RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

18681 Lake Drive East
Chanhassen, MN 55317
952-607-6512
www.rpbcwd.org

Riley Purgatory Bluff Creek Watershed District Permit Application Review

Permit No: 2022-044

Considered at Board of Managers Meeting: July 13, 2022

Received complete: May 23, 2022

Applicant:	SE Maple Grove AM, LLC, Rene Ristau
Consultant:	Loucks, Inc., Matt Seitz
Project:	Staring Lake Corporate Center – The applicant proposes the expansion of an existing parking lot associated with the Staring Lake Corporate Center. Stormwater management facilities include an infiltration basin and Rain Guardians to provide volume control, water quality, and rate control.
Location:	13200 Pioneer Trail, Eden Prairie, Minnesota
Reviewer:	Heather Lau P.E. and Scott Sobiech P.E., Barr Engineering

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 July 13, 2022 meeting of the managers:

Resolved that the application for Permit 2022-044 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 have been affirmatively resolved, the RPBCWD president or administrator is authorized and directed to sign and deliver Permit 2022-044 to the applicant on behalf of RPBCWD.

Upon roll call vote, the resolutions were adopted, _____.

Applicable Rule Conformance Summary

Rule	Issue		Conforms to RPBCWD Rules?	Comments
C	**Erosion Control Plan**		See Comment	See rule-specific permit condition C1 related to name of individual responsible for on-site erosion control.
J	**Stormwater Management**	Rate	Yes	
		Volume	Yes	
		Water Quality	Yes	
		Low Floor Elev.	Yes	
		Maintenance	See Comment	See rule-specific permit condition J1 related to recordation of stormwater facility maintenance declaration.
		Chloride Management	See Comment	See stipulation #5 related to providing a chloride management plan prior to project close-out.
		Wetland Protection	Yes	
L	**Permit Fee Deposit**		See Comment	$3,000 received May 23, 2022. As of June 29, 2022 the amount due is $2,956.
M	**Financial Assurances**		See Comment	The financial assurance is calculated at $77,268.

Background

The applicant proposes construction of a 0.103-acre parking lot expansion and stormwater management facility on a lot currently consisting of the existing Staring Lake Corporate Center building and parking lot. Proposed stormwater management facilities include an infiltration basin and Rain Guardians, a pretreatment settling structure, to provide volume control, water quality, and rate control.

The project site information is summarized below:

Project Site Information	Area (acres)
Total Site Area	10.05
Existing Site Impervious	4.416
Disturbed Existing Impervious Area	0.011
Proposed Site Impervious Area	4.507
Change in Impervious Area	0.091 (<50% increase)
Regulated Impervious Area	0.103
Total Disturbed Area	0.253

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

1. Permit Application received May 23, 2022 (Notified applicant on June 14, 2022 that submittal was complete and provided comments on submitted materials); materials submitted to address comments were provided on June 27, 2022.
2. Stormwater Management Report dated May 23, 2022 (revised June 27, 2022)
3. Project Plan Set (8 sheets) dated May 23, 2022 (revised to 9 sheets on June 27, 2022)
4. Electronic HydroCAD models received on May 23, 2022 (revised June 27, 2022)
5. Electronic MIDS models received on May 23, 2022 (revised June 27, 2022)
6. Geotechnical Evaluation Report by Braun Intertec dated April 13, 2022
7. Letter of Jurisdictional Determination by the Corps of Engineers dated April 11, 2022
8. Engineer's Preliminary Estimate of Construction Costs dated May 20, 2022
9. Double Ring Infiltrometer Report by Braun Intertec dated June 24, 2022

Rule Specific Permit Conditions

Rule C: Erosion Prevention and Sediment Control

Because the project will alter 0.253 acres of land-surface area, the project must conform to the requirements in the RPBCWD Erosion Prevention and Sediment Control rule (Rule C, Subsection 2.1).

The erosion and sediment control plans prepared by Westwood includes installation of perimeter control, inlet protection for storm sewer catch basins, a rock construction entrance, protection of stormwater management facilities, placement of a minimum of 6 inches of topsoil with at least 5% organic matter, construction sequencing, decompaction of pervious areas compacted during construction, erosion control blanket, and retention of native topsoil onsite. To conform to RPBCWD Rule C requirements the following revisions are needed:

C1. The Applicant must provide the name and contact information of the individual responsible for erosion control at the site. RPBCWD must be notified if the responsible individual changes during the permit term.

Rule J: Stormwater Management

Because the project will alter 0.253 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 only apply to the disturbed areas and additional impervious surface on the project site because the proposed activity will not disturb more than 50 percent of the existing impervious surface and increase the impervious surface on the parcel by less than 50 percent(Rule J, Subsection 2.3).

The project proposes an infiltration basin and Rain Guardians (for pretreatment) to provide volume control, water quality, and rate control.

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 the table below.

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
North	0.1	<0.1	0.5	0.1	1.4	0.3	<0.1	<0.1
South	<0.1	0	0.1	<0.1	0.3	<0.1	<0.1	<0.1

The proposed stormwater management plan will provide rate control in compliance with the RPBCWD requirements for the 2-, 10-, and 100-year events. Thus, the proposed project meets the rate control requirements in Rule J, Subsection 3.1a.

Volume Abstraction

Subsection 3.1.b of Rule J requires the abstraction onsite of 1.1 inches of runoff from the new and disturbed impervious surface of the parcel. An abstraction volume of 410 cubic feet is required from the proposed 0.103 acres (4,470 square feet) of impervious area. Plans indicate pretreatment for runoff entering the infiltration basin is provided by Rain Guardians, thus the proposed project conforms with RPBCWD Rule J, Subsection 3.1b.1.

Soil borings performed by Braun Intertec show that soils in the project area are typically silty sand and poorly graded sand. Groundwater was not observed at the soil boring under the proposed system (ST-1). The subsurface investigation information summarized in the table below shows that groundwater is at least 3 feet below the bottom of the proposed infiltration basin (Rule J, Subsection 3.1.b.2.a).

Proposed BMP	Nearest Subsurface Investigation	Boring is within footprint?	Groundwater Elevation (feet)	BMP Bottom Elevation (feet)	Separation (feet)
Infiltration Basin	ST-1	Yes	No groundwater observed at boring bottom (approx. el 849.4 ft)	857.0	7.6

Double ring infiltrometer testing results provided by Braun Intertec on June 24, 2022 show an infiltration rate of 44 inches per hour (in/hr) beneath the proposed stormwater management feature. Because the infiltration rate exceeds 8.3 in/hr, the construction drawings require the soil beneath the infiltration basin be amended by blending the top 12 to 18 inches with topsoil to reduce infiltration rates. The engineer concurs with the applicant's design infiltration rates of 1.63 inches per hour for sand and silty sand based on the guidelines provided in the MN Stormwater Manual. Based on the design infiltration rate, the engineer concurs that the basins will draw down within 48 hours (Rule J, subsection 3.1b.3). The applicant must submit documentation verifying the infiltration capacity of the amended soils do not exceed 8.3 inches/hour and are not less than the design infiltration rate.

The table below summarizes the volume abstraction required and the volume abstraction achieved by the proposed stormwater management facilities on site. With the stipulation noted above regarding verification of amended soil infiltration rate, 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	410	6.3	2,363

Water Quality Management

Subsection 3.1.c of Rule J requires the Applicant provide for at 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. The applicant is proposing to use proprietary Rain Guardians as pretreatment and an infiltration basin to achieve the required TP and TSS removals.

The MIDS calculator was used to evaluate the removal efficiencies of the stormwater management features. The results of this modeling are summarized in tables below showing the annual TSS and TP removal requirements are achieved and that there is no net increase in TSS and TP leaving the site. The engineer concurs with the modeling and finds that the proposed project is in conformance with Rule J, Subsection 3.1.c.

Annual TSS and TP removal summary

Pollutant of Interest	Regulated Site Loading (lbs/yr)	Required Load Removal (lbs/yr)	Provided Load Reduction (lbs/yr)
Total Suspended Solids (TSS)	42.5	38.3 (90%)	38.1 (90%)
Total Phosphorus (TP)	0.23	0.14 (60%)	0.21 (90%)

Summary of net change in TSS and TP leaving the site

Pollutant of Interest	Existing Site Loading (lbs/yr)	Proposed Site Load after Treatment (lbs/yr)	Change (lbs/yr)
Total Suspended Solids (TSS)	19.2	4.4	-14.8
Total Phosphorus (TP)	0.105	0.02	-0.09

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 existing Staring Lake Corporate Center building and the 100-year flood elevation in the infiltration basin are summarized below. Because the low floor elevations of the existing structure are more than two feet above the proposed 100-year flood elevation, the proposed project is in conformance with Rule J, Subsection 3.6.

Existing Building Low Floor Elevation (ft)	Stormwater Facility	100-year Event Flood Elevation of Stormwater Facility (ft)	Freeboard to 100-year Event (ft)
867.05	Infiltration Basin	859.39	7.66

Maintenance

Subsection 3.7 of Rule J requires the submission of a 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. The stormwater management facilities include an infiltration and proprietary Rain Guardians for pretreatment. To conform to the RPBCWD Rule J the following revisions are needed:

J1. Permit applicant must provide a maintenance and inspection declaration as required by Rule J, Subsection 3.7. A draft declaration must be provided for District approval prior to recordation as a condition of issuance of the permit.

Wetland Protection

Because runoff from this site is tributary to a downstream, off-site stormwater pond and is not tributary to any wetland, the proposed project does not trigger analysis under Rule J, subsection 3.10.

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.

Rule L: Permit Fee Deposit:

The RPBCWD permit fee schedule adopted in February 2020 requires permit applicants to deposit $3,000 to be held in escrow and applied to cover the $10 permit-processing fee and reimburse RPBCWD for permit review and inspection-related costs and 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 May 23, 2022. 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. As of July 6, 2022 the amount due is $2,956.

Rule M: Financial Assurance:

	Unit	Unit Cost	# of Units	Total
Rule C: Erosion Control				
Silt Fence	LF	$2.50	350	$875
Inlet Protection	EA	$100	3	$300
Rock Entrance	EA	$250	1	$250
Restoration	Ac	$2,500	0.253	$633
Rule J: Chloride Management	LS	$5,000	1	$5,000
Rule J: Stormwater Management infiltration basin and Rain Guardian: 125% of engineer's opinion of cost ($56,195)	EA	125% OPC	1	$70,244

	Unit	Unit Cost	# of Units	Total
Contingency (10%)		10%		$7,024
Total Financial Assurance				**$77,268**

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.

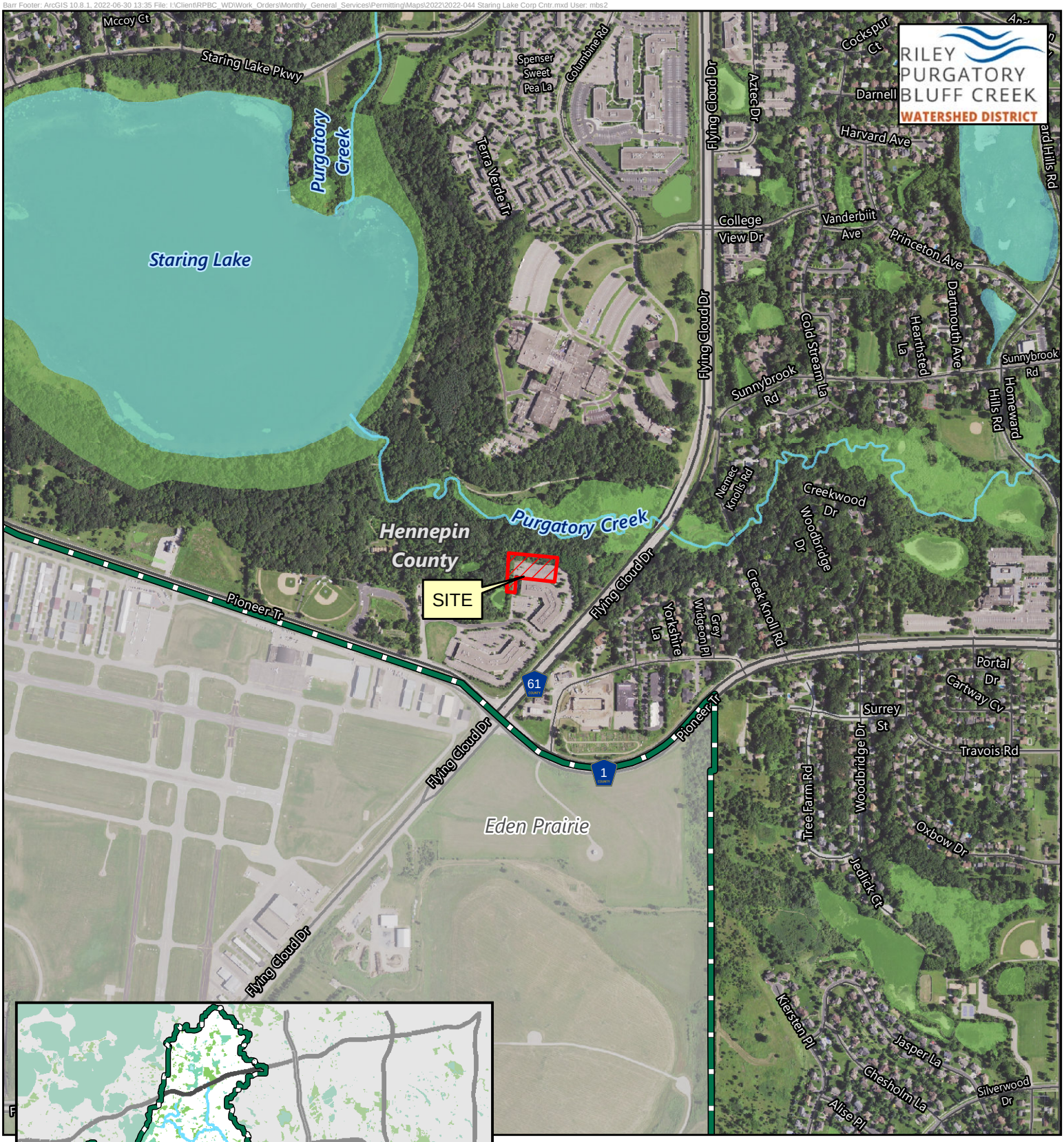
Recommendation:

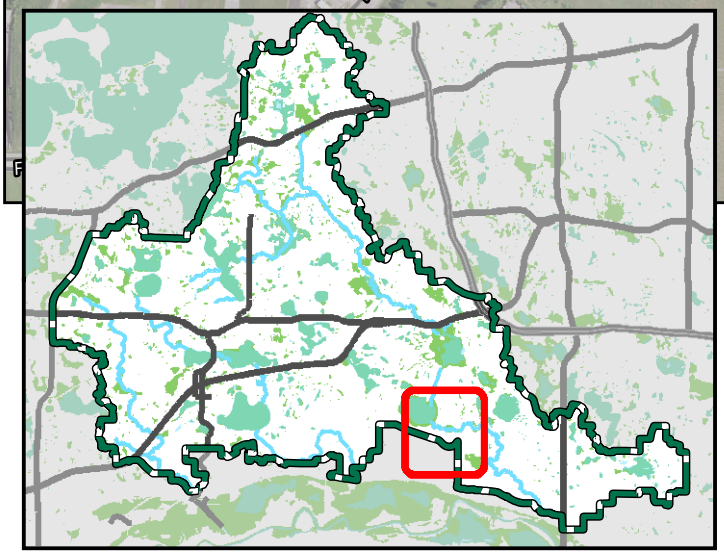
Approval, contingent upon:

1. Financial Assurance in the amount of $77,268.
2. Applicant providing the name and contact information of the individual responsible for erosion and sediment control at the site.
3. Receipt in recordation a maintenance declaration for the operation and maintenance all stormwater management facilities. Drafts of all documents to be recorded must be approved by the District prior to recordation and proof of recordation 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. As of July 6, 2022 the amount due is $2,956.

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, all the stormwater facilities conform to design specifications and function 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;
3. Providing the following additional close-out materials:
    a. Documentation that disturbed pervious areas remaining pervious have been decompacted per Rule C.2c criteria
4. The work on the Staring Lake Corporate Center development under the terms of permit 2022-044, if issued, must have an impervious surface area and configuration materially consistent with the approved plans. Design that differs materially from the approved plans (e.g., in terms of total impervious area) will need to be the subject of a request for a permit modification or new permit, which will be subject to review for compliance with all applicable regulatory requirements.
5. 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.
6. Replenish the permit fee deposit to the original amount or such lesser amount as the RPBCWD administrator determines sufficient within 45 days of receiving notice that such deposit is due in order to cover continued actual costs incurred to monitor compliance with permit conditions and the RPBCWD Rules.





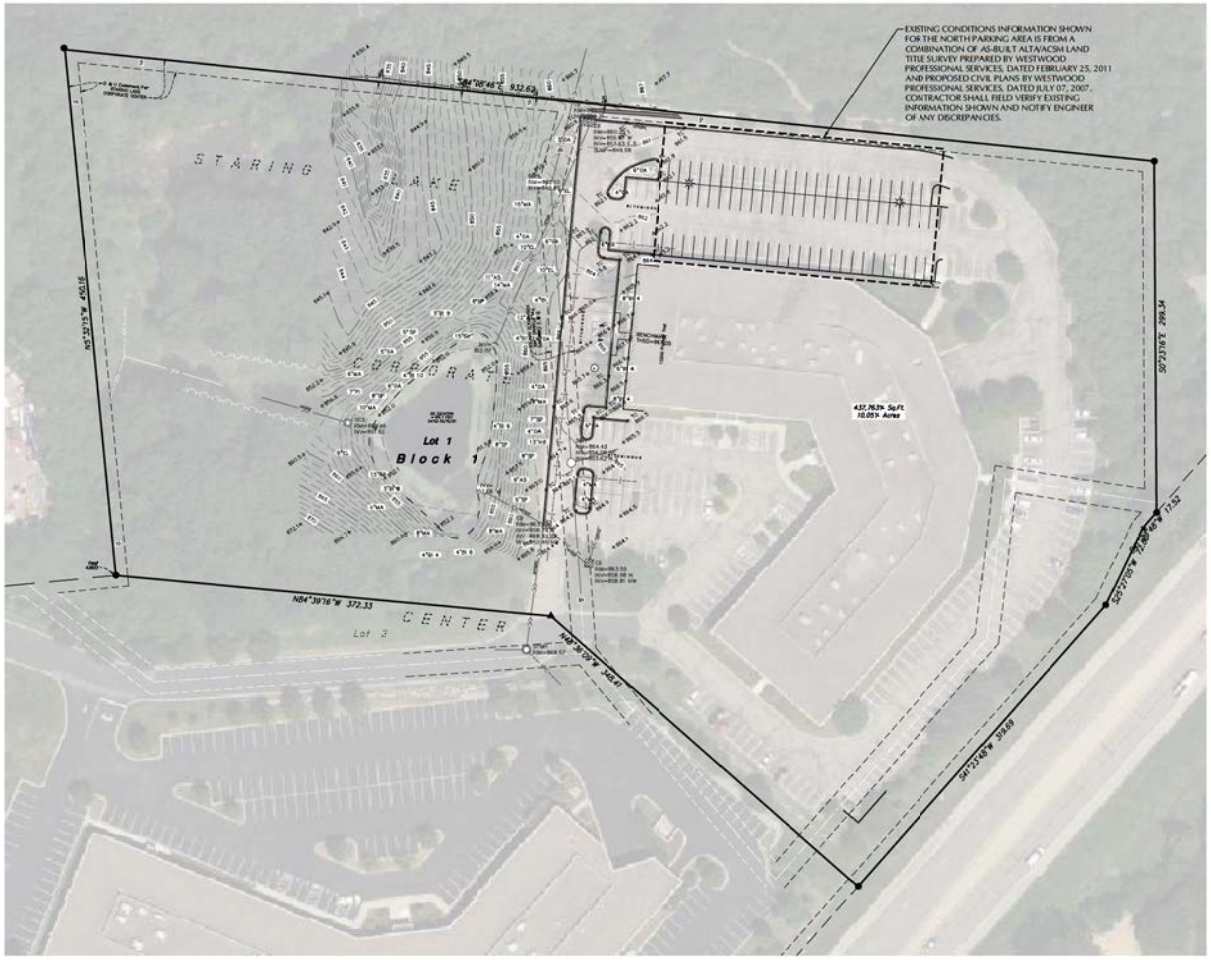
N

Feet

0 1,000

Permit Location Map

STARING LAKE
CORPORATE CENTER
Permit 2022-044
Riley Purgatory Bluff Creek
Watershed District



NOTE:
EXISTING CONDITIONS INFORMATION SHOWN IS FROM A BOUNDARY & TOPOGRAPHY SURVEY PREPARED BY LOUCKS, DATED MARCH 04, 2022.

EXISTING CONDITIONS GENERAL NOTES

1. THE INFORMATION SHOWN ON THIS EXISTING CONDITIONS PLAN WAS PREPARED FROM AN PARTIAL BOUNDARY & TOPOGRAPHIC SURVEY PREPARED BY LOUCKS. UTILITY INFORMATION SHOWN ON THIS PLAN, SUCH AS SANITARY SEWER, WATERMAIN, STORM SEWER, FORCEMAIN, ETC. WAS PROVIDED BY THE CITY OF EDEN PRAIRIE RECORD PLANS.
2. THE BEARINGS FOR THIS SURVEY ARE BASED ON THE PLAT STARING LAKE CORPORATE CENTER.
3. BENCHMARK: MNDOT 2744K (STEEL ROD IMBEDED IN MONUMENT) IN EDEN PRAIRIE; 2.0 MILES SOUTHWEST OF THE JUNCTION OF TH 212 & I-494; AT THE ENTRANCE TO HENNEPIN VOCATIONAL TECH SCHOOL (SOUTH CAMPUS); 500.0 FEET WEST OF TH 212 ON COLLEGE DRIVE; 78.5 FEET EAST OF THE NORTH-SOUTH DRIVE; 75.0 FEET SOUTH OF THE EAST-WEST ENTRANCE DRIVE; 0.6 FOOT NORTHEAST OF A WITNESS POST. ELEVATION=879.74 FEET (NGVD 29)

   SITE BENCHMARK: WEST THRESHOLD OF BUILDING, 13200 PIONEER TRAIL. ELEVATION=867.05 (NGVD29)
4. THE GROSS LAND AREA IS 437,763 +/- SQUARE FEET OR 10.05 +/- ACRES.
5. WE HAVE SHOWN BURIED STRUCTURES AND UTILITIES ON AND/OR SERVING THE SITE TO THE BEST OF OUR ABILITY, SUBJECT TO THE FOLLOWING RESTRICTIONS:
   A. UTILITY OPERATORS DO NOT CONSISTENTLY RESPOND TO LOCATE REQUESTS THROUGH THE GOPHER STATE ONE CALL SERVICE FOR BOUNDARY AND LOCATION PURPOSES SUCH AS THIS.
   B. THOSE UTILITY OPERATORS THAT DO RESPOND, OFTEN WILL NOT LOCATE SERVICES FROM THE MAIN LINE TO THE CUSTOMER'S STRUCTURE OR FACILITY - THEY CONSIDER THOSE SEGMENTS PRIVATE INSTALLATIONS THAT ARE OUTSIDE OF THEIR JURISDICTION. IF A PRIVATE SERVICE TO AN ADJOINER'S SITE CROSSES THIS SITE OR A SERVICE TO THIS SITE CROSSES AN ADJOINER, IT MAY NOT BE LOCATED SINCE MOST OPERATORS WILL NOT MARK SUCH "PRIVATE" SERVICES.
   C. SNOW AND ICE CONDITIONS DURING WINTER MONTHS MAY OBSCURE OTHERWISE VISIBLE EVIDENCE OF A BURIED STRUCTURE OR UTILITY.
   D. MAPS PROVIDED BY UTILITY OPERATORS, EITHER ALONE OR WITH A FIELD LOCATION OR IN LIEU OF SUCH A LOCATION, ARE VERY OFTEN INACCURATE OR INCONCLUSIVE. MAPS PROVIDED BY UTILITY OPERATORS ARE VERY OFTEN AT A VERY SMALL SCALE, OR NO SCALE.
   E. EXTREME CAUTION MUST BE EXERCISED BEFORE AN EXCAVATION TAKES PLACE ON OR NEAR THE SITE. BEFORE DIGGING, YOU ARE REQUIRED BY LAW TO NOTIFY GOPHER STATE ONE CALL AT LEAST 48 HOURS IN ADVANCE AT 651-454-0002.
   F. UTILITY INFORMATION SHOWN ON THIS PLAN, SUCH AS NATURAL GAS, ELECTRIC LINES, TELEPHONE LINES, FIBEROPTIC LINES, CABLE TELEVISION LINES, UNDERGROUND PIPELINES, ETC., WAS SUPPLIED OR LOCATED BY GOPHER STATE ONE CALL, TICKET NUMBERS 220330666 & 220330676.

DESCRIPTION OF PROPERTY

(Per Hennepin County Tax Records)

Lot 1, Block 1, STARING LAKE CORPORATE CENTER, Hennepin County, Minnesota.

SURVEY LEGEND

- FOUND 1/2 INCH OPEN IRON MONUMENT UNLESS SHOWN OTHERWISE
- SET 1/2 INCH X 14 INCH IRON MONUMENT, MARKED "LS 48988"
- FOUND PK NAIL
- AS ASH
- BI BIRCH
- EL ELM
- HB HACKBERRY
- MA MAPLE
- OA OAK
- PI PINE
- SP SPRUCE
- CONIFEROUS TREE
- DECIDUOUS TREE
- CATCH BASIN
- STORM MANHOLE
- SANITARY MANHOLE
- FLARED END SECTION
- SIGN
- 872.5 SPOT ELEVATION
- IP IRON PIPE
- MC MOTORCYCLE STALL
- TC TOP OF CURB
- THSD ELEV @ THRESHOLD
- TNH TOP NUT HYDRANT
- STORM SEWER
- MAPPED STORM SEWER
- SANITARY SEWER
- MAPPED SANITARY SEWER
- MAPPED WATERMAIN
- CHAIN LINK FENCE
- CONCRETE CURB
- RETAINING WALL
- CONCRETE
- NO PARKING
- 872 CONTOUR
- WATER LINE
- TREE LINE

CALL BEFORE YOU DIG!
Gopher State One Call
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

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 651-4540002 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.

N

0 50 100
SCALE IN FEET

STARING LAKE CORPORATE CENTER
EDEN PRAIRIE, MN

SYNDICATED EQUITIES
13200 PIONEER TRAIL
EDEN PRAIRIE, MN 55347

LOUCKS
PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
7200 Hemlock Lane, Suite 300
Maple Grove, MN 55369
763.424.5505
www.loucksinc.com

CADD QUALIFICATION

CADD Files prepared by the Consultant for this project are instruments of service for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

05/23/2022 WATERSHED SUBMITTAL
06/01/2022 CITY SUBMITTAL
06/27/2022 WATERSHED RESUBMIT

PROFESSIONAL SIGNATURE

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.

Max J. Seitz - PE
License No. 56735
Date

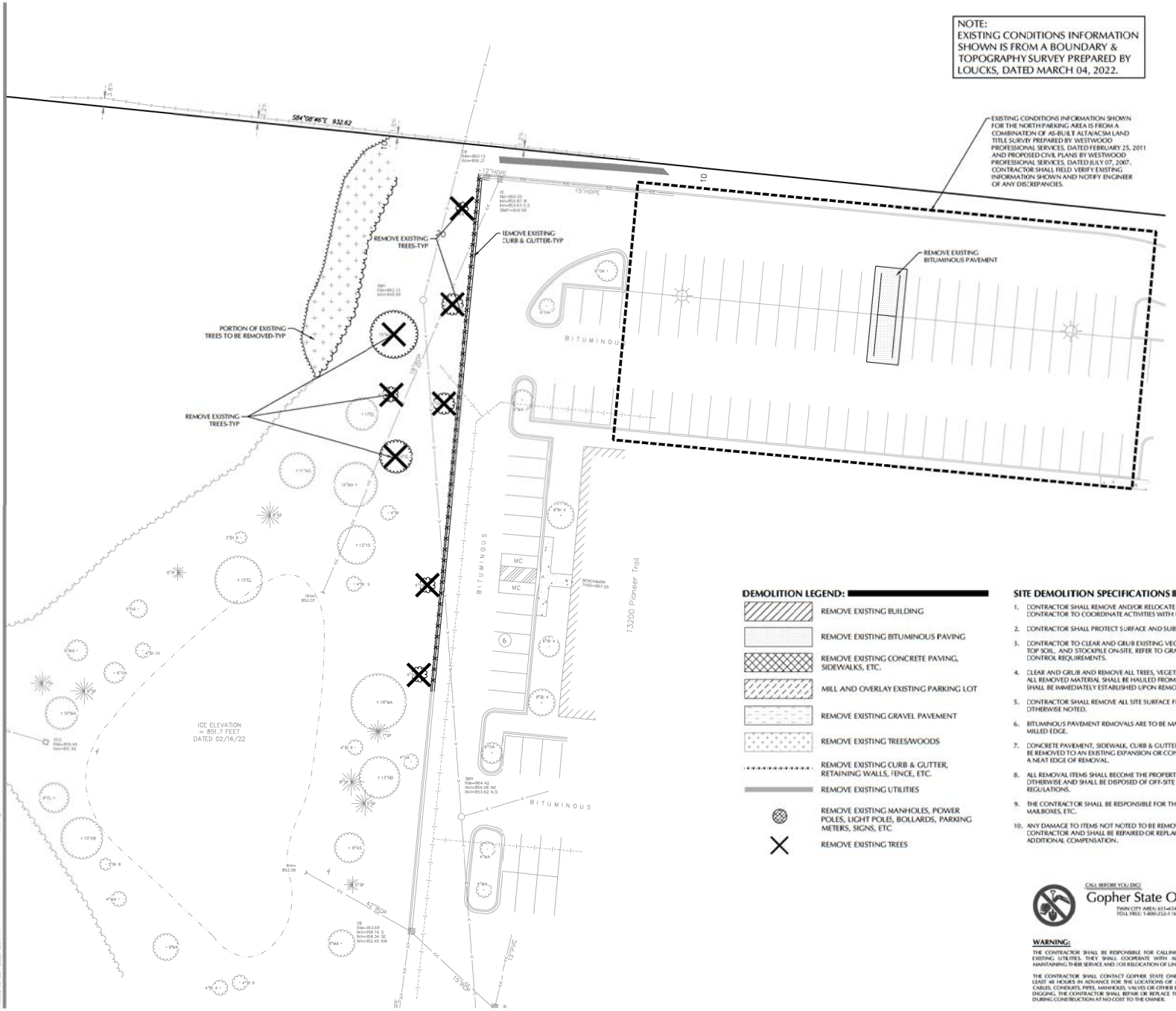
QUALITY CONTROL

Loucks Project No.	21231A
Project Lead	MJS
Drawn By	TRG
Checked By	JJD
Review Date	06/27/2022

SHEET INDEX

EXISTING CONDITIONS PLAN
C1-1

Plotted: 06 /25 / 2022 2:30 PM W:\2021\21231A\CADD DATA\CIVIL\...\Dwg Sheet Files\C1-1 - EXISTING CONDITIONS PLAN



SITE DEMOLITION SPECIFICATIONS

1. CONTRACTOR SHALL REMOVE AND/OR RELOCATE EXISTING PRIVATE UTILITIES AS NECESSARY. CONTRACTOR TO COORDINATE ACTIVITIES WITH UTILITY COMPANIES.
2. CONTRACTOR SHALL PROTECT SURFACE AND SUBSURFACE FEATURES NOT NOTED FOR REMOVAL.
3. CONTRACTOR TO CLEAR AND GRUB EXISTING VEGETATION WITHIN CONSTRUCTION LIMITS, STRIP TOP SOIL, AND STOCKPILE ON-SITE. REFER TO GRADING PLAN FOR SEDIMENT AND EROSION CONTROL REQUIREMENTS.
4. CLEAR AND GRUB AND REMOVE ALL TREES, VEGETATION AND SITE DEBRIS PRIOR TO GRADING. ALL REMOVED MATERIAL SHALL BE HAULED FROM THE SITE DAILY. EROSION CONTROL MEASURES SHALL BE IMMEDIATELY ESTABLISHED UPON REMOVAL. SEE SWPPP IC3-21.
5. CONTRACTOR SHALL REMOVE ALL SITE SURFACE FEATURES WITHIN REMOVAL LIMITS UNLESS OTHERWISE NOTED.
6. BITUMINOUS PAVEMENT REMOVALS ARE TO BE MADE TO A VERTICAL SAW CUT OR TO A NEAT MILLED EDGE.
7. CONCRETE PAVEMENT, SIDEWALK, CURB & GUTTER AND OTHER POURED CONCRETE ITEMS ARE TO BE REMOVED TO AN EXISTING EXPANSION OR CONTRACTION JOINT. SAW CUT AS NECESSARY FOR A NEAT EDGE OF REMOVAL.
8. ALL REMOVAL ITEMS SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS SPECIFIED OTHERWISE AND SHALL BE DISPOSED OF OFF-SITE IN A MANNER MEETING ALL APPLICABLE REGULATIONS.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF ALL SIGNS, MAILBOXES, ETC.
10. ANY DAMAGE TO ITEMS NOT NOTED TO BE REMOVED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED OR REPLACED TO ORIGINAL CONDITION WITH NO ADDITIONAL COMPENSATION.

CALL BEFORE YOU DIG!
Gopher State One Call
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

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 651-4540002 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.

N
0 20 40
SCALE IN FEET

STARING LAKE CORPORATE CENTER
EDEN PRAIRIE, MN

SYNDICATED EQUITIES
13200 PIONEER TRAIL
EDEN PRAIRIE, MN 55347

LOUCKS
PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
7200 Hemlock Lane, Suite 300
Maple Grove, MN 55369
763.424.5505
www.loucksinc.com

CADD QUALIFICATION

SUBMITTAL/REVISIONS

05/23/2022	WATERSHED SUBMITTAL
06/01/2022	CITY SUBMITTAL
06/27/2022	WATERSHED RESUBMIT

PROFESSIONAL SIGNATURE

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.

Max J. Seitz - PE
License No. 56735
Date

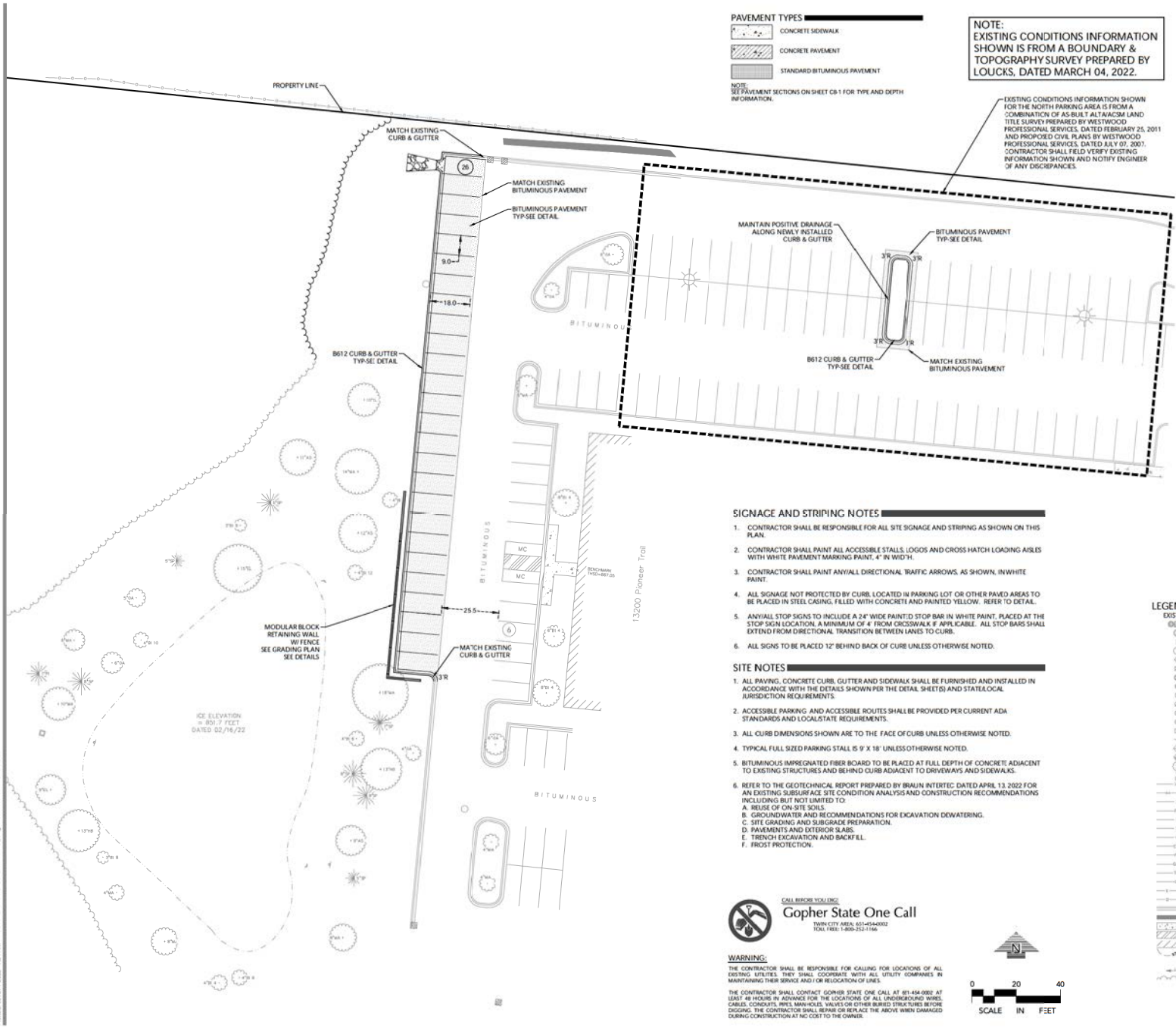
QUALITY CONTROL

Loucks Project No.	21231A
Project Lead	MJS
Drawn By	TRG
Checked By	JJD
Review Date	06/27/2022

SHEET INDEX

DEMOLITION PLAN
C1-2

Plotted: 06 /25 / 2022 2:31 PM W:\2021\21231A\CADD DATA\CIVIL\dwg Sheet Files\C1-2 - DEMOLITION PLAN



PAVEMENT TYPES

- CONCRETE SIDEWALK
- CONCRETE PAVEMENT
- STANDARD BITUMINOUS PAVEMENT

NOTE:
SEE PAVEMENT SECTIONS ON SHEET C8-1 FOR TYPE AND DEPTH INFORMATION.

NOTE:
EXISTING CONDITIONS INFORMATION SHOWN IS FROM A BOUNDARY & TOPOGRAPHY SURVEY PREPARED BY LOUCKS, DATED MARCH 04, 2022.

SITE DATA

CURRENT ZONING: I-2 INDUSTRIAL PARK
PROPERTY AREA:
DISTURBED AREA:
EXISTING IMPERVIOUS AREA:
PROPOSED IMPERVIOUS AREA:

BUILDING DATA

TOTAL GROSS SF=64,100 SF

CURRENT:
53,800 SF (OFFICE)
10,300 SF (SHELL SPACE)

PROPOSED:
85% OFFICE 15% SHOWROOM/WAREHOUSING
54,485 SF (OFFICE)
9,615 SF (SHOWROOM/WAREHOUSING)

PARKING CALCULATIONS

EXISTING PARKING =	254 STALLS
REMOVED PARKING=	2 STALLS
ADDED PARKING=	26 STALLS
TOTAL PARKING=	278 STALLS
REQUIRED PARKING=	278 STALLS**
EXISTING ACCESSIBLE PARKING =	8 STALLS
PROPOSED ACCESSIBLE PARKING=	8 STALLS

**MINIMUM PARKING REQUIRED FOR 5/1000 GFA OFFICE & 0.5/1000 GFA WAREHOUSE

54,485 SF (OFFICE)/200=273 STALLS
9,615 SF (SHOWROOM/WAREHOUSING)/2000=5 STALLS

SIGNAGE AND STRIPING NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SITE SIGNAGE AND STRIPING AS SHOWN ON THIS PLAN.
2. CONTRACTOR SHALL PAINT ALL ACCESSIBLE STALLS, LOGOS AND CROSS HATCH LOADING AISLES WITH WHITE PAVEMENT MARKING PAINT, 4" IN WIDTH.
3. CONTRACTOR SHALL PAINT ANY/ALL DIRECTIONAL TRAFFIC ARROWS, AS SHOWN, IN WHITE PAINT.
4. ALL SIGNAGE NOT PROTECTED BY CURB, LOCATED IN PARKING LOT OR OTHER PAVED AREAS TO BE PLACED IN STEEL CASING, FILLED WITH CONCRETE AND PAINTED YELLOW. REFER TO DETAIL.
5. ANY/ALL STOP SIGNS TO INCLUDE A 24" WIDE PAINTED STOP BAR IN WHITE PAINT, PLACED AT THE STOP SIGN LOCATION, A MINIMUM OF 4' FROM CROSSWALK IF APPLICABLE. ALL STOP BARS SHALL EXTEND FROM DIRECTIONAL TRANSITION BETWEEN LANES TO CURB.
6. ALL SIGNS TO BE PLACED 12' BEHIND BACK OF CURB UNLESS OTHERWISE NOTED.

SITE NOTES

1. ALL PAVING, CONCRETE CURB, GUTTER AND SIDEWALK SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE DETAILS SHOWN PER THE DETAIL SHEET(S) AND STATE/LOCAL JURISDICTION REQUIREMENTS.
2. ACCESSIBLE PARKING AND ACCESSIBLE ROUTES SHALL BE PROVIDED PER CURRENT ADA STANDARDS AND LOCAL/STATE REQUIREMENTS.
3. ALL CURB DIMENSIONS SHOWN ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
4. TYPICAL FULL SIZED PARKING STALL IS 9' X 18' UNLESS OTHERWISE NOTED.
5. BITUMINOUS IMPREGNATED FIBER BOARD TO BE PLACED AT FULL DEPTH OF CONCRETE ADJACENT TO EXISTING STRUCTURES AND BEHIND CURB ADJACENT TO DRIVEWAYS AND SIDEWALKS.
6. REFER TO THE GEOTECHNICAL REPORT PREPARED BY BRAUN INTERTEC DATED APRIL 13, 2022 FOR AN EXISTING SUBSURFACE SITE CONDITION ANALYSIS AND CONSTRUCTION RECOMMENDATIONS INCLUDING BUT NOT LIMITED TO:
   A. REUSE OF ON-SITE SOILS.
   B. GROUNDWATER AND RECOMMENDATIONS FOR EXCAVATION DEWATERING.
   C. SITE GRADING AND SUBGRADE PREPARATION.
   D. PAVEMENTS AND EXTERIOR SLABS.
   E. TRENCH EXCAVATION AND BACKFILL.
   F. FROST PROTECTION.

LEGEND

EXISTING		PROPOSED
	CATCH BASIN	
	STORM MANHOLE	
	FLARED END SECTION	
	SANITARY MANHOLE	
	HYDRANT	
	GATE VALVE	
	POST INDICATOR VALVE	
	WATER MANHOLE / WELL	
	LIGHT POLE	
	POWER POLE	
	ELECTRIC METER	
	GAS METER	
	TELEPHONE PEDESTAL	
	SIGN	
	BENCHMARK	
	SOIL BORING	
	PARKING STALL COUNT	
	ACCESSIBLE PARKING STALL	
	STORM SEWER	
	DRAINTILE	
	SANITARY SEWER	
	FORCEMAIN	
	WATERMAIN	
	SANITARY SEWER SERVICE	
	WATER SERVICE	
	UNDERGROUND ELECTRIC	
	UNDERGROUND FIBER OPTIC	
	UNDERGROUND GAS	
	UNDERGROUND TELEPHONE	
	OVERHEAD UTILITY	
	FENCE	
	CHAIN LINK FENCE	
	CONCRETE CURB	
	RETAINING WALL	
	CONCRETE	
	NO PARKING	
	BUILDING	
	CONTOUR	
	SPOT ELEVATION	
	DIRECTION OF FLOW	
	TREE LINE	
	PARKING STALL COUNTS	
	PARKING SETBACK LINE	
	BUILDING SETBACK LINE	

CALL BEFORE YOU DIG!
Gopher State One Call
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

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, MAN-HOLES, 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.

N

0 20 40
SCALE IN FEET

STARING LAKE CORPORATE CENTER
EDEN PRAIRIE, MN

SYNDICATED EQUITIES
13200 PIONEER TRAIL
EDEN PRAIRIE, MN 55347

LOUCKS
PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
7200 Hemlock Lane, Suite 300
Maple Grove, MN 55369
763.424.5505
www.loucksinc.com

CADD QUALIFICATION

CADD Files prepared by the Consultant for this project are instruments of service for use solely with respect to this project. These CADD Files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions, and such party shall indemnify and hold harmless the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

05/23/2022 WATERSHED SUBMITTAL
06/01/2022 CITY SUBMITTAL
06/27/2022 WATERSHED RESUBMIT

PROFESSIONAL SIGNATURE

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.

Max J. Seitz - PE
License No. 56735
Date

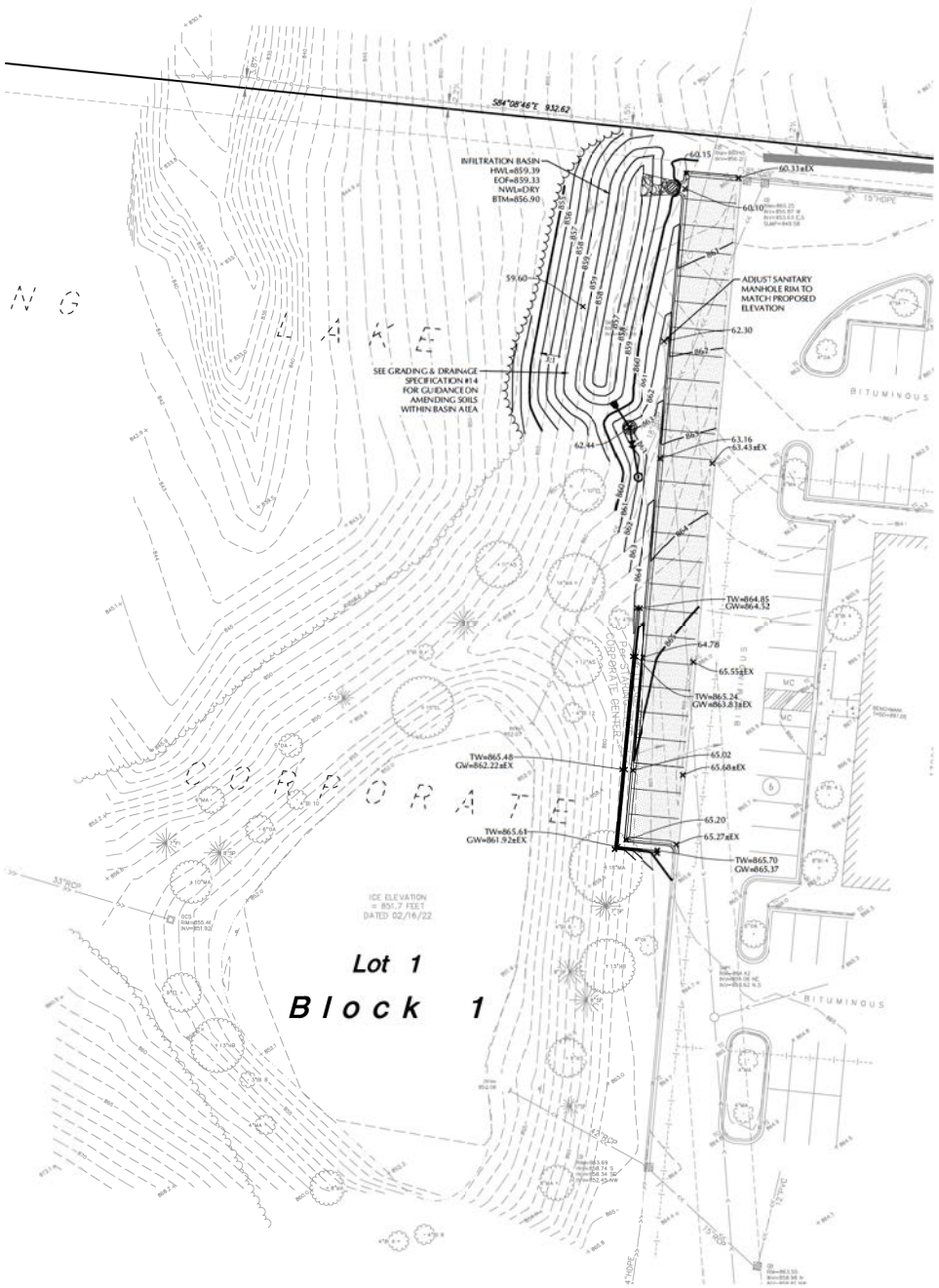
QUALITY CONTROL

Loucks Project No.	21231A
Project Lead	MJS
Drawn By	TRG
Checked By	JJD
Review Date	06/27/2022

SHEET INDEX

SITE PLAN
C2-1

Plotted: 06 / 27 / 2022 9:34 AM W:\2021\21231A\CADD DATA\CIVIL\dwg Sheet Files\C2-1 - SITE PLAN



GRADING & DRAINAGE NOTES

SEE STORMWATER POLLUTION PREVENTION PLAN IOR SOIL STABILIZATION INFORMATION.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE ESTABLISHED AROUND THE ENTIRE SITE PERIMETER AND IN ACCORDANCE WITH NPDES PIRMIT REQUIREMENTS, BEST MANAGEMENT PRACTICES, CITY REQUIREMENTS AND THE DETAILS SHOWN ON THE CIVIL DETAILS SHEETS OF THESE PLANS.

ALL CURB SPOT ELEVATIONS ARE TO GUTTER LINE UNLESS NOTED OTHERWISE.

GRADING, DRAINAGE & EROSION CONTROL SPECIFICATIONS

1. SPOT ELEVATIONS REPRESENT FINISHED SURFACE GRADES, GUTTER/FLOW LINE, FACE OF BUILDING, OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
2. CATCH BASINS AND MANHOLES IN PAVED AREAS SHALL BE SUMPED 0.04 FEET. ALL CATCH BASINS IN GUTTERS SHALL BE SUMPED 0.10 FEET. RIM ELEVATIONS SHOWN ON PLANS DO NOT REFLECT SUMPED ELEVATIONS.
3. ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE MINIMUM OF 6 INCHES OF PREMILUM TOP SOIL AND SEED/MULCH OR SOD. THESE AREAS SHALL BE WATERED/MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION IS ESTABLISHED. VERIFY WITH LANDSCAPE PLAN.
4. FOR SITE RETAINING WALLS "TW" EQUALS SURFACE GRADE AT TOP FACE OF WALL (NOT TOP OF WALL), "GW" EQUALS SURFACE GRADE AT BOTTOM FACE OF WALL (NOT BOTTOM OF BURIED WALL COURSES).
5. REFER TO THE GEOTECHNICAL EVALUATION REPORT (REPORT NO B2201925), DATED 04/13/22 AS PREPARED BY BRAUN INTERTEC FOR AN EXISTING SUBSURFACE SITE CONDITION ANALYSIS AND CONSTRUCTION RECOMMENDATIONS.
6. STREETS MUST BE CLEANED AND SWEPT WHENEVER TRACKING OF SEDIMENTS OCCURS AND BEFORE SITES ARE LEFT IDLE FOR WEEKENDS AND HOLIDAYS, OR AS DIRECTED BY CITY. A REGULAR SWEEPING SCHEDULE MUST BE ESTABLISHED.
7. DUST MUST BE ADEQUATELY CONTROLLED.
8. SEE UTILITY PLAN FOR WATER, STORM AND SANITARY SEWER INFORMATION.
9. SEE SITE PLAN FOR CURB AND BITUMINOUS TAPER LOCATIONS.
10. A STREET SWEEPER MUST BE AVAILABLE WITHIN 3 HOURS UPON NOTICE FROM THE CITY THAT THE STREETS NEED TO BE SWEPT.
11. THE CONTRACTOR ALONG WITH THE OWNER SHALL OBTAIN ALL NECESSARY PIRMITS AND APPROVALS FROM GOVERNING AUTHORITIES, INCLUDING ANY CITY PERMITS AND THE NPDES PERMIT FROM THE MPCA.
12. INSTALL EROSION CONTROL AND TREE PROTECTION MEASURES BEFORE BEGINNING SITE GRADING ACTIVITIES. SOME EROSION CONTROLS SUCH AS BALE CHECKS AND TEMPORARY SILT PONDS MAY BE INSTALLED AS GRADING OCCURS IN SPECIFIC AREAS. MAINTAIN EROSION CONTROLS THROUGHOUT THE GRADING PROCESS AND REMOVE WHEN TURF HAS BEEN ESTABLISHED.
13. THE CONTRACTOR SHALL ADHERE TO ALL REQUIREMENTS OF THE MPCA NPDES PERMIT. THE AREA TO BE DISTURBED SHALL BE MINIMIZED AND TURF SHALL BE ESTABLISHED WITHIN THE TIME REQUIRED.
14. SOILS WITHIN THE PROPOSED BASIN AREA SHALL BE AMENDED BY BLENDING THE TOP 12 TO 18 INCHES OF IN PLACE NATIVE SOIL WITH TOPSOIL THROUGH THE USE OF TILLING EQUIPMENT.

RPBCWD NOTES

1. NATURAL TOPOGRAPHY AND SOIL CONDITIONS MUST BE PROTECTED, INCLUDING RETENTION ONSITE OF NATIVE TOPSOIL TO THE GREATEST EXTENT POSSIBLE.
2. 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.
3. FINAL SITE STABILIZATION MEASURES MUST ENSURE THAT AT LEAST SIX INCHES OF TOPSOIL (CONTAINING AT LEAST 5% ORGANIC MATTER) BE SPREAD AND INCORPORATED INTO THE UNDERLYING SOIL DURING FINAL SITE TREATMENT WHEREVER TOPSOIL HAS BEEN REMOVED.
4. CONSTRUCTION SITE WASTE SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER AND SANITARY WASTE MUST BE PROPERLY MANAGED.
5. 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.
6. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPS MUST BE REMOVED UPON FINAL STABILIZATION.
7. 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.
8. 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.
9. 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.

NOTE:
EXISTING CONDITIONS INFORMATION SHOWN IS FROM A BOUNDARY & TOPOGRAPHY SURVEY PREPARED BY LOUCKS, DATED MARCH 04, 2022.

LEGEND

EXISTING		PROPOSED
	CATCH BASIN	
	STORM MANHOLE	
	FLARED END SECTION	
	SANITARY MANHOLE	
	HYDRANT	
	GATE VALVE	
	POST INDICATOR VALVE	
	WATER MANHOLE / WELL	
	LIGHT POLE	
	POWER POLE	
	ELECTRIC METER	
	GAS METER	
	TELEPHONE PEDESTAL	
	SIGN	
	BENCHMARK	
	SOIL BORING	
	PARKING STALL COUNT	
	ACCESSIBLE PARKING STALL	
	STORM SEWER	
	DRAINTILE	
	SANITARY SEWER	
	FORCEMAIN	
	WATERMAIN	
	SANITARY SEWER SERVICE	
	WATER SERVICE	
	UNDERGROUND ELECTRIC	
	UNDERGROUND FIBER OPTIC	
	UNDERGROUND GAS	
	UNDERGROUND TELEPHONE	
	OVERHEAD UTILITY	
	FENCE	
	CHAIN LINK FENCE	
	CONCRETE CURB	
	RETAINING WALL	
	CONCRETE	
	NO PARKING	
	BUILDING	
	CONTOUR	
	SPOT ELEVATION	
	DIRECTION OF FLOW	
	TREE LINE	
	PARKING STALL COUNTS	
	PARKING SETBACK LINE	
	BUILDING SETBACK LINE	

CALL BEFORE YOU DIG!
Gopher State One Call
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

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 651-4540002 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.

N

0 20 40
SCALE IN FEET

STARING LAKE CORPORATE CENTER
EDEN PRAIRIE, MN

SYNDICATED EQUITIES
13200 PIONEER TRAIL
EDEN PRAIRIE, MN 55347

LOUCKS
PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
7200 Hemlock Lane, Suite 300
Maple Grove, MN 55369
763.424.5505
www.loucksinc.com

CADD QUALIFICATION

CADD Files prepared by the Consultant for this project are instruments of service for use solely with respect to this project. These CADD Files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions or deletions to these CADD Files shall be made at the full risk of that party making such revisions, additions or deletions, and such party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

05/23/2022 WATERSHED SUBMITTAL
06/01/2022 CITY SUBMITTAL
06/27/2022 WATERSHED RESUBMIT

PROFESSIONAL SIGNATURE

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.

Max J. Seitz - PE
License No. 56735
Date

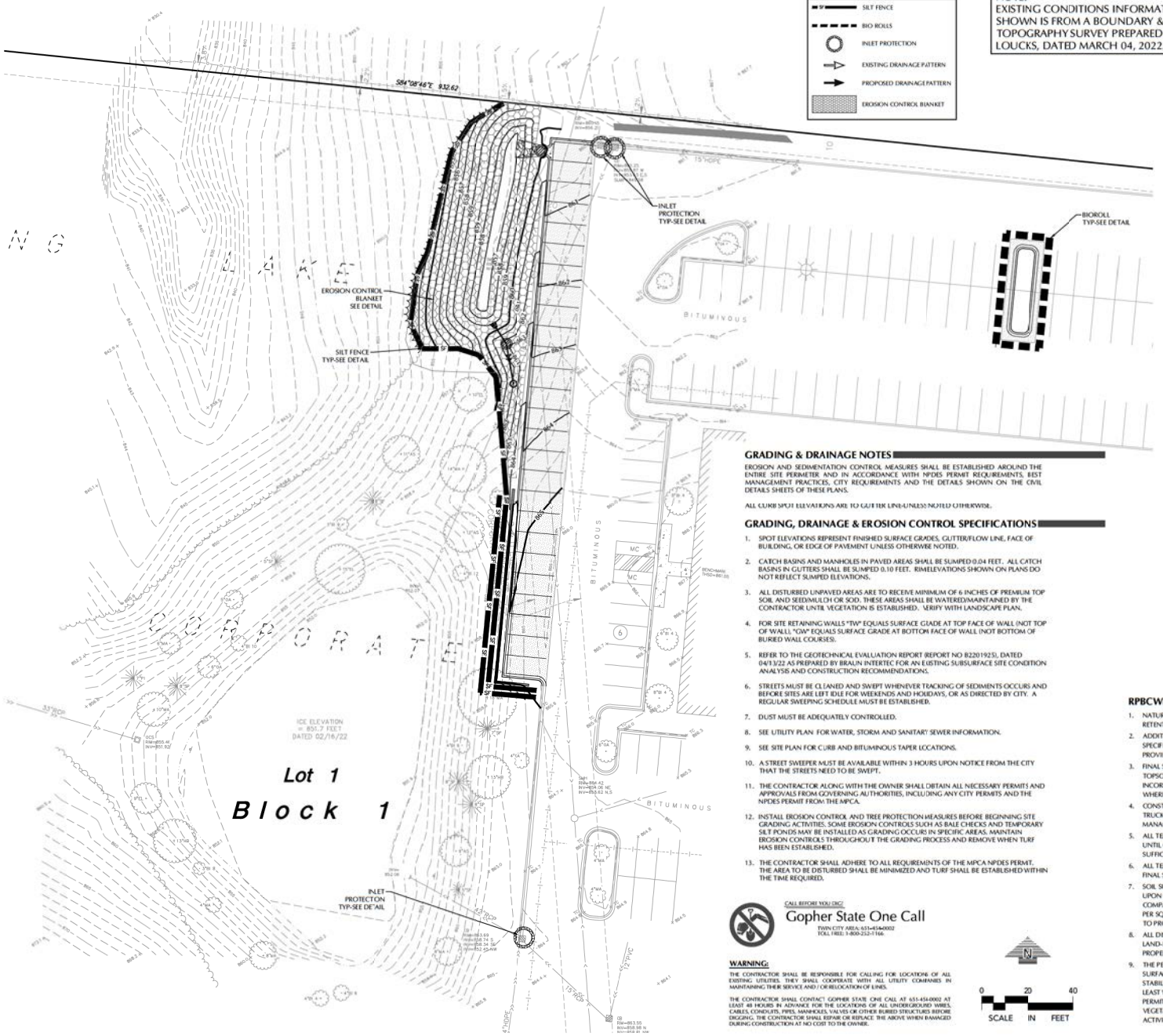
QUALITY CONTROL

Loucks Project No.	21231A
Project Lead	MJS
Drawn By	TRG
Checked By	JJD
Review Date	06/27/2022

SHEET INDEX

GRADING & DRAINAGE PLAN
C3-1

Plotted: 06 /25 / 2022 2:32 PM W:\2021\21231A\CADD DATA\CIVIL\dwg Sheet Files\C3-1 - GRADING & DRAINAGE PLAN



SWPPP LEGEND

- SILT FENCE
- BIO ROLLS
- INLET PROTECTION
- EXISTING DRAINAGE PATTERN
- PROPOSED DRAINAGE PATTERN
- EROSION CONTROL BLANKET

NOTE:
EXISTING CONDITIONS INFORMATION SHOWN IS FROM A BOUNDARY & TOPOGRAPHY SURVEY PREPARED BY LOUCKS, DATED MARCH 04, 2022.

LEGEND

EXISTING		PROPOSED
	CATCH BASIN	
	STORM MANHOLE	
	FLARED END SECTION	
	SANITARY MANHOLE	
	HYDRANT	
	GATE VALVE	
	POST INDICATOR VALVE	
	WATER MANHOLE / WELL	
	LIGHT POLE	
	POWER POLE	
	ELECTRIC METER	
	GAS METER	
	TELEPHONE PEDESTAL	
	SIGN	
	BENCHMARK	
	SOIL BORING	
	PARKING STALL COUNT	
	ACCESSIBLE PARKING STALL	
	STORM SEWER	
	DRAINTILE	
	SANITARY SEWER	
	FORCEMAIN	
	WATERMAIN	
	SANITARY SEWER SERVICE	
	WATER SERVICE	
	UNDERGROUND ELECTRIC	
	UNDERGROUND FIBER OPTIC	
	UNDERGROUND GAS	
	UNDERGROUND TELEPHONE	
	OVERHEAD UTILITY	
	FENCE	
	CHAIN LINK FENCE	
	CONCRETE CURB	
	RETAINING WALL	
	CONCRETE	
	NO PARKING	
	BUILDING	
	CONTOUR	
	SPOT ELEVATION	
	DIRECTION OF FLOW	
	TREE LINE	
	PARKING STALL COUNTS	
	PARKING SETBACK LINE	
	BUILDING SETBACK LINE	

GRADING & DRAINAGE NOTES

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE ESTABLISHED AROUND THE ENTIRE SITE PERIMETER AND IN ACCORDANCE WITH NPDES PERMIT REQUIREMENTS, BEST MANAGEMENT PRACTICES, CITY REQUIREMENTS AND THE DETAILS SHOWN ON THE CIVIL DETAILS SHEETS OF THESE PLANS.

ALL CURB SPOT ELEVATIONS ARE TO GUTTER LINE UNLESS NOTED OTHERWISE.

GRADING, DRAINAGE & EROSION CONTROL SPECIFICATIONS

1. SPOT ELEVATIONS REPRESENT FINISHED SURFACE GRADES, GUTTER/FLOW LINE, FACE OF BUILDING, OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
2. CATCH BASINS AND MANHOLES IN PAVED AREAS SHALL BE SUMPED 0.04 FEET. ALL CATCH BASINS IN GUTTERS SHALL BE SUMPED 0.10 FEET. RIM ELEVATIONS SHOWN ON PLANS DO NOT REFLECT SUMPED ELEVATIONS.
3. ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE MINIMUM OF 6 INCHES OF PREMIUM TOP SOIL AND SEED/MULCH OR SOD. THESE AREAS SHALL BE WATERED/MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION IS ESTABLISHED. VERIFY WITH LANDSCAPE PLAN.
4. FOR SITE RETAINING WALLS "TW" EQUALS SURFACE GRADE AT TOP FACE OF WALL (NOT TOP OF WALL). "GW" EQUALS SURFACE GRADE AT BOTTOM FACE OF WALL (NOT BOTTOM OF BURIED WALL COURSES).
5. REFER TO THE GEOTECHNICAL EVALUATION REPORT (REPORT NO B2201925), DATED 04/13/22 AS PREPARED BY BRAUN INTERTEC FOR AN EXISTING SUBSURFACE SITE CONDITION ANALYSIS AND CONSTRUCTION RECOMMENDATIONS.
6. STREETS MUST BE CLEANED AND SWEPT WHENEVER TRACKING OF SEDIMENTS OCCURS AND BEFORE SITES ARE LEFT IDLE FOR WEEKENDS AND HOLIDAYS, OR AS DIRECTED BY CITY. A REGULAR SWEEPING SCHEDULE MUST BE ESTABLISHED.
7. DUST MUST BE ADEQUATELY CONTROLLED.
8. SEE UTILITY PLAN FOR WATER, STORM AND SANITARY SEWER INFORMATION.
9. SEE SITE PLAN FOR CURB AND BITUMINOUS TAPER LOCATIONS.
10. A STREET SWEEPER MUST BE AVAILABLE WITHIN 3 HOURS UPON NOTICE FROM THE CITY THAT THE STREETS NEED TO BE SWEPT.
11. THE CONTRACTOR ALONG WITH THE OWNER SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM GOVERNING AUTHORITIES, INCLUDING ANY CITY PERMITS AND THE NPDES PERMIT FROM THE MPCA.
12. INSTALL EROSION CONTROL AND TREE PROTECTION MEASURES BEFORE BEGINNING SITE GRADING ACTIVITIES. SOME EROSION CONTROLS SUCH AS BALE CHECKS AND TEMPORARY SILT PONDS MAY BE INSTALLED AS GRADING OCCURS IN SPECIFIC AREAS. MAINTAIN EROSION CONTROLS THROUGHOUT THE GRADING PROCESS AND REMOVE WHEN TURF HAS BEEN ESTABLISHED.
13. THE CONTRACTOR SHALL ADHERE TO ALL REQUIREMENTS OF THE MPCA NPDES PERMIT. THE AREA TO BE DISTURBED SHALL BE MINIMIZED AND TURF SHALL BE ESTABLISHED WITHIN THE TIME REQUIRED.

CALL BEFORE YOU DIG!
Gopher State One Call
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

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.

SCALE IN FEET
0 20 40

RPBCWD NOTES

1. NATURAL TOPOGRAPHY AND SOIL CONDITIONS MUST BE PROTECTED, INCLUDING RETENTION ONSITE OF NATIVE TOPSOIL TO THE GREATEST EXTENT POSSIBLE.
2. 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.
3. FINAL SITE STABILIZATION MEASURES MUST ENSURE THAT AT LEAST SIX INCHES OF TOPSOIL (CONTAINING AT LEAST 5% ORGANIC MATTER) BE SPREAD AND INCORPORATED INTO THE UNDERLYING SOIL DURING FINAL SITE TREATMENT WHEREVER TOPSOIL HAS BEEN REMOVED.
4. CONSTRUCTION SITE WASTE SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER AND SANITARY WASTE MUST BE PROPERLY MANAGED.
5. 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.
6. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPS MUST BE REMOVED UPON FINAL STABILIZATION.
7. 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.
8. 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.
9. 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.

STARING LAKE CORPORATE CENTER
EDEN PRAIRIE, MN

SYNDICATED EQUITIES
13200 PIONEER TRAIL
EDEN PRAIRIE, MN 55347

LOUCKS
PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
7200 Hemlock Lane, Suite 300
Maple Grove, MN 55369
763.424.5505
www.loucksinc.com

CADD QUALIFICATION

CADD Files prepared by the Consultant for this project are instruments of service for use solely with respect to this project. These CADD Files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions, and such party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

05/23/2022	WATERSHED SUBMITTAL
06/01/2022	CITY SUBMITTAL
06/27/2022	WATERSHED RESUBMIT

PROFESSIONAL SIGNATURE

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.

Max J. Seitz - PE
License No. 56735
Date

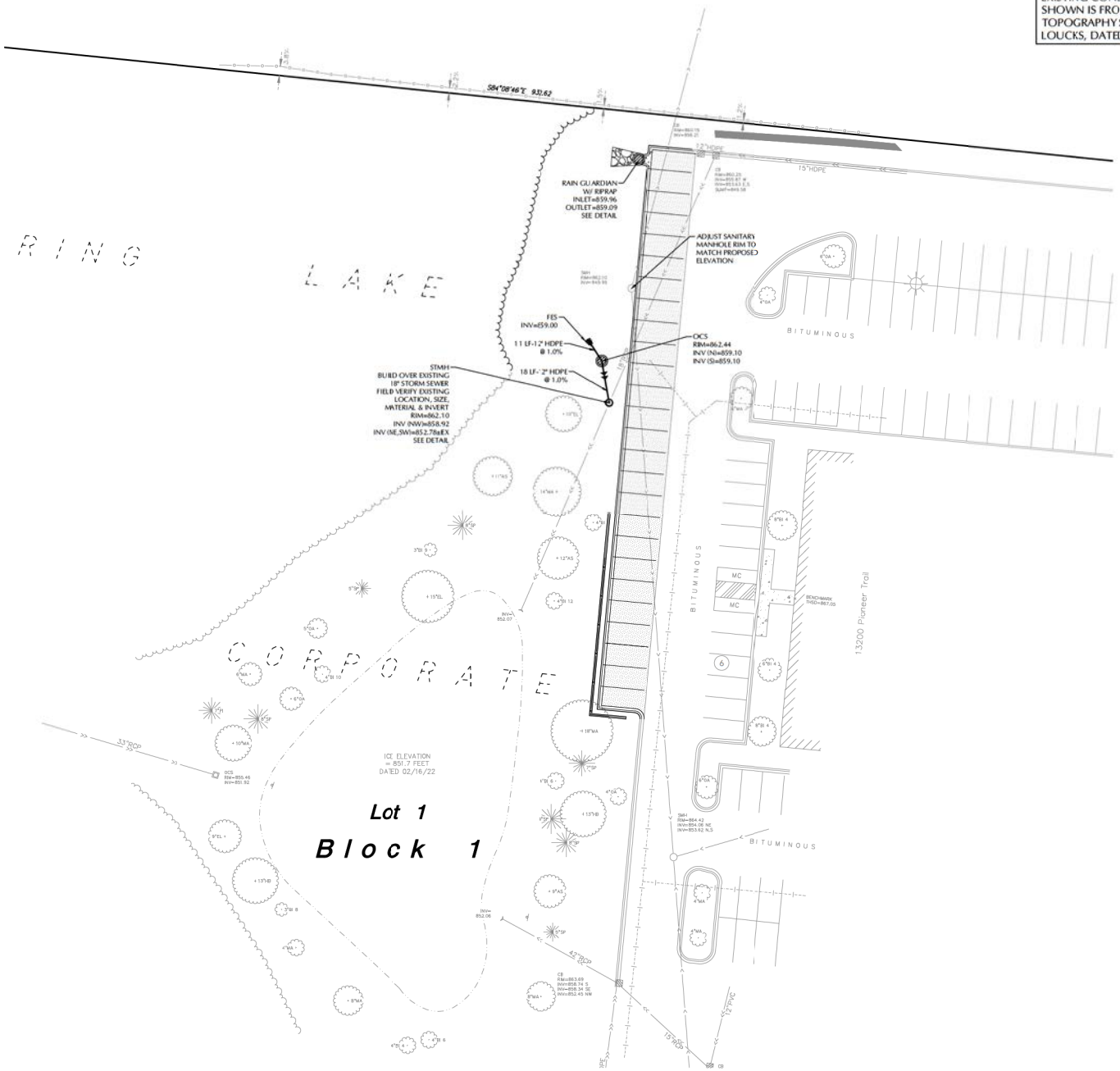
QUALITY CONTROL

Loucks Project No.	21231A
Project Lead	MJS
Drawn By	TRG
Checked By	JJD
Review Date	06/27/2022

SHEET INDEX

STORMWATER POLLUTION PREVENTION PLAN

C3-2



NOTE:
EXISTING CONDITIONS INFORMATION SHOWN IS FROM A BOUNDARY & TOPOGRAPHY SURVEY PREPARED BY LOUCKS, DATED MARCH 04, 2022.

UTILITY NOTES

1. ALL SANITARY SEWER, STORM SEWER AND WATERMAIN UTILITIES SHALL BE FURNISHED AND INSTALLED PER THE REQUIREMENTS OF THE SPECIFICATIONS,THE MINNESOTA PLUMBING CODE, THE LOCAL GOVERNING UNIT , AND THE STANDARD UTILITIES SPECIFICATION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM, 2013 EDITION.
2. ALL UTILITY PIPE BEDDING SHALL BE COMPACTED SAND OR FINE GRANULAR MATERIAL. ALL COMPACTION SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CEAM SPECIFICATION AND THE GEOTECHNICAL REPORT.
3. ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE PERFORMED PER THE REQUIREMENTS OF THE STATE AND LOCAL JURISDICTIONS. THE CITY DEPARTMENT OF ENGINEERING AND BUILDING INSPECTIONS DEPARTMENT AND THE CONSTRUCTION ENGINEER MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY WORK WITHIN THE PUBLIC RIGHT OF WAY, OR WORK IMPACTING PUBLIC UTILITIES.
4. ALL STORM SEWER , SANITARY SEWER AND WATER SERVICES SHALL TERMINATE 5' FROM THE BUILDING FACE UNLESS OTHERWISE NOTED.
5. A MINIMUM OF 18 INCHES OF VERTICAL SEPARATION AND 10 FEET OF HORIZONTAL SEPARATION IS REQUIRED FOR ALL UTILITES UNLESS OTHERWISE NOTED.
6. ALL NEW WATERMAIN AND SERVICES MUST HAVE A MINIMUM OF 7.5 FEET OF COVER. EXTRA DEPTH MAY BE REQUIRED TO MAINTAIN A MINIMUM 18" VERTICAL SEPARATION TO SANITARY OR STORM SEWER LINES. THE CONTRACTOR SHALL FIELD ADJUST WATERMAIN TO AVOID CONFLICTS WITH SANITARY SEWER, STORM SEWER, AND SERVICES AS REQUIRED. INSULATION OF WATER AND SANITARY SEWER LINES SHALL BE PROVIDED WHERE 7.5 FEET MINIMUM DEPTH CAN NOT BE ATTAINED.
7. ALL FIRE HYDRANTS SHALL BE LOCATED 5 FEET BEHIND BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
8. PROPOSED PIPE MATERIALS:

   STORM SEWER DUAL WALL HDPE 12" DIAMETER
9. ALL PORTIONS OF THE STORM SEWER SYSTEM, INCLUDING CATCH BASINS, LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED ACCORDANCE WITH MINNESOTA RULES, PART 4715.2820
10. ALL JOINTS AND CONNECTIONS IN THE STORM SEWER SYSTEM SHALL BE GASTIGHT OR WATERTIGHT (SEE MINNESOTA RULES, PART 4715.0700). APPROVED RESILIENT RUBBER JOINTS MUST BE USED TO MAKE WATERTIGHT CONNECTIONS TO MANHOLES, CATCHBASINS, AND OTHER STRUCTURES.
11. HIGH-DENSITY POLYETHYLENE (HDPE) STORM DRAINS MUST COMPLY WITH MINNESOTA RULES, PART 4715.0540:
    a. PIPES 4-INCH TO 10-INCH IN SIZE MUST COMPLY WITH AASHTO M252.
    b. PIPES 12-INCH TO 60-INCH IN SIZE MUST COMPLY WITH ASTM F2306.
    c. ALL FITTINGS MUST COMPLY WITH ASTM D3212.
    d. WATER-TIGHT JOINTS MUST BE USED AT ALL CONNECTIONS INCLUDING STRUCTURES.
12. CONTRACTOR AND MANHOLE FABRICATOR SHALL SUMP LOWER ALL STORM SEWER CATCH BASIN CASTINGS WITHIN PAVED AREAS 0.16 FEET OR 2-INCHES BELOW THE RIM ELEVATION DEPICTED ON THE UTILITY PLAN.
13. ALL STREET REPAIRS AND PATCHING SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. ALL TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY. THIS SHALL INCLUDE ALL SIGNAGE, BARRICADES, FLASHERS AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT THE EXPRESSED AUTHORITY OF THE CITY.
14. THE CITY SHALL OPERATE ALL GATE VALVES.
15. CONNECTIONS TO EXISTING MANHOLES SHALL BE MADE BY CORE DRILLING THE MANHOLE AT THE PROPOSED INVERT ELEVATIONS AND INSTALLING A RUBBER BOOT. GROUT IN THE BOOT AND AN INVERT FOR THE NEW SEWER LINE.
16. PIPE LENGTHS SHOWN ON THE PLAN INCLUDE THE APRON SECTION.
17. WATERMAIN PIPE SHALL BE DIP CLASS 52, INSTALLED WITH 7.5 FEET OF COVER TO TOP PIPE. FITTINGS SHALL BE COMPACT TYPE. PIPE AND FITTINGS SHALL HAVE A CEMENT MORTAR LINING. CONDUCTIVITY SHALL BE PROVIDED BY WELDED STRAPS ACROSS EACH JOINT
18. TRENCH COMPACTION SHALL BE 95% STANDARD PROCTOR DENSITY IN THE AREA FROM THE PIPE ZONE TO WITHIN 3 FEET OF FINISHED GRADE AND 100% IN FINAL 3 FEET OF THE BACKFILL TO FINISH GRADE.

CALL BEFORE YOU DIG!
Gopher State One Call
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

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 651-4540002 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.

N

0 20 40
SCALE IN FEET

STARING LAKE CORPORATE CENTER
EDEN PRAIRIE, MN

SYNDICATED EQUITIES
13200 PIONEER TRAIL
EDEN PRAIRIE, MN 55347

LOUCKS
PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
7200 Hemlock Lane, Suite 300
Maple Grove, MN 55369
763.424.5505
www.loucksinc.com

CADD QUALIFICATION

CADD Files prepared by the Consultant for this project are instruments of service for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

05/23/2022 WATERSHED SUBMITTAL
06/01/2022 CITY SUBMITTAL
06/27/2022 WATERSHED RESUBMIT

PROFESSIONAL SIGNATURE

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.

Max J. Seitz - PE
License No. 56735
Date

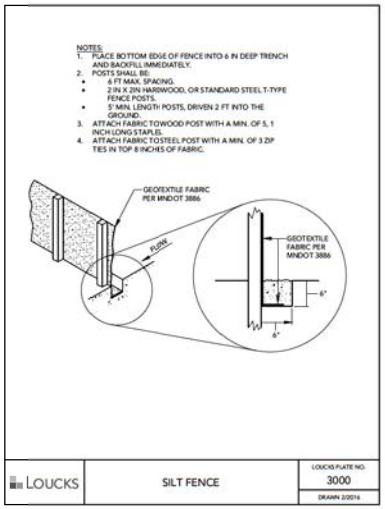
QUALITY CONTROL

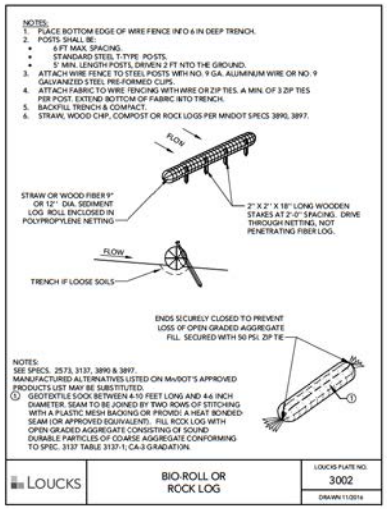
Loucks Project No.	21231A
Project Lead	MJS
Drawn By	TRG
Checked By	JJD
Review Date	06/27/2022

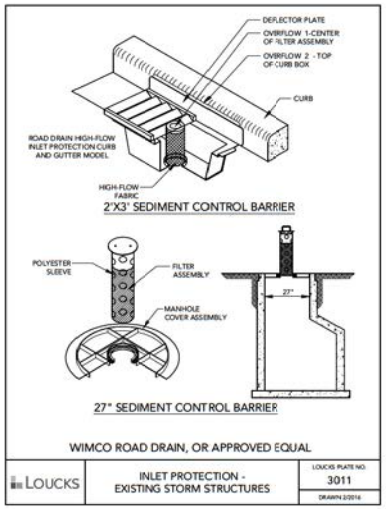
SHEET INDEX

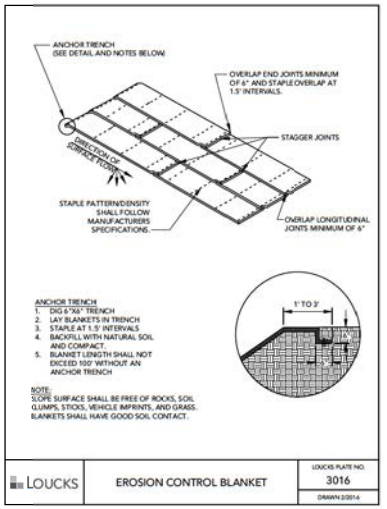
UTILITY PLAN
C4-1

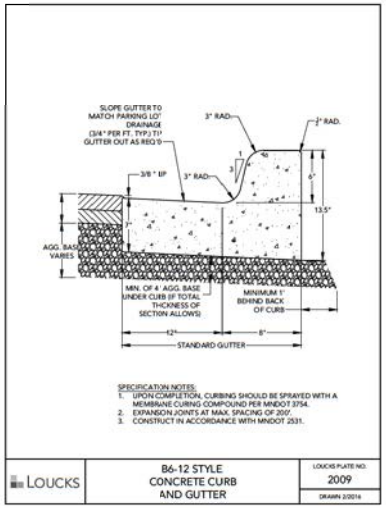
Plotted: 06 /25 / 2022 2:33 PM W:\2021\21231A\CADD DATA\CIVIL\Dwg Sheet Files\C4-1 - UTILITY PLAN

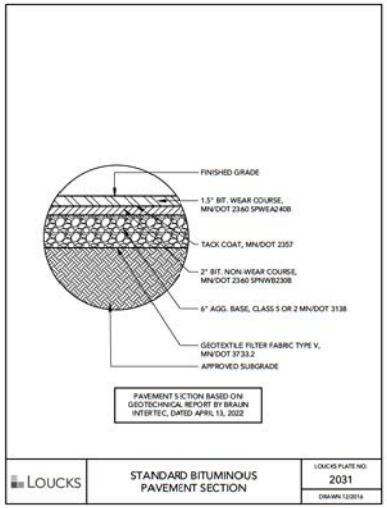


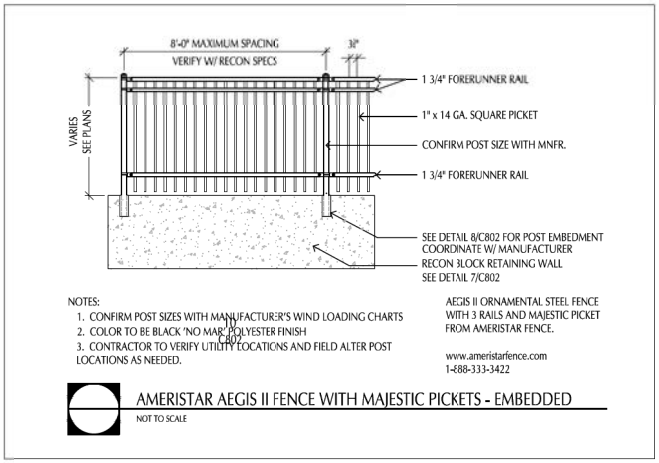












STARING LAKE CORPORATE CENTER
EDEN PRAIRIE, MN

SYNDICATED EQUITIES
13200 PIONEER TRAIL
EDEN PRAIRIE, MN 55347

LOUCKS
PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
7200 Hemlock Lane, Suite 300
Maple Grove, MN 55369
763.424.5505
www.loucksinc.com

CADD QUALIFICATION

SUBMITTAL/REVISIONS

05/23/2022 WATERSHED SUBMITTAL
06/01/2022 CITY SUBMITTAL
06/27/2022 WATERSHED RESUBMIT

PROFESSIONAL SIGNATURE

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.

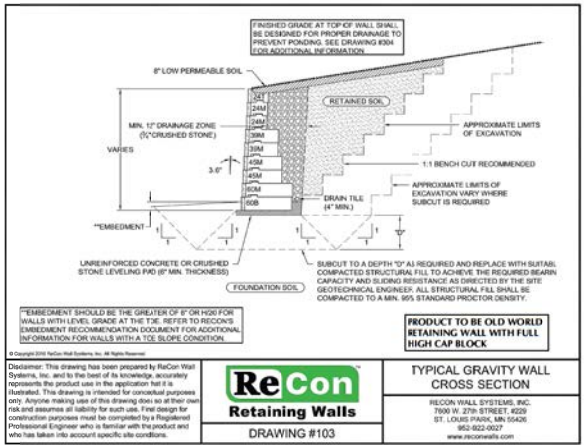
Max J. Seitz - PE
License No. 56735
Date

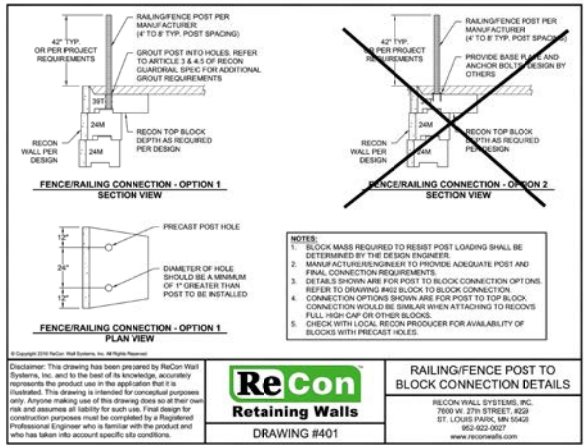
QUALITY CONTROL

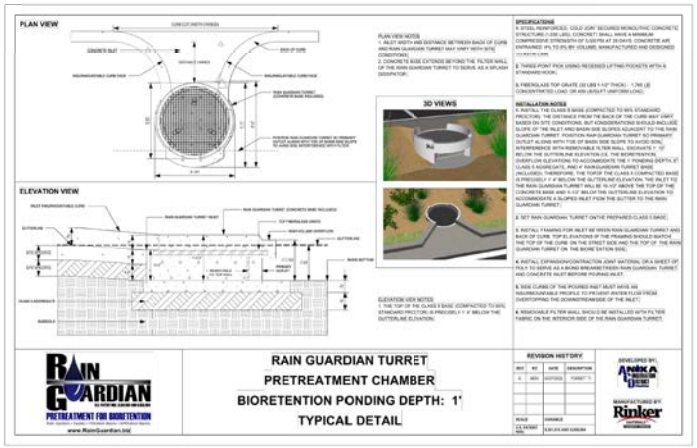
Loucks Project No.	21231A
Project Lead	MJS
Drawn By	TRG
Checked By	JJD
Review Date	06/27/2022

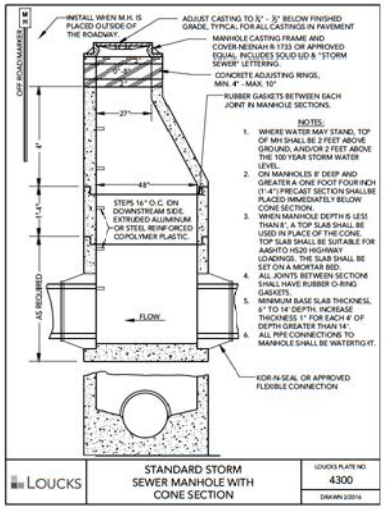
SHEET INDEX

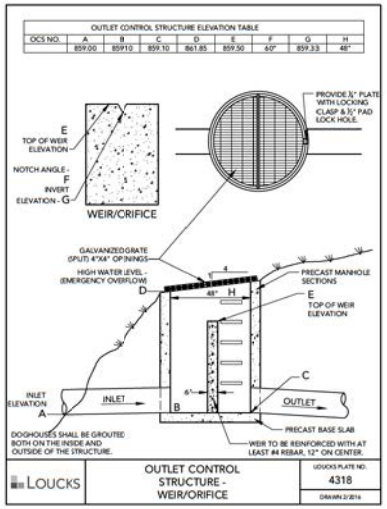
DETAIL SHEET
C8-1











STARING LAKE CORPORATE CENTER
EDEN PRAIRIE, MN
SYNDICATED EQUITIES
13200 PIONEER TRAIL
EDEN PRAIRIE, MN 55347
LOUCKS
PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
7200 Hemlock Lane, Suite 300
Maple Grove, MN 55369
763.424.5505
www.loucksinc.com

CADD QUALIFICATION

CADD Files prepared by the Consultant for this project are instruments of service for use solely with respect to this project. These CADD Files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing Files for information and reference only. All intentional or unintentional revisions, additions or deletions to these CADD Files shall be made at the full risk of that party making such revisions, additions or deletions, and such party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

05/23/2022 WATERSHED SUBMITTAL
06/01/2022 CITY SUBMITTAL
06/27/2022 WATERSHED RESUBMIT

PROFESSIONAL SIGNATURE

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.

Max J. Seitz - PE
License No. 56735
Date

QUALITY CONTROL

Loucks Project No.	21231A
Project Lead	MJS
Drawn By	TRG
Checked By	JJD
Review Date	06/27/2022

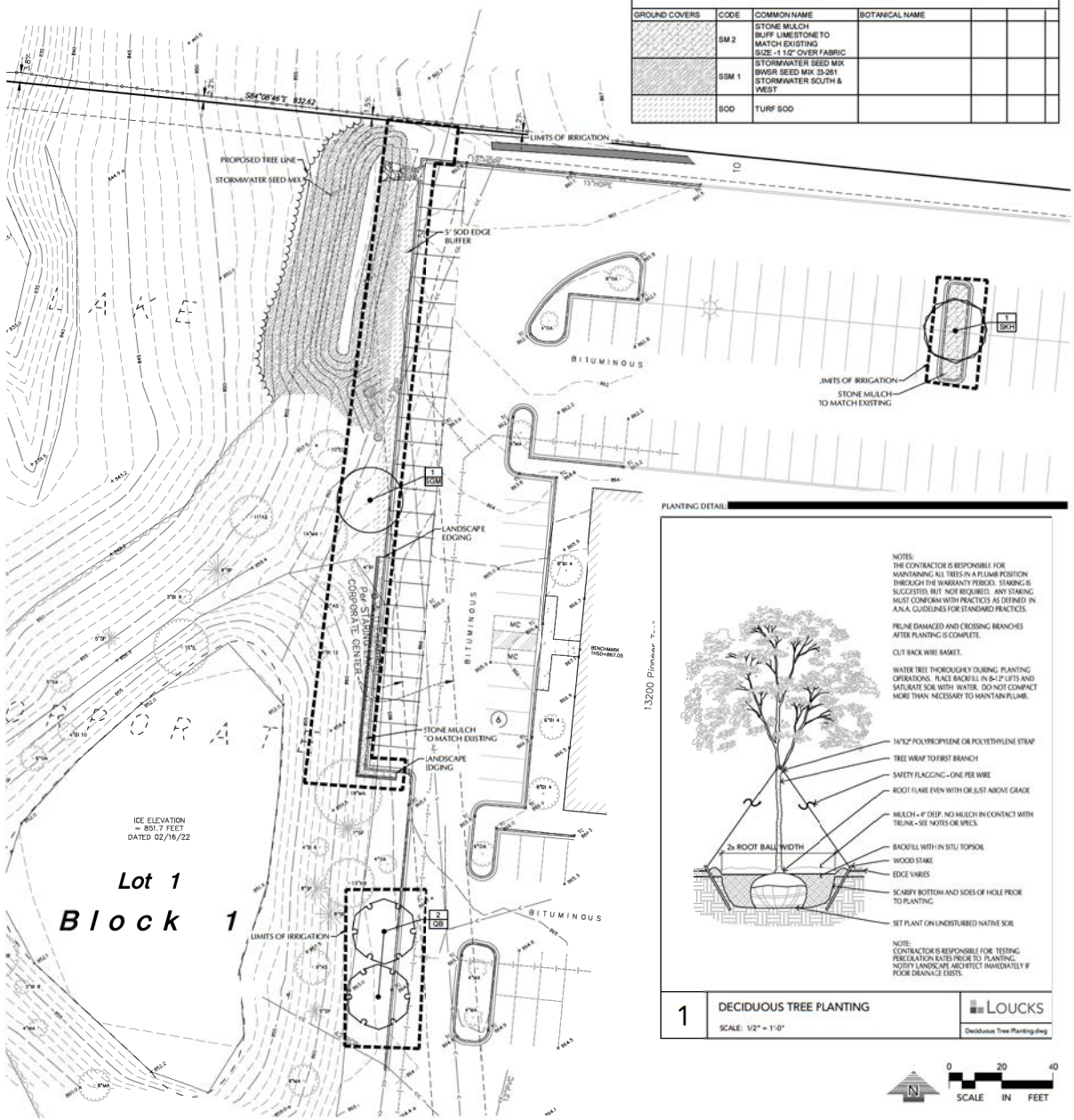
SHEET INDEX

DETAIL SHEET
C8-2

PLANT SCHEDULE

DECIDUOUS TREES	QTY	COMMON NAME	BOTANICAL NAME	CONT	SIZE
SGM	1	SIENNA GLEN MAPLE	Acer freemanii 'Sienna Glen'	B & B	2.5"Cal
SKH	1	SKYLINE HONEYLOCUST	Gleditsia triacanthos 'Skycole'	B & B	2.5"Cal
QB	2	SWAMP WHITE OAK	Quercus bicolor	B & B	2.5"Cal

GROUND COVERS	CODE	COMMON NAME	BOTANICAL NAME		
	SM 2	STONE MULCH BUFF LIMESTONE TO MATCH EXISTING SIZE -1 1/2" OVER FABRIC			
	SSM 1	STORMWATER SEED MIX BWSR SEED MIX 33-261 STORMWATER SOUTH & WEST			
	SOD	TURF SOD			



PLANTING DETAIL

1 DECIDUOUS TREE PLANTING
SCALE: 1/2" = 1'-0"
LOUCKS
Deciduous Tree Planting.dwg

N
0 20 40
SCALE IN FEET

LANDSCAPE SUMMARY:

TREES REMOVED: SIX INCH CALIPER OR GREATER : 4 TREES
TREES PROPOSED: 4

GENERAL NOTES:

CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID. CONTRACTOR TO INSPECT SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS RELATING TO THE NATURE AND SCOPE OF WORK.

VERIFY LAYOUT AND ANY DIMENSIONS SHOWN AND BRING TO THE ATTENTION OF THE LANDSCAPE ARCHITECT ANY DISCREPANCIES WHICH MAY COMPROMISE THE DESIGN AND/OR INTENT OF THE PROJECT'S LAYOUT.

ASSURE COMPLIANCE WITH ALL APPLICABLE CODES AND REGULATIONS GOVERNING THE WORK OR MATERIALS SUPPLIED.

CONTRACTOR SHALL PROTECT ALL EXISTING ROADS, CURBS/GUTTERS, TRAILS, TREES, LAWNS AND SITE ELEMENTS DURING PLANTING OPERATIONS. ANY DAMAGE TO SAME SHALL BE REPAIRED AT NO COST TO THE OWNER.

CONTRACTOR SHALL VERIFY ALIGNMENT AND LOCATION OF ALL UNDERGROUND AND ABOVE GRADE UTILITIES AND PROVIDE THE NECESSARY PROTECTION FOR SAME BEFORE CONSTRUCTION / MATERIAL INSTALLATON BEGINS (MINIMUM 10' - 0" CLEARANCE).

ALL UNDERGROUND UTILITIES SHALL BE LAID SO THAT TRENCHES DO NOT CUT THROUGH ROOT SYSTEMS OF ANY EXISTING TREES TO REMAIN.

EXISTING CONTOURS, TRAILS, VEGETATION, CURB/GUTTER AND OTHER EXISTING ELEMENTS BASED UPON INFORMATION SUPPLIED TO LANDSCAPE ARCHITECT BY OTHERS. CONTRACTOR SHALL VERIFY ANY AND ALL DISCREPANCIES PRIOR TO CONSTRUCTION AND NOTIFY LANDSCAPE ARCHITECT OF SAME.

THE ALIGNMENT AND GRADES OF THE PROPOSED WALKS, TRAILS AND/OR ROADWAYS ARE SUBJECT TO FIELD ADJUSTMENT REQUIRED TO CONFORM TO LOCALIZED TOPOGRAPHIC CONDITIONS AND TO MINIMIZE TREE REMOVAL AND GRADING. ANY CHANGE IN ALIGNMENT MUST BE APPROVED BY LANDSCAPE ARCHITECT.

IRRIGATION NOTES:

VERIFY EXISTING/PROPOSED IRRIGATION SYSTEM LAYOUT AND CONFIRM COMPLETE LIMITS OF IRRIGATION PRIOR TO SUPPLYING SHOP DRAWINGS.

LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AN IRRIGATION LAYOUT PLAN AND SPECIFICATION AS A PART OF THE SCOPE OF WORK WHEN BIDDING. THESE SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ORDER AND/OR INSTALLATION. IT SHALL BE THE LANDSCAPE CONTRACTORS RESPONSIBILITY TO INSURE THAT ALL SODDED/SEEDED AND PLANTED AREAS ARE IRRIGATED PROPERLY, INCLUDING THOSE AREAS DIRECTLY AROUND AND ABUTTING BUILDING FOUNDATION.

THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE OWNER WITH AN IRRIGATION SCHEDULE APPROPRIATE TO THE PROJECT SITE CONDITIONS AND TO PLANT MATERIAL GROWTH REQUIREMENTS.

IRRIGATION SYSTEM IS NOT TO SPRINKLE ACROSS PAVEMENT. THE SYSTEM SHALL INCORPORATE A RAIN SENSOR INTO IRRIGATION SYSTEM.

PLANTINGS OUTSIDE THE LIMITS OF IRRIGATION ARE TO BE WATERED REGULARLY UNTIL PLANTING/SOD/SEED HAS BEEN ESTABLISHED.

LANDSCAPE INSTALLATION:

COORDINATE THE PHASED CONSTRUCTION AND PLANTING INSTALLATION WITH OTHER CONTRACTORS WORKING ON SITE.

NO PLANTING WILL BE INSTALLED UNTIL COMPLETE GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.

WHERE SOD/SEED ABUTS PAVED SURFACES, FINISHED GRADE OF SOD/SEED SHALL BE HELD 1" BELOW SURFACE ELEVATION OF TRAIL, SLAB, CURB, ETC.

SEED ALL AREAS DISTURBED DUE TO GRADING OTHER THAN THOSE AREAS NOTED TO RECEIVE SOD. SEED SHALL BE INSTALLED AND MULCHED AS PER MNDOT SPECS.

SOD ALL DESIGNATED AREAS DISTURBED DUE TO GRADING. SOD SHALL BE LAID PARALLEL TO THE CONTOURS AND SHALL HAVE STAGGERED JOINTS. ON SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES, THE SOD SHALL BE STAKED TO THE GROUND.

ALL PLANT MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, AMERICAN ASSOCIATION OF NURSERYMEN. UNLESS NOTED OTHERWISE, ALL SHRUBS SHALL HAVE AT LEAST 5 CANES AT THE SPECIFIED MINIMUM SHRUB HEIGHT OR WIDTH. ORNAMENTAL TREES SHALL HAVE NO V CROTCHES AND SHALL BEGIN BRANCHING NO LOWER THAN 3' ABOVE ROOT BALL. STREET AND BOULEVARD TREES SHALL BEGIN BRANCHING NO LOWER THAN 5' ABOVE FINISHED GRADE.

ANY CONIFEROUS TREE PREVIOUSLY PRUNED FOR CHRISTMAS TREE SALES SHALL NOT BE USED. ALL CONIFEROUS TREES SHALL BE FULL FORM, NATURAL TO THE SPECIES, WITHOUT PRUNING.

PLAN TAKES PRECEDENCE OVER PLANT SCHEDULE IF DISCREPANCIES IN QUANTITIES EXIST. SPECIFICATIONS TAKE PRECEDENCE OVER NOTES.

NO PLANT MATERIAL SUBSTITUTIONS WILL BE ACCEPTED UNLESS APPROVAL IS REQUESTED OF THE LANDSCAPE ARCHITECT BY THE LANDSCAPE CONTRACTOR PRIOR TO THE SUBMISSION OF A BID AND/OR QUOTATION.

ALL PROPOSED PLANTS SHALL BE LOCATED AND STAKED AS SHOWN ON PLAN. ADJUSTMENTS IN LOCATION OF PROPOSED PLANT MATERIALS MAY BE NEEDED IN FIELD. SHOULD AN ADJUSTMENT BE ADVISED, THE LANDSCAPE ARCHITECT MUST BE NOTIFIED.

ALL PLANT MATERIALS SHALL BE FERTILIZED UPON INSTALLATION WITH A 27-3-3 SLOW RELEASE FERTILIZER MIXED IN WITH THE PLANTING SOIL PER THE MANUFACTURER'S INSTRUCTIONS. PLANTS MAY BE TREATED FOR SUMMER AND FALL INSTALLATION WITH AN APPLICATION OF GRANULAR 27-3-3 AT 6 OZ PER 2.5" CALIPER PER TREE AND 3 OZ PER SHRUB WITH AN ADDITIONAL APPLICATION OF 27-3-3 THE FOLLOWING SPRING IN THE TREE SAUCER.

ALL PLANTING AREAS RECEIVING PERENNIALS, GROUND COVER, ANNUALS, AND/OR VINES SHALL RECEIVE A MINIMUM OF 12" DEPTH OF PLANTING SOIL CONSISTING OF 5 PARTS CLEAN TOPSOIL AND 1 PART PEAT. SHRUBS AND TREES TO BE BACKFILLED WITH SAME PLANTING SOIL.

ALL PLANTS TO BE INSTALLED AS PER PLANTING DETAILS. REMOVE ALL FLAGGING AND LABELS FROM PLANTS.

WRAPPING MATERIAL SHALL BE CORRUGATED PVC PIPING 1" GREATER IN CALIPER THAN THE TREE BEING PROTECTED OR QUALITY, HEAVY, WATERPROOF CREPE PAPER MANUFACTURED FOR THIS PURPOSE. WRAP.

BLACK POLY EDGER TO BE USED TO CONTAIN SHRUBS, PERENNIALS, AND ANNUALS WHERE BED MEETS SOD/SEED UNLESS NOTED OTHERWISE.

ALL ANNUAL AND PERENNIAL PLANTING BEDS TO RECEIVE 3" DEEP SHREDDED HARDWOOD MULCH WITH NO WEED BARRIER.
ALL SHRUB BED MASSINGS TO RECEIVE 3" DEEP SHREDDED HARDWOOD MULCH AND PREEN WEED BARRIER.
ALL TREES TO RECEIVE 4" DEEP SHREDDED HARDWOOD MULCH WITH NO MULCH IN DIRECT CONTACT WITH TREE TRUNK.

SPREAD GRANULAR PRE EMERGENT HERBICIDE (PREEN OR EQUAL) PER MANUFACTURER'S RECOMMENDATIONS UNDER ALL MULCHED AREAS.

MAINTENANCE STRIPS TO HAVE EDGER AND MULCH AS SPECIFIED/INDICATED ON DRAWING OR IN SPECIFICATION.

IF THE LANDSCAPE CONTRACTOR IS CONCERNED OR PERCEIVES ANY DEFICIENCIES IN THE PLANT SELECTIONS, SOIL CONDITIONS OR ANY OTHER SITE CONDITION WHICH MIGHT NEGATIVELY AFFECT PLANT ESTABLISHMENT, SURVIVAL OR GUARANTEE HE MUST BRING THESE DEFICIENCIES TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO PROCUREMENT AND/OR INSTALLATION.

CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR THE OWNER ACCEPTANCE INSPECTION OF ALL LANDSCAPE AND SITE IMPROVEMENTS.

CONTRACTOR IS RESPONSIBLE FOR ON-GOING MAINTENANCE OF ALL NEWLY INSTALLED MATERIALS UNTIL TIME OF OWNER ACCEPTANCE. ANY ACTS OF VANDALISM OR DAMAGE WHICH MAY OCCUR PRIOR TO OWNER ACCEPTANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL PROVIDE THE OWNER WITH A MAINTENANCE PROGRAM INCLUDING, BUT NOT NECESSARILY LIMITED TO, PRUNING, FERTILIZATION AND DISEASE/PEST CONTROL.

CONTRACTOR SHALL GUARANTEE NEW PLANT MATERIAL THROUGH ONE CALENDAR YEAR FROM THE DATE OF OWNER ACCEPTANCE.

WARRANTY IONE FULL GROWING SEASON) FOR LANDSCAPE MATERIALS SHALL BEGIN ON THE DATE OF ACCEPTANCE BY THE LANDSCAPE ARCHITECT AFTER THE COMPLETION OF PLANTING OF ALL LANDSCAPE MATERIALS. NO PARTIAL ACCEPTANCE WILL BE CONSIDERED.

UNLESS NOTED OTHERWISE THE APPROPRIATE DATES FOR SPRING PLANT MATERIAL INSTALLATION AND SEED/SOD PLACEMENT IS FROM THE TIME GROUND HAS THAWED TO JUNE 15.

FALL SODDING IS GENERALLY ACCEPTABLE FROM AUGUST 15 - NOVEMBER 1. FALL SEEDING FROM AUGUST 15 - SEPTEMBER 15; DORMANT SEEDING IN THE FALL SHALL NOT OCCUR PRIOR TO NOVEMBER 1. FALL CONIFEROUS PLANTING MAY OCCUR FROM AUGUST 15 - OCTOBER 1 AND DECIDUOUS PLANTING FROM THE FIRST FROST UNTIL NOVEMBER 15. PLANTING OUTSIDE THESE DATES IS NOT RECOMMENDED, ANY ADJUSTMENT MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.

PROTECT ALL EXISTING OAKS ON SITE SCHEDULED TO REMAIN. IF EXISTING OAKS ARE DAMAGED IN ANY MANNER, ABOVE OR BELOW GROUND IN THE ROOT SYSTEM, AN ASPHALTIC TREE PRUNING PAINT SHOULD BE APPLIED IMMEDIATELY AFTER WOUNDING. OAKS ARE NOT TO BE PRUNED, REMOVED OR TRANSPLANTED BETWEEN APRIL 15 AND JULY 1. NOTIFY LANDSCAPE ARCHITECT IF THESE DATES ARE UNAVOIDABLE.

LANDSCAPE CONTRACTOR SHALL ESTABLISH TO HIS SATISFACTION THAT SOIL AND COMPACTION CONDITIONS ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AT AND AROUND THE BUILDING SITE.

STARING LAKE CORPORATE CENTER
EDEN PRAIRIE, MN

SYNDICATED EQUITIES
13200 PIONEER TRAIL
EDEN PRAIRIE, MN 55347

LOUCKS
PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
7200 Hemlock Lane, Suite 300
Maple Grove, MN 55369
763.424.5505
www.loucksinc.com

CADD QUALIFICATION

CADD Files prepared by the Consultant for this project are instruments of service for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

05/23/2022	WATERSHED SUBMITTAL
06/01/2022	CITY SUBMITTAL
06/27/2022	WATERSHED RESUBMIT

PROFESSIONAL SIGNATURE

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 Landscape Architect under the laws of the State of Minnesota.

Nathan W. Schoff - LA
License No. 52050
Date

QUALITY CONTROL

Loucks Project No.	20499
Project Lead	NWE
Drawn By	NLH
Checked By	TDG
Review Date	06/27/2022

SHEET INDEX

LANDSCAPE PLAN
L1-1