

POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

PENNSYLVANIA PIPELINE PROJECT EBENSBURG STATION

CAMBRIA TOWNSHIP, CAMBRIA COUNTY, PENNSYLVANIA
NOVEMBER 2016

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PREPARED BY:

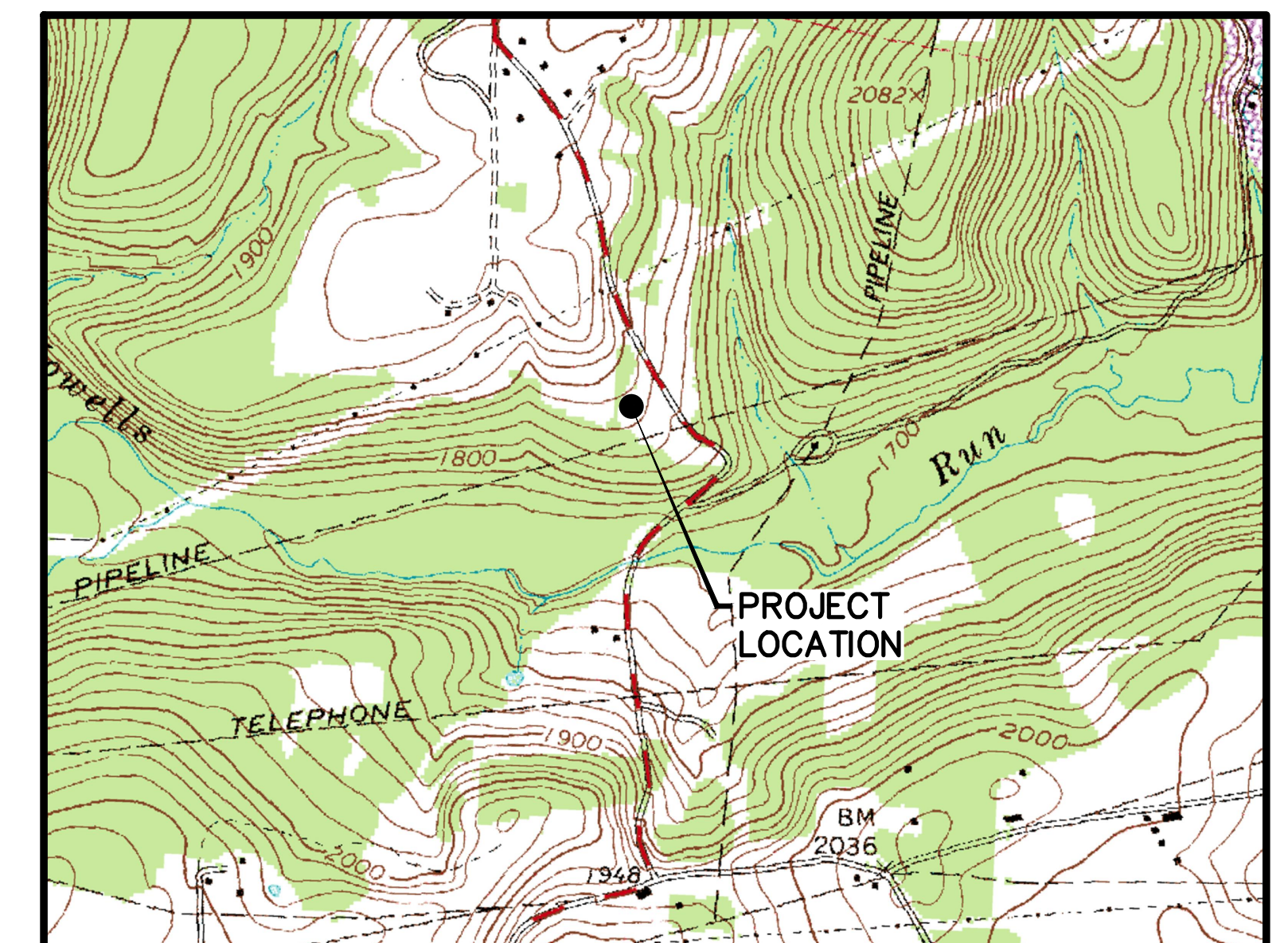


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661 ANDERSEN DRIVE – FOSTER PLAZA 7, PITTSBURGH, PA 15220
TEL: (412) 921-7090 | FAX: (412) 921-4040

PREPARED FOR:

SUNOCO PIPELINE L.P.
SINKING SPRING, PENNSYLVANIA 19608



LOCATION MAP
EBENSBURG STATION
CAMBRIA TOWNSHIP, CAMBRIA COUNTY, PENNSYLVANIA

0 1000 2000
SCALE IN FEET



NOTE: A GEOTECHNICAL REPORT IS BEING PREPARED SEPARATELY FROM THIS PLAN. THE CERTIFYING ENGINEER OF THIS PLAN HAS NOT ASSESSED AND DOES NOT CERTIFY THE GEOTECHNICAL FEATURES OF THIS PLAN, INCLUDING FOUNDATION DESIGN AND SLOPE STABILITY.



NOTES:

1. SURVEY COMPLETED BY TRICO SURVEYING & MAPPING, INC.
2. BOUNDARY AND ADJACENT PROPERTY LINES FROM TRICO SURVEYING & MAPPING, INC.
3. THE PROJECT TAKES PLACE WITHIN CAMBRIA TOWNSHIP, CAMBRIA COUNTY, PENNSYLVANIA.
4. THE RIGHTS-OF-WAYS AND EASEMENTS SHOWN ON THIS PLAN ARE THE RESPONSIBILITY OF SUNOCO PIPELINE L.P. TO SECURE WITH THE INDIVIDUAL PROPERTY OWNER. THE RIGHTS-OF-WAY AND EASEMENTS SHOWN ON THIS PERMIT DRAWING REPRESENT THE BEST AVAILABLE PROPERTY INFORMATION AS PROVIDED TO TETRA TECH, INC. BY SUNOCO PIPELINE L.P. THE RIGHTS-OF-WAY AND EASEMENTS SHALL BE VERIFIED AND LOCATED IN THE FIELD BY SUNOCO PIPELINE L.P.
5. PAST AND PRESENT LAND USE IS RESIDENTIAL AREAS. POST CONSTRUCTION LAND USE WILL BE A MAINTAINED GRAVEL PAD, ACCESS ROAD, AND VEGETATED AREAS.
6. COMPOST FILTER SOCK INSTALLATION TO BE ADJUSTED AS NEEDED TO ACCOMMODATE ACTUAL CONTOURS IDENTIFIED IN FIELD DURING VARIOUS PHASE OF THE PROJECT.
7. A HIGHWAY OCCUPANCY PERMIT ISSUED BY THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION IS REQUIRED PURSUANT TO §420 OF THE ACT OF JUNE 1, 1945 (P.L. 1242, NO. 428) KNOWN AS THE STATE HIGHWAY LAW.
8. PAVE DRIVEWAY TO THE LIMITS INDICATED. CONSTRUCT ASPHALT PAVEMENT UPON COMPLETION OF ALL SITE WORK. PROVIDE A FINISHED SURFACE WITH A CROSS-SLOPE OF 1/4" PER FOOT FROM THE HIGH SIDE FOR THE ENTIRE WIDTH OF THE DRIVEWAY. CONSTRUCT THE ASPHALT PAVEMENT BY PLACING A 2" COMPACTED LAYER OF BITUMINOUS WEARING COURSE ID-3 IN ACCORDANCE WITH PENNDOT PUBLICATION 408 ON 6" OF COMPACTED 2A. COMPACT THE 2A UNTIL NO MOVEMENT IS EVIDENT UNDER CONSTRUCTION EQUIPMENT.
9. THE RESPONSIBILITY FOR LONG TERM OPERATION AND MAINTENANCE OF THE BEST MANAGEMENT PRACTICES DETAILED ON THESE PLANS IS A COVENANT THAT RUNS WITH THE LAND AND IS BINDING AND ENFORCEABLE BY SUBSEQUENT GRANTEEES. AN INSTRUMENT SHALL BE RECORDED AT THE RECORDER OF DEEDS TO PROVIDE FOR NECESSARY ACCESS FOR LONG TERM OPERATION AND MAINTENANCE OF THE BEST MANAGEMENT PRACTICES.
10. THE PROJECT AREA SURFACE WATER RUNOFF DRAINS 500 FT TO THE SOUTHEAST TO SANDERS RUN AND HOWELLS RUN DESIGNATED AS COLD WATER FISHERIES (CWF) UNDER PA CODE 25 CHAPTER 93.
11. FOR EACH INSPECTION AND MAINTENANCE EVENT A WRITTEN REPORT MUST BE GENERATED AND KEPT ON SITE.
12. PRIOR TO APPLICATION FOR NOTICE OF TERMINATION; THE PCSM BMP INSTRUMENT WILL BE RECORDED WITH THE CAMBRIA COUNTY RECORDER OF DEEDS.
13. A LICENSED PROFESSIONAL SHALL OVERSEE ALL INSTALLATION AND TESTING PROCEDURES FOR THE INFILTRATION FILTERS, UNDERGROUND STORAGE PIPES, LEVEL SPREADER, AND VEGETATED CHANNELS.

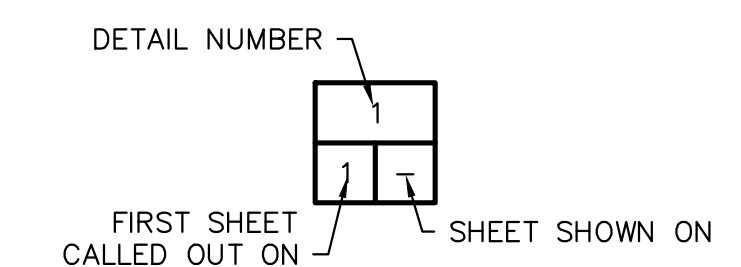
PROJECT DESCRIPTION:

THE PROJECT INVOLVES CONSTRUCTION OF THE EBENSBURG PUMP STATION, WHICH WILL BE CONNECTED TO A PROPOSED TRANSMISSION PIPELINE. CONSTRUCTION ACTIVITIES WILL INVOLVE INSTALLATION OF A ROCK CONSTRUCTION ENTRANCE, CLEARING AND GRUBBING, PUMP STATION INSTALLATION, AND SITE RESTORATION. PUMP STATION INSTALLATION WILL INCLUDE A POWER DISTRIBUTION CENTER, ENCLOSED FLARE, KNOCKOUT TANK, PUMP MOTOR, CABLE TRAY, PIPE RACK, LIGHT POLE, AND PIPE SUPPORTS. THE PROPOSED EBENSBURG PUMP STATION WILL BE CONSTRUCTED WITHIN A LOD OF APPROXIMATELY 4.44 ACRES IN CAMBRIA COUNTY.

LEGEND

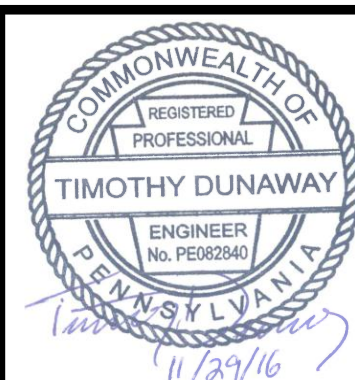
- 1.320— EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING STORM PIPE
- ~~~~~ EXISTING TREE LINE
- x-x-x-x- EXISTING FENCELINE
- EXISTING ENCLOSURE
- > EXISTING STREAM WITH FLOW DIRECTION
- OVH— EXISTING ELECTRIC OVERHEAD
- UE— EXISTING ELECTRIC UNDERGROUND
- ⊙ EXISTING LIGHT POLE
- W— EXISTING WATER LINE
- GAS— EXISTING GAS LINE
- SAN— EXISTING SANITARY SEWER LINE
- PROPERTY LINE
- PARCEL SETBACK
- PROPOSED FENCE LINE
- ===== PROPOSED STORMWATER SYSTEM
- x-x-x-x- SECURITY FENCE
- PROPOSED 10' CONTOUR
- PROPOSED 2' CONTOUR
- EASEMENT
- ROAD CENTERLINE
- ⊙ UTILITY POLE
- REBAR FOUND
- ⊙ CLEANOUT
- ⊙ DROP INLET
- ⊙ MANHOLE
- RIGHT-OF-WAY
- ε-ε-ε— PROPOSED ELECTRIC UNDERGROUND
- OH— PROPOSED ELECTRIC OVERHEAD
- 12-12-12-12- 12" COMPOST FILTER SOCK
- 18-18-18-18- 18" COMPOST FILTER SOCK
- 24-24-24-24- 24" COMPOST FILTER SOCK
- 32-32-32-32- 32" COMPOST FILTER SOCK
- ▭ LEVEL SPREADER
- LIMIT OF DISTURBANCE
- ▨ STRUCTURE REMOVAL/DEMOLITION AREA
- VC → VEGETATED CHANNEL
- ▲ ROCK FILTER
- ▩ BERM

DETAIL INDICATOR



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1	TD	11/30/16	REVISED FOR DEP TECHNICAL COMMENTS



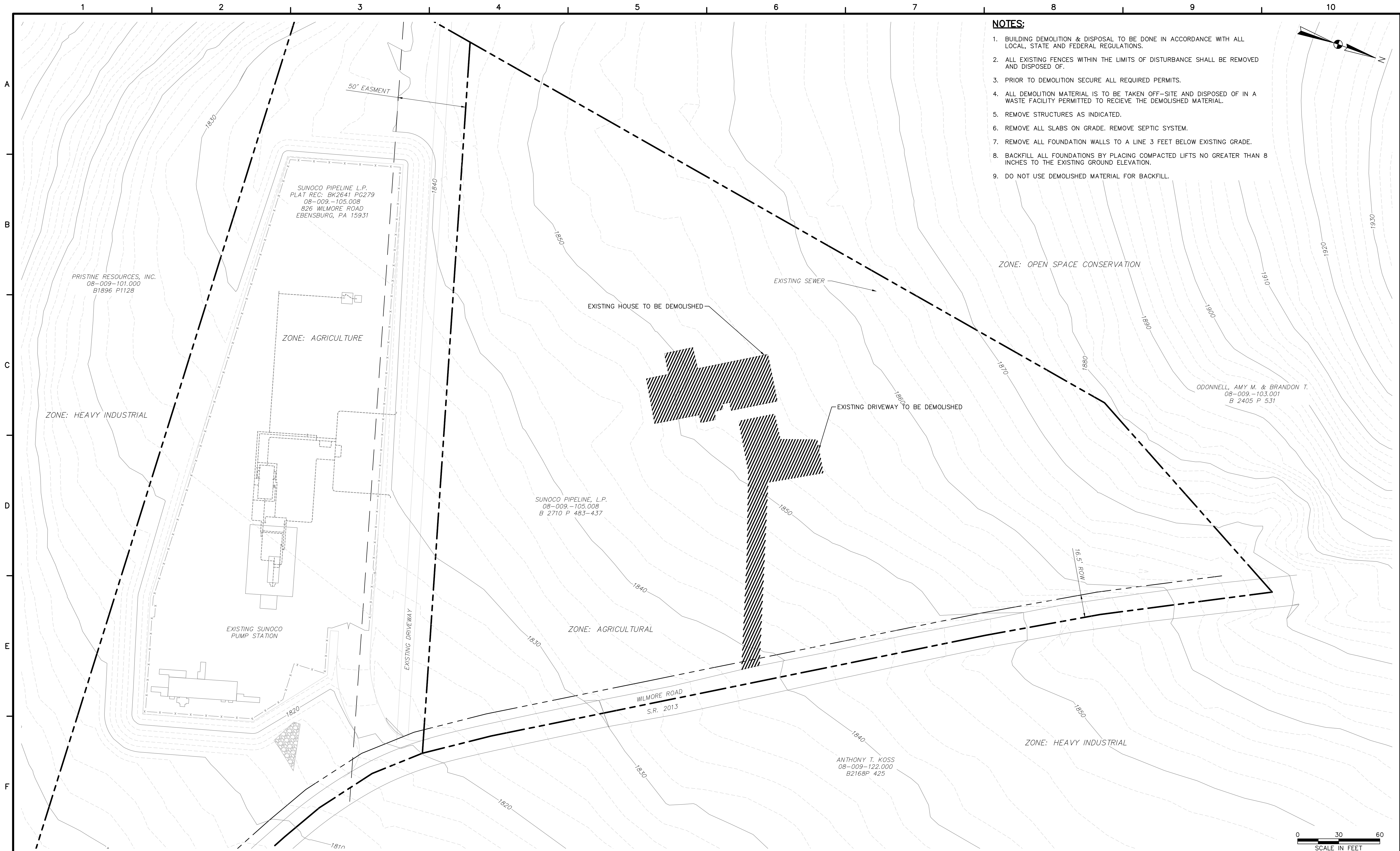
SUNOCO PIPELINE L.P.
SINKING SPRING, PENNSYLVANIA

EBENSBURG STATION

ESCGP-2 POST CONSTRUCTION STORMWATER PLAN

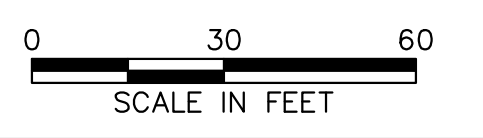
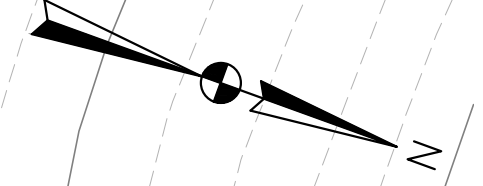
GENERAL NOTES & LEGEND

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C-1	
SHEET	1 OF 5



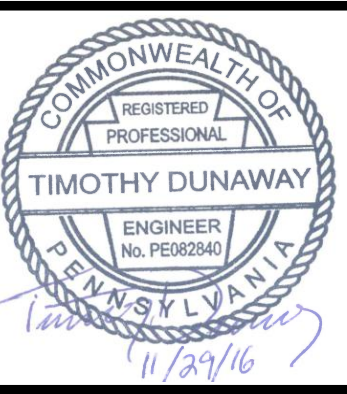
NOTES:

1. BUILDING DEMOLITION & DISPOSAL TO BE DONE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
2. ALL EXISTING FENCES WITHIN THE LIMITS OF DISTURBANCE SHALL BE REMOVED AND DISPOSED OF.
3. PRIOR TO DEMOLITION SECURE ALL REQUIRED PERMITS.
4. ALL DEMOLITION MATERIAL IS TO BE TAKEN OFF-SITE AND DISPOSED OF IN A WASTE FACILITY PERMITTED TO RECEIVE THE DEMOLISHED MATERIAL.
5. REMOVE STRUCTURES AS INDICATED.
6. REMOVE ALL SLABS ON GRADE. REMOVE SEPTIC SYSTEM.
7. REMOVE ALL FOUNDATION WALLS TO A LINE 3 FEET BELOW EXISTING GRADE.
8. BACKFILL ALL FOUNDATIONS BY PLACING COMPACTED LIFTS NO GREATER THAN 8 INCHES TO THE EXISTING GROUND ELEVATION.
9. DO NOT USE DEMOLISHED MATERIAL FOR BACKFILL.



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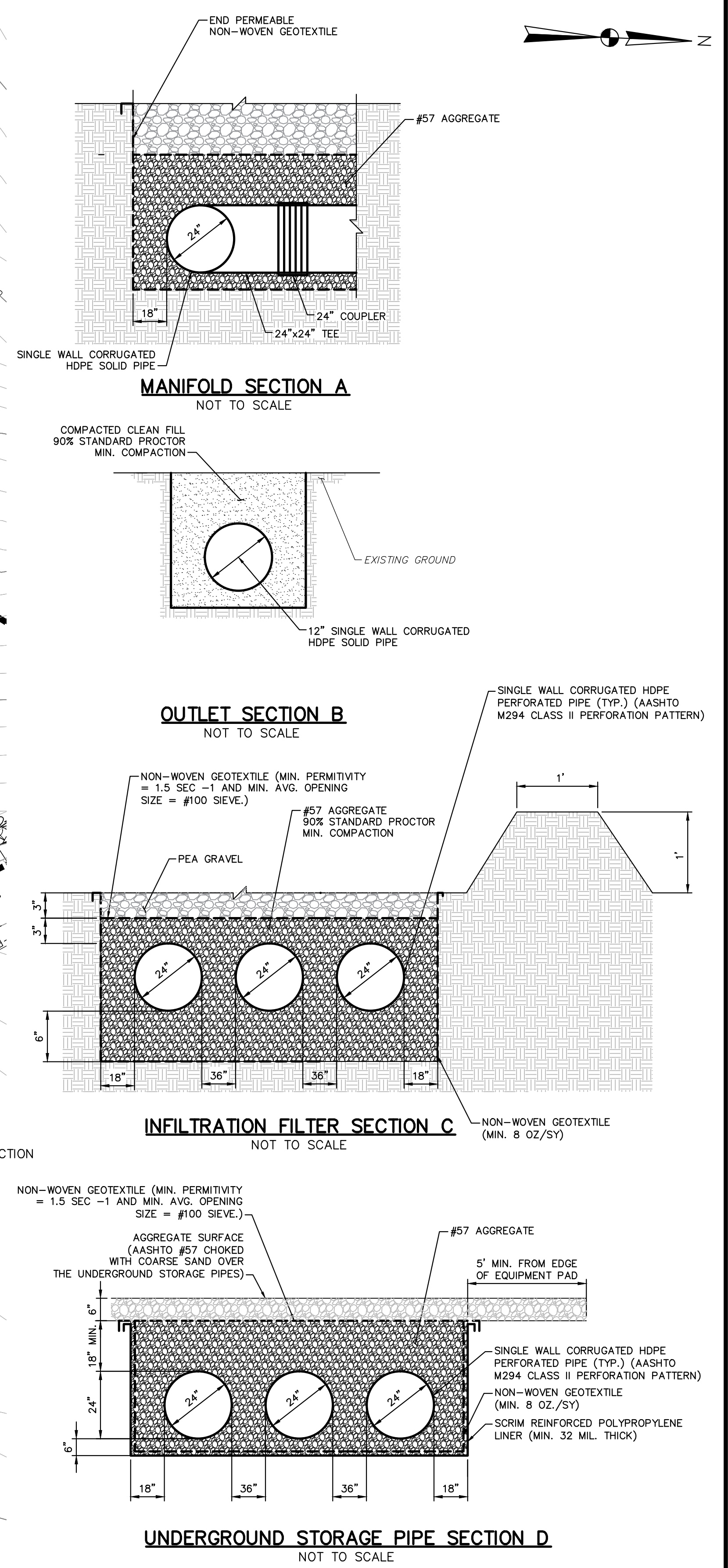
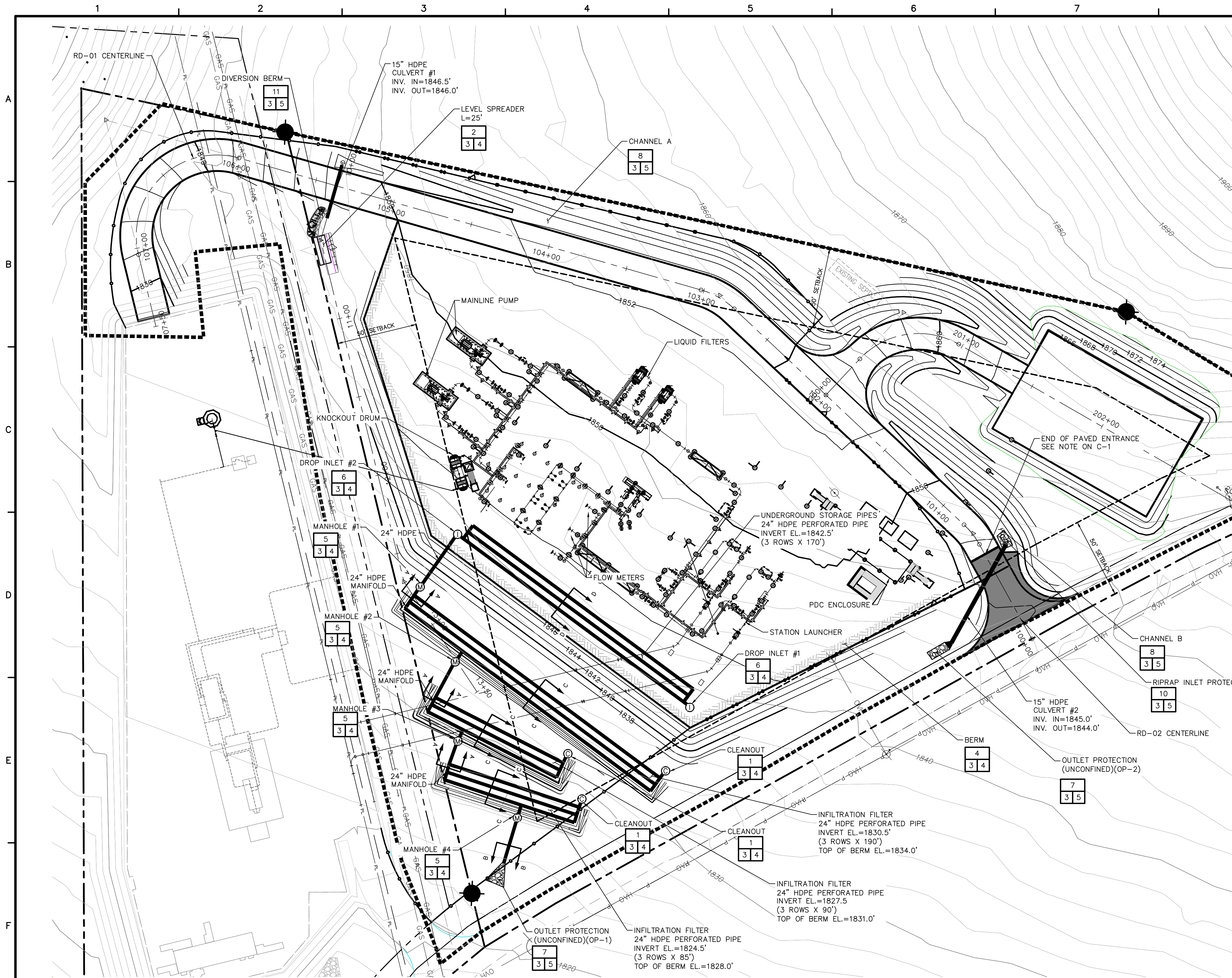
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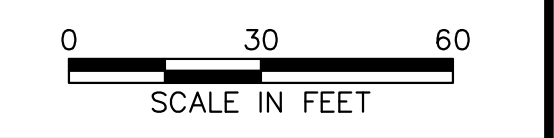
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ESCCP-2 POST CONSTRUCTION STORMWATER PLAN
 EXISTING CONDITIONS PLAN

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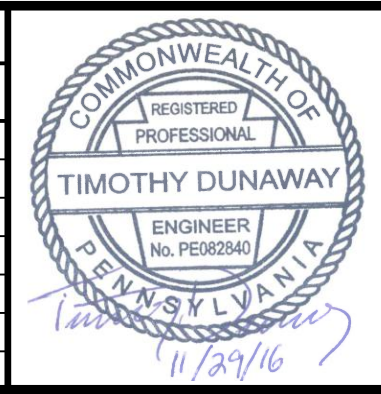


NOTE:
 1. EXISTING WETLANDS ARE NOT PRESENT WITHIN THE LIMITS OF DISTURBANCE OF THE PROJECT.



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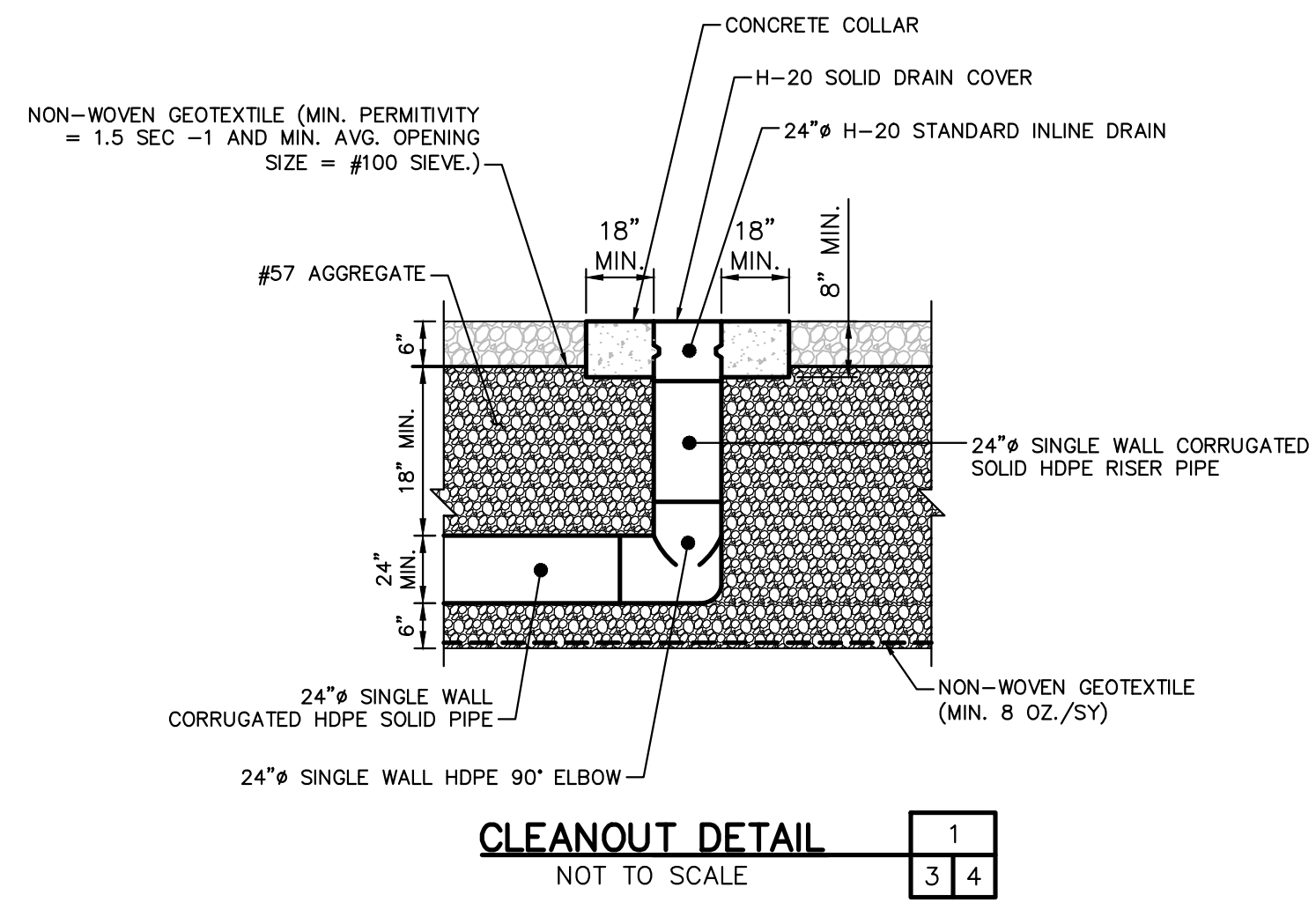
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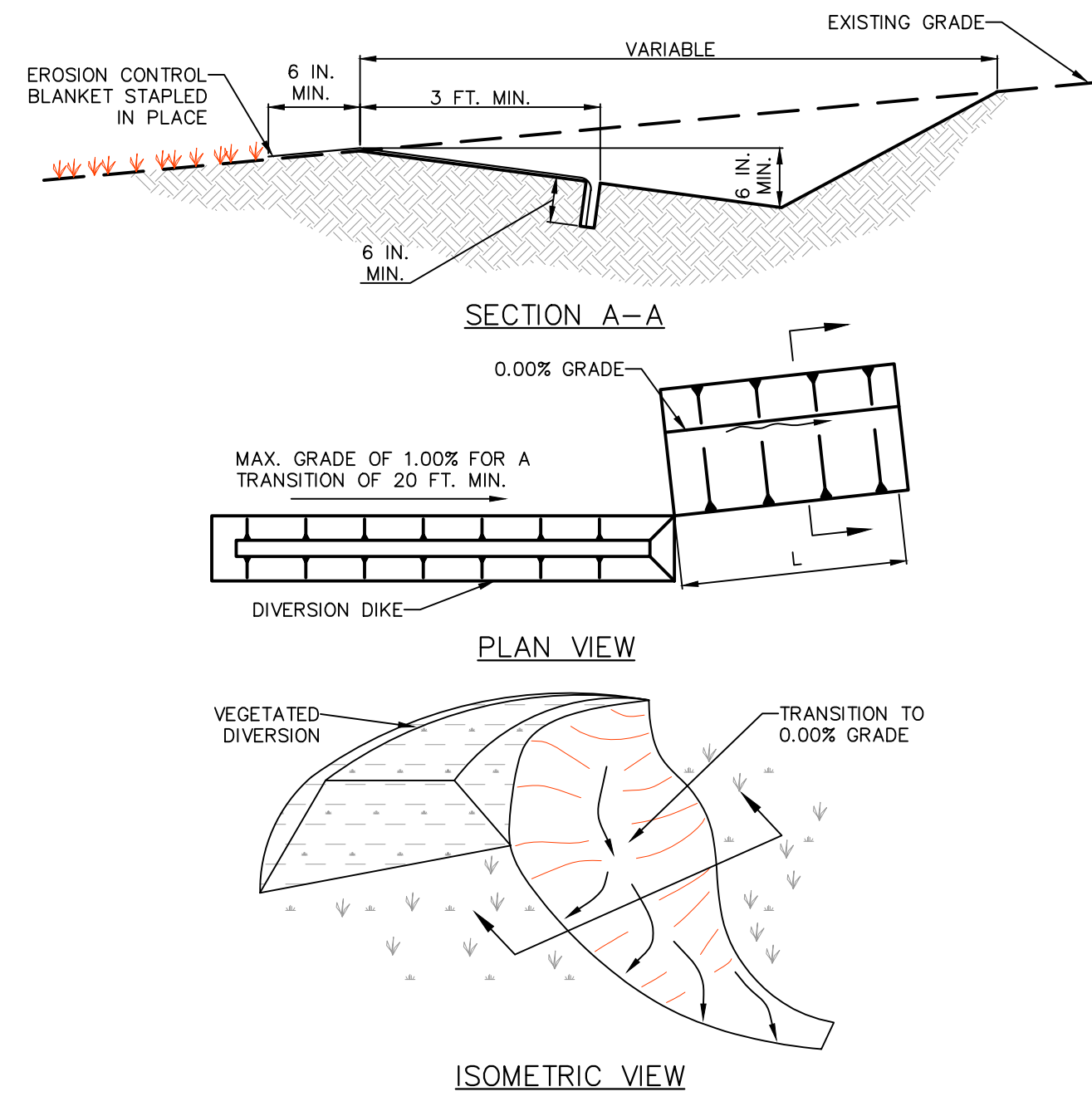
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C-3
 SHEET 3 OF 5

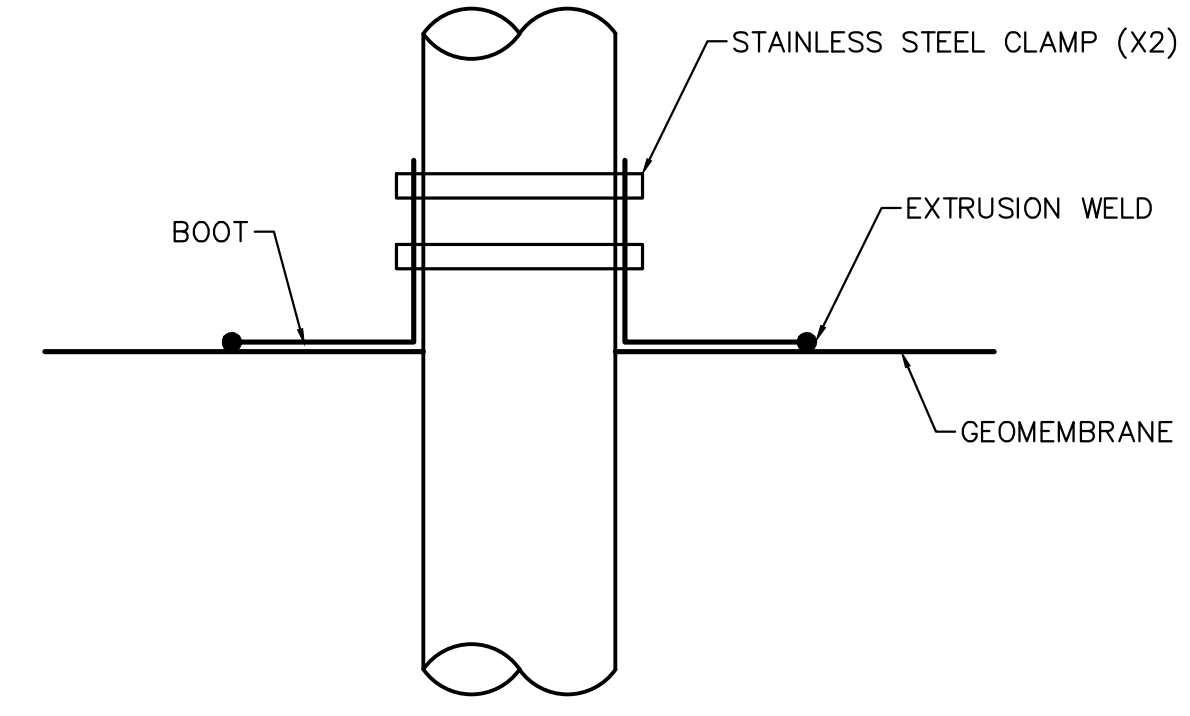
A



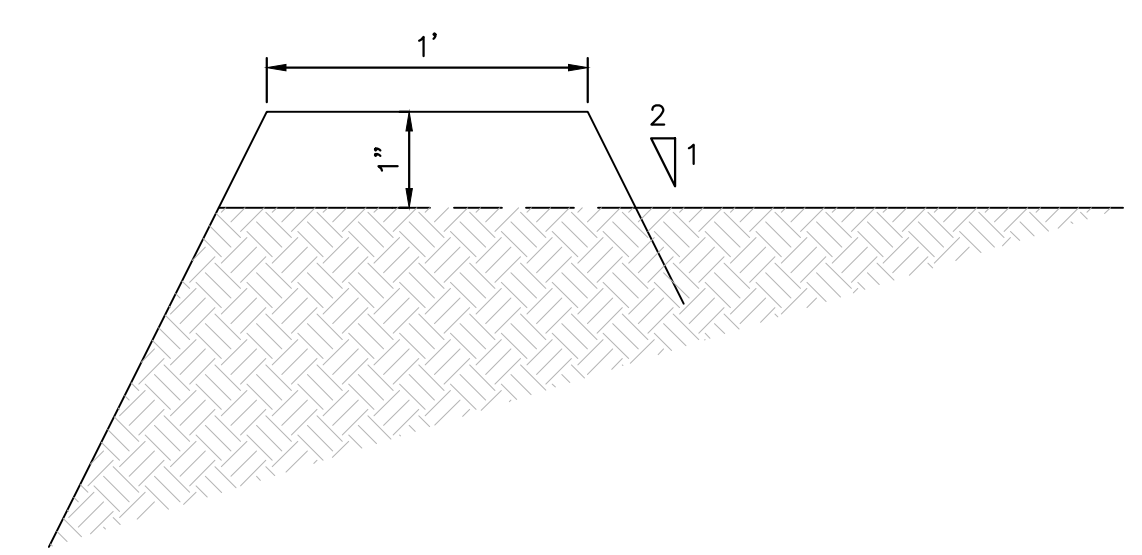
CLEANOUT DETAIL 1
NOT TO SCALE 3 4



EARTHEN LEVEL SPREADER 2
NOT TO SCALE 3 4



STANDARD GEOMEMBRANE BOOT PENETRATION DETAIL 3
NOT TO SCALE 4 4



BERM DETAIL 4
NOT TO SCALE 3 4

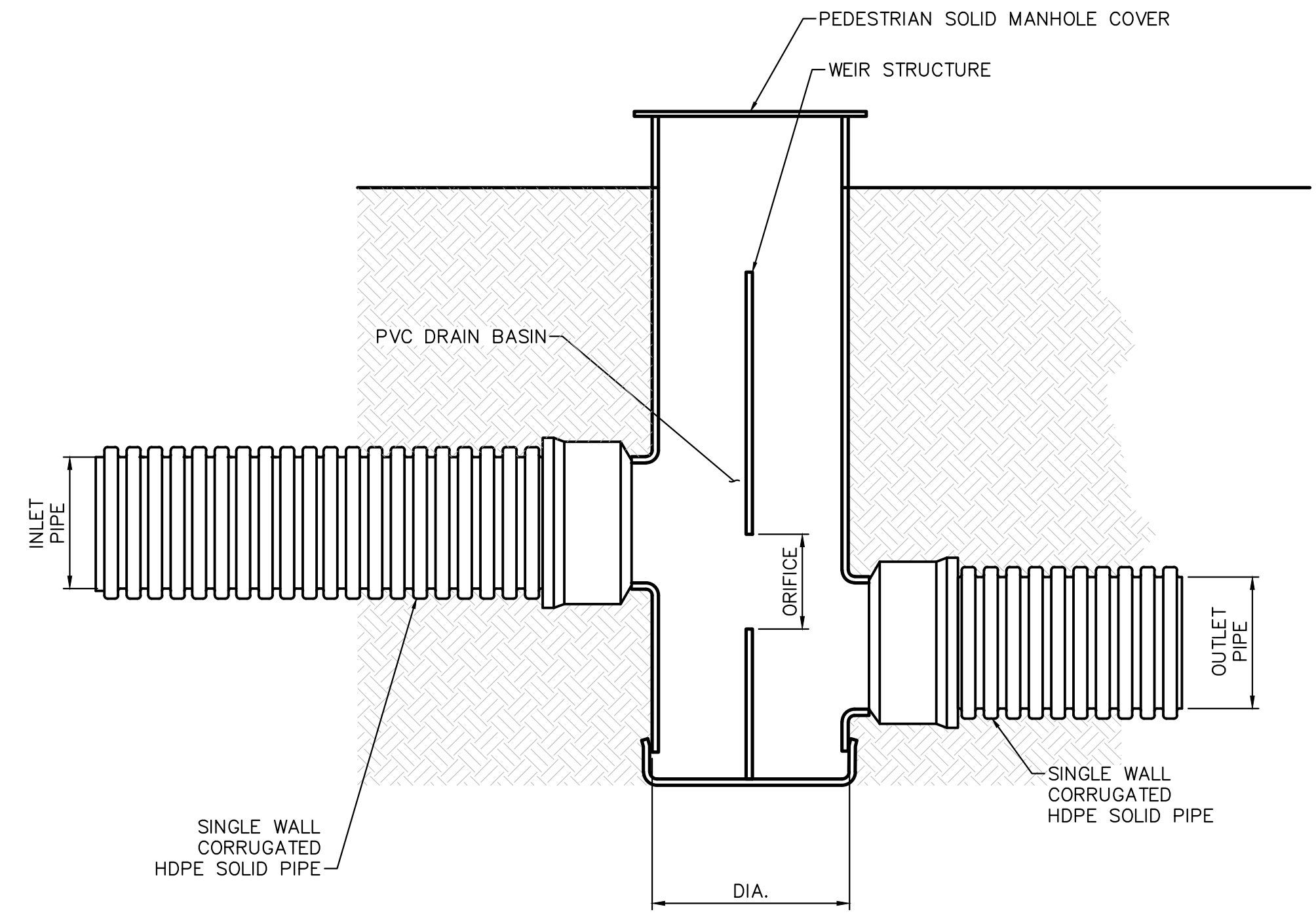
B

C

D

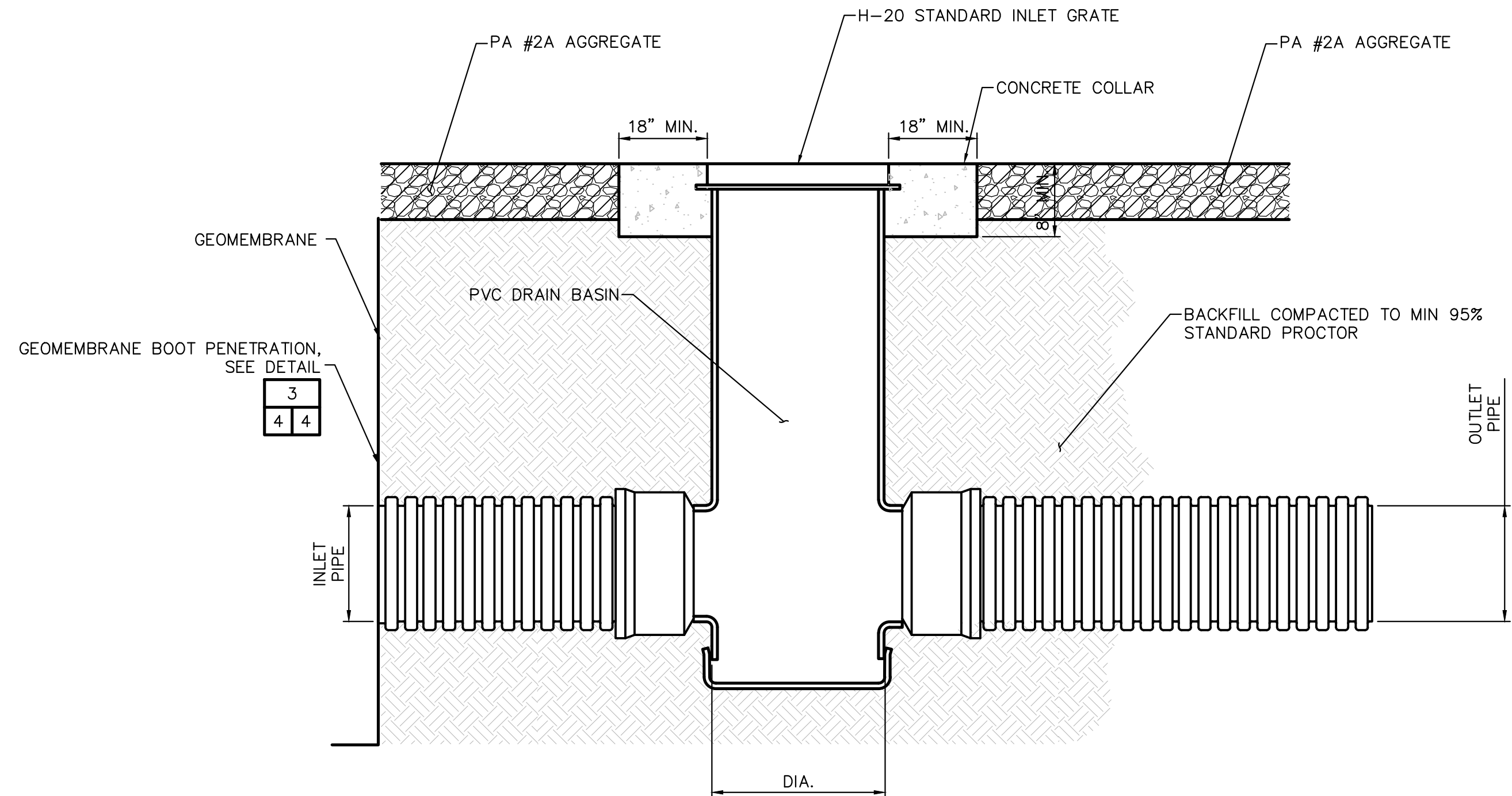
E

F



Manhole Details									
MH #	Manhole Diameter (IN)	Manhole Top Elev. (FT)	Interior Weir Elev. (FT)	Orifice Diameter (IN)	Orifice Invert Elev. (FT)	Inlet Pipe Diameter (IN)	Inlet Pipe Invert Elev. (FT)	Outlet Pipe Diameter (IN)	Outlet Pipe Invert Elev. (FT)
1	30	1835.00	N/A	N/A	N/A	18	1831.50	24	1830.50
2	30	1834.50	1833.00	7	1830.50	24	1830.50	24	1827.50
3	30	1831.50	1830.00	6	1827.50	24	1827.50	24	1824.50
4	30	1828.50	1826.80	N/A	N/A	24	1824.50	12	1824.00

MANHOLE DETAIL 5
NOT TO SCALE 3 4



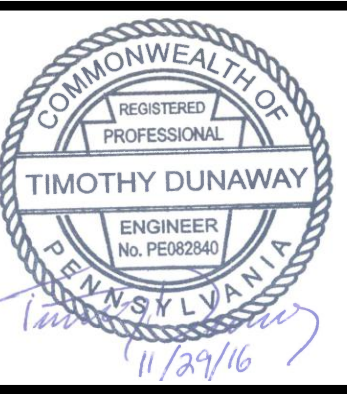
Drop Inlet Details									
Inlet #	Drop Inlet Diameter (IN)	Drop Inlet Top Elev. (FT)	Interior Weir Elev. (FT)	Orifice Diameter (IN)	Orifice Invert Elev. (FT)	Inlet Pipe Diameter (IN)	Inlet Pipe Invert Elev. (FT)	Outlet Pipe Diameter (IN)	Outlet Pipe Invert Elev. (FT)
1	30	1847.00	N/A	N/A	N/A	N/A	N/A	24	1842.50
2	30	1847.00	1846.00	15	1842.00	24	1842.50	18	1841.00

DROP INLET DETAIL 6
NOT TO SCALE 3 4



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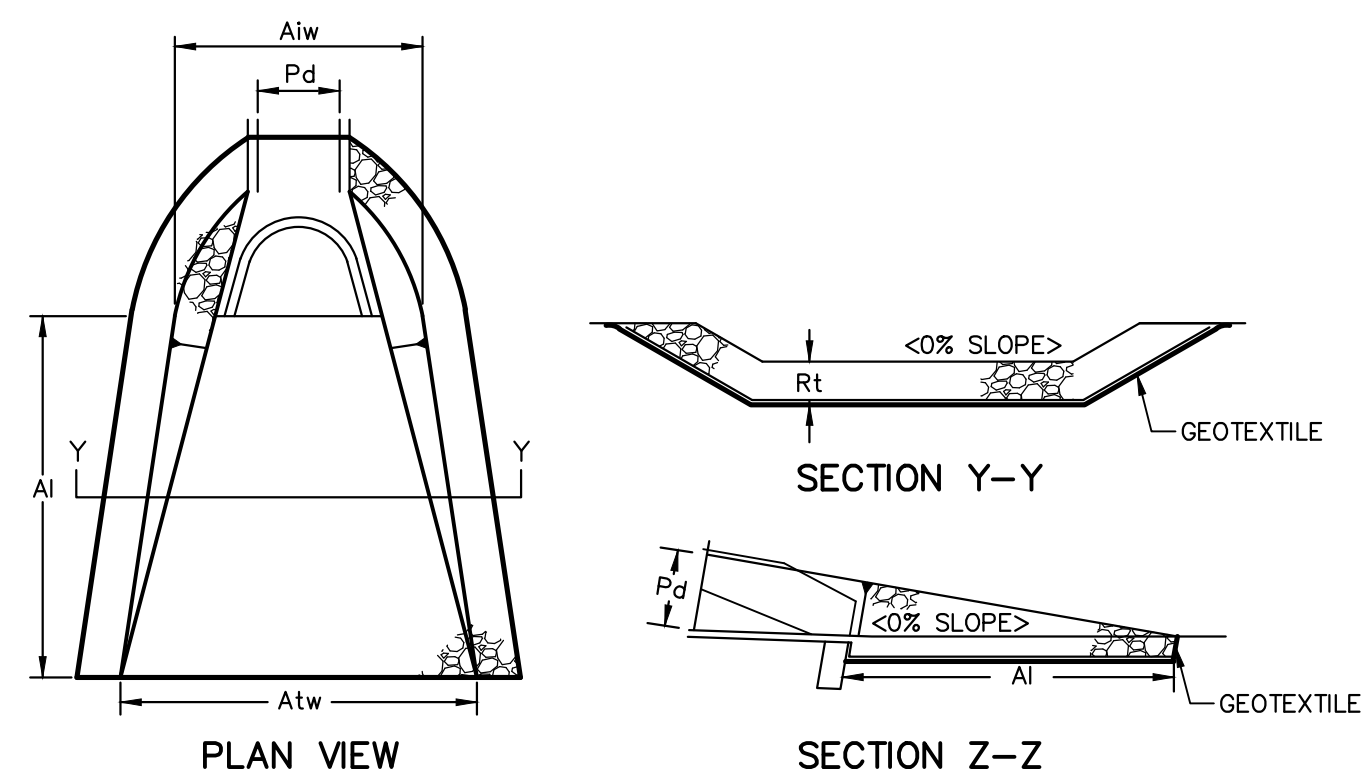
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ESCGP-2 POST CONSTRUCTION STORMWATER PLAN

STORMWATER MANAGEMENT DETAILS (1 OF 2)

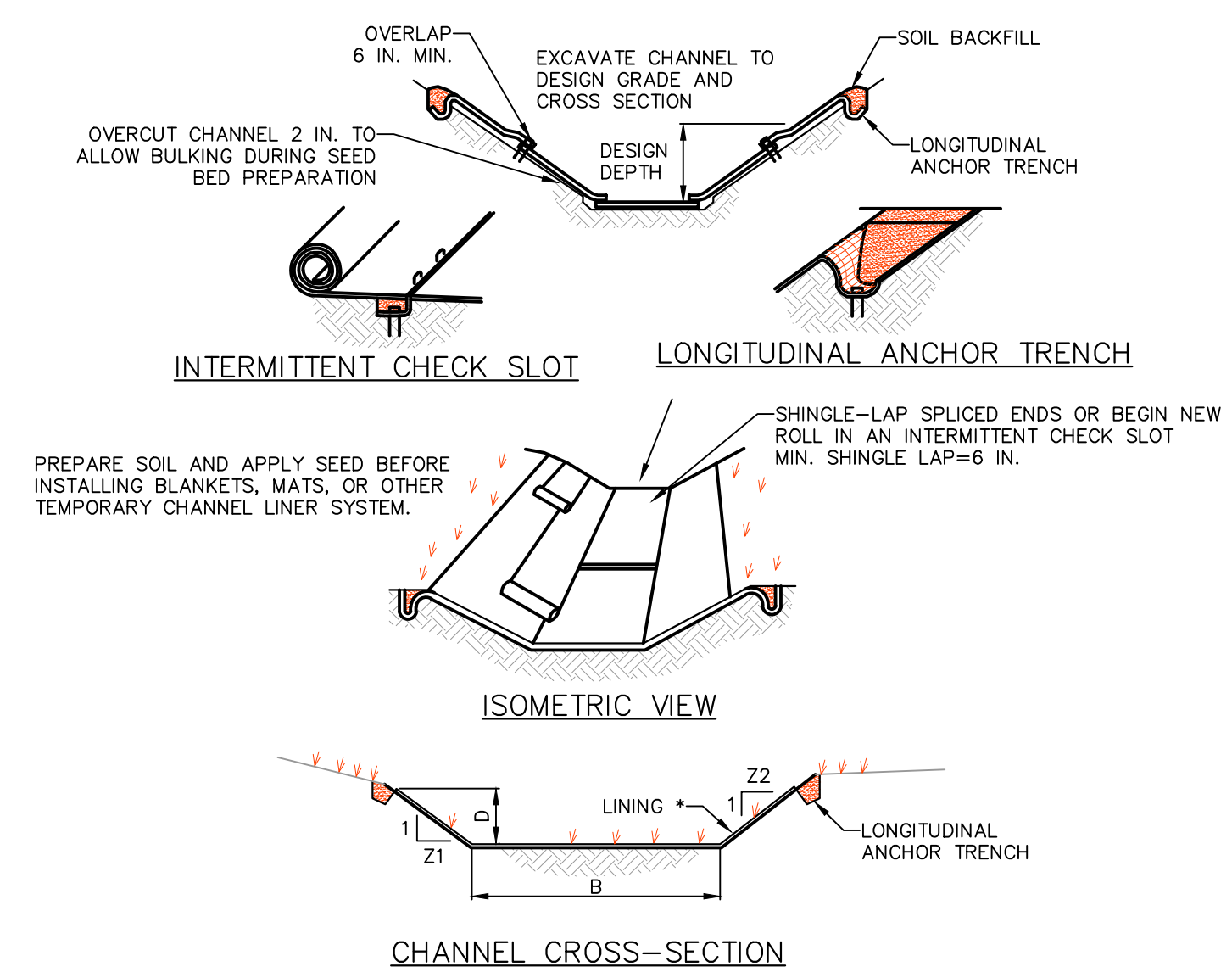
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C-4	
SHEET	4 OF 5

A
B
C
D
E
F



OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP		APRON		
		SIZE (R-)	THICK. Rt (IN)	LENGTH Ai (FT)	INITIAL WIDTH Aiw (FT)	TERMINAL WIDTH Atw (FT)
OP-1	12	R-4	18	10	3	13
OP-2	15	R-3	9	9	3	12

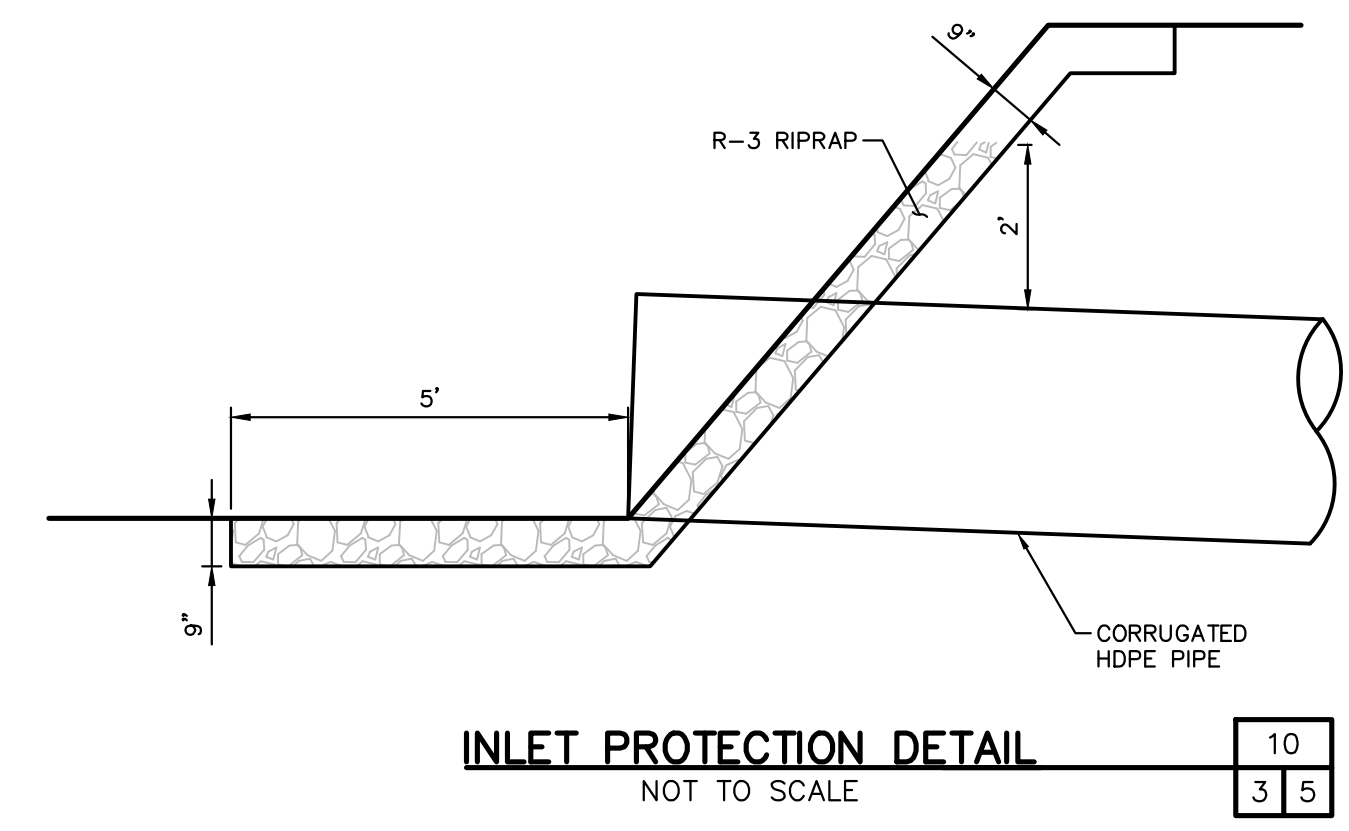
RIPRAP APRONS AT PIPE OUTLETS WITH FLARED END SECTIONS
NOT TO SCALE



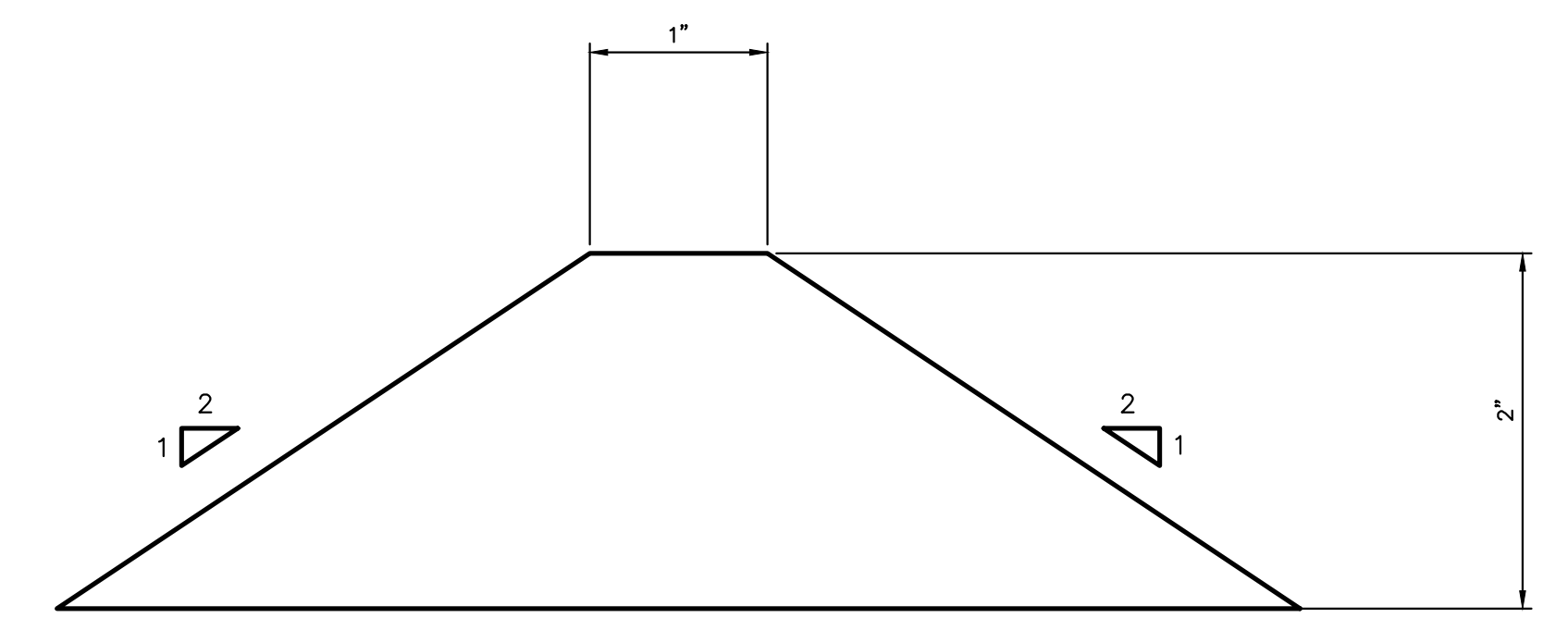
* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

CHANNEL NO.	BOTTOM WIDTH B (FT)	DEPTH D (FT)	Z1 (FT)	Z2 (FT)	LINING*
A	2	2	2	2	GRASS + TRM
B	2	2	2	2	GRASS + TRM

VEGETATED CHANNELS
NOT TO SCALE



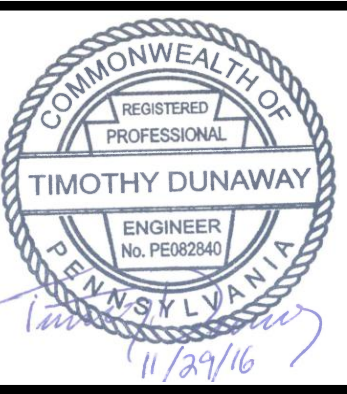
INLET PROTECTION DETAIL
NOT TO SCALE



DIVERSION BERM
NOT TO SCALE

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ESCGP-2 POST CONSTRUCTION STORMWATER PLAN

STORMWATER MANAGEMENT DETAILS (2 OF 2)

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C-5	
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