

Permit Application No.: **17-576**

Rules: **Erosion Control, Wetland Protection
Shoreline & Streambank Stabilization,
Floodplain Alteration, Waterbody Crossings
& Structures, and Variance**

Applicant: **City of Hopkins**

Received: **11/14/17**

Project: **Blake Road**

Complete: **12/29/17**

Location: **Blake Road between Trunk Highway 7 and Spruce Avenue, Hopkins**

Noticed: **1/11/18 & 1/25/18**

Recommendation:

Staff recommend approval with the following conditions:

- Authorization from the Minnehaha Creek Watershed District and the Minnesota Department of Transportation to conduct work on MCWD property and MnDOT right of way, respectively
- Submission of an executed maintenance agreement for Waterbody Crossings & Structures after approval of a draft by MCWD staff
Submission of an executed maintenance agreement for Waterbody Crossings & Structures after approval of a draft by MCWD staff
- Identification of the Contractor responsible for maintaining the erosion control plan

Background:

The City of Hopkins has applied for a MCWD permit for Erosion Control, Wetland Protection, Shoreline & Streambank Stabilization, Floodplain Alteration, Waterbody Crossings & Structures, and Variance to the required setback for horizontal directional boring under a watercourse for road and utility improvements to 1.8 miles of Blake Road between Highway 7 and Spruce Avenue in the City of Hopkins. The purpose of the project is to upgrade the roadway and associated utilities to facilitate and support forecasted redevelopment in the area, to improve safety of pedestrians and bicyclists at crossings along the roadway, and to improve business and residential access. The linear reconstruction will reduce Blake Road from a 60 foot-wide, five-lane undivided roadway to a 42.3 foot-wide, four-lane divided roadway with an 8-10 foot-wide trail along each side, where there is an existing walkway. Center medians and dedicated left turn lanes will also be included throughout the corridor. Overall, the project will result in a 0.57 acre decrease in impervious surface. The Blake Road Corridor drains to Minnehaha Creek (the Creek).

Per section 2(d)(1) of the Stormwater Management Rule, linear projects that create less than 10,000 square feet of new impervious surface are exempt from the rule. As the project proposes a reduction in impervious surface, the Stormwater Management Rule is not applicable to the permit application.

Property Rights:

MCWD's procedural rule requires that an application bearing the original signature of the property owner(s) must be submitted to the District to obtain a permit. An application with the necessary signature has been submitted on behalf of the City of Hopkins, however the City of Hopkins does not own or have all of the property rights necessary to construct the entirety of the Project. The City owns the Blake Road ROW from Excelsior Boulevard to Spruce Avenue. Hennepin County owns the Blake Road ROW from Excelsior Boulevard to Highway 7 (CSAH 20). The Minnesota Department of Transportation (MnDOT) owns the ROW at the corner of Blake Road and Highway 7. CSAH 20 will be turned over to the City of Hopkins three to five years after the project is completed as documented in the executed Agreement for Jurisdictional Transfer (attachment 13).

Given the unique nature of this extensive public infrastructure project, staff determines in consultation with legal counsel that the procedural requirement can be met without a procedural variance by conditioning board approval of the permit on demonstration that all necessary property rights have been acquired for work as listed in the recommended conditions of approval.

Erosion Control:

The District's Erosion Control rule is applicable for any project that proposes earth disturbance of 5,000 square feet and or 50 cubic yards of excavation or fill. The proposed linear redevelopment will disturb approximately 12 acres of land; therefore, the rule is applied. The applicant has provided the proper erosion control measures including floating silt curtain, silt fence, sediment control log, inlet protection, construction access stabilization, location of concrete washout, and final stabilization, including six inches of topsoil (attachment 5). A Minnesota Pollution Control Agency National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) stormwater permit for construction activity was issued on November 8th, 2017 (NPDES permit # C00048141, attachment 6).

The erosion control plan meets the District's rule requirements.

Wetland Protection Rule:

Two wetlands were identified on or adjacent to the project site. The boundaries and types of both wetlands were confirmed in a MCWD Wetland Conservation Act (WCA) W16-53 Notice of Decision (NOD) dated October 4th, 2016 (attachment 3). Wetland A was identified on the MCWD-owned 415 Blake Road (Cottageville Park) parcel, over which the city is seeking to obtain an easement for the project. There are no proposed impacts to Wetland A and it is outside of the boundaries of the area over which the applicant will obtain an easement for purposes of the project. Wetland B was identified within the MnDOT ROW and is proposed to be temporarily and permanently impacted by work associated the replacement of an existing culvert. MnDOT is the Local Unit of Government (LGU) for WCA for wetlands located within the MnDOT ROW, and has sent a NOD confirming that the proposed temporary and permanent impacts associated with the culvert replacement qualify to meet a WCA de minimis exemption and therefore no replacement plan is required for the impact (attachment 4). Per section 5(a) of the MCWD Wetland Protection Rule, wetland buffer is required when the Waterbody Crossing and Structures rule is applied. Both Wetland A and Wetland B are located outside of the City of Hopkins ROW and are on land owned by other public entities (MCWD & MnDOT respectively). As with Wetland A, the nature and extent of the easement over the MnDOT ROW the city is obtaining does not extend to the area upgradient from the wetland to which the buffer requirement applies, no buffer is provided.

The Wetland Protection rule is met.

Shoreline & Streambank Stabilization:

The District's Shoreline and Streambank Stabilization rule is applicable for any project proposing an improvement or alteration of the shoreline of a water basin or the bank of a watercourse. There is an existing culvert outfall and associated riprap located to the east of the Blake Road Bridge (Bridge) on the 415 Blake Road parcel. Erosion and scouring has resulted at and below the top of the streambank, which has eroded up to the culvert outfall. Replacement of the culvert outfall 5213 and associated riprap will disturb and stabilize approximately 30 linear feet of streambank at the outfall location (attachment 7 & 8), therefore the rule is applied. There will be no streambank disturbance associated with the replacement of the existing culvert 5316, therefore the Shoreline & Streambank Stabilization rule is not applied to that element. All other portions of the Creek streambank within the construction limits will remain in the existing condition.

Per section 2(b) applications for maintenance of an existing improvement that has not degraded to a natural state are not required to submit an erosion intensity calculation. There is existing riprap that is no longer installed in compliance with section 6 Criteria for Stabilization Techniques (attachment 7). Replacement of the culvert and associated riprap was analyzed as maintenance of an existing improvement therefore, the applicant is not required to submit an erosion intensity calculation to determine the stabilization practice. The District engineer has determined that riprap for energy dissipation is applicable based on the existing outfall condition and the provided velocity calculations for the discharge rate of stormwater. The 5213 culvert velocity discharge calculation for the 10-year flow event is 6.54 feet/second. According to the MnDOT drainage manual and confirmed by the District Engineer, vegetative stabilization is not recommended for the proposed velocity and riprap stabilization is deemed necessary to stabilize the outfall and bank of the creek.

To stabilize the outfall and the portion of the streambank that will be destabilized by the culvert placement, 12.3 cubic yards of Class III riprap will be utilized and will also include 1.1 cubic yards of granular filter, and 41.6 square yards of geotextile filter fabric per MnDOT Standard Plate 3133D (attachment 9). The specifications of the MnDOT Standard Plate 3133D meet the rule requirements for section 6 Criteria for Stabilization Techniques.

The project as designed meets the District's Shoreline & Streambank Stabilization Rule.

Floodplain Alteration:

The District's Floodplain Alteration rule is triggered for any alteration or filling of land below the 100-year high water elevation. The FEMA 100-year base flood elevation contour west of the Blake Road bridge is 902' and east of the Blake Road Bridge is 901'. As the proposed replacement of two culverts east and west of the Blake Road Bridge (culverts 5213 & 5316) will cause land disturbance below the 100-year floodplain elevation contour, the rule is applied.

As discussed in the Shoreline & Streambank analysis, culvert 5213 is proposed to be stabilized with 12.3 cubic yards of Class III riprap. Culvert 5316 to the west of the Bridge is proposed to be stabilized with 15.8 cubic yards of Class III riprap. The proposed riprap for energy dissipation has been determined, by the District Engineer, to be necessary for stabilization and the proposed quantities are in conformance with standard engineering practices. The District established a policy, as documented in the 2014 Statement of Need and Reasonableness Housekeeping Amendments to MCWD Rules, that riprap placed below the 100-year floodplain elevation would not be regulated as fill. Per the policy, the 28.1 cubic yards of riprap does not require 28.1 cubic yards of compensatory storage.

While there is proposed land disturbance within the floodplain, Staff and the District Engineer have confirmed that the proposed culvert replacement and associated grading will result in no net fill of the floodplain.

The project at designed meets the District’s Floodplain Alteration Rule.

Waterbody Crossings and Structures:

The District Waterbody Crossings & Structures rule is applicable for any project that proposes to place a road, highway, utility, bridge, boardwalk or associated structure in contact with the bed or bank of any waterbody. Three project elements trigger the MCWD Waterbody Crossings and Structure Rule: a culvert east of the Bridge (outfall 5213) and associated riprap proposed to come into contact with the bank of Minnehaha Creek, a culvert outfall proposed in contact with the bank of Wetland B near the intersection of Hwy 7 & Blake Road, and horizontal directional boring under Minnehaha Creek to install both a watermain and sanitary sewer line. The below table summarizes the proposed waterbody crossings and structures:

Waterbody	Waterbody Crossing or Structure	Existing (diameter, type, invert elevation)	Proposed (diameter, type, invert elevation)
Minnehaha Creek	Outfall 5213	21" RCP inv= 898.81'	30" RCP inv= 898.81'
Wetland B	Outfall at Hwy 7	18", RCP inv= 901.13'	24" RCP, inv= 901.13'
Minnehaha Creek	Watermain Pipe, Directional Bore	8", n/a, n/a	12", n/a, n/a
Minnehaha Creek	Sanitary Pipe, Direction Bore	6", n/a, n/a	12", n/a, n/a

Per section 3(a), structures in public waters shall meet a demonstrated public benefit and meet a specific need for all other projects. The two proposed culvert replacements are needed to correct existing degraded conditions that are causing erosion and sedimentation. Additionally, the Blake Road Corridor improvements are associated with meeting public safety improvements, demonstrating a public benefit. The installment of the watermain and sanitary sewer lines are to service the public and therefore demonstrate a public benefit.

Per the sections 3(b) the placement of the utility shall retain adequate hydraulic capacity, specifically changes in hydraulic capacity may not result in upstream or downstream increases in flood stage. Outfall 5213 and within the Hwy 7 ROW will be reconstructed at the same location and elevation with the same pipe material. The diameter of the outfall pipes will be increased in size to conform to present engineering standards, however, there will be a reduction in impervious surface and the drainage pattern is not changing from existing to proposed conditions, therefore, rates and volumes to these outfalls will not be increased. Additionally, there is a proposed sump catch basin proposed at each outfall to provide a new best management practice pre-treatment. The culvert replacements will not alter the Creek cross-section from existing to proposed conditions. The proposed directional boring 3-5 feet below the Creek bed will not impede hydraulic capacity. The applicant has demonstrated that hydraulic capacity will be retained per section 3(b).

Per Section 3(e) the placement of a utility shall not adversely affect water quality, specifically there will not be an increase in erosion or TSS loading. The riprap stabilization at the culvert outfalls will provide long term stabilization of the bank of the Creek and the bank of Wetland B and slow the velocity of water discharging. As there is demonstrated erosion in the existing condition, the proposed condition will reduce TSS loading to downstream waterbodies. Water quality will not be negatively affected per section 3(e).

Per section 3(g), projects involving horizontal direction drilling shall provide a minimum clearance of 3 feet below the bed of a waterbody, and a minimum set back of 100 feet from the stream bank for pilot, entrance, and exit holes. The sanitary sewer line is proposed 3 feet below the bed of Minnehaha Creek and the watermain is proposed 5 feet below the bed of Minnehaha Creek (attachment 9). The north bore pit is proposed 100 feet from the bank of Minnehaha Creek. The applicant is requesting a variance for the south bore pit which is proposed to be located 50 feet from the bank of the Creek. The applicant asserts that the borehole cannot be located in compliance with the 100-foot setback requirement because of an existing high pressure gas main located 90 feet south of the Creek (MCWD permit 17-109, attachment 11). The request for a variance from the required set-back for the south bore pit is discussed in the following section of this permit report.

Per section 3(h), the project shall provide design detail for avoiding sanitary discharge to a surface water in the event of a sanitary sewer breakage. The applicant has demonstrated that the bore pits will be defended with redundant erosion control best management practices. The sanitary line has included redundant valves in the plan set to avoid sanitary discharge into the Creek.

Per Section 3(f), the applicant has submitted design alternatives to show the proposed plan meets the minimal impact solution with relation to natural resource impact. One alternative submitted was a no-build situation. The proposed upgraded sanitary and water main lines under the creek are needed to accommodate projected future growth and development of the area. The existing culverts that discharge into Minnehaha Creek and Wetland B are degraded and need to be updated to correct existing erosion. Leaving the culverts in the existing condition will result in continued streambank and wetland erosion and continued transportation of sediment to downstream waterbodies. Additionally, a no-build situation does not meet the project goals. The second alternative submitted was to relocate the south pore pit 100 feet or greater from the bank of Minnehaha Creek. As there is an existing high pressure gas main located within the Blake Road ROW 90-feet south of Minnehaha Creek, relocating the bore pit could risk damage to the high pressure gas main and therefore is not feasible. Vegetation stabilization and no stabilization were considered for the culvert outfalls. Based on the velocities submitted for the 10-year flow design, vegetation stabilization at these locations is not recommended as there is a high potential for the vegetation to erode prior to establishment, and would not be considered a corrective action for the existing eroded conditions. Based on the two alternatives submitted for the horizontal directional boring and culvert replacements, MCWD staff concur that the applicant has demonstrated that the proposed plan represents a minimal impact solution.

Per section 3(c) hydraulic crossings shall retain adequate navigation capacity. There is no structural work proposed to the Bridge, there is no proposed increase to the 100 year floodplain elevation, and there is no proposed change to the existing Creek cross-section, therefore navigation capacity will not change from existing to proposed conditions.

Per section 3(d), aquatic and upland wildlife passages shall be preserved. The proposed culvert outfall replacements are for stormwater conveyance from the stormsewer pipe and do not provide a connection between a waterbody or watercourse. The proposed directional bore is below the bed of the Creek. Aquatic and upland wildlife passages will be preserved from existing to proposed conditions.

MCWD and the City of Hopkins will execute a permit specific maintenance agreement in accordance with section 6 for the proposed culverts, as listed in the recommendation for conditional approval.

The Project as designed, with the exception of the 50-foot setback from the Creek bank for the southern bore pit, meets the District's Waterbody Crossings and Structures rule.

Variance:

The applicant has requested a variance to the required setback for horizontal directional boring under a watercourse from 100 feet to 50 feet for the southern bore pit due to the location of an existing high pressure gas main located 90-feet south of the creek. Under the District's variance rule, the applicant must demonstrate the following:

- (a) Because of special conditions inherent to the property that do not apply generally to other land or structures in the District, strict compliance with the minimum set back requirement will cause undue hardship to the applicant;
- (b) The hardship was not created by the applicant, its owner or representative, or a contractor. Economic hardship is not grounds for issuing a variance;
- (c) Granting the variance will not serve merely as a convenience to the applicant;
- (d) There is no feasible and prudent alternative to the bore pit location; and
- (e) Granting the variance will not impair or be contrary to the intent of the rules.

The applicant has submitted a signed variance application (attachment 12). The City of Hopkins is proposing to install a 12-inch PVC sanitary sewer and a 12-inch HDPE watermain under Minnehaha Creek to replace existing structures. These pipes will be installed via horizontal directional boring because it is the less intensive option when compared to open-trench installation. Under section 3(g) of the Waterbody Crossings & Structures rule, the proposed entrance and exit holes for these borings must have a minimum setback of 100-feet from the streambank. The project proposes to locate the entrance hole to the north at least 100-feet from the Creek and the hole to the south approximately 50-feet from the Creek. The southern hole is located within the 100-foot minimum setback due to an existing high-pressure gas main that was installed in 2017. The gas main sits 90-feet from the Creek. To construct both the new watermain and the new sanitary sewer while avoiding impacts to the in-place gas main, the applicant has proposed the bore pit to be located closer to the Creek streambank at 50-feet.

The variance application was analyzed under Section 2 of the Variances and Exceptions Rule. The space constraints requiring the variance are a result of special conditions that are unique to this location and do not apply to other land in the District. The inability to move the bore pit to the 100-foot minimum setback distance was not created by the City of Hopkins but is instead due to the existing location of a high-pressure gas main within the Blake Road right-of-way. The limitations were not created by the City of Hopkins as the gas main was installed by CenterPoint Energy. The City of Hopkins has provided redundant erosion control best management practices to protect the water quality and integrity of the Creek, reducing the risk the rule provision is in place to address. The Variance is not requested by the City of Hopkins as a convenience, but is due to site limitations. The City of Hopkins has demonstrated that there is no feasible or prudent alternative to the bore pit by considering the following alternatives:

- The alternative of moving the bore pit to the 100-foot setback distance near the high-pressure gas main would risk damage to the gas main during construction, creating the potential to cause leakage, breakage and evacuation of the area. Leakage would result in a vapor cloud that has the potential to easily ignite. Horizontal directional boring near the high-pressure gas main provides unnecessary risks that can be avoided.
- The alternative of moving the bore pit to a distance farther than the location of the high-pressure gas main would require boring past the gas main and would have a high potential of causing damage to the pipeline as noted above.
- Relocating the high-pressure gas main is a risky operation that would involve strategic planning and risk of leakage.

Staff concurs in the factual statements and technical justifications stated above and in the variance application. Accordingly, staff finds there is an adequate technical basis and justification to grant the requested variance.

Summary:

The City of Hopkins has applied for a MCWD permit for Erosion Control, Shoreline & Streambank Stabilization, Floodplain Alteration, Waterbody Crossings & Structures, and Variance to the required setback for horizontal directional boring under a watercourse for road and utility improvements along Blake Road between Highway 7 and Spruce Avenue in the City of Hopkins. The project as proposed meets the applicable requirements under the District's Erosion Control, Wetland Protection, Streambank Stabilization, Floodplain Alteration and Waterbody Crossings & Structures rules with the exception of the 50-foot setback from the Creek bank for the southern bore pit, which the applicant has requested a variance for. Staff recommends approval of the MCWD permit application with the conditions of authorization from MCWD and MnDOT to conduct work outside the City of ROW, submission of an executed maintenance agreement for Waterbody Crossings & Structures, along with identification of the contractor responsible for maintaining the erosion control plan.

Attachments:

1. Permit Application
2. Site Location Map
3. W16-53 NOD
4. MnDOT WCA NOD
5. Erosion Control Plan
6. NPDES Permit
7. Existing Culvert 5213 at Streambank Detail
8. Proposed Culvert 5213 at Streambank Detail
9. MnDOT Standard Plate 3133D
10. Waterbody Crossings & Structures Site Plan
11. MCWD Permit 17-109 Site Plan
12. Variance Application
13. Agreement for Jurisdictional Transfer

17-576

WATER RESOURCE PERMIT APPLICATION FORM

Use this form to notify/apply to the Minnehaha Creek Watershed District (MCWD) of a proposed project or work which may fall within their jurisdiction. Fill out this form completely and submit with your site plan, maps, etc. to the MCWD at:

15320 Minnetonka Blvd. Minnetonka, MN 55345.

Keep a copy for your records.

YOU MUST OBTAIN ALL REQUIRED AUTHORIZATIONS BEFORE BEGINNING WORK.

1. Name of each property owner: City of Hopkins (Nate Stanley)

Mailing Address: 1010 1st Street South City: Hopkins State: MN Zip: 55343

Email Address: nstanley@hopkinsmn.com Phone: 952-548-6356 Fax: _____

2. Property Owner Representative Information (not required) (licensed contractor, architect, engineer, etc...)

Business Name: WSB & Associates, Inc Representative Name: Roxy Franta

Business Address: 701 Xenia Ave S, Ste 300 City: Minneapolis State: MN Zip: 55416

Email Address: rfranta@wsbeng.com Phone: 763-762-2844 Fax: _____

3. Project Address: Blake Road (Between TH 7 and Spruce Ave) City: Hopkins

State: MN Zip: 55343 Qtr Section(s): NE 1/4 Section(s): 19 Township(s): 117 Range(s): 21

Lot: _____ Block: _____ Subdivision: _____ PID: _____

4. Size of project parcel (square feet or acres): 1.8 miles

Area of disturbance (square feet): 12.10 acres Volume of excavation/fill (cubic yards): 121.09 SF

Area of existing impervious surface: 9.49 acres Area of proposed impervious surface: 8.92 acre

Length of shoreline affected (feet): 10 ft Waterbody (& bay if applicable): Minnehaha Creek

5. Type of permit being applied for (Check all that apply):

- | | |
|--|--|
| <input checked="" type="checkbox"/> EROSION CONTROL | <input checked="" type="checkbox"/> WATERBODY CROSSINGS/STRUCTURES |
| <input type="checkbox"/> FLOODPLAIN ALTERATION | <input type="checkbox"/> STORMWATER MANAGEMENT |
| <input type="checkbox"/> WETLAND PROTECTION | <input type="checkbox"/> APPROPRIATIONS |
| <input type="checkbox"/> DREDGING | <input type="checkbox"/> ILLICIT DISCHARGE |
| <input checked="" type="checkbox"/> SHORELINE/STREAMBANK STABILIZATION | |

6. Project purpose (Check all that apply):

- | | |
|---|--|
| <input type="checkbox"/> SINGLE FAMILY HOME | <input type="checkbox"/> MULTI FAMILY RESIDENTIAL (apartments) |
| <input checked="" type="checkbox"/> ROAD CONSTRUCTION | <input type="checkbox"/> COMMERCIAL or INSTITUTIONAL |
| <input type="checkbox"/> UTILITIES | <input type="checkbox"/> SUBDIVISIONS (include number of lots) |
| <input type="checkbox"/> DREDGING | <input type="checkbox"/> LANDSCAPING (pools, berms, etc.) |
| <input type="checkbox"/> SHORELINE/STREAMBANK STABILIZATION | <input type="checkbox"/> OTHER (DESCRIBE): |

7. NPDES/SDS General Stormwater Permit Number (if applicable): Not yet obtained

8. Waterbody receiving runoff from site: Minnehaha Creek

9. Project Timeline: Start Date: May 1, 2018 Completion Date: November 2019

Permits have been applied for: City County MN Pollution Control Agency DNR COE

Permits have been received: City County MN Pollution Control Agency DNR COE

By signing below, I hereby request a permit to authorize the activities described herein. I certify that I am familiar with MCWD Rules and that the proposed activity will be conducted in compliance with these Rules. I am familiar with the information contained in this application and, to the best of my knowledge and belief, all information is true, complete and accurate. I understand that proceeding with work before all required authorizations are obtained may be subject to federal, state and/or local administrative, civil and/or criminal penalties.

Signature of Each Property Owner

Date

11/9/2017



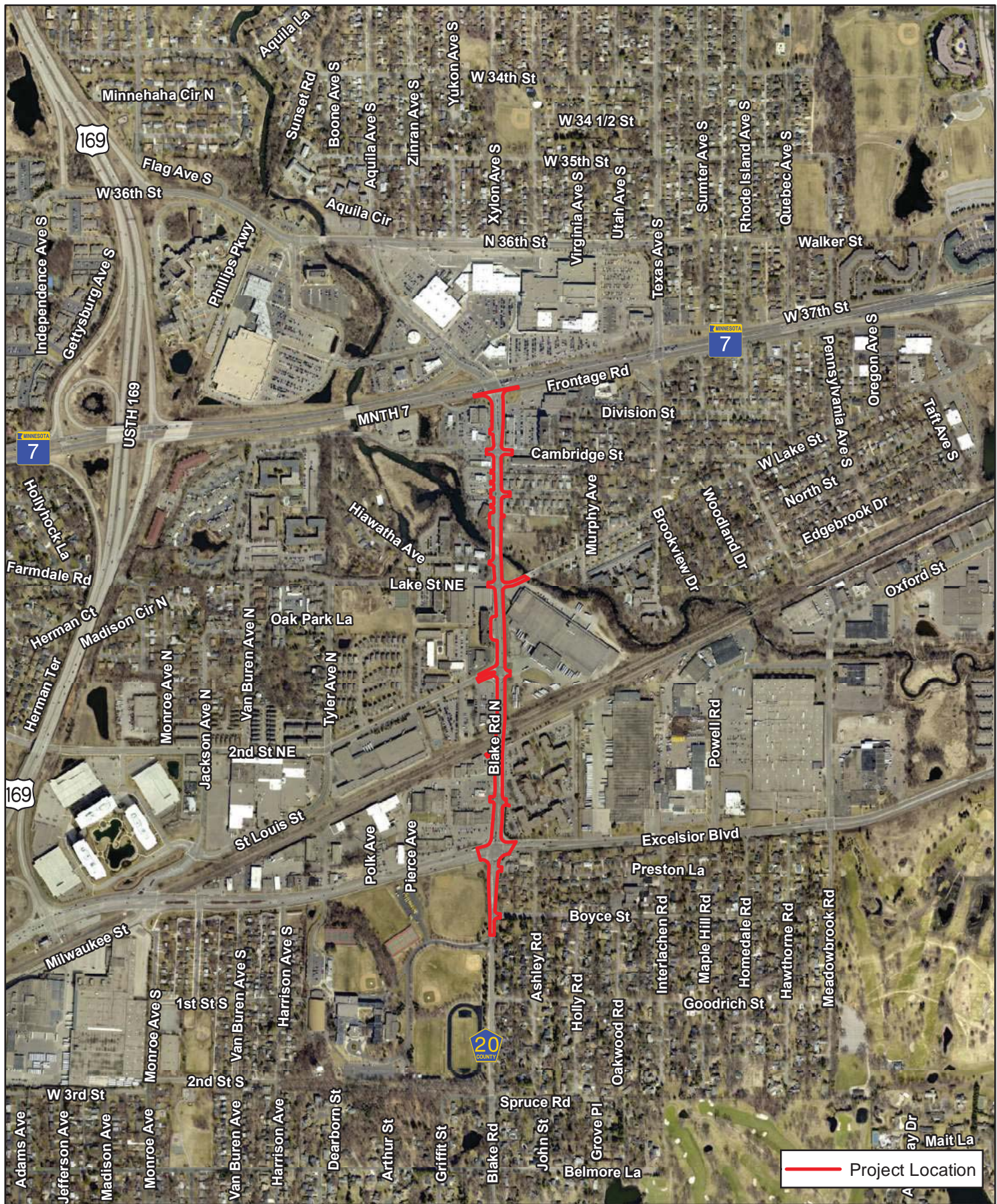


Figure 1 - Project Location

Blake Road Improvements
City of Hopkins







	Project Site
	Wetland Boundary
	Parcels

Figure 2A - Property Ownership
 Blake Road Improvements
 City of Hopkins

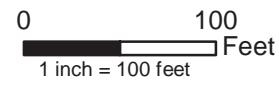
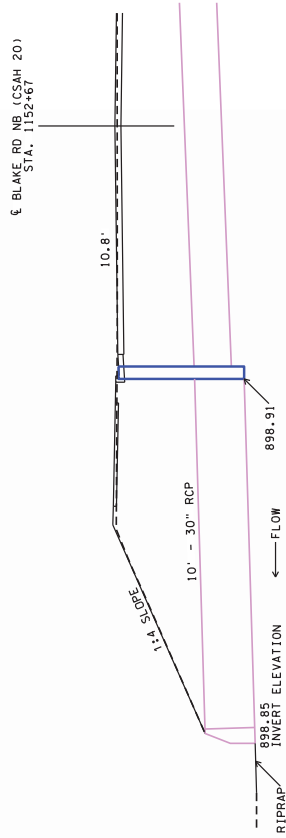
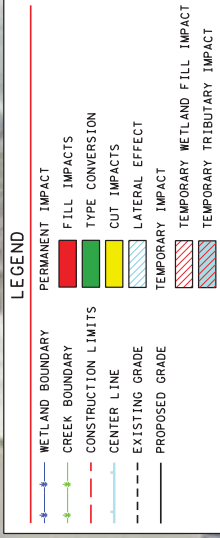
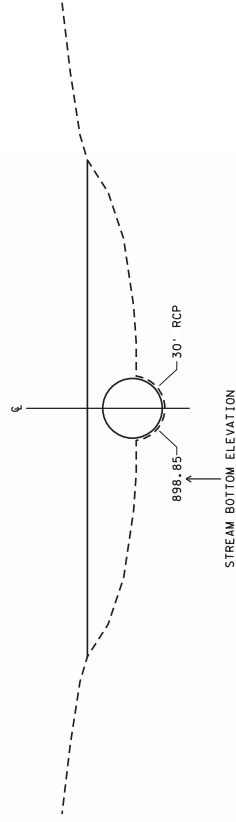


Figure 3a - Aquatic Resource Impacts

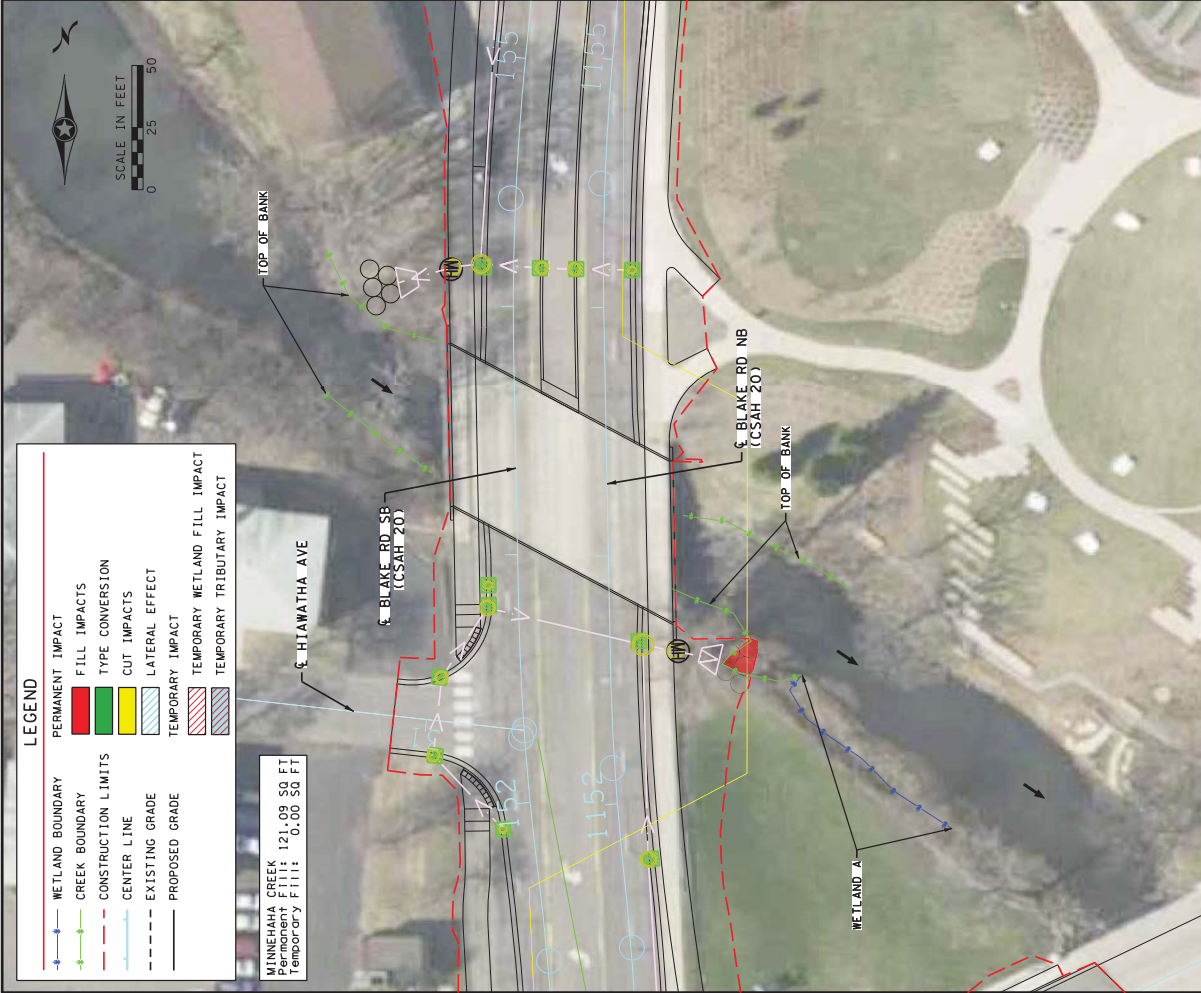
LONGITUDINAL CROSS SECTION



TRANSVERSE CROSS SECTION



MINNEHAHA CREEK
 Permanent Fill: 121.09 SQ FT
 Temporary Fill: 0.00 SQ FT



NO.	DATE	REV.	CHK.	BY	REVISIONS

775 North Avenue South, Suite 300
 Minneapolis, MN 55416
 (763)541-8800 | wsbeng.com



BLAKE ROAD (CSAH 20)
 Improvements
 City of Hopkins, Minnesota

CITY OF HOPKINS, MINNESOTA
 MINNEHAHA CREEK
 CULVERT EXTENSION
 S.A.P. 022-620-015, S.A.P. 132-021-018, S.A.P. 132-350-002, S.A.P. 132-365-001

SHEET 1 OF 1 SHEETS

Minnesota Wetland Conservation Act

Notice of Decision

Local Government Unit (LGU) Minnehaha Creek Watershed District	Address 15320 Minnetonka Blvd Minnetonka, MN 55345
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1. PROJECT INFORMATION

Applicant Name City of Hopkins	Project Name Blake Road Improvements	Date of Application 9/6/2016	Application Number W16-53
<input checked="" type="checkbox"/> Attach site locator map			

Type of Decision:

<input checked="" type="checkbox"/> Wetland Boundary or Type	<input type="checkbox"/> No-Loss	<input type="checkbox"/> Exemption	<input type="checkbox"/> Sequencing
<input type="checkbox"/> Replacement Plan	<input type="checkbox"/> Banking Plan		

Technical Evaluation Panel Findings and Recommendation (if any):

<input type="checkbox"/> Approve	<input type="checkbox"/> Approve with conditions	<input type="checkbox"/> Deny
Summary (or attach):		

2. LOCAL GOVERNMENT UNIT DECISION

Date of Decision: 10/04/2016		
<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Approved with conditions (include below)	<input type="checkbox"/> Denied

LGU Findings and Conclusions (attach additional sheets as necessary):

<p>The City of Hopkins has applied for wetland boundary & type confirmation for the wetlands located at Blake Road, from south of Blake School entrance to State Trunk Hwy 7 in the City of Hopkins, Hennepin County, Minnesota. Legal description: Section 19, Township 117N, Range 21 W. The boundary/type approval was requested September 6th, 2016.</p> <p>A wetland delineation was conducted by Roxy Franta of WSB & Associates on August 12th, 2016. A complete delineation report and WCA application were submitted to MCWD on September 6th, 2016. Two wetlands were delineated on site. Wetland A was identified as a Type 2, Fresh (Wet) Meadow. Wetland A is positioned adjacent to Minnehaha Creek, which is a DNR Public Watercourse, as wetland fringe. Wetland B was identified as a Type 1, Seasonally Flooded Basin.</p> <p>MCWD reviewed the boundaries in the field on October 3rd, 2016. MCWD was in agreement with the wetland boundaries and types identified on site.</p> <p>MCWD approves the wetland boundaries and types as delineated in the field and documented in the delineation report. This decision is valid for five years. A future project located on this property may require a permit from the MCWD.</p>

For Replacement Plans using credits from the State Wetland Bank:


Bank Account #	Bank Service Area	County	Credits Approved for Withdrawal (sq. ft. or nearest .01 acre)
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Replacement Plan Approval Conditions. In addition to any conditions specified by the LGU, the approval of a Wetland Replacement Plan is conditional upon the following:

- Financial Assurance:** For project-specific replacement that is not in-advance, a financial assurance specified by the LGU must be submitted to the LGU in accordance with MN Rule 8420.0522, Subp. 9 (List amount and type in LGU Findings).
- Deed Recording:** For project-specific replacement, evidence must be provided to the LGU that the BWSR "Declaration of Restrictions and Covenants" and "Consent to Replacement Wetland" forms have been filed with the county recorder's office in which the replacement wetland is located.
- Credit Withdrawal:** For replacement consisting of wetland bank credits, confirmation that BWSR has withdrawn the credits from the state wetland bank as specified in the approved replacement plan.

Wetlands may not be impacted until all applicable conditions have been met!

LGU Authorized Signature:

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 5 provides notice that a decision was made by the LGU under the Wetland Conservation Act as specified above. If additional details on the decision exist, they have been provided to the landowner and are available from the LGU upon request.		
Name Heidi Quinn	Title Permitting Technician	
Signature 	Date 10/4/2016	Phone Number and E-mail (952) 641-4504 hquinn@minnehahacreek.org

THIS DECISION ONLY APPLIES TO THE MINNESOTA WETLAND CONSERVATION ACT. Additional approvals or permits from local, state, and federal agencies may be required. Check with all appropriate authorities before commencing work in or near wetlands.

Applicants proceed at their own risk if work authorized by this decision is started before the time period for appeal (30 days) has expired. If this decision is reversed or revised under appeal, the applicant may be responsible for restoring or replacing all wetland impacts.

This decision is valid for three years from the date of decision unless a longer period is advised by the TEP and specified in this notice of decision.

3. APPEAL OF THIS DECISION

Pursuant to MN Rule 8420.0905, any appeal of this decision can only be commenced by mailing a petition for appeal, including applicable fee, within thirty (30) calendar days of the date of the mailing of this Notice to the following as indicated:

Check one:

<input checked="" type="checkbox"/> Appeal of an LGU staff decision. Send petition and \$0 fee (if applicable) to: Minnehaha Creek Watershed District 15320 Minnetonka Blvd Minnetonka, MN 55345	<input type="checkbox"/> Appeal of LGU governing body decision. Send petition and \$500 filing fee to: Executive Director Minnesota Board of Water and Soil Resources 520 Lafayette Road North St. Paul, MN 55155
--	---

4. LIST OF ADDRESSEES

<input checked="" type="checkbox"/>	SWCD TEP member: Stacey Lijewski – stacey.lijewski@hennepin.us
<input checked="" type="checkbox"/>	BWSR TEP member: Ben Meyer – ben.meyer@state.mn.us
<input type="checkbox"/>	LGU TEP member (if different than LGU Contact):
<input type="checkbox"/>	DNR TEP member: Kate Drewry – kate.drewry@state.mn.us , Jason Spiegel – jason.spiegel@state.mn.us
<input checked="" type="checkbox"/>	DNR Regional Office (if different than DNR TEP member): Becky Horton – becky.horton@state.mn.us
<input checked="" type="checkbox"/>	WD or WMO (if applicable): Mike Hayman – mhayman@minnehahacreek.org
<input checked="" type="checkbox"/>	Applicant (notice only) and Landowner (if different): Roxy Franta – rfranta@wsbeng.com
<input checked="" type="checkbox"/>	Members of the public who requested notice (notice only): Nate Stanley – nstanley@hopkinsmn.com
<input checked="" type="checkbox"/>	Corps of Engineers Project Manager (notice only): Melissa Jenny – melissa.m.jenny@usace.army.mil
<input type="checkbox"/>	BWSR Wetland Bank Coordinator (wetland bank plan applications only)

5. MAILING INFORMATION

➤ For a list of BWSR TEP representatives: www.bwsr.state.mn.us/aboutbwsr/workareas/WCA_areas.pdf

➤ For a list of DNR TEP representatives: www.bwsr.state.mn.us/wetlands/wca/DNR_TEP_contacts.pdf

➤ Department of Natural Resources Regional Offices:

NW Region:	NE Region:	Central Region:	Southern Region:
Reg. Env. Assess. Ecol. Div. Ecol. Resources 2115 Birchmont Beach Rd. NE Bemidji, MN 56601	Reg. Env. Assess. Ecol. Div. Ecol. Resources 1201 E. Hwy. 2 Grand Rapids, MN 55744	Reg. Env. Assess. Ecol. Div. Ecol. Resources 1200 Warner Road St. Paul, MN 55106	Reg. Env. Assess. Ecol. Div. Ecol. Resources 261 Hwy. 15 South New Ulm, MN 56073

For a map of DNR Administrative Regions, see: http://files.dnr.state.mn.us/aboutdnr/dnr_regions.pdf

➤ For a list of Corps of Project Managers: www.mvp.usace.army.mil/regulatory/default.asp?pageid=687
or send to:

US Army Corps of Engineers
St. Paul District, ATTN: OP-R
180 Fifth St. East, Suite 700
St. Paul, MN 55101-1678

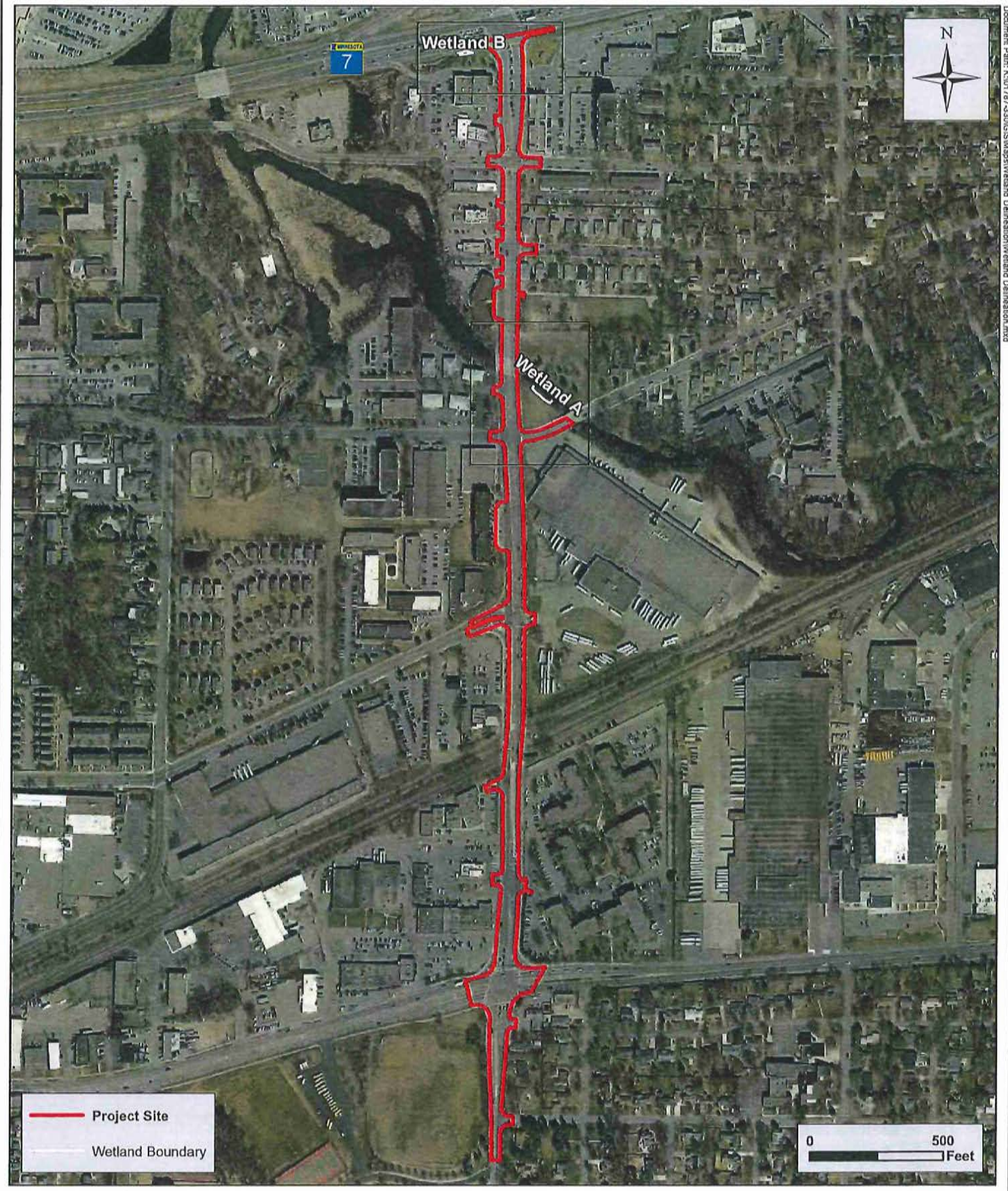
➤ For Wetland Bank Plan applications, also send a copy of the application to:

Minnesota Board of Water and Soil Resources
Wetland Bank Coordinator
520 Lafayette Road North
St. Paul, MN 55155

6. ATTACHMENTS

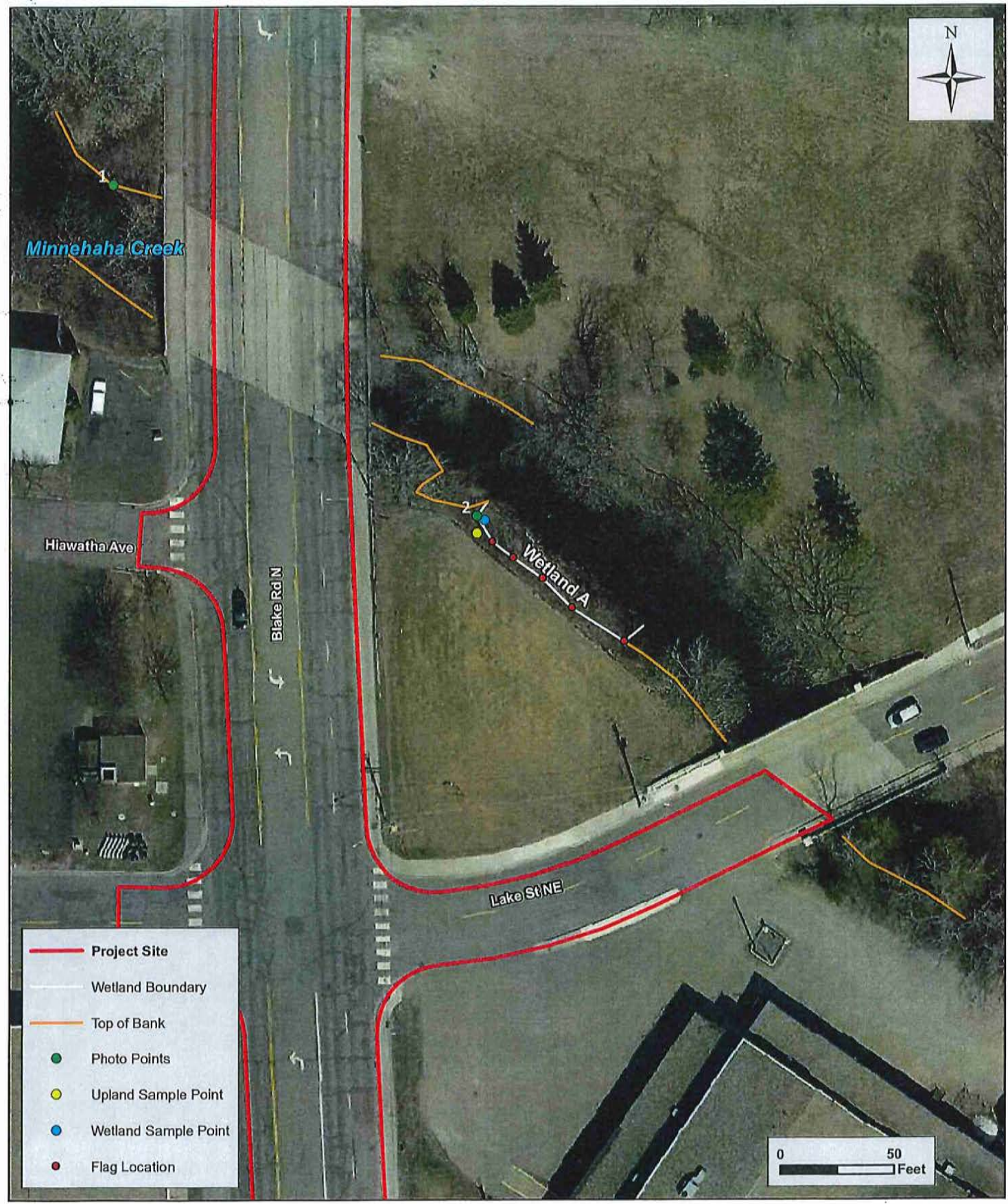
In addition to the site locator map, list any other attachments:

Approved wetland boundaries



**Figure 6a: Wetland Delineation
CSAH 20 (Blake Rd) Improvements
Hopkins, MN**



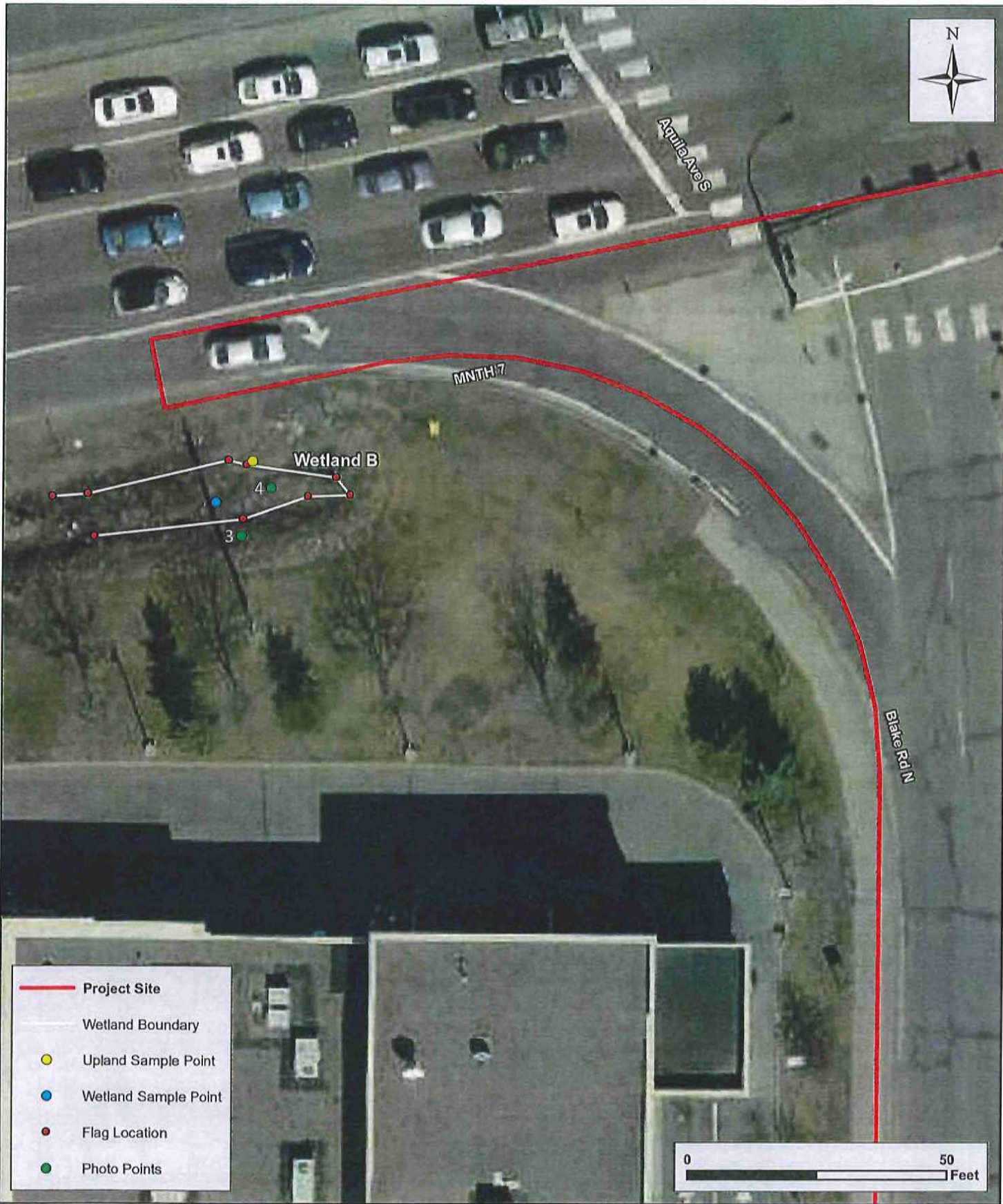


- Project Site
- Wetland Boundary
- Top of Bank
- Photo Points
- Upland Sample Point
- Wetland Sample Point
- Flag Location



**Figure 6b: Wetland A
CSAH 20 (Blake Rd) Improvements
Hopkins, MN**





- Project Site
- Wetland Boundary
- Upland Sample Point
- Wetland Sample Point
- Flag Location
- Photo Points



Figure 6c: Wetland B
CSAH 20 (Blake Rd) Improvements
Hopkins, MN



Minnesota Wetland Conservation Act

Notice of Decision

Local Government Unit (LGU) Minnesota Department of Transportation Office of Environmental Stewardship	Address 395 John Ireland Blvd Mailstop 620 St. Paul, MN 55155-1899
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1. PROJECT INFORMATION

Applicant Name City of Hopkins (Nate Stanley)	Project Name Blake Road Improvements	Date of Application: 11/28/17	Application No. 17-M05
<input checked="" type="checkbox"/> Attach site locator map.			

Type of Decision:

<input type="checkbox"/> Wetland Boundary or Type	<input type="checkbox"/> No-Loss	<input checked="" type="checkbox"/> Exemption	<input type="checkbox"/> Sequencing
<input type="checkbox"/> Replacement Plan			

Technical Evaluation Panel Findings and Recommendation (if any):

<input type="checkbox"/> Approve	<input type="checkbox"/> Approve with conditions	<input type="checkbox"/> Deny
A full TEP was not convened for this application due to the scope and scale of the proposed project.		

2. LOCAL GOVERNMENT UNIT DECISION

Date of Decision: 12/19/17		
<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Approved with conditions (include below)	<input type="checkbox"/> Denied

LGU Findings and Conclusions (attach additional sheets as necessary):

On 11/28/17, WSB & Associates submitted an exemption application on behalf of the City of Hopkins (Nate Stanley) for proposed wetland impacts in MnDOT's Highway 7 Right of Way (ROW) along Blake Road in the City of Hopkins, Hennepin County, Minnesota. The proposed wetland impacts are part of a larger city project to improve the roadway and utilities along Blake Road between Spruce Road and Highway 7.

The applicant proposed 57.79 sq. ft. of permanent fill and 71.41 sq. ft. of temporary fill to Wetland B, a Type 1 seasonally-flooded basin, as defined in the wetland delineation approved by Minnehaha Creek Watershed District on 10/4/16. The impacts are proposed in order to facilitate culvert replacement and riprap stabilization at the wetland. Fill is also proposed within Minnehaha Creek, which is outside the regulatory scope of WCA.

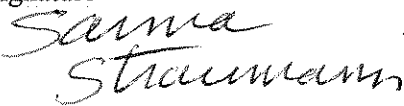
Based on the limited area of proposed wetland impact, the criteria of 8420.0420 Subp.8.A.(3)(b), and the submitted application, MnDOT has determined that the proposed project is eligible for a WCA De Minimis Exemption.

Replacement Plan Approval Conditions. In addition to any conditions specified by the LGU, the approval of a Wetland Replacement Plan is conditional upon the following:

- Financial Assurance:** For project-specific replacement that is not in-advance, a financial assurance specified by the LGU must be submitted to the LGU in accordance with MN Rule 8420.0522, Subp. 9.
- Credit Withdrawal:** For replacement consisting of wetland bank credits, confirmation that the credits will be withdrawn from the wetland bank as specified in the approved replacement plan.

Wetlands may not be impacted until all applicable conditions have been met!

LGU Authorized Signature:

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 5 provides notice that a decision was made by the LGU under the Wetland Conservation Act as specified above.		
Name Sarma Straumanis	Title Wetland Program Coordinator	
Signature 	Date 12/19/17	Phone Number and E-mail 651-366-3626 <u>sarma.straumanis@state.mn.us</u>

THIS DECISION ONLY APPLIES TO THE MINNESOTA WETLAND CONSERVATION ACT.

Additional approvals or permits from local, state, and federal agencies may be required. Check with all appropriate authorities before commencing work in or near wetlands.

Applicants proceed at their own risk if work authorized by this decision is started before the time period for appeal (30 days) has expired. If this decision is reversed or revised under appeal, the applicant may be responsible for restoring or replacing all wetland impacts.

This decision is valid for three years from the date of decision unless a longer period is advised by the TEP and specified in this notice of decision.

3. APPEAL OF THIS DECISION

Pursuant to MN Rule 8420.0905, any appeal of this decision can only be commenced by mailing a petition for appeal, within thirty (30) calendar days of the date of the mailing of this Notice to the:

Executive Director
Minnesota Board of Water and Soil Resources
520 Lafayette Road North
St. Paul, MN 55155

4. LIST OF ADDRESSEES

<input checked="" type="checkbox"/> SWCD TEP member: Stacey Lijewski (Hennepin County Environmental Services) – stacey.lijweski@hennepin.us
<input checked="" type="checkbox"/> BWSR TEP member: Ben Carlson – ben.carlson@state.mn.us
<input checked="" type="checkbox"/> Local LGU: Heidi Quinn (Minnehaha Creek Watershed District) – hquinn@minnehahacreek.org
<input checked="" type="checkbox"/> DNR TEP member: Becky Horton – becky.horton@state.mn.us
<input type="checkbox"/> DNR Regional Office (if different than DNR TEP member):
<input checked="" type="checkbox"/> Applicant (notice only) and Landowner (if different): Nate Stanley (City of Hopkins) – nstanley@hopkinsmn.com
<input type="checkbox"/> Members of the public who requested notice (notice only): Roxy Franta (WSB) – rfranta@wsbeng.com
<input checked="" type="checkbox"/> Corps of Engineers Project Manager (notice only): Ryan Malterud – ryan.m.malterud@usace.army.mil
<input checked="" type="checkbox"/> MnDOT District Contact (notice only): Beth Neuendorf – beth.neuendorf@state.mn.us, Katie Heinz – katherine.heinz@state.mn.us

5. ATTACHMENTS

In addition to the site locator map, list any other attachments:
<input checked="" type="checkbox"/> Joint application
<input type="checkbox"/>
<input type="checkbox"/>

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE

PROJECT LOCATION/DESCRIPTION

PROJECT/SITE NAME: BLAKE ROAD (CSAH 20) IMPROVEMENTS
 PROJECT NUMBERS: S.A.P. 027-620-015, S.A.P. 132-020-018, S.A.P. 132-350-350, S.A.P. 132-355-001,
 C.P. 2013-06, HENNEPIN COUNTY PROJ. NO. 1426, WSB 1787-330
 PROJECT LOCATION: STREET: BLAKE ROAD CITY: HOPKINS COUNTY: HENNEPIN
 STATE: MINNESOTA ZIP: 55343 LATITUDE/LONGITUDE: 44.9303/-93.3056

CONTACT INFORMATION/RESPONSIBLE PARTIES

THE CITY OF HOPKINS OWNS THE LAND, ADJACENT ROADS, AND EASEMENT AREAS ASSOCIATED WITH THE PROJECT. THE CITY OF HOPKINS IS THE OWNER PERMITTEE APPLYING FOR PERMIT COVERAGE AND WILL BE RESPONSIBLE FOR DEVELOPING THIS SWPPP AND THE LONG-TERM MAINTENANCE PLAN OF THE PERMANENT STORMWATER MANAGEMENT SYSTEM FOR THIS PROJECT (IF APPLICABLE). THE OWNER WILL ENSURE THAT THE DESCRIBED WORK IN THE SWPPP IS BEING COMPLETED BY THE OPERATOR PERMITTEE.

OWNER/PERMITTEE: CITY OF HOPKINS (NATE STANLEY, CITY ENGINEER)
 1010 1ST ST SOUTH
 HOPKINS, MN 55343
 952-548-6356/NSTANLEY@HOPKINSMN.COM

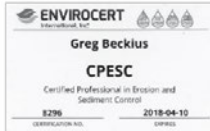
THE PRIMARY CONTRACTOR WILL ENTER INTO A CONTRACT WITH THE CITY OF HOPKINS TO COMPLETE THE REQUIRED WORK FOR THIS PROJECT. THE PRIMARY CONTRACTOR WILL BECOME (UNDER CONTRACT) THE OPERATOR CO-PERMITTEE ON THE NPDES PERMIT (THROUGH EXECUTION OF A NPDES PERMIT MODIFICATION FORM), AND THEREBY AGREE TO IMPLEMENT THIS SWPPP IN COOPERATION WITH THE OWNER. THE OPERATOR IS RESPONSIBLE FOR DEVELOPING A CHAIN OF RESPONSIBILITY PRIOR TO STARTING CONSTRUCTION (REFER TO SWPPP AMENDMENT SECTION). THE NPDES PERMIT MODIFICATION FORM SHALL BE SUBMITTED TO THE MPCA AFTER THE PROJECT IS AWARDED TO THE PRIMARY CONTRACTOR, PRIOR TO LETTING THE PROJECT.

THE OPERATOR WILL INSURE THAT INDIVIDUALS OVERSEEING OR IMPLEMENTING THE SWPPP HAVE BEEN PROPERLY TRAINED AND THAT CERTIFICATIONS WILL BE MADE AVAILABLE UPON REQUEST. THIS INCLUDES ANY SUB-CONTRACTORS THAT THE OPERATOR EMPLOYS UNDER SEPARATE CONTRACT. THE EROSION CONTROL SUPERVISOR SHALL HAVE AUTHORITY OVER ALL OPERATOR OPERATIONS WHICH INFLUENCE NPDES PERMIT COMPLIANCE INCLUDING OPERATIONS THAT INCREASES THE EROSION POTENTIAL ON THE PROJECT.

THE OPERATOR WILL IMPLEMENT AND MAINTAIN BMPs FOR THE DURATION OF CONSTRUCTION PROJECT. THE OPERATOR WILL COMPLETE THE REQUIRED SITE INSPECTIONS, AND IS RESPONSIBLE FOR NPDES PERMIT REQUIREMENTS PART II.B, II.C, III.B-F, IV, V, AND APPLICABLE CONSTRUCTION ACTIVITY REQUIREMENTS FOUND IN APPENDIX A, PART C TO REMAIN IN COMPLIANCE WITH NPDES PERMIT.

OPERATOR/PERMITTEE: (TO BE DETERMINED THROUGH TRANSFER OF NPDES-CSW PERMIT)

SWPPP DEVELOPER:
 WSB & ASSOCIATES, INC. (GREG BECKIUS)
 540 GATEWAY BLVD.
 BURNSVILLE, MN 55337
 952-737-4668/GBECKIUS@WSBENG.COM



WATER RESOURCE ENGINEER:
 WSB & ASSOCIATES, INC. (JACOB NEHWALL)
 701 KENIA AVE. SOUTH, SUITE 300
 MINNEAPOLIS, MN 55416
 763-231-4861/JNEHWALL@WSBENG.COM

APPLICABLE FEDERAL, TRIBAL, STATE OR LOCAL PROGRAMS: THE MORE STRINGENT OF LOCAL VS. STATE VS. FEDERAL RULES SHALL APPLY WHERE THEY CONFLICT. THE OPERATOR IS RESPONSIBLE TO COMPLY WITH ALL APPLICABLE PERMITS, MNDOT SPECIAL PROVISION, MNDOT SPEC BOOK (2016 EDITION), AND MNDOT SPECIFICATIONS 1717.

AGENCY CONTACTS	PERMIT	NAME	PHONE NUMBER/E-MAIL
MPCA (EMERGENCY)	N/A	STATE DUTY OFFICER	1-800-422-0799
MPCA	NPDES-CSW SC000XXXXX	AMY DELBECO	651-757-2446/AMY.DELBECO@STATE.MN.US
ACOE	SECTION 404	LEO GRABOWSKI	219-829-8402/LEO.A.GRABOWSKI@USACE.ARMY.MIL
DNR	FLOODPLAIN	KATE DRENNY	651-258-5753/KATE.DRENNY@STATE.MN.US
MCDW/LGU	EROSION CONTROL & STORMWATER MANAGEMENT	HEIDI QUINN	952-641-4504/HQUINN@MINNEHAHA.CREEK.ORG

PROJECT DESCRIPTION & SCHEDULE

THE PROJECT INCLUDES STREET RECONSTRUCTION AND IMPROVEMENTS TO BLAKE ROAD WITHIN HOPKINS, MINNESOTA. THE PROJECT INCLUDES SIDEWALK AND INTERSECTION IMPROVEMENTS.

TENTATIVE CONSTRUCTION SCHEDULE (OPERATOR SHOULD PROVIDE ESTIMATED CONSTRUCTION SCHEDULE TO THE ENGINEER)	
CONSTRUCTION ACTIVITIES:	ESTIMATED DATES OF SOIL DISTURBANCE ACTIVITIES:
TEMPORARY SEDIMENT CONTROL BMPs & REMOVALS	APRIL 2018
GRADING/TEMPORARY EROSION CONTROL BMPs	APRIL - JUNE 2018
FINAL STABILIZATION	JULY 2018

ESTIMATED SCHEDULE. CONTRACTOR TO SUBMIT ACCURATE SCHEDULE AS PART OF A SWPPP AMENDMENT

PRE-CONSTRUCTION IMPERVIOUS SURFACE AND DISTURBED AREA CALCULATIONS

TOTAL AREA TO BE DISTURBED = 12.10 ACRES
 IMPERVIOUS AREA: PRE-CONSTRUCTION = 9.49 ACRES/POST-CONSTRUCTION = 8.92 ACRES
 NET INCREASE OF IMPERVIOUS AREA = -0.57 ACRES

PERMANENT STORMWATER MANAGEMENT SYSTEMS

NPDES PERMANENT WATER QUALITY VOLUME CONTROL (PART III.D) IS NOT REQUIRED FOR THIS PROJECT AS THE NET INCREASE OF IMPERVIOUS SERVICES IS LESS THAN 1 ACRE.

LOCATION OF SWPPP COMPONENTS	TITLE	LOCATION
DESCRIPTION		
SWPPP NARRATIVE	SWPPP NARRATIVE	PLAN SET
SITE CONDITIONS	SWPPP NARRATIVE	PLAN SET
SITE MAP	SWPPP NARRATIVE	PLAN SET
CONSTRUCTION PHASING/STAGING, BUFFERS, & AREAS NOT TO BE DISTURBED	SWPPP NARRATIVE	PLAN SET
DIRECTION OF FLOW (PRE-/POST-CONSTRUCTION)	DRAINAGE PLAN	PLAN SET
IMPERVIOUS SURFACES	CONSTRUCTION PLAN & PROFILE	PLAN SET
TEMPORARY EROSION & SEDIMENT CONTROL BMPs/STEEP SLOPES (3:1), DNR FISH EXCLUSION	TEMPORARY EROSION AND SEDIMENT CONTROL PLAN, SWPPP NARRATIVE	PLAN SET
PERMANENT EROSION CONTROL BMPs	TURF ESTABLISHMENT PLAN, SWPPP NARRATIVE	PLAN SET
STORM SEWER	DRAINAGE PLAN	PLAN SET
URDING	URDING PLAN	PLAN SET
ESTIMATED BMP QUANTITIES	ESTIMATED QUANTITIES	PLAN SET
BMP DETAILS/SPECIFICATIONS	MISC. DETAILS, SWPPP NARRATIVE	PLAN SET
HYDROLOGIC/WATER QUALITY MODELING	N/A	

EXISTING SITE CONDITIONS, SOILS, & WATER RESOURCES

SOILS AND NATIVE TOPSOIL: NATIVE TOPSOIL WILL BE STRIPPED AND STOCKPILED FOR FINAL GRADING OPERATIONS, WHERE INDICATED IN THE CONSTRUCTION PLANS AND SPECIFICATIONS. METHODS AND EQUIPMENT TO MINIMIZE SOIL COMPACTION (IN PROPOSED INFILTRATION AREAS, DRIP LINE OF TREES TO BE PRESERVED, ETC.) SHALL BE DETERMINED BY THE OPERATOR'S SWPPP AMENDMENT. TRACKED VEHICLES ARE PREFERRED AND WHEELED VEHICLES ARE DISCOURAGED IN THESE AREAS.

USDA-NRCS MAPPED SOIL SURVEY UNIT NO., NAME, TEXTURE, SLOPE PERCENTAGE	APPROXIMATE PARTICLE SIZE RANGE (%)		
	SAND (0.05-2.00)	SILT (0.002-0.05)	CLAY (>0.002)
L28A - SUCKERCREEK FINE SANDY LOAM, 0-2% SLOPES, OCCASIONALLY FLOODED	50-70%	0-5%	15-20%
L52C - URBAN LAND-LESTER COMPLEX, 2 TO 18 PERCENT SLOPES	23-53%	27-50%	7-27%
L54A - URBAN LAND-DUNDAS COMPLEX, 0 TO 3 PERCENT SLOPES	23-53%	27-50%	7-27%
L55B - URBAN LAND-MALARDI COMPLEX, 0 TO 8 PERCENT SLOPES	50-70%	0-5%	15-20%
U1A - URBAN LAND-UDORTHEMTE, WET SUBSTRATUM, COMPLEX, 0-2% SLOPES	N/A	N/A	N/A
U4A - URBAN LAND-UDIPAMENTS (CUT AND FILL LAND) COMPLEX, 0-2% SLOPES	N/A	N/A	N/A
U6B - URBAN LAND-UDORTHEMTE (CUT AND FILL LAND) COMPLEX, 0-6% SLOPES	N/A	N/A	N/A

DESCRIPTION OF RECEIVING WATERS (LOCATED WITHIN 1-MILE): STORMWATER FROM THIS PROJECT WILL BE CONVEYED THROUGH THE CONSTRUCTED CURB/GUTTER SYSTEM AND ENTER THE EXISTING CITY STORM SEWER SYSTEM. FROM THE UTILITY SYSTEM, THE WATER WILL ULTIMATELY DISCHARGE TO MINNEHAHA CREEK AND A UNNAMED MOUND WETLAND ADJACENT TO MINNEHAHA CREEK. DISCHARGE POINTS AND STORM SEWER OUTLETS ARE IDENTIFIED ON THE SWPPP RESOURCE MAP ASSOCIATED WITH THIS NARRATIVE.

DESCRIPTION OF IMPAIRED WATERS OR WATER SUBJECT TO TMDLS: A SPECIAL AND IMPAIRED WATERS SEARCH WAS COMPLETED USING THE MPCA SEARCH ENGINE ON 05/23/2017. BASED ON THIS REVIEW, THE FOLLOWING IMPAIRED WATER (WITH CONSTRUCTION RELATED IMPAIRMENTS) IS LOCATED WITHIN ONE MILE OF, AND DOWNSTREAM OF ANY PROJECT DISCHARGE POINTS: MINNEHAHA CREEK IS IMPAIRED (CHLORIDE; FECAL COLIFORM; FISHES BIOASSESSMENTS; OXYGEN, DISSOLVED), THEREFORE APPENDIX A, PART C.1 & C.2 REQUIREMENTS APPLY TO THIS PROJECT.

POTENTIAL FOR SEDIMENT AND/OR OTHER POLLUTANT(S) DISCHARGING FROM THE PROJECT SITE

THE TEMPORARY EROSION AND SEDIMENT CONTROL BMPs IN THIS SWPPP HAVE BEEN DESIGNED TO MINIMIZE THE POTENTIAL OF SEDIMENTS DISCHARGING OFF-SITE FROM A 0.5 INCH RAINFALL WITHIN A 24 HOUR PERIOD. THE NOAA ATLAS 14 POINT PRECIPITATION FREQUENCY ESTIMATE FOR THE PROJECT LOCATION WAS REVIEWED AND USED FOR ANTICIPATED INSPECTION FREQUENCY, BMP DESIGN, AND ESTIMATING CONSTRUCTION ACTIVITIES IN THIS SWPPP. ATLAS 14 RESULTS DO NOT NECESSARILY REFLECT ANY DESIGN CRITERIA IN THE PERMANENT STORMWATER MANAGEMENT SYSTEM.

ROUTINE INSPECTION AND BMP MAINTENANCE BY THE OPERATOR IS CRUCIAL IN ENSURING THE FUNCTIONALITY OF EACH BMP. STEEP SLOPES AND OTHER ENVIRONMENTALLY SENSITIVE AREAS THAT ARE AT A HIGHER RISK OF SEDIMENTATION ARE DEFINED IN THE SWPPP (IF APPLICABLE).

CONSTRUCTION PHASING/STAGING, BUFFERS, & AREAS NOT TO BE DISTURBED

THE PRESERVED AREAS OF EXISTING VEGETATION WILL BE IDENTIFIED ON THE PLAN SHEETS AS "DO NOT DISTURB AREA". THE OPERATOR IS RESPONSIBLE FOR PRESERVING A 50 FOOT NATURAL BUFFER OR (IF INFEASIBLE) PROVIDE REDUNDANT SEDIMENT CONTROL BMPs, WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEET AND RECEIVES DRAINAGE FROM THE PROJECT'S GRADING LIMITS. THIS REQUIREMENT DOES NOT APPLY TO ADJACENT ROAD SIDE DITCHES, JUDICIAL/COUNTY DITCHES, STORMWATER CONVEYANCES, STORM DRAIN INLETS, OR SEDIMENT BASINS.

THE PROJECT WILL BE CONSTRUCTED IN A SINGLE LANE PHASE. WORK WILL BE SCHEDULED TO OCCUR ON AN EAST/WEST & WEST/EAST BASIS. THE SCHEDULE FOR INSTALLING TEMPORARY BMPs SHALL BE INCORPORATED INTO THE OPERATOR'S WEEKLY SCHEDULE FOR EACH CONSTRUCTION STAGE AND PRESENTED TO THE OWNER'S REPRESENTATIVE (PER MNDOT SPEC 1717.D).

ENVIRONMENTALLY SENSITIVE AREAS

STEEP SLOPES: THERE ARE MINOR STEEP SLOPES (3:1 AND STEEPER) ARE LOCATED ALONG THE PROJECT CORRIDOR. THE MAIN ALIGNMENT CONTAINS GENERALLY GENTLE SLOPES; THE STEEP SLOPES ARE LOCATED ALONG THE BANKS OF MINNEHAHA CREEK NEAR THE EXISTING BRIDGE, AROUND STA. 152+50. BMPs WILL BE INSTALLED TO ADDRESS THE STEEP SLOPES.

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NO.	DATE	BY	CHK	REVISIONS

Design By: MAN
 Plan By: MAN
 Checked By: NEH
 Approved By: NEH
 I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY OR UNDER MY DIRECT SUPERVISION AND THAT I AM A LEGALLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 CERTIFIED BY: [Signature] MICHAEL E. HENTGES, PE
 LICENSED PROFESSIONAL ENGINEER
 DATE: 12/28/2017 L.L.C. NO: 44620

701 Xenia Avenue South, Suite 300
 Minneapolis, MN 55416
 (763)641-4800 | wsbeng.com

BLAKE ROAD (CSAH 20)
 Improvements
 City of Hopkins, Minnesota

CITY OF HOPKINS, MINNESOTA
 STORM WATER POLLUTION PREVENTION PLAN
 S.P. 2706-242 (TH.7), S.A.P. 027-620-015, S.A.P. 132-020-018, S.A.P. 132-355-001

SHEET
 184
 OF
 313
 SHEETS

CONTAMINATED PROPERTIES: THE MPCA'S "WHAT'S IN MY NEIGHBORHOOD" DATABASE WAS REVIEWED ON 8/19/2016. BASED ON THE DATABASES REVIEWED, A LIMITED PHASE I ESA HAS IDENTIFIED 9 HIGH RISK SITES, 12 MEDIUM RISK SITES, AND 11 LOW RISK SITES AT THE PROJECT CORRIDOR. SITES THAT ARE A LOW POTENTIAL FOR SUBSURFACE CONTAMINATION DO NOT APPEAR TO WARRANT FURTHER INVESTIGATION AT THIS TIME. ADDITIONAL INFORMATION CAN BE FOUND IN THE PROJECT LIMITED PHASE I ESA. A LIMITED PHASE II ESA WAS RECOMMENDED FOR THE HIGH AND MEDIUM RISK SITES TO DETERMINE IF CONTAMINATION IS PRESENT WITHIN THE PROPOSED ALIGNMENT. CONTRACTOR TO STOP WORK IMMEDIATELY IF CONTAMINATED MATERIAL IS FOUND FOR FURTHER INVESTIGATION; CONTAMINATED MATERIAL CONSISTS OF, BUT NOT LIMITED TO: ODOOR, DISCOLORATION, SHEEN, DEBRIS.

DRINKING WATER SUPPLY MANAGEMENT AREAS: A REVIEW OF WELLS LISTED IN THE MDH MWI WAS CONDUCTED. THERE ARE 2 WELLS LISTED ADJACENT TO THE PROJECT SITE AND WILL BE CALLED OUT ON THE PLAN SHEETS. NO FUELING OR MAINTENANCE ACTIVITIES ARE TO OCCUR IN THE VICINITY OF THESE WELL LOCATIONS.

STORMWATER POLLUTION MITIGATION MEASURES (AS IDENTIFIED FROM ENVIRONMENTAL REVIEW): NO FORMAL ENVIRONMENTAL REVIEW WAS REQUIRED FOR THIS PROJECT; THEREFORE, NO ADDITIONAL STORMWATER RELATED MITIGATION MEASURES APPLY.

KARST AREAS: THERE ARE NO KNOWN KARST AREAS WITHIN OR ADJACENT TO THE PROJECT LIMITS.

ENVIRONMENTALLY SENSITIVE AREAS: AREAS OF HIGH ENVIRONMENTAL RISKS ARE KNOWN TO BE LOCATED IMMEDIATELY ADJACENT TO THE PROJECT LIMITS, AS IDENTIFIED IN THE CONSTRUCTION PLAN SET. THESE AREAS SHALL HAVE PROPER BMPs IN PLACE AT ALL TIMES WHEN WORKING IN THE VICINITY. ADDITIONAL BMPs OR PLANS MAY BE REQUIRED BY THE PROJECT ENGINEER. CONTRACTOR TO SUBMIT SITE MANAGEMENT PLAN FOR BRIDGE WORK OVER MINNEHAHA CREEK ADDRESSING CONSTRUCTABILITY AND BMPs IN PLACE.

FLOOD CONTINGENCY PLAN: PROJECT ACTIVITIES MAY OCCUR WITHIN THE 100-YEAR FLOODPLAIN, THEREFORE, THE PROJECT ENGINEER (AT THEIR DISCRETION) WILL REQUIRE A PREVENTATIVE FLOOD CONTINGENCY PLAN FOR SPECIFIC PROJECT ACTIVITIES AND AREAS IF SEASONAL PRECIPITATION POSSES A POTENTIAL RISK OF FLOODING WORK AREAS WITHIN THE PROJECT LIMITS. THIS PLAN SHALL BE SUBMITTED BY THE OPERATOR TO THE PROJECT ENGINEER FOR APPROVAL A MINIMUM OF 72 HOURS PRIOR TO THE SCHEDULED WORK AND/OR DURING ACTIVE WORK WITHIN THE FLOODPLAIN. NO WORK WITHIN THE FLOODPLAIN CAN COMMENCE UNTIL WRITTEN APPROVAL/NOTICE TO PROCEED FROM THE PROJECT ENGINEER IS RECEIVED. THE AREA OF CONCERN IS NEAR MINNEHAHA CREEK AND WITH THE FLOOD ELEVATION AT 301.

FISH EXCLUSION DATES: IF BRIDGE WORK OCCURS, OPERATOR IS PROHIBITED FROM CONDUCTING IN-STREAM WORK DURING THE FISH SPawning AND MIGRATION DATES OF MARCH 15 TO JUNE 15 FOR NON-TROUT WATERS. IF WORK MUST BE CONDUCTING DURING THIS TIMEFRAME, CONTRACTOR SHALL OBTAIN APPROPRIATE MNDNR PERMIT AND CONTACT THE LOCAL DNR FISHERIES MANAGER FOR WRITTEN APPROVAL PRIOR TO CONDUCTING THE IN-STREAM WORK.

AQUATIC INVASIVE SPECIES: ALL IN-STREAM AND Dewatering EQUIPMENT SHALL BE DECONTAMINATED OF ALL AQUATIC PLANTS AND PROHIBITED INVASIVE SPECIES PRIOR TO USING WITHIN SURFACE WATERS ON-SITE AND TRANSPORTING OFF-SITE. ALL DECONTAMINATION ACTIVITIES SHALL MEET THE CHAPTER 1 STANDARDS OF THE MINNESOTA DNR'S BEST PRACTICES MANUAL FOR MEETING DNR GENERAL PUBLIC WATERS WORK PERMIT GF 2004-0001.

WETLANDS: THERE ARE NO WETLAND IMPACTS PROPOSED WITH THIS PROJECT. THERE ARE TWO NON-NWI DELINEATED WETLANDS ADJACENT TO THE PROJECT THAT WILL BE PROTECTED TO THE MAXIMUM EXTENT PRACTICABLE.

INSPECTION, SWPPP AMENDMENTS, RECORD KEEPING, & TRAINING

1. THE SWPPP CHAIN OF RESPONSIBILITY MUST BE AMENDED BY THE OPERATOR WHEN THE IDENTITY OF RESPONSIBLE SITE OPERATORS (EROSION CONTROL SUPERVISOR, SUB-CONTRACTORS, ETC.) ARE KNOWN.
2. THE OPERATOR MUST INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. THE OPERATOR SHALL PROVIDE A RAINFALL GAUGE ON-SITE, WITHIN ONE MILE OF THE SITE, OR SOURCE OF THE WEATHER REPORTING SYSTEM THAT USES SITE SPECIFIC RAINFALL DATA FROM RADAR SUBMARINES. THE LOCATION AND SOURCE OF THE RAINFALL GAUGE OR REPORTING SYSTEM MUST BE DOCUMENTED IN THE FIRST SWPPP INSPECTION REPORT. THE INSPECTION FREQUENCY MAY BE REDUCED TO ONCE PER MONTH, IF SITE CONDITIONS MEET PART IV.E.3 OF THE NPDES PERMIT. ALL INSPECTIONS AND MAINTENANCE CONDUCTED MUST BE RECORDED IN WRITING BY THE OPERATOR AND RETAINED WITH THE SWPPP. RECORDS OF EACH INSPECTION AND MAINTENANCE ACTIVITY SHALL INCLUDE:
 - A. DATE, TIME, AND NAME OF PERSON(S) CONDUCTING INSPECTIONS;
 - B. FINDINGS OF INSPECTIONS, INCLUDING RECOMMENDATIONS FOR CORRECTIVE ACTIONS;
 - C. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES); INCLUDING DOCUMENTATION/PHOTOS OF IMPLEMENTED BMPs INTENDED TO CORRECT A PROBLEM BUT FAILED.
 - D. DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCHES) IN 24 HOURS;
 - E. DOCUMENTATION OF CHANGES MADE TO THE SWPPP.
3. SWPPP AMENDMENTS AND SITE PLANS WILL BE PREPARED BY THE OPERATOR AND SUBMITTED TO THE OWNER FOR REVIEW AND WRITTEN APPROVAL BY THE PROJECT OWNER (OR DESIGNATED REPRESENTATIVE). ALL OWNER ACCEPTED AND DENIED SWPPP AMENDMENTS AND SITE PLANS MUST BE RECORDED IN WRITING RETAINED WITH THE SWPPP.
4. THE SWPPP SHALL BE AMENDED TO INCLUDE ADDITIONAL OR MODIFIED BMPs, DESIGNED TO CORRECT IDENTIFIED PROBLEMS OR ADDRESS SITUATIONS (UNDER PART III.B OF THE NPDES PERMIT), PRIOR TO CONDUCTING SPECIFIC STAGES/PHASES OF THE PROJECT, AS REQUIRED BY THE OWNER AND DEFINED IN THIS PROJECT SWPPP.
5. THE SWPPP (ORIGINAL OR COPIES), ALL CHANGES TO THE SWPPP, PROJECT MANUAL, AND INSPECTIONS/MAINTENANCE RECORDS MUST BE KEPT AT THE SITE DURING CONSTRUCTION BY THE OPERATOR WHO HAS OPERATIONAL CONTROL OF THAT PORTION OF THE SITE. THE SWPPP CAN BE KEPT IN THE FIELD OFFICE OR ON-SITE VEHICLE DURING NORMAL WORKING HOURS.
6. THE OPERATOR MUST ASSIGN A TRAINED INDIVIDUAL(S) (PURSUANT TO PARTS III.A.3 & III.F) TO OVERSEE THE IMPLEMENTATION, MAINTENANCE, AND REPAIR OF BMPs. THIS INDIVIDUAL(S) SHALL ALSO PERFORM INSPECTIONS, REVISE/AMEND THE SWPPP (DOCUMENT IN SWPPP AS NECESSARY), AND BE AVAILABLE FOR AN ONSITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY THE PERMITTED OWNER (OR ITS DESIGNEE), LOCAL GOVERNMENT UNITS, OR MPCA.

POLLUTION PREVENTION MANAGEMENT MEASURES

POTENTIAL SOURCES OF POLLUTANTS FROM CONSTRUCTION ACTIVITIES INCLUDE:

- SEDIMENT AND FUGITIVE DUST GENERATED FROM CLEARING AND GRUBBING, IMPORT/EXPORT OPERATIONS, REMOVALS/COMPACTION, MASS/FINE GRADING, EXCAVATIONS, TRENCHING, TOPSOIL STRIPING STOCKPILING, WET/DRY PAVEMENT CUTTING, STREET CONSTRUCTION.

- BASIC/ACIDIC PH LEVELS FROM CURB AND GUTTER, MANHOLE STRUCTURES, SIDEWALKS, DRIVEWAY APRONS, FOUNDATIONS, BRIDGE ABUTMENTS, WET/DRY PAVEMENT CUTTING, MASONRY WASHOUT/CLEANOUT.
- EXCESS NUTRIENTS FROM LANDSCAPING INSTALLATIONS, SOIL ADDITIVES, FERTILIZATION, MULCHING.
- HYDROCARBONS FROM STREET CONSTRUCTION, DEMOLITION/REMOVALS, WET/DRY PAVEMENT CUTTING.

OPERATOR WILL COMPLY WITH ALL OF THE POLLUTION PREVENTION AND MANAGEMENT MEASURES IDENTIFIED IN THE NPDES-CSW PERMIT, PART IV.F.1-4. OPERATOR WILL SUBMIT A SPILL PREVENTION AND RESPONSE PLAN (SPRP) TO THE ENGINEER PRIOR TO ANY CONSTRUCTION ACTIVITY. STORAGE AND DISPOSAL OF CONSTRUCTION AND HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH MPCA REGULATIONS.

CONSTRUCTION ACTIVITY REQUIREMENTS (PART IV.): EROSION CONTROL, PROCEDURES, & MAINTENANCE STANDARDS

THE OPERATOR IS RESPONSIBLE FOR THE INSTALLATION, OPERATION, AND CONTINUED MAINTENANCE OF ALL TEMPORARY AND PERMANENT WATER QUALITY MANAGEMENT BMPs, AS WELL AS ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPs, FOR THE DURATION OF THE CONSTRUCTION WORK AT THE SITE, UNTIL FINAL STABILIZATION IS ACHIEVED. ALL BMPs MUST BE ADEQUATELY LOCATED, DESIGNED, INSTALLED, AND MAINTAINED TO PREVENT EROSION FROM A MINIMUM (.5 INCH TOTAL RAINFALL EVENT WITHIN 24 HOURS.

ALL NONFUNCTIONAL BMPs MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL BMPs BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS UNLESS ANOTHER TIME FRAME IS SPECIFIED IN THE SWPPP. ALL ERODED MATERIAL THAT LEAVES THE SITE SHALL BE COLLECTED BY THE OPERATOR AND RETURNED TO THE SITE AT THE OPERATOR'S EXPENSE AND INCIDENTAL TO THE PROJECT COST.

TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION WHENEVER ANY CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 7 CALENDAR DAYS. ALL EXPOSED SOIL AREAS SHALL BE STABILIZED WITHIN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. INITIATED STABILIZATION IS DEFINED AS COMPLETING ONE (OR MORE) OF THE FOLLOWING: SOIL PREPARATION FOR VEGETATION, MULCHING (OR OTHER TEMPORARY NON-VEGETATIVE BMP), SEEDING/PLANTING, OR SCHEDULING STABILIZATION MEASURES TO BE FULLY INSTALLED AND COMPLETED WITHIN THE 7 DAY TIMEFRAME.

EXPOSED SOILS THAT ARE WITHIN 200 FEET OF MINNEHAHA CREEK DURING THE FISH SPANNING PERIOD MUST BE STABILIZED WITHIN 24 HOURS, NEAR STA. 1125+00. TEMPORARY STOCKPILES WITHOUT SIGNIFICANT SILT, CLAY, OR ORGANIC COMPONENTS (E.G., CLEAN AGGREGATE STOCKPILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES) AND THE CONSTRUCTED BASE COMPONENTS OF ROADS, PARKING LOTS AND SIMILAR SURFACES ARE EXEMPT FROM THIS REQUIREMENT.

TEMPORARY & PERMANENT EROSION CONTROL BMPs

SEED MIX/SOD: MNDOT SEED MIX WITH APPROPRIATE MNDOT FERTILIZER AND/OR SOD WILL BE USED AS PERMANENT COVER FOR ALL EXPOSED GROUND AREAS PER MANUFACTURERS SPECIFICATIONS.

EROSION CONTROL BLANKET: EROSION CONTROL BLANKETS (ECBS) ARE A SOIL STABILIZATION (EROSION CONTROL) BMP, INTENDED TO PROTECT DISTURBED SOIL SURFACES FROM RAINDROP IMPACT EROSION. ECBS ARE CARPET-LIKE MATS, INSTALLED OVER AND ANCHORED TO THE PROPERLY PREPARED SOIL SURFACES. PROPERLY SELECTED AND INSTALLED, ECBS CAN MIMIC THE BENEFICIAL EFFECTS OF VEGETATIVE COVER THEREBY REDUCING EROSION RATES BY OVER 90%. ECBS ALSO PROTECT SEEDS AND PROVIDE A BENEFICIAL ENVIRONMENT FOR VEGETATION TO BECOME ESTABLISHED.

HYDRO-MULCH TYPE 3884.B.2: HYDROMULCHING IS A SOIL STABILIZATION (EROSION CONTROL) TECHNIQUE FOR APPLYING FIBER MULCH TO THE EXPOSED AND DISTURBED SOIL SURFACE. THE FIBER IS APPLIED HYDRAULICALLY, IN A SLURRY, PRODUCED BY MIXING FIBER, WATER AND A BINDING AGENT TOGETHER IN A MECHANICAL HYDROSEEDER. WOOD FIBER IS WIDELY USED BUT OTHER FIBERS CAN INCLUDE PAPER, STRAW, COIR, CORN, ETC. THE EFFECTIVENESS OF HYDROMULCHING IS DEPENDENT ON:

- PROPER SOIL PREPARATION
- APPLICATION RATES (DEPENDENT ON THE MANUFACTURERS RECOMMENDATIONS)
- THE TYPE OF FIBERS USED
- THE TYPE OF BOND AGENT(S) ADDED

TEMPORARY WINTER COVER: AREAS OF EXPOSED SOILS THAT ARE NOT COMPLETED BEFORE THE WINTER WILL BE STABILIZED WITH TYPE #3 (CERTIFIED AS WEE FEE) ADJACENT TO WETLAND OR STORMWATER PONDS. ALL OTHER DISTURBED AREAS SHALL BE STABILIZED WITH TYPE #1 MULCH, UNLESS ALTERNATIVE MORE PROTECTIVE BMPs ARE SPECIFIC WITHIN THE SWPPP. ALL EXPOSED SOILS SHALL BE STABILIZED BEFORE CONSTRUCTION IS COMPLETED FOR THE SEASON.

STORM SEWER OUTLETS: PIPE OUTLETS MUST HAVE TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS AFTER HYDRAULIC CONNECTION TO A RECEIVING SURFACE WATER.

CONSTRUCTION ACTIVITY REQUIREMENTS (PART IV.): SEDIMENT CONTROL, PROCEDURES, & MAINTENANCE STANDARDS

PERIMETER CONTROL BMPs SHALL BE INSTALLED ON ALL DOWN GRADIENT PERIMETERS AND UPGRADE OF ANY BUFFER AREAS, PRIOR TO INITIATING UPGRADE LAND DISTURBANCE ACTIVITIES. UPLAND PERIMETER CONTROLS BMPs SHALL BE PLACED AS CLOSE AS POSSIBLE TO FOLLOW A SINGLE CONTOUR ELEVATION. ALL SILT FENCES MUST BE REPAIRED, REPLACED, OR MAINTAINED WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/2 OF THE HEIGHT OF THE FENCE. ALL REPAIRS MUST BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS. FLOATING SILT CURTAIN SHALL BE INSTALLED AS CLOSE TO THE SHORELINE AS POSSIBLE FOR SHORELAND/IN-WATER SHORT-TERM CONSTRUCTION ACTIVITIES. AFTER THE SHORT-TERM ACTIVITY IS COMPLETE, AN UPLAND PERIMETER CONTROL MUST BE INSTALLED IF EXPOSED SOILS CONTINUE TO DRAIN TO THE SURFACE WATER.

SURFACE WATERS INCLUDING OFF-SITE AND DOWNSTREAM DRAINAGE DITCHES, CATCH BASINS, AND CONVEYANCE SYSTEMS, MUST BE INSPECTED FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION. THE REMOVAL AND STABILIZATION OF EXPOSED SOILS MUST TAKE PLACE WITHIN SEVEN (7) DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS. IF PRECLUDED, REMOVAL AND STABILIZATION MUST TAKE PLACE WITHIN SEVEN (7) CALENDAR DAYS OF OBTAINING ACCESS. THE PERMITTEE ARE RESPONSIBLE FOR CONTACTING ALL LOCAL, REGIONAL, STATE, AND FEDERAL AGENCIES AND RECEIVING ANY APPLICABLE PERMITS, PRIOR TO CONDUCTING ANY WORK.

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Design By: MAN
 Plan By: MAN
 Checked By: NEH
 Approved By: NEH

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY OR UNDER THE CLOSE SUPERVISION AND UNDER MY SEAL AS A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

CERTIFIED BY: 
 LICENSED PROFESSIONAL ENGINEER NICHOLAS E. VENTRESCA, PE
 DATE: 12/28/2017 LIC. NO: 44620



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BLAKE ROAD (CSAH 20)
 Improvements
 City of Hopkins, Minnesota

CITY OF HOPKINS, MINNESOTA

STORM WATER POLLUTION PREVENTION PLAN
 S.P. 2708-242 (TH.7), S.A.P. 027-620-015, S.A.P. 132-020-018, S.A.P. 132-355-001

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IF THE DOWN GRADIENT TREATMENT SYSTEM IS OVERLOADED, ADDITIONAL UP GRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPs MUST BE INSTALLED TO ELIMINATE THE OVERLOADING, AND THE SWPPP MUST BE AMENDED TO IDENTIFY THESE ADDITIONAL PRACTICES.

TEMPORARY & PERMANENT SEDIMENT CONTROL BMPs

SEDIMENT CONTROL LOGS: BIOROLLS WILL BE STAKED PLACED IN ACCORDANCE TO THE PLAN SHEETS WHERE THE SITE SLOPES OFF OF THE PROJECT LOCATION AS WELL AS AROUND TEMPORARY STOCKPILES. BIOROLLS WILL BE FILLED WITH A COMPOST MATERIAL AND CLEANED OUT OR REPLACED WHEN THE SEDIMENT REACHES 1/2 OF THE HEIGHT OF THE ROLL.

MACHINE SLICED SILT FENCE: A SILT FENCE IS A TEMPORARY SEDIMENT BARRIER CONSISTING OF FILTER FABRIC ENTRENCHED INTO THE SOIL AND ATTACHED TO SUPPORTING POSTS. SILT FENCE IS INTENDED TO BE INSTALLED WHERE SEDIMENT-LADEN WATER CAN FLOW, THUS ALLOWING THE SEDIMENT TO FALL OUT OF SUSPENSION AND SEPARATE FROM THE RUNOFF. SILT FENCE INSTALLED WITH A TRENCHER OR BY SLICING IS THE MOST EFFECTIVE INSTALLATION METHOD TO ENSURE AGAINST COMMON SILT FENCE FAILURES. THE BMP WILL BE CLEANED OUT OR REPLACED WHEN THE SEDIMENT REACHES 1/2 THE HEIGHT OF THE FENCE.

FLOTATION SILT CURTAIN: FLOTATION SILT CURTAIN WILL BE IN PLACE WHERE PROJECT ACTIVITIES ARE LOCATED WITHIN OR NEAR A SURFACE WATER/WETLAND. THE CURTAIN WILL BE LOCATED AS TIGHT TO THE SHORELINE AS POSSIBLE AND NOT TO EXCEED 1/4 THE STREAM WIDTH. DOWN GRADIENT PERIMETER CONTROL MUST STILL BE INSTALLED AS WELL AS AN ADDITIONAL REDUNDANT BMP WHEN WORK IS WITHIN 50 FEET OF THE SURFACE WATER.

TEMPORARY STOCKPILES: ALL STOCKPILES MUST HAVE SILT FENCE OR EQUIVALENT PERIMETER SEDIMENT CONTROLS IMPLEMENTED AND MAINTAINED AT ALL TIMES. PILES CANNOT BE PLACED IN BUFFER AREAS OR SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURBS AND GUTTER SYSTEMS, OR CONDUITS AND DITCHES UNLESS THERE IS A BYPASS IN PLACE TO PREVENT STORMWATER RUN-ON INTO THE STOCKPILE.

CONSTRUCTION SITE ENTRANCE/VEHICLE TRACKING: OPERATOR MUST MINIMIZE SEDIMENT FROM LEAVING THE CONSTRUCTION SITE (OR ONTO STREETS WITHIN THE SITE) BY IMPLEMENTING BMPs SUCH AS ROCK PADS, SLASH MULCH, CONCRETE OR STEEL WASH RACKS, OR EQUIVALENT SYSTEMS. STREET SWEEPING MUST BE USED DAILY DURING CONSTRUCTION OPERATIONS IF SUCH BMPs ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO THE STREET. TRACKED SEDIMENT MUST BE REMOVED FROM ALL PAVED SURFACES (ON AND OFF-SITE) WITHIN 24 HOURS OF DISCOVERY, OR SOONER AS DIRECTED BY THE PROJECT OWNER. MULTIPLE STREET SWEEPINGS AT THE OPERATOR'S EXPENSE MAY BE REQUIRED ON ALL ENTRY/EXIT POINTS TO THE SITE AT THE DISCRETION OF THE PROJECT OWNER.

INLET PROTECTION: ALL STORM DRAIN INLETS (INCLUDING DOWN GRADIENT, OFF-SITE) MUST BE PROTECTED BY APPROPRIATE BMPs DURING CONSTRUCTION UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLET HAVE BEEN STABILIZED. SILT FENCE IS NOT AN ACCEPTABLE CATCH BASIN INLET PROTECTION EMP. CONTRACTOR SHALL CLEAN, REMOVE AND DISPOSE OF SEDIMENT, AND/OR REPLACE STORM DRAIN INLET PROTECTION OR A ROUTINE BASIS TO ENSURE THE DEVICE IS FULLY FUNCTIONAL PRIOR TO THE NEXT FORECASTED PRECIPITATION EVENT (30% OR GREATER). INLET PROTECTION MAY BE REMOVED FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (STREET FLOODING/FREEZING) HAS BEEN IDENTIFIED AND THE PERMITTEE(S) HAS RECEIVED WRITTEN CORRESPONDENCE FROM THE JURISDICTIONAL AUTHORITY (E.G. CITY/COUNTY/TOWNSHIP/MNDOT ENGINEER) VERIFYING THE NEED FOR REMOVAL. WRITTEN CORRESPONDENCE MUST BE DOCUMENTED IN THE SWPPP AND AVAILABLE WITHIN 72 HOURS UPON REQUEST. PERMISSION TO REMOVE INLET PROTECTION BASED ON A SPECIFIC SAFETY CONCERN MUST STILL BE OBTAINED FROM THE LOCAL JURISDICTIONAL AUTHORITY WITHIN 30 DAYS OF REMOVAL.

CHEMICAL TREATMENTS: OPERATOR MUST AMEND THE SWPPP TO INCLUDE THE INTENDED USES AND LOCATIONS OF FLOCCULANTS, POLYMERS, AND OTHER SEDIMENTATION TREATMENT CHEMICALS. CHEMICAL TREATMENTS MAY ONLY BE APPLIED IN AREAS WHERE TREATED STORMWATER IS DIRECTED TO A RECEIVING SEDIMENT CONTROL SYSTEM (NOT DIRECTLY DISCHARGED TO NATURAL WATER BODIES). THIS INCLUDES DOCUMENTING THE EXPECTED SOIL TYPES, MANUFACTURER'S RECOMMENDED DOSING, APPLICATION RATES/QUANTITIES, AND MONITORING RESULTS (TURBIDITY, PH).

TEMPORARY/PERMANENT DRAINAGE DITCHES & SWALES: THE NORMAL WETTED PERIMETER (2-YEAR, 24-HOUR PRECIPITATION EVENT) OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH, CHANNEL, OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, MUST BE STABILIZED WITHIN THE LAST 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER WITHIN 24 HOURS OF CONNECTION. THE REMAINING PORTIONS OF THE CHANNEL MUST BE STABILIZED WITHIN 7 DAYS. ALL STORMWATER CONVEYANCE CHANNELS MUST USE EROSION CONTROL AND VELOCITY DISSIPATION DEVICES WITHIN AND ALONG THE LENGTH OF THE CHANNEL AND AT ANY OUTLETS. TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE PART OF A TEMPORARY SEDIMENTATION CONTROL SYSTEM (WITH PROPERLY DESIGNED ROCK TRAP CHECKS, RTO ROLLS, SILT DICES ETC.) DO NOT NEED TO BE STABILIZED. THESE AREAS MUST BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT SYSTEM. MULCH, HYDROMULCH, TACKIFIER, OR POLYACRYLAMIDE BELOW THE WETTED PERIMETER OF A DITCH, SWALE, OR OTHER SURFACE WATER CONVEYANCE ARE NOT ACCEPTABLE STABILIZATION.

DUST CONTROL: DUST FROM THE SITE WILL BE CONTROLLED BY INCREASED STREET SWEEPING AND/OR USING A MOBILE PRESSURE-TYPE DISTRIBUTOR TRUCK TO APPLY POTABLE WATER TO DISTURBED AREAS. THE MOBILE UNIT WILL APPLY WATER AT A RATE NECESSARY TO PREVENT RUNOFF AND BONDING.

DEWATERING, STREAM DIVERSION, AND BASIN DRAINING

WHEN DEWATERING IS REQUIRED, THE CONTRACTOR SHALL SUBMIT A DEWATERING PLAN AND NARRATIVE TO THE PROJECT ENGINEER FOR APPROVAL 10 DAYS PRIOR TO UNDERTAKING THESE ACTIVITIES. DEWATERING PLAN MUST INCLUDE EMP'S TO PREVENT SEDIMENT TRANSPORT, EROSION, AND ADVERSE IMPACTS TO DOWNSTREAM RECEIVING WATERS. THE DEWATERING PLAN MUST ALSO INCLUDE ANY SPECIFIC CHEMICAL TREATMENTS (FLOC, POLYMERS, ETC.) THAT WILL BE USED. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY PERMITS NECESSARY FOR THE OPERATIONS; THE DEWATERING PLAN AND DNR APPROPRIATIONS PERMIT WILL BECOME PART OF THE SWPPP. WATER THAT IS TURBID OR HAS SEDIMENT MUST BE DISCHARGED TO A TEMPORARY OR PERMANENT SEDIMENTATION BASIN (AND/OR OTHER APPROPRIATE BMPs) ON THE PROJECT SITE WHENEVER POSSIBLE. DISCHARGE FROM THE TEMPORARY OR PERMANENT SEDIMENTATION BASIN MUST BE VISUALLY CHECKED TO ENSURE ADEQUATE TREATMENT IS OBTAINED IN THE BASIN AND THAT NUISANCE CONDITIONS (SEE MINN. R. 7050.0210, SUBP. 2), IMPACTS TO WETLANDS, AND EROSION IN RECEIVING CHANNELS OR ON DOWNSLOPE PROPERTIES WILL NOT RESULT FROM THE DISCHARGE. THE DISCHARGE MUST BE DISPERSED OVER NATURAL ROCK RIPRAP, SAND BAGS, PLASTIC SHEETING, OR OTHER ACCEPTED ENERGY DISSIPATION MEASURES. ADEQUATE SEDIMENTATION CONTROL MEASURES AND ADDITIONAL FILTRATION EMPs ARE REQUIRED FOR DISCHARGE WATER THAT CONTAINS SUSPENDED SOLIDS, OIL, OR GREASE.

FINAL STABILIZATION

FINAL STABILIZATION IS ACHIEVED WHEN NPDES CGP PARTS IV.G.1-5. ARE COMPLETED PRIOR TO SUBMISSION OF THE NOTICE OF TERMINATION TO MPCA. SEE PERMANENT EROSION CONTROL PRACTICES FOR SPECIFIC METHODS AND APPLICATIONS.



Figure 1. SWPPP Resource Map

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Design By: MAN
 Plan By: MAN
 Checked By: MAN
 Approved By: NEH
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 CERTIFIED BY: [Signature]
 LICENSED PROFESSIONAL ENGINEER
 MICHAEL E. HENTGES, PE
 DATE: 12/28/2017 L.I.C. NO: 44620

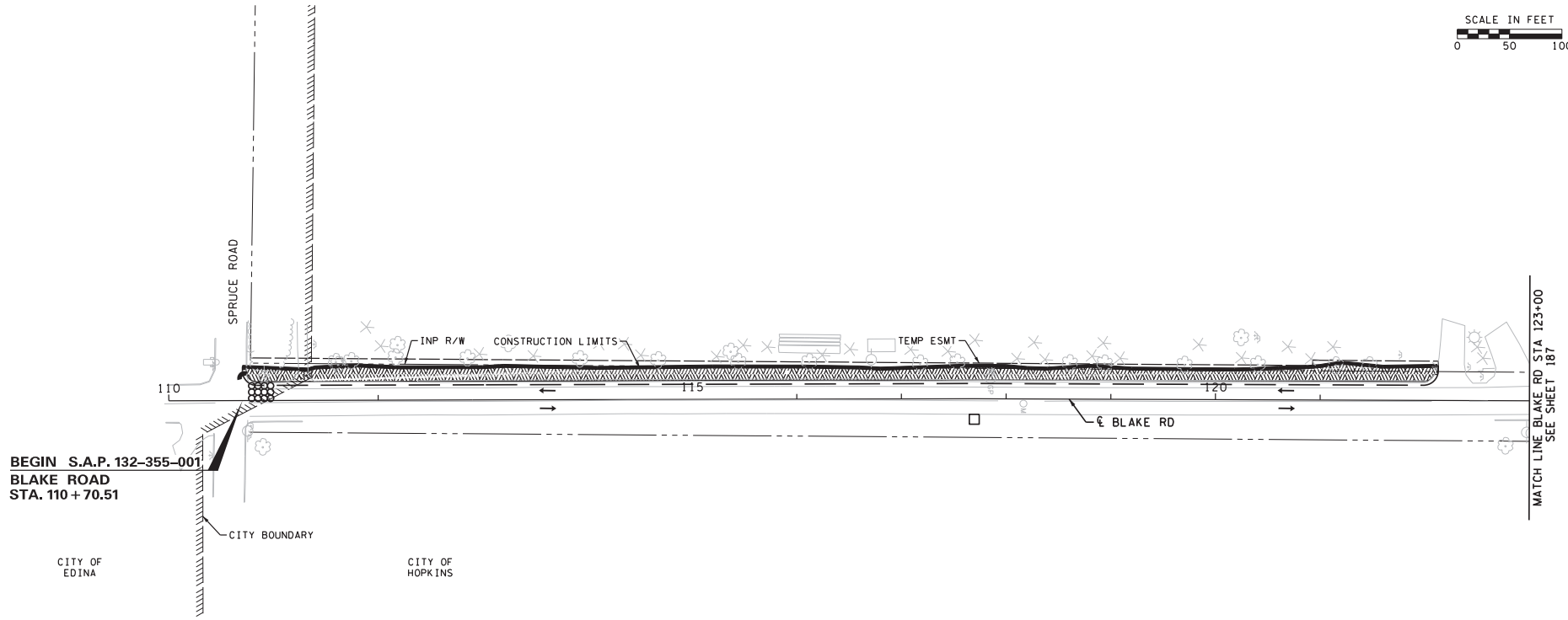
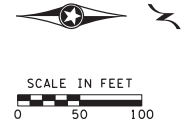
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City of Hopkins
BLAKE ROAD (CSAH 20) Improvements
 City of Hopkins, Minnesota

CITY OF HOPKINS, MINNESOTA
STORM WATER POLLUTION PREVENTION PLAN
 S.P. 2706-242 (TH.7), S.A.P. 027-620-015, S.A.P. 132-020-018, S.A.P. 132-355-001

SHEET 186 OF 313 SHEETS

BLAKE ROAD



**BEGIN S.A.P. 132-355-001
BLAKE ROAD
STA. 110+70.51**

**MATCH LINE BLAKE RD STA 123+00
SEE SHEET 187**

GENERAL NOTES:

- 1) ALL STREETS/SIDEWALKS IN AND ADJACENT TO THE PROJECT SHALL REMAIN CLEAN AND PASSABLE AT ALL TIMES. ADJACENT STREET/CURB LINE AND SIDEWALKS TO BE SWEEPED FREE OF DEBRIS AT THE END OF EACH WORK DAY, OR AS OFTEN AS NEEDED TO ENSURE PUBLIC SAFETY.
- 2) A ROCK CONSTRUCTION ENTRANCE WILL BE PLACED AT ALL ENTRANCES THAT LEAD TO THE PROJECT SITE IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN AND THE APPROVED STANDARD DETAILS.
- 3) ALL STORM SEWER CATCH BASINS MUST BE PROTECTED WITH APPROPRIATE DROP INLET PROTECTION BMP DEVICES. IN THE EVENT THAT THE STORM FEATURE IS TO BE REMOVED, ENSURE THE REMAINING PORTIONS OF THE STORM LINE IS PROPERLY SEALED OFF.
- 4) IN THE EVENT THAT PERMANENT STABILIZATION CANNOT BE IMPLEMENTED WITHIN 7 DAYS AFTER CONSTRUCTION ACTIVITY IN THE DISTURBED AREAS HAS CEASED, TEMPORARY HYDRO-MULCH STABILIZATION MUST BE SCHEDULED TO OCCUR WITHIN 7 DAY TIME FRAME (EXCEPT WHERE CALLED OUT BY NOTE 5).
- 5) EROSION CONTROL BLANKET SHALL BE IMPLEMENTED THE LAST 200' OF THE NWP OF ALL DRAINAGE WITHIN 24 HOURS (I.E DITCH LINES, CURB LINES), OR A SEDIMENT TRAP MUST BE INSTALLED PER THE APPROVED STANDARD DETAILS WITHIN 24 HOURS OF CONNECTING THE UTILITIES.
- 6) EXPOSED SOILS THAT ARE WITHIN 200 FEET OF MINNEHAHA CREEK DURING MARCH 15 TO JUNE 15 MUST BE STABILIZED WITHIN 24 HOURS, NEAR STA. 1125+00.
- 7) A SEDIMENT TRAP MUST BE INSTALLED PER THE APPROVED STANDARD DETAILS WITHIN 24 HOURS OF CONNECTING THE UTILITIES.
- 8) IN THE EVENT THAT DEWATERING OPERATIONS NEED TO OCCUR, A DEWATERING PLAN MUST BE SUBMITTED AND APPROVED BY THE ENGINEER BEFORE ANY OPERATIONS TAKE PLACE. THE PLAN MUST BE DEVELOPED IN ACCORDANCE WITH THE SWPPP GUIDELINES.
- 9) PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS (I.E CONCRETE). WASTES MUST NOT CONTACT THE GROUND. PROVIDE ADEQUATE SIGNAGE PER THE NPDES PERMIT.
- 10) ALL STOCKPILES MUST HAVE PERIMETER SEDIMENT CONTROL IMPLEMENTED AND MAINTAINED AT ALL TIMES. STOCKPILES TO RECEIVE HYDRO-MULCH IF UNWORKED FOR 7 DAYS.

EROSION CONTROL LEGEND

	SILT FENCE, TYPE MS
	FLOTATION SILT CURTAIN TYPE MOVING
	SEDIMENT CONTROL LOG TYPE STRAW
	STORM DRAIN INLET PROTECTION
	CULVERT END CONTROLS
	SEDIMENT CONTROL LOG (ROCK)
	STABILIZED CONSTRUCTION EXIT (LS)
	HYDRAULIC STABILIZED FIBER MATRIX
	EROSION CONTROL BLANKET - CAT. 3N

DATE: 12/28/2017 12:53:01 PM
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NO.	DATE	BY	CHK	REVISIONS

Design By: MAN
 Plan By: MAN
 Checked By: NEH
 Approved By: NEH
 DATE: 12/28/2017 L.C. NO: 44620

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

CERTIFIED BY: NICHOLAS E. HENTGES, PE
 LICENSED PROFESSIONAL ENGINEER
 DATE: 12/28/2017 L.C. NO: 44620

WSB
 701 Xenia Avenue South, Suite 300
 Minneapolis, MN 55416
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Blake Road (CSAH 20) Improvements
 City of Hopkins, Minnesota

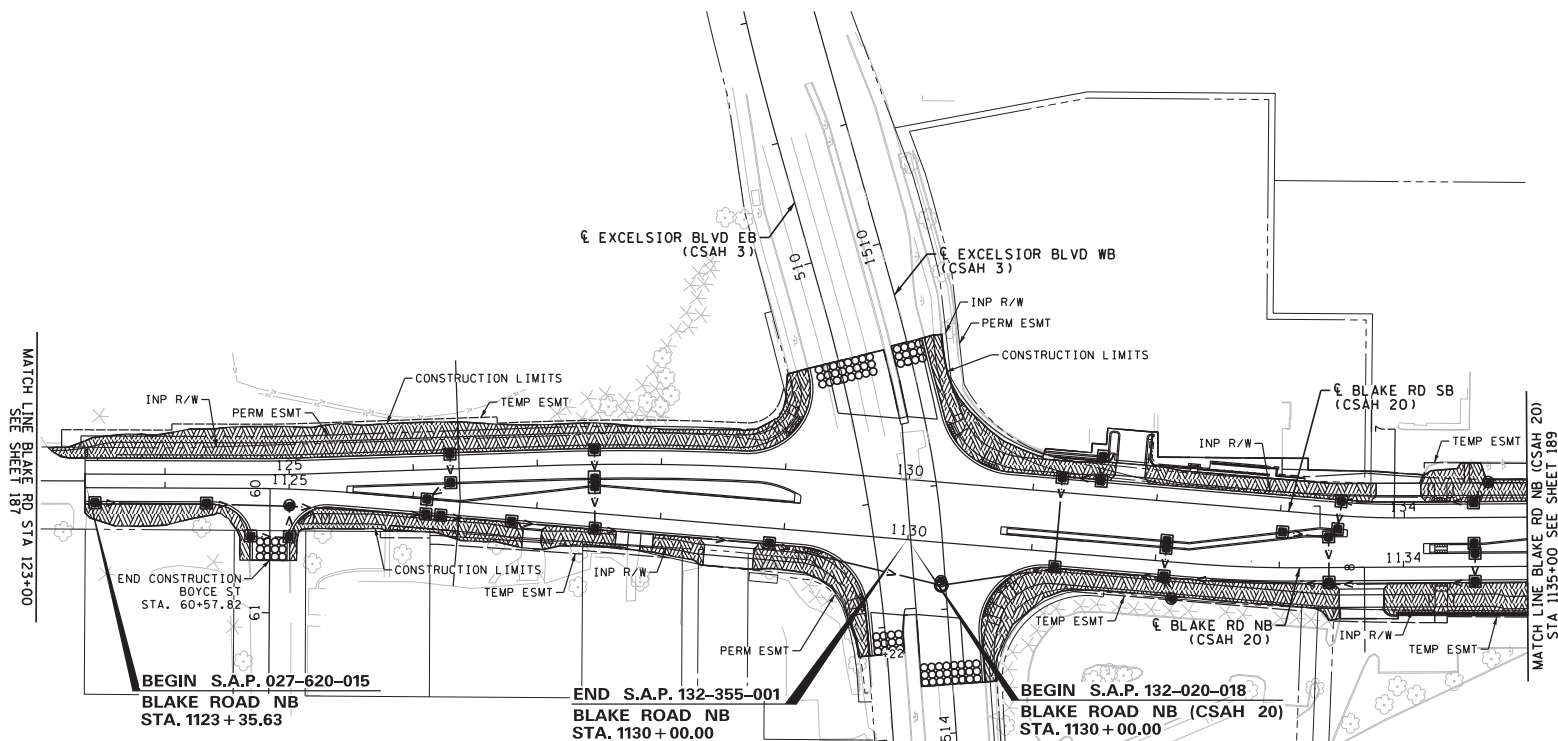
CITY OF HOPKINS, MINNESOTA
 BLAKE RD STA 110+00 TO BLAKE RD STA 123+00
 TEMPORARY EROSION CONTROL
 S.P. 2706-242 (TH 7), S.A.P. 027-620-015, S.A.P. 132-020-018, S.A.P. 132-355-001

SHEET 187 OF 313 SHEETS

BLAKE ROAD / BLAKE ROAD (CSAH 20)



SCALE IN FEET
0 50 100



GENERAL NOTES
SEE SHEET 187 FOR GENERAL NOTES.

DATE: 12/29/2017 12:53:46 PM
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NO.	DATE	BY	CHK	REVISIONS

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Approved By: NEH

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CERTIFIED BY: *[Signature]*
LICENSED PROFESSIONAL ENGINEER: NICHOLAS E. HENTGES, PE
DATE: 12/28/2017 L.I.C. NO: 44620

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BLAKE ROAD (CSAH 20) Improvements
City of Hopkins, Minnesota

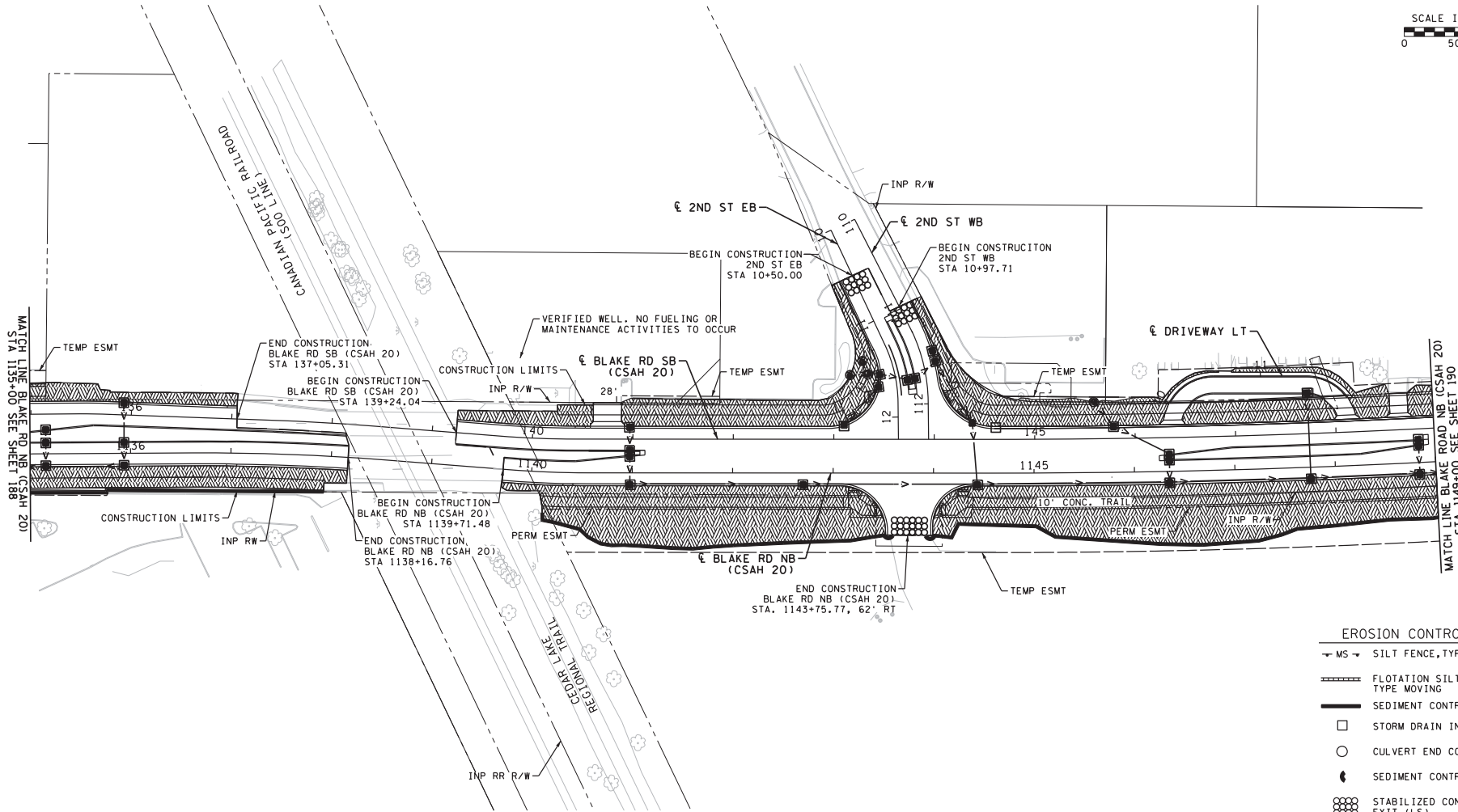
CITY OF HOPKINS, MINNESOTA
BLAKE ROAD STA 123+00 TO BLAKE ROAD NB (CSAH 20) STA 1135+00
TEMPORARY EROSION CONTROL
S.P. 2706-242 (TH 7), S.A.P. 027-620-015, S.A.P. 132-020-018, S.A.P. 132-355-001

SHEET 188 OF 313 SHEETS

BLAKE ROAD (CSAH 20)



SCALE IN FEET
0 50 100



EROSION CONTROL LEGEND

- MS → SILT FENCE, TYPE MS
- ▬ FLUTATION SILT CURTAIN TYPE MOVING
- ▬ SEDIMENT CONTROL LOG TYPE STRAW
- STORM DRAIN INLET PROTECTION
- CULVERT END CONTROLS
- SEDIMENT CONTROL LOG (ROCK)
- ▨ STABILIZED CONSTRUCTION EXIT (LS)
- ▨ HYDRAULIC STABILIZED FIBER MATRIX
- ▨ EROSION CONTROL BLANKET - CAT. 3N

GENERAL NOTES

SEE SHEET 187 FOR GENERAL NOTES.

DATE: 12/29/2017 12:53:19 PM
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NO.	DATE	BY	CHK	REVISIONS

Design By: MAN
Plan By: MAN
Checked By: NEH
Approved By: NEH

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CERTIFIED BY: *[Signature]*
LICENSED PROFESSIONAL ENGINEER
NICHOLAS E. HENTGES, PE
DATE: 12/28/2017 L.I.C. NO: 44620



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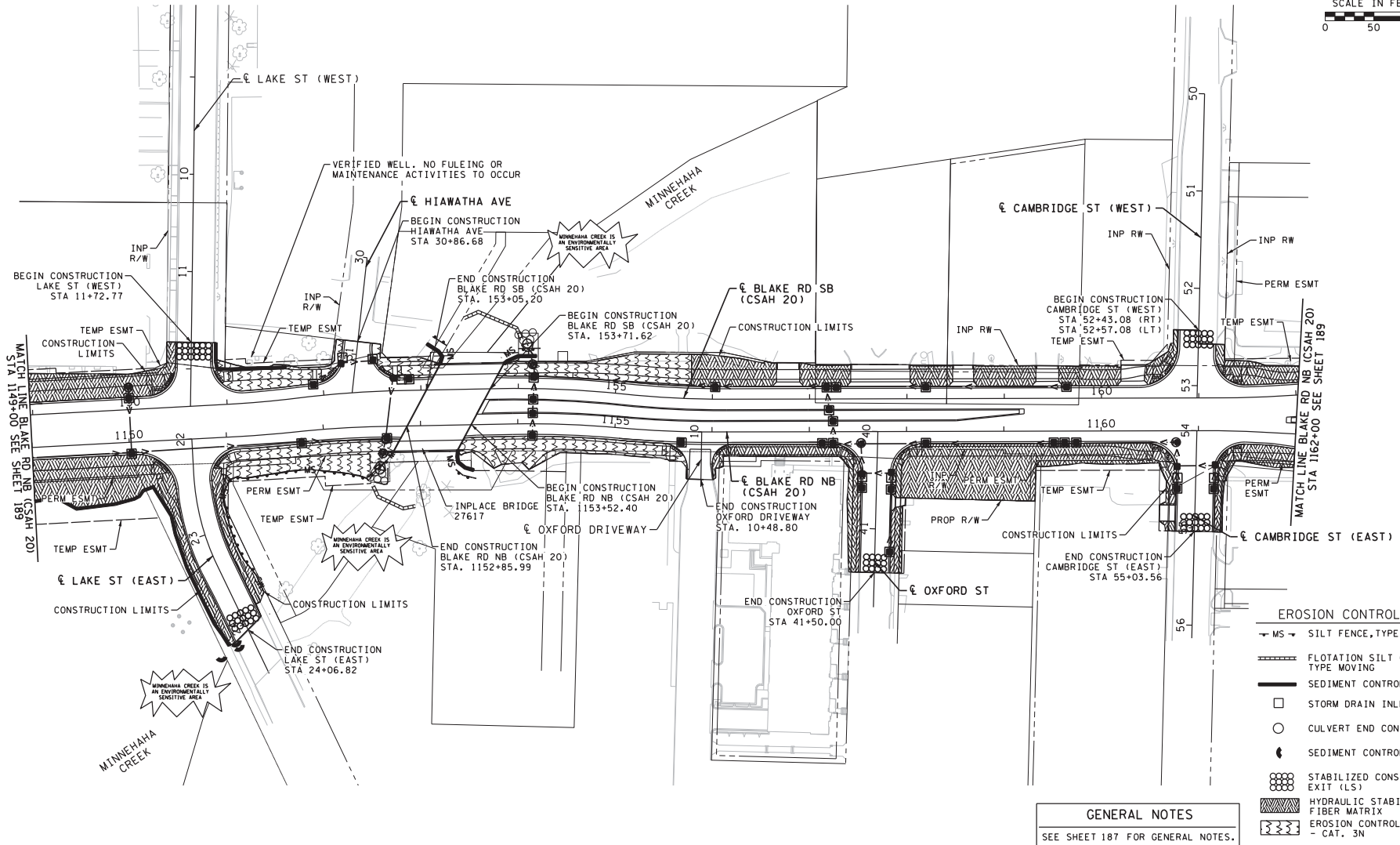


BLAKE ROAD (CSAH 20)
Improvements
City of Hopkins, Minnesota

CITY OF HOPKINS, MINNESOTA
BLAKE RD NB (CSAH 20) STA 1135+00 TO BLAKE RD NB (CSAH 20) STA 1149+00
TEMPORARY EROSION CONTROL
S.P. 2706-242 (TH 7), S.A.P. 027-620-015, S.A.P. 132-020-018, S.A.P. 132-355-001

SHEET
189
OF
313
SHEETS

BLAKE ROAD (CSAH 20)



- EROSION CONTROL LEGEND**
- MS SILT FENCE, TYPE MS
 - FLUTATION SILT CURTAIN TYPE MOVING
 - SEDIMENT CONTROL LOG TYPE STRAW
 - STORM DRAIN INLET PROTECTION
 - CULVERT END CONTROLS
 - SEDIMENT CONTROL LOG (ROCK)
 - STABILIZED CONSTRUCTION EXIT (LS)
 - HYDRAULIC STABILIZED FIBER MATRIX
 - EROSION CONTROL BLANKET - CAT. 3N

GENERAL NOTES
SEE SHEET 187 FOR GENERAL NOTES.

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Approved By: NEH

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CERTIFIED BY: *Nicholas E. Ventges*
LICENSED PROFESSIONAL ENGINEER - NICHOLAS E. VENTGES, PE
DATE: 12/28/2017 L.I.C. NO: 44620

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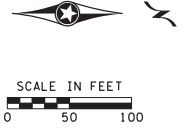
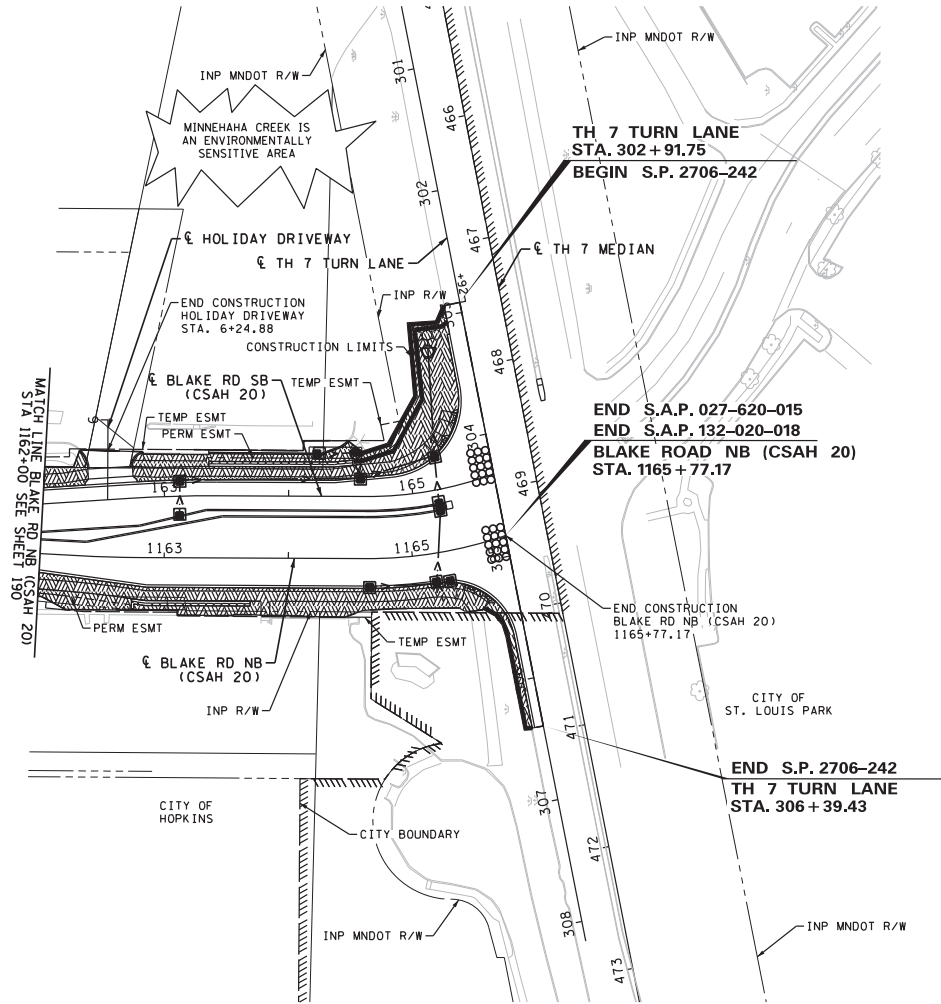


BLAKE ROAD (CSAH 20)
Improvements
City of Hopkins, Minnesota

CITY OF HOPKINS, MINNESOTA
BLAKE RD NB (CSAH 20) STA 1149+00 TO BLAKE RD NB (CSAH 20) STA 1162+00
TEMPORARY EROSION CONTROL
S.P. 2706-242 (TH.7), S.A.P. 027-620-015, S.A.P. 132-020-018, S.A.P. 132-355-001

SHEET 190 OF 313 SHEETS

BLAKE ROAD (CSAH 20)



EROSION CONTROL LEGEND	
	SILT FENCE, TYPE MS
	FLOTATION SILT CURTAIN TYPE MOVING
	SEDIMENT CONTROL LOG TYPE STRAW
	STORM DRAIN INLET PROTECTION
	CULVERT END CONTROLS
	SEDIMENT CONTROL LOG (ROCK)
	STABILIZED CONSTRUCTION EXIT (LS)
	HYDRAULIC STABILIZED FIBER MATRIX
	EROSION CONTROL BLANKET - CAT. 3N

GENERAL NOTES
SEE SHEET 187 FOR GENERAL NOTES.

DATE: 12/29/2017 12:53:25 PM
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CERTIFIED BY:
NICHOLAS E. HENIGES, P.E.
DATE: 12/28/2017 LIC. NO: 44620

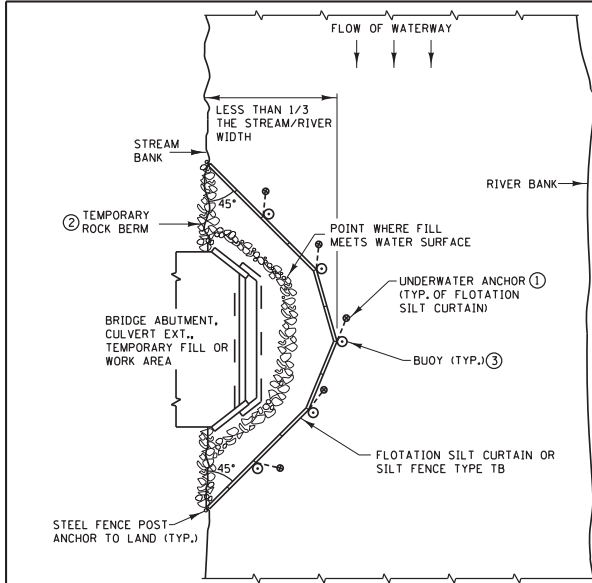
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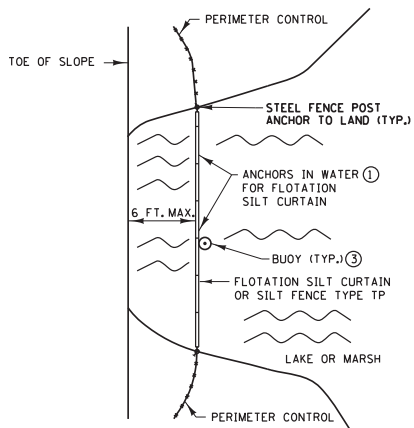
BLAKE ROAD (CSAH 20)
Improvements
City of Hopkins, Minnesota

CITY OF HOPKINS, MINNESOTA
BLAKE RD NB (CSAH 20) STA 1162+00 TO BLAKE RD NB (CSAH 20) STA 1165+77.17
TEMPORARY EROSION CONTROL
S.P. 2706-242 (TH 7), S.A.P. 027-620-015, S.A.P. 132-020-018, S.A.P. 132-355-001

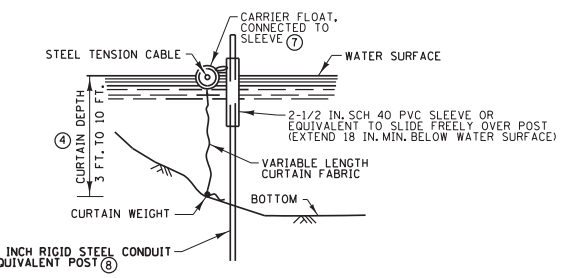
SHEET 191 OF 313 SHEETS



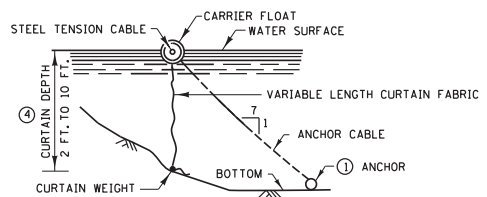
PLAN VIEW FOR STREAM ⑤



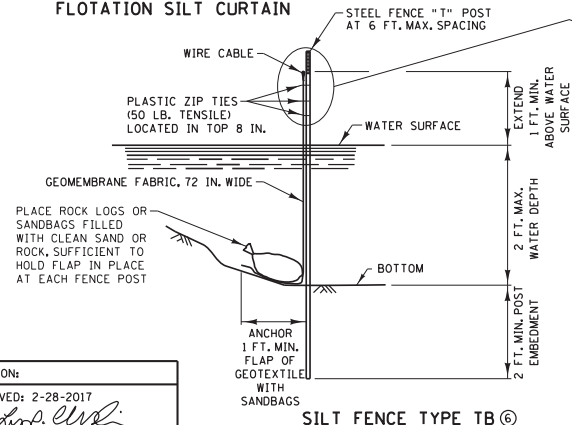
PLAN VIEW FOR LAKE OR MARSH ⑤



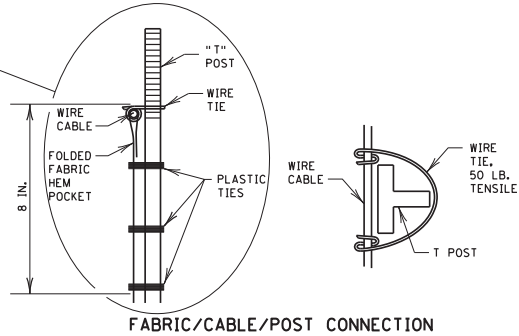
ALTERNATE FLOTATION SILT CURTAIN



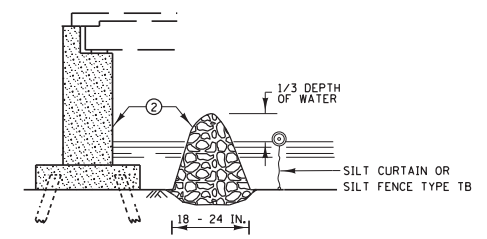
FLOTATION SILT CURTAIN



SILT FENCE TYPE TB ⑥



FABRIC/CABLE/POST CONNECTION

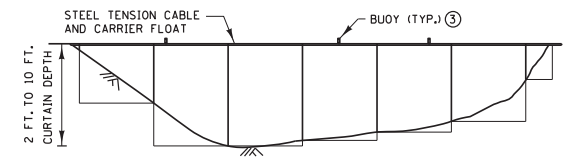


TEMPORARY ROCK BERM FOR SEDIMENT CONTROL

INSTALLATION GUIDELINES
SILT FENCE TYPE TB
MINIMUM WATER DEPTH: 1 FT.
MAXIMUM WATER DEPTH: 3 FT.
MAXIMUM WATER VELOCITY: 5 FT./SEC.

INSTALLATION GUIDELINES ④
FLOTATION SILT CURTAIN TYPE: STILL WATER
MINIMUM WATER DEPTH: 3 FT.
MAXIMUM WATER DEPTH: 10 FT.
MAXIMUM WATER VELOCITY: 2 FT./SEC.
MAXIMUM WAVE HEIGHT: 1 FT

INSTALLATION GUIDELINES ④
FLOTATION SILT CURTAIN TYPE: MOVING WATER
MINIMUM WATER DEPTH: 3 FT.
MAXIMUM WATER DEPTH: 10 FT.
MAXIMUM WATER VELOCITY: 5 FT./SEC.
MAXIMUM WAVE HEIGHT: 2 FT.



FRONT VIEW FOR FLOTATION SILT CURTAIN

NOTES:

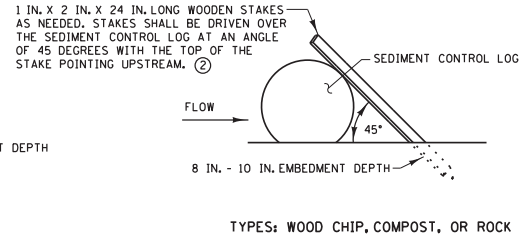
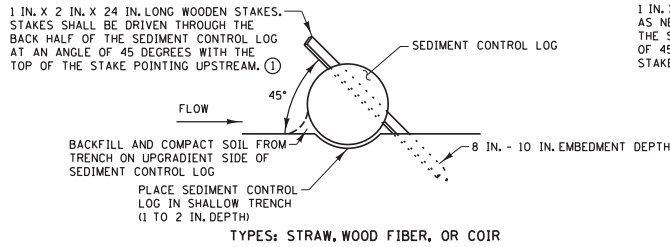
- SEE SPECS. 2573, 3886, 3887 & 3893.
- ① FOR ANCHOR SPACING AND WEIGHT REQUIREMENTS, SEE SPEC. 2573.
- ② IN AREAS WHERE THE PLAN CALLS FOR RIPRAP AT A BRIDGE, CULVERT, OR SLOPE, A TEMPORARY ROCK BERM CONSTRUCTED FROM THE RIPRAP CAN BE USED TO PROVIDE ADDITIONAL PROTECTION. WHEN THE WORK IS COMPLETE THE RIPRAP CAN THEN BE MOVED TO THE PERMANENT LOCATION INDICATED IN THE PLANS. THE TEMPORARY ROCK BERM IS INCIDENTAL.
- ③ ON U.S. COAST GUARD OR OTHER MOTORIZED WATERWAYS, BUOYS ARE REQUIRED TO MARK THE ENDS AND SPECIAL AREAS FOR VISIBILITY. PLACE BUOYS AS REQUIRED FOR NAVIGATIONAL PURPOSES.
- ④ MINIMUM WATER DEPTH APPLIES TO THE DEEPEST POINT ALONG THE FLOTATION SILT CURTAIN OR SILT FENCE TYPE TB FOR DETERMINING APPLICABILITY OF FLOTATION SILT CURTAIN OR SILT FENCE TYPE TB.
- ⑤ SILT CURTAIN SHOULD BE REMOVED WHEN THE AREA CONTRIBUTING DIRECT RUNOFF HAS BEEN TEMPORARILY OR PERMANENTLY STABILIZED. SILT CURTAIN SHOULD ALSO BE REMOVED BEFORE WINTER IF ICE UP OR ICE FLOW IS ANTICIPATED.
- ⑥ ANCHOR FLOAT MUST BE CONNECTED SECURELY TO SLEEVE WITH A MINIMUM TENSILE STRENGTH OF 100 LBS. CONNECTION METHOD MUST ALLOW FOR SLEEVE TO MOVE FREELY ON POST.
- ⑦ PROVIDE SUFFICIENT NUMBER OF POST ANCHORS TO MAINTAIN SILT CURTAIN POSITION.

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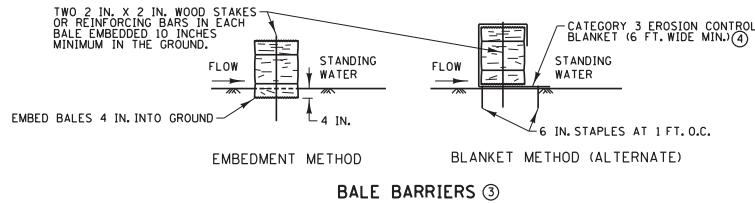
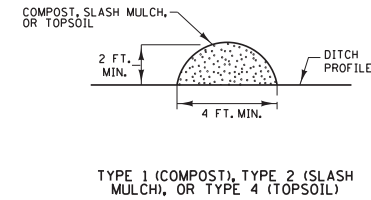
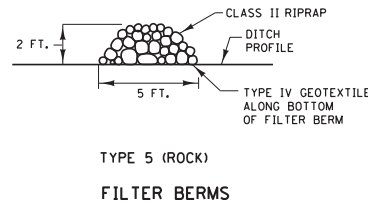
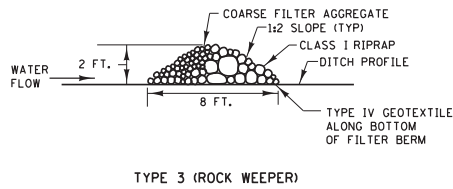
REVISION:
APPROVED: 2-28-2017
[Signature]
CHIEF ENVIRONMENTAL OFFICER

 DEPARTMENT OF TRANSPORTATION STATE DESIGN ENGINEER <i>[Signature]</i> APPROVED: 2-28-2017	REVISED: APPROVED: 2-28-2017	TEMPORARY SEDIMENT CONTROL SILT CURTAIN OR SILT FENCE TYPE TB	
	STANDARD PLAN 5-297.405		1 OF 8

S.P. 2706-242 (TH 7), S.A.P. 027-620-015, 132-020-018, 132-355-001 SHEET NO. 192 OF 313 SHEETS



SEDIMENT CONTROL LOGS



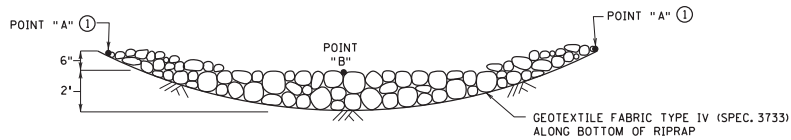
NOTES:

- SEE SPECS. 2573, 3149, 3874, 3882, 3886, & 3897.
- ① SPACE BETWEEN STAKES SHALL BE A MAXIMUM OF 1 FOOT FOR DITCH CHECKS OR 2 FEET FOR OTHER APPLICATIONS.
- ② PLACE STAKES AS NEEDED TO PREVENT MOVEMENT OF SEDIMENT CONTROL LOGS PLACED ON SLOPES OR AS NEEDED DUE TO OTHER FACTORS. STAKES SHALL BE INCIDENTAL.
- ③ TO BE USED FOR CRITICAL PERIMETER CONTROL AREAS WHERE STANDING WATER OCCURS (6 INCH MAX. DEPTH). BALES SHALL CONSIST OF TYPE 1 MULCH OF APPROXIMATELY 14 IN. X 18 IN. X 36 IN. LONG. BALES SHALL BE PLACED ON EDGE AND BUTTED TIGHT TO ADJACENT BALES.
- ④ INSTEAD OF TRENCHING, PLACE BALE ON THE BLANKET AND WRAP BLANKET AROUND THE BALE. PLACE STAKE THROUGH BALE AND BLANKET.

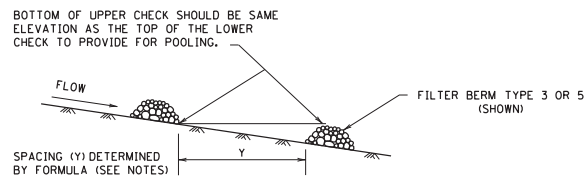
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APPROVED: 2-28-2017
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CHIEF ENVIRONMENTAL OFFICER

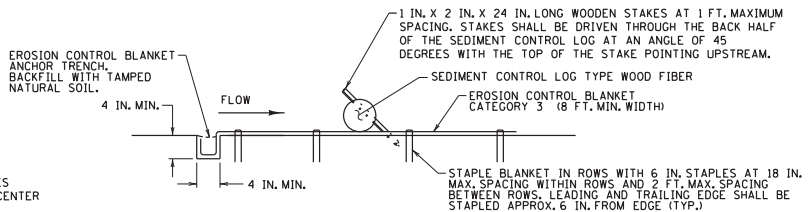
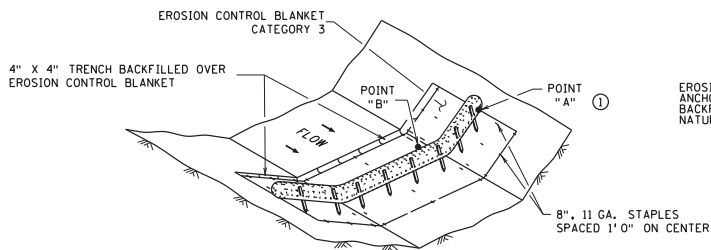
	REVISION: 	TEMPORARY SEDIMENT CONTROL FILTER BERMS, SEDIMENT CONTROL LOGS, AND BALE BARRIERS	
		APPROVED: 2-28-2017	STANDARD PLAN 5-297.405
DEPARTMENT OF TRANSPORTATION STATE DESIGN ENGINEER		2-28-2017	2 OF 8
S.P. 2706-242 (TH 7), S.A.P. 027-620-015, 132-020-018, 132-355-001			SHEET NO. 193 OF 313 SHEETS



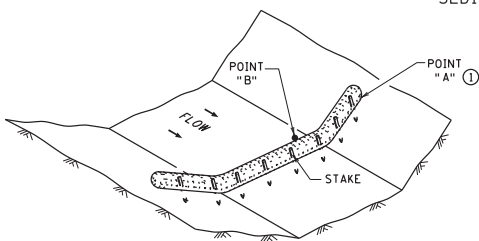
ROCK DITCH CHECKS
 FILTER BERMS TYPE 3 (ROCK WEEPER) OR FILTER TYPE 5 (ROCK) ②③
 (FOR USE ON ROUGH GRADED AREAS)



DITCH CHECK SPACING
 (FOR ALL FILTER BERM TYPES)



SEDIMENT CONTROL LOG TYPE BLANKET SYSTEM ④



SEDIMENT CONTROL LOG TYPE WOOD FIBER, OR TYPE COMPOST ⑤
 (FOR USE ON ROUGH GRADED AREAS)

NOTES:

SEE SPECS. 2573, 3601, 3733, 3885, 3886 & 3889.

FOR DITCH CHECKS, PLACE SEDIMENT CONTROL LOG PERPENDICULAR TO FLOW AND IN A CRESCENT SHAPE WITH THE ENDS FACING UPSTREAM.

APPROXIMATE SPACING BETWEEN EACH DITCH CHECK SHOULD BE DETERMINED FROM THE FOLLOWING SPACING FORMULA:

$$\text{APPROXIMATE SPACING OF DITCH CHECKS (FT.)} = Y = \frac{\text{DITCH CHECK HEIGHT (FT)}}{\% \text{ CHANNEL SLOPE}} \times 100$$

- ① POINT "A" MUST BE A MINIMUM OF 6 INCHES HIGHER THAN POINT "B" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.
- ② PERMANENT ROCK DITCH CHECKS PLACED WITHIN THE CLEAR ZONE ARE TO BE 18" OR LESS IN HEIGHT. A 1:6 APPROACH AND DEPARTURE SLOPE SHALL BE PROVIDED.
- ③ DITCH GRADE 3% - 5%, MAX. FLOW VELOCITY 12 FT./SEC..
- ④ DITCH GRADE 1.5% - 3%, MAX. FLOW VELOCITY 4.5 FT./SEC..
- ⑤ DITCH GRADE 1.5% - 3%, MAX. FLOW VELOCITY 1.5 FT./SEC..

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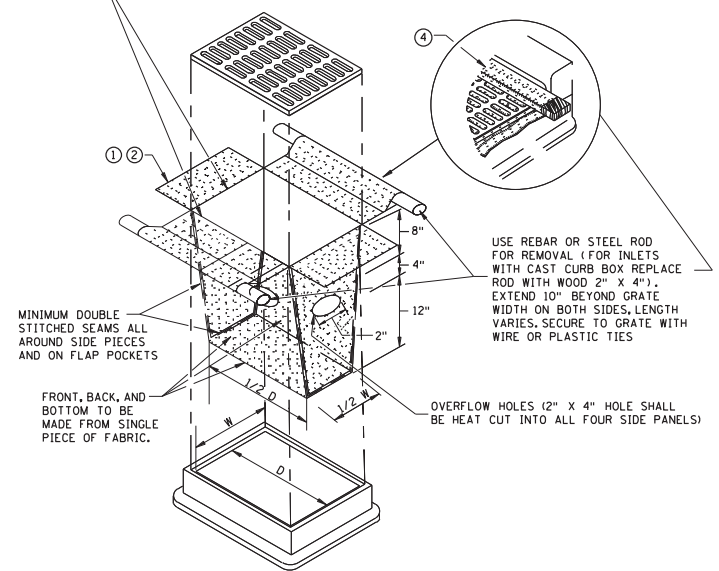
REVISION:
 APPROVED: 2-28-2017
[Signature]
 CHIEF ENVIRONMENTAL OFFICER

 MINNESOTA DEPARTMENT OF TRANSPORTATION	REVISED: APPROVED: <i>[Signature]</i> STATE DESIGN ENGINEER	TEMPORARY SEDIMENT CONTROL DITCH CHECK	
	2-28-2017	STANDARD PLAN 5-297.405	3 OF 8

S.P. 2706-242 (TH 7), S.A.P. 027-620-015, 132-020-018, 132-355-001

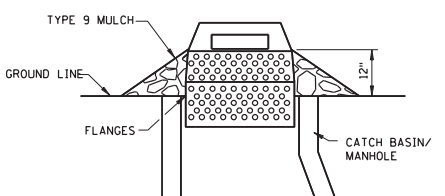
SHEET NO. 194 OF 313 SHEETS

INLET SPECIFICATIONS AS PER THE PLAN DIMENSION LENGTH AND WIDTH TO MATCH FLAP POCKET



FILTER BAG INSERT ③

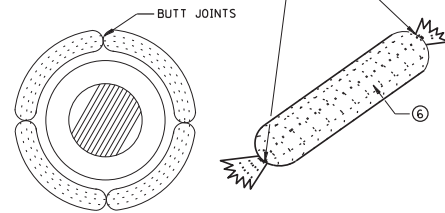
(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX)



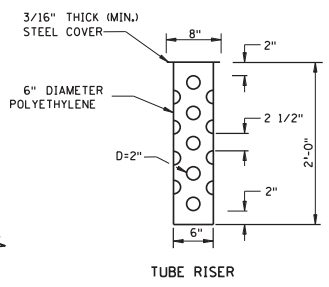
SEDIMENT CONTROL INLET HAT

NOTE: THE SEDIMENT CONTROL BARRIER SHALL BE A METAL OR PLASTIC/POLYETHYLENE RISER SIZED TO FIT INSIDE THE CATCH BASIN/MANHOLE; HAVE PERFORATIONS TO ALLOW FOR WATER INFILTRATION; HAVE AN OVERFLOW OPENING, FLANGES AND A LID/COVER.

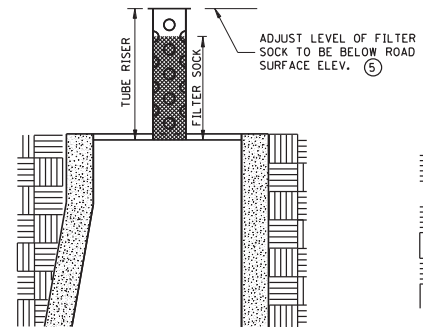
ENDS SECURELY CLOSED TO PREVENT LOSS OF OPEN GRADED AGGREGATE FILL. SECURED WITH 50 PSI. ZIP TIE.



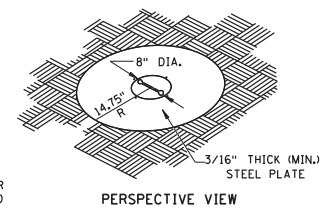
ROCK LOG/COMPOST LOG



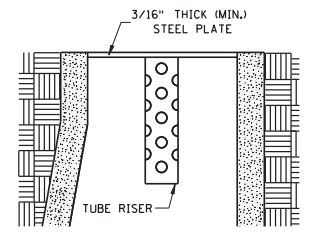
TUBE RISER



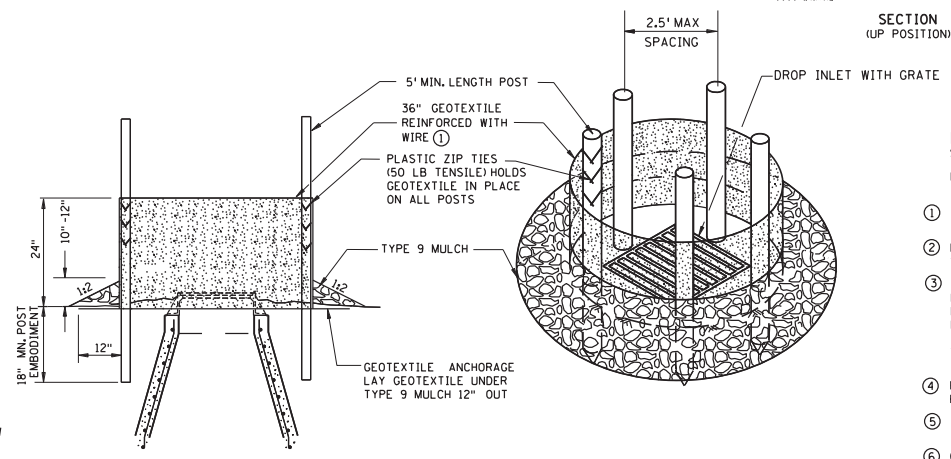
SECTION (UP POSITION)



PERSPECTIVE VIEW



SECTION (DOWN POSITION)



POP-UP HEAD

SILT FENCE RING AND ROCK FILTER BERM
USE WHERE INLET DRAINS IN AN AREA WITH SLOPES AT 1:3 OR LESS

NOTES:

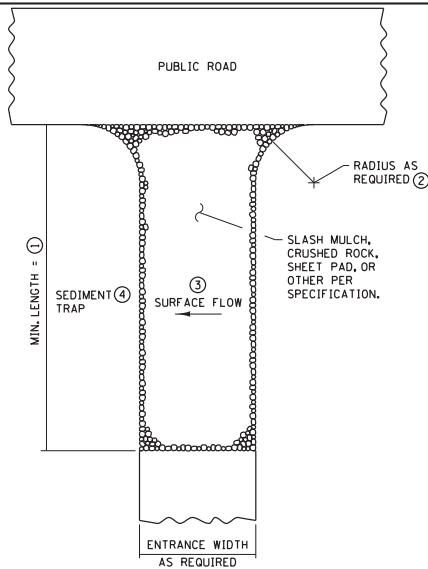
- SEE SPECS. 2573, 3137, & 3886.
- DEVICES MUST BE ADJUSTED ACCORDINGLY AS TO NOT CAUSE FLOODING ON ROADWAY THAT WOULD IMPEDE TRAFFIC FLOW.
- ① ALL GEOTEXTILE USED FOR INLET PROTECTION SHALL BE MONOFILAMENT IN BOTH DIRECTIONS, MEETING SPEC. 3886.
- ② FINISHED SIZE, INCLUDING POCKETS WHERE REQUIRED SHALL EXTEND A MINIMUM OF 10 INCHES AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ③ INSTALLATION NOTES: DO NOT PLACE FILTER BAG INSERT IN INLETS SHALLOWER THAN 30 INCHES. MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE. THE PLACED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE OF 3 INCHES BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES. WHERE NECESSARY THE CONTRACTOR SHALL CLINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3 INCH SIDE CLEARANCE.
- ④ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2 INCH X 4 INCH OR USE A ROCK SOCK OR SAND BAGS IN PLACE OF THE FLAP POCKETS.
- ⑤ SOCK HEIGHT MUST NOT BE SO HIGH AS TO SLOW DOWN WATER FILTRATION TO CAUSE FLOODING OF THE ROADWAY.
- ⑥ GEOTEXTILE SOCK BETWEEN 4-10 FEET LONG AND 4-6 INCH DIAMETER. SEAM TO BE JOINED BY TWO ROWS OF STITCHING WITH A PLASTIC MESH BACKING OR PROVIDE A HEAT BONDED SEAM (OR APPROVED EQUIVALENT). FILL ROCK LOG WITH OPEN GRADED AGGREGATE CONSISTING OF SOUND DURABLE PARTICLES OF COARSE AGGREGATE CONFORMING TO SPEC. 3137 TABLE 3137-1; CA-3 GRADATION.

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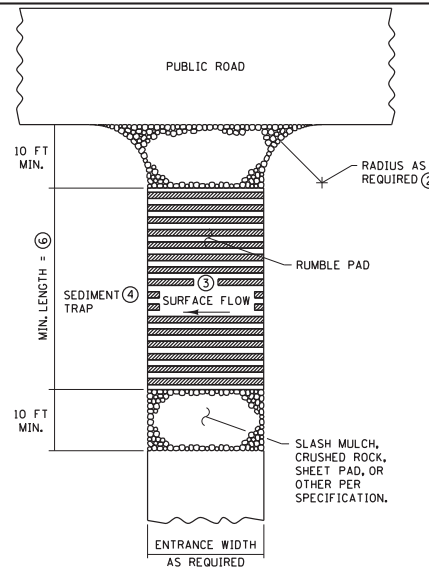
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APPROVED: 2-28-2017
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APPROVED: 2-28-2017

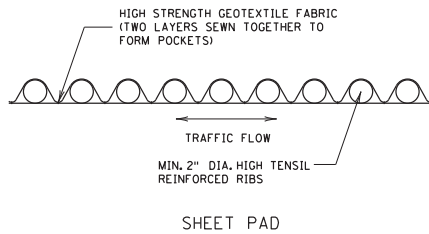
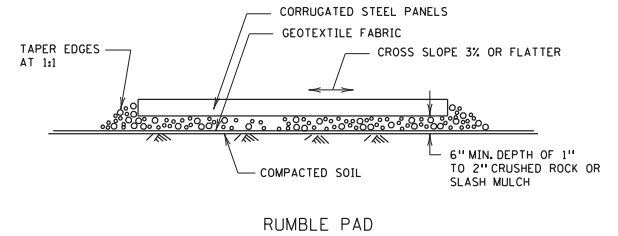
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TEMPORARY SEDIMENT CONTROL
STORM DRAIN INLET PROTECTION
STANDARD PLAN 5-297.405 4 OF 8



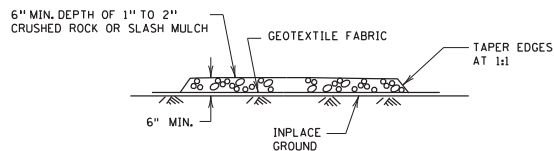
SLASH MULCH, CRUSHED ROCK, OR SHEET PAD CONSTRUCTION EXIT ①⑦



RUMBLE PAD CONSTRUCTION EXIT ⑥⑦



SHEET PAD



SLASH MULCH OR CRUSHED ROCK

NOTES:

- SEE SPECS. 2573 & 3882.
- ① MINIMUM LENGTH SHALL BE THE GREATER OF 50 FEET OR A LENGTH SUFFICIENT TO ALLOW A MINIMUM OF 5 TIRE ROTATIONS ON THE PROVIDED PAD. MINIMUM LENGTH SHALL BE CALCULATED USING THE LARGEST TIRE WHICH WILL BE USED IN TYPICAL OPERATIONS.
 - ② PROVIDE RADIUS OR WIDEN PAD SUFFICIENTLY TO PREVENT VEHICLE TIRES FROM TRACKING OFF OF PAD WHEN LEAVING SITE.
 - ③ IF RUNOFF FROM DISTURBED AREAS FLOWS TOWARD CONSTRUCTION EXITS, PREVENT RUNOFF FROM DRAINING DIRECTLY TO PUBLIC ROAD OVER CONSTRUCTION EXIT BY CROWNING THE EXIT OR SLOPING TO ONE SIDE. IF SURFACE GRADING IS INSUFFICIENT, PROVIDE OTHER MEANS OF INTERCEPTING RUNOFF.
 - ④ IF RUNOFF FROM CONSTRUCTION EXITS WILL DRAIN OFF OF PROJECT SITE, PROVIDE SEDIMENT TRAP WITH STABILIZED OVERFLOW.
 - ⑤ IF A TIRE WASH OFF IS REQUIRED THE CONSTRUCTION EXITS SHALL BE GRADED TO DRAIN THE WASH WATER TO A SEDIMENT TRAP.
 - ⑥ MINIMUM LENGTH OF RUMBLE PAD SHALL BE 20 FEET, OR AS REQUIRED TO REMOVE SEDIMENT FROM TIRES. IF SIGNIFICANT SEDIMENT IS TRACKED FROM THE SITE, THE RUMBLE PAD SHALL BE LENGTHENED OR THE DESIGN MODIFIED TO PROVIDE ADDITIONAL VIBRATION. WASH-OFF LENGTH SHALL BE AS REQUIRED TO EFFECTIVELY REMOVE CONSTRUCTION SEDIMENT FROM VEHICLE TIRES.
 - ⑦ MAINTENANCE OF CONSTRUCTION EXITS SHALL OCCUR WHEN THE EFFECTIVENESS OF SEDIMENT REMOVAL HAS BEEN REDUCED. MAINTENANCE SHALL CONSIST OF REMOVING SEDIMENT AND CLEANING THE MATERIALS OR PLACING ADDITIONAL MATERIAL (SLASH MULCH OR CRUSHED ROCK) OVER SEDIMENT FILLED MATERIAL TO RESTORE EFFECTIVENESS.

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APPROVED: 2-28-2017
[Signature]
CHIEF ENVIRONMENTAL OFFICER



REVISOR:
[Signature]
APPROVED:
2-28-2017
STATE DESIGN ENGINEER

TEMPORARY SEDIMENT CONTROL
STABILIZED CONSTRUCTION EXIT

STANDARD PLAN 5-297.405 5 OF 8

S.P. 2706-242 (TH 7), S.A.P. 027-620-015, 132-020-018, 132-355-001

SHEET NO. 196 OF 313 SHEETS



COVERAGE CARD

**Construction Stormwater
National Pollutant Discharge Elimination System/State Disposal
System General Permit MNR100001**

The Construction site identified below is covered under the National Pollutant Discharge Elimination System/State Disposal System General Permit MNR100001 and is authorized by the Minnesota Pollution Control Agency (MPCA) to discharge stormwater associated with construction activities.

Permit ID Number: C00048141

Owner: Hopkins city of

General Contractor: Hopkins city of

Project Name: Blake Road (CSAH 20) Improvements

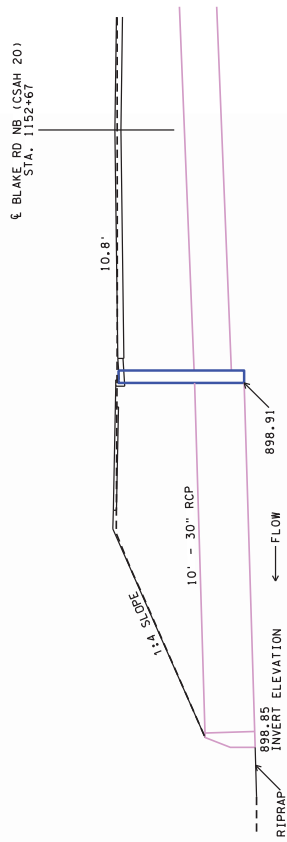
Permit Coverage Date: 11/08/2017

If you have questions regarding the stormwater program for construction activity, please access the MPCA Stormwater website at <http://www.pca.state.mn.us/stormwater>, or call the Construction Stormwater Program at 651-757-2119 or toll free at 800-657-3804.

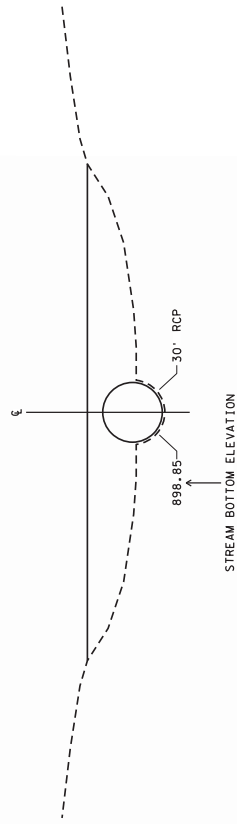


Figure 3a - Aquatic Resource Impacts

LONGITUDINAL CROSS SECTION



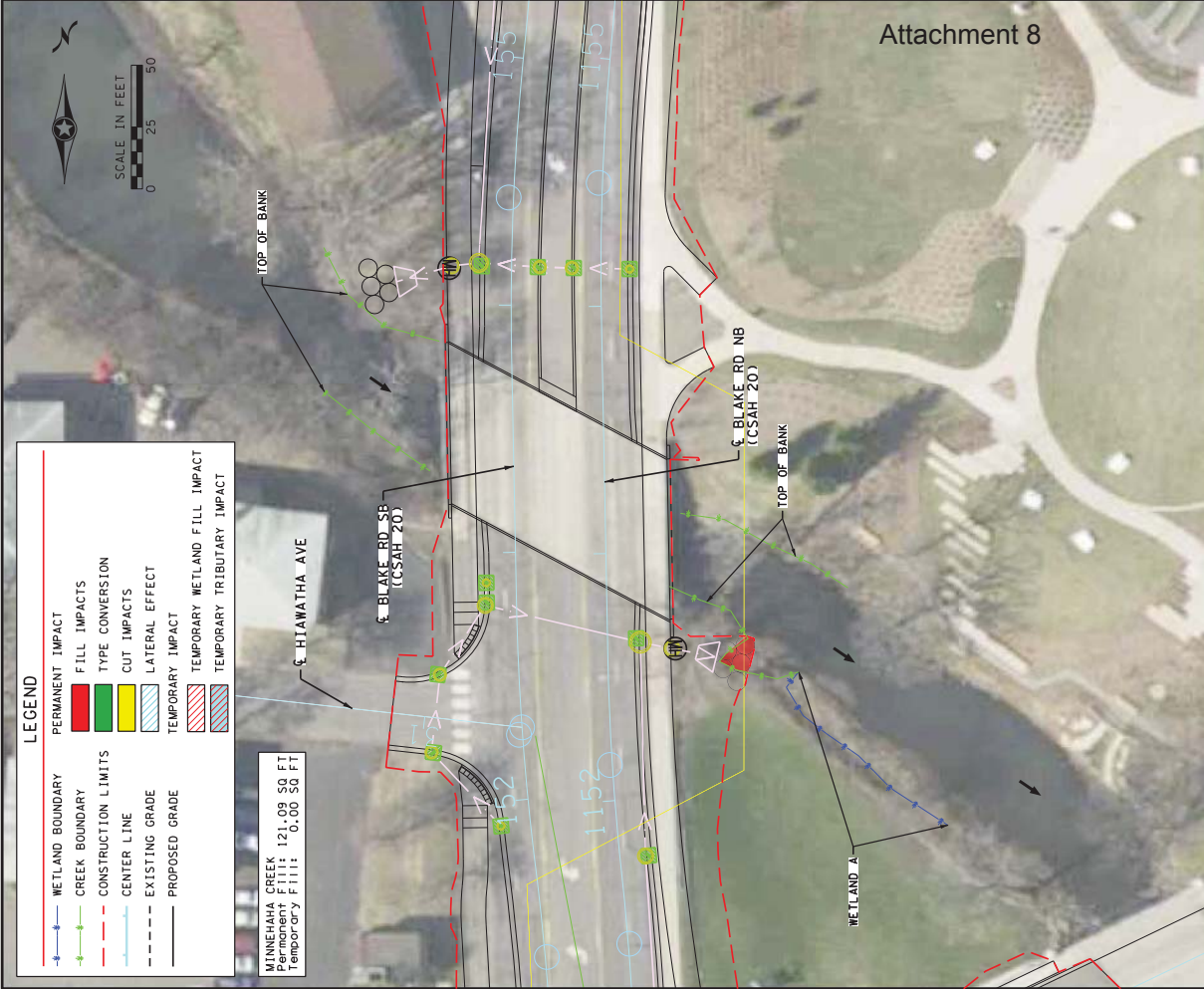
TRANSVERSE CROSS SECTION



LEGEND

- WETLAND BOUNDARY
- CREEK BOUNDARY
- CONSTRUCTION LIMITS
- CENTER LINE
- EXISTING GRADE
- PROPOSED GRADE
- PERMANENT IMPACT
- FILL IMPACTS
- TYPE CONVERSION
- CUT IMPACTS
- LATERAL EFFECT
- TEMPORARY IMPACT
- TEMPORARY WETLAND FILL IMPACT
- TEMPORARY TRIBUTARY IMPACT

MINNEHAHA CREEK
 Permanent Fill: 121.09 SQ FT
 Temporary Fill: 0.00 SQ FT



NO.	DATE	REV.	CHK.	BY	REVISIONS

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 Minneapolis, MN 55416
 (763) 551-4800 | wsbeng.com



BLAKE ROAD (CSAH 20)
 Improvements
 City of Hopkins, Minnesota

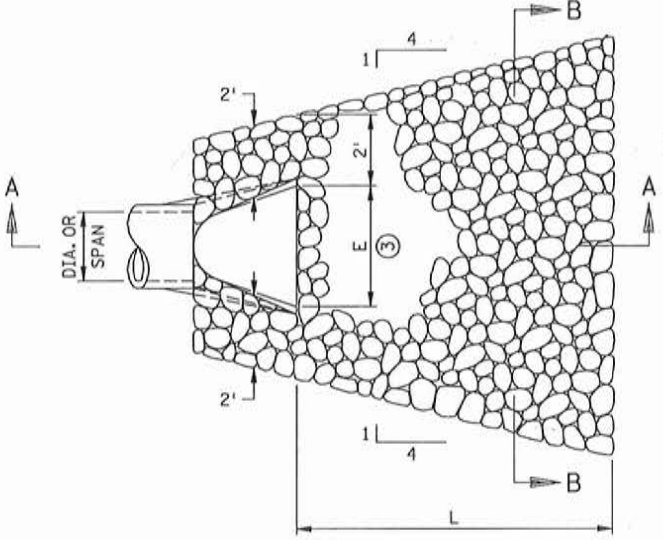
CITY OF HOPKINS, MINNESOTA
 MINNEHAHA CREEK
 CULVERT EXTENSION
 S.A.P. 022-620-015, S.A.P. 132-021-018, S.A.P. 132-350-002, S.A.P. 132-365-001

TABLE OF QUANTITIES
RIPRAP AT RCP OUTLETS

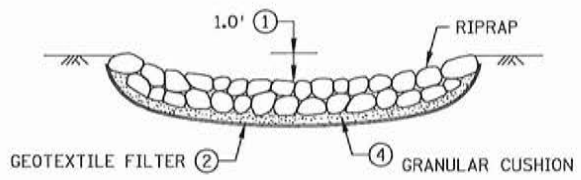
DIA. OF ROUND PIPE (IN.)	L (FT.)	CLASS II d ₅₀ = 6"			CLASS III d ₅₀ = 9"			CLASS IV d ₅₀ = 12"		
		GEO-TEXTILE FILTER (SQ. YD.)	GRANULAR FILTER UNDER APRON (CU. YD.)	12" DEPTH RIPRAP (CU. YD.)	GEO-TEXTILE FILTER (SQ. YD.)	GRANULAR FILTER UNDER APRON (CU. YD.)	18" DEPTH RIPRAP (CU. YD.)	GEO-TEXTILE FILTER (SQ. YD.)	GRANULAR FILTER UNDER APRON (CU. YD.)	24" DEPTH RIPRAP (CU. YD.)
12	8	16.9	0.2	3.0	19.6	0.3	4.4	22.6	0.3	5.9
15	8	18.0	0.2	3.2	20.8	0.3	4.8	23.9	0.4	6.4
18	10	22.4	0.3	4.3	25.6	0.4	6.4	29.0	0.5	8.5
21	10	24.1	0.4	4.7	27.4	0.6	7.1	30.9	0.7	9.4
24	12	29.7	0.5	6.2	33.4	0.8	9.2	37.3	1.0	12.3
27	12	31.4	0.6	6.6	35.2	0.9	9.9	39.2	1.2	13.2
30	14	37.4	0.8	8.2	41.6	1.1	12.3	46.0	1.5	16.4
36	16	45.9	1.1	10.6	50.5	1.6	15.8	55.4	2.1	21.1
42	18	52.8	1.2	12.5	57.8	1.7	18.7	63.0	2.3	24.9
48	20	61.1	1.5	14.8	66.5	2.2	22.2	72.0	2.9	29.6

TABLE OF QUANTITIES
RIPRAP AT RCP-A OUTLETS

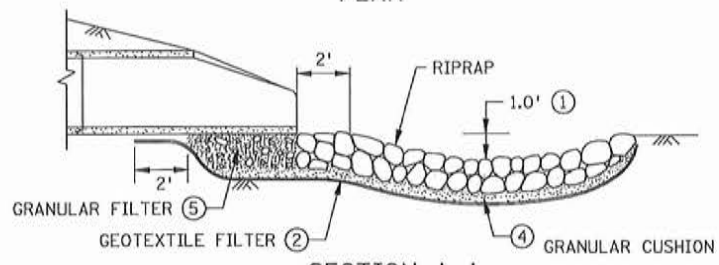
SPAN OF PIPE ARCH (IN.)	L (FT.)	CLASS II d ₅₀ = 6"			CLASS III d ₅₀ = 9"			CLASS IV d ₅₀ = 12"		
		GEO-TEXTILE FILTER (SQ. YD.)	GRANUL FILTER UNDER APRON (CU. YD.)	12" DEPTH RIPRAP (CU. YD.)	GEO-TEXTILE FILTER (SQ. YD.)	GRANUL FILTER UNDER APRON (CU. YD.)	18" DEPTH RIPRAP (CU. YD.)	GEO-TEXTILE FILTER (SQ. YD.)	GRANUL FILTER UNDER APRON (CU. YD.)	24" DEPTH RIPRAP (CU. YD.)
22	10	22.4	0.3	4.1	25.6	0.4	6.1	29.0	0.5	8.1
28	12	29.5	0.5	5.7	33.2	0.7	8.5	37.1	0.9	11.3
36	14	37.3	0.8	7.5	41.5	1.1	11.2	45.8	1.5	14.9
43	16	45.9	1.1	9.5	50.5	1.6	14.3	55.3	2.1	19.0
51	18	52.5	1.2	11.3	57.5	1.7	16.9	62.7	2.3	22.5
58	20	59.9	1.3	13.2	65.2	1.9	19.8	70.7	2.5	26.4



PLAN



SECTION B-B



SECTION A-A

NOTES:

- REQUIREMENTS FOR GEOTEXTILE TYPE, RIPRAP SIZE AND THICKNESS WILL BE DESIGNATED IN THE PLANS.
- PIPE SIZES LARGER THAN THOSE SHOWN REQUIRE A SPECIAL DESIGN.
- ① FOR PIPES GREATER THAN OR EQUAL TO 30", USE 1.5'.
- ② GEOTEXTILE FILTER, SPEC. 3733, SHALL COVER THE BOTTOM AND SIDES OF THE AREA EXCAVATED FOR THE RIPRAP, GRANULAR FILTER MATERIALS.
- ③ DIMENSION E IS GIVEN ON STANDARD PLATES 3100 AND 3110.
- ④ GRANULAR FILTER, SPEC. 3601, MAY BE USED AS A CUSHION LAYER. PLACE FILTER PER SPEC. 2511. THE CUSHION LAYER IS INCIDENTAL.
- ⑤ GRANULAR FILTER OR RIPRAP, SPEC. 3601, TO EXTEND UNDER ENTIRE OPEN PORTION OF PIPE APRON. DEPTH OF MATERIAL UNDER APRON SHALL MATCH RIPRAP DEPTH. WHEN USING RIPRAP INCREASE RIPRAP QUANTITY ACCORDINGLY AND PLACE A 3" LAYER OF 1.5" CRUSHED ROCK UNDER THE APRON TO AID IN GRADING FOR APRON PLACEMENT. CRUSHED ROCK IS INCIDENTAL.

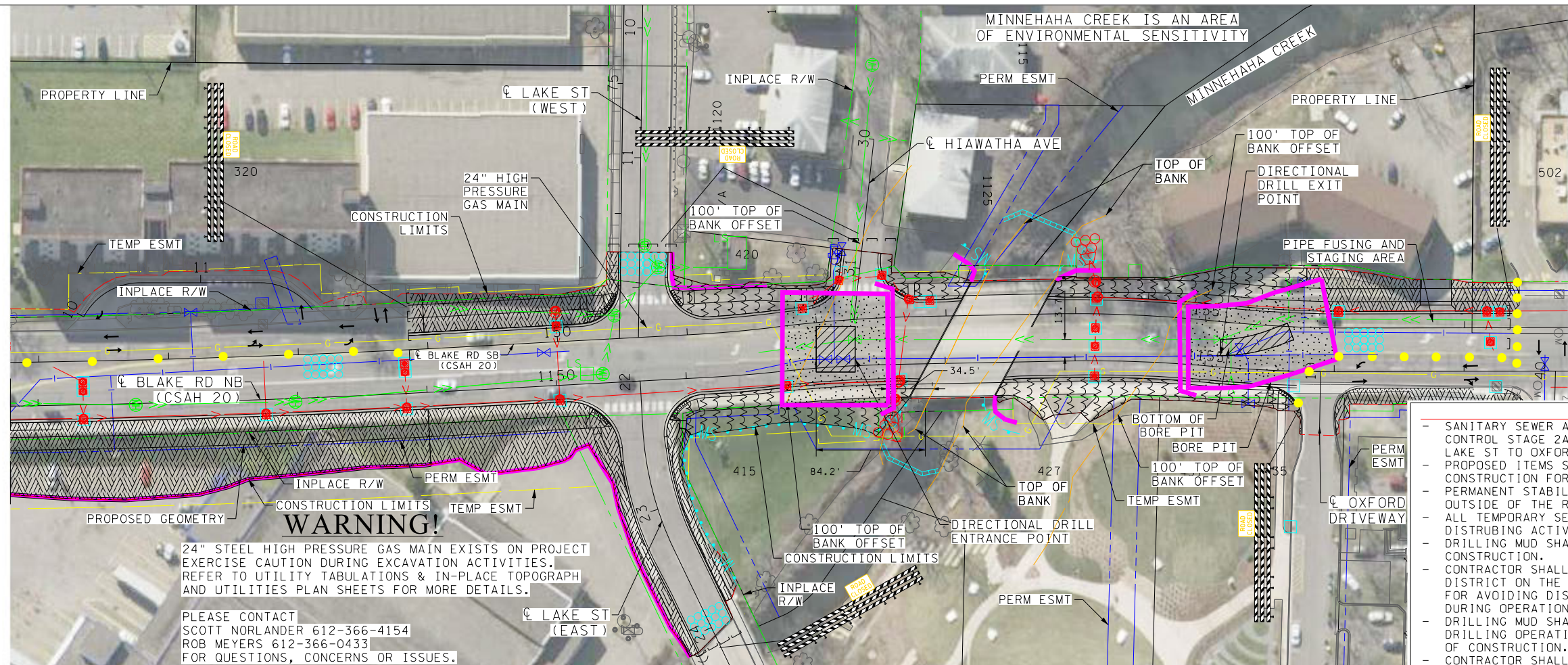
APPROVED DECEMBER 9, 2013
Christina Ry
STATE DESIGN ENGINEER

STATE OF MINNESOTA
DEPARTMENT OF TRANSPORTATION

RIPRAP AT RCP OUTLETS

SPECIFICATION REFERENCE
3100
3110
3601
3733
2511

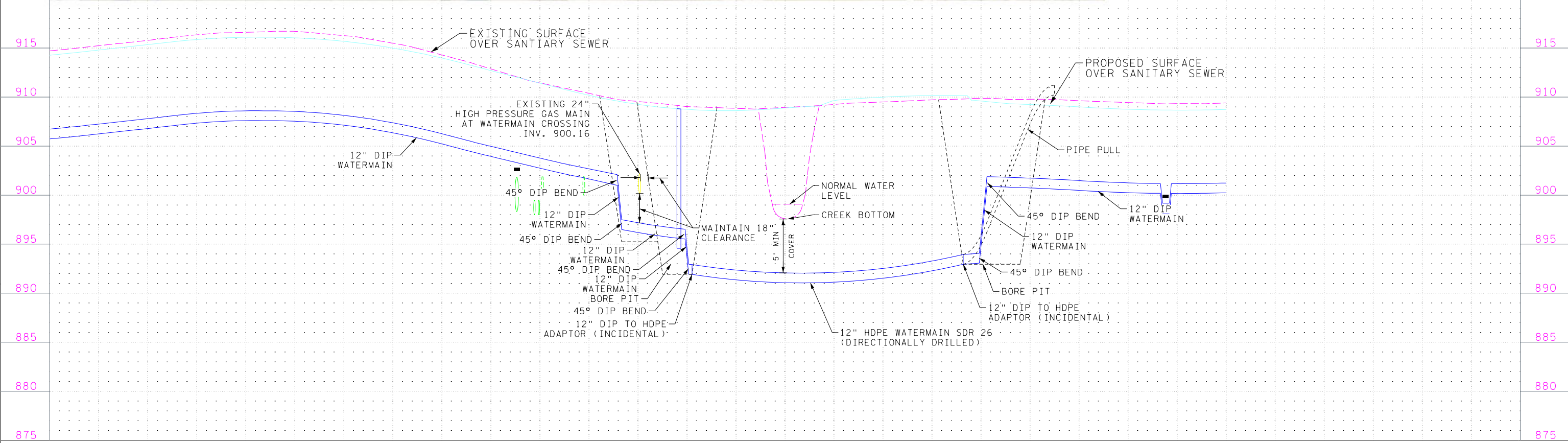
STANDARD PLATE NO.
3133D



LEGEND

	SANITARY SEWER MANHOLE		SILT FENCE TYPE MS
	SANITARY SEWER		FLOTATION SILT CURTAIN TYPE MOVING WATER
	SANITARY SEWER GATE VALVE		SEDIMENT CONTROL LOG TYPE STRAW
	WATERMAIN		STORM DRAINING INLET PROTECTION
	WATERMAIN GATE VALVE/HYDRANT		CULVERT END CONTROLS
	STORM SEWER		STABILIZED CONST. EX.
	STORM SEWER STRUCTURE		HYDRAULIC STABILIZED FIBER MATRIC
	TRAFFIC DIRECTION DURING CONSTRUCTION		EROSION CONTROL BLANKET CATEGORY 3N
	TRAFFIC BARREL		

- NOTES**
- SANITARY SEWER AND WATERMAIN WILL BE CONSTRUCTED UNDER PROPOSED TRAFFIC CONTROL STAGE 2A WHICH HAS A FULL CLOSURE OF BLAKE RD (CSAH 20) FROM LAKE ST TO OXFORD DRIVEWAY.
 - PROPOSED ITEMS SHOWN IS WHAT WILL BE OR HAS BEEN CONSTRUCTED AT TIME OF CONSTRUCTION FOR PROPOSED SANITARY SEWER, WATERMAIN, AND GEOMETRICS.
 - PERMANENT STABILIZATION IS SODDING TYPE LAWN IN ALL DISTURBED LOCATIONS OUTSIDE OF THE ROADWAY.
 - ALL TEMPORARY SEDIMENT CONTROL BMPs SHALL BE INSTALLED PRIOR TO LAND DISTURBING ACTIVITIES.
 - DRILLING MUD SHALL NOT BE USED AS FILL TO RESTORE THE PIT AREAS AFTER CONSTRUCTION.
 - CONTRACTOR SHALL IDENTIFY AND REPORT TO MINNEHAHA CREEK WATERSHED DISTRICT ON THE LOCATION OF THE DISPOSAL OF DRILLING MUD AND A DESIGN FOR AVOIDING DISCHARGE TO A SURFACE WATER IN THE EVENT OF PIPE BREAKAGE DURING OPERATIONS.
 - DRILLING MUD SHALL BE CONTAINED IN THE PIT AREAS DURING DIRECTIONAL DRILLING OPERATIONS AND PROPERLY DISPOSED OF OFF SITE AFTER COMPLETION OF CONSTRUCTION.
 - CONTRACTOR SHALL FOLLOW OSHA REQUIREMENTS FOR BORE PIT CONSTRUCTION.



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Plan By:	
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Approved By:	

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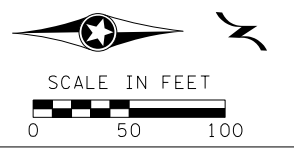
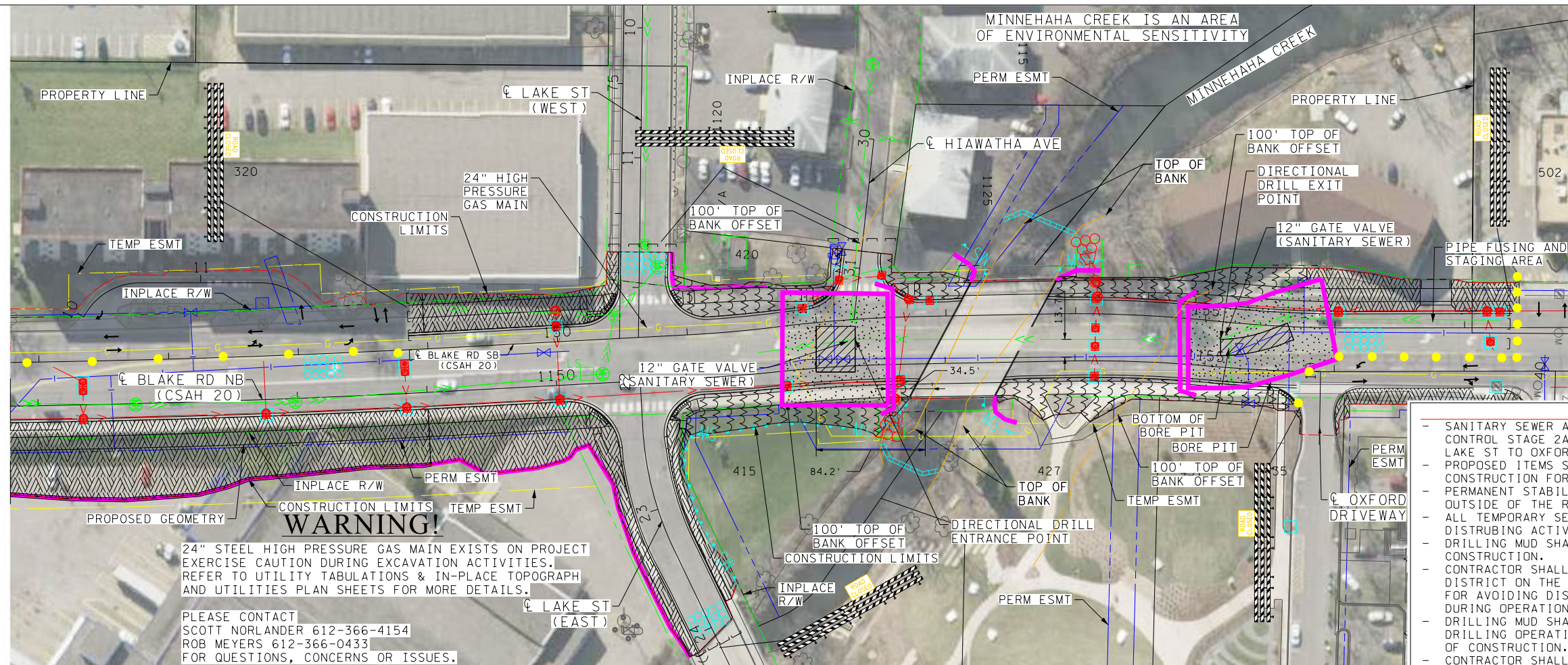
BLAKE ROAD (CSAH 20) Improvements
 City of Hopkins, Minnesota

CITY OF HOPKINS, MINNESOTA

WATERMAIN CROSSING

S.P. 2706-242 (TH 7), S.A.P. 027-620-015, S.A.P. 132-020-018, S.A.P. 132-355-001

SHEET 1 OF 2 SHEETS



LEGEND

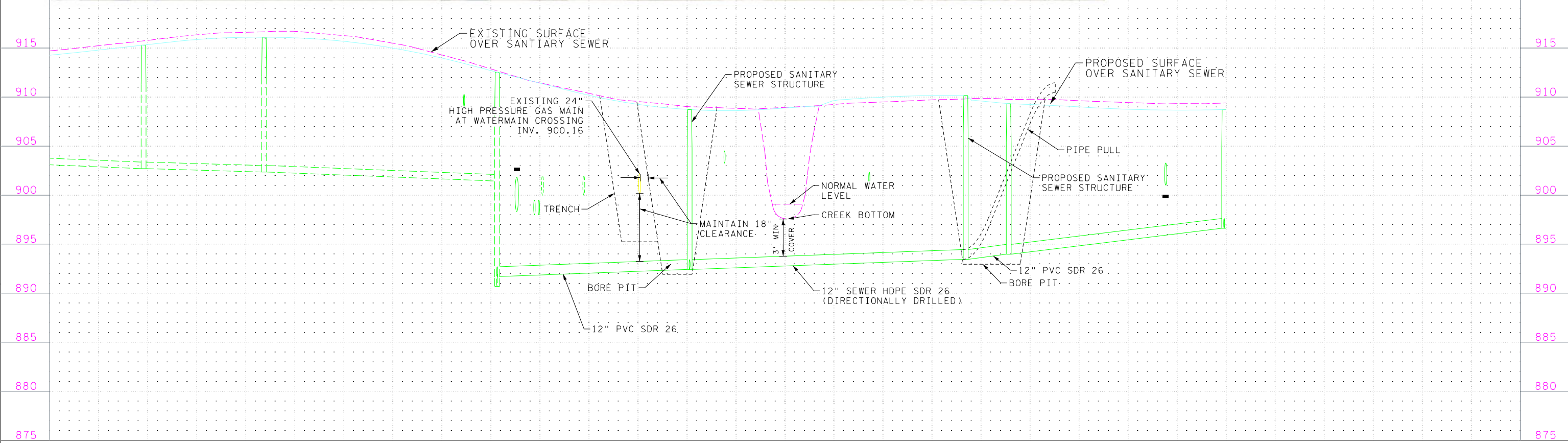
	SANITARY SEWER MANHOLE		SILT FENCE TYPE MS
	SANITARY SEWER		FLOTATION SILT CURTAIN TYPE MOVING WATER
	WATERMAIN		SEDIMENT CONTROL LOG TYPE STRAW
	WATERMAIN GATE VALVE/HYDRANT		STORM DRAINING INLET PROTECTION
	STORM SEWER		CULVERT END CONTROLS
	STORM SEWER STRUCTURE		STABILIZED CONST. EX.
	TRAFFIC DIRECTION DURING CONSTRUCTION		HYDRAULIC STABILIZED FIBER MATRIC
	TRAFFIC BARREL		EROSION CONTROL BLANKET CATEGORY 3N

- NOTES**
- SANITARY SEWER AND WATERMAIN WILL BE CONSTRUCTED UNDER PROPOSED TRAFFIC CONTROL STAGE 2A WHICH HAS A FULL CLOSURE OF BLAKE RD (CSAH 20) FROM LAKE ST TO OXFORD DRIVEWAY.
 - PROPOSED ITEMS SHOWN IS WHAT WILL BE OR HAS BEEN CONSTRUCTED AT TIME OF CONSTRUCTION FOR PROPOSED SANITARY SEWER, WATERMAIN, AND GEOMETRICS.
 - PERMANENT STABILIZATION IS SODDING TYPE LAWN IN ALL DISTURBED LOCATIONS OUTSIDE OF THE ROADWAY.
 - ALL TEMPORARY SEDIMENT CONTROL BMPs SHALL BE INSTALLED PRIOR TO LAND DISTURBING ACTIVITIES.
 - DRILLING MUD SHALL NOT BE USED AS FILL TO RESTORE THE PIT AREAS AFTER CONSTRUCTION.
 - CONTRACTOR SHALL IDENTIFY AND REPORT TO MINNEHAHA CREEK WATERSHED DISTRICT ON THE LOCATION OF THE DISPOSAL OF DRILLING MUD AND A DESIGN FOR AVOIDING DISCHARGE TO A SURFACE WATER IN THE EVENT OF PIPE BREAKAGE DURING OPERATIONS.
 - DRILLING MUD SHALL BE CONTAINED IN THE PIT AREAS DURING DIRECTIONAL DRILLING OPERATIONS AND PROPERLY DISPOSED OF OFF SITE AFTER COMPLETION OF CONSTRUCTION.
 - CONTRACTOR SHALL FOLLOW OSHA REQUIREMENTS FOR BORE PIT CONSTRUCTION.

WARNING!

24" STEEL HIGH PRESSURE GAS MAIN EXISTS ON PROJECT EXERCISE CAUTION DURING EXCAVATION ACTIVITIES. REFER TO UTILITY TABULATIONS & IN-PLACE TOPOGRAPH AND UTILITIES PLAN SHEETS FOR MORE DETAILS.

PLEASE CONTACT
SCOTT NORLANDER 612-366-4154
ROB MEYERS 612-366-0433
FOR QUESTIONS, CONCERNS OR ISSUES.



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Approved By:	

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BLAKE ROAD (CSAH 20) Improvements
City of Hopkins, Minnesota

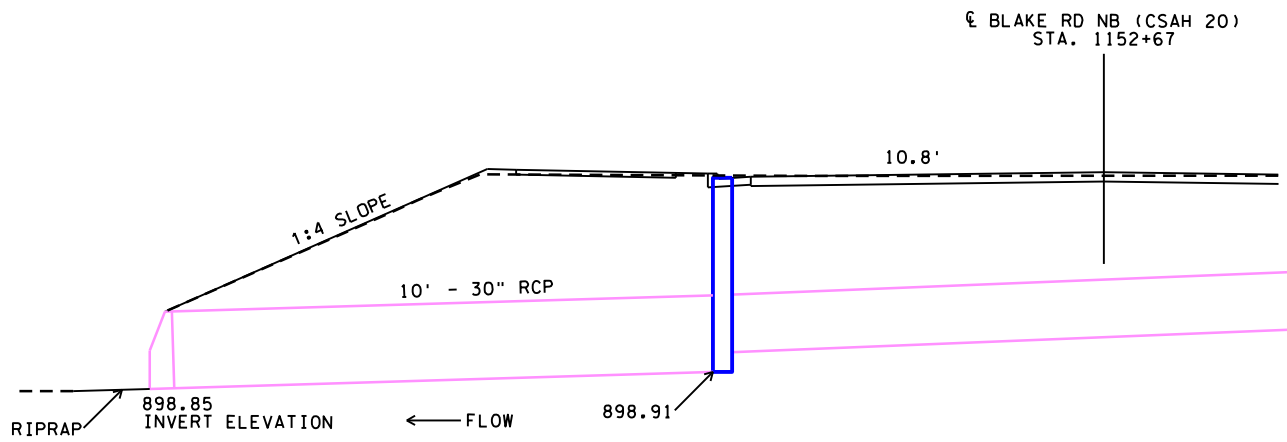
CITY OF HOPKINS, MINNESOTA

SANITARY SEWER CROSSING
S.P. 2706-242 (TH 7), S.A.P. 027-620-015, S.A.P. 132-020-018, S.A.P. 132-355-001

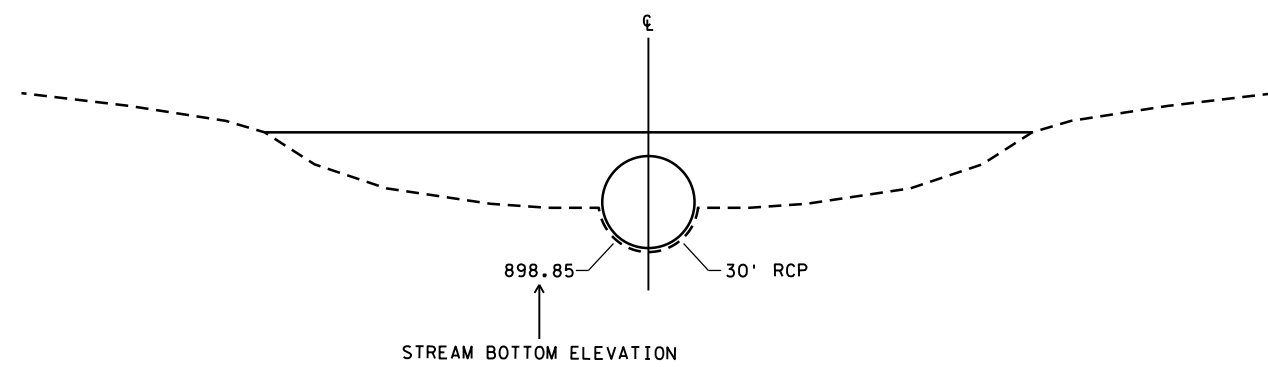
SHEET 2 OF 2 SHEETS

Figure 3a - Aquatic Resource Impacts

LONGITUDINAL CROSS SECTION

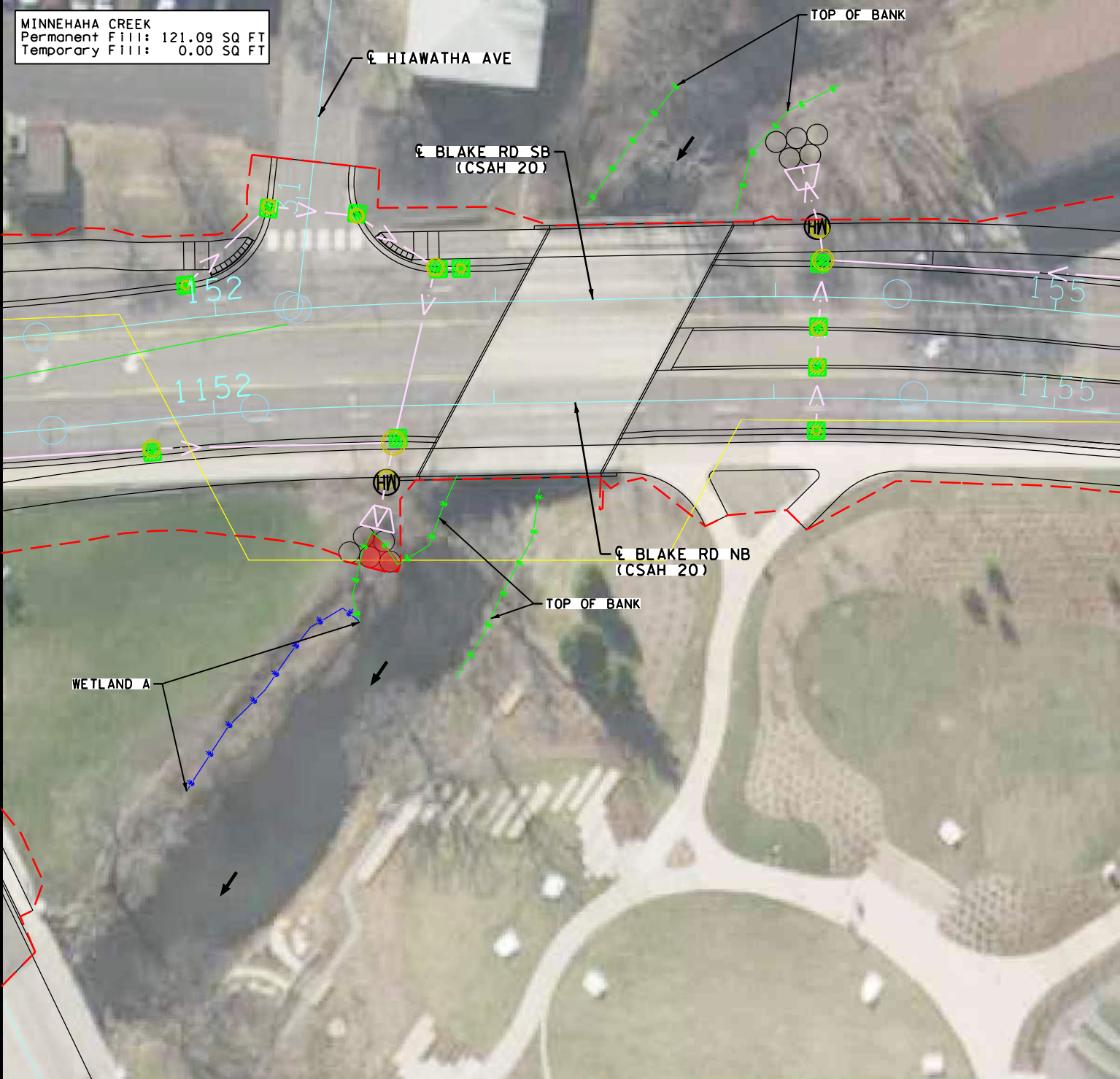
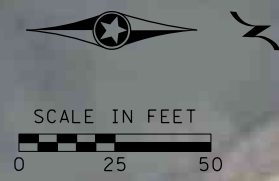


TRANSVERSE CROSS SECTION



LEGEND

- WETLAND BOUNDARY
- CREEK BOUNDARY
- CONSTRUCTION LIMITS
- CENTER LINE
- EXISTING GRADE
- PROPOSED GRADE
- PERMANENT IMPACT
- FILL IMPACTS
- TYPE CONVERSION
- CUT IMPACTS
- LATERAL EFFECT
- TEMPORARY IMPACT
- TEMPORARY WETLAND FILL IMPACT
- TEMPORARY TRIBUTARY IMPACT



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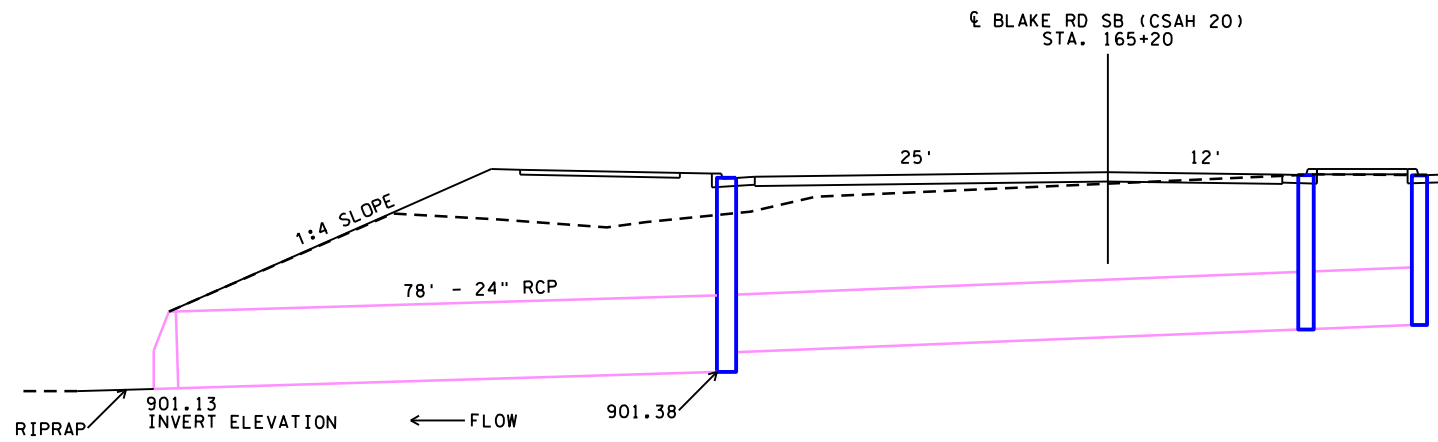
BLAKE ROAD (CSAH 20) Improvements
City of Hopkins, Minnesota

CITY OF HOPKINS, MINNESOTA
MINNEHAHA CREEK
CULVERT EXTENSION
S.A.P. 027-620-015, S.A.P. 132-020-018, S.A.P. 132-350-002, S.A.P. 132-355-001

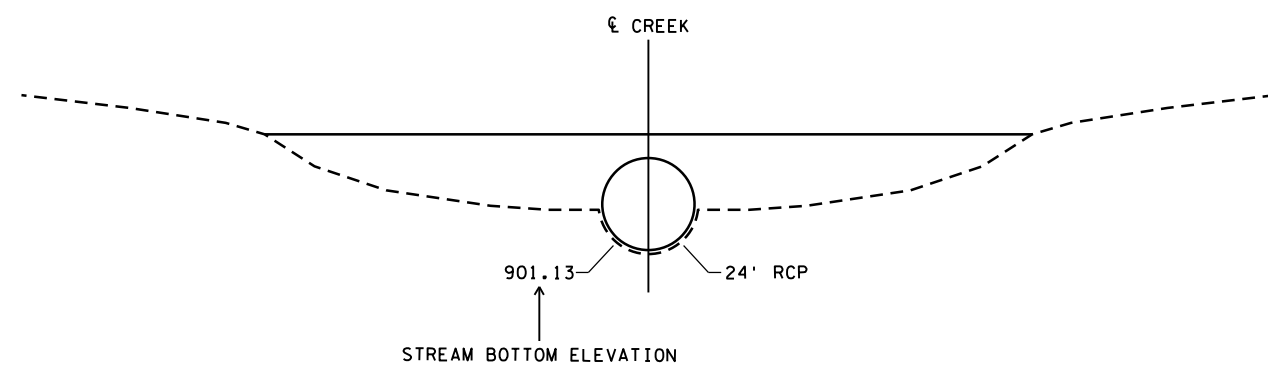
SHEET 1 OF 1 SHEETS

Figure 3b - Aquatic Resource Impacts

LONGITUDINAL CROSS SECTION



TRANSVERSE CROSS SECTION



LEGEND

- WETLAND BOUNDARY
- CONSTRUCTION LIMITS
- CENTER LINE
- EXISTING GRADE
- PROPOSED GRADE

PERMANENT IMPACT

- FILL IMPACTS
- TYPE CONVERSION
- CUT IMPACTS
- LATERAL EFFECT

TEMPORARY IMPACT

- TEMPORARY WETLAND FILL IMPACT
- TEMPORARY TRIBUTARY IMPACT



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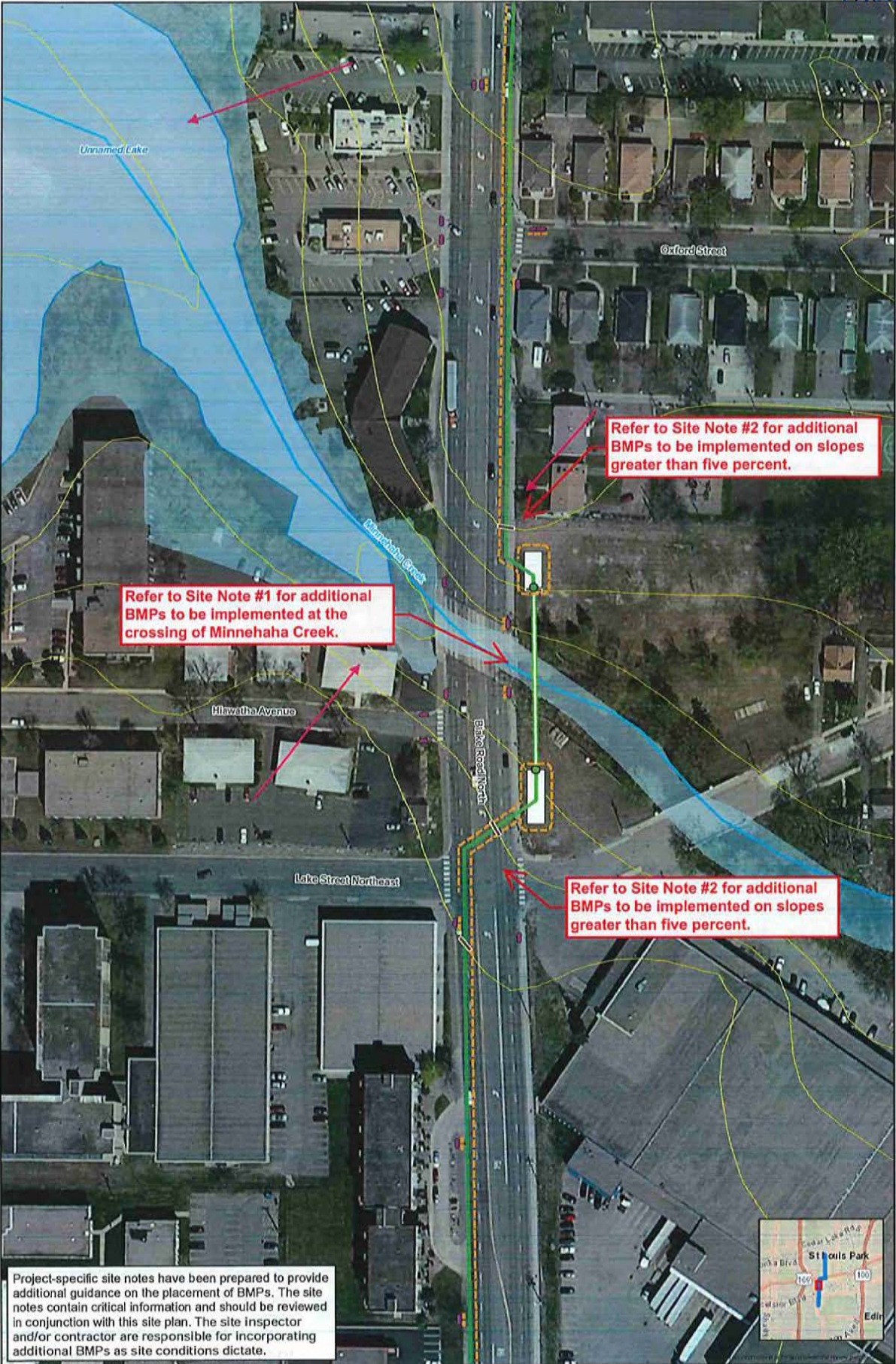
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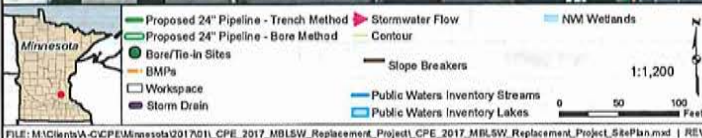
BLAKE ROAD (CSAH 20) Improvements
City of Hopkins, Minnesota

CITY OF HOPKINS, MINNESOTA
WETLAND B
CULVERT EXTENSION
S.A.P. 027-620-015, S.A.P. 132-020-018, S.A.P. 132-350-002, S.A.P. 132-355-001

SHEET 1 OF 1 SHEETS



Project-specific site notes have been prepared to provide additional guidance on the placement of BMPs. The site notes contain critical information and should be reviewed in conjunction with this site plan. The site inspector and/or contractor are responsible for incorporating additional BMPs as site conditions dictate.



CenterPoint Energy

Figure 2 Site Plan
2017 MBLSW Replacement Project
St. Louis Park, Hopkins, and Edina, Hennepin County, Minnesota
Page 6 of 9

ERAI

Request for Variance And Statement of Hardship

The Board of Managers may hear requests for variances from the literal provisions of these rules in instances where their strict enforcement would cause undue hardship because of circumstances unique to the property under consideration. The Board of Managers may grant variances where it is demonstrated that such action will be keeping with the spirit and intent of these rules. An applicant granted a variance from full compliance with a requirement of the rules would be required to meet the requirement to the degree feasible short of full compliance.

In order to grant a variance, the Board of Managers shall determine that:

- the special conditions which apply to the structure or land in question do not apply generally to other land or structures in the District
- the granting of such variance will not merely serve as a convenience to the applicant,
- the variance will not impair or be contrary to the intent of these rules.

A hardship cannot be created by the landowner, the landowner's agent or representative, or a contractor, and must be unique to the property. Economic hardship are not grounds for issuing a variance.

A variance shall become void one year after it is granted if not used.

A violation of any condition set forth in a variance shall be a violation of the District rules and shall automatically terminate the variance.

Date November 1, 2017

Permit #

Applicant City of Hopkins (Nate Stanley)

Address 1010 1st Street South

Telephone number 952-548-6356

Property ID number Blake Road

MCWD Rule (circle applicable rule(s)): Waterbody Crossings &
Structures

Description of project:

The City of Hopkins is proposing to make roadway and utility improvements to Blake Road between Spruce Road and Trunk Highway 7 in the City of Hopkins. The improvements include the replacement of the sanitary sewer and watermain under Minnehaha Creek using horizontal directional drilling.

Requirements of rule(s)

MCWD Waterbody Crossing & Structures Rule Section 3(g) - Shall provide for a minimum clearance of 3 feet below the bed of a waterbody, and a minimum setback of 100 feet from any stream bank for pilot, entrance, and exit holes, for projects involving horizontal direction drilling.

Requested Variance

A 12-inch PVC sanitary pipe and a 12-inch HDPE water main pipe will be installed under Minnehaha Creek using horizontal directional drilling. Due to constraints from existing utilities located near the 100-foot setback location on the south side of the Creek, the City of Hopkins requests a variance from Section 3(g) of the MCWD Waterbody Crossings & Structures Rule to locate the southern entrance pit at 50 feet from Minnehaha Creek.

Statement of Hardship (include any mitigating circumstances).

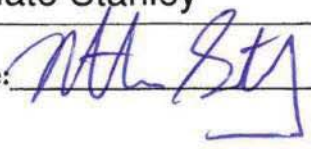
The space constraints requiring the variance are a result of special conditions that are unique to this location and do not apply to other land in the District. The inability to move the bore pit to the 100-foot minimum setback distance was not created by the City of Hopkins but is instead due to the existing location of a high-pressure gas main within the Blake Road right-of-way. Increasing the distance between the bore pit and the creek is not considered feasible. The City of Hopkins proposes to locate the southern bore pit at a distance of 50 feet from Minnehaha Creek to avoid an existing high-pressure gas main that is located at 100 feet from the Creek.

How do you propose to meet the requirements of the applicable MCWD rules?

The City of Hopkins will implement and maintain best management practices, including erosion and sediment controls throughout the construction process.

Applicant name: Nate Stanley

Date: 11/9/2017

Applicant signature: 

Staff Recommendation (For staff use only) Approve

HENNEPIN COUNTY
MINNESOTA

Nate

November 2, 2016

Steven Stadler
Director of Public Works
City of Hopkins
1010 First Street S
Hopkins MN 55343

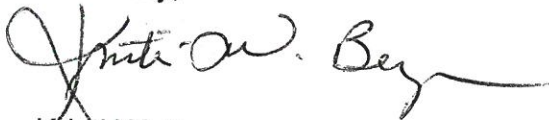
AGREEMENT NO. PW 04-01-16
C.P. 1426
COOPERATIVE AGREEMENT

Dear Steven Stadler,

Submitted for your file is a fully executed copy of the above referenced agreement.

If you have any questions, please call me at 612-596-0307.

Sincerely,



Kristi W. Beyer
Administrative Secretary

Kwb

Enclosure



Agreement No. PW 04-01-16
County State Aid Highway No. 20
County Project No. 1426
City of Hopkins
County of Hennepin

AGREEMENT FOR JURISDICTIONAL TRANSFER

THIS AGREEMENT, made and entered into this 18th day of October, 2016, by and between the **County of Hennepin**, a body politic and corporate under the laws of the State of Minnesota, hereinafter referred to as the "County", and the **City of Hopkins**, a body politic and corporate under the laws of the State of Minnesota, hereinafter referred to as the "City".

WITNESSETH:

WHEREAS, the County and the City have been negotiating to bring about the transfer of County State Aid Highway No. (CSAH) 20 (Blake Road) between CSAH 3 (Excelsior Boulevard) and Trunk Highway (TH) 7 from the County to the City; and

WHEREAS, the construction of the Southwest Light Rail Transit (SWLRT) line through the City will result in a SWLRT at-grade crossing of CSAH 20 and a SWLRT station on the CSAH 20 corridor; and

WHEREAS, the Parties anticipate the introduction of a SWLRT station on the CSAH 20 corridor will provide a stimulus to development/redevelopment along the CSAH 20 corridor; and

WHEREAS, the City has engaged in a visioning process intended to conform the reconfiguration of CSAH 20 between CSAH 3 and TH 7 in a manner complementary to the anticipated development/redevelopment of the properties along CSAH 20; and

WHEREAS, CSAH 20 is in need of reconstruction between CSAH 3 and TH 7; and

WHEREAS, the City is willing to receive jurisdiction of CSAH 20 within the aforesaid limits with the understanding that the City would take the lead in the design, construction, construction oversight and necessary right-of-way acquisition to support the reconstruction of CSAH 20 between CSAH 3 and TH 7 in a manner agreed to by the Parties and hereinafter referred to as the Project; and

WHEREAS, the County has acknowledged that the City is properly positioned to design and reconstruct CSAH 20 in a manner reflective of a vision to complement area development/redevelopment in a time frame complimentary to the projected SWLRT schedule; and

WHEREAS, it is contemplated that said work be carried out by the parties hereto under the provisions of Minnesota Statutes, Section 162.17, Subdivision I and Section 471.59.

NOW, THEREFORE, IT IS HEREBY AGREED:

WL

I

The City shall be responsible for the acquisition of all new rights-of-way, permanent easements, and temporary easements required for the construction of the Project.

It is hereby understood that the phrase "responsible for the acquisition of" as used in this Agreement shall be construed to mean the performance of all tasks and duties necessary and legally required to obtain the right to use the subject properties for the purposes set forth in this Agreement. Said rights may be obtained by, but are not limited to, direct purchase, dedication, donation, or eminent domain.

All new right-of-way, permanent easements, and temporary easements acquired by the City to construct the Project must meet the approval of the Administrative Manager for the County's Land Acquisition Group or designated representative prior to being incorporated into the plans for the Project.

Upon completion of the Project, all permanent right-of-way acquisition for CSAH 20 as provided herein shall remain in the ownership of the City.

II

The City and the County recognize that in order to carry out the Project, the facilities of one or more private utilities in the Project area rights-of-way (ROW) may need to be relocated due to interference with the means and methods the City will select to carry out the Project work. The City acknowledges that the County is the primary ROW manager of CSAH 20 within the Project. The County acknowledges that the City has an interest in the management of the County ROW within the Project boundaries given the fact jurisdiction of CSAH 20 is to transfer to the City, and the City may be required to exercise certain rights in the ROW to carry out the Project work. Accordingly, the County hereby authorizes and delegates to the City any and all ROW management authority that the City deems necessary to carry out the Project work, including but not limited to, the right to require private utilities to relocate their facilities. Prior to the City's exercise of this right, the City shall provide the County twenty-four (24) hours written notice of the City's intended exercise of such a right, including, but not limited to, a description of the scope, duration, and object of the City action. The County and City agree that each will cooperate with the other to carry out the intended purposes of the Project and the County will act in ROW management matters to further those purposes as reasonably requested by the City.

If any portion of this provision is deemed unenforceable, all surviving provisions will remain in full force and effect. Nothing herein is intended to limit or exceed the authority of the City or the County under Minnesota Law to manage ROW in which they have an interest.

III

The City or its agents shall prepare the necessary plans, specifications and proposals; shall advertise

Agreement No. PW 04-01-16
County State Aid Highway No. 20

for bids for the construction; receive and open bids pursuant to said advertisement and enter into a contract with the successful bidder at the unit prices specified in the bid of such bidder. The contract will include plans and specifications approved by the County and by the Minnesota Department of Transportation Division of State Aid for Local Transportation.

The City shall also apply for, and comply with, at its sole cost and expense, all permits and approvals from all other governmental or regulatory agencies as may be required to accomplish the Project. Said permits and approvals shall be obtained prior to start of any construction. Copies of said permits shall be given to the County Engineer or designated representative prior to the start of construction activities.

IV

The City or its agents will administer the contract and inspect the construction of all the contract work contemplated herewith. However, the County Engineer or designee shall have the right, as the work progresses, to enter upon the job site to make any inspections deemed necessary and shall cooperate with the City's Project Engineer and staff at their request to the extent necessary, but will have no responsibility for the supervision of the work.

The County agrees that the City may make changes in the aforementioned approved plans or in the character of said contract construction which are reasonably necessary to cause said construction to be in all things performed and completed in a satisfactory manner. It is further agreed by the County that the City may enter into any change orders or supplemental agreements with the City's contractor for the performance of any additional construction or construction occasioned by any necessary, advantageous or desirable changes in plans, within the original scope of the Project. The City shall obtain the approval of the County Engineer or designed representative on said change orders or supplemental agreements. The County will respond to the City's request for approvals within seven (7) calendar days.

V

The City or its agents shall be responsible for the design of the CSAH 20 traffic control signals serving the CSAH 20 intersections with 2nd Street North East and Cambridge Street in accordance with County standards.

The County will supply traffic signal cabinet, controllers, video detection equipment, and control equipment, including the emergency vehicle preemption (EVP) cards, (County Supplied Equipment) for the permanent traffic control signal systems to be installed at the two CSAH 20 intersections. The City agrees to reimburse the County for fifty (50) percent of the costs of the County Supplied Equipment to be installed at these intersections. It is estimated that the cost for the County Supplied Equipment will be \$30,000.00 per intersection for a total estimated City cost share of \$60,000.00. It is further agreed that said estimate of the costs of County Supplied Equipment is an estimate and that the actual costs of equipment as determined by the County Engineer shall govern in computing the total final apportionment of cost participation by the City in the County Supplied Equipment.

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County State Aid Highway No. 20

It is further understood that if the City desires, the City will provide signal service cabinets designed for battery backup. It is further understood and agreed that the City shall be responsible for providing the batteries, inverter and cabling for the service cabinets.

The City or its agents shall notify the County's Signal Shop Supervisor two (2) weeks in advance of need of the County Supplied Equipment. The County shall notify the City when the County Supplied Equipment is ready to be picked up for field installation. It shall be the responsibility of the City or its agents to pick up the County Supplied Equipment at the Hennepin County Department of Transportation Public Works Facility in Medina, Minnesota and shall install said equipment on the Project.

Upon pickup of the County Supplied Equipment by the City or its agents, the County will invoice the City for the County Supplied Equipment. Payment shall be made to the County by the City for the full amount due as stated in the invoice within forty-five (45) days of the invoice.

The City shall notify the County a minimum of one (1) week prior to the date of any traffic signal turn ons. The County's Traffic Operations Engineer or his designated representative must be present at the time any traffic signal systems are turned on.

The County hereby reserves the right to perform final inspection of the traffic control signal system at the time of energizing and also the right to require any modifications prior to approving the system for operation. No traffic control signal system may be placed in operation without approval of the installed system by the County.

VI

The County will participate in right-of-way acquisition and construction costs in accordance with the Hennepin County Public Works Business Line Transportation Department Policies for Cost Participation between Hennepin County and Other Agencies for Cooperative Highway Projects adopted February 7, 2012.

It is further understood and agreed by the City that the County will reimburse the City up to ten (10) percent of the County's construction cost participation for design engineering and up to eight (8) percent of the County's construction cost participation for construction engineering/oversight.

It is further understood and agreed by the City that the County's cost participation must be eligible for County State Aid funding and that the County's contribution to the Project's costs must be for right-of-way, construction and engineering that benefits CSAH 20. Accordingly, it is understood and agreed that the County reserves the right not to make payment to the City for its share of the costs for the project if any action or inaction of the City causes the Minnesota Department of Transportation's (MnDOT) State Aid Engineer to determine that the County's costs are not eligible for State Aid funding.

The County's cost participation for the Project shall not exceed \$14,456,000 without an amendment to

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this Agreement. For information purposes only the County's cost participation has been computed based on the following estimated Project cost components:

Right-of-Way: \$2,000,000
Construction: \$10,380,000 (refer to Article XVI)
Engineering: \$2,076,000

The City may invoice the County up to \$1,038,000 for the County's aforesaid engineering cost participation upon the City's execution of a consultant engineering contract for design of the Project. Payment shall be made to the City by the County within forty-five (45) days of the invoice.

It is understood and agreed that if parcels are acquired in total, the City will use its best efforts to sell at the most favorable price those portions of said parcels which are not required for the Project. The proceeds from such sales shall be shared with the County at the same cost participation percentage used to acquire the parcels.

The acquisition costs incurred by the City as described herein shall include, but are not limited to the following:

- monies paid to property owners, or on behalf of property owners, as part of negotiated settlements
- costs incurred with obtaining property through, and compliance with, Minnesota Statute Chapter 117 (eminent domain), including all damages and awards resulting there from
- relocation expenses, including the costs of consultants used therefore
- acquisition consultant services
- appraisals and appraisal services
- title opinions and updates
- document searches (judgment, name title, etc.)
- closing, conveyance and recordation fees and taxes
- costs to maintain, provide security for, or remove and dispose of vacant property, and any improvements thereon.
- costs incurred for the relocation, reconstruction, adjustment, and/or removal of existing private or public utility conduits or other structures located in or upon lands acquired and within present right-of-way when existing valid easements and/or permits provide for reimbursement to the utility owner for the relocation, reconstruction, adjustment, and/or removal of the existing utility facilities (or when a court of competent jurisdiction determines that the City or County is obliged to pay such amounts)

Damages, as used in this section pertains to acquisition costs allowed by Minnesota Statutes Chapter 117 and does not abrogate the meaning of the language set forth elsewhere in this Agreement.

The City may invoice the County for its share of ROW costs as said costs are accrued. Payments shall be made to the City by the County within forty-five (45) days of said invoices.

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After an award by the City to the successful bidder on the project, the City may invoice the County for ninety-five (95) percent of the estimated County's shares of the contract construction costs and construction engineering costs and the balance of the estimated County's share of the design engineering costs for the Project. Payments shall be made to the City by the County for the full amounts due as stated on an invoice within forty-five (45) days of the invoice.

In the event the City Engineer determines the need to amend the construction contract with a supplemental agreement or change order which results in an increase in the contract amount for the Project, the County hereby agrees to remit within forty-five (45) days of submittal of an invoice by the City of said change an amount equal to ninety-five (95) percent of the estimated County's shares as documented in the supplemental agreement or change order. Said invoice shall include documentation of the additional costs.

The remainder of the County's shares in the ROW, engineering and contract construction costs of the Project, including additional costs resulting from supplemental agreements and change orders, will be due the City upon acceptance by the City of all the construction work performed by the City's construction contractor and submittal of the City Engineer's final estimate for the Project to the County.

Upon final payment to the Project contractor by the City, any amount remaining as a balance in the deposit account will be returned to the County, within 45 days, on a proportionate basis based on the County's initial deposit amount and the County's final proportionate share of the Project costs. Likewise, any amount due the City from the County upon final payment by the City shall be paid by the County as its final payment for the construction and engineering costs of the Project within forty-five (45) days of receipt of an invoice from the City.

VII

It is understood and agreed that County will not participate in the cost of landscape improvements the City may propose to install in conjunction with the Project such as street lighting, pedestrian level lighting, boulevard or median plantings, benches, shelters, banners or utility burial without amendment to this Agreement. However, such items may compete for Roadside Enhancement Partnership Program (REEP) funds to help offset City construction costs for these items.

VIII

The City also agrees that any contract let by the City or its agents for the performance of the work included in the Project as provided herein shall include clauses that will: 1) Require the Contractor to defend, indemnify, and hold the County and its officials, officers agents and employees harmless from any liability, causes of action, judgments, damages, losses, costs or expenses including without limitation to reasonable attorneys' fees, arising out of or by reason of the acts and/or omissions of the said Contractor, its officers, employees, agents or subcontractors; 2) Require the Contractor to be an independent contractor for the purposes of completing the work provided for in this Agreement; and 3) Require the Contractor to provide and

maintain insurance in accordance with the following:

1. Commercial General Liability on an occurrence basis with Contractual Liability and Explosion, Collapse and Underground Property Damage (XCU) Liability coverages:

	<u>Limits</u>
General Aggregate	\$2,000,000
Products-Completed Operations Aggregate	\$2,000,000
Personal and Advertising Injury	\$1,500,000
Each Occurrence – Combined Bodily Injury and Property Damage	\$1,500,000

Hennepin County shall be named as an additional insured for the Commercial General Liability coverage with respect to operations covered under this Agreement.

2. Automobile Liability:

Combined Single limit each occurrence coverage or the equivalent covering owned, non-owned, and hired automobiles	\$1,000,000
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3. Workers' Compensation and Employer's Liability:

A. Workers' Compensation	Statutory
--------------------------	-----------

If the Contractor is based outside the State of Minnesota, coverages must apply to Minnesota Laws

- B. Employer's Liability – Bodily injury by:

Accident – Each Accident	\$500,000
Disease – Policy Limit	\$500,000
Disease – Each Employee	\$500,000

- | | |
|---------------------------------------|-------------|
| 4. Professional Liability – Per Claim | \$1,500,000 |
| Aggregate | \$2,000,000 |

It is understood and agreed by the parties hereto that the above listed Professional Liability insurance will not be required in any construction contract let by City if the City's Contractor is not required to perform design engineering as part of said construction contract.

An umbrella or excess policy over primary liability coverages is an acceptable method to provide the

wl

required insurance limits.

The above subparagraphs establish minimum insurance requirements. It is the sole responsibility of the City's Contractor to determine the need for and to procure additional insurance which may be needed in connection with said Project.

All insurance policies shall be open to inspection by the County and copies of policies shall be submitted to the County upon written request.

IX

The City shall install, cause the installation of, or perpetuate the existence of an adequate three wire, 120/240 volt, single phase, alternating current electrical power connection to the traffic control signals and integral street lights located on CSAH 20 and included in the Project, at the sole cost and expense of the City. Further, the City shall provide the electrical energy for the operation for said traffic control signals and integral streetlights, at its sole cost and expense.

X

The City shall not revise by addition or deletion, nor alter or adjust any component, part, sequence, or timing of the traffic control signals located on CSAH 20 and included in the Project.

XI

It is understood that the EVP Systems provided with the traffic control signals located on CSAH 20 and included in the Project, shall be installed, operated, maintained or removed in accordance with the following conditions and requirements:

1. Emitter units may be installed and used only on vehicles responding to an emergency as defined in Minnesota Statutes Chapter 169.01, Subdivision 5 and 169.03. Upon request, the City will provide the County Engineer or his designated representative a list of all such vehicles with emitter units.
2. Malfunctions of EVP Systems shall be reported to the County immediately.
3. In the event said EVP Systems or components are, in the opinion of the County, being misused or the conditions set forth herein are violated, and such misuse or violation continues after receipt by the City of written notice thereof from the County, the County shall remove the EVP Systems. Upon removal of the EVP Systems pursuant to this paragraph, the field wiring, cabinet wiring, detector receivers, infrared detector heads, indicator lamps and all other components shall become the property of the County.
4. All timing of said EVP Systems shall be determined by the County.

XII

As part of the Project, "No-Parking" signs will be installed as represented in the plans and the City, at its expense, shall provide the enforcement for the prohibition of on-street parking on those portions of CSAH 20 constructed under this Project.

It is further agreed that the City shall at its own expense, remove and replace all City owned signs that are within the construction limits of the Project.

XIII

Upon completion of the Project the County shall, at its own cost and expense, retain ownership and maintenance responsibilities for those portions of the roadway storm sewer drainage system functioning as catch basins and associated lead pipes that are within or between the outermost curb lines of the County roadways as well as those within the radius return limits of intersecting municipal streets until such time as jurisdiction of CSAH 20 reverts to the City. All other components of the roadway storm sewer drainage system, constructed as a part of this Project including but not limited to all trunk lines, manholes and drainage ponds shall become the property of the City, and shall be maintained by the City.

It is hereby understood that the County requires an operational clear zone behind the face of curb for storage of snow removed from County roadways. The City hereby agrees that the City shall be responsible for the removal of any snow including that placed on the sidewalks and/or pedestrian/bicycle paths as a result of the County's snow removal operations on CSAH 20 within the limits of the Project. This paragraph is not intended to confer a benefit upon any third party and the City's decision to remove snow from the sidewalks and/or pedestrian/bicycle paths shall be made by the City at its sole discretion pursuant to its policy on removal of snow and ice from sidewalks and/or pedestrian/bicycle paths.

All questions of maintenance responsibilities that may arise shall be jointly resolved by the City's Director of Public Works and the County's Transportation Road and Bridge Operations Department Director.

XIV

It is understood and agreed by the Parties that three (3) years after the City's receipt of final payment from the County of its Project costs, CSAH 20 shall be removed from the County State Aid Highway system.

The process by which the CSAH 20 designation shall be removed from Blake Road shall begin with a City resolution stating support for the Commissioner of the Minnesota Department of Transportation's removal of CSAH 20 from the County State Aid Highway System three (3) years after the City's receipt of final payment from the County of its Project costs and acceptance of Blake Road jurisdiction under Provisions of Minnesota Statutes, Section 612.02, and shall end when the County advises the Commissioner that the three (3) year period has passed. Thereafter, the City agrees to accept such conveyance subject to existing encumbrances such as permits and easements and perform all roadway and other maintenance at its sole cost

Agreement No. PW 04-01-16
County State Aid Highway No. 20

and expense, and will request that the Commissioner designate the segment a Municipal State Aid route. During this three (3) year period, the County shall notify the City of any new encumbrances to the property to be transferred to the City, and the City shall retain the ability to object to such encumbrances which are not necessary to the completion of this Agreement.

It is further understood and agreed by the Parties that upon transfer of CSAH 20/Blake Road as stated herein the traffic control signal system at the CSAH 3/Blake Road intersection shall remain the property of the County and the traffic control signal system at the TH 7/Blake Road intersection shall remain the property of the State of Minnesota.

XV

The County shall provide the City with the following information and records, to the extent that they are available for the route to be transferred.

1. As-built construction plans, microfilm records, and electronic files.
2. Inventory data.
3. History of most recent improvements/upgrades.

XVI

It is understood and agreed by the Parties that the construction of the SWLRT station along Blake Road will generate pedestrian activity along the south side of CSAH 3/Excelsior Boulevard from Blake Road to the east City limit where no pedestrian facilities currently exist. It is further understood and agreed by the Parties that the City is in a better position to install the needed facilities along the south side of CSAH 3, and that the County will provide \$150,000 toward the cost of the installation. The \$150,000 will be drawn from the County's State Aid Construction Account, and will reduce the construction costs the City would normally be responsible to pay for the CSAH 20/Blake Road reconstruction by \$150,000. This \$150,000 will be added to the \$10,230,000 in construction cost participation the County intends to pay as outlined in Article VI, yielding a construction cost component of \$10,380,000. The Parties further agree that the \$150,000 the County will provide to install the needed facilities shall constitute the entire amount the County will provide for said facilities, and the City will heretofore be responsible for the installation of the facilities either in conjunction with the Project or thereafter as deemed appropriate by the City.

XVII

Each party agrees that it will be responsible for its own acts and the results thereof, to the extent authorized by the law, and shall not be responsible for the acts of the other party and the results thereof. The County's and the City's liability is governed by the provisions of Minnesota Statutes, Chapter 466.

The County and the City each warrant that they are able to comply with the aforementioned indemnity requirements through an insurance or self-insurance program.

XVIII

The City agrees to defend, indemnify and hold harmless the County, its officials, officers, agents, volunteers and employees, from any liabilities, claims, causes of action, judgments, damages, losses, costs or expenses, including reasonable attorneys' fees, resulting directly or indirectly from any act or omission of the City, its contractors, anyone directly or indirectly employed by them, and/or anyone for whose acts and/or omissions they may be liable for related to the ownership, maintenance, existence, restoration, repair or replacement of the afore defined City owned improvements constructed as part of the Project. The City's liability shall be governed by the provisions of Minnesota Statutes, Chapter 466 or other applicable law.

The County agrees to defend, indemnify, and hold harmless the City, its officials, officers, agents, volunteers, and employees from any liability, claims, causes of action, judgments, damages, losses, costs, or expenses, including reasonable attorneys' fees, resulting directly or indirectly from any act or omission of the County, its contractors, anyone directly or indirectly employed by them, and/or anyone for whose acts and/or omissions they may be liable related to the ownership, maintenance, existence, restoration, repair or replacement of the afore defined County owned improvements constructed as part of the Project. The County's liability shall be governed by the provisions of Minnesota Statutes, Chapter 466 or other applicable law.

XIX

All records kept by the City and the County with respect to the Project shall be subject to examination by the representatives of each party hereto.

XX

It is further agreed that any and all employees of the City and all other persons engaged by the City in the performance of any work or services required or provided for herein to be performed by the City shall not be considered employees of the County, and that any and all claims that may or might arise under the Minnesota Economic Security Law or the Workers' Compensation Act of the State of Minnesota on behalf of said employees while so engaged and any and all claims made by any third parties as a consequence of any act or omission on the part of said employees while so engaged on any of the work or services provided to be rendered herein shall in no way be the obligation or responsibility of the County.

Also, any and all employees of the County and all other persons engaged by the County in the performance of any work or services required or provided for herein to be performed by the County shall not be considered employees of the City, and that any and all claims that may or might arise under the Minnesota Economic Security Law or the Workers' Compensation Act of the State of Minnesota on behalf of said employees while so engaged and any and all claims made by any third parties as a consequence of any act or omission on the part of said employees while so engaged on any of the work or services provided to be rendered herein shall in no way be the obligation or responsibility of the City.

XXI

In order to coordinate the services of the County with the activities of the City so as to accomplish the purposes of this Agreement, the Hennepin County Engineer or designated representative shall manage this Agreement on behalf of the County and serve as liaison between the County and the City.

In order to coordinate the services of the City with the activities of the County so as to accomplish the purposes of this Agreement, the City Engineer or designated representative shall manage this Agreement on behalf of the City and serve as liaison between the City and the County.

XXII

It is understood and agreed that the entire Agreement between the parties is contained herein and that this Agreement supersedes all oral agreements and negotiations between the parties relating to the subject matter hereof. All items referred to in this Agreement are incorporated or attached and are deemed to be part of this Agreement.

Any alterations, variations, modifications, or waivers of provisions of this Agreement shall only be valid when they have been reduced to writing as an amendment to this Agreement signed by the parties hereto.

XXIII

The whereas clauses are incorporated herein and are hereby made a part of this Agreement.

XXIV

The provisions of Minnesota Statutes 181.59 and of any applicable local ordinance relating to civil rights and discrimination and the Affirmative Action Policy statement of Hennepin County shall be considered a part of this Agreement as though fully set forth herein.

(this space left intentionally blank)

IN TESTIMONY WHEREOF, the parties hereto have caused this Agreement to be executed by their respective duly authorized officers as of the day and year first above written.

CITY OF HOPKINS

(Seal)

By: Molly Cummings
Mayor

Date: MAY 17, 2016

And: [Signature]
Manager

Date: MAY 17, 2016

COUNTY OF HENNEPIN

ATTEST:

By: [Signature]
Deputy Clerk of the County Board

Date: 10-31-16

By: Jane A. Collins
Chair of its County Board

Date: 10-24-16

APPROVED AS TO FORM:

By: [Signature]
Assistant County Attorney

Date: 5/5/16

And: [Signature]
Assistant/Deputy County Administrator

Date: 10/6/16

And: [Signature]
Assistant County Administrator, Public Works

Date: 10/9/16

APPROVED AS TO EXECUTION:

By: [Signature]
Assistant County Attorney

Date: 10/28/16

RECOMMENDED FOR APPROVAL:

By: [Signature]
County Highway Engineer

Date: 6/21/16

WL

**CITY OF HOPKINS
HENNEPIN COUNTY, MINNESOTA**

RESOLUTION NO. 2016-042

**RESOLUTION APPROVING AGREEMENT FOR JURISDICTIONAL TRANSFER
OF COUNTY STATE AID HIGHWAY NO. 20 (BLAKE ROAD)
CITY PROJECT 2013-06**

WHEREAS, Hennepin County (County) and the City of Hopkins (City) have been negotiating to bring about the transfer of County State Aid Highway No. (CSAH) 20 (Blake Road) between CSAH 3 (Excelsior Boulevard) and Trunk Highway (TH) 7 from the County to the City, and

WHEREAS, the construction of the Southwest Light Rail Transit (SWLRT) line through the City will result in a SWLRT at-grade crossing of CSAH 20 and a SWLRT station on the CSAH 20 corridor, and

WHEREAS, the Parties anticipate the introduction of a SWLRT station on the CSAH 20 corridor will provide a stimulus to development/redevelopment along the CSAH 20 corridor, and

WHEREAS, the City has engaged in a visioning process intended to conform the reconfiguration of CSAH 20 between CSAH 3 and TH 7 in a manner complementary to the anticipated development/redevelopment of the properties along CSAH 20, and

WHEREAS, CSAH 20 is in need of reconstruction between CSAH 3 and TH 7, and

WHEREAS, the City is willing to receive jurisdiction of CSAH 20 within the aforesaid limits with the understanding that the City would take the lead in design, construction, construction oversight and necessary right-of-way acquisition to support the reconstruction of CSAH 20 between CSAH 3 and TH 7 in a manner agreed to by the Parties and hereinafter referred to as the project, and

WHEREAS, the County has acknowledged that the City is properly positioned to design and reconstruct CSAH 20 in a manner reflective of a vision to complement area development/redevelopment in a time frame complementary to the projected SWLRT schedule, and

WHEREAS, it is contemplated that said work be carried out by the Parties hereto under the provisions of Minnesota Statutes, Section 162.17, Subdivision I and Section 471.59, and

WHEREAS, an Agreement for Jurisdictional Transfer of CSAH 20 has been developed and is acceptable to the Parties which specifies the terms and responsibilities for the reconstruction and transfer.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Hopkins, Minnesota:

The Mayor and City Manager are hereby authorized to enter into an agreement with Hennepin County for the said project.

Adopted by the City Council of the City of Hopkins, Minnesota, this 17th day of May, 2016.

By Molly Cummings
Molly Cummings, Mayor

ATTEST:

Amy Domeier
Amy Domeier, City Clerk

STATE OF MINNESOTA
COUNTY OF HENNEPIN
CITY OF HOPKINS

I, THE UNDERSIGNED, AMY DOMEIER, CLERK OF THE CITY OF HOPKINS, HENNEPIN COUNTY, MINNESOTA, AND CUSTODIAN OF THE SEAL AND RECORDS OF SAID CITY HEREBY CERTIFY THAT THE ABOVE OR FOREGOING IS A TRUE AND CORRECT TRANSCRIPT AND COPY OF THE WHOLE RECORD THEREOF RESERVED AND ON FILE IN THE OFFICE OF SAID CITY CLERK.

Amy Domeier
AMY DOMEIER, CITY CLERK OF THE CITY OF HOPKINS