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<b>Title:</b>	Approval of 100% Design Plans for the 2023-2024 Stormwater Pond Dredging Project and Authorization to Solicit Bids	
<b>Resolution number:</b>	23-063	
<b>Prepared by:</b>	Name: Josh Wolf Phone: 952-641-4588 jwolf@minnehahacreek.org	
<b>Reviewed by:</b>	Tiffany Schaufler, Senior Project Maintenance Coordinator	
<b>Recommended action:</b>	Board approval of the final design for the 2023-2024 Stormwater Pond Maintenance project and authorization to solicit bids for construction.	
<b>Schedule:</b>	October 20, 2023 – Bid solicitation begins November 7, 2023 – Mandatory pre-bid meeting November 14, 2023 – Bid opening November 27, 2023 – Award contract January 2024 – Construction begins March 29, 2024 – Final completion	
<b>Budget considerations:</b>	Fund name and code: Project Maintenance & Land Management, 2003-4340 Fund budget: \$2,594,155.00 Expenditures to date: \$1,984,424.57	
<b>Past Board action:</b>	Res # 21-021	Authorization to Execute a Contract for 2021 Annual Stormwater Pond Maintenance
	Res # 22-046	Authorization to Execute a Contract to Analyze MCWD Stormwater Pond Survey Data and Develop Maintenance Recommendations
	Res # 23-033	Authorization to Release the Request for Proposals for Engineering and Design Services for Annual Stormwater Pond Survey and Maintenance
	Res # 23-043	Authorization to Contract for Engineering and Design Services for 2023-2024 Stormwater Pond Survey and Maintenance

**Summary:**

The Minnehaha Creek Watershed District (MCWD) is responsible for the inspection and/or maintenance of 26 stormwater ponds through ownership or cooperative agreements with its partner communities. The MCWD Board of Managers has established a policy that dictates cyclical investigation and maintenance of its stormwater management infrastructure to ensure the long-term water quality and water quantity function of these systems.

In 2010, the Project Maintenance and Land Management (PMLM) Program recommended pond sediment surveys of six to eleven ponds each year on a three-year rotating basis to adhere to the policy established by the Board. As the District continued its rotational survey efforts it collected a volume of dredging data in the ensuing 12 years. Following the recent completion of MCWD's Stormwater Pond Data Analysis, a 20-year schedule was developed, and ponds are now selected for survey and maintenance based off historical data and a calculated sedimentation rate for each pond. This

maintenance is necessary to ensure stormwater ponds are functioning as designed and continue to accrue their designed water resource benefit.

Best management practices indicate that a stormwater pond should be dredged when 50% of its wet volume is filled. Utilizing results from MCWD's Stormwater Pond Data Analysis the MCWD Stormwater Pond Maintenance Plan identifies that Twin Lakes Park Pond and Nokomis-Amelia Pond are estimated to have reached this threshold and require maintenance.

At the August 10, 2023 MCWD Board Meeting, the board authorized a contract with Stantec Consulting for engineering and design services for 2023-2024 stormwater pond survey and maintenance.

Through Stantec's engineering and design, it was identified that both Twin Lake Park pond and Nokomis-Amelia pond have accumulated sediment to the recommended threshold for cleanout and should have this accumulated sediment removed to restore them to their original as-built condition. Due to observed levels of contamination, removed material will be disposed of at an appropriate landfill. The ponds will be dewatered and subsequently dredged during January through March 2024. The estimated accumulated sediment to be removed is 3,030 cubic yards from Twin Lake Park pond and 6,740 cubic yards from Nokomis-Amelia pond, which will return both ponds to their as-built volumes.

At the October 12, 2023 Board meeting, staff will seek approval of the final design plans and authorization to solicit bids for construction. The bid period is tentatively scheduled to run from October 20<sup>th</sup>, to November 14<sup>th</sup>, 2023, with construction contract approval anticipated at the November 27<sup>th</sup>, 2023 Board Meeting.

**Supporting Documents:**

- Final design plans for the 2023-2024 Stormwater Pond Maintenance



**RESOLUTION**

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**Resolution number:** 23-063

**Title:** Approval of 100% Design Plans for the 2023-2024 Stormwater Pond Dredging Project and Authorization to Solicit Bids

WHEREAS, the Minnehaha Creek Watershed District (MCWD) engages in regional capital improvement projects as described in its Water Resources Management Plan;

WHEREAS, the MCWD has a policy that dictates cyclical investigation and maintenance of its stormwater management infrastructure and conducts pond sediment surveys on the 26 regional ponds that MCWD is responsible for inspecting and maintaining;

WHEREAS, the Project Maintenance and Land Management Program (PMLM) annually budgets for this effort in accordance with the PMLM Maintenance Plan;

WHEREAS, utilizing MCWD’s Stormwater Pond Data Analysis, the two ponds recommended for survey and maintenance in 2023-2024 are Twin Lakes Park pond and Nokomis-Amelia pond;

WHEREAS, on August 10, 2023, MCWD Board of Managers authorized staff to enter into a contract with Stantec Consulting for engineering and design services for 2023-2024 stormwater pond survey and maintenance;

WHEREAS, on July 28, 2023, MCWD staff presented final design plans prepared by Stantec Consulting for Board of Managers consideration.

NOW, THEREFORE, BE IT RESOLVED that the Minnehaha Creek Watershed District Board of Managers approves the final design plans for the 2023-2024 Stormwater Pond Maintenance and authorizes the District Administrator to solicit bids for construction maintenance of Twin Lakes Park pond and Nokomis-Amelia pond.

Resolution Number 23-063 was moved by Manager \_\_\_\_\_, seconded by Manager \_\_\_\_\_. Motion to adopt the resolution \_\_\_ ayes, \_\_\_ nays, \_\_\_ abstentions. Date: 10/12/2023

\_\_\_\_\_  
Secretary Date: \_\_\_\_\_

# CONSTRUCTION PLANS FOR 2023-2024 STORMWATER POND MAINTENANCE

**OWNER:**  
MINNEHAHA CREEK WATERSHED DISTRICT



15320 MINNETONKA BLVD  
MINNETONKA, MN 553405

**ENGINEER:**  
STANTEC CONSULTING SERVICES INC.



ONE CARLSON PARKWAY, SUITE 100  
PLYMOUTH, MN 55447  
CONTACT: CHRIS MEEHAN, P.E.  
PH: (763) 252-6844

**WARNING:**  
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG  
**GOPHER STATE ONE CALL**  
TWIN CITY AREA: 651-454-0002  
TOLL FREE 1-800-252-1166

AMELIA POND & TWIN LAKES POND  
CITY OF MINNEAPOLIS AND CITY OF ST. LOUIS PARK  
HENNEPIN COUNTY, MN



**PROJECT LOCATION MAP**  
NOT TO SCALE



**TWIN LAKES POND VICINITY MAP**  
NOT TO SCALE



**AMELIA POND VICINITY MAP**  
NOT TO SCALE

THIS PLAN SET CONTAINS 10 SHEETS

INDEX	
SHEET NUMBER	SHEET TITLE
G-001	COVER SHEET
G-002	GENERAL NOTES AND LEGEND
C-001	EX. CONDITIONS, REMOVALS, EROSION CONTROL PLAN (TWIN LAKES POND)
C-002	EX. CONDITIONS, REMOVALS, EROSION CONTROL PLAN (AMELIA POND)
C-101	SWPPP (TWIN LAKES POND)
C-102	SWPPP (AMELIA POND)
C-201	PROPOSED CONDITIONS (TWIN LAKES POND)
C-202	PROPOSED CONDITIONS (AMELIA POND)
C-801	DETAILS
C-802	DETAILS



ONE CARLSON PARKWAY, SUITE 100  
PLYMOUTH MN, 55447  
PHONE: 763-479-4200  
FAX: 763-479-4242  
WWW.STANTEC.COM

CLIENT:  
MINNEHAHA CREEK WATERSHED DISTRICT  
15320 MINNETONKA BLVD  
MINNETONKA, MN 55345



**2023-2024 STORMWATER POND MAINTENANCE**  
AMELIA POND & TWIN LAKES POND  
HENNEPIN COUNTY, MINNESOTA

PROJECT TITLE

ISSUE NO:

0

DESCRIPTION:  
ISSUED FOR: MOWD

DATE:  
10/09/2023

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

CHRIS MEEHAN  
LICENSE NO.: 43066  
DATE: #####

PROJECT NO.: 227706259

DWN BY: SMD    CHK'D BY: NPW    APP'D BY: CJM

ISSUE DATE: 10/09/2023

ISSUE NO.: 0

SHEET TITLE:  
COVER SHEET

SHEET NO.:  
G-001

### GOVERNING SPECIFICATIONS

- PROJECT MANUAL FOR 2023-2024 STORMWATER POND MAINTENANCE.
- MINNESOTA DEPARTMENT OF TRANSPORTATION (MNDOT) 'STANDARD SPECIFICATIONS FOR CONSTRUCTION' LATEST EDITION AND SUPPLEMENTS.
- CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM) STANDARD SPECIFICATIONS FOR UTILITIES LATEST EDITION.
- APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES

### GENERAL NOTES

- UNTIL REVISION BLOCK STATES 'ISSUED FOR CONSTRUCTION', THE PLAN SET IS NOT CERTIFIED FOR CONSTRUCTION AND CONTRACTOR IS BUILDING AT THEIR OWN RISK.
- EXISTING CONDITIONS SHOWN ARE FROM A COMBINATION OF TOPOGRAPHIC SURVEY AND LIDAR DATA COMPLETED BY STANTEC CONSULTING SERVICES, INC., DATED 08/16/2023 AND 10/24/2019. EXISTING FEATURES MAY NOT BE EXACT TO THEIR LOCATION. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE CONDITIONS OF THE SITE AND MUST IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF DISCREPANCIES OR VARIATIONS FROM THE DRAWINGS.
- SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CIAS/SC 38-2 ENTITLED 'STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA'. EXACT LOCATION/DEPTH OF SUBSURFACE UTILITIES SUCH AS GAS, TELEPHONE, FIBER OPTIC, SEWER, WATER, PIPELINES, ELECTRICAL, AND CABLE TV ARE UNKNOWN AND THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE.
- CONTRACTOR RESPONSIBLE FOR CONTACTING GOPHER STATE ONE CALL (1-800-252-1166) A MINIMUM OF 48 HOURS IN ADVANCE (EXCLUDING HOLIDAYS AND WEEKENDS) BEFORE STARTING WORK FOR LOCATIONS OF UNDERGROUND UTILITIES.
- CONTRACTOR SHALL ANTICIPATE PRIVATE UTILITY CONFLICTS THROUGHOUT THE PROJECT SUB CUT AND TRENCH AREAS AND MUST COORDINATE THE RELOCATION OR PROTECTION OF EXISTING UTILITIES, OR INSTALLATION OF NEW UTILITIES WITH UTILITY OWNERS THAT MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE STARTING WORK. COSTS FOR SUCH WORK, INCLUDING EXTRA TIME AND EFFORT FOR PROVISIONS NECESSARY TO WORK AROUND OR UNDER UTILITIES, IS THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER. FEES OR CHARGES WHICH ARE TO BE PAID TO THE UTILITY COMPANY, INCLUDING WORK THAT MUST BE PERFORMED BY THE UTILITY COMPANY, ARE AT NO ADDITIONAL COST TO THE OWNER.
- QUANTITIES ARE APPROXIMATE, AND MAY VARY TO ALLOW COMPLETION OF WORK.
- WORK AND MATERIALS MUST COMPLY WITH CITY, COUNTY, STATE, AND FEDERAL (INCLUDING OSHA) REGULATIONS AND CODES.
- CONTRACTOR SHALL COORDINATE WORK WITH OTHER CONTRACTORS PERFORMING WORK AT OR NEAR THE SITE.
- CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS TO ADJACENT PROPERTIES THROUGHOUT CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE AND MAINTAIN MAIL, GARBAGE, AND RECYCLING SERVICES TO PROPERTIES THROUGHOUT CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE AND MAINTAIN STORMWATER DRAINAGE CONVEYANCE THROUGHOUT CONSTRUCTION (BOTH PIPED AND OVERLAND FLOW).
- CONTRACTOR SHALL COORDINATE AND MAINTAIN UTILITY SERVICES TO ADJACENT PROPERTIES AT ALL TIMES. UTILITY SERVICE MUST NOT BE INTERRUPTED WITHOUT APPROVAL FROM OWNER, CITY, AND ADJACENT PROPERTIES.
- CONSTRUCTION LIMITS ARE TO PROPERTY LINE UNLESS SHOWN OR NOTED OTHERWISE. CONTRACTOR SHALL RESTRICT CONSTRUCTION ACTIVITIES TO AREAS DESIGNATED ON PLANS WITHIN THE CONSTRUCTION LIMITS.
- CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING PAVEMENT, SITE FEATURES, UTILITIES, TREES, ETC., UNLESS NOTED OR SHOWN OTHERWISE.
- CONTRACTOR SHALL PHOTO OR VIDEO DOCUMENT EXISTING CONDITIONS OF TREES AND PLANTINGS, ADJOINING CONSTRUCTION, SURFACES, AND SITE IMPROVEMENTS, ETC. TO REMAIN THAT MIGHT BE MISCONSTRUED AS DAMAGE CAUSED BY CONSTRUCTION OPERATIONS. SUBMIT TO ENGINEER AND OWNER BEFORE CONSTRUCTION BEGINS. USE ADEQUATELY DETAILED PHOTOGRAPHS OR VIDEO RECORDINGS. INCLUDE PLANS AND NOTATIONS TO INDICATE SPECIFIC EXISTING DAMAGE CONDITIONS OF ITEMS DESIGNATED TO REMAIN. ANY DAMAGE TO THE EXISTING PAVEMENT, CURBING, STRIPING, OR OTHER SITE FEATURE TO REMAIN MUST BE REPLACED BY THE CONTRACTOR, TO OWNER'S SATISFACTION, AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING CONSTRUCTION AND WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES.
- CONTRACTOR MUST IMMEDIATELY NOTIFY THE OWNER AND ENGINEER IN WRITING OF DISCREPANCIES OR CONFLICTS IN THE CONTRACT DOCUMENTS BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO NOTIFY OWNER AND ENGINEER OF AN IDENTIFIABLE CONFLICT BEFORE PROCEEDING WITH INSTALLATION RELIEVES OWNER AND ENGINEER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.
- CONTRACTOR SHALL HAVE ONE COPY OF EACH REQUIRED CONSTRUCTION PERMIT AND ONE COPY OF THE MOST CURRENT AND COMPLETE SET OF CONSTRUCTION DOCUMENTS (INCLUDING PLANS, SPECIFICATIONS, GEOTECHNICAL REPORT, SPECIAL CONDITIONS AND PROVISIONS, ETC.) AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
- CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR IMPLEMENTATION AND ENFORCEMENT OF SAFE WORK PRACTICES, INCLUDING BUT NOT LIMITED TO PERSONNEL MONITORING, USE OF TRENCHING, SHEETING, AND SHORING, SCAFFOLDING, MATERIALS HANDLING AND DRILLING; OPERATION OF EQUIPMENT; AND SAFETY OF PUBLIC DURING PROGRESS OF WORK.
- CONTRACTOR SHALL PLAN FOR AND ENSURE PERSONNEL COMPLY WITH PROVISIONS OF OSHA SAFETY AND HEALTH STANDARDS (29 CFR 1910) AND GENERAL CONSTRUCTION STANDARDS (29 CFR 1926) AS APPROPRIATE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH WORK. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS FOR SAFETY OF EMPLOYEES ON PROJECT SITE AND OTHER PERSONS AND ORGANIZATIONS WHO MAY BE AFFECTED BY THE PROJECT. CONTRACTOR'S DUTIES AND RESPONSIBILITIES FOR SAFETY IN CONNECTION WITH WORK SHALL CONTINUE UNTIL SUCH TIME AS ALL WORK IS COMPLETED, AND ENGINEER HAS ISSUED NOTICE TO CONTRACTOR THAT WORK IS COMPLETE.
- HAZARDOUS MATERIALS, INCLUDING BUT NOT LIMITED TO OIL, GASOLINE, PAINT AND OTHER HAZARDOUS SUBSTANCES MUST BE PROPERLY STORED, BY THE CONTRACTOR, INCLUDING SECONDARY CONTAINMENTS, TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH MCPA REGULATIONS. CONTRACTOR SHALL REMOVE SPILL OF FUELS, OILS, OR OTHER CHEMICALS IMMEDIATELY UPON DETECTION.

### HORIZONTAL AND VERTICAL CONTROL NOTES

- THE HORIZONTAL CONTROL FOR THIS PLAN IS NAD83 HENNEPIN COUNTY COORDINATES SYSTEM US FOOT.
- THE VERTICAL CONTROL FOR THIS PLAN IS NAVD88.

### REMOVAL / DEMOLITION NOTES

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- CONTRACTOR SHALL OBTAIN PERMITS REQUIRED FOR DEMOLITION, REMOVAL AND DISPOSAL.
- CONTRACTOR SHALL REVIEW FEATURES NOT SPECIFICALLY IDENTIFIED ON PLAN FOR SALVAGE OR REMOVAL THAT CONFLICT WITH CONSTRUCTION WITH THE ENGINEER.
- MATERIALS REMOVED/DEMOLISHED BY CONTRACTOR BECOME PROPERTY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED. CONTRACTOR SHALL LOAD AND HAUL MATERIAL OFF-SITE AND PROPERLY DISPOSE OF MATERIALS IN ACCORDANCE WITH APPLICABLE REGULATIONS. CONTRACTOR MUST LEAVE THE SITE IN A CONDITION TO THE SATISFACTION OF THE OWNER AND ENGINEER.
- CONTRACTOR SHALL COORDINATE UTILITY REMOVAL WORK WITH APPROPRIATE UTILITY OWNER.
- CONTRACTOR SHALL SALVAGE AND REINSTALL STREET AND TRAFFIC SIGNS IN CONFLICT WITH CONSTRUCTION ACTIVITIES AS NOTED OR AS DIRECTED BY ENGINEER. IF SIGNS ARE DAMAGED DURING CONSTRUCTION, CONTRACTOR REQUIRED TO PROVIDE NEW SIGNS AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL SALVAGE AND REINSTALL FENCE IN CONFLICT WITH CONSTRUCTION ACTIVITIES AS NOTED OR AS DIRECTED BY ENGINEER. IF FENCE IS DAMAGED DURING CONSTRUCTION, CONTRACTOR REQUIRED TO PROVIDE NEW FENCE, TO OWNER'S SATISFACTION, AT NO ADDITIONAL COST TO THE OWNER.
- IN THE EVENT THAT UNKNOWN CONTAINERS OR TANKS ARE ENCOUNTERED, THE CONTRACTOR MUST CONTACT THE ENGINEER IMMEDIATELY. ALL CONTAINERS OR TANKS MUST BE DISPOSED OF PROPERLY AT A REGULATED/PERMITTED FACILITY.
- CONTRACTOR SHALL REVIEW ALL TREE REMOVALS WITH THE OWNER AND ENGINEER PRIOR TO REMOVAL OPERATIONS.
- CLEARING AND GRUBBING OPERATIONS MUST COMPLY WITH THE FOLLOWING:
  - PROTECT ALL TREES AND PLANTS NOT DESIGNATED FOR REMOVAL.
  - CONDUCT OPERATIONS IN SUCH A MANNER THAT DOES NOT DAMAGE PROTECTED TREES AND VEGETATION.
  - CUT, REMOVE, AND DISPOSE OF TREES, BRUSH, SHRUBS, WINDFALLS, LOGS, STUMPS, ROOTS, FALLEN TIMBER, AND OTHER VEGETATION.
  - BACKFILL DEPRESSIONS WITH NATIVE SOILS OR SUITABLE FILL MATERIAL AS REQUIRED BY DESIGN OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER AND COMPACT BACKFILL AS DIRECTED.
  - DISPOSE OF DEBRIS IN ACCORDANCE WITH APPLICABLE REGULATIONS.
  - CONSIDER BENEFICIAL USE DESIGNATIONS FOR UNADULTERATED WOOD, WOOD CHIPS, BARK AND SAWDUST.
  - NO BURYING OF CLEARED AND GRUBBED WASTE WITHIN THE CONSTRUCTION LIMITS.

### TRAFFIC CONTROL NOTES

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- CONTRACTOR SHALL COORDINATE CONSTRUCTION STAGING, ON OR OFF SITE, AS NECESSARY TO COMPLETE THE WORK. IF OFFSITE STAGING AREA IS REQUIRED, CONTRACTOR IS RESPONSIBLE TO FIND, OBTAIN, AND PAY FOR NECESSARY STAGING AREA AT NO ADDITIONAL COST TO THE OWNER. SUBMIT A STAGING PLAN TO THE ENGINEER FOR REVIEW BEFORE STARTING WORK.
- CONTRACTOR RESPONSIBLE FOR ALL TRAFFIC CONTROL AND DETOURS. TRAFFIC CONTROL AND DETOURS MUST BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MN MUTCD, INCLUDING LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS. SUBMIT TRAFFIC CONTROL PLAN AND DETOUR PLAN TO CITY AND ENGINEER FOR REVIEW BEFORE CONSTRUCTION RELATED ACTIVITIES. PLANS MUST COMPLY WITH APPLICABLE PERMIT REQUIREMENTS.

### EROSION CONTROL NOTES

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- CONTRACTOR SHALL CONFORM TO AND CONDUCT INSPECTIONS IN ACCORDANCE WITH THE NPDES PERMIT REQUIREMENTS.
- BEFORE SITE DISTURBANCE AND AS REQUIRED AS CONSTRUCTION PROGRESSES, CONTRACTOR SHALL INSTALL, MAINTAIN, REPAIR, AND REPLACE EROSION PREVENTION MEASURES AND SEDIMENT CONTROL DEVICES (INLET PROTECTION, CONSTRUCTION ENTRANCE, SILT FENCE, EROSION CONTROL BLANKET, ETC.) IN ACCORDANCE WITH THE NPDES PERMIT, AND CITY, STATE, AND WATERSHED DISTRICT PERMITS.
- ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DEPENDING ON SITE CONDITIONS DURING CONSTRUCTION. COORDINATE WITH ENGINEER.
- CONTRACTOR SHALL STABILIZE ALL EXPOSED SOIL AREAS WITHIN THE CONSTRUCTION LIMITS WITHIN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE THAT HAS TEMPORARILY (WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS) OR PERMANENTLY CEASED. STABILIZATION MUST BE INITIATED PROMPTLY.
- CONTRACTOR SHALL REMOVE ANY SEDIMENT THAT HAS TRACKED ONTO PAVED SURFACES BOTH ON AND OFFSITE WITHIN 24 HOURS AND AS DIRECTED BY CITY, OWNER, AND/OR ENGINEER. SWEEP STREET IN ACCORDANCE WITH CITY AND NDPEIS PERMIT REQUIREMENTS.
- CONTRACTOR SHALL MINIMIZE DUST FROM CONSTRUCTION OPERATIONS BY PROVIDING WATER OR OTHER APPROVED METHOD ON A DAILY BASIS.
- CONTRACTOR SHALL PHASE GRADING WORK TO MINIMIZE THE DURATION THAT DISTURBED SOIL IS EXPOSED.
- CONTRACTOR SHALL PROVIDE/INSTALL DIVERSION DITCHES, SEDIMENT BASINS, AND OTHER EROSION PROTECTION/SEDIMENT CONTROL MEASURES AS NECESSARY DURING INTERIM PROJECT CONDITIONS (NOT SHOWN ON PLANS) TO MANAGE/DIVERT STORM WATER AWAY FROM SITE FEATURES AND CONTROL EROSION/SEDIMENT. CONTRACTOR SHALL ADJUST MEASURES AS NECESSARY THROUGHOUT PROJECT PHASING.
- CONTRACTOR SHALL LOCATE SOIL STOCKPILES NO LESS THAN 50 FEET FROM ROADWAYS, STORMWATER INLETS, PONDS, WETLANDS, DRAINAGE CHANNELS, AND OTHER SURFACE WATERS. IF REMAINING FOR MORE THAN 7 DAYS, STABILIZE THE STOCKPILES BY MULCHING, VEGETATED COVER, TARPS, OR OTHER MEANS IN ACCORDANCE WITH THE NPDES PERMIT. PLACE PERIMETER SEDIMENT CONTROLS AROUND STOCKPILES TO CONTROL EROSION. COVER TEMPORARY STOCKPILES LOCATED ON PAVED SURFACES IF LEFT FROM MORE THAN 24 HOURS.
- CONTRACTOR SHALL REMOVE ALL EROSION CONTROL MEASURES AFTER SITE HAS BEEN STABILIZED AND VEGETATION IS ESTABLISHED AS DIRECTED BY ENGINEER. EROSION CONTROL MEASURES USED FOR CONSTRUCTION MUST NOT BE REMOVED UNTIL AUTHORIZED BY OWNER OR ENGINEER.
- SOIL PREPARATION: PREPARE SOIL IN ACCORDANCE WITH MNDOT SPECS 2574, PART 3.A.4 SOIL BED PREPARATION AND PART 3.A.5 SUBSOILING.

### DEWATERING NOTES

- CONTRACTOR SHALL ANTICIPATE GROUND WATER. A BID ITEM HAS BEEN PROVIDED FOR ALL DEWATERING WORK NECESSARY FOR CONSTRUCTION.
- CONTRACTOR SHALL OBTAIN APPLICABLE REQUIRED PERMITS (INCLUDING MN DNR WATER APPROPRIATION PERMIT) AND SUBMIT DEWATERING PLAN TO ENGINEER FOR REVIEW. DEWATERING MUST MEET PERMIT REQUIREMENTS AND BE ACCEPTED BEFORE STARTING CONSTRUCTION ACTIVITIES.
- CONTRACTOR MUST DEWATER IN ACCORDANCE WITH THE PROJECT SWPPP AND NPDES PERMIT.
- CONTRACTOR MUST DISCHARGE TURBID OR SEDIMENT-LADEN WATER RELATED TO DEWATERING OR BASIN DRAINING (E.G. PUMPED DISCHARGES, TRENCH/DITCH CUTS FOR DRAINAGE) TO A TEMPORARY OR PERMANENT SEDIMENTATION BASIN ON THE PROJECT SITE UNLESS INFESIBLE. CONTRACTOR MAY DISCHARGE FROM THE TEMPORARY OR PERMANENT SEDIMENTATION BASINS TO THE SURFACE WATERS IF THE BASIN WATER HAS BEEN VISUALLY CHECKED TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED IN THE BASIN AND THAT NUISANCE CONDITIONS (SEE MINNESOTA RULES CHAPTER 7050.0210, SUBPART 2) WILL NOT RESULT FROM THE DISCHARGE. IF THE WATER CANNOT BE DISCHARGED TO A SEDIMENTATION BASIN PRIOR TO ENTERING THE SURFACE WATER, IT MUST BE TREATED WITH THE APPROPRIATE BMP'S (E.G. SILT BAGS), SUCH THAT THE DISCHARGE DOES NOT ADVERSELY AFFECT THE RECEIVING WATER OR GREASE, THE CONTRACTOR MUST USE AN OIL-WATER SEPARATOR OR SUITABLE FILTRATION DEVICE (E.G. CARTRIDGE FILTERS, ABSORBENTS PADS) PRIOR TO DISCHARGING THE WATER. THE CONTRACTOR MUST ENSURE THAT DISCHARGE POINTS ARE ADEQUATELY PROTECTED FROM EROSION AND SCOUR. THE DISCHARGE MUST BE DISPERSED OVER NATURAL ROCK RIPRAP, SANDBAGS, PLASTIC SHEETING, OR OTHER ACCEPTED ENERGY DISSIPATION MEASURES.
- CONTRACTOR MUST DISCHARGE WATER FROM DEWATERING OR BASIN-DRAINING ACTIVITIES IN A MANNER THAT DOES NOT CAUSE NUISANCE CONDITIONS, EROSION IN RECEIVING CHANNELS OR ON DOWN SLOPE PROPERTIES, OR INUNDATION IN WETLANDS CAUSING SIGNIFICANT ADVERSE IMPACT TO THE WETLAND.
- IF THE CONTRACTOR IS USING FILTERS WITH BACKWASH WATER, THE CONTRACTOR MUST HAUL THE BACKWASH WATER AWAY FOR DISPOSAL, RETURN THE BACKWASH WATER TO THE BEGINNING OF THE TREATMENT PROCESS, OR INCORPORATE THE BACKWASH WATER INTO THE SITE IN A MANNER THAT DOES NOT CAUSE EROSION. THE CONTRACTOR MAY DISCHARGE BACKWASH WATER TO THE SANITARY SEWER IF PERMISSION IS GRANTED BY THE SANITARY SEWER AUTHORITY. THE CONTRACTOR MUST REPLACE AND CLEAN THE FILTER MEDIA USED IN DEWATERING DEVICES WHEN REQUIRED TO REMAIN ADEQUATE FUNCTION.

### TREE PRESERVATION NOTES

- CONTRACTOR SHALL PROTECT EXISTING TREES THAT ARE NOT TO BE REMOVED. INSTALL ORANGE MESH FENCING, 4 FEET HIGH, WITH STAKES EVERY 10 FEET, 5 FEET OUTSIDE OF THE DRIP LINE OF PRESERVED TREES, OR AT THE CONSTRUCTION LIMITS. DO NOT PERFORM ACTIONS WITHIN THE PROTECTED AREA THAT MAY HARM THE TREE AND COMPACT THE SOIL, INCLUDING EXCAVATION, STORING MATERIALS, PARKING AND TRAFFIC DURING CONSTRUCTION. WHERE CONSTRUCTION REQUIRES DISTURBANCE WITHIN THE PROTECTED AREAS, DISTURB THE ROOT ZONE AS LITTLE AS POSSIBLE.
- TREE PROTECTION MEASURES/FENCING MUST BE IN PLACE PRIOR TO BEGINNING CONSTRUCTION AND MUST BE REVIEWED BY OWNER AND ENGINEER BEFORE STARTING CONSTRUCTION.
- WHEN TREE ROOTS ARE ENCOUNTERED THAT MUST BE REMOVED, CONTRACTOR SHALL CUT ROOTS CLEANLY AS FAR FROM THE TREE AS POSSIBLE AND IMMEDIATELY WATER AND BACKFILL OVER THE ROOTS TO PREVENT DRYING.

### EROSION CONTROL LEGEND

	CONSTRUCTION ACCESS ROUTE AND STAGING AREA
	MUD MAT CONSTRUCTION ENTRANCE
	SEED MIX 21-112 AND STRAW MULCH
	SEED MIX 25-151 AND CATEGORY 25 EROSION CONTROL BLANKET
	RIPRAP
	SILT FENCE
	BIOLOG
	FLOTATION SILT CURTAIN
	INLET PROTECTION

### GRADING LEGEND

	PROPOSED MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	GRADING LIMITS
	CONSTRUCTION LIMITS
	FINISHED GRADE SPOT ELEVATION
	EMERGENCY OVERFLOW SPOT ELEVATION

### EXISTING CONDITIONS LEGEND

	EXISTING PROPERTY LINE
	EXISTING FENCE LINE
	EXISTING STORM SEWER
	EXISTING FORECMAIN
	EXISTING WATERMAIN
	EXISTING UNDERGROUND GAS LINE
	EXISTING UNDERGROUND COMMUNICATION LINE
	EXISTING UNDERGROUND FIBER OPTIC LINE
	EXISTING UNDERGROUND UTILITY LINE
	EXISTING OVERHEAD ELECTRIC LINE
	EXISTING EDGE OF PAVEMENT
	EXISTING EDGE OF GRAVEL
	EXISTING ROAD CENTERLINE
	EXISTING DITCH CENTERLINE
	EXISTING TREE LINE
	EXISTING WETLAND BOUNDARY
	EXISTING CONCRETE SURFACE
	EXISTING ASPHALT SURFACE
	EXISTING GRAVEL SURFACE
	PROTECT EXISTING TRAIL
	EXISTING MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	EXISTING WATERMAIN
	EXISTING SANITARY MANHOLE
	EXISTING STORM SEWER MANHOLE
	EXISTING FLARED END SECTION
	EXISTING HYDRANT
	EXISTING WATER VALVE
	EXISTING WATER METER
	EXISTING GAS MARKER
	EXISTING GAS VALVE
	EXISTING METER
	EXISTING COMMUNICATIONS PEDESTAL
	EXISTING TELEPHONE MANHOLE
	EXISTING ELECTRICAL PEDESTAL
	EXISTING ELECTRIC METER
	EXISTING TRANSFORMER
	EXISTING ELECTRIC MANHOLE
	EXISTING SIGN
	EXISTING UTILITY POLE
	EXISTING ANCHOR CABLE
	EXISTING LIGHT POLE
	EXISTING DECIDUOUS TREE
	EXISTING CONIFEROUS TREE
	EXISTING MAILBOX
	EXISTING HAND HOLE



ONE CARLSON PARKWAY, SUITE 100  
 PLYMOUTH MN, 55447  
 PHONE: 763-479-4200  
 FAX: 763-479-4242  
 WWW.STANTEC.COM

CLIENT:

**MINNEHAHA CREEK  
 WATERSHED  
 DISTRICT**

15320 MINNETONKA BLVD  
 MINNETONKA, MN 55345



**2023-2024 STORMWATER  
 POND MAINTENANCE**  
 AMELIA POND & TWIN LAKES POND  
 HENNEPIN COUNTY, MINNESOTA

PROJECT TITLE	2023-2024 STORMWATER POND MAINTENANCE											
ISSUE NO.	0											
DESCRIPTION	ISSUED FOR MVDOT											
DATE	10/09/2023											

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

CHRIS J. KEHAN  
 LICENSE NO.: 43066  
 DATE: #####

PROJECT NO.: 227706259

DWN BY: SMD    CHK'D BY: NPW    APP'D BY: CJM

ISSUE DATE: 10/09/2023

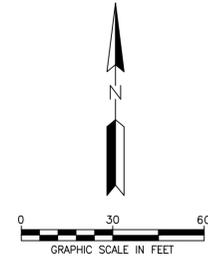
ISSUE NO.: 0

SHEET TITLE:

GENERAL NOTES AND LEGEND

SHEET NO.:

**G-002**



### NOTES

- SEE SHEET G-002 FOR ADDITIONAL PROJECT NOTES
- CONTRACTOR TO PROVIDE STORMWATER BYPASS FROM POND INLET TO POND OUTLET AS NECESSARY, AS WEATHER CONDITIONS DICTATE.
- CONTRACTOR TO PROVIDE EROSION CONTROL BLANKET ON ALL SLOPES ABOVE NWL GREATER THAN 4:1 SLOPE UPON FINAL EXCAVATION FOR POND SIDE SLOPE RESTORATION.
- ALL STOCKPILING MUST TAKE PLACE WITHIN EXCAVATED POND FOOTPRINT.
- CONTRACTOR TO SUBMIT HAUL ROUTE TO OWNER 72 HOURS PRIOR TO CONSTRUCTION ACTIVITY.
- CONTRACTOR MAY USE EXISTING TRAIL FOR ACCESS TO POND CLEANOUT. CONTRACTOR IS REQUIRED TO PROTECT THE TRAIL AND ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.



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 AMELIA POND & TWIN LAKES POND  
 HENNEPIN COUNTY, MINNESOTA

PROJECT TITLE

ISSUE NO:

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DESCRIPTION:

ISSUED FOR: MOW

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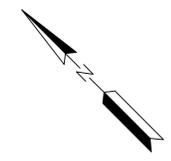
ISSUE DATE: 10/09/2023

ISSUE NO.: 0

SHEET TITLE:  
**EX. CONDITIONS, REMOVALS  
 EROSION CONTROL PLAN  
 (TWIN LAKES POND)**

SHEET NO.:

**C-001**



**NOTES**

- SEE SHEET G-002 FOR ADDITIONAL PROJECT NOTES
- CONTRACTOR TO PROVIDE STORMWATER BYPASS FROM POND INLET TO POND OUTLET AS NECESSARY, AS WEATHER CONDITIONS DICTATE.
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 PLYMOUTH MN, 55447  
 PHONE: 763-479-4200  
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 WWW.STANTEC.COM

CLIENT:  
**MINNEHAHA CREEK WATERSHED DISTRICT**  
 15320 MINNETONKA BLVD  
 MINNETONKA, MN 55345



**2023-2024 STORMWATER POND MAINTENANCE**  
 AMELIA POND & TWIN LAKES POND  
 HENNEPIN COUNTY, MINNESOTA

PROJECT TITLE	ISSUE NO.	DESCRIPTION	DATE
	0	ISSUED FOR MCWD	10/09/2023

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CHRIS JOHAN  
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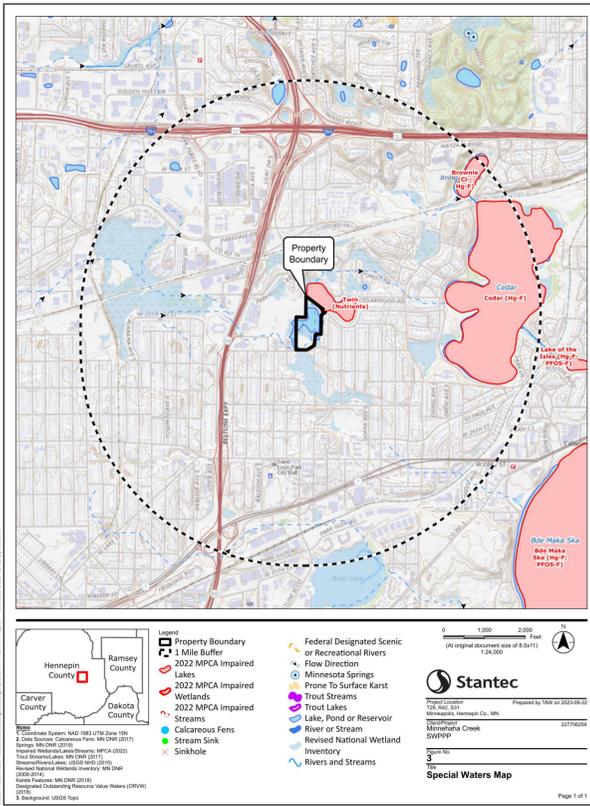
DWN BY: SMD    CHK'D BY: NPW    APP'D BY: CJM  
 ISSUE DATE: 10/09/2023

ISSUE NO.: 0

SHEET TITLE:  
 EX. CONDITIONS, REMOVALS  
 EROSION CONTROL PLAN  
 (AMELIA POND)

SHEET NO.:  
**C-002**

# IMPAIRED WATERS MAP



# SOIL MAP



# PROJECT INFORMATION

PROJECT NAME: 2023-2024 STORMWATER POND MAINTENANCE  
 PROJECT LOCATION: ST. LOUIS PARK, MN  
 PROJECT TYPE: DREDGING OF STORMWATER PONDS  
 TOTAL AREA DISTURBED BY CONSTRUCTION: APPROXIMATELY 1.2 ACRES. THE TOTAL SITE AREA IS APPROXIMATELY 26.68 ACRES.

ESTIMATED CONSTRUCTION DATES: WINTER 2023 - SPRING 2024  
 CUMULATIVE IMPERVIOUS SURFACE/PERMANENT STORMWATER MANAGEMENT REQUIREMENTS:  
 THE PROPOSED PROJECT RESULTS IN A ±0.0 ACRE NET INCREASE/DECREASE IN IMPERVIOUS SURFACE WITHIN THE LIMITS OF DISTURBANCE.

TWIN LAKES POND ULTIMATELY DRAINS TO TWIN LAKE, WHICH IS LISTED AS AN IMPAIRED WATER FOR AQUATIC RECREATION. THERE ARE CURRENT APPROVED TMDLS FOR THE WATERBODY FOR NUTRIENTS.

THERE IS NO PERMANENT STORMWATER MANAGEMENT REQUIRED AS PART OF THIS PROJECT

PARTY RESPONSIBLE FOR LONG TERM OPERATION AND MAINTENANCE OF THE SITE (OWNER): MINNEHAHA CREEK WATERSHED DISTRICT  
 CONTACT: JOSH WOLF  
 CONTACT PHONE: 952-641-4588  
 CONTACT EMAIL: JWOLF@MINNEHAHACREEK.ORG  
 PARTY RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP (CONTRACTOR): TBD  
 CONTRACTOR: TBD  
 CONTRACTOR PHONE: TBD  
 CONTRACTOR EMAIL: TBD

CONTRACTOR SHALL PROVIDE A CHAIN OF RESPONSIBILITY WITH ALL OPERATORS ON THE SITE FOR INCORPORATION INTO THIS SWPPP DOCUMENT TO ENSURE THAT THE SWPPP WILL BE IMPLEMENTED AND STAY IN EFFECT UNTIL THE CONSTRUCTION PROJECT IS COMPLETE (THROUGH FINAL STABILIZATION AND NOT SUBMITTAL). CONTRACTOR SHALL ALSO PROVIDE DOCUMENTATION OF PERSONNEL TRAINING IN ACCORDANCE WITH THE PERMIT FOR INCORPORATION INTO THIS SWPPP DOCUMENT AS SOON AS THE PERSONNEL FOR THE PROJECT HAVE BEEN DETERMINED. CONTRACTOR IS RESPONSIBLE FOR KEEPING A FINAL SWPPP DOCUMENT, CONTAINING THE INFORMATION REQUIRED ABOVE, AT THE CONSTRUCTION SITE FOR THE DURATION OF THE PROJECT.

# SWPPP DOCUMENTS

THE SWPPP IS COMPOSED OF, BUT NOT LIMITED TO, THE BELOW PROJECT DOCUMENTS. THESE DOCUMENTS SHALL BE KEPT ON THE PROJECT SITE AT ALL TIMES THROUGHOUT CONSTRUCTION. THE SWPPP SHALL BE AMENDED BY THE PERSON RESPONSIBLE TO INCLUDE ANY DOCUMENTS NECESSARY TO ENSURE ADHERENCE TO THE GENERAL PERMIT.

2023-2024 STORMWATER POND MAINTENANCE CIVIL CONSTRUCTION DRAWINGS BY STANTEC DATED OCTOBER 9, 2023

RECORD RETENTION - THE SWPPP, ALL CHANGES TO IT, AND INSPECTION AND MAINTENANCE RECORDS MUST BE KEPT ON-SITE DURING CONSTRUCTION; THE CONSTRUCTION DRAWINGS ARE INCORPORATED HEREIN BY REFERENCE, AND A COPY OF THE PLAN SET SHOULD BE KEPT ON-SITE WITH THE SWPPP RECORDS. THE OWNER MUST RETAIN A COPY OF THE SWPPP ALONG WITH THE FOLLOWING RECORDS FOR THREE (3) YEARS AFTER SUBMITTAL OF THE NOTICE OF TERMINATION:

- ANY OTHER PERMITS REQUIRED FOR THE PROJECT;
- RECORDS OF ALL INSPECTION AND MAINTENANCE CONDUCTED DURING CONSTRUCTION;
- ALL PERMANENT OPERATIONS AND MAINTENANCE AGREEMENTS THAT HAVE BEEN IMPLEMENTED, INCLUDING ALL RIGHT OF WAY, CONTRACT, COVENANTS AND OTHER BINDING REQUIREMENTS REGARDING PERPETUAL MAINTENANCE; AND
- ALL REQUIRED CALCULATIONS FOR DESIGN OF THE TEMPORARY AND PERMANENT STORMWATER MANAGEMENT SYSTEMS.

# INSPECTIONS

THE INSPECTION LOG WILL BE COMPLETED BY THE CONTRACTOR FOR THE CONSTRUCTION SITE. INSPECTOR(S): TBD - TRAINING DOCUMENTATION (PER SECTION 21.2 OF THE PERMIT) WILL BE INCORPORATED INTO THIS SWPPP AS SOON AS THE PERSONNEL FOR THE PROJECT HAVE BEEN DETERMINED. THE CONTRACTOR WILL MAKE CORRECTIONS OR REPAIRS REQUIRED TO COMPLY WITH THE PERMIT.

INSPECTIONS AT THE SITE WILL BE COMPLETED IN ACCORDANCE WITH THE PERMIT AS FOLLOWS: 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 INDIVIDUAL PERFORMING INSPECTIONS MUST BE TRAINED AS REQUIRED BY SECTION 21.3 OF THE PERMIT. TRAINING DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR FOR INCORPORATION INTO THE SWPPP. INSPECTIONS MUST INCLUDE STABILIZED AREAS, EROSION PREVENTION AND SEDIMENT CONTROL BMPs, AND INFILTRATION AREAS. CORRECTIVE ACTIONS MUST BE IDENTIFIED AND DATE OF CORRECTION MUST BE NOTED AS IDENTIFIED IN SECTION 11.11 OF THE PERMIT. ANY OFFSITE DISCHARGE MUST BE DOCUMENTED AS IDENTIFIED IN SECTION 11.11 OF THE PERMIT. ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION MUST BE DOCUMENTED WITHIN SEVEN (7) CALENDAR DAYS. AN INSPECTION LOG IS ALSO ATTACHED; THE INSPECTION LOG AND SWPPP MUST BE KEPT ON-SITE FOR THE DURATION OF THE CONSTRUCTION PROJECT.

AT A MINIMUM, THE FOLLOWING SHALL BE COMPLETED DURING EACH INSPECTION:

- RECORD DATE AND TIME OF INSPECTION.
- RECORD RAINFALL RECORDS SINCE THE MOST RECENT INSPECTION.
- INSPECT THE SITE FOR EXCESS EROSION AND SEDIMENTATION.
- INSPECT THE SITE FOR DEBRIS, TRASH, AND SPILLS.
- INSPECT TEMPORARY EROSION AND SEDIMENTATION CONTROL DEVICES.
- INSPECT CONSTRUCTION ENTRANCES FOR SEDIMENT TRACKING ONTO PUBLIC STREETS.
- RECORD RECOMMENDED REPAIRS AND MODIFICATIONS TO EROSION AND SEDIMENT CONTROLS.
- RECOMMEND ANY NECESSARY CHANGES TO THIS SWPPP.
- RECORD REPAIRS AND MODIFICATIONS IMPLEMENTED SINCE PREVIOUS INSPECTIONS.
- INSPECT THE ADJACENT STREETS AND CURB AND GUTTER FOR SEDIMENT, LITTER, AND CONSTRUCTION DEBRIS.

THE GENERAL CONTRACTOR MUST UPDATE THE SWPPP, INCLUDING THE JOBSITE BINDER AND SITE MAPS, TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO THE PROJECT SITE. UPDATES SHALL BE MADE DAILY TO TRACK PROGRESS WHEN ANY OF THE FOLLOWING ACTIVITIES OCCUR: BMP INSTALLATION, MODIFICATION OR REMOVAL, CONSTRUCTION ACTIVITIES (E.G. PAVING, SEWER INSTALLATION, ETC), CLEARING, GRUBBING, GRADING, OR TEMPORARY AND PERMANENT STABILIZATION.

THE CONTRACTOR MAY UPDATE OR MODIFY THE SWPPP WITHOUT ENGINEER APPROVAL IN AN EMERGENCY SITUATION TO PREVENT SEDIMENT DISCHARGE OR PROTECT WATER QUALITY. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE TO ENSURE COMPLIANCE WITH THE PERMIT AND PROTECTION OF DOWNSTREAM WATER QUALITY.

# EROSION AND SEDIMENT CONTROL

PRIOR TO ANY SITE DISTURBANCE, AND AS REQUIRED AS CONSTRUCTION PROGRESSES, ANY PERMIT REQUIRED EROSION PREVENTION MEASURES AND THE SEDIMENT CONTROL DEVICES (CONSTRUCTION ENTRANCE, EROSION CONTROL BLANKET, AND BIOLOG) SHOWN ON THE CONSTRUCTION DRAWINGS WILL BE INSTALLED AT THE SITE.

ALL EXPOSED SOIL AREAS, INCLUDING STOCKPILES, WITHIN THE CONSTRUCTION LIMITS WILL BE STABILIZED WITHIN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY (WILL NOT RESUME FOR A PERIOD EXCEEDING 7 CALENDAR DAYS) OR PERMANENTLY CEASED. STABILIZATION WILL BE INITIATED IMMEDIATELY. EXPOSED SOIL AREAS MUST HAVE TEMPORARY EROSION PROTECTION (SLASH MULCH, EROSION CONTROL BLANKET, SEED) OR PERMANENT COVER YEAR ROUND.

CONTRACTOR SHALL IMPLEMENT APPROPRIATE CONSTRUCTION PHASING, VEGETATIVE BUFFER STRIPS, HORIZONTAL SLOPE GRADING, AND OTHER CONSTRUCTION PRACTICES THAT MINIMIZE EROSION WHEN PRACTICAL. THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH THAT DRAINS WATER FROM A CONSTRUCTION SITE, OR DIVERTS WATER AROUND A SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE TO ANY SURFACE WATER. STABILIZATION MUST BE COMPLETED WITHIN 24 HOURS OF CONNECTING TO A SURFACE WATER. PIPE OUTLETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER.

SWPPP IMPLEMENTATION, PHASING, AND SEQUENCE OF CONSTRUCTION:  
 BMP AND EROSION CONTROL. INSTALLATION SEQUENCE SHALL BE AS FOLLOWS:

- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AND INSTALL SILT FENCE.
- INSTALL INLET PROTECTION AT EXISTING STORMWATER CULTVERTS AND INLETS.
- PREPARE TEMPORARY STORAGE, PARKING, AND PHASING AREAS.
- PERFORM CLEARING AND GRUBBING OF THE SITE, IF APPLICABLE.
- PERFORM POND DREDGING TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
- BEGIN EXCAVATION OF PERMANENT STORMWATER BASIN AREAS. SEE SEQUENCING BELOW FOR ADDITIONAL INFORMATION.
- TEMPORARILY SEED WITH PURE LIVE SEED THROUGHOUT CONSTRUCTION. DISTURBED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE AS REQUIRED BY NPDES OR PERMIT.

SEDIMENT CONTROL PRACTICES MUST MINIMIZE SEDIMENT FROM ENTERING SURFACE WATERS, INCLUDING CURB AND GUTTER SYSTEMS AND STORM SEWER INLETS. THE FOLLOWING MEASURES WILL BE TAKEN AS SEDIMENT CONTROL PRACTICES IN ORDER TO MINIMIZE SEDIMENTS FROM ENTERING SURFACE WATERS:

- INSTALLATION OF SEDIMENT CONTROL PRACTICES ON ALL DOWN GRADIENT PERIMETERS PRIOR TO LAND DISTURBING ACTIVITIES.
- SILT FENCING, BIOLOGS, OR OTHER SEDIMENT CONTROL SURROUNDING TEMPORARY SOIL STOCKPILES.
- VEHICLE TRACKING BMP AT CONSTRUCTION SITE ENTRANCE/EXIT. STREET SWEEPING SHALL BE PERFORMED IF VEHICLE TRACKING BMPs ARE NOT ADEQUATE TO PREVENT SEDIMENT TRACKING. TRACKED SEDIMENT MUST BE REMOVED FROM ALL PAVED SURFACES BOTH ON AND OFFSITE WITHIN 24 HOURS OF DISCOVERY PER THE PERMIT.
- STREET SWEEPING IS NOT TO BE USED AS A PRIMARY BMP FOR SEDIMENT TRACKING. IF SEDIMENT IS TRACKED OFFSITE, WORK WILL CEASE UNTIL PROPER EROSION CONTROL AND SEDIMENT CONTROL DEVICES ARE INSTALLED AND/OR BEING MAINTAINED TO PREVENT TRACKING BEYOND THE SITE'S PERIMETER (CONTAINMENT AREA). ALL STREET SWEEPING MUST BE PERFORMED UTILIZING A PICK-UP SWEEPER. IF NECESSARY WATER WILL ALSO BE USED TO CLEAN UP THE STREETS PRIOR TO BEING SWEEPED TO ENSURE THEY ARE FULLY CLEANED.

THE FOLLOWING GUIDELINES WILL BE USED TO DETERMINE IF POLLUTION CONTROL DEVICES REQUIRE MAINTENANCE, REPAIR, OR REPLACEMENT:

- IF SEDIMENT CONTROL DEVICES SUCH AS SILT FENCE ARE FILLED TO 1/3 THE HEIGHT OF THE FENCE, REMOVE ALL SEDIMENT WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.
- IF INLET PROTECTION DEVICES APPEAR PLUGGED WITH SEDIMENT, ARE FILLED TO 1/3 CAPACITY, OR HAVE STANDING WATER AROUND THEM, REMOVE THE SEDIMENT AND CLEAN OR REPLACE THE FILTER WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.
- IF THE GRAVEL CONSTRUCTION ENTRANCE(S) ARE FILLED WITH SEDIMENT EITHER REPLACE THE ENTRANCE OR ADD ADDITIONAL GRAVEL WITH 24 HOURS OF DETECTION OR NOTIFICATION.
- IF SEDIMENT FROM THE SITE IS OBSERVED ON ADJACENT STREETS OR OTHER PROPERTIES, THE INSPECTOR SHALL IDENTIFY THE SOURCE AND DISCHARGE LOCATION OF THE SEDIMENT AND INSTRUCT TO IMPLEMENT ADDITIONAL EROSION AND SEDIMENT CONTROLS AT THOSE LOCATIONS TO PREVENT FUTURE DISCHARGES.
- IF BUILDING MATERIALS, CHEMICALS, OR GENERAL REFUSE IS BEING USED, STORED, DISPOSED OF, OR OTHERWISE MANAGED INAPPROPRIATELY, CORRECT SUCH DEFECTS WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.
- IF EXCESSIVE SEDIMENTS OR DEBRIS ARE OBSERVED AT THE FLARED END SECTION OUTFALLS, THE INSPECTOR SHALL DETERMINE THE SOURCE AND DISCHARGE LOCATIONS OF SUCH MATERIALS. IF THE DISCHARGE HAS OCCURRED ON THE PROPERTY, REMOVE THE SEDIMENTS AND DEBRIS WITHIN 24 HOURS OF NOTIFICATION AND CORRECT THE SOURCE OF SUCH MATERIALS AS DIRECTED BY THE INSPECTOR

# POLLUTION PREVENTION MEASURES

**SOLID WASTE:**  
 SOLID WASTE, INCLUDING BUT NOT LIMITED TO, COLLECTED ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS, PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION DEBRIS AND OTHER WASTE, INCLUDING ALL TRASH ONSITE, MUST BE REGULARLY DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.

**HAZARDOUS MATERIALS:**  
 HAZARDOUS MATERIALS, INCLUDING BUT NOT LIMITED TO OIL, GASOLINE, PAINT AND ANY HAZARDOUS SUBSTANCE MUST BE PROPERLY STORED INCLUDING SECONDARY CONTAINMENTS, TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH MPCA REGULATIONS.

**CONSTRUCTION EQUIPMENT/VEHICLES:**  
 EXTERNAL WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE CONTAINED AND WASTE PROPERLY DISPOSED OF. NO ENGINE DEGREASING IS ALLOWED ON SITE. REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS SHALL BE TAKEN. ADEQUATE SUPPLIES MUST BE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS; CONDUCT FUELING IN A CONTAINED AREA UNLESS INFEASIBLE.

**CONCRETE WASHOUT AREA:**  
 CONCRETE WASHOUT WILL BE PERMITTED ON-SITE; CONTRACTOR SHALL FOLLOW ALL PERMIT REQUIREMENTS FOR CONCRETE WASHOUT. THE CONTRACTOR SHALL PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS. LIQUID AND SOLID WASHOUT WASTES MUST NOT CONTACT THE GROUND AND THE CONTAINMENT MUST BE DESIGNED TO PROHIBIT RUNOFF FROM THE WASHOUT OPERATIONS/AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA RULES. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY THAT REQUIRES SITE PERSONNEL TO UTILIZE THE PROPER FACILITIES FOR CONCRETE WASHOUT AND DISPOSAL OF WASHOUT WASTES. CONTRACTOR SHALL REVISE SWPPP TO INDICATE WASHOUT LOCATION ONCE THE LOCATION HAS BEEN DETERMINED.

FERTILIZERS AND LANDSCAPE MATERIALS MUST BE UNDER COVER TO PREVENT THE DISCHARGE OF POLLUTANTS OR PROTECTED BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.

PORTABLE TOILETS MUST BE POSITIONED SO THAT THEY ARE SECURE AND WILL NOT BE TIPPED OR KNOCKED OVER. SANITARY WASTE MUST BE DISPOSED OF PROPERLY.

# GENERAL SWPPP NOTES

DEWATERING IS ANTICIPATED TO BE REQUIRED DURING POND DREDGING. CONTRACTOR SHALL COMPLY WITH PERMIT SECTION 10.1 REQUIREMENTS FOR DEWATERING. CONTRACTOR MUST NOT CAUSE NUISANCE CONDITIONS (MINN. R. 7050.0210, SUBP. 2) IN SURFACE WATERS FROM DEWATERING DISCHARGES. PERMITTEES MUST DISCHARGE TURBID OR SEDIMENT-LADEN WATERS RELATED TO DEWATERING OR BASIN DRAINING TO A SEDIMENT CONTROL (E.G. SEDIMENT TRAP OR BASIN, FILTER BAG) DESIGNED TO PREVENT DISCHARGES WITH VISUAL TURBIDITY. CONTRACTOR MUST DISCHARGE ALL WATER FROM DEWATERING ACTIVITIES IN A MANNER THAT DOES NOT CAUSE EROSION OR SCOUR IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS OR INUNDATION OF WETLANDS IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS THAT CAUSES SIGNIFICANT ADVERSE IMPACT TO THE WETLAND. (MINN. R. 7090). IF NUISANCE CONDITIONS RESULT FROM THE DISCHARGE, CONTRACTOR MUST CEASE DEWATERING IMMEDIATELY AND CORRECTIVE ACTIONS MUST OCCUR BEFORE DEWATERING IS RESUMED.

THIS SWPPP SHALL BE AMENDED BY THE CONTRACTOR IN ACCORDANCE WITH THE PERMIT AS NECESSARY TO INCLUDE ADDITIONAL REQUIREMENTS, TO CORRECT PROBLEMS IDENTIFIED, OR TO ADDRESS SITUATIONS PER SECTION 6.1 OF THE PERMIT.

THE PROJECT WILL NOT DISTURB MORE THAN 5 ACRES THAT PROMOTE DRAINAGE TO A COMMON LOCATION, THEREFORE A TEMPORARY SEDIMENT BASIN WILL NOT BE REQUIRED. THIS SWPPP SHALL BE AMENDED BY THE CONTRACTOR IN ACCORDANCE WITH THE GENERAL PERMIT TO INCLUDE TEMPORARY SEDIMENTATION BASINS, IF THEY BECOME NECESSARY. BASINS, IF DESIGNED BY THE CONTRACTOR, SHALL ACCOMMODATE NO LESS THAN 3,600 CUBIC FEET OF LIVE STORAGE PER ACRE OF CONTRIBUTING DRAINAGE AREA. BASIN OUTLETS SHALL BE DESIGNED TO WITHDRAW WATER FROM THE SURFACE OF THE BASIN. PREVENT SHORT-CIRCUITING AND THE DISCHARGE OF FLOATING DEBRIS. BASINS SHALL HAVE A STABILIZED EMERGENCY OVERFLOW LOCATION AND BE DESIGNED TO PREVENT THE DISCHARGE OF POLLUTANTS TO THE EXTENT PRACTICAL.

**FINAL STABILIZATION:**  
 ALL PVIOUS AREAS DISTURBED BY CONSTRUCTION AS DESIGNATED WILL RECEIVE VEGETATIVE COVER ACCORDING TO THE PLANS AND SPECIFICATIONS AND WITHIN THE SPECIFIED VEGETATIVE TIME SCHEDULE. FINAL STABILIZATION WILL OCCUR WHEN THE SITE HAS A UNIFORM VEGETATIVE COVER WITH A DENSITY OF 70% OVER THE RESTORED PVIOUS AREAS. ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMPs (SUCH AS SILT FENCE) MUST BE REMOVED AS PART OF THE SITE FINAL STABILIZATION. ALL SEDIMENT MUST BE CLEANED OUT OF CONVEYANCES AND TEMPORARY SEDIMENTATION BASINS IF APPLICABLE. NOTICE OF TERMINATION (NOT) MUST BE SUBMITTED WITHIN 30 DAYS OF FINAL STABILIZATION.

# IMPAIRED WATERS, SPECIAL WATERS, AND WETLANDS

THIS PROJECT IS LOCATED WITHIN ONE MILE OF, AND ULTIMATELY DISCHARGES TO AN IMPAIRED WATER. TWIN LAKE IS LOCATED NORTHEAST OF THE PROJECT LOCATION AND IS LISTED AS IMPAIRED FOR AQUATIC RECREATION. THERE ARE CURRENT APPROVED TMDLS FOR THE WATER BODY FOR NUTRIENTS. DISCHARGE TO AN IMPAIRED WATER REQUIRES IMPLEMENTATION OF SECTION 23.1 OF THE PERMIT AS INCORPORATED INTO THIS SWPPP DOCUMENT.

THE PROJECT WILL NOT IMPACT WETLANDS. 0 SF OF WETLANDS WILL BE MITIGATED AS PART OF THIS PROJECT.

SITE SOILS - SITE SOILS ARE SHOWN ON THIS SHEET. THIS PROJECT IS NOT LOCATED IN A KARST AREA.

# ESTIMATED BMP QUANTITIES AND INSTALLATION SCHEDULE

THE ADJACENT TABLE INDICATES THE ESTIMATED MATERIAL QUANTITIES NECESSARY TO IMPLEMENT THE TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BMPs IDENTIFIED IN THIS SWPPP AND ON THE CONSTRUCTION DRAWINGS. TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BMPs WILL BE INSTALLED/CONSTRUCTED WHEN NECESSARY AS CONSTRUCTION ACTIVITIES PROGRESS AND IN ACCORDANCE WITH THE NPDES PERMIT REQUIREMENTS.

MAINTAIN AND REPLACE BMPs DURING THE EXECUTION OF THE PROJECT AS REQUIRED TO CONTINUE SWPPP COVERAGE DURING CONSTRUCTION

ESTIMATED BMP QUANTITIES		
ITEM	QUANTITY (TWIN LAKES POND)	UNIT
SILT FENCE	1190	LF
FLOATATION SILT CURTAIN	40	LF
BIOLOG	200	LF
INLET PROTECTION	1	EA
TEMP CONSTRUCTION ENTRANCE	1	EA
EROSION CONTROL BLANKET	420	SY
TURF ESTABLISHMENT	420	SY

# CERTIFICATION

IN ACCORDANCE WITH SECTION 21 OF THE GENERAL PERMIT AUTHORIZATION TO DISCHARGE STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NPDES, THE PREPARER OF THIS DOCUMENT WAS TRAINED UNDER THE UNIVERSITY OF MINNESOTA EROSION AND SEDIMENT CONTROL CERTIFICATION PROGRAM. JOSEPH R. PESIK'S CERTIFICATION IN DESIGN OF SWPPP IS VALID THROUGH MAY 31, 2026.

*Joseph R. Pesik*

**Stantec**  
 ONE CARLSON PARKWAY, SUITE 100  
 PLYMOUTH MN, 55447  
 PHONE: 763-479-4200  
 FAX: 763-479-4242  
 WWW.STANTEC.COM

CLIENT:  
**MINNEHAHA CREEK WATERSHED DISTRICT**  
 15320 MINNETONKA BLVD  
 MINNETONKA, MN 55345

**MINNEHAHA CREEK WATERSHED DISTRICT**

**2023-2024 STORMWATER POND MAINTENANCE**  
 AMELIA POND & TWIN LAKES POND  
 HENNEPIN COUNTY, MINNESOTA

PROJECT TITLE: 2023-2024 STORMWATER POND MAINTENANCE

ISSUE NO.: 0

DATE: 10/09/2023

DESCRIPTION: ISSUED FOR RFP

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

CHRIS HAN

LICENSE NO.: 43066

PROJECT NO.: 227706259

DWN BY: SMD    CHK'D BY: NPW    APP'D BY: CJM

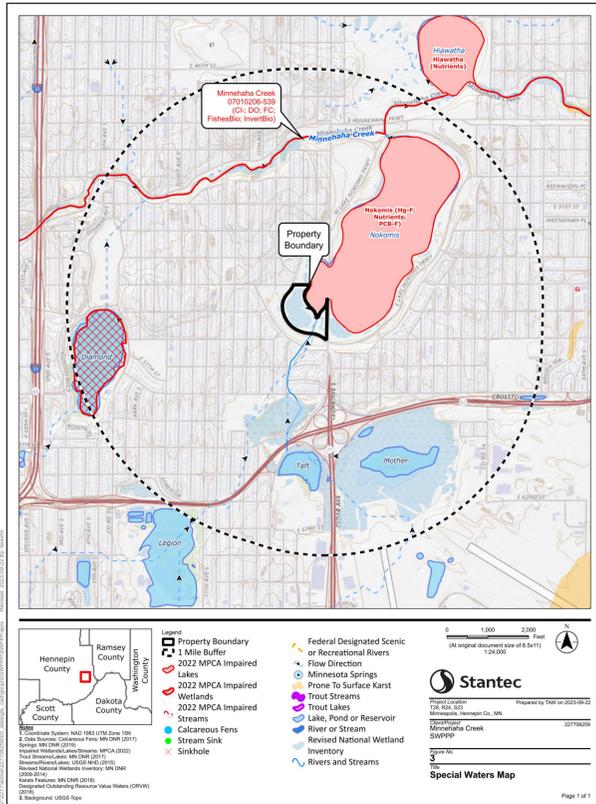
ISSUE DATE: 10/09/2023

ISSUE NO.: 0

SHEET TITLE: SWPPP (TWIN LAKES POND)

SHEET NO.: C-101

# IMPAIRED WATERS MAP



# SOIL MAP



# PROJECT INFORMATION

PROJECT NAME: 2023-2024 STORMWATER POND MAINTENANCE  
 PROJECT LOCATION: MINNEAPOLIS, MN  
 PROJECT TYPE: DREDGING OF STORMWATER PONDS  
 TOTAL AREA DISTURBED BY CONSTRUCTION: APPROXIMATELY 2.8 ACRES. THE TOTAL SITE AREA IS APPROXIMATELY 34.43 ACRES.

ESTIMATED CONSTRUCTION DATES: WINTER 2023 - SPRING 2024  
 CUMULATIVE IMPERVIOUS SURFACE/PERMANENT STORMWATER MANAGEMENT REQUIREMENTS:  
 THE PROPOSED PROJECT RESULTS IN A ±0.0 ACRE NET INCREASE/DECREASE IN IMPERVIOUS SURFACE WITHIN THE LIMITS OF DISTURBANCE.

AMELIA POND ULTIMATELY DRAINS TO LAKE NOKOMIS, WHICH IS LISTED AS AN IMPAIRED WATER FOR AQUATIC CONSUMPTION. THERE ARE CURRENT APPROVED TMDLS FOR THE WATERBODY FOR PCBs IN FISH TISSUE.

THERE IS NO PERMANENT STORMWATER MANAGEMENT REQUIRED AS PART OF THIS PROJECT

PARTY RESPONSIBLE FOR LONG TERM OPERATION AND MAINTENANCE OF THE SITE (OWNER): MINNEHAHA CREEK WATERSHED DISTRICT  
 CONTACT: JOSH WOLF  
 CONTACT PHONE: 952-641-4588  
 CONTACT EMAIL: JWOLF@MINNEHAHACREEK.ORG  
 PARTY RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP (CONTRACTOR): TBD  
 CONTRACTOR: TBD  
 CONTRACTOR PHONE: TBD  
 CONTRACTOR EMAIL: TBD

CONTRACTOR SHALL PROVIDE A CHAIN OF RESPONSIBILITY WITH ALL OPERATORS ON THE SITE FOR INCORPORATION INTO THIS SWPPP DOCUMENT TO ENSURE THAT THE SWPPP WILL BE IMPLEMENTED AND STAY IN EFFECT UNTIL THE CONSTRUCTION PROJECT IS COMPLETE (THROUGH FINAL STABILIZATION AND NOT SUBMITTAL). CONTRACTOR SHALL ALSO PROVIDE DOCUMENTATION OF PERSONNEL TRAINING IN ACCORDANCE WITH THE PERMIT FOR INCORPORATION INTO THIS SWPPP DOCUMENT AS SOON AS THE PERSONNEL FOR THE PROJECT HAVE BEEN DETERMINED. CONTRACTOR IS RESPONSIBLE FOR KEEPING A FINAL SWPPP DOCUMENT, CONTAINING THE INFORMATION REQUIRED ABOVE, AT THE CONSTRUCTION SITE FOR THE DURATION OF THE PROJECT.

# SWPPP DOCUMENTS

THE SWPPP IS COMPOSED OF, BUT NOT LIMITED TO, THE BELOW PROJECT DOCUMENTS. THESE DOCUMENTS SHALL BE KEPT ON THE PROJECT SITE AT ALL TIMES THROUGHOUT CONSTRUCTION. THE SWPPP SHALL BE AMENDED BY THE PERSON RESPONSIBLE TO INCLUDE ANY DOCUMENTS NECESSARY TO ENSURE ADHERENCE TO THE GENERAL PERMIT.

2023-2024 STORMWATER POND MAINTENANCE CIVIL CONSTRUCTION DRAWINGS BY STANTEC DATED OCTOBER 9, 2023

RECORD RETENTION - THE SWPPP, ALL CHANGES TO IT, AND INSPECTION AND MAINTENANCE RECORDS MUST BE KEPT ON-SITE DURING CONSTRUCTION; THE CONSTRUCTION DRAWINGS ARE INCORPORATED HEREIN BY REFERENCE, AND A COPY OF THE PLAN SET SHOULD BE KEPT ON-SITE WITH THE SWPPP RECORDS. THE OWNER MUST RETAIN A COPY OF THE SWPPP ALONG WITH THE FOLLOWING RECORDS FOR THREE (3) YEARS AFTER SUBMITTAL OF THE NOTICE OF TERMINATION:

- ANY OTHER PERMITS REQUIRED FOR THE PROJECT;
- RECORDS OF ALL INSPECTION AND MAINTENANCE CONDUCTED DURING CONSTRUCTION;
- ALL PERMANENT OPERATIONS AND MAINTENANCE AGREEMENTS THAT HAVE BEEN IMPLEMENTED, INCLUDING ALL RIGHT OF WAY, CONTRACT, COVENANTS AND OTHER BINDING REQUIREMENTS REGARDING PERPETUAL MAINTENANCE; AND
- ALL REQUIRED CALCULATIONS FOR DESIGN OF THE TEMPORARY AND PERMANENT STORMWATER MANAGEMENT SYSTEMS.

# INSPECTIONS

THE INSPECTION LOG WILL BE COMPLETED BY THE CONTRACTOR FOR THE CONSTRUCTION SITE. INSPECTOR(S): TBD - TRAINING DOCUMENTATION (PER SECTION 21.2 OF THE PERMIT) WILL BE INCORPORATED INTO THIS SWPPP AS SOON AS THE PERSONNEL FOR THE PROJECT HAVE BEEN DETERMINED. THE CONTRACTOR WILL MAKE CORRECTIONS OR REPAIRS REQUIRED TO COMPLY WITH THE PERMIT.

INSPECTIONS AT THE SITE WILL BE COMPLETED IN ACCORDANCE WITH THE PERMIT AS FOLLOWS: 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 INDIVIDUAL PERFORMING INSPECTIONS MUST BE TRAINED AS REQUIRED BY SECTION 21.3 OF THE PERMIT. TRAINING DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR FOR INCORPORATION INTO THE SWPPP. INSPECTIONS MUST INCLUDE STABILIZED AREAS, EROSION PREVENTION AND SEDIMENT CONTROL BMPs, AND INFILTRATION AREAS. CORRECTIVE ACTIONS MUST BE IDENTIFIED AND DATE OF CORRECTION MUST BE NOTED AS IDENTIFIED IN SECTION 11.11 OF THE PERMIT. ANY OFFSITE DISCHARGE MUST BE DOCUMENTED AS IDENTIFIED IN SECTION 11.11 OF THE PERMIT. ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION MUST BE DOCUMENTED WITHIN SEVEN (7) CALENDAR DAYS. AN INSPECTION LOG IS ALSO ATTACHED; THE INSPECTION LOG AND SWPPP MUST BE KEPT ON-SITE FOR THE DURATION OF THE CONSTRUCTION PROJECT.

AT A MINIMUM, THE FOLLOWING SHALL BE COMPLETED DURING EACH INSPECTION:  
 -RECORD DATE AND TIME OF INSPECTION.  
 -RECORD RAINFALL RECORDS SINCE THE MOST RECENT INSPECTION.  
 -INSPECT THE SITE FOR EXCESS EROSION AND SEDIMENTATION.  
 -INSPECT THE SITE FOR DEBRIS, TRASH, AND SPILLS.  
 -INSPECT TEMPORARY EROSION AND SEDIMENTATION CONTROL DEVICES.  
 -INSPECT CONSTRUCTION ENTRANCES FOR SEDIMENT TRACKING ONTO PUBLIC STREETS.  
 -RECORD RECOMMENDED REPAIRS AND MODIFICATIONS TO EROSION AND SEDIMENT CONTROLS.  
 -RECOMMEND ANY NECESSARY CHANGES TO THIS SWPPP.  
 -RECORD REPAIRS AND MODIFICATIONS IMPLEMENTED SINCE PREVIOUS INSPECTIONS.  
 -INSPECT THE ADJACENT STREETS AND CURB AND GUTTER FOR SEDIMENT, LITTER, AND CONSTRUCTION DEBRIS.

THE GENERAL CONTRACTOR MUST UPDATE THE SWPPP, INCLUDING THE JOBSITE BINDER AND SITE MAPS, TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO THE PROJECT SITE. UPDATES SHALL BE MADE DAILY TO TRACK PROGRESS WHEN ANY OF THE FOLLOWING ACTIVITIES OCCUR: BMP INSTALLATION, MODIFICATION OR REMOVAL, CONSTRUCTION ACTIVITIES (E.G. PAVING, SEWER INSTALLATION, ETC), CLEARING, GRUBBING, GRADING, OR TEMPORARY AND PERMANENT STABILIZATION.

THE CONTRACTOR MAY UPDATE OR MODIFY THE SWPPP WITHOUT ENGINEER APPROVAL IN AN EMERGENCY SITUATION TO PREVENT SEDIMENT DISCHARGE OR PROTECT WATER QUALITY. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE TO ENSURE COMPLIANCE WITH THE PERMIT AND PROTECTION OF DOWNSTREAM WATER QUALITY.

# EROSION AND SEDIMENT CONTROL

PRIOR TO ANY SITE DISTURBANCE, AND AS REQUIRED AS CONSTRUCTION PROGRESSES, ANY PERMIT REQUIRED EROSION PREVENTION MEASURES AND THE SEDIMENT CONTROL DEVICES (CONSTRUCTION ENTRANCE, EROSION CONTROL BLANKET, AND BIOLOG) SHOWN ON THE CONSTRUCTION DRAWINGS WILL BE INSTALLED AT THE SITE.

ALL EXPOSED SOIL AREAS, INCLUDING STOCKPILES, WITHIN THE CONSTRUCTION LIMITS WILL BE STABILIZED WITHIN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY (WILL NOT RESUME FOR A PERIOD EXCEEDING 7 CALENDAR DAYS) OR PERMANENTLY CEASED. STABILIZATION WILL BE INITIATED IMMEDIATELY. EXPOSED SOIL AREAS MUST HAVE TEMPORARY EROSION PROTECTION (SLASH MULCH, EROSION CONTROL BLANKET, SEED) OR PERMANENT COVER YEAR ROUND.

CONTRACTOR SHALL IMPLEMENT APPROPRIATE CONSTRUCTION PHASING, VEGETATIVE BUFFER STRIPS, HORIZONTAL SLOPE GRADING, AND OTHER CONSTRUCTION PRACTICES THAT MINIMIZE EROSION WHEN PRACTICAL. THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH THAT DRAINS WATER FROM A CONSTRUCTION SITE, OR DIVERTS WATER AROUND A SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE TO ANY SURFACE WATER. STABILIZATION MUST BE COMPLETED WITHIN 24 HOURS OF CONNECTING TO A SURFACE WATER. PIPE OUTLETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER.

- SWPPP IMPLEMENTATION, PHASING, AND SEQUENCE OF CONSTRUCTION:  
 BMP AND EROSION CONTROL INSTALLATION SEQUENCE SHALL BE AS FOLLOWS:
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AND INSTALL SILT FENCE.
  - INSTALL INLET PROTECTION AT EXISTING STORMWATER CULTVERTS AND INLETS.
  - PREPARE TEMPORARY STORAGE, PARKING, AND PHASING AREAS.
  - PERFORM CLEARING AND GRUBBING OF THE SITE, IF APPLICABLE.
  - PERFORM POND DREDGING TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
  - BEGIN EXCAVATION OF PERMANENT STORMWATER BASIN AREAS. SEE SEQUENCING BELOW FOR ADDITIONAL INFORMATION.
  - TEMPORARILY SEED WITH PURE LIVE SEED THROUGHOUT CONSTRUCTION. DISTURBED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE AS REQUIRED BY NPDES OR PERMIT.

SEDIMENT CONTROL PRACTICES MUST MINIMIZE SEDIMENT FROM ENTERING SURFACE WATERS, INCLUDING CURB AND GUTTER SYSTEMS AND STORM SEWER INLETS. THE FOLLOWING MEASURES WILL BE TAKEN AS SEDIMENT CONTROL PRACTICES IN ORDER TO MINIMIZE SEDIMENTS FROM ENTERING SURFACE WATERS:

- INSTALLATION OF SEDIMENT CONTROL PRACTICES ON ALL DOWN GRADIENT PERIMETERS PRIOR TO LAND DISTURBING ACTIVITIES.
- SILT FENCING, BIOLOGS, OR OTHER SEDIMENT CONTROL SURROUNDING TEMPORARY SOIL STOCKPILES.
- VEHICLE TRACKING BMP AT CONSTRUCTION SITE ENTRANCE/EXIT. STREET SWEEPING SHALL BE PERFORMED IF VEHICLE TRACKING BMPs ARE NOT ADEQUATE TO PREVENT SEDIMENT TRACKING. TRACKED SEDIMENT MUST BE REMOVED FROM ALL PAVED SURFACES BOTH ON AND OFFSITE WITHIN 24 HOURS OF DISCOVERY PER THE PERMIT.
- STREET SWEEPING IS NOT TO BE USED AS A PRIMARY BMP FOR SEDIMENT TRACKING. IF SEDIMENT IS TRACKED OFFSITE, WORK WILL CEASE UNTIL PROPER EROSION CONTROL AND SEDIMENT CONTROL DEVICES ARE INSTALLED AND/OR BEING MAINTAINED TO PREVENT TRACKING BEYOND THE SITE'S PERIMETER (CONTAINMENT AREA). ALL STREET SWEEPING MUST BE PERFORMED UTILIZING A PICK-UP SWEEPER. IF NECESSARY WATER WILL ALSO BE USED TO CLEAN UP THE STREETS PRIOR TO BEING SWEEPED TO ENSURE THEY ARE FULLY CLEANED.

THE FOLLOWING GUIDELINES WILL BE USED TO DETERMINE IF POLLUTION CONTROL DEVICES REQUIRE MAINTENANCE, REPAIR, OR REPLACEMENT:

- IF SEDIMENT CONTROL DEVICES SUCH AS SILT FENCE ARE FILLED TO 1/3 THE HEIGHT OF THE FENCE, REMOVE ALL SEDIMENT WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.
- IF INLET PROTECTION DEVICES APPEAR PLUGGED WITH SEDIMENT, ARE FILLED TO 1/3 CAPACITY, OR HAVE STANDING WATER AROUND THEM, REMOVE THE SEDIMENT AND CLEAN OR REPLACE THE FILTER WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.
- IF THE GRAVEL CONSTRUCTION ENTRANCE(S) ARE FILLED WITH SEDIMENT EITHER REPLACE THE ENTRANCE OR ADD ADDITIONAL GRAVEL WITH 24 HOURS OF DETECTION OR NOTIFICATION.
- IF SEDIMENT FROM THE SITE IS OBSERVED ON ADJACENT STREETS OR OTHER PROPERTIES, THE INSPECTOR SHALL IDENTIFY THE SOURCE AND DISCHARGE LOCATION OF THE SEDIMENT AND INSTRUCT TO IMPLEMENT ADDITIONAL EROSION AND SEDIMENT CONTROLS AT THOSE LOCATIONS TO PREVENT FUTURE DISCHARGES.
- IF BUILDING MATERIALS, CHEMICALS, OR GENERAL REFUSE IS BEING USED, STORED, DISPOSED OF, OR OTHERWISE MANAGED INAPPROPRIATELY, CORRECT SUCH DEFECTS WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.
- IF EXCESSIVE SEDIMENTS OR DEBRIS ARE OBSERVED AT THE FLARED END SECTION OUTFALLS, THE INSPECTOR SHALL DETERMINE THE SOURCE AND DISCHARGE LOCATIONS OF SUCH MATERIALS. IF THE DISCHARGE HAS OCCURRED ON THE PROPERTY, REMOVE THE SEDIMENTS AND DEBRIS WITHIN 24 HOURS OF NOTIFICATION AND CORRECT THE SOURCE OF SUCH MATERIALS AS DIRECTED BY THE INSPECTOR

# POLLUTION PREVENTION MEASURES

**SOLID WASTE:**  
 SOLID WASTE, INCLUDING BUT NOT LIMITED TO, COLLECTED ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS, PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION DEBRIS AND OTHER WASTE, INCLUDING ALL TRASH ONSITE, MUST BE REGULARLY DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.

**HAZARDOUS MATERIALS:**  
 HAZARDOUS MATERIALS, INCLUDING BUT NOT LIMITED TO OIL, GASOLINE, PAINT AND ANY HAZARDOUS SUBSTANCE MUST BE PROPERLY STORED INCLUDING SECONDARY CONTAINMENTS, TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH MPCA REGULATIONS.

**CONSTRUCTION EQUIPMENT/VEHICLES:**  
 EXTERNAL WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE CONTAINED AND WASTE PROPERLY DISPOSED OF. NO ENGINE DEGREASING IS ALLOWED ON SITE. REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS SHALL BE TAKEN. ADEQUATE SUPPLIES MUST BE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS; CONDUCT FUELING IN A CONTAINED AREA UNLESS INFEASIBLE.

**CONCRETE WASHOUT AREA:**  
 CONCRETE WASHOUT WILL BE PERMITTED ON-SITE; CONTRACTOR SHALL FOLLOW ALL PERMIT REQUIREMENTS FOR CONCRETE WASHOUT. THE CONTRACTOR SHALL PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS. LIQUID AND SOLID WASHOUT WASTES MUST NOT CONTACT THE GROUND AND THE CONTAINMENT MUST BE DESIGNED TO PROHIBIT RUNOFF FROM THE WASHOUT OPERATIONS/AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA RULES. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY THAT REQUIRES SITE PERSONNEL TO UTILIZE THE PROPER FACILITIES FOR CONCRETE WASHOUT AND DISPOSAL OF WASHOUT WASTES. CONTRACTOR SHALL REVISE SWPPP TO INDICATE WASHOUT LOCATION ONCE THE LOCATION HAS BEEN DETERMINED.

FERTILIZERS AND LANDSCAPE MATERIALS MUST BE UNDER COVER TO PREVENT THE DISCHARGE OF POLLUTANTS OR PROTECTED BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.

PORTABLE TOILETS MUST BE POSITIONED SO THAT THEY ARE SECURE AND WILL NOT BE TIPPED OR KNOCKED OVER. SANITARY WASTE MUST BE DISPOSED OF PROPERLY.

# GENERAL SWPPP NOTES

DEWATERING IS ANTICIPATED TO BE REQUIRED DURING POND DREDGING. CONTRACTOR SHALL COMPLY WITH PERMIT SECTION 10.1 REQUIREMENTS FOR DEWATERING. CONTRACTOR MUST NOT CAUSE NUISANCE CONDITIONS (MINN. R. 7050.0210, SUBP. 2) IN SURFACE WATERS FROM DEWATERING DISCHARGES. PERMITTEES MUST DISCHARGE TURBID OR SEDIMENT-LADEN WATERS RELATED TO DEWATERING OR BASIN DRAINING TO A SEDIMENT CONTROL (E.G. SEDIMENT TRAP OR BASIN, FILTER BAG) DESIGNED TO PREVENT DISCHARGES WITH VISUAL TURBIDITY. CONTRACTOR MUST DISCHARGE ALL WATER FROM DEWATERING ACTIVITIES IN A MANNER THAT DOES NOT CAUSE EROSION OR SCOUR IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS OR INUNDATION OF WETLANDS IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS THAT CAUSES SIGNIFICANT ADVERSE IMPACT TO THE WETLAND. (MINN. R. 7090). IF NUISANCE CONDITIONS RESULT FROM THE DISCHARGE, CONTRACTOR MUST CEASE DEWATERING IMMEDIATELY AND CORRECTIVE ACTIONS MUST OCCUR BEFORE DEWATERING IS RESUMED.

THIS SWPPP SHALL BE AMENDED BY THE CONTRACTOR IN ACCORDANCE WITH THE PERMIT AS NECESSARY TO INCLUDE ADDITIONAL REQUIREMENTS, TO CORRECT PROBLEMS IDENTIFIED, OR TO ADDRESS SITUATIONS PER SECTION 6.1 OF THE PERMIT.

THE PROJECT WILL NOT DISTURB MORE THAN 5 ACRES THAT PROMOTE DRAINAGE TO A COMMON LOCATION, THEREFORE A TEMPORARY SEDIMENT BASIN WILL NOT BE REQUIRED. THIS SWPPP SHALL BE AMENDED BY THE CONTRACTOR IN ACCORDANCE WITH THE GENERAL PERMIT TO INCLUDE TEMPORARY SEDIMENTATION BASINS, IF THEY BECOME NECESSARY. BASINS, IF DESIGNED BY THE CONTRACTOR, SHALL ACCOMMODATE NO LESS THAN 3.00 CUBIC FEET OF LIVE STORAGE PER ACRE OF CONTRIBUTING DRAINAGE AREA. BASIN OUTLETS SHALL BE DESIGNED TO WITHDRAW WATER FROM THE SURFACE OF THE BASIN. PREVENT SHORT-CIRCUITING AND THE DISCHARGE OF FLOATING DEBRIS. BASINS SHALL HAVE A STABILIZED EMERGENCY OVERFLOW LOCATION AND BE DESIGNED TO PREVENT THE DISCHARGE OF POLLUTANTS TO THE EXTENT PRACTICAL.

**FINAL STABILIZATION:**  
 ALL PVIOUS AREAS DISTURBED BY CONSTRUCTION AS DESIGNATED WILL RECEIVE VEGETATIVE COVER ACCORDING TO THE PLANS AND SPECIFICATIONS AND WITHIN THE SPECIFIED VEGETATIVE TIME SCHEDULE. FINAL STABILIZATION WILL OCCUR WHEN THE SITE HAS A UNIFORM VEGETATIVE COVER WITH A DENSITY OF 70% OVER THE RESTORED PVIOUS AREAS. ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMPs (SUCH AS SILT FENCE) MUST BE REMOVED AS PART OF THE SITE FINAL STABILIZATION. ALL SEDIMENT MUST BE CLEANED OUT OF CONVEYANCES AND TEMPORARY SEDIMENTATION BASINS IF APPLICABLE. NOTICE OF TERMINATION (NOT) MUST BE SUBMITTED WITHIN 30 DAYS OF FINAL STABILIZATION.

# IMPAIRED WATERS, SPECIAL WATERS, AND WETLANDS

THIS PROJECT IS LOCATED WITHIN ONE MILE OF, AND ULTIMATELY DISCHARGES TO AN IMPAIRED WATER. LAKE NOKOMIS IS LOCATED NORTHEAST OF THE PROJECT LOCATION AND IS LISTED AS IMPAIRED FOR AQUATIC CONSUMPTION. THERE ARE CURRENT APPROVED TMDLS FOR THE WATER BODY FOR PCBs IN FISH TISSUE. DISCHARGE TO AN IMPAIRED WATER REQUIRES IMPLEMENTATION OF SECTION 23.1 OF THE PERMIT AS INCORPORATED INTO THIS SWPPP DOCUMENT.

THE PROJECT WILL NOT IMPACT WETLANDS. 0 SF OF WETLANDS WILL BE MITIGATED AS PART OF THIS PROJECT.

SITE SOILS - SITE SOILS ARE SHOWN ON THIS SHEET. THIS PROJECT IS NOT LOCATED IN A KARST AREA.

# ESTIMATED BMP QUANTITIES AND INSTALLATION SCHEDULE

THE ADJACENT TABLE INDICATES THE ESTIMATED MATERIAL QUANTITIES NECESSARY TO IMPLEMENT THE TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BMPs IDENTIFIED IN THIS SWPPP AND ON THE CONSTRUCTION DRAWINGS. TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BMPs WILL BE INSTALLED/CONSTRUCTED WHEN NECESSARY AS CONSTRUCTION ACTIVITIES PROGRESS AND IN ACCORDANCE WITH THE NPDES PERMIT REQUIREMENTS.

MAINTAIN AND REPLACE BMPs DURING THE EXECUTION OF THE PROJECT AS REQUIRED TO CONTINUE SWPPP COVERAGE DURING CONSTRUCTION

ESTIMATED BMP QUANTITIES		
ITEM	QUANTITY (AMELIA POND)	UNIT
SILT FENCE	920	LF
BIOLOG	2480	LF
INLET PROTECTION	2	EA
TEMP CONSTRUCTION ENTRANCE	2	EA
VEGETATION ESTABLISHMENT	8780	SY

# CERTIFICATION

IN ACCORDANCE WITH SECTION 21 OF THE GENERAL PERMIT AUTHORIZATION TO DISCHARGE STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NPDES, THE PREPARER OF THIS DOCUMENT WAS TRAINED UNDER THE UNIVERSITY OF MINNESOTA EROSION AND SEDIMENT CONTROL CERTIFICATION PROGRAM. JOSEPH R. PESIK'S CERTIFICATION IN DESIGN OF SWPPP IS VALID THROUGH MAY 31, 2026.

*Joseph R. Pesik*

**Stantec**  
 ONE CARLSON PARKWAY, SUITE 100  
 PLYMOUTH MN, 55447  
 PHONE: 763-479-4200  
 FAX: 763-479-4242  
 WWW.STANTEC.COM

CLIENT:  
**MINNEHAHA CREEK WATERSHED DISTRICT**  
 15320 MINNETONKA BLVD  
 MINNETONKA, MN 55345

**MINNEHAHA CREEK WATERSHED DISTRICT**

**2023-2024 STORMWATER POND MAINTENANCE**  
 AMELIA POND & TWIN LAKES POND  
 HENNEPIN COUNTY, MINNESOTA

PROJECT TITLE	ISSUE NO.	DATE	DESCRIPTION
	0	10/09/2023	ISSUED FOR MOWD

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

CHRIS JOSEPHAN  
 LICENSE NO.: 43066  
 DATE: #####

PROJECT NO.: 227706259

DWN BY: SMD CHKD BY: NPW APPD BY: CJM

ISSUE DATE: 10/09/2023

ISSUE NO.: 0

SHEET TITLE:  
 SWPPP (AMELIA POND)

SHEET NO.:  
**C-102**



### NOTES

- SEE SHEET G-002 FOR ADDITIONAL PROJECT NOTES.
- EROSION CONTROL BLANKET (CATEGORY 25) SHALL USED FOR SLOPES STEEPER THAN 3H:1V, IF ENCOUNTERED. SEE DETAIL, 3/C-801.
- STOCKPILE DREGGED MUCK WITHIN POND FOOTPRINT DURING DREGGING ACTIVITIES.
- CONTRACTOR MAY USE EXISTING TRAIL FOR ACCESS TO POND CLEANOUT. CONTRACTOR IS REQUIRED TO PROTECT THE TRAIL AND ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.



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 PLYMOUTH MN, 55447  
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 MINNETONKA, MN 55345



## 2023-2024 STORMWATER POND MAINTENANCE

AMELIA POND & TWIN LAKES POND  
 HENNEPIN COUNTY, MINNESOTA

PROJECT TITLE

ISSUE NO:

0

DESCRIPTION:

ISSUED FOR: MOW

DATE:

10/09/2023

CERTIFICATION:

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

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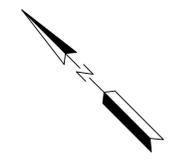
SHEET TITLE:

PROPOSED CONDITIONS

(TWIN LAKES POND)

SHEET NO.:

C-201



**NOTES**

1. SEE SHEET G-002 FOR ADDITIONAL PROJECT NOTES.
2. EROSION CONTROL BLANKET (CATEGORY 25) SHALL USED FOR SLOPES STEEPER THAN 3H:1V, IF ENCOUNTERED. SEE DETAIL, 3/C-801.
3. STOCKPILE DREDGED MUCK WITHIN POND FOOTPRINT DURING DREDGING ACTIVITIES.
4. CONTRACTOR MAY USE EXISTING TRAIL FOR ACCESS TO POND CLEANOUT. CONTRACTOR IS REQUIRED TO PROTECT THE TRAIL AND ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

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 AMELIA POND & TWIN LAKES POND  
 HENNEPIN COUNTY, MINNESOTA

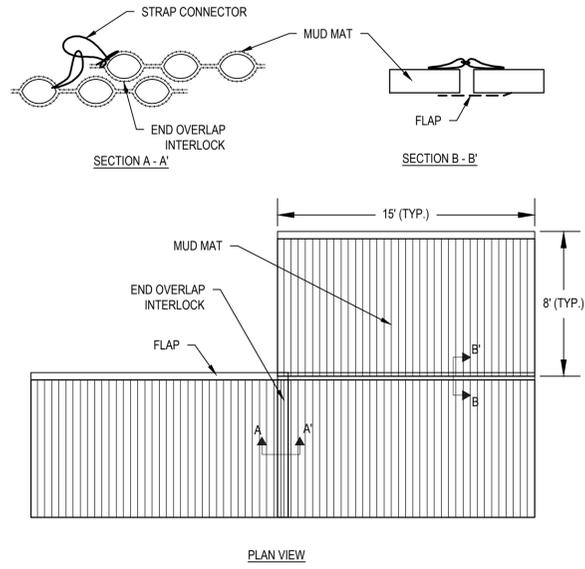
PROJECT TITLE	ISSUE NO.	DESCRIPTION	DATE
	0	ISSUED FOR MOWD	10/09/2023

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

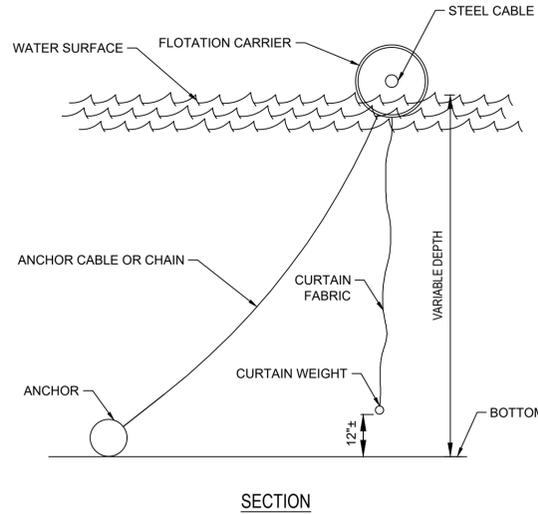
CHRIS JOHAN  
 LICENSE NO.: 43066  
 DATE: #####

PROJECT NO.: 227706259  
 DWN BY: SMD    CHK'D BY: NPW    APP'D BY: CJM  
 ISSUE DATE: 10/09/2023  
 ISSUE NO.: 0

SHEET TITLE:  
**PROPOSED CONDITIONS (AMELIA POND)**  
 SHEET NO.:  
**C-202**

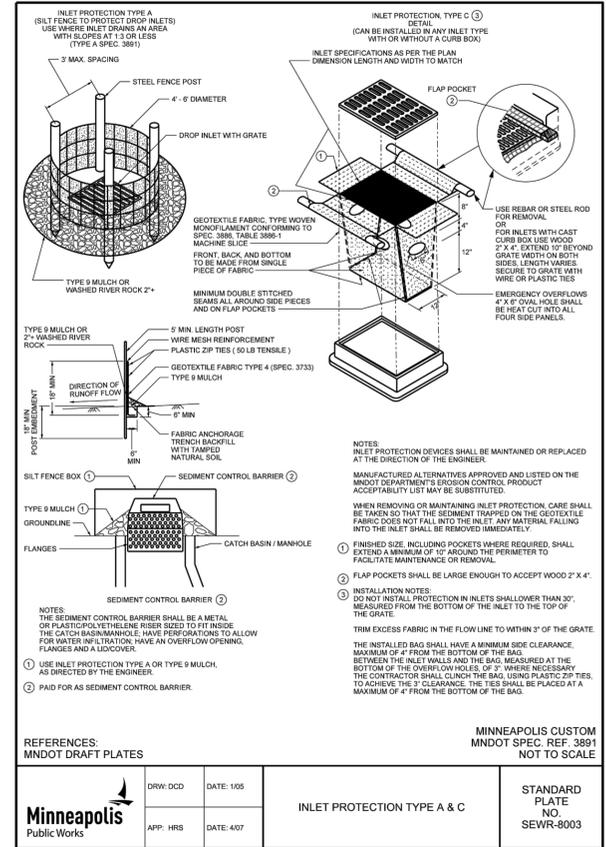


**1 MUD MAT CONSTRUCTION ENTRANCE**  
NOT TO SCALE



- NOTES:**
- DOUBLE FLOTATION SILT CURTAIN SHOULD BE SPACED 10' APART.
  - CURTAIN LENGTH TO MATCH BOTTOM PROFILE AS CLOSELY AS POSSIBLE.
  - MAXIMUM INTERVAL FOR SPACING OF WEIGHT IS 15'.

**2 FLOTATION SILT CURTAIN**  
NOT TO SCALE

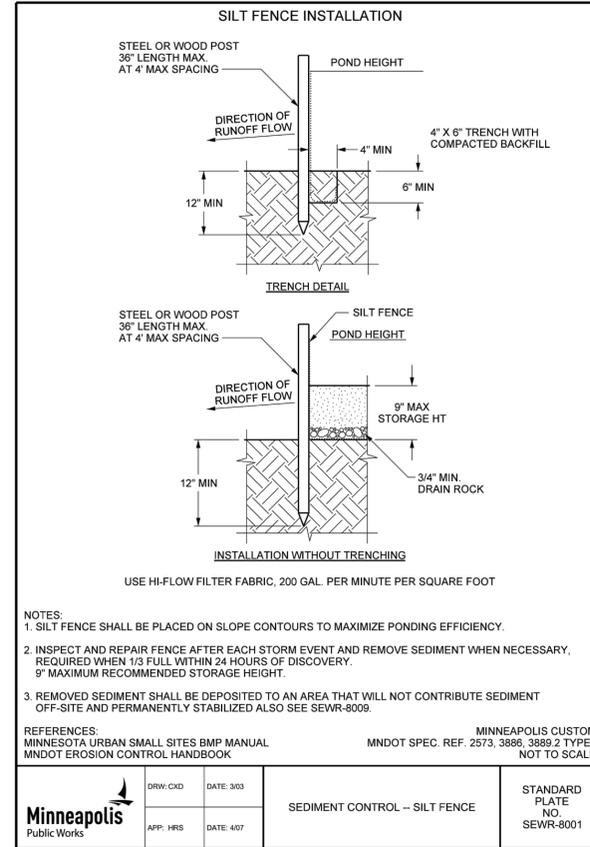


**MINNEAPOLIS CUSTOM MNDOT SPEC. REF. 3891 NOT TO SCALE**

**MINNEAPOLIS Public Works**

DRW: DCD DATE: 1/05  
APP: HRS DATE: 4/07

STANDARD PLATE NO. SEWR-8003

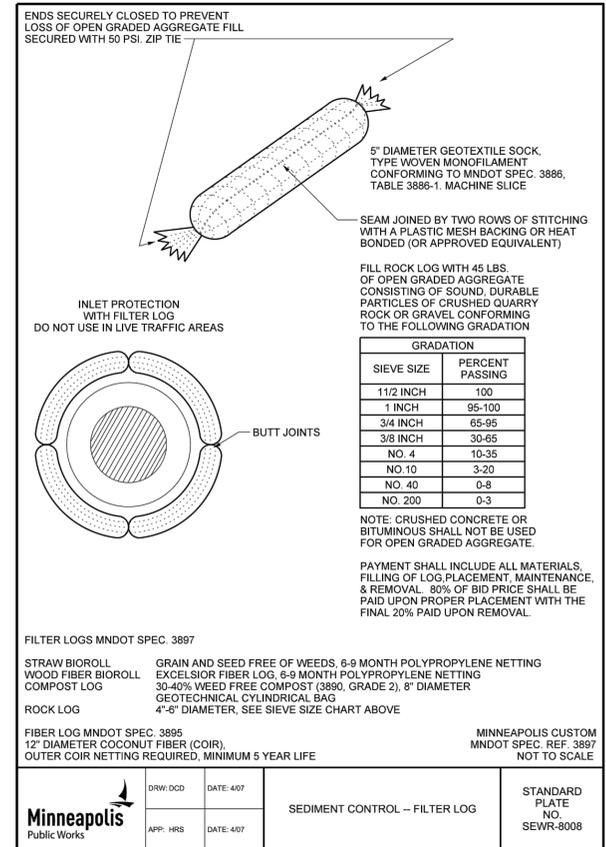


**MINNEAPOLIS CUSTOM MNDOT SPEC. REF. 2573, 3886, 3889 2 TYPE I MNDOT EROSION CONTROL HANDBOOK**

**MINNEAPOLIS Public Works**

DRW: CND DATE: 3/03  
APP: HRS DATE: 4/07

STANDARD PLATE NO. SEWR-8001

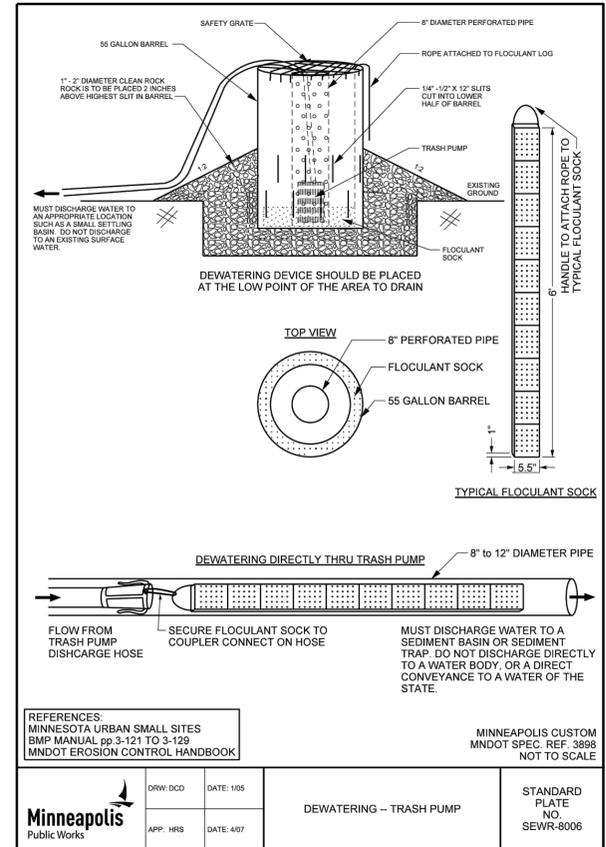


**MINNEAPOLIS CUSTOM MNDOT SPEC. REF. 3897 NOT TO SCALE**

**MINNEAPOLIS Public Works**

DRW: DCD DATE: 4/07  
APP: HRS DATE: 4/07

STANDARD PLATE NO. SEWR-8008

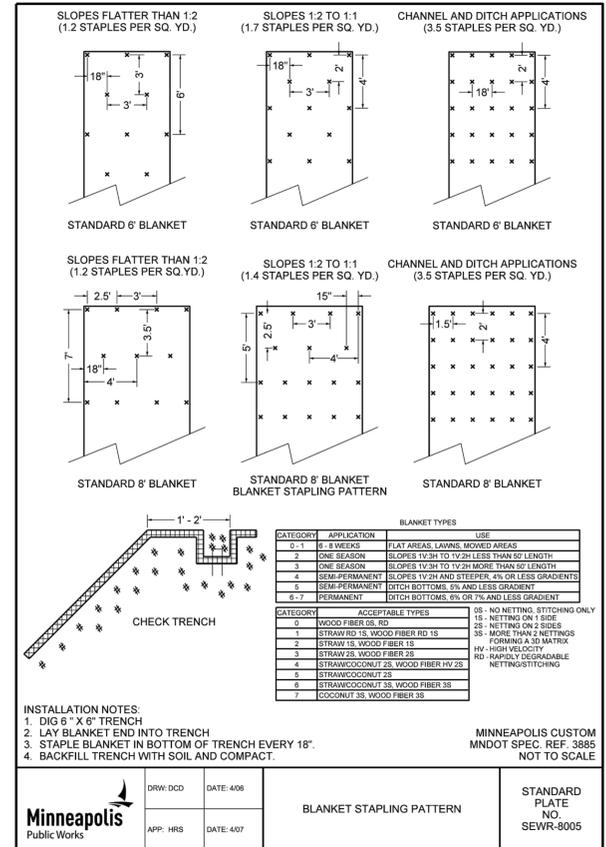


**MINNEAPOLIS CUSTOM MNDOT SPEC. REF. 3888 NOT TO SCALE**

**MINNEAPOLIS Public Works**

DRW: DCD DATE: 1/05  
APP: HRS DATE: 4/07

STANDARD PLATE NO. SEWR-8006

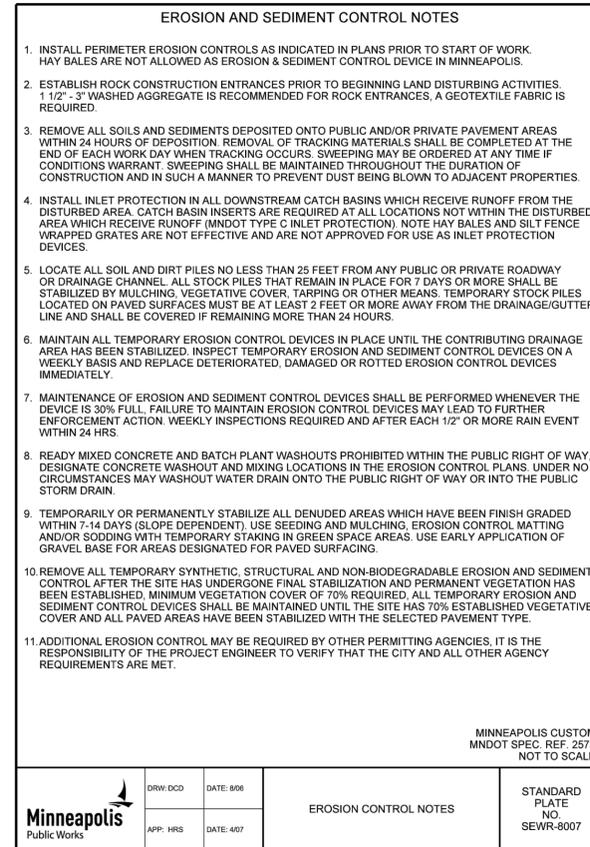


**MINNEAPOLIS CUSTOM MNDOT SPEC. REF. 3885 NOT TO SCALE**

**MINNEAPOLIS Public Works**

DRW: DCD DATE: 4/08  
APP: HRS DATE: 4/07

STANDARD PLATE NO. SEWR-8005



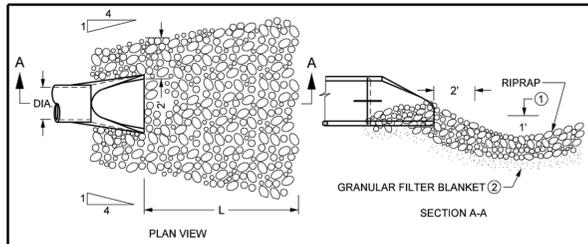
**MINNEAPOLIS CUSTOM MNDOT SPEC. REF. 2573 NOT TO SCALE**

**MINNEAPOLIS Public Works**

DRW: DCD DATE: 8/06  
APP: HRS DATE: 4/07

STANDARD PLATE NO. SEWR-8007

PROJECT TITLE	ISSUE NO.	0
DESCRIPTION	ISSUED FOR	MNDOT
DATE	10/09/2023	
CERTIFICATION	I HEREBY CERTIFY THAT THIS PLAN SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.	
NAME	CHRIS JOHAN	
LICENSE NO.	43066	
PROJECT NO.	227706259	
DWN BY:	CHKD BY:	APPD BY:
SMD	NPW	CJM
ISSUE DATE:	10/09/2023	
ISSUE NO.:	0	
SHEET TITLE:	DETAILS	
SHEET NO.:	C-801	



**TABLE OF QUANTITIES - RIPRAP AT RCP OUTLETS**

DIA. OF ROUND PIPE (IN.)	L (FT.)	CLASS II 450 = 6"		CLASS III 450 = 9"		CLASS IV 450 = 12"	
		12" DEPTH RIPRAP (CU.YDS.)	6" DEPTH GRANULAR FILTER (CU.YDS.)	18" DEPTH RIPRAP (CU.YDS.)	9" DEPTH GRANULAR FILTER (CU.YDS.)	24" DEPTH RIPRAP (CU.YDS.)	12" DEPTH GRANULAR FILTER (CU.YDS.)
12	8	2.8	1.4	4.1	2.1	5.5	2.8
15	8	2.9	1.5	4.4	2.2	5.8	2.9
18	10	3.9	2.0	5.9	3.0	7.8	3.9
21	10	4.2	2.1	6.3	3.2	8.4	4.2
24	12	5.5	2.8	8.3	4.2	11.0	5.5
27	12	5.8	2.9	8.7	4.4	11.6	5.8
30	14	7.3	3.7	10.9	5.5	14.5	7.3
36	16	9.2	4.6	13.8	6.9	18.3	9.2
42	18	10.9	5.5	16.3	8.2	21.7	10.9
48	20	12.9	6.5	19.4	9.7	25.8	12.9

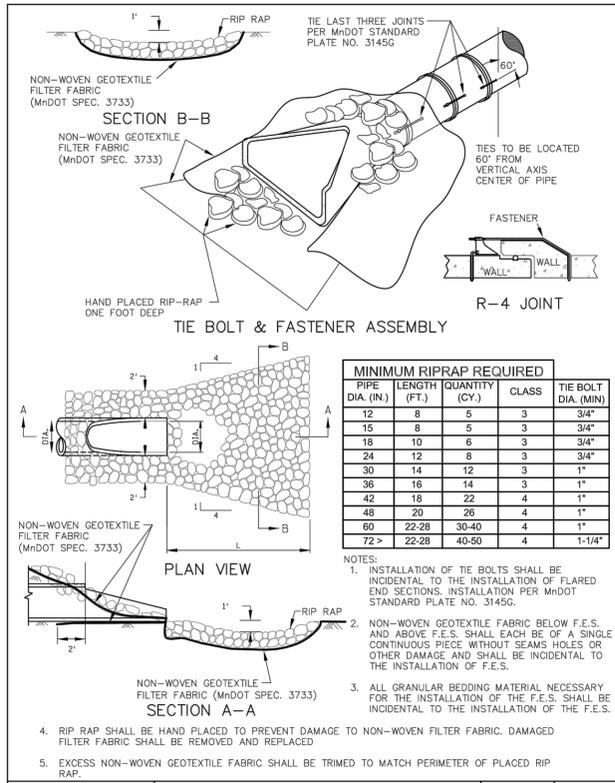
- ① FOR PIPES GREATER THAN OR EQUAL TO 30" USE 1.5."
- ② GEOTEXTILE FABRIC MAY BE SUBSTITUTED FOR GRANULAR FILTER UNLESS OTHERWISE SPECIFIED. FABRIC SHALL COVER THE AREA OF RIPRAP AND EXTEND UNDER THE CULVERT APRON 3 FT. FABRIC SHALL MEET MNDOT SPEC. 3733.

NOTES:  
PIPE SIZES LARGER THAN THOSE SHOWN REQUIRE A SPECIAL DESIGN.

REQUIREMENTS FOR RIPRAP SIZE, THICKNESS AND FILTER BLANKET WILL BE DESIGNATED IN THE PLANS.

MNDOT SPEC. REF. 3601, 3733  
MNDOT 3133C  
NOT TO SCALE

MINNEAPOLIS Public Works	DRAW: CXD	DATE: 4/03	RIPRAP AT RC PIPE OUTLETS	STANDARD PLATE NO. SEWR-3005
	APP: HRS	DATE: 12/06		

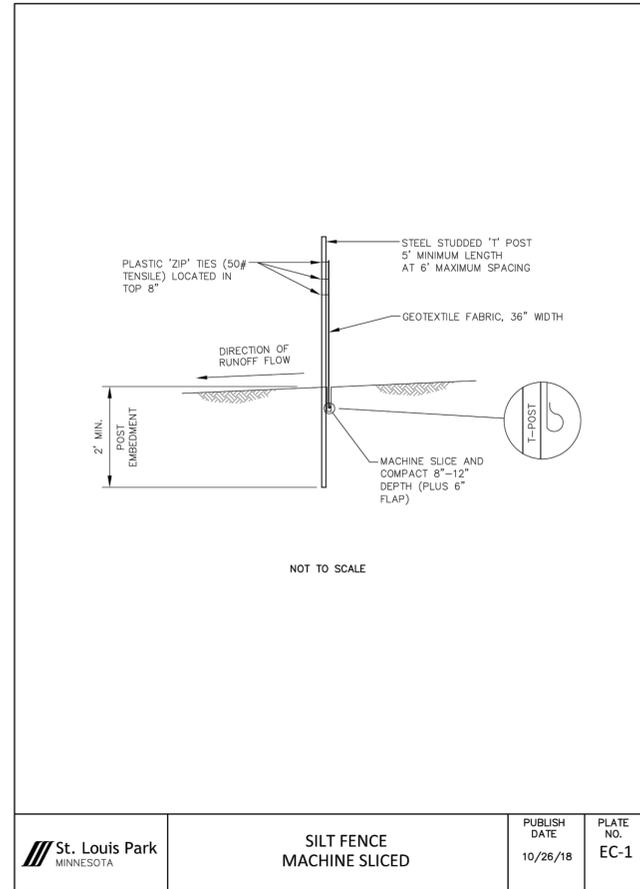


**MINIMUM RIPRAP REQUIRED**

PIPE DIA. (IN.)	LENGTH (FT.)	QUANTITY (CY.)	CLASS	TIE BOLT DIA. (MIN)
12	8	5	3	3/4"
15	8	5	3	3/4"
18	10	6	3	3/4"
24	12	8	3	3/4"
30	14	12	3	1"
36	16	14	3	1"
42	18	22	4	1"
48	20	26	4	1"
60	22-28	30-40	4	1"
72 >	22-28	40-50	4	1-1/4"

- NOTES:
- INSTALLATION OF TIE BOLTS SHALL BE INCIDENTAL TO THE INSTALLATION OF FLARED END SECTIONS. INSTALLATION PER MNDOT STANDARD PLATE NO. 31455G.
  - NON-WOVEN GEOTEXTILE FABRIC BELOW F.E.S. AND ABOVE F.E.S. SHALL EACH BE OF A SINGLE CONTINUOUS PIECE WITHOUT SEAMS HOLES OR OTHER DAMAGE AND SHALL BE INCIDENTAL TO THE INSTALLATION OF F.E.S.
  - ALL GRANULAR BEDDING MATERIAL NECESSARY FOR THE INSTALLATION OF THE F.E.S. SHALL BE INCIDENTAL TO THE INSTALLATION OF THE F.E.S.
  - RIP RAP SHALL BE HAND PLACED TO PREVENT DAMAGE TO NON-WOVEN FILTER FABRIC. DAMAGED FILTER FABRIC SHALL BE REMOVED AND REPLACED.
  - EXCESS NON-WOVEN GEOTEXTILE FABRIC SHALL BE TRIMMED TO MATCH PERIMETER OF PLACED RIP RAP.

St. Louis Park MINNESOTA	FLARED END	PUBLISH DATE	PLATE NO.
		12/16/21	S-4

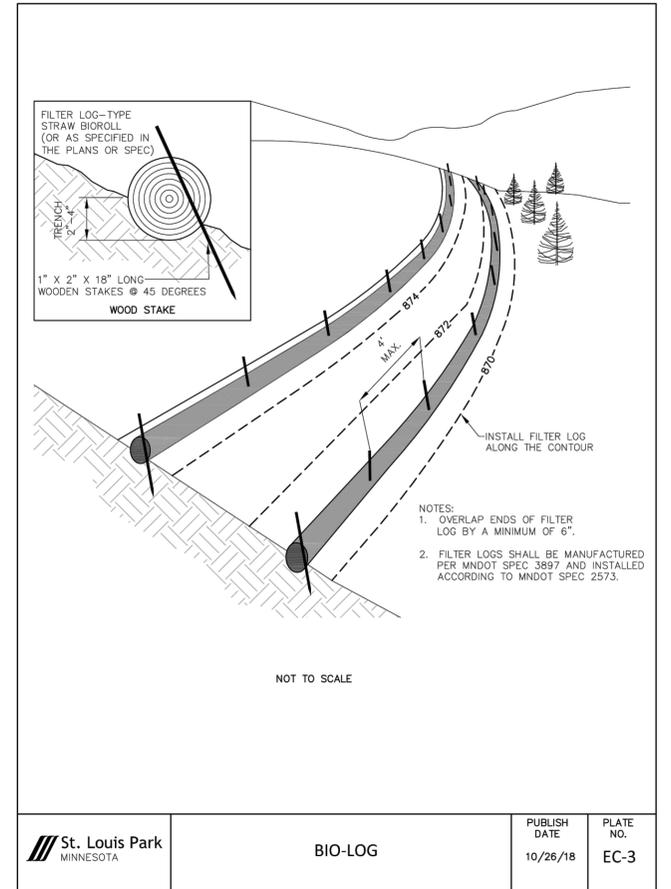


**MINIMUM RIPRAP REQUIRED**

PIPE DIA. (IN.)	LENGTH (FT.)	QUANTITY (CY.)	CLASS	TIE BOLT DIA. (MIN)
12	8	5	3	3/4"
15	8	5	3	3/4"
18	10	6	3	3/4"
24	12	8	3	3/4"
30	14	12	3	1"
36	16	14	3	1"
42	18	22	4	1"
48	20	26	4	1"
60	22-28	30-40	4	1"
72 >	22-28	40-50	4	1-1/4"

- NOTES:
- INSTALLATION OF TIE BOLTS SHALL BE INCIDENTAL TO THE INSTALLATION OF FLARED END SECTIONS. INSTALLATION PER MNDOT STANDARD PLATE NO. 31455G.
  - NON-WOVEN GEOTEXTILE FABRIC BELOW F.E.S. AND ABOVE F.E.S. SHALL EACH BE OF A SINGLE CONTINUOUS PIECE WITHOUT SEAMS HOLES OR OTHER DAMAGE AND SHALL BE INCIDENTAL TO THE INSTALLATION OF F.E.S.
  - ALL GRANULAR BEDDING MATERIAL NECESSARY FOR THE INSTALLATION OF THE F.E.S. SHALL BE INCIDENTAL TO THE INSTALLATION OF THE F.E.S.
  - RIP RAP SHALL BE HAND PLACED TO PREVENT DAMAGE TO NON-WOVEN FILTER FABRIC. DAMAGED FILTER FABRIC SHALL BE REMOVED AND REPLACED.
  - EXCESS NON-WOVEN GEOTEXTILE FABRIC SHALL BE TRIMMED TO MATCH PERIMETER OF PLACED RIP RAP.

St. Louis Park MINNESOTA	SILT FENCE MACHINE SLICED	PUBLISH DATE	PLATE NO.
		10/26/18	EC-1



**MINIMUM RIPRAP REQUIRED**

PIPE DIA. (IN.)	LENGTH (FT.)	QUANTITY (CY.)	CLASS	TIE BOLT DIA. (MIN)
12	8	5	3	3/4"
15	8	5	3	3/4"
18	10	6	3	3/4"
24	12	8	3	3/4"
30	14	12	3	1"
36	16	14	3	1"
42	18	22	4	1"
48	20	26	4	1"
60	22-28	30-40	4	1"
72 >	22-28	40-50	4	1-1/4"

- NOTES:
- OVERLAP ENDS OF FILTER LOG BY A MINIMUM OF 6".
  - FILTER LOGS SHALL BE MANUFACTURED PER MNDOT SPEC. 3887 AND INSTALLED ACCORDING TO MNDOT SPEC 2573.

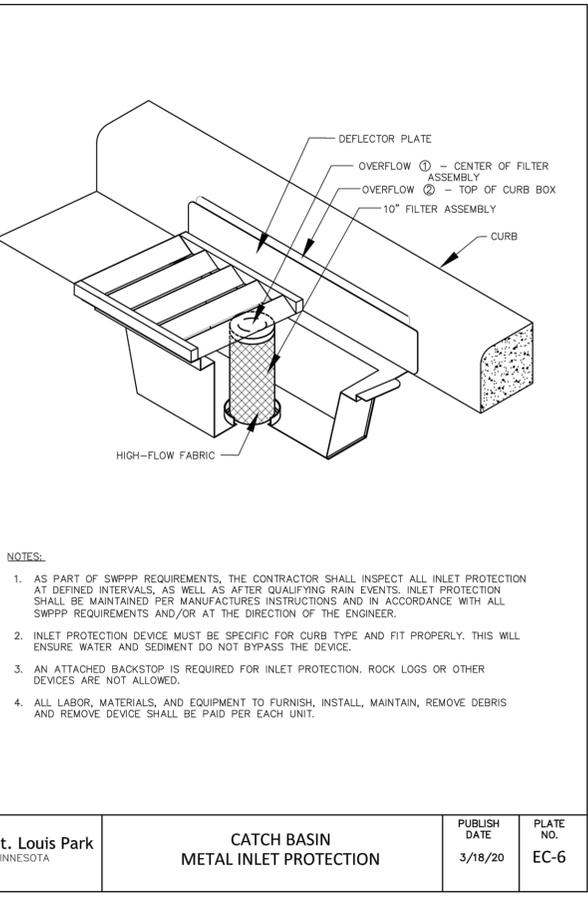
St. Louis Park MINNESOTA	BIO-LOG	PUBLISH DATE	PLATE NO.
		10/26/18	EC-3

PROJECT TITLE	ISSUE NO.	DATE	DESCRIPTION
	0	10/09/2023	ISSUED FOR MCDWD

CERTIFICATION:  
I HEREBY CERTIFY THAT THIS PLAN SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  
CHRIS JOHAN  
LICENSE NO.: 43066  
DATE: #####

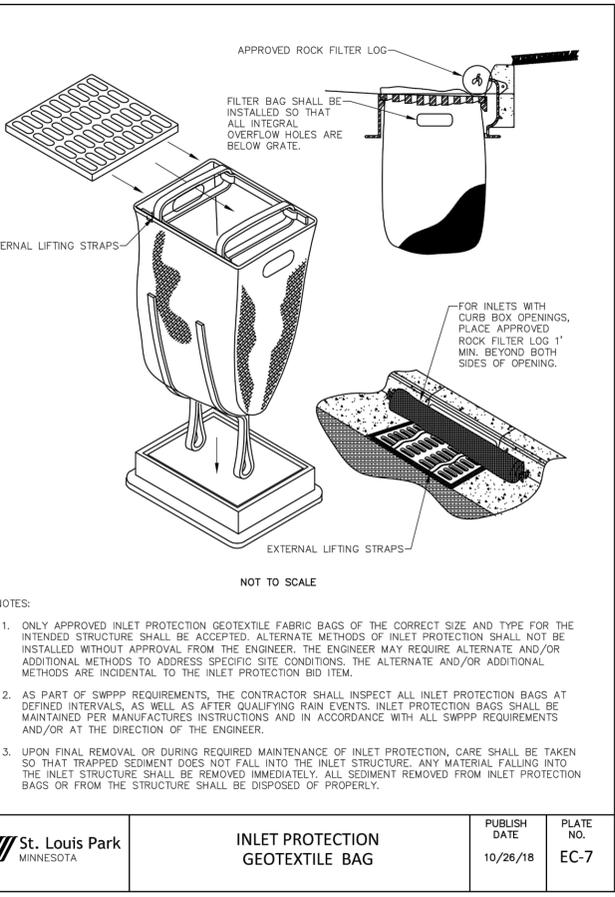
PROJECT NO.:	227706259	
DWN BY:	CHK'D BY:	APP'D BY:
SMD	NPW	CJM
ISSUE DATE:	10/09/2023	
ISSUE NO.:	0	

SHEET TITLE:	DETAILS
SHEET NO.:	C-802



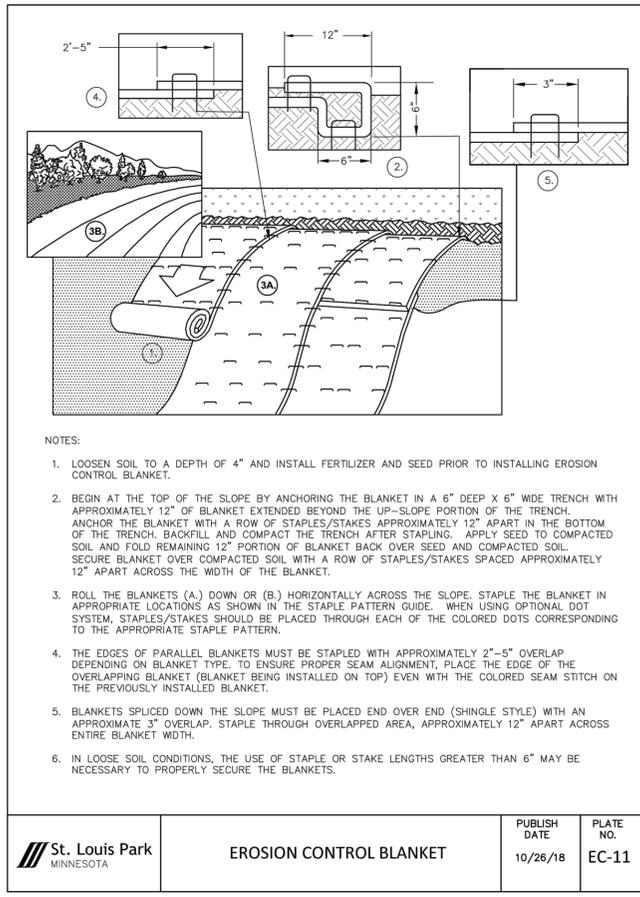
- NOTES:
- AS PART OF SWPPP REQUIREMENTS, THE CONTRACTOR SHALL INSPECT ALL INLET PROTECTION AT DEFINED INTERVALS, AS WELL AS AFTER QUALIFYING RAIN EVENTS. INLET PROTECTION SHALL BE MAINTAINED PER MANUFACTURER'S INSTRUCTIONS AND IN ACCORDANCE WITH ALL SWPPP REQUIREMENTS AND/OR AT THE DIRECTION OF THE ENGINEER.
  - INLET PROTECTION DEVICE MUST BE SPECIFIC FOR CURB TYPE AND FIT PROPERLY. THIS WILL ENSURE WATER AND SEDIMENT DO NOT BYPASS THE DEVICE.
  - AN ATTACHED BACKSTOP IS REQUIRED FOR INLET PROTECTION. ROCK LOGS OR OTHER DEVICES ARE NOT ALLOWED.
  - ALL LABOR, MATERIALS, AND EQUIPMENT TO FURNISH, INSTALL, MAINTAIN, REMOVE DEBRIS AND REMOVE DEVICE SHALL BE PAID PER EACH UNIT.

St. Louis Park MINNESOTA	CATCH BASIN METAL INLET PROTECTION	PUBLISH DATE	PLATE NO.
		3/18/20	EC-6



- NOTES:
- ONLY APPROVED INLET PROTECTION GEOTEXTILE FABRIC BAGS OF THE CORRECT SIZE AND TYPE FOR THE INTENDED STRUCTURE SHALL BE ACCEPTED. ALTERNATE METHODS OF INLET PROTECTION SHALL NOT BE INSTALLED WITHOUT APPROVAL FROM THE ENGINEER. THE ENGINEER MAY REQUIRE ALTERNATE AND/OR ADDITIONAL METHODS TO ADDRESS SPECIFIC SITE CONDITIONS. THE ALTERNATE AND/OR ADDITIONAL METHODS ARE INCIDENTAL TO THE INLET PROTECTION BID ITEM.
  - AS PART OF SWPPP REQUIREMENTS, THE CONTRACTOR SHALL INSPECT ALL INLET PROTECTION BAGS AT DEFINED INTERVALS, AS WELL AS AFTER QUALIFYING RAIN EVENTS. INLET PROTECTION BAGS SHALL BE MAINTAINED PER MANUFACTURER'S INSTRUCTIONS AND IN ACCORDANCE WITH ALL SWPPP REQUIREMENTS AND/OR AT THE DIRECTION OF THE ENGINEER.
  - UPON FINAL REMOVAL OR DURING REQUIRED MAINTENANCE OF INLET PROTECTION, CARE SHALL BE TAKEN SO THAT TRAPPED SEDIMENT DOES NOT FALL INTO THE INLET STRUCTURE. ANY MATERIAL FALLING INTO THE INLET STRUCTURE SHALL BE REMOVED IMMEDIATELY. ALL SEDIMENT REMOVED FROM INLET PROTECTION BAGS OR FROM THE STRUCTURE SHALL BE DISPOSED OF PROPERLY.

St. Louis Park MINNESOTA	INLET PROTECTION GEOTEXTILE BAG	PUBLISH DATE	PLATE NO.
		10/26/18	EC-7



- NOTES:
- LOOSEN SOIL TO A DEPTH OF 4" AND INSTALL FERTILIZER AND SEED PRIOR TO INSTALLING EROSION CONTROL BLANKET.
  - BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
  - ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. STAPLE THE BLANKET IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
  - THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
  - BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.
  - IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

St. Louis Park MINNESOTA	EROSION CONTROL BLANKET	PUBLISH DATE	PLATE NO.
		10/26/18	EC-11

MINNEHAHA CREEK WATERSHED DISTRICT  
2023-2024 STORMWATER POND MAINTENANCE  
Opinion of Probable Construction Cost  
10/09/2023

Bid Item	Description	Units	Quantity	Unit Price	Total Cost
<b>Base Bid</b>					
<b>SCHEDULE A - TWIN LAKE PARK POND</b>					
1	MOBILIZATION & DEMOBILIZATION	LS	1	\$15,000.00	\$ 15,000.00
2	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
3	MUCK EXCAVATION - EXPORT CONTAMINATED MATERIAL (EV)	CY	3510	\$ 50.00	\$ 175,500.00
4	STREET SWEEPER WITH PICKUP BROOM	HOUR	20	\$ 160.00	\$ 3,200.00
5	TEMPORARY DEWATERING	LS	1	\$10,000.00	\$ 10,000.00
6	SILT FENCE, TYPE MS - MAINTAINED	LIN FT	1190	\$ 5.00	\$ 5,950.00
7	SEDIMENT CONTROL LOG TYPE STRAW (OR BIOROLL) - MAINTAINED	LIN FT	200	\$ 3.00	\$ 600.00
8	FLOATATION SILT CURTAIN - MAINTAINED	LIN FT	40	\$ 25.00	\$ 1,000.00
9	INLET PROTECTION - MAINTAINED	EA	1	\$ 250.00	\$ 250.00
10	TEMPORARY CONSTRUCTION ENTRANCE - MAINTAINED	EA	1	\$ 2,500.00	\$ 2,500.00
11	MNDOT SEED MIXTURE 25-151 WITH EROSION CONTROL BLANKET (CAT 25)	SQ YD	420	\$ 6.00	\$ 2,520.00
<b>SCHEDULE B - NOKOMIS - AMELIA POND</b>					
12	MOBILIZATION & DEMOBILIZATION	LS	1	\$15,000.00	\$ 15,000.00
13	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
14	MUCK EXCAVATION - EXPORT CONTAMINATED MATERIAL (EV)	CY	7090	\$ 50.00	\$ 354,500.00
15	STREET SWEEPER WITH PICKUP BROOM	HOUR	10	\$ 160.00	\$ 1,600.00
16	TEMPORARY DEWATERING	LS	1	\$10,000.00	\$ 10,000.00
17	SILT FENCE, TYPE MS - MAINTAINED	LIN FT	920	\$ 5.00	\$ 4,600.00
18	SEDIMENT CONTROL LOG TYPE STRAW (OR BIOROLL) - MAINTAINED	LIN FT	2480	\$ 3.00	\$ 7,440.00
19	FLOATATION SILT CURTAIN - MAINTAINED	LIN FT	0	\$ 25.00	\$ -
20	INLET PROTECTION - MAINTAINED	EA	2	\$ 250.00	\$ 500.00
21	TEMPORARY CONSTRUCTION ENTRANCE - MAINTAINED	EA	2	\$ 2,500.00	\$ 5,000.00
22	MNDOT SEED MIXTURE 21-112 INCLUDING STRAW MULCH TYPE 1 W/DISC ANCHORING	SQ YD	8780	\$ 5.00	\$ 43,900.00
<b>TOTAL BASE BID</b>					<b>\$ 664,060.00</b>
<b>Alternate #1</b>					
23	RANDOM RIPRAP CLASS III	TON	35	\$ 120.00	\$ 4,200.00
24	RANDOM RIPRAP CLASS IV	TON	63	\$ 150.00	\$ 9,450.00
<b>TOTAL ALTERNATE #1</b>					<b>\$ 13,650.00</b>
<b>TOTAL CONSTRUCTION COSTS</b>					<b>\$677,710.00</b>
5% CONTINGENCY					\$33,885.50
<b>TOTAL COSTS</b>					<b>\$711,595.50</b>