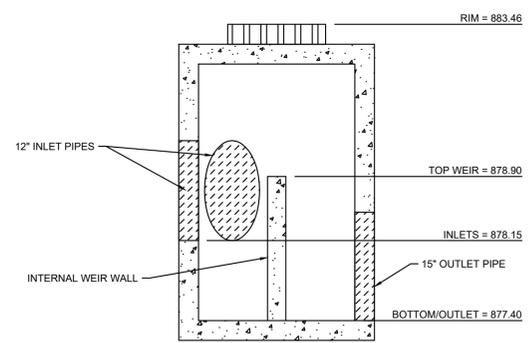
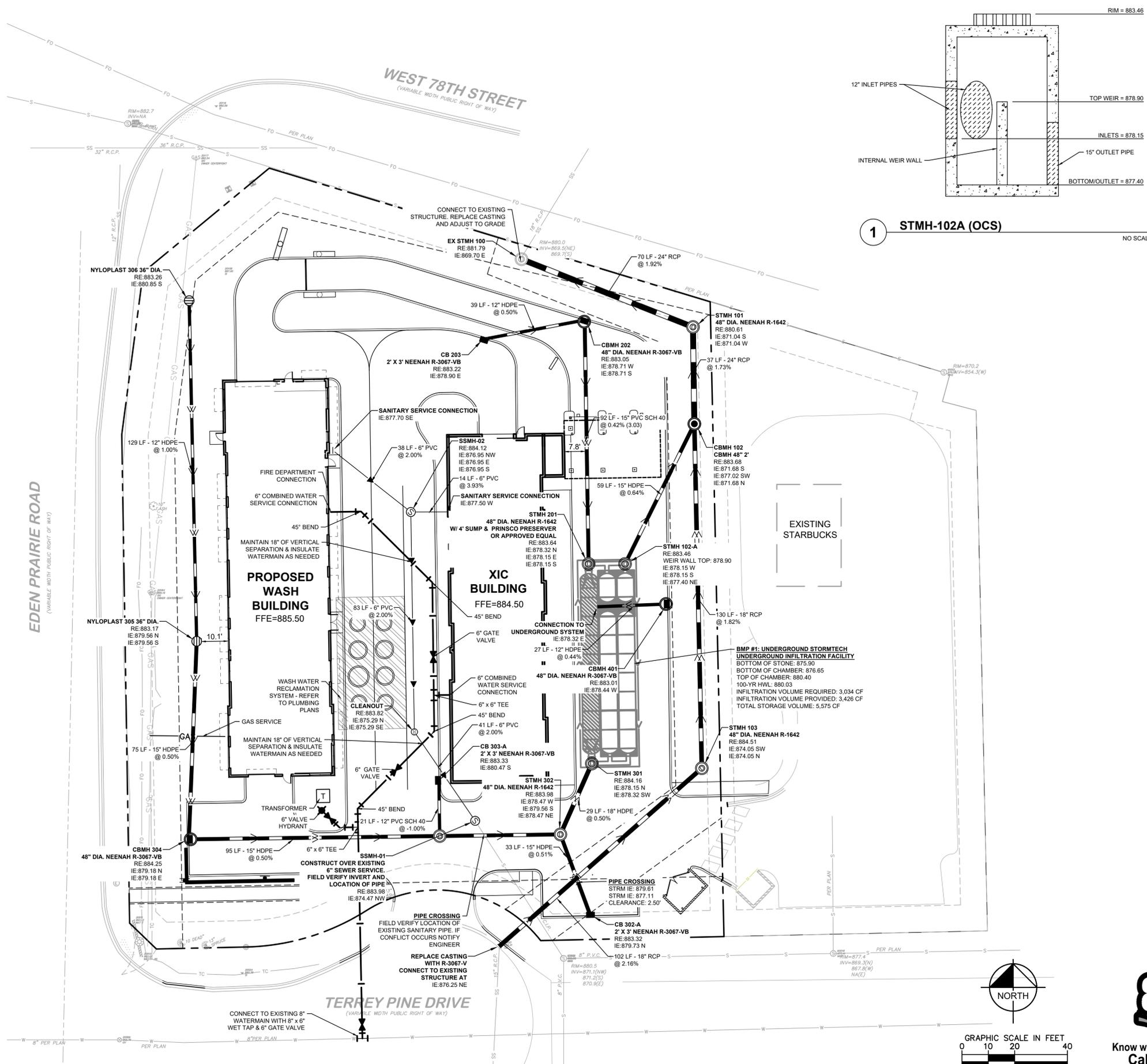
KHA PROJECT 16 0303000	DATE 08/23/2023	SCALE #####	DESIGNED BY M/S/C/E	DRAWN BY M/S/C/E	CHECKED BY JF-J
LIBRARY CENTER: MAKE THIS AN INSTRUMENT OF SERVICE. THIS SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.					
JARED F. JONES MIN. LIC. NO. 46610 DATE: 03/27/2023					

**Kimley»Horn**  
2023 KIMLEY-HORN AND ASSOCIATES, INC.  
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114  
PHONE: 651-454-4197  
WWW.KIMLEY-HORN.COM

CITY COMMENTS	REVISIONS	DATE	BY
		08/14/23	JF-J

SHEET NUMBER  
**C401**



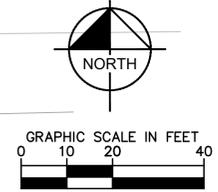


1 STMH-102A (OCS) NO SCALE

LEGEND		
EXISTING	PROPOSED	
		GATE VALVE
		HYDRANT
		REDUCER
		TEE
		SANITARY SEWER MANHOLE
		SANITARY CLEANOUT
		WATERMAIN
		SANITARY SEWER
		STORM SEWER
		UNDERGROUND ELECTRIC
		TELEPHONE
		GAS MAIN

**UTILITY PLAN NOTES**

- INSTALL UTILITIES IN ACCORDANCE WITH APPLICABLE CITY SPECIFICATIONS, STATE PLUMBING CODE, AND BUILDING PERMIT REQUIREMENTS.
- CONTACT STATE 811 CALL-BEFORE-YOU-DIG LOCATING SERVICE AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION FOR UNDERGROUND UTILITY LOCATIONS.
- CONTRACTOR IS RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
- SANITARY SEWER PIPE SHALL BE:  
PVC: ASTM D-2729, D-3054  
PVC SCH 40: ASTM D-1785, F-714, F-894  
SANITARY SEWER FITTINGS SHALL BE:  
PVC: ASTM D-2729, D-3034  
PVC SCH40: ASTM D-2665, F-2794, F-1866
- WATER MAIN PIPE SHALL BE:  
DUCTILE IRON: AWWA C-900  
DUCTILE IRON: AWWA C-115  
WATER MAIN FITTINGS SHALL BE:  
PVC: ASTM D-2464, D-2466, D-2467, F-1970, AWWA C-907  
DUCTILE IRON: AWWA C-153, C-110, ASME 316.4
- STORM SEWER PIPE SHALL BE:  
RCP: ASTM C-76  
HDPE: ASTM F-714, F-894  
PVC: ASTM D-2729  
PVC SCH40: ASTM D-1785, D-2665, F-794  
DRAIN TILE SHALL BE:  
PE: ASTM F-6667  
PVC: ASTM D-2729  
STORM SEWER FITTINGS SHALL BE:  
RCP: ASTM C-76, JOINTS PER ASTM C-361, C-990, AND C-443  
HDPE: ASTM D-3212  
PVC: ASTM D-2729, JOINTS PER ASTM D-3212  
PVC SCH40: ASTM D-2665, F-794, F-1866
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- MAINTAIN A MINIMUM OF 7'-6" COVER ON ALL WATER LINES.
- FOR WATER LINES AND STUB-OUTS UTILIZE MECHANICAL JOINTS WITH RESTRAINTS SUCH AS THRUST BLOCKING, WITH STAINLESS STEEL OR COBALT BLUE BOLTS, OR AS INDICATED IN THE CITY SPECIFICATIONS AND PROJECT DOCUMENTS.
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- IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (OR ANY OBSTRUCTION EXISTING AND PROPOSED), THE SANITARY PIPE MATERIAL SHALL BE PVC SCHEDULE 40 OR PVC C900 AND HAVE MECHANICAL JOINTS AT LEAST 10 FEET ON EITHER SIDE OF THE CENTER LINE OF THE CROSSING. THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE FASTENERS AS REQUIRED TO PROVIDE A MINIMUM OF 18-INCH VERTICAL SEPARATION MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
- ALL PVC & HDPE SEWER AND WATER PIPE SHALL HAVE A TRACER WIRE INSTALLED IN THE TRENCH AND TERMINATED PER THE DETAILS.
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- IN PAVEMENT AREAS, RAISE MANHOLE CASTINGS TO BE FLUSH WITH PROPOSED FINISHED SURFACE GRADE. IN GREEN AREAS, RAISE MANHOLE CASTINGS TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATION & INSTALL A WATERTIGHT LID.
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- CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
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PRELIMINARY - NOT FOR CONSTRUCTION

CREW CARWASH  
EDEN PRAIRIE  
PREPARED FOR  
CREW CARWASH  
EDEN PRAIRIE

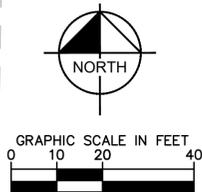
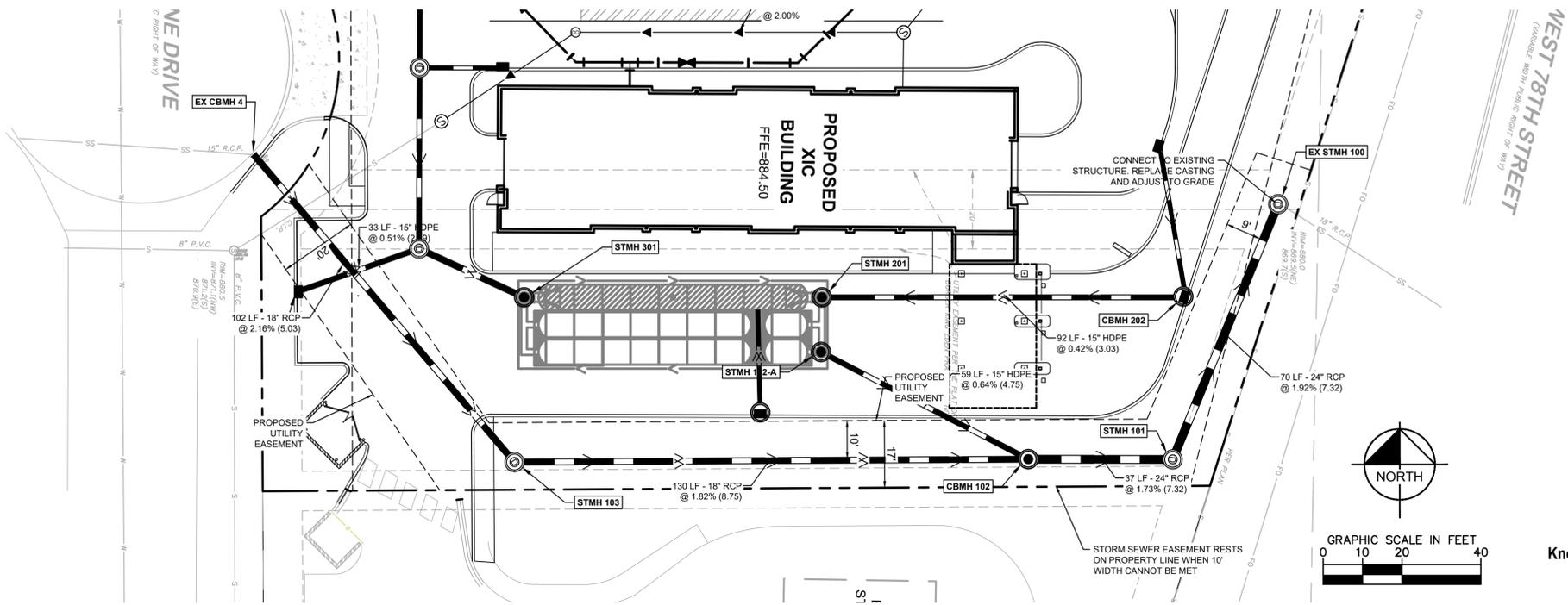
UTILITY PLAN

KHA PROJECT	161033000
DATE	08/23/2023
SCALE	###/###
DESIGNED BY	M/S/C/E
DRAWN BY	M/S/C/E
CHECKED BY	JF/J

**Kimley»Horn**  
2023 KIMLEY-HORN AND ASSOCIATES, INC.  
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114  
PHONE: 651-454-1977  
WWW.KIMLEY-HORN.COM

CITY COMMENTS	REVISIONS	DATE	BY
		08/14/23	JF/J

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

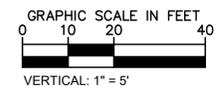
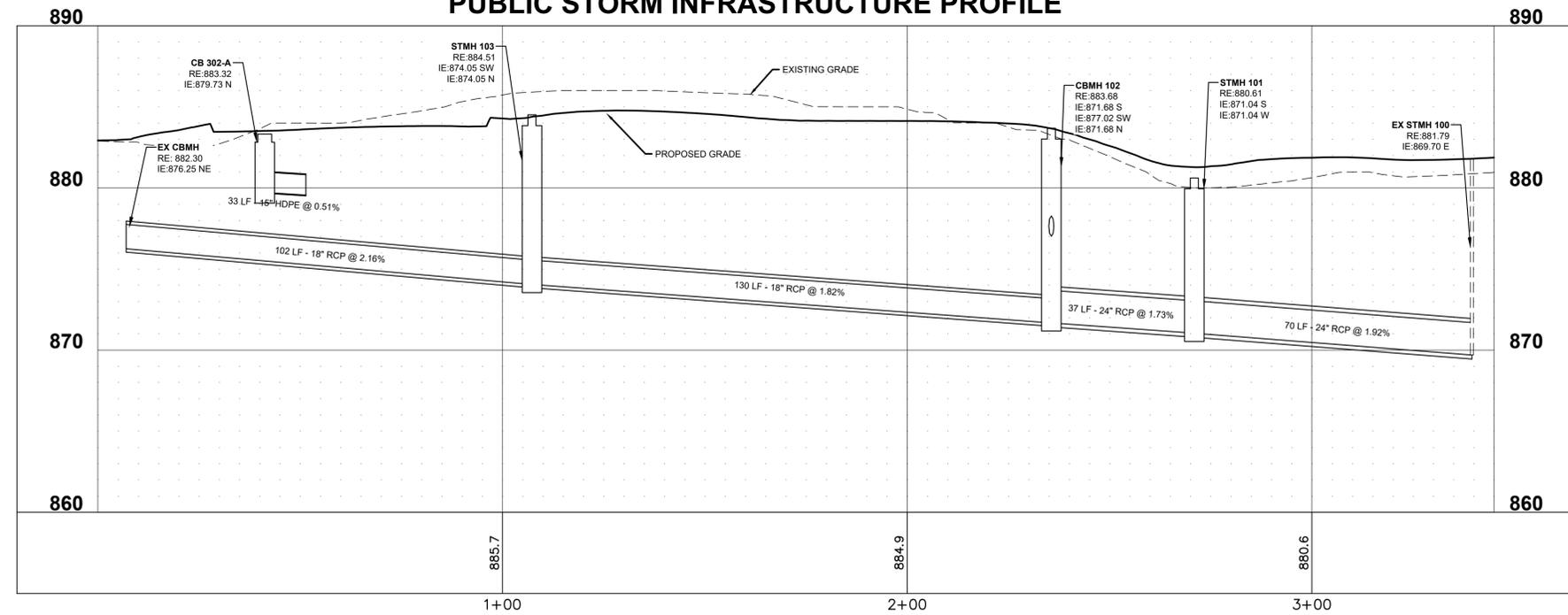


LEGEND		
EXISTING	PROPOSED	
		GATE VALVE
		HYDRANT
		REDUCER
		TEE
		SANITARY SEWER MANHOLE
		SANITARY CLEANOUT
		WATERMAIN
		SANITARY SEWER
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**PUBLIC STORM INFRASTRUCTURE PROFILE**



PRELIMINARY - NOT FOR CONSTRUCTION

**CREW CARWASH  
EDEN PRAIRIE  
PREPARED FOR  
CREW CARWASH  
EDEN PRAIRIE**

**Kimley»Horn**  
2023 KIMLEY-HORN AND ASSOCIATES, INC.  
787 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114  
PHONE: 651-454-1977  
WWW.KIMLEY-HORN.COM

KHA PROJECT 161033000	DATE 08/23/2023	SCALE #####	DESIGNED BY M5/C/E	DRAWN BY M5/C/E	CHECKED BY JF/J
UTILITY SERVICE: THIS IS AN ESTIMATE. SPECIFICATION OR REPORTS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.					
FIRST M. LAST M5/C/E DATE: 03/27/2023 LIC. NO. 12345					

No.	REVISIONS	DATE	BY
1		08/14/23	JF/J

SHEET NUMBER  
**C601**





**EDEN PRAIRIE ROAD**  
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)

**WEST 78TH STREET**  
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)

**TERREY PINE DRIVE**  
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)

**LANDSCAPE LEGEND**

- EDGER (TYP.)
- APPROXIMATE LIMITS OF SOD / IRRIGATION, SOD ALL DISTURBED AREAS (TYP.)
- 4 - 6" RIVER ROCK (TYP.)

**LANDSCAPE KEYNOTES**

- (A) EDGER (TYP.)
- (B) ROCK MULCH (TYP.)
- (C) SOD (TYP.)
- (D) 4 - 6" RIVER ROCK (TYP.)

**LANDSCAPE SUMMARY**

**C-HWY HIGHWAY COMMERCIAL**

**ONE-STORY BUILDING CALIPER INCHES REQUIREMENT**  
\*BUILDING GREATER THAN 20' HEIGHT CONSIDERED TWO-STORY

**CALIPER INCHES REQUIRED:** TOTAL GROSS SQUARE FOOTAGE OF ALL FLOORS OF A BUILDING DIVIDED BY THREE HUNDRED TWENTY (320).  
34.5 CAL INCHES = (11,068 TOTAL GROSS S.F. / 320)

**CALIPER INCHES PROVIDED:** 44.5 CAL. INCHES  
(12) @ 2.5" CAL. (OR 6' HT. CONIFER)  
(4) @ 3" CAL. (OR 7' HT. CONIFER)

**MAXIMUM SIZE REQUIRED:** NO MORE THAN EIGHTY PERCENT (80%) OF TREES MAY BE OF THE MINIMUM SIZE REQUIREMENT.  
4 TREES GREATER THAN MIN. SIZE REQUIRED  
14 TREES MAX. MIN. SIZE / 80% = (18 TOTAL TREES \* .8)

**MINIMUM SIZE PROVIDED:** 14 TREES / 80% = (14 TREES 2.5" CAL MIN. (OR 6 HT. CONIFER) / 18 TOTAL PROPOSED TREES)

**UNDERSTORY TREES CALIPER INCHES REQUIRED:** UNDERSTORY TREES MAY MAKE UP NO MORE THAN TWENTY PERCENT (20%) OF THE TOTAL TREE CALIPER INCHES REQUIRED.  
9.4 CAL. INCHES MAX. = (47 TOTAL CAL. INCHES \* .2)

**UNDERSTORY TREE CALIPER INCHES PROVIDED:** 10 CAL. INCHES  
(4) @ 2.5 CAL. UNDERSTORY TREES

\* FOR THE PURPOSES OF SATISFYING THE TOTAL CALIPER INCH REQUIREMENT, CONIFEROUS TREES MAY BE CONSIDERED EQUIVALENT TO OVERSTORY TREES BY DIVIDING THE HEIGHT OF A CONIFEROUS TREE SIX (6) FEET HEIGHT MINIMUM BY 2.4 TO DETERMINE EQUIVALENT CALIPER INCHES.

\* SHRUBS, PERENNIALS, OR PLANTING BEDS MAY BE SUBSTITUTED FOR TREES ACCORDING TO THE FOLLOWING LIMIT: NOT LESS THAN TEN PERCENT (10%) AND NO MORE THAN TWENTY-FIVE PERCENT (25%) OF THE TOTAL TREE CALIPER INCHES REQUIRED SHALL BE REPLACED WITH SHRUBS AND PERENNIALS, OR PLANTING BEDS. ADDITIONAL SHRUBS, PERENNIALS OR PLANTING BEDS BEYOND THE TWENTY-FIVE (25%) SUBSTITUTION RATE ARE ALLOWED.

**SPECIES DIVERSITY**

**SPECIES DIVERSITY REQUIRED:** NOT MORE THAN THIRTY PERCENT (30%) OF THE REQUIRED CALIPER INCHES SHALL BE COMPOSED OF ONE SPECIES UNLESS APPROVED BY THE CITY.  
5 TREES MAXIMUM OF ONE SPECIES = ((41.5 TOTAL REQUIRED CAL. INCHES \* 0.3) / 2.5)

**SPECIES DIVERSITY PROVIDED:** NO MORE THAN 4 TREES (25% OF REQUIRED CALIPER INCHES) OF ONE SPECIES HAVE BEEN PROVIDED

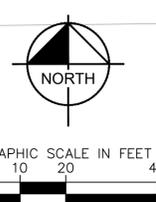
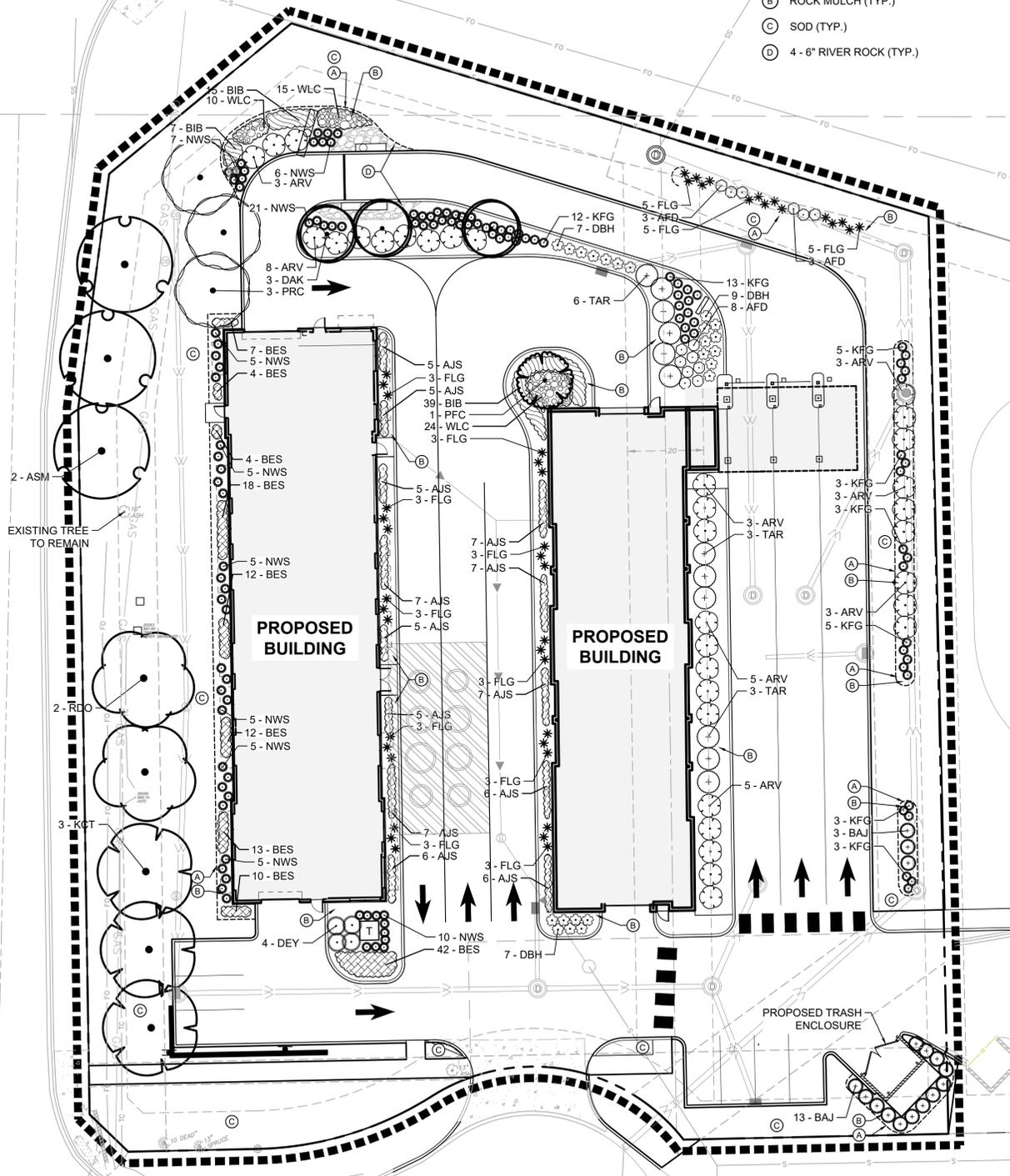
**TREE REPLACEMENT**

**TREE REPLACEMENT REQUIRED:** HERITAGE OR SIGNIFICANT TREES TO BE REPLACED IF LOST DUE TO LAND ALTERATION OR CONSTRUCTION ACTIVITY.  
(45) REPLACEMENT CAL. INCHES = ((30/10) \* 0.5) \* 30

**TREE REPLACEMENT PROVIDED:** (44.5) CAL. INCHES  
(12) @ 2.5" CAL. (OR 6' HT. CONIFER)  
(4) @ 3" CAL. (OR 7' HT. CONIFER)

**PLANT SCHEDULE**

ORNAMENTAL TREE	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	CAL/SIZE	
	PFC	1	PRUNUS SARGENTII 'JFS-KW58'	PINK FLAIR® SARGENT CHERRY	B & B	2.5" CAL.	
	PRC	3	MALUS X 'PRAIRIE ROSE'	PRAIRIE ROSE CRABAPPLE	B & B	2.5" CAL.	
OVERSTORY TREE	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	CAL/SIZE	
	ASM	3	ACER SACCHARUM 'BARRETT COLE'	APOLLO® SUGAR MAPLE	B & B	2.5" CAL.	
	DAK	3	BETULA PLATYPHYLLA 'FARGO'	DAKOTA PINNACLE BIRCH	B & B	2.5" CAL.	
	KCT	3	GYMNOCLADUS DIOICA 'ESPRESSO'	KENTUCKY COFFEETREE	B & B	2.5" CAL.	
	RDO	2	QUERCUS RUBRA	RED OAK	B & B	3" CAL.	
CONIFEROUS SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	SPACING	
	BAJ	16	JUNIPERUS SCOPULORUM 'BLUE ARROW'	BLUE ARROW JUNIPER	#5 CONT.	4' O.C.	
	DEY	4	TAXUS CUSPIDATA 'DENSIFORMIS'	DENSE YEW	#5 CONT.	5' O.C.	
	TAR	12	THUJA OCCIDENTALIS 'TECHNY'	TECHNY ARBORVITAE	#5 CONT.	6' O.C.	
DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	SPACING	
	AFD	14	CORNUS SERICEA 'ARTIC FIRE'	ARTIC FIRE DOGWOOD	#5 CONT.	5' O.C.	
	ARV	33	VIBURNUM DENTATUM 'ARROWWOOD'	ARROWWOOD VIBURNUM	#5 CONT.	6' O.C.	
	DBH	23	DIERVILLA LONICERA	DWARF BUSH HONEYSUCKLE	#5 CONT.	3' O.C.	
ORNAMENTAL GRASSES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	SPACING	
	FLG	45	MISCANTHUS X 'PURPURASCENS'	FLAME GRASS	#1 CONT.	30" O.C.	
	KFG	47	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	#1 CONT.	30" O.C.	
	NWS	74	PANICUM VIRGATUM 'NORTHWIND'	NORTHWIND SWITCH GRASS	#1 CONT.	30" O.C.	
PERENNIALS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SPACING	SPACIN
	AJS	78	SEDUM X 'AUTUMN JOY'	AUTUMN JOY SEDUM	#1 CONT.	24" O.C.	24" o.c.
	BES	122	RUDBECKIA FULGIDA 'GOLDSTURM'	BLACK-EYED SUSAN	#1 CONT.	18" O.C.	18" o.c.
	BIB	61	AMSONIA X 'BLUE ICE'	BLUE ICE BLUESTAR	#1 CONT.	24" O.C.	24" o.c.
	WLC	49	NEPETA X 'WALKER'S LOW'	WALKER'S LOW CATMINT	#1 CONT.	24" O.C.	24" o.c.



Know what's below.  
Call before you dig.

PRELIMINARY - NOT FOR CONSTRUCTION

**CREW CARWASH**  
**EDEN PRAIRIE**  
PREPARED FOR  
**CREW CARWASH**  
EDEN PRAIRIE

**LANDSCAPE PLAN**

KHA PROJECT: 161033000  
DATE: 08/23/2023  
SCALE: AS SHOWN  
DESIGNED BY: SSL  
DRAWN BY: SSL  
CHECKED BY: RAH

THIS REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

**Kimley»Horn**

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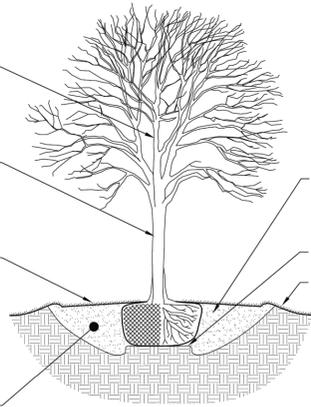
SHEET NUMBER  
**L100**

TREE MUST MEET OR EXCEED ANSI Z60.1 (AMERICAN STANDARD FOR NURSERY STOCK). ONE DOMINANT LEADER MUST BE MAINTAINED THROUGH THE WARRANTY PERIOD. REMOVE TAGS & LABELS.

DO NOT STAKE OR WRAP TRUNK UNLESS NECESSARY. IF STAKING IS NECESSARY, USE A WIDE FLEXIBLE STEM ATTACHMENT MATERIAL PLACED 1/2 OR 1/3 THE DISTANCE FROM THE GROUND UP TO THE FIRST SET OF BRANCHES. STAKING AND TRUNK WRAPPING MUST BE REMOVED AT THE END OF THE FIRST COMPLETE GROWING SEASON.

MULCH 4-6 INCHES DEEP LEAVING A 6-INCH CIRCLE OF BARE SOIL AROUND THE TRUNK OF THE TREE, PAST THE EDGE OF THE PLANTING HOLE.

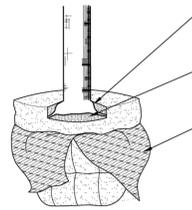
IF TREE IS PLANTED IN NATIVE SOILS IN GOOD CONDITION, RE-FILL PLANTING HOLE WITH EXCAVATED NATIVE SOIL MATERIAL. IF TREE IS PLANTED IN POOR SOILS, RE-FILL PLANTING HOLE WITH A 50/50 MIX OF COMPOST AND NATIVE SOILS.



DIAMETER OF THE PLANTING HOLE SHALL BE TRIPLE THE DIAMETER OF THE ROOTBALL. IF AUGER IS USED TO DIG HOLES, SCARIFY THE SIDES OF THE HOLE WITH HAND TOOLS.

SIT SOILBALL ON UNDISTURBED OR COMPACTED SOIL TO PREVENT SETTLING

IMPERMEABLE LANDSCAPE MATERIAL SHALL NOT BE PLACED AROUND TREES



EACH TREE MUST BE PLANTED WITH THE FIRST MAIN LATERAL ROOT AT FINISH GRADE. TREES WITH THE FIRST MAIN LATERAL NOT VISIBLE WILL BE REJECTED

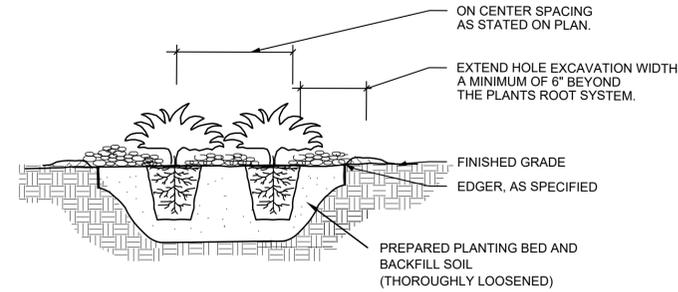
REMOVE EXCESS SOIL/ROOTS FROM THE SOILBALL TO EXPOSE THE FIRST MAIN LATERAL ROOT. PRUNE ALL ENCRINGLING ROOTS

IF BAB, REMOVE ALL TWINE AROUND THE STEM. ALL SYNTHETIC BURLAP MUST BE REMOVED. NON-SYNTHETIC BURLAP, IF PEELED BACK MUST BE REMOVED, NOT FOLDED DOWN. ASSURE WIRE BASKET DOES NOT PROTRUDE ABOVE FINAL GRADE.

### 1 TREE PLANTING DETAIL

SCALE: N.T.S.

L101



ON CENTER SPACING AS STATED ON PLAN.

EXTEND HOLE EXCAVATION WIDTH A MINIMUM OF 6" BEYOND THE PLANTS ROOT SYSTEM.

FINISHED GRADE EDGER, AS SPECIFIED

PREPARED PLANTING BED AND BACKFILL SOIL (THOROUGHLY LOOSENED)

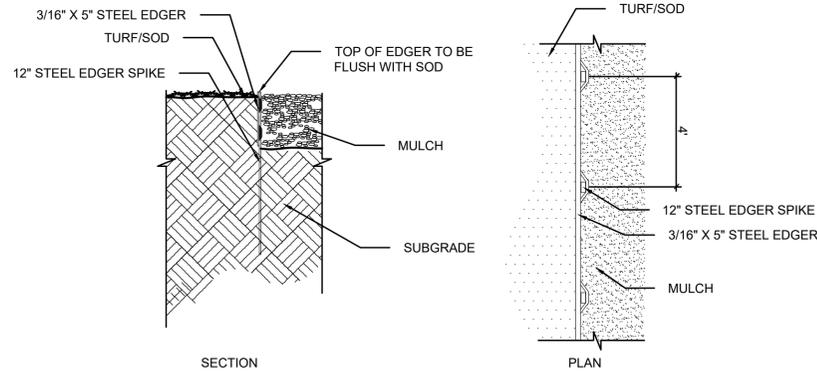
### NOTES:

1. SCARIFY SIDES AND BOTTOM OF HOLE.
2. PROCEED WITH CORRECTIVE PRUNING OF TOP AND ROOT.
3. REMOVE CONTAINER AND SCORE OUTSIDE OF SOIL MASS TO REDIRECT AND PREVENT CIRCLING FIBROUS ROOTS. REMOVE OR CORRECT STEM GIRDLING ROOTS.
4. PLUMB AND BACKFILL WITH PLANTING SOIL.
5. WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS.
6. BACK FILL VOIDS AND WATER SECOND TIME.
7. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.
8. MIX IN 3-4" OF ORGANIC COMPOST.

### 2 SHRUB / PERENNIAL PLANTING DETAIL

SCALE: N.T.S.

L101



SECTION

PLAN

### 3 STEEL EDGER DETAIL

SCALE: N.T.S.

L101

### LANDSCAPE NOTES

1. CONTRACTOR SHALL CONTACT COMMON GROUND ALLIANCE AT 811 OR CALL811.COM TO VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY PLANTS OR LANDSCAPE MATERIAL.
2. ACTUAL LOCATION OF PLANT MATERIAL IS SUBJECT TO FIELD AND SITE CONDITIONS.
3. NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
4. ALL SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO SUBMISSION OF ANY BID AND/OR QUOTE BY THE LANDSCAPE CONTRACTOR.
5. CONTRACTOR SHALL PROVIDE TWO YEAR GUARANTEE OF ALL PLANT MATERIALS. THE GUARANTEE BEGINS ON THE DATE OF THE LANDSCAPE ARCHITECT'S OR OWNER'S WRITTEN ACCEPTANCE OF THE INITIAL PLANTING. REPLACEMENT PLANT MATERIAL SHALL HAVE A ONE YEAR GUARANTEE COMMENCING UPON PLANTING.
6. ALL PLANTS TO BE SPECIMEN GRADE, MINNESOTA-GROWN AND/OR HARDY. SPECIMEN GRADE SHALL ADHERE TO, BUT IS NOT LIMITED BY, THE FOLLOWING STANDARDS: ALL PLANTS SHALL BE FREE FROM DISEASE, PESTS, WOUNDS, SCARS, ETC. ALL PLANTS SHALL BE FREE FROM NOTICEABLE GAPS, HOLES, OR DEFORMITIES. ALL PLANTS SHALL BE FREE FROM BROKEN OR DEAD BRANCHES. ALL PLANTS SHALL HAVE HEAVY, HEALTHY BRANCHING AND LEAFING. CONIFEROUS TREES SHALL HAVE AN ESTABLISHED MAIN LEADER AND A HEIGHT TO WIDTH RATIO OF NO LESS THAN 5:3.
7. PLANTS TO MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2014 OR MOST CURRENT VERSION) REQUIREMENTS FOR SIZE AND TYPE SPECIFIED.
8. PLANTS TO BE INSTALLED AS PER MNLA & ANSI STANDARD PLANTING PRACTICES.
9. PLANTS SHALL BE IMMEDIATELY PLANTED UPON ARRIVAL AT SITE. PROPERLY HEEL-IN MATERIALS IF NECESSARY; TEMPORARY ONLY.
10. PRIOR TO PLANTING, FIELD VERIFY THAT THE ROOT COLLAR/ROOT FLARE IS LOCATED AT THE TOP OF THE BALLED & BURLAP TREE. IF THIS IS NOT THE CASE, SOIL SHALL BE REMOVED DOWN TO THE ROOT COLLAR/ROOT FLARE. WHEN THE BALLED & BURLAP TREE IS PLANTED, THE ROOT COLLAR/ROOT FLARE SHALL BE EVEN OR SLIGHTLY ABOVE FINISHED GRADE.
11. OPEN TOP OF BURLAP ON BB MATERIALS; REMOVE POT ON POTTED PLANTS; SPLIT AND BREAK APART PEAT POTS.
12. PRUNE PLANTS AS NECESSARY - PER STANDARD NURSERY PRACTICE AND TO CORRECT POOR BRANCHING OF EXISTING AND PROPOSED TREES.
13. WRAP ALL SMOOTH-BARKED TREES - FASTEN TOP AND BOTTOM. REMOVE BY APRIL 1ST.
14. STAKING OF TREES AS REQUIRED; REPOSITION, PLUMB AND STAKE IF NOT PLUMB AFTER ONE YEAR.
15. THE NEED FOR SOIL AMENDMENTS SHALL BE DETERMINED UPON SITE SOIL CONDITIONS PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT FOR THE NEED OF ANY SOIL AMENDMENTS.
16. TOPSOIL SHALL ADHERE TO MN/DOT STANDARD SPECIFICATION 3877 (LOAM TOPSOIL BORROW) AND MAY CONSIST OF EXISTING TOP SOIL FROM THE SITE IF FREE OF ROOTS, ROCKS LARGER THAN ONE INCH, SUBSOIL DEBRIS, AND LARGE WEEDS UNLESS SPECIFIED OTHERWISE. MINIMUM 6" DEPTH TOPSOIL FOR ALL LAWN GRASS AREAS AND 12" DEPTH TOPSOIL FOR TREE, SHRUBS, AND PERENNIALS. TOPSOIL SHALL CONTAIN AT LEAST 5% ORGANIC CONTENT CONSISTENT WITH THE TOPSOIL REQUIREMENTS OF THE RILEY-PURGATORY BLUFF CREEK WATERSHED DISTRICT STANDARD.
17. MULCH TO BE AT ALL TREE, SHRUB, PERENNIAL, AND MAINTENANCE AREAS. TREE AND SHRUB PLANTING BEDS SHALL HAVE 4" DEPTH OF DOUBLE SHREDED HARDWOOD MULCH. DOUBLE SHREDED HARDWOOD MULCH TO BE USED AROUND ALL PLANTS WITHIN TURF AREAS, PERENNIAL AND ORNAMENTAL GRASS BEDS SHALL HAVE 2" DEPTH DOUBLE SHREDED HARDWOOD MULCH. MULCH TO BE FREE OF DELETERIOUS MATERIAL AND NATURAL IN COLOR, OR APPROVED EQUAL. ROCK MULCH TO BE RIVER ROCK, 1 1/2 TO 6" DIAMETER, AT MINIMUM 3" DEPTH, OR APPROVED EQUAL. ROCK MULCH TO BE ON COMMERCIAL GRADE FILTER FABRIC, BY TYPAR, OR APPROVED EQUAL WITH NO EXPOSURE. MULCH AND FABRIC TO BE APPROVED BY OWNER PRIOR TO INSTALLATION. MULCH TO MATCH EXISTING CONDITIONS (WHERE APPLICABLE).
18. EDGING TO BE COMMERCIAL GRADE COL-MET (OR EQUAL) STEEL EDGING; 3/16" THICK X 5" TALL, COLOR BLACK, OR SPADED EDGE, AS INDICATED. STEEL EDGING SHALL BE PLACED WITH SMOOTH CURVES AND STAKED WITH METAL SPIKES NO GREATER THAN 4 FOOT ON CENTER WITH TOP OF EDGER AT GRADE. FOR MOWERS TO CUT ABOVE WITHOUT DAMAGE. UTILIZE CURBS AND SIDEWALKS FOR EDGING WHERE POSSIBLE. SPADED EDGE TO PROVIDE V-SHAPED DEPTH AND WIDTH TO CREATE SEPARATION BETWEEN MULCH AND GRASS. INDIVIDUAL TREE, SHRUB, OR RAIN-GARDEN BEDS TO BE SPADED EDGE, UNLESS NOTED OTHERWISE. EDGING TO MATCH EXISTING CONDITIONS (WHERE APPLICABLE).
19. ALL DISTURBED AREAS TO BE SODDED OR SEEDED, UNLESS OTHERWISE NOTED. PARKING LOT ISLANDS TO BE SODDED WITH SHREDED HARDWOOD MULCH AROUND ALL TREES AND SHRUBS. SOD TO BE STANDARD MINNESOTA GROWN AND HARDY BLUEGRASS MIX, FREE OF LAWN WEEDS. ALL TOPSOIL AREAS TO BE RAKED TO REMOVE DEBRIS AND ENSURE DRAINAGE. SLOPES OF 3:1 OR GREATER SHALL BE STAKED. SEED AS SPECIFIED AND PER MN/DOT SPECIFICATIONS. IF NOT INDICATED ON LANDSCAPE PLAN, SEE EROSION CONTROL PLAN.
20. PROVIDE IRRIGATION TO ALL PLANTED AREAS ON SITE. IRRIGATION SYSTEM TO BE DESIGN/BUILD BY LANDSCAPE CONTRACTOR. LANDSCAPE CONTRACTOR TO PROVIDE SHOP DRAWINGS TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. CONTRACTOR TO PROVIDE OPERATION MANUALS, AS-BUILT PLANS, AND NORMAL PROGRAMMING. SYSTEM SHALL BE WINTERIZED AND HAVE SPRING STARTUP DURING FIRST YEAR OF OPERATION. SYSTEM SHALL HAVE ONE-YEAR WARRANTY ON ALL PARTS AND LABOR. ALL INFORMATION ABOUT INSTALLATION AND SCHEDULING CAN BE OBTAINED FROM THE GENERAL CONTRACTOR. SYSTEM SHALL INCLUDE A RAIN SENSOR AND APPROPRIATE TECHNOLOGY.
21. CONTRACTOR SHALL PROVIDE NECESSARY WATERING OF PLANT MATERIALS UNTIL THE PLANT IS FULLY ESTABLISHED OR IRRIGATION SYSTEM IS OPERATIONAL. OWNER WILL NOT PROVIDE WATER FOR CONTRACTOR.
22. REPAIR, REPLACE, OR PROVIDE SOD/SEED AS REQUIRED FOR ANY ROADWAY BOULEVARD AREAS ADJACENT TO THE SITE DISTURBED DURING CONSTRUCTION.
23. REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO OWNER.
24. MAINTAIN TREES, SHRUBS, AND OTHER PLANTS UNTIL PROJECT COMPLETION, BUT IN NO CASE, LESS THAN FOLLOWING PERIOD; 1 YEAR AFTER PROJECT COMPLETION. MAINTAIN TREES, SHRUBS, AND OTHER PLANTS BY PRUNING, CULTIVATING, AND WEEDING AS REQUIRED FOR HEALTHY GROWTH. RESTORE PLANTING SAUCERS. TIGHTEN AND REPAIR STAKE AND GUY SUPPORTS AND RESET TREES AND SHRUBS TO PROPER GRADES OR VERTICAL POSITION AS REQUIRED. RESTORE OR REPLACE DAMAGED WRAPPINGS. SPRAY AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF INSECTS AND DISEASE. REPLENISH MULCH TO THE REQUIRED DEPTH. MAINTAIN LAWNS FOR 45 DAYS AFTER INSTALLING SOD INCLUDING MOWING WHEN SOD RECIRES 4" IN HEIGHT. WEED PLANTING BEDS AND MULCH SAUCERS AT MINIMUM ONCE A MONTH DURING THE GROWING SEASON. PROVIDE A MONTHLY REPORT TO THE OWNER ON WEEDING AND OTHER MAINTENANCE RESPONSIBILITIES.

PRELIMINARY - NOT FOR CONSTRUCTION

CREW CARWASH  
EDEN PRAIRIE  
PREPARED FOR  
CREW CARWASH

LANDSCAPE  
DETAILS

SHEET NUMBER  
L101

I HEREBY CERTIFY THAT THIS IS AN ORIGINAL SPECIFICATION OR REPORT THAT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

RYAN A. HYLLESTED, P.L.A.  
MN LIC. NO. 53828  
DATE: 08/23/2023

**Kimley»Horn**

2023 KIMLEY-HORN AND ASSOCIATES, INC.  
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114  
PHONE: 651-454-1877  
WWW.KIMLEY-HORN.COM

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