

## Riley Purgatory Bluff Creek Watershed District Permit Application Review

**Permit No:** 2022-039

**Considered at Board of Managers Meeting:** July 13, 2022

**Received complete:** June 6, 2022

**Applicant:** Brian Davies, Border Foods Inc.

**Representative:** Westwood Professional Services, Tyler Maxson

**Project:** The project proposes the redevelopment of a Taco Bell restaurant and associated onsite parking areas in Minnetonka, MN. The project includes a subsurface stormwater infiltration/detention chamber to provide volume control, water quality, and rate control.

**Location:** 15110 Highway 7, Minnetonka, MN, 55345

**Reviewer:** Dallen Webster, EIT; and Scott Sobiech, PE; Barr Engineering Co.

### Proposed Board Action

Manager \_\_\_\_\_ moved and Manager \_\_\_\_\_ seconded adoption of the following resolutions based on the permit report that follows and the presentation of the matter at the July 13, 2022 meeting of the managers:

Resolved that the application for Permit 2022-039 is approved, subject to the conditions and stipulations set forth in the Recommendations section of the attached report;

Resolved that on determination by the RPBCWD administrator that the conditions of approval of the permit have been affirmatively resolved, the RPBCWD president or administrator is authorized and directed to sign and deliver Permit 2022-039 to the applicant, on behalf of RPBCWD.

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

### Applicable Rule Conformance Summary

Rule	Issue	Conforms to RBPCWD Rules?	Comments	
C	Erosion Control Plan	See comment	See rule-specific permit condition C1 related to name of individual responsible for on-site erosion control.	
J	Stormwater Management	Rate	Yes	
		Volume	See comments	See stipulation #5 related to verifying the infiltration capacity of the soils and separation from groundwater.
		Water Quality	Yes	
		Low Floor Elev.	Yes	
		Maintenance	See comment	See rule-specific permit condition J1 related to recordation of stormwater facility maintenance declaration.

Rule	Issue	Conforms to RBPCWD Rules?	Comments
	Chloride Management	See comment	See stipulation #4 related to providing an executed chloride management plan prior to permit close-out.
	Wetland Protection	Yes	
<b>L</b>	<b>Permit Fee Deposit</b>	Yes	\$3,000 deposit fee received May 19, 2022. The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. As of July 7, 2022 the amount due is \$2,785.
<b>M</b>	<b>Financial Assurance</b>	See Comment	The financial assurance is calculated at \$58,988

### **Background**

The proposed redevelopment will include the demolition and removal of the existing Taco Bell fast-food restaurant and parking lot for the construction of a new Taco Bell restaurant and onsite parking areas in Minnetonka, Minnesota. The applicant proposes to use a subsurface stormwater infiltration/detention chamber facility, to provide water quality treatment, rate control, and volume abstraction.

While there are no on-site or adjacent Wetland Conservation Act-protected wetlands for which wetland buffers would be required, the treated runoff leaving the site from the subsurface infiltration/detention system is conveyed via storm sewer to a vegetated swale (Highway 7 ditch) prior to entering an off-site protected wetland.

The project site information is summarized in Table 1.

**Table 1. Project site information**

Site Information	Project Area
Total Site Area (acres)	0.65
Existing Site Impervious Area (acres)	0.47
Post Construction Site Impervious (acres)	0.39
New (increase) in Site Impervious Area (acres)	- 0.08
Percent decrease in Impervious Surface	21%
Disturbed Site Impervious Area (acres)	0.47
Percent Disturbance of Existing Impervious Surface	100%
Total Disturbed Area (acres)	0.55

Exhibits:

1. Permit application dated April 28, 2022 (Notified applicant on May 11, 2022 that submittal was incomplete, revised materials completing the application received June 6, 2022)
2. Project Plan set dated March 29, 2022 (revised June 3, 2022)
3. Stormwater Report memo dated April 26, 2022 (revised June 3, 2022)

4. Proposed HydroCAD Models received April 28, 2022 (revised June 6, 2022 and June 30, 2022)
5. Existing HydroCAD Models received April 28, 2022 (revised June 6, 2022 and June 30, 2022)
6. Review Responses dated June 3, 2022 (the applicant's responses to the May 11th incomplete notice/review comments)
7. Existing P8 Model received April 28, 2022 (revised June 6, 2022)
8. Proposed P8 Model received April 28, 2022 (revised June 6, 2022 and June 30, 2022)
9. Engineer's Estimate of Probable Construction Cost memo dated June 3, 2022
10. StormTech MC3500 Cost Estimate received June 17, 2022
11. City of Minnetonka Storm Sewer As-built Exhibit received June 30, 2022
12. Watershed Wetlands memo dated June 30, 2022
13. Proposed P8 Model results report received June 30, 2022
14. Existing and Proposed HydroCAD Model results report received June 30, 2022

### **Rule Specific Permit Conditions**

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

Because the project will involve the alteration of 0.55 acres of land-surface area or vegetation, the project must conform to the erosion prevention and sediment control requirements established in Rule C.

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

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

#### **Rule J: Stormwater Management**

Because the project will disturb 0.55 acres of land-surface area, the project must meet the criteria of RPBCWD's Stormwater Management rule (Rule J, Subsection 2.1). The criteria listed in Subsection 3.1 will apply to the entire project site because the site activity will disturb more than 50 percent of the existing impervious surface on the parcel (Rule J, Subsection 2.3).

The applicant is proposing construction of a subsurface stormwater infiltration/detention chamber facility to provide the rate control, volume abstraction and water quality management for the disturbed and

replaced impervious area. Pretreatment for runoff entering the infiltration basin is being provided by a catch basin with a sump.

**Rate Control**

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

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

Modeled Discharge Location	2-Year Discharge (cfs)		10-Year Discharge (cfs)		100-Year Discharge (cfs)		10-Day Snowmelt (cfs)	
	Ex	Prop	Ex	Prop	Ex	Prop	Ex	Prop
South to N Frontage Road	0.6	< 0.1	0.9	0.2	1.6	0.4	< 0.1	< 0.1
North to Highwood Drive	1.6	0.5	2.6	2.2	4.7	4.1	0.1	0.1

**Volume Abstraction**

Subsection 3.1.b of Rule J requires the abstraction onsite of 1.1 inches of runoff from the regulated impervious surface of the site. An abstraction volume of 1,595 cubic feet is required from the 0.39 acres (17,399 square feet) of regulated site impervious area on the project for volume retention. Pretreatment of runoff entering the infiltration basin is provided with a catch basin with a sump to conform to Rule J, Subsection 3.1.b.1.

The soil boring performed by American Engineering Testing, Inc. at the location of the proposed subsurface infiltration/detention system show that soils in the project area are primarily sand and silty sand. Groundwater was not observed at the soil boring (SB-4) under the proposed system. The subsurface investigation information summarized Table 3 shows that groundwater is at least 3 feet below the bottom of the proposed subsurface infiltration/detention system (Rule J, Subsection 3.1.b.2.a).

**Table 3. Groundwater Separation Analysis**

Proposed BMP	Nearest Subsurface Investigation	Boring is within footprint?	Groundwater Elevation (feet)	BMP Bottom Elevation (feet)	Separation (feet)
Subsurface infiltration/detention System	SB-4	Yes	No groundwater observed at boring bottom (approx. el 1016.8 ft)	1023.75	6.95

The engineer concurs with the applicant’s design infiltration rates of 0.45 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). Because of the existing drive lane is at the location of proposed subsurface infiltration/detention, subsurface infiltration testing was not performed at that BMP location. Per Rule J, Subsection 3.1.b.2.c measured infiltration capacity of the soils at the bottom of the infiltration systems must be provided. The applicant must submit documentation verifying the infiltration capacity of the soils and that the volume control capacity is calculated using the measured infiltration rate. If infiltration capacity is less than needed to conform with the volume abstraction requirement in subsection 3.1b or there is inadequate separation to groundwater, design modifications to achieve compliance with RPBCWD requirements will need to be submitted (in the form of an application for a permit modification or new permit).

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

**Table 4. Volume Abstraction Summary**

Required Abstraction Depth (inches)	Required Abstraction Volume (cubic feet)	Provided Abstraction Depth (inches)	Provided Abstraction Volume (cubic feet)
1.1	1,595	1.15	1,670

**Water Quality Management**

Subsection 3.1.c of Rule J requires the Applicant to provide volume abstraction in accordance with 3.1b or least 60 percent annual removal efficiency for total phosphorus (TP), and at least 90 percent annual removal efficiency for total suspended solids (TSS) from site runoff, and no net increase in TSS or TP loading leaving the site from existing conditions. Because the subsurface infiltration/detention system proposed by the applicant provides volume abstraction meeting the standard in 3.1b and the engineer concurs with the modeling, under paragraph 3.1c.i, the engineer finds that the proposed project provides the required stormwater-quality protection.

**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. The lowest elevation of the nearest building and the 100-year event flood elevation in the proposed underground system is summarized below. The RPBCWD Engineer concurs that the proposed project is in conformance with Rule J, Subsection 3.6.

Location	Low Floor Elevation of Building (feet)	100-year Event Flood Elevation (feet)	Freeboard (feet)
Subsurface infiltration/detention system	1,032.50	1,027.44	5.06

**Maintenance**

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

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

**Chloride Management**

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

**Wetland Protection**

Because the proposed activities discharge to an offsite wetland, they must conform to RPBCWD wetland protection criteria (Rule J, subsection 3.10). In accordance with Rule J, subsection 3.10a, there is no proposed activity subject to Rule J that will alter the site in a manner that increases the bounce in water level, duration of inundation, or change the runout elevation in the subwatershed, for the wetland receiving runoff from the land disturbing activities. Rather than conduct a MNRAM for the offsite wetland, the applicant elected to demonstrate compliance with the criteria for discharging to an exceptional value wetland. Because the applicant’s HydroCAD model results demonstrate, and the engineer concurs, that the

proposed flow rate and volumes flowing towards the wetland are less than the under existing conditions, the bounce and inundation will not increase, thus the project meets the Bounce and Inundation criterion.

Rule J, Subsection 3.10b requires that for exceptional value wetlands, the project must meet at least 75 percent annual removal efficiency for phosphorus and at least 90 percent annual removal efficiency for total suspended solids. The Applicant is proposing the construction of an underground infiltration system to provide volume abstraction and water quality treatment. The applicant used P8 to estimate the TP and TSS reduction provided by the underground infiltration system. The results of this modeling are summarized in Table 5 below showing the annual TSS and TP removal requirements are achieved prior to discharge entering the offsite wetland. The engineer concurs with the modeling and finds that the proposed project is in conformance with Rule J, Subsection 3.10b.

**Table 5. 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)	261	235 (90%)	252 (97%)
Total Phosphorus (TP)	0.82	0.62 (75%)	0.76 (93%)

**Rule L: Permit Fee**

The RPBCWD permit fee schedule requires permit applicants to submit a permit-fee deposit of \$3,000 to be held in escrow and applied to reimburse RPBCWD for the permit-application processing fee and permit review and inspection-related costs. When a permit application is approved, the deposit must be replenished to the applicable deposit amount by the applicant before the permit will be issued to cover actual costs incurred to monitor compliance with permit conditions and the RPBCWD Rules. A permit fee deposit of \$3,000 was received on behalf of Border Foods, Inc. on May 19, 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.

The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. The amount needed to replenish the permit fee deposit is \$2,785 as of July 6, 2022.

**Rule M: Financial Assurance**

	Unit	Unit Cost	# of Units	Total
Rules C: Silt fence:	LF	\$2.50	600	\$1,500
Inlet protection	EA	\$100	5	\$500

	Unit	Unit Cost	# of Units	Total
Rock Entrance	EA	\$250	1	\$250
Restoration	Ac	\$2,500	0.55	\$1,375
Rules J: Chloride Management	LS	\$5,000	1	\$5,000
Rules J: Stormwater Management: 125% of engineer's opinion of cost	EA	125% OPC	1	\$45,000
Contingency (10%)		10%		\$5,363
<b>Total Financial Assurance</b>				<b>\$58,988</b>

**Applicable General Requirements:**

1. The RPBCWD Administrator and Engineer shall be notified at least three days prior to commencement of work.
2. Construction shall be consistent with the plans and specifications approved by the District as a part of the permitting process. The date of the approved plans and specifications is listed on the permit.
3. Construction must be consistent with the plans, specifications, and models that were submitted by the applicant that were the basis of permit approval. The date(s) of the approved plans, specifications, and modeling are listed on the permit. The grant of the permit does not in any way relieve the permittee, its engineer, or other professional consultants of responsibility for the permitted work.
4. The grant of the permit will not relieve the permittee of any responsibility to obtain approval of any other regulatory body with authority.
5. The issuance of this permit will not convey any rights to either real or personal property, or any exclusive privileges, nor will 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 approve the permit application was made in reliance on the information provided by the applicant. Any substantive change in the work affecting the nature and extent of applicability of RPBCWD regulatory requirements or substantive changes in the methods or means of compliance with RPBCWD regulatory requirements must be the subject of an application for a permit modification to the RPBCWD.
8. If the conditions herein are met and the permit is issued by RPBCWD, the applicant, by accepting the permit, grants access to the site of the work at all reasonable times during and after construction to authorized representatives of the RPBCWD for inspection of the work.

## **Findings**

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

## **Recommendation:**

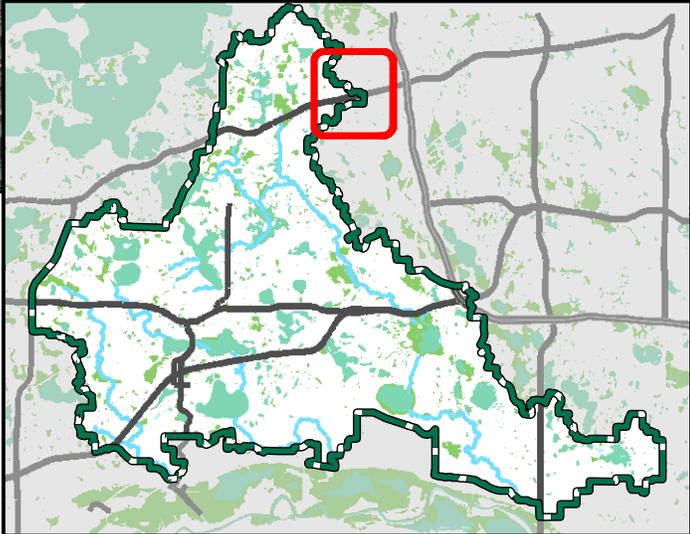
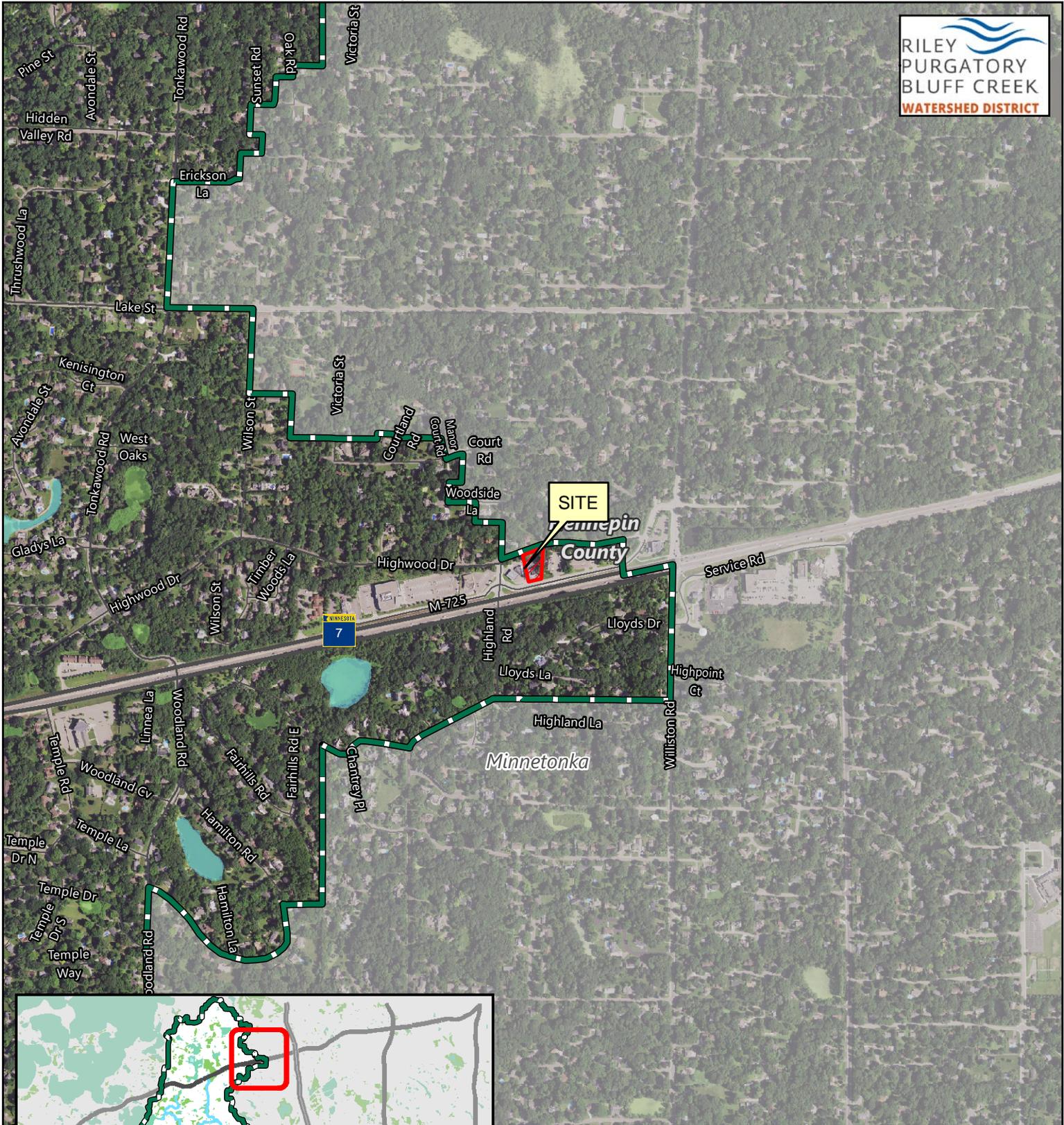
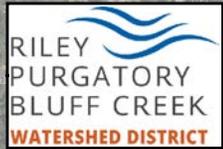
Approval of the permit contingent upon:

1. Financial Assurance in the amount of \$58,988.
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 by RPBCWD of documentation of recordation of a maintenance declaration for the stormwater management facilities. A draft must be reviewed and approved by the District prior to recordation.
4. The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. The amount needed to replenish the permit fee deposit is \$2,785 as of July 6, 2022.

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

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

separation to groundwater (Rule J subsection 3.1.b.2). If infiltration capacity is less than needed to conform with the volume abstraction requirement in subsection 3.1b or there is inadequate separation to groundwater, design modifications to achieve compliance with RPBCWD requirements will need to be submitted (in the form of an application for a permit modification or new permit).



Permit Location Map

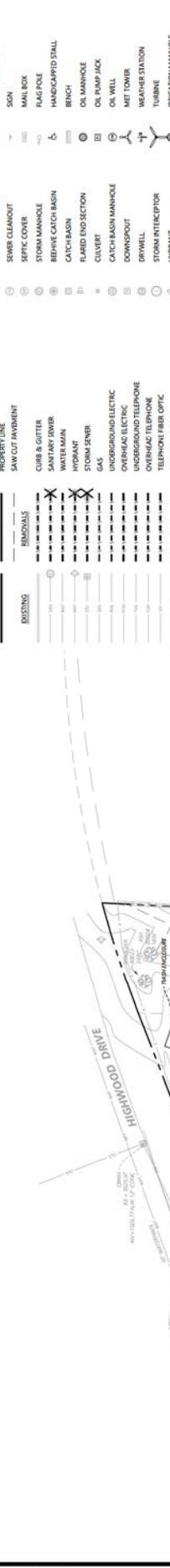


Feet



TACO BELL REDEVELOPMENT  
**Permit 2022-039**  
Riley Purgatory Bluff Creek  
Watershed District





**REMOVAL LEGEND**

EXISTING	PROPOSED
PROPERTY LINE	PROPERTY LINE
SAW CUT PAVEMENT	SAW CUT PAVEMENT
REMOVALS	REMOVALS
CURB & GUTTER	CURB & GUTTER
SAW CUT SWIM	SAW CUT SWIM
HYDRANT	HYDRANT
STORM SEWER	STORM SEWER
GAS	GAS
UNDERGROUND ELECTRIC	UNDERGROUND ELECTRIC
OVERHEAD ELECTRIC	OVERHEAD ELECTRIC
UNDERGROUND TELEPHONE	UNDERGROUND TELEPHONE
OVERHEAD TELEPHONE	OVERHEAD TELEPHONE
TELEPHONE FIBER OPTIC	TELEPHONE FIBER OPTIC
CABLE TELEVISION	CABLE TELEVISION
RETAINING WALL	RETAINING WALL
POCK	POCK
FOUNDATION	FOUNDATION
FOUNDATIONS	FOUNDATIONS
BUILDING	BUILDING
TREE	TREE
TRAFFIC SIGN	TRAFFIC SIGN
CONSTRUCTION BARRICADE	CONSTRUCTION BARRICADE
SOIL BORING LOCATION	SOIL BORING LOCATION

- REMOVAL NOTES**
- LOCATIONS AND ELEVATIONS OF EXISTING TOPOGRAPHY AND UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR SHALL RE-VERIFY SITE CONDITIONS AND UTILITIES IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND.
  - CONTRACTOR SHALL CORRECT LIMITS OF REMOVALS WITH PROPOSED IMPROVEMENTS AND FIELD VERIFY CONDITION OF EXISTING UTILITIES TO REMAIN. CONTRACTOR SHALL MAINTAIN RECORD OF ALL UTILITIES TO REMAIN AND SHALL BE RESPONSIBLE FOR AS FENCES, SIGNS, IRRIGATION HEADS, ETC.) THAT MAY BE DAMAGED BY CONSTRUCTION.
  - CONTRACTOR SHALL MAKE ALL NECESSARY EROSION CONTROL MEASURES REQUIRED TO MAINTAIN SITE STABILITY PRIOR TO EXECUTING ANY SITE REMOVALS.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH UTILITY PROVIDERS FOR REMOVAL AND/OR RELOCATION OF EXISTING UTILITIES AFFECTED BY SITE DEVELOPMENT. ALL PERMITS, APPLICATIONS AND FEES ARE THE RESPONSIBILITY OF THE CONTRACTOR.

**TREE INVENTORY**

CODE	SPECIES	DBH	CONDITION	STATUS	MITIGATION INCHES	LOCATION
TR001	ASH	10	SAVED	SAVED	0	OFF SITE
TR002	SPRUCE	16	SAVED	SAVED	0	OFF SITE
TR003	SPRUCE	12	SAVED	SAVED	0	OFF SITE
TR004	MAPLE	8	SAVED	SAVED	0	OFF SITE
TR005	SPRUCE	10	REMOVED	REMOVED	0	ON SITE
TR006	ASH	18	REMOVED	REMOVED	0	ON SITE
TR007	ASH	18	REMOVED	REMOVED	0	ON SITE
TR008	ASH	18	REMOVED	REMOVED	0	ON SITE
TR009	ASH	18	REMOVED	REMOVED	0	ON SITE
TR010	ASH	18	REMOVED	REMOVED	0	ON SITE
TR011	ASH	18	REMOVED	REMOVED	0	ON SITE
TR012	ASH	18	REMOVED	REMOVED	0	ON SITE
TR013	BECKHAMER	14	SAVED	SAVED	0	ON SITE
TR014	ASH	14	SAVED	SAVED	0	ON SITE
TR015	ASH	14	SAVED	SAVED	0	ON SITE
TR016	OAK	16	SAVED	SAVED	0	ON SITE
TR017	ASH	16	REMOVED	REMOVED	12"	ON SITE
TR018	LM	12	REMOVED	REMOVED	12"	ON SITE
TR019	LM	12	REMOVED	REMOVED	12"	ON SITE
TR020	LM	12	REMOVED	REMOVED	12"	ON SITE
TR021	LM	12	REMOVED	REMOVED	12"	ON SITE
TR022	LM	12	REMOVED	REMOVED	12"	ON SITE
TR023	BECKHAMER	12	REMOVED	REMOVED	0	ON SITE
TR024	BECKHAMER	12	REMOVED	REMOVED	0	ON SITE
TR025	LM	12	REMOVED	REMOVED	12"	ON SITE
TR026	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR027	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR028	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR029	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR030	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR031	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR032	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR033	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR034	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR035	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR036	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR037	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR038	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR039	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR040	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR041	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR042	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR043	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR044	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR045	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR046	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR047	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR048	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR049	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR050	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR051	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR052	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR053	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR054	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR055	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR056	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR057	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR058	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR059	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR060	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR061	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR062	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR063	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR064	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR065	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR066	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR067	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR068	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR069	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR070	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR071	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR072	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
TR073	SPRUCE	8	REMOVED	REMOVED	0	ON SITE
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TR199	SPRUCE	8				





### GENERAL EROSION CONTROL NOTES

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- SEED AND MULCH. SOIL EROSION CONTROL, BLANKET OR BIRD SURFACE WITHIN 2 WEEKS OF COMPLETION OF CONSTRUCTION.
- THE SITE MUST BE STABILIZED PER THE REQUIREMENTS OF THE NPDES, NPDES, WQDES, AND CITY.

- TEMPORARY (GREATER THAN 1 YEAR) SEED SHALL BE INDOOT SEED MIX 2:2:11 AT 30:5 POUNDS PER ACRE.
- TEMPORARY (LESS THAN 1 YEAR) SEED SHALL BE INDOOT SEED MIX 2:1:12 (FALL) OR 2:1:11 (SPRING) SUMMER AT 10:5 POUNDS PER ACRE.
- STATION/RETENTION BASIN SHALL BE INDOOT SEED MIX 34:26:2 AT 14:5 POUNDS PER ACRE.
- POND SLOPES SHALL BE INDOOT SEED MIX 33:36:1 AT 3:5 POUNDS PER ACRE.
- GENERAL SEEDING SHALL BE INDOOT SEED MIX 25:15:1 AT 7:0 POUNDS PER ACRE.
- MULCH SHALL BE INDOOT TYPE 1 APPLIED AT 2-TONS PER ACRE.
- FOR AREAS WITH SLOPE OF 3:1 OR GREATER, RESTORATION WITH SOIL OR EROSION CONTROL BLANKETS IS REQUIRED.
- ALL TEMPORARY STOOPIQUES MUST HAVE SILT FENCE INSTALLED AROUND THEM TO TRAP SEDIMENT.
- ALL PERMANENT PONDS USED AS TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION SHALL BE STABILIZED TO ORIGINAL ELEVATION PRIOR TO THE FILLING OF THE POND TO THE PROPOSED BOTTOM ELEVATION.
- ALL CONSTRUCTION SHALL CONFORM TO LOCAL AND STATE RULES INCLUDING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS.
- THE SITE MUST BE KEPT IN A WELL-DRAINING CONDITION AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DITCHES, PIPING OR OTHER MEANS REQUIRED TO MAINTAIN DRAINAGE OF THE SITE. BUILDING PADS MUST BE PROVIDED WITH A POSITIVE OUTFLOW.
- PUBLIC STREETS USED FOR HAULING SHALL BE KEPT FREE OF SOIL AND DEBRIS. STREET SWEEPING SHALL BE CONCURRENT WITH SITE WORK.

### RPBCWD STANDARD EROSION CONTROL NOTES

- TEMPORARY EROSION CONTROL MEASURES MUST BE PROTECTED, INCLUDING RETENTION ON SITE OF NATIVE TOPSOIL TO THE GREATEST EXTENT POSSIBLE.
- 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.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPs MUST BE MAINTAINED UNTIL COMPLETION OF CONSTRUCTION AND VEGETATION IS ESTABLISHED SUFFICIENTLY TO INSURE STABILITY OF THE SITE AS DETERMINED BY THE DISTRICT.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPs MUST BE REMOVED UPON FINAL STABILIZATION.
- SOIL SURFACES COMPACTED DURING CONSTRUCTION AND REMAINING BEYOND UPON COMPLETION OF CONSTRUCTION MUST BE RECOMPACTED 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.
- PERMANENT 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 BODY WITHIN 100 FEET THEREOF.
- THE SEDIMENT BASIN, AS A MINIMUM, MUST MAINTAIN AND REPAIR ALL EXISTING SURFACES AND ALL EROSION AND SEDIMENT CONTROL FACILITIES AND SOIL STABILIZATION MEASURES EVERYDAY WORKS 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.
- TOPSOIL TO BE INSTALLED AS PART OF THE SITE RESTORATION SHALL CONTAIN AT LEAST 5% ORGANIC CONTENT CONSISTENT WITH THE WATERSED DISTRICT'S TOPSOIL DEFINITION.
- CONSTRUCTION SHOULD INCLUDE MINIMIZATION OF THE DISTURBANCE DURATION AND DURATION, INCLUDING PHASING OF DISTURBANCE TO MINIMIZE QUANTITY OF DISTURBED AREA AT ANY ONE TIME.
- STAKING OFF AND MARKING OF PROPOSED INFILTRATION FACILITIES TO PREVENT SOIL COMPACTION BY HEAVY EQUIPMENT, AND THE PROTECTION OF EXISTING INFILTRATION FACILITIES FROM DISTURBANCE BY CONSTRUCTION EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. INFILTRATION FACILITIES MUST NOT BE LOCATED TO WITHIN 3 FEET FINAL GRADE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND FULLY STABILIZED. ANY ACCUMULATED SEDIMENT IN AN INFILTRATION FACILITY MUST BE REMOVED IN A MANNER THAT DOES NOT DISTURB THE FACILITY. THE SOIL BELOW AN INFILTRATION PRACTICE MUST BE LOGGED TO A MINIMUM DEPTH OF 18 INCHES PRIOR TO INSTALLATION OR PLANTING.

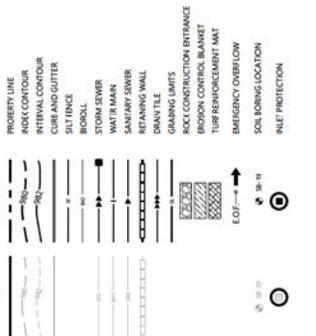
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### EROSION CONTROL LEGEND



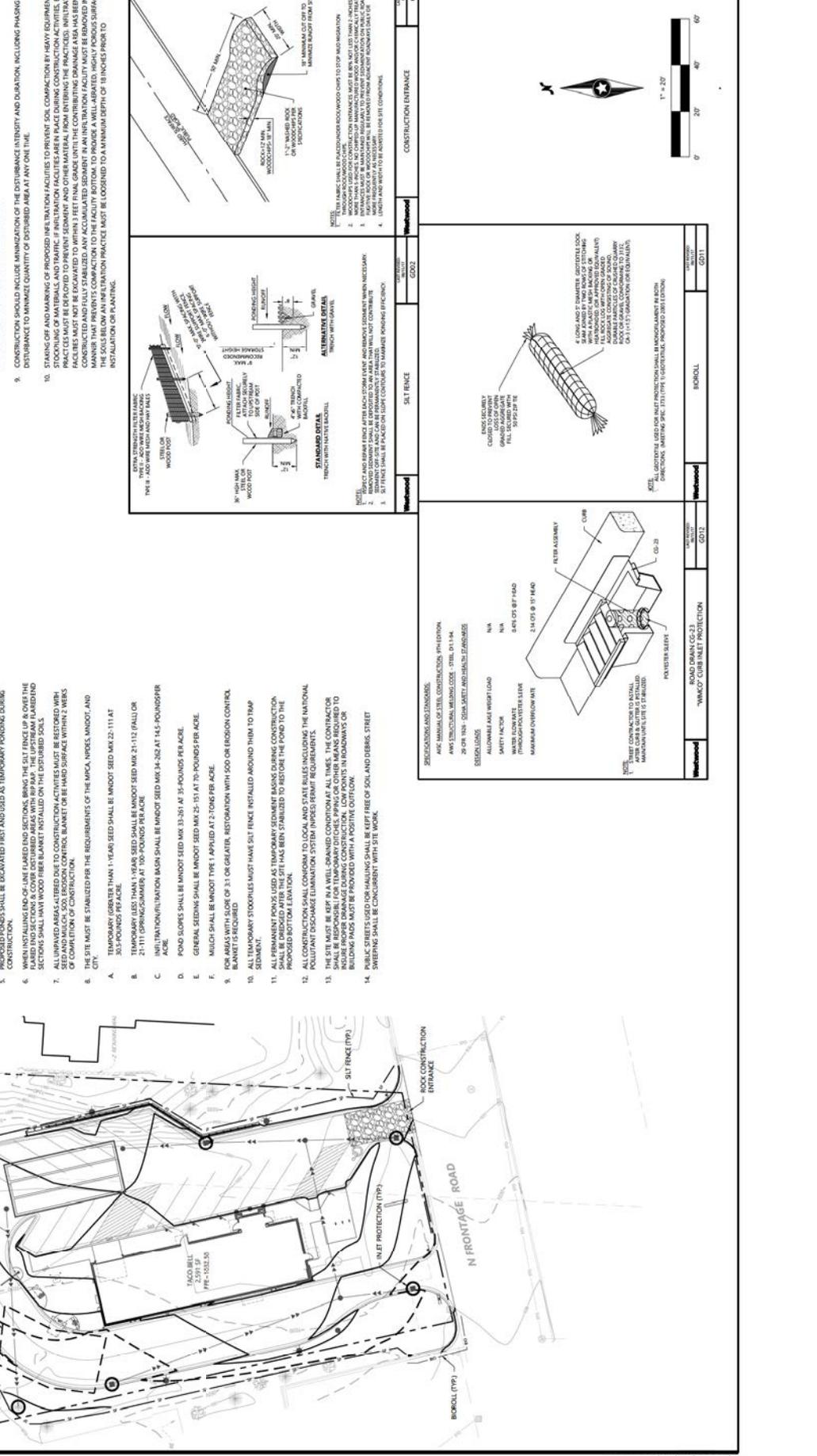
### EROSION CONTROL LEGEND



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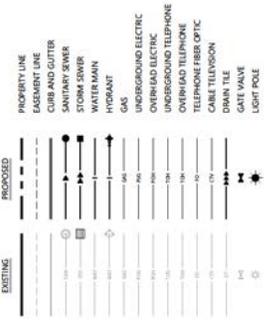


### EROSION CONTROL LEGEND



CALL OUTS below apply:  
 811 or call 811.com  
 www.811.com

**UTILITY LEGEND**

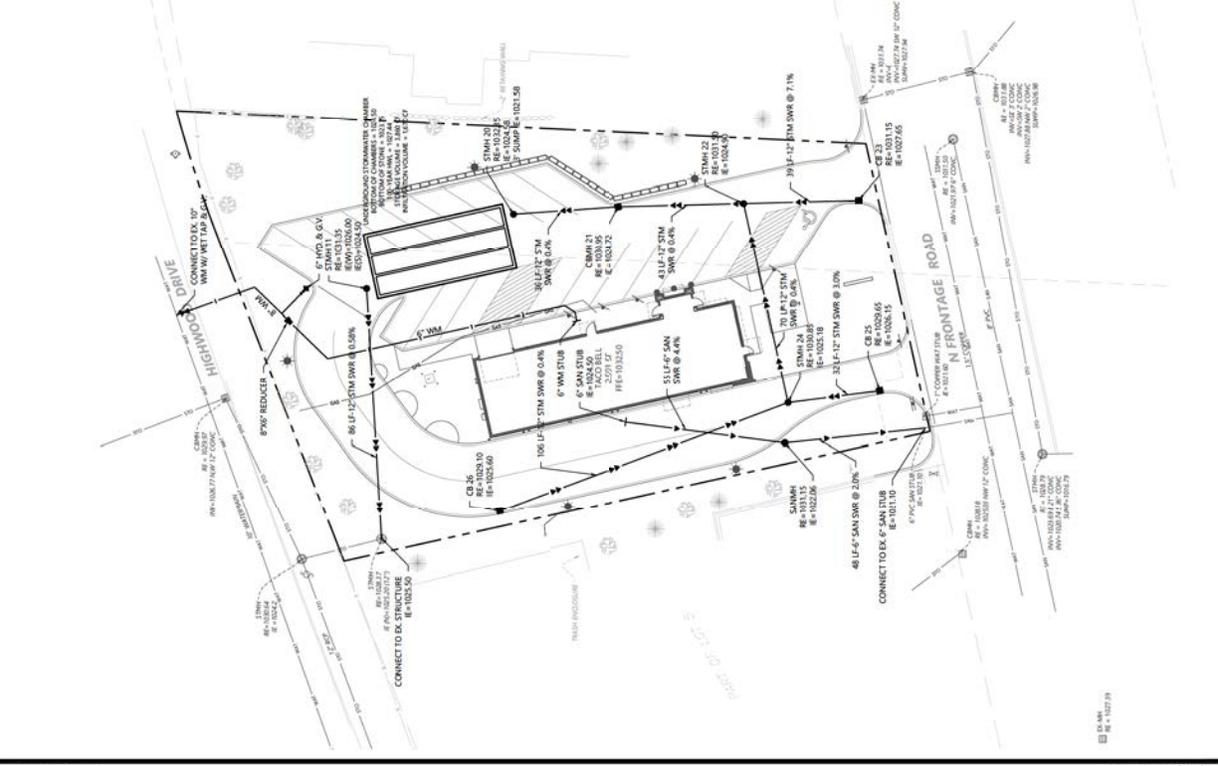
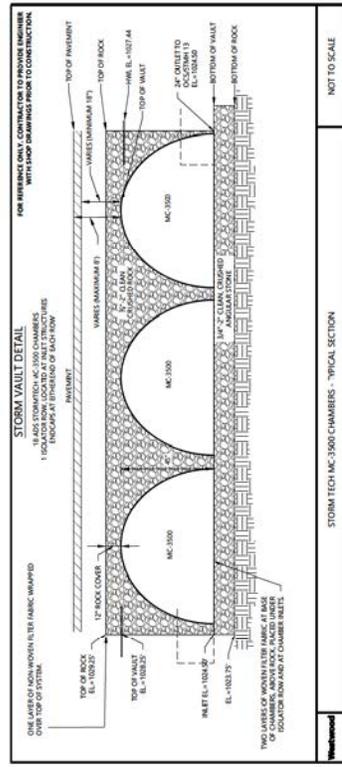


**GENERAL UTILITY NOTES**

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND DEPTH OF ALL UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES SHOWN ON THIS PLAN BY MEANS OF A GROUND PENETRATING RADAR (GPR) SURVEY PRIOR TO CONSTRUCTION AND NOTIFY THE OWNER OF ANY DISCREPANCIES.
- ALL SANITARY SEWERS, STORM SEWERS AND WATER MAIN MATERIAL AND INSTALLATIONS SHALL BE PER CITY REQUIREMENTS, MINNESOTA PLUMBING AND MECHANICAL CODE, PART 7613.00, AND SERVICE LINE INSTALLATION AND SPECIFICATIONS FOR WATER MAIN AND SERVICE LINE INSTALLATION AND SPECIFICATIONS FOR SANITARY SEWER SERVICE LINE INSTALLATION, AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA.
- PROVIDE CITY AND LOCAL PERMITS FOR THE PROPOSED WORK OR NOTIFY THE OWNER OR ENGINEER THAT PERMITS HAVE BEEN OBTAINED. OTHERWISE ARRANGE WITH THE OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING UTILITIES AND DIMENSIONS OF DOORWAYS, WALKS, TRUCK DOCKS, PORCHES, BUILDINGS AND DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE APPROPRIATE UTILITY COMPANY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SERVICE LINE CONSTRUCTION WITH THE UTILITY COMPANIES.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY CITY PERMITS FOR UTILITY CONNECTIONS, AND UTILITIES SHALL BE INSPECTED AND APPROVED BY THE CITY. THE CITY SHALL BE NOTIFIED 48 HOURS PRIOR TO COMMENCING WORK. CONTRACTOR SHALL NOT OPERATE, INTERFERE WITH, CONNECT ANY PIPE OR HOSE TO, OR REMOVE ANY UTILITY FROM THE CITY. ANY ADVERSE CONSEQUENCES OF SCHEDULED OR UNSCHEDULED DISRUPTIONS OF SERVICE TO THE PUBLIC ARE TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
- WATER MAIN LENGTHS AS SHOWN ARE APPROXIMATE. HORIZONTAL AND VERTICAL ALIGNMENT SHALL BE AS SHOWN. THE CONTRACTOR SHALL NOT EXCEED THE MAXIMUM RECOMMENDED PIPE MANUFACTURER OR CITY SPECIFICATIONS FOR WATER MAIN. THE CONTRACTOR SHALL PROVIDE WATER MAIN THREAT RESTRAINTS PER CITY STANDARD REQUIREMENTS.
- A MINIMUM VERTICAL SEPARATION OF 18 INCHES IS REQUIRED BY ALL WATER LINE CROSSINGS WITH SANITARY SEWER OR STORM SEWER. THE EXISTING UTILITY CROSSINGS WITH STORM SEWER.
- UTILITY SERVICES TYPICALLY TERMINATE AT OUTSIDE BUILDING WALL UNLESS SHOWN OTHERWISE.
- DOCKE (FROM WATER MAIN) SHALL BE CLASS 5 PER AWWA C115 OR C151. SHALL BE PER AWWA C900 AND INSTALLED PER AWWA C605 IF ALLOWED BY CITY.

**STORM SEWER CASTING SCHEDULE**

NUMBER	STRUCTURE	TYPE	SIZE	CASTING TYPE
11	20" DIA	48"	48"	NETWAK 1.500
12	20" DIA	48"	48"	NETWAK 1.500
13	20" DIA	48"	48"	NETWAK 1.500
14	20" DIA	48"	48"	NETWAK 1.500
15	20" DIA	48"	48"	NETWAK 1.500
16	20" DIA	48"	48"	NETWAK 1.500
17	20" DIA	48"	48"	NETWAK 1.500
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19	20" DIA	48"	48"	NETWAK 1.500
20	20" DIA	48"	48"	NETWAK 1.500





CALL BEFORE DIGGING  
 811 or call 811.com  
 www.811.com



**LANDSCAPE KEYNOTES**

A ROCK MULCH (TYP)  
 B EDGE (TYP)  
 C SAND (TYP)  
 D SPREAD HEDGE 4' MIN HEIGHT

**LANDSCAPE SUMMARY**

TREE SPECIFICATIONS	REQUIRED	PROVIDED
OVERSTORY DECIDUOUS TREE	11	11
SHRUB	11	11
PERENNIAL	11	11
EDGE	11	11
ORNAMENTAL TREE	11	11

**OVERSTORY DECIDUOUS TREE**  
 11 TREES SUMMED THAT ARE OVER 1" CAL EACH  
 CODE REQUIRES 1" REMOVED WITH LIFE SPODES  
 TOTAL CALIPER INCHES 11

**SHRUB**  
 11 TREES SUMMED THAT ARE OVER 1" CAL EACH  
 CODE REQUIRES 1" REMOVED WITH LIFE SPODES  
 TOTAL CALIPER INCHES 11

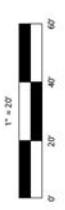
**PERENNIAL**  
 11 TREES SUMMED THAT ARE OVER 1" CAL EACH  
 CODE REQUIRES 1" REMOVED WITH LIFE SPODES  
 TOTAL CALIPER INCHES 11

**ORNAMENTAL TREE**  
 11 TREES SUMMED THAT ARE OVER 1" CAL EACH  
 CODE REQUIRES 1" REMOVED WITH LIFE SPODES  
 TOTAL CALIPER INCHES 11

**PLANT SCHEDULE**

CODE	QTY	COMMON	SPECIFIC NAME	SIZE	ROOT	SPACING
OVERSTORY TREE	6	COMMON HACKBERRY	CELTIS OCCIDENTALIS	2.0" CAL	BB	6x6 DOWN
SHRUB	1	SHAWB WHITE OAK	QUERCUS ALBA	2.0" CAL	BB	6x6 DOWN
PERENNIAL	1	IMPERIAL FORTISCOUST	GEOPHA THURANTHOS VARIETAS IMPERIALIS	2.0" CAL	BB	6x6 DOWN
DECIDUOUS SHRUB	11	BLACK CHERRYBERRY	PRUNELLA ANTOCYPARATA	1" CAL	CONT	4' x 4' O.C.
SHRUB	1	BLACK CHERRYBERRY	PRUNELLA ANTOCYPARATA	1" CAL	CONT	4' x 4' O.C.
SHRUB	1	COMPACT VIBURNUM	VIBURNUM TIGRARIUM MAILE COMPACT	1" CAL	CONT	4' x 4' O.C.
CONFERENCE SHRUB	28	HOLMSTRUP ABBOTTWILE	TILIA OCCIDENTALIS THOMASTRUP	1" CAL	CONT	4' x 4' O.C.
SHRUB	1	BIRD'S NEST SPURGE	PERICLARIA NODIGRANIS	1" CAL	CONT	4' x 4' O.C.
PERENNIAL	27	SALE BUSTARD GRASS	CESTRODIOXYS CLOSTRIGIA MAILE FORESTER	1" CAL	CONT	2' x 2' O.C.
PERENNIAL	1	AUTUMN OY FLOOM	HIMROCALUS WARDONIAE	1" CAL	CONT	1' x 1' O.C.
PERENNIAL	1	PARSONS NE DWILLY	STACHYS AUSTRIANA DW	1" CAL	CONT	1' x 1' O.C.

ABBREVIATIONS: BB = BALLED AND BURIED CAL = CALIPER HT = HEIGHT MIN = MINIMUM O.C. = ON CENTER SP = SPREAD  
 QTY = QUANTITY CONT = CONTAINS \*NOTE: QUANTITIES ON PLAN SCHEDULE LIST QUANTITIES IN THE EVENT OF A DISCREPANCY.



SHEET NUMBER: L100  
 DATE: 06/03/22  
 PROJECT NUMBER: 0033247.00

LANDSCAPE PLAN

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TACO BELL  
 HIGHWAY 7  
 MINNETONKA, MN

JEFFREY R. WESTENSCOFF  
 LICENSE NO. 44018  
 DATE: 06/03/22

BORDER FOODS, INC.  
 5425 BOONE AVENUE  
 NEW HOPKINS, MN 55343

REVISIONS:  
 INITIALS: \_\_\_\_\_ DATE: 06/03/22

DESIGNED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 PROJECT NO.: \_\_\_\_\_  
 SHEET NO.: \_\_\_\_\_