RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

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Chanhassen, MN 55317
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Riley Purgatory Bluff Creek Watershed District Permit Application Review

Permit No: 2023-012

Considered at Board of Managers Meeting: October 4, 2023

Application Received complete: July 27, 2023 (application-review period extend by 60 days on September 19, 2023)

Applicant: Mesenbrink Construction

Consultant: Rehder & Associates, Inc., Nick Adams

Project: Audubon Business Park – The applicant proposes constructing 2 office/warehouse buildings, associated site improvements including the removal of a small portion of McGlynn Road. The stormwater management system includes filtration and infiltration basins to provide water quality treatment, rate control, and volume abstraction.

Location: Southwest corner of Hwy 5 and Audubon Road, Chanhassen

Reviewer: Katherine Tomaska, EIT; Scott Sobiech, PE, Barr Engineering

Potential Board Variance Action

Manager _____ moved and Manager _____ seconded adoption of the following resolution based on the permit report that follows, the presentation of the matter at the October 4, 2023, meeting of the managers and the managers' findings, as well as the factual findings in the permit report that follows:

Resolved that the variance request for Permit 2023-012 from compliance with Rule B, subsection 3.2b is approved, based on the facts and analysis provided by the RPBCWD engineer below and placed in the record at the October 4, 2023 meeting of the managers, and the managers' findings in the record of the October 4 meeting, and subject to the following conditions: 1. [CONDITION(S)],

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 October 4, 2023 meeting of the managers:

Resolved that the application for Permit 2023-012 is approved, subject to the conditions and stipulations set forth in the Recommendations section of the attached report;

Resolved that on determination by the RPBCWD administrator that the conditions of approval of the permit have been affirmatively resolved, the RPBCWD president or administrator is authorized and directed to sign and deliver Permit 2023-012 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
B	**Floodplain Management and Drainage Alterations**	No		See Rule K Variance discussion for compensatory storage not being provided within the floodplain of the same waterbody.
C	**Erosion Control Plan**	See Comment		See rule-specific permit condition C1 related to name of individual responsible for on-site erosion control.
D	**Wetland and Creek Buffer**	See Comment		See rule-specific permit condition D1 related to recordation of buffer maintenance declaration.
J	**Stormwater Management**	Rate	Yes	
		Volume	Yes	
		Water Quality	Yes	
		Low Floor Elev.	Yes	
		Maintenance	Yes	See rule-specific permit condition J1 related to recordation of stormwater facilities maintenance declaration.
		Chloride Management	See Comment	See stipulation #4.
		Wetland Protection	NA	
K	**Variances and Exceptions**	See Comment		Variance from compensatory storage location requirements in subsection 3.2 of the Floodplain Management and Drainage Alteration Rule requested. See Rule Specific Permit Condition K1
L	**Permit Fee**	Yes		$3000 received April 4, 2023 with an additional $2,000 variance fee received on April 13, 2023. The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. As of September 28 the amount due is $6,709
M	**Financial Assurance**	See Comment		The financial assurance is calculated at $485,576.

Project Description

The proposed work will redevelop a 28-acre site at the southwest corner of Hwy 5 and Audubon Road Chanhassen, Minnesota. The existing site consists of old farmland and a small portion of McGlynn Road. The applicant proposes constructing 2 office/warehouse buildings and associated site improvements (e.g.,

utilities, parking, hardscape, stormwater management facilities, and landscape). The stormwater management system includes the construction of one wet pond and five infiltration basins to provide water quality treatment, rate control, and volume abstraction.

There are six wetlands onsite under existing conditions, four of which will be filled and replaced under a Wetland Conservation Act replacement plan approved by the City of Chanhassen, acting as the local government unit administering WCA. No disturbance is proposed of the two remaining wetlands. The water resources within the project site or downgradient of the proposed activities are summarized in the following table. The table also provides a brief explanation of how each resource is implicated in the permit application review process.

Water resource impacted by proposed project

Water Resource	Projected resource impacts
Wetland 1	A Wetland Conservation Act-protected, medium value wetland onsite and downgradient from proposed land-disturbing activities.
Wetland 2	A Wetland Conservation Act-protected, medium value wetland onsite and downgradient from proposed land-disturbing activities.
Wetland 3	A 0.21-acre Wetland Conservation Act-protected wetland, medium value onsite that the city of Chanhassen, the local government unit (LGU) responsible for administering the Wetland Conservation Act, allowed to be filled. Compensatory storage for the floodplain fill will be provided.
Wetland 4	A 0.17-acre Wetland Conservation Act-protected, medium value wetland onsite that the city of Chanhassen, the LGU responsible for administering the Wetland Conservation Act, allowed to be filled. Compensatory storage for the floodplain fill will be provided.
Wetland 5	A 0.12-acre Wetland Conservation Act-protected, medium value wetland onsite that the city of Chanhassen, the LGU responsible for administering the Wetland Conservation Act, allowed to be filled. Compensatory storage for the floodplain fill will be provided.
Wetland 6	A 0.01-acre Wetland Conservation Act-protected, medium value wetland onsite that the city of Chanhassen, the LGU responsible for administering the Wetland Conservation Act, allowed to be filled. Compensatory storage for the floodplain fill will be provided.

The project site information is summarized below:

	Area (acres)
Total Site Area	28.34
Existing Site Impervious Area	0.48[1]
Post Construction Site Impervious	18.69
Distributed Impervious Area	0.48 (100% disturbed)
Increase in Site Impervious Area	18.21 (>100% increase)
Regulated Impervious area	18.69
Total Disturbed Area	27.8

[1] The existing impervious surface on the site is associated with the McGlynn Road cul-de-sac.

Exhibits:

1. Permit Application received March 18, 2023 (The applicant was informed on April 6, 2023 that the application was incomplete because of missing information related to Rule B analysis, Rule D analysis, Rule J analysis, and a variance request. Materials completing the application were received on July 27, 2023. RPBCWD extended the review timeline by 60 days in accordance with Minn. Stat. sec. 15.99)
2. Stormwater Management Report dated March 19, 2023 (revised June 6, 2023; June 16, 2023; July 27, 2023; August 30, 2023)
3. Project Plan Set dated March 19, 2023 (revised June 2, 2023; July 27, 2023; August 30, 2023)
4. Electronic P8 and HydroCAD models received on March 20, 2023 (revised June 2, 2023; July 27, 2023; August 31, 2023)
5. Federal Package Wetland Permit, received March 18, 2023
6. Geotechnical Report, dated November 3, 2023
7. MNRAM Wetland Functional Assessment Summary received April 15, 2023
8. Infiltration Basin Cross Section Exhibits received June 2, 2023
9. Infiltrometer Testing Results received June 2, 2023
10. Landscape Plans dated
11. Engineer's Opinion of Probable Cost for Stormwater Management features dated June 1, 2023 (revised July 27, 2023; August 30, 2023)
12. Variance Request Memorandum dated June 2, 2023 (revised August 30, 2023)
13. Minnesota WCA Notice of Decision dated July 20, 2023
14. Response to RPBCWD Comments dated July 27, 2023
15. Response to RPBCWD Comments dated August 31, 2023

Rule Specific Permit Conditions

Rule B: Floodplain Management and Drainage Alterations

Because the project involves work or fill placement below the 100-year flood elevation of Wetlands 3, 4, 5, and 6, the project must conform to the requirements in the RPBCWD Floodplain Management and Drainage Alterations rule (Rule B, Subsection 2.1).

Because the project proposes new structures, the project must conform with low floor elevation requirements set forth by Rule B, Subsection 3.1. The following table summarizes the low floor analysis for the proposed lowest structure adjacent to the respective floodplain of interest. The lowest proposed structure elevations meet the freeboard requirement in Rule B, Subsection 3.1 by providing at least two feet of freeboard.

Building	Low Floor Elevation of Building (feet)	100-year Event Flood Elevation of Adjacent Stormwater Facility (feet)	Freeboard (feet)
North Building	977.5	968.9	8.6
South Building	977.5	970.5	7.0

Placement of fill below the 100-year flood elevation is prohibited unless fully compensatory flood storage is provided within the floodplain of the same waterbody (Rule B, Subsection 3.2). Compensatory storage must be provided at or below the same elevation for fill in the floodplain of a water basin (Rule B, Subsection 3.2b).

The following table summarizes the proposed fill and compensatory storage for each waterbody impacted by the project. The supporting materials demonstrate, and the RPBCWD Engineer concurs, that the proposed project will result in a net increase in floodplain storage for site. Because the LGU for WCA approved the elimination of Wetlands 3, 4, 5, and 6 , the compensatory storage for filling in the floodplains will not be provided within the floodplain of the same waterbody. The applicant has requested a variance from compliance with this requirement of Rule B, Subsection 3.2b. See the Rule K discussion for additional information on the variance request.

Water Resource	100-Year Elevation (feet)	Proposed Fill (CY)	Proposed Feature Providing Compensatory Storage[1]	Proposed Compensatory Storage (CY)
Wetland 3	969.18	623.8	Infiltration Basin 4[1]	654.3
Wetland 4	972.84	90.7	Wet detention Basin/Infiltration Basin 1	7,658
Wetland 5	964.84	30.5		
Wetland 6	970.74	33.7		

[1] Infiltration Basin 4 provides compensatory storage is in the same subwatershed to the next downgradient receiving waterbody as Wetland 3, and the proposed wet detention basin/Infiltration Basin 1 are in the same subwatershed as wetlands 4, 5 and 6.

The engineer concurs with the applicant provided runoff modeling results that demonstrate the proposed project will decrease the flow rates leaving the site relative to existing conditions (see the rate control analysis in Rule J below). Because the proposed flow rates leaving the site will be lower than existing flow rates the project is not reasonably likely to adversely impact off-site flood risk or channel stability. The applicant also provided pre- and post-project water quality modeling to demonstrate no adverse impact to water quality. The modeling results show the total suspended solids and total phosphorus load leaving the site after the project will be less than the existing load leaving the site. This also supports the engineer's determination that the project meets the requirements of Rule B, subsection 3.3. Because no watercourses exist on the site, Rule B, Subsection 3.4 does not impose requirements on the project. See Rule C analysis

of the applicant's submitted erosion control plan to demonstrate conformance with Rule B, Subsection 3.5. A note on the plans indicates that activities must be conducted to minimize the potential transfer of aquatic invasive species conforming to Rule B, Subsection 3.6.

With the exception of compensatory storage within the floodplain of the same waterbody, which is the subject of the applicant's variance request, the proposed project conforms to the floodplain management and drainage alteration requirements of Rule B.

Rule C: Erosion and Sediment Control

Because the project will alter 27.8 acres of land-surface area the project must conform to the requirements in the RPBCWD Erosion and Sediment Control rule (Rule C, Subsection 2.1).

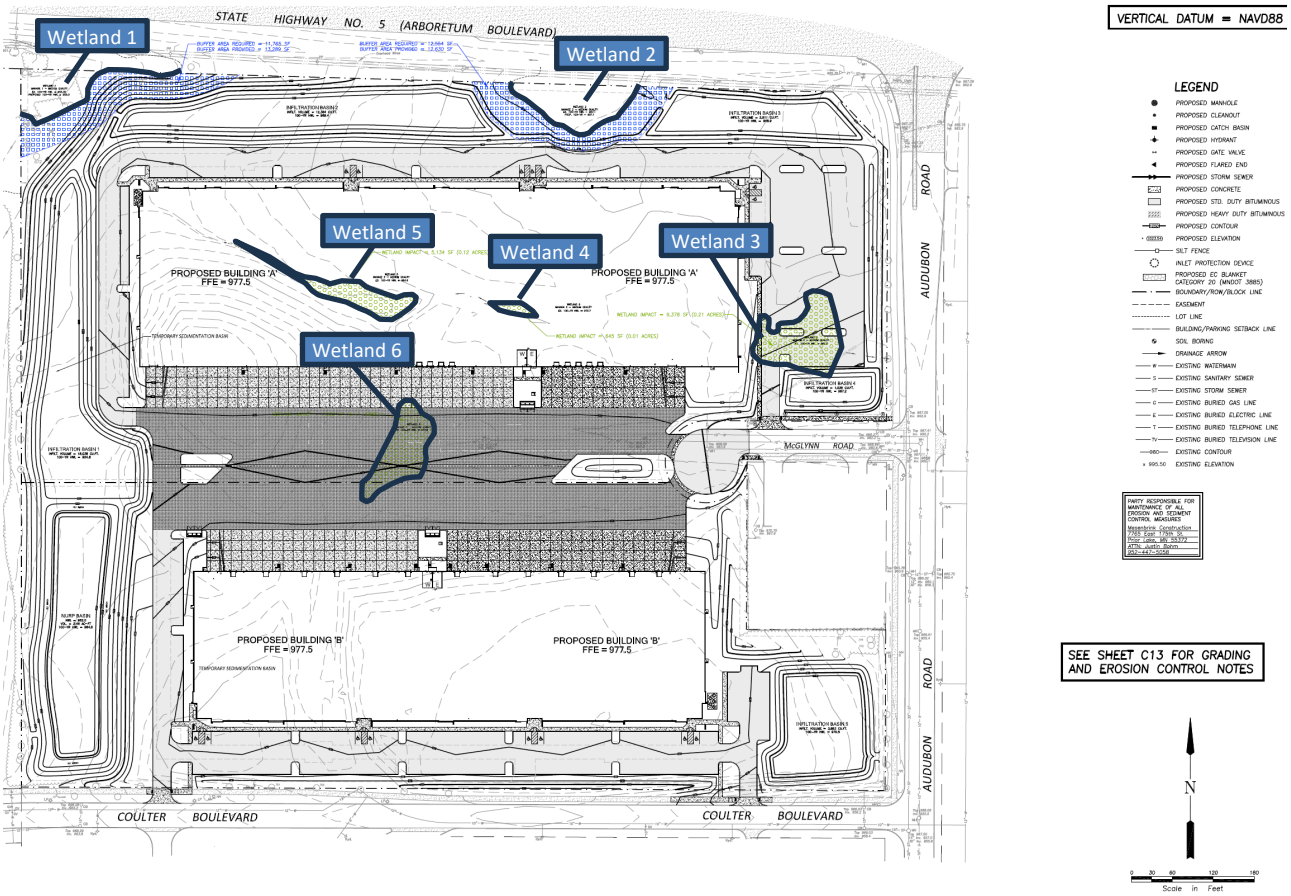
The erosion control plan prepared by Loucks includes installation of silt fence, inlet protection for storm sewer catch basins, daily inspection, placement of a minimum of 6 inches of topsoil, decompaction of areas compacted during construction, and retention of native topsoil onsite. To conform to the RPBCWD Rule C requirements the following revisions are needed:

C1. The Applicant must provide the name 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 D: Wetland and Creek Buffers

Because the proposed work triggers a permit under RPBCWD Rule B and Rule J and two wetlands (wetland 1 and 2) protected by the state Wetland Conservation Act will remain downgradient from the proposed land-disturbing activities, Rule D, Subsections 2.1a and 3.1 require buffers.

The City of Chanhassen is the LGU administering WCA requirements and in that capacity approved elimination of Wetlands 3, 4, 5, and 6 (totaling 1.05 acres) as part of the proposed construction activities, leaving no wetland to buffer. Because the applicant proposes land-disturbing activities upgradient from wetland 1 and 2, Subsection 3.1b requires wetland buffer along the portion of the wetlands that are downgradient from the land-disturbing activities.



A MnRAM analysis indicates that Wetland 1 and Wetland 2 are a medium value wetlands. Rule D, Subsection 3.1.b.iii requires a wetland buffer with an average of 40 feet from the delineated edge of the wetland, minimum 20 feet. As summarized in the table below, the proposed buffer widths are compliant with Rule D, Subsection 3.1.b.iii.

Wetland ID	RPBCWD Wetland Value	Required Minimum Width (ft)	Required Average Width (ft)	Required Area (sq ft)	Provided Area (sq ft)	Provided Minimum Width (ft)	Provided Average Width (ft)
Wetland 1	Medium	20	40	11,765	13,289	39.5	56.8
Wetland 2	Medium	20	40	12,554	12,630	22	40.2

The plan requires revegetating disturbed areas within the proposed buffer with Board of Water and Soil Resources native vegetation seed mx for wetland fringes to conform with Rule D, Subsection 3.3. The engineer's review of plan sheets shows that buffer markers will be placed per District criteria (Subsection 3.4). A note is included on the plan sheet indicating the project will be constructed so as to minimize the potential transfer of aquatic invasive species (e.g., zebra mussels, Eurasian watermilfoil, etc.) to the maximum extent possible conforming to Rule D, Subsection 3.5.

To conform to the RPBCWD Rule D the following revisions are needed:

D1. Buffer areas and maintenance requirements must be documented in a declaration recorded after review and approval by RPBCWD in accordance with Rule D, Subsection 3.5. Permit applicant must provide a maintenance declaration. A draft declaration must be provided for District review prior to recording.

Rule J: Stormwater Management

Because the development project will alter 27.8 acres of land-surface area the project must meet the criteria of RPBCWD's Stormwater Management rule (Rule J, Subsection 2.1). Because the applicant proposes to disturb 100% of the existing site impervious surface on the site, the criteria in section 3 apply to the entire site (Rule J, subsection 2.3).

The project includes installation of storm sewer to route runoff to one wet detention basin and five infiltration basins to provide water quality treatment, rate control, and volume abstraction.

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. The proposed project is in conformance with RPBCWD Rule J, Subsection 3.1.a.

Discharge Location	2-Year Discharge (cfs)		10-Year Discharge (cfs)		100-Year Discharge (cfs)		10-Day Snowmelt Discharge (cfs)	
	Ex	Prop	Ex	Prop	Ex	Prop	Ex	Prop
West	7.8	1.5	16.3	2.6	37.1	5.1	<0.1	<0.1
Wetland 1	15.7	15.2	34.2	20.7	79.3	31.4	0.1	<0.1
Northeast	2.7	0.1	6.1	0.7	15.3	2.9	<0.1	<0.1
Audubon	3.6	3.5	8.6	4.5	22.2	6.6	<0.1	<0.1
McGlynn	8.1	3.1	15.5	5.2	33.3	10.1	<0.1	<0.1
Coulter	2.6	2.4	5.3	2.8	11.9	3.8	<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 impervious surface of the parcel. An abstraction volume of 74,627 cubic feet is required from the 18.69 acres of regulated impervious area. Forty-nine soil borings completed by Itco Allied Engineering Co. show that soils in the project area are typically sandy clay loam, clay loam, or clay. Itco Allied Engineering Co. also

completed 13 double ring infiltrometer tests on the existing soils and determined the infiltration rates of the existing soils to be 0.06-1.8 inches per hour beneath the proposed stormwater management features. Because some of the test exhibited atypical patterns (i.e., increasing infiltration over time) raising concerns over the validity of the test results, the RPBCWD engineer concurs design infiltration rate of 0.06 inches per hour. Because of the low in-situ infiltration measurements at some locations and the identifications of redoximorphic soils, the site is considered restricted. While groundwater was not observed in any of the borings, several borings identified of redoximorphic soils suggesting evidence of seasonal high groundwater. The subsurface investigation information summarized in the table below supports a determination that groundwater is at least 3 feet below the bottom of the proposed infiltration stormwater facilities (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)
Wet Basin	B-5 (2022)	Yes	Mottled soils observed at Elevation 963.7 ft	958	No
Infiltration Basin 1	B-2 (2022)	Yes	No groundwater observed at boring bottom (approx. el 944.4 ft)	962	Yes
Infiltration Basin 2	B-1 & B-2 (2023)	Yes	No groundwater observed at boring bottom (approx. el 948.0 ft)	966	Yes
Infiltration Basin 3	B-3 & B-4 (2023)	Yes	No groundwater observed at boring bottom (approx. el 953.0 ft)	968	Yes
Infiltration Basin 4	B-5 (2023)	Yes	No groundwater observed at boring bottom (approx. el 953.0 ft)	966	Yes
Infiltration Basin 5	B-6 (2023)	Yes	No groundwater	968.5	Yes

			observed at boring bottom (approx. el 962.0 ft)		

Because the engineer concurs that the predominate soil type at the site and the identification of redoximorphic soils supports that the abstraction standard in Subsection 3.1 of Rule J cannot practicably be met, the site is considered a restricted site and stormwater runoff volume must be provided in accordance with Subsection 3.3 of Rule J. For restricted sites, Subsection 3.3 of Rule J requires rate control in accordance with Subsection 3.1a and that abstraction and water quality protection be provided in accordance with the following sequence: (a)Abstraction of 0.55 inches of runoff from site impervious surface determined in accordance with paragraphs 2.3, 3.1 or 3.2, as applicable, and treatment of all runoff to the standard in paragraph 3.1c; or (b) Abstraction of runoff onsite to the maximum extent practicable and treatment of all runoff to the standard in paragraph 3.1c; or (c) Off-site abstraction and treatment in the watershed to the standards in paragraph 3.1b and 3.1c.

Based on the presence of predominately clay soils at the site and some of the infiltration tests exhibiting atypical patterns, the RPBCWD engineer concurs design infiltration rates of 0.06 inches per hour beneath three proposed infiltration basins and 0.165 inches per hour beneath two proposed infiltration basins. The engineer finds that under the design infiltration rate, the infiltration basins will draw down within 48 hours (Rule J, subsection 3.1biii). Plans indicate pretreatment for runoff entering the infiltration basins is provided by sump manholes and rain guardian turrets thus the proposed project conforms with RPBCWD Rule J, Subsection 3.1b.1.

The designed abstraction performance for the project site is summarized in the table below and demonstrates that the proposed infiltration on the site will conform with the volume abstraction requirement in subsection 3.3a.

	Abstraction Depth (inches)	Abstraction Volume (cubic feet)
Required	0.55	37,314
Provided	0.57	38,348

Water Quality Management

Subsection 3.1.c of Rule J requires the Applicant to 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 a wet detention pond and five infiltration basins to achieve the required TP and TSS removals.

The P8 modeling results of runoff from the site summarized in tables below show the annual TSS and TP removal requirement is 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)	14,788	13,309 (90%)	13,368 (90.4%)
Total Phosphorus (TP)	48.2	28.9 (60%)	38.0 (78.8%)

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)	3,412	1,419	-1,993
Total Phosphorus (TP)	11.7	10.2	-1.5

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 proposed buildings and the adjacent stormwater management feature or waterbody are summarized below.

Stormwater Facility	Low Floor Elevation of Building (feet)	100-year Event Flood Elevation of Adjacent Stormwater Facility (feet)	Freeboard (feet)
North Building	977.5	968.9	8.6
South Building	977.5	970.5	7.0

Because the provided separation is greater than the minimum required, the elevation and location of the proposed stormwater facilities meet the requirements in Rule J, Subsection 3.6.

Maintenance

Subsection 3.7 of Rule J requires the submission of a maintenance declaration. 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.

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

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, Permit applicant must provide a chloride management plan that designates the individual authorized to implement the chloride management plan.

Wetland Protection

Because runoff from this site is directly tributary to on-site medium value wetlands, the project must comply with the wetland protection criteria in Rule J, Subsection 3.10

The following table summarizes the allowable change in bounce and inundation duration from Table J1 of RPBCWD Rule J. The information summarized in the following table also summarizes the applicant's analysis for wetland protection and the potential impacts on the wetlands. The hydrologic models demonstrate that the duration of inundation has not been increased from existing conditions. The submitted materials demonstrate, and the RPBCWD engineer concurs, that project is in conformance with Rule J, Subsection 3.10a for the medium value wetland at the site.

Wetland	RPBCWD Wetland Value	Change in Bounce for, 10-Year Event (feet)	1-year change in Inundation Period (days)	2-year change in Inundation Period (days)	10-year change in Inundation Period (days)	Runout Control Elevation1
Rule J, Table J1 Criteria	Medium	Existing +/- 1.0 feet	Existing+2 days	Existing+2 days	Existing +14 days	0 to 1.0 ft above existing runout
Wetland 1	Medium	0.06	0	0	0	No change
Wetland 2	Medium	0.01	0	0	0	No change

Rule J, Subsection 3.10b requires that treatment of runoff to medium value wetlands archive 90 percent total suspended solids removal and 60 percent total phosphorus removal. P8 modeling results summarized in the below table show the proposed project is in conformance with Rule J, Subsection 3.10b.

Wetland	RPBCWD Wetland Value	TSS Removal (%)	TP Removal (%)
Criteria	Medium	90	60
Wetland 1	Medium	92.9	80.7
Wetland 2	Medium	95.8	88.9

Rule K: Variances and Exceptions

Rule B subsection 3.2 requires compensatory flood storage within the floodplain of the same waterbody. The Applicant requested a variance from this provision of RPBCWD's Rule B – Floodplain Management and Drainage Alterations.

Rule K requires the Board of Managers to find that because of unique conditions inherent to the subject property the application of rule provisions will impose a practical difficulty on the Applicant. Assessment of practical difficulty is conducted against the following criteria:

1. how substantial the variation is from the rule provision;
2. the effect of the variance on government services;
3. whether the variance will substantially change the character of or cause material adverse effect to water resources, flood levels, drainage or the general welfare in the District, or be a substantial detriment to neighboring properties;
4. whether the practical difficulty can be alleviated by a technically and economically feasible method other than a variance. Economic hardship alone may not serve as grounds for issuing a variance if any reasonable use of the property exists under the terms of the District rules;
5. how the practical difficulty occurred, including whether the landowner, the landowner's agent or representative, or a contractor, created the need for the variance; and
6. in light of all of the above factors, whether allowing the variance will serve the interests of justice.

The local government unit (LGU) administering the WCA, City of Chanhassen, approved the elimination of Wetland 3, 4, 5, and 6. Rule B subsection 3.2 requires compensatory flood storage within the floodplain of the same waterbody. The Applicant requested variances from this provision of RPBCWD's Rule B – Floodplain Management and Drainage Alterations. The applicant asserts that the need for the variance results from the unique condition of the LGU's having approved complete elimination of the wetlands. Following is the RPBCWD engineer's assessment of information received relevant to the applicant's request for a variance from the requirement that the applicant provide compensatory flood storage within the floodplain of the same waterbody:

- Related to variance criterion 1 – The project will involve 778.8 cubic yards of fill and 8,312.3 cubic yards of compensatory storage below the respective 100-year flood elevations (see below table) but outside floodplain of the wetlands, thus providing a net increase of 7,533.6 cubic yards of floodplain storage. This flood storage is also used for stormwater management on the site.

Water Resource	100-Year Elevation (feet)	Proposed Fill (CY)	Proposed Feature Providing Compensatory Storage	Proposed Compensatory Storage (CY)
Wetland 3	969.18	623.8	Infiltration Basin 4	654.3
Wetland 4	972.84	90.7	NURP Basin/Infiltration Basin 1	7,658
Wetland 5	964.84	30.5		
Wetland 6	970.74	33.7		

- With regard to variance criteria 2 and 3 – Because the proposed project will reduce the site discharge volume and rate leaving the site relative to existing conditions, as discussed in the Rule J analysis, the proposed project is not reasonably likely to cause off-site adverse impacts. Because the project involves a net increase of storage below the 100-year flood elevation of the wetlands being filled, the proposed alterations are not likely to adversely affect offsite governmental services, water resources, flood levels, or neighboring properties. The proposed variance only impacts the applicant's property.
- Technical measures incorporated into the project plan to alleviate the practical difficulty (variance criterion 4) include creation of compensatory flood storage volume in the wet detention basin and five infiltration basins to comply with RPBCWD regulatory requirements, but not within the same floodplains. Routing the developed site runoff to the proposed stormwater management facilities will allow the runoff to be stored in the facilities resulting in reduced site discharge as summarized in the rate control analysis of Rule J above. Because the Wetlands 3, 4, 5, and 6 will no longer exist the compensatory storage cannot be provided within the floodplain of the same wetland.
- With regard to variance criterion 5, the applicant has created the circumstances leading to the variances, though it did so with the approval of another relevant regulatory body, the LGU administering WCA.

Because the project increase flood storage below the existing 100-year flood elevations of Wetlands 3, 4, 5, and 6, which the LGU is allowing to be filled, the engineer finds there is an adequate technical basis for the managers to rely on to grant the requested variance. To offset the loss of some of the wetland and floodplain functions, the engineer recommends the applicant revise the design of the wet detention basin to promote and establish wetland characteristics.

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 April 4, 2023. The applicant also provided an additional $2,000 fee related to the variance request on April 13, 2023. The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. Subsequently, if the costs of review, administration, inspections and closeout-related or other regulatory activities exceed the fee deposit amount, the applicant will be required to replenish the deposit to the original amount or such lesser amount as the RPBCWD administrator deems sufficient within 30 days of receiving notice that such deposit is due. The administrator will close out the relevant application or permit and revoke prior approvals, if any, if the permit-fee deposit is not timely replenished.

L1. The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. As of September 28, 2023 the amount due is $6,709.

Rule M: Financial Assurance:

	Unit	Unit Cost	# of Units	Total
Rule C: Erosion Control				
Silt Fence	LF	$2.50	10,400	$26,000
Inlet Protection	EA	$100	36	$3,600
Rock Entrance	EA	$250	1	$250
Restoration	Ac	$2,500	27.8	$69,500
Rule D: Wetland and Creek Buffers	LS	$5,000	1	$5,000
Rule J: Chloride Management	LS	$5,000	1	$5,000
Rule J: Stormwater Management One detention basin and five infiltration basins: 125% of engineer's opinion of cost ($265,666)	EA	125% OPC	1	$332,083
Contingency (10%)		10%		$44,143
Total Financial Assurance				**$485,576**

<u>Applicable General Requirements:</u>

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

Findings

1. The proposed project includes the information necessary, plan sheets and erosion control plan for review.
2. The proposed project conforms to Rule B except the applicant has requested a variance from compliance with the Rule B criteria related to compensatory storage within the same floodplain.
3. The proposed project will conform to Rules C, D, 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 $485,576.
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 maintenance of the wetland buffer and associated maintenance requirements as well as all stormwater management facilities. Drafts of all documents to be recorded must be provided to the District for review and approval prior to recordation.
4. Receipt of revised plans revising the design of the wet detention basin to promote and establish wetland characteristics and function.

5. The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. As of September 28, 2023 the amount due is $6,709.

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 stormwater management 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:

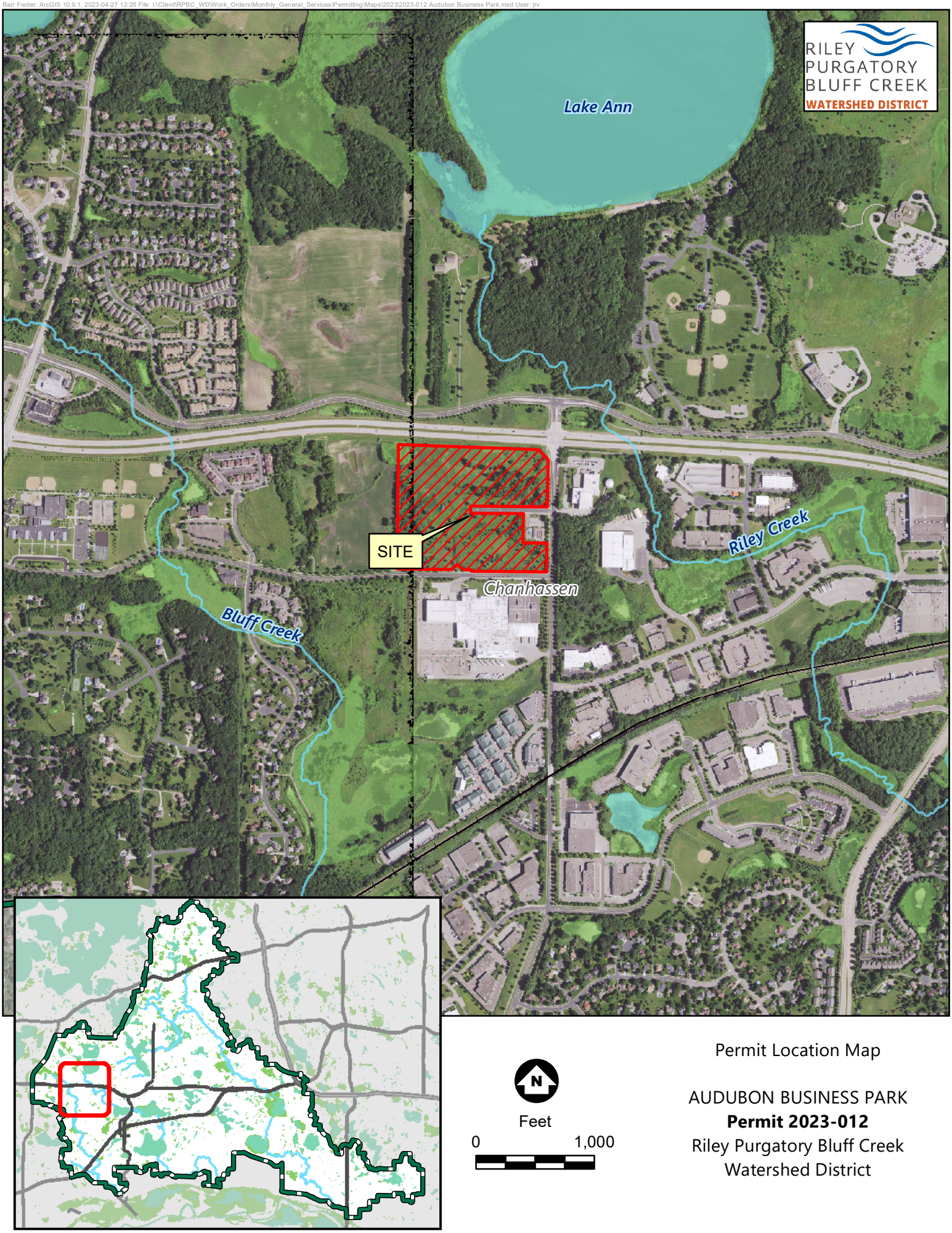
    a. Documentation that constructed infiltration facilities perform as designed. This may include infiltration testing, flood testing, or other with prior approval from RPBCWD

b. Documentation that disturbed pervious areas remaining pervious have been decompacted per Rule C.2c criteria

4. The work on the Audubon Business Park development under the terms of permit 2023-012, 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 deems 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.

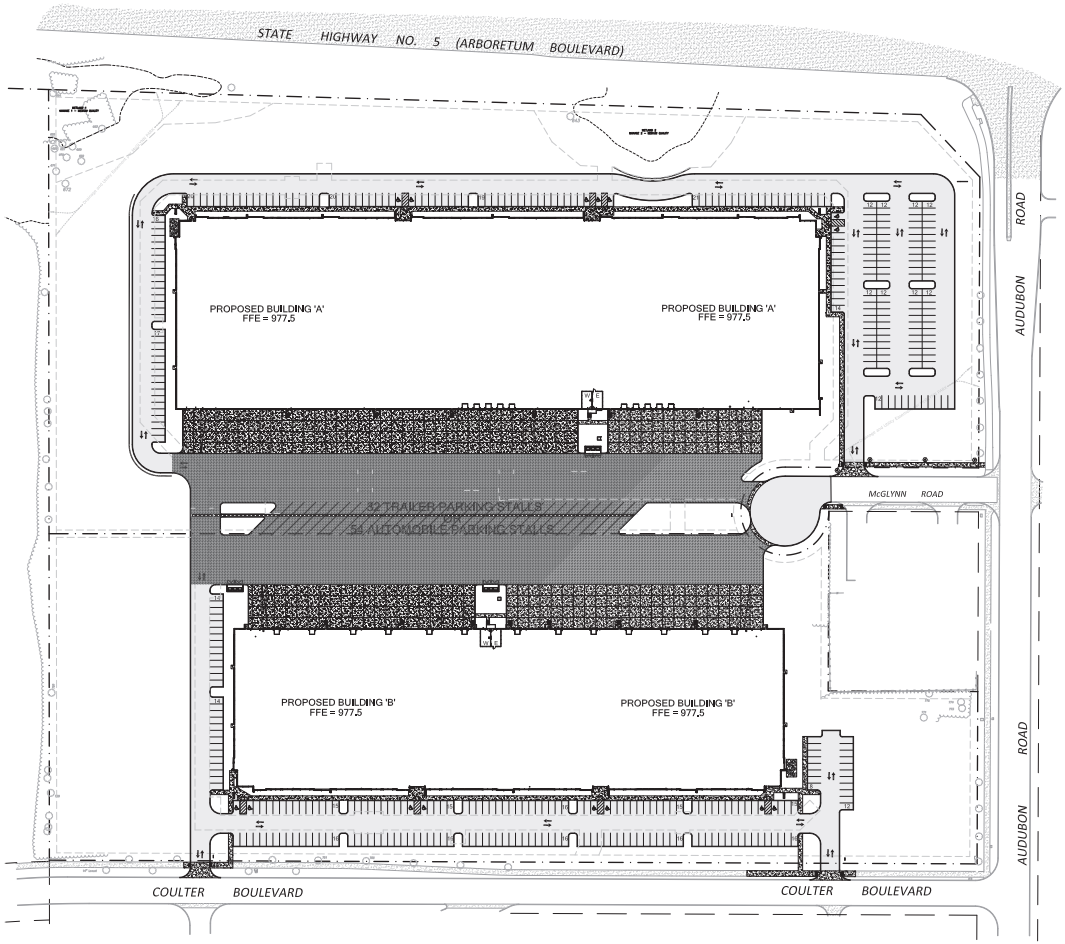


Permit Location Map

AUDUBON BUSINESS PARK
Permit 2023-012
Riley Purgatory Bluff Creek
Watershed District

AUDUBON BUSINESS PARK

CHANHASSEN, MN



VERTICAL DATUM = NAVD88

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SHEET INDEX

TITLE	SHEET NO.
COVER SHEET	C0
SITE DEMOLITION PLAN	C1–C5
SITE DIMENSION PLAN	C6–C10
GRADING, DRAINAGE & EROSION CONTROL PLAN	C11–C15
UTILITY PLAN	C16–C20
WATERMAIN PLAN & PROFILE	C21–C28
DETAILS	C29–C30
CITY STANDARD DETAILS	C31–C34
SWPPP	C35
WETLAND BUFFER SIGNAGE PLAN	C36
TREE PRESERVATION PLAN	C37–C42

NOT INCLUDED IN THE SUBMITTAL

REHDER & ASSOCIATES, INC.
Civil Engineers & Land Surveyors
8445 Freland Drive, Suite 110
Eden Prairie, MN 55344
Telephone: 952-934-2050
www.rehder.com

PROJECT NO.: 221-1321.157 DRAWING FILE: 1321157.DWG

I hereby certify that this plan 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.

PRELIMINARY

Name _____ Date _____ Reg. No. _____

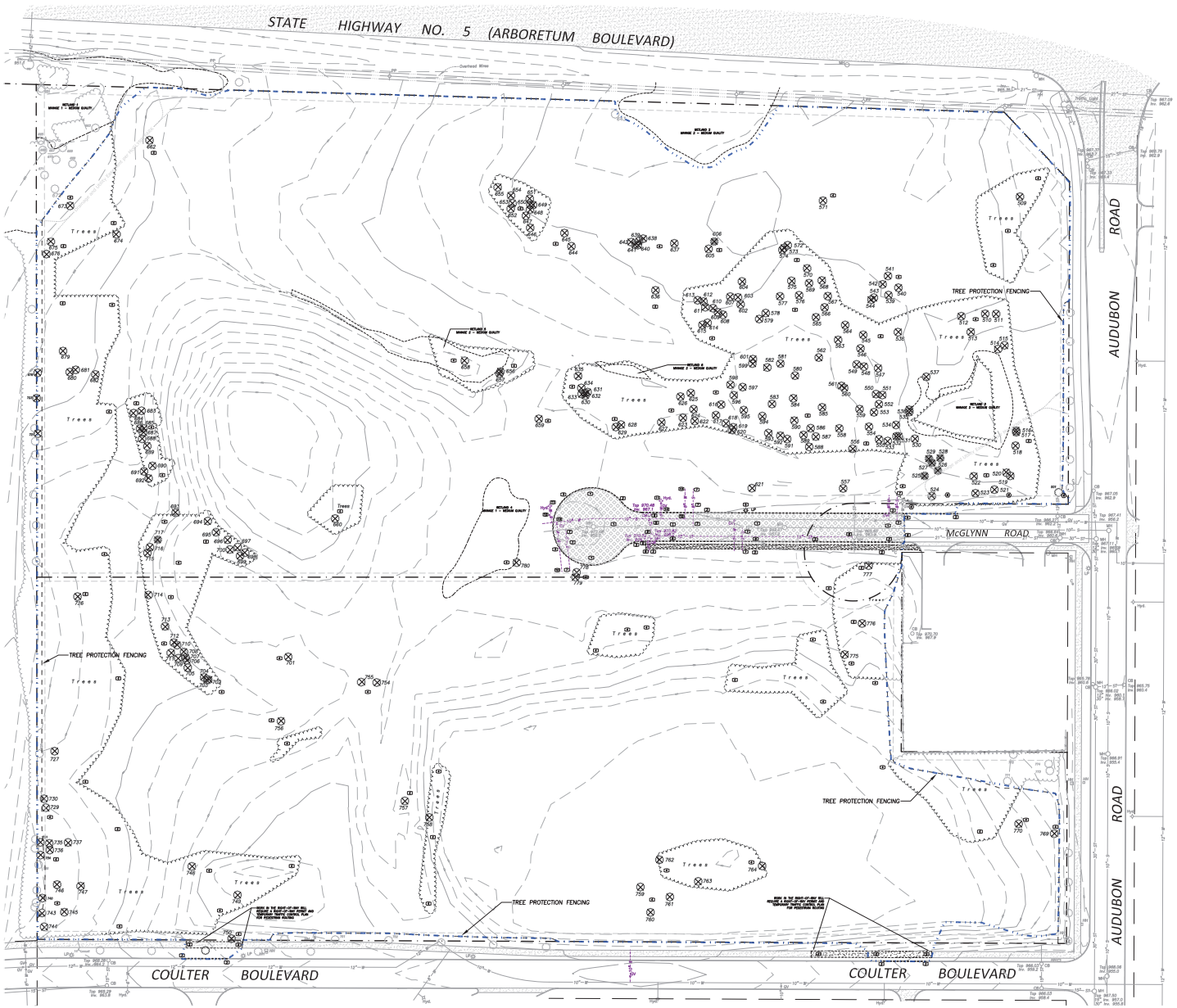
Issued

RPBCWD SUBMITTAL	3-19-23
CITY SUBMITTAL	6-2-23
CITY SUBMITTAL	6-16-23
ADDRESS RPBCWD COMMENTS	7-27-23
ADDRESS CITY COMMENTS	8-2-23
ADDRESS RPBCWD COMMENTS	8-30-23

COVER SHEET
AUDUBON BUSINESS PARK
CITY OF CHANHASSEN

SHEET NUMBER

C0



DEMOLITION NOTES

1 – Remove bituminous pavement
2 – Remove concrete pavement
3 – Remove curb & gutter
4 – Remove tree(s)
5 – Remove light pole
6 – Full depth bituminous sawcut
7 – Remove sanitary sewer service pipe
8 – Remove storm sewer pipe
9 – Remove storm sewer structure
10 – Remove water main pipe
11 – Remove & salvage hydrant

LEGEND

123 EXISTING TREE TO BE REMOVED
EXISTING BITUMINOUS TO BE REMOVED
EXISTING CONCRETE TO BE REMOVED
BOUNDARY/ROW/BLOCK LINE
EASEMENT
BUILDING/PARKING SETBACK LINE
W EXISTING WATERMAIN
S EXISTING SANITARY SEWER
ST EXISTING STORM SEWER
980 EXISTING CONTOUR
x 995.50 EXISTING ELEVATION
CONSTRUCTION LIMITS
TREE PROTECTION FENCING

N

0 30 60 120 180
Scale in Feet

REHDER & ASSOCIATES, INC.
Civil Engineers & Land Surveyors
2440 Venture Drive, Suite 110
Chaska, MN 55318
Telephone: 612-432-5051
www.rehder.com

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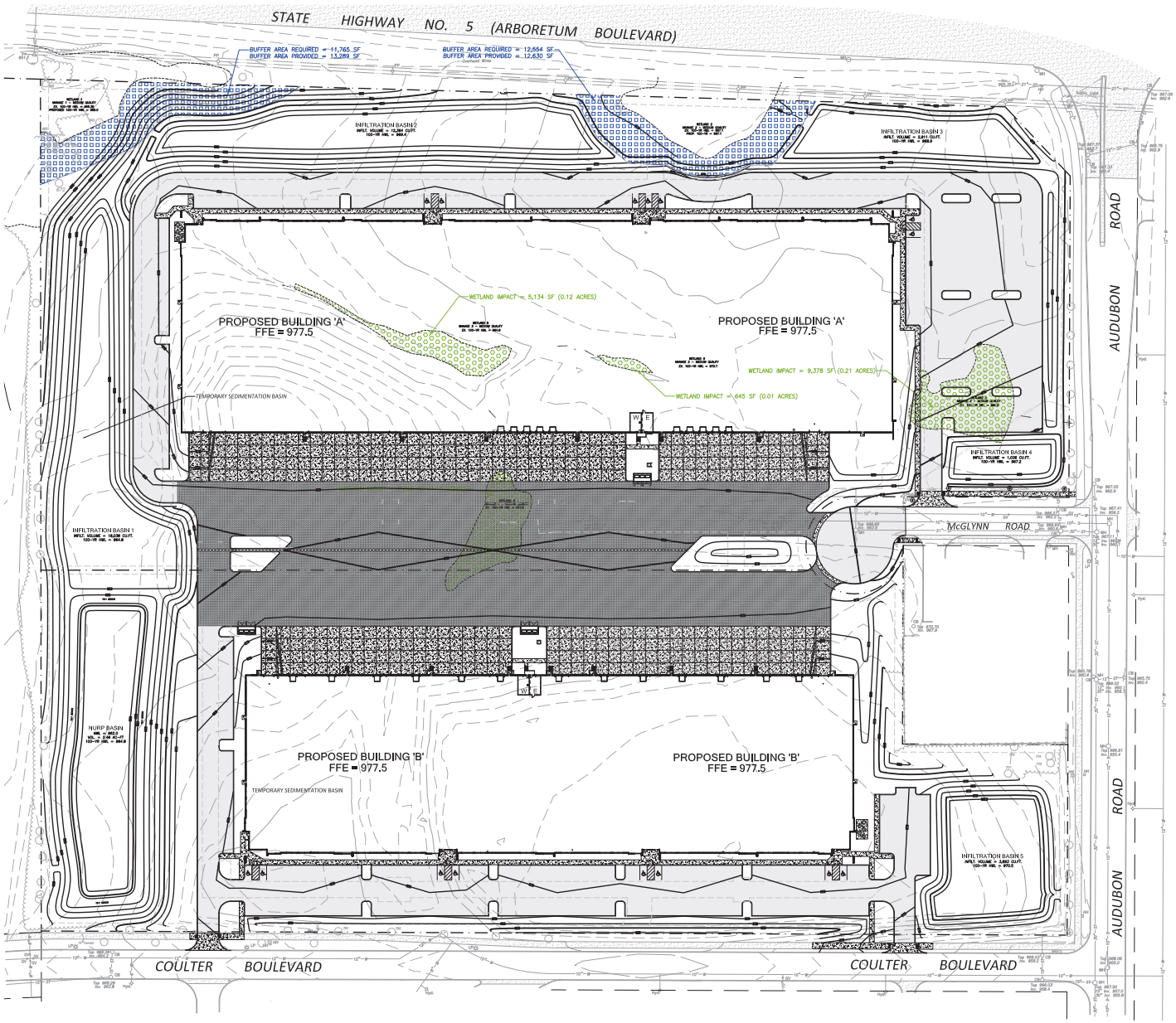
RPBOARD SUBMITTAL	3-19-23
DRC SUBMITTAL	6-16-23
DRC SUBMITTAL	7-6-23
ADDRESS RPBOARD COMMENTS	7-27-23
ADDRESS CITY COMMENTS	8-2-23
ADDRESS RPBOARD COMMENTS	8-30-23

OVERALL SITE DEMOLITION PLAN
AUDUBON BUSINESS PARK
CITY OF CHANHASSEN

SHEET NUMBER

C1



VERTICAL DATUM = NAVD88

LEGEND

- PROPOSED MANHOLE
- PROPOSED CLEANOUT
- PROPOSED CATCH BASIN
- PROPOSED HYDRANT
- PROPOSED GATE VALVE
- PROPOSED FLARED END
- PROPOSED STORM SEWER
- PROPOSED CONCRETE
- PROPOSED STD. DUTY BITUMINOUS
- PROPOSED HEAVY DUTY BITUMINOUS
- 1060 PROPOSED CONTOUR
- 1033.50 PROPOSED ELEVATION
- SILT FENCE
- INLET PROTECTION DEVICE
- PROPOSED EC BLANKET CATEGORY 20 (MNDOT 3885)
- BOUNDARY/ROW/BLOCK LINE
- EASEMENT
- LOT LINE
- BUILDING/PARKING SETBACK LINE
- SOIL BORING
- DRAINAGE ARROW
- W EXISTING WATERMAIN
- S EXISTING SANITARY SEWER
- ST EXISTING STORM SEWER
- G EXISTING BURIED GAS LINE
- E EXISTING BURIED ELECTRIC LINE
- T EXISTING BURIED TELEPHONE LINE
- TV EXISTING BURIED TELEVISION LINE
- 980 EXISTING CONTOUR
- x 995.50 EXISTING ELEVATION

PARTY RESPONSIBLE FOR MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES

Mesenbrink Construction
7765 East 175th St.
Prior Lake, MN 55372
ATTN: Justin Bohm
952-447-5058

SEE SHEET C13 FOR GRADING AND EROSION CONTROL NOTES

N

0 30 60 120 180
Scale in Feet

REHDER & ASSOCIATES, INC.
Civil Engineers & Land Surveyors
9440 Federal Drive, Suite 110
Eagan, MN 55123
Telephone: 651-452-5051
www.rehder.com

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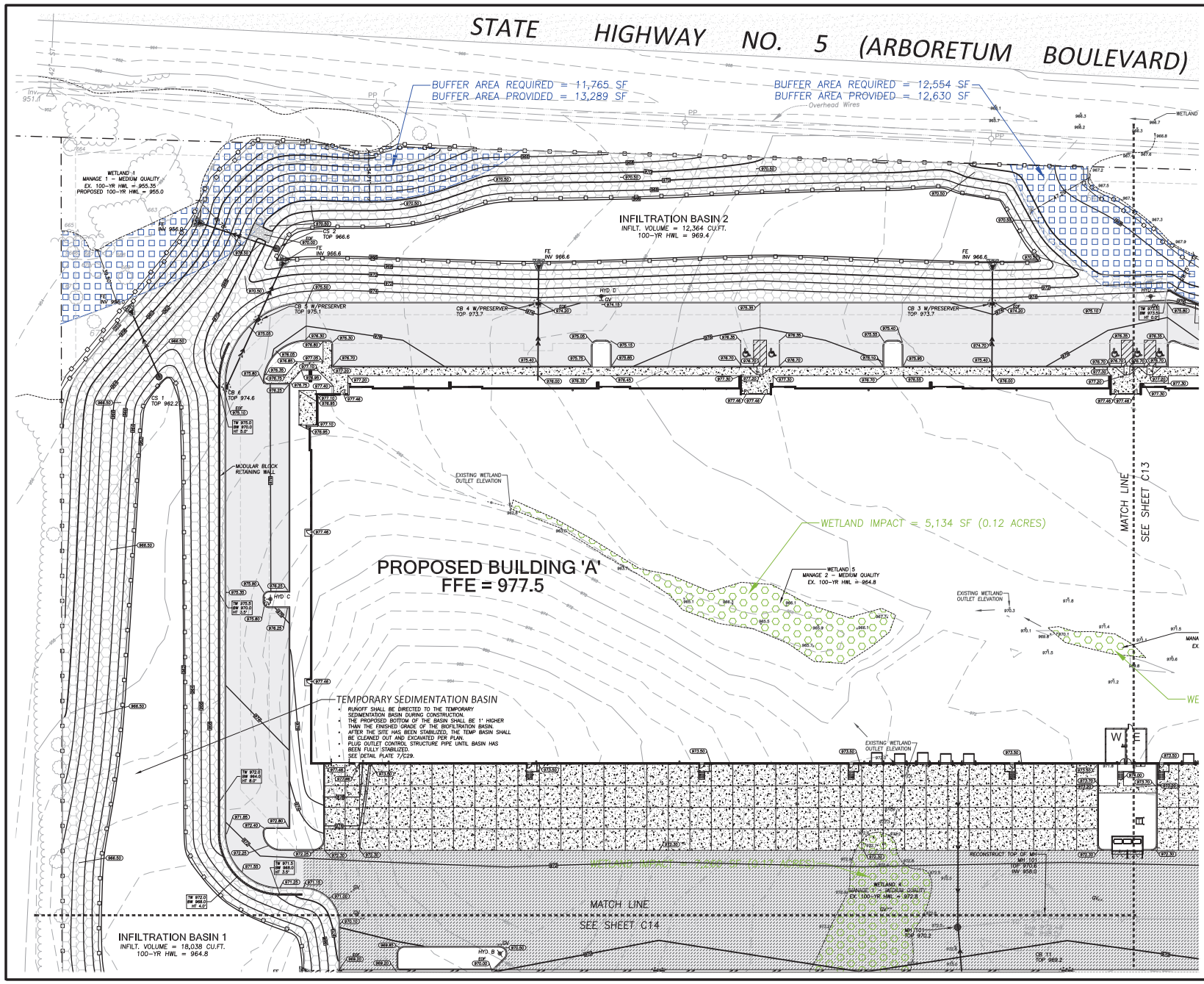
RPRCND SUBMITTAL	3-19-23
CITY SUBMITTAL	4-21-23
ADDRESS RPRCNDT COMMENTS	6-16-23
CITY SUBMITTAL	7-27-23
ADDRESS RPRCNDT COMMENTS	8-25-23
ADDRESS RPRCNDT COMMENTS	8-30-23

OVERALL GRADING, DRAINAGE & EROSION CONTROL PLAN
AUDUBON BUSINESS PARK
CITY OF CHANHASSEN

SHEET NUMBER

C11



LEGEND

- PROPOSED MANHOLE
- PROPOSED CLEANOUT
- PROPOSED CATCH BASIN
- PROPOSED HYDRANT
- PROPOSED GATE VALVE
- PROPOSED FLARED END
- PROPOSED STORM SEWER
- PROPOSED CONCRETE
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- TV — EXISTING BURIED TELEVISION LINE
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- x 995.50 EXISTING ELEVATION

PARTY RESPONSIBLE FOR MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES
Mesenbrink Construction
7765 East 175th St.
Prior Lake, MN 55372
ATTN: Justin Bohm
952-447-5058

SEE SHEET C13 FOR GRADING AND EROSION CONTROL NOTES

N

0 15 30 60 90
Scale in Feet

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CITY SUBMITTAL	6-16-23
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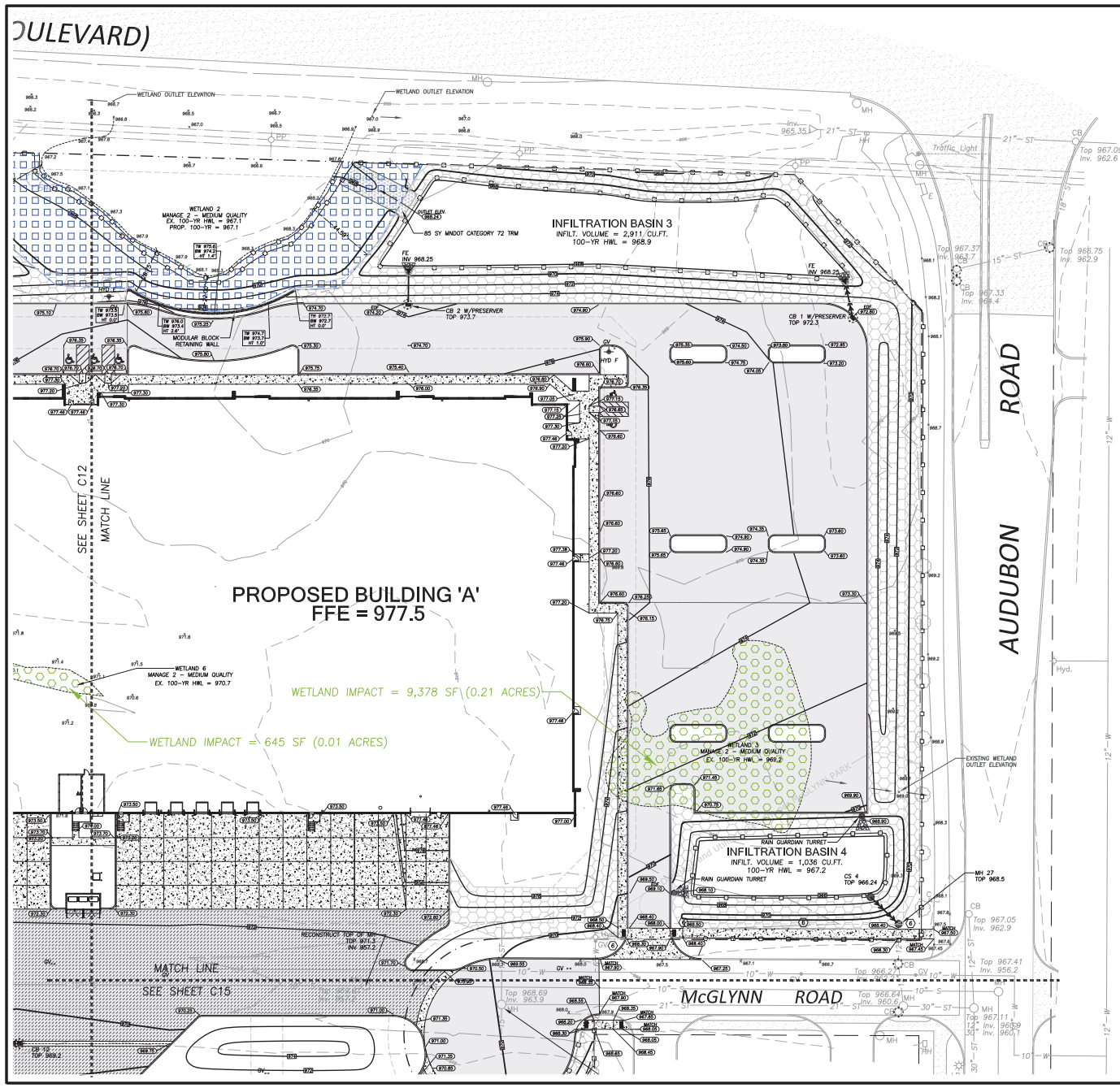
ADDRESS CITY COMMENTS	8-16-23
ADDRESS RPBCWD COMMENTS	8-30-23

GRADING, DRAINAGE & EROSION CONTROL PLAN
AUDUBON BUSINESS PARK
CITY OF CHANHASSEN

SHEET NUMBER
C12



GRADING NOTES

1 – All elevations shown are to final surfaces.
2 – Contractor is responsible for obtaining a National Pollutant Discharge Elimination System (NPDES) General Storm Water Permit for Construction Activity before construction begins.
3 – Place 6-inches of topsoil over all areas to be re-established with turf or planting bed areas for final stabilization. Topsoil shall contain at least 5% organic content.

EROSION CONTROL NOTES

1 – Contractor is responsible for all notifications and inspections required by General Storm Water Permit.
2 – All erosion control measures shown shall be installed prior to grading operations and maintained until all areas disturbed have been restored.
3 – Sweep and vacuum paved public streets as necessary where construction sediment has been deposited.
4 – Each area disturbed by construction shall be restored per the specifications within 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.
5 – Temporary soil stockpiles must have silt fence around them and cannot be placed in surface waters, including storm water conveyances such as curb and gutter systems, or conduits and ditches.
6 – The normal wetted perimeter of any temporary or permanent drainage ditch or swale that drains water from any portion of the construction site, or diverts water around the site, must be stabilized within 200 lineal feet from the property edge, or from the point of discharge into any surface water. Stabilization of the last 200 lineal feet must be completed within 24 hours after connecting to a surface water.
7 – All pipe outlets must be provided with temporary or permanent energy dissipation within 24 hours of connection to a surface water.
8 – Excess concrete/water from concrete trucks shall be disposed of in portable washout concrete basin or disposed of in a contained area.
9 – Provide EC Blanket on all 3:1 slopes.
10 – Reestablish all disturbed areas within wetland buffers using the native vegetation seed mix on Sheet C22.

INSPECTION AND MAINTENANCE

- The site must be inspected once every seven (7) days during active construction and within 24 hours after a rainfall event greater than 0.5 inches in 24 hours.
- All inspections and maintenance conducted must be recorded in writing and records retained with the SWPPP.
- Areas of the site that have undergone final stabilization, may have the inspection of these areas reduced to once per month.
- All silt fence must be repaired, replaced, or supplemented within 24 hours when they become nonfunctional or the sediment reaches 1/3 of the height of the fence.
- Temporary and permanent sedimentation basins must be drained and the sediment removed when the depth of the sediment reaches 1/2 the storage volume. Removal must be completed within 72 hours of discovery.
- Surface waters and conveyance systems must be inspected for evidence of sediment being deposited. Removal and stabilization must take place within seven (7) days of discovery unless precluded by legal, regulatory, or physical access constraints.
- Construction site vehicle exit locations must have sediment removed from off-site paved surfaces within 24 hours of discovery.
- Infiltration areas shall be graded to finished grade when all contributing drainage areas have been stabilized. Protect infiltration area from sediment and heavy equipment compaction during/after construction with silt fence.

POLLUTION PREVENTION MANAGEMENT

- All solid waste must be disposed of off-site per the MPCA disposal requirements.
- All hazardous waste must be properly stored with restricted access to storage areas to prevent vandalism. Storage and disposal of hazardous waste must be in compliance with MPCA Regulations.

RPBCWD STANDARD EROSION CONTROL NOTES

a. Natural topography and soil conditions must be protected, including retention onsite of native topsoil to the greatest extent possible.
b. 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.
c. 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.
d. Construction site waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste must be properly managed.
e. 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.
f. All temporary erosion and sediment control BMPs must be removed upon final stabilization.
g. 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.
h. 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.
i. 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.
j. Activities must be conducted so as to minimize the potential transfer of aquatic invasive species (e.g., zebra mussels, eurasian watermilfoil, etc.) to the maximum extent possible.

PARTY RESPONSIBLE FOR MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES
Meesenbrink Construction 7765 East 170th St. Prior Lake, MN 55372 ATTN: Justin Bohm 952-447-5968

N

0 15 30 60 90
Scale in Feet

REHDER & ASSOCIATES, INC.
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8400 Normandale Lake Blvd., Suite 110
Bloomington, MN 55437
Telephone: 952-830-0050
www.rehder-inc.com

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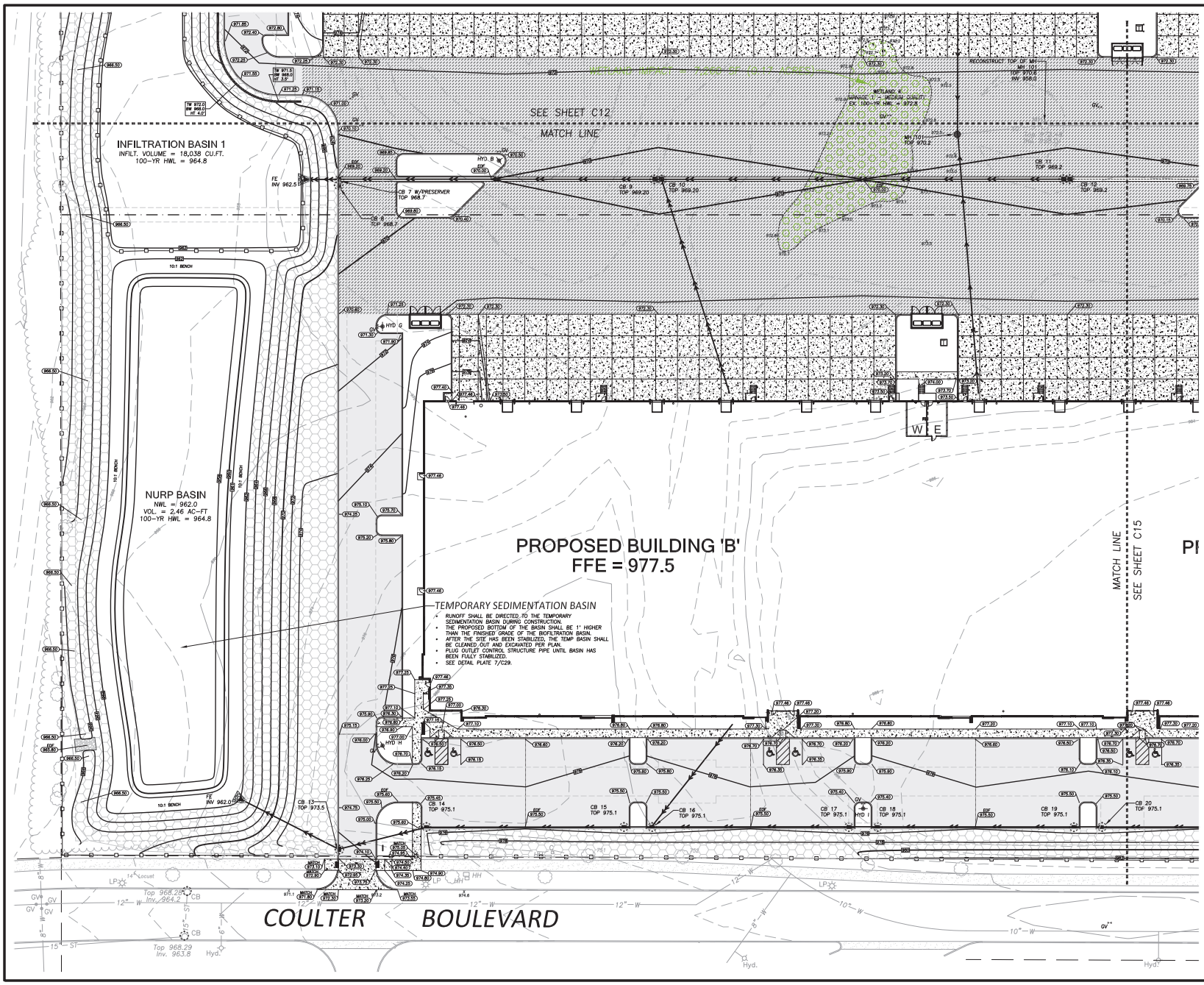
ADDRESS RPBCWD COMMENTS	8-30-23

GRADING, DRAINAGE & EROSION CONTROL PLAN
AUDUBON BUSINESS PARK
CITY OF CHANHASSEN

SHEET NUMBER
C13



LEGEND

- PROPOSED MANHOLE
- PROPOSED CLEANOUT
- PROPOSED CATCH BASIN
- PROPOSED HYDRANT
- PROPOSED GATE VALVE
- PROPOSED FLARED END
- PROPOSED STORM SEWER
- PROPOSED CONCRETE
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- TV — EXISTING BURIED TELEVISION LINE
- 980 — EXISTING CONTOUR
- x 995.50 EXISTING ELEVATION

PARTY RESPONSIBLE FOR MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES

Mesenbrink Construction
7765 East 175th St.
Prior Lake, MN 55372
ATTN: Justin Bohm
952-447-5008

SEE SHEET C13 FOR GRADING AND EROSION CONTROL NOTES

N

0 15 30 60 90
Scale in Feet

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www.rehder.com

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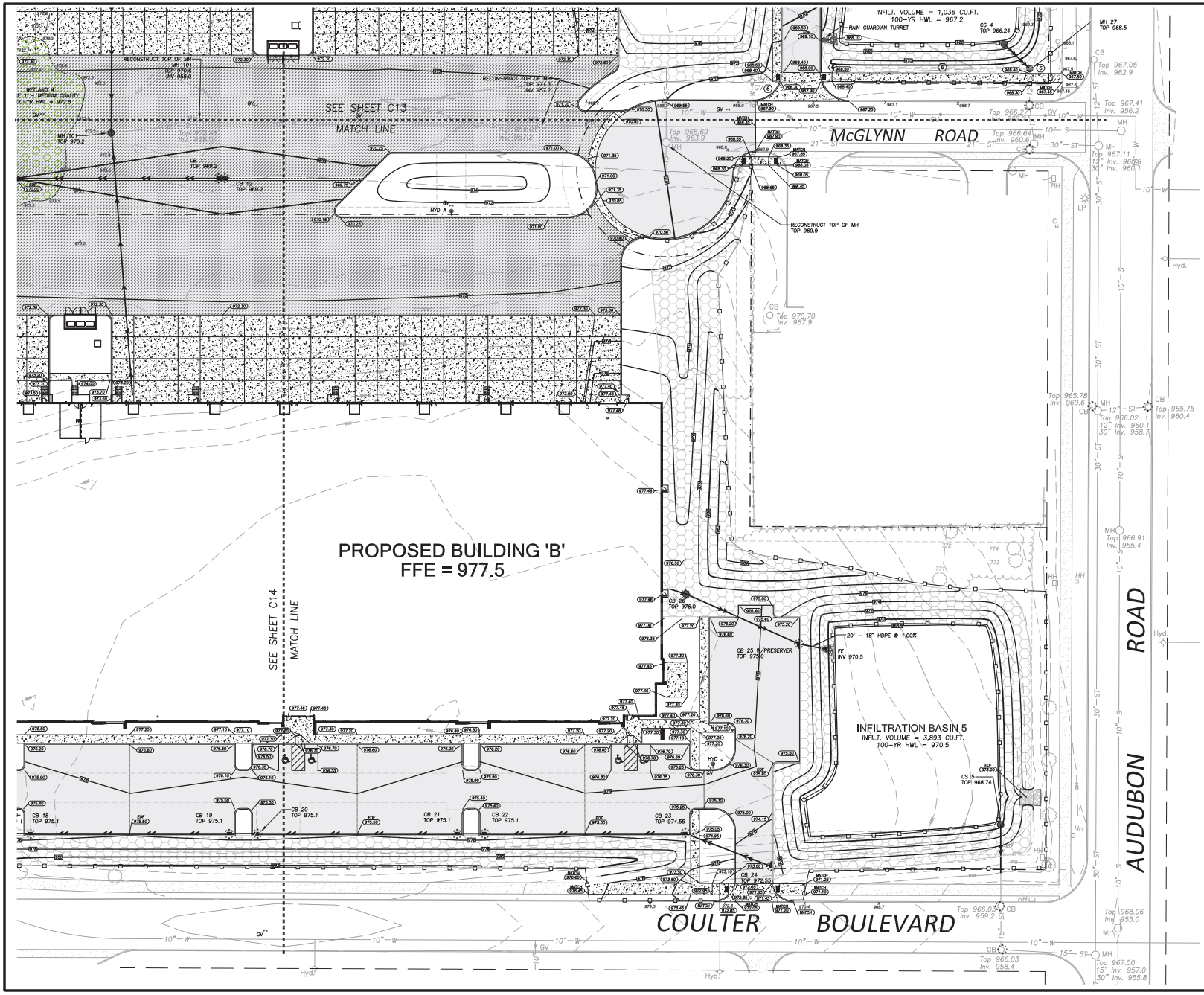
ADDRESS CITY COMMENTS	8-18-23
ADDRESS RPBCWD COMMENTS	8-30-23

GRADING, DRAINAGE & EROSION CONTROL PLAN
AUDUBON BUSINESS PARK
CITY OF CHANHASSEN

SHEET NUMBER

C14



LEGEND

- PROPOSED MANHOLE
- PROPOSED CLEANOUT
- PROPOSED CATCH BASIN
- PROPOSED HYDRANT
- PROPOSED GATE VALVE
- PROPOSED FLARED END
- PROPOSED STORM SEWER
- PROPOSED CONCRETE
- PROPOSED STD. DUTY BITUMINOUS
- PROPOSED HEAVY DUTY BITUMINOUS
- 950 PROPOSED CONTOUR
- 921.54 PROPOSED ELEVATION
- SILT FENCE
- INLET PROTECTION DEVICE
- PROPOSED EC BLANKET CATEGORY 20 (MNDOT 3885)
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- 980 EXISTING CONTOUR
- × 995.50 EXISTING ELEVATION

PARTY RESPONSIBLE FOR MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES

Meesenbrink Construction
7765 East 175th St
Prior Lake, MN 55372
ATTN: Justin Bohm
952-447-5058

SEE SHEET C13 FOR GRADING AND EROSION CONTROL NOTES

N

0 15 30 60 90
Scale in Feet

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www.rehder.com

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CITY SUBMITTAL	6-16-23
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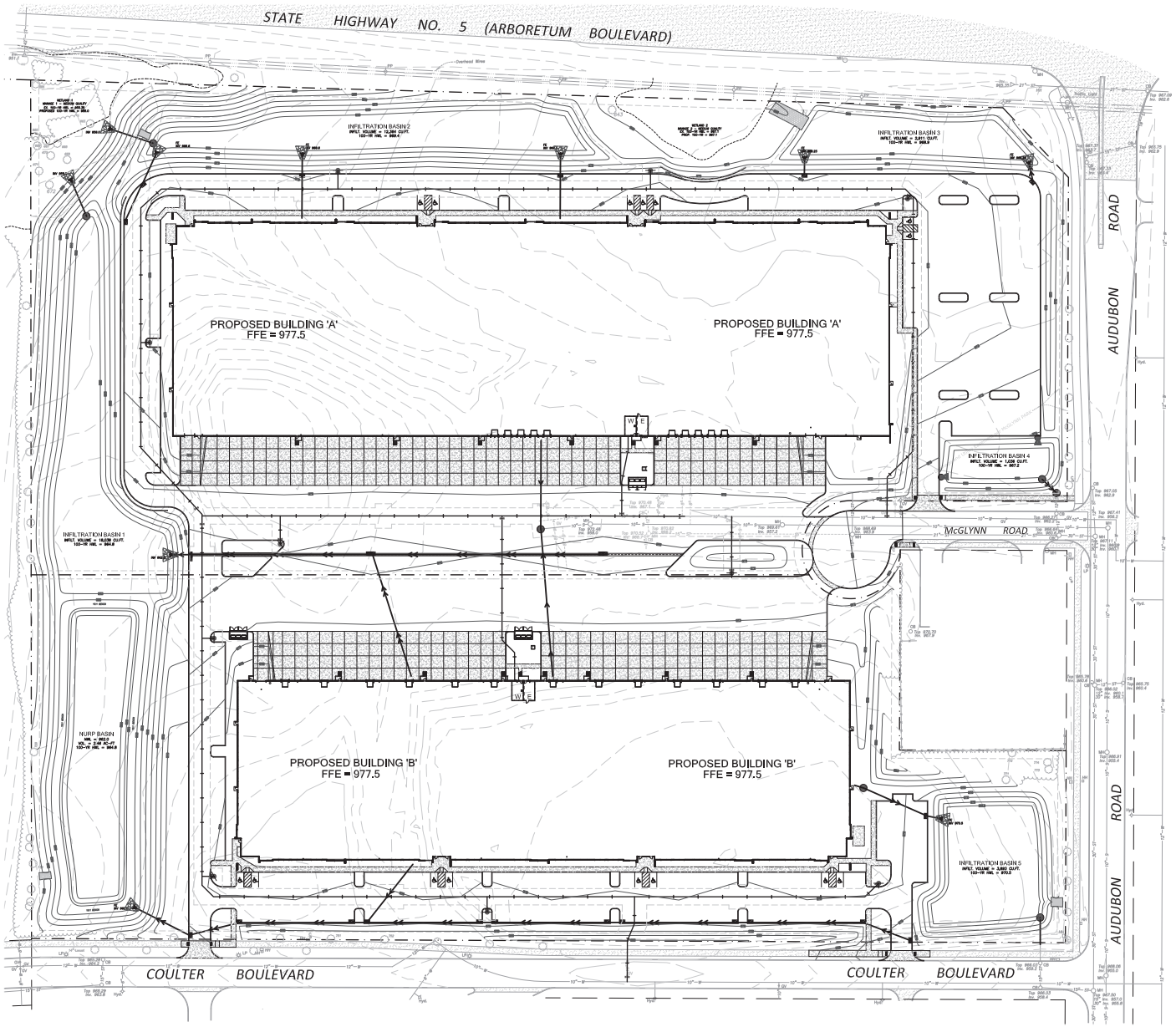
ADDRESS CITY COMMENTS	8-7-23
ADDRESS RPBCWD COMMENTS	8-30-23

GRADING, DRAINAGE & EROSION CONTROL PLAN
AUDUBON BUSINESS PARK
CITY OF CHANHASSEN

SHEET NUMBER

C15



LEGEND

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- PROPOSED CLEANOUT
- PROPOSED CATCH BASIN
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- PROPOSED GATE VALVE
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- PROPOSED WATERMAIN
- PROPOSED CONCRETE
- PROPOSED BITUMINOUS
- (1050) PROPOSED CONTOUR
- BOUNDARY/ROW/BLOCK LINE
- EASEMENT
- LOT LINE
- BUILDING/PARKING SETBACK LINE
- SOIL BORING
- DRAINAGE ARROW
- W EXISTING WATERMAIN
- S EXISTING SANITARY SEWER
- ST EXISTING STORM SEWER
- G EXISTING BURIED GAS LINE
- E EXISTING BURIED ELECTRIC LINE
- T EXISTING BURIED TELEPHONE LINE
- TV EXISTING BURIED TELEVISION LINE
- 980 EXISTING CONTOUR
- x 995.50 EXISTING ELEVATION

SEE SHEET C18 FOR UTILITY NOTES, CATCH BASIN/MANHOLE SCHDEULE AND HYDRANT SCHEDULE

N

0 30 60 120 180
Scale in Feet

REHDER & ASSOCIATES, INC.
Civil Engineers & Land Surveyors
9444 Inland Drive, Suite 110
Eagan, MN 55122
Telephone: 651-452-5051
www.rehder.com

PROJECT NO.: 221-1321.157 DRAWING FILE: 1321157.DWG

I hereby certify that this plan 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.

PRELIMINARY

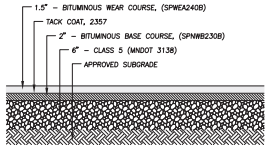
Date
Reg. No.
Name

Issued

RPBCWD SUBMITTAL	3-19-23
CITY SUBMITTAL	4-14-23
CITY SUBMITTAL	6-16-23
ADDRESS RPBCWD COMMENTS	7-27-23
ADDRESS CITY COMMENTS	8-11-23
ADDRESS RPBCWD COMMENTS	8-30-23

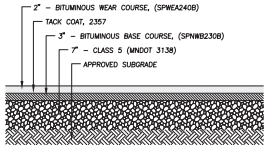
OVERALL UTILITY PLAN
AUDUBON BUSINESS PARK
CITY OF CHANHASSEN

SHEET NUMBER
C16



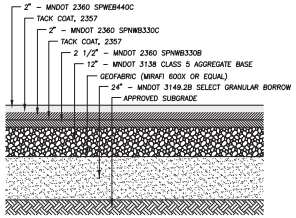
NOTE: PAVEMENT RECOMMENDATION PROVIDED BY ITCO ALLIED ENGINEERING COMPANY, PROJECT NO. 22042A.

1 C29 STANDAR DUTY PAVEMENT SECTION
NO SCALE

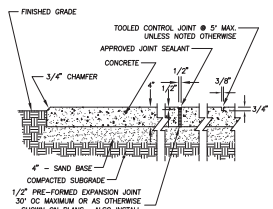


NOTE: PAVEMENT RECOMMENDATION PROVIDED BY ITCO ALLIED ENGINEERING COMPANY, PROJECT NO. 22042A.

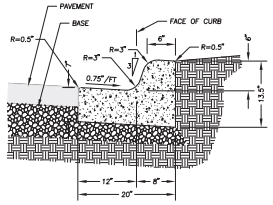
2 C29 HEAVY DUTY PAVEMENT SECTION
NO SCALE



3 C29 MCGLYNN ROAD PAVEMENT SECTION
NO SCALE

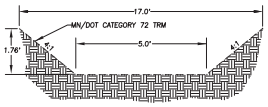


4 C29 CONCRETE SIDEWALK
NO SCALE

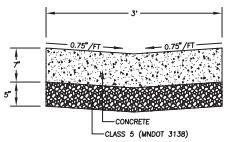


Note: Where contours indicate, ignore 0.75"/ft slope indicated above and match adjoining pavement slope to prevent gutter from "ponding".

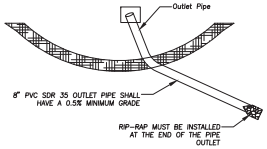
5 C29 B612 CONCRETE CURB & GUTTER
NO SCALE



12 C29 BASIN 3 OVERFLOW OUTLET
NO SCALE



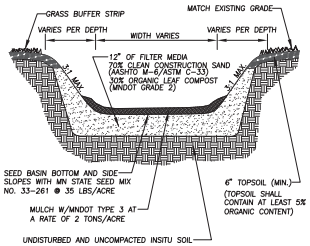
6 C29 VALLEY GUTTER
NO SCALE



NOTE:

1. The basins must provide storage below the outlet pipe for a calculated volume of runoff from a 2 year, 24 hour storm from each acre drained to the basin, except that in no case shall the basin provide less than 1800 cubic feet of storage below the outlet pipe from each acre drained to the basin.
2. Where no such calculation has been performed, a temporary sediment basin providing 3,600 cubic feet of storage below the outlet pipe per acre drained to the basin, shall be provided where attainable until final stabilization of the site.
3. Temporary basin outlets must be designed to prevent short-circuiting and the discharge of floating debris. The basin must be designed with the ability to allow complete basin drawdown for maintenance activities, and provide a stabilized emergency overflow to prevent failure of pond integrity. Energy dissipation must be provided for the basin outlet.
4. The temporary basins must be constructed and made operation concurrent with the start of soil disturbance that is upgradient of the area and contributes runoff to the pond.
5. Outlet pipe must be installed with a floating head skimmer or equal – to allow complete basin drawdown and water withdraw from basin surface.

7 C29 TEMPORARY SEDIMENTATION BASIN WITH OUTLET PIPE
NO SCALE



NOTES:

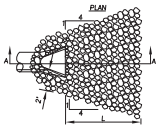
A. Grading and construction of the infiltration basins shall not begin until all construction in the contributing drainage area has been completed and the site is stabilized.
B. Grading shall be done using low-impact earthmoving equipment to prevent compaction of underlying soils. Small tracked dozers and bobcats are recommended.
C. Excavate the infiltration basins to the specified depth. All sub-material below the specified elevation shall be loosened to a minimum depth of 18" prior to installation of plantings/seeding.
D. In the event that sediment is introduced into the infiltration basins following excavation, this material will need to be removed prior to finishing the construction process.

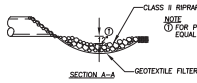
10 C29 INFILTRATION BASIN X-SECTION
NO SCALE

RIPRAP REQUIREMENTS

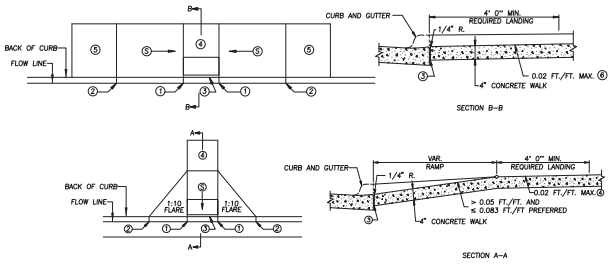
PIPE DIA. [IN]	L [FT]	GEOTEXTILE FILTER [SY]	RIPRAP [CY]
12"	8	16.9	3.0
15	8	18.0	3.2
18	10	22.4	4.3
21	10	24.1	4.7
24	12	29.7	6.2
27	12	31.4	6.6
30	14	37.4	8.2
36	16	45.9	10.6
42	18	52.8	12.5
48	20	61.1	14.8

(ONE CUBIC YARD IS APPROXIMATELY 2,800 LBS.)





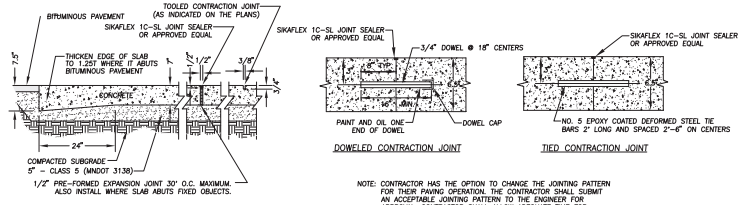
11 C29 RIPRAP DETAIL
NO SCALE



① 0" CURB HEIGHT.
② FULL CURB HEIGHT.
③ 1/2" PREFORMED JOINT FILLER MATERIAL AASHTO M 213. JOINT FILLER SHALL BE PLACED FLUSH WITH THE BACK OF CURB AND ADJACENT SIDEWALK. JOINT SHALL BE FREE OF DEBRIS. RECTANGULAR DETECTABLE WARNINGS SHALL BE SETBACK 3" FROM THE BACK OF CURB. RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3" MINIMUM TO 6" MAXIMUM FROM THE BACK OF CURB.
④ 4' BY 4' MIN. LANDING WITH MAX. 2.0% SLOPE IN ALL DIRECTIONS.
⑤ 8' LONGITUDINAL SLOPE IS GREATER THAN 5.0%, 4' X 4' MIN. LANDING WITH MAX 2.0% SLOPE IN ALL DIRECTIONS REQUIRED.
⑥ INDICATES PEDESTRIAN RAMP – SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%

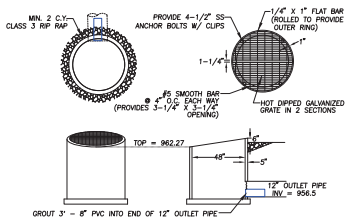
8 C29 PEDESTRIAN RAMP (PRIVATE)
NO SCALE

9 C29 ACCESSIBLE PARKING SIGN AND POST
NO SCALE

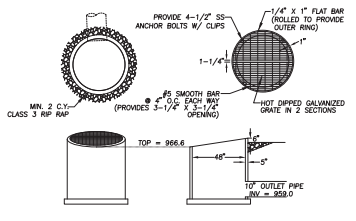


NOTE: CONTRACTOR HAS THE OPTION TO CHANGE THE JOINTING PATTERN FOR THEIR PAVING OPERATION. THE CONTRACTOR SHALL SUBMIT AN ACCEPTABLE JOINTING PATTERN TO THE ENGINEER FOR APPROVAL. CONTRACTOR SHALL ALLOW ADEQUATE TIME FOR REVIEW AND SHALL RECEIVE APPROVAL PRIOR TO CHANGING.

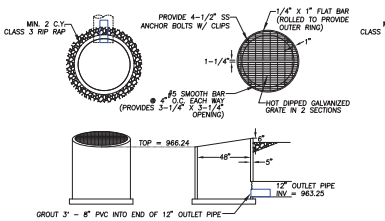
18 C29 CONCRETE PAVEMENT SECTION (DOCK AREA)
NO SCALE



13 C29 CONTROL STRUCTURE 1
NO SCALE



14 C29 CONTROL STRUCTURE 2
NO SCALE



15 C29 CONTROL STRUCTURE 4
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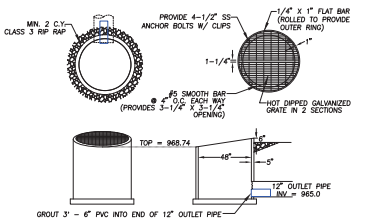

16 C29 CONTROL STRUCTURE 5
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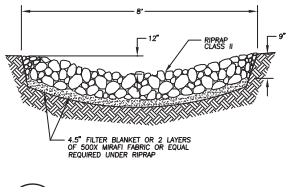

17 C29 POND OVERFLOW
NO SCALE

REHDER & ASSOCIATES, INC.
Civil Engineers & Land Surveyors
9400 Inland Drive, Suite 110
Eden Prairie, MN 55347
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I hereby certify that this plan 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.

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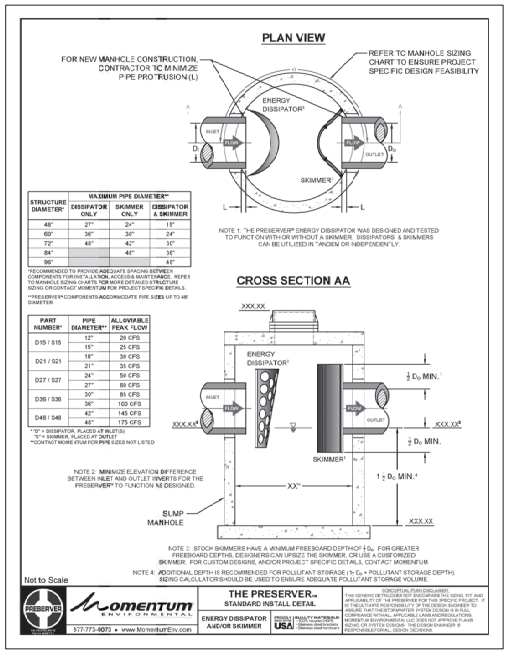
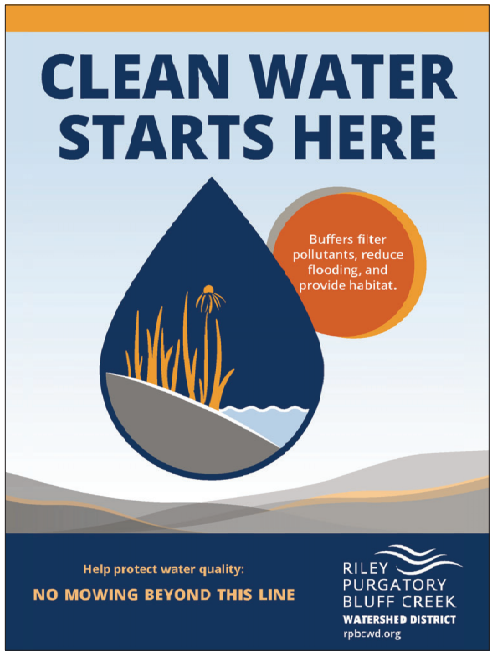
DETAILS
AUDUBON BUSINESS PARK
CITY OF CHANHASSEN

SHEET NUMBER
C29





1
C30

WETLAND BUFFER SIGN
NO SCALE

WETLAND BUFFER SEED MIX

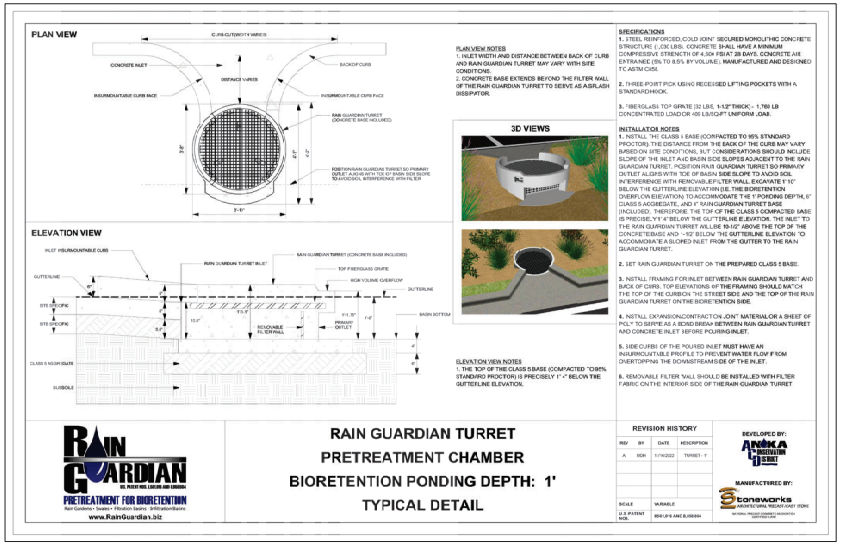
SHOOTING STAR
WILDFLOWERS
2740 County Road 13 • Spring Grove, MN 55974
(507) 498-3944 Phone • (507) 498-3843 Fax • www.sstseed

Description: Mixture WS (BWSR Wetland Fringe)
Seeding Rate: 6 lbs/Acre (179.7 Seeds/Square Foot)
Notes: This mix is designed for conservation projects.

Common Name	Scientific Name	% of Mix	Seed/sFt	Rate/Acre
Grasses				
American Sloughgrass	Beckmannia syzigachne	19.60%	14.7	0.88 PLS Lbs
Fringed Brome	Bromus ciliatus	13.00%	3.8	1.04 PLS Lbs
Blue Joint Grass	Calamagrostis canadensis	1.40%	3.2	0.08 PLS Lbs
Virginia Wild Rye	Elymus virginicus	24.40%	3.0	1.92 PLS Lbs
American Manna Grass	Glyceria grandis	2.80%	4.1	0.13 PLS Lbs
Annual Rye	Lolium rigidum	11.90%	8.8	1.23 PLS Lbs
Fowl Bluegrass	Poa palustris	18.80%	68.8	1.48 PLS Lbs
Prairie Cord Grass	Spartina pectinata	5.80%	1.0	0.40 PLS Lbs
Sedges & Rushes				
Formed-Jewel Sedge	Carex bicornis	0.90%	1.2	0.04 PLS Lbs
Brown Fox Sedge	Carex vulpinoidea	5.80%	14.7	0.43 PLS Lbs
Green Bulrush	Scirpus atrovirens	1.40%	13.5	0.08 PLS Lbs
Wool grass	Scirpus cyperinus	0.90%	25.0	0.04 PLS Lbs
Softstem Bulrush	Scirpus validus	2.80%	1.8	0.13 PLS Lbs
Wildflowers				
Northern Water Plantain	Alisma triviale	1.40%	1.9	0.08 PLS Lbs
Swamp Milkweed	Asclepias incarnata	0.70%	3.0	0.02 PLS Lbs
Swamp Aster	Aster lanceolatus	0.10%	3.2	0.01 PLS Lbs
Flat-topped Aster	Aster ambelatus	0.10%	3.2	0.01 PLS Lbs
Joe Pye Weed	Eupatorium maculatum	0.10%	3.3	0.01 PLS Lbs
Boneset	Eupatorium perfoliatum	0.10%	3.5	0.01 PLS Lbs
Sneezeweed	Helenium autumnale	0.10%	3.4	0.01 PLS Lbs
Prairie Blazingstar	Liatris pycnostachya	0.40%	3.1	0.03 PLS Lbs
Great Blue Lobelia	Lobelia siphilitica	0.10%	1.5	0.01 PLS Lbs
Monkey Flower	Mimulus ringens	0.10%	5.8	0.01 PLS Lbs
Common Arrowhead	Sagittaria latifolia	0.60%	3.9	0.04 PLS Lbs
Blue Vervain	Verbena hastata	0.30%	3.5	0.02 PLS Lbs

Request a price quote for this mix by contacting info@sstseed or (507) 498-3944. Substitutions may be necessary based on availability at the time of order.

Page 1 of 1



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DETAILS
AUDUBON BUSINESS PARK
CITY OF CHANHASSEN

SHEET NUMBER
C30

SWPPP NOTES

1. THE NATURE OF THIS PROJECT WILL CONSIST OF CONSTRUCTING TWO OFFICE/WAREHOUSE BUILDINGS, A BITUMINOUS PARKING LOT FOR CARS AND SEMI TRUCKS/TRAILERS, TWO CONCRETE PAVEMENT LOADING DOCKS, FIVE INFILTRATION BASINS AND OTHER ASSOCIATED SITE IMPROVEMENTS.

2. THE INTENDED SEQUENCING OF MAJOR CONSTRUCTION ACTIVITIES ARE AS FOLLOWS:
   - 2.1. INSTALL VEHICLE TRACKING BMP.
   - 2.2. INSTALL SILT FENCE & INLET PROTECTION AROUND SITE.
   - 2.3. CLEAR AND GRUB SITE.
   - 2.4. STRIP AND STOCKPILE TOPSOIL.
   - 2.5. REMOVE PAVEMENTS AND UTILITIES.
   - 2.6. ROUGH GRADE SITE.
   - 2.7. IMPORT CLEAN FILL OR EXPORT CUT FOR SITE BALANCE.
   - 2.8. INSTALL UTILITIES.
   - 2.9. INSTALL BUILDING FOUNDATIONS (AS REQUIRED).
   - 2.10. INSTALL CURB AND GUTTER (AS REQUIRED).
   - 2.11. INSTALL PAVEMENTS AND WALKS (AS REQUIRED).
   - 2.12. FINAL GRADE SITE.
   - 2.13. SEED AND MULCH.
   - 2.14. INSTALL BIO-ROLLS OR SILT FENCE AT BACK OF CURB OR PAVEMENT, AS NECESSARY THROUGH BUILDING CONSTRUCTION PROCESS.
   - 2.15. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE SILT FENCE AND RESEED ANY AREAS DISTURBED BY THE REMOVAL.
   - 2.16. ENSURE FINAL STABILIZATION MEASURE ARE COMPLETE.
   - 2.17. PROVIDE DIGITAL COPY OF ALL FIELD SWPPP DOCUMENTATION INCLUDING INSPECTION REPORTS AND SWPPP REVISIONS TO THE OWNER.
   - 2.18. SUBMIT NOTICE OF TERMINATION TO MPCA. NOTE: THE NOTICE OF TERMINATION MUST BE SUBMITTED TO MPCA BEFORE FINAL STABILIZATION IS CONSIDERED COMPLETE.

3. SITE DATA:

3.1.	SITE ADDRESS:	Southwest corner of Highway 5 & Audubon Rd in Chanhassen, MN
3.2.	SITE AREA:	28.34 ACRES
3.3.	AREA OF DISTURBANCE:	27.76 ACRES
3.4.	PRE-CONSTRUCTION IMPERVIOUS AREA:	0.48 ACRES
3.5.	POST-CONSTRUCTION IMPERVIOUS AREA:	18.49 ACRES
3.6.	PLANNED CONSTRUCTION START DATE:	9-14-2023
3.7.	ESTIMATED CONSTRUCTION COMPLETION DATE:	11-29-2024

GENERAL SOIL TYPE: Type 'D' soils of mostly clay loams (CL) and sandy clays(SC)

4. THE LOCATION OF AREAS NOT TO BE DISTURBED MUST BE IDENTIFIED WITH FLAGS, STAKES, SIGNS, SILT FENCE, ETC. BEFORE CONSTRUCTION BEGINS.

5. A TEMPORARY SEDIMENTATION BASIN WILL BE REQUIRED AND CONSTRUCTED AS INDICATED ON THE PLAN. THE TEMPORARY SEDIMENTATION BASIN SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF SECTION 14 OF THE PERMIT. SINCE THE SITE DISCHARGES TO A SPECIAL OR IMPAIRED WATER, THE BASIN SHALL ALSO MEET OR EXCEED THE MINIMUM REQUIREMENTS OF SECTION 23 OF THE PERMIT.
   - 5.1. TEMPORARY SEDIMENTATION BASINS MUST BE DRAINED AND SEDIMENT REMOVED WHEN THE DEPTH OF THE SEDIMENT REACHED 1/2 THE STORAGE VOLUME. REMOVAL MUST BE COMPLETED WITH 72 HOURS OF DISCOVERY. NO DRAINAGE AREA TO BE MORE THAN FIVE (5) ACRES OF RUNOFF CAUSING THE NEED FOR A TEMPORARY SEDIMENT BASIN.
   - 5.2. GRADING WORK SHALL BE PHASED TO THE EXTENT POSSIBLE, TO MINIMIZE THE DURATION OF EXPOSED SOIL. RUNOFF SHALL BE DIRECTED TO THE TEMPORARY SEDIMENTATION BASIN TO PREVENT INUNDATION OF THE SILT FENCE.

6. THE LOCATION OF INFILTRATION SYSTEMS SHALL BE CLEARLY MARKED ON SITE AND COMPACTION OF UNDERLYING SOILS SHALL BE AVOIDED. HEAVY EQUIPMENT, CONSTRUCTION TRAFFIC, CONSTRUCTION STAGING, AND ANY OTHER ACTIVITY RESULTING IN COMPACTION SHALL BE KEPT OUT OF THE INFILTRATION PRACTICE. HEAVY EQUIPMENT SHALL NOT BE USED TO EXCAVATE INFILTRATION SYSTEMS UNLESS WORK IS COMPLETED FROM OUTSIDE OF THE INFILTRATION PRACTICE.

7. ALL DISTURBED GROUND LEFT INACTIVE FOR SEVEN (7) OR MORE DAYS SHALL BE STABILIZED BY SEEDING OR SODDING (ONLY AVAILABLE PRIOR TO SEPTEMBER 15) OR BY MULCHING OR COVERING OR OTHER EQUIVALENT CONTROL MEASURE.

8. ON SLOPES 3:1 OR GREATER, MAINTAIN SHEET FLOW AND MINIMIZE RILLS AND/OR GULLIES. SLOPE LENGTHS SHALL BE NO GREATER THAN 75 FEET.

9. ALL STORM DRAINS AND INLETS MUST BE PROTECTED UNTIL ALL SOURCES OF POTENTIAL DISCHARGE ARE STABILIZED.

10. TEMPORARY SOIL STOCKPILES MUST HAVE EFFECTIVE SEDIMENT CONTROL AND CAN NOT BE PLACED IN SURFACE WATERS OR STORM WATER CONVEYANCE SYSTEMS. TEMPORARY STOCKPILES WITHOUT SIGNIFICANT AMOUNT OF SILT, CLAY, OR ORGANIC COMPOUNDS ARE EXEMPT EX: CLEAN AGGREGATE STOCKPILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES.

11. SEDIMENT LADEN WATER MUST BE DISCHARGED TO A SEDIMENTATION BASIN WHENEVER POSSIBLE. IF NOT POSSIBLE, IT MUST BE TREATED WITH THE APPROPRIATE BMP'S.

12. SOLID WASTES MUST BE STORED, COLLECTED AND DISPOSED OF PROPERLY PER MPCA STANDARDS.

13. EXTERNAL WASHING OF CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE PROPERLY CONTAINED.

14. NO ENGINE DEGREASING IS ALLOWED ON SITE.

15. IN THE EVENT OF ENCOUNTERING A WELL OR SPRING DURING CONSTRUCTION, CONTRACTOR TO CEASE CONSTRUCTION ACTIVITY AND NOTIFY ENGINEER.

16. THE OWNER WHO SIGNS THE NPDES PERMIT APPLICATION IS A PERMITTEE AND IS RESPONSIBLE FOR COMPLIANCE WITH ALL TERMS AND CONDITIONS OF THE PERMIT. THE OPERATOR (CONTRACTOR) WHO SIGNS THE NPDES PERMIT APPLICATION IS A PERMITEE FOR PARTS 2.B-2.F, PART 5, PART 6, AND APPLICABLE CONSTRUCTION ACTIVITY REQUIREMENTS FOUND IN APPENDIX A, PART C OF THE NPDES PERMIT AND IS JOINTLY RESPONSIBLE WITH THE OWNER FOR COMPLIANCE WITH THOSE PORTIONS OF THE PERMIT.

17. DOCUMENT RETENTION: PERMITTEE(S) MUST MAKE THE SWPPP, INCLUDING ALL INSPECTION REPORTS, MAINTENANCE RECORDS, TRAINING RECORDS AND OTHER INFORMATION REQUIRED BY THIS PERMIT, AVAILABLE TO FEDERAL, STATE, AND LOCAL OFFICIALS WITHIN THREE (3) DAYS UPON REQUEST FOR THE DURATION OF THE PERMIT AND FOR THREE (3) YEARS FOLLOWING THE NOTICE OF TERMINATION.

18. SWPPP AMENDMENTS AND SUBMITTALS:
   - 18.1. CONTRACTOR MUST PREPARE AND SUBMIT TO THE ENGINEER A SWPPP AMENDMENT AS NECESSARY TO INCLUDE ADDITIONAL BEST MANAGEMENT PRACTICES (BMP'S) TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS THE FOLLOWING SITUATIONS:
     - 18.1.1. UPDATE CONTRACT INFORMATION AND TRAINING DOCUMENTATION FOR CONSTRUCTION SWPPP MANAGER AND BMP INSTALLER.
     - 18.1.2. THERE IS A CHANGE IN CONSTRUCTION METHOD OF PHASING, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS NOT ANTICIPATED DURING THE DESIGN OF THE SWPPP INCLUDING BUT NOT LIMITED TO:
       - 18.1.2.1. TYPES AND/OR LOCATION OF BMP'S
       - 18.1.2.2. MATERIAL STORAGE AND SPILL RESPONSE
       - 18.1.2.3. FUELING PLANS
       - 18.1.2.4. LOCATION FOR STOCKPILES, CONCRETE WASHOUT, AND SANITATION FACILITIES
       - 18.1.2.5. PROJECT PHASING
     - 18.1.3. IT IS DETERMINED THAT THE SWPPP IS NOT ACHIEVING OBJECTIVES OF MINIMIZING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
     - 18.1.4. THE SWPPP IS NOT CONSISTENT WITH THE TERMS AND CONDITIONS OF THE PERMIT.
     - 18.1.5. THERE IS A CHANGE IN DESIGN, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS THAT HAS A SIGNIFICANT EFFECT ON DISCHARGE.
   - 18.2. THE CONTRACTOR MAY IMPLEMENT SWPPP AMENDMENTS IMMEDIATELY AND IS NOT REQUIRED TO WITH FOR ENGINEER REVIEW OF THE SUBMITTAL. THE RESPONSIBILITY FOR COMPLETENESS OF SWPPP AMENDMENTS AND COMPLIANCE WITH THE PERMIT LIES WITH THE CONTRACTOR. REVIEW, COMMENT, OR LACK OF COMMENT BY THE ENGINEER ON A SWPPP AMENDMENT SHALL NOT ABSOLVE THE RESPONSIBILITIES OF THE CONTRACTOR IN ANY WAY.
   - 18.3. IF A CHANGE ORDER IS ISSUED FOR A DESIGN CHANGE THE SWPPP AMENDMENT WILL BE PREPARED BY THE ENGINEER AND INCLUDED IN THE CHANGE ORDER.
   - 18.4. IN ADDITION TO SWPPP AMENDMENTS, THE CONTRACT SHALL SUBMIT TO THE ENGINEER WEEKLY EROSION AND SEDIMENT CONTROL SCHEDULE MEETING THE REQUIREMENTS OF MNDOT 1717.
   - 18.5. THE CONTRACTOR SHALL KEEP COPIES OF ALL SWPPP AMENDMENTS, WEEKLY EROSION AND SEDIMENT CONTROL SCHEDULES, INSPECTION LOGS, AND MAINTENANCE LOGS WITH THE FILED COPY OF THE SWPPP. A PDF COP OF THESE DOCUMENTS WILL BE PROVIDED ALONG WITH A COPY OF THE FINAL FIELD COPY OF THE SWPPP TO THE ENGINEER ALONG WITH THE SIGNED NOTICE OF TERMINATION WHEN FINAL STABILIZATION IS COMPLETE.

19. INSPECTION & MAINTENANCE
   - 19.1. A TRAINED PERSON SHALL ROUTINELY INSPECT THE ENTIRE SITE AT THE TIME INTERVAL INDICATED ON THIS SHEET OF THE SWPPP DURING ACTIVE CONSTRUCTION AND WITHIN 24-HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS.
   - 19.2. ALL INSPECTIONS AND MAINTENANCE CONDUCTED DURING CONSTRUCTION MUST BE RECORDED ON THE DAY IT IS COMPLETED AND RETAINED WITH THE SWPPP. INSPECTION REPORT FORMS WILL BE PROVIDED BY THE CONTRACTOR BUT A TEMPLATE CAN BE PROVIDED BY THE ENGINEER UPON REQUEST.
   - 19.3. THE CONTRACTOR MAY REQUEST A CHANGE IN INSPECTION SCHEDULE FOR THE FOLLOWING CONDITIONS:
     - 19.3.1. INSPECTION OF AREAS WITH PERMANENT COVER TO BE REDUCED TO ONCE PER MONTH,
     - 19.3.2. INSPECTION OF AREAS THAT HAVE PERMANENT COVER AND HAVE NO CONSTRUCTION ACTIVITY FOR 12 MONTHS TO BE SUSPENDED UNTIL CONSTRUCTION RESUMES,
     - 19.3.3. INSPECTION OF AREAS WHERE CONSTRUCTION IS SUSPENDED DUE TO FROZEN GROUND CONDITIONS, INSPECTION TO BE SUSPENDED UNTIL THE EARLIER OF WITHIN 24 HOURS OF RUNOFF OCCURRING, OR UPON RESUMING CONSTRUCTION.
   - 19.4. NO CHANGE IN INSPECTION SCHEDULE SHALL OCCUR UNTIL AUTHORIZED BY THE ENGINEER
   - 19.5. INSPECTIONS MUST INCLUDE:
     - 19.5.1. ALL EROSION PREVENTION AND SEDIMENT CONTROL BMP'S AND POLLUTION MANAGEMENT MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS.
     - 19.5.2. SURFACE WATERS, INCLUDING DRAINAGE DITCHES AND CONVEYANCE SYSTEMS FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION.
     - 19.5.3. CONSTRUCTION SITE VEHICLE EXIT LOCATIONS, STREETS AND CURB AND GUTTER SYSTEMS WITHIN AND ADJACENT TO THE PROJECT FOR SEDIMENTATION FROM EROSION OR TRACKED SEDIMENT FROM VEHICLES.
     - 19.5.4. INFILTRATION AREAS TO ENSURE THAT NO SEDIMENT FROM ONGOING CONSTRUCTION ACTIVITY IS REACHING THE INFILTRATION AREA AND THAT EQUIPMENT IS NOT BEING DRIVEN ACROSS THE INFILTRATION AREA.
   - 19.6. PERMITTEES MUST OBTAIN RAINFALL AMOUNTS BY EITHER A PROPERLY MAINTAINED RAIN GUAGE INSTALLED ONSITE, A WEATHER STATION THAT IS WITHIN ONE (1) MILE OF THE SITE LOCATION, OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES.
   - 19.7. ALL NON-FUNCTIONING BMP'S AND THOSE BMP'S WHERE SEDIMENT REACHES ONE-HALF (1/2) OF THE DEPTH OF THE BMP, OR IN THE CASE OF SEDIMENT BASINS ONE-HALF (1/2) OF THE STORAGE VOLUME, MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW.
   - 19.8. PERMITTEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL NONFUNCTIONAL BMP'S WITH FUNCTIONAL BMP'S BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW.
   - 19.9. ANY SEDIMENT THAT ESCAPES THE SITE MUST BE REMOVED AND THE AREA STABILIZED WITHIN 7 CALENDAR DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS IN WHICH CASE THE WORK SHALL BE COMPLETED WITHIN 7 CALENDAR DAYS OF AUTHORIZATION. PAVED SURFACES SUCH AS STREETS SHALL HAVE ANY ESCAPED OR TRACKED SEDIMENT REMOVED BY THE END OF THE DAY THAT IT IS DISCOVERED. SEDIMENT RELEASE, OTHER THAN PAVED SURFACES THAT CAN BE CLEANED UP WITH STREET SWEEPING SHALL BE REPORTED IMMEDIATELY UPON DISCOVERY TO THE ENGINEER.
   - 19.10. SILT FENCE TO BE REPAIRED, REPLACED, SUPPLEMENTED WHEN NONFUNCTIONAL, OR 1/3 FULL, WITHIN 24 HOURS.

20. CONCRETE WASHOUT AREA:
   - 20.1. CONTRACTOR TO PROVIDE PORTABLE OR PREFABRICATED CONCRETE WASH-OUT CONTAINER WITH RAIN PROTECTION.
   - 20.2. CONCRETE WASH-OUT TO BE IDENTIFIED WITH SIGNAGE STATING "CONCRETE WASHOUT AREA DO NOT OVERFILL".
   - 20.3. CONCRETE WASH-OUT WATER NEEDS TO BE PUMPED WITHIN 24 HOURS OF STANDING WATER IN WASH-OUT AREA.

21. POLLUTION PREVENTION AND OTHER BMP'S:
   - 21.1. PESTICIDES, HERBICIDES, FERTILIZERS, TREATMENT CHEMICALS, ETC. MUST BE UNDER COVER.
   - 21.2. HAZARDOUS MATERIALS (OIL, GAS, PAINT, ETC.) MUST BE PROPERLY STORED IN SEALED CONTAINERS AND MEET STATE SECONDARY CONTAINMENT REQUIREMENTS.
   - 21.3. PORTABLE TOILETS MUST BE SECURED.
   - 21.4. ADEQUATE SPILL RESPONSE KIT AND DISPOSAL PLAN ON-SITE. SPILLS MUST BE CLEANED UP IMMEDIATELY.
   - 21.5. ALL MPCA LIQUID AND SOLID WASTE (CONCRETE, STUCCO, PAINT, CURES, ETC) WASHOUT REQUIREMENTS MUST BE MET ON SITE.

22. EROSION PREVENTION PRACTICES:
   - 22.1. STORM WATER CONVEYANCE CHANNELS SHALL BE ROUTED AROUND UNSTABILIZED AREAS. EROSION CONTROLS AND VELOCITY DISSIPATION DEVICES SHALL BE USED AT OUTLETS WITHIN AND ALONG THE LENGTH OF ANY CONSTRUCTED CONVEYANCE CHANNEL.
   - 22.2. THE NORMAL WETTED PERIMETER OF ALL DITCHES OR SWALES, INCLUDING STORM WATER MANAGEMENT POND SLOPES, THAT DRAIN WATERS FROM THE SITE MUST BE STABILIZED WITHIN 200' OF ANY PROPERTY EDGE OR DISCHARGE POINT, INCLUDING STORM SEWER INLETS, WITHIN 24 HOURS OF CONNECTION.
   - 22.3. TEMPORARY OR PERMANENT DITCHES OR SWALES USED AS SEDIMENT CONTAINMENT DURING CONSTRUCTION DO NOT NEED TO BE STABILIZED DURING TEMPORARY PERIOD OF USE AND SHALL BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER USED AS SEDIMENT CONTAINMENT.
   - 22.4. MULCH, HYDROMULCH, TACKIFIER, OR OTHER SIMILAR PRACTICE SHALL NOT BE USED IN ANY PORTION OF THE WETTED PERIMETER OF A TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE SECTION WITH A CONTINUOUS SLOPE OF GREATER THAN 2 PERCENT.
   - 22.5. ENERGY DISSIPATION SHALL BE INSTALLED AT ALL TEMPORARY OR PERMANENT PIPE OUTLETS WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER OR PERMANENT STORM WATER TREATMENT SYSTEM.
   - 22.6. THE CONTRACTOR SHALL PHASE CONSTRUCTION AND USE CONSTRUCTION METHODS TO THE EXTENT PRACTICAL TO MINIMIZE EXPOSED SOILS. THE PROJECT PHASING SHALL BE DOCUMENTED IN THE WEEKLY EROSION AND SEDIMENT CONTROL SCHEDULE.

23. SEDIMENT CONTROL PRACTICES:
   - 23.1. DOWN GRADIENT BMP'S, INCLUDING PERIMETER BMP'S, MUST BE IN PLACE BEFORE UP GRADIENT LAND-DISTURBING ACTIVITIES BEGIN AND SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION.
   - 23.2. ALL BMP'S THAT HAVE BEEN ADJUSTED OR REMOVED TO ACCOMMODATE SHORT-TERM ACTIVITIES SHALL BE REINSTALLED OR REPLACED THE EARLIER OF THE END OF THE WORK DAY OR BEFORE THE NEXT PRECIPITATION EVENT, EVEN IF THE ACTIVITY IS NOT COMPLETE.
   - 23.3. INLET BMP'S MAY BE REMOVED FOR SPECIFIC SAFETY CONCERNS. THE BMP'S SHALL BE REPLACED AS SOON AS THE SAFETY CONCERN IS RESOLVED. THE REMOVAL SHALL BE DOCUMENTED IN THE SWPPP AS A SWPPP AMENDMENT.
   - 23.4. TEMPORARY STOCKPILES MUST HAVE SEDIMENT CONTROL BMP'S. THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER A SWPPP AMENDMENT SHOWING THE LOCATION OF TEMPORARY STOCKPILES AND THE BMP'S FOR EACH STOCKPILE. THE SWPPP AMENDMENT MUSH MEET THE MINIMUM REQUIREMENTS OF SECTION 9 OF THE PERMIT.
   - 23.5. SOIL COMPACTION SHALL BE MINIMIZED AND TOPSOIL SHALL BE PRESERVED, UNLESS INFEASIBLE OR IF CONSTRUCTION ACTIVITIES DICTATE SOIL COMPACTION OR TOPSOIL STRIPPING.
   - 23.6. THE USE OF POLYMERS, FLOCCULANTS, OR OTHER SEDIMENTATION TREATMENT CHEMICALS ARE NOT PROPOSED AS PART OF THIS SWPPP AS DESIGNED BY THE ENGINEER. IF METHODS OR PHASING OF CONSTRUCTION REQUIRE THE USE OF ANY OF THESE CHEMICALS, THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER A SWPPP AMENDMENT THAT MEETS THE MINIMUM REQUIREMENTS OF SECTION 09 OF THE PERMIT.

24. TEMPORARY SEDIMENTATION BASIN:
   - 24.1. A TEMPORARY SEDIMENTATION BASIN IS INCLUDED IN THE SWPPP. TEMPORARY SEDIMENTATION BASINS SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF SECTION 14 OF THE PERMIT. BASIN DRAINING OR DEWATERING SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF SECTION 10 OF THE PERMIT.
   - 24.2. WHERE TEN (10) OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION, PERMITTEES MUST PROVIDE A TEMPORARY SEDIMENT BASIN TO PROVIDE TREATMENT OF THE RUNOFF BEFORE IT LEAVES THE CONSTRUCTION SITE OR ENTERS SURFACE WATERS. PERMITTEES MAY CONVERT A TEMPORARY SEDIMENT BASIN TO A PERMANENT BASIN AFTER CONSTRUCTION IS COMPLETE. THE TEMPORARY BASIN IS NO LONGER REQUIRED WHEN PERMANENT COVER HAS REDUCED THE ACREAGE OF DISTURBED SOIL TO LESS THAN TEN (10) ACRES DRAINING TO A COMMON LOCATION.
   - 24.3. THE TEMPORARY BASIN MUST PROVIDE LIVE STORAGE FOR A CALCULATED TWO (2)-YEAR, 24-HOUR STORM FROM EACH ACRE DRAIN TO THE BASIN OR 1,800 CUBIC FEET OF LIVE STORAGE PER ACRE DRAINED, WHICHEVER IS GREATER.
   - 24.4. WHERE PERMITTEES HAVE NOT CALCULATED THE TWO (2)-YEAR, 24-HOUR STORM RUNOFF AMOUNT, THE TEMPORARY BASIN MUST PROVIDE 3,600 CUBIC FEET OF LIVE STORAGE PER ACRE OF THE BASINS' DRAINAGE AREA.
   - 24.5. PERMITTEES MUST DESIGN BASIN OUTLETS TO PREVENT SHORT-CIRCUITING AND THE DISCHARGE OF FLOATING DEBRIS.
   - 24.6. PERMITTEES MUST DESIGN THE OUTLET STRUCTURE TO WITHDRAW WATER FROM THE SURFACE TO MINIMIZE THE DISCHARGE OF POLLUTANTS. PERMITTEES MAY TEMPORARILY SUSPEND THE USE OF A SURFACE WITHDRAWAL MECHANISM DURING FROZEN CONDITIONS. THE BASIN MUST INCLUDE A STABILIZE EMERGENCY OVERFLOW TO PREVENT FAILURE OF POND INTEGRITY.
   - 24.7. PERMITTEES MUST PROVIDE ENERGY DISSIPATION FOR THE BASIN OUTLET WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER.
   - 24.8. PERMITTEES MUST LOCATED TEMPORARY BASINS OUTSIDE OF SURFACE WATERS AND ANY BUFFER ZONE REQUIRED IN ITEM 23.11.
   - 24.9. PERMITTEES MUST CONSTRUCT THE TEMPORARY BASINS PRIOR TO DISTURBING 10 OR MORE ACRES OF SOIL DRAINING TO A COMMON LOCATION.
   - 24.10. WHERE A TEMPORARY SEDIMENT BASIN MEETING THE REQUIREMENTS OF ITEM 14.3 THROUGH 14.9 OF THE PERMIT IS INFEASIBLE, PERMITTEES MUST INSTALL EFFECTIVE SEDIMENT CONTROLS SUCH AS SMALLER SEDIMENT BASINS AND/OR SEDIMENT TRAPS, SILT FENCES, VEGETATIVE BUFFER STRIPS OR ANY APPROPRIATE COMBINATION OF MEASURES AS DICTATED BY INDIVIDUAL SITE CONDITIONS. IN DETERMINING WHETHER INSTALLING A SEDIMENT BASIN IS INFEASIBLE, PERMITTEES MUST CONSIDER PUBLIC SAFETY AND MAY CONSIDER FACTORS SUCH AS SITE SOILS, SLOPE AND AVAILABLE AREA ON-SITE. PERMITTEES MUST DOCUMENT THIS DETERMINATION OF INFEASIBILITY IN THE SWPPP.

25. DEWATERING:
   - 25.1. ALL DEWATERING SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF SECTION 10 OF THE PERMIT.
   - 25.2. PERMITTEES MUST DISCHARGE TURBID OR SEDIMENT-LADEN WATERS RELATED TO DEWATERING OR BASIN DRAINAGE TO A TEMPORARY OR PERMANENT SEDIMENTATION BASIN ON THE PROJECT SITE UNLESS INFEASIBLE. PERMITTEES MAY DEWATER TO SURFACE WATERS IF THEY VISUALLY CHECK TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED AND NUISANCE CONDITIONS WILL NOT RESULT FROM THE DISCHARGE. IF PERMITTEES CANNOT DISCHARGE THE WATER TO A SEDIMENTATION BASIN PRIOR TO ENTERING A SURFACE WATER, PERMITTEES MUST TREAT IT WITH APPROPRIATE BMPS SUCH THAT THE DISCHARGE DOES NOT ADVERSELY AFFECT THE SURFACE WATER OR DOWNSTREAM PROPERTIES.
   - 25.3. IF PERMITTEES MUST DISCHARGE WATER CONTAINING OIL OR GREASE, THEY MUST USE AN OIL-WATER SEPARATOR OR SUITABLE FILTRATION DEVICE.
   - 25.4. PERMITTEES MUST DISCHARGE ALL WATER FROM DEWATERING OR BASIN-DRAINING ACTIVITIES IN A MANNER THAT DOES NOT CAUSE EROSION OR SCOUR IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS OR INUNDATION OF WETLANDS IN THE IMMEDIATE VICINITY OF DISCHRAGE POINTS THAT CAUSES SIGNIFICANT ADVERSE IMPACT TO THE WETLAND.
   - 25.5. IF PERMITTEES USE FILTERS WITH BACKWASH WATER, THEY MUST HAUL THE BACKWASH WATER AWAY FOR DISPOSAL, RETURN THE BACKWASH WATER TO THE BEGINNING OF THE TREATMENT PROCESS, OR INCORPORATE THE BACKWASH WATER INTO THE SITE IN A MANNER THAT DOES NOT CAUSE EROSION.

26. FINAL STABILIZATION:
   - 26.1. FINAL STABILIZATION IS NOT COMPLETE UNTIL ALL THE FOLLOWING REQUIREMENTS HAVE BEEN MET:
     - 26.1.1. SUBSTANTIAL COMPLETION HAS BEEN REACHED AND NO GROUND DISTURBING ACTIVITIES ARE ANTICIPATED.
     - 26.1.2. PERMANENT COVER HAS BEEN INSTALLED WITH AN ESTABLISHED MINIMUM UNIFORM PERENNIAL VEGETATION DENSITY OF 70 PERCENT OF ITS EXPECTED FINAL GROWTH. VEGETATION IS NOT REQUIRED IN AREAS WHERE NO VEGETATION IS PROPOSED BY THIS PROJECT SUCH AS IMPERVIOUS SURFACES OR THE BASE OF A SAND FILTER.
     - 26.1.3. ACCUMULATED SEDIMENT HAS BEEN REMOVED FROM ALL PERMANENT STORM WATER TREATMENT SYSTEMS AS NECESSARY TO ENSURE THE SYSTEM IS OPERATING AS DESIGNED.
     - 26.1.4. ALL SEDIMENT HAS BEEN REMOVED FROM CONVEYANCE SYSTEMS.
     - 26.1.5. ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMP'S HAVE BEEN REMOVED. BMP'S DESIGNATED ON THE SWPPP TO REMAIN TO DECOMPOSE ON-SITE MAY REMAIN.
     - 26.1.6. FOR RESIDENTIAL CONSTRUCTION ONLY, PERMIT COVERAGE TERMINATES ON INDIVIDUAL LOTS IF THE STRUCTURES ARE FINISHED AND TEMPORARY EROSION PREVENTION AND DOWNGRADIENT PERIMETER CONTROL IS COMPLETE, THE RESIDENCE SELLS TO THE HOMEOWNER, AND THE PERMITTEE DISTRIBUTES THE MPCA'S "HOMEOWNER FACT SHEET" TO THE HOMEOWNER.
     - 26.1.7. FOR AGRICULTURAL LAND ONLY (E.G., PIPELINES ACROSS CROPLAND), THE DISTURBED LAND MUST BE RETURNED TO ITS PRE-CONSTRUCTION AGRICULTURAL USE PRIOR TO SUBMITTING THE NOTICE OF TERMINATION.

27. TERMINATION OF COVERAGE:
   - 27.1. PERMITTE(S) WISHING TO TERMINATE COVERAGE MUST SUBMIT A NOTICE OF TERMINATION TO THE MPCA. ALL PERMITTEE(S) MUST SUBMIT A NOTICE OF TERMINATION WITHIN 30 DAYS AFTER ONE OR MORE OF THE FOLLOWING CONDITIONS HAVE BEEN MET:
     - 27.1.1. FINAL STABILIZATION, PER SECTION 9 OF THE PERMIT HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE.
     - 27.1.2. TRANSFER OF OWNERSHIP AS DESCRIBED IN THE PERMIT.

RESPONSIBLE PARTIES

THE CONTRACTOR AND OWNER WILL BE JOINT APPLICANTS UNDER THE MPCA'S GENERAL STORMWATER PERMIT FOR CONSTRUCTION ACTIVITY AS REQUIRED BY THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PHASE II PROGRAM.

THE CONTRACTOR SHALL PROVIDE ONE OR MORE TRAINED CONSTRUCTION SWPPP MANAGER(S) KNOWLEGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BMP'S THAT WILL OVERSEE THE IMPLEMENTATION OF THE SWPPP, AND THE INSTALLATION, INSPECTION AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMP'S.

A CONSTRUCTION SWPPP MANAGER MUST BE AVAILABLE FOR AN ON-SITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY THE MPCA.

THE SWPPP DESIGNER, CONSTRUCTION SWPPP MANAGER, AND BMP INSTALLER MUST HAVE APPROPRIATE TRAINING. DOCUMENTATION SHOWING TRAINING COMMENSURATE WITH THE JOB DUTIES AND RESPONSIBILITIES IS REQUIRED TO BE INCLUDED IN THE SWPPP PRIOR TO ANY WORK BEGINNING ON THE SITE. TRAINING DOCUMENTATION FOR THE SWPPP DESIGNER IS INCLUDED BELOW. THE CONTRACTOR SHALL ATTACH TRAINING DOCUMENTATION TO THIS SWPPP FOR THE CONSTRUCTION SWPPP MANAGER AND BMP INSTALLER PRIOR TO THE START OF CONSTRUCTION. THIS INFORMATION SHALL BE KEPT UP TO DATE UNTIL THE PROJECT NOTICE OF TERMINATION IS FILED.

OWNER:

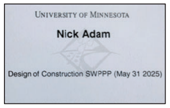
BY: MESENBRINK CONSTRUCTION
NAME: JOHN MESENBRINK
TITLE: GENERAL CONTRACTOR
PHONE: 612-968-3800
EMAIL: JDB@MESENBRINKCONSTRUCTION.COM

CONTRACTOR:

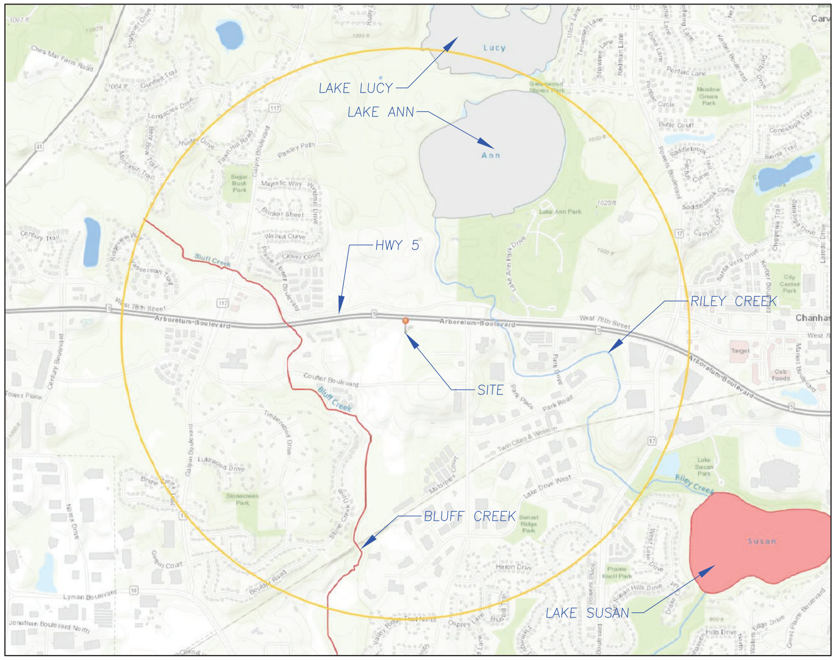
BY: MESENBRINK CONSTRUCTION
NAME: JUSTIN BOHM
TITLE: GENERAL CONTRACTOR
PHONE: 952-447-5058
EMAIL: JDB@MESENBRINKCONSTRUCTION.COM

SWPPP DESIGNER:

BY: REHDER & ASSOCIATES, INC.
NAME: NICK ADAM, P.E.
TITLE: PROJECT ENGINEER
PHONE: 651-337-6729
EMAIL: NADAM@REHDER.COM


University of Minnesota
Nick Adam
Design of Construction SWPPP (May 31 2025)

SURFACE WATERS WITHIN 1-MILE OF SITE



RECEIVING WATERS

NAME OF WATER BODY	TYPE OF WATER BODY	SPECIAL WATER	IMPAIRED WATER
BLUFF CREEK	STREAM	NO	YES
RILEY CREEK	STREAM	NO	NO

MPCA COVERAGE LETTER

PERMANENT STORMWATER MANAGEMENT SYSTEM

X	INFILTRATION/FILTRATION
X	WET SEDIMENTATION BASIN
	REGIONAL PONDING
	PERMANENT STORMWATER MANAGEMENT NOT REQUIRED

ESTIMATED BMP QUANTITIES

DESCRIPTION	QUANTITY	UNIT
ROCK CONSTRUCTION ENTRANCE (1" - 2" WASHED ROCK)	50	TONS
SILT FENCE	10,400	L.F.
INLET PROTECTION (PRE-CASTING)	25	EACH
INLET PROTECTION (POST-CASTING)	36	EACH
EROSION CONTROL BLANKET (CATEGORY 20)	20,900	S.Y.
EROSION CONTROL TRM (CATEGORY 72)	85	S.Y.

SITE STABILIZATION COMPLETION:

STABILIZATION OF EXPOSED SOILS SHALL BEGIN IMMEDIATELY AND SHALL BE COMPLETED AFTER THE CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED NO LATER THAN: 7 DAYS

SITE INSPECTION INTERVAL:

A TRAINED PERSON SHALL ROUTINELY INSPECT THE ENTIRE CONSTRUCTION SITE DURING ACTIVE CONSTRUCTION AT AN INTERVAL OF NO MORE THAN: 7 DAYS

REHDER
& ASSOCIATES, INC.
Civil Engineers & Land Surveyors
3440 Federal Drive, Suite 110
Eagan, MN 55122
Telephone: 651-452-5051
www.rehder.com

PROJECT NO.: 221-1321.157 DRAWING FILE: 1321157.DWG

I hereby certify that this plan 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.

PRELIMINARY

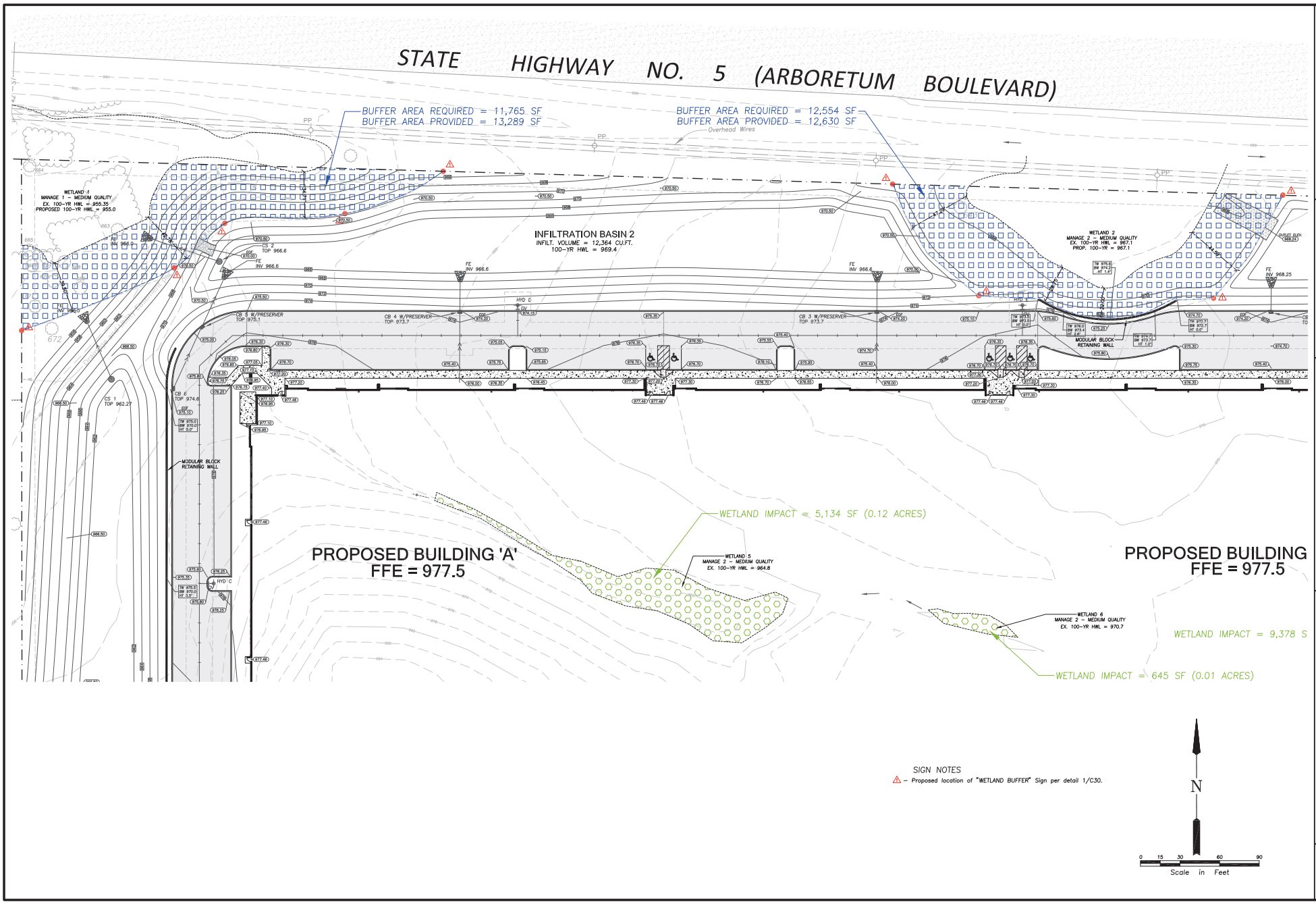
Name ______ Date ______
Reg. No. ______

Issued

DRC SUBMITTAL	6-2-23
CITY SUBMITTAL	6-16-23
ADDRESS RPBCWD COMMENTS	7-27-23
ADDRESS CITY COMMENTS	8-2-23
ADDRESS RPBCWD COMMENTS	8-30-23

SWPPP
AUDUBON BUSINESS PARK
CITY OF CHANHASSEN

SHEET NUMBER
C35



SIGN NOTES

⚠ – Proposed location of "WETLAND BUFFER" Sign per detail 1/C30.

REHDER & ASSOCIATES, INC.
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www.rehderassoc.com

PROJECT NO.: 221-1321.157 DRAWING FILE: 1321157.DWG

I hereby certify that this plan 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.

PRELIMINARY

Name Reg. No. Date

Issued

DRC SUBMITTAL	6-2-23
DRC SUBMITTAL	6-16-23
ADDRESS APPROVED COMMENTS	7-27-23
ADDRESS CITY COMMENTS	8-2-23
ADDRESS APPROVED COMMENTS	8-30-23

WETLAND BUFFER SIGNAGE PLAN
AUDUBON BUSINESS PARK
CITY OF CHANHASSEN

SHEET NUMBER
C36

REHDER
& ASSOCIATES, INC.
Civil Engineers & Land Surveyors

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Technical Memorandum

Date: 8-30-23

To: Scott Sobiech – Barr Engineering

From: Nicholas Adam, P.E. – Rehder & Associates, Inc.

Re: RPBCWD Permit 2023-012: Audubon Business Park – Variance Request

As part of our application for a District permit, we are requesting a variance from RPBCWD Rule B.

We are requesting a variance from the requirement that compensatory storage be provided within the floodplain of the basin. The requirement cannot be met for the wetlands 4, 5 & 6 due to fill occurring in these areas. Compensatory storage will be provided within a separate basin (Infiltration Basin 1) that will exceed the floodplain storage lost due to filling.

Refer to the table in the Floodplain Management and Drainage Alterations section of the narrative for compensatory storage. The unique factors that support the requested variance are as follows:

The existing project site consists of green space, 6 wetlands, and a section of McGlynn Road that will be vacated and become part of the proposed development. The proposed site consists of 2 large office/warehouse buildings, associated parking, and stormwater management. The proposed site will remove wetlands 4, 5 & 6 and thus also the floodplain storage provided by the wetlands. Wetland 3 will also be removed and compensatory flood storage provided in Infiltration Basin 4. The basin is within the same floodplain and at the same elevation +/- 1 foot. Due to the location of the wetlands and site building parameters there is no feasible alternative to provide floodplain mitigation within the same floodplains.

1.1 How substantial the variation is from the rule provision:

The variance request is not substantial and adequate mitigation is provided in the proposed basins.

1.2 The effect of the variance on government services:

There is no adverse effect on government services. The filling of the floodplain volume of the existing wetlands will be mitigated by the proposed Infiltration Basin 1. Maintenance of the proposed basins will be the responsibility of the Owner.

1.3 Whether the variance will substantially change the character of or cause material adverse effect to water resources, flood elevations, drainage or the general welfare in the District or be a substantial detriment to neighboring properties:

There will be no material adverse effect to water resources, flood elevations, drainage or general welfare in the District. The proposed basins provide the required mitigation to offset the fill within the floodplain. In addition, volume control, water quality and rate control is being provided. The project will meet or exceed District rules and will not impact neighboring properties.

1.4 Whether the practical difficulty can be alleviated by a technically and economically feasible method other than a variance. An economic hardship alone may not serve as grounds for issuing a variance if any reasonable use of the property exists under the terms of the District rules:

The wetlands are located near the center of the property and although options were explored to save the wetlands, the size of the proposed buildings needed for the development require the wetlands to be removed/filled. Thus there are no technical or economically feasible alternatives to the variance.

1.5 How the practical difficulty occurred, including whether the landowner, the landowner's agent or representative, or a contractor, created the need for the variance:

The practical difficulty was not created by the landowner or landowner's representatives. The practical difficulty stems from compliance with the City and Watershed rules/requirements.

1.6 In light of all factors, whether allowing the variance will serve the interests of justice:

Allowing the variance will serve the interests of justice by allowing the proposed development to proceed as approved by the City and complying with the intent of the District rules by providing the required floodplain mitigation.