

Applicant: Jason Schneiderman; JAS Bloomington Property, LLC
Consultant: Benjamin Quaas; Rehder & Associates, Inc.
Project: Schneidermans Furniture Redevelopment
Location: 2740 American Blvd West, Bloomington, MN
Applicable Rule(s): 4, 5, 11 and 12
Reviewer(s): Azeemuddin Ahmed and Louise Heffernan; Barr Engineering Co.

General Background & Comment

The applicant proposes the construction of a building addition and parking lot improvements on the 4.57-acre site located at 2740 American Blvd West in Bloomington (Schneiderman's Furniture). The project proposes site improvements including landscaping, utilities, sidewalk improvements, and construction of a stormwater management facility.

The project site information includes the following:

- Total Site Area: 199,069 square feet (4.57 acres)
- Disturbed Area: 94,090 square feet (2.16 acres)
- Existing Site Impervious Area: 172,062 square feet (3.95 acres)
- Proposed Site Impervious Area: 124,582 square feet (2.86 acres)
- 28% decrease in the site impervious area: 47,480 square feet decrease
- 19% disturbance of the existing impervious surface: 33,106 square feet (0.76 acres)

Exhibits Reviewed:

1. Permit Application dated July 7, 2023 (received July 12, 2023). Email correspondence dated July 17, 2023, identifying modeling required to complete the application. Email correspondence dated July 31, 2023, outlining three items required to complete the application.
2. Plans dated July 12, 2023 (received July 12, 2023), revised September 8, 2023, prepared by Rehder & Associates, Inc.
3. Landscape Plans dated July 12, 2023 (received July 12, 2023), prepared by Calyx Design Group.
4. Stormwater Management Report dated July 12, 2023 (received July 12, 2023), revised September 8, 2023, prepared by Rehder & Associates, Inc.

5. Geotechnical Evaluation dated June 23, 2023, revised July 20, 2023, prepared by American Engineering Testing, Inc.
6. Electronic HydroCAD modeling received on July 17, 2023, revised September 8, 2023, prepared by Rehder & Associates, Inc.
7. Electronic MIDS modeling received on July 17, 2023, revised September 8, 2023, prepared by Rehder & Associates, Inc.
8. Review comment responses dated September 8, 2023 (received September 8, 2023), prepared by Rehder & Associates, Inc.
9. Review comment responses email dated September 29, 2023, prepared by Rehder & Associates, Inc.

The application with the submittal items above is complete.

4.0 Stormwater Management

NMCWD's requirements for stormwater management apply to the project because more than 50 cubic yards of material will be disturbed and 5,000 square feet or more of surface area is to be altered, Rules 4.2.1a and b.

The NMCWD's Rule for Redevelopment, Rule 4.2.3, states, if the proposed activity will increase total impervious surface by 50 percent or more or will disturb 50 percent or more of the existing site impervious surface, the stormwater criteria will apply to the entire site. Otherwise, the criteria of section 4.3 will apply only to the disturbed, replaced, and net additional impervious surface on the project site. Since the proposed activities will decrease the total impervious surface of the site by 28% and will disturb 19% of the existing site impervious area, the district's stormwater management criteria will apply only to the disturbed, replaced, and net additional impervious surface on the project site (33,106 square feet - 0.76 acres).

Stormwater management for compliance with subsection 4.3.1 will be provided by an infiltration basin to provide rate control, volume retention and water quality management for the regulated area, including the 33,106 square feet of regulated impervious surface.

Rule 4.3.1b requires the 2-, 10-, and 100-year post development peak runoff rates be equal to or less than the existing discharge rates for all collection points where stormwater leaves the site. The applicant used a HydroCAD hydrologic model to simulate runoff rates at the four collection points where stormwater discharge leaves the site. The existing and proposed 2-, 10- and 100-year frequency discharge rates are summarized in the tables below.

Peak Discharge Rates (Existing)

Location	2-Year 24-hr (c.f.s.)	10-Year 24-hr (c.f.s.)	100-Year 24-hr (c.f.s.)
To Northeast (MnDOT Culvert)	10.9	16.7	29.8
To Northwest	<1.0	<1.0	1.5
To East	2.9	4.5	7.9
To South	<1.0	<1.0	1.0

Peak Discharge Rates (Proposed)

Location	2-Year 24-hr (c.f.s.)	10-Year 24-hr (c.f.s.)	100-Year 24-hr (c.f.s.)
To Northeast (MnDOT Culvert)	9.0	14.9	29.4
To Northwest	<1.0	<1.0	1.1
To East	<1.0	<1.0	<1.0
To South	<1.0	<1.0	1.0

The proposed stormwater management plan provides rate control in compliance with the NMCWD requirements for the 2-, 10-, and 100-year events. Rule 4.3.1b is met.

A retention volume of 3,035 cubic feet is required from the 33,106 square feet (0.76 acres) of regulated impervious surface with an infiltration area of 1,686 square feet required. Boring B-4 in the geotechnical report by American Engineering Testing, Inc. identifies the soil within the area of the proposed infiltration basin as primarily silty sand (SM). A design infiltration rate of 0.45 inches per hour has been used for the infiltration basin, conforming with infiltration rates identified in the Minnesota Stormwater Manual.

The table below summarizes the volume retention required and volume retention achieved. The proposed project is in conformance with subsection 4.3.1a.

Volume Retention Summary

Required Volume Retention (cubic feet)	Provided Volume Retention (cubic feet)	Maximum Infiltration Depth Allowable* (feet)	Provided Infiltration Depth (feet)
3,035	3,153	1.8	1.7

*Maximum inundation depth allowable for the infiltration basin to draw down within 48-hours based on a design infiltration rate of 0.45 inches/hour.

With an infiltration depth of 1.7 feet (1.8 feet allowable), the volume below the outlet is drawn down within the required 48-hours, complying with Rule 4.3.1a (ii).

Rule 4.5.4d (i) requires that a minimum of three feet of separation be provided between the bottom of a stormwater management facility and groundwater. Per the geotechnical report by American Engineering Testing, Inc., groundwater was not encountered to the bottom of the boring, elevation 824.3 M.S.L., completed near the proposed infiltration basin (Boring B-4). The bottom of the infiltration basin is proposed to be 834.8 M.S.L., providing a separation of 10.5 feet (to the bottom of the boring where groundwater was not encountered). Rule 4.5.4d (i) is met.

NMCWD's water quality criterion requires 60% annual removal efficiency for total phosphorus (TP) and 90% annual removal efficiency for total suspended solids (TSS) from the regulated site runoff. A MIDS model was used to evaluate the proposed infiltration basin's annual removal efficiencies. The results of the MIDS modeling are summarized in the table below. The NMCWD engineer agrees with the modeling results and the project is in conformance with Rule 4.3.1c criteria.

Annual TSS and TP Removal Summary

Pollutant of Interest	Regulated Site Loading (lbs./year)	Required Load Removal (lbs./year)	Provided Load Reduction (lbs./year)
Total Suspended Solids (TSS)	356.4	320.7 (90%)	320.7 (90%)
Total Phosphorus (TP)	2.0	1.2 (60%)	1.8 (90%)

Rule 4.3.3 states that all new and reconstructed buildings must be constructed such that the low floor is at least two feet above the 100-year high-water elevation or one foot above the emergency overflow of a constructed stormwater management facility. Additionally, Rule 4.3.3 states that all new and reconstructed buildings must be constructed such that no opening where surface flow can enter the structure is less than two feet above the 100-year high-water elevation of an adjacent facility. Rule 4.3.3 also states that a stormwater management facility must be constructed at an elevation that ensures no adjacent habitable building will be brought into noncompliance with a standard in subsection 4.3.3. The low floor and low opening elevation of the existing building and the proposed building addition onsite is 842.9 M.S.L., 5.5 feet above the 100-year high-water elevation of the infiltration basin (elevation 837.4 M.S.L.). The low floor and low opening elevation of the adjacent building located at 2631 Southtown Drive is 839.4 M.S.L., 2.0 feet above the 100-year high-water elevation of the infiltration basin (elevation 837.4 M.S.L.). Rule 4.3.3 is met.

In accordance with Rule 4.3.1a (i), where infiltration or filtration facilities, practices or systems are proposed, pre-treatment of runoff must be provided. Pretreatment will be provided two rain guardian turrets and a sump structure, complying with Rule 4.3.1a (i).

Subsection 4.3.5 requires the submission of a maintenance plan. All stormwater management structures and facilities must be designed for maintenance access and properly maintained in perpetuity to assure that they continue to function as designed. The applicant must provide a receipt showing recordation of a maintenance declaration for the operation and maintenance of the stormwater management facility.

5.0 Erosion and Sediment Control

The district's requirements for erosion and sediment control apply to the project because more than 50 cubic yards of material will be disturbed and 5,000 square feet or more of surface area is altered, Rules 5.2.1a and b.

The erosion control plan prepared by Rehder & Associates, Inc. includes installation of perimeter erosion control (silt fence), inlet protection, and a rock construction entrance.

The contractor for the project will need to designate a contact who will remain liable to the district for performance under the District's Erosion and Sediment Control Rule 5.0 from the time the permitted activities commence until vegetative cover is established, in accordance with subsection 5.4.1e. NMCWD must be notified if the responsible individual changes during the permit term.

11.0 Fees

Fees for the project are:

Rule 4:	\$750
Rule 5:	\$750
Total Fees:	\$1,500

12.0 Financial Assurances

Financial Assurances for the project are:

Rule 4: Stormwater Management Facility: 1,686 S.F. x \$12/S.F.=	\$20,232
Rule 5: Perimeter Control: 1,180 L.F. x \$2.50/L.F. =	\$2,950
Inlet Protection: 3 x \$100 =	\$300
Site Restoration: 2.16 acres x \$2,500/acre =	\$5,400
Chloride Management	\$5,000
Contingency and Administration	\$12,418

Findings

1. The proposed project includes the information necessary, plan sheets and erosion control plan for review.
2. The proposed project will conform to Rules 4 and 5 with the fulfilment of the conditions identified below.
3. The proposed stormwater management facility will provide volume retention, rate control, and water quality management in accordance with subsections 4.3.1a-c criteria.
4. In accordance with NMCWD Rule 4.3.5, the applicant must provide a maintenance and inspection plan that identifies and protects the design, capacity, and functionality of the stormwater management facility, and record the plan in a declaration on the property title.

Recommendation

Approval, contingent upon:

Compliance with the General Provisions (attached).

Financial Assurance in the amount of \$46,300; \$41,300 for stormwater management, erosion control and site restoration, \$5,000 for compliance with the chloride management requirements.

The applicant providing a name and contact information for the individual responsible for the erosion and sediment control at the site. NMCWD must be notified if the responsible individual changes during the permit term.

Per Rule 4.3.5, a receipt showing recordation of a maintenance declaration for the operation and maintenance of the stormwater management facility is required. A draft of the declaration must be approved by the district prior to recordation.

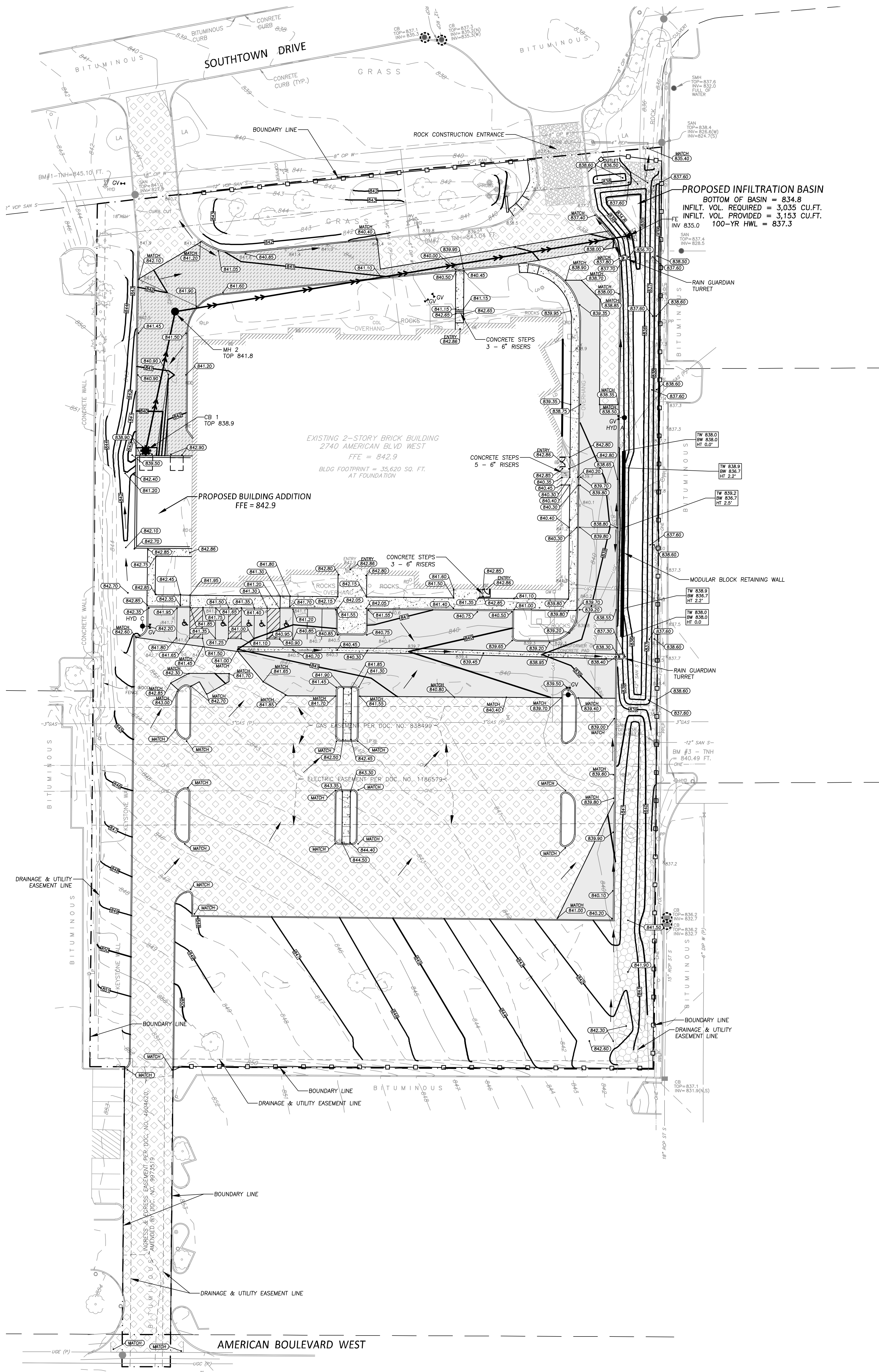
By accepting the permit, when issued, the applicant agrees to the following stipulations for closeout of the permit and release of the financial assurance after the project:

The work associated with the building addition and parking lot improvements at 2740 American Blvd West under the terms of Permit #2023-088 must have an impervious surface area and configuration materially consistent with the approved plans. A design that differs materially from the approved plans 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.

Per Rule 4.5.6, an as-built drawing of the stormwater management facility conforming to the design specifications, including a stage volume relationship in tabular form for the infiltration basin, as approved by the district, must be provided.

Per Rule 12.4.1b, demonstration and confirmation that the stormwater management facility has been constructed or installed and are functioning as designed and permitted. Verification, through daily observation logs and photographs, must be provided showing the stormwater management facility used for volume retention have drawn down within 48 hours from the completion of two 1-inch (approximate) separate rainfall events.

Submission of a plan for post-project management of Chloride use on the site. The plan must include 1) the designation of an individual authorized to implement the chloride use plan and 2) the designation of a Minnesota Pollution Control Agency certified salt applicator engaged in the implementation of the chloride-use plan for the site. The release of the \$5,000 of the financial assurance required for the chloride-management plan requires that chloride-management plan has been provided and approved by the District's Administrator.



CITY OF BLOOMINGTON STANDARD NOTES

1. All construction and post-construction parking and storage of equipment and materials must be on-site.
2. Use of public streets for private construction, parking, loading/unloading, and storage will not be allowed.
3. Contractor shall obtain a Public Works Permit Application for obstructions and concrete work within the Right-of-Way. Permit is required prior to removals or installation. Contact Brian Hansen at 952-563-4543 or bhansen@ci.bloomington.mn.us for permit application and fee information.
3. Public Works permit application for underground work within the right-of-way is required prior to removal or installation of sanitary sewer, water or storm work within the public right-of-way. Contact Utilities at 952-563-4568 for permit application and for fee information.
4. Use approved inlet protection at all active storm sewer inlets; no bales allowed for inlet protection and/or ditch checks.
5. Utility service additions/removals to be at the Developer's expense.
6. Designate all approved parking stalls with white 4" wide striping.
7. All public sidewalks shall not be obstructed.
8. Street lighting and interconnect conduit must be exposed for City inspection prior to pouring concrete or backfilling excavations in the City right-of-way.
9. Storage of materials or equipment shall not be allowed on public streets or within public right-of-way.
10. Restore City street by complying with the City Street Improvement Policy; contact Utilities (952-563-4568) for the requirements.
11. Temporary street signs, lighting, and addresses shall be provided during construction.
12. All parking stall striping must be painted white.

GRADING NOTES

1. All elevations shown are to final surfaces.
2. The contractor shall conduct three infiltration rate tests equally spaced throughout the proposed infiltration basin. If infiltration rates less than 0.45 inches/hour are encountered, the contractor shall notify the Engineer and excavate the subgrade 3 feet below the proposed finished grade and replace the soil with 36 inches of filter sand (Clean ASHTO M-6 or ASTM-C-33 Concrete sand or approved equal).

EROSION CONTROL NOTES

1. All erosion control measures shown shall be installed prior to grading operations and maintained until all areas disturbed have been restored.
2. Sweep paved public streets as necessary where construction sediment has been deposited.
3. Each area disturbed by construction shall be restored per the specifications within 7 days after the construction activity in that portion of the site has temporarily or permanently ceased.
4. 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.
5. All pipe outlets must be provided with temporary or permanent energy dissipation within 24 hours of connection to a surface water.
6. Excess concrete/water from concrete trucks shall be disposed of in portable washout concrete basin or disposed of in a contained area.
7. Spring/summer temporary turf establishment: seed shall be MNDOT Mixture 21-111 @ 100 lbs/acre and mulch shall be MNDOT Type 1. Winter temporary turf establishment: seed shall be MNDOT Mixture 21-112 @ 100 lbs/acre and mulch shall be MNDOT Type 1.
8. 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 linear feet from the property edge, or from the point of discharge into any surface water. Stabilization of the last 200 linear feet must be completed within 24 hours after connecting to a surface water.
9. Mulch, hydromulch, tackifier, polyacrylamide, or similar erosion prevention practices cannot be used within the normal wetted perimeter of drainage ditches or swale sections with a continuous slope greater than 2%.
10. Dewatering shall use a filter bag or approved equal. Discharge the water to well vegetated areas that are adjacent to the receiving water to allow for additional treatment. No chemicals shall be used to unless approved by the City. If using filters with backwash water, backwash water must be hauled away for disposal, returned to the beginning of the treatment process, or incorporated into the site in a manner that does not erode into runoff.
11. Erosion control blanket shall be biodegradable materials and non-fixed joints. Erosion control blanket shall also be natural netting with a loose weave.

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.
- 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.
- 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.
- All nonfunctional BMP's must be repaired, replaced, or supplemented with functional BMP's by the end of the next business day after discovery, or as soon as field conditions allow.

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.
- Portable toilets must be positioned so that they are secure.

INFILTRATION BASIN NOTES

- A. Grading and construction of the infiltration basin 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
- C. Excavate the infiltration basin to the specified depth. All sub-material below the specified elevation shall be left undisturbed.
- D. In the event that sediment is introduced into the infiltration basin following excavation, this material will need to be removed prior to finishing the construction process.
- E. Seeding shall be completed within 48 hours of grading.
- F. The site shall be free from all weeds and invasive plant species.

PARTY RESPONSIBLE FOR MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES

XXXXXXXXXXXXXXXXXXXX
XXXX, MN XXXXX
Ph: XXX-XXX-XXXX

Boundary, topographical & utility information was prepared by Sundt Land Surveying. This information has not been verified as to its accuracy or completeness by Rehder & Associates, Inc.

NOTE: CONTRACTOR TO COORDINATE REMOVAL/ABANDONMENT AND RELOCATION OF EXISTING POWER POLES, OVERHEAD ELECTRIC LINES, BURIED ELECTRIC LINES, BURIED COMMUNICATION LINES AND BURIED GAS LINES WITH THE APPROPRIATE UTILITY COMPANY.

NOTE: INSTALL INLET PROTECTION DEVICES IN NEAREST DOWNSTREAM CATCH BASINS OR AS REQUIRED BY THE CITY.

NOTE: ALL CONSTRUCTION AND POST-CONSTRUCTION PARKING AND STORAGE OF EQUIPMENT AND MATERIALS MUST BE ON-SITE. USE OF PUBLIC STREETS FOR PRIVATE CONSTRUCTION PARKING, LOADING/UNLOADING, AND STORAGE WILL NOT BE ALLOWED.

NOTE: THE FIRST FLOOR ELEVATION OF THE NEIGHBORING BUILDING AT 2631 SOUTHDOWN DRIVE IS 839.37

LEGEND

- PROPOSED MANHOLE
- ◀ PROPOSED FLARED END
- PROPOSED STORM SEWER
- ▬ PROPOSED CONCRETE
- ▬ PROPOSED BITUMINOUS
- ▬ PROPOSED HEAVY DUTY BITUMINOUS
- ▬ PROPOSED BITUMINOUS MILL & OVERLAY
- PROPOSED CONTOUR
- PROPOSED ELEVATION
- ◻ SILT FENCE
- ⊙ INLET PROTECTION DEVICE
- ▬ PROPOSED EC BLANKET CATEGORY 20 (MNDOT 3885)
- BOUNDARY/ROW/BLOCK LINE
- EASEMENT
- BUILDING/PARKING SETBACK LINE
- SOIL BORING
- DRAINAGE ARROW
- W EXISTING WATERMAIN
- S EXISTING SANITARY SEWER
- ST EXISTING STORM SEWER
- G EXISTING BURIED GAS LINE
- UGE EXISTING BURIED ELECTRIC LINE
- UGC EXISTING BURIED COMMUNICATION LINE
- FOL EXISTING BURIED FIBER OPTIC LINE
- OHE EXISTING OVERHEAD ELECTRIC LINE
- 980 EXISTING CONTOUR
- 995.50 EXISTING ELEVATION



0 15 30 60 90
Scale in Feet

finn daniels
ARCHITECTS

2145 Ford Parkway, Suite 301
Saint Paul, Minnesota 55116
651.690.5525
www.finn-daniels.com

CONSULTANTS:

REHDER & ASSOCIATES, INC.
Civil Engineers & Land Surveyors
3440 Federal Drive, Suite 310
Eagan, MN 55122
Telephone: 651-452-8051
www.rehder.com

PROJECT NO.: 231-1564.018
DRAWING FILE: 1564018.DWG

I hereby certify that this plan, specification, or report was prepared by me, or under my direct supervision and I am a duly Licensed Professional Engineer under the laws in the State of Minnesota.
PRELIMINARY NOT FOR CONSTRUCTION

License Number _____ Date _____

PROJECT:

Schneiderman's Furniture
BLOOMINGTON

2740 AMERICAN BLVD. W.
BLOOMINGTON, MN

PROJECT NO.: 23008

DRAWN BY: BJQ

CHECKED BY: NPA

ISSUES AND REVISIONS:

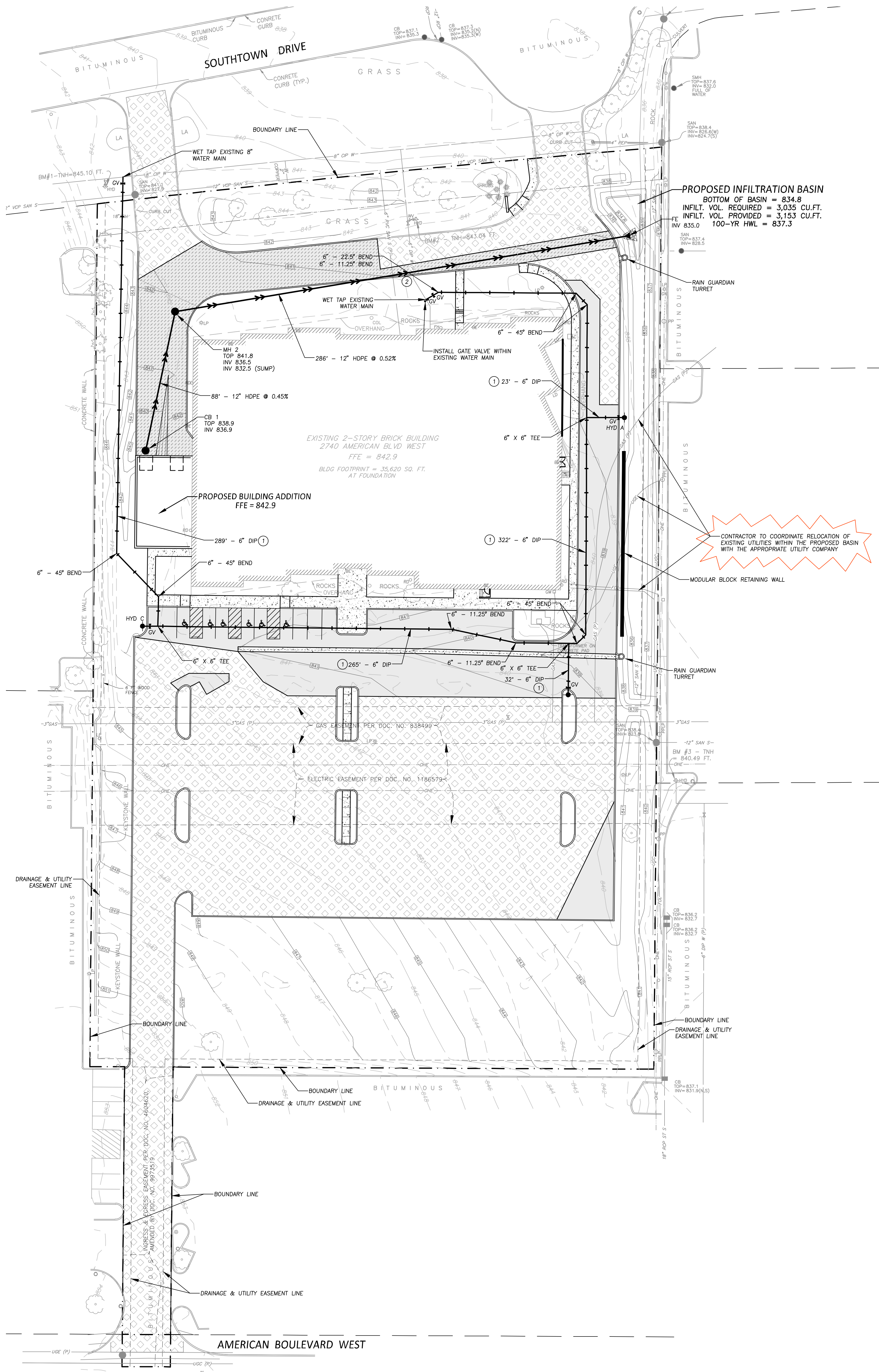
FSBP SUBMITTAL / SCHEMATIC DESIGN 07.12.2023

ADDRESS NMCWD COMMENTS 09.08.2023

SHEET TITLE:

GRADING, DRAINAGE & EROSION CONTROL PLAN

C103



PARTY RESPONSIBLE FOR
MAINTENANCE OF ALL
EROSION AND SEDIMENT
CONTROL MEASURES
XXXXXXXX
XXXXXXXX
XXXX, MN XXXXX
Ph: XXX-XXX-XXXX

Boundary, topographical & utility information was
prepared by Sunde Land Surveying. This information
has not been verified as to its accuracy or
completeness by Rehder & Associates, Inc.

CITY OF BLOOMINGTON STANDARD NOTES

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4. Public Works permit application for underground work within the right-of-way is required prior to removal or installation of sanitary sewer, water or storm work within the public right-of-way. Contact Utilities at 952-563-4568 for permit application and for fee information.
5. Use approved inlet protection at all active storm sewer inlets; no bales allowed for inlet protection and/or checks.
6. Utility service additions/removals to be at the Developer's expense.
7. Designate all approved parking stalls with white 4" wide striping.
8. All public sidewalks shall not be obstructed.
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INFILTRATION BASIN NOTES

- A. Grading and construction of the infiltration basin 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.
- C. Small tracked dozers and
- D. Excavate the infiltration basin to the specified depth. All sub-material below the specified elevation shall be left undisturbed.
- E. In the event that sediment is introduced into the infiltration basin following excavation, this material will need to be removed prior to finishing the construction process.
- F. Seeding shall be completed within 48 hours of grading.
- G. The site shall be free from all weeds and invasive plant species.

UTILITY NOTES

1. All watermain, valves, services, etc. shall have a minimum of 8' and maximum of 10' of cover.
2. Water mains crossing storm or sanitary sewers shall have a minimum of 18-inch vertical separation.
3. Wrap DIP water main with 8 mil minimum poly.
4. All ductile iron pipe shall be coated with a layer of arc-sprayed zinc per ISO 8179. The mass of the zinc shall be a minimum of 200g/m² with a finishing layer of asphaltic coating. Ductile iron pipe shall be lined with cement mortar lining per ANSI/AWWA 21.4/C104. Manufacture all ductile iron pipe in the USA. All metal pipe shall be covered with a V-Bio polyethylene encasement conforming to the latest revisions of AWWA/ANSI C105/21.05 to include anti-microbial biocide and VCI on inside surface of 3-layer co-extruded linear low-density polyethylene fused into a single layer no less than 8-mils in thickness. All mechanical joint bolts and nuts shall be made domestically of a minimum 304 stainless steel. Either standard body fittings (AWWA C110/A21.10) or short body fittings (AWWA C153/A21.53) are approved. Manufacture all fittings in the USA.
5. HDPE & PVC Pipe connections into all concrete structures shall be made with water tight materials, utilizing an A-Lok or WaterStop gasket or boot, cast-in-place rubber boot, or approved equal. Where the alignment precludes the use of the above approved watertight methods, Conseal 231 waterstop sealant, or approved equal will only be allowed as approved by the Engineer.
6. Prior to issuance of the Certificate of Occupancy, the developer/contractor must submit electronic utility as-builts to the Public Works Department. Contact Brian Hansen (952-563-4543) for requirements.
7. PVC sewer services shall be Schedule 40, SDR 26 or approved equal.
8. All DIP watermain 12-inches in diameter or smaller shall be Class 52.
9. Provide a minimum of 10-feet of horizontal separation between watermain and sewers.
10. Taps of live water mains are done by City forces and shall be paid for and coordinated with the Contractor.
11. All components of the water system, up to the water meter or fire service equipment must utilize protective internal coatings meeting current ANSI/AWWA standards for cement mortar lining or special coatings. The use of unlined or uncoated pipe is not allowed.

NOTE: CONTRACTOR TO COORDINATE REMOVAL/ABANDONMENT AND RELOCATION OF EXISTING POWER POLES, OVERHEAD ELECTRIC LINES, BURIED ELECTRIC LINES, BURIED COMMUNICATION LINES AND BURIED GAS LINES WITH THE APPROPRIATE UTILITY COMPANY.

NOTE: INSTALL INLET PROTECTION DEVICES IN NEAREST DOWNSTREAM CATCH BASINS OR AS REQUIRED BY THE CITY.

CATCH BASIN/MANHOLE SCHEDULE		
STRUCTURE NO.	BARREL SIZE	NEENAH CASTING NO.
CB 1	48"	R-2573-1C
MH 2	48"	R-1642B

NOTE: ALL CONSTRUCTION AND POST-CONSTRUCTION PARKING AND STORAGE OF EQUIPMENT AND MATERIALS MUST BE ON-SITE. USE OF PUBLIC STREETS FOR PRIVATE CONSTRUCTION PARKING, LOADING/UNLOADING, AND STORAGE WILL NOT BE ALLOWED.

LEGEND

- PROPOSED MANHOLE/CATCH BASIN
- ◀ PROPOSED FLARED END
- PROPOSED STORM SEWER
- PROPOSED WATERMAIN
- ▒ PROPOSED CONCRETE
- ▒ PROPOSED BITUMINOUS
- ▒ PROPOSED HEAVY DUTY BITUMINOUS
- ▒ PROPOSED BITUMINOUS MILL & OVERLAY
- BOUNDARY/ROW/BLOCK LINE
- - - EASEMENT
- - - BUILDING/PARKING SETBACK LINE
- SOIL BORING
- DRAINAGE ARROW
- W EXISTING WATERMAIN
- S EXISTING SANITARY SEWER
- ST EXISTING STORM SEWER
- G EXISTING BURIED GAS LINE
- UGE EXISTING BURIED ELECTRIC LINE
- UGG EXISTING BURIED COMMUNICATION LINE
- FOL EXISTING BURIED FIBER OPTIC LINE
- OHE EXISTING OVERHEAD ELECTRIC LINE
- 980- EXISTING CONTOUR
- x 995.50 EXISTING ELEVATION



0 15 30 60 90
Scale in Feet

finn daniels
ARCHITECTS

2145 Ford Parkway, Suite 301
Saint Paul, Minnesota 55116
651.690.5525
www.finn-daniels.com

CONSULTANTS:

REHDER & ASSOCIATES, INC.
Civil Engineers & Land Surveyors
3440 Federal Drive, Suite 110
Eagan, MN 55122
Telephone: 651-452-8051
www.rehder.com

PROJECT NO.: 231-1564.018
DRAWING FILE: 1564018.DWG

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws in the State of Minnesota.
DATE: 07/12/2023
PRELIMINARY NOT FOR CONSTRUCTION

License Number _____ Date _____

PROJECT:

Schneiderman's
Furniture
BLOOMINGTON

2740 AMERICAN BLVD. W.
BLOOMINGTON, MN

PROJECT NO.: 23008

DRAWN BY: BJQ

CHECKED BY: NPA

ISSUES AND REVISIONS:

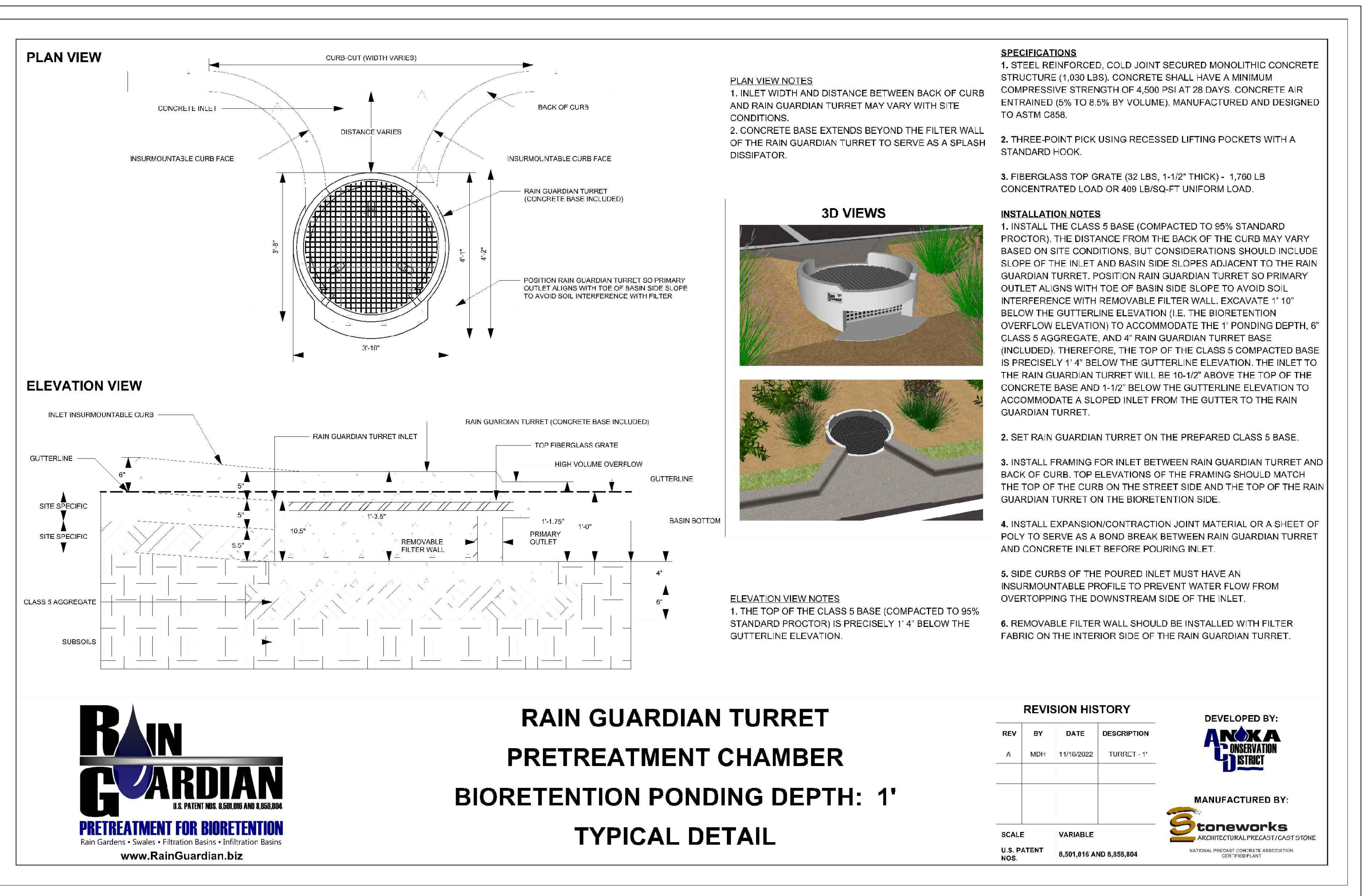
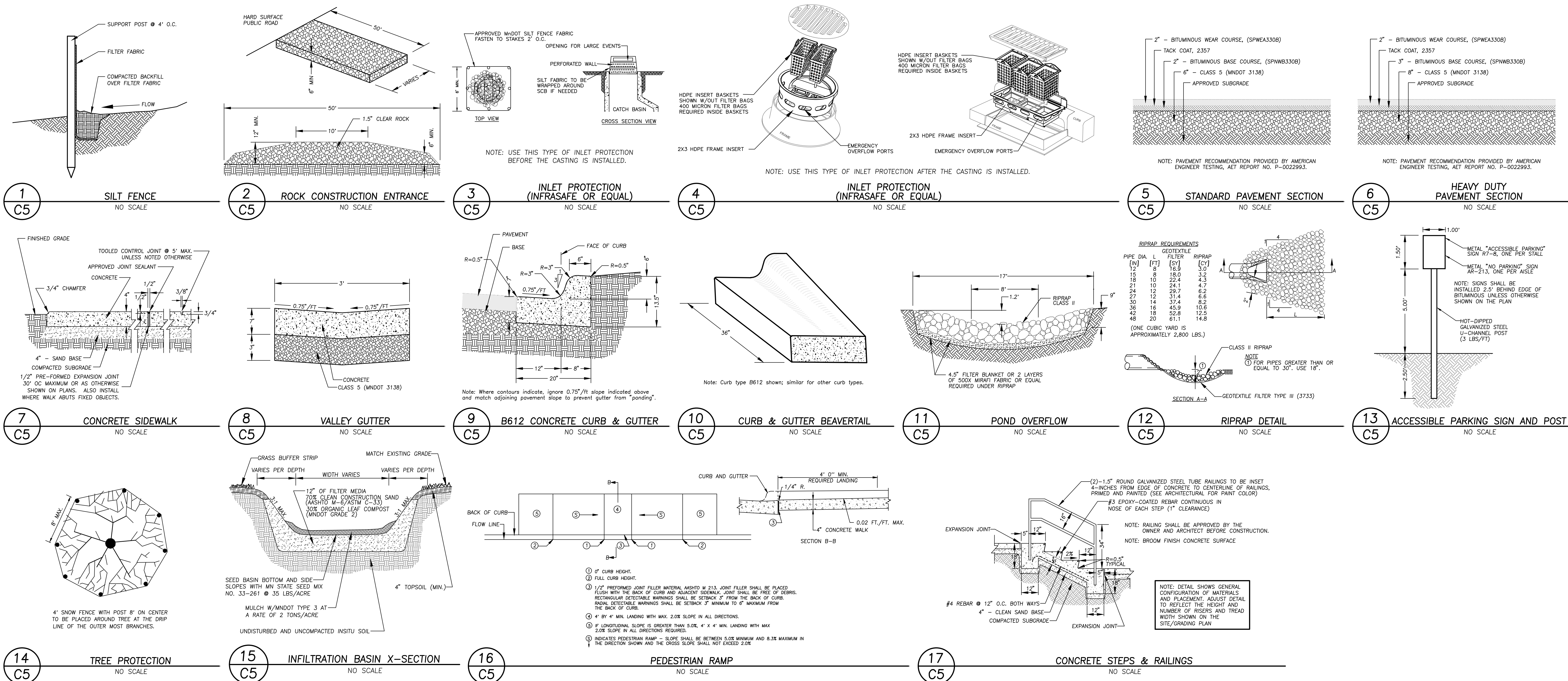
FSBP SUBMITTAL / SCHEMATIC DESIGN
07.12.2023

ADDRESS NMCWD COMMENTS
09.08.2023

SHEET TITLE:

UTILITY PLAN

C104



2145 Ford Parkway, Suite 301
Saint Paul, Minnesota 55116
651.690.5525
www.finn-daniels.com

CONSULTANTS:

REHDER & ASSOCIATES, INC.
Civil Engineers & Land Surveyors
3440 Federal Drive, Suite 110
Eagan, MN 55122
Telephone: 651-452-8051
www.rehder.com

PROJECT NO.: 231-1564.018
DRAWING FILE: 1564018.DWG

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws in the State of Minnesota.

License Number _____ Date _____

PROJECT:

Schneiderman's Furniture BLOOMINGTON

2740 AMERICAN BLVD. W. BLOOMINGTON, MN

PROJECT NO.: 23008

DRAWN BY: BJQ

CHECKED BY: NPA

ISSUES AND REVISIONS:

NO.	DESCRIPTION	DATE
1	FSBP SUBMITTAL / SCHEMATIC DESIGN	07.12.2023
2	ADDRESS NMCWD COMMENTS	09.08.2023

SHEET TITLE:

DETAILS & SPECIFICATIONS

C105

CONSULTANTS:



PROJECT NO.: 231-1564.018
DRAWING FILE: 1564018.DWG

I hereby certify that this plan, specification, or report was prepared by the Engineer under my direct supervision and with a duly Licensed Professional Engineer under the laws in the State of Minnesota.
PRELIMINARY NOT FOR CONSTRUCTION
Title: _____
Name: _____

License Number _____ Date _____

PROJECT:

Schneiderman's
Furniture
BLOOMINGTON

2740 AMERICAN BLVD. W.
BLOOMINGTON, MN

PROJECT NO.: 23008

DRAWN BY: BJQ

CHECKED BY: NPA

ISSUES AND REVISIONS:

ADDRESS NMCWD COMMENTS
09.08.2023

PRELIMINARY NOT FOR CONSTRUCTION

SHEET TITLE:

SWPPP

C107

SWPPP NOTES

1. THE NATURE OF THIS PROJECT WILL CONSIST OF CONSTRUCTING XXXXXXXXXXXXXXXXXXXXXXX.
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 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: 12345 XXXXXXXXXXXXXXX, XXXXXXXXXXXXXXX, MN XXXXX
 - 3.2. SITE AREA: XXX.XX ACRES
 - 3.3. AREA OF DISTURBANCE: XXX.XX ACRES
 - 3.4. PRE-CONSTRUCTION IMPERVIOUS AREA: XXX.XX ACRES
 - 3.5. POST-CONSTRUCTION IMPERVIOUS AREA: XXX.XX ACRES
 - 3.6. PLANNED CONSTRUCTION START DATE: XXX/XX/XX
 - 3.7. ESTIMATED CONSTRUCTION COMPLETION DATE: XXX/XX/XXGENERAL SOIL TYPE: XXXXXXXXXXXXXXXXXXXXXXX
4. THE LOCATION OF AREAS NOT TO BE DISTURBED MUST BE IDENTIFIED WITH FLAGS, STAKES, SIGNS, SILT FENCE, ETC. BEFORE CONSTRUCTION BEGINS.
5. NO DRAINAGE AREA TO BE MORE THAN FIVE (5) ACRES OF RUNOFF CAUSING THE NEED FOR A TEMPORARY SEDIMENT BASIN.
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 PERMITEE 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: PERMITEE(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. IF 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 ASSOLVE 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 COPY 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. PERMITEES MUST OBTAIN RAINFALL AMOUNTS BY EITHER A PROPERLY MAINTAINED RAIN GAUGE 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. PERMITEES 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. EROSION 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 MUST 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 HAS NOT BEEN INCLUDED IN THIS SWPPP AS DESIGNED BY THE ENGINEER. IF A BASIN IS LATER DETERMINED TO BE DESIRABLE OR NECESSARY, THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER A SWPPP AMENDMENT. TEMPORARY SEDIMENTATION BASINS SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF SECTION 14 OF THE PERMIT AND SHALL INCLUDE A BASIN DRAINING PLAN MEETING OR EXCEEDING THE MINIMUM REQUIREMENTS OF SECTION 10 OF THE PERMIT. WHERE THE SITE DISCHARGES TO SPECIAL AND/OR IMPAIRED WATERS, THE SWPPP AMENDMENT SHALL ALSO MEET OR EXCEED THE MINIMUM REQUIREMENTS OF SECTION 23 OF THE PERMIT.
25. DEWATERING:
 - 25.1. A DEWATERING PLAN HAS NOT BEEN INCLUDED IN THIS SWPPP AS DESIGNED BY THE ENGINEER. IF DEWATERING IS REQUIRED FOR THIS PROJECT, THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER A SWPPP AMENDMENT. ALL DEWATERING SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF SECTION 10 OF THE PERMIT.
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 PERMITEE 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. PERMITEE(S) WISHING TO TERMINATE COVERAGE MUST SUBMIT A NOTICE OF TERMINATION TO THE MPCA. ALL PERMITEE(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 PERMITEE 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) KNOWLEDGEABLE 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 COMENSURATIVE 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: XXXXXXXXXXXXXXX
NAME: XXXXXXXXXXXXXXX
TITLE: XXXXXXXXXXXXXXX
PHONE: XXXXXXXXXXXXXXX
EMAIL: XXXXXXXXXXXXXXX

SWPPP DESIGNER:

BY: XXXXXXXXXXXXXXX
NAME: XXXXXXXXXXXXXXX
TITLE: XXXXXXXXXXXXXXX
PHONE: XXXXXXXXXXXXXXX
EMAIL: XXXXXXXXXXXXXXX

CONTRACTOR:

BY: XXXXXXXXXXXXXXX
NAME: XXXXXXXXXXXXXXX
TITLE: XXXXXXXXXXXXXXX
PHONE: XXXXXXXXXXXXXXX
EMAIL: XXXXXXXXXXXXXXX

CONSTRUCTION SWPPP MANAGER:

BY: XXXXXXXXXXXXXXX
NAME: XXXXXXXXXXXXXXX
TITLE: XXXXXXXXXXXXXXX
PHONE: XXXXXXXXXXXXXXX
EMAIL: XXXXXXXXXXXXXXX

SURFACE WATERS WITHIN 1-MILE OF SITE

RECEIVING WATERS

NAME OF WATER BODY	TYPE OF WATER BODY	SPECIAL WATER	IMPAIRED WATER

MPCA COVERAGE LETTER

PERMANENT STORMWATER MANAGEMENT SYSTEM

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

ESTIMATED BMP QUANTITIES

DESCRIPTION	QUANTITY	UNIT
ROCK CONSTRUCTION ENTRANCE (1" - 2" WASHED ROCK)	50	TONS
SILT FENCE	X	L.F.
INLET PROTECTION (PRE-CASTING)	X	EACH
INLET PROTECTION (POST-CASTING)	X	EACH
BIGROLLS/BIGDOLLS	X	L.F.
EROSION CONTROL BLANKET (CATEGORY XX)	X	S.Y.
EROSION CONTROL BLANKET (CATEGORY XX)	X	S.Y.
ROCK DITCH CHECKS	X	EACH
X	X	X

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: 14 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