

GENERAL NOTES

1. ALL EXISTING INFORMATION TAKEN FROM CAD FILE PROVIDED BY CE GOLF DESIGN.
2. RESULTS OF PUSH PROBE SAMPLING ORGANIC SOILS SAMPLING BY BRAIN INTERTECT, PROJECT BL-10-07517, DATED JULY 23, 2010.
3. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS INCLUDING LOCATIONS OF EXISTING UTILITIES, AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION.
4. CONTRACTOR TO PREVENT DIRT AND/OR DEBRIS FROM BEING TRANSPORTED OFF-SITE IN AN UNCONTROLLED MANNER. SEDIMENT DISCOVERED SHALL BE REMOVED BY CONTRACTOR WITHIN 7 DAYS OF DISCOVERY.
5. ALL WORK TO BE PERFORMED IN ACCORDANCE WITH CITY OF SHOREWOOD AND STATE OF MINNESOTA REGULATIONS AND STANDARDS.
6. EXISTING UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS. CONTRACTOR TO FIELD VERIFY THE LOCATION OF ALL EXISTING UTILITIES WHICH MAY INCLUDE BUT IS NOT LIMITED TO: ELECTRIC, TELEPHONE, GAS, CABLE TV, COMPUTER CABLE, FIBER OPTIC CABLE, SANITARY SEWER, STORM SEWER AND WATER MAIN. CONTRACTOR TO CONTACT THE GOPHER STATE ONE CALL BEFORE EXCAVATING.
7. CONTRACTOR TO PROTECT FROM DAMAGE ALL EXISTING IMPROVEMENTS, LANDSCAPING, STRUCTURES AND UTILITIES THAT ARE TO REMAIN. CONTRACTOR TO STORE AND PROTECT EXISTING SITE FEATURES WHICH NEED TO BE REMOVED AND REPLACED. CONTRACTOR TO PREVENT DAMAGE OR THEFT OF THESE ITEMS AND TO REPAIR AND REPLACE AT OWN EXPENSE.
8. ALL EXCAVATIONS MUST COMPLY WITH THE REQUIREMENTS OF OSHA 29 CFR, PART 1926, SUBPART P "EXCAVATIONS AND TRENCHES". THIS DOCUMENT STATES THAT EXCAVATION SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
9. PROVIDE THE FOLLOWING MINIMUM COVER OVER THE TOP OF PIPE AS FOLLOWS:

α. 1' OVER STORM SEWER
9. CONTRACTOR SHALL COORDINATE WITH ARCHITECT'S DRAWINGS TO VERIFY LOCATION, SIZE AND QUANTITY OF ALL ROOF DRAINS AND UTILITY CONNECTIONS.
10. PROVIDE TRAFFIC CONTROL IN ACCORDANCE WITH MMUTCD, INCLUDING "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS", CURRENT EDITION.
11. DRAWINGS DO NOT INDICATE AREAS OF TEMPORARY SUPPORT SYSTEMS. THE CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS AND WILL HAVE TOTAL CONTROL OVER THE TYPES AND

- DESIGN OF ALL SHORING, SHEETING, BRACING, ANCHORAGES, EXCAVATION SUPPORT WALLS, DIRECTIONAL BORING, AUGER JACKING, SOIL STABILIZATION AND OTHER METHODS OF PROTECTING EXISTING IMPROVEMENTS. SEE SPECIFICATIONS FOR SUBMITTAL REQUIREMENTS.
12. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO STARTING CONSTRUCTION.
13. ALL MATERIALS FOR PROPOSED CONSTRUCTION OR REPAIR OF EXISTING FACILITIES SHALL BE NEW PRODUCTS DIRECT FROM THE FACTORY AND FREE FROM DEFECTS.
14. WHEN WORKING AROUND EXISTING UTILITIES, LIGHT POLES, TRAFFIC SIGNALS, TELEPHONE OR POWER POLES, THE CONTRACTOR SHALL PROVIDE SUFFICIENT SUPPORT OR BRACING TO PREVENT EXCESSIVE STRESS ON THE PIPING. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACILITIES.
15. CARE MUST BE TAKEN DURING CONSTRUCTION AND EXCAVATION TO PROTECT ANY SURVEY MONUMENTS AND/OR PROPERTY IRONS. MONUMENTS DAMAGED OR DISPLACED DUE TO CONTRACTOR NEGLIGENCE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
16. CONTRACTOR SHALL NOT BLOCK DRAINAGE FROM OR DIRECT EXCESS DRAINAGE ONTO ADJACENT PROPERTY.
17. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THE SATISFACTION OF THE OWNING AUTHORITY.
18. CONTRACTOR MUST ADHERE TO AXLE LOAD LIMITS WHEN DELIVERING MATERIALS AND EQUIPMENT TO THE SITE. ANY DAMAGE TO THE ROADWAY AND THE CITY RIGHT-OF-WAY SHALL BE REPAIRED TO THE CITY'S SATISFACTION AT THE COST OF THE CONTRACTOR.
19. CONTRACTOR SHALL TAKE PHOTOGRAPHS AND DOCUMENT THE CONDITION OF THE EXISTING ROADWAY PRIOR TO CONSTRUCTION.
20. THE CONTRACTOR SHALL SUBMIT AN AS-BUILT SURVEY OF THE COMPLETED SITE PREPARED AND SIGNED BY A LICENSED SURVEYOR TO THE CIVIL ENGINEER AT THE END OF THE PROJECT. AS-BUILT SURVEY SHALL INCLUDE ENOUGH INFORMATION TO VERIFY THE CONSTRUCTED TOPOGRAPHY, UTILITY AND SITE ELEMENTS. COORDINATE WITH OWNER AND CIVIL ENGINEER FOR SCHEDULE FOR WHEN THIS SHALL BE COMPLETED.

LEGEND

	EXISTING PROPERTY LINE
	LIMITS OF DISTURBANCE
	EXISTING CONTOUR LINE
	EXISTING FAIRWAY/GREEN
	EXISTING POND
	EXISTING CART PATH
	EXISTING TREES
	PROPOSED CONTOUR
	DENOTES SURFACE DRAINAGE
	PROPOSED CATCH BASIN
	PROPOSED STORM SEWER
	PROPOSED DRAINTILE
	PROPOSED CLEANOUT
	SILT FENCE
	EROSION CONTROL AT MANHOLE
	ROCK CONSTRUCTION ENTRANCE
	PROPOSED SURFACE OVERFLOW
	PROPOSED WETLAND BUFFER
	PROPOSED VEGETATED FILTER STRIP

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ISLAND VIEW GOLF COURSE
COURSE BUILDINGS
WACONIA, MN

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For PIERCE PINI & ASSOCIATES, INC.

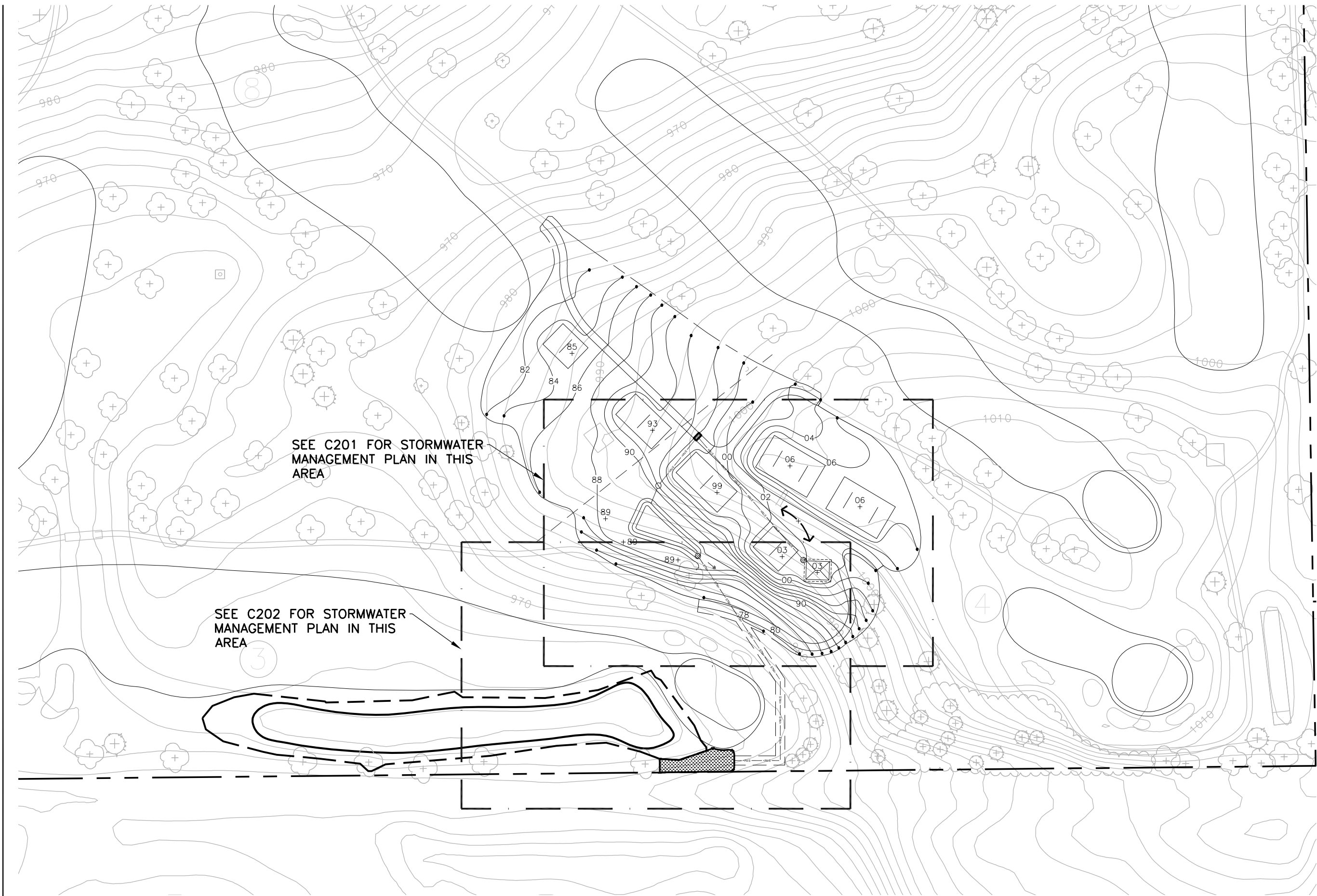
By	
Name Rhonda S. Pierce	
Date 07/21/2026 Reg. No. 41333	
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Drawn	JDR
Checked	RSP
Date	7/21/2026

Watershed Resubmittal

Drawing Title

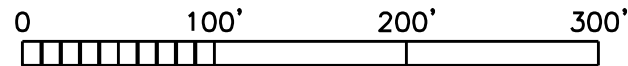
CIVIL NOTES AND LEGEND

C100



1
C200

OVERALL STORMWATER MANAGEMENT PLAN



1"=100'

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ISLAND VIEW GOLF COURSE COURSE BUILDINGS WACONIA, MN

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OVERALL
STORMWATER
MANAGEMENT
PLAN

C200

ISLAND VIEW GOLF COURSE
COURSE BUILDINGS
WACONIA, MN

For PIERCE PINI & ASSOCIATES, INC.

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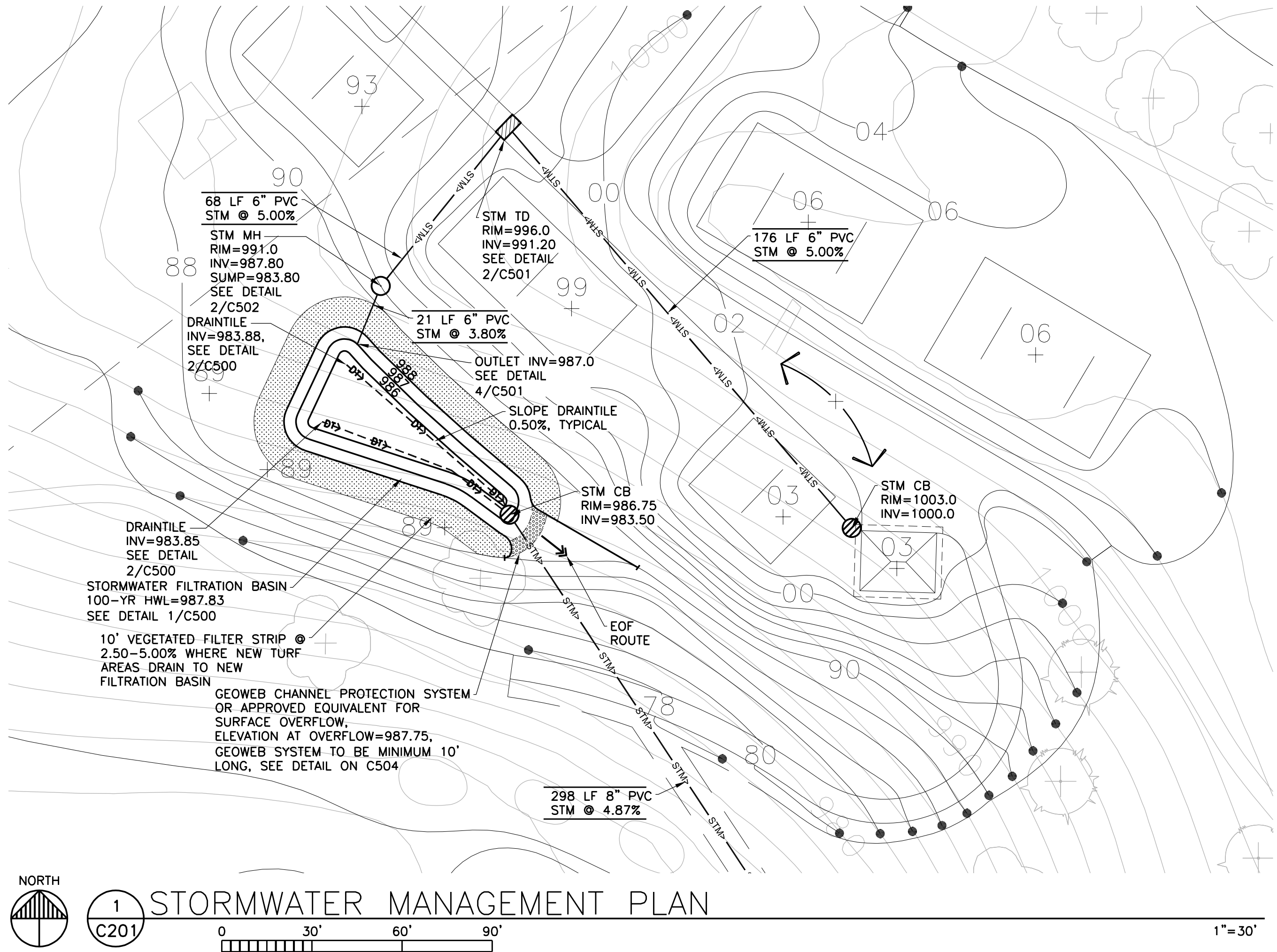
Date 7/21/2026

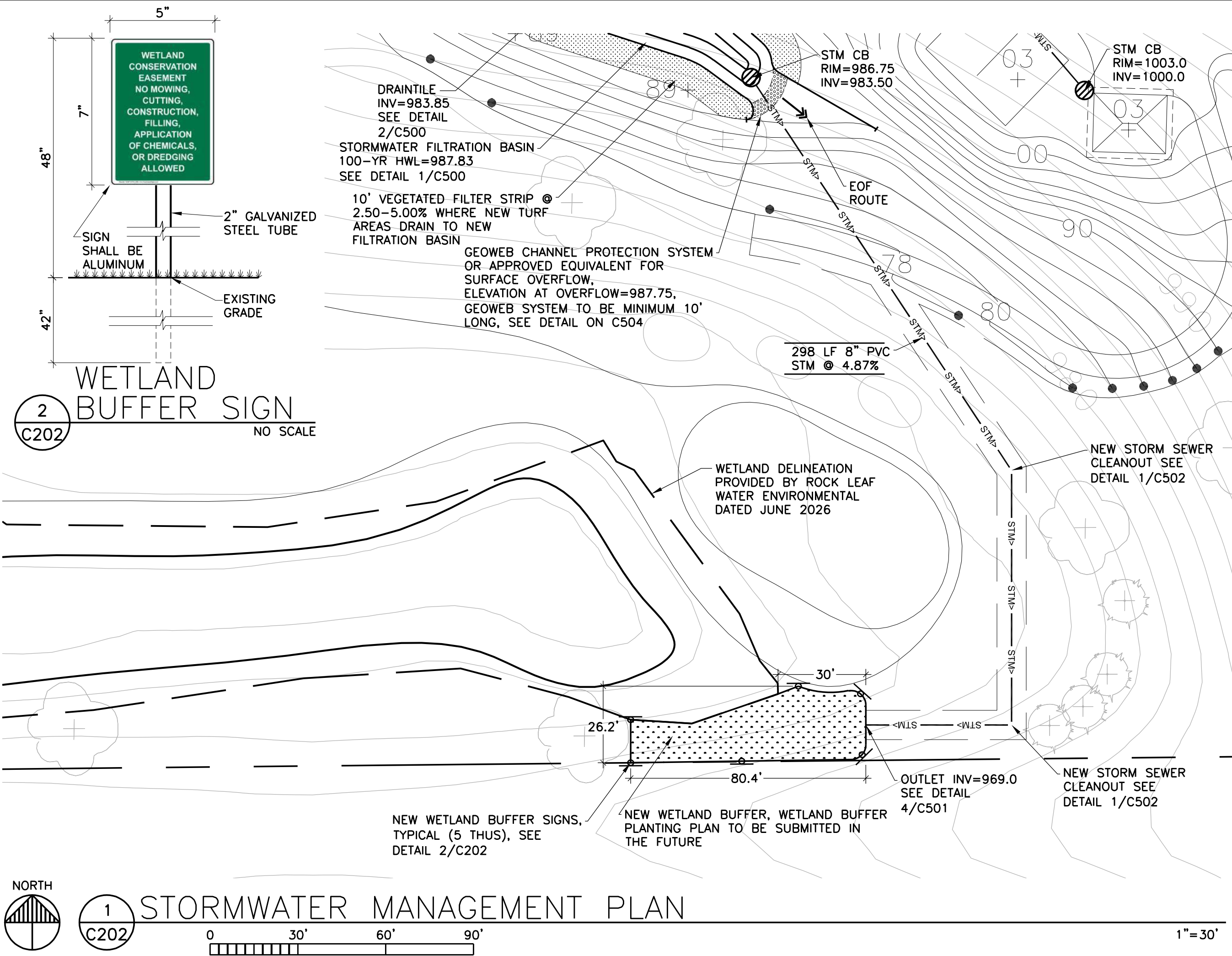
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Drawing Title

STORMWATER MANAGEMENT PLAN

C201





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STORMWATER
MANAGEMENT
PLAN

C202

SWPPP NARRATIVE

THIS STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN COMPLETED TO FULFILL THE PERMIT REQUIREMENTS OF THE GENERAL CONSTRUCTION STORMWATER PERMIT (NPDES/SDS PERMIT) FOR EROSION AND SEDIMENT CONTROL FROM SITES WITH MORE THAN 1 ACRE OF SOIL DISTURBANCE. A PERMIT FROM THE MINNESOTA POLLUTION CONTROL AGENCY (MPCA) IS REQUIRED FOR THIS PROJECT.

THE MINNEHAHA CREEK WATERSHED DISTRICT HAS JURISDICTIONAL AUTHORITY FOR EROSION AND SOIL CONTROL AND STORMWATER MANAGEMENT AT THIS SITE. IN ADDITION TO THE PROVISIONS OF THE PERMIT, EROSION PREVENTION AND SEDIMENTATION CONTROL SPECIFICATIONS AND PLANS. MPCA PROCEDURES FOR APPLICATION, MAINTENANCE AND TERMINATION OF THE PERMIT ARE DESCRIBED IN THE SPECIFICATIONS. ADDITIONAL INFORMATION AND GENERAL CONTRACTOR REQUIREMENTS ARE CONTAINED IN THE SPECIFICATIONS THAT IS NOT INCLUDED ON THIS SHEET. THE GENERAL CONTRACTOR SHALL FOLLOW PERMIT REQUIREMENTS AT ALL TIMES; NOTHING IN THE SWPPP OR SPECIFICATIONS SUPERCEDES THE GENERAL CONTRACTORS RESPONSIBILITIES UNDER THE PERMIT.

THIS SWPPP MUST BE KEPT ONSITE AND UPDATED AS NECESSARY TO REFLECT CHANGES TO SITE CONDITIONS, PLACEMENT OF CONTROL MEASURES AND ELEMENTS ONSITE. THIS DOCUMENT IS REQUIRED TO REFLECT CURRENT CONDITIONS BASED ON SITE INSPECTIONS AND ACTIONS.

1. PROJECT DESCRIPTION/LOCATION

SEE STORMWATER MANAGEMENT CALCULATIONS AND REPORT AND SPECIFICATIONS FOR THIS SITE AND INCORPORATE INFORMATION INTO CONSTRUCTION PROCEDURES.

PROJECT NAME:	ISLAND VIEW GOLF COURSE RESTROOM AND TEE BOX RENOVATION
PROJECT NUMBER:	26-011
PROJECT LOCATION:	WACONIA, MN
TOTAL DISTURBED AREA:	2.967 ACRES
PRE-CONSTRUCTION IMPERVIOUS SURFACE ACRES:	0.154 ACRES
POST-CONSTRUCTION IMPERVIOUS SURFACE ACRES:	0.258 ACRES
CUMULATIVE NEW IMPERVIOUS SURFACE ACRES:	0.104 ACRE
WORK IN/NEAR WATER/CONVEYANCE?:	NO
ECOLOGICALLY SENSITIVE AREAS IN PROJECT SCOPE?:	NO
TEMPORARY BASIN IN PROJECT SCOPE*?:	NO
TYPE AND DESIGN CRITERIA OF PERMANENT BMPS IN PROJECT SCOPE**:	STORMWATER FILTRATION BASIN

**LONG TERM MAINTENANCE OF PROJECT BMPS WILL BE CONDUCTED BY OWNER. DESIGN CALCULATIONS AND DETAILS ARE MAINTAINED WITH PROJECT DOCUMENTATION AND BY OWNER’S REPRESENTATIVE.

THE PLANNED SCOPE OF THE PROJECT INCLUDES:

- ADDITION OF RESTROOM BUILDING AND SEPTIC FIELD TO EXISTING PUMP HOUSE. NEW RESTROOM BUILDING AND TEE BOX MODIFICATIONS TO HOLES 4 AND 8 OF THE GOLF COURSE WITH NEW CART PATHS.
- STORMWATER FROM THIS SITE WILL BE ROUTED TO A STORMWATER FILTRATION BASIN. STORMWATER FILTRATION BASINS WILL DAYLIGHT AND DISCHARGE TO EXISTING POND AT THE SOUTH END OF THE GOLF COURSE.

2. SPECIAL AND IMPAIRED WATERS

- a. SPECIAL AND IMPAIRED WATERS: THESE WETLANDS, FENS, TROUT STREAMS, ORVWS AND IMPAIRED WATERS ARE LOCATED WITHIN ONE MILE (AERIAL RADIUS) OF THE PROJECT LIMITS. LAKE WACONIA ARE IMPAIRED WATERS WITHIN ONE MILE BUT THEY WILL NOT BE AFFECTED OR IMPACTED BY THIS PROJECT.

WATER BODY NAME	REACH NUMBER	IMPAIRMENTS	APPLICABLE?
LAKE WACONIA	10-0059-00	MERCURY IN FISH TISSUE	N

3. ECOLOGICAL AND OTHER SENSITIVE AREAS

IN ADDITION TO ANY ADDITIONAL PROVISIONS DICTATED IN THE RESPECTIVE PART BELOW, THE GENERAL CONTRACTOR SHALL PROVIDE SPECIAL CARE AND ATTENTION TO ECOLOGICAL OR OTHER SENSITIVE AREA(S) INDICATED IN THIS SECTION TO PREVENT TRAFFIC AND DISTURBANCE, AND TO PRESERVE VEGETATIVE COVER IN IDENTIFIED AREAS. IDENTIFIED AREAS AND APPROPRIATE SETBACKS SHALL BE MARKED IN THE FIELD BY THE GENERAL CONTRACTOR, AS SPECIFIED IN SUBSEQUENT PAGE DETAILS, IF APPLICABLE.

- a. PLACEMENT OF FILL IN WATERS OF THE STATE: THERE IS NO WORK IN WATERS OF THE STATE ASSOCIATED WITH THIS PROJECT. NO ADDITIONAL PROVISIONS APPLY TO THIS PROJECT.
- b. DRINKING WATER SUPPLY MANAGEMENT AREA: THIS PROJECT IS NOT WITHIN A WELLHEAD PROTECTION AREA, DRINKING WATER SUPPLY MANAGEMENT AREA (DWSMA), OR WITHIN A KNOWN KARST AREA. NO ADDITIONAL PROVISIONS APPLY TO THIS PROJECT.
- c. ENVIRONMENTAL REVIEW: THIS PROJECT IS NOT SUBJECT TO FINDINGS OF AN ENVIRONMENTAL, OR ARCHEOLOGICAL AND HISTORIC PLACES REVIEW. NO ADDITIONAL PROVISIONS APPLY TO THIS PROJECT.
- d. ENDANGERED OR THREATENED SPECIES: THERE ARE NO ENDANGERED OR THREATENED SPECIES AFFECTED BY THIS PROJECT. NO ADDITIONAL PROVISIONS APPLY TO THIS PROJECT.
- e. AQUATIC INVASIVE SPECIES, INFESTED WATERS AND WORK IN WATERS RESTRICTIONS: PROJECT SCOPE DOES NOT INCLUDE WORK IN OR NEAR PUBLIC WATERS. NO PUBLIC WATERS IN OR NEAR THE PROJECT SITE ARE LISTED OR SPECIALLY DESIGNATED BY THE MINNESOTA DEPARTMENT OF NATURAL RESOURCES DEPARTMENT OF WATER (DOW).
- f. SOIL TYPES TYPICALLY FOUND ON THIS PROJECT SITE ARE TYPICALLY: TOPSOIL FILL WITH PEAT, LEAN CLAY, SILTY SAND AND SANDY LEAN CLAY. BORINGS ENCOUNTERED SANDY LEAN CLAY TO TERMINATION DEPTH. SOILS WILL BE CORRECTED AND/OR AMENDED DURING THE PROJECT TO ACCOMMODATE PROPOSED STRUCTURES AND PAVEMENTS.

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COURSE BUILDINGS
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By
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Date

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Drawing Title

SWPPP
NARRATIVE

C300

SWPPP NARRATIVE

4. PROJECT PERSONNEL AND SWPPP IMPLEMENTATION RESPONSIBILITIES

ORGANIZATION	CONTACT NAME & CERTIFICATION NUMBER	PHONE
OWNER	ISLAND VIEW GOLF COURSE – ALLEN COLE	612-834-4751
ENGINEER FIRM NAME	PIERCE PINI + ASSOCIATES, INC.	763-537-1311
SWPPP PREPARER: PIERCE PINI AND ASSOCIATES	JEFFREY ROUNDS	763-537-1311
GENERAL CONTRACTOR FIRM NAME	HOXIE HOMES AND REMODELING, LLC. – JEFF HOXIE	952-217-6825
SOIL/EROSION CONSTRUCTION SITE MANAGER		
SOIL/EROSION CONSTRUCTION SITE MANAGER		

MPCA DUTY OFFICER 24-HOUR EMERGENCY SPILL NOTIFICATION: 651-649-5451 OR 800-422-0798

- a. THE OWNER AND THE NAMED GENERAL CONTRACTOR ARE CO-PERMITTEES FOR THE GENERAL CONSTRUCTION STORMWATER PERMIT (NPDES/SDS PERMIT). THE GENERAL CONTRACTOR IS RESPONSIBLE TO COMPLY WITH ALL ASPECTS OF THE PERMIT AND STORMWATER COMPLIANCE POLICY AT ALL TIMES UNTIL THE NOTICE OF TERMINATION (NOT) HAS BEEN FILED WITH THE MPCA.
- b. THE GENERAL CONTRACTOR SHALL DEVELOP A CHAIN OF COMMAND WITH ALL OPERATORS ON THE SITE TO ENSURE THAT THE SWPPP IS IMPLEMENTED AND MAINTAINED UNTIL THE PROJECT IS COMPLETE, THE ENTIRE SITE HAS UNDERGONE FINAL STABILIZATION, AND OWNER HAS COMPLETED THE FINAL INSPECTION.
- c. THE PROJECT ENGINEER OF RECORD IS RESPONSIBLE FOR THE DESIGN OF THE SWPPP. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP AND THE INSTALLATION, INSPECTION AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs) DESCRIBED BY THE SWPPP AT ALL STAGES OF CONSTRUCTION UNTIL THE OWNER HAS COMPLETED THE FINAL INSPECTION.
- d. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE IMPLEMENTATION OF THE SWPPP INCLUDING THE ACTIVITIES OF ALL OF SUBCONTRACTORS DURING CONSTRUCTION.
- e. GENERAL CONTRACTOR SHALL PROVIDE AT LEAST ONE CERTIFIED INSTALLER FOR EACH SUBCONTRACTOR TO OVERSEE ALL INSTALLATION AND MAINTENANCE OF BMPs AND IMPLEMENTATION OF THE SWPPP. CERTIFICATION IS THROUGH THE UNIVERSITY OF MINNESOTA EROSION AND STORMWATER MANAGEMENT CERTIFICATION PROGRAM (<http://www.erosion.umn.edu/>) OR APPROVED EQUIVALENT.
- f. GENERAL CONTRACTOR SHALL PROVIDE AT LEAST ONE CERTIFIED INDIVIDUAL TO CONDUCT INSPECTION AND MAINTENANCE OF ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPs IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMIT. GENERAL CONTRACTOR SHALL PROVIDE EVIDENCE OF CERTIFICATION FOR EACH INDIVIDUAL AT THE PRE-CONSTRUCTION MEETING AND IS MAINTAINED BY GENERAL CONTRACTOR WITH PROJECT DOCUMENTATION.
- g. THIS SWPPP HAS BEEN PREPARED BY INDIVIDUAL(S) TRAINED IN ACCORDANCE WITH THE PERMIT'S TRAINING REQUIREMENTS FOR PREPARATION OF SWPPPS.

PREPARED BY:
JEFFREY ROUNDS
PIERCE PINI AND ASSOCIATES
JEFF@PIERCEPINI.COM
763-537-1311

TRAINING/CERTIFICATION:
DATE OF TRAINING/CERTIFICATION: 2024
INSTRUCTOR(S): JOHN CHAPMAN
CERTIFICATION EXPIRATION: 2027

5. SEQUENCE OF CONSTRUCTION

THE FOLLOWING DESCRIBES, IN GENERAL, THE SEQUENCE OF WORK PERFORMED ON THE SITE:

- a. GENERAL CONTRACTOR SHALL VERIFY THAT ALL PERMITS HAVE BEEN OBTAINED AND/OR OBTAIN THE NECESSARY PERMITS IN ACCORDANCE WITH THE MPCA POLICY.
- b. GENERAL CONTRACTOR SHALL INSTALL ALL PERIMETER AND DOWN-GRADIENT EROSION CONTROL AND SEDIMENT CONTROL BMPs, INCLUDING CONSTRUCTION ENTRANCES AND INLET PROTECTION DEVICES PRIOR TO SITE GRADING, EXCAVATION, STOCKPILING OR DISTURBING EXISTING VEGETATIVE COVER. GENERAL CONTRACTOR SHALL INSTALL ALL DOWN-GRADIENT PERIMETER CONTROLS BEFORE ANY UP-GRADIENT DISTURBANCE BEGINS.
- c. THE GENERAL CONTRACTOR SHALL ATTEMPT TO PHASE ALL WORK TO MINIMIZE EROSION AND MAINTAIN VEGETATIVE COVER TO THE EXTENT POSSIBLE. PRESERVE ALL NATURAL BUFFERS SHOWN ON PLAN.
- d. GENERAL CONTRACTOR SHALL MARK OR OTHERWISE DELINEATE AREAS ON THE SITE NOT TO BE DISTURBED, INCLUDING ECOLOGICALLY SENSITIVE AREAS, BEFORE CONSTRUCTION BEGINS.
- e. GENERAL CONTRACTOR SHALL ESTABLISH SITE LOCATION AND COMPLETE INSTALLATION OF ANY PORTABLE TOILET, FUELING AREA, SPILL KIT LOCATION, CONCRETE WASHOUT AREA, HAZARDOUS MATERIAL HANDLING AND STORAGE AREA, LITTER CONTROL DEVICE AREA, STAGING AREA, STOCK PILING AREA, AND OTHER SWPPP DESIGNATED AREAS. UPDATE ONSITE-COPY OF SWPPP TO REFLECT LOCATION OF THESE ITEMS.
- f. GENERAL CONTRACTOR SHALL ESTABLISH AND ENFORCE PROTOCOL REGARDING CLEANING OF ALL EQUIPMENT THAT HAS BEEN USED IN INFESTED WATERS OR WATERS WITH INVASIVE SPECIES TO PREVENT THE SPREAD OF BOTH AQUATIC AND TERRESTRIAL INVASIVES. GENERAL CONTRACTOR SHALL OBTAIN VERIFICATIONS FROM ALL SUBCONTRACTORS THAT EQUIPMENT IS CLEAN, OR NEW, AND WILL NOT SPREAD INVASIVES.
- g. GENERAL CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF SITE DEWATERING. DEWATERING SHALL FOLLOW MPCA AND UNIVERSITY OF MINNESOTA STANDARDS AND REQUIREMENTS. SUBMIT PLAN OF ACTION FOR REVIEW PRIOR TO CONSTRUCTION.
- h. GENERAL CONTRACTOR SHALL ESTABLISH AND ENFORCE TRAFFIC FLOW AND PATTERNS, INCLUDING HAUL ROADS, AT PROJECT SITE TO MINIMIZE SOIL DISTURBANCE, TRACKING AND COMPACTION, AND TO PRESERVE NATIVE AND EXISTING VEGETATION. UPDATE ONSITE-COPY OF SWPPP TO REFLECT HAUL ROADS AND OTHER SITE TRAFFIC PATTERNS.

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Date 5/21/2006

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SWPPP
NARRATIVE

C301

SWPPP NARRATIVE

- j. GENERAL CONTRACTOR SHALL PERFORM SITE GRADING, EXCAVATION, STOCKPILING WORK IN ACCORDANCE WITH THE SWPPP.
 - A. STOCKPILES SHALL BE PROTECTED AROUND THE ENTIRE PERIMETER WHEN NOT ACTIVELY BEING WORKED; STOCKPILES ACTIVELY BEING WORKED SHALL BE STABILIZED AT THE END OF EACH WORK DAY. PRESERVED TOPSOIL STOCKPILES SHALL ADDITIONALLY BE COVERED. PLACE BMP A MINIMUM OF 5 FEET FROM THE TOE OF THE SLOPE WHERE FEASIBLE. STABILIZE ALL ERODABLE STOCKPILES.
 - B. DO NOT PLACE STOCKPILES IN NATURAL BUFFER AREAS, SURFACE WATERS OR STORMWATER CONVEYANCES INCLUDING GUTTERS OR SWALES.
 - C. MINIMIZE SOIL COMPACTION AND PRESERVE TOPSOIL, UNLESS INFEASIBLE. MINIMIZING SOIL COMPACTION IS NOT REQUIRED WHERE THE FUNCTION OF A SPECIFIC AREA OF THE SITE DICTATES THAT IT BE COMPACTED.
- j. GENERAL CONTRACTOR SHALL PROVIDE GRADING AND BMP INSTALLATION TO LIMIT SOIL EXPOSURE ON ALL SLOPES OF 3H:1V OR STEEPER TO AN UNBROKEN LENGTH OF 75 FEET OR LESS.
- k. GENERAL CONTRACTOR SHALL STABILIZE ALL EXPOSED SOILS NO LATER THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
 - A. GENERAL CONTRACTOR SHALL MAINTAIN 70% VEGETATIVE COVER ON COMPLETED AREAS OF THE PROJECT SITE.
 - B. STABILIZE ALL AREAS OF THE SITE PRIOR TO THE ONSET OF WINTER.
 - C. STABILIZE WETTED PERIMETER OF DITCH (I.E. WHERE THE DITCH GETS WET).
- l. WHEN PERMANENT BMPS OR PORTIONS THEREOF ARE INSTALLED, GENERAL CONTRACTOR SHALL STAKE OR MARK THESE AREAS, AND INSTALL SEDIMENT PROTECTION UPGRADIENT OF COMPLETED AREAS TO AVOID COMPACTION AND FOULING OF SYSTEM ELEMENTS. PERMANENT BMPS SHALL BE CONSTRUCTED AND STABILIZED TO THE EXTENT PRACTICABLE PRIOR TO BEING PLACED INTO SERVICE. IN THE EVENT THAT PERMANENT STABILIZATION CANNOT BE ACHIEVED BEFORE BEING PLACED INTO SERVICE, TEMPORARY MEASURES TO PREVENT FOULING SHALL BE IN PLACE.
- m. GENERAL CONTRACTOR SHALL PERFORM SITE RESTORATION ACTIVITIES FOR PERMANENT VEGETATIVE ESTABLISHMENT. TEMPORARY BMPS SUCH AS MULCH AND HYDROSEED DO NOT CONSTITUTE PERMANENT VEGETATIVE COVER; SOD INSTALLATION MAY CONSTITUTE PERMANENT VEGETATIVE COVER.
- n. THE GENERAL CONTRACTOR SHALL ENSURE FINAL STABILIZATION:
 - A. ALL SOIL DISTURBING ACTIVITIES ARE COMPLETE AND A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DESTINY OF 70% OVER THE ENTIRE PERVIOUS SURFACE HAS BEEN ACHIEVED, INCLUDING STABILIZATION OF ALL DITCHES AND SWALES.
 - B. GENERAL CONTRACTOR SHALL ENSURE THAT ALL PERMANENT STORMWATER TREATMENT SYSTEMS ARE CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS IF INCLUDED WITHIN THE SCOPE OF THE PROJECT.
 - C. GENERAL CONTRACTOR SHALL REMOVE ALL TEMPORARY SYNTHETIC AND STRUCTURAL BMPS, EXCEPT AS SPECIFICALLY AUTHORIZED/REQUIRED BY THE CITY OF MINNEAPOLIS.
 - D. GENERAL CONTRACTOR SHALL REMOVE ALL SEDIMENTS FROM STORMWATER CONVEYANCES AND PERMANENT WATER QUALITY BASINS.
 - E. GENERAL CONTRACTOR SHALL REQUEST A FINAL INSPECTION FROM THE CITY OF MINNEAPOLIS PRIOR TO INITIATING PERMIT TERMINATION.
- o. PERMIT SHALL BE TERMINATED IN ACCORDANCE WITH MPCA POLICY.

6. SITE INSPECTION AND MAINTENANCE

- a. INSPECT THE ENTIRE CONSTRUCTION SITE AND DOWNGRADIENT ADJACENT SITES/AREAS, INCLUDING THE FOLLOWING:
 - A. INSPECT SURFACE WATER, INCLUDING DRAINAGE DITCHES, AND OFF-SITE PROPERTIES FOR SIGNS OF EROSION AND SEDIMENT DEPOSITION.
 - B. INSPECT CONSTRUCTION SITE VEHICLE EXIT LOCATIONS FOR EVIDENCE OF TRACKING ONTO PAVED SURFACES.
 - C. INSPECT INFILTRATION AREAS FOR SIGNS OF SEDIMENT DEPOSITION AND COMPACTION, AND TO ENSURE EQUIPMENT IS NOT BEING DRIVEN INTO THE AREA.
 - D. INSPECT, MONITOR AND MAINTAIN ALL WATER QUALITY MANAGEMENT, EROSION PREVENTION AND SEDIMENT CONTROL BMPS.
 - E. INSPECT, MONITOR AND MAINTAIN POLLUTION PREVENTION BMPS.
- c. INSPECT, MONITOR AND MAINTAIN POLLUTION PREVENTION BMPS.
- d. INSPECTION FREQUENCY: GENERAL CONTRACTOR SHALL CONDUCT A SITE STORMWATER INSPECTION A MINIMUM OF ONCE EVERY SEVEN DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. INSPECTIONS MAY BE SUSPENDED DUE TO FROZEN GROUND CONDITIONS UNTIL FIRST RUNOFF OCCURS OR CONSTRUCTION ACTIVITIES RESUME, WHICHEVER COMES FIRST. GENERAL CONTRACTOR SHALL NOTE EXACT DATE OF LAST INSPECTION PRIOR TO WINTER SUSPENSION AND FIRST DATE WHEN CONSTRUCTION RESUMES. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR INSPECTIONS UNTIL THE SITE HAS UNDERGONE FINAL STABILIZATION AND THE NOTE HAS BEEN SUBMITTED TO THE MPCA, OR UNTIL PERMIT COVERAGE HAS BEEN TRANSFERRED TO ANOTHER PERMITTEE.
- e. RECORD ALL INSPECTIONS, MAINTENANCE AND CORRECTIVE ACTIONS CONDUCTED DURING CONSTRUCTION ON A PROVIDED INSPECTION FORM WITHIN 24 HOURS OF THE ACTION. DATE AND INITIAL THE ON-SITE SWPPP WITH ANY CHANGES TO REFLECT ON-SITE CONDITIONS. COPIES OF ALL SHALL BE SUBMITTED TO THE CIVIL ENGINEER.
- f. ALL EROSION CONTROL MEASURES MUST BE INSTALLED AND MAINTAINED BY GENERAL CONTRACTOR ACCORDING TO THE DETAILS INCLUDED IN THE CONSTRUCTION DOCUMENTS AND IN ACCORDANCE WITH THE PRODUCT MANUFACTURER’S RECOMMENDATIONS. BMPS MUST BE OPERATIONALLY FUNCTIONAL AND ADEQUATE. ALL NONFUNCTIONAL BMPS MUST BE REPAIRED OR REPLACED WITHIN 24 HOURS OF DISCOVERY OR THEREAFTER AS SOON AS FIELD CONDITIONS ALLOW.
- g. THE GENERAL CONTRACTOR SHALL RESPOND TO CHANGING SITE CONDITIONS AND IMPLEMENT/SUPPLEMENT EROSION PREVENTION AND SEDIMENT CONTROL MEASURES UTILIZED TO PROVIDE ADEQUATE PROTECTION OF DISTURBED SOILS AND ADEQUATE PREVENTION OF SEDIMENT TRANSPORT OFF-SITE. UPDATE SWPPP DOCUMENTS WHEN CHANGES ARE MADE.
- h. WHEN AN INSPECTION FINDS EROSION PREVENTION AND SEDIMENT CONTROL BMPS THAT ARE NONFUNCTIONAL OR INADEQUATE, ANY NONFUNCTIONAL BMPS MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL BMPS WITHIN 24 HOURS AFTER DISCOVERY OR THEREAFTER AS SOON AS FIELD CONDITIONS ALLOW. THE GENERAL CONTRACTOR SHALL ALSO PLACE ANY ADDITIONAL EROSION CONTROL MEASURES DEEMED NECESSARY BY THE AUTHORITY HAVING JURISDICTION OR A/E WITHIN 24 HOURS OF NOTICE.

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COURSE BUILDINGS
WACONIA, MN

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Name Rhonda S. Pierce	
Date 07/21/2026 Reg. No. 41333	
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A. IF DOWN GRADIENT SEDIMENT CONTROLS ARE OVERLOADED, THE GENERAL CONTRACTOR MUST INSTALL ADDITIONAL UPGRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPs TO ELIMINATE OVERLOADING. THE SWPPP MUST BE AMENDED TO IDENTIFY THESE ADDITIONAL PRACTICES.

- i. REPAIR OR REPLACE INLET PROTECTION DEVICES WHEN THEY BECOME NONFUNCTIONAL OR SEDIMENT REACHES ONE-HALF THE DEPTH OF THE DEVICE. SITE INLETS REMOVED IN RESPONSE TO A PUBLIC SAFETY CONCERN MUST BE RETURNED TO SERVICE AS SOON AS THE THREAT (EG. FLOODING) HAS RECEDED.
- j. REPAIR, REPLACE OR SUPPLEMENT PERIMETER CONTROL DEVICES WHEN THEY BECOME NON-FUNCTIONAL OR THE SEDIMENT REACHES ONE-HALF THE HEIGHT OF THE DEVICE. GENERAL CONTRACTOR SHALL REPAIR OR REPLACE DEVICE THAT IS NONFUNCTIONAL BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY OR THEREAFTER AS SOON AS FIELD CONDITIONS ALLOW. PERIMETER CONTROL DEVICES REMOVED IN RESPONSE TO A PUBLIC SAFETY CONCERN MUST BE RETURNED TO SERVICE AS SOON AS THE THREAT HAS RECEDED.
- k. TEMPORARY AND PERMANENT SEDIMENTATION BASINS MUST BE DRAINED AND SEDIMENT REMOVED BY GENERAL CONTRACTOR ONCE THE SEDIMENT COLLECTED REACHES ONE-HALF THE STORAGE VOLUME WITHIN 72 HOURS OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW.
- l. ALL SEDIMENT DEPOSITS WITHIN SURFACE WATERS OR STORMWATER CONVEYANCES MUST BE REMOVED AND RESTABILIZED BY GENERAL CONTRACTOR WITHIN 7 DAYS OF DISCOVERY, INCLUDING DELTAS AND STORM SEWER SEDIMENT DEPOSITS. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED, IF NECESSARY, FOR SUCH SEDIMENT REMOVAL.
- m. MAINTAIN EXISTING PAVED SURFACES CLEAN OF SEDIMENT. CONSTRUCTION ENTRANCES AND PUBLIC AND PRIVATE ROADS LEADING TO AND FROM THE CONSTRUCTION ENTRANCE SHALL BE CHECKED DAILY BY GENERAL CONTRACTOR. IF THE ENTRANCE BECOMES INUNDATED WITH SEDIMENT, THE GENERAL CONTRACTOR SHALL CLEAN OR REPLACE AS APPROPRIATE. PUBLIC AND PRIVATE ROADS LEADING TO AND FROM THE CONSTRUCTION ENTRANCE SWEEPED OR OTHERWISE CLEANED DAILY. GENERAL CONTRACTOR SHALL EXTEND SWEEPING TO THE EXTREMITY OF ANY SEDIMENT TRACKING THAT OCCURS OFF-SITE. USE MECHANICAL METHODS TO REMOVE SOLIDS FIRST, FOLLOWED BY WET METHODS, ONLY AS NEEDED. SWEEPING IS NOT A SUBSTITUTE FOR PROPER MAINTENANCE OF CONSTRUCTION ENTRANCES.
- n. GENERAL CONTRACTOR SHALL REMOVE ANY OFF-SITE SEDIMENT ACCUMULATIONS IN A MANNER AND AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS. STREET SWEEPING MAY HAVE TO OCCUR MORE FREQUENTLY THAN DESCRIBED ABOVE TO MINIMIZE OFF-SITE IMPACTS. THERE ARE DOWNSTREAM WATERWAYS THAT WOULD BE ADVERSELY AFFECTED BY VEHICULAR TRACKED SOILS. STREET SWEEPING IS IMPERATIVE TO MAKE SURE THIS DOES NOT OCCUR.
- o. ALL INFILTRATION/FILTRATION AREAS MUST BE INSPECTED BY GENERAL CONTRACTOR TO ENSURE THAT NO SEDIMENT FROM ONGOING CONSTRUCTION IS ACCUMULATING OVER THE INFILTRATION/FILTRATION AREA. SEDIMENT ACCUMULATED OVER INFILTRATION/FILTRATION MUST BE REMOVED BY GENERAL CONTRACTOR.
- p. SEE CIVIL NOTES, DETAILS AND DRAWINGS ON CONSTRUCTION DOCUMENTS.

7. POLLUTION PREVENTION AND SPILL RESPONSE

GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING POLLUTION PREVENTION MEASURES AT THE SITE, AS DESCRIBED IN DETAIL IN THE EROSION PREVENTION AND SEDIMENTATION CONTROL SPECIFICATIONS SECTION 312500.

IN GENERAL, THE FOLLOWING MEASURES ARE REQUIRED AT PROJECT SITES.

- a. BUILDING MATERIALS AND WASTES WITH THE POTENTIAL TO CONTAMINATE STORMWATER SHALL BE STORED INSIDE OR UNDER COVER IN A DESIGNATED AREA, AND SHALL BE INDICATED BY THE GENERAL CONTRACTOR ON THE SWPPP SITE MAP.
- b. LITTER AND SOLID WASTE SHALL BE PLACED INTO COVERED CONTAINERS AT A DESIGNATED AREA AT THE SITE AND SHALL BE INDICATED BY THE GENERAL CONTRACTOR ON THE SWPPP SITE MAP.
- c. ON-SITE FUELING SHALL BE CONDUCTED IN DESIGNATED AREAS ONLY AND SHALL BE INDICATED BY THE GENERAL CONTRACTOR ON THE SWPPP SITE MAP.
- d. A SPILL RESPONSE KIT AT EACH LOCATION SPECIFIC TO THE MATERIALS USED AT THE PROJECT SITE AND SHALL BE INDICATED BY THE GENERAL CONTRACTOR ON THE SWPPP SITE MAP.
- e. PORTABLE TOILETS SHALL BE SECURED IN PLACE TO PREVENT BEING TIPPED OR KNOCKED OVER AND SHALL BE INDICATED BY THE GENERAL CONTRACTOR ON THE SWPPP SITE MAP.
- f. VEHICLE AND EQUIPMENT WASHING IS PROHIBITED AT PROJECT SITES.
- g. CONCRETE WASH OUT WASTE, INCLUDING WASTE CURED CONCRETE, SHALL BE MANAGED OFF-SITE OR MANAGED ON-SITE IN A DESIGNATED CONCRETE WASHOUT AREA AND SHALL BE INDICATED BY THE GENERAL CONTRACTOR ON THE SWPPP SITE MAP. ON-SITE BATCH PLANTS AND MORTAR MIX AREAS ARE CONCRETE PRODUCTS AND SHALL FOLLOW ALL STORMWATER MANAGEMENT CONTROLS AS NOTED HEREIN AND WITHIN NPDES PERMIT.
- h. THE GENERAL CONTRACTOR SHALL USE OR ENSURE USE OF METHODS AND OPERATIONS WHICH PREVENT DUST, PARTICLES, PIECES AND SLURRY FROM DEPOSITING IN VEGETATED OR FUTURE VEGETATED AREAS OR FROM LEAVING THE PROJECT SITE AND ENTERING A STORMWATER CONVEYANCE SYSTEM, INCLUDING A DITCH OR CULVERT.
- i. IN THE EVENT OF A SPILL AT THE PROJECT SITE WITH A RELEASE OR POTENTIAL RELEASE TO THE ENVIRONMENT, THE GENERAL CONTRACTOR SHALL CONTACT WITH THE STATE DUTY OFFICER.

8. PERMANENT STORMWATER PRACTICES

- a. CONSTRUCTION SEQUENCING OF FILTRATION PRACTICES:
 - A. STORMWATER MANAGEMENT SYSTEMS ARE DESIGNED TO MEET MINNEHAHA CREEK WATERSHED DISTRICT REQUIREMENTS FOR WATER QUALITY AND RATE CONTROL.
 - B. ALL SITE WORK SHOULD BE COMPLETE PRIOR TO WORK ON THE FILTRATION SYSTEMS BEING STARTED TO THE EXTENT POSSIBLE. IF CONSTRUCTION OF THESE AREAS NEEDS TO OCCUR PRIOR TO FINAL SITE STABILIZATION, THEN THE CONSTRUCTED AREA MUST BE PROTECTED AND CONTRIBUTING FLOWS NEED TO BE FILTERED TO PREVENT CLOGGING OF THE SYSTEM OR COMPACTION OF THE FILTRATION AREA.
 - C. INSTALLATION OF FILTRATION PRACTICES SHALL BE DONE DURING PERIODS OF DRY WEATHER AND COMPLETED BEFORE A RAINFALL EVENT. PLACEMENT OF ENGINEERED SOILS SHALL BE ON DRY NATIVE SOIL ONLY.
 - D. EXCAVATION SHALL BE COMPLETED USING A BACKHOE WITH A TOOTHED BUCKET.
 - E. THE BOTTOM SURFACE OF EXCAVATION SHALL BE LEVEL WITHOUT DIPS OR SWALES.
 - F. ENGINEERED SOIL SHALL REMAIN UNCONTAMINATED (NOT MIXED WITH OTHER SOILS) WHEN INSTALLED.
 - G. DURING CONSTRUCTION, STORMWATER MUST BE ROUTED AROUND FILTRATION AREAS UNTIL ALL CONSTRUCTION ACTIVITY HAS CEASED AND TRIBUTARY SURFACES ARE CLEANED OF SEDIMENT.

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By

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- H. SHOP DRAWINGS OF ALL SYSTEMS NEED TO BE APPROVED PRIOR TO CONSTRUCTION. ALL SOIL MATERIAL TESTING SHALL BE DONE PRIOR TO INSTALLATION TO ENSURE SOIL MIXTURE IS ADEQUATE FOR FILTRATION. TESTS SHALL BE SUBMITTED TO ENGINEER AND APPROVED PRIOR TO INSTALLATION. SPECIFICATIONS INDICATE MATERIALS REQUIRED FOR EACH SYSTEM.
- I. NOTIFY CIVIL ENGINEER OF WORK BEING DONE ON STORMWATER SYSTEMS AND THE SCHEDULE OF CONSTRUCTION. ALLOW A MINIMUM OF FIVE WORKING DAYS FOR NOTIFICATION SO ENGINEER CAN CONDUCT SITE MEETING TO DISCUSS THE INTENT OF THE SYSTEM AND CONSTRUCTION OBSERVATION CAN BE SCHEDULED ACCORDINGLY. SITE MEETING TO REVIEW THE INTENT OF THE DESIGN AND THE CONSTRUCTION OF THE FILTRATION SYSTEM NEEDS TO OCCUR PRIOR TO STARTING CONSTRUCTION ON THE SYSTEMS.
- J. ALL SOIL MATERIAL TESTING SHALL BE DONE TO ENSURE ENGINEERED SOIL SECTION MEETS MINIMUM INFILTRATION RATE OF 1.60 INCHES PER HOUR. THE DESIGN OF THE STORMWATER SYSTEMS UTILIZED AN INFILTRATION RATE OF 0.80 INCHES PER HOUR. FIELD TESTING REQUIRES A FACTOR OF TWO PLACED ON THE TESTING RESULTS SO FIELD TESTS MUST PROVIDE RESULTS OF 1.60 INCHES PER HOUR MINIMUM. THIS TESTING SHALL BE DONE ON PLACED SOILS PRIOR TO COMPLETING THE LANDSCAPING AND PLANTINGS OF THE INFILTRATION SYSTEM TO ENSURE THE SOILS WILL DRAIN. SOILS THAT ARE OVERCOMPACTED OR DO NOT NEED MINIMUM INFILTRATION TESTING SHALL BE REMOVED AND REPLACED WITH APPROPRIATE SOILS THAT MEET THE SPECIFIED RATE.
- K. CONTRACTOR TO COORDINATE GEOTECHNICAL ENGINEER TO CONDUCT DOUBLE RING INFILTROMETER TESTS TO MEASURE SUBGRADE INFILTRATION RATE TO ENSURE SUBGRADE MEETS MINIMUM INFILTRATION RATE PER NOTE J. SEE SPECIFICATIONS FOR TESTING REQUIREMENTS.
- L. MAINTAIN EROSION AND SEDIMENT CONTROL ON CONTRIBUTING AREAS TO AVOID CLOGGING OF SYSTEM.
- M. CONSTRUCT STORMWATER SYSTEMS PER DRAWINGS AND SPECIFICATIONS.
- N. COMPLETE CONSTRUCTION OF CONCRETE PAVEMENT AFTER STORMWATER SYSTEM IS INSTALLED. AFTER PAVEMENT IS INSTALLED, VERIFY THAT SYSTEMS ARE CLEAR AND FULLY FUNCTIONAL. VACUUM AND CLEAN SYSTEMS AS NEEDED SO THEY ARE FULLY FUNCTIONAL AT PROJECT CLOSEOUT.
- O. INSTALL LANDSCAPING AND PLANTING MATERIALS PER LANDSCAPE DRAWINGS AND SPECIFICATIONS.
- P. GENERAL CONTRACTOR SHALL TEST INFILTRATION SYSTEM AFTER CONSTRUCTION EFFORTS ON THE SITE HAVE BEEN COMPLETED PRIOR TO FINAL CLOSEOUT. INFILTRATION MUST MEET RATES AS NOTED IN J, ABOVE, SEE SPECIFICATIONS FOR TESTING.
- Q. REMOVE ALL TEMPORARY EROSION CONTROL BMP'S AFTER PAVING AND INFILTRATION AREAS ARE COMPLETE AND AFTER TURF HAS BEEN ESTABLISHED.
- R. GENERAL CONTRACTOR SHALL TAKE PHOTOGRAPHS AND MEASUREMENTS OF ALL STORMWATER MANAGEMENT SYSTEMS THROUGHOUT CONSTRUCTION. DOCUMENTATION OF CONSTRUCTION SHALL BE SUBMITTED TO THE CIVIL ENGINEER AT THE CLOSEOUT OF THE PROJECT. CLOSEOUT DOCUMENTATION SHALL INCLUDE PHOTOGRAPHS AND MEASUREMENTS OF SYSTEM DURING CONSTRUCTION, TESTING REPORTS AND OBSERVATIONS AND REDLINE DRAWINGS OF ANY FIELD MODIFICATIONS MADE DURING CONSTRUCTION.
- S. A LETTER WRITTEN ON COMPANY LETTERHEAD THAT THE STORMWATER MANAGEMENT PRACTICES HAVE BEEN BUILT PER THE CIVIL PLANS, OR PER REDLINE FIELD DRAWINGS, SHALL BE SUBMITTED TO THE CIVIL ENGINEER AT THE CLOSEOUT OF THE PROJECT.

- T. THE GENERAL CONTRACTOR SHALL SUBMIT AN AS-BUILT SURVEY OF THE COMPLETED SITE PREPARED AND SIGNED BY A LICENSED SURVEYOR TO THE CIVIL ENGINEER AT THE END OF THE PROJECT. AS-BUILT SURVEY SHALL INCLUDE ENOUGH INFORMATION TO VERIFY THE CONSTRUCTED TOPOGRAPHY, UTILITY AND SITE ELEMENTS. COORDINATE WITH OWNER AND CIVIL ENGINEER FOR SCHEDULE FOR WHEN THIS SHALL BE COMPLETED. A COPY OF THE CADD FILE AND CERTIFIED PDF FILE SHALL BE PROVIDED TO CIVIL ENGINEER.
- U. GENERAL CONTRACTOR TO COMPLETE NOTICE OF TERMINATION (NOT) UPON COMPLETION OF PROJECT AND SUBMIT TO OWNER.
- V. SEE NOTES ON SHEET C100 AND SPECIFICATION 312500 FOR FURTHER INFORMATION.

ACREAGE SUMMARY	
TOTAL SITE AREA WITHIN WATERSHED BOUNDARY	127.40 ACRES
ON-SITE DISTURBED AREA	2.97 ACRES
OFF-SITE DISTURBED AREA (INCL. STAGING AREA)	0.00 ACRES
TOTAL DISTURBED AREA	2.97 ACRES
EXISTING IMPERVIOUS AREA	0.15 ACRES
PROPOSED IMPERVIOUS AREA	0.26 ACRES

SOIL ASSOCIATION	HYDROLOGIC SOIL GROUP
LEAN CLAY (CL)	D

ESTIMATED BMP QUANTITIES	
SILT FENCE	2,750 LF
FILTER LOGS	1,375 LF
CATCH BASIN INSERTS	3 EA
ROCK CONSTRUCTION ENTRANCE	40 CY

NOTES:

1. QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL DETERMINE FOR THEMSELVES THE EXACT QUANTITIES FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL NOT RELY ON THESE QUANTITIES FOR THEIR BID AND CIVIL ENGINEER IS NOT RESPONSIBLE FOR COST ESTIMATES OR ACTUAL CONSTRUCTION COSTS.

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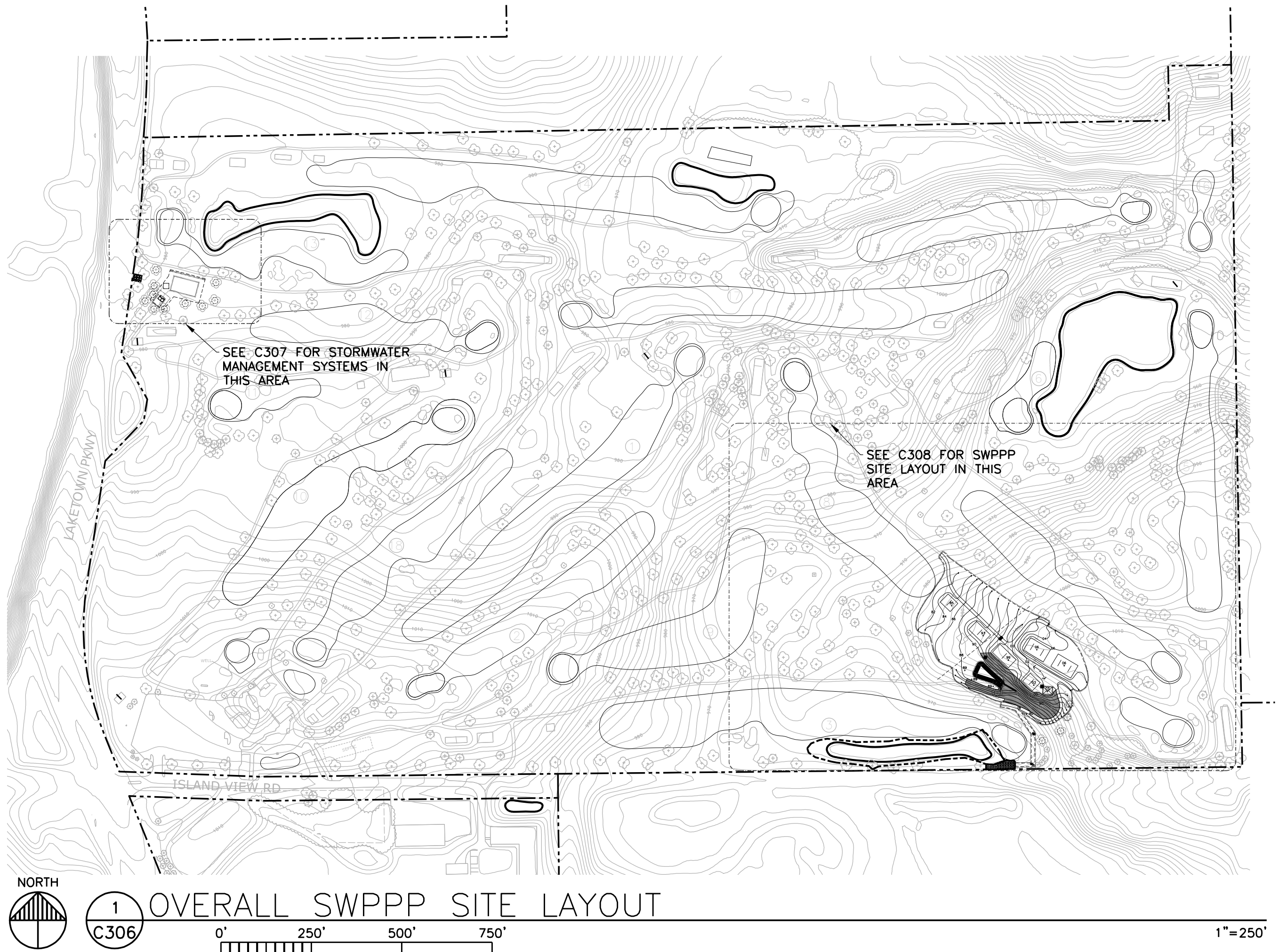
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OVERALL SWPPP SITE LAYOUT

C306



NOTES

1. RESTROOM ADDITION DRAINS TO THE WEST TOWARD LAKETOWN PKWY AND NOT TOWARD THE MANAGE CLASS 1 WETLAND TO THE NORTH OF THE CART PATH, A VEGETATED BUFFER TO THIS WETLAND IS NOT REQUIRED PER MCWD RULE 7.4a2

INSTALL ROCK CONSTRUCTION ENTRANCE AT A LOCATION WHERE CONSTRUCTION VEHICLES ENTER AND EXIT THE SITE, SEE DETAILS 1/C312 AND 2/C312, CONTRACTOR MAY USE OTHER METHODS AS APPROVED BY ENGINEER

CONCRETE WASHOUT AREA PER MPCA STANDARDS. CONTRACTOR TO FIELD LOCATE DURING CONSTRUCTION, SEE DETAIL 2/C309

EXISTING MANAGEMENT CLASS - MANAGE 2 WETLAND

INSTALL DOUBLE ROW PERIMETER EROSION CONTROL AT DOWN STREAM EDGE OF SEPTIC FIELD CONSTRUCTION, SEE DETAILS 1/C309 AND 2/C309

INSTALL TEMPORARY FENCE AROUND SEPTIC FIELD TO PROTECT FROM DAMAGE DURING CONSTRUCTION

LIMITS OF DISTURBANCE

INSTALL PERIMETER EROSION CONTROL AT DOWN STREAM EDGE OF ALL CONSTRUCTION ACTIVITIES, SEE DETAILS 1/C309 AND 2/C309

EXISTING TREE MAY NEED TO BE REMOVED FOR NEW GRADES AND FOOTING INSTALLATION AT NEW RESTROOM ADDITION, PROTECT TREE IF POSSIBLE

INSTALL TREE PROTECTION FENCING AROUND EXISTING TREES TO REMAIN, SEE DETAIL 2/C311

EXISTING TREE MAY NEED TO BE REMOVED FOR NEW GRADES AND FOOTING INSTALLATION AT NEW RESTROOM ADDITION, PROTECT TREE IF POSSIBLE

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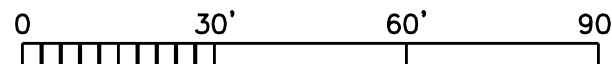
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SWPPP SITE
LAYOUT

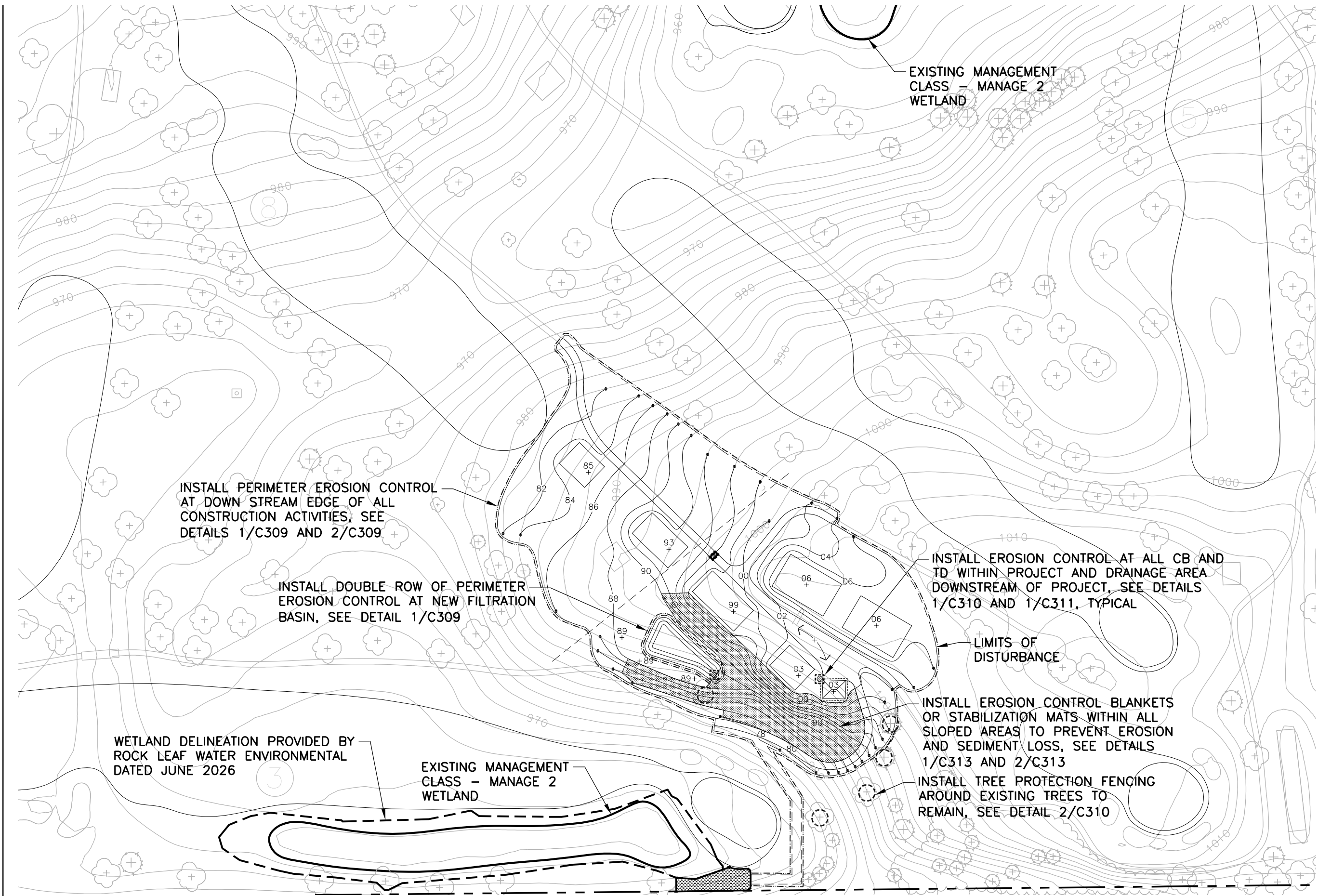
C307



SWPPP SITE LAYOUT

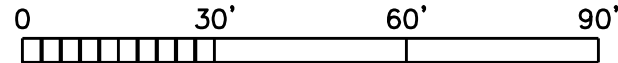


1"=30'



1
C308

SWPPP SITE LAYOUT



1"=100'

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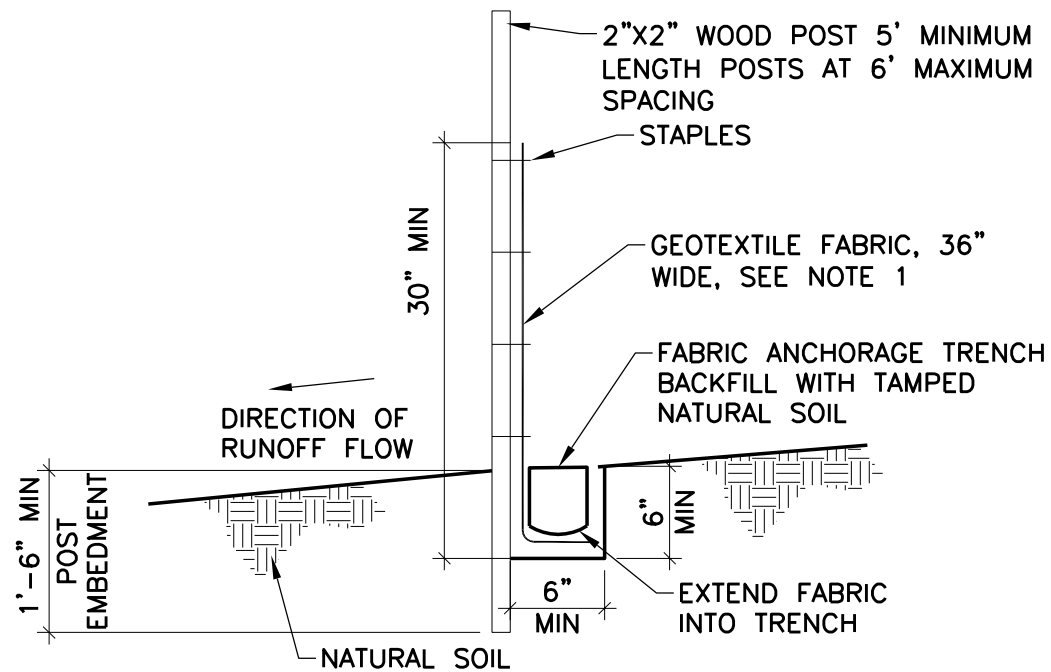
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SWPPP SITE
LAYOUT

C308



		BY ACCEPTED DESIGN PRACTICES
SLOPE H:V	PERCENT	MAXIMUM SLOPE LENGTH
100:1	1%	100 FT
50:1	2%	75 FT
25:1	4%	75 FT
20:1	5%	75-50 FT
17:1	6%	50 FT
12.5:1	8%	50 FT
10:1	10%	50-25 FT
5:1	20%	25-15 FT
4:1	25%	15 FT
3:1	33%	15 FT
2:1	50%	15 FT

- NOTES:
1. GEOTEXTILE FABRIC SHALL BE PER MNDOT SPEC 3886.
 2. SILT FENCES SHOULD BE INSTALLED ON THE CONTOUR (AS OPPOSED TO UP AND DOWN A HILL) AND CONSTRUCTED SO THAT FLOW CANNOT BYPASS THE ENDS.
 3. ENSURE DRAINAGE AREA IS NO GREATER THAN 1/4 ACRE PER 100 FT OF FENCE.
 4. FIELD VERIFY THE MAXIMUM SLOPE LENGTH IN THE TABLE. THIS LENGTH EQUATES TO A 2 FOOT STORAGE HEIGHT FOR THE 100-YEAR EVENT.
 5. SILT FENCE INSTALLATION TO CONFORM TO MNDOT SPEC 2573.3

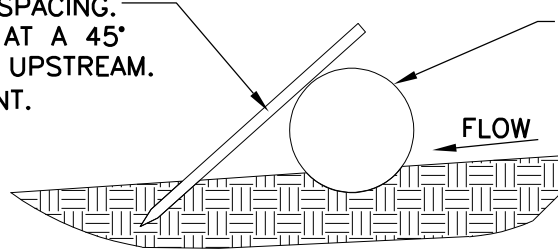
1

C309

SILT FENCE – PREASSEMBLED

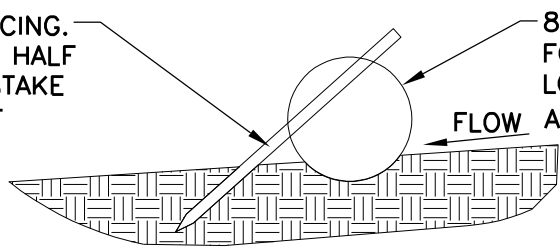
NO SCALE

1"x2"x24" WOOD STAKES AT 3' MAX SPACING. STAKES SHALL BE DRIVEN OVER LOG AT A 45° ANGLE WITH TOP OF STAKE POINTING UPSTREAM. PROVIDE 8"-10" OF STAKE EMBEDMENT.



FIELD INSTALLATION USING MULCH OR COMPOST

1"x2"x24" WOOD STAKES AT 3' MAX SPACING. STAKES SHALL BE DRIVEN TROUGH BACK HALF OF LOG AT A 45° ANGLE WITH TOP OF STAKE POINTING UPSTREAM. PROVIDE 8"-10" OF STAKE EMBEDMENT.



FIELD INSTALLATION USING STRAW OR WOOD FIBER

2

C309

SEDIMENT CONTROL FILTER LOG

NO SCALE

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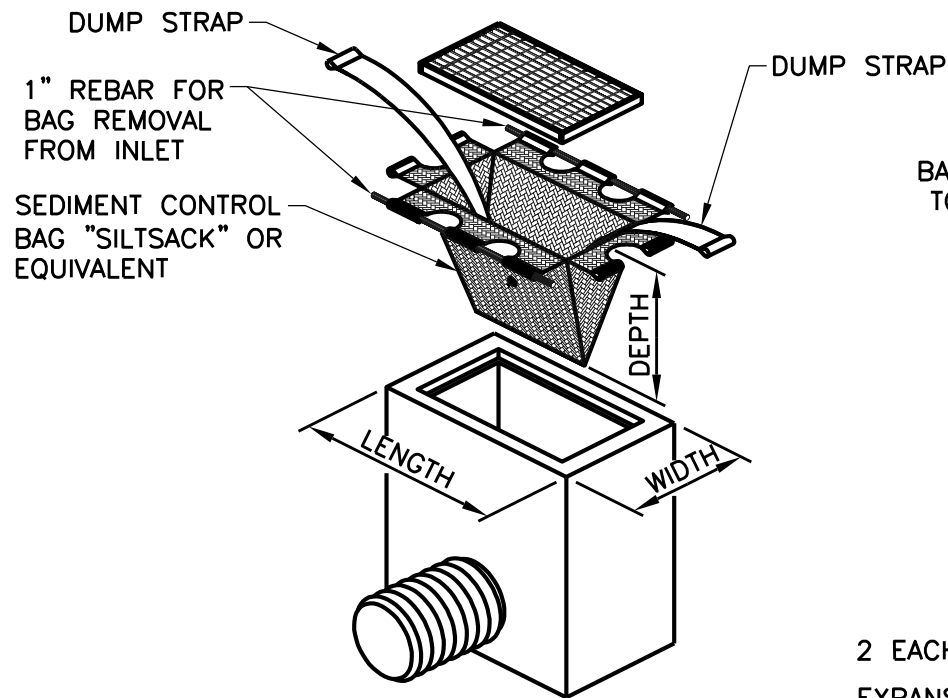
Date 4/30/2026

Watershed Submittal

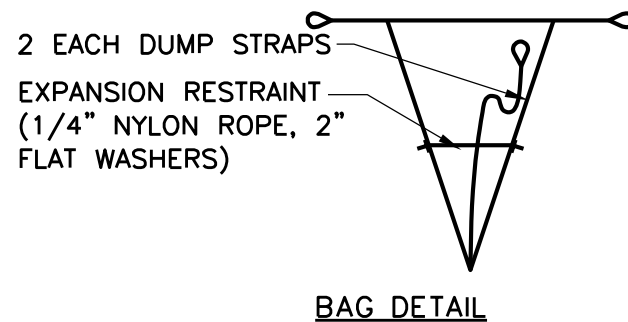
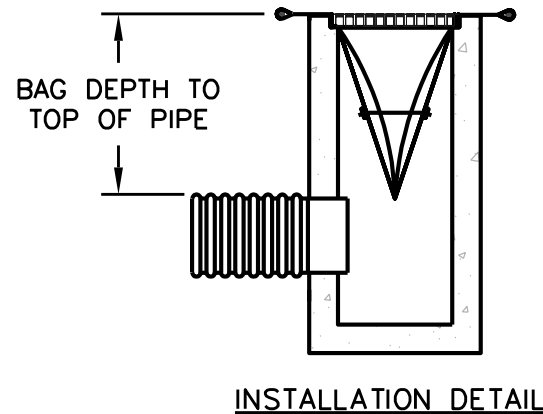
Drawing Title

SWPPP DETAILS

C309



CB STYLE	LENGTH	WIDTH	DEPTH
TYPE 1 CB	24"	20"	VARIABLE
TYPE 1 CCI	29.5"	24"	VARIABLE
USA G2	32.5"	27.5"	VARIABLE

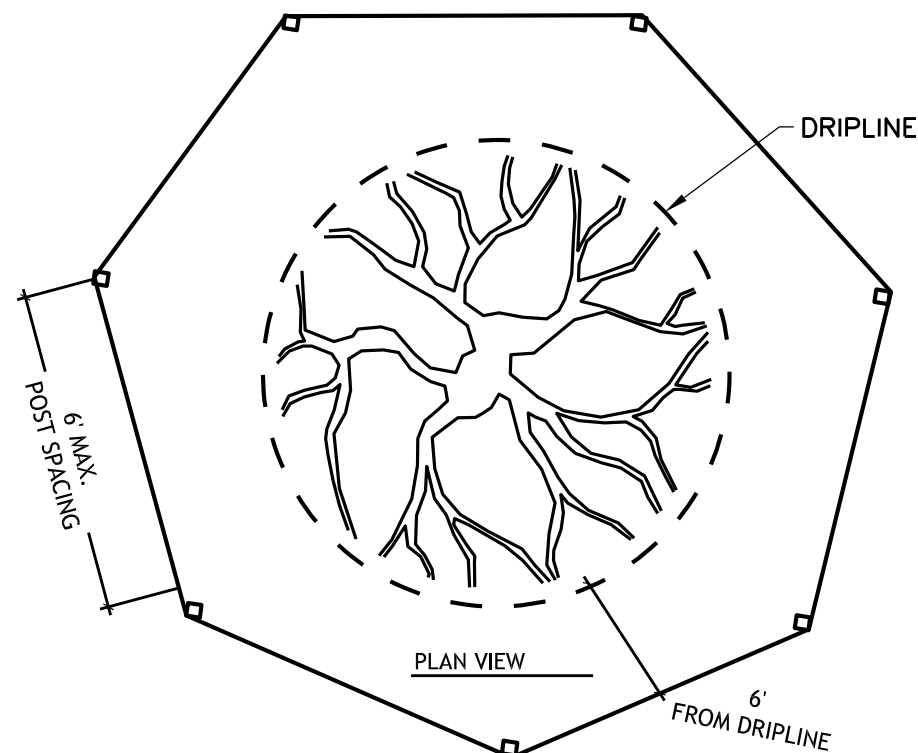
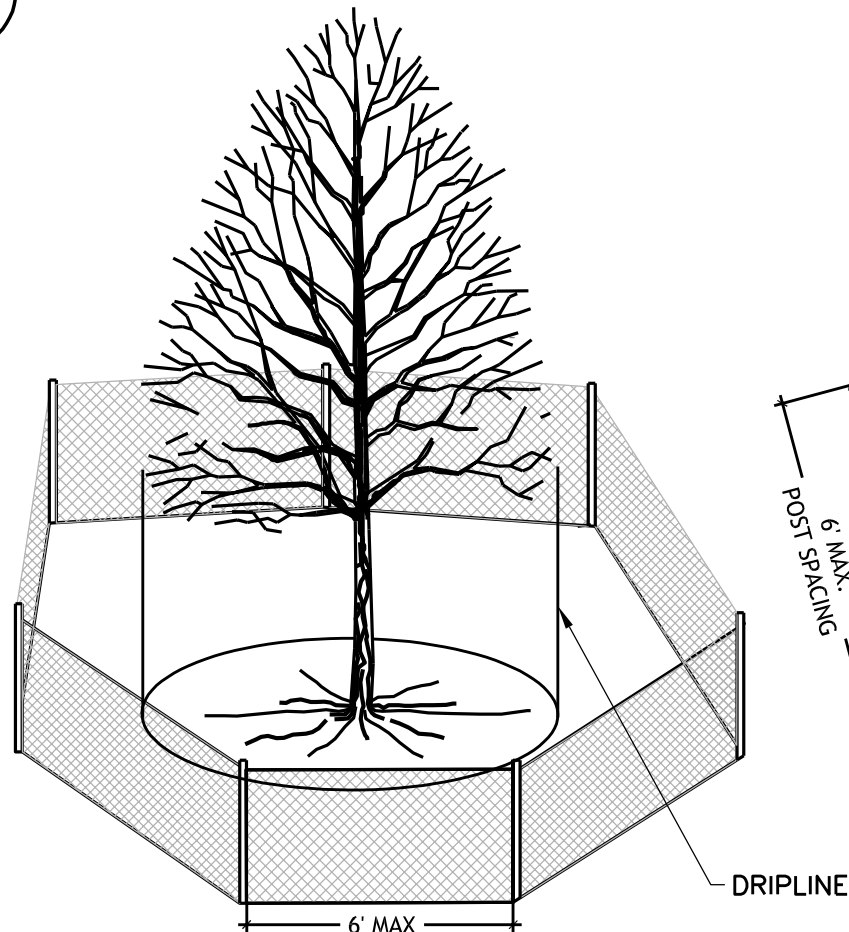


NOTES:

1. THE DIMENSION CHART ABOVE IS FOR STANDARD CATCH BASINS AND INLETS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE CORRECT SIZE DEVICE FOR EACH INLET.
2. FOR NON-STANDARD CATCH BASINS AND INLETS, THE CONTRACTOR SHALL MEASURE DIMENSIONS IN THE FIELD AND ORDER THE APPROPRIATE SIZE(S).
3. THE INLET SEDIMENT CONTROL DEVICE SHALL BE OF HIGH FLOW DESIGN (200 GAL/MIN/FT), AS PER THE MANUFACTURER'S SPECS.
4. THE SEDIMENT CONTROL DEVICE SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED A MINIMUM ONCE PER MONTH OR WITHIN THE 48 HOURS FOLLOWING A STORM EVENT. FILTER SHALL BE CLEANED IN A MANNER WHICH ENSURES THAT ALL SEDIMENT REMAINS ON SITE.
5. SUBSTITUTION OF A SHEET OF FILTER FABRIC PLACED OVER THE OPENING OF THE INLET IS NOT APPROVED.
6. RECESSED CURB INLET CATCH BASINS MUST BE BLOCKED WHEN USING FILTER FABRIC INLET SACKS, SIZE OF FILTER INLET SACK TO BE DETERMINED BY MANUFACTURER.
7. THE FILTER SHALL BE REPLACED OR CLEANED WHEN THE BAG BECOMES HALF FULL.

1 SILT SACK

NO SCALE



TREE PROTECTION NOTES:

1) ALL TREE PROTECTION FENCING AND EROSION CONTROL FENCING SHALL BE INSTALLED ACCORDING TO THE PLANS PRIOR TO ANY DEMOLITION. AFTER DEMOLITION OR AS NECESSARY, TREE PROTECTION FENCING MAY BE RELOCATED WITH APPROVAL FROM THE ARCHITECT. ALL TREE PROTECTION FENCING AND EROSION CONTROL DEVICES SHALL BE MAINTAINED FOR THE DURATION OF THE CONSTRUCTION PERIOD.

2) CONTRACTOR SHALL NOT STORE ANY MATERIALS OR PARK ANY VEHICLES IN TREE PROTECTION ZONES. THE FENCE SHALL PREVENT TRAFFIC MOVEMENT AND THE PLACEMENT OF TEMPORARY FACILITIES, EQUIPMENT, STOCKPILES AND SUPPLIES FROM HARMING VEGETATION WITHIN THE LIMITS OF PROTECTION.

3) THE CONTRACTOR SHALL CLEANLY CUT ALL ROOTS EXPOSED BY GRADING AS DIRECTED BY THE ARCHITECT.

4) THE CONTRACTOR SHALL USE DESIGNATED CONSTRUCTION ENTRANCES AND STAGING AREAS.

2 TREE PROTECTION DETAIL

NO SCALE

PIERCE PINI & ASSOCIATES

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ISLAND VIEW GOLF COURSE
COURSE BUILDINGS
WACONIA, MN

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For: PIERCE PINI & ASSOCIATES, INC.

By:

Name Rhonda S. Pierce

Date 04/30/2026 Reg. No. 41333

Issued for

Date

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Comm. No. 26-011

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Checked RSP

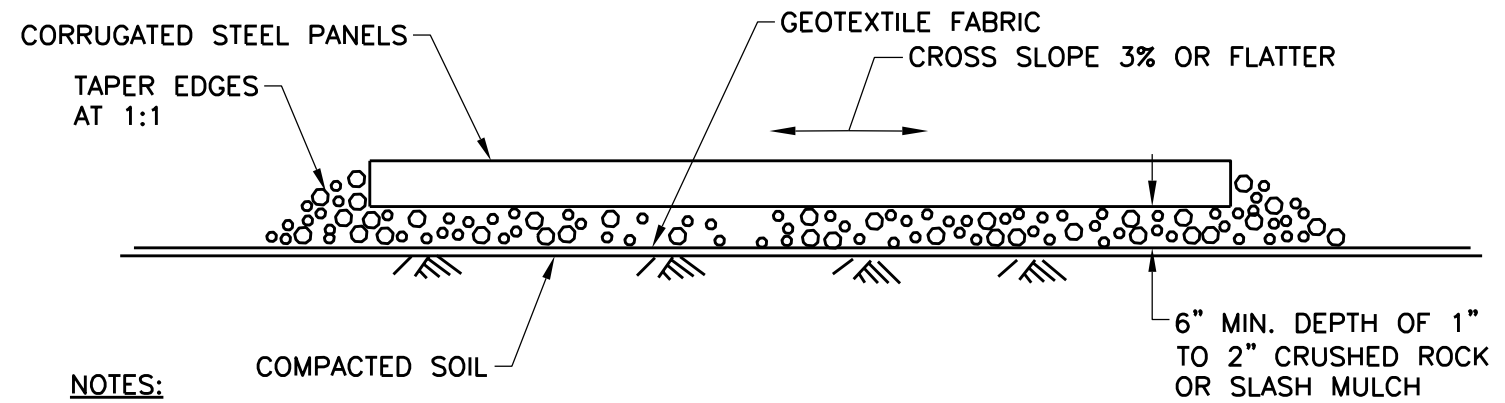
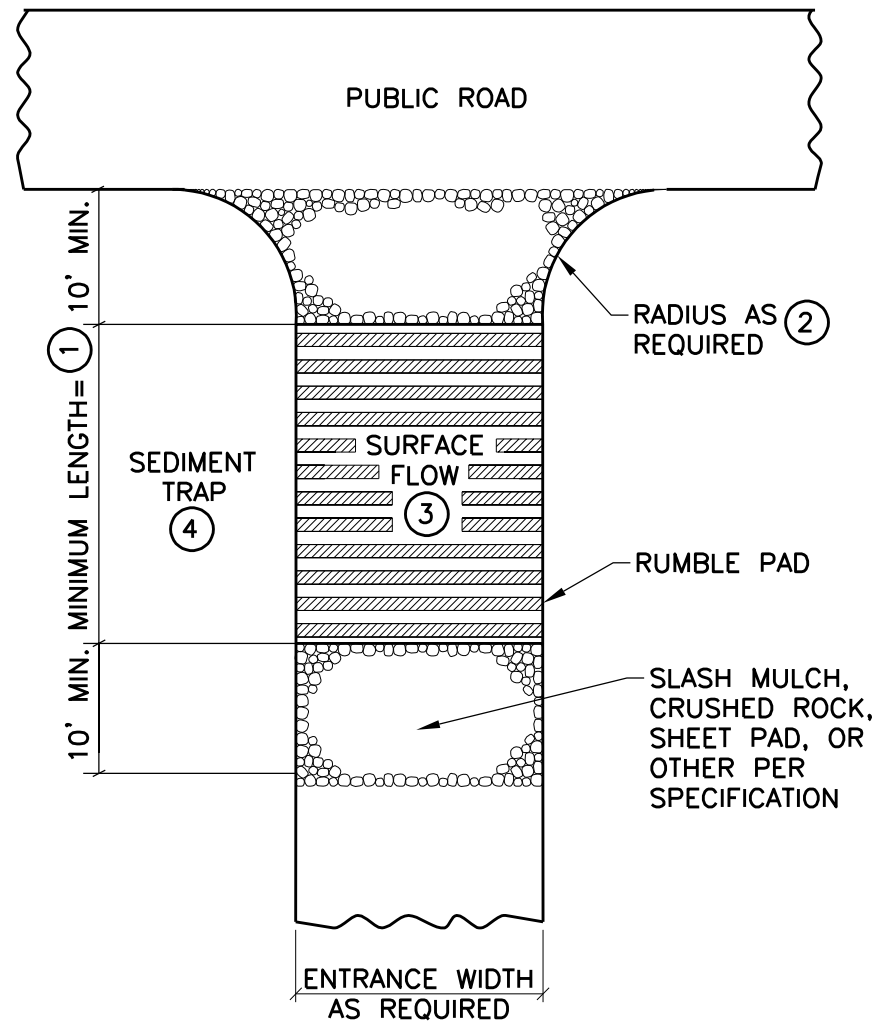
Date 4/30/2026

Watershed Submittal

Drawing Title

SWPPP DETAILS

C311



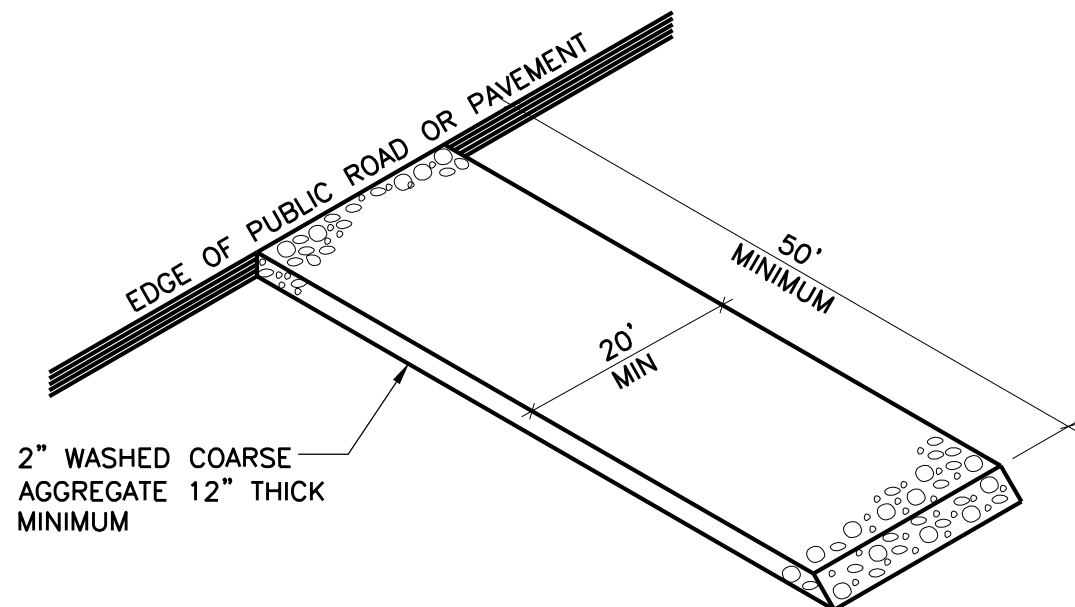
NOTES:

- ① 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.
- 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 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.

1 RUMBLE PAD CONSTRUCTION EXIT

RUMBLE PAD CONSTRUCTION EXIT ⑤⑥

NO SCALE



2 GRAVEL CONSTRUCTION ENTRANCE

NO SCALE

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ISLAND VIEW GOLF COURSE
COURSE BUILDINGS
WACONIA, MN

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By

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COURSE BUILDINGS
WACONIA, MN

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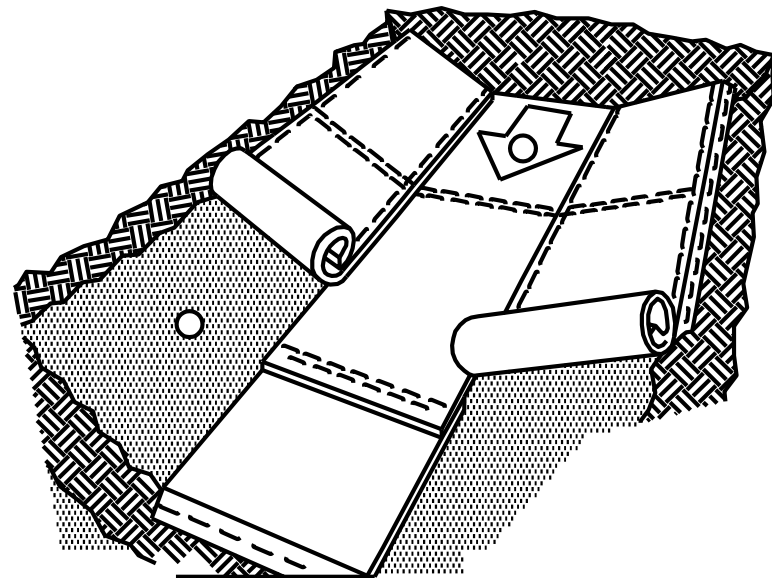
Watershed Submittal

Drawing Title

SWPPP DETAILS

C313

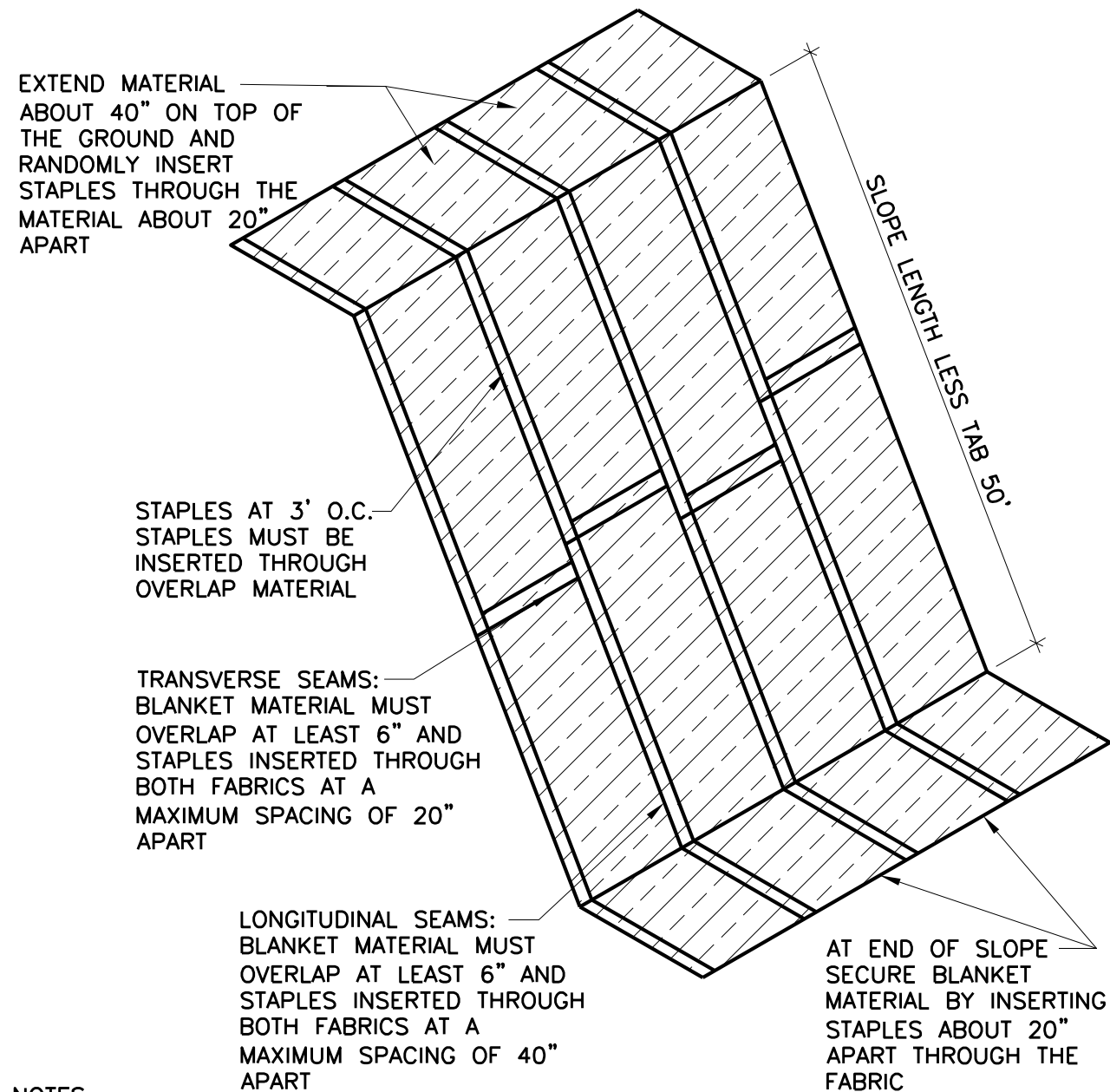
1. BEFORE INSTALLATION APPLY TOPSOIL, FERTILIZER AND SEED TO SURFACE.
2. BEGIN AT THE TOP OF THE CHANNEL, INSTALL MATS BY ANCHORING IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF MAT EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR WITH A ROW OF STAPLES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF MAT BACK OVER SEED AND SOIL. SECURE MATS WITH A WITH A ROW OF STAPLES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE MATS.
3. ROLL CENTER MATS IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL.
4. PLACE CONSECUTIVE AND ADJACENT MATS END OVER END (SHINGLE STYLE) WITH A MINIMUM 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE OVERLAPPED MATS.
5. FULL LENGTH EDGE OF MATS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES APPROXIMATELY 12" APART IN A 6" DEEP BY 6" WIDE TRENCH.
6. THE TERMINAL END OF MATS MUST BE ANCHORED WITH A ROW OF STAPLES APPROXIMATELY 12" APART IN A 6" DEEP BY 6" WIDE TRENCH.
7. BACKFILL AND SEED AFTER STAPLING.
8. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR PROPER INSTALLATION.



EROSION
STABILIZATION MATS

1
C313

NO SCALE



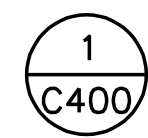
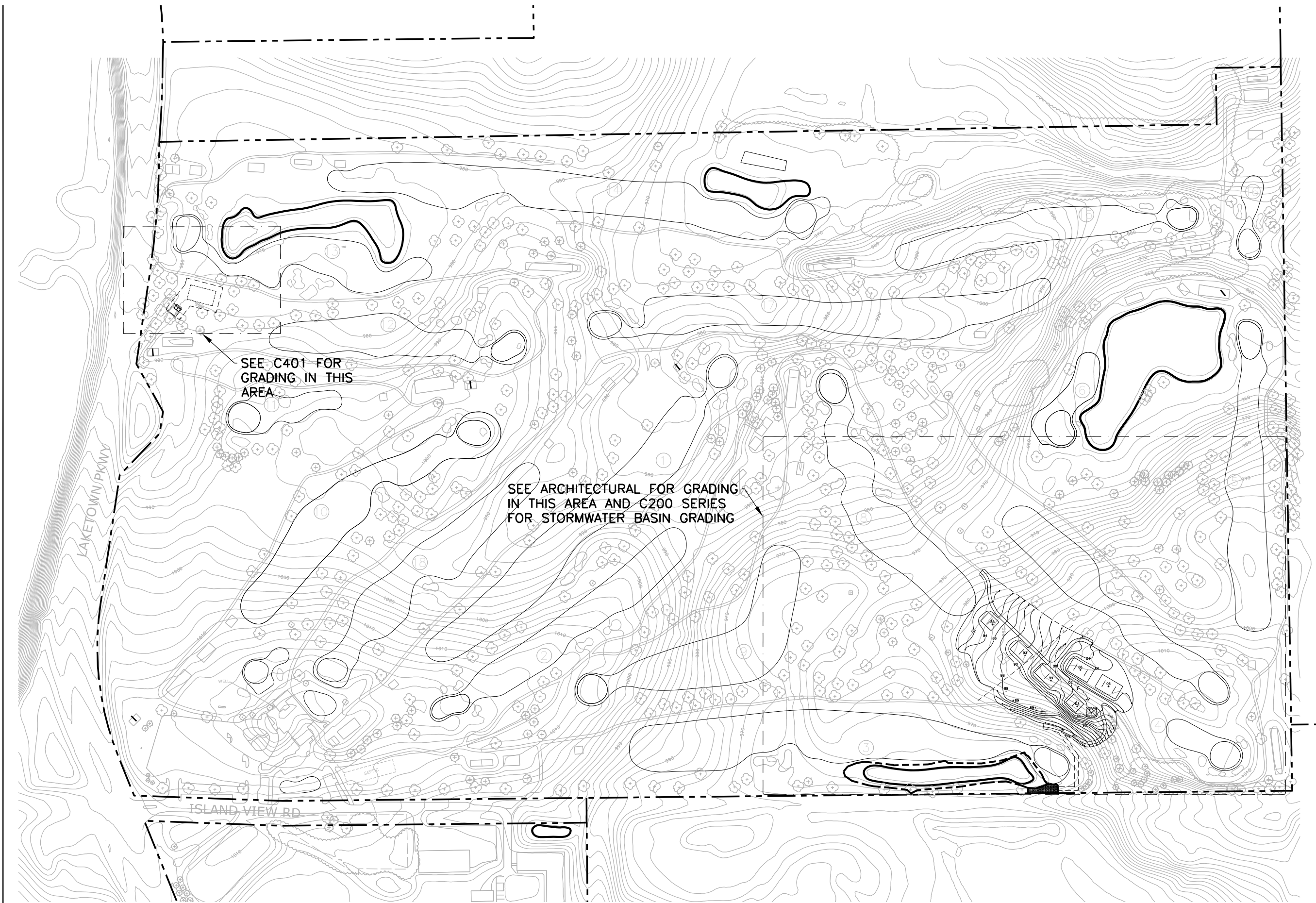
NOTES:

1. EROSION CONTROL BLANKET TO BE CATEGORY 4-COCONUT 2S FOR SLOPES GREATER THAN 5:1 AND SIDES AND BOTTOM OF ALL DRAINAGE SWALES AND PONDING AREAS AND CATEGORY 2-STRAW 2S FOR ALL SLOPES LESS THAN 5:1 PER MNDOT SPEC. SECTION 3885.
2. INSTALL PER MNDOT SPEC. SECTION 2575

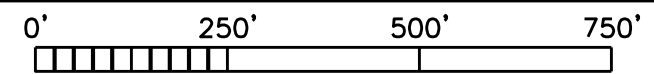
2
C313

EROSION CONTROL BLANKET

NO SCALE



OVERALL GRADING AND DRAINAGE PLAN



1"=250'

PIERCE PINI & ASSOCIATES

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FAX 763.537.1354

ISLAND VIEW GOLF COURSE COURSE BUILDINGS WACONIA, MN

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For PIERCE PINI & ASSOCIATES, INC.

By
Name Rhonda S. Pierce
Date 07/21/2026 Reg. No. 41333

Issued for	Date

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Checked	RSP
Date	7/21/2026

Watershed Resubmittal

Drawing Title

OVERALL
GRADING AND
DRAINAGE PLAN

C400

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WACONIA, MN

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Drawing Title

GRADING AND DRAINAGE PLAN

C401

1. RESTROOM ADDITION DRAINS TO THE WEST TOWARD LAKETOWN PKWY AND NOT TOWARD THE MANAGEMENT CLASS - MANAGE 2 WETLAND TO THE NORTH OF THE CART PATH, A VEGETATED BUFFER TO THIS WETLAND IS NOT REQUIRED PER MCWD RULE 7.4o2

— SEE STORMWATER REPORT
FOR EXISTING BASIN
CALCULATIONS AND
100-YEAR HWL

DIRECT RUNOFF FROM NEW RESTROOM ADDITION TO THE WEST TOWARD LAKETOWN PKWY, PROPOSED DRAINAGE FROM NEW RESTROOMS MUST NOT BE DIRECTED TOWARD THE EXISTING POND TO THE NORTH

NEW SEPTIC FIELD
BY OTHERS

LIMITS OF DISTURBANCE

SEE ARCHITECTURAL FOR
NEW RESTROOM
ADDITION

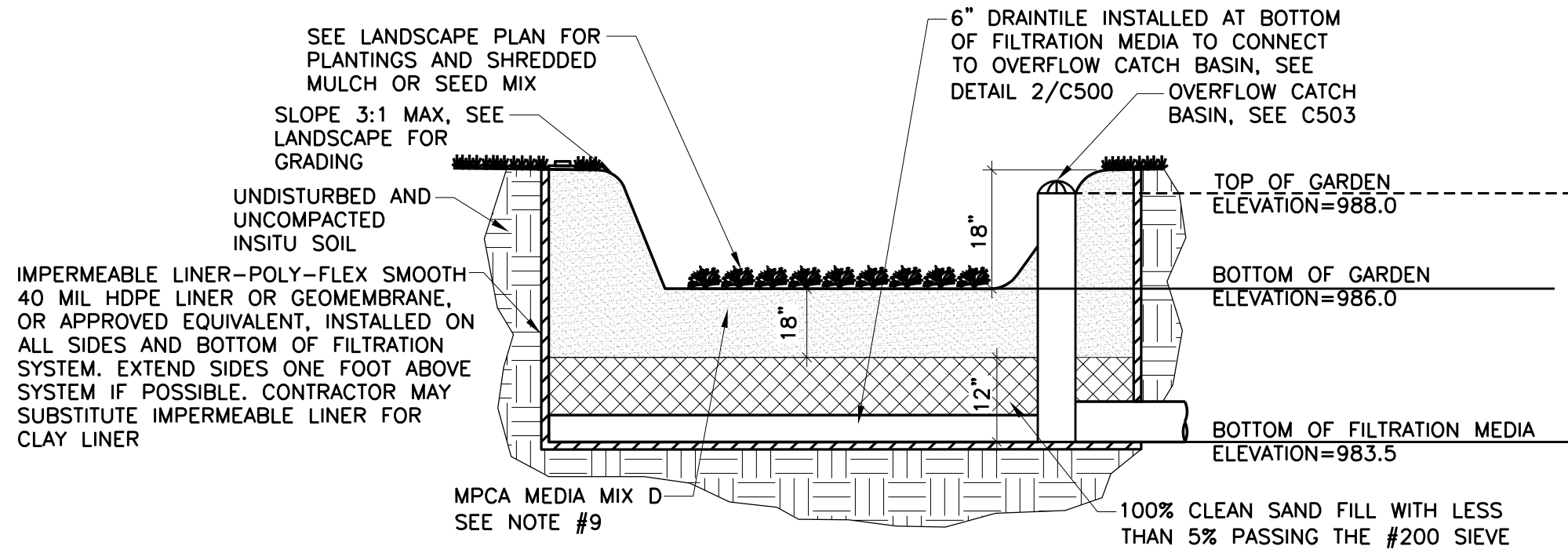
SLOPE AT ALL EGRESS LOCATIONS CANNOT EXCEED 2.00% FOR THE FIRST 5' PER MINNESOTA STATE BUILDING CODE. SLOPE NEW CONCRETE STOOP MINIMUM 1.50% AWAY FROM NEW ADDITION AND MAXIMUM 2.00%

RESTROOM FINISHED FLOOR=980.85
NEW RESTROOM FINISHED FLOOR ELEVATION MUST BE TWO FEET
HIGHER THAN THE 100-YEAR STORM EVENT ELEVATION OF 978.85 IN
THE EXISTING BASIN TO THE NORTH. IN THE FIELD, BLEND NEW
GRADES TO PROVIDE ADA ACCESS TO THE NEW RESTROOM FACILITY


$$\begin{array}{r} 1 \\ \hline 401 \end{array}$$

GRADING AND DRAINAGE PLAN

$$1'' = 30'$$



NOTES:

1. FILTRATION GARDEN SHALL USE A WATER TOLERANT SEED MIX.
3. SURFACE FILTRATION SYSTEM SHALL NOT BE EXCAVATED TO FINAL GRADE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND FULLY STABILIZED.
4. FILTRATION PERIMETER CONTROL AND EROSION CONTROL PRACTICES SHALL REMAIN IN PLACE UNTIL THE FINAL COMPLETION OF THE PROJECT OR VEGETATION HAS BEEN ESTABLISHED (WHICHEVER IS LATER).
5. INSTALLATION OF FILTRATION PRACTICES SHALL BE

DONE DURING PERIODS OF DRY WEATHER AND COMPLETED BEFORE A RAINFALL EVENT. PLACEMENT OF ENGINEERED SOILS SHALL BE ON DRY NATIVE SOIL ONLY.

6. THE BOTTOM EXCAVATION OF FILTRATION AREAS SHALL BE LEVEL WITHOUT DIPS OR SWALES.
7. DURING CONSTRUCTION, STORMWATER MUST BE ROUTED AROUND FILTRATION AREAS UNTIL ALL CONSTRUCTION ACTIVITY HAS CEASED AND TRIBUTARY SURFACES ARE CLEANED OF SEDIMENT. IT IS REQUIRED THAT IMPERVIOUS AREA CONSTRUCTION IS COMPLETED, AND PERVIOUS AREA ESTABLISHED WITH DENSE AND HEALTHY VEGETATION PRIOR TO

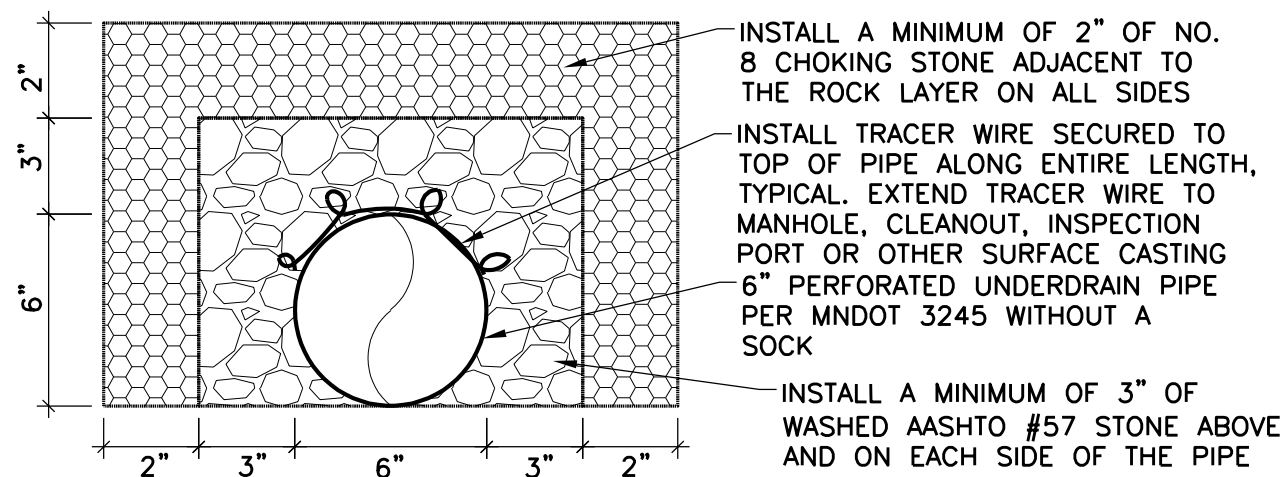
INTRODUCTION OF STORMWATER INTO A VEGETATED FILTRATION PRACTICE.

8. ENGINEERED SOIL SHALL REMAIN UNCONTAMINATED (NOT MIXED WITH OTHER SOIL) BEFORE AND DURING INSTALLATION.
9. FILTER MEDIA SHALL BE MPCA FILTER MEDIA MIX D
 - 9.1. SILT PLUS CLAY 25-40%, BY DRY WEIGHT
 - 9.2. TOTAL SAND: 60-75%, BY DRY WEIGHT
 - 9.3. COARSE AND MEDIUM SAND: MIN. 55%, BY DRY WEIGHT
 - 9.4. FINE GRAVEL LESS THAN 5 MILLIMETERS: MAX. 12%, BY DRY WEIGHT
 - 9.5. ORGANIC MATTER CONTENT: 2-5% MNDOT GRADE 2 COMPOST

1 FILTRATION BASIN SECTION DETAIL

C500

NO SCALE



NOTES:

1. A SOCK IS NOT ALLOWED ON THE DRAINTILE. IF THE DRAINTILE IS FURNISHED WITH A SOCK, IT MUST BE REMOVED PRIOR TO INSTALLATION.
2. DO NOT INSTALL GEOFABRIC AROUND DRAINTILE OR DRAINTILE ROCK SECTION
3. DRAINTILE SHALL BE 6" PVC SCH 40 OR SDR 35 WITH 3/8" PERFORATED ON 12" CENTERS, TWO ROWS AT 5:00 AND 7:00, RESPECTIVELY.
4. INSTALL DRAINTILE SO PERFORATIONS ARE AT THE BOTTOM, NOT THE TOP.

2 DRAINTILE DETAIL

C500

NO SCALE

PIERCE PINI & ASSOCIATES

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ISLAND VIEW GOLF COURSE COURSE BUILDINGS WACONIA, MN

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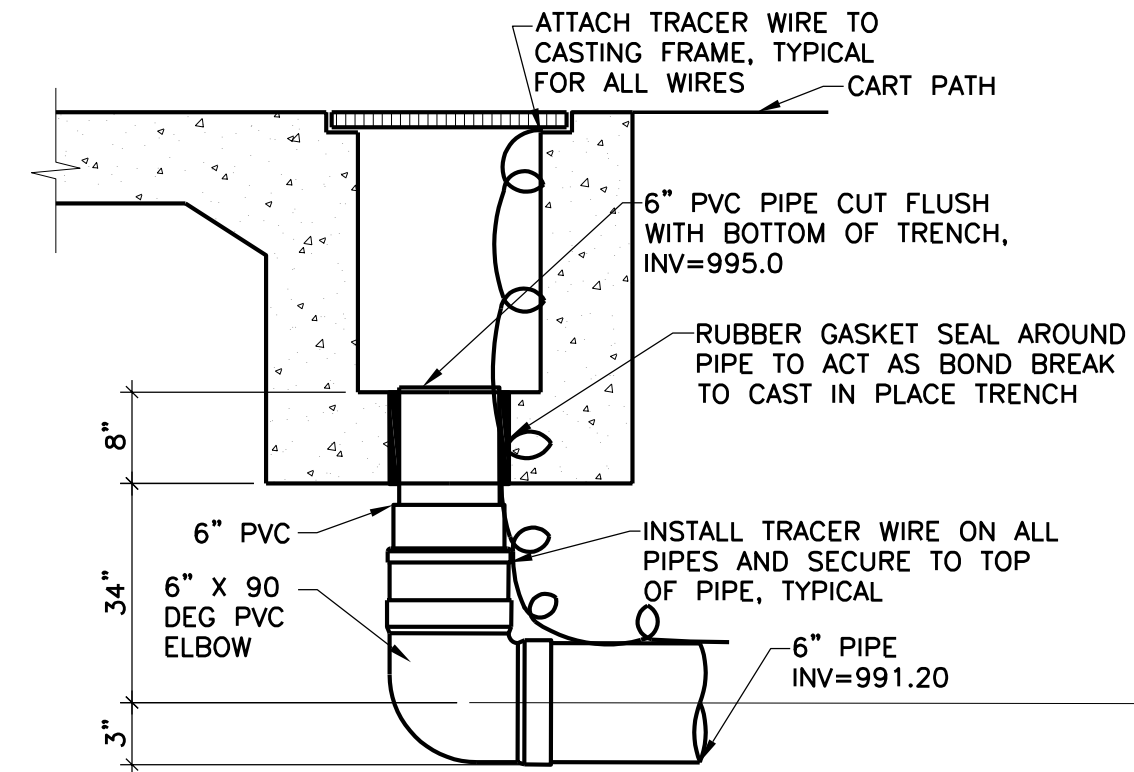
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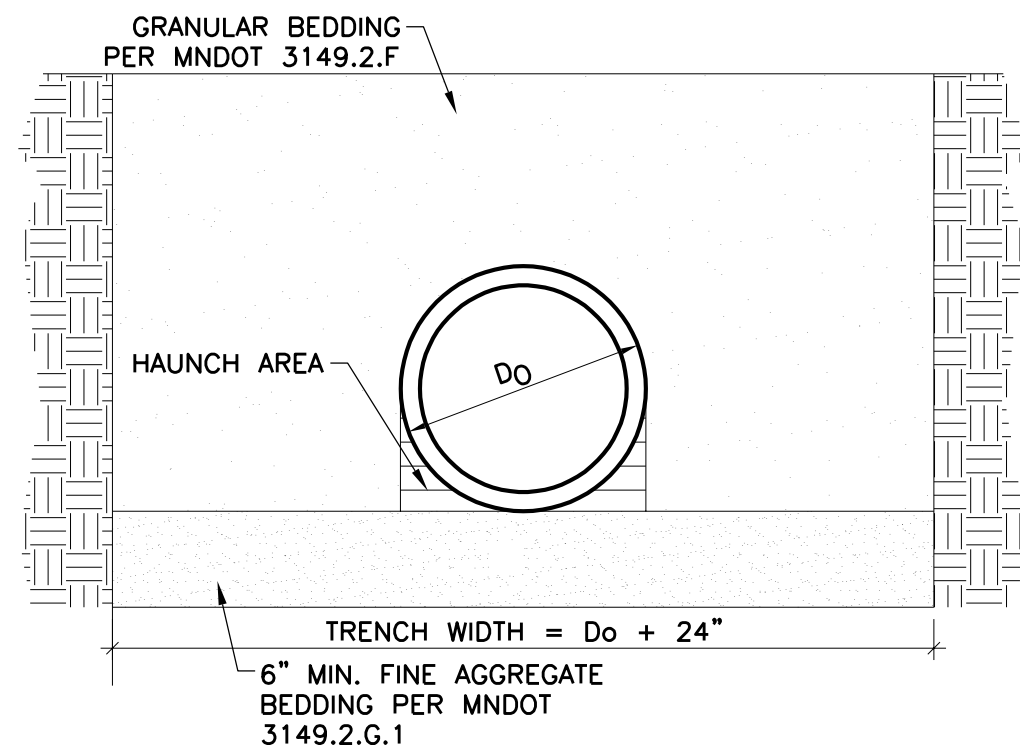
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CIVIL DETAILS

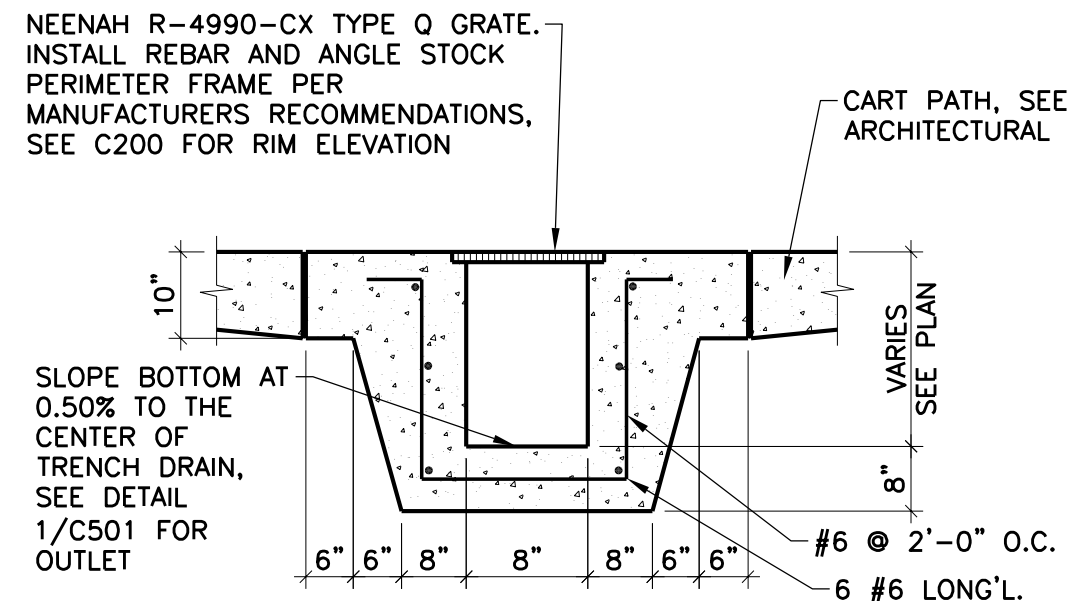
C500



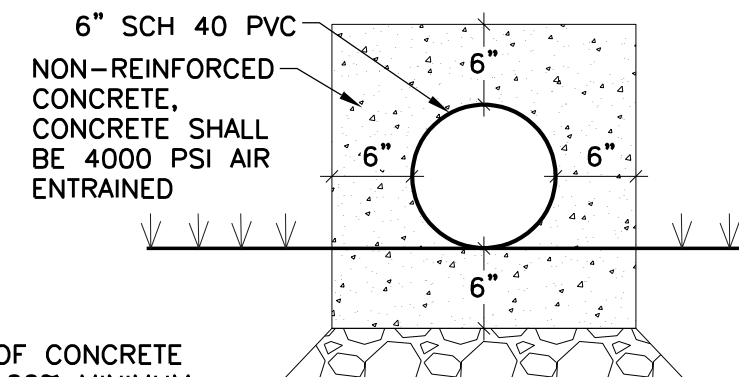
1 TRENCH DRAIN OUTLET
C501 NO SCALE



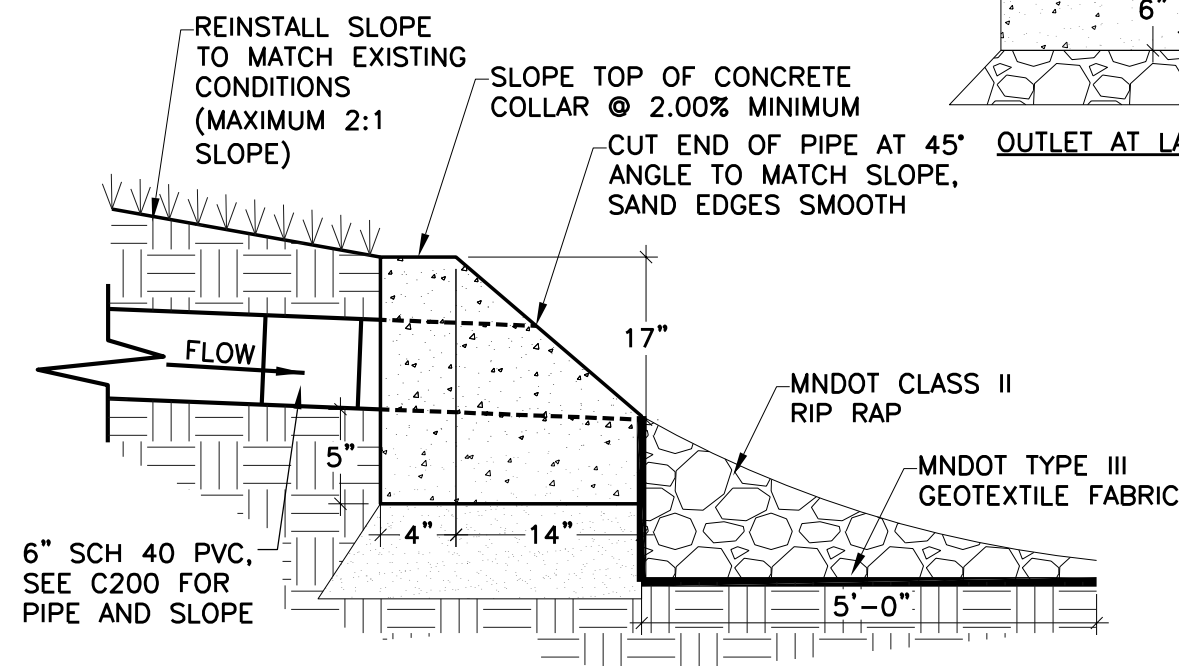
3 FLEXIBLE PIPE BEDDING
C501 NO SCALE



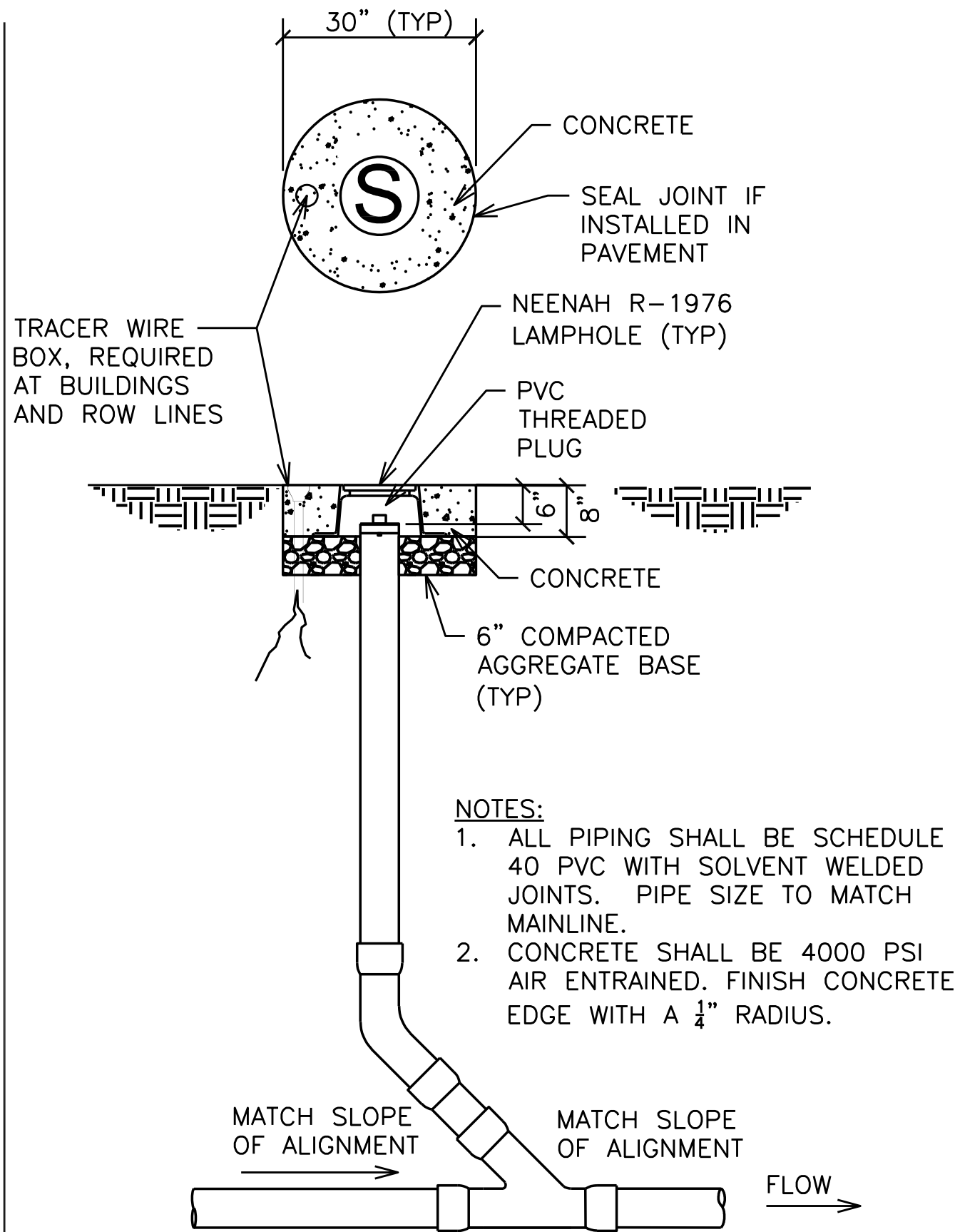
2 TRENCH DRAIN DETAIL
C501 NO SCALE



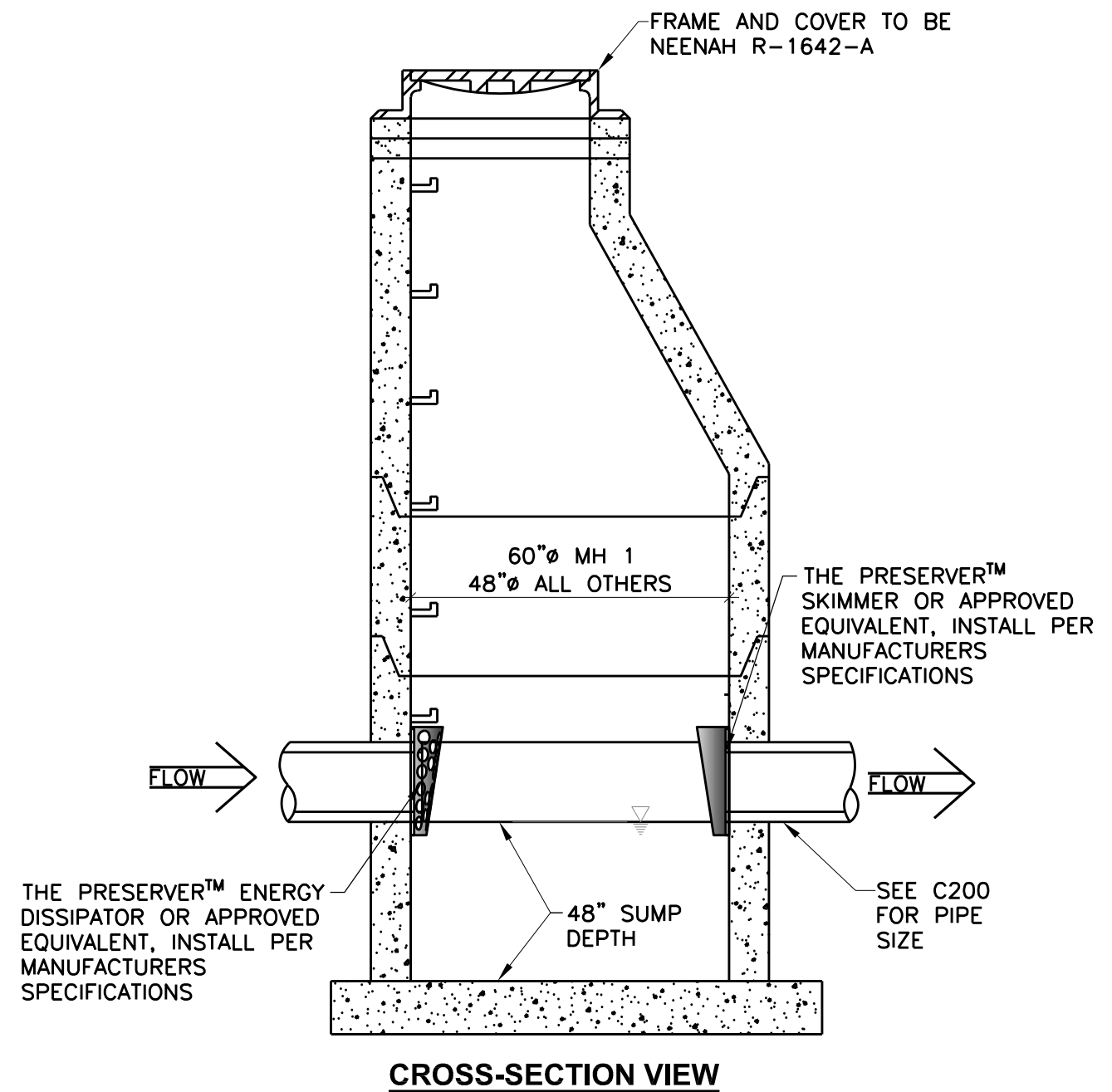
OUTLET AT LANDSCAPE



4 DRAIN OUTLET TO LANDSCAPE
C501 NO SCALE

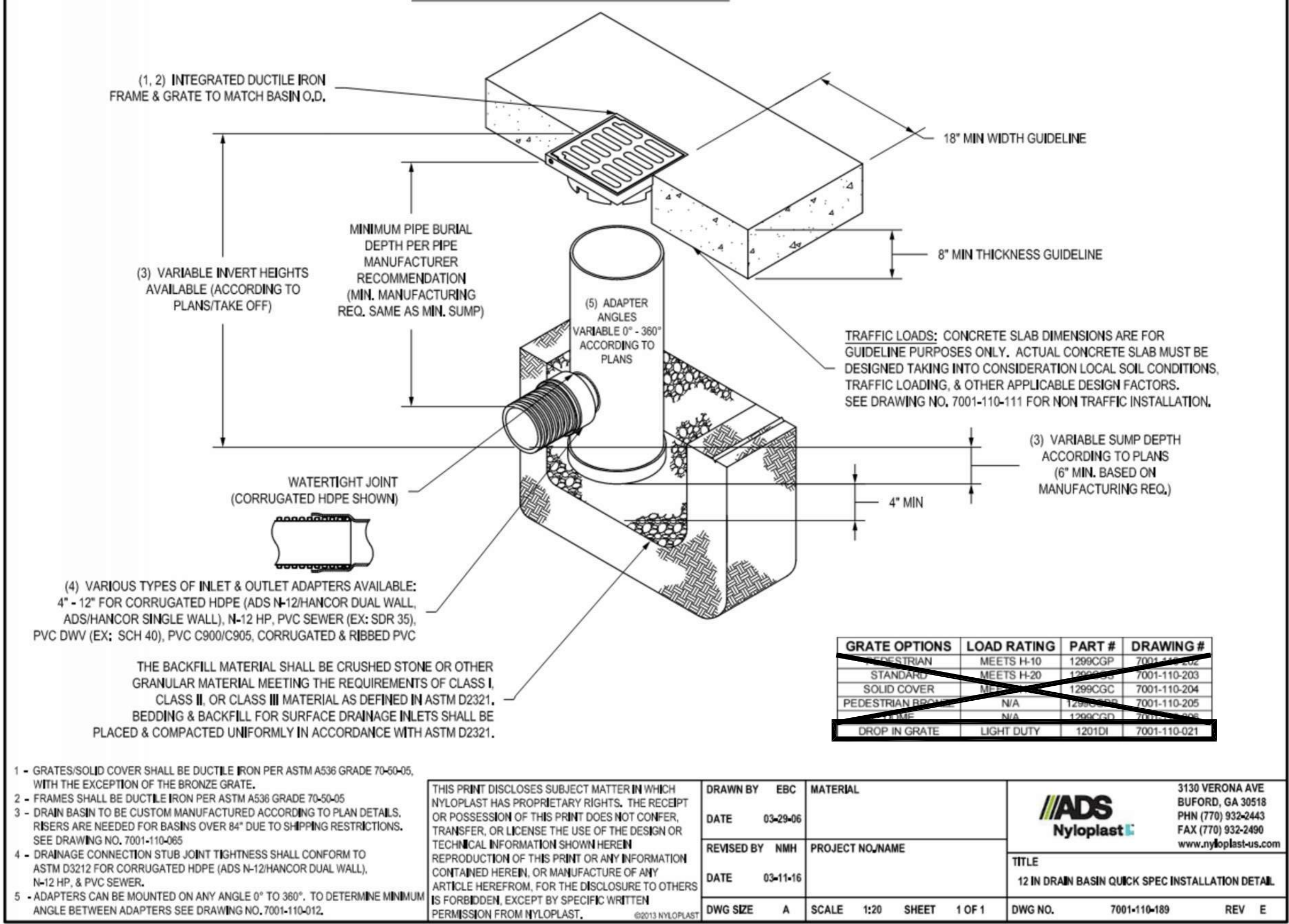


1 STORM SEWER CLEANOUT
C502 NO SCALE



2 MANHOLE WITH PRESERVER
C502 NO SCALE

NYLOPLAST 12" DRAIN BASIN: 2812AG __ X



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ISLAND VIEW GOLF COURSE
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CIVIL DETAILS

C503

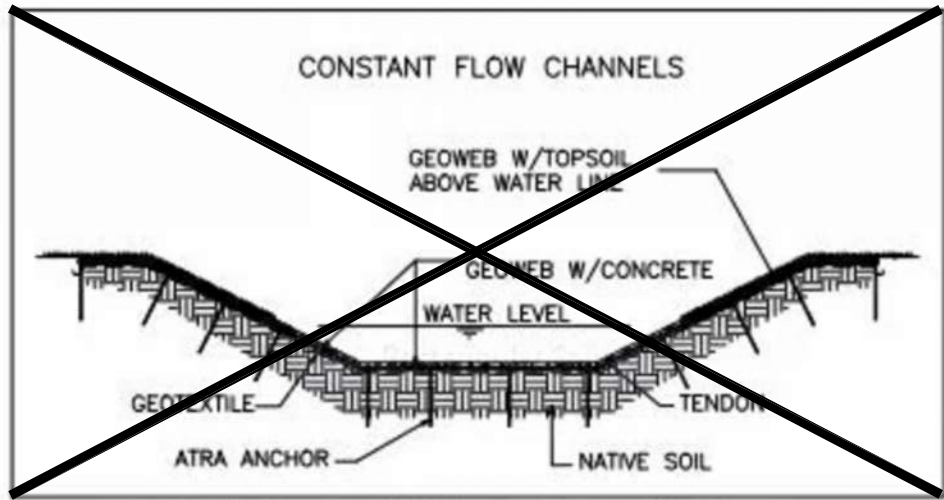
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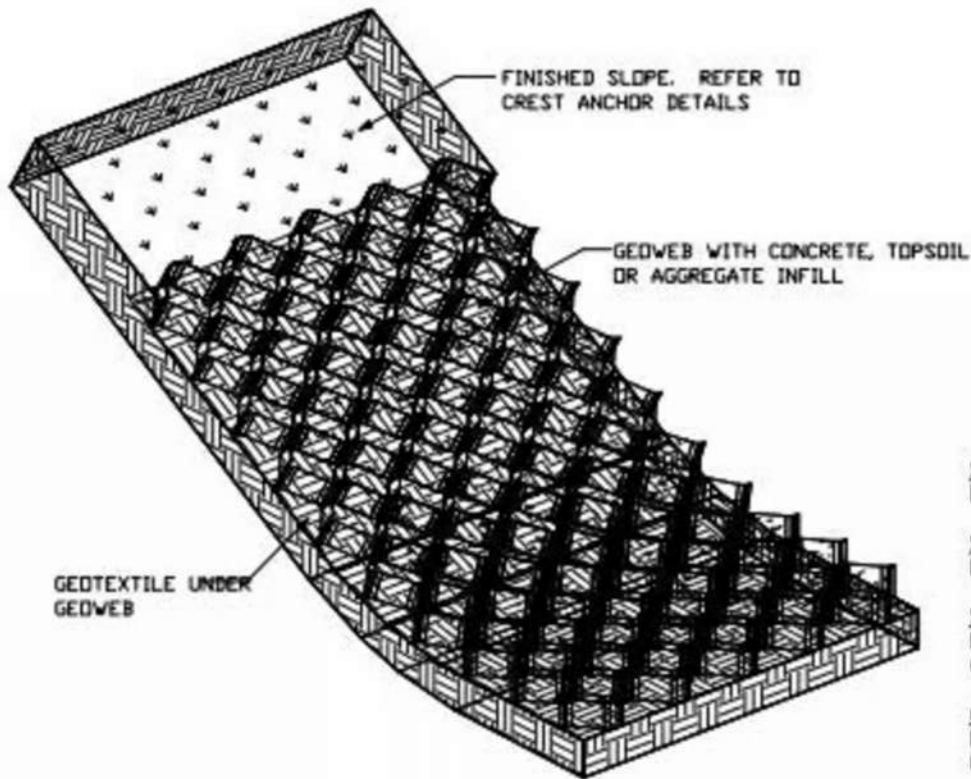
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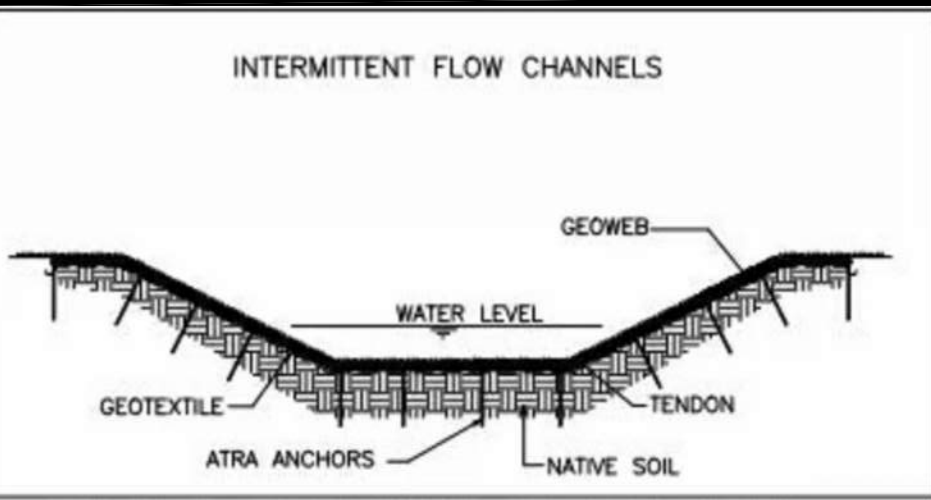
C504



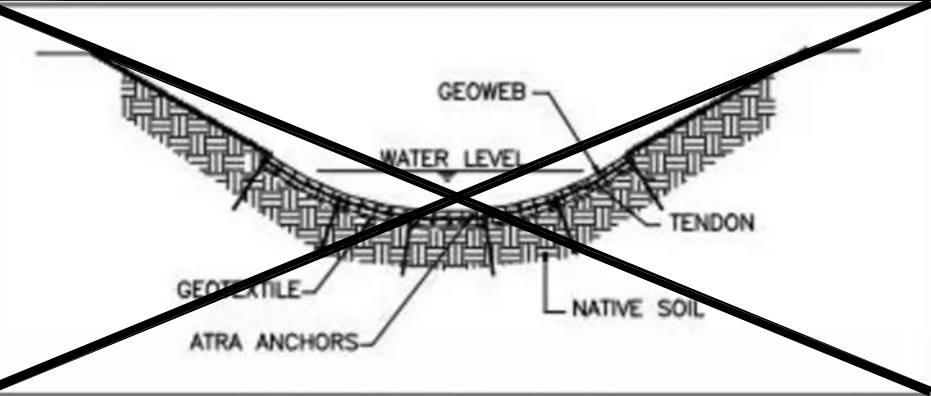
CONCRETE FILLED CHANNEL PROTECTION SYSTEM



PARTIAL ISOMETRIC CHANNEL SYSTEM



SOIL FILLED (GRASS) CHANNEL PROTECTION SYSTEM



DITCH PROTECTION SYSTEM

GENERAL GUIDELINES FOR SELECTION OF INFILL MATERIALS:

SOIL INFILL WITH VEGETATED COVER
PEAK VELOCITY OF 26 FPS AND 15.9 PSF OF SHEAR.

SOIL INFILL WITH EROSION CONTROL BARRIER OR TURF REINFORCEMENT MAT
PEAK VELOCITY BASED ON ECB OR TRM CHARACTERISTICS.

STONE INFILL
PEAK VELOCITY BASED ON SLOPE GRADIENT AND AGGREGATE SIZE.
CONSULT PRESTO GEOSYSTEMS FOR AGGREGATE SIZING.

CONCRETE INFILL
PEAK VELOCITY OVER 40 FPS AND 21 PSF OF SHEAR. MAXIMUM
UNDETERMINED THROUGH TESTING

NOTE:
1. VELOCITY VALUES BASED ON GEOWEB TESTING AT COLORADO STATE UNIVERSITY. TESTING DOCUMENTS AVAILABLE BY REQUEST.
2. ANCHOR REQUIREMENTS AND INFILL SELECTION SHOULD BE DESIGNED ON A PROJECT SPECIFIC BASIS.

NOTES:

1. GEOWEB SECTIONS SHALL BE FILLED WITH THE SPECIFIED MATERIAL WHICH IS SUITABLE FOR THE HYDRAULIC CONDITIONS.
2. GEOWEB ANCHORAGE SHALL BE AS SPECIFIED AND ADEQUATE TO PREVENT SLIDING.
3. ATRA ANCHOR LENGTH AND PATTERN SHALL BE AS SPECIFIED.
4. TENDON TYPE AND PATTERN SHALL BE AS SPECIFIED.
5. PROVIDE GEOTEXTILE SEPARATION LAYER AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

PRESTO® PRODUCTS CO.
670 NORTH PERKINS STREET
APPLETON, WI 54914
920-738-1328
WWW.PRESTOGEOWEB.COM

GENUINE GEOWEB®
CHANNEL PROTECTION SYSTEM

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