

TESD CONESTOGA
ATHLETIC FIELDS

TREDYFFRIN TOWNSHIP
CHESTER COUNTY, PA

HSA PROJECT # :21-019



PROJECT TEAM

CLIENT
Tredyffrin/Easttown School District
940 West Valley Road, Suite 1700
Wayne, PA 19087
(610) 240-1900

ARCHITECTURAL
Heckendorn Shiles Architects
347 East Conestoga Road
Wayne, PA 19087
610-994-3500

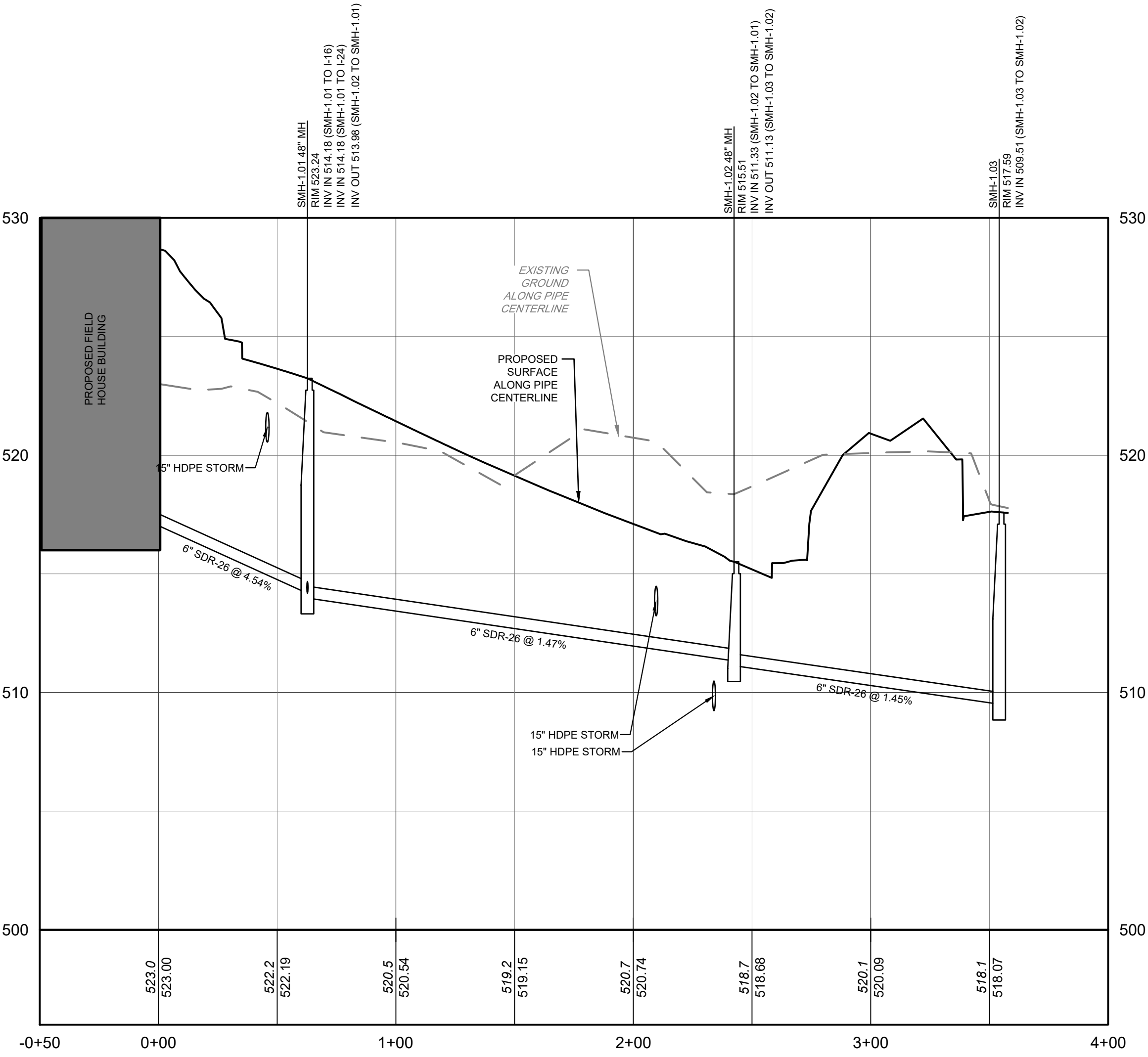
STRUCTURAL ENGINEER
N/A

MEPFP ENGINEER
Schiller and Hersh Associates, Inc.
636 Skippack Pike, Suite 200
Blue Bell, PA 19422
(215) 886-8947

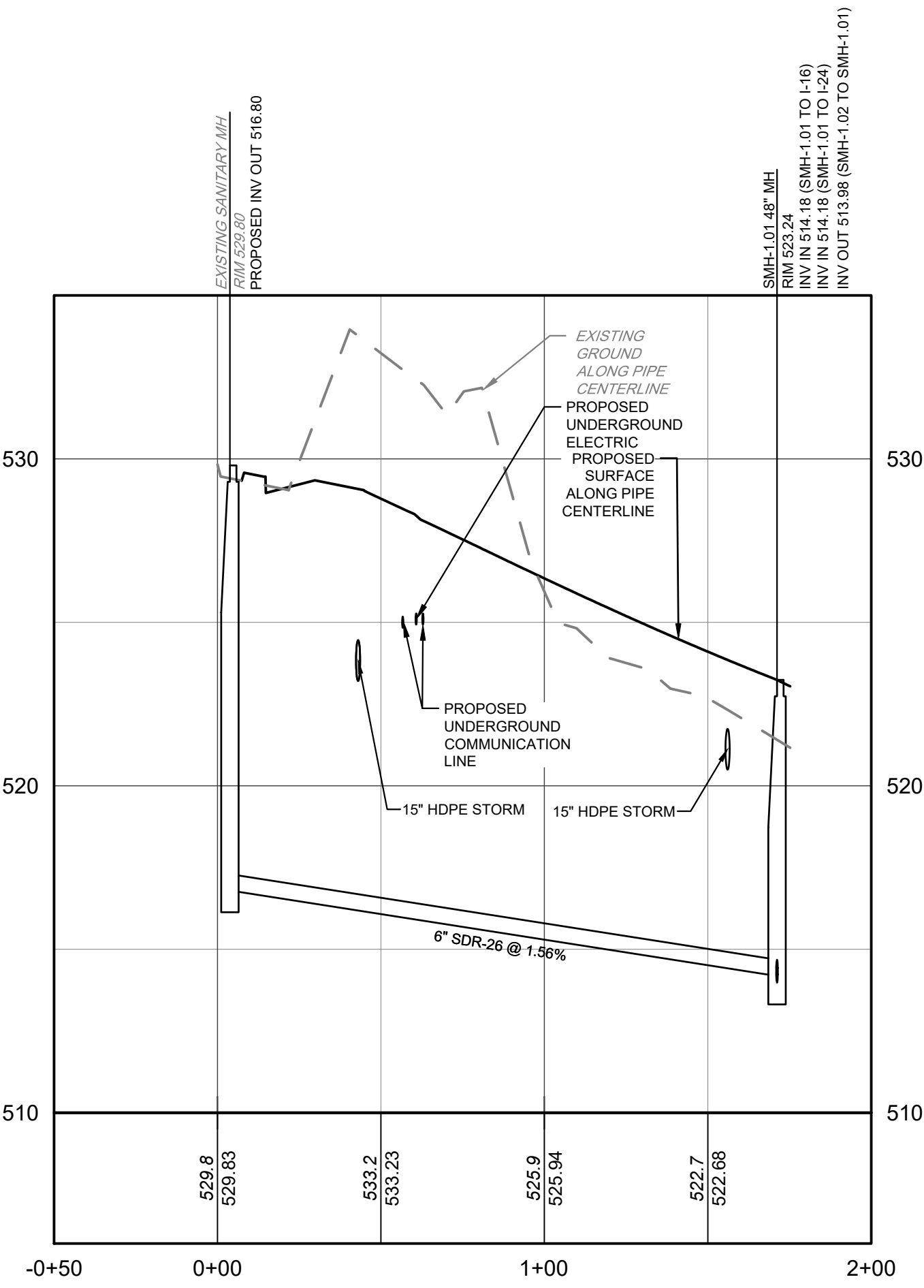
SITE / CIVIL
Pennoni Associates, Inc.
158 W Gay Street, Suite 300
West Chester, PA 19380
(610) 429-8907

MISC DISCIPLINE
N/A

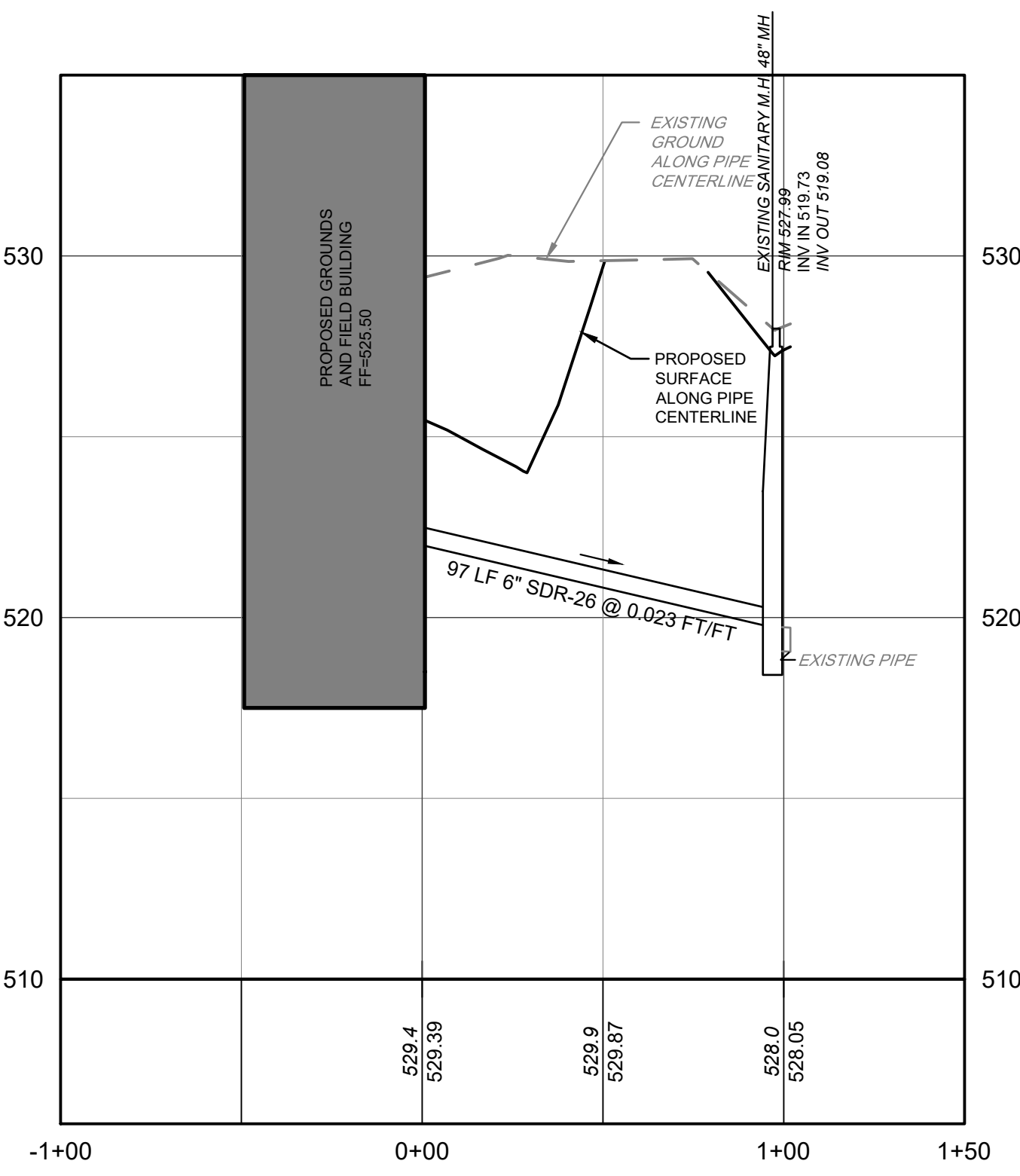
NOT FOR
CONSTRUCTION



PROPOSED FIELD HOUSE TO EXISTING MH 6+00
HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 4'



EXISTING MH TO SMH-1.01 4+00
HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 4'



PROPOSED GROUNDS AND FIELD BUILDING TO EXISTING MH 4+00
HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 4'

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIVE OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES. AND OWNER SHALL
INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES
FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES
ARISING OUT OF OR RESULTING THEREFROM.

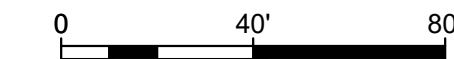
Δ	DATE	ISSUED FOR
1	03/16/2023	LAND DEVELOPMENT SUBMISSION
2	05/18/2023	REVISED PER TWP COMMENTS
3	06/14/2023	REVISED PER CCOD COMMENTS
4	07/20/2023	REVISED PER TWP REVIEW
5	09/26/2023	REV. PER TWP & NPOES REVIEW
6	09/29/2023	REVISED PER SSM REVIEW
7	01/17/2024	ISSUED FOR FINAL SUBMISSION
8	03/18/2024	BID ISSUE

SHEET TITLE

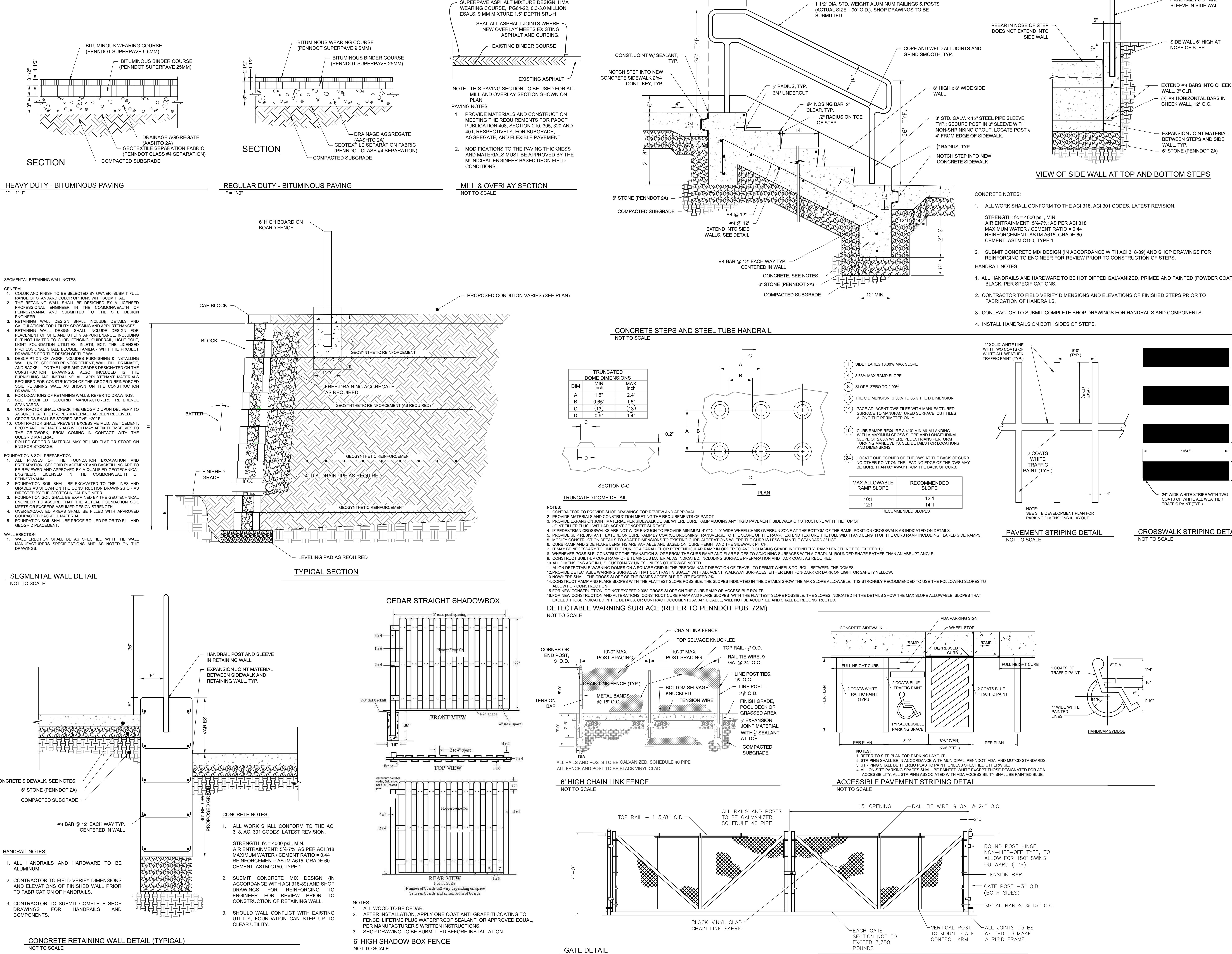
SANITARY
PROFILES

DRAWING NUMBER

CS4501



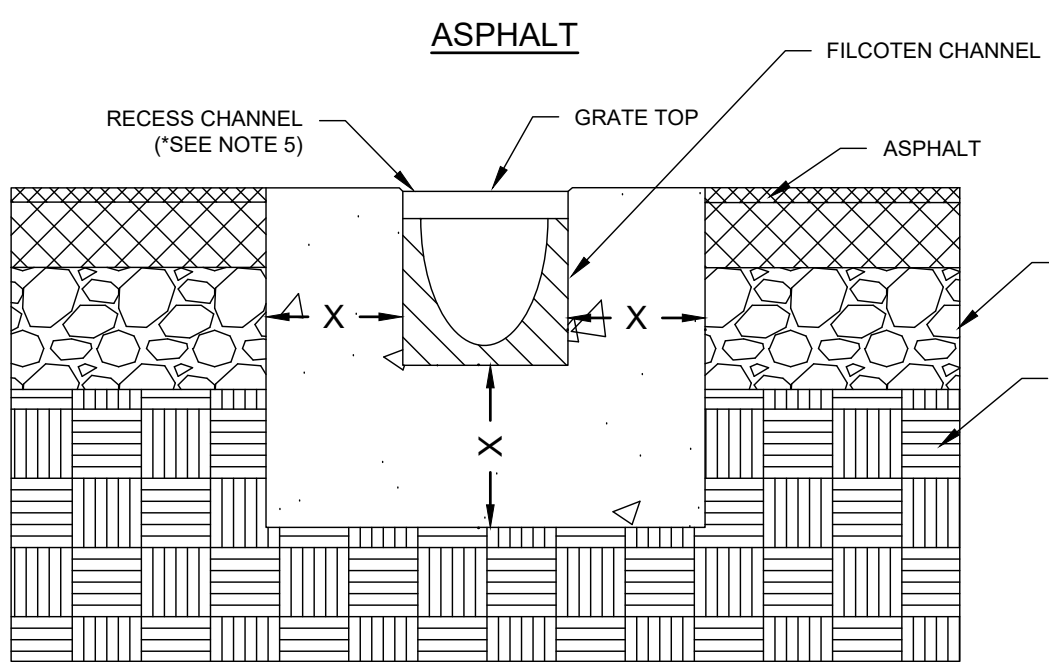
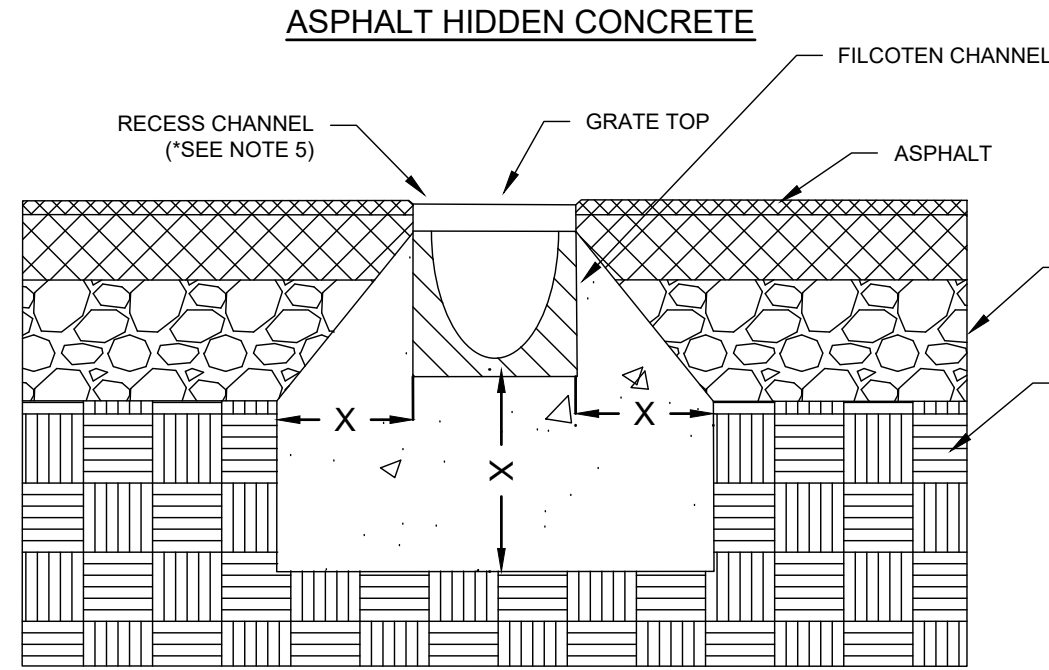
NOT FOR
CONSTRUCTION



DIN LOAD CLASS					
CHANNEL NOMINAL WIDTH	CLASS A PEDESTRIAN 15 kN/3375 LBS	CLASS B LIGHT DUTY 225 kN/50,000 LBS	CLASS C MEDIUM DUTY 250 kN/55,000 LBS	CLASS D HEAVY DUTY 400 kN/89,000 LBS	CLASS E EXTRA DUTY 500 kN/115,000 LBS
NW100	4"	X = 4"	X = 4"	X = 6"	X = 8"
NW200	6"	X = 6"	X = 6"	X = 8"	X = 10"
NW300	12"	X = 8"	X = 10"	X = 12"	X = 12"

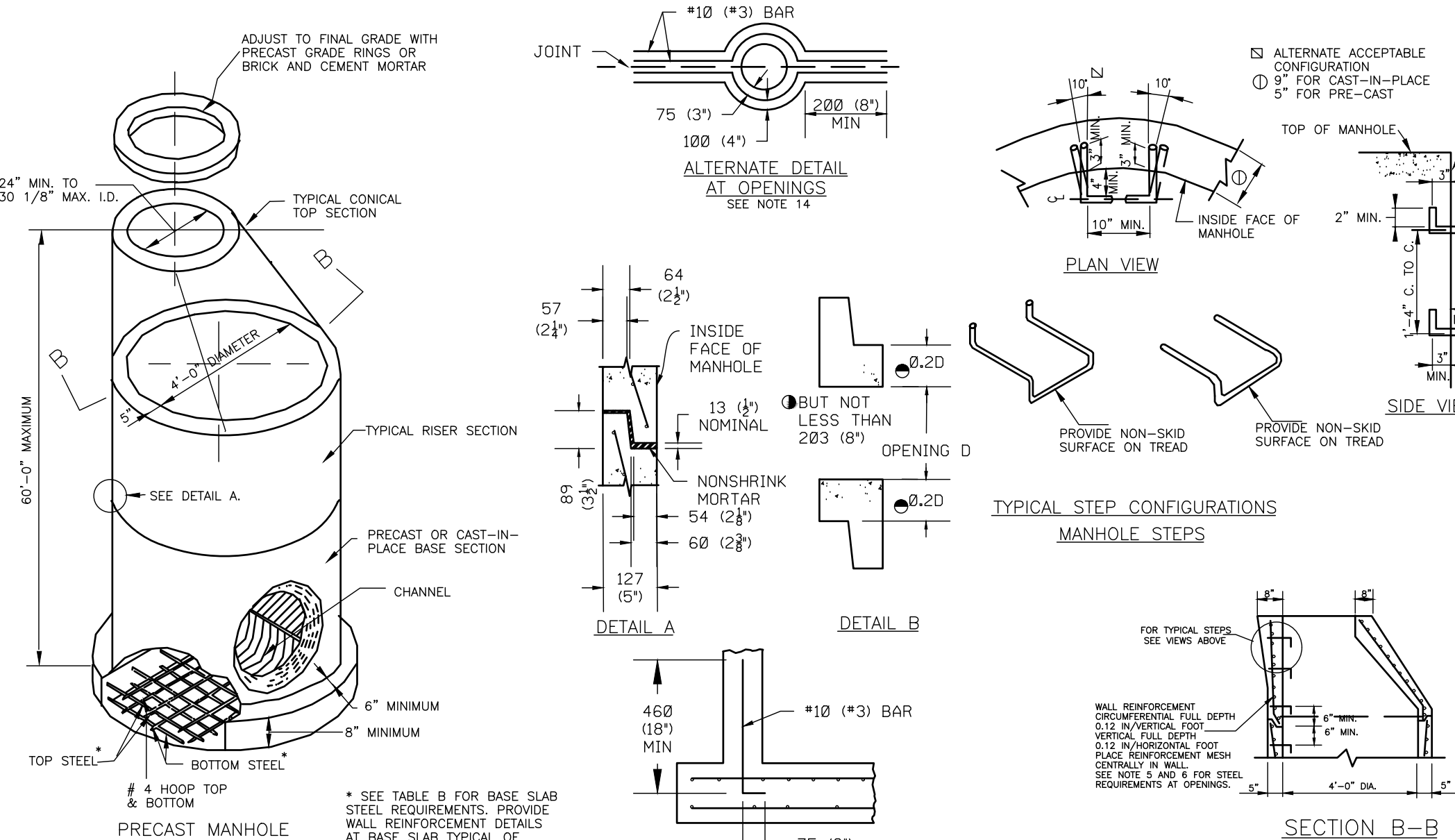
FILCOTEN INSTALLATION DETAIL
NW100, NW200, NW300 CLASS A-E, ASPHALT & HIDDEN CONCRETE

- NOTES:
- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION.
 - EXPANSION AND CONTRACTION CONTROL JOINTS ARE RECOMMENDED TO PROTECT THE CHANNEL AND SURROUNDING CONCRETE. CONSULT WITH AN ENGINEER NECESSARY.
 - MINIMUM CONCRETE COMPRESSIVE STRENGTH OF 4000 PSI AND VIBRATION TO ELIMINATE AIR POCKETS IS RECOMMENDED.
 - THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS AND CONTRACTORS FOR PLANNING PURPOSES.
 - RECESS CHANNEL/GRATE 1" FOR PEDESTRIAN TRAFFIC OF 1" FOR VEHICULAR TRAFFIC.
 - DRAWING IS NOT TO SCALE.

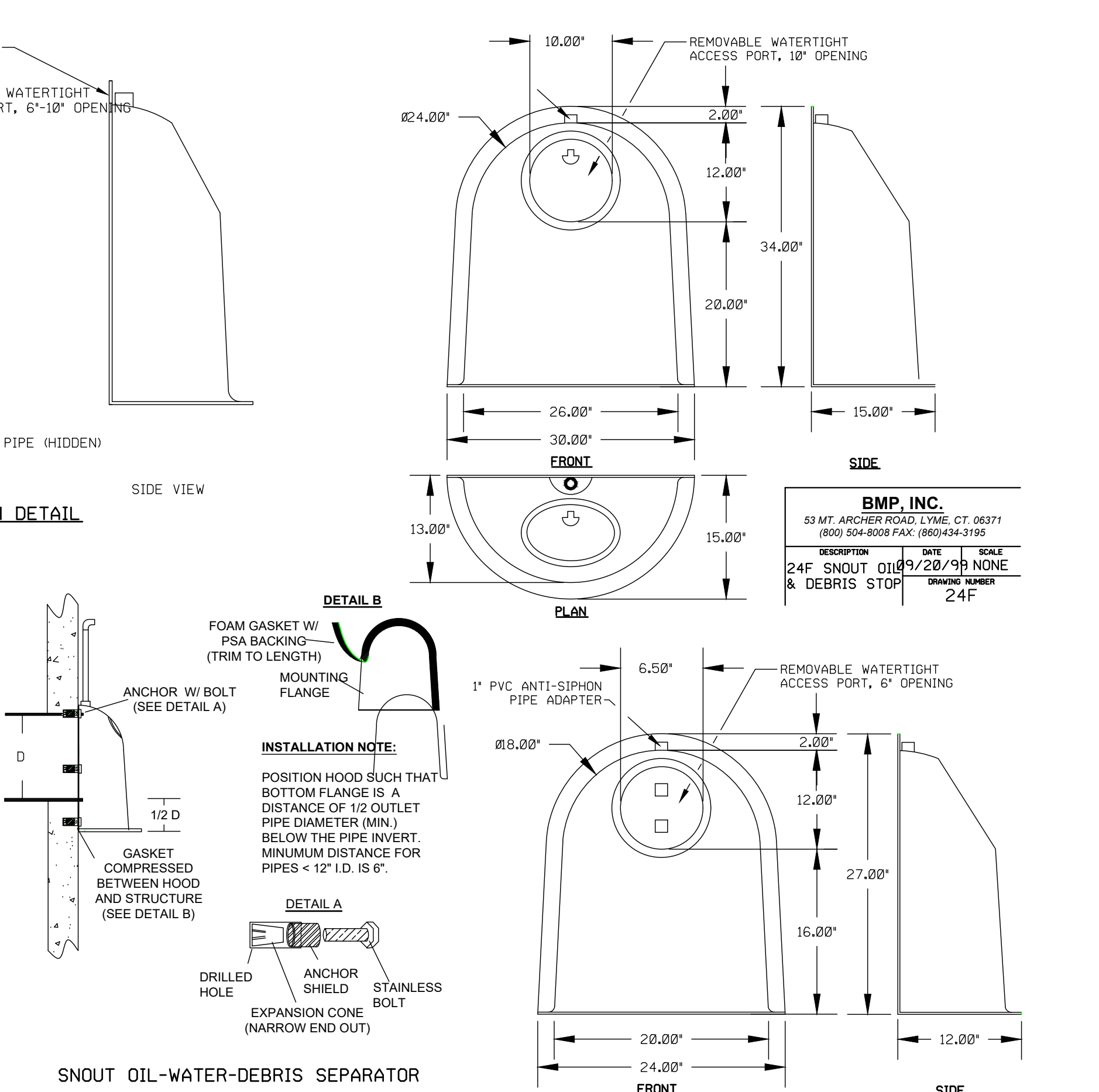


BMP, INC.
53 MT. ARCHER ROAD, LYME, CT 06371
(800) 504-8008 FAX: (860) 434-3195
DESCRIPTION: 24F SNOUT OIL & DEBRIS STOP
DATE: 01/19/2019
SCALE: NONE
DRAWN: JH

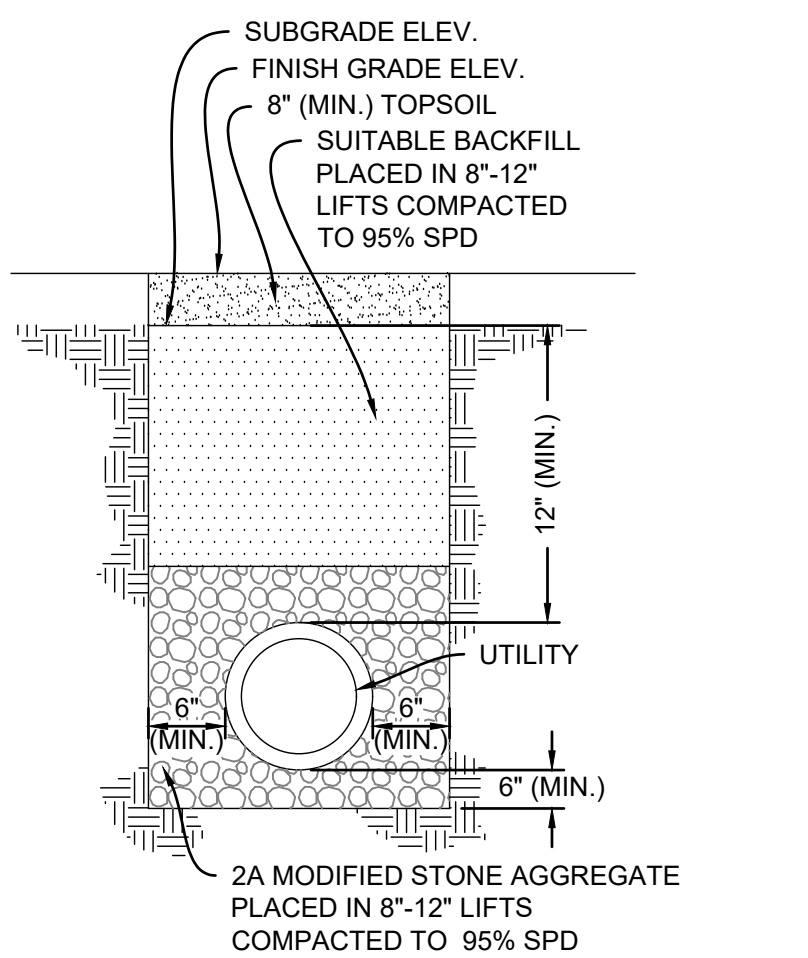
BMP, INC.
53 MT. ARCHER ROAD, LYME, CT 06371
(800) 504-8008 FAX: (860) 434-3195
DESCRIPTION: 18F SNOUT OIL & DEBRIS STOP
DATE: 01/19/2019
SCALE: NONE
DRAWN: JH



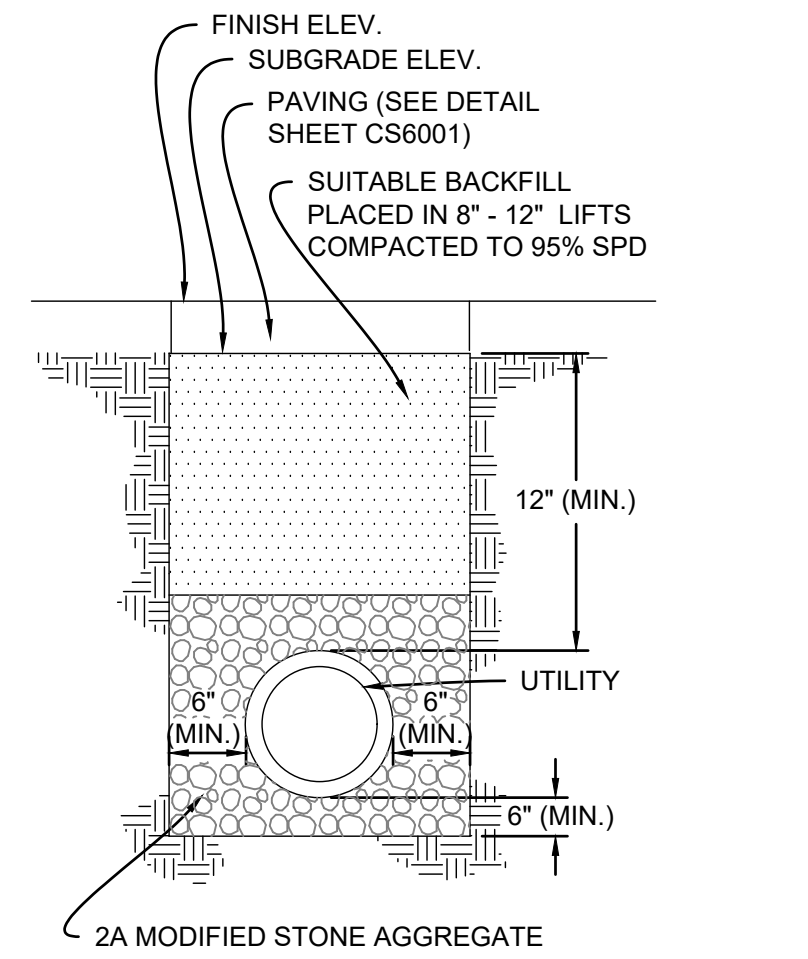
MANHOLE (REFER TO PENNDOT PUB. 72M)
NOT TO SCALE



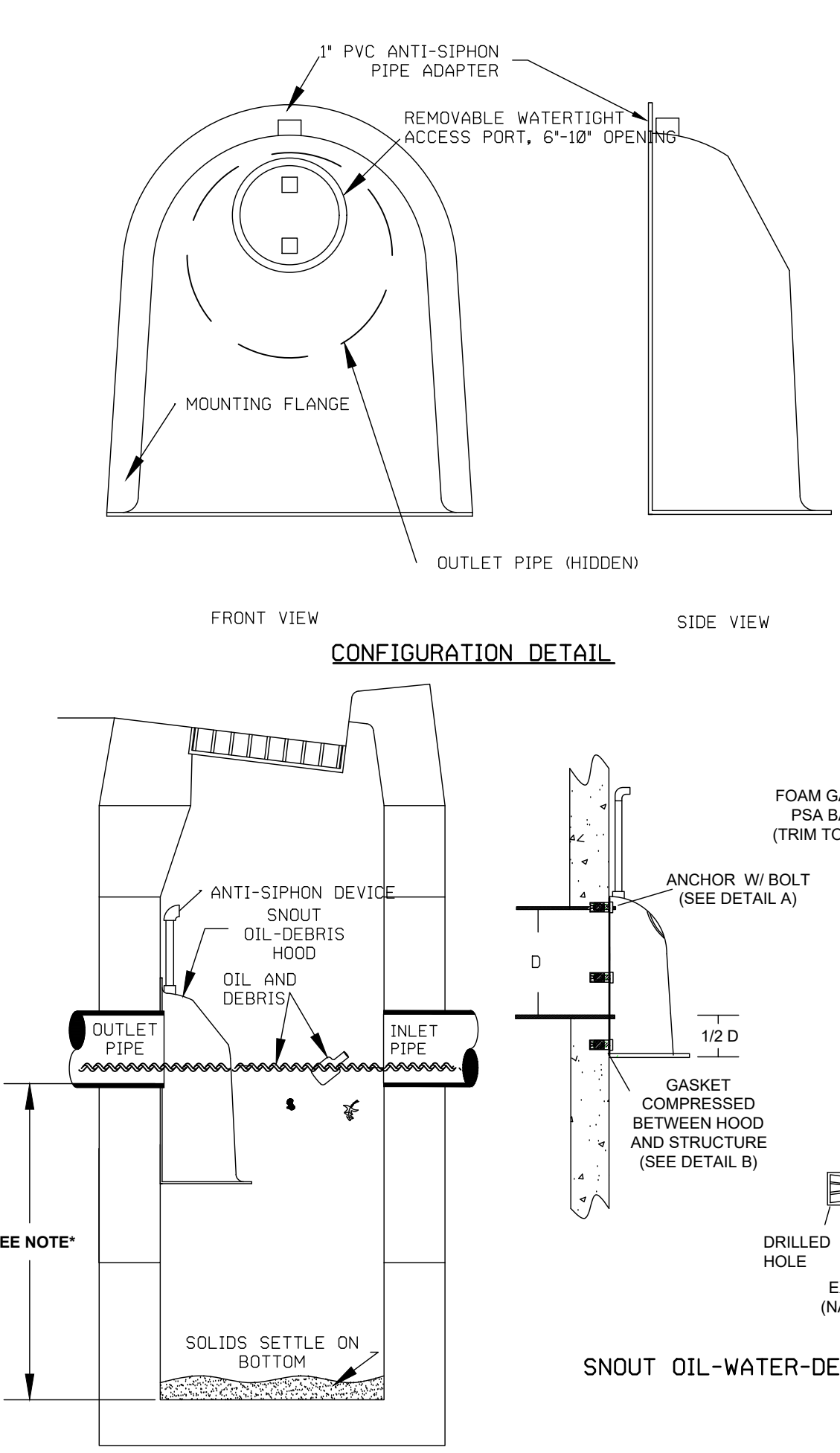
SNOUT OIL-WATER-DEBRIS SEPARATOR



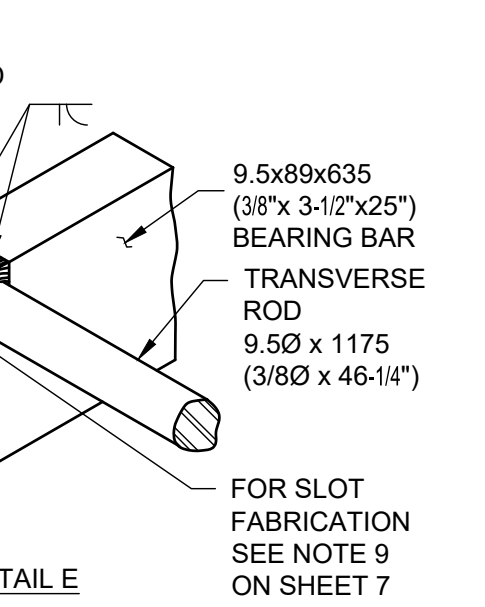
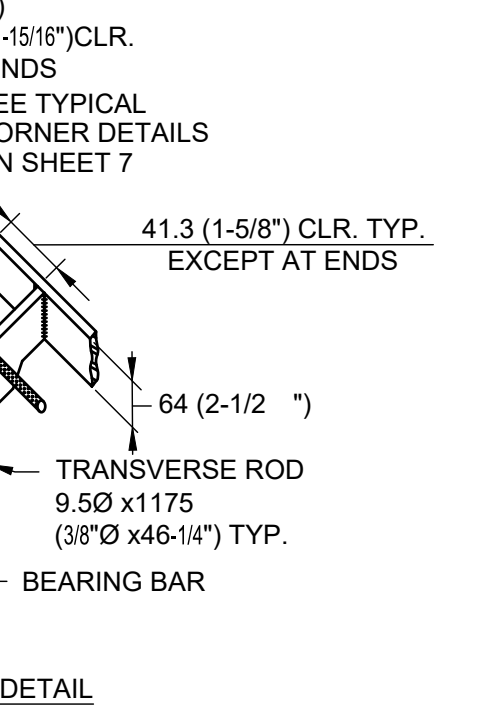
TYPICAL UTILITY TRENCH - GRASS AREAS
NOT TO SCALE



TYPICAL UTILITY TRENCH - PAVED AREAS
NOT TO SCALE



INSTALLATION DETAIL
BMP SNOUT DETAIL
NOT TO SCALE



STRUCTURAL STEEL GRATE - BICYCLE SAFE (PENNDOT STANDARD RC-45)
NOT TO SCALE

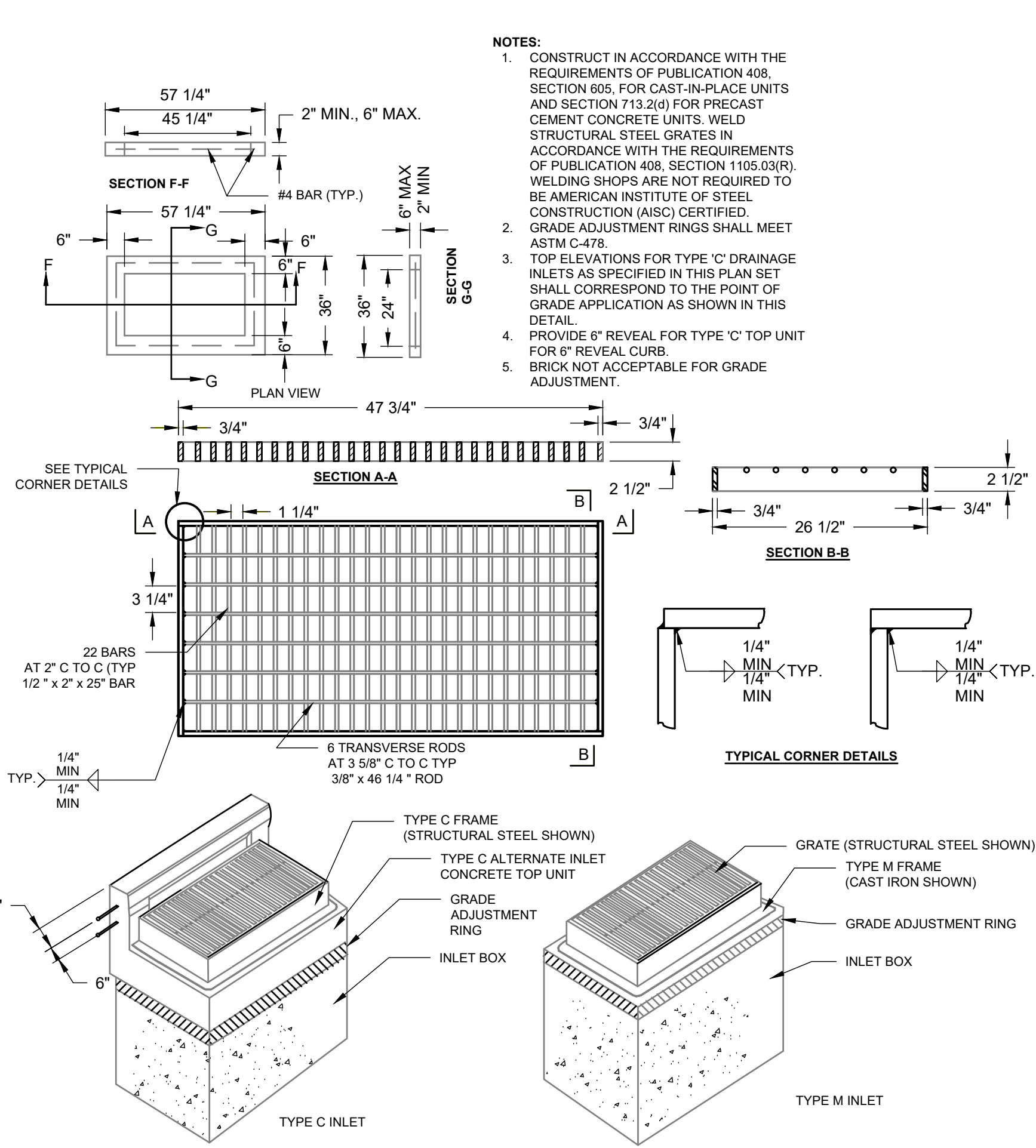


ROOF DRAIN CONVEYANCE/CONNECTION DETAIL
NOT TO SCALE

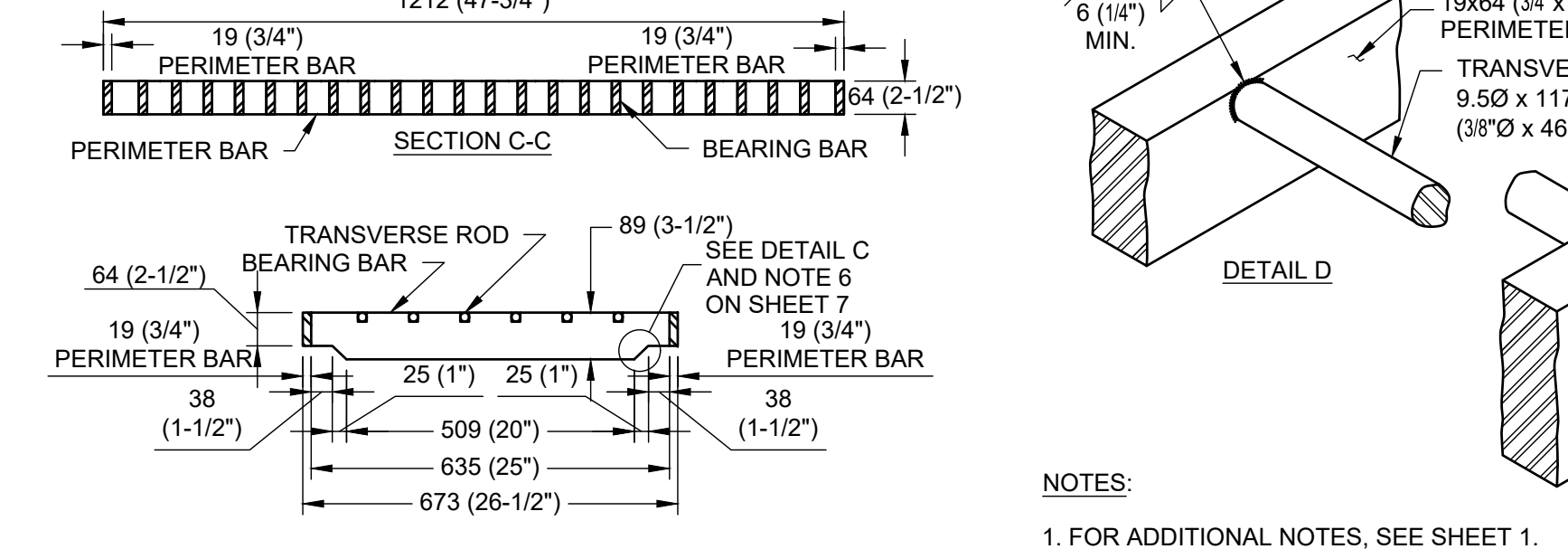
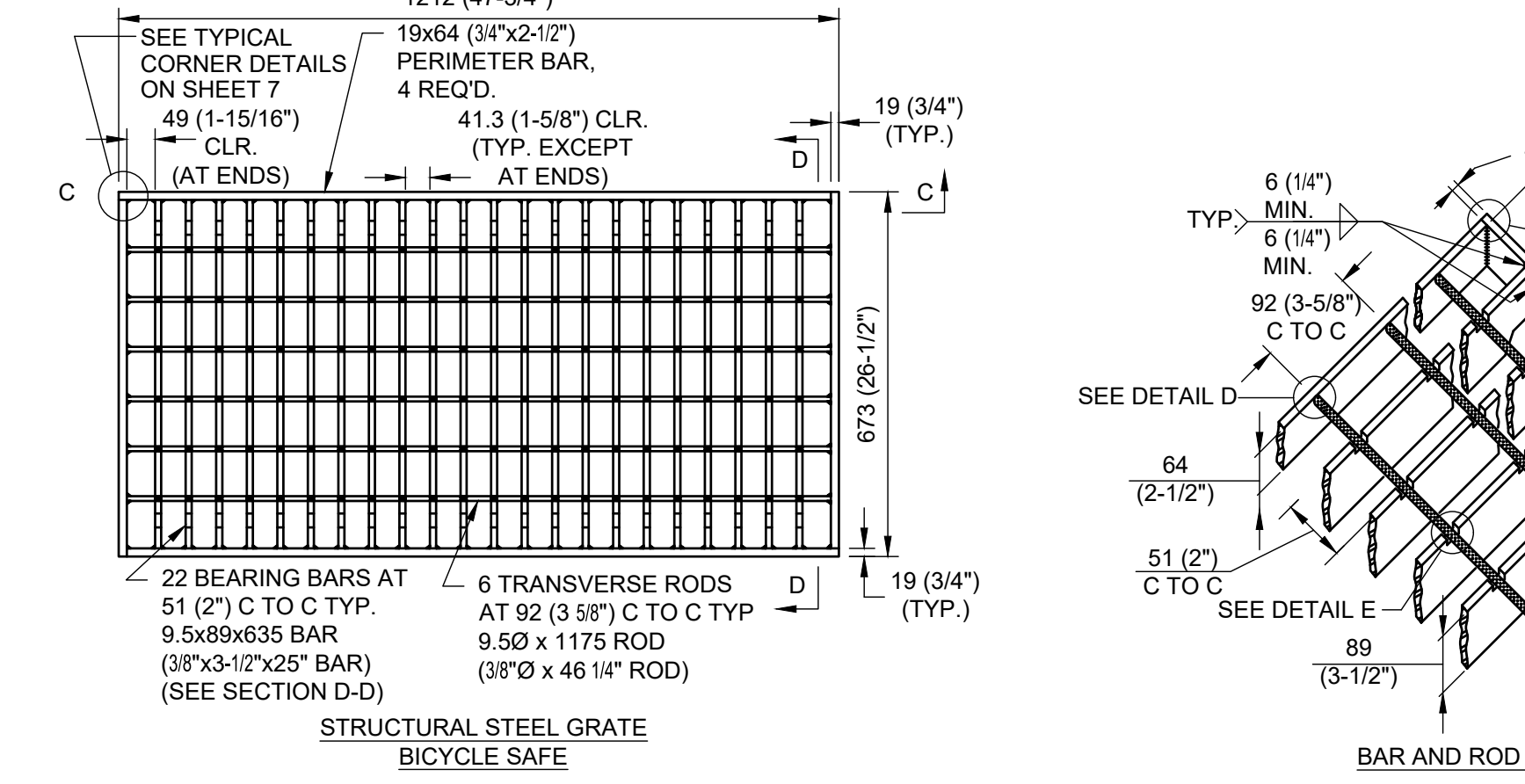
STRUCTURAL STEEL GRATE - BICYCLE SAFE (PENNDOT STANDARD RC-45)
NOT TO SCALE

STRUCTURAL STEEL GRATE - BICYCLE SAFE (PENNDOT STANDARD RC-45)
NOT TO SCALE

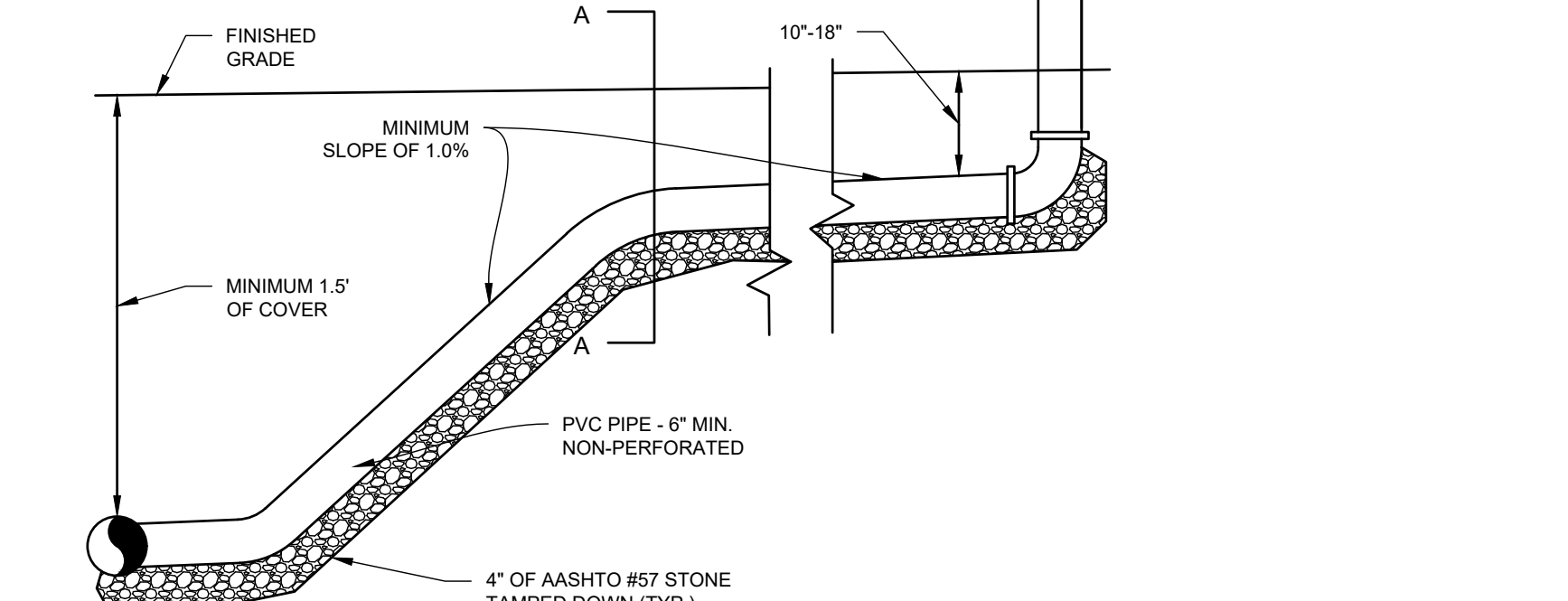
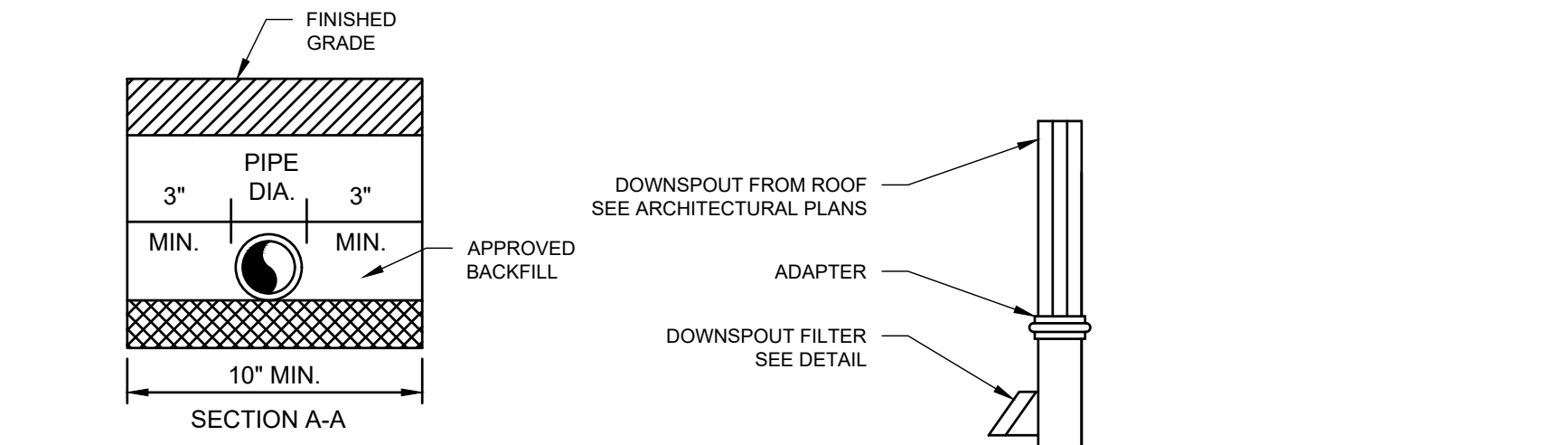
- NOTES:
- CONSTRUCT IN ACCORDANCE WITH THE REQUIREMENTS OF PUBLICATION 408, SECTION 605, FOR CAST-IN-PLACE UNITS AND SECTION 713.269 FOR PRECAST CEMENT CONCRETE UNITS. WELD STRUCTURAL STEEL GRATES IN ACCORDANCE WITH THE REQUIREMENTS OF PUBLICATION 408, SECTION 1105.03(R). WELDING SHOPS ARE NOT REQUIRED TO BE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) CERTIFIED.
 - GRADE ADJUSTMENT RINGS SHALL MEET ASTM C-478.
 - TOP ELEVATIONS FOR TYPE 'C' DRAINAGE INLETS AS SPECIFIED IN THIS PLAN SET SHALL CORRESPOND TO THE POINT OF GRADE APPLICATION AS SHOWN IN THIS DETAIL.
 - PROVIDE 6" REVEAL FOR TYPE 'C' TOP UNIT FOR 6" REVEAL CURB.
 - BRICK NOT ACCEPTABLE FOR GRADE ADJUSTMENT.



INLET BOXES, FRAME, AND GRATE (REFER TO PENNDOT PUB. 72M)
NOT TO SCALE



STRUCTURAL STEEL GRATE - BICYCLE SAFE (PENNDOT STANDARD RC-45)
NOT TO SCALE



ROOF DRAIN CONVEYANCE/CONNECTION DETAIL
NOT TO SCALE

STRUCTURAL STEEL GRATE - BICYCLE SAFE (PENNDOT STANDARD RC-45)
NOT TO SCALE

STRUCTURAL STEEL GRATE - BICYCLE SAFE (PENNDOT STANDARD RC-45)
NOT TO SCALE

CS6041



SOILS SUMMARY CHART:

NRCS WEB SOIL SURVEY, CHESTER COUNTY, PENNSYLVANIA, APRIL, 8 2019

SYMBOL	NAME	GROUP	SLOPES (%)	DEPTH TO		LIMITATIONS			RESOLUTION
				WATER TABLE (FT)	BEDROCK (IN)	FROST	PIPES	BUILDING	
GgC	GLENELG SILT LOAM	B	8-15	--	72-120	MODERATE	LOW	HIGH	SEE RESOLUTION NOTES
GgB	GLENELG SILT LOAM	B	3-8	--	72-120	MODERATE	LOW	HIGH	SEE RESOLUTION NOTES
UmB	URBAN LAND - GLENELG COMPLEX	B	0-8	--	60-120	MODERATE	LOW	HIGH	SEE RESOLUTION NOTES
UmD	URBAN LAND - GLENELG COMPLEX	B	8-25	--	60-120	MODERATE	LOW	HIGH	SEE RESOLUTION NOTES
UuG	URBAN LAND - UDORTHENTS SCHIST AND GNEISS COMPLEX	B	0-8	5	60-120	MODERATE	MODERATE	MODERATE	SEE RESOLUTION NOTES

RESOLUTION NOTES:

- HIGH WATER TABLE: IF SITE IS TO BE USED FOR CONSTRUCTION, DEWATER EXCAVATIONS THROUGH A PUMPED WATER FILTER BAG AS NECESSARY, AVOID PONDING DURING CONSTRUCTION. CLOSE ALL EXCAVATIONS AS SOON AS PRACTICAL. ENSURE ALL INSTALLED PIPE IS WATERTIGHT.
- EROSION HAZARD: THE CONTRACTOR SHALL FOLLOW THE EROSION AND SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION AND PLANS. THE EROSION CONTROL MEASURES SHALL BE INSPECTED AFTER EVERY RUNOFF EVENT AND ON A WEEKLY BASIS. IMMEDIATELY AFTER EVERY RUNOFF EVENT THE EROSION AND SEDIMENTATION FACILITIES AND MEASURES WILL BE CLEANED, REPAIRED, AND REPLACED AS NEEDED. WASHED-OUT AREAS WILL BE RE-GRADED AND RE-SEED. SILT FENCES WILL BE INSPECTED AND RESTORED TO AN UPRIGHT AND EFFECTIVE POSITION AFTER EVERY RUNOFF EVENT OR WHEN THEY ARE OBSERVED TO BE IN NEED OF MAINTENANCE.
- PIPING HAZARD: SUITABLE FILL MATERIAL FOR ALL PIPING SHALL BE USED PER RECOMMENDATIONS OF A GEOTECHNICAL ENGINEER. ANTI-SEEP COLLARS SHALL BE INSTALLED AT THE DETENTION BASIN OUTLET STRUCTURE PIPE BARRELS AS SHOWN ON DETAILS.

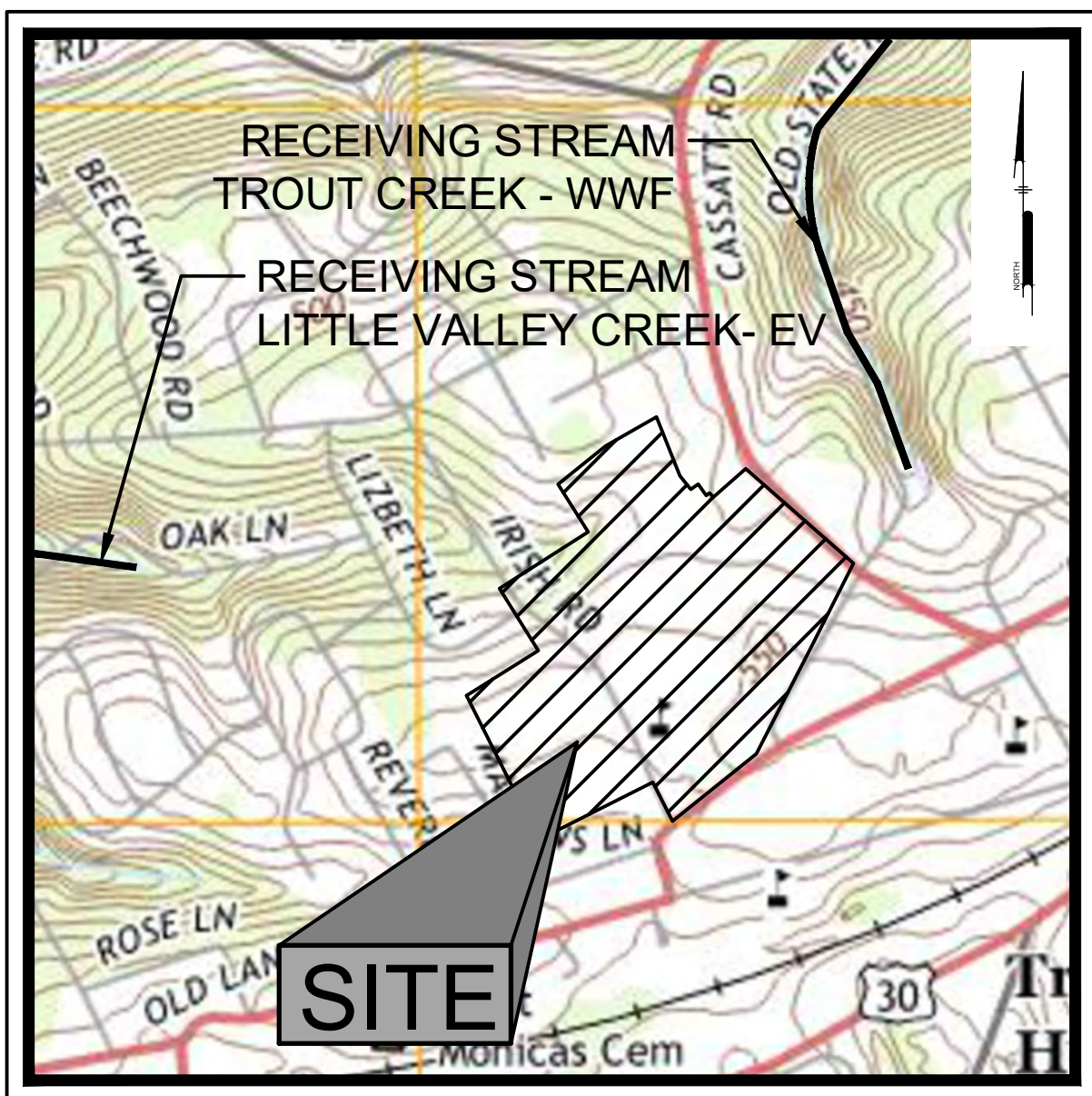
GEOLOGY CHART

OCTORARO FORMATION
-ALBITE-CHLORITE SCHIST, PHYLLITE, SOME HORNBLENDE GNEISS, AND GRANITIZED MEMBERS.

STATE: PENNSYLVANIA
NAME: OCTORARO FORMATION
GEOLOGIC AGE: LOWER PALEOZOIC
ORIGINAL MAP LABEL: X6
PRIMARY ROCK TYPE: ALBITE-CHLORITE SCHIST
SECONDARY ROCK TYPE: PHYLLITE
OTHER ROCK TYPES: HORNBLENDE GNEISS

E&S LEGEND:

- LOD PROPOSED LIMIT OF DISTURBANCE
- SSF PROPOSED SUPER SILT FENCE
- OPS PROPOSED COMPOST FILTER SOCK
- PROPOSED SLOPE MATTING
- PROPOSED ROCK CONSTRUCTION ENTRANCE
- PROPOSED CONCRETE WASHOUT
- PROJECT SITE AREA



USGS MAP

Scale: 1" = 800'

EROSION & SEDIMENT POLLUTION CONTROL PLAN NOTES

- THE PROJECT'S RECEIVING WATERCOURSE IS THE TRIBUTARY 00997 OF LITTLE VALLEY CREEK AND TROUT CREEK WATERSHED.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION BMPs MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL SITE INSPECTIONS WILL BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE. THE COMPLIANCE ACTION AND THE DATE, TIME, AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG WILL BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.

ALL PREVENTIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING, MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs OR MODIFICATIONS OF THOSE INSTALLED WILL BE NEEDED.

WHERE BMPs ARE FOUND TO FAIL TO ALLEVIATE EROSION OR SEDIMENT POLLUTION, THE PERMITTEE OR CO-PERMITTEE SHALL INCLUDE THE FOLLOWING INFORMATION:

a. THE LOCATION AND SEVERITY OF THE BMPs FAILURE AND ANY POLLUTION EVENTS.
b. ALL STEPS TAKEN TO REDUCE, ELIMINATE AND PREVENT THE REOCCURENCE OF THE NON-COMPLIANCE.
c. THE TIME FRAME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.

AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPs MUST BE STABILIZED IMMEDIATELY.
- AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
- UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THAT WILL EXCEED 4 DAYS, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION. (PLEASE NOTE THAT HYDROSEED IS NOT CONSIDERED STABILIZATION UNTIL IT GERMINATES). HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
- AREAS WHICH ARE TO BE TOP-SOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES (6 TO 12 INCHES ON COMPACTED SOILS) PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING, I.E. YARDS.
- SEDIMENT TRACKED ONTO ANY ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE RESIDENCE BY THE END OF EACH WORKDAY AND DISPOSED AS A MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED OR SWEEP INTO ANY ROAD SIDE DITCH, STORM SEWER OR SURFACE WATER.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- CONTRACTOR TO ENSURE THAT PIPES DISCHARGING INTO SUBSURFACE BASINS ARE SEALED UNTIL ALL FLOW SOURCES TO THAT AREA ARE FULLY STABILIZED. ONCE THE SUBSURFACE BASIN IS CONSTRUCTED, IMMEDIATELY INSTALL FILTER SOCKS ALONG THE PERIMETER OF THE SUBSURFACE BASIN TO PREVENT SEDIMENT FROM ENTERING THE SUBSURFACE BASIN. THE SILT SOCKS MUST REMAIN IN PLACE UNTIL THE CONTRIBUTING AREA TO THE SUBSURFACE BASIN ACHIEVES 70% UNIFORM STABILIZATION. IMMEDIATELY INSTALL INLET PROTECTION ON ALL NEW INLETS.
- CONTRACTOR TO ENSURE THE PROPOSED PIPING HAS AT LEAST ONE AND A HALF FEET OF COVER.
- CONTRACTOR TO INSTALL ORANGE CONSTRUCTION FENCE AROUND THE PERIMETER OF ALL INFILTRATION BMPs TO AVOID COMPACTION FROM MACHINERY.
- STOCKPILES SHALL NOT BE PLACED ABOVE THE LOCATION OF ANY PROPOSED SUBSURFACE BASIN OR TRENCH.
- TREE REMOVAL SHALL NOT BE CONDUCTED FROM MAY 15 TO AUGUST 15.

TESD CONESTOGA ATHLETIC FIELDS

TREDYFFRIN TOWNSHIP
CHESTER COUNTY, PA

HSA PROJECT #: 21-019

HSA
Heckendorn Shiles Architects

PROJECT TEAM

CLIENT
Tredyffrin/Easttown School District
940 West Valley Road, Suite 1700
Wayne, PA 19087
(610) 240-1900

ARCHITECTURAL
Heckendorn Shiles Architects
347 East Conestoga Road
Wayne, PA 19087
610-994-3500

STRUCTURAL ENGINEER

N/A

MEPFP ENGINEER
Schiller and Hersh Associates, Inc.
636 Skippack Pike, Suite 200
Blue Bell, PA 19422
(215) 886-8947

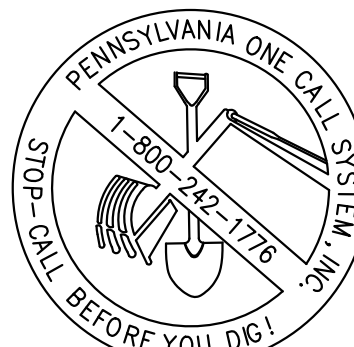
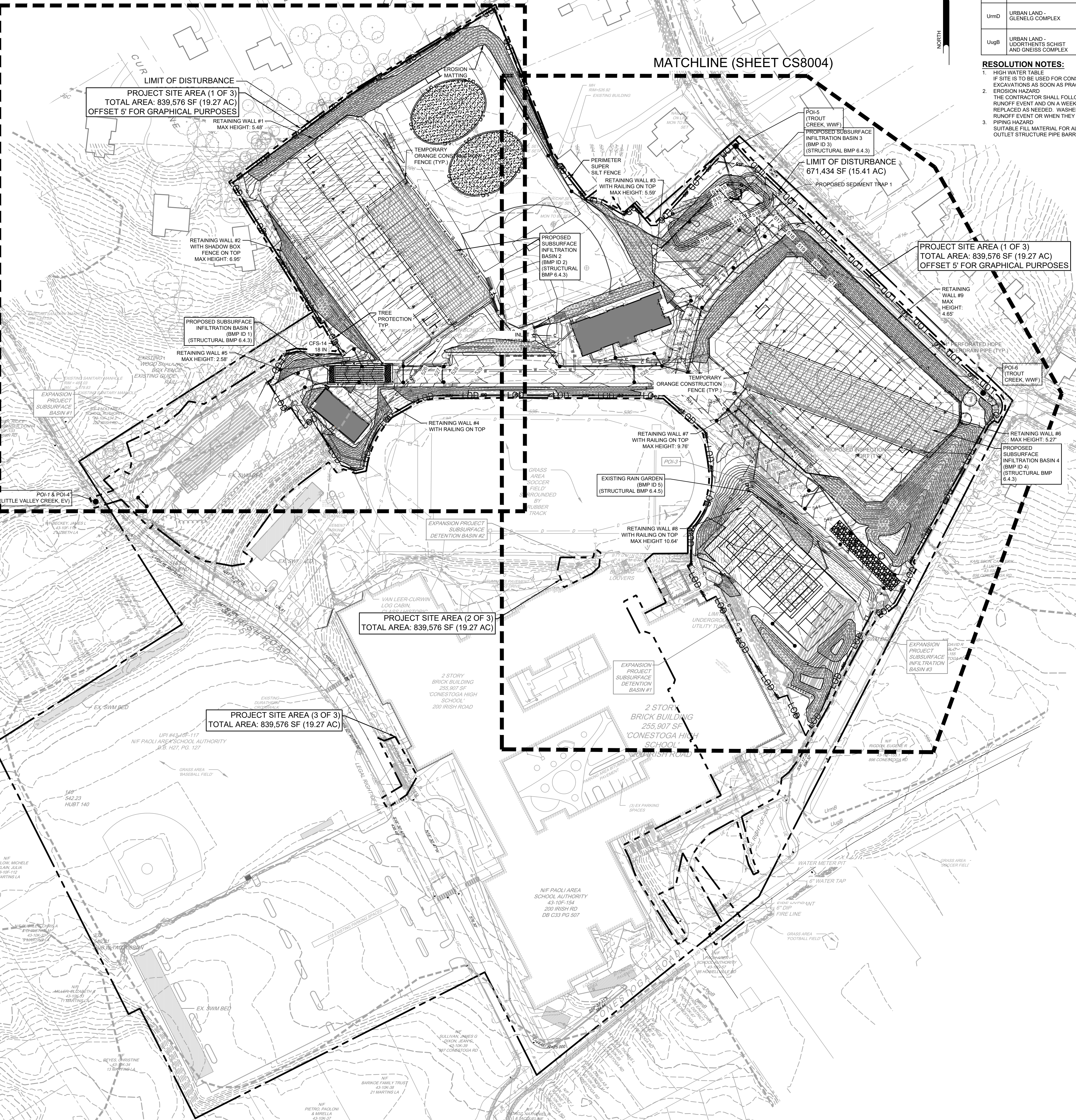
SITE / CIVIL
Pennoni Associates, Inc.
158 W Gay Street, Suite 300
West Chester, PA 19380
(610) 429-8907

MISC DISCIPLINE
N/A

NOT FOR
CONSTRUCTION

MATCHLINE (SHEET CS8003)

MATCHLINE (SHEET CS8004)



CALL BEFORE YOU DIG
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA
CALL 1-800-242-1776
PA ACT 287 OF 1974 REQUIRES THREE WORKING DAYS
NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL OR
BLAST PENNSYLVANIA ONE-CALL SYSTEM, INC.
SERIAL NUMBER(S): 2022312994

0 80' 160'

SHEET 33 OF 51

SHEET TITLE

OVERALL EROSION AND
SEDIMENTATION CONTROL
PLAN
DRAWING NUMBER

CS8000

TESD CONESTOGA
ATHLETIC FIELDS

TREDYFFRIN TOWNSHIP
CHESTER COUNTY, PA

HSA PROJECT #: 21-019
HSA
Heckendorn Shiles Architects

PROJECT TEAM

CLIENT
Tredyffrin/Easttown School District
940 West Valley Road, Suite 1700
Wayne, PA 19087
(610) 240-1900

ARCHITECTURAL
Heckendorn Shiles Architects
347 East Conestoga Road
Wayne, PA 19087
610-994-3500

STRUCTURAL ENGINEER
N/A

MEPFP ENGINEER
Schiller and Hersh Associates, Inc.
636 Skippack Pike, Suite 200
Blue Bell, PA 19422
(215) 886-8947

SITE / CIVIL
Pennoni Associates, Inc.
158 W Gay Street, Suite 300
West Chester, PA 19380
(610) 429-8907

MISC DISCIPLINE
N/A

NOT FOR
CONSTRUCTION

E&S LEGEND:

- LOD PROPOSED LIMIT OF DISTURBANCE
PROPOSED INLET PROTECTION
SSF PROPOSED SUPER SILT FENCE
CFS PROPOSED COMPOST FILTER SOCK
PROPOSED SLOPE MATTING
PROPOSED ROCK CONSTRUCTION ENTRANCE
PROPOSED CONCRETE WASHOUT
PROJECT SITE AREA
PROPOSED SKIMMER AND TEMP RISER
PROPOSED BAFFLE
CHANNEL DRAINAGE AREA
SEDIMENT TRAP DRAINAGE AREA

NOTES:

EXPOSED SOIL TO BE SPRINKLED WITH WATER UNTIL MOIST ON A DAILY BASIS TO PREVENT DUST GENERATION AND TRANSPORT. ANY WHERE DUST COULD BE PRODUCED WILL BE WETTED TO PREVENT DUST GENERATION.

SOILS SUMMARY CHART:

NRCS WEB SOIL SURVEY, CHESTER COUNTY, PENNSYLVANIA, APRIL 8 2019

SYMBOL	NAME	GROUP	SLOPES (%)	DEPTH TO		LIMITATIONS			RESOLUTION
				WATER TABLE (FT)	BEDROCK (IN)	FROST	PIPES	BUILDING	
GgC	GLENELG SILT LOAM	B	8-15	--	72-120	MODERATE	LOW	HIGH	SEE RESOLUTION NOTES
GgB	GLENELG SILT LOAM	B	3-8	--	72-120	MODERATE	LOW	HIGH	SEE RESOLUTION NOTES
UrmB	URBAN LAND - GLENELG COMPLEX	B	0-8	--	60-120	MODERATE	LOW	HIGH	SEE RESOLUTION NOTES
UrmD	URBAN LAND - GLENELG COMPLEX	B	8-25	--	60-120	MODERATE	LOW	HIGH	SEE RESOLUTION NOTES
UugB	URBAN LAND - UDORTHEN'S SCHIST AND GNEISS COMPLEX	B	0-8	5	60-120	MODERATE	MODERATE	MODERATE	SEE RESOLUTION NOTES

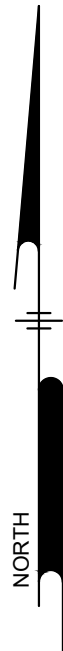
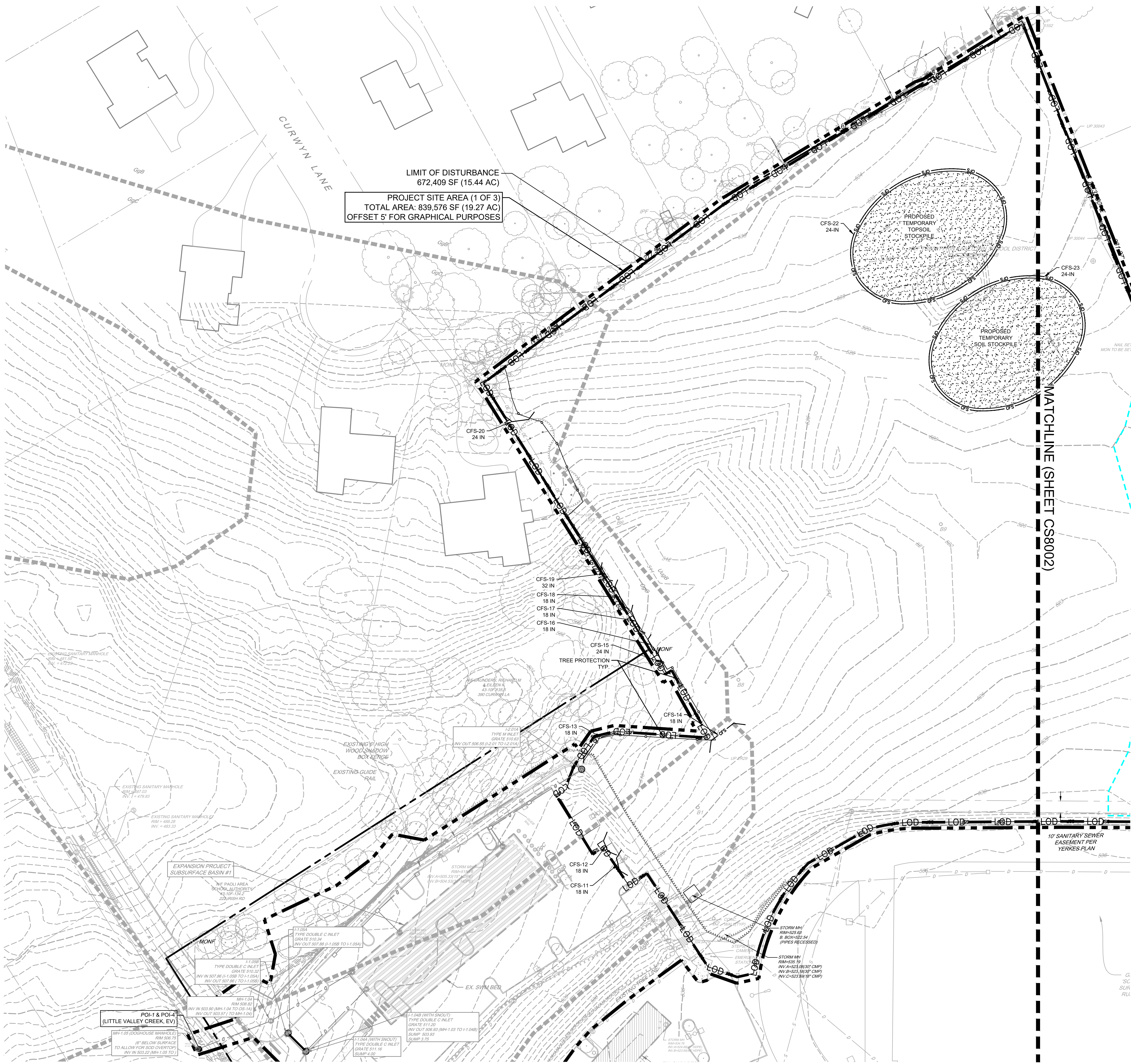
RESOLUTION NOTES:

- HIGH WATER TABLE
IF SITE IS TO BE USED FOR CONSTRUCTION, DEWATER EXCAVATIONS THROUGH A PUMPED WATER FILTER BAG AS NECESSARY, AVOID PONDING DURING CONSTRUCTION, CLOSE ALL EXCAVATIONS AS SOON AS PRACTICAL, ENSURE ALL INSTALLED PIPE IS WATERTIGHT.
- EROSION HAZARD
THE CONTRACTOR SHALL FOLLOW THE EROSION AND SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION AND PLANS. THE EROSION CONTROL MEASURES SHALL BE INSPECTED AFTER EVERY RUNOFF EVENT AND ON A WEEKLY BASIS. IMMEDIATELY AFTER EVERY RUNOFF EVENT THE EROSION AND SEDIMENTATION FACILITIES AND MEASURES WILL BE CLEANED, REPAIRED, AND REPLACED AS NEEDED. WASHED-OUT AREAS WILL BE RE-GRADED AND RE-SEEDED. SILT FENCES WILL BE INSPECTED AND RESTORED TO AN UPRIGHT AND EFFECTIVE POSITION AFTER EVERY RUNOFF EVENT OR WHEN THEY ARE OBSERVED TO BE IN NEED OF MAINTENANCE.
- PIPING HAZARD
SUITABLE FILL MATERIAL FOR ALL PIPING SHALL BE USED PER RECOMMENDATIONS OF A GEOTECHNICAL ENGINEER. ANTI-SEEP COLLARS SHALL BE INSTALLED AT THE DETENTION BASIN OUTLET STRUCTURE PIPE BARRELS AS SHOWN ON DETAILS.

GEOLOGY CHART

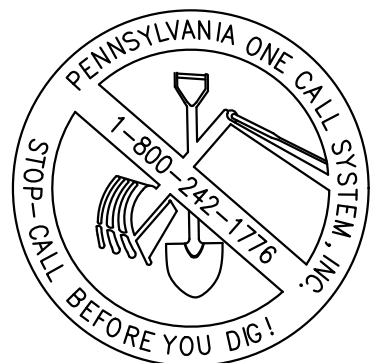
OCTORARO FORMATION
-ALBITE-CHLORITE SCHIST, PHYLLITE, SOME HORNBLENDE GNEISS, AND GRANITIZED MEMBERS.

STATE-PENNSYLVANIA
NAME: OCTORARO FORMATION
GEOLOGIC AGE: LOWER PALEOZOIC
ORIGINAL MAP LABEL: X6
PRIMARY ROCK TYPE: ALBITE-CHLORITE SCHIST
SECONDARY ROCK TYPE: PHYLLITE
OTHER ROCK TYPES: HORNBLENDE GNEISS



0 40' 80'

SHEET 34 OF 51



CALL BEFORE YOU DIG
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA
CALL 1-800-242-1776
PA ACT 287 OF 1974 REQUIRES THREE WORKING DAYS
NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL OR
BLAST PENNSYLVANIA ONE-CALL SYSTEM, INC.
SERIAL NUMBER(S): 20223192994

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR RELIANCE BY OWNER OR OTHERS ON THE EXTENSIVE OF THE PROJECT OR ON ANY OTHER PROJECT. ANY RELIANCE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES. AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

Δ	DATE	ISSUED FOR
	03/16/2023	LAND DEVELOPMENT SUBMISSION
1	05/18/2023	REVISED PER TWP COMMENTS
2	06/14/2023	REVISED PER CDD COMMENTS
3	07/20/2023	REVISED PER TWP REVIEW
4	09/26/2023	REV. PER TWP & NPOES REVIEW
5	09/29/2023	REVISED PER ISM REVIEW
6	01/17/2024	ISSUED FOR FINAL SUBMISSION
7	03/18/2024	BID ISSUE

SHEET TITLE
EROSION AND
SEDIMENTATION CONTROL
PLAN - PHASE 1
DRAWING NUMBER
CS8001

TREDYFFRIN TOWNSHIP
CHESTER COUNTY, PA



Heckendorn Shiles Architects

CLIENT
Reddyffrin/Easttown School District
40 West Valley Road, Suite 1700
Wayne, PA 19087
(610) 240-1900

ARCHITECTURAL
eckendorn Shiles Architects
47 East Conestoga Road
Wayne, PA 19087
610-994-3500

STRUCTURAL ENGINEER
/A

EPFP ENGINEER
Chiller and Hersh Associates, Inc.
36 Skippack Pike, Suite 200
Blue Bell, PA 19422
(610) 886-8947

TE / CIVIL
Ennoni Associates, Inc
58 W Gay Street, Suite 300
West Chester, PA 19380
(610) 429-8907

ISC DISCIPLINE
A

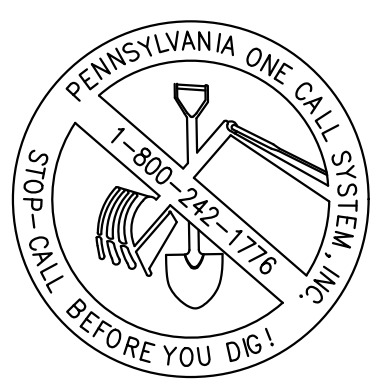
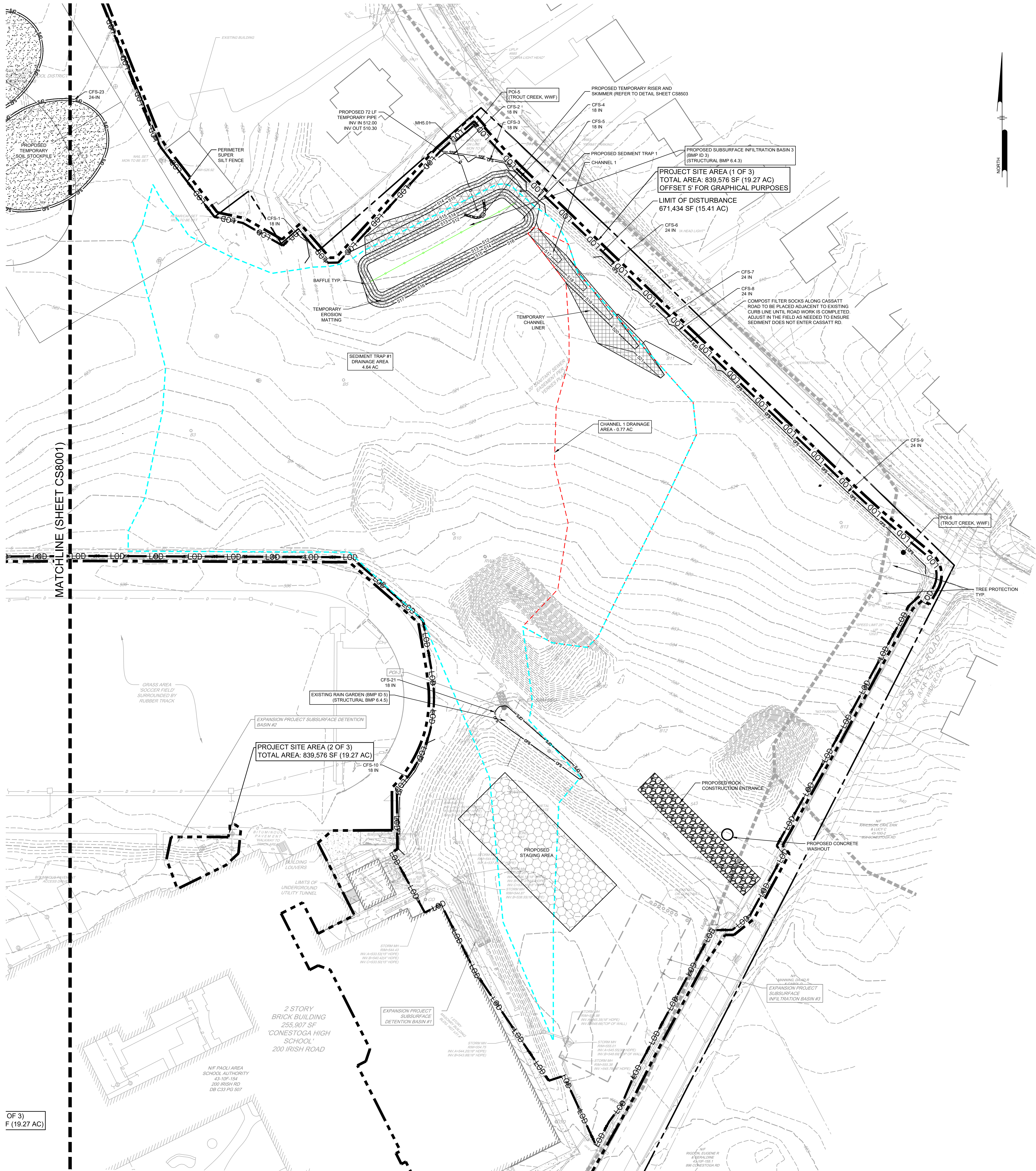
NOT FOR
CONSTRUCTION

ALL DOCUMENTS PREPARED BY PENNINO ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED TO BE PRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNINO ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNINO ASSOCIATES. PENNINO ASSOCIATES SHALL INDEMNIFY AND HOLD HARMLESS PENNINO ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

	DATE	ISSUED FOR
	03/16/2023	LAND DEVELOPMENT SUBMISSION
1	05/18/2023	REVISED PER TWP COMMENTS
2	06/14/2023	REVISED PER CCCD COMMENTS
3	07/20/2023	REVISED PER TWP REVIEW
4	09/26/2023	REV. PER TWP & NPDES REVIEW
5	09/29/2023	REVISED PER SSM REVIEW
6	01/17/2024	ISSUED FOR FINAL SUBMISSION
7	03/18/2024	BID ISSUE

EROSION AND
SEDIMENTATION CONTROL
PLAN - PHASE 1

CS8002



CALL BEFORE YOU DIG
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA
CALL 1-800-242-1776
PA. ACT 287 OF 1974 REQUIRES THREE WORKING DAYS
NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL OR
BLAST PENNSYLVANIA ONE-CALL SYSTEM, INC.
SERIAL NUMBER(S): 20223192994

OF 3)
F (19.27 AC)

SHEET 35 OF 51

\\accounts\HESAX\HESAX2\106 - TESD - Nursery Property Development\DESIGN_ SHEETS\CS80027.dwg PLOTTED: 3/19/2024 5:42 PM, BY: Shawn Lewis PLOTSTYLE: PInnov.NCS.plt PROJECT STATUS: --

TESD CONESTOGA
ATHLETIC FIELDS

TREDYFFRIN TOWNSHIP
CHESTER COUNTY, PA

HSA PROJECT # :21-019

HSA
Heckendorn Shiles Architects

PROJECT TEAM

CLIENT
Tredyffrin/Easttown School District
940 West Valley Road, Suite 1700
Wayne, PA 19087
(610) 240-1900

ARCHITECTURAL
Heckendorn Shiles Architects
347 East Conestoga Road
Wayne, PA 19087
610-994-3500

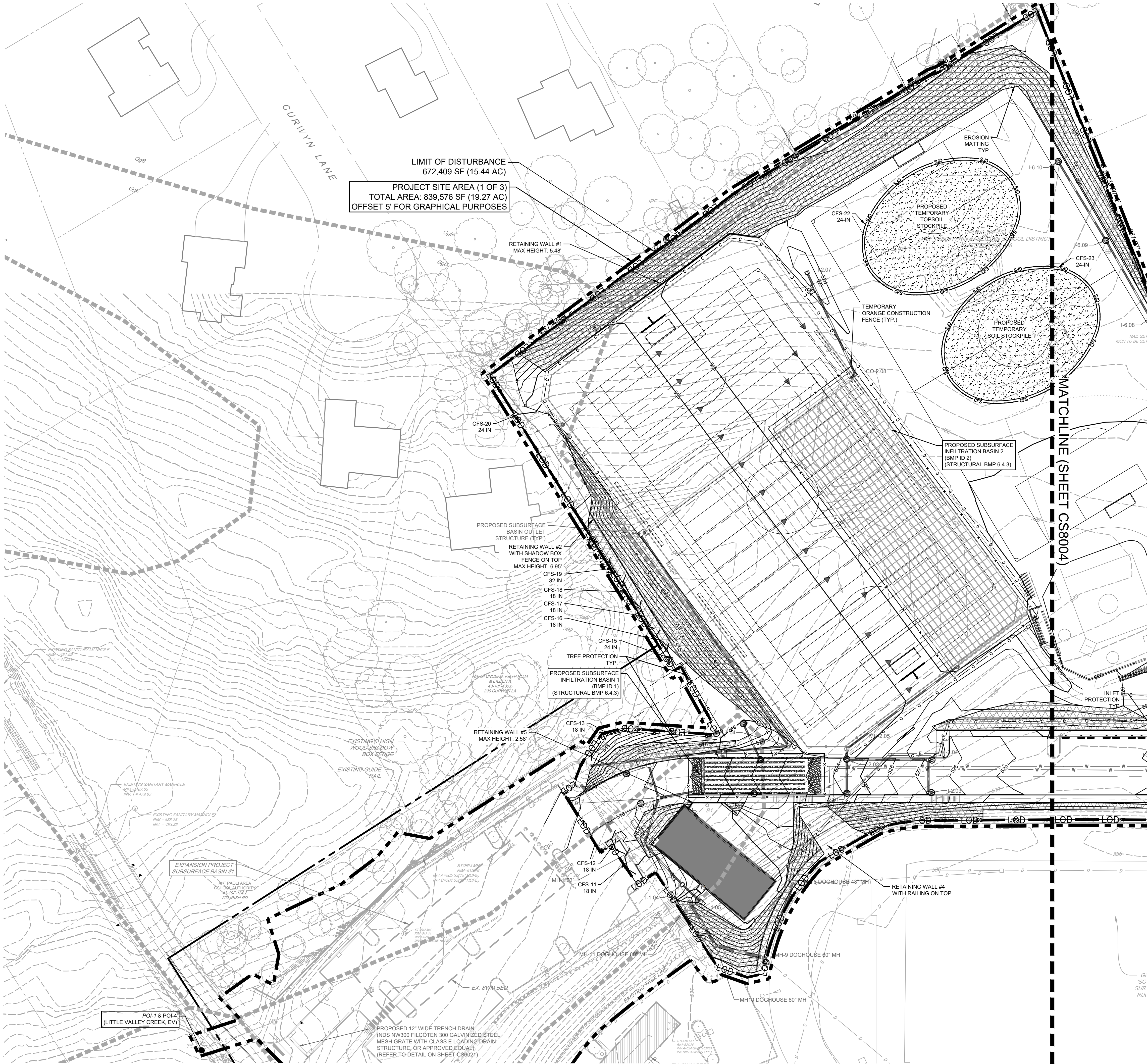
STRUCTURAL ENGINEER
N/A

MEPFP ENGINEER
Schiller and Hersh Associates, Inc.
636 Skippack Pike, Suite 200
Blue Bell, PA 19422
(215) 886-8947

SITE / CIVIL
Pennoni Associates, Inc
158 W Gay Street, Suite 300
West Chester, PA 19380
(610) 429-8907

MISC DISCIPLINE
N/A

NOT FOR
CONSTRUCTION



E&S LEGEND:

- LOD PROPOSED LIMIT OF DISTURBANCE
- PROPOSED INLET PROTECTION
- PROPOSED SUPER SILT FENCE
- PROPOSED COMPOST FILTER SOCK
- PROPOSED SLOPE MATTING
- PROPOSED ROCK CONSTRUCTION ENTRANCE
- PROPOSED CONCRETE WASHOUT
- PROJECT SITE AREA

EROSION & SEDIMENT POLLUTION CONTROL PLAN NOTES

- THE PROJECTS RECEIVING WATERCOURSE IS THE TRIBUTARY 00907 OF LITTLE VALLEY CREEK AND TROUT CREEK WATERSHED.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION BMPs MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL SITE INSPECTIONS WILL BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE. THE COMPLIANCE ACTIONS AND THE DATE, TIME, AND NAME OF THE PERSON CONDUCTING THE INSPECTION, THE INSPECTION LOG WILL BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.
- ALL PREVENTIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING, MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs OR MODIFICATIONS OF THOSE INSTALLED WILL BE NEEDED.
- WHERE BMPs ARE FOUND TO FAIL TO ALLEVIATE EROSION OR SEDIMENT POLLUTION, THE PERMITTEE OR CO-PERMITTEE SHALL INCLUDE THE FOLLOWING INFORMATION:
 - a. THE LOCATION AND SEVERITY OF THE BMPs FAILURE AND ANY POLLUTION EVENTS.
 - b. ALL STEPS TAKEN TO, REDUCE, ELIMINATE AND PREVENT THE RECURRENT OF THE NON-COMPLIANCE.
 - c. THE TIME FRAME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPs MUST BE STABILIZED IMMEDIATELY.
- AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
- UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THAT WILL EXCEED 4 DAYS, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION. (PLEASE NOTE THAT HYDROSEED IS NOT CONSIDERED STABILIZATION UNTIL IT GERMINATES). HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
- AREAS WHICH ARE TO BE TOP-SOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES (6 TO 12 INCHES ON COMPACTED SOILS) PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING, I.E. YARDS.
- SEDIMENT TRACKED ONTO ANY ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE RESIDENCE BY THE END OF EACH WORKDAY AND DISPOSED AS A MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED OR SWEEPED INTO ANY ROAD SIDE DITCH, STORM SEWER OR SURFACE WATER.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- CONTRACTOR IS TO ENSURE THAT PIPES DISCHARGING INTO SUBSURFACE BASINS ARE SEALED UNTIL ALL FLOW SOURCES TO THAT AREA ARE FULLY STABILIZED. ONCE THE SUBSURFACE BASIN IS CONSTRUCTED, IMMEDIATELY INSTALL FILTER SOCKS ALONG THE PERIMETER OF THE SUBSURFACE BASIN TO PREVENT SEDIMENT FROM ENTERING THE SUBSURFACE BASIN. THE SILT SOCKS MUST REMAIN IN PLACE UNTIL THE CONTRIBUTING AREA TO THE SUBSURFACE BASIN ACHIEVES 70% UNIFORM STABILIZATION. IMMEDIATELY INSTALL INLET PROTECTION ON ALL NEW INLETS.
- CONTRACTOR TO ENSURE THE PROPOSED PIPING HAS AT LEAST ONE AND A HALF FEET OF COVER.
- CONTRACTOR TO INSTALL ORANGE CONSTRUCTION FENCE AROUND THE PERIMETER OF ALL INFILTRATION BMPs TO AVOID COMPACTION FROM MACHINERY.
- STOCKPILES SHALL NOT BE PLACED ABOVE THE LOCATION OF ANY PROPOSED SUBSURFACE BASIN OR TRENCH.
- TREE REMOVAL SHALL NOT BE CONDUCTED FROM MAY 15 TO AUGUST 15.

SOILS SUMMARY CHART:

NRCS WEB SOIL SURVEY, CHESTER COUNTY, PENNSYLVANIA, APRIL 8 2019				DEPTH TO		LIMITATIONS			RESOLUTION
SYMBOL	NAME	GROUP	SLOPES (%)	WATER TABLE (FT)	BEDROCK (IN)	FROST	PIPES	BUILDING	
GgC	GLENELG SILT LOAM	B	8-15	--	72-120	MODERATE	LOW	HIGH	SEE RESOLUTION NOTES
GgB	GLENELG SILT LOAM	B	3-8	--	72-120	MODERATE	LOW	HIGH	SEE RESOLUTION NOTES
Umb	URBAN LAND - GLENELG COMPLEX	B	0-8	--	60-120	MODERATE	LOW	HIGH	SEE RESOLUTION NOTES
Umq	URBAN LAND - GLENELG COMPLEX	B	8-25	--	60-120	MODERATE	LOW	HIGH	SEE RESOLUTION NOTES
UugB	URBAN LAND - UDORTHEN'S SCHIST AND GNEISS COMPLEX	B	0-8	5	60-120	MODERATE	MODERATE	MODERATE	SEE RESOLUTION NOTES

RESOLUTION NOTES:

- WATER TABLE: IF SITE IS TO BE USED FOR CONSTRUCTION, DEWATER EXCAVATIONS THROUGH A PUMPED WATER FILTER BAG AS NECESSARY. AVOID PONDING DURING CONSTRUCTION. CLOSE ALL EXCAVATIONS AS SOON AS PRACTICAL. ENSURE ALL INSTALLED PIPE IS WATERTIGHT.
- EROSION HAZARD: THE CONTRACTOR SHALL FOLLOW THE EROSION AND SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION AND PLANS. THE EROSION CONTROL MEASURES SHALL BE INSPECTED AFTER EVERY RUNOFF EVENT AND ON A WEEKLY BASIS IMMEDIATELY AFTER EVERY RUNOFF EVENT THE EROSION AND SEDIMENTATION FACILITIES AND MEASURES WILL BE CLEANED, REPAIRED, AND REPLACED AS NEEDED. WASHED-OUT AREAS WILL BE RE-GRADED AND RE-SEED. SILT FENCES WILL BE INSPECTED AND RESTORED TO AN UPRIGHT AND EFFECTIVE POSITION AFTER EVERY RUNOFF EVENT OR WHEN THEY ARE OBSERVED TO BE IN NEED OF MAINTENANCE.
- PIPING HAZARD: SUITABLE FILL MATERIAL FOR ALL PIPING SHALL BE USED PER RECOMMENDATIONS OF A GEOTECHNICAL ENGINEER. ANTI-SLEEP COLLARS SHALL BE INSTALLED AT THE DETENTION BASIN OUTLET STRUCTURE PIPE BARRELS AS SHOWN ON DETAILS.

GEOLOGY CHART

OCTORARO FORMATION
ALBITE-CHLORITE SCHIST, PHYLLITE, SOME HORNBLende GNEISS, AND GRANITIZED MEMBERS.
STATE: PENNSYLVANIA
NAME: OCTORARO FORMATION
GEOLOGIC AGE: LOWER PALEOZOIC
ORIGINAL MAP LABEL: 50
PRIMARY ROCK TYPE: ALBITE-CHLORITE SCHIST
SECONDARY ROCK TYPE: PHYLLITE
OTHER ROCK TYPES: HORNBLende GNEISS



CALL BEFORE YOU DIG

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA
CALL 1-800-242-1776
PA. ACT 287 OF 1974 REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL OR BLAST PENNSYLVANIA ONE-CALL SYSTEM, INC.
SERIAL NUMBER(S): 20223152954

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR RELIANCE BY OWNER OR OTHERS ON THE EXTENSIVENESS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY RELIANCE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES. AND OWNERS SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

A	DATE	ISSUED FOR
	03/16/2023	LAND DEVELOPMENT SUBMISSION
1	05/18/2023	REVISED PER TWP COMMENTS
2	06/14/2023	REVISED PER CDD COMMENTS
3	07/20/2023	REVISED PER TWP REVIEW
4	09/26/2023	REV. PER TWP & NPDES REVIEW
5	09/29/2023	REVISED PER ISM REVIEW
6	01/17/2024	ISSUED FOR FINAL SUBMISSION
7	03/18/2024	BID ISSUE

SHEET TITLE

EROSION AND
SEDIMENTATION CONTROL
PLAN - PHASE 2
DRAWING NUMBER

CS8003

0 40' 80'

SHEET 36 OF 51

TESD CONESTOGA
ATHLETIC FIELDS

TREDYFFRIN TOWNSHIP
CHESTER COUNTY, PA

HSA PROJECT # :21-019



PROJECT TEAM

CLIENT
Tredyffrin/Easttown School District
940 West Valley Road, Suite 1700
Wayne, PA 19087
(610) 240-1900

ARCHITECTURAL
Heckendorn Shiles Architects
347 East Conestoga Road
Wayne, PA 19087
610-994-3500

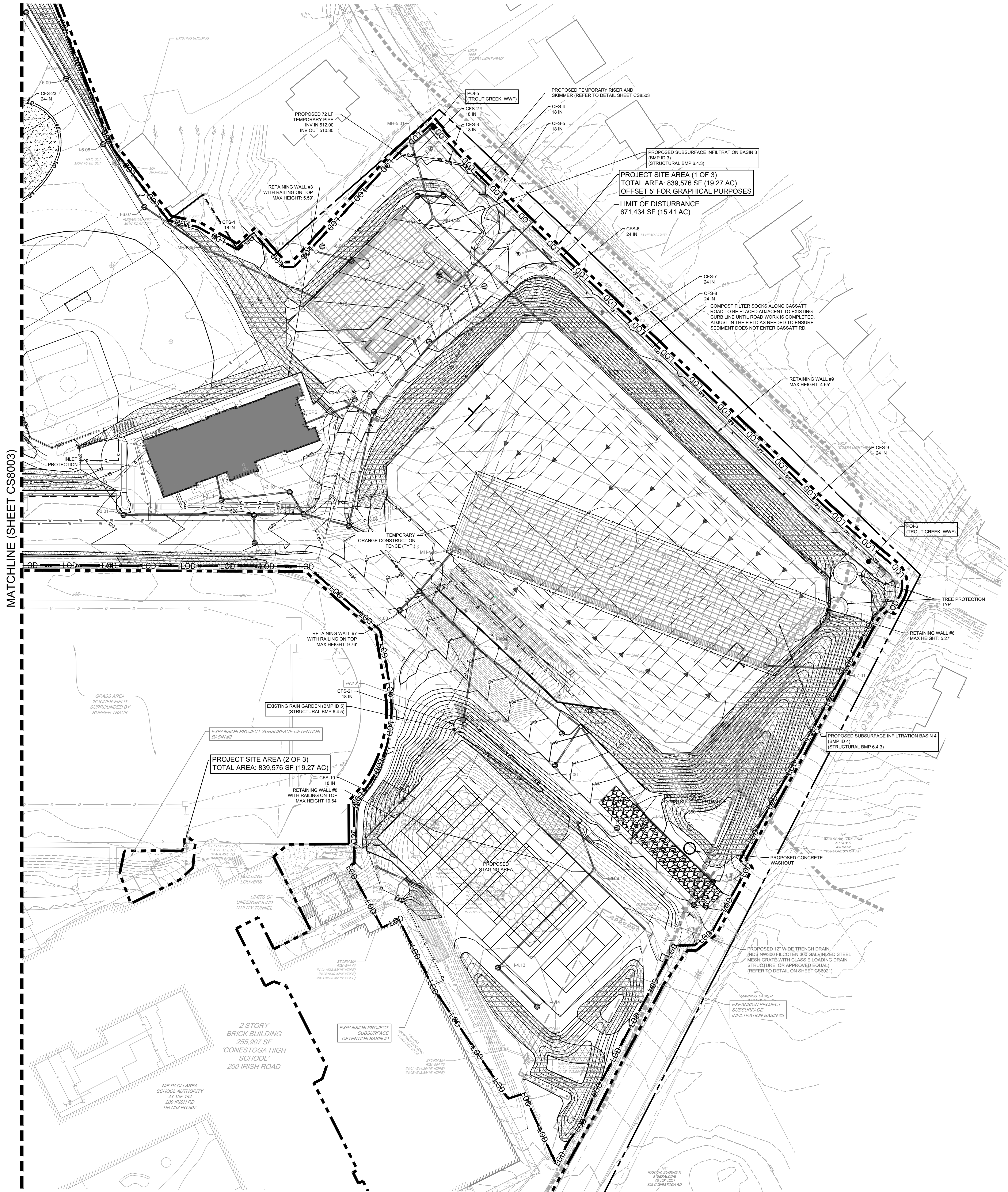
STRUCTURAL ENGINEER
N/A

MEPFP ENGINEER
Schiller and Hersh Associates, Inc.
636 Skippack Pike, Suite 200
Blue Bell, PA 19422
(215) 886-8947

SITE / CIVIL
Pennoni Associates, Inc.
158 W Gay Street, Suite 300
West Chester, PA 19380
(610) 429-8907

MISC DISCIPLINE
N/A

NOT FOR
CONSTRUCTION



- E&S LEGEND:
- LOD PROPOSED LIMIT OF DISTURBANCE
 - PROPOSED INLET PROTECTION
 - PROPOSED SUPER SILT FENCE
 - CFS PROPOSED COMPOST FILTER SOCK
 - PROPOSED SLOPE MATTING
 - PROPOSED ROCK CONSTRUCTION ENTRANCE
 - PROPOSED CONCRETE WASHOUT
 - PROJECT SITE AREA



CALL BEFORE YOU DIG
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA
CALL 1-800-242-1776
PA. ACT 287 OF 1974 REQUIRES THREE WORKING DAYS
NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL OR
BLAST PENNSYLVANIA ONE-CALL SYSTEM, INC.
SERIAL NUMBER(S): 20223162964

0 40' 80'

COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS

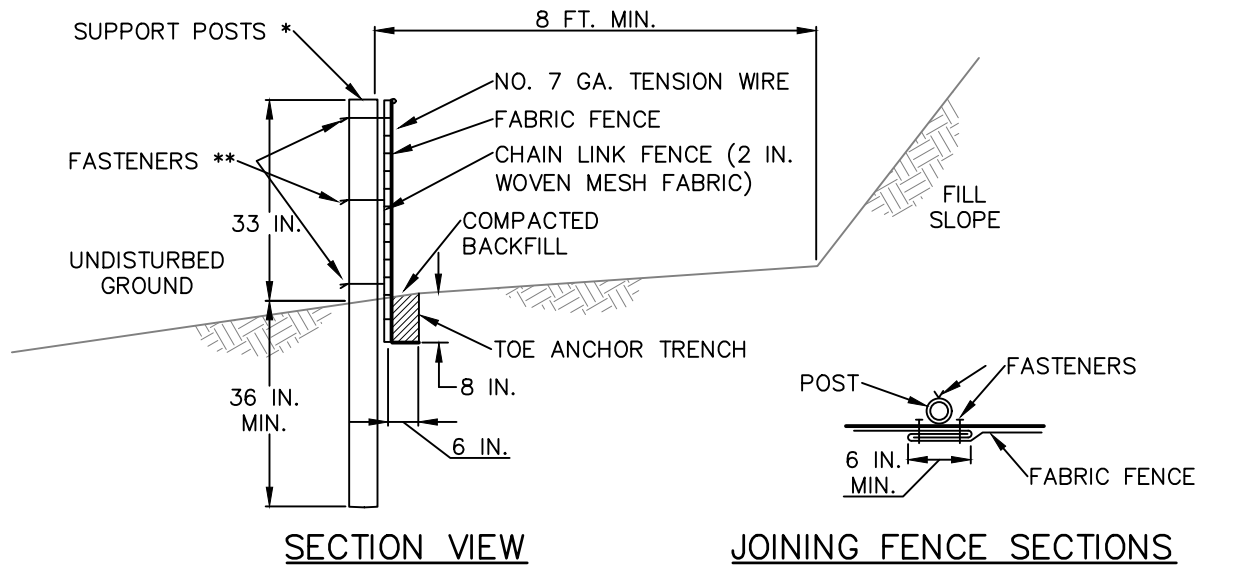
MATERIAL TYPE	3 mil HDPE	5 mil HDPE	5 mil HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HMFPP)
MATERIAL CHARACTERISTICS	PHOTODEGRADABLE	PHOTODEGRADABLE	PHOTODEGRADABLE	PHOTODEGRADABLE	PHOTODEGRADABLE
SOCK DIAMETERS	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"
TENSILE STRENGTH		26 PSI	26 PSI	44 PSI	202 PSI
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS

TWO-PLY SYSTEMS	
INNER CONTAINMENT NETTING	HDPE BIAXIAL NET
	CONTINUOUSLY WOUND
	FUSION-WELDED JUNCTURES
OUTER FILTRATION MESH	3/4" X 3/4" MAX APERTURE SIZE
	COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER AND NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH)
	3/16" MAX APERTURE SIZE
SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS	

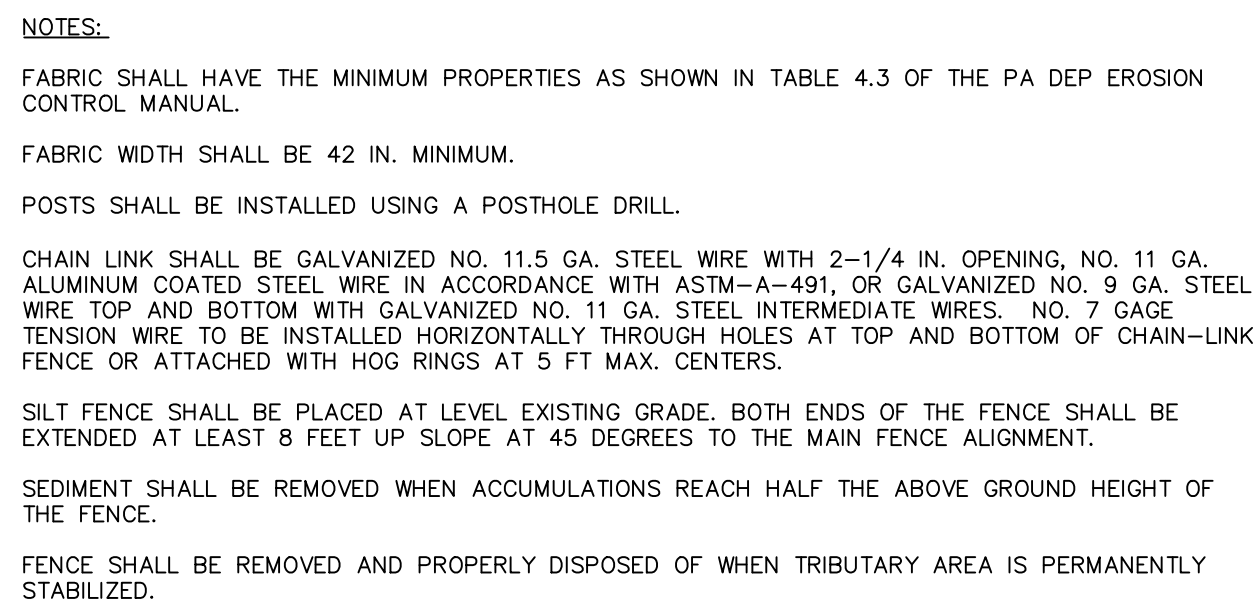
COMPOST STANDARDS

ORGANIC MATTER CONTENT	25 % - 100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5 - 8.5
MOISTURE CONTENT	30% - 60%
PARTICLE SIZE	30% - 50% PASS THROUGH 3/8" SIEVE
SOLUBLE SALT CONCENTRATION	5.0 dS/m (MMHOS/CM) MAX

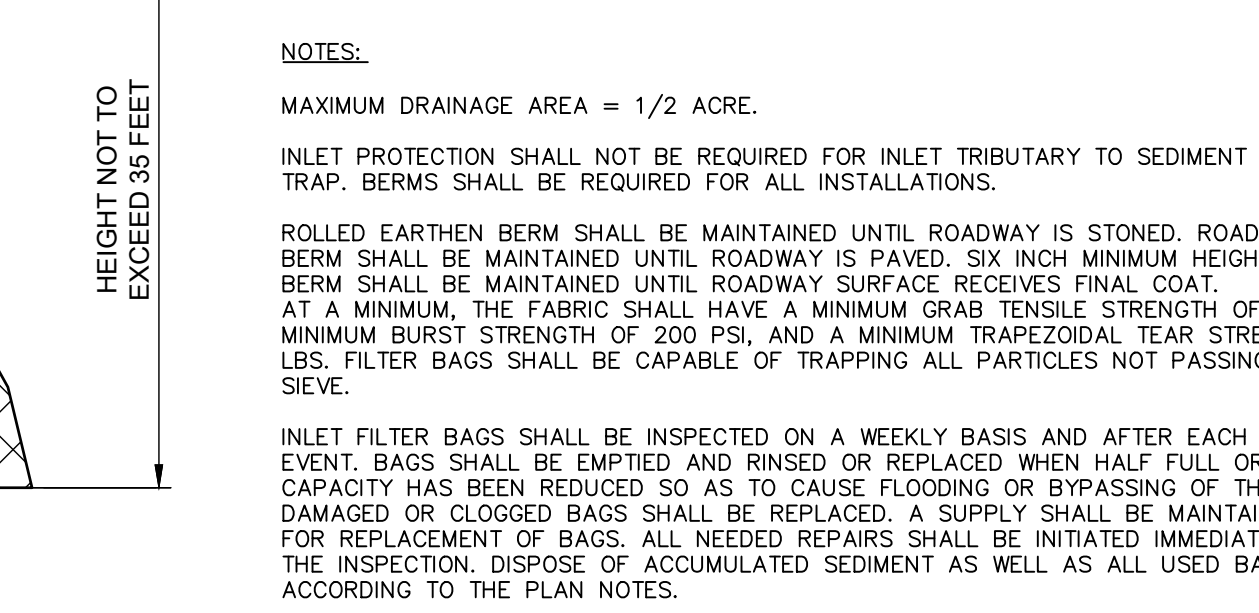
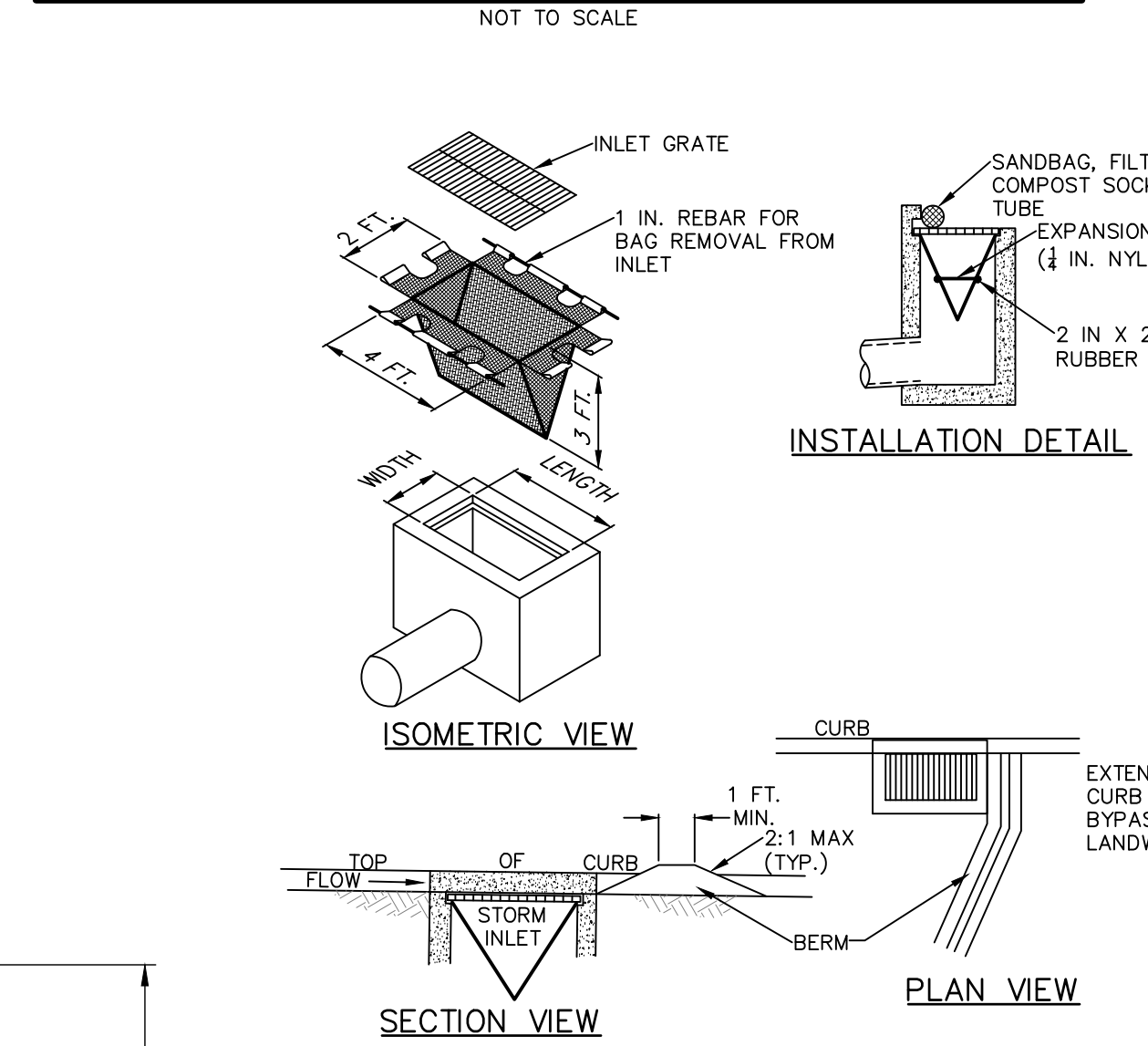
STANDARD CONSTRUCTION DETAIL #4-1
COMPOST FILTER SOCK



NOTES:
SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL.
COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.
COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.
TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.
ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS. PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

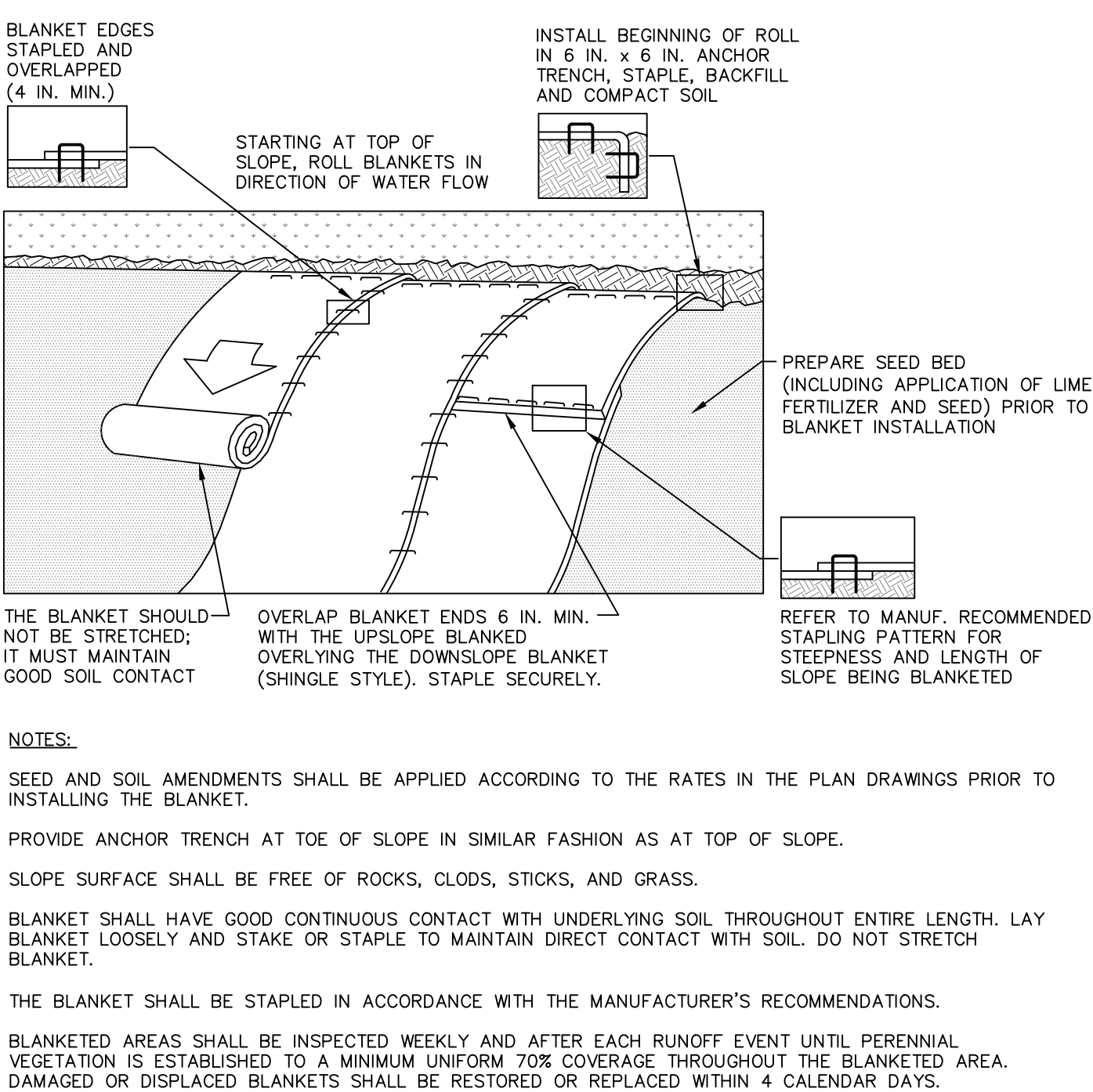


STANDARD CONSTRUCTION DETAIL #4-10
SUPER SILT FENCE

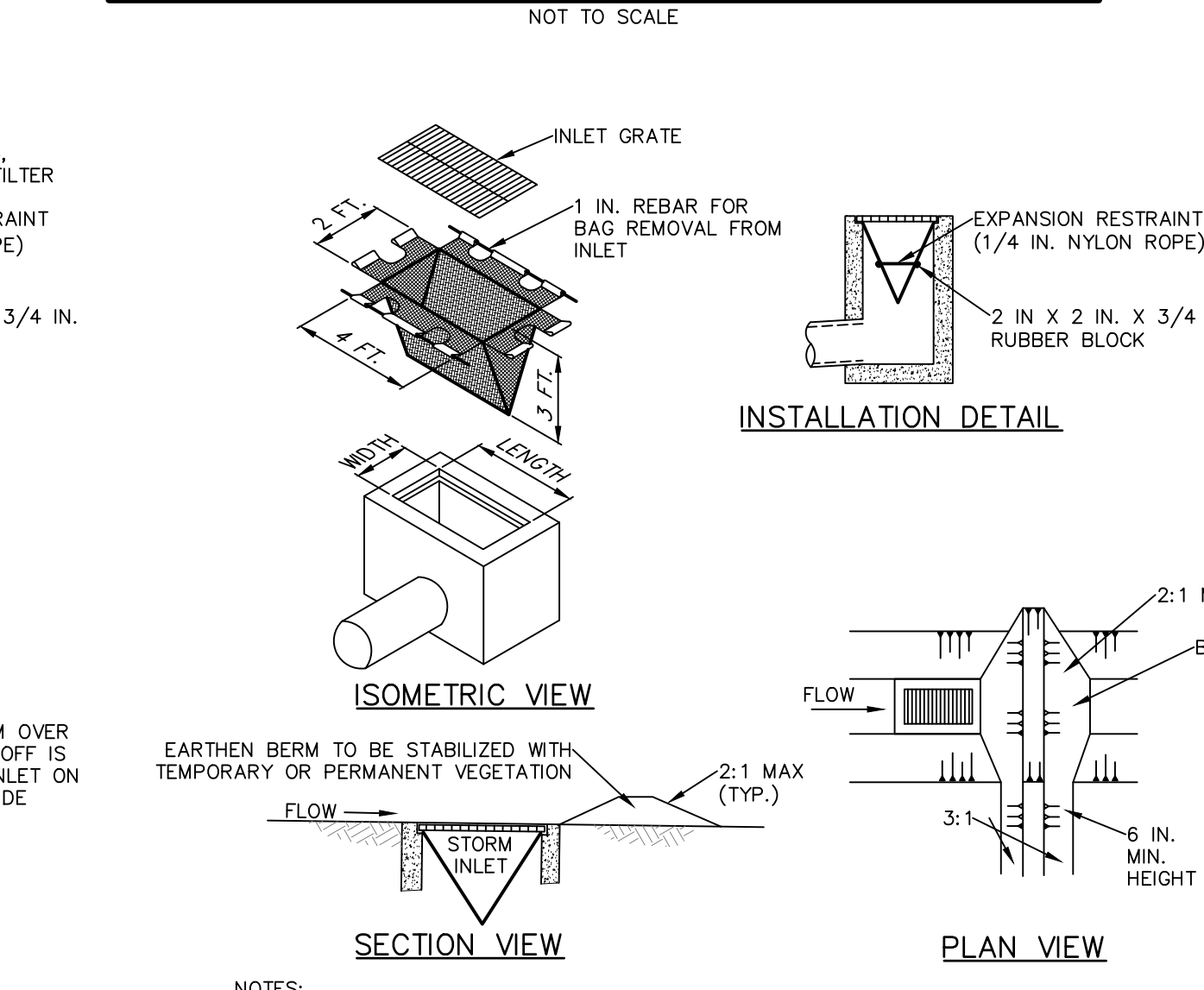


STANDARD CONSTRUCTION DETAIL #4-15
FILTER BAG INLET PROTECTION - TYPE C INLET

NOT TO SCALE

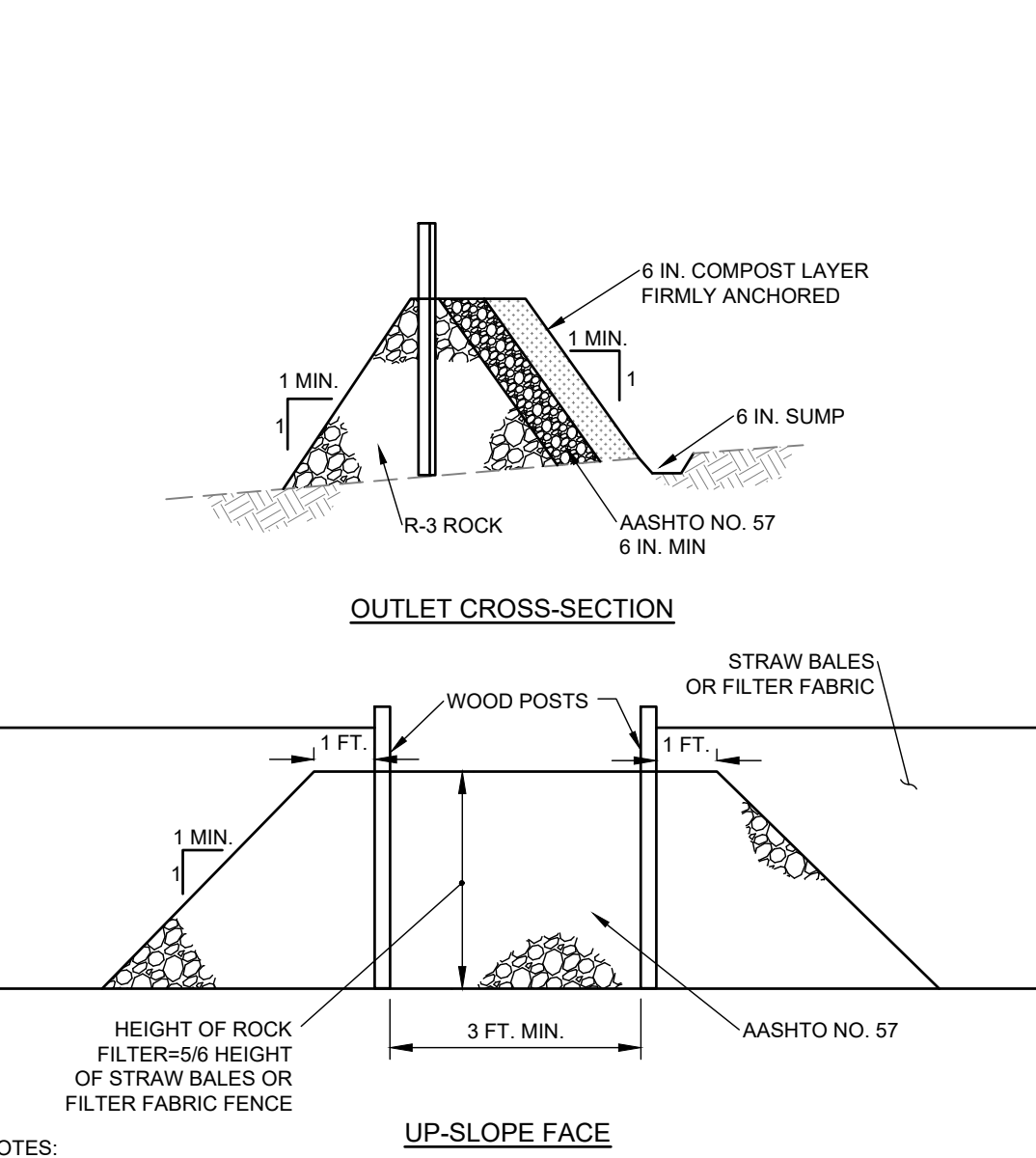


STANDARD CONSTRUCTION DETAIL #11-1
EROSION CONTROL BLANKET INSTALLATION

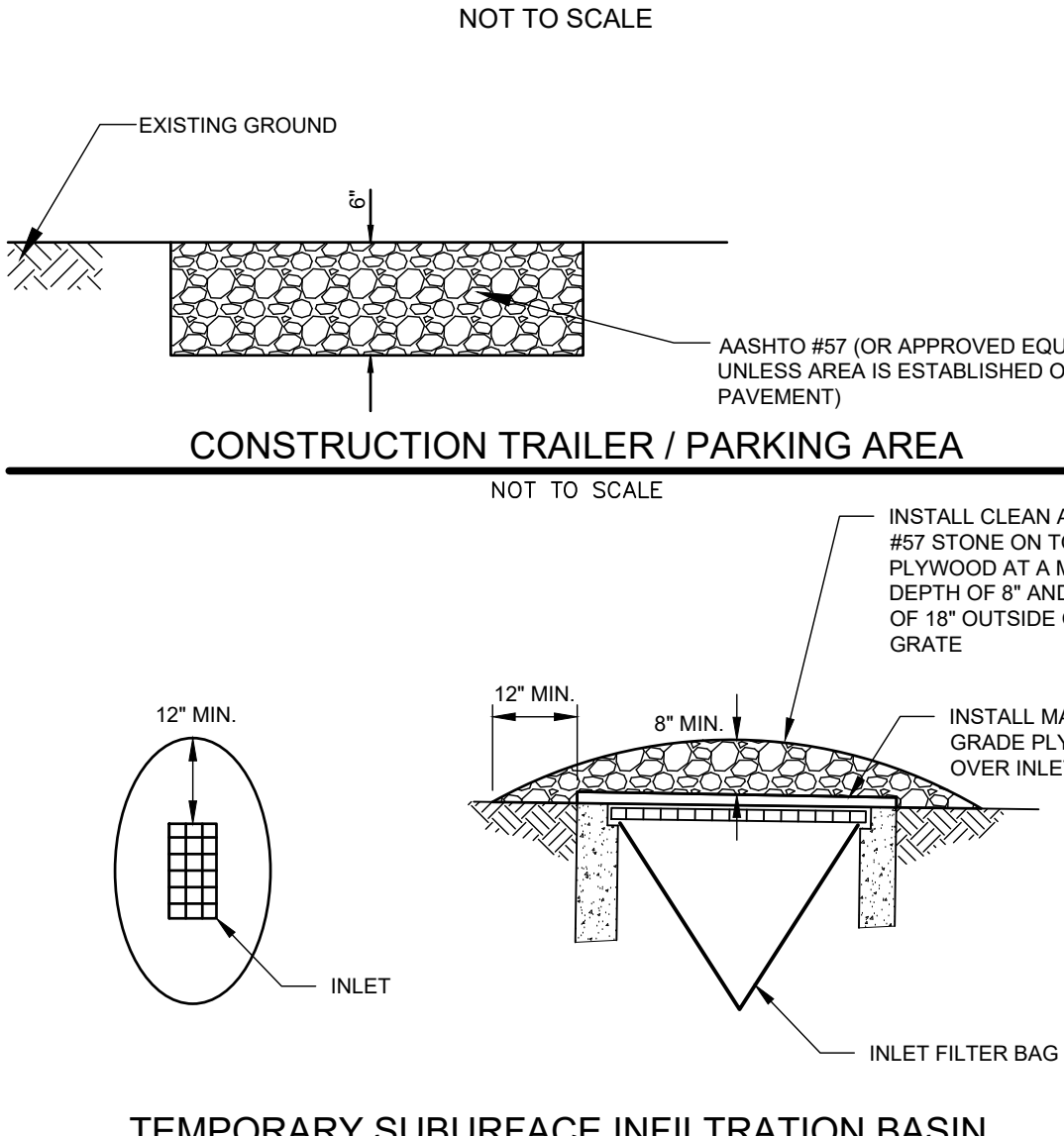


STANDARD CONSTRUCTION DETAIL #4-16
FILTER BAG INLET PROTECTION - TYPE M INLET

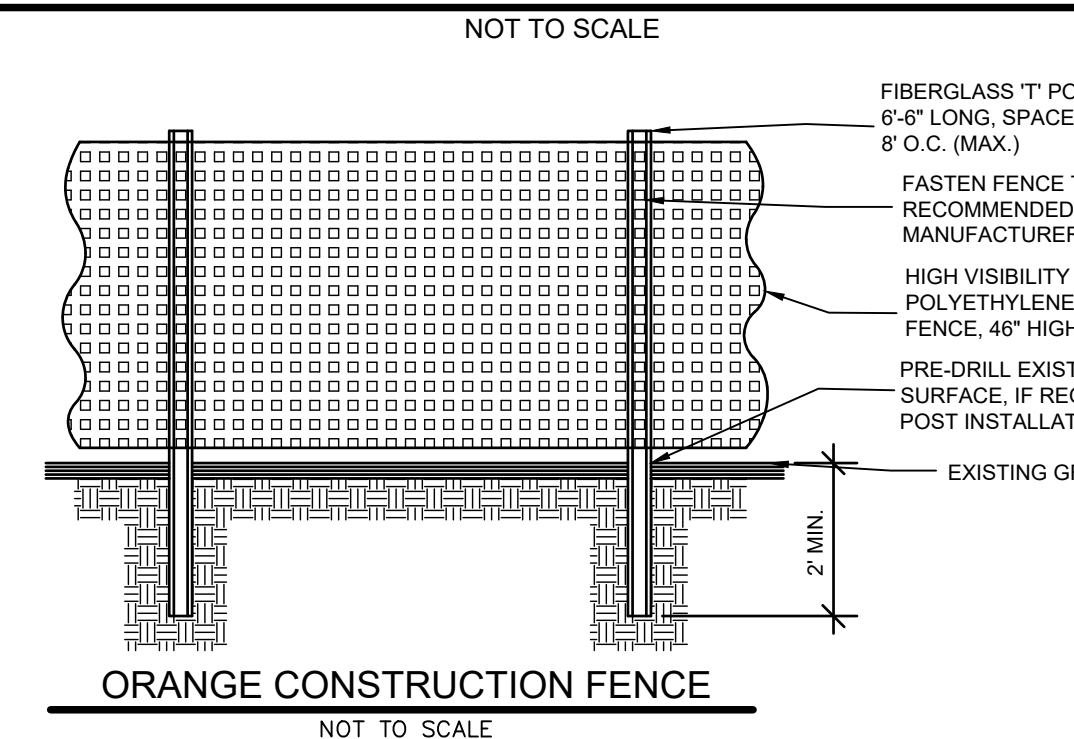
NOT TO SCALE



STANDARD CONSTRUCTION DETAIL #4-6
ROCK FILTER OUTLET

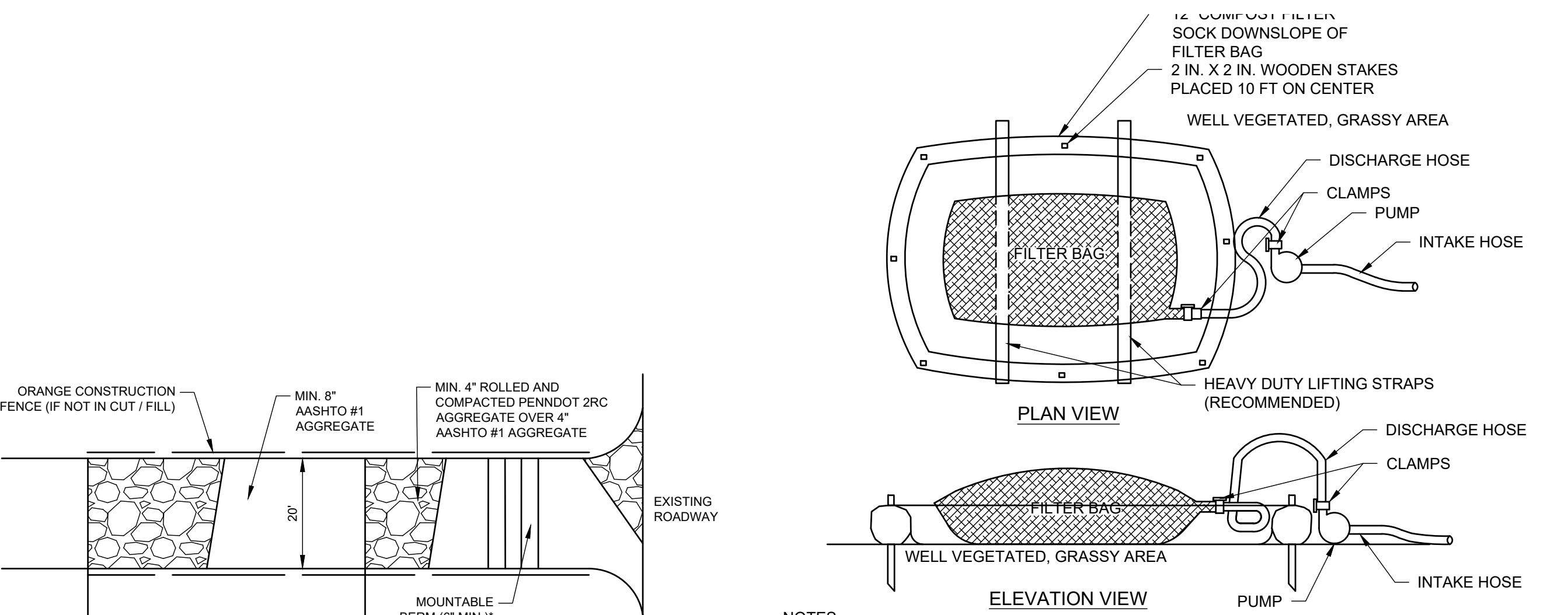


STANDARD CONSTRUCTION DETAIL #4-6
ROCK FILTER OUTLET



STANDARD CONSTRUCTION DETAIL #4-6
ROCK FILTER OUTLET

NOT TO SCALE



NOTES:
LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4832	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL. UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

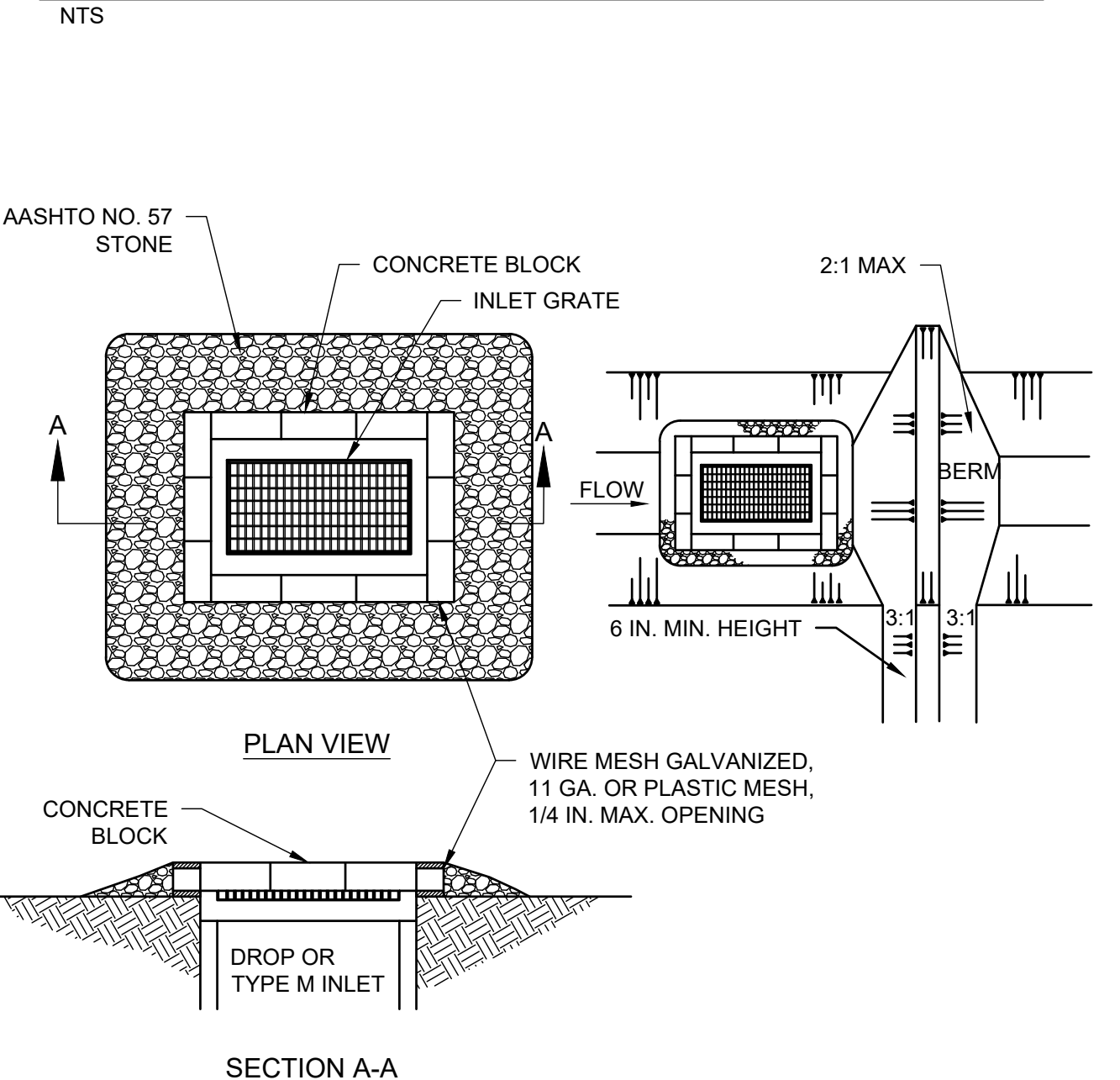
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

PUMPED WATER FILTER BAG
NTS STANDARD CONSTRUCTION DETAIL #3-16

ALTERNATE ROCK CONSTRUCTION ENTRANCE



NOTES:
MAXIMUM DRAINAGE AREA = 1 ACRE.
INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS NOT LOCATED AT A LOW POINT.

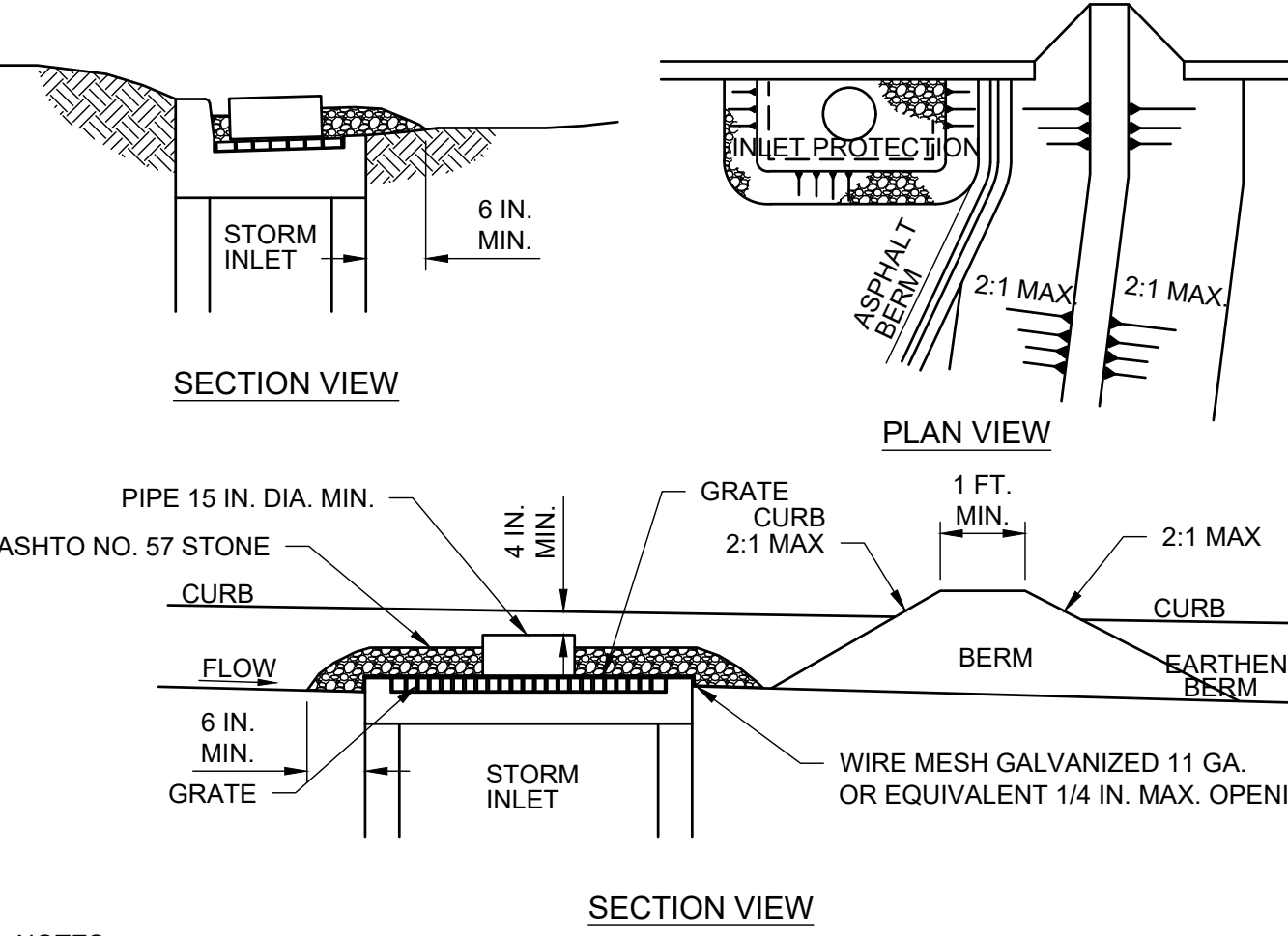
ROLLED EARTHEN BERM IN ROADWAY SHALL BE PROVIDED AND MAINTAINED IMMEDIATELY DOWN GRADIENT OF THE PROTECTED INLET UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR TO REMAIN PERMANENTLY.

TOP OF BLOCK SHALL BE AT LEAST 6 INCHES BELOW ADJACENT ROADS IF PONDED WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC.

SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE STONE. DAMAGED OR CLOGGED INSTALLATIONS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

FOR SYSTEMS DISCHARGING TO HQ OR EV SURFACE WATER, A 6 INCH THICK COMPOST LAYER SHALL BE SECURELY ANCHORED ON OUTSIDE AND OVER TOP OF STONE. COMPOST SHALL MEET THE STANDARDS IN TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

STONE & CONCRETE BLOCK INLET PROTECTION - TYPE M
NTS STANDARD CONSTRUCTION DETAIL #4-18



NOTES:
INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE PROVIDED AND MAINTAINED IMMEDIATELY DOWN GRADIENT OF THE PROTECTED INLET UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR TO REMAIN PERMANENTLY.

STONE INLET PROTECTION AND BERM FOR A TYPE C INLET CAN BE USED IN ONE ACRE MAXIMUM DRAINAGE AREA WITH 15 IN OVERFLOW PIPE AND 4 IN. HEAD. A PERFORATED PLATE WELDED TO A METAL RISER MAY NOT BE SUBSTITUTED FOR THE WIRE MESH. A SLOTTED PLATE WELDED TO THE RISER MAY BE USED IN CONJUNCTION WITH THE WIRE MESH IF CALCULATIONS ARE PROVIDED TO SHOW SUFFICIENT CAPACITY OF THE INLET TO ACCEPT THE PEAK RUNOFF FOR A 2-YEAR STORM EVENT FROM THE TRIBUTARY DRAINAGE AREA.

SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE STONE. DAMAGED OR CLOGGED INSTALLATIONS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

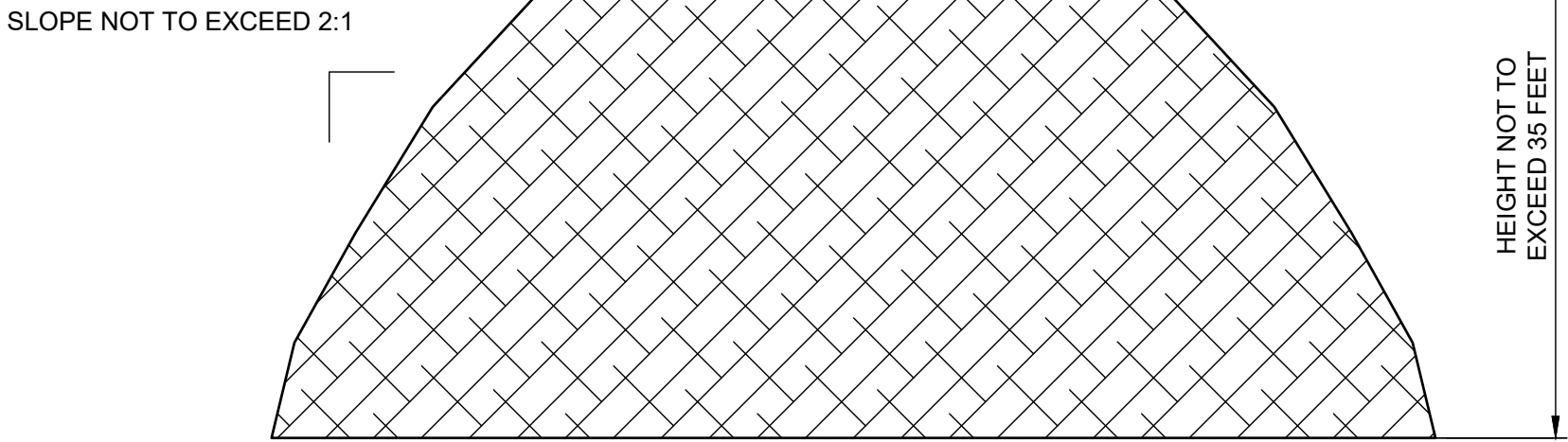
FOR SYSTEMS DISCHARGING TO HQ OR EV SURFACE WATER, A 6 IN. THICK COMPOST LAYER SHALL BE SECURELY ANCHORED ON OUTSIDE AND OVER TOP OF STONE. COMPOST SHALL MEET THE STANDARDS IN TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STONE INLET BERM-TYPE C INLET

NTS STANDARD CONSTRUCTION DETAIL #4-19

SLOPE NOT TO EXCEED 2:1



NOTE:
1. TEMPORARY TOP SOIL STOCKPILE IS TO BE SURROUNDED BY 24" COMPOST FILTER SOCK ON DOWNGRADE SIDE.
2. IMMEDIATELY APPLY TEMPORARY SEEDING TO ALL STOCKPILES

TOPSOIL STOCKPILE
NTS

NOT TO SCALE