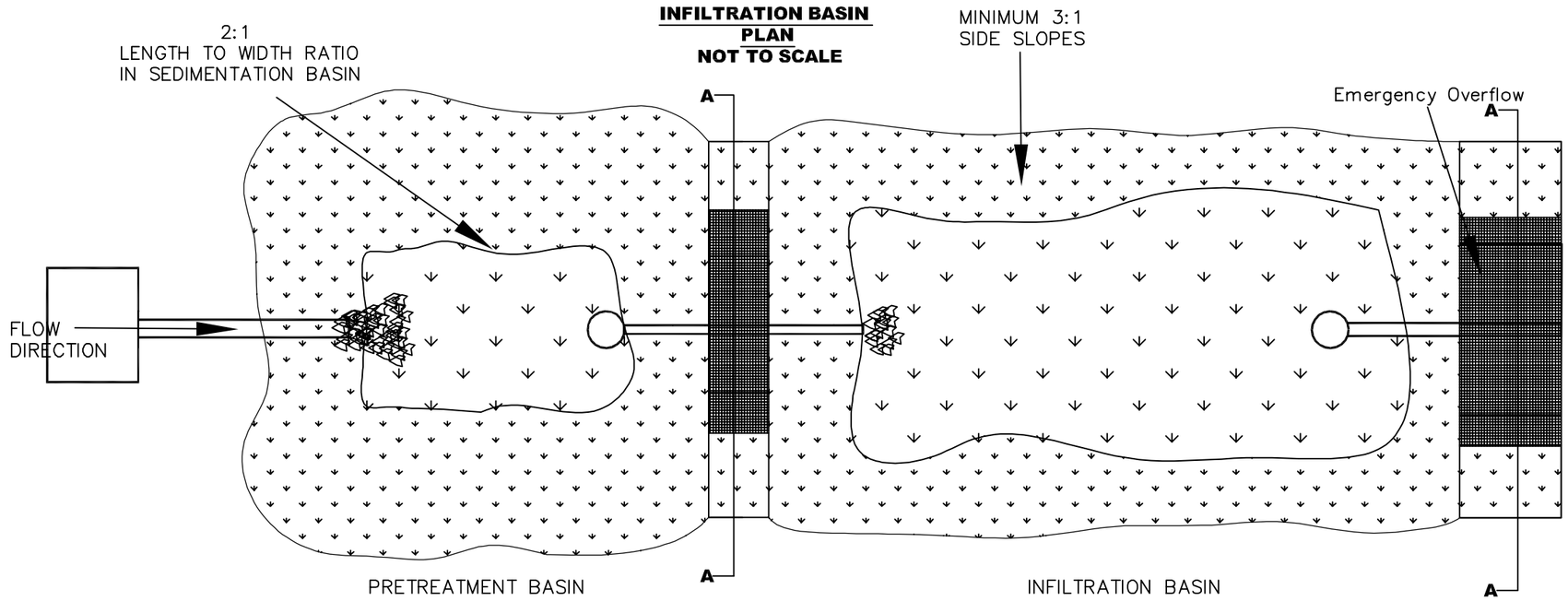
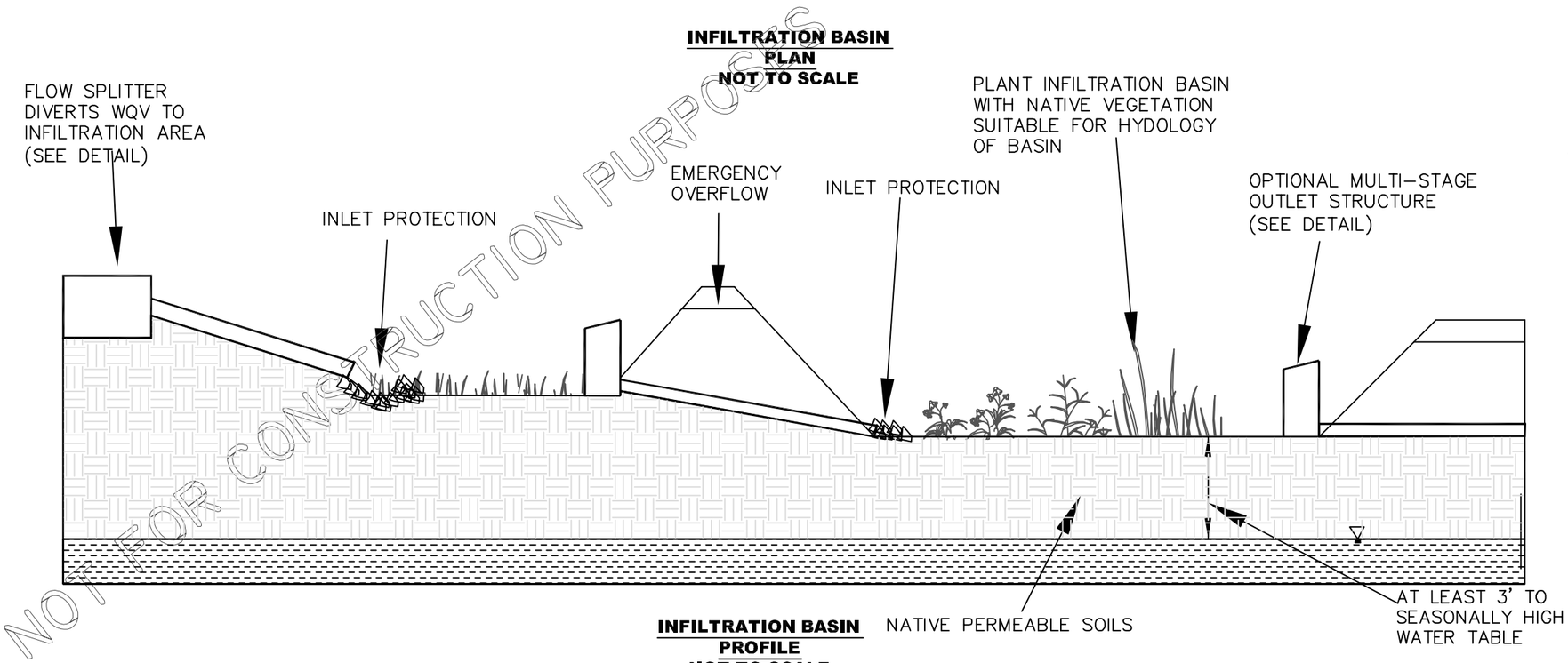


INFILTRATION BASIN
PLAN
NOT TO SCALE



INFILTRATION BASIN
PROFILE
NOT TO SCALE

CONSTRUCTION SEQUENCING:

1. PERFORM CONTINUOUS INSPECTIONS OF EROSION CONTROL PRACTICES.
2. INSTALL SILT FENCE ALONG THE PERIMETER OF THE SITE TO PREVENT SEDIMENT FROM LEAVING THE SITE DURING THE CONSTRUCTION PROCESS.
3. ALL DOWNGRADIENT PERIMETER SEDIMENT-CONTROL BMPS MUST BE IN PLACE BEFORE ANY UP GRADIENT LAND-DISTURBING ACTIVITY BEGINS.
4. REMOVE TOPSOIL FROM THE SITE AND PLACE IN TEMPORARY STOCKPILE LOCATION. TEMPORARY SEED THE STOCKPILE.
5. INSTALL UNDERGROUND UTILITIES (WATER, SANITARY SEWER, ELECTRIC AND PHONES) TAKING THE LOCATION AND FUNCTION OF STORM WATER BMPS INTO CONSIDERATION.
7. SEED AND MULCH DISTURBED AREAS ON SITE.
8. CONSTRUCT THE ROADS TAKING THE LOCATION AND FUNCTION OF STORM WATER BMPS INTO CONSIDERATION.
9. PERFORM ALL OTHER SITE IMPROVEMENTS TAKING THE LOCATION AND FUNCTION OF THE STORM WATER BMPS INTO CONSIDERATION.
10. FINAL GRADE THE SITE.
11. STABILIZE THE SITE BY IMPLEMENTING THE NATIVE SEEDING AND PLANTING PORTION OF THE LANDSCAPING PLAN.
12. INSTALL THE EROSION CONTROL BLANKET
13. REMOVE THE SILT FENCE AFTER THE SITE IS STABILIZED PER PROJECT ENGINEER APPROVAL.

GENERAL NOTES:

1. INSTALL ALL TEMPORARY EROSION CONTROL MEASURES (IN ACCORDANCE WITH MnDOT GENERAL CONDITIONS 2573) PRIOR TO THE START OF ANY CONSTRUCTION OPERATION THAT MAY CAUSE ANY SEDIMENTATION OR SILTATION AT THE SITE.
2. INSTALL STORM DRAIN INLET PROTECTION TO PREVENT CLOGGING OF THE STORM SEWER AND SEDIMENT LOADS TO DOWNSTREAM STORM WATER FACILITIES OR WATERBODIES.
3. IF THE STORMWATER BMP IS BEING DESIGNED TO SERVE AS A TEMPORARY SEDIMENT BASIN, GRADE THE BMP TO WITHIN THREE (3) FEET OF FINAL GRADE TO PROTECT THE UNDERLYING MATERIAL FROM CLOGGING. ONCE CONSTRUCTION IN THE CONTRIBUTING DRAINAGE AREA HAS BEEN COMPLETED AND THE SITE IS STABILIZED, EXCAVATE THE INFILTRATION BASIN TO FINAL GRADE AND COMPLETE CONSTRUCTION OF THE BMP.
4. GRADING OF THE INFILTRATION BASIN SHALL BE ACCOMPLISHED USING LOW-IMPACT EARTH-MOVING EQUIPMENT TO PREVENT COMPACTION OF THE UNDERLYING SOILS. SMALL TRACKED DOZERS AND BOBCATS WITH RUNNER TRACKS ARE RECOMMENDED.
5. EXCAVATE THE INFILTRATION BASIN TO THE SPECIFIED DEPTH (ELEVATION). IT IS RECOMMENDED THAT ALL SUB MATERIAL BELOW THE SPECIFIED ELEVATION SHALL BE LEFT UNDISTURBED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. GRADE TO THE DEPTH (ELEVATION) SPECIFIED IN THE CONSTRUCTION DOCUMENTS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
7. IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE BMP DURING OR IMMEDIATELY FOLLOWING EXCAVATION, THIS MATERIAL WILL NEED TO BE REMOVED FROM THE BASIN PRIOR TO INITIATING THE NEXT STEP IN THE CONSTRUCTION PROCESS. SEDIMENT THAT HAS BEEN WASHED INTO THE BASIN DURING THE EXCAVATION PROCESS CAN SEAL THE PERMEABLE MATERIAL, SIGNIFICANTLY REDUCING THE INFILTRATION CAPACITY OF THE SOILS.
8. SEEDING AND INSTALLATION OF EROSION CONTROL BLANKET SHALL BE COMPLETED WITHIN 48 HOURS OF FINAL GRADING.
9. INFILTRATION AREA SHALL BE STAKED OFF DURING CONSTRUCTION TO RESTRICT HEAVY EQUIPEMENT TRAFFIC FROM COMPACTING NATIVE SOILS.

NO.	REVISION DESCRIPTION	DATE	BY

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

Print Name:_____ Sign Name:_____ License No._____

Date _____

Date	Designed By	Drawn By

Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155-4194
Phone: (651)-296-6300
TTY: (651)-282-5332
WEBSITE:www.pca.state.mn.us/

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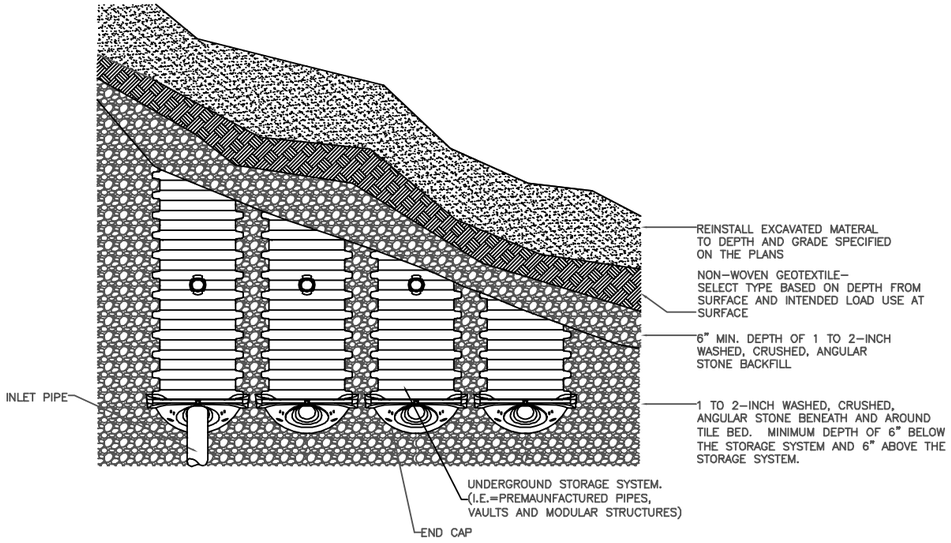
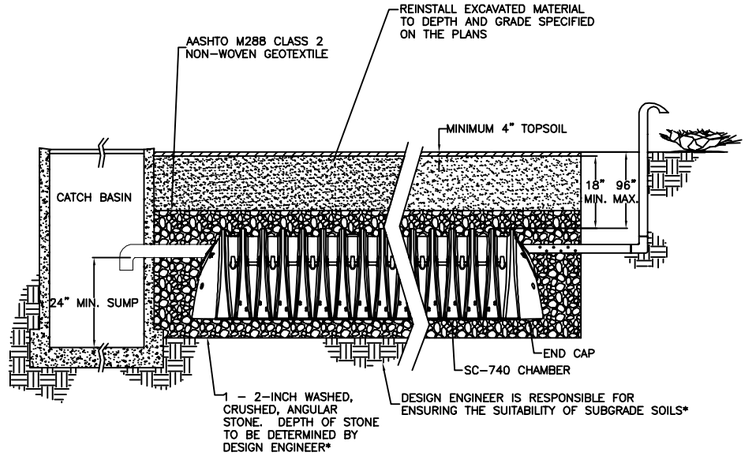
INFILTRATION BASIN PLAN AND PROFILE

Sheet No. _____ of _____ Sheets



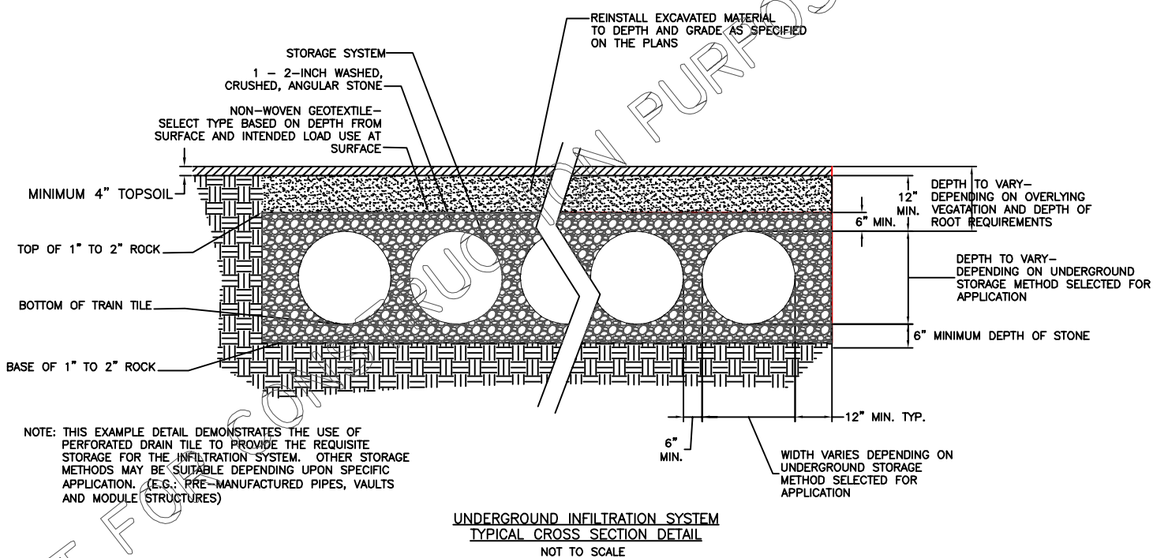
UNDERGROUND INFILTRATION SYSTEM
PLAN VIEW DETAIL

NOT TO SCALE



UNDERGROUND INFILTRATION SYSTEM
VENT DETAIL

NOT TO SCALE



NOTE: THIS EXAMPLE DETAIL DEMONSTRATES THE USE OF PERFORATED DRAIN TILE TO PROVIDE THE REQUISITE STORAGE FOR THE INFILTRATION SYSTEM. OTHER STORAGE METHODS MAY BE SUITABLE DEPENDING UPON SPECIFIC APPLICATION. (E.G.: PRE-MANUFACTURED PIPES, VAULTS AND MODULE STRUCTURES)

UNDERGROUND INFILTRATION SYSTEM
TYPICAL CROSS SECTION DETAIL

NOT TO SCALE

INFILTRATION SUBSURFACE PLANS & PROFILE

NOT TO SCALE

NO.	REVISION DESCRIPTION	DATE	BY

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

Print Name:

Sign Name: License No.

Date

Date | Designed By | Drawn By

Minnesota Pollution Control Agency
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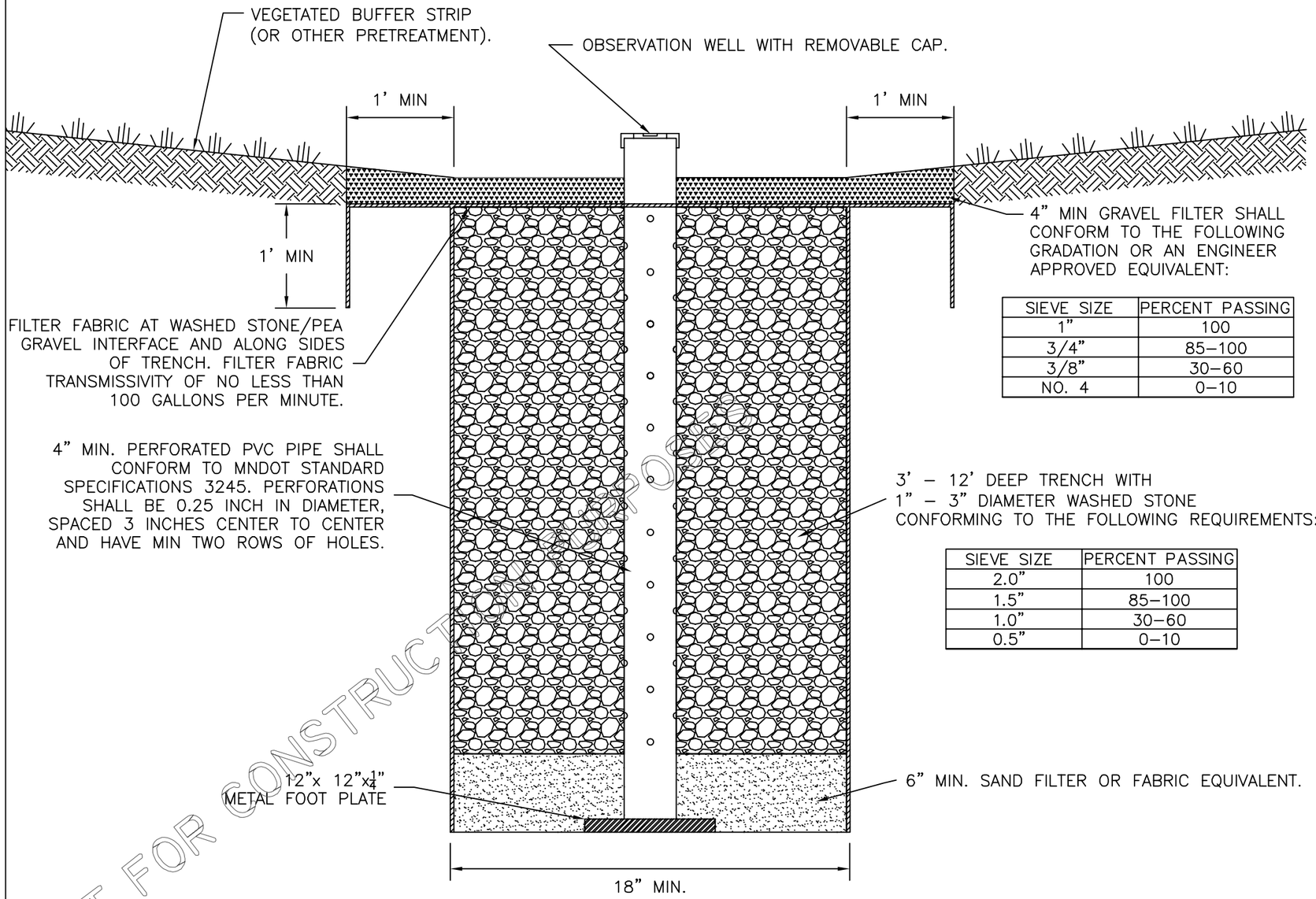
INFILTRATION SUBSURFACE PLANS AND SECTIONS

Sheet No. of Sheets



SIEVE SIZE	PERCENT PASSING
1"	100
3/4"	85–100
3/8"	30–60
NO. 4	0–10

SIEVE SIZE	PERCENT PASSING
2.0"	100
1.5"	85–100
1.0"	30–60
0.5"	0–10

TYPICAL INFILTRATION TRENCH CROSS–SECTION

NOT TO SCALE

CONSTRUCTION SEQUENCING:

1. PERFORM CONTINUOUS INSPECTION OF EROSION CONTROL PRACTICES.
2. INSTALL SILT FENCE ALONG THE PERIMETER OF THE SITE TO PREVENT SEDIMENT FROM LEAVING THE SITE DURING THE CONSTRUCTION PROCESS.
3. ALL DOWNGRADIENT PERIMETER SEDIMENT-CONTROL BMPS MUST BE IN PLACE BEFORE ANY UP GRADIENT LAND-DISTURBING ACTIVITY BEGINS.
4. REMOVE TOPSOIL FROM THE SITE AND PLACE IN TEMPORARY STOCKPILE LOCATION. TEMPORARY SEED THE STOCKPILE.
5. INSTALL UNDERGROUND UTILITIES (WATER, SANITARY SEWER, ELECTRIC AND PHONES) TAKING THE LOCATION AND FUNCTION OF STORM WATER BMPS INTO CONSIDERATION.
6. ROUGH GRADE THE SITE. IF THE INFILTRATION TRENCH IS GOING TO BE USED FOR TEMPORARY SEDIMENT CONTROL, GRADE THE INFILTRATION TRENCH TO WITHIN THREE (3) FEET OF FINAL GRADE TO PREVENT CLOGGING OF INSITU SOIL.
7. SEED AND MULCH DISTURBED AREAS ON SITE.
8. CONSTRUCT THE ROADS TAKING THE LOCATION AND FUNCTION OF STORM WATER BMPS INTO CONSIDERATION.
9. PERFORM ALL OTHER SITE IMPROVEMENTS TAKING THE LOCATION AND FUNCTION OF THE STORM WATER BMPS INTO CONSIDERATION.
10. FINAL GRADE THE SITE.
11. STABILIZE THE SITE BY IMPLEMENTING THE NATIVE SEEDING AND PLANTING PORTION OF THE LANDSCAPING PLAN.
12. REMOVE THE SILT FENCE AFTER THE SITE IS STABILIZED PER PROJECT ENGINEER APPROVAL.

GENERAL NOTES:

1. INSTALL ALL TEMPORARY EROSION CONTROL MEASURES (IN ACCORDANCE WITH MnDOT GENERAL CONDITIONS 2573) PRIOR TO SITE DISTURBANCE.
2. INSTALL STORM DRAIN INLET PROTECTION TO PREVENT CLOGGING OF THE STORM SEWER AND SEDIMENT LOADS TO DOWNSTREAM STORM WATER FACILITIES OR WATERBODIES.
3. IF THE STORM WATER BMP IS BEING DESIGNED TO SERVE AS A TEMPORARY SEDIMENT BASIN, GRADE THE BMP TO WITHIN THREE (3) FEET OF FINAL GRADE TO PREVENT CLOGGING OF INSITU SOIL. ONCE CONSTRUCTION IN THE CONTRIBUTING DRAINAGE AREA HAS BEEN COMPLETED AND THE SITE IS STABILIZED, EXCAVATE THE INFILTRATION TRENCH TO FINAL GRADE AND COMPLETE CONSTRUCTION OF THE INFILTRATION TRENCH.
4. GRADING OF THE INFILTRATION TRENCH SHALL BE ACCOMPLISHED USING LOW-IMPACT EARTH-MOVING EQUIPMENT TO PREVENT COMPACTION OF THE UNDERLYING SOILS. WIDE TRACKED VEHICLES SUCH AS BACK HOES, SMALL DOZERS AND BOBCATS ARE RECOMMENDED.
5. EXCAVATE THE INFILTRATION TRENCH TO THE SPECIFIED DEPTH (ELEVATION). ALL SUB MATERIAL BELOW THE SPECIFIED ELEVATION SHALL BE LEFT UNDISTURBED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. GRADE TO THE DEPTH (ELEVATION) SPECIFIED IN THE CONSTRUCTION DOCUMENTS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
7. IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE BMP DURING OR IMMEDIATELY FOLLOWING EXCAVATION, THE SEDIMENT WILL NEED TO BE REMOVED FROM THE INFILTRATION TRENCH PRIOR TO INITIATING THE NEXT STEP IN THE INFILTRATION TRENCH CONSTRUCTION PROCESS.
8. MATERIAL EXCAVATED FROM THE INFILTRATION TRENCH SHALL BE DISPOSED OF ON-SITE AT LOCATIONS (TEMPORARY STOCKPILE AREAS) DESIGNATED BY ENGINEER.
9. CLEAN, WASHED 1 TO 3-INCH GRAVEL SHALL BE PLACED IN THE BOTTOM OF THE INFILTRATION TRENCH TO THE DEPTH SPECIFIED IN THE CONSTRUCTION DOCUMENTS. GRAVEL SHOULD BE PLACED IN LIFTS AND LIGHTLY COMPACTED WITH PLATE COMPACTORS.

NO.	REVISION DESCRIPTION	DATE	BY

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

Print Name:

Sign Name: License No.

Date

Date | Designed By | Drawn By

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TYPICAL INFILTRATION TRENCH CROSS–SECTION

Sheet No. of Sheets