

## Riley-Purgatory-Bluff Creek Watershed District Permit Application Review

**Permit No:** 2022-059

**Received complete:** August 16, 2022

**Considered at Board of Manager's Meeting:** September 14, 2022

**Applicant:** City of Eden Prairie; Patrick Sejkora

**Consultant:** Stantec, Josh Accola

**Project:** 23-43-C Pond Dredging and Infrastructure Improvements – the applicant proposes to remove accumulated sediment from Pond 23-43-C, part of a public water wetland, and the replacement of a waterbody crossing between two basins of the wetland.

**Location:** 11824 Welters Way in Eden Prairie

**Reviewer:** Scott Sobiech, PE Barr Engineering

### 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 14, 2022 meeting of the managers:

Resolved that the application for Permit 2022-059 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 variances and permit have been affirmatively resolved, the RPBCWD president or administrator is authorized and directed to sign and deliver to the applicant, Permit 2022-059 on behalf of RPBCWD.

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

**Applicable Rule Conformance Summary**

Rule	Issue	Conforms to RPBCWD Rules?	Comments
B	Floodplain Management and Drainage Alterations	Yes	
C	Erosion Control Plan	See Comment	See rule-specific permit condition C1 related to providing name and contact information for the individual responsible for erosion control.
D	Wetland and Creek Buffers	Yes	
E	Dredging and Sediment Removal	See Comment	See rule-specific permit condition E1 related to disposal location of dredged materials.
L	Permit Fees	NA	Governmental Agency
M	Financial Assurances	NA	Governmental Agency

**Project Description**

The City of Eden Prairie proposes to remove accumulated sediment from basin 23-43-C (Pond C) to remove nutrients, pollutants, and contaminants and restore treatment capacity of the basin. The city also plans to replace the deteriorated corrugated metal arch culvert connecting upgradient Pond 23-43-A (Pond A) to Pond C with a concrete arch culvert. Pond A and Pond C together are classified by the state as Public Waters Wetland 1008W.

Pond C was excavated and the crossing was constructed in the mid-1970s, prior to the Wetland Conservation Act being enacted. Over time the basin volume has been reduced by sedimentation from Pond A and from inlets on the east and west sides. During a June 2021 survey, the applicant determined that sediment has reduced the volume of Pond C by roughly 50%. Approximately 2,000 cubic yard of accumulated sediment will be removed down elevation of 797 feet, which corresponds to the original constructed bottom elevation shown on the as-built profile. The work will occur on city-owned property upstream and downstream of the culvert, within right of way, and within existing drainage and utility easements on private property surrounding the basins.

The project site information is summarized in the following table.

	Project Total
Existing Site Impervious (acres)	0
Existing Impervious Area Disturbed (acres)	0
New (Increase) in Site Impervious Area (acres)	0
Proposed Impervious Area (acres)	0
Excavation (cubic yards)	2,000
Total Disturbed Area (acres)	1.1

The following materials were reviewed in support of the permit request:

1. Permit application received July 27, 2022 (Incomplete notice was sent on August 8, 2022; materials submitted to complete application on August 16, 2022)
2. Project Narrative dated July 26, 2022 (Revised August 16, 2022)
3. Site plan received July 26, 2022 (revised August 16, 2022).
4. PCSWMM hydrologic and hydraulic models received July 8, 2022
5. Executed Programmatic maintenance Agreement dated May 22, 2022

#### **Rule B: Floodplain Management and Drainage Alterations**

Because the proposed project involves land-disturbing activities below the 100-year flood elevations of Pond A (for the culvert replacement) and Pond C (for the culvert replacement and the dredging), the project activities must conform to the RPBCWD's Floodplain Management and Drainage Alterations rule (Rule B).

Rule B, Subsections 3.1 and 3.4 are not relevant because no buildings will be constructed or reconstructed as part of the project, and the no impervious surface will be created or re-created within 50 feet of a watercourse. Because the cross section information provided on the drawing shows only excavation, the proposed activity will not result in any fill being placed below the 100-year flood elevation. As such, the RPBCWD engineer agrees with the applicant's PCSWMM modeling that shows the proposed activities will not result in a rise in the 100-year elevation, the proposed project will not result in loss of flood storage below the 100-year flood elevation and the project conforms to Rule B, Subsection 3.2. Because the applicant has demonstrated with PCSWMM modeling and the engineer concurs that the project will preserve the existing 100-year flood level, the project will not alter surface flows, complying with subsection 3.3. The applicant included erosion control measures on the site drawing to comply with subsection 3.5. The information on the plan sheet includes a note indicating that activities must be conducted to minimize the potential transfer of aquatic invasive species conforming to Rule B, Subsection 3.6.

The RPBCWD Engineer concurs that the proposed project conforms to the floodplain management and drainage alteration requirements of Rule B.

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

Because the applicant proposes to excavate 2,000 cubic yards of earth, the project must conform to the requirements in the RPBCWD Erosion Prevention and Sediment Control rule (Rule C, Subsection 2.1).

The plans, including erosion control measures, prepared by Stantec include installation of stabilized construction entrance, sediment control log, floating silt curtain, placement of a minimum of 6 inches of topsoil in upland areas along access and associated with the culvert replacement, decompaction of pervious areas compacted during construction prior to topsoil placement, and retention of native topsoil onsite.

To conform to the 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 D: Wetland and Creek Buffers**

Because the proposed work triggers RPBCWD Rules B and E and will disturb both Pond A and Pond C, which together are classified by the state as public water wetland PWI 1008W, Rule D, Subsections 2.1a requires the applicant to establish buffer areas. Because the activities constitute a disturbance of PWI 1008W, wetland buffer must be provided around the entire wetland on the property owned by the applicant (Rule D, subsection 3.1a).

The MnRAM analyses indicates PWI 1008W is a medium value wetland. Rule D, Subsection 3.2.a.iii requires wetland buffer with an average of 40 feet from the delineated edge of the wetland, minimum 20 feet. Because Subsection 3.2f only requires buffer on property owned by the applicant and the city only has property rights to install buffer on city property, the project conforms to the requirements even though the buffer provided falls well short of the applicable average and minimum widths. The buffer widths are summarized in the following table.

**Wetland buffer summary**

Wetland ID	RPBCWD Wetland Value	Required Minimum Width (ft)	Required Average Width (ft)	Provided Minimum Width (ft)	Provided Average Width (ft)
PWI 1008W	Medium	20	40	1.7	27

The plans require revegetating disturbed areas within the proposed buffer with native vegetation, thus conforming with Rule D, Subsection 3.3. A note is included on the plan sheet indicating the project will be constructed so as to minimize the potential transfer of aquatic invasive species (e.g., zebra mussels, Eurasian watermilfoil, etc.) to the maximum extent possible conforming to Rule D, Subsection 3.6.

Because the applicant entered into a programmatic maintenance agreement with RPBCWD to cover maintenance requirement associated with city project, including buffer maintenance, staff will add the project to the inventory of those to be maintained under the terms of the agreement to conform to Subsection 3.5 of Rule D.

**Rule E, Dredging and Sediment Removal**

Because the project involves removal of material from PWI 1008W, a public water wetland, the project requires approval under RPBCWD Rule E, Dredging and Sediment Removal. The purpose of the land-



disturbing activities is to remove sediment to eliminate a source of nutrients, pollutants, and contaminants (Rule E, subsection 2.1c).

Because proposed sediment removal is not intended for navigation purposes, Rule E subsection 3.1a does not impose requirement on this project. Because the proposed removal of material from the wetland will be to the original construction elevation shown on the as-built drawing (elevation 797 feet), the proposed activities will restore the original cross section and the ecological function to conditions that existed following the original 1975 construction (Rule E, subsections 3.1b, 3.1c, 3.1d, and 3.1g). Because the proposed work involves removal of sediment from a wetland rather than a marina, channel or lakeshore, Rule E, subsection 3.1f does not impose requirements on this project. The RPBCWD engineer concurs with the applicant provided natural resources map based on information from Hennepin County showing that the area is not an ecologically sensitive area, thus the project conforms with Rule E, subsection 3.1g.

A note on sheet G-002 directs the contractor that no work affecting the bed or banks of a protected water shall occur between April 1 and June 30 (Rule E, Subsection 3.5). Banks will be immediately stabilized after completion of permitted work and revegetated as soon as growing conditions allow (Rule E, Subsection 3.3) and the plans call for the installation of floating silt curtain (Rule E, Subsection 3.4). A note is included on the plan sheet indicating the project will be constructed so as to minimize the potential transfer of aquatic invasive species (e.g., zebra mussels, Eurasian watermilfoil, etc.) to the maximum extent possible (Rule E, Subsection 3.6).

Because the submitted materials indicate the dredge materials will be disposed of offsite but do not define the offsite location, the following revisions are needed to conform to the RPBCWD Rule E, subsection 3.2 requirements:

- E1. The plans must be updated to require the following
  - a. Dredged or excavated sediment must be placed at a location:
    - i. above the ordinary high-water level of a public water, public water wetland or wetland subject to the Wetland Conservation Act;
    - ii. Not in a floodplain; or
    - iii. Not subject to erosion or likely to cause re-deposition of the sediment to an adjacent waterbody, stormwater-management facility or storm sewer.

### **Rule G: Waterbody Crossings and Structures**

Because the project proposes to rehabilitate a waterbody crossing in contact with the bed and bank of PWI 1008W, the proposed project must meet the criteria of RPBCWD's Waterbody Crossings and Structures Rule (Rule G, Subsection 3). The waterbody crossing proposed for reconstruction connects Pond A and Pond C. Only the criteria in Subsections 3.1, 3.2 and 3.7 impose requirements on the work.

Because the project will use the bed and banks of a public waterbody, the applicant must show that the work will provide a public benefit. (Rule G, Subsection 3.1a). By replacing a deteriorated corrugated metal culvert, the city will eliminate the risk of the culvert failing which would block stormwater flow and increase flood risk.

Rule G, Subsection 3.2.a requires that the construction of a waterbody crossing in contact with the bed or bank of a waterbody retain adequate hydraulic capacity and assure no net increase in the flood stage of the pertinent waterbody. The RPBCWD engineer concurs with the stormwater modeling provided by the applicant indicating that the 100-year flood elevation upstream and downstream of the crossing is unchanged under proposed conditions relative to existing conditions as summarized in following table, thus the project conforms to Rule G, Subsection 3.2a

**Waterbody crossing 100-year high water level (HWL) comparison**

Existing Upstream HWL (ft)	Proposed Upstream HWL (ft)	Existing Downstream HWL (ft)	Proposed Downstream HWL (ft)	Change in Upstream HWL (ft)	Change in Downstream HWL (ft)
905.38	805.38	805.36	805.36	0	0

Because the existing crossing does not provide navigational capacity, the requirement set forth by Rule G, subsection 3.2.b does not impose a requirement on the project. Because the waterbody crossing improvement is designed with nearly identical inverts and pipe sizes as summarized in following table, the project will maintain existing wildlife passage, is not reasonably likely to change flow gradient, increase scour, or affect water quality. (Rule G, subsections 3.2c-d)

**Waterbody crossing information summary**

Existing Pipe Size/ Material	Proposed Pipe Size/ Material	Existing Inverts (Upstream - Downstream)	Proposed Inverts (Upstream - Downstream)	Existing Pipe Length (ft)	Proposed Pipe Length (ft)
65" Arch CMP	65" Arch RCP	799.81-800.2	799.81-799.81	90	65

As part of the design process, the applicant evaluated 5 crossing alternatives using various pipe diameters and materials as summarized in the following table. The do-nothing alternative was dismissed because the existing culvert is deteriorated with age and needs replacement. The HDPE pipe option was dismissed because the minimal cover above the pipe is insufficient to achieve. The ellipse pipe alternatives were not selected due to long lead times to procure the ellipse pipe. Because the applicant selected the alternative that minimizes the excavation extents to those need to remove the existing deteriorated pipe and shortens the length of the pipe by 25 feet, the project will result in the minimum

amount of impact to PWI 1008W and the engineer concurs the proposed crossing rehabilitation represents the minimal impact solution (Rule G, subsections 3.2e).

	Peak Headwater Elevation (feet)	Peak Tailwater Elevation (feet)	Peak Discharge in the pipe (cfs)	Pipe Velocity (ft/s)	Peak Overland Discharge (cfs)	Max Overland Velocity (ft/s)
Existing 64/43 CMP Arch	805.38	805.36	36.5	2.5	40.3	2.1
<b>65x40 Arch RCP</b>	<b>805.38</b>	<b>805.36</b>	<b>37.2</b>	<b>2.6</b>	<b>39.2</b>	<b>0.3</b>
58x36 Arch RCP	805.38	805.36	35.8	3.1	41.1	9.5
43x68 Ellipse RCP	805.37	805.36	38.0	2.3	37.9	0.4
38x60 Ellipse RCP	805.38	805.36	36.6	2.8	40.1	1.6
42" Round HDPE	805.38	805.36	34.6	3.6	42.1	2.2

The project plans include a note requiring no activity affecting the bed/banks of a protected water be conducted between April 1 and June 30 (Rule G, Subsection 3.7a) and indicate the banks will be immediately stabilized after completion of permitted work and revegetated as soon as growing conditions allow (Rule G, Subsection 3.7b). A note is included on the plan sheet indicating the project will be constructed so as to minimize the potential transfer of aquatic invasive species (e.g., zebra mussels, Eurasian watermilfoil, etc.) to the maximum extent possible (Rule G, Subsection 3.7c).

Rule G, Subsection 3.7d requires compliance with the applicable criteria in subsection 3.3 of Rule F. The RPBCWD engineer concurs with the applicant’s assertion that because the crossing will be submerged and the PCSWMM modeling indicates low flow velocities, the erosion forces are low, riprap is not needed and the plans call for restoration with native vegetation (Rule F, subsection 3.3a).

Because the applicant entered into a programmatic maintenance agreement with RPBCWD to cover maintenance requirement associated with city project, including waterbody crossing maintenance, staff must add the project to the inventory of those to be maintained under the terms of the agreement to conform to Subsection 5 of Rule G.

**Applicable General Requirements:**

1. The RPBCWD Administrator and Engineer shall be notified at least three days prior to commencement of work.
2. 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 above and on the permit. The granting of the permit does not in any way relieve the permittee, its engineer, or other professional consultants of responsibility for the permitted work.

3. The grant of the permit does not relieve the permittee of any responsibility to obtain approval of any other regulatory body with authority.
4. 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.
5. 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.
6. 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.
7. 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 Rule C if the Rule Specific Permit Conditions listed above are met.
3. The proposed project conforms to Rules B, D, E, and G.
4. Under Minnesota Department of Natural Resources General Permit 2015-1192 (attached to this report), approval of work under RPBCWD rule E and G constitutes approval under applicable DNR work in waters rules. Compliance with conditions on approval and payment of applicable fees, if any, are necessary to benefit from general permit approval and the responsibility of the applicant.

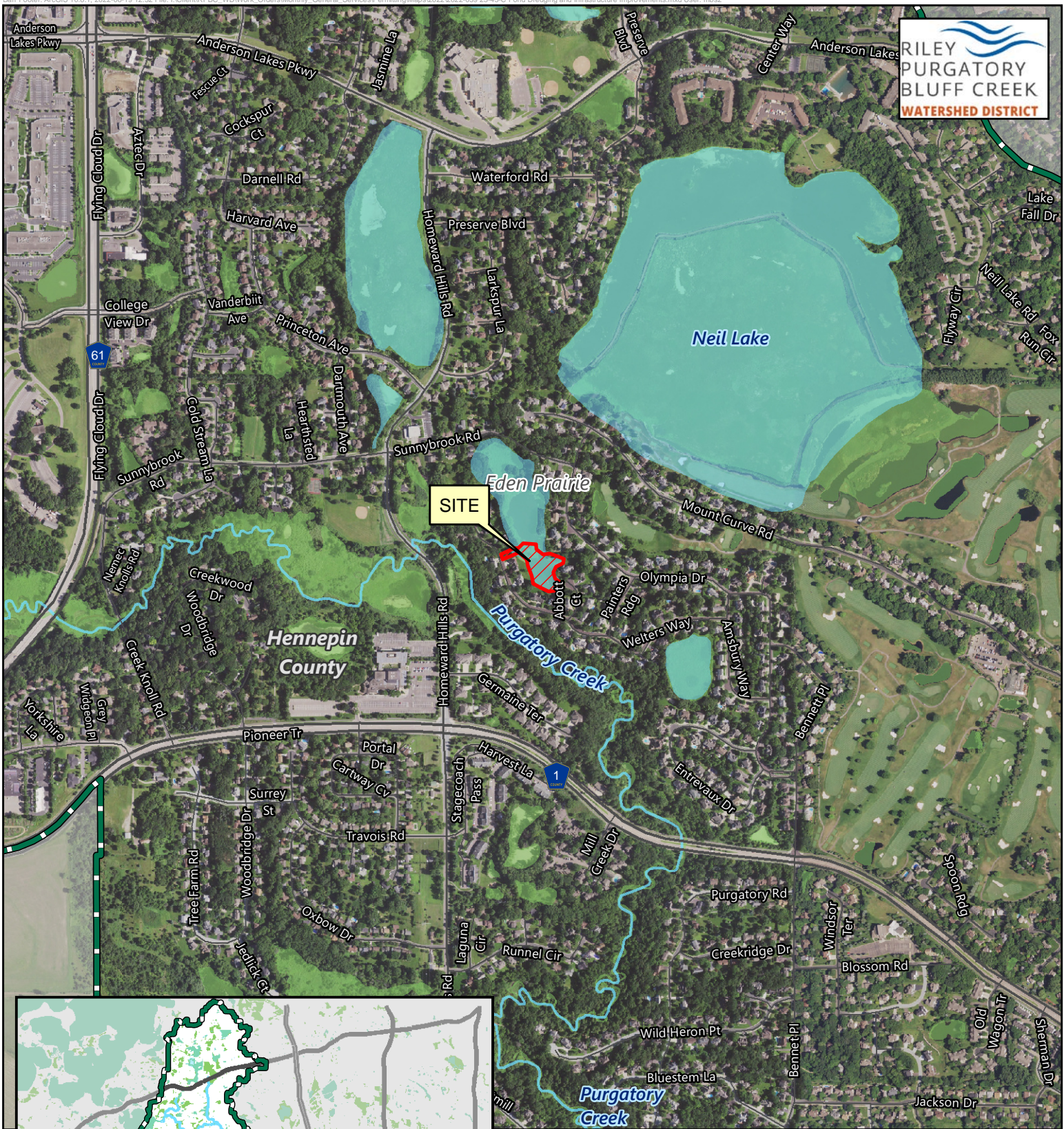
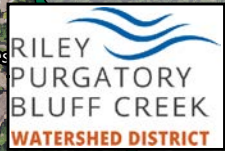
### **Recommendation:**

The engineer recommends approval of the permit, contingent upon:

1. Continued compliance with General Requirements
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. Receipt of updated plans or specifications requiring the dredged or excavated sediment must be placed at a location:

- a. above the ordinary high-water level of a public water, public water wetland or wetland subject to the Wetland Conservation Act;
  - b. Not in a floodplain; or
  - c. Not subject to erosion or likely to cause re-deposition of the sediment to an adjacent waterbody, stormwater-management facility, or storm sewer.
4. Addition by RPBCWD staff of the project and site to the inventory of those to be maintained under the programmatic maintenance agreement between RPBCWD and Eden Prairie.





Permit Location Map

23-43-C POND DREDGING AND  
INFRASTRUCTURE IMPROVEMENTS  
**Permit 2022-059**  
Riley Purgatory Bluff Creek  
Watershed District



Feet





# FINAL CIVIL CONSTRUCTION PLANS

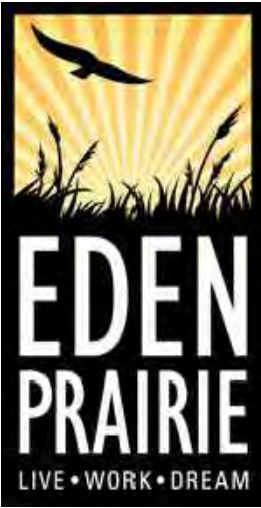
## FOR

# CITY OF EDEN PRAIRIE POND IMPROVEMENTS (POND 23-43-C)

### EDEN PRAIRIE, MINNESOTA AUGUST 2022



7500 OLSON MEMORIAL HWY  
SUITE 300  
GOLDEN VALLEY, MN 55427  
PHONE: 763-252-6800  
FAX: 952-831-1268



CLIENT:

**CITY OF EDEN PRAIRIE**  
**POND IMPROVEMENTS**  
 CITY OF EDEN PRAIRIE  
 HENNEPIN COUNTY, MINNESOTA

**CLIENT**



CITY OF EDEN PRAIRIE  
8080 MITCHELL ROAD  
EDEN PRAIRIE, MN 55344  
(P) - 952-949-8360  
CONTACT: PARTICK SEJKORA, P.E.

**ENGINEER**



STANTEC CONSULTING SERVICES, INC.  
7500 OLSON MEMORIAL HIGHWAY  
SUITE 300  
GOLDEN VALLEY, MINNESOTA 55427  
(E) - HAGEN.KACZMAREK@STANTEC.COM  
CONTACT: HAGEN KACZMAREK

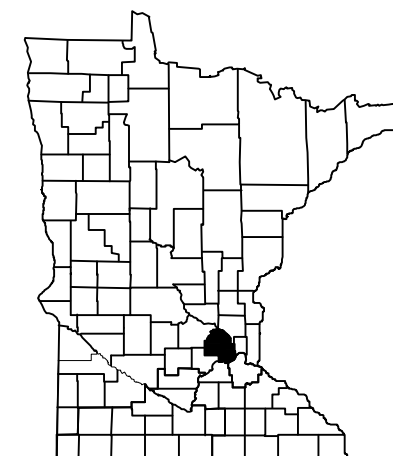


THIS PLANSET CONTAINS 10 SHEETS

SHEET INDEX	
Sheet Number	Sheet Title
G-001	COVER SHEET
G-002	GENERAL NOTES
G-003	EXISTING CONDITIONS
C-101	GRADING AND EROSION PLAN
C-201	UTILITY AND RESTORATION PLAN
C-202	UTILITY AND RESTORATION PLAN
C-203	POND PROFILES
C-301	SWPPP
C-801	DETAILS
C-802	DETAILS



**VICINITY MAP**  
NOT TO SCALE



**PROJECT LOCATION**  
CITY: EDEN PRAIRIE  
COUNTY: HENNEPIN

PROJECT TITLE:

ISSUE NO.:

DESCRIPTION:	ISSUE NO. 1
50% CITY SUBMITTAL PLANS (POND 23-43-C)	2
FINAL CITY SUBMITTAL PLANS (POND 23-43-C)	
DATE:	
08/22/2021	
08/19/2022	

**CERTIFICATION:**  
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.

*Josh J.O. Accola*  
JOSH J.O. ACCOLA

LICENSE NO.: 56108

DATE: 08/19/2022

PROJECT NO.: 227704352

DWN BY: MDH    CHK'D BY: HK    APP'D BY: HK

ISSUE DATE: 08/19/2022

ISSUE NO.: 2

SHEET TITLE:  
COVER SHEET

SHEET NO.:  
**G-001**

**WARNING:**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG  
**GOPHER STATE ONE CALL**

TWIN CITY AREA: 651-454-0002  
TOLL FREE: 1-800-252-1166



## GOVERNING SPECIFICATIONS

- CITY OF EDEN PRAIRIE STANDARD SPECIFICATIONS AND REQUIREMENTS.
- MINNESOTA DEPARTMENT OF TRANSPORTATION (MNDOT) "STANDARD SPECIFICATIONS FOR CONSTRUCTION" LATEST EDITION AND SUPPLEMENTS.
- CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM) STANDARD SPECIFICATIONS FOR UTILITIES LATEST EDITION.
- APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES

## GENERAL NOTES

- UNTIL REVISION BLOCK STATES "ISSUED FOR CONSTRUCTION", THE PLAN SET IS NOT CERTIFIED FOR CONSTRUCTION AND CONTRACTOR IS BUILDING AT THEIR OWN RISK.
- EXISTING CONDITIONS SHOWN ARE FROM A COMBINATION OF TOPOGRAPHIC SURVEY AND LIDAR DATA COMPLETED BY STANTEC CONSULTING SERVICES, INC., DATED 08/21/2021. EXISTING FEATURES MAY NOT BE EXACT TO THEIR LOCATION. CONTRACTOR RESPONSIBLE FOR VERIFYING THE CONDITIONS OF THE SITE AND MUST IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF DISCREPANCIES OR VARIATIONS FROM THE DRAWINGS.
- SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CIASCE 38-2 ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA". EXACT LOCATION/DEPTH OF SUBSURFACE UTILITIES SUCH AS GAS, TELEPHONE, FIBER OPTIC, SEWER, WATER, PIPELINES, ELECTRICAL, AND CABLE TV ARE UNKNOWN AND THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE.
- CONTRACTOR RESPONSIBLE FOR CONTACTING GOPHER STATE ONE CALL (1-800-252-1166) A MINIMUM OF 48 HOURS IN ADVANCE (EXCLUDING HOLIDAYS AND WEEKENDS) BEFORE STARTING WORK FOR LOCATIONS OF UNDERGROUND UTILITIES.
- CONTRACTOR SHALL ANTICIPATE PRIVATE UTILITY CONFLICTS THROUGHOUT THE PROJECT SUB CUT AND TRENCH AREAS AND MUST COORDINATE THE RELOCATION OR PROTECTION OF EXISTING UTILITIES, OR INSTALLATION OF NEW UTILITIES WITH UTILITY OWNERS THAT MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE STARTING WORK. COSTS FOR SUCH WORK, INCLUDING EXTRA TIME AND EFFORT FOR PROVISIONS NECESSARY TO WORK AROUND OR UNDER UTILITIES, IS THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER. FEES OR CHARGES WHICH ARE TO BE PAID TO THE UTILITY COMPANY, INCLUDING WORK THAT MUST BE PERFORMED BY THE UTILITY COMPANY, ARE AT NO ADDITIONAL COST TO THE OWNER.
- QUANTITIES ARE APPROXIMATE, AND MAY VARY TO ALLOW COMPLETION OF WORK.
- WORK AND MATERIALS MUST COMPLY WITH CITY, COUNTY, STATE, AND FEDERAL (INCLUDING OSHA) REGULATIONS AND CODES.
- CONTRACTOR SHALL COORDINATE WORK WITH OTHER CONTRACTORS PERFORMING WORK AT OR NEAR THE SITE.
- CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS TO ADJACENT PROPERTIES THROUGHOUT CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE AND MAINTAIN MAIL, GARBAGE, AND RECYCLING SERVICES TO PROPERTIES THROUGHOUT CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE AND MAINTAIN STORMWATER DRAINAGE CONVEYANCE THROUGHOUT CONSTRUCTION (BOTH PIPED AND OVERLAND FLOW).
- CONTRACTOR SHALL COORDINATE AND MAINTAIN WATER AND SANITARY FLOW TO AND FROM PROPERTIES. PROVIDE BYPASS AND TEMPORARY SYSTEMS, AS NECESSARY.
- CONTRACTOR SHALL COORDINATE AND MAINTAIN UTILITY SERVICES TO ADJACENT PROPERTIES AT ALL TIMES. UTILITY SERVICE MUST NOT BE INTERRUPTED WITHOUT APPROVAL FROM OWNER, CITY, AND ADJACENT PROPERTIES.
- CONSTRUCTION LIMITS ARE TO PROPERTY LINE UNLESS SHOWN OR NOTED OTHERWISE. CONTRACTOR SHALL RESTRICT CONSTRUCTION ACTIVITIES TO AREAS DESIGNATED ON PLANS WITHIN THE CONSTRUCTION LIMITS.
- CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING PAVEMENT, SITE FEATURES, UTILITIES, TREES, ETC., UNLESS NOTED OR SHOWN OTHERWISE.
- CONTRACTOR SHALL PHOTO OR VIDEO DOCUMENT EXISTING CONDITIONS OF TREES AND PLANTINGS, ADJOINING CONSTRUCTION, SURFACES, AND SITE IMPROVEMENTS, ETC. TO REMAIN THAT MIGHT BE MISCONSTRUED AS DAMAGE CAUSED BY CONSTRUCTION OPERATIONS. SUBMIT TO ENGINEER AND OWNER BEFORE CONSTRUCTION BEGINS. USE ADEQUATELY DETAILED PHOTOGRAPHS OR VIDEO RECORDINGS. INCLUDE PLANS AND NOTATIONS TO INDICATE SPECIFIC EXISTING DAMAGE CONDITIONS OF ITEMS DESIGNATED TO REMAIN. ANY DAMAGE TO THE EXISTING PAVEMENT, CURBING, STRIPING, OR OTHER SITE FEATURE TO REMAIN MUST BE REPLACED BY THE CONTRACTOR, TO OWNER'S SATISFACTION, AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING CONSTRUCTION AND WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES.
- CONTRACTOR MUST IMMEDIATELY NOTIFY THE OWNER AND ENGINEER IN WRITING OF DISCREPANCIES OR CONFLICTS IN THE CONTRACT DOCUMENTS BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO NOTIFY OWNER AND ENGINEER OF AN IDENTIFIABLE CONFLICT BEFORE PROCEEDING WITH INSTALLATION RELIEVES OWNER AND ENGINEER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.
- CONTRACTOR SHALL HAVE ONE COPY OF EACH REQUIRED CONSTRUCTION PERMIT AND ONE COPY OF THE MOST CURRENT AND COMPLETE SET OF CONSTRUCTION DOCUMENTS (INCLUDING PLANS, SPECIFICATIONS, GEOTECHNICAL REPORT, SPECIAL CONDITIONS AND PROVISIONS, ETC.) AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
- CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR IMPLEMENTATION AND ENFORCEMENT OF SAFE WORK PRACTICES, INCLUDING BUT NOT LIMITED TO PERSONNEL MONITORING, USE OF TRENCHING, SHEETING, AND SHORING, SCAFFOLDING, MATERIALS HANDLING AND DRILLING; OPERATION OF EQUIPMENT; AND SAFETY OF PUBLIC DURING PROGRESS OF WORK.
- CONTRACTOR SHALL PLAN FOR AND ENSURE PERSONNEL COMPLY WITH PROVISIONS OF OSHA SAFETY AND HEALTH STANDARDS (29 CFR 1910) AND GENERAL CONSTRUCTION STANDARDS (29 CFR 1926) AS APPROPRIATE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH WORK. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS FOR SAFETY OF EMPLOYEES ON PROJECT SITE AND OTHER PERSONS AND ORGANIZATIONS WHO MAY BE AFFECTED BY THE PROJECT. CONTRACTOR'S DUTIES AND RESPONSIBILITIES FOR SAFETY IN CONNECTION WITH WORK SHALL CONTINUE UNTIL SUCH TIME AS ALL WORK IS COMPLETED, AND ENGINEER HAS ISSUED NOTICE TO CONTRACTOR THAT WORK IS COMPLETE.
- HAZARDOUS MATERIALS, INCLUDING BUT NOT LIMITED TO OIL, GASOLINE, PAINT AND OTHER HAZARDOUS SUBSTANCES MUST BE PROPERLY STORED, BY THE CONTRACTOR, INCLUDING SECONDARY CONTAINMENTS, TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH MPCA REGULATIONS. CONTRACTOR SHALL REMOVE SPILL OF FUELS, OILS, OR OTHER CHEMICALS IMMEDIATELY UPON DETECTION.
- CONTRACTOR SHALL DOCUMENT AND MAINTAIN AS-BUILT INFORMATION AS CONSTRUCTION PROGRESSES AND IS RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER AS REQUIRED BY JURISDICTIONAL AGENCIES FOR CERTIFICATION. ALL AS-BUILT DATA MUST BE COLLECTED BY A STATE OF MN PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED AND PAID FOR BY THE CONTRACTOR.

## HORIZONTAL AND VERTICAL CONTROL NOTES

- THE VERTICAL CONTROL FOR THE EXISTING PLAN IS NGVD29.
- THE HORIZONTAL CONTROL FOR THE PROPOSED PLAN IS NAD83 HENNEPIN COUNTY COORDINATES SYSTEM US FOOT.
- THE VERTICAL CONTROL FOR THE PROPOSED PLAN IS NAVD88.

## REMOVAL / DEMOLITION NOTES

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- CONTRACTOR SHALL OBTAIN PERMITS REQUIRED FOR DEMOLITION, REMOVAL AND DISPOSAL.
- CONTRACTOR SHALL REVIEW FEATURES NOT SPECIFICALLY IDENTIFIED ON PLAN FOR SALVAGE OR REMOVAL THAT CONFLICT WITH CONSTRUCTION WITH THE ENGINEER.
- MATERIALS REMOVED/DEMOLISHED BY CONTRACTOR BECOME PROPERTY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED. CONTRACTOR SHALL LOAD AND HAUL MATERIAL OFF-SITE AND PROPERLY DISPOSE OF MATERIALS IN ACCORDANCE WITH APPLICABLE REGULATIONS. CONTRACTOR MUST LEAVE THE SITE IN A CONDITION TO THE SATISFACTION OF THE OWNER AND ENGINEER.
- CONTRACTOR SHALL SAWCUT FULL DEPTH AT PAVEMENT REMOVAL LIMITS AND AS NECESSARY TO CREATE A SMOOTH FIT/TRANSITION ALONGS MATCHING PAVEMENT AREAS.
- CONTRACTOR SHALL COORDINATE UTILITY REMOVAL WORK WITH APPROPRIATE UTILITY OWNER.
- CONTRACTOR SHALL SALVAGE AND REINSTALL STREET AND TRAFFIC SIGNS IN CONFLICT WITH CONSTRUCTION ACTIVITIES AS NOTED OR AS DIRECTED BY ENGINEER. IF SIGNS ARE DAMAGED DURING CONSTRUCTION, CONTRACTOR REQUIRED TO PROVIDE NEW SIGNS AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL SALVAGE AND REINSTALL FENCE IN CONFLICT WITH CONSTRUCTION ACTIVITIES AS NOTED OR AS DIRECTED BY ENGINEER. IF FENCE IS DAMAGED DURING CONSTRUCTION, CONTRACTOR REQUIRED TO PROVIDE NEW FENCE, TO OWNER'S SATISFACTION, AT NO ADDITIONAL COST TO THE OWNER.
- IN THE EVENT THAT UNKNOWN CONTAINERS OR TANKS ARE ENCOUNTERED, THE CONTRACTOR MUST CONTACT THE ENGINEER IMMEDIATELY. ALL CONTAINERS OR TANKS MUST BE DISPOSED OF PROPERLY AT A REGULATED/PERMITTED FACILITY.
- CONTRACTOR SHALL REVIEW ALL TREE REMOVALS WITH THE OWNER AND ENGINEER PRIOR TO REMOVAL OPERATIONS.
- CLEARING AND GRUBBING OPERATIONS MUST COMPLY WITH THE FOLLOWING:
  - PROTECT ALL TREES AND PLANTS NOT DESIGNATED FOR REMOVAL.
  - CONDUCT OPERATIONS IN SUCH A MANNER THAT DOES NOT DAMAGE PROTECTED TREES AND VEGETATION.
  - CUT, REMOVE, AND DISPOSE OF TREES, BRUSH, SHRUBS, WINDFALLS, LOGS, STUMPS, ROOTS, FALLEN TIMBER, AND OTHER VEGETATION.
  - BACKFILL DEPRESSIONS WITH NATIVE SOILS OR SUITABLE FILL MATERIAL AS REQUIRED BY DESIGN OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER AND COMPACT BACKFILL AS DIRECTED.
  - DISPOSE OF DEBRIS IN ACCORDANCE WITH APPLICABLE REGULATIONS.
  - CONSIDER BENEFICIAL USE DESIGNATIONS FOR UNADULTERATED WOOD, WOOD CHIPS, BARK AND SAWDUST.
  - NO BURYING OF CLEARED AND GRUBBED WASTE WITHIN THE CONSTRUCTION LIMITS.

## EROSION CONTROL NOTES

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- CONTRACTOR SHALL CONFORM TO AND CONDUCT INSPECTIONS IN ACCORDANCE WITH THE NPDES PERMIT REQUIREMENTS.
- BEFORE SITE DISTURBANCE AND AS REQUIRED AS CONSTRUCTION PROGRESSES, CONTRACTOR SHALL INSTALL, MAINTAIN, REPAIR, AND REPLACE EROSION PREVENTION MEASURES AND SEDIMENT CONTROL DEVICES (INLET PROTECTION, CONSTRUCTION ENTRANCE, SILT FENCE, EROSION CONTROL BLANKET, ETC.) IN ACCORDANCE WITH THE NPDES PERMIT, AND CITY, STATE, AND WATERSHED DISTRICT PERMITS.
- ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DEPENDING ON SITE CONDITIONS DURING CONSTRUCTION. COORDINATE WITH ENGINEER.
- CONTRACTOR SHALL STABILIZE ALL EXPOSED SOIL AREAS WITHIN THE CONSTRUCTION LIMITS WITHIN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE THAT HAS TEMPORARILY (WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS) OR PERMANENTLY CEASED. STABILIZATION MUST BE INITIATED PROMPTLY.
- CONTRACTOR SHALL REMOVE ANY SEDIMENT THAT HAS TRACKED ONTO PAVED SURFACES BOTH ON AND OFFSITE WITHIN 24 HOURS AND AS DIRECTED BY CITY, OWNER, AND/OR ENGINEER. SWEEP STREET IN ACCORDANCE WITH CITY AND NDPS PERMIT REQUIREMENTS.
- CONTRACTOR SHALL COMPLETE CONCRETE WASH-OUT OFF-SITE OR PROVIDE SELF-CONTAINED CONCRETE READY MIX TRUCKS.
- CONTRACTOR SHALL MINIMIZE DUST FROM CONSTRUCTION OPERATIONS BY PROVIDING WATER OR OTHER APPROVED METHOD ON A DAILY BASIS.
- CONTRACTOR SHALL PHASE GRADING WORK TO MINIMIZE THE DURATION THAT DISTURBED SOIL IS EXPOSED.
- CONTRACTOR SHALL PROVIDE/INSTALL DIVERSION DITCHES, SEDIMENT BASINS, AND OTHER EROSION PROTECTION/SEDIMENT CONTROL MEASURES AS NECESSARY DURING INTERIM PROJECT CONDITIONS (NOT SHOWN ON PLANS) TO MANAGE/DIVERT STORM WATER AWAY FROM SITE FEATURES AND CONTROL EROSION/SEDIMENT. CONTRACTOR SHALL ADJUST MEASURES AS NECESSARY THROUGHOUT PROJECT PHASING.
- CONTRACTOR SHALL LOCATE SOIL STOCKPILES NO LESS THAN 50 FEET FROM ROADWAYS, STORMWATER INLETS, PONDS, WETLANDS, DRAINAGE CHANNELS, AND OTHER SURFACE FEATURES. IF REMAINING FOR MORE THAN 7 DAYS, STABILIZE THE STOCKPILES BY MULCHING, VEGETATED COVER, TARPS, OR OTHER MEANS IN ACCORDANCE WITH THE NPDES PERMIT. PLACE PERIMETER SEDIMENT CONTROLS AROUND STOCKPILES TO CONTROL EROSION. COVER TEMPORARY STOCKPILES LOCATED ON PAVED SURFACES IF LEFT FROM MORE THAN 24 HOURS.
- CONTRACTOR SHALL REMOVE ALL EROSION CONTROL MEASURES AFTER SITE HAS BEEN STABILIZED AND VEGETATION IS ESTABLISHED AS DIRECTED BY ENGINEER. EROSION CONTROL MEASURES USED FOR CONSTRUCTION MUST NOT BE REMOVED UNTIL AUTHORIZED BY OWNER OR ENGINEER.
- SOIL PREPARATION: PREPARE SOIL IN ACCORDANCE WITH MNDOT SPECS 2574, PART 3 A.4 SOIL BED PREPARATION AND PART 3 A.5 SUBSOILING.
- RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT (RPBCWD) SPECIFICATIONS
  - NATURAL TOPOGRAPHY AND SOIL CONDITIONS MUST BE PROTECTED, INCLUDING RETENTION ONSITE OF NATIVE TOPSOIL TO THE GREATEST EXTENT POSSIBLE.
  - ADDITIONAL MEASURES, SUCH AS HYDRAULIC MULCHING AND OTHER PRACTICES AS SPECIFIED BY THE DISTRICT MUST BE USED ON SLOPES OF 3:1 (H:V) OR STEEPER TO PROVIDE ADEQUATE STABILIZATION.
  - FINAL SITE STABILIZATION MEASURES MUST SPECIFY THAT AT LEAST SIX INCHES OF TOPSOIL OR ORGANIC MATTER BE SPREAD AND INCORPORATED INTO THE UNDERLYING SOIL DURING FINAL SITE TREATMENT WHEREVER TOPSOIL HAS BEEN REMOVED.
  - CONSTRUCTION SITE WASTE SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER AND SANITARY WASTE MUST BE PROPERLY MANAGED.
  - ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPS MUST BE MAINTAINED UNTIL COMPLETION OF CONSTRUCTION AND VEGETATION IS ESTABLISHED SUFFICIENTLY TO ENSURE STABILITY OF THE SITE, AS DETERMINED BY THE DISTRICT.
  - ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPS MUST BE REMOVED UPON FINAL STABILIZATION.
  - ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPS MUST BE REMOVED UPON FINAL STABILIZATION.
  - ALL DISTURBED AREAS MUST BE STABILIZED WITHIN 7 CALENDAR DAYS AFTER LAND-DISTURBING WORK HAS TEMPORARILY OR PERMANENTLY CEASED ON A PROPERTY THAT DRAINS TO AN IMPAIRED WATER, WITHIN 14 DAYS ELSEWHERE.
  - THE PERMITTEE MUST, AT A MINIMUM, INSPECT, MAINTAIN AND REPAIR ALL DISTURBED SURFACES AND ALL EROSION AND SEDIMENT CONTROL FACILITIES AND SOIL STABILIZATION MEASURES EVERY DAY WORK IS PERFORMED ON THE SITE AND AT LEAST WEEKLY UNTIL LAND-DISTURBING ACTIVITY HAS CEASED. THEREAFTER, THE PERMITTEE MUST PERFORM THESE RESPONSIBILITIES AT LEAST WEEKLY UNTIL VEGETATIVE COVER IS ESTABLISHED. THE PERMITTEE WILL MAINTAIN A LOG OF ACTIVITIES UNDER THIS SECTION FOR INSPECTION BY THE DISTRICT ON REQUEST.
  - ACTIVITIES MUST BE CONDUCTED SO AS TO MINIMIZE THE POTENTIAL TRANSFER OF AQUATIC INVASIVE SPECIES (E.G., ZEBRA MUSSELS, EURASIAN WATERMILFOIL, ETC.) TO THE MAXIMUM EXTENT POSSIBLE.
  - EROSION OF BANKS BY ENTRY OF CONSTRUCTION EQUIPMENT WILL BE AVOIDED. (PER RULE E, SUBSECTION 3.3)
  - NO EXCESS POND SEDIMENTS CAN BE PLACED IN THE UPSTREAM POND OR PLACED IN THE FLOODPLAIN.
  - NO ACTIVITY AFFECTING THE BED OR BANKS OF A PROTECTED WATER MAY BE CONDUCTED BETWEEN MARCH 15 AND JUNE 15 ON WATERCOURSES, OR BETWEEN APRIL 1 AND JUNE 30 ON ALL OTHER PUBLIC WATER WATERBODIES, TO MINIMIZE IMPACTS ON FISH SPAWNING AND MIGRATION. (PER RULE G, SUBSECTION 3.7A)
  - BANKS MUST BE STABILIZED IMMEDIATELY AFTER COMPLETION OF PERMITTED WORK AND REVEGETATED AS SOON AS GROWING CONDITIONS ALLOW. (PER RULE G, SUBSECTION 3.7B)
  - TOPSOIL SHALL BE REQUIRED TO BE A MINIMUM OF 5% ORGANIC MATTER TO BE IN COMPLIANCE WITH RPBCWD'S TOPSOIL REQUIREMENTS.

## DEWATERING NOTES

- CONTRACTOR SHALL ANTICIPATE GROUND WATER. A BID ITEM HAS BEEN PROVIDED FOR ALL DEWATERING WORK NECESSARY FOR CONSTRUCTION.
- CONTRACTOR SHALL OBTAIN APPLICABLE REQUIRED PERMITS (INCLUDING MN DNR WATER APPROPRIATION PERMIT) AND SUBMIT DEWATERING PLAN TO ENGINEER FOR REVIEW. DEWATERING MUST MEET PERMIT REQUIREMENTS AND BE ACCEPTED BEFORE STARTING CONSTRUCTION ACTIVITIES.
- CONTRACTOR MUST DEWATER IN ACCORDANCE WITH THE PROJECT SWPPP AND NPDES PERMIT.
- CONTRACTOR MUST DISCHARGE TURBID OR SEDIMENT-LADEN WATER RELATED TO DEWATERING OR BASIN DRAINING (E.G. PUMPED DISCHARGES, TRENCH/DITCH CUTS FOR DRAINAGE) TO A TEMPORARY OR PERMANENT SEDIMENTATION BASIN ON THE PROJECT SITE UNLESS INFEASIBLE. CONTRACTOR MAY DISCHARGE FROM THE TEMPORARY OR PERMANENT SEDIMENTATION BASINS TO THE SURFACE WATERS IF THE BASIN WATER HAS BEEN VISUALLY CHECKED TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED IN THE BASIN AND THAT NUISANCE CONDITIONS (SEE MINNESOTA RULES CHAPTER 7050.0210, SUBPART 2) WILL NOT RESULT FROM THE DISCHARGE. IF THE WATER CANNOT BE DISCHARGED TO A SEDIMENTATION BASIN PRIOR TO ENTERING THE SURFACE WATER, IT MUST BE TREATED WITH THE APPROPRIATE BMPs (E.G. SILT BAGS), SUCH THAT THE DISCHARGE DOES NOT ADVERSELY AFFECT THE RECEIVING WATER OR DOWNSTREAM PROPERTIES. IF THE CONTRACTOR MUST DISCHARGE WATER THAT CONTAINS OIL OR GREASE, THE CONTRACTOR MUST USE AN OIL-WATER SEPARATOR OR SUITABLE FILTRATION DEVICE (E.G. CARTRIDGE FILTERS, ABSORBENTS PADS) PRIOR TO DISCHARGING THE WATER. THE CONTRACTOR MUST ENSURE THAT DISCHARGE POINTS ARE ADEQUATELY PROTECTED FROM EROSION AND SCOUR. THE DISCHARGE MUST BE DISPERSED OVER NATURAL ROCK RIPRAP, SANDBAGS, PLASTIC SHEETING, OR OTHER ACCEPTED ENERGY DISSIPATION MEASURES.
- CONTRACTOR MUST DISCHARGE WATER FROM DEWATERING OR BASIN-DRAINING ACTIVITIES IN A MANNER THAT DOES NOT CAUSE NUISANCE CONDITIONS, EROSION IN RECEIVING CHANNELS OR ON DOWN SLOPE PROPERTIES, OR INUNDATION IN WETLANDS CAUSING SIGNIFICANT ADVERSE IMPACT TO THE WETLAND.
- IF THE CONTRACTOR IS USING FILTERS WITH BACKWASH WATER, THE CONTRACTOR MUST HAUL THE BACKWASH WATER AWAY FOR DISPOSAL. RETURN THE BACKWASH WATER TO THE BEGINNING OF THE TREATMENT PROCESS, OR INCORPORATE THE BACKWASH WATER INTO THE SITE IN A MANNER THAT DOES NOT CAUSE EROSION. THE CONTRACTOR MAY DISCHARGE BACKWASH WATER TO THE SANITARY SEWER IF PERMISSION IS GRANTED BY THE SANITARY SEWER AUTHORITY. THE CONTRACTOR MUST REPLACE AND CLEAN THE FILTER MEDIA USED IN DEWATERING DEVICES WHEN REQUIRED TO RETAIN ADEQUATE FUNCTION.

## TREE PRESERVATION NOTES

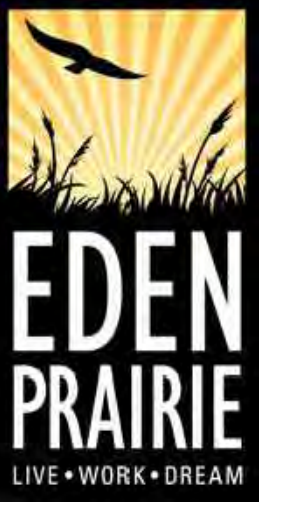
- CONTRACTOR SHALL PROTECT EXISTING TREES THAT ARE NOT TO BE REMOVED. INSTALL ORANGE MESH FENCING, 4 FEET HIGH, WITH STAKES EVERY 10 FEET, 5 FEET OUTSIDE OF THE DRIP LINE OF PRESERVED TREES, OR AT THE CONSTRUCTION LIMITS. DO NOT PERFORM ACTIONS WITHIN THE PROTECTED AREA THAT MAY HARM THE TREE AND COMPACT THE SOIL, INCLUDING EXCAVATION, STORING MATERIALS, PARKING AND TRAFFIC DURING CONSTRUCTION. WHERE CONSTRUCTION REQUIRES DISTURBANCE WITHIN THE PROTECTED AREAS, DISTURB THE ROOT ZONE AS LITTLE AS POSSIBLE.
- TREE PROTECTION MEASURES/FENCING MUST BE IN PLACE PRIOR TO BEGINNING CONSTRUCTION AND MUST BE REVIEWED BY OWNER AND ENGINEER BEFORE STARTING CONSTRUCTION.
- WHEN TREE ROOTS ARE ENCOUNTERED THAT MUST BE REMOVED, CONTRACTOR SHALL CUT ROOTS CLEANLY AS FAR FROM THE TREE AS POSSIBLE AND IMMEDIATELY WATER AND BACKFILL OVER THE ROOTS TO PREVENT DRYING.

## TRAFFIC CONTROL NOTES

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- CONTRACTOR SHALL COORDINATE CONSTRUCTION STAGING, ON OR OFFSITE, AS NECESSARY TO COMPLETE THE WORK. IF OFFSITE STAGING AREA IS REQUIRED, CONTRACTOR IS RESPONSIBLE TO FIND, OBTAIN, AND PAY FOR NECESSARY STAGING AREA AT NO ADDITIONAL COST TO THE OWNER. SUBMIT A STAGING PLAN TO THE ENGINEER FOR REVIEW BEFORE STARTING WORK.
- CONTRACTOR RESPONSIBLE FOR ALL TRAFFIC CONTROL AND DETOURS. TRAFFIC CONTROL AND DETOURS MUST BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MN MUTCD, INCLUDING LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS. SUBMIT TRAFFIC CONTROL PLAN AND DETOUR PLAN TO CITY AND ENGINEER FOR REVIEW BEFORE CONSTRUCTION RELATED ACTIVITIES. PLANS MUST COMPLY WITH APPLICABLE PERMIT REQUIREMENTS.
- CONTRACTOR MUST SCHEDULE WORK IMPACTING WELTER'S WAY WITH THE OWNER, CITY AND ENGINEER. CLOSURES OR DETOURS MUST BE ACCEPTED BY OWNER AND CITY PRIOR TO STARTING WORK.
- CONTRACTOR SHALL MAINTAIN TWO-WAY TRAFFIC ON WELTER'S WAY AT ALL TIMES.



7500 OLSON MEMORIAL HWY  
SUITE 300  
GOLDEN VALLEY, MN 55427  
PHONE: 763-252-6800  
FAX: 952-831-1268



CLIENT:

CITY OF EDEN PRAIRIE  
POND IMPROVEMENTS  
CITY OF EDEN PRAIRIE  
HENNEPIN COUNTY, MINNESOTA

PROJECT TITLE:

DATE:	DESCRIPTION:	ISSUE NO.:
08/22/2021	50% CITY SUBMITTAL PLANS (POND 23-45-C)	1
08/19/2022	FINAL CITY SUBMITTAL PLANS (POND 23-45-C)	2

CERTIFICATION:  
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DUAL LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

*Josh J.O. Accola*

JOSH J.O. ACCOLA

LICENSE NO.: 56108

DATE: 08/19/2022

PROJECT NO.: 227704352

DWN BY: MDH    CHK'D BY: HK    APP'D BY: HK

ISSUE DATE: 08/19/2022

ISSUE NO.: 2

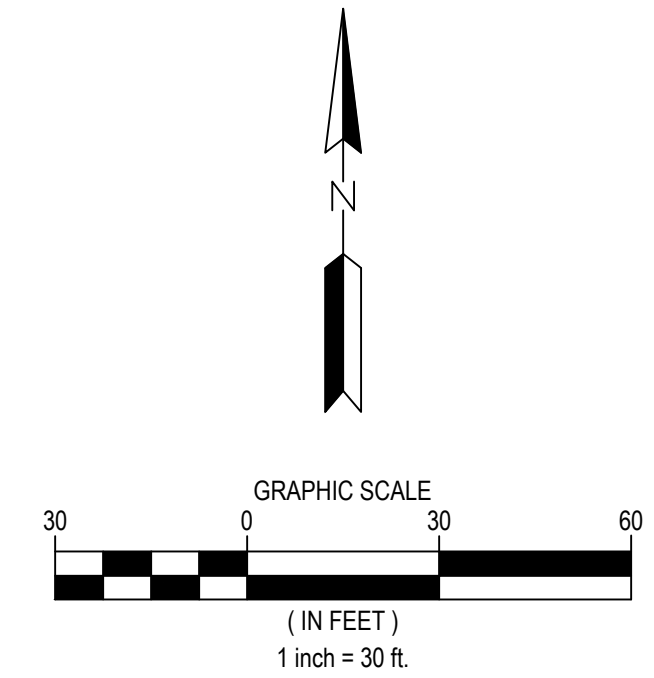
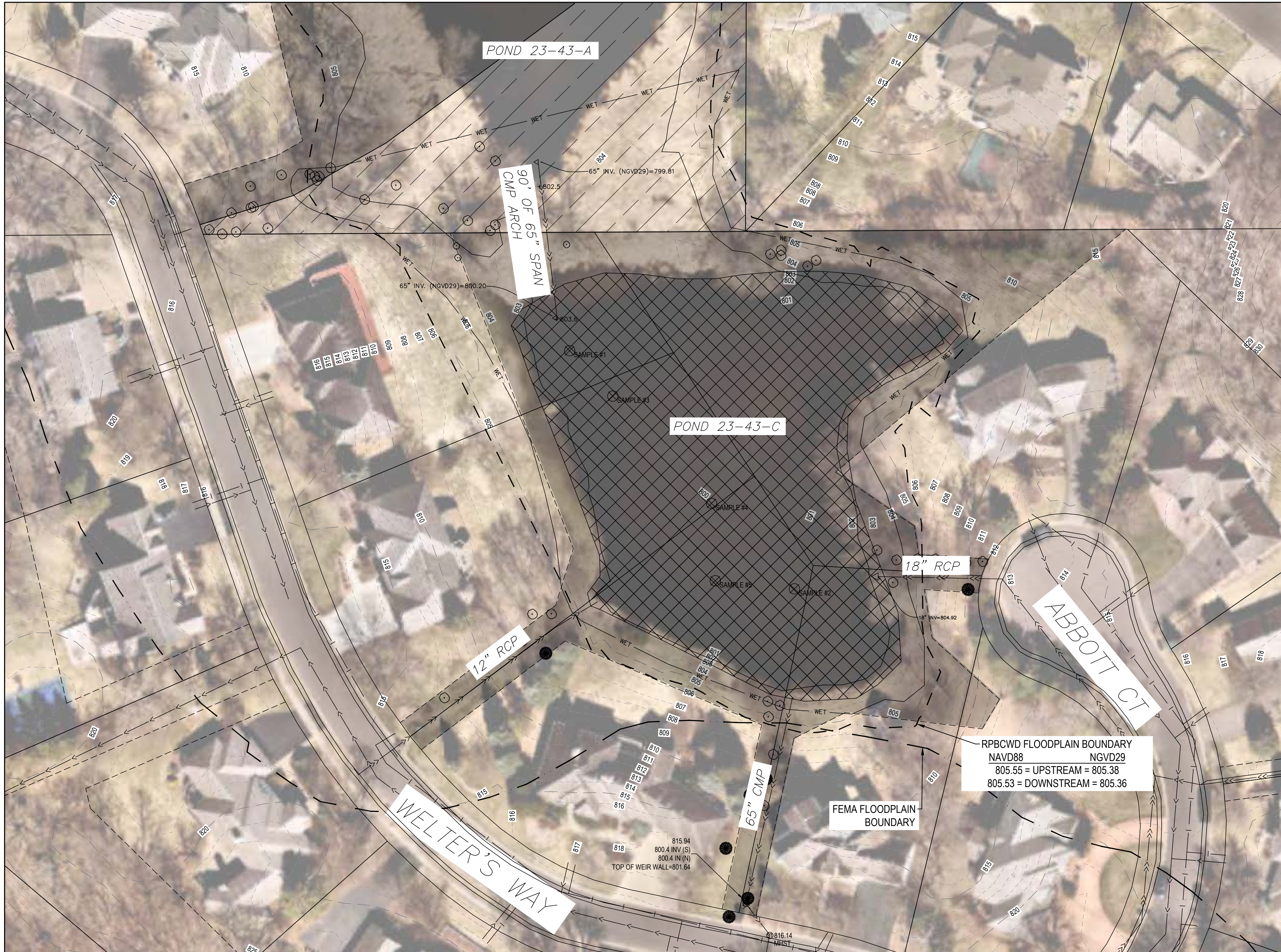
SHEET TITLE:

GENERAL NOTES

SHEET NO.:

G-002





**LEGEND**

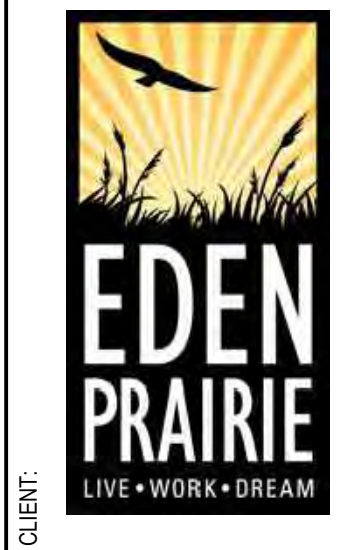
	PROPERTY BOUNDARY
	LOT LINE
	EASEMENT LINE
	SETBACK LINE
	RIGHT OF WAY LINE
	SECTION LINE
	QUARTER LINE
	EXISTING EASEMENT LINE
	EXISTING PROPERTY LINE
	EXISTING STORM SEWER
	EXISTING SANITARY SEWER
	EXISTING WATERMAIN
	901 EXISTING MINOR CONTOUR
	900 EXISTING MAJOR CONTOUR
	EXISTING EASEMENT
	CITY-OWNED PARCEL
	EXCEEDS TIER 1 RESIDENTIAL (2 mg/kg) or TIER 2 INDUSTRIAL (23 mg/kg) SRV/ BaP EQUIVALENT
	FEMA FLOOD BOUNDARY

- NOTES**
- SEE SHEET G-002 FOR ADDITIONAL PROJECT NOTES.
  - EXISTING UTILITY SERVICE LINES MAY NOT BE SHOWN IN THEIR ENTIRETY ON PLANS. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING UTILITY SERVICE LINES WITHIN THE LIMITS OF DISTURBANCE AND REMOVE EXISTING INFRASTRUCTURE AS NECESSARY TO INSTALL PROPOSED IMPROVEMENTS.
  - SEE SEDIMENT TESTING RESULTS MEMORANDUM FOR ADDITIONAL INFORMATION.

**WARNING:**  
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG  
**GOPHER STATE ONE CALL**  
 TWIN CITY AREA: 651-454-0002  
 TOLL FREE 1-800-252-1166



**CITY OF EDEN PRAIRIE  
 POND IMPROVEMENTS**  
 CITY OF EDEN PRAIRIE  
 HENNEPIN COUNTY, MINNESOTA

DATE	DESCRIPTION	ISSUE NO.
08/22/2021	50% CITY SUBMITTAL PLANS (POND 23-43-C)	1
08/19/2022	FINAL CITY SUBMITTAL PLANS (POND 23-43-C)	2

**CERTIFICATION:**  
 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.

*JOSH J.O. ACCOLA*  
 JOSH J.O. ACCOLA

LICENSE NO.: 56108

DATE: 08/19/2022

PROJECT NO.: 227704352

DWN BY: MDH    CHKD BY: HK    APPD BY: HK

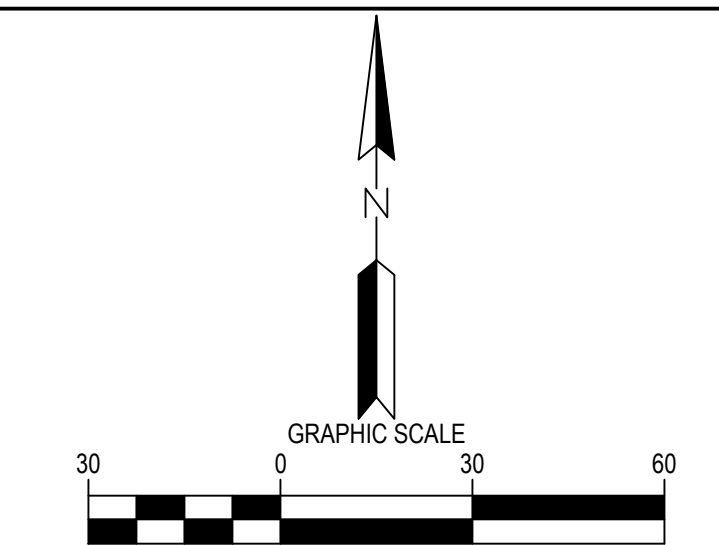
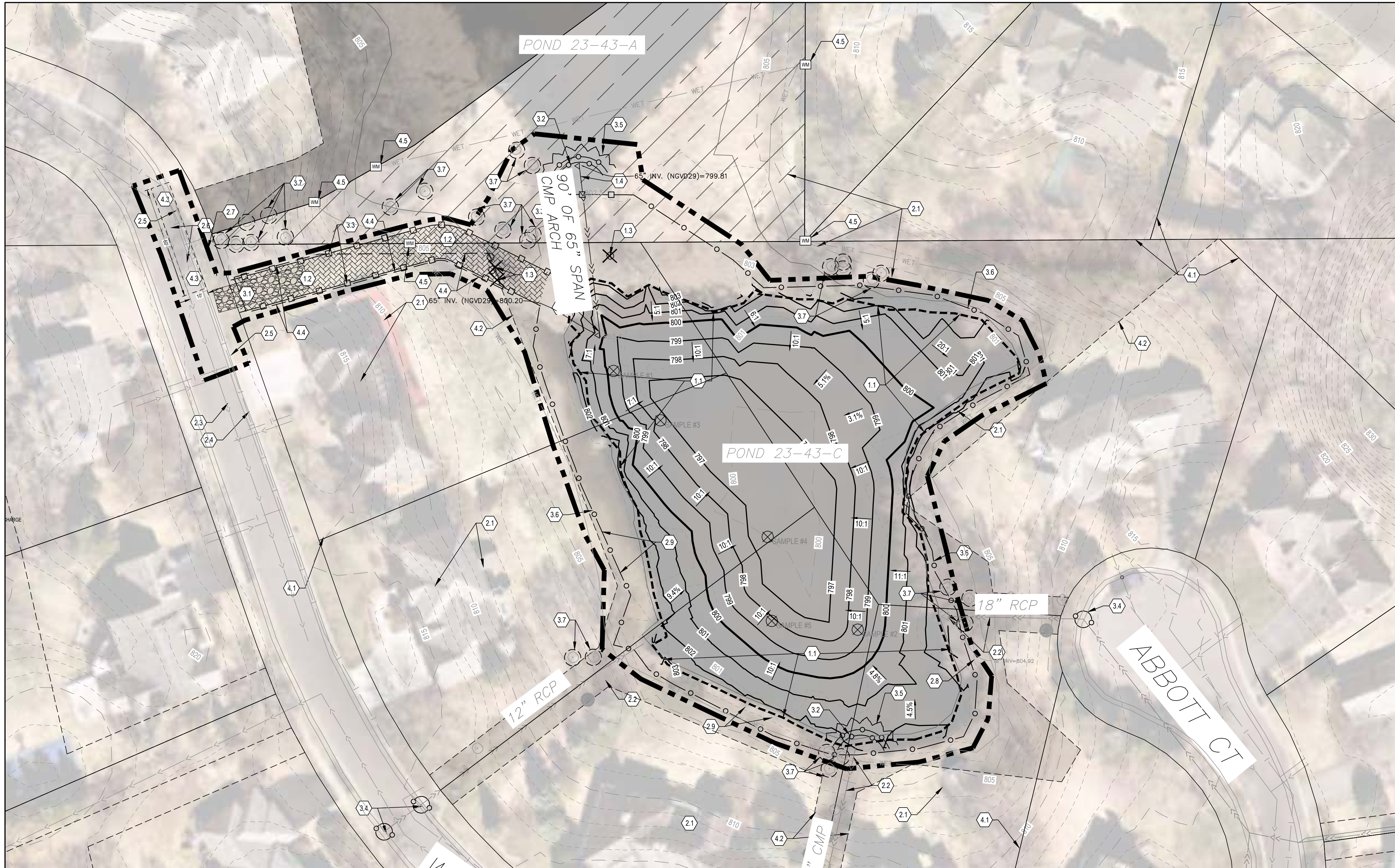
ISSUE DATE: 08/19/2022

ISSUE NO.: 2

SHEET TITLE:  
 EXISTING CONDITIONS

SHEET NO.:  
**G-003**





**LEGEND**

- PROPERTY BOUNDARY
- LOT LINE
- EASEMENT LINE
- SETBACK LINE
- RIGHT OF WAY LINE
- SECTION LINE
- QUARTER LINE
- EXISTING EASEMENT LINE
- EXISTING PROPERTY LINE
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- ROCK CONSTRUCTION EXIT
- CLEAR AND GRUB
- RIPRAP
- SILT FENCE
- FLOTATION SILT CURTAIN
- TEMPORARY EARTH DAM
- ORANGE CONSTRUCTION FENCE
- POND DREDGING LIMITS
- CONSTRUCTION LIMITS
- CULVERT PROTECTION
- INLET PROTECTION
- REMOVE EXISTING TREE
- EXISTING EASEMENT
- CITY-OWNED PARCEL
- TREE PROTECTION
- WETLAND MONUMENT

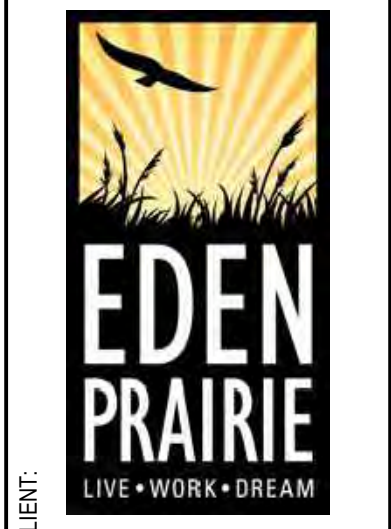
**KEYNOTES**

1. REMOVAL ITEM
  - 1.1. POND DREDGING LIMITS. APPROXIMATE LOCATION ONLY. REMOVE EXCESS SEDIMENT GREATER THAN 1 FOOT IN DEPTH TO POND BOTTOM. APPROXIMATE VOLUME OF EXCESS SEDIMENT = 1,946 CU YD.
  - 1.2. CLEAR AND GRUB EXISTING TREES/ VEGETATION AS NECESSARY FOR PROPOSED IMPROVEMENTS.
  - 1.3. REMOVE TREE
  - 1.4. REMOVE EXISTING CULVERT, FLARED END SECTIONS, AND ALL APPURTENANCES.
2. PROTECT ITEM
  - 2.1. PROTECT EXISTING BUILDING, PAVEMENT AND INFRASTRUCTURE.
  - 2.2. PROTECT EXISTING STORM PIPES, STRUCTURES, AND ALL APPURTENANCES (TYP.)
  - 2.3. PROTECT EXISTING SANITARY PIPES, STRUCTURES, AND ALL APPURTENANCES (TYP.)
  - 2.4. PROTECT EXISTING WATERMAIN, VALVES, AND ALL APPURTENANCES (TYP.)
  - 2.5. PROTECT EXISTING CURB AND GUTTER (TYP.)
  - 2.6. PROTECT EXISTING BITUMINOUS PAVEMENT (TYP.)
  - 2.7. PROTECT EXISTING FIRE HYDRANT (TYP.)
  - 2.8. PROTECT EXISTING METAL FENCING (TYP.)
  - 2.9. PROTECT EXISTING RIPRAP (TYP.)
3. EROSION CONTROL ITEM
  - 3.1. ROCK CONSTRUCTION ENTRANCE - SEE DETAIL 1/C-801
  - 3.2. FLOTATION SILT CURTAIN - SEE DETAIL 2/C-801. INSTALL PRIOR TO DEWATERING AND INSTALLATION OF TEMPORARY EARTH DAM. UPON DEWATERING AND DAM INSTALLATION, REMOVE FLOTATION SILT CURTAIN IN THIS AREA AND INSTALL DOUBLE ROW SILT FENCE. TIE SILT FENCE ENDS INTO SLOPE ABOVE STRUCTURE.
  - 3.3. SILT FENCE - SEE DETAIL 3/C-801
  - 3.4. INLET PROTECTION - SEE DETAIL 4/C-801
  - 3.5. TEMPORARY EARTH DAM - COMPLY WITH ALL REQUIRED REGULATIONS AND PERMITTING CONTRACTOR SHALL PREVENT STORMWATER DISCHARGE TO DOWNSTREAM PONDS IN THE EVENT THAT TEMPERATURES ARE WARM ENOUGH TO ALLOW FLOWING WATER.
  - 3.6. ORANGE CONSTRUCTION/SNOW FENCE
  - 3.7. TREE PROTECTION (TYP.) - SEE NOTE 3, THIS SHEET
  - 3.8. MISCELLANEOUS ITEM
    - 4.1. EXISTING PARCEL BOUNDARY (TYP.)
    - 4.2. EXISTING EASEMENT (TYP.)
    - 4.3. TRUCK STAGING AREA - 60'X10'
    - 4.4. TEMPORARY CONSTRUCTION EASEMENT
    - 4.5. INSTALL WETLAND MONUMENT

**NOTES**

1. SEE SHEET G-002 FOR ADDITIONAL PROJECT NOTES.
2. CONSTRUCTION SITE SHALL HAVE A STABILIZED EXIT AT ALL TIMES THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR IS ULTIMATELY RESPONSIBLE TO PROTECT DOWNSTREAM WATERS FROM CONSTRUCTION RUNOFF.
3. UNTRENCHED SILT FENCE OR ORANGE SNOW FENCE MAY BE USED FOR TREE PROTECTION.
4. CONSTRUCTION LIMITS AND SILT FENCE ARE SHOWN OFFSET FROM PROPERTY LINE FOR CLARITY, WHERE APPLICABLE.
5. EXISTING TREES ON SITE MAY NOT BE SHOWN IN THEIR ENTIRETY. CONTRACTOR TO COORDINATE WITH OWNER PRIOR TO ANY TREE REMOVAL NOT SHOWN ON SURVEY.
6. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT ALL STORM INLETS RECEIVING CONSTRUCTION STORMWATER DISCHARGE HAVE PROPER INLET PROTECTION PER NPDES REQUIREMENTS.
7. CONTRACTOR MUST IMMEDIATELY NOTIFY THE OWNER AND ENGINEER IN WRITING OF DISCREPANCIES OR CONFLICTS IN THE CONTRACT DOCUMENTS BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO NOTIFY OWNER AND ENGINEER OF AN IDENTIFIABLE CONFLICT BEFORE PROCEEDING WITH INSTALLATION RELIEVES OWNER AND ENGINEER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.
8. NATURAL TOPOGRAPHY AND SOIL CONDITIONS MUST BE PROTECTED, INCLUDING RETENTION ON SITE OF NATIVE TOPSOIL TO THE GREATEST EXTENT POSSIBLE.
9. ADDITIONAL MEASURES, SUCH AS HYDRAULIC MULCHING AND OTHER PRACTICES AS SPECIFIED BY THE DISTRICT MUST BE USED ON SLOPES OF 3:1 (H:V) OR STEEPER TO PROVIDE ADEQUATE STABILIZATION.
10. FINAL SITE STABILIZATION MEASURES MUST SPECIFY THAT AT LEAST SIX INCHES OF TOPSOIL OR ORGANIC MATTER BE SPREAD AND INCORPORATED INTO THE UNDERLYING SOIL DURING FINAL SITE TREATMENT WHEREVER TOPSOIL HAS BEEN REMOVED.
11. CONSTRUCTION SITE WASTE SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER AND SANITARY WASTE MUST BE PROPERLY MANAGED.
12. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPS MUST BE MAINTAINED UNTIL COMPLETION OF CONSTRUCTION AND VEGETATION IS ESTABLISHED SUFFICIENTLY TO ENSURE STABILITY OF THE SITE, AS DETERMINED BY THE DISTRICT.
13. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPS MUST BE REMOVED UPON FINAL STABILIZATION.
14. SOIL SURFACES COMPACTED DURING CONSTRUCTION AND REMAINING PERVIOUS UPON COMPLETION OF CONSTRUCTION MUST BE DECOMPACTED TO ACHIEVE A SOIL COMPACTION TESTING PRESSURE OF LESS THAN 1,400 KILOPASCALS OR 200 POUNDS PER SQUARE INCH IN THE UPPER 12 INCHES OF THE SOIL PROFILE WHILE TAKING CARE TO PROTECT UTILITIES, TREE ROOTS, AND OTHER EXISTING VEGETATION.
15. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN 7 CALENDAR DAYS AFTER LAND-DISTURBING WORK HAS TEMPORARILY OR PERMANENTLY CEASED ON A PROPERTY THAT DRAINS TO AN IMPAIRED WATER, WITHIN 14 DAYS ELSEWHERE.
16. THE PERMITTEE MUST, AT A MINIMUM, INSPECT, MAINTAIN AND REPAIR ALL DISTURBED SURFACES AND ALL EROSION AND SEDIMENT CONTROL FACILITIES AND SOIL STABILIZATION MEASURES EVERY DAY WORK IS PERFORMED ON THE SITE AND AT LEAST WEEKLY UNTIL LAND-DISTURBING ACTIVITY HAS CEASED. THEREAFTER, THE PERMITTEE MUST PERFORM THESE RESPONSIBILITIES AT LEAST WEEKLY UNTIL VEGETATIVE COVER IS ESTABLISHED. THE PERMITTEE WILL MAINTAIN A LOG OF ACTIVITIES UNDER THIS SECTION FOR INSPECTION BY THE DISTRICT ON REQUEST.
17. ACTIVITIES MUST BE CONDUCTED SO AS TO MINIMIZE THE POTENTIAL TRANSFER OF AQUATIC INVASIVE SPECIES (E.G., ZEBRA MUSSELS, EURASIAN WATERMILFOIL, ETC.) TO THE MAXIMUM EXTENT POSSIBLE.
18. PROVIDE TURF, LANDSCAPING, IRRIGATION, AND PET CONTAINMENT SYSTEM PROTECTION. CONTRACTOR SHALL SELECT APPROPRIATE PROTECTION FOR THE EQUIPMENT AND SEQUENCING UTILIZED FOR THIS PROJECT. IF TURF, LANDSCAPING, IRRIGATION, OR PET CONTAINMENT IS DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL RESTORE THE DAMAGED AREA TO PRE-CONSTRUCTION CONDITIONS AT THE CONST OF THE CONTRACTOR (NO COST TO OWNER).
19. TREES AND WOODY DEBRIS REMOVAL WITHIN DREDGING EXTENTS IS INCIDENTAL AND THE RESPONSIBILITY OF THE CONTRACTOR.
20. SOIL SURFACES COMPACTED DURING CONSTRUCTION AND REMAINING PERVIOUS UPON COMPLETION OF CONSTRUCTION MUST BE DECOMPACTED TO ACHIEVE A SOIL COMPACTION TESTING PRESSURE OF LESS THAN 1,400 KILOPASCALS OR 200 POUNDS PER SQUARE INCH IN THE UPPER 12 INCHES OF THE SOIL PROFILE WHILE TAKING CARE TO PROTECT UTILITIES, TREE ROOTS, AND OTHER EXISTING VEGETATION.

**WARNING:**  
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 THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.  
 CALL BEFORE YOU DIG  
**GOPHER STATE ONE CALL**  
 TWIN CITY AREA: 651-454-0002  
 TOLL FREE 1-800-252-1166



**CITY OF EDEN PRAIRIE**  
**POND IMPROVEMENTS**  
 CITY OF EDEN PRAIRIE  
 HENNEPIN COUNTY, MINNESOTA

DATE	DESCRIPTION	ISSUE NO.
08/22/2021	50% CITY SUBMITTAL PLANS (POND 23-43-C)	1
08/19/2022	FINAL CITY SUBMITTAL PLANS (POND 23-43-C)	2

**CERTIFICATION:**  
 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.

JOSH J.O. ACCOLA  
 LICENSE NO.: 56108  
 DATE: 08/19/2022

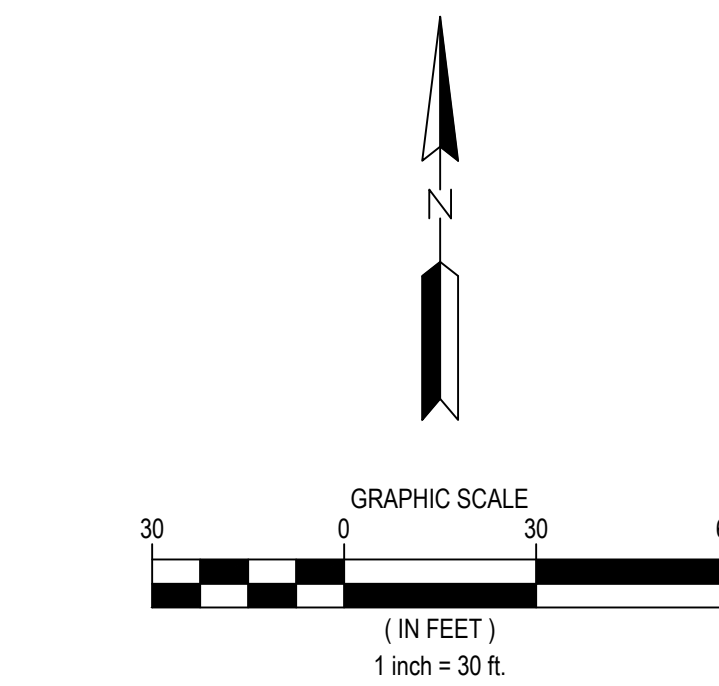
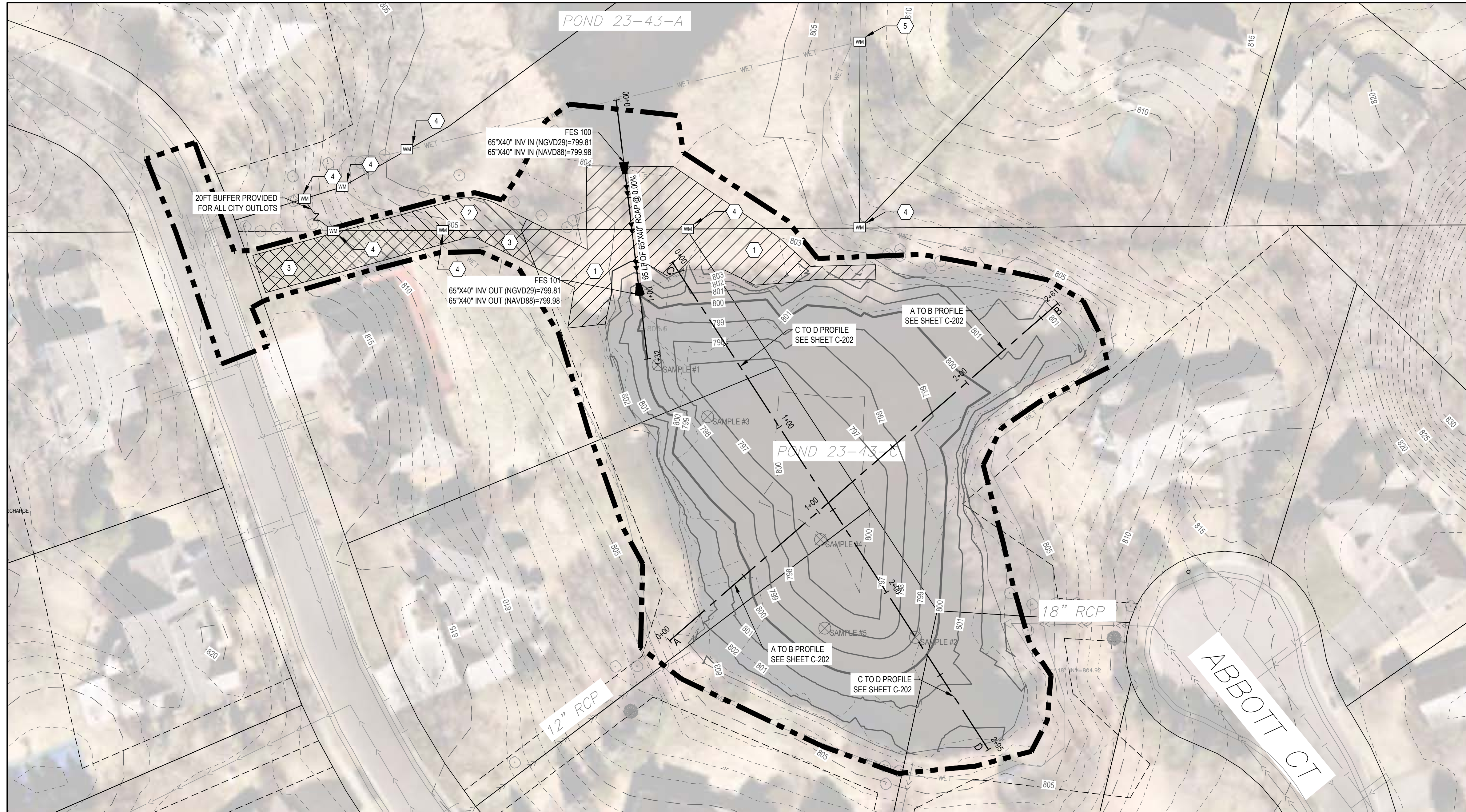
PROJECT NO.: 227704352  
 DWN BY: MDH  
 CHKD BY: HK  
 APPD BY: HK

ISSUE DATE: 08/19/2022  
 SHEET TITLE:  
**GRADING AND EROSION CONTROL PLAN**

SHEET NO.:  
**C-101**



8/16/2022 9:02:19 AM



**LEGEND**

	PROPERTY BOUNDARY
	LOT LINE
	EASEMENT LINE
	SETBACK LINE
	RIGHT OF WAY LINE
	SECTION LINE
	QUARTER LINE
	EXISTING EASEMENT LINE
	EXISTING PROPERTY LINE
	EXISTING MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	WETLAND BUFFER BOUNDARY
	WETLAND SEED MIX - MNDOT 34-261
	PROPERTY OWNER SPECIFIC SEED MIX
	BWSR MESIC SHORT URBAN BUFFER SOUTH & WEST SEED MIX
	WETLAND MONUMENT

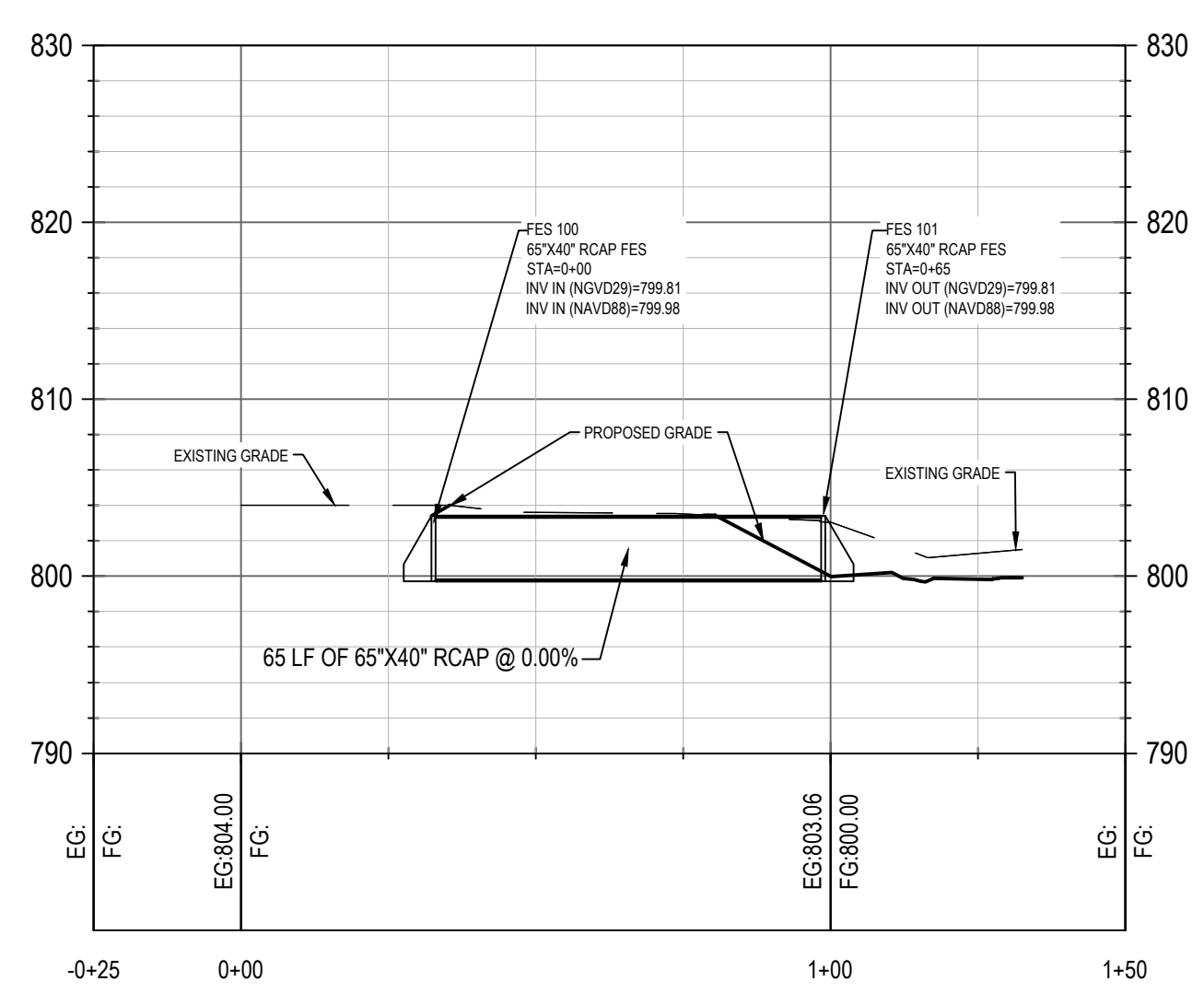
**NOTES**

- SEE SHEET G-002 FOR ADDITIONAL PROJECT NOTES.

**KEYNOTES**

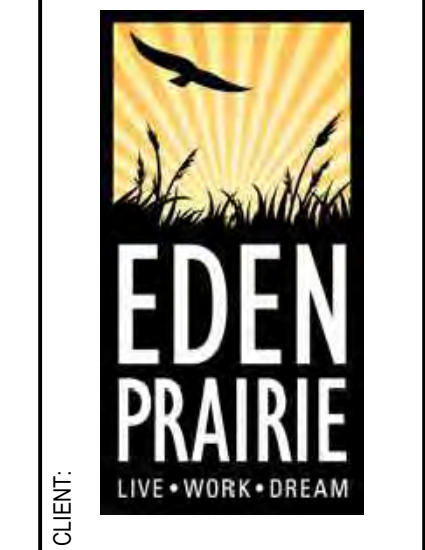
- MNDOT 34-261 WETLAND SEED MIX
- BWSR MESIC SHORT URBAN BUFFER SOUTH & WEST SEED MIX
- SEED MIX SPECIFIC TO PROPERTY OWNER. CONTRACTOR TO COORDINATE WITH OWNER AND CITY.
- INSTALL WETLAND BUFFER SIGN AT AN AVERAGE OF 20 FEET FROM THE DELINEATED EDGE OF A LOW VALUE WETLAND, WITH A MINIMUM WIDTH OF 10 FEET (SEE C-802).
- FLUSH MOUNT BUFFER MARKER REQUIRED ALONG PROPERTY LINES (SEE C-802).

**23-43-C CULVERT PROFILE**



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 TWIN CITY AREA: 651-454-0002  
 TOLL FREE 1-800-252-1166

**Stantec**  
 7500 OLSON MEMORIAL HWY  
 SUITE 300  
 GOLDEN VALLEY, MN 55427  
 PHONE: 763-252-6800  
 FAX: 952-831-1268



**CITY OF EDEN PRAIRIE**  
**POND IMPROVEMENTS**  
 CITY OF EDEN PRAIRIE  
 HENNEPIN COUNTY, MINNESOTA

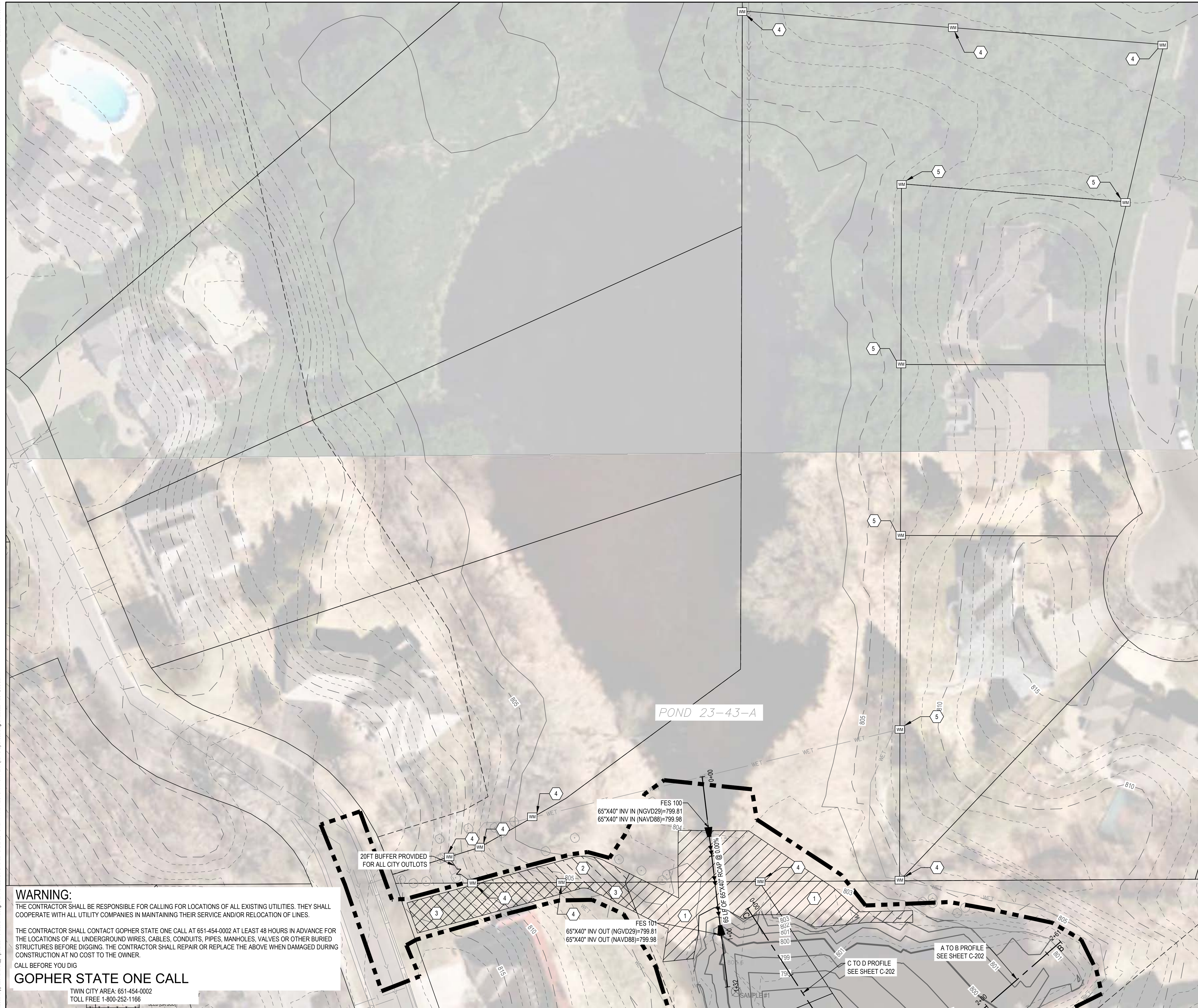
PROJECT TITLE: 23-43-C CULVERT PROFILE

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 JOSH J.O. ACCOLA  
 LICENSE NO.: 56108  
 DATE: 08/19/2022  
 PROJECT NO.: 227704352  
 DWN BY: MDH    CHK'D BY: HK    APP'D BY: HK  
 ISSUE DATE: 08/19/2022  
 ISSUE NO.: 2  
 SHEET TITLE: UTILITY AND RESTORATION PLAN  
 SHEET NO.: C-201

\\na02-pfd\01\shared\_projects\227704352\cadd\pfd\LANDSCAPE\23-43-C\201 UTILITY AND RESTORATION PLAN (23-43-C) (4552).dwg 8/16/2022 PESHK JOSEPH





**WARNING:**

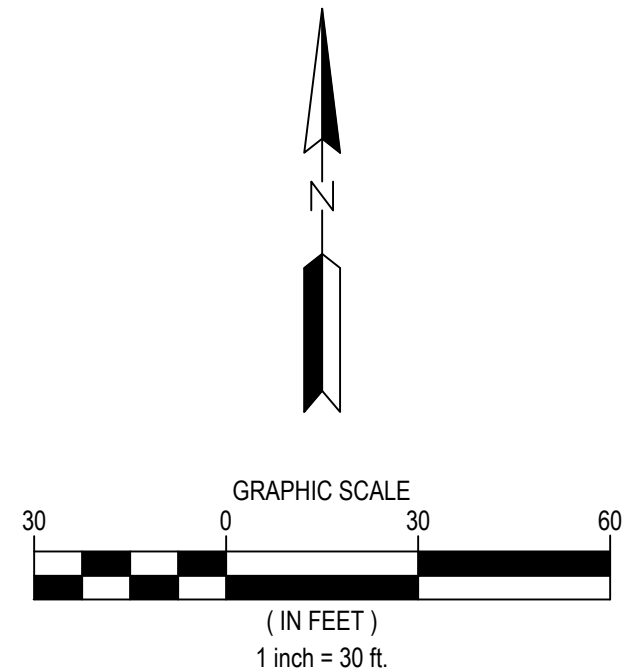
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CALL BEFORE YOU DIG

**GOPHER STATE ONE CALL**

TWIN CITY AREA: 651-454-0002  
TOLL FREE: 1-800-252-1166



**LEGEND**

- PROPERTY BOUNDARY
- LOT LINE
- EASEMENT LINE
- SETBACK LINE
- RIGHT OF WAY LINE
- SECTION LINE
- QUARTER LINE
- EXISTING EASEMENT LINE
- EXISTING PROPERTY LINE
- EXISTING MINOR CONTOUR
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- WETLAND MONUMENT

**NOTES**

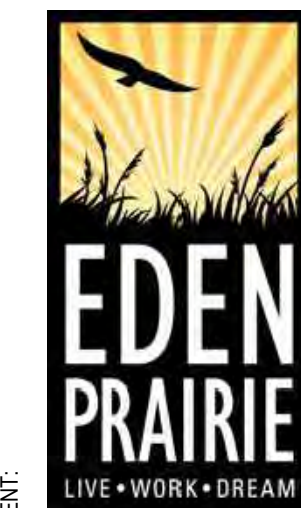
1. SEE SHEET G-002 FOR ADDITIONAL PROJECT NOTES.

**KEYNOTES**

1. MNDOT 34-261 WETLAND SEED MIX
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7500 OLSON MEMORIAL HWY  
SUITE 300  
GOLDEN VALLEY, MN 55427  
PHONE: 763-252-6800  
FAX: 952-831-1268



CLIENT:

**CITY OF EDEN PRAIRIE**  
**POND IMPROVEMENTS**  
CITY OF EDEN PRAIRIE  
HENNEPIN COUNTY, MINNESOTA

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JOSH J.O. ACCOLA

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DWN BY: MDH    CHK'D BY: HK    APP'D BY: HK

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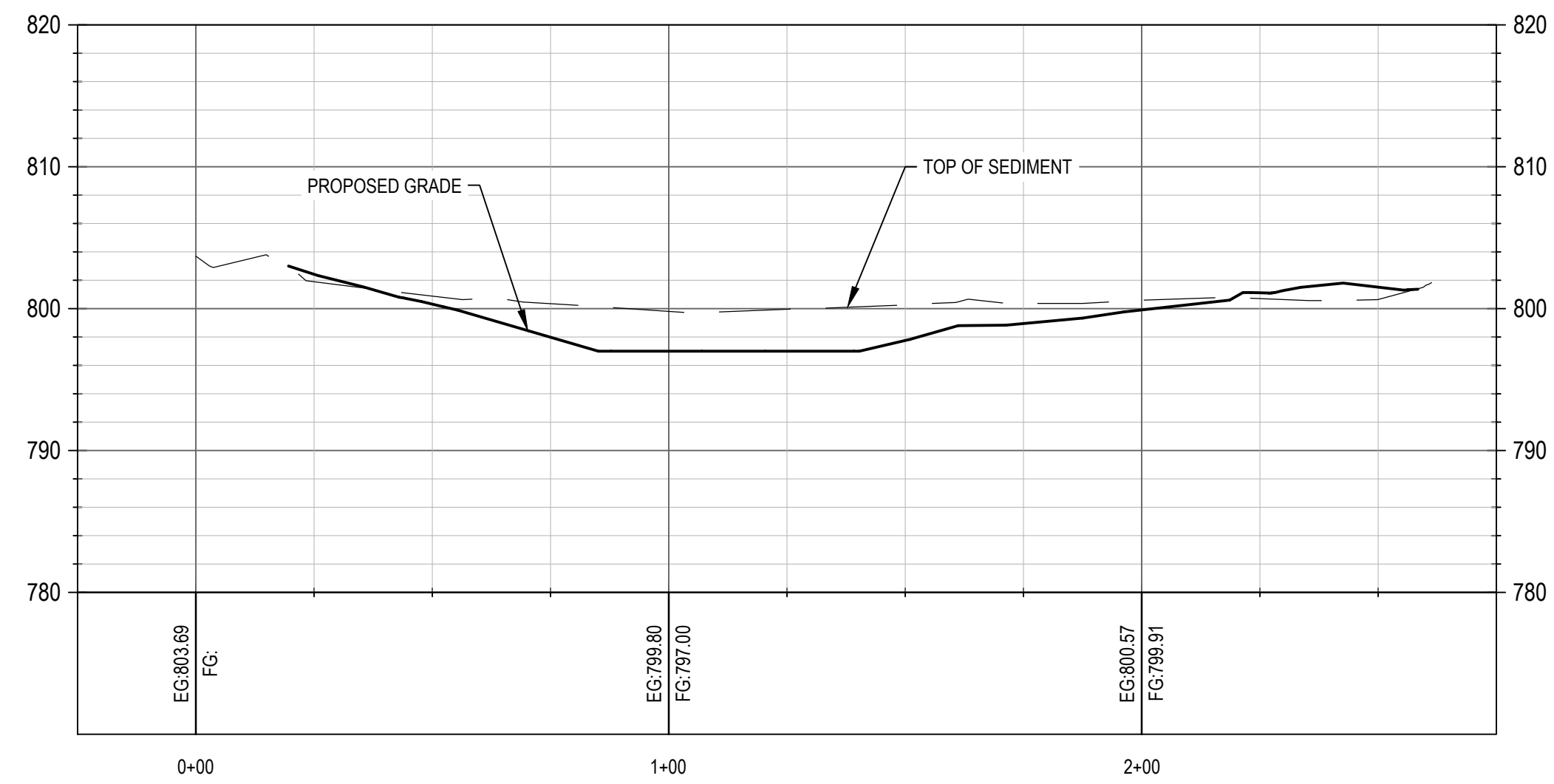
ISSUE NO.: 2

SHEET TITLE:  
UTILITY AND RESTORATION PLAN

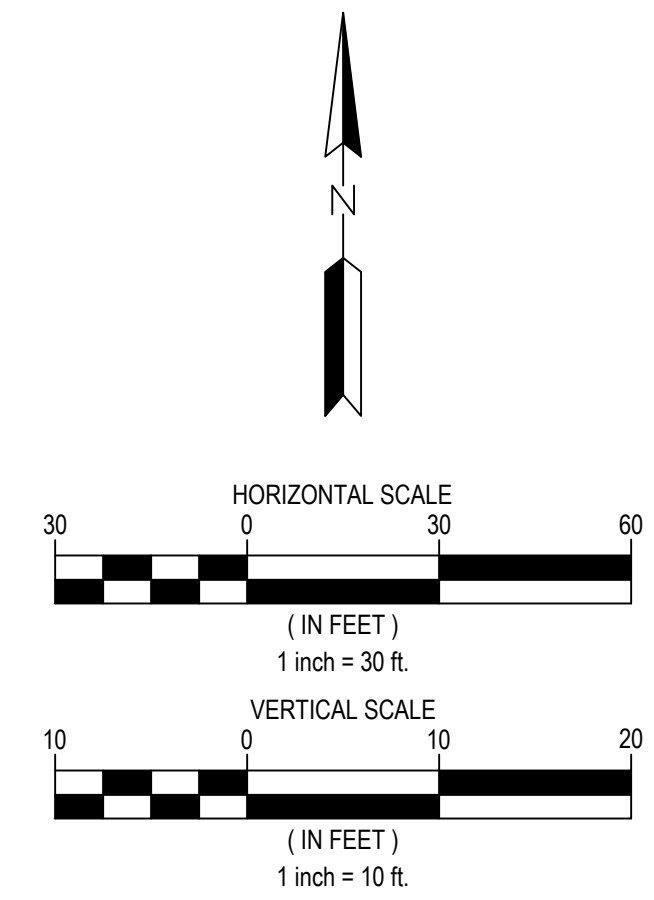
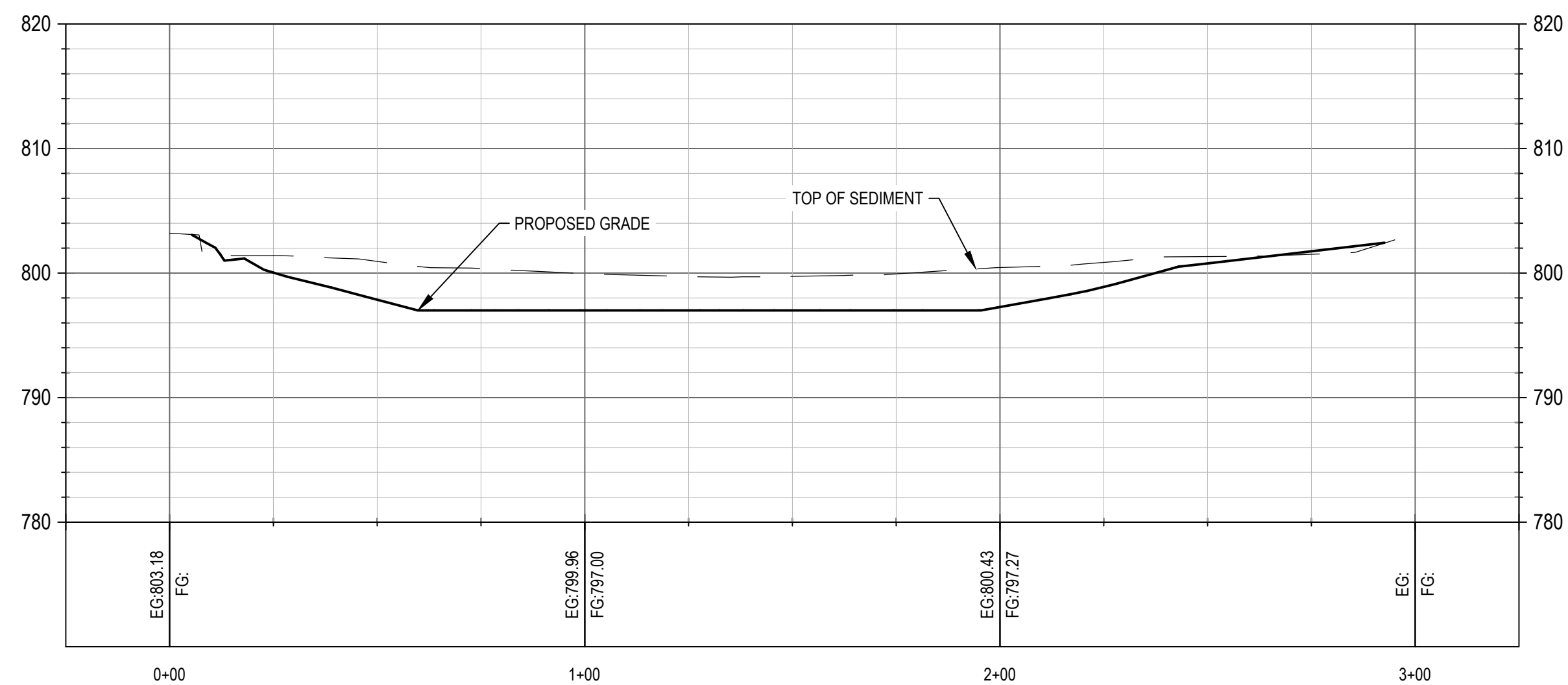
SHEET NO.:  
**C-202**



### A TO B PROFILE



### C TO D PROFILE

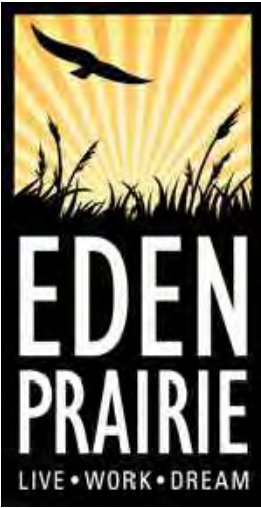


#### LEGEND

- PROPERTY BOUNDARY
- LOT LINE
- EASEMENT LINE
- SETBACK LINE
- RIGHT OF WAY LINE
- SECTION LINE
- QUARTER LINE
- EXISTING EASEMENT LINE
- EXISTING PROPERTY LINE



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*Josh J.O. Accola*  
JOSH J.O. ACCOLA

LICENSE NO.: 56108

DATE: 08/19/2022

PROJECT NO.: 227704352

DWN BY: MDH    CHK'D BY: HK    APP'D BY: HK

ISSUE DATE: 08/19/2022

ISSUE NO.: 2

SHEET TITLE:  
POND PROFILES

SHEET NO.:  
**C-203**

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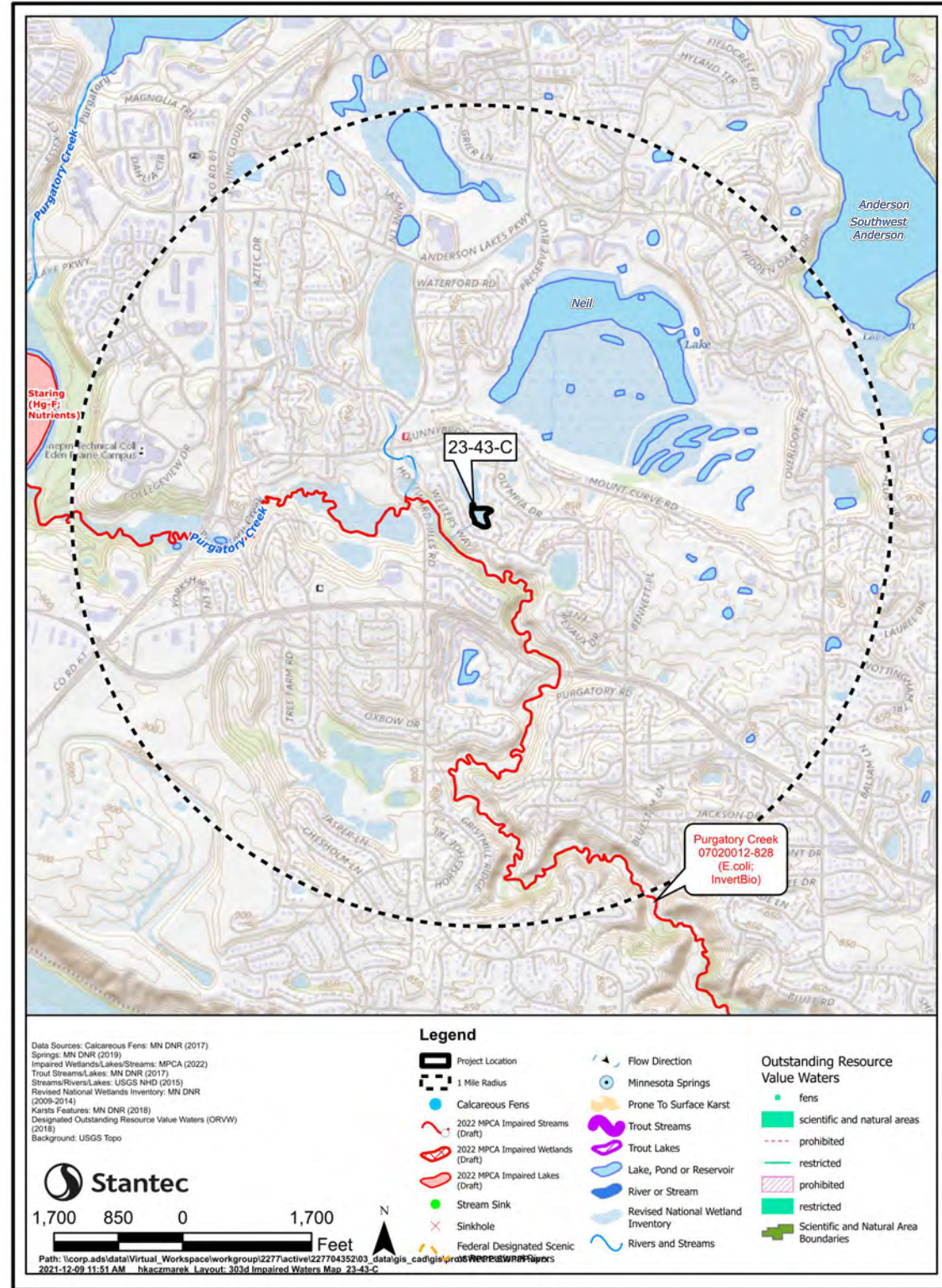
CALL BEFORE YOU DIG

**GOPHER STATE ONE CALL**

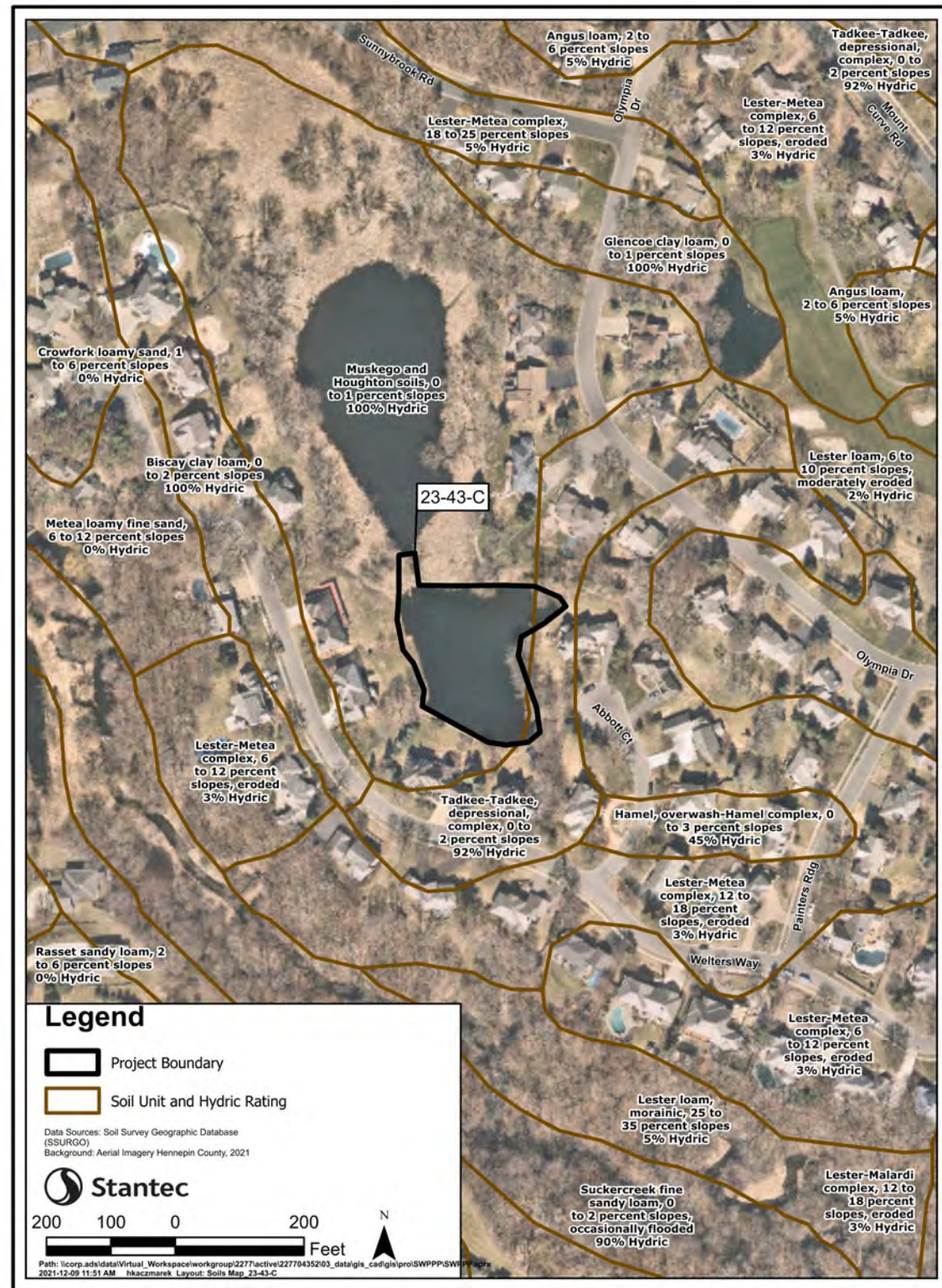
TWIN CITY AREA: 651-454-0002  
TOLL FREE 1-800-252-1166



# IMPAIRED WATERS MAP



# SOIL MAP



# PROJECT INFORMATION

PROJECT NAME: EDEN PRAIRIE POND DREDGING IMPROVEMENTS (23-43-C)  
 PROJECT LOCATION: EDEN PRAIRIE, MN 55344. NORTH OF WELTERS WAY AND SOUTH OF OLYMPIA DRIVE.  
 PROJECT TYPE: POND DREDGING AND CULVERT REPLACEMENT.  
 TOTAL AREA DISTURBED BY CONSTRUCTION: APPROXIMATELY 1.02 ACRES. THE TOTAL SITE AREA IS APPROXIMATELY 1.02 ACRES.

ESTIMATED CONSTRUCTION DATES: WINTER 2022 - SPRING 2023  
 CUMULATIVE IMPERVIOUS SURFACE/PERMANENT STORMWATER MANAGEMENT REQUIREMENTS:  
 THE PROPOSED PROJECT RESULTS IN A ±0.0 ACRE NET INCREASE/DECREASE IN IMPERVIOUS SURFACE WITHIN THE LIMITS OF DISTURBANCE.

PARTY RESPONSIBLE FOR LONG TERM OPERATION AND MAINTENANCE OF THE SITE (OWNER): CITY OF EDEN PRAIRIE  
 CONTACT: PATRICK SEJKORA  
 CONTACT PHONE: 952-949-8360  
 CONTACT EMAIL: PSEJKORA@EDENPRAIRIE.ORG  
 PARTY RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP (CONTRACTOR): TBD  
 CONTRACTOR: (FOREMAN NAME)  
 CONTRACTOR PHONE: (PHONE #)  
 CONTRACTOR EMAIL: (EMAIL)

CONTRACTOR SHALL PROVIDE A CHAIN OF RESPONSIBILITY WITH ALL OPERATORS ON THE SITE FOR INCORPORATION INTO THIS SWPPP DOCUMENT TO ENSURE THAT THE SWPPP WILL BE IMPLEMENTED AND STAY IN EFFECT UNTIL THE CONSTRUCTION PROJECT IS COMPLETE (THROUGH FINAL STABILIZATION AND NOT SUBMITTAL). CONTRACTOR SHALL ALSO PROVIDE DOCUMENTATION OF PERSONNEL TRAINING IN ACCORDANCE WITH THE PERMIT FOR INCORPORATION INTO THIS SWPPP DOCUMENT AS SOON AS THE PERSONNEL FOR THE PROJECT HAVE BEEN DETERMINED. CONTRACTOR IS RESPONSIBLE FOR KEEPING A FINAL SWPPP DOCUMENT, CONTAINING THE INFORMATION REQUIRED ABOVE, AT THE CONSTRUCTION SITE FOR THE DURATION OF THE PROJECT.

# SWPPP DOCUMENTS

THE SWPPP IS COMPOSED OF, BUT NOT LIMITED TO, THE BELOW PROJECT DOCUMENTS. THESE DOCUMENTS SHALL BE KEPT ON THE PROJECT SITE AT ALL TIMES THROUGHOUT CONSTRUCTION. THE SWPPP SHALL BE AMENDED BY THE PERSON RESPONSIBLE TO INCLUDE ANY DOCUMENTS NECESSARY TO ENSURE ADHERENCE TO THE GENERAL PERMIT.

CITY OF EDEN PRAIRIE POND IMPROVEMENTS CIVIL CONSTRUCTION PLANS (23-43-C) BY STANTEC CONSULTING SERVICES, INC. - DATED JULY, 2022.

RECORD RETENTION - THE SWPPP, ALL CHANGES TO IT, AND INSPECTION AND MAINTENANCE RECORDS MUST BE KEPT ON-SITE DURING CONSTRUCTION; THE CONSTRUCTION DRAWINGS ARE INCORPORATED HEREIN BY REFERENCE, AND A COPY OF THE PLAN SET SHOULD BE KEPT ON-SITE WITH THE SWPPP RECORDS. THE OWNER MUST RETAIN A COPY OF THE SWPPP ALONG WITH THE FOLLOWING RECORDS FOR THREE (3) YEARS AFTER SUBMITTAL OF THE NOTICE OF TERMINATION.

- ANY OTHER PERMITS REQUIRED FOR THE PROJECT;
- RECORDS OF ALL INSPECTION AND MAINTENANCE CONDUCTED DURING CONSTRUCTION;
- ALL PERMANENT OPERATIONS AND MAINTENANCE AGREEMENTS THAT HAVE BEEN IMPLEMENTED, INCLUDING ALL RIGHT OF WAY, CONTRACT, COVENANTS AND OTHER BINDING REQUIREMENTS REGARDING PERPETUAL MAINTENANCE; AND
- ALL REQUIRED CALCULATIONS FOR DESIGN OF THE TEMPORARY AND PERMANENT STORMWATER MANAGEMENT SYSTEMS.

# INSPECTIONS

THE INSPECTION LOG WILL BE COMPLETED BY THE CONTRACTOR FOR THE CONSTRUCTION SITE. INSPECTOR(S) TBD - TRAINING DOCUMENTATION (PER SECTION 21.2 OF THE PERMIT) WILL BE INCORPORATED INTO THIS SWPPP AS SOON AS THE PERSONNEL FOR THE PROJECT HAVE BEEN DETERMINED. THE CONTRACTOR WILL MAKE CORRECTIONS OR REPAIRS REQUIRED TO COMPLY WITH THE PERMIT.

INSPECTIONS AT THE SITE WILL BE COMPLETED IN ACCORDANCE WITH THE PERMIT AS FOLLOWS: ONCE EVERY 7 DAYS DURING ACTIVE CONSTRUCTION AND, WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS.

- THE INDIVIDUAL PERFORMING INSPECTIONS MUST BE TRAINED AS REQUIRED BY SECTION 21.3 OF THE PERMIT. TRAINING DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR FOR INCORPORATION INTO THE SWPPP. INSPECTIONS MUST INCLUDE STABILIZED AREAS, EROSION PREVENTION AND SEDIMENT CONTROL BMPs, AND INFILTRATION AREAS. CORRECTIVE ACTIONS MUST BE IDENTIFIED AND DATE OF CORRECTION MUST BE NOTED AS IDENTIFIED IN SECTION 11.11 OF THE PERMIT. ANY OFFSITE DISCHARGE MUST BE DOCUMENTED AS IDENTIFIED IN SECTION 11.11 OF THE PERMIT. ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION MUST BE DOCUMENTED WITHIN SEVEN (7) CALENDAR DAYS. AN INSPECTION LOG IS ALSO ATTACHED; THE INSPECTION LOG AND SWPPP MUST BE KEPT ON-SITE FOR THE DURATION OF THE CONSTRUCTION PROJECT.

- AT A MINIMUM, THE FOLLOWING SHALL BE COMPLETED DURING EACH INSPECTION:
- RECORD DATE AND TIME OF INSPECTION.
  - RECORD RAINFALL RECORDS SINCE THE MOST RECENT INSPECTION.
  - INSPECT THE SITE FOR EXCESS EROSION AND SEDIMENTATION.
  - INSPECT THE SITE FOR DEBRIS, TRASH, AND SPILLS.
  - INSPECT TEMPORARY EROSION AND SEDIMENTATION CONTROL DEVICES.
  - INSPECT CONSTRUCTION ENTRANCES FOR SEDIMENT TRACKING ONTO PUBLIC STREETS.
  - RECORD RECOMMENDED REPAIRS AND MODIFICATIONS TO EROSION AND SEDIMENT CONTROLS.
  - RECOMMEND ANY NECESSARY CHANGES TO THIS SWPPP.
  - RECORD REPAIRS AND MODIFICATIONS IMPLEMENTED SINCE PREVIOUS INSPECTIONS.
  - INSPECT THE ADJACENT STREETS AND CURB AND GUTTER FOR SEDIMENT, LITTER, AND CONSTRUCTION DEBRIS.

THE GENERAL CONTRACTOR MUST UPDATE THE SWPPP, INCLUDING THE JOBSITE BINDER AND SITE MAPS, TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO THE PROJECT SITE. UPDATES SHALL BE MADE DAILY TO TRACK PROGRESS WHEN ANY OF THE FOLLOWING ACTIVITIES OCCUR: BMP INSTALLATION, MODIFICATION OR REMOVAL, CONSTRUCTION ACTIVITIES (E.G. PAVING, SEWER INSTALLATION, ETC), CLEARING, GRUBBING, GRADING, OR TEMPORARY AND PERMANENT STABILIZATION.

THE CONTRACTOR MAY UPDATE OR MODIFY THE SWPPP WITHOUT ENGINEER APPROVAL IN AN EMERGENCY SITUATION TO PREVENT SEDIMENT DISCHARGE OR PROTECT WATER QUALITY. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE TO ENSURE COMPLIANCE WITH THE PERMIT AND PROTECTION OF DOWNSTREAM WATER QUALITY.

# IMPAIRED WATERS, SPECIAL WATERS, AND WETLANDS

THE SITE ULTIMATELY DRAINS TO, AND IS WITHIN 1 MILE OF, PURGATORY CREEK. THERE ARE CURRENTLY NO APPROVED TMDLS FOR THIS SEGMENT OF THE WATERBODY, PER THE MPCA IMPAIRED WATERS VIEWER.

THE PROJECT WILL TEMPORARILY IMPACT 1.02 ACRES OF WETLANDS.

SITE SOILS ARE SHOWN ON THIS SHEET. THIS PROJECT IS NOT LOCATED IN AN AREA PRONE TO KARST.

# EROSION AND SEDIMENT CONTROL

PRIOR TO ANY SITE DISTURBANCE, AND AS REQUIRED AS CONSTRUCTION PROGRESSES, ANY PERMIT REQUIRED EROSION PREVENTION MEASURES AND THE SEDIMENT CONTROL DEVICES (FLOTATION SILT CURTAIN, CONSTRUCTION ENTRANCE, SILT FENCE, INLET PROTECTION, CULVERT PROTECTION, PERMANENT STABILIZATION USING SEEDING) SHOWN ON THE CONSTRUCTION DRAWINGS WILL BE INSTALLED AT THE SITE.

ALL EXPOSED SOIL AREAS WITHIN THE CONSTRUCTION LIMITS WILL BE STABILIZED WITHIN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY (WILL NOT RESUME FOR A PERIOD EXCEEDING 7 CALENDAR DAYS) OR PERMANENTLY CEASED. STABILIZATION WILL BE INITIATED IMMEDIATELY. EXPOSED SOIL AREAS MUST HAVE TEMPORARY EROSION PROTECTION (SLASH MULCH, EROSION CONTROL BLANKET, SEED) OR PERMANENT COVER YEAR ROUND.

CONTRACTOR SHALL IMPLEMENT APPROPRIATE CONSTRUCTION PHASING, VEGETATIVE BUFFER STRIPS, HORIZONTAL SLOPE GRADING, AND OTHER CONSTRUCTION PRACTICES THAT MINIMIZE EROSION WHEN PRACTICAL. THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH THAT DRAINS WATER FROM A CONSTRUCTION SITE, OR DIVERTS WATER AROUND A SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE TO ANY SURFACE WATER. STABILIZATION MUST BE COMPLETED WITHIN 24 HOURS OF CONNECTING TO A SURFACE WATER. PIPE OUTLETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER.

SWPPP IMPLEMENTATION, PHASING, AND SEQUENCE OF CONSTRUCTION:

- BMP AND EROSION CONTROL INSTALLATION SEQUENCE SHALL BE AS FOLLOWS:
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE, CONCRETE WASHOUT PIT, AND INSTALL SILT FENCE.
  - INSTALL INLET PROTECTION AT EXISTING STORMWATER CULVERTS AND INLETS.
  - PREPARE TEMPORARY STORAGE, PARKING, AND PHASING AREAS.
  - CONSTRUCT AND STABILIZE DIVERSIONS AND TEMPORARY SEDIMENT TRAPS/BASINS.
  - PERFORM CLEARING AND GRUBBING OF THE SITE, IF APPLICABLE.
  - PERFORM MASS GRADING, ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
  - BEGIN EXCAVATION OF PERMANENT STORMWATER BASIN AREAS. SEE SEQUENCING BELOW FOR ADDITIONAL INFORMATION.
  - TEMPORARILY SEED WITH PURE LIVE SEED THROUGHOUT CONSTRUCTION. DISTURBED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE AS REQUIRED BY NPDES OR PERMIT.

SEDIMENT CONTROL PRACTICES MUST MINIMIZE SEDIMENT FROM ENTERING SURFACE WATERS, INCLUDING CURB AND GUTTER SYSTEMS AND STORM SEWER INLETS. THE FOLLOWING MEASURES WILL BE TAKEN AS SEDIMENT CONTROL PRACTICES IN ORDER TO MINIMIZE SEDIMENTS FROM ENTERING SURFACE WATERS:

- INSTALLATION OF SEDIMENT CONTROL PRACTICES ON ALL DOWN GRADIENT PERIMETERS PRIOR TO LAND DISTURBING ACTIVITIES.
- SILT FENCING, BIOLOGS, OR OTHER SEDIMENT CONTROL SURROUNDING TEMPORARY SOIL STOCKPILES.
- VEHICLE TRACKING BMP AT CONSTRUCTION SITE ENTRANCE/EXIT. STREET SWEEPING SHALL BE PERFORMED IF VEHICLE TRACKING BMPs ARE NOT ADEQUATE TO PREVENT SEDIMENT TRACKING. TRACKED SEDIMENT MUST BE REMOVED FROM ALL PAVED SURFACES BOTH ON AND OFFSITE WITHIN 24 HOURS OF DISCOVERY PER THE PERMIT.
- STREET SWEEPING IS NOT TO BE USED AS A PRIMARY BMP FOR SEDIMENT TRACKING. IF SEDIMENT IS TRACKED OFFSITE, WORK WILL CEASE UNTIL PROPER EROSION CONTROL AND SEDIMENT CONTROL DEVICES ARE INSTALLED AND/OR BEING MAINTAINED TO PREVENT TRACKING BEYOND THE SITE'S PERIMETER (CONTAINMENT AREA). ALL STREET SWEEPING MUST BE PERFORMED UTILIZING A PICK-UP SWEEPER. IF NECESSARY WATER WILL ALSO BE USED TO CLEAN UP THE STREETS PRIOR TO BEING SWEEPED TO ENSURE THEY ARE FULLY CLEANED.

THE FOLLOWING GUIDELINES WILL BE USED TO DETERMINE IF POLLUTION CONTROL DEVICES REQUIRE MAINTENANCE, REPAIR, OR REPLACEMENT:

- IF SEDIMENT CONTROL DEVICES SUCH AS SILT FENCE ARE FILLED TO 1/3 THE HEIGHT OF THE FENCE, REMOVE ALL SEDIMENT WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.
- IF INLET PROTECTION DEVICES APPEAR PLUGGED WITH SEDIMENT, ARE FILLED TO 1/3 CAPACITY, OR HAVE STANDING WATER AROUND THEM, REMOVE THE SEDIMENT AND CLEAN OR REPLACE THE FILTER WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.
- IF THE GRAVEL CONSTRUCTION ENTRANCE(S) ARE FILLED WITH SEDIMENT EITHER REPLACE THE ENTRANCE OR ADD ADDITIONAL GRAVEL WITH 24 HOURS OF DETECTION OR NOTIFICATION.
- IF SEDIMENT FROM THE SITE IS OBSERVED ON ADJACENT STREETS OR OTHER PROPERTIES, THE INSPECTOR SHALL IDENTIFY THE SOURCE AND DISCHARGE LOCATION OF THE SEDIMENT AND INSTRUCT TO IMPLEMENT ADDITIONAL EROSION AND SEDIMENT CONTROLS AT THOSE LOCATIONS TO PREVENT FUTURE DISCHARGES.
- IF BUILDING MATERIALS, CHEMICALS, OR GENERAL REFUSE IS BEING USED, STORED, DISPOSED OF, OR OTHERWISE MANAGED INAPPROPRIATELY, CORRECT SUCH DEFECTS WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.
- IF EXCESSIVE SEDIMENTS OR DEBRIS ARE OBSERVED AT THE FLARED END SECTION OUTFALLS, THE INSPECTOR SHALL DETERMINE THE SOURCE AND DISCHARGE LOCATIONS OF SUCH MATERIALS. IF THE DISCHARGE HAS OCCURRED ON THE PROPERTY, REMOVE THE SEDIMENTS AND DEBRIS WITHIN 24 HOURS OF NOTIFICATION AND CORRECT THE SOURCE OF SUCH MATERIALS AS DIRECTED BY THE INSPECTOR

# POLLUTION PREVENTION MEASURES

**SOLID WASTE:**  
 SOLID WASTE, INCLUDING BUT NOT LIMITED TO, COLLECTED ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS, PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION DEBRIS AND OTHER WASTE, INCLUDING ALL TRASH ON-SITE, MUST BE REGULARLY DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.

**HAZARDOUS MATERIALS:**  
 HAZARDOUS MATERIALS, INCLUDING BUT NOT LIMITED TO OIL, GASOLINE, PAINT AND ANY HAZARDOUS SUBSTANCE MUST BE PROPERLY STORED INCLUDING SECONDARY CONTAINMENTS, TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH MPCA REGULATIONS.

**CONSTRUCTION EQUIPMENT/VEHICLES:**  
 EXTERNAL WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE CONTAINED AND WASTE PROPERLY DISPOSED OF. NO ENGINE DEGREASING IS ALLOWED ON SITE. REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS SHALL BE TAKEN. ADEQUATE SUPPLIES MUST BE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS; CONDUCT FUELING IN A CONTAINED AREA UNLESS INFEASIBLE.

**CONCRETE WASHOUT AREA:**  
 CONCRETE WASHOUT WILL BE PERMITTED ON-SITE; CONTRACTOR SHALL FOLLOW ALL PERMIT REQUIREMENTS FOR CONCRETE WASHOUT. THE CONTRACTOR SHALL PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS. LIQUID AND SOLID WASHOUT WASTES MUST NOT CONTACT THE GROUND AND THE CONTAINMENT MUST BE DESIGNED TO PROHIBIT RUNOFF FROM THE WASHOUT OPERATIONS/AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA RULES. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY THAT REQUIRES SITE PERSONNEL TO UTILIZE THE PROPER FACILITIES FOR CONCRETE WASHOUT AND DISPOSAL OF WASHOUT WASTES. CONTRACTOR SHALL REVISE SWPPP TO INDICATE WASHOUT LOCATION ONCE THE LOCATION HAS BEEN DETERMINED.

FERTILIZERS AND LANDSCAPE MATERIALS MUST BE UNDER COVER TO PREVENT THE DISCHARGE OF POLLUTANTS OR PROTECTED BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.

PORTABLE TOILETS MUST BE POSITIONED SO THAT THEY ARE SECURE AND WILL NOT BE TIPPED OR KNOCKED OVER. SANITARY WASTE MUST BE DISPOSED OF PROPERLY.

# GENERAL SWPPP NOTES

DEWATERING IS ANTICIPATED TO BE REQUIRED DURING PROPOSED IMPROVEMENTS. IN THE EVENT THAT DEWATERING IS NECESSARY CONTRACTOR SHALL COMPLY WITH PERMIT SECTION 10.1 REQUIREMENTS FOR DEWATERING.

THIS SWPPP SHALL BE AMENDED BY THE CONTRACTOR IN ACCORDANCE WITH THE PERMIT AS NECESSARY TO INCLUDE ADDITIONAL REQUIREMENTS, TO CORRECT PROBLEMS IDENTIFIED, OR TO ADDRESS SITUATIONS PER SECTION 6.1 OF THE PERMIT.

THE PROJECT WILL DISTURB MORE THAN 5 ACRES THAT PROMOTE DRAINAGE TO A COMMON LOCATION, THEREFORE A TEMPORARY SEDIMENT BASIN WILL NOT BE REQUIRED. THIS SWPPP SHALL BE AMENDED BY THE CONTRACTOR IN ACCORDANCE WITH THE GENERAL PERMIT TO INCLUDE TEMPORARY SEDIMENTATION BASINS, IF THEY BECOME NECESSARY. BASINS, IF DESIGNED BY THE CONTRACTOR, SHALL ACCOMMODATE NO LESS THAN 3,600 CUBIC FEET OF LIVE STORAGE PER ACRE OF CONTRIBUTING DRAINAGE AREA. BASIN OUTLETS SHALL BE DESIGNED TO WITHDRAW WATER FROM THE SURFACE OF THE BASIN. PREVENT SHORT-CIRCUITING AND THE DISCHARGE OF FLOATING DEBRIS. BASINS SHALL HAVE A STABILIZED EMERGENCY OVERFLOW LOCATION AND BE DESIGNED TO PREVENT THE DISCHARGE OF POLLUTANTS TO THE EXTENT PRACTICAL.

**FINAL STABILIZATION:**  
 ALL PERVIOUS AREAS DISTURBED BY CONSTRUCTION AS DESIGNATED WILL RECEIVE VEGETATIVE COVER ACCORDING TO THE PLANS AND SPECIFICATIONS AND WITHIN THE SPECIFIED VEGETATIVE TIME SCHEDULE. FINAL STABILIZATION WILL OCCUR WHEN THE SITE HAS A UNIFORM VEGETATIVE COVER WITH A DENSITY OF 70% OVER THE RESTORED PERVIOUS AREAS. ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMPs (SUCH AS SILT FENCE) MUST BE REMOVED AS PART OF THE SITE FINAL STABILIZATION. ALL SEDIMENT MUST BE CLEANED OUT OF CONVEYANCES AND TEMPORARY SEDIMENTATION BASINS IF APPLICABLE. NOTICE OF TERMINATION (NOT) MUST BE SUBMITTED WITHIN 30 DAYS OF FINAL STABILIZATION.

# ESTIMATED BMP QUANTITIES AND INSTALLATION SCHEDULE

THE ADJACENT TABLE INDICATES THE ESTIMATED MATERIAL QUANTITIES NECESSARY TO IMPLEMENT THE TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BMPs IDENTIFIED IN THIS SWPPP AND ON THE CONSTRUCTION DRAWINGS. TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BMPs WILL BE INSTALLED/CONSTRUCTED WHEN NECESSARY AS CONSTRUCTION ACTIVITIES PROGRESS AND IN ACCORDANCE WITH THE NPDES PERMIT REQUIREMENTS.

MAINTAIN AND REPLACE BMPs DURING THE EXECUTION OF THE PROJECT AS REQUIRED TO CONTINUE SWPPP COVERAGE DURING CONSTRUCTION

ESTIMATED BMP QUANTITIES		
ITEM	UNITS	ESTIMATED QUANTITY
TEMPORARY EARTH DAM (2) AND DEWATERING	LS	1
TEMPORARY CONSTRUCTION ENTRANCE - MAINTAINED	EA	1
FLOTATION SILT CURTAIN, TYPE STILL WATER - MAINTAINED	LF	138
INLET PROTECTION - MAINTAINED	EA	3
SILT FENCE - MAINTAINED	LF	442
ORANGE CONSTRUCTION FENCE	LF	885
WETLAND SEED MIX MNDOT 34-261	SY	700
PROPERTY OWNER SPECIFIC SEED MIX	SY	218
BWSR MESIC SHORT URBAN BUFFER SOUTH AND WEST SEED MIX	SY	100

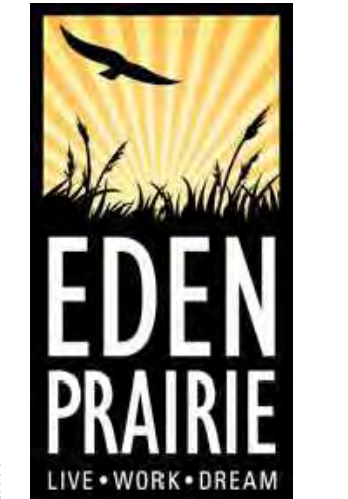
NOTE: QUANTITIES ON PLAN SUPERCEDES LIST QUANTITIES IN A DISCREPANCY

# CERTIFICATION

IN ACCORDANCE WITH SECTION 21 OF THE GENERAL PERMIT AUTHORIZATION TO DISCHARGE STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NPDES, THE PREPARER OF THIS DOCUMENT WAS TRAINED UNDER THE UNIVERSITY OF MINNESOTA EROSION AND SEDIMENT CONTROL CERTIFICATION PROGRAM. JOSH ACCOLA'S CERTIFICATION IN DESIGN OF SWPPP IS VALID THROUGH MAY 31ST, 2023.



7500 OLSON MEMORIAL HWY  
 SUITE 300  
 GOLDEN VALLEY, MN 55427  
 PHONE: 763-252-6800  
 FAX: 952-831-1268



CITY OF EDEN PRAIRIE  
 POND IMPROVEMENTS  
 CITY OF EDEN PRAIRIE  
 HENNEPIN COUNTY, MINNESOTA

DATE	DESCRIPTION	ISSUE NO.
08/22/2021	50% CITY SUBMITTAL PLANS (POND 23-43-C)	1
08/19/2022	FINAL CITY SUBMITTAL PLANS (POND 23-43-C)	2

CERTIFICATION:  
 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.

JOSH J.O. ACCOLA

LICENSE NO.: 56108

DATE: 08/19/2022

PROJECT NO.: 227704352

DWN BY: MDH  
 CHKD BY: HK  
 APPD BY: HK

ISSUE DATE: 08/19/2022

ISSUE NO.: 2

SHEET TITLE:  
 SWPPP

SHEET NO.:

C-301

# WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

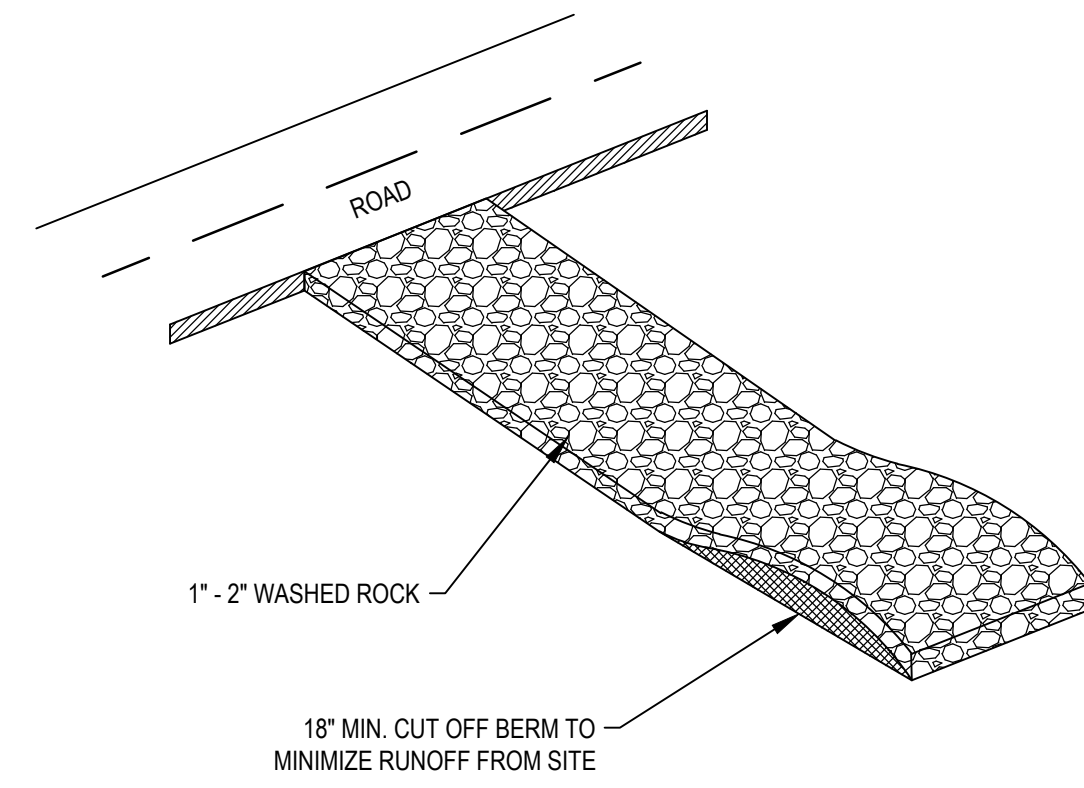
THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG

# GOPHER STATE ONE CALL

TWIN CITY AREA: 651-454-0002  
 TOLL FREE 1-800-252-1166



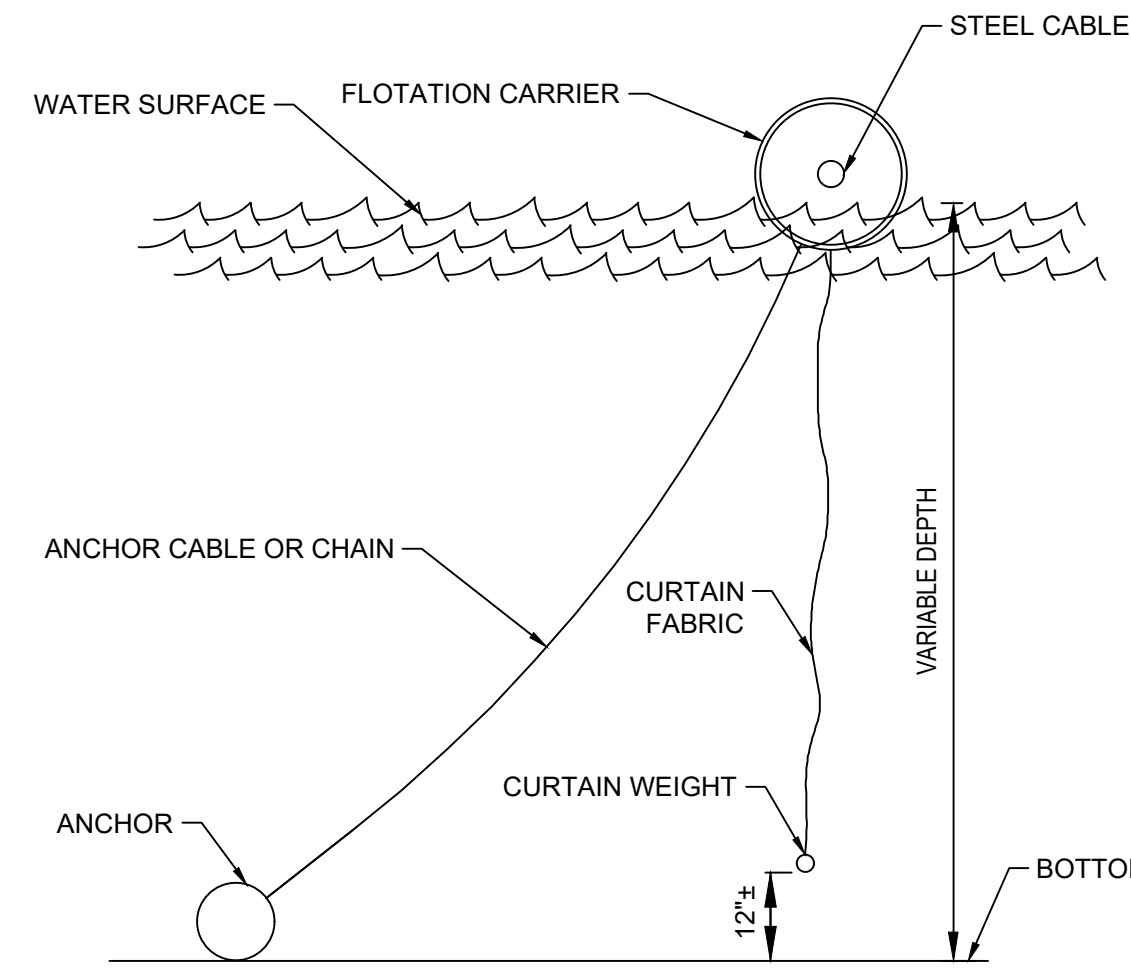


ISOMETRIC

NOTES:

- 1. FILTER FABRIC SHALL BE PLACED UNDER ROCK TO STOP MUD MIGRATION THROUGH ROCK.
- 2. ENTRANCE MUST BE MAINTAINED TO PREVENT SEDIMENTATION ON PUBLIC ROADWAYS.
- 3. FUGITIVE ROCKS SHALL BE REMOVED FROM ADJACENT ROADWAYS DAILY OR MORE FREQUENTLY AS NECESSARY.

1 STABILIZED CONSTRUCTION EXIT  
C-801 NOT TO SCALE

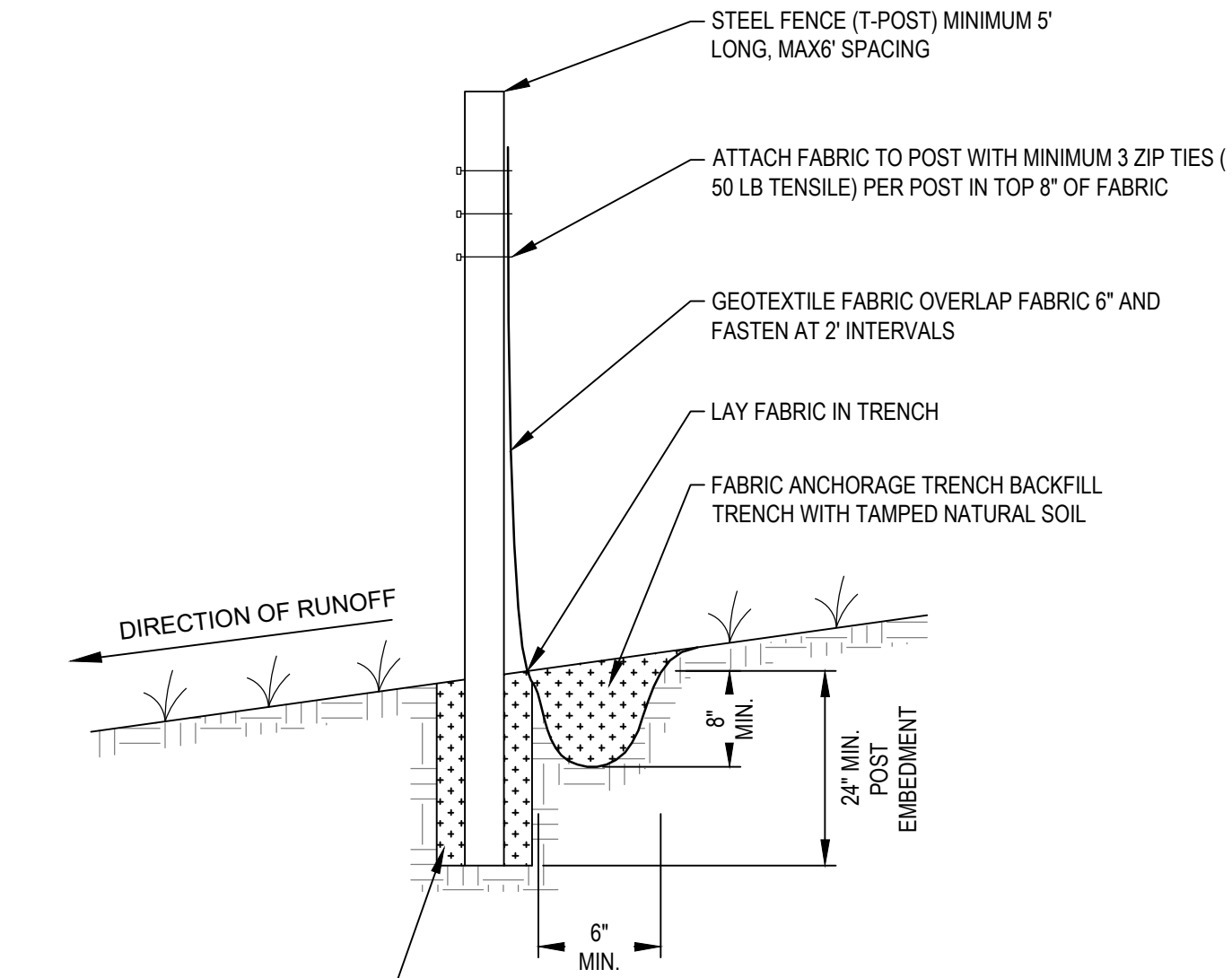


SECTION

NOTES:

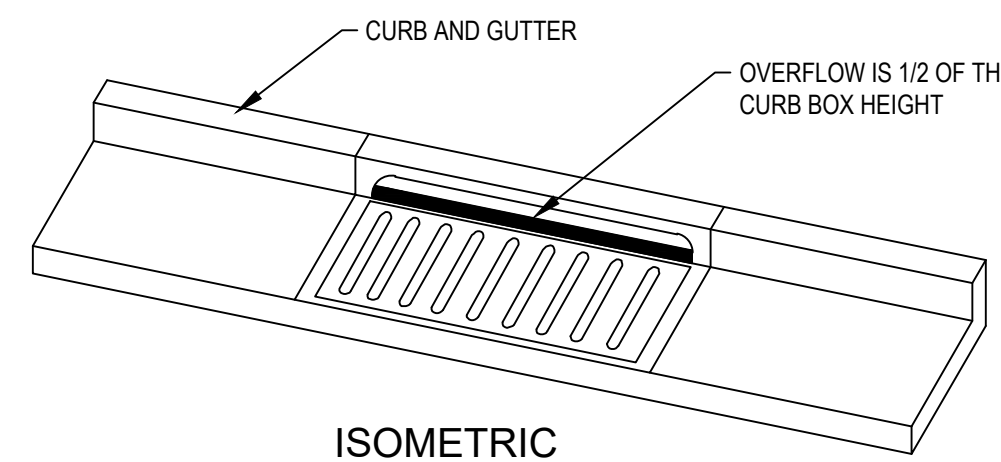
- 1. DOUBLE FLOTATION SILT CURTAIN SHOULD BE SPACED 10' APART.
- 2. CURTAIN LENGTH TO MATCH BOTTOM PROFILE AS CLOSELY AS POSSIBLE.
- 3. MAXIMUM INTERVAL FOR SPACING OF WEIGHT IS 15'.

2 FLOTATION SILT CURTAIN  
C-801 NOT TO SCALE



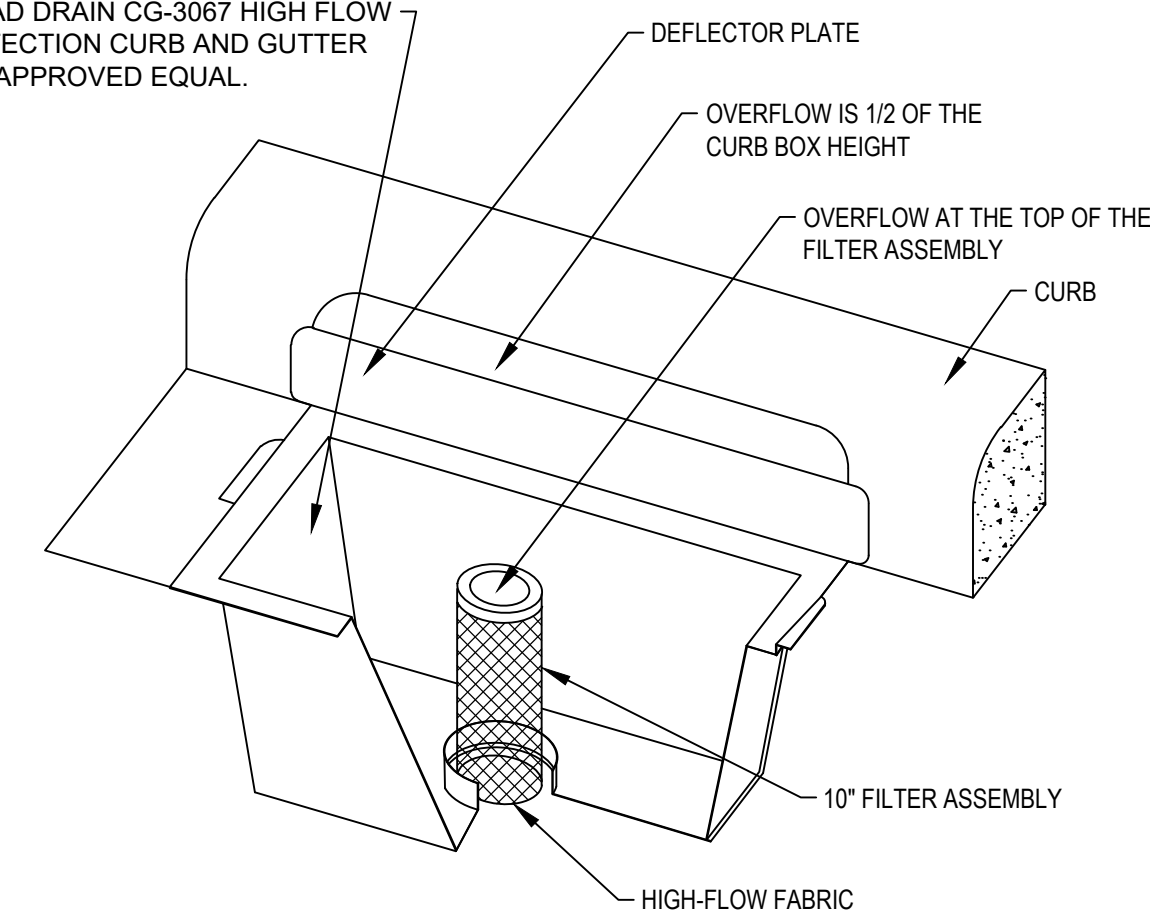
SECTION

3 SILT FENCE MACHINE SLICED  
C-801 NOT TO SCALE

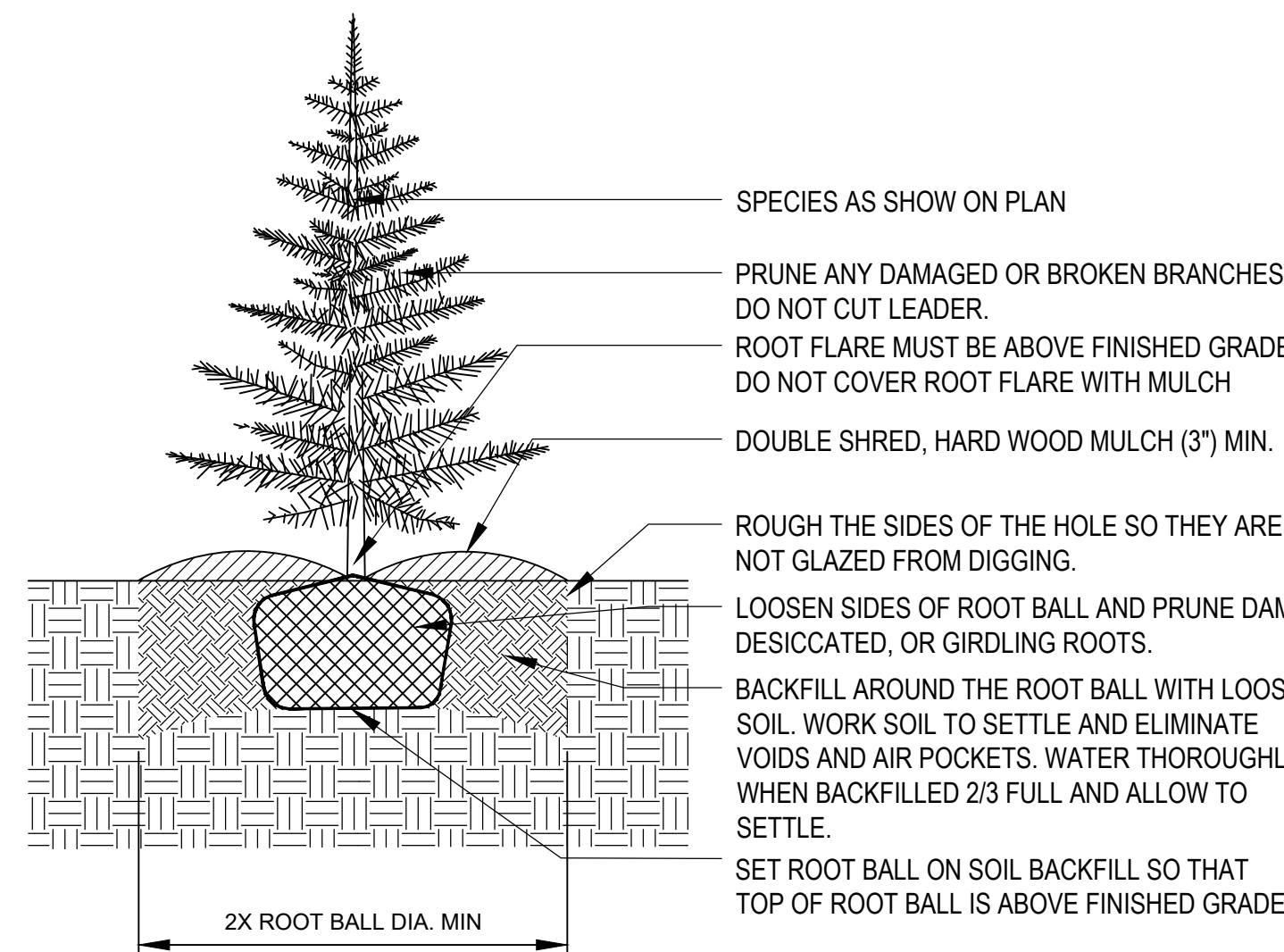


ISOMETRIC

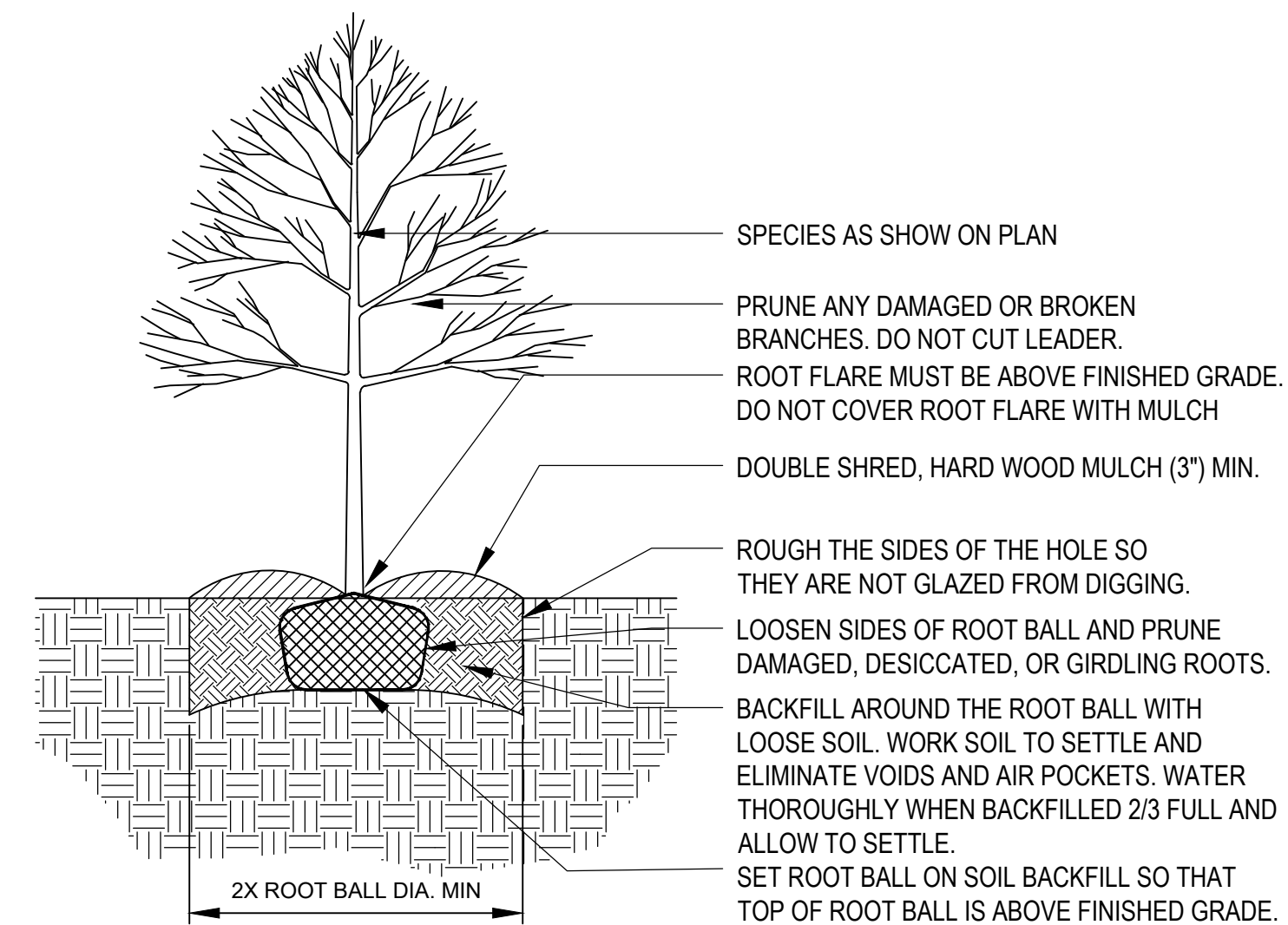
WIMCO ROAD DRAIN CG-3067 HIGH FLOW INLET PROTECTION CURB AND GUTTER MODEL OR APPROVED EQUAL.



4 INLET PROTECTION CATCH BASIN INSERT  
C-801 NOT TO SCALE



5 CONIFEROUS AND DECIDUOUS TREE PLANTING  
C-801 NOT TO SCALE



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CALL BEFORE YOU DIG

**GOPHER STATE ONE CALL**  
TWIN CITY AREA: 651-454-0002  
TOLL FREE: 1-800-252-1166



**CITY OF EDEN PRAIRIE**  
**POND IMPROVEMENTS**  
CITY OF EDEN PRAIRIE  
HENNEPIN COUNTY, MINNESOTA

PROJECT TITLE:

ISSUE NO.:

1

2

DESCRIPTION:  
50% CITY SUBMITTAL PLANS (POND 23-43-C)  
FINAL CITY SUBMITTAL PLANS (POND 23-43-C)

DATE:  
08/22/2021  
08/19/2022

CERTIFICATION:  
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.

JOSH J.O. ACCOLA  
LICENSE NO.: 56108

DATE: 08/19/2022

PROJECT NO.: 227704352

DWN BY: MDH    CHK'D BY: HK    APP'D BY: HK

ISSUE DATE: 08/19/2022

ISSUE NO.: 2

SHEET TITLE: DETAILS

SHEET NO.: C-801



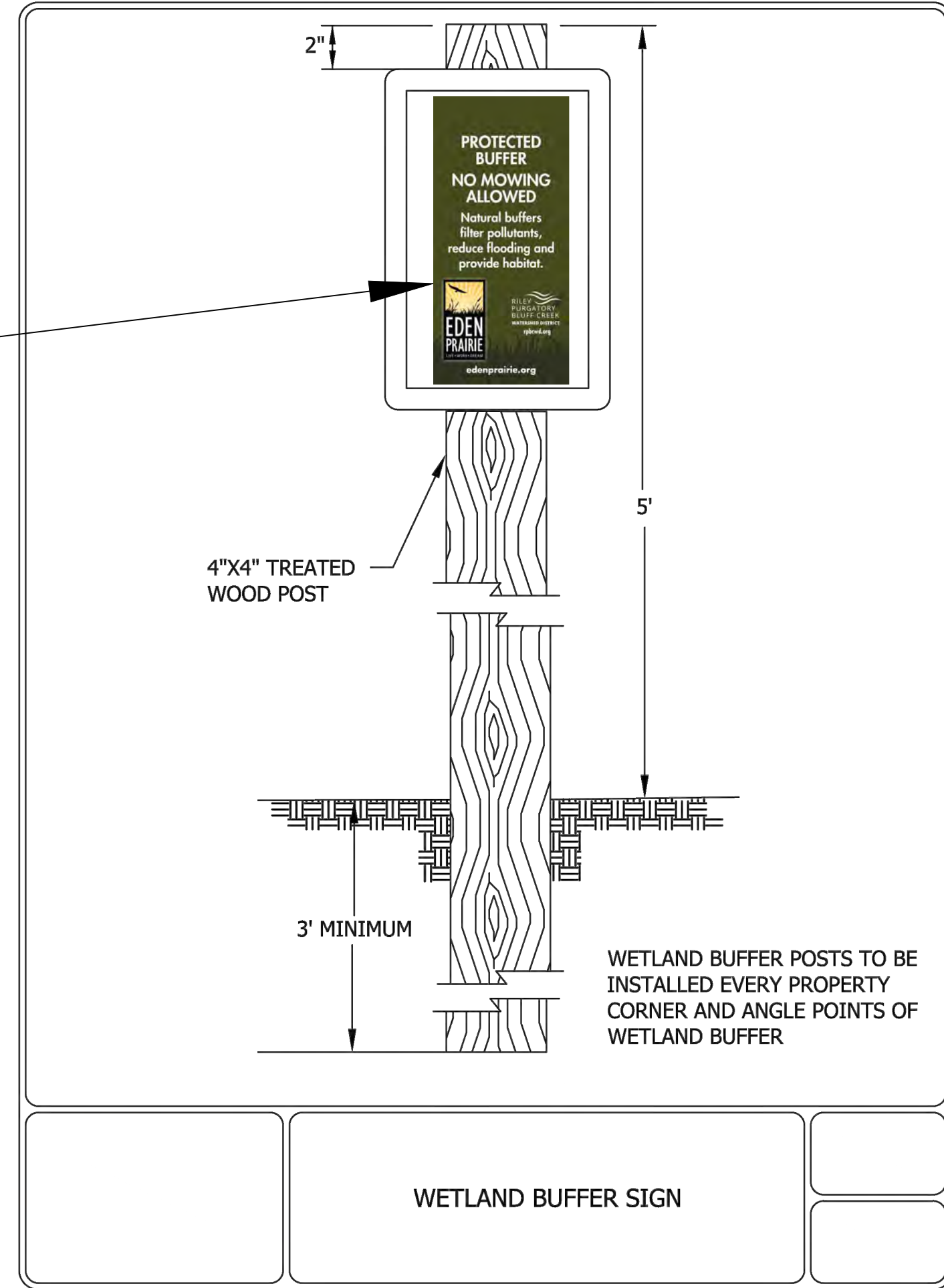
**PROTECTED BUFFER  
NO MOWING ALLOWED**

Natural buffers filter pollutants, reduce flooding and provide habitat.



RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT  
rpbcd.org

edenprairie.org



WETLAND BUFFER SIGN

Apron Size	V-bar Size	H-bar Size	No. of H-bars Req'd	Bolt Dia.	"A" Dim.
18	1/2"	3/8"	3	1/2"	5
24	3/4"	3/4"	4	1/2"	7
30	3/4"	3/4"	4	1/2"	7 1/2
36	3/4"	1"	4	1/2"	10 1/2
42	3/4"	1"	4	3/4"	11
48	3/4"	1 1/2"	4	3/4"	12
54	3/4"	1 1/2"	4	3/4"	12
60	3/4"	1 1/2"	5	3/4"	14
72	3/4"	1 1/2"	5	3/4"	14
84	3/4"	1 1/2"	6	3/4"	15

Apron Size	V-bar Size	H-bar Size	No. of H-bars Req'd	Bolt Dia.	"A" Dim.
12	1/2"	3/8"	3	1/2"	4
15	1/2"	3/8"	3	1/2"	4 1/2
18	1/2"	3/8"	4	1/2"	4 1/2
21	1/2"	3/8"	4	1/2"	5
24	3/8"	3/8"	4	1/2"	5
27	3/8"	3/8"	4	1/2"	5 1/2
30	3/8"	3/8"	4	1/2"	5 1/2
36	3/4"	1"	4	3/4"	8
42	3/4"	1"	4	3/4"	8
48	3/4"	1"	5	3/4"	8
54	3/4"	1 1/2"	5	3/4"	8
60	3/4"	1 1/2"	5	3/4"	8
66	3/4"	1 1/2"	6	3/4"	8
72	3/4"	1 1/2"	6	3/4"	9
84	3/4"	1 1/2"	7	3/4"	10
90	3/4"	1 1/2"	7	3/4"	14

NOTE:  
ALL BARS, PLATES, PIPE & BOLTS SHALL BE HOT-ROLLED, GALVANIZED STEEL.  
ALL APRONS SHALL BE MARKED WITH AN 8'-2 LB. GREEN CHANNEL POST.  
TRASH GUARDS SHALL BE REQUIRED ON APRONS 24" OR LARGER.

CITY OF EDEN PRAIRIE, MINNESOTA  
TRASH GUARD FOR CONC. APRONS  
DEPARTMENT OF ENGINEERING 3-13

CITY OF EDEN PRAIRIE, MINNESOTA  
BEDDING FOR ALL PVC, HDPE, SIZES AND 15" AND LARGER RCP AND DIP  
DEPARTMENT OF ENGINEERING 1-98

**NOTES:**

1. BUFFER MARKER TO BE IDENTIFIED WITH A DURABLE MARKER OR CAP BEARING INFORMATION SHOWN ON DETAIL WITH A MINIMUM DIAMETER OF 3 INCHES.
2. BUFFER MARKER TO BE COMPOSED OF A DURABLE MATERIAL.
3. BUFFER MARKER TO BE DETECTABLE WITH CONVENTIONAL INSTRUMENTS FOR FINDING FERROUS OR MAGNETIC OBJECTS.
4. BUFFER MARKER TO BE INSTALLED FLUSH TO THE GROUND SURFACE.
5. BUFFER MARKER TO BE MOUNTED TO A BURIED PIECE OF REBAR WITH A MINIMUM LENGTH OF 18 INCHES AND A MINIMUM DIAMETER OF 1/2 INCH (#4 REBAR IS ACCEPTABLE).

**3** DETAIL: FLUSH MOUNT BUFFER MARKERS  
NOT TO SCALE

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CITY OF EDEN PRAIRIE  
POND IMPROVEMENTS  
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ISSUE NO.: 2

SHEET TITLE:  
DETAILS

SHEET NO.:  
C-802



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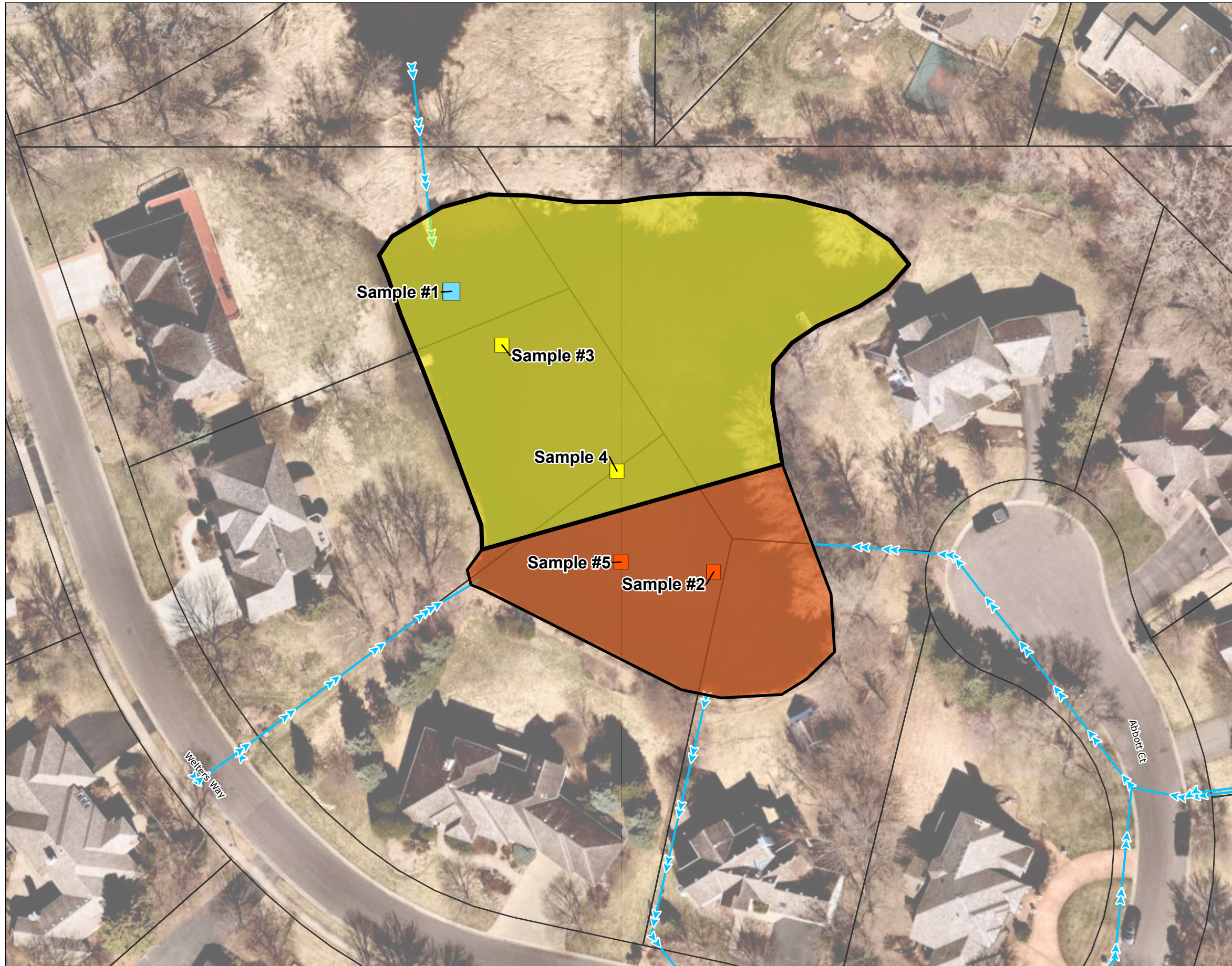


Figure No.

2

Title

**Sediment Samples 23-43-C**

City of Eden Prairie

227704229

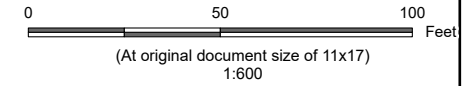
Sediment Sampling

Initial and Supplemental Sampling

Project Location

T116N, R22W, S26  
Eden Prairie, Hennepin Co., MN

Prepared by HDK on 2022-07-24



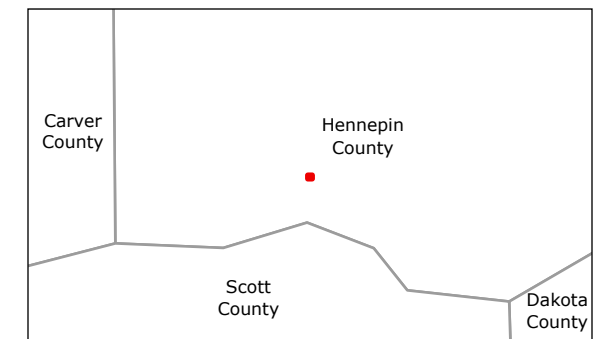
Legend

**Sediment Sample Results**

- Uncontaminated (< 2 mg/kg)
- Exceeds Tier I (> 2 mg/kg))
- Exceeds Tier II (>23 mg/kg)

**BaP Equivalent Sediment Zones**

- Below Tier I Residential
- Tier I Residential (> 2mg/kg)
- Tier II (> 23mg/kg)
- Storm Sewer
- Parcel Boundary



Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: City of Eden Prairie, Hennepin County, Stantec
3. Background: Hennepin County 2020 Aerial
4. Sediment Samples: Sediment samples were collected on 8/18/2021 and October 18, 2021. Additional sampling was requested to further characterize BaP equivalence in the pond.





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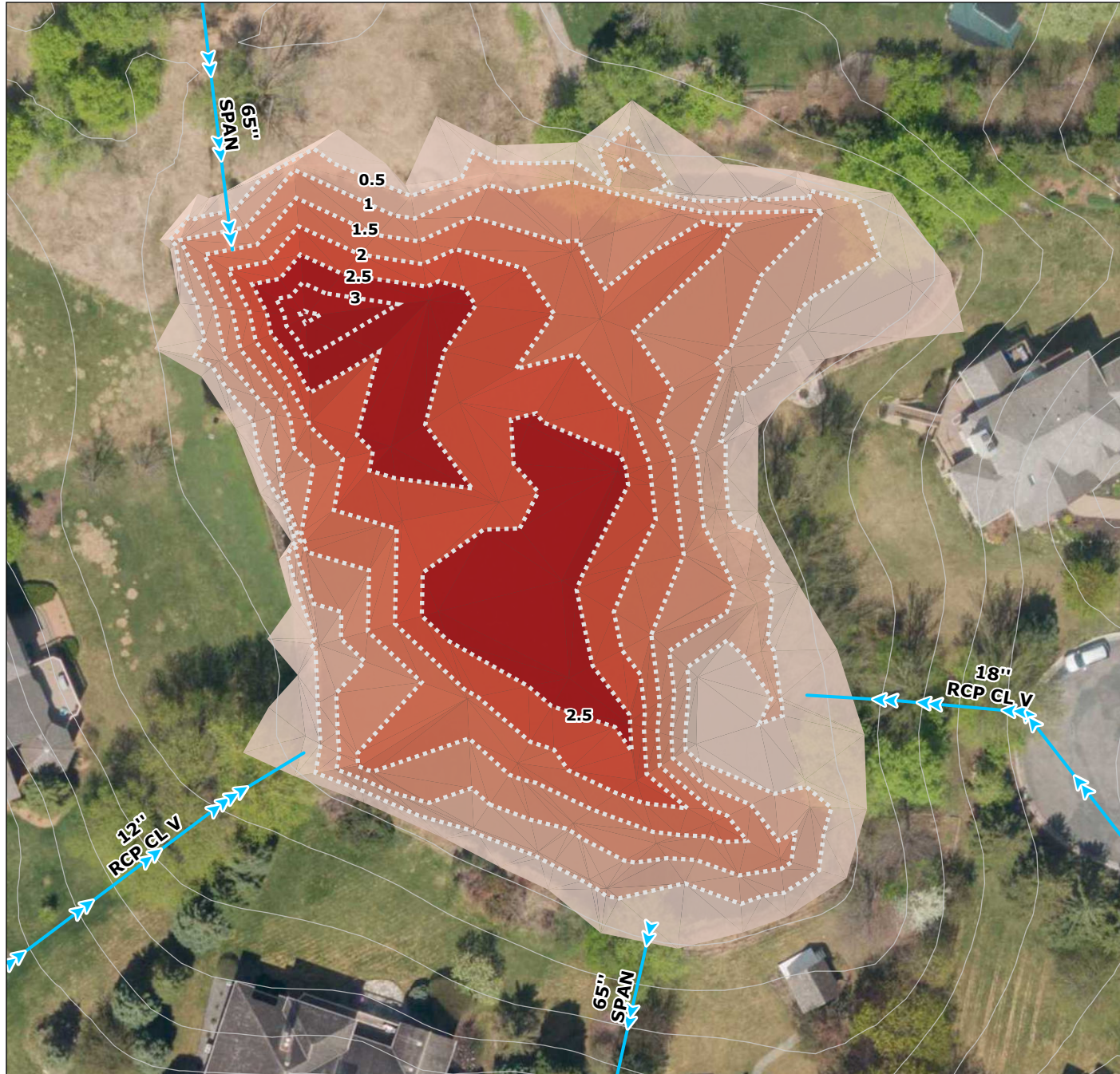


Figure No.

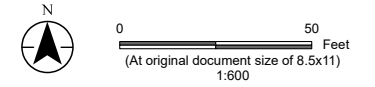
**1**

Title

**Sediment Accumulation 23-43-C**

Client/Project 227704352  
 City of Eden Prairie  
 Pond Dredging 23-43-C  
 RPBCWD Permitting

Project Location Prepared by HDK on 2022-07-24  
 T116N, R22W, S07  
 City of Eden Prairie, Hennepin Co., MN



Legend

- Stormwater Flow
- Contours (2ft)

**Bathymetric Contours**

**Index\_Cont**

- Intermediate Contour (0.5ft)
- Index Contour (5ft)
- Change Contours (feet)

**Sediment Accumulation**

**Elevation**

- > 2.5
- 2.0 - 2.5
- 1.5 - 2.0
- 1.0 - 1.5
- 0.5 - 1.0
- 0.0 - 0.5
- No Change

**Notes**

1. Coordinate System: NAD 1983 HARN Adj MN Hennepin Feet
2. Data Sources: Hennepin County, City of Eden Prairie, Stantec
3. Background: Aerial Imagery, Hennepin County, 2020.







# Hennepin County Natural Resources Map

Date: 8/10/2022



## Legend

### Land Cover - Quality

- High Quality
- Good Quality
- Moderate Quality
- Poor Quality

■ Altered Non-Native Plant Community: Native Species Present

■ Altered Non-Native Plant Community: No Native Species Present

■ Ecologically Significant Areas

Point location (UTM 15N):  
466884.6142155623,  
4964745.523283382

Comments:

1 inch = 200 feet



This data (i) is furnished 'AS IS' with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is not suitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this data.

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