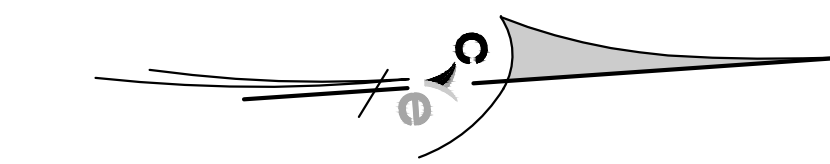


PRELIMINARY LAND DEVELOPMENT PLANS
FOR
GLENSIDE ELEMENTARY SCHOOL -
BUILDING ADDITIONS & RENOVATIONS
CHELTENHAM TOWNSHIP, MONTGOMERY COUNTY, PA

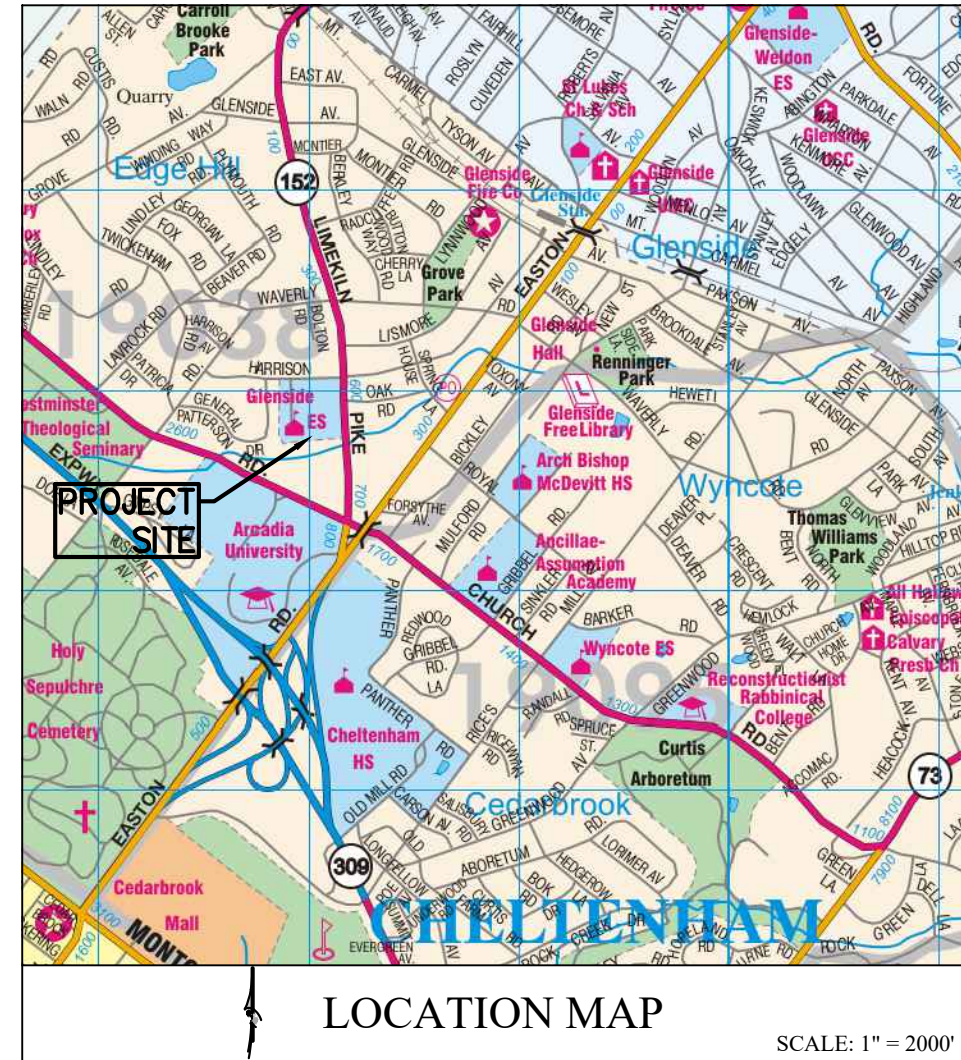
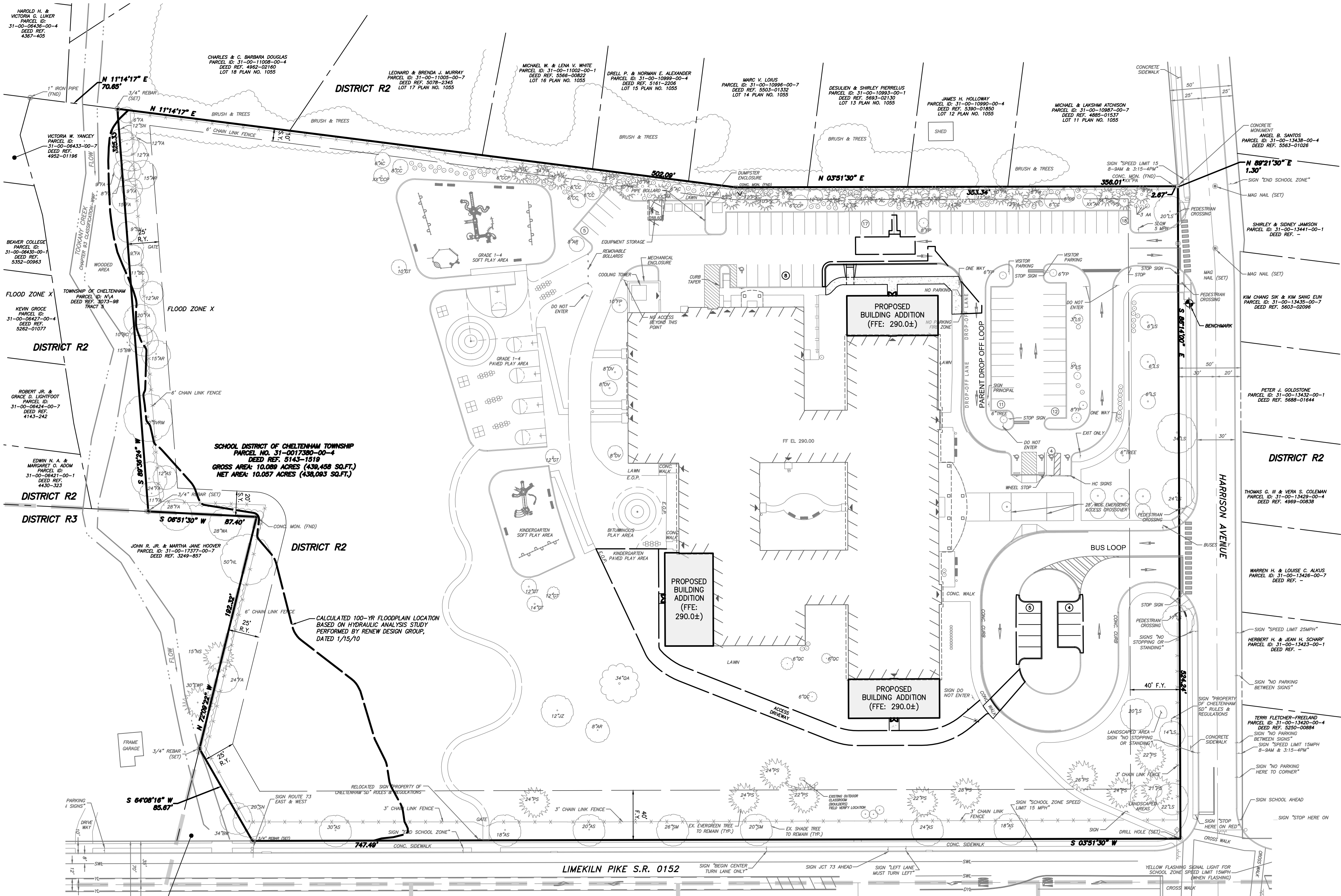


SHEET INDEX	
SHEET NUMBER	TITLE
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	DEMOLITION PLAN
4	SITE LAYOUT PLAN
5	GRADING & UTILITY PLAN
6	CONSTRUCTION DETAILS
7	UTILITY PROFILES
8	EROSION & SEDIMENTATION CONTROL PLAN
9	EROSION & SEDIMENTATION CONTROL NOTES
10	EROSION & SEDIMENTATION CONTROL DETAILS
11	POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN
12	POST-CONSTRUCTION STORMWATER MANAGEMENT NOTES & DETAILS
13	POST-CONSTRUCTION STORMWATER MANAGEMENT DETAILS
14	LANDSCAPE PLAN
15	LIGHTING PLAN
16	LANDSCAPE & LIGHTING DETAILS
17	VEHICLE CIRCULATION PLAN

PRELIMINARY PLAN:
NOT TO BE RECORDED.

WAIVER REQUEST:

1. SECTION 260-15C(11)(B) OF THE CHELTENHAM TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE: A WAIVER IS REQUESTED FROM THIS SECTION OF THE ORDINANCE TO NOT PROVIDE THE LOCATIONS AND DESCRIPTIONS OF EXISTING BUILDINGS AND STRUCTURES LESS THAN 400 FEET BEYOND THE TRACT BOUNDARIES. THE SITE IS BORDERED BY RESIDENTIAL USES, SO THIS INFORMATION CONSISTS OF RESIDENTIAL BUILDINGS, DRIVEWAYS, ETC.



COMMONWEALTH OF PENNSYLVANIA
COUNTY OF MONTGOMERY

ON THE _____ DAY OF _____, 20____, BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC OF THE COMMONWEALTH OF PENNSYLVANIA, RESIDING IN _____, PERSONALLY APPEARED _____, WHO ACKNOWLEDGED HIMSELF TO BE THE _____ OF CHELTENHAM SCHOOL DISTRICT, BEING AUTHORIZED TO DO SO, HE EXECUTED THE FOREGOING PLAN BY SIGNING THAT SAID CORPORATION IS THE OWNER OF THE DESIGNATED LAND, THAT ALL NECESSARY APPROVAL OF THE PLAN HAS BEEN OBTAINED AND IS ENDORSED THEREON AND THAT SAID CORPORATION DESIRES THAT THE FOREGOING PLAN MAY BE DULY RECORDED.

WITNESS MY HAND AND SEAL THE DAY AND DATE WRITTEN
NOTARY SEAL

(NOTARY PUBLIC OR OTHER OFFICER)
MY COMMISSION EXPIRES: _____

APPROVED BY THE BOARD OF COMMISSIONERS OF THE TOWNSHIP OF CHELTENHAM THIS _____ DAY OF _____, 20____.

(PRESIDENT)

(SECRETARY)

REVIEWED AND APPROVED BY THE CHELTENHAM TOWNSHIP ENGINEER THIS _____ DAY OF _____, 20____.

(TOWNSHIP ENGINEER)

MOPC NO. _____
PROCESSED AND REVIEWED. A REPORT HAS BEEN PREPARED BY THE MONTGOMERY COUNTY PLANNING COMMISSION IN ACCORDANCE WITH THE MUNICIPALITIES PLANNING CODE.

CERTIFIED THIS DATE _____
FOR THE DIRECTOR
MONTGOMERY COUNTY PLANNING COMMISSION

NO.	DATE	REVISION

PRELIMINARY LAND DEVELOPMENT PLANS
FOR
GLENSIDE ELEMENTARY SCHOOL-
BUILDING ADDITIONS & RENOVATIONS
CHELTENHAM TWP. - MONTGOMERY COUNTY - PENNSYLVANIA

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
1" = 50'	2/21/2024	RRB	JRM	22407

CVE
ChesterValley
ENGINEERS, INC.
112 Moores Road, Suite 200, Malvern, PA 19355
610-644-4623
www.chesterv.com

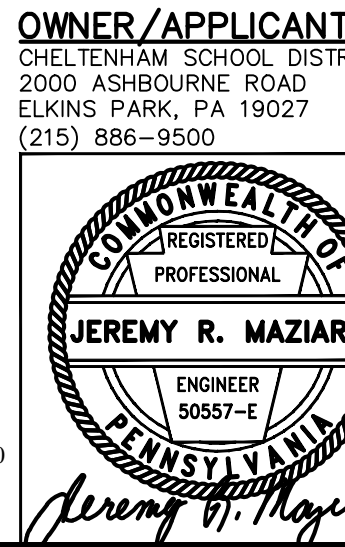
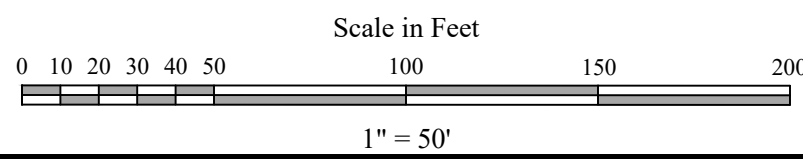
ASSESSMENT MAP BLOCK: 137 UNIT 39

SURVEYOR'S ACKNOWLEDGEMENT
THIS IS TO CERTIFY THAT THIS PLAN REPRESENTS A FIELD SURVEY BY ME OR UNDER MY SUPERVISION, THAT ALL PROPERTY CORNERS ARE SET AS SHOWN HEREON, THAT ALL GEOMETRIC AND GEODETIC DETAILS AS SHOWN ARE CORRECT, AND THAT ALL LOTS OR TRACTS HAVE A BOUNDARY CLOSURE ERROR OF 1:10,000 OR BETTER

SIGNATURE (JOSEPH H. BLACKBURN, III, P.L.S.)
DATE 2/21/2025

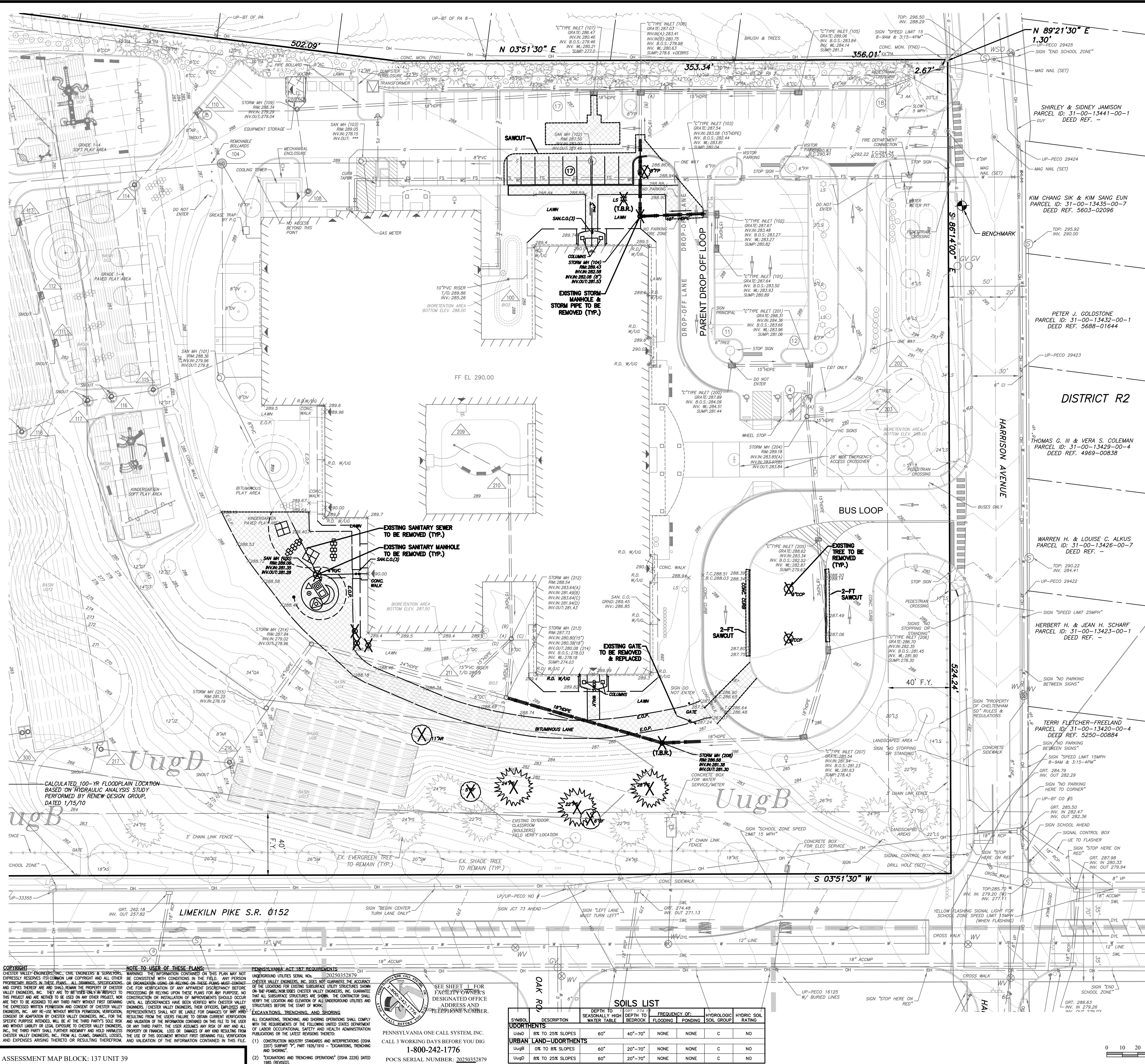
ENGINEER'S STATEMENT
I, JEREMY R. MAZIARZ, P.E., HEREBY CERTIFY THAT I AM A PROFESSIONAL ENGINEER, THAT THE SITE DESIGN CONFORMS TO ALL APPLICABLE SUBDIVISION AND ZONING REGULATIONS, AND THAT SITE DESIGN MEETS ACCEPTED DESIGN STANDARDS AND PRACTICES.

SIGNATURE (JEREMY R. MAZIARZ, P.E. 50557-E)
DATE 2/21/2025



OWNER/APPLICANT:
CHELTENHAM SCHOOL DISTRICT
2000 ASHBOURNE ROAD
ELKINS PARK, PA 19027
(215) 886-9500

J:\CVC-23000\22407 Glenside ELEM.dwg Sheet 01 - Cover.dwg 2/21/2025 9:20:35 AM

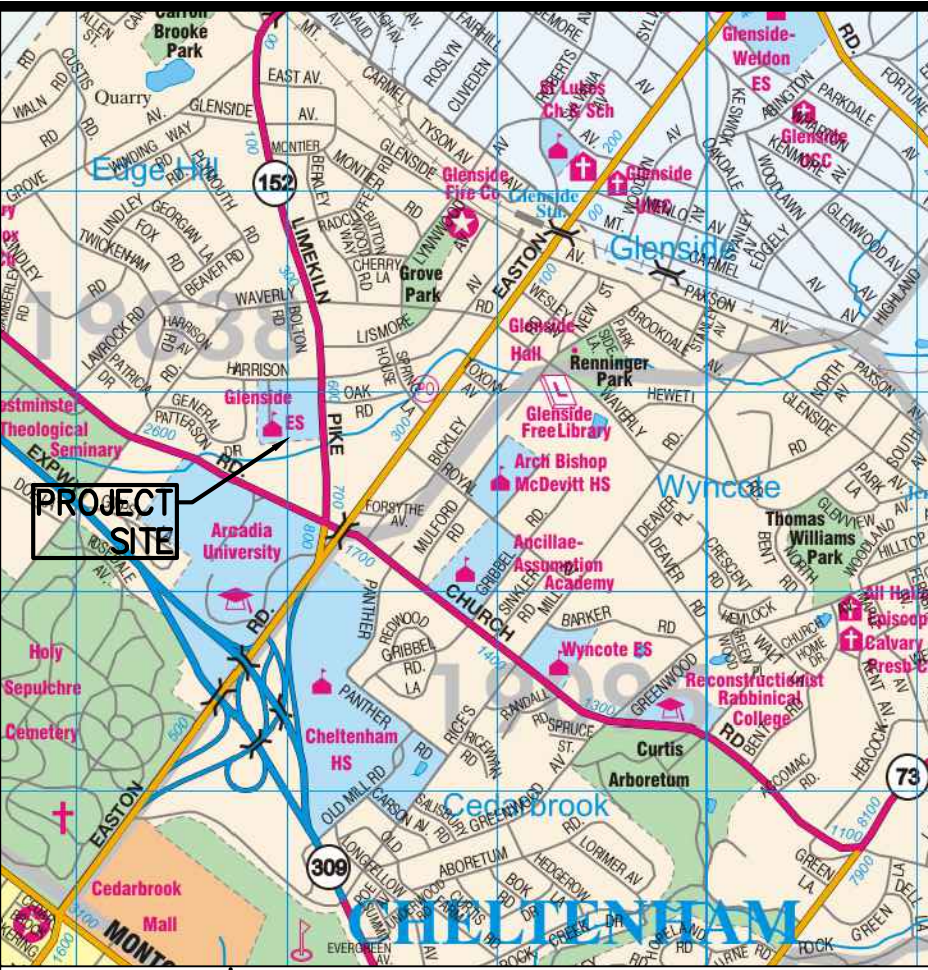


DEMOLITION NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES WITHIN THE WORK AREA BEFORE THE START OF CONSTRUCTION. IF A CONFLICT EXISTS, CONTRACTOR IS TO NOTIFY THE ENGINEER IMMEDIATELY.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL/DEMOLITION OF ALL ANCILLARY FEATURES WHICH ARE LOCATED ON THE PROPERTY AND CONFLICT WITH PROPOSED GRADING INCLUDING, BUT NOT LIMITED TO, POSTS, VEGETATION, FADS, STEPS, SIGNS, SHRUBS, CURBS, LIGHT AND LAMP POSTS, MAILBOXES, MECHANICAL, ELECTRICAL AND HVAC EQUIPMENT, WALLS, ROOF DRAIN PIPING, ETC.
3. IF REQUIRED, CONTRACTOR IS RESPONSIBLE FOR GRADE ADJUSTMENT OF ALL SURFACE UTILITIES INCLUDING BUT NOT LIMITED TO VALVES, UDS, GRATES, RIMS, CAPS, STORM AND SANITARY STRUCTURES WITHIN THE LIMITS OF WORK. GRADE ADJUSTMENTS SHALL BE MADE PRIOR TO THE INSTALLATION OF PAVEMENT WEARING COURSE OR PLACEMENT OF TOPSOIL IN UNPAVED AREAS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL EXISTING FEATURES WHICH ARE DAMAGED DURING CONSTRUCTION AND ARE INDICATED TO REMAIN.
5. REMOVAL OF EXISTING PAVED SURFACES INCLUDES THE REMOVAL OF CRUSHED STONE BASE MATERIALS.
6. REMOVAL OF EXISTING STRUCTURES INCLUDES THE REMOVAL OF ALL FOOTINGS, FOUNDATION WALLS AND OTHER STRUCTURAL SUPPORT ELEMENTS.
7. REMOVAL OF ALL FENCES, POSTS AND OTHER SIMILAR FEATURES INCLUDES THE REMOVAL OF CONCRETE FOOTINGS AND BASES.
8. CONTRACTOR IS RESPONSIBLE FOR ALL TREE REMOVAL WITHIN THE PROPOSED LIMITS OF WORK, PER THE OWNER'S DISCRETION.
9. DEMOLITION OF TREES AND OTHER VEGETATION INCLUDES REMOVAL OF ALL STUMPS AND ROOT SYSTEMS WITHIN 24" OF EXISTING GRADE.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL ELECTRICAL, MECHANICAL, AND HVAC EQUIPMENT AND AS REQUIRED PER THE MECHANICAL, ELECTRICAL AND PLUMBING PLANS.
11. WHERE PROPOSED CURB AND SIDEWALK ARE TO MATCH EXISTING, THE CONTRACTOR IS TO PROVIDE A CLEAN TRANSITION AND REMOVE/REPLACE ANY EXISTING CURB AND/OR SIDEWALK THAT IS DAMAGED, PER THE OWNER'S DISCRETION.
12. BITUMINOUS PAVING SHALL BE SAWCUT PRIOR TO APPLICATION OF THE NEW PAVING, INCLUDING PATCHING IN AREAS OF CURB REPLACEMENT, IF REQUIRED.
13. CONTRACTOR IS TO VERIFY WITH OWNER AND LANDSCAPE ARCHITECT WHICH EXISTING TREES ARE TO BE REMOVED OR REQUIRE SELECTIVE PRUNING DUE TO THE CLOSE PROXIMITY TO THE PROPOSED CONSTRUCTION.
14. CONTRACTOR IS TO VERIFY WITH OWNER IF EXISTING LIGHT POLES/FIXTURES TO BE REMOVED ARE TO BE RE-INSTALLED OR REPLACED. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL LIGHTS, BASES, WRING AND CONDUITS FOR ALL LIGHTS TO BE REMOVED.
15. CONTRACTOR SHALL PROVIDE SAFE PEDESTRIAN ACCESS TO BUILDING ENTRANCES DURING SITE CONSTRUCTION PER OWNER'S BUILDING ACCESS REQUIREMENTS.

CHELLENHAM TOWNSHIP UTILITY LIST

- COMPANY: CROWN CASTLE
ADDRESS: 1500 CORPORATE DR
CANONSBURG, PA. 15317
CONTACT: FIBER DIG TEAM PERSONNEL
EMAIL: FIBER.DIG@CROWNCASTLE.COM
PHONE: (603) 654-3110
- COMPANY: COMCAST
ADDRESS: 1250 HADDONFIELD-BERLIN RD
CHERRY HILL, NJ. 08034
CONTACT: WYATT PARRISH
EMAIL: WYATT_PARRISH@CABLE.COMCAST.COM
PHONE: (484) 368-4391
- COMPANY: AQUA PENNSYLVANIA
ADDRESS: 782 LANCASTER AVE
BRYN MAWR, PA. 19010
CONTACT: THOMAS WADDY
EMAIL: TWADDY@AQUAAMERICA.COM
PHONE: (610) 525-1400 EXT. 52105
- COMPANY: CHELLENHAM TOWNSHIP OF
ADDRESS: 8230 OLD YORK RD
ELKINS PARK, PA. 19027
CONTACT: TOM CINAGLIA
EMAIL: TCINAGLIA@CHELLENHAM-TOWNSHIP.ORG
PHONE: (215) 887-1000 EXT. 222
- COMPANY: PECO AN EXELON COMPANY C/O USIC
ADDRESS: 450 S HENDERSON ROAD SUITE B
KING OF PRUSSIA, PA. 19406
CONTACT: NIKKIA SIMPKINS
EMAIL: NIKKIASIMPKINS@USICLLC.COM
PHONE: (484) 681-5720
- COMPANY: TRANSCONTINENTAL GAS/WILLIAMS GAS
ADDRESS: 99 FARMER RD
PRINCETON, NJ. 08540
CONTACT: KEVIN ESTOR
EMAIL: KEVINESTOR@WILLIAMS.COM
PHONE: (609) 285-2425
- COMPANY: TEXAS EASTERN/ENBRIDGE
ADDRESS: SUITE 400
2601 MARKET PLACE
HARRISBURG, PA. 17110
CONTACT: RYAN LUMBATIS
EMAIL: RYAN.LUMBATIS@ENBRIDGE.COM
PHONE: (717) 540-8330
- COMPANY: VERIZON BUSINESS FORMERLY MCI
ADDRESS: 7000 WESTON PKWY
CARY, NC. 27513
CONTACT: VICTOR WOOD
EMAIL: VICTOR.S.WOOD@VERIZON.COM
PHONE: (919) 414-2782



LOCATION MAP
SCALE: 1" = 2000'

LEGEND

- EXISTING FEATURES
- EXISTING PROPERTY BOUNDARY
 - EXISTING ADJOINING PROP. LINE
 - EXISTING RIGHT-OF-WAY LINE
 - EXISTING EASEMENT
 - EXISTING SETBACK BOUNDARY
 - EXISTING FLOOD PLAIN
 - EXISTING STREAM
 - EXISTING WETLANDS
 - EXISTING BUILDING
 - EXISTING 1' CONTOURS
 - EXISTING 5' CONTOURS
 - EXISTING SPOT ELEVATION
 - EXISTING SOIL TYPE
 - EXISTING CURB
 - EXISTING EDGE OF PAVEMENT
 - EXISTING FENCE
 - EXISTING STORM INLET AND PIPE
 - EXISTING STORM MANHOLE AND PIPE
 - EXISTING SAN. MANHOLE AND PIPE
 - EXISTING U/G FIRE LINE
 - EXISTING U/G WATER LINE
 - EXISTING U/G ELECTRIC LINE
 - EXISTING U/G TELEPHONE LINE
 - EXISTING U/G GAS LINE
 - EXISTING OVERHEAD WIRES
 - EXISTING LIGHT POLE
 - EXISTING SIGN
 - EXISTING UTILITY POLE
 - EXISTING CONIFEROUS TREE
 - EXISTING DECIDUOUS TREE
 - EXISTING TREE & SHRUB LINE
 - SLOPES 15-25%
 - SLOPES 25% AND GREATER
- DEMOLITION FEATURES
- TO BE REMOVED
 - EXISTING FEATURE TO BE REMOVED
 - EXISTING FEATURE TO BE REMOVED
 - EXISTING PAVEMENT / CONCRETE / STRUCTURE TO BE REMOVED

DEMOLITION PLAN

PRELIMINARY LAND DEVELOPMENT PLANS
FOR
**GLENSIDE ELEMENTARY SCHOOL-
BUILDING ADDITIONS & RENOVATIONS**
CHELTENHAM TWP. - MONTGOMERY COUNTY - PENNSYLVANIA

SCALE: 1" = 30'
DATE: 2/21/2024
DRAWN BY: RRB
CHECKED BY: JRM

PROJECT NO. 22407
F.B. 112 Moores Road, Suite 200, Malvern, PA 19355
610-644-4623
www.chestervalley.com

ChesterValley ENGINEERS, INC. 22407

ASSESSMENT MAP BLOCK: 137 UNIT 39

NOTE TO USER OF THESE PLANS: THE INFORMATION CONTAINED ON THIS PLAN MAY NOT BE CONSIDERED WITH CONDITIONS IN THE FIELD. ANY PERSON EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND ALL OTHER PROPRY RIGHTS IN THESE PLANS. ALL DRAWINGS, SPECIFICATIONS, OR ORGANIZATION USING OR RELYING ON THESE PLANS MUST CONTACT CHESTER VALLEY ENGINEERS, INC. FOR THE LOCATION OF EXISTING SURVEYING UTILITY STRUCTURES SHOWN ON THE PLANS. CHESTER VALLEY ENGINEERS, INC. GUARANTEES THAT ALL SURVEYING STRUCTURES ARE CORRECT. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK.

PENNSYLVANIA ACT 187 REQUIREMENTS: UNDERGROUND UTILITIES SERIAL NO. 20250352879

CHESTER VALLEY ENGINEERS, INC. DOES NOT GUARANTEE THE ACCURACY OF THE LOCATION OF EXISTING SURVEYING UTILITY STRUCTURES SHOWN ON THE PLANS. CHESTER VALLEY ENGINEERS, INC. GUARANTEES THAT ALL SURVEYING STRUCTURES ARE CORRECT. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK.

SEE SHEET 1 FOR FACILITY OWNER'S DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.

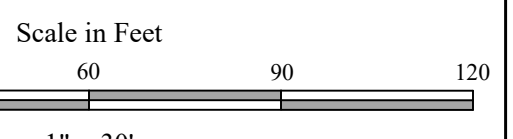
PENNSYLVANIA ONE CALL SYSTEM, INC. CALL 3 WORKING DAYS BEFORE YOU DIG 1-800-242-1776

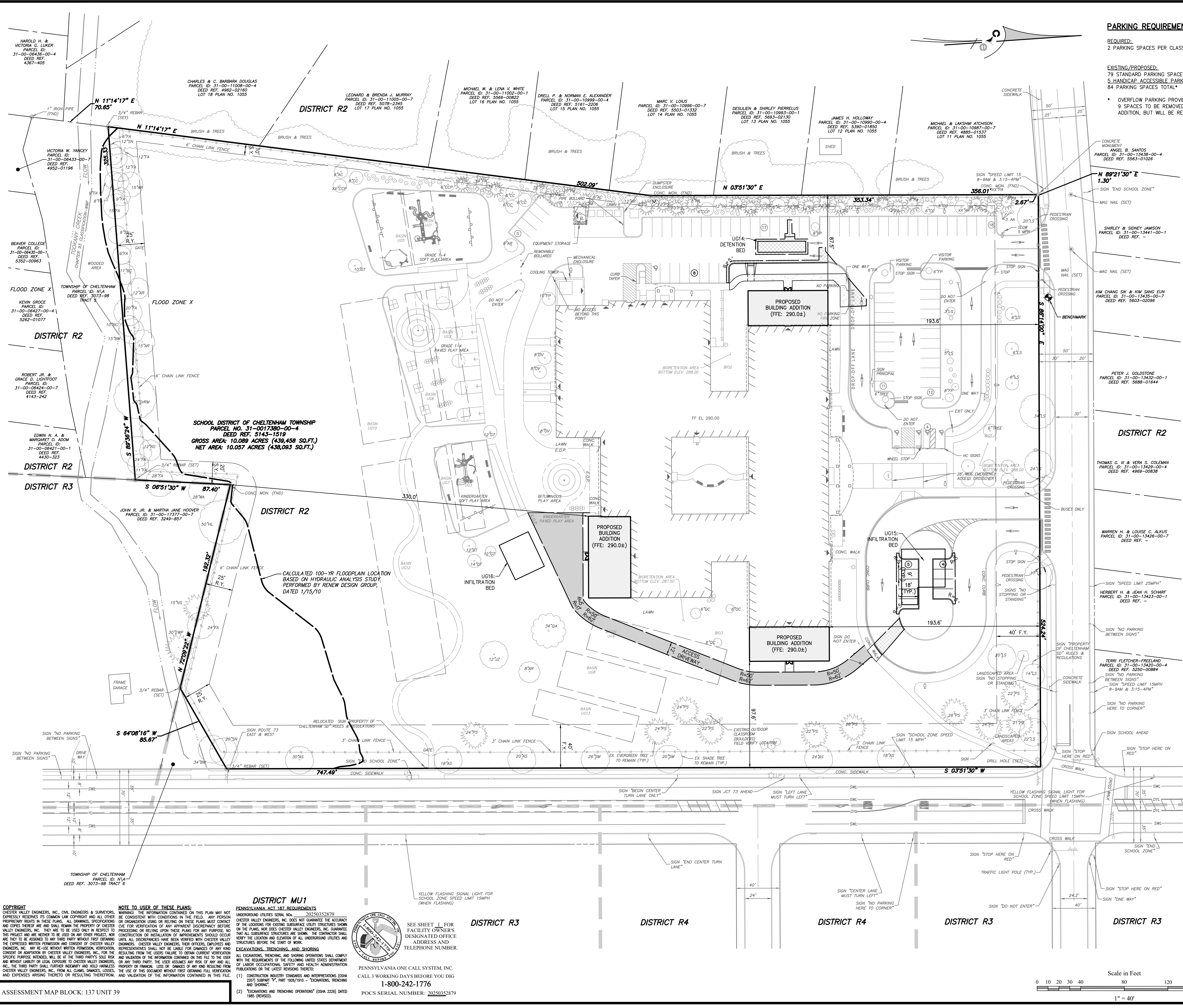
POCS SERIAL NUMBER: 20250352879

CONTRACTING AND TRENCHING OPERATIONS (094 2226) DATED 1885 (REVISED).

SOILS LIST

SYMBOL	DESCRIPTION	DEPTH TO SEASONALLY HIGH WATER TABLE	FREQUENCY OF FLOODING	HYDROLOGIC SOIL GROUP	HYDRIC RATING
Ugdb	0% TO 25% SLOPES	60"	40"-70"	NONE	C NO
Ugdb	0% TO 25% SLOPES	60"	20"-70"	NONE	C NO
Ugdb	0% TO 25% SLOPES	60"	20"-70"	NONE	C NO



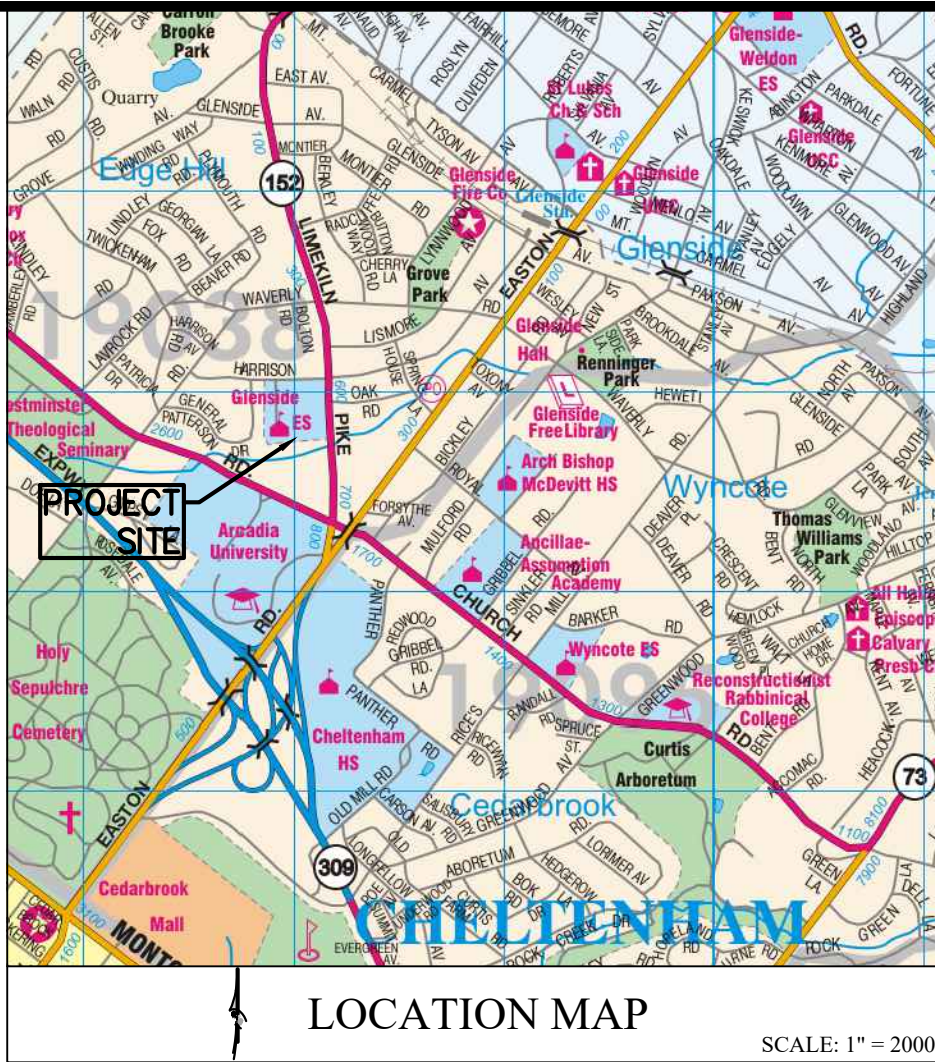


PARKING REQUIREMENTS/TABULATION

REQUIRED:
2 PARKING SPACES PER CLASSROOM
(2x30) = 60 SPACES
60 SPACES TOTAL

EXISTING/PROPOSED:
79 STANDARD PARKING SPACES*
5 HANDICAP ACCESSIBLE PARKING SPACES
84 PARKING SPACES TOTAL*

* OVERFLOW PARKING PROVIDED AT PLAY AREA.
9 SPACES TO BE REMOVED TO CONSTRUCT THE WESTERN BUILDING ADDITION, BUT WILL BE REPLACED WITHIN THE BUS LOOP AREA.



LEGEND

EXISTING FEATURES

[Symbol]	EXISTING PROPERTY BOUNDARY
[Symbol]	EXISTING ADJOINING PROP. LINE
[Symbol]	EXISTING RIGHT-OF-WAY LINE
[Symbol]	EXISTING EASEMENT
[Symbol]	EXISTING SETBACK BOUNDARY
[Symbol]	EXISTING FLOOD PLAIN
[Symbol]	EXISTING STREAM
[Symbol]	EXISTING WETLANDS
[Symbol]	EXISTING BUILDING
[Symbol]	EXISTING CURB
[Symbol]	EXISTING EDGE OF PAVEMENT
[Symbol]	EXISTING FENCE
[Symbol]	EXISTING LIGHT POLE
[Symbol]	EXISTING SIGN
[Symbol]	EXISTING UTILITY POLE
[Symbol]	EXISTING CONIFEROUS TREE
[Symbol]	EXISTING DECIDUOUS TREE
[Symbol]	EXISTING TREE & SHRUB LINE

PROPOSED FEATURES

[Symbol]	PROPOSED BUILDING
[Symbol]	PROPOSED HEAVY-DUTY PAVEMENT SECTION
[Symbol]	PROPOSED ACCESS DRIVEWAY
[Symbol]	PROPOSED STANDARD DUTY PAVEMENT SECTION
[Symbol]	PROPOSED CONCRETE PAD/SIDEWALK
[Symbol]	PROPOSED CONCRETE CURB
[Symbol]	NUMBER OF PROPOSED PARKING SPACES

ZONING TABULATION - R2 RESIDENTIAL ZONING DISTRICT

THE ENTIRE PARCEL IS ZONED R2-RESIDENTIAL ZONING DISTRICT.

ITEM	REQUIRED	EXISTING	PROPOSED
MIN. LOT SIZE (AC.)	0.23 AC.	10.06 AC. (NET)	10.06 AC. (NET)
MIN. LOT WIDTH (FT.)	70 FT. @ STREET	479.4 FT.	479.4 FT.
MINIMUM BUILDING SETBACKS:			
FRONT (FT.)	40 FT.	129.1 FT.	97.6 FT.
SIDE (FT.)	10 FT.	96.5 FT.	87.5 FT.
SIDE, AGGREGATE (FT.)	30 FT.	389.9 FT.	389.9 FT.
REAR (FT.)	25 FT.	302.4 FT.	302.4 FT.
MAXIMUM LAND COVERAGE:			
MAX. BUILDING COVERAGE	20%	12.4% (A)	14.1% (A)
MAX. IMPERVIOUS COVERAGE	40%	38.5% (A)	39.8% (A)
MAXIMUM BUILDING HEIGHT:			
SEE ZONING ORDINANCE FOR DEF.	40 FEET OR 3-STORIES	33'-10" (EXISTING)	33'-10" (EXISTING)

IMPERVIOUS COVERAGE SUMMARY TABLE

ITEM	EXISTING	TO BE REMOVED	PROPOSED	TOTAL
BUILDING	54,388 S.F.	-428 S.F.	7,573 S.F.	61,533 S.F.
DRIVEWAY & PAVEMENT	82,029 S.F.	-9,016 S.F.	7,593 S.F.	80,606 S.F.
PLAYGROUND	12,650 S.F.	0 S.F.	0 S.F.	12,650 S.F.
CONCRETE	19,435 S.F.	-1,061 S.F.	1,030 S.F.	19,404 S.F.
WALLS	91 S.F.	0 S.F.	0 S.F.	91 S.F.
MISC.	64 S.F.	0 S.F.	0 S.F.	64 S.F.
TOTAL	168,657 S.F.	-10,505 S.F.	16,196 S.F.	174,348 S.F.

EXISTING IMPERVIOUS COVERAGE: 54,388 / 438,015 = 12.42%
EXISTING IMPERVIOUS COVERAGE: 168,657 / 438,015 = 38.50%

PROPOSED BUILDING COVERAGE: 61,533 / 438,015 = 14.05%
PROPOSED IMPERVIOUS COVERAGE: 174,348 / 438,015 = 39.80%

SITE LAYOUT PLAN

NO.		DATE	REVISION
PRELIMINARY LAND DEVELOPMENT PLANS			
FOR			
GLENSSIDE ELEMENTARY SCHOOL-BUILDING ADDITIONS & RENOVATIONS			
CHELTENHAM TWP. - MONTGOMERY COUNTY - PENNSYLVANIA			
PROJECT NO.		22407	
SCALE		DATE	
1" = 40'		2/21/2024	
DRAWN BY		CHECKED BY	
RRB		JRM	
DRAWING		F.B.	

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ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, FOR
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PROVIDED BY LAW.

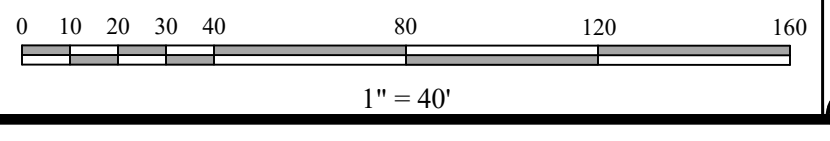
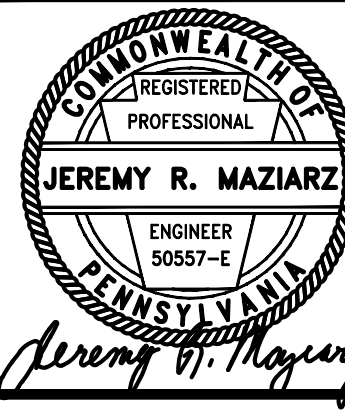
NOTE TO USER OF THESE PLANS:
WARNING: THE INFORMATION CONTAINED ON THIS PLAN MAY NOT
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PROCEEDING OR RELYING UPON THESE PLANS FOR ANY PURPOSE,
DOES SO AT HIS OR HER OWN RISK. THE USER ASSUMES ALL
LIABILITY FOR ANY AND ALL DAMAGES, LOSSES, AND EXPENSES
RESULTING FROM HIS OR HER USE OF THESE PLANS. THE USER
WARRANTS THAT HE OR SHE HAS THE NECESSARY RIGHTS, POWERS,
AUTHORITY, AND PERMISSION TO USE THESE PLANS FOR THE
PURPOSES INTENDED HEREON. THE USER AGREES TO INDEMNIFY
AND HOLD HARMLESS CHESTER VALLEY ENGINEERS, INC. FROM
AND AGAINST ALL DAMAGES, LOSSES, AND EXPENSES, INCLUDING
ATTORNEY'S FEES, THAT MAY BE INCURRED BY CHESTER VALLEY
ENGINEERS, INC. AS A RESULT OF THE USER'S USE OF THESE
PLANS.

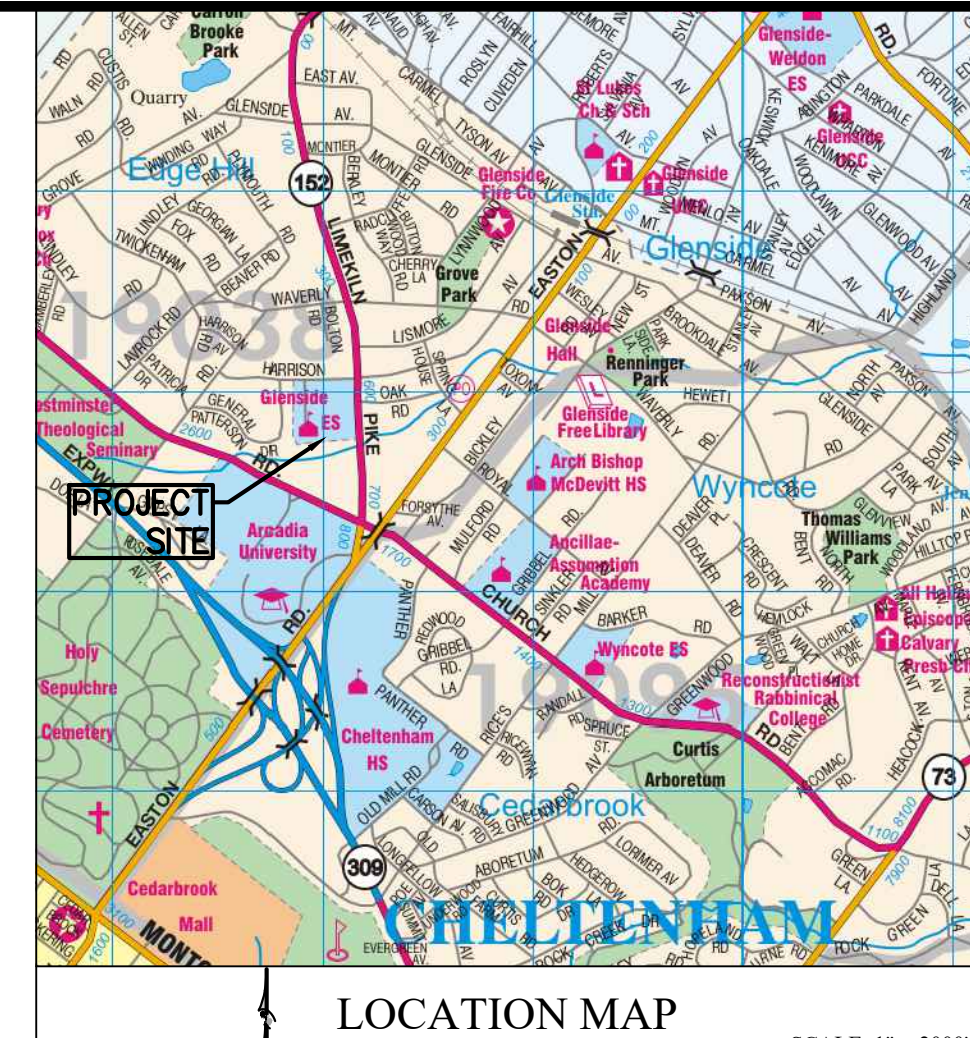
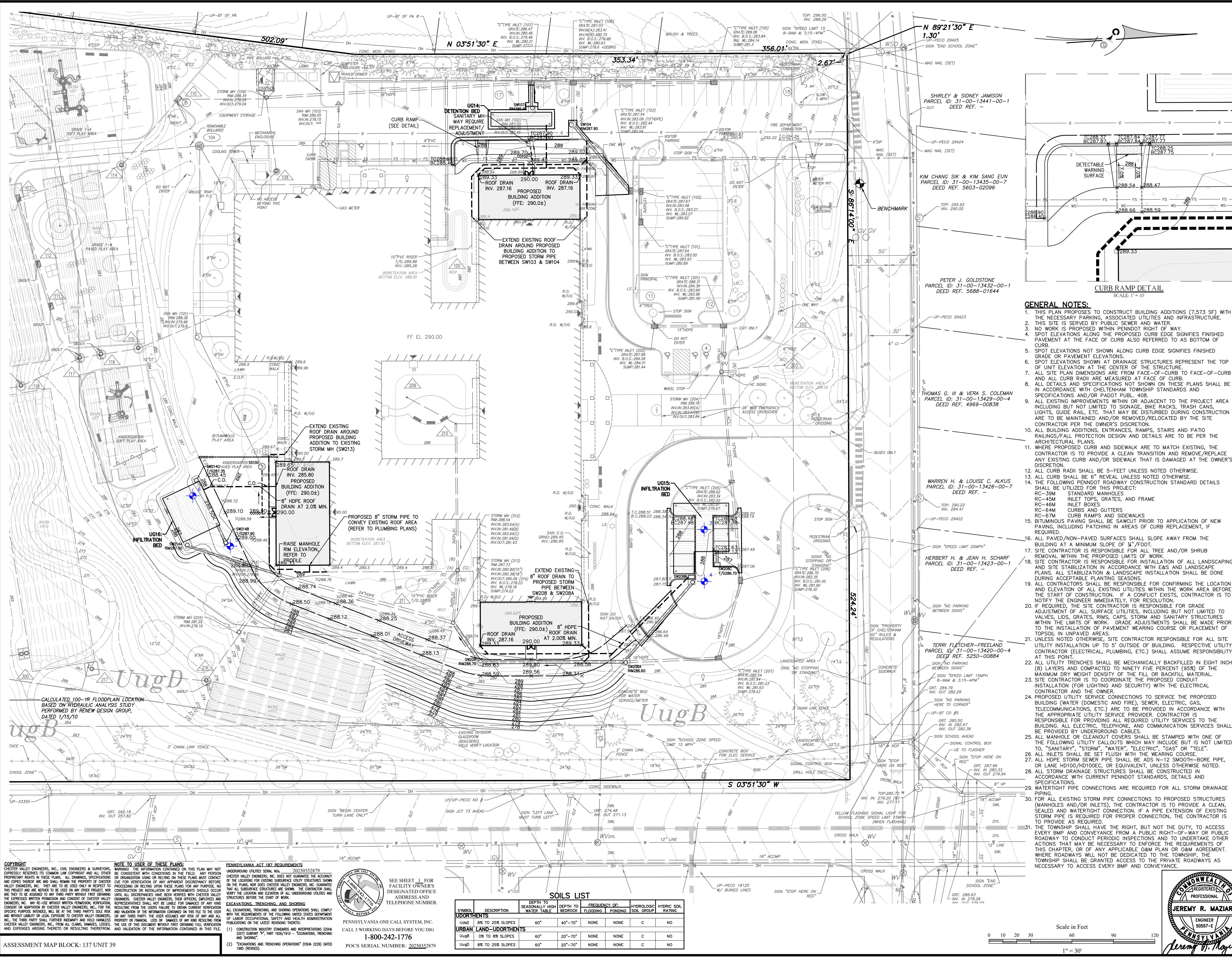
DISTRICT MU1
PENNSYLVANIA ACT 187 REQUIREMENTS
UNDERGROUND UTILITIES SERIAL NO. 20250352879
CHESTER VALLEY ENGINEERS, INC. DOES NOT GUARANTEE THE ACCURACY
OF THE LOCATIONS FOR EXISTING SURFACE UTILITY STRUCTURES SHOWN
ON THE PLANS, NOR DOES CHESTER VALLEY ENGINEERS, INC. GUARANTEE
THAT ALL SURFACE STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL
VERIFY THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES AND
STRUCTURES BEFORE THE START OF WORK.

EXCAVATIONS, TRENCHING, AND SHORING
ALL EXCAVATIONS, TRENCHING, AND SHORING OPERATIONS SHALL COMPLY
WITH THE REQUIREMENTS OF THE FOLLOWING UNITED STATES DEPARTMENT
OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PUBLICATIONS OF THE LATEST EDITIONS THEREOF:
(1) CONSTRUCTION INDUSTRY CONSENSUS DOCS (CNS) AND INTERPRETATIONS (CNSI)
(2) "EXCAVATIONS AND TRENCHING OPERATIONS" (29 CFR 1926.650) DATED
1985 (REVISED).

SEE SHEET 1 FOR
FACILITY OWNER'S
DESIGNATED OFFICE
ADDRESS AND
TELEPHONE NUMBER.

PENNSYLVANIA ONE CALL SYSTEM, INC.
CALL 3 WORKING DAYS BEFORE YOU DIG
1-800-242-1776
POCS SERIAL NUMBER: 20250352879





LEGEND	
EXISTING FEATURES	
[Symbol]	EXISTING PROPERTY BOUNDARY
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[Symbol]	EXISTING 5' CONTOURS
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[Symbol]	EXISTING EDGE OF PAVEMENT
[Symbol]	EXISTING FENCE
[Symbol]	EXISTING STORM INLET AND PIPE
[Symbol]	EXISTING STORM MANHOLE AND PIPE
[Symbol]	EXISTING SAN. MANHOLE AND PIPE
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[Symbol]	EXISTING U/G ELECTRIC LINE
[Symbol]	EXISTING U/G TELEPHONE LINE
[Symbol]	EXISTING U/G GAS LINE
[Symbol]	EXISTING OVERHEAD WIRES
[Symbol]	EXISTING LIGHT POLE
[Symbol]	EXISTING UTILITY POLE
[Symbol]	EXISTING CONIFEROUS TREE
[Symbol]	EXISTING DECIDUOUS TREE
[Symbol]	EXISTING TREE & SHRUB LINE
[Symbol]	SLOPES 15-25%
[Symbol]	SLOPES 25% AND GREATER
PROPOSED FEATURES	
[Symbol]	PROPOSED BUILDING
[Symbol]	PROPOSED HEAVY DUTY PAVEMENT SECTION
[Symbol]	PROPOSED ACCESS DRIVEWAY PAVEMENT SECTION
[Symbol]	PROPOSED STANDARD UTILITY PAVEMENT SECTION
[Symbol]	PROPOSED CONCRETE PAD/SIDEWALK
[Symbol]	PROPOSED CONCRETE CURB
[Symbol]	NUMBER OF PROPOSED PARKING SPACES
[Symbol]	PROPOSED 1' CONTOURS
[Symbol]	PROPOSED 5' CONTOURS
[Symbol]	PROPOSED SPOT ELEVATION
[Symbol]	PROPOSED STORMWATER MANAGEMENT FACILITY (SW UG#)
[Symbol]	PROPOSED STORM PIPE AND INLET
[Symbol]	PROPOSED STORM PIPE AND CLEANOUT
[Symbol]	PROPOSED PIPE FLOW ARROW

GRADING & UTILITY PLAN

NO.	DATE	REVISION

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

GLENSIDE ELEMENTARY SCHOOL-BUILDING ADDITIONS & RENOVATIONS

CHELTENHAM TWP. - MONTGOMERY COUNTY - PENNSYLVANIA

ChesterValley
ENGINEERS, INC.

22407

112 Moores Road, Suite 200, Malvern, PA 19355
610-644-4623
www.chestervalley.com

F.B.

SCALE 1" = 30'	DATE 2/21/2024	DRAWN BY RRB	CHECKED BY JRM	DRAWING
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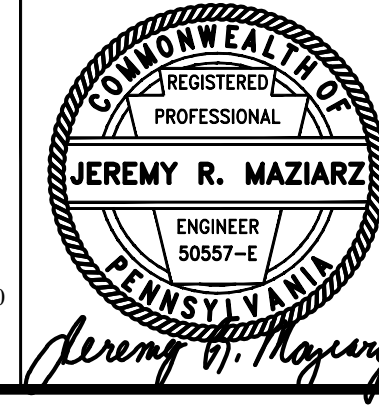
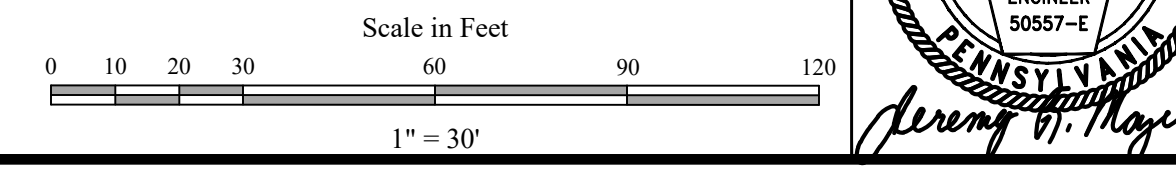
PENNSYLVANIA ACT 187 REQUIREMENTS
UNDERGROUND UTILITIES SERIAL NO. 2025032879
CHESTER VALLEY ENGINEERS, INC. DOES NOT GUARANTEE THE ACCURACY OF THE LOCATION FOR EXISTING SUBSURFACE UTILITY STRUCTURES SHOWN ON THE PLANS. NOR DOES CHESTER VALLEY ENGINEERS, INC. GUARANTEE THAT ALL SUBSURFACE STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK.

EXCAVATIONS, TRENCHING, AND SHORING
ALL EXCAVATIONS, TRENCHING, AND SHORING OPERATIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING WETTED STATES GOVERNMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION PUBLICATIONS OF THE MOST RECENT EDITIONS:
(1) CONSTRUCTION SAFETY HANDBOOK AND INTERPRETATIONS (OSHA 2007) SUPPLEMENT 1, PART 1026/1010 - EXCAVATIONS, TRENCHING AND SHORING.
(2) "EXCAVATIONS AND TRENCHING OPERATIONS" (OSHA 2226) DATED 1985 (REVISED).

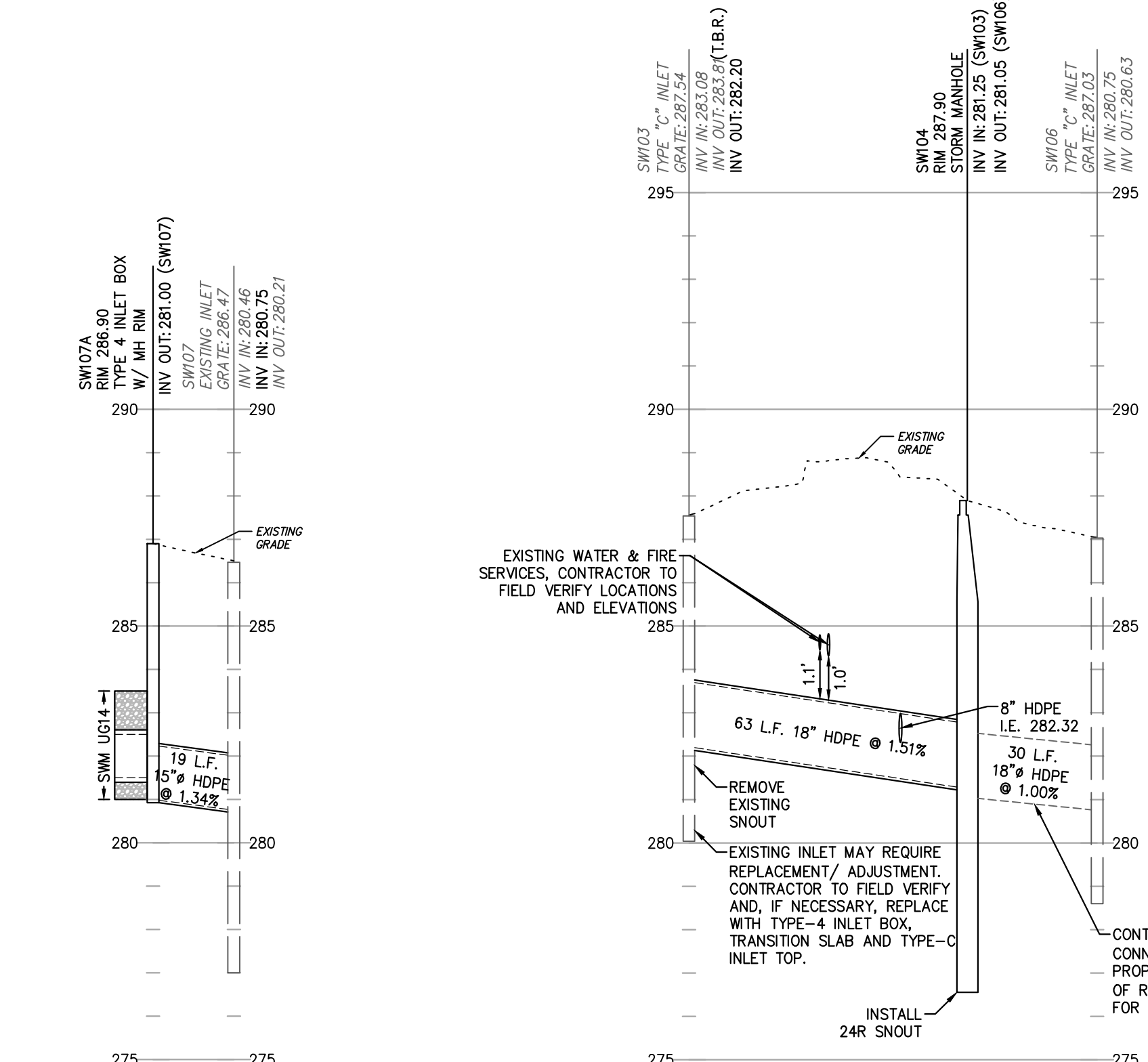
SEE SHEET 1 FOR FACILITY OWNER'S DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.

PENNSYLVANIA ONE CALL SYSTEM, INC.
CALL 3 WORKING DAYS BEFORE YOU DIG
1-800-242-1776
POCS SERIAL NUMBER: 2025032879

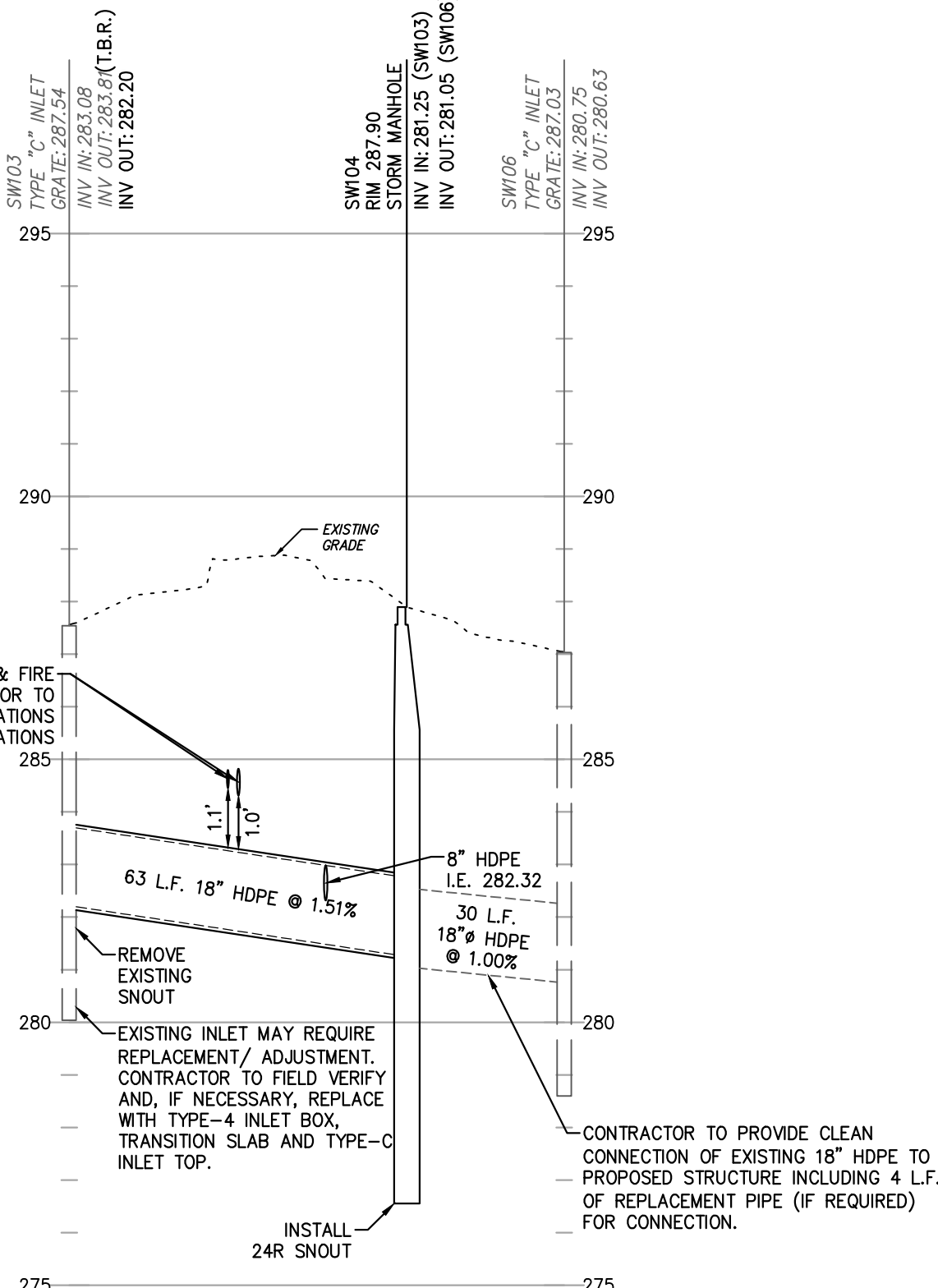
SOILS LIST		DEPTH TO SEASONALLY HIGH WATER TABLE		FREQUENCY OF FLOODING		HYDROLOGIC SOIL GROUP		HYDROLOGIC RATING	
SYMBOL	DESCRIPTION	DEPTH TO SEASONALLY HIGH WATER TABLE	DEPTH TO BEDROCK	FLOODING	PONDING	HYDROLOGIC SOIL GROUP	HYDROLOGIC RATING		
UG04	OK TO 25% SLOPES	60"	40"-70"	NONE	NONE	C	NO		
UG05	OK TO 8% SLOPES	60"	20"-70"	NONE	NONE	C	NO		
UG06	8% TO 25% SLOPES	60"	20"-70"	NONE	NONE	C	NO		



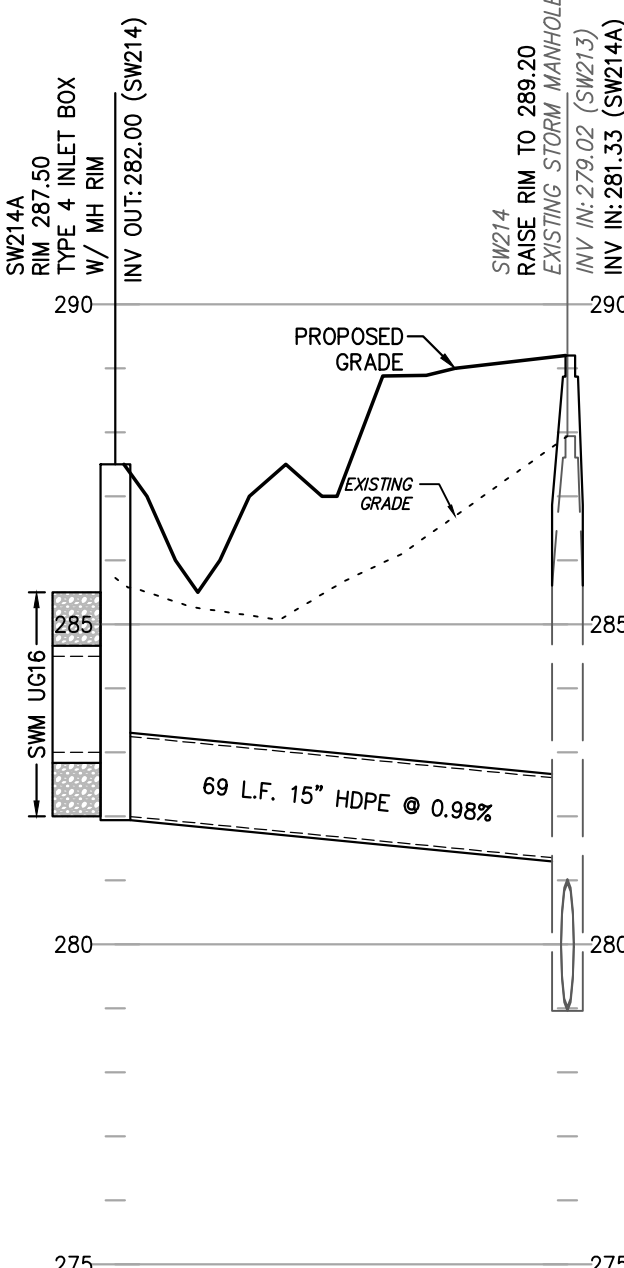
J:\CVI-23000\22407 Glenside Elementary\Sheet 05 - G05 Plan.dwg 2/21/2023 9:21:28 AM



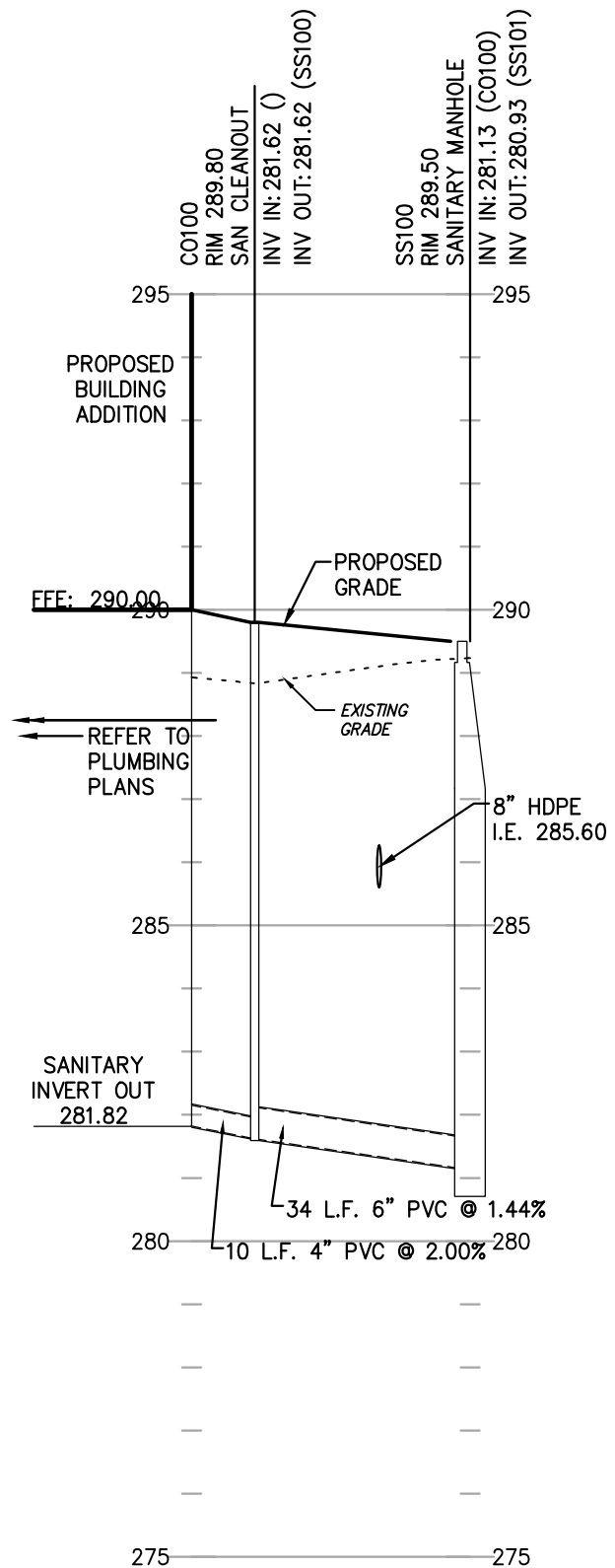
STORMWATER PROFILE
FROM SW107A TO SW107
SCALE: 1"=30' HORIZ. 1"=3' VERT.



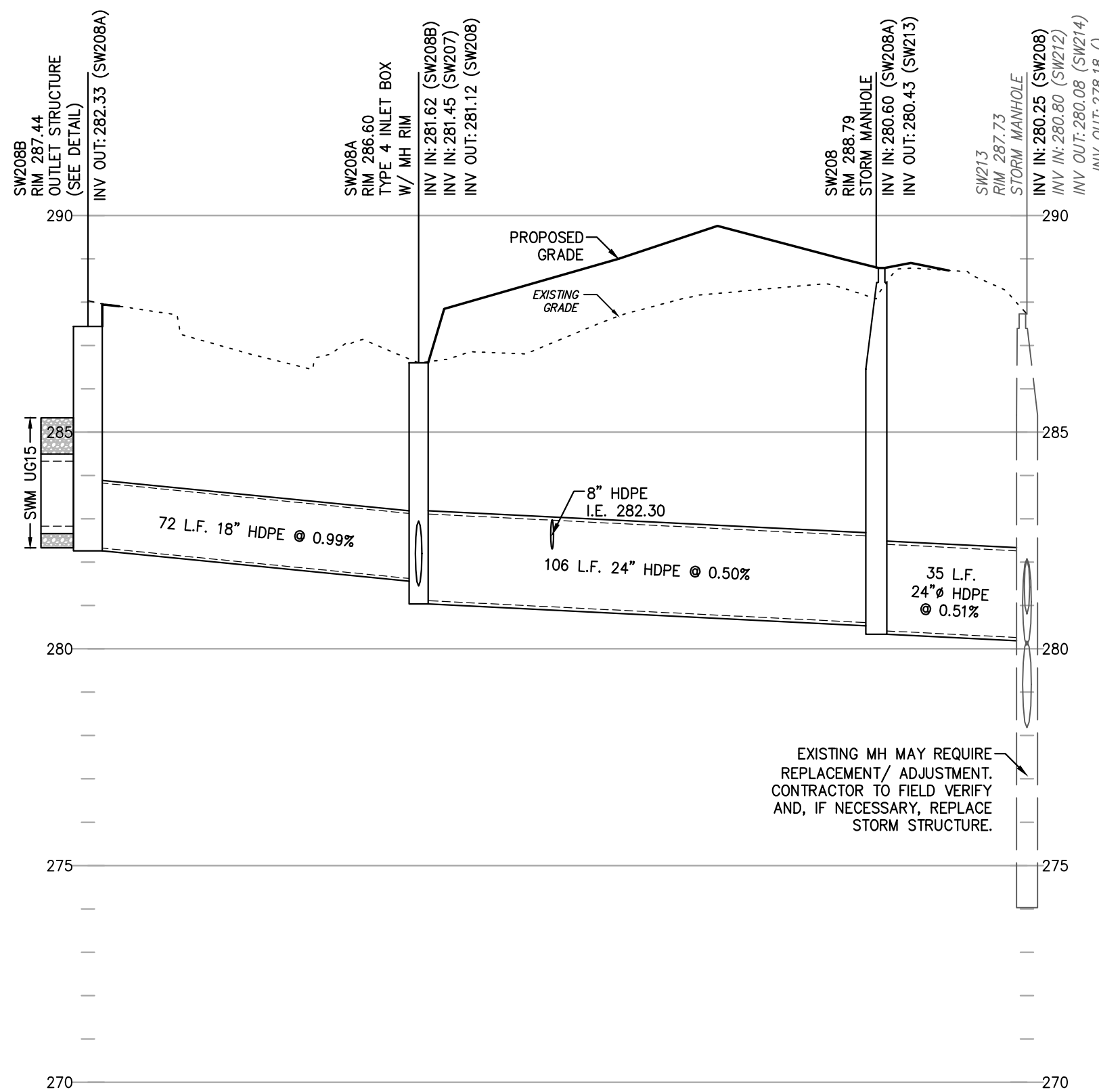
STORMWATER PROFILE
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SCALE: 1"=30' HORIZ. 1"=3' VERT.



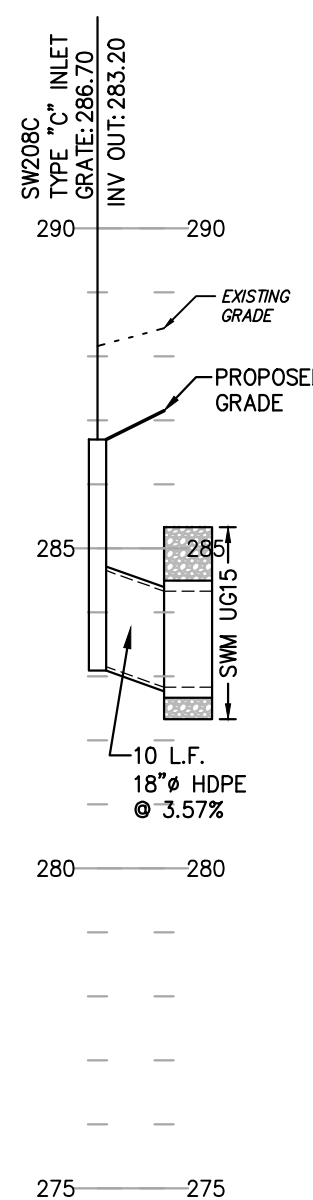
STORMWATER PROFILE
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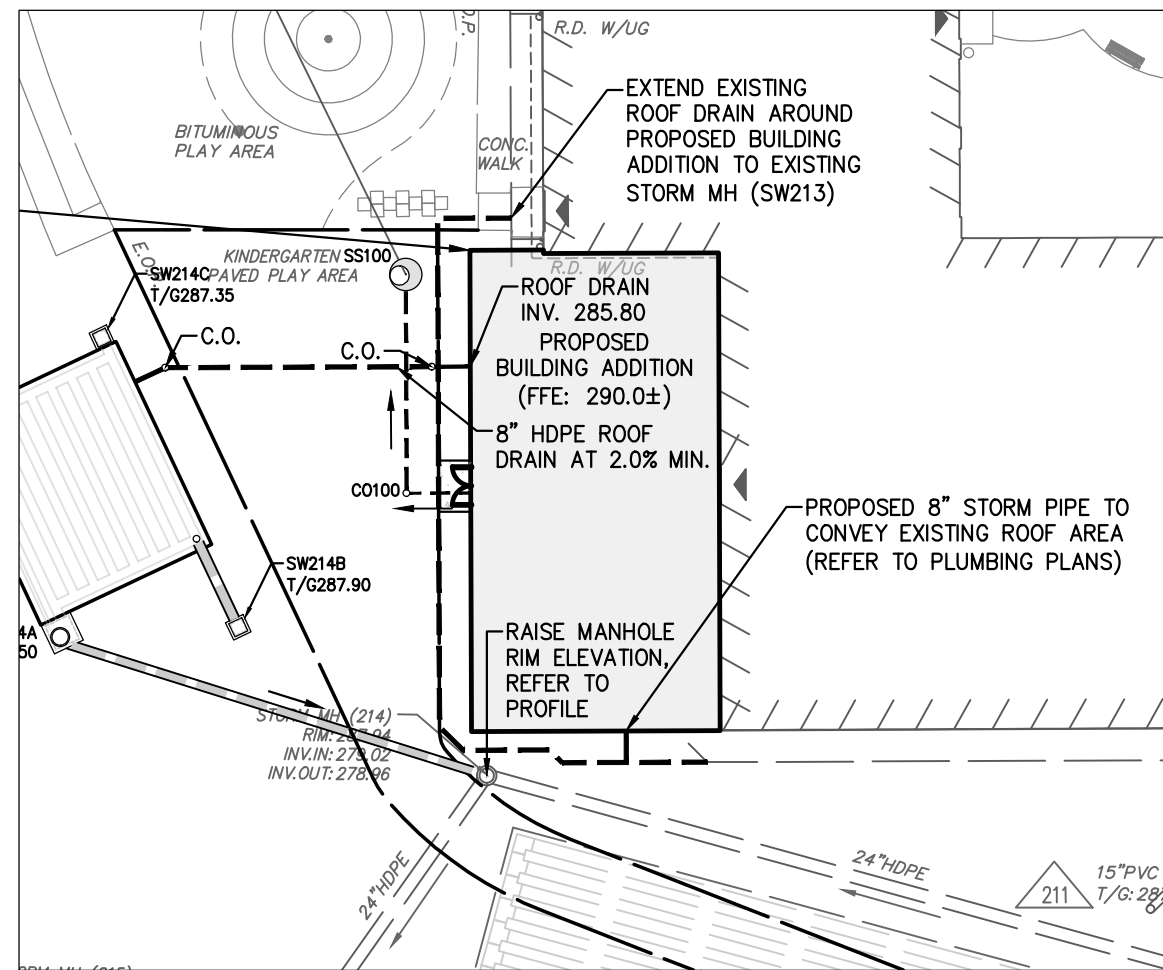
SANITARY SEWER PROFILE
FROM SAN_C0100 TO SS100
SCALE: 1"=30' HORIZ. 1"=3' VERT.



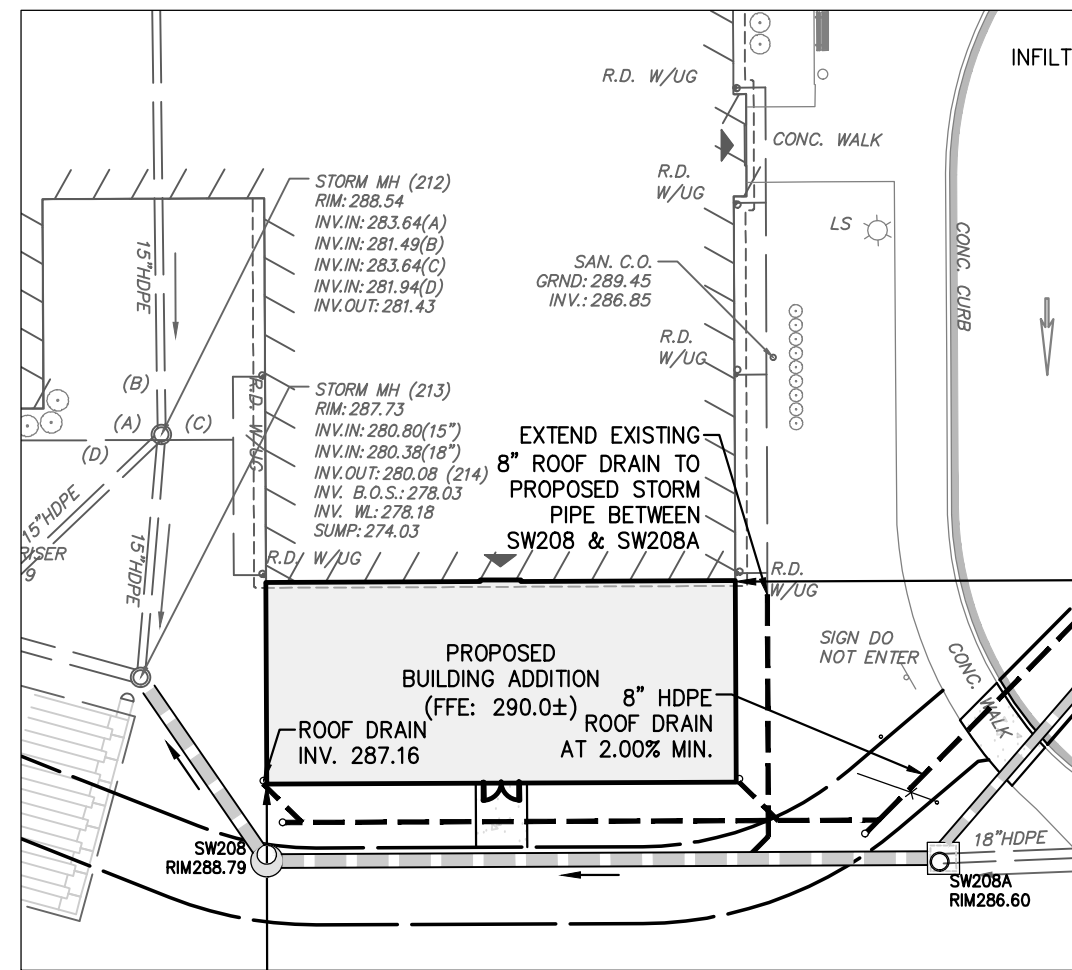
STORMWATER PROFILE
FROM SW208B TO SW213
SCALE: 1"=30' HORIZ. 1"=3' VERT.



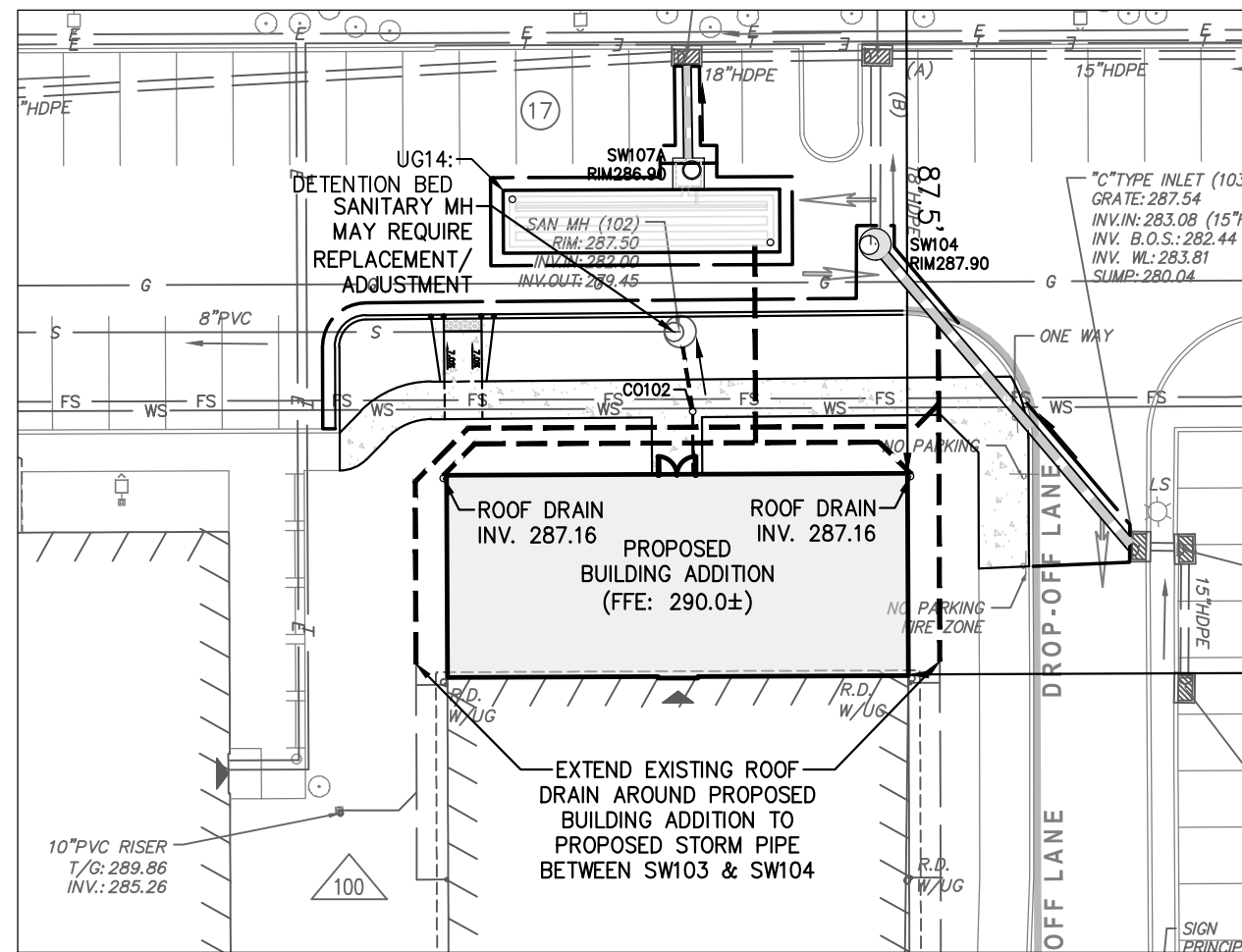
STORMWATER PROFILE
FROM SW208C TO UG15
SCALE: 1"=30' HORIZ. 1"=3' VERT.



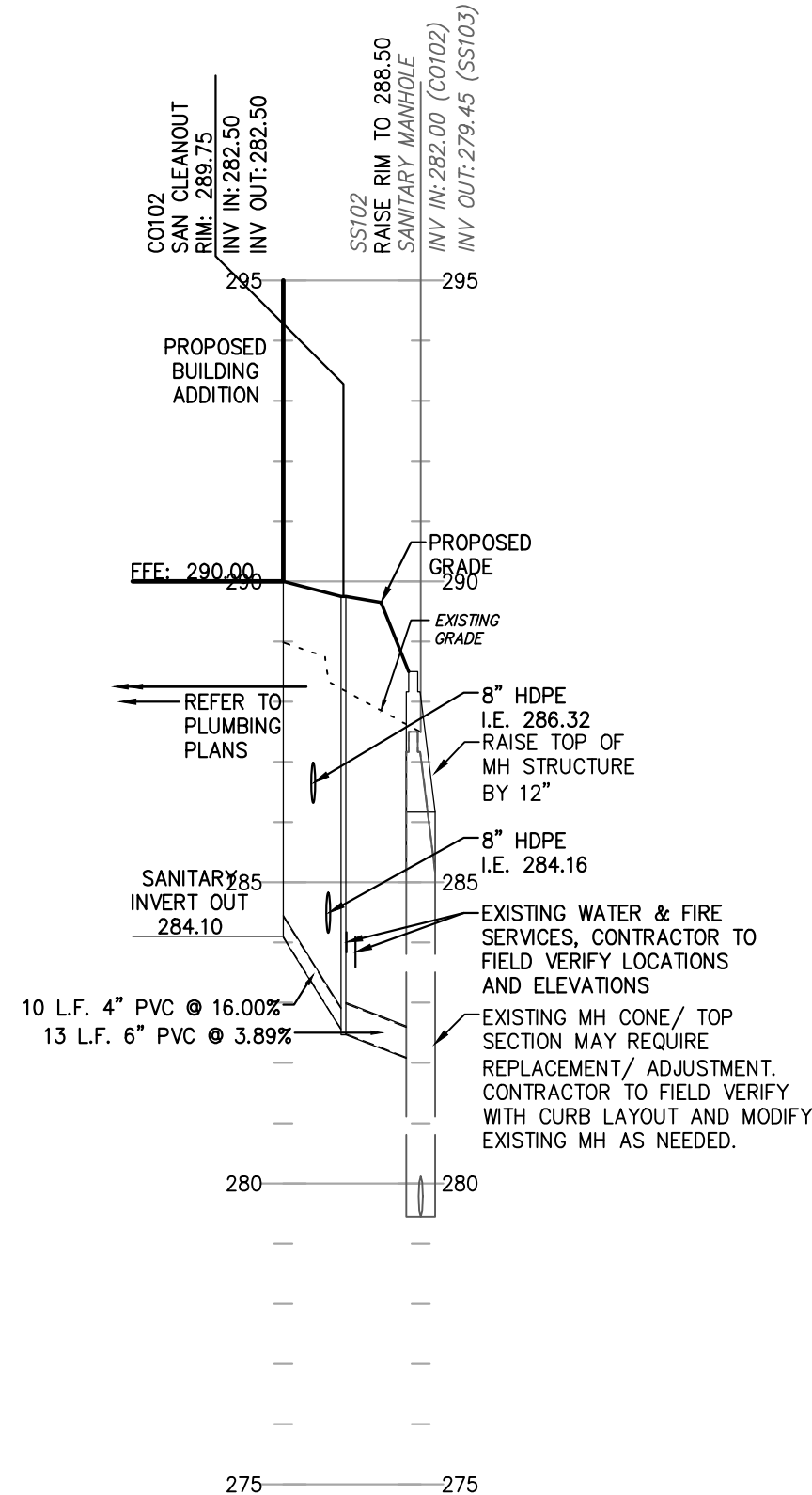
PLAN - SAN_C0100 TO SS100
SCALE: 1"=30'



PLAN - STORM DRAINS AROUND EAST BUILDING ADDITION
SCALE: 1"=30'



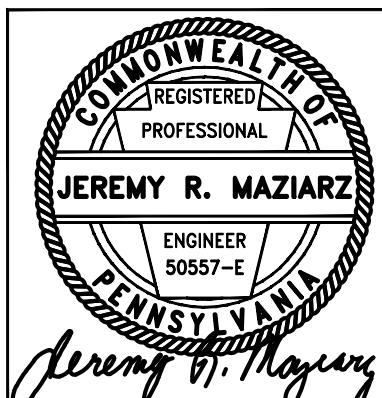
PLAN - SAN_C0102 TO SS102
SCALE: 1"=30'



SANITARY SEWER PROFILE
FROM SAN_C0102 TO SS102
SCALE: 1"=30' HORIZ. 1"=3' VERT.

UTILITY PROFILES

NO.		DATE		REVISION	
PRELIMINARY LAND DEVELOPMENT PLANS FOR GLENDSIDE ELEMENTARY SCHOOL- BUILDING ADDITIONS & RENOVATIONS CHELTENHAM TWP. - MONTGOMERY COUNTY - PENNSYLVANIA					
PROJECT NO.				22407	
SCALE				AS NOTED	
DATE				2/21/2024	
DRAWN BY				RRB	
CHECKED BY				JRM	
DRAWING					



GENERAL EROSION AND SEDIMENTATION CONTROL NOTES

CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION, STABILIZATION, AND MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROLS AND RELATED ITEMS INCLUDED WITHIN THESE PLANS.

ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS, SHALL BE DONE IN ACCORDANCE WITH APPROVED E&S PLANS. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN (STAMPED, SIGNED, AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO THE IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.

THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.

1. THE MONTGOMERY COUNTY CONSERVATION DISTRICT (MCCD) 143 LEVEL ROAD COLLEGEVILLE, PA 19426 PHONE: (610) 489-4506 FAX: (610) 489-0791
2. THE RECEIVING WATER FOR THIS PROJECT IS TACONY CREEK. THE CHAPTER 93 CLASSIFICATION FOR TACONY CREEK IS WARM WATER FISHES, MIGRATORY FISHES (WWF-MF).
3. NOTIFY THE MONTGOMERY COUNTY CONSERVATION DISTRICT AND ARRANGE A PRE-CONSTRUCTION MEETING FOR ALL INVOLVED PARTIES (INCLUDING MCCD, APPLICANT, ENGINEER, AND TOWNSHIP OFFICIALS).
4. NOTIFY THE TOWNSHIP ENGINEER AT LEAST 48 HOURS PRIOR TO ANY EARTH DISTURBANCE ACTIVITIES.
5. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN A MANNER SUCH THAT ALL EROSION AND AIR/WATER POLLUTION IS MINIMIZED. STATE AND LOCAL LAWS CONCERNING ABATEMENT SHALL BE FOLLOWED.
6. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.
7. THE LIMITS OF WORK SHOWN ON THIS PLAN ARE THE REAL EXTENT REQUIRED FOR CONSTRUCTION. THE CONTRACTOR SHALL ADHERE TO THESE LIMITS IN MINIMIZING DISTURBED LAND, AND ALL CONSTRUCTION SHALL BE CONDUCTED WITHIN THESE LIMITS. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMITS OF THE PROJECT SITE. PROPERTY BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
8. TOPSOIL TAKEN FROM CONSTRUCTION AREAS SHALL BE SEEDED WITH A VEGETATIVE COVER AND STOCKPILED FOR REUSE IN FINISH GRADING. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILING SHALL BE CONDUCTED IN THE MANNER DESCRIBED IN THE PLAN DRAWINGS. STOCKPILING SHALL BE CONDUCTED IN SUCH A MANNER AS TO PREVENT DAMAGE TO ADJACENT PROPERTIES AND STREAMS IN ACCORDANCE WITH PADOT 4008, SECTION 845. STOCKPILES OF CRUSHED STONE AND MULCHES MUST BE MAINTAINED AT THE SITE IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION.
10. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE. CONSTRUCTION WASTES MUST BE RECYCLED TO THE EXTENT PRACTICABLE, AND DISPOSAL METHODS MUST COMPLY WITH FEDERAL, STATE AND LOCAL REQUIREMENTS.
11. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM PP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
13. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS.
14. 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.
15. ALL PREVENTIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRAIDING, RESEEDING, REMULCHING AND RENETTING, MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S OR MODIFICATIONS OF THOSE INSTALLED WILL BE NEEDED.
16. SEDIMENT TRAPPED ON PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY OR AS NEEDED THROUGHOUT THE WORKDAY, OR AS DIRECTED BY THE CONSERVATION DISTRICT OR MUNICIPALITY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEEPED INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
17. ALL SEDIMENT REMOVED FROM DISPOSAL SHALL BE RECYCLED OR REUSED IN THE PLAN DRAWINGS.
18. 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 THE 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.
19. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLUPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, CONDUTIS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
20. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 8 INCHES IN THICKNESS.
21. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILL.
22. FROZEN MATERIALS OF SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
23. FILLS SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
24. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATIONS FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
25. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THE CONSERVATION DISTRICT OR THE DEPARTMENT.
26. ANY DISTURBED AREA, ON WHICH ACTIVITY HAS CEASED FOR ANY AMOUNT OF TIME, MUST BE SEEDED AND MULCHED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. DISTURBED AREAS WHICH ARE NOT AT FINISH GRADE AND WHICH WILL BE WITHIN DISTURBED AREAS MUST BE SEEDED AND MULCHED WITH A QUICK GROWING TEMPORARY SEED MIXTURE AND MULCH. DISTURBED AREAS WHICH ARE EITHER AT FINISH GRADE OR WILL NOT BE RE-DISTURBED WITHIN ONE YEAR MUST BE SEEDED WITH A PERMANENT SEED MIXTURE AND MULCHED.
27. ANY AREA SHALL BE ALLOWED TO HAVE ACHIEVED PERMANENT 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. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
28. E&S BMP'S SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
29. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMP'S.
30. AFTER FINAL STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP'S MUST BE REMOVED OR CONVERTED TO PERMANENT POST-CONSTRUCTION STORMWATER BMP'S. AREAS DISTURBED DURING THE REMOVAL OR CONVERSION OF THE BMP'S SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID VEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
31. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
32. FAILURE TO CORRECTLY INSTALL E&S BMP'S, FAILURE TO PREVENT SEDIMENT LADEN RUNOFF FROM LEAVING THE SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMP'S MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAM LAW. THE CLEAN STREAM LAW PROVIDES FOR UP TO \$10,000 PER DAY CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR OR CRIMINAL PENALTIES FOR EACH VIOLATION. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE II, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.
34. THE PERMITTEE SHALL NOTIFY THE MONTGOMERY COUNTY CONSERVATION DISTRICT IMMEDIATELY PRIOR TO ANY CESSATION IN EARTHMOVING ACTIVITIES.
35. EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED AND FUNCTIONAL BEFORE GENERAL SITE DISTURBANCE WITHIN THE TRIBUTARY AREA OF THOSE CONTROLS BEGINS. RUNOFF FROM DISTURBED AREAS MUST PASS THROUGH A SEDIMENT REMOVAL OR RETENTION FACILITY BEFORE LEAVING THE SITE.
36. ONLY LIMITED UP SLOPE DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO SEDIMENT TRAPS AND CHANNELS OF CONVEYANCE FOR GRADING AND ACQUIRING BORROW TO CONSTRUCT THOSE CONTROLS.
37. WHERE BMP'S 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 BMP'S FAILURE AND ANY POLLUTION EVENTS.
 - B. ALL STEPS TAKEN TO REDUCE, ELIMINATE AND PREVENT THE RECCURENCE OF THE NON-COMPLIANCE.
 - C. THE TIME FRAME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.
38. ACCUMULATED SILT SHALL BE REMOVED ALONG SILT FENCING OR COMPOST FILTER SOCKS, REGRADED, AND STABILIZED ELSEWHERE ON THE SITE. SILT SHALL ALSO BE REMOVED FROM THE SEDIMENT TRAPS AT THE CLEANOUT ELEVATIONS. THE SILT SHALL BE SPREAD ELSEWHERE ON THE SITE AND SEEDED. SHOULD ANY MEASURES CONTAINED WITHIN THIS PLAN PROVE TO BE INCAPABLE OF ADEQUATELY REMOVING SEDIMENT FROM ON-SITE FLOWS PRIOR TO THE DISCHARGE OF OR STABILIZATION OF SURFACES INVOLVED, ADDITIONAL MEASUREMENT MUST BE IMPLEMENTED IMMEDIATELY BY THE OWNER/ DEVELOPER TO ELIMINATE SUCH PROBLEMS.
41. CHANNELS, SEDIMENTATION BASINS, SEDIMENTATION TRAPS AND STOCKPILES MUST BE SEEDED AND MULCHED IMMEDIATELY.
42. GRADED AREAS ARE TO BE TEMPORARILY SEEDED AND MULCHED IMMEDIATELY FOLLOWING EARTHMOVING PROCEDURES. TEMPORARY SEED SHALL BE ANNUAL RYE GRASS APPLIED AT THE RATES SPECIFIED. MULCH SHALL BE HAY OR STRAW APPLIED AT THE RATE OF AT LEAST 3 TONS PER ACRE.
43. LIME SHALL BE APPLIED TO ALL TEMPORARILY SEEDED AREAS AT A MINIMUM RATE AS SPECIFIED.
44. ALL TEMPORARILY SEEDED AREAS SHALL HAVE 5-5.5 FERTILIZER APPLIED AT THE MINIMUM RATES SPECIFIED.
45. ESTABLISH PERMANENT SEEDING AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED. PERMANENT SEEDING SHALL BE AT THE RATES SPECIFIED. FERTILIZER AND LIME SHALL BE APPLIED AT THE MINIMUM RATES SPECIFIED.
46. PERMANENTLY SEEDED AREAS SHALL HAVE HAY OR STRAW APPLIED AT THE RATE OF AT LEAST 3 TONS PER ACRE.
47. ANY AREAS WHERE HYDROSEED IS USED, MULCH IS NEEDED AT A MINIMUM RATE OF 3 TONS PER ACRE.
48. SILT FENCING AND COMPOST FILTER SOCKS ARE TO BE MAINTAINED, AND REPLACED IF NECESSARY, DURING THE ENTIRE CONSTRUCTION PERIOD UNTIL A PERMANENT VEGETATIVE COVER WITHIN THE TRIBUTARY AREA IS ESTABLISHED.
49. DUST CONTROL SHALL BE PROVIDED BY THE CONTRACTOR AT ALL TIMES DURING CONSTRUCTION.
50. CONSTRUCTION VEHICLES LEAVING THE SITE SHALL NOT DEPOSIT ANY MATERIAL OUTSIDE OF THE PROJECT SITE BOUNDARIES AND/OR A PUBLIC RIGHT-OF-WAY. ANY MATERIAL DEPOSITED SHALL BE IMMEDIATELY REMOVED.
51. IF ANY SIGNIFICANT CHANGES ARE TO BE MADE TO THE EROSION AND SEDIMENTATION CONTROL PLAN, THE BUILDER OR LANDOWNER WILL CONTACT THE MONTGOMERY COUNTY CONSERVATION DISTRICT AT (610) 892-3444 FOR THE ADEQUATELY THESE CHANGES.
52. SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAP WITH INLET PROTECTION AFTER EACH RUNOFF EVENT.
53. EACH SEDIMENT TRAP/BASIN MUST BE STABILIZED AND FUNCTIONING PROPERLY PRIOR TO ANY FURTHER EARTH DISTURBANCE ACTIVITY. UPON INSTALLATION OF THE TEMPORARY SEDIMENT TRAP/BASIN RISER(S), AN IMMEDIATE INSPECTION OF THE RISER(S) SHALL BE CONDUCTED BY A QUALIFIED SITE REPRESENTATIVE FROM THE MONTGOMERY COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING THAT THE PROPER RISER IS INSTALLED AND SEALED, PER PLAN. SEDIMENT TRAPS/BASINS MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES.
54. UPON REQUEST, THE PERMIT HOLDER AND/OR HIS CONTRACTOR SHALL PROVIDE AN AS-BUILT FOR ANY SEDIMENT BASIN OR TRAP TO THE MUNICIPAL INSPECTOR, LOCAL CONSERVATION DISTRICT, OR DEP.
55. BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E & S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE MONTGOMERY COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMMEDIATELY APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
56. ALL CONCRETE TRUCKS SHALL UTILIZE THE CONCRETE WASHOUT AREA PRIOR TO LEAVING THE SITE.
57. UTILITY LINE TRENCH EXCAVATION NOTES:
 - A. LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
 - B. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
 - C. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
 - D. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
 - E. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND/ OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
 - F. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED.

SPECIAL GEOLOGIC AND SOIL CONDITIONS

NO SPECIAL SOIL OR GEOLOGICAL ISSUES ARE KNOWN.

CONSTRUCTION SEQUENCE

AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES (INCLUDING CLEARING AND GRUBBING), THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE COUNTY CONSERVATION DISTRICT, TOWNSHIP ENGINEER/INSPECTOR, AND LICENSED PROFESSIONAL ENGINEER OR DESIGNEE TO AN ON-SITE PRE-CONSTRUCTION MEETING.

UPON INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMP'S AND AT LEAST 3 DAYS PRIOR TO PROCEEDING WITH THE BULK EARTH DISTURBANCE ACTIVITIES, THE PERMITTEE OR CO-PERMITTEE SHALL PROVIDE NOTIFICATION TO THE TOWNSHIP.

AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED BY THE TOWNSHIP PRIOR TO IMPLEMENTATION. EACH STEP OF THE SEQUENCE SHALL BE COMPLETED BEFORE PROCEEDING TO THE NEXT STEP, EXCEPT WHERE NOTED.

PRIOR TO EARTH DISTURBANCE ACTIVITY DESCRIBED IN ANY STEP OF THE CONSTRUCTION SEQUENCE, CLEAR AND GRUB AND STRIP TOPSOIL. STOCKPILE TOPSOIL IN THE DESIGNATED LOCATIONS.

UPON COMPLETION OR TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITY, OR ANY STATE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.

ANTICIPATED CONSTRUCTION START DATE: WINTER 2025
ANTICIPATED CONSTRUCTION END DATE: WINTER 2026

BUILDING ADDITIONS & RENOVATIONS

1. FIELD DELINEATE LIMITS OF DISTURBANCE PRIOR TO EARTH MOVING ACTIVITIES.
 2. INSTALL TREE PROTECTION FENCING AND COMPOST FILTER SOCKS. NOTIFY THE TOWNSHIP ENGINEER FOLLOWING THE INSTALLATION OF PROTECTIVE MEASURES AND PRIOR TO EARTH DISTURBANCE.
 3. INSTALL THE ROCK CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT AREA AS DEPICTED ON THE EROSION & SEDIMENTATION CONTROL PLANS.
 4. THROUGHOUT CONSTRUCTION, THE CONTRACTOR SHALL ENSURE THAT ALL SITE STORM WATER, INCLUDING THAT COMING OFF OF THE ROCK CONSTRUCTION ENTRANCE (RCE), IS DIRECTED INTO AN E&S CONTROL BMP.
 5. PRIOR TO DEMOLITION, ALL EXISTING UTILITIES TO BE RELOCATED (WATER, ELECTRIC, TELECOMMUNICATIONS, ETC.) ARE TO BE SHUT DOWN.
 6. PERFORM DEMOLITION ACTIVITIES, AS INDICATED ON THE PLANS. RELOCATE EXISTING UTILITIES AS NECESSARY.
 7. CLEAR AND GRUB, STRIP TOPSOIL AND STOCKPILE IN LOCATIONS SHOWN ON EROSION & SEDIMENTATION CONTROL PLAN. TEMPORARILY STABILIZE TOPSOIL STOCKPILE.
 8. PERFORM ROUGH GRADING.
 9. BEGIN CONSTRUCTION OF THE BUILDING ADDITIONS.
 10. CONTRACTOR SHALL GUARANTEE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS, WALLS, SIDEWALKS AND ADA RAMPS.
 11. BEGIN CONSTRUCTION OF SWM #100 AND SWM #200. INSTALL STORMWATER MANAGEMENT FACILITIES WITH ASSOCIATED STORM STRUCTURES AND DISTRIBUTION PIPE.
- CRITICAL STAGE OF CONSTRUCTION: CONTACT ENGINEER PRIOR TO EXCAVATION AND FINAL GRADING OF SWM UG14-UG16. CONTACT ENGINEER PRIOR TO PLACEMENT OF GEOTEXTILE FABRIC, STONE AND DISTRIBUTION PIPE INSIDE SWM UG14-UG16.**

- TEMPORARILY SEAL INLETS AS INDICATED ON THE PLANS. CONTRACTOR SHOULD ENSURE THAT NO SEDIMENT OR SEDIMENT LADEN RUNOFF IS ALLOWED TO ENTER THE INFILTRATION BMP'S DURING SITE CONSTRUCTION. ONLY AFTER THE TRIBUTARY DRAINAGE AREA TO THE INFILTRATION BMP'S IS FULLY STABILIZED (I.E. 70% STABILIZATION), CAN RUNOFF BE INTRODUCED TO THESE FACILITIES. IF SEDIMENT ENTERS THE STONE WITHIN THESE FACILITIES, THE STONE SHALL BE REMOVED AND REPLACED.
12. INSTALL REMAINING STORM STRUCTURES AND ASSOCIATED PIPES. IMMEDIATELY BLOCK/SEAL INLETS AS INDICATED ON THE PLANS. SEDIMENT INLETS MUST REMAIN BLOCKED/SEALED UNTIL THE TRIBUTARY DRAINAGE AREA ACHIEVES FINAL STABILIZATION.
 13. BEGIN CONSTRUCTION OF THE PARKING SPACES & HARDSCAPE AREAS. STABILIZE WITH STONE BASE AS CONSTRUCTION ALLOWS.
 14. FINALIZE BUILDING CONSTRUCTION.
 15. FINE GRADE ALL PREVIOUSLY DISTURBED AREAS THAT ARE READY FOR FINAL STABILIZATION. STABILIZE WITH SEEDING AND HAY OR STRAW MULCH CONSISTENT WITH STABILIZATION CRITERIA.
 16. INSTALL WEARING COURSE AND PAVEMENT STRIPING AS INDICATED ON THE PLANS AND DETAILS.
 17. COLLECT ALL SILT AND SEDIMENT DEPOSITS IN EROSION CONTROL DEVICES AND PLACE ON SITE IN NON-ERODIBLE AREAS. PERMANENTLY STABILIZE ALL DISTURBED AREAS. TEMPORARY EROSION CONTROLS MAY NOT BE REMOVED UNTIL STABILIZATION IS ATTAINED (70% UNIFORM COVERAGE OF A PERENNIAL VEGETATIVE SPECIES).
 18. UPON STABILIZATION OF ALL DISTURBED AREAS, REMOVE REMAINING SEDIMENT BARRIERS AND CONTROLS. IMMEDIATELY STABILIZE AREAS DISTURBED BY REMOVAL PROCESS IN ACCORDANCE WITH PERMANENT SEED AND MULCH SPECIFICATIONS.

OPERATION AND MAINTENANCE PROCEDURE

TEMPORARY EROSION AND SEDIMENT CONTROL BMP'S

1. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION, STABILIZATION AND MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROL MEASURES. INSPECTION/MAINTENANCE OF THESE MEASURES SHALL BE CONDUCTED ON A WEEKLY BASIS AND AFTER EVERY MEASURABLE RAINFALL. A WRITTEN REPORT DOCUMENTING THE INSPECTION AND APPLICABLE REPAIRS SHALL BE KEPT ON SITE AND AVAILABLE FOR INSPECTION UPON REQUEST.
2. THE OPERATION AND MAINTENANCE REQUIREMENTS FOR THE TEMPORARY E&S BMP'S FOR THIS PROJECT INCLUDE THE FOLLOWING:
 - A. COMPOST FILTER SOCK SHALL BE INSPECTED/MAINTAINED TO ENSURE THAT THE WOODEN STAKES AND FABRIC CONFORM TO THE STANDARD DETAIL. FABRIC WHICH IS TORN, DISTENDED/DEFORMED OR OTHERWISE COMPROMISED SHALL BE REPLACED. ALL MATERIAL DEPOSITED BEHIND THE COMPOST FILTER SOCK SHALL BE DISTRIBUTED ON SITE AND IMMEDIATELY STABILIZED USING SEED AND MULCH.
 - B. STABILIZED CONSTRUCTION ENTRANCE (SCE) – THE SCE SHALL BE INSPECTED/MAINTAINED TO ENSURE THAT THE STRUCTURE CONFORMS TO THE STANDARD DETAIL. ROCK SHOULD BE MAINTAINED AT FULL DEPTH AND MAY REQUIRE REPLACEMENT AND/OR REDISTRIBUTION. MATERIAL DEPOSITED ON THE SCE SHALL BE DISTRIBUTED ON SITE AND IMMEDIATELY STABILIZED USING SEED AND MULCH.
 - C. INLET PROTECTION – SHALL BE CLEARED AND CLEANED AFTER EACH RUNOFF EVENT, SEDIMENT SHALL BE DISTRIBUTED ON SITE AND IMMEDIATELY STABILIZED.
 - D. ROCK FILTER OUTLET – IF INSTALLED, OUTLET SHALL BE INSPECTED/MAINTAINED TO ENSURE THAT MATERIAL IS NOT DISPLACED OR DAMAGED.

STAGING OF EARTH MOVING ACTIVITIES

1. THE OVERALL SCHEDULE OF THE PROJECT IS THAT CONSTRUCTION WILL START APPROXIMATELY DURING WINTER, 2025. THE CONTRACTOR MAY SELECT HIS SCHEDULE FOR THE SPECIFIC PORTIONS OF THE PROJECT, UNLESS OTHERWISE SPECIFIED.
2. SPECIFIED EROSION CONTROL MEASURES AND FACILITIES INCLUDING BUT NOT LIMITED TO CONSTRUCTION ENTRANCES MUST BE INSTALLED AND BE OPERATIONAL PRIOR TO ANY EARTH MOVING ACTIVITIES WITHIN THE UPSLOPE DRAINAGE AREAS.
3. FOR PIPELINE CONSTRUCTION WITHIN DRIVEWAYS AND PAVED AREAS, THE FOLLOWING STAGES ARE TO BE IMPLEMENTED SEQUENTIALLY AS WORK PROCEEDS:
 - A. INSTALL INLET PROTECTION AND OTHER MEASURES AS SHOWN ON THE PLANS. THESE MEASURES SHALL BE INSTALLED AT LEAST 500 FEET AHEAD OF PIPE INSTALLATION.
 - B. EXCAVATE TRENCHES AND DISCHARGE MATERIAL DIRECTLY INTO TRUCKS. CLEAN UP SPILLAGE WITH EACH TRUCKLOAD.
 - C. INSTALL PIPELINE AND BACKFILL. EROSION CONTROL FACILITIES MAY BE REMOVED WHEN TEMPORARY OR PERMANENT REPAVING IS INSTALLED AND THE AREA HAS BEEN CLEANED OF ALL DEBRIS.
 - D. PLACE TEMPORARY PAVING OR GRAVEL SURFACE OVER TRENCH AT THE END OF EACH WORK DAY.

EROSION CONTROL MAINTENANCE PROGRAM TEMPORARY

UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION BMP'S ON A DAILY BASIS AND AFTER EACH RUNOFF EVENT. ALL SITE INSPECTIONS SHALL 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 SHALL BE NOTED. THE INSPECTION LOG SHALL BE KEPT ON SITE AT ALL TIMES, AND MADE AVAILABLE TO THE TOWNSHIP UPON REQUEST.

ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, REGRAIDING, RESEEDING, REMULCHING, AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S OR MODIFICATIONS OF THOSE INSTALLED WILL BE NEEDED.

WHERE BMP'S ARE FOUND TO FAIL TO ALLEVIATE EROSION AND SEDIMENTATION POLLUTION, THE CONTRACTOR SHALL INCLUDE THE FOLLOWING INFORMATION:

- A) THE LOCATION AND SEVERITY OF THE BMP'S FAILURE AND ANY POLLUTION EVENTS.
- B) ALL STEPS TAKEN TO REDUCE, ELIMINATE AND PREVENT THE RECCURENCE OF THE NON-COMPLIANCE.
- C) THE TIME FRAME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.

VEGETATIVE STABILIZATION NOTES

1. AS DISTURBED AREAS WITHIN A PROJECT APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE THE COMPLETION DATE AND SCHEDULE THE SEEDER). IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED. WAITING UNTIL EARTHMOVING IS COMPLETED BEFORE MAKING PREPARATIONS FOR SEEDING AND MULCHING IS NOT ACCEPTABLE. THIS REQUIREMENT SHOULD BE CLEARLY STATED IN THE SEEDING AND MULCHING SPECIFICATIONS CONTAINED ON THE PLAN DRAWINGS.
2. BEFORE THE SEEDING BEGINS, TOPSOIL SHOULD BE APPLIED AND ANY REQUIRED SOIL AMENDMENTS WORKED INTO THE SOIL TO A DEPTH OF 4 TO 6 INCHES. IF COMPOST IS TO BE ADDED TO THE TOPSOIL, IT SHOULD BE WORKED INTO THE SOIL WITH THE OTHER SOIL AMENDMENTS UNLESS IT IS BEING APPLIED AS AN EROSION CONTROL BMP.
3. UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY IN A SPECIAL PROTECTION WATERSHED, THE PROJECT SITE TRIBUTARY TO THE SPECIAL PROTECTION WATERS MUST BE IMMEDIATELY STABILIZED. IN ALL OTHER WATERSHEDS, CESSATION OF ACTIVITY FOR AT LEAST 4 DAYS REQUIRES TEMPORARY STABILIZATION.
4. SURFACE ROUGHENING SHOULD BE APPLIED TO SLOPES 3H:1V OR STEEPER UNLESS A STABLE ROCK FACE IS PROVIDED OR IT CAN BE SHOWN THAT THERE IS NOT A POTENTIAL FOR SEDIMENT POLLUTION TO SURFACE WATERS. FOR ROUGHENED SURFACES WITHIN 50 FEET OF A SURFACE WATER, AND WHERE BLANKETING OF SEEDED AREAS IS PROPOSED AS THE MEANS TO ACHIEVING PERMANENT STABILIZATION, SPRAY ON TYPE BLANKETS ARE RECOMMENDED.
5. FILL SLOPES SHOULD BE SEEDED AND MULCHED AT REGULAR VERTICAL INCREMENTS – 15 TO 25 FEET MAXIMUM – AS THE FILL IS BEING CONSTRUCTED. THIS WILL ALLOW THE BOTTOM OF THE FILL TO PROGRESS TOWARD STABILIZATION WHILE WORK CONTINUES ON THE UPPER PORTION, MAKING FINAL STABILIZATION EASIER TO ACHIEVE AND PROVIDING SOME VEGETATIVE BUFFERING AT THE BOTTOM OF THE SLOPE.
6. WHEREVER SEED AND MULCH IS APPLIED BY HYDROSEEDING METHODS, THE SEED AND MULCH SHOULD BE APPLIED IN SEPARATE APPLICATIONS WITH THE SEED BEING APPLIED FIRST AND THE MULCH APPLIED ON TOP OF THE SEED. THIS IS TO ENSURE THAT THE SEED MAKES CONTACT WITH THE UNDERLYING SOIL. SITE PREPARATION SHOULD BE COMPLETED PRIOR TO ADDING SEED TO THE HYDROSEEDING EQUIPMENT. RUNNING SEED THROUGH THE PUMPING SYSTEM CAN RESULT IN EXCESSIVE ABRASION OF THE SEED AND REDUCE THE PERCENTAGE OF PURE LIVE SEED IN THE APPLICATION. THEREFORE ALL SITE PREPARATION SHOULD BE COMPLETED PRIOR TO THE ARRIVAL OF THE HYDROSEEDER.
7. IN CRITICAL AREAS (E.G. ADJACENT TO OR WITHIN 50 FEET OF STREAMS, PONDS, OR WETLANDS) A PROTECTIVE BLANKET SHOULD BE PROVIDED FOR ALL SEEDED AREAS, CONSIDERATION SHOULD BE GIVEN TO USE OF MULCH WITH NETTING OR PROTECTIVE BLANKETS FOR ALL SEEDED AREAS ON SLOPES 3H:1V OR STEEPER.
8. VEHICULAR TRAFFIC SHOULD BE RESTRICTED FROM AREAS TO BE SEEDED TO PREVENT SOIL COMPACTION.
9. AS SOON AS SLOPES, CHANNELS, DITCHES AND OTHER AREAS DISTURBED DURING CONSTRUCTION, REACH FINAL GRADE, STABILIZE IMMEDIATELY, IN ACCORDANCE WITH SEEDING, MULCHING AND STABILIZATION SPECIFICATIONS.
10. NO MORE THAN 15,000 SQUARE FEET OF DISTURBED AREA REACH FINAL GRADE BEFORE INITIATING SEEDING AND MULCHING OPERATIONS.
11. CESSATION OF ACTIVITY FOR 4 DAYS OR LONGER REQUIRES TEMPORARY STABILIZATION.

SOIL TYPE USE LIMITATIONS AND RESOLUTIONS

1. SOIL TYPES POORLY SUITED AS SOURCES OF TOPSOIL RESTRICT OR PLACE CONDITIONS ON PLANNING VEGETATIVE STABILIZATION. ACIDIC, LOW FERTILITY, EXCESSIVE DRYNESS AND EXCESSIVE WETNESS LIMIT PLANT GROWTH.
RESOLUTIONS: IDENTIFYING AND RESOLVING CHARACTERISTICS, THAT RENDER THE SOIL TYPES POORLY, SUITED AS TOPSOIL.
2. ACIDIC SOIL TYPES EXHIBITING PH REACTION VALUES LOWER THAN ABOUT 5.5, LIMIT VEGETATIVE STABILIZATION. SOIL TESTS MIGHT BE NECESSARY TO DETERMINE SITE SPECIFIC PH REACTION.
RESOLUTIONS: APPLYING LIME CONSISTENT WITH RATES DETERMINED BY SOIL TESTING; SELECTING VEGETATIVE SPECIES TOLERANT TO ACIDIC SOIL CONDITIONS; AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.
3. LOW FERTILITY SOIL TYPES LACKING IN SUFFICIENT AMOUNTS OF ESSENTIAL PLANT NUTRIENTS SUCH AS: NITROGEN, PHOSPHOROUS, POTASSIUM, SULFUR, MAGNESIUM, CALCIUM, IRON, MANGANESE, BORON, CHLORINE, ZINC, COPPER AND MOLYBDENUM, LIMIT VEGETATION STABILIZATION. SOIL TESTS MIGHT BE NECESSARY TO DETERMINE SITE SPECIFIC SOIL FERTILITY.
RESOLUTIONS: INCORPORATING SOIL NUTRIENTS CONSISTENT WITH RATES DETERMINED BY SOIL TESTING; SELECTIVE VEGETATIVE SPECIES TOLERANT TO LOW FERTILITY SOIL CONDITIONS, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.
4. ERODIBLE SOIL TYPES EXHIBITING K VALUES GREATER THAN 0.36 OR PLASTICITY INDEX VALUES LOWER THAN 10, LIMIT VEGETATIVE STABILIZATION OF CHANNELS.
RESOLUTIONS: PROVIDING TEMPORARY CHANNEL LINING, PROVIDING PERMANENT CHANNEL LINING, DECREASING CHANNEL GRADE, INCREASING CHANNEL WIDTH, SELECTING VEGETATIVE WITH GREATER RETARDANCE, SELECTING PERMANENT LININGS OTHER THAN GRASSES, AND IMPLEMENTING COMBINATION OF THESE AND/OR METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLES 6 AND 7 OF THE EROSION AND SEDIMENT POLLUTION CONTROL MANUAL PUBLISHED BY PADEP.
5. WET SOIL TYPES HAVE EXCESSIVE ROOT ZONE AND SOIL MOISTURES. SOME SOIL SURVEYS INDICATE WETNESS, HIGH WATER TABLE AND FLOODING. THIS INDICATOR IS AFFECTED BY SOIL DISTURBANCE.
RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO WET CONDITIONS, TILING VEGETATIVE AREAS, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.
6. DRY SOIL TYPES LACK SUFFICIENT ROOT ZONE SOIL MOISTURES. THIS INDICATOR IS AFFECTED BY SOIL DISTURBANCE.
RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO DRY CONDITIONS, IRRIGATING VEGETATED AREAS AND IMPLEMENTING COMBINATION OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.
7. SOIL TYPES SUSCEPTIBLE TO SINKHOLE AND SOLUTION CHANNEL/CHAMBER FORMATION POSE LIMITATIONS ON LOCATING RESERVOIR AREAS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS, AND STORMWATER DETENTION BASINS.
RESOLUTIONS: LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, LINING RESERVOIR AREAS WITH IMPERMEABLE LININGS, LIMITING STANDING WATER DEPTHS, LIMITING RETENTION TIMES AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.
8. SOIL TYPES THAT EXHIBIT INSTABILITY IN POND EMBANKMENTS OR SUSCEPTIBILITY TO PIPING AND SEEPING POSE LIMITATIONS ON PLANNING EMBANKMENTS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS AND STORMWATER DETENTION BASINS.
RESOLUTIONS: IMPORTING OTHER SOIL FOR EMBANKMENT OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, LIMITING EMBANKMENT SOIL TYPE STEEPNESS AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.
9. SOILS THAT ARE DIFFICULT TO COMPACT, UNSUITABLE FOR WINTER GRADING, OR SUSCEPTIBLE TO FROST ACTION POSE LIMITATIONS ON PLANNING EMBANKMENTS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORM WATER RETENTION BASINS AND STORMWATER DETENTION BASINS.
RESOLUTIONS: IMPORTING OTHER SOIL FOR EMBANKMENT OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, NOT CONSTRUCTING EMBANKMENTS DURING PERIODS PRONE TO FROST AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.

- RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO WET CONDITIONS, TILING VEGETATIVE AREAS, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.
- RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO DRY CONDITIONS, IRRIGATING VEGETATED AREAS AND IMPLEMENTING COMBINATION OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.
- RESOLUTIONS: IMPORTING OTHER SOIL FOR EMBANKMENT OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, LIMITING EMBANKMENT SOIL TYPE STEEPNESS AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.

RESOLUTIONS: PROVIDING TEMPORARY CHANNEL LINING, PROVIDING PERMANENT CHANNEL LINING, DECREASING CHANNEL GRADE, INCREASING CHANNEL WIDTH, SELECTING VEGETATIVE WITH GREATER RETARDANCE, SELECTING PERMANENT LININGS OTHER THAN GRASSES, AND IMPLEMENTING COMBINATION OF THESE AND/OR METHODS.

RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO WET CONDITIONS, TILING VEGETATIVE AREAS, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.

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RESOLUTIONS: IMPORTING OTHER SOIL FOR EMBANKMENT OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, LIMITING EMBANKMENT SOIL TYPE STEEPNESS AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.

RESOLUTIONS: LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, LINING RESERVOIR AREAS WITH IMPERMEABLE LININGS, LIMITING STANDING WATER DEPTHS, LIMITING RETENTION TIMES AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.

RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO WET CONDITIONS, TILING VEGETATIVE AREAS, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.

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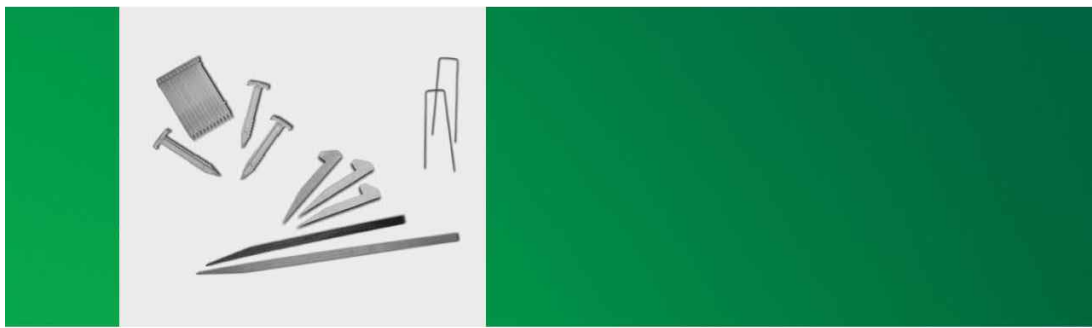
DISPOSAL AND RECYCLING

CONTRACTOR IS RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL DEMOLISHED OR UNUSED CONSTRUCTION MATERIALS. GARBAGE SHALL BE COLLECTED ON-SITE UNTIL RETRIEVED BY AN APPROVED DISPOSAL OR RECYCLING COMPANY. CONTRACTOR SHALL NOT INCINERATE EXCESS MATERIALS.

LIKELY WASTE TO BE GENERATED AT THIS SITE:

- UNUSED CONCRETE TO BE PLACED IN CONCRETE WASHOUT AREAS;
- EXCESS SILT SOCK AND FENCING MATERIALS;
- GENERAL RUBBISH AND DEBRIS

THERMAL IMPACTS



Installation Made Easy

When under the pressure of severe conditions, even the best erosion control products can function to their full potential without proper installation and anchoring. North American Green supplies a wide variety of fastener options for nearly every application and soil type.

For use in cohesive soils, wire staples are a cost-effective means to fasten RoatMax® System Rolled Erosion Control Products (RECPs). Available in 4 in., 6 in., 10 in. and 12 in. lengths, our U-shaped staples reach various depths to ensure adequate pull-out resistance. For installation using our handy 1/2" shoulder installation tool, 6 in. U-top staples or 6 in. wide top pins are available.

Our biodegradable BioStaples® are available in 4 in. and 6 in. lengths and provide an environmentally friendly alternative to metal staples. For an even more durable, deeper reaching pin material anchoring option, our wood staples® are available in 6 in., 12 in., 18 in., 19 in. and 24 in. lengths.

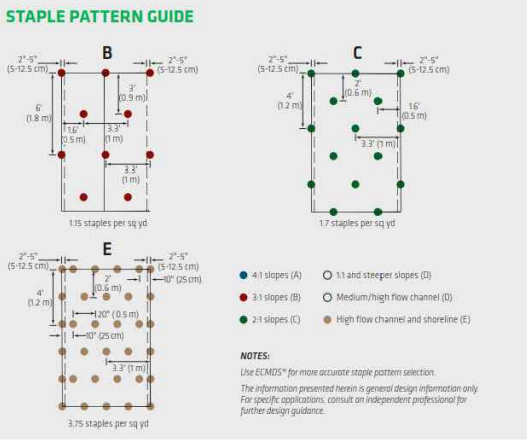
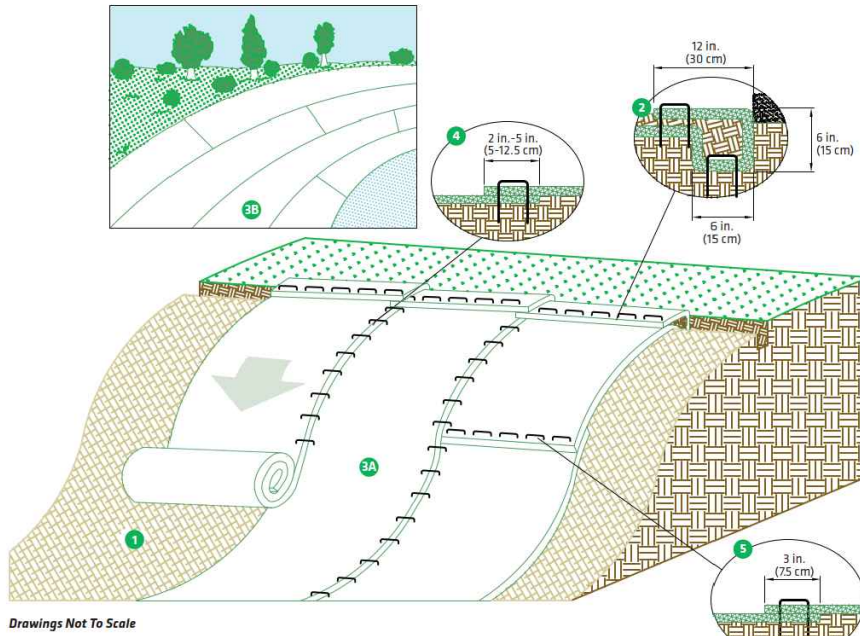


FIGURE 1

Slope Installation

The following slope guide outlines general recommendations for installing RoatMax® System temporary and/or permanent RECPs on varying applications. Consult the slope pattern guide (Figure 1) for fastener spacing recommendations based on the slope severity.

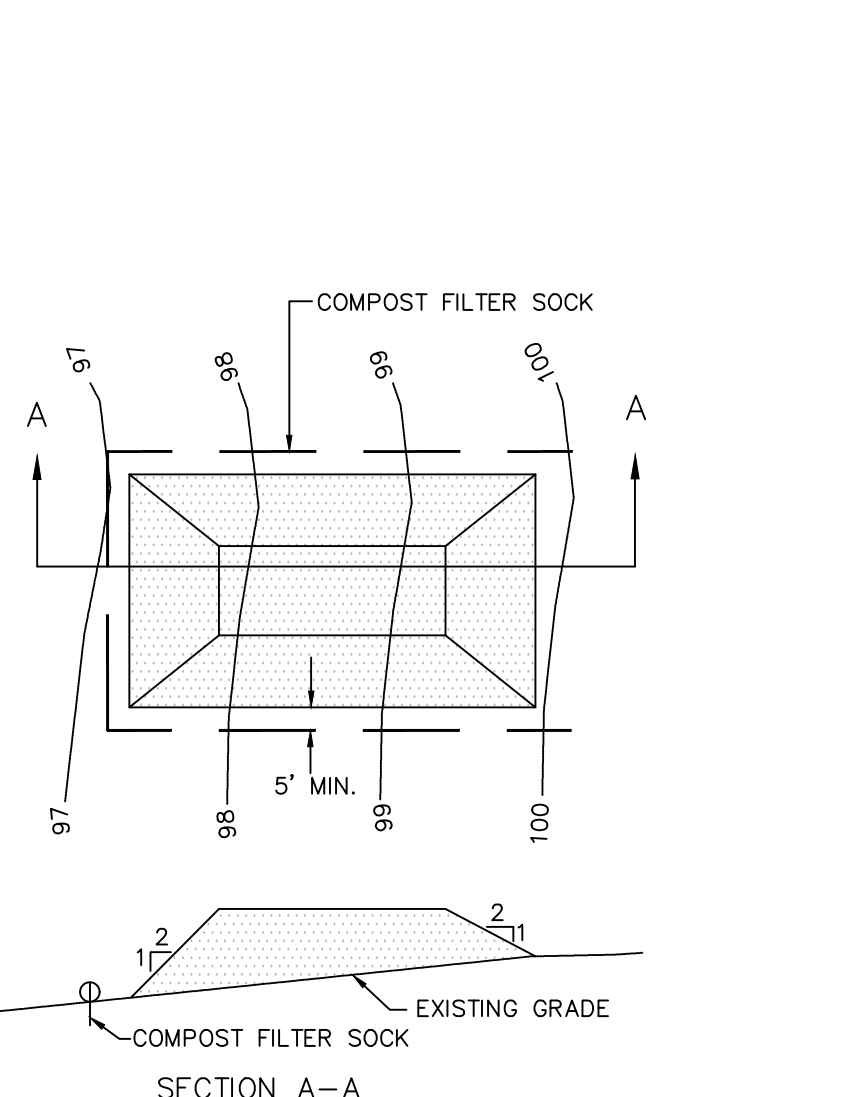


SLOPE INSTALLATION STEPS

1. Prepare soil before installing RECPs, including any necessary application of lime, fertilizer and seed.
2. Begin at the top of the slope by anchoring the RECPs in a 6 in. (15 cm) deep x 6 in. (15 cm) wide trench with approx. 100 in. (100 cm) of RECPs extended beyond the upslope portion of the trench. Anchor the RECPs with a row of staples/stakes approximately 12 in. (30 cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and field over remaining 12 in. (30 cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12 in. (30 cm) apart across the width of the RECPs.
3. Roll the RECPs (A) down or (B) horizontally across the slope. RECPs will enroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.
4. The edges of parallel RECPs must be stapled with an approximately 2 in. x 5 in. (5 x 12.5 cm) overlap depending on the RECP type.
5. Consecutive RECPs split down the slope must be end-over and (dimple style) with an approximate 3 in. (7.5 cm) overlap. Stagger through overlapped area, approximately 12 in. (30 cm) apart across entire RECPs width.*

*NOTE: In adverse soil conditions longer staples/stakes are earth anchors may be necessary to properly secure the RECPs.

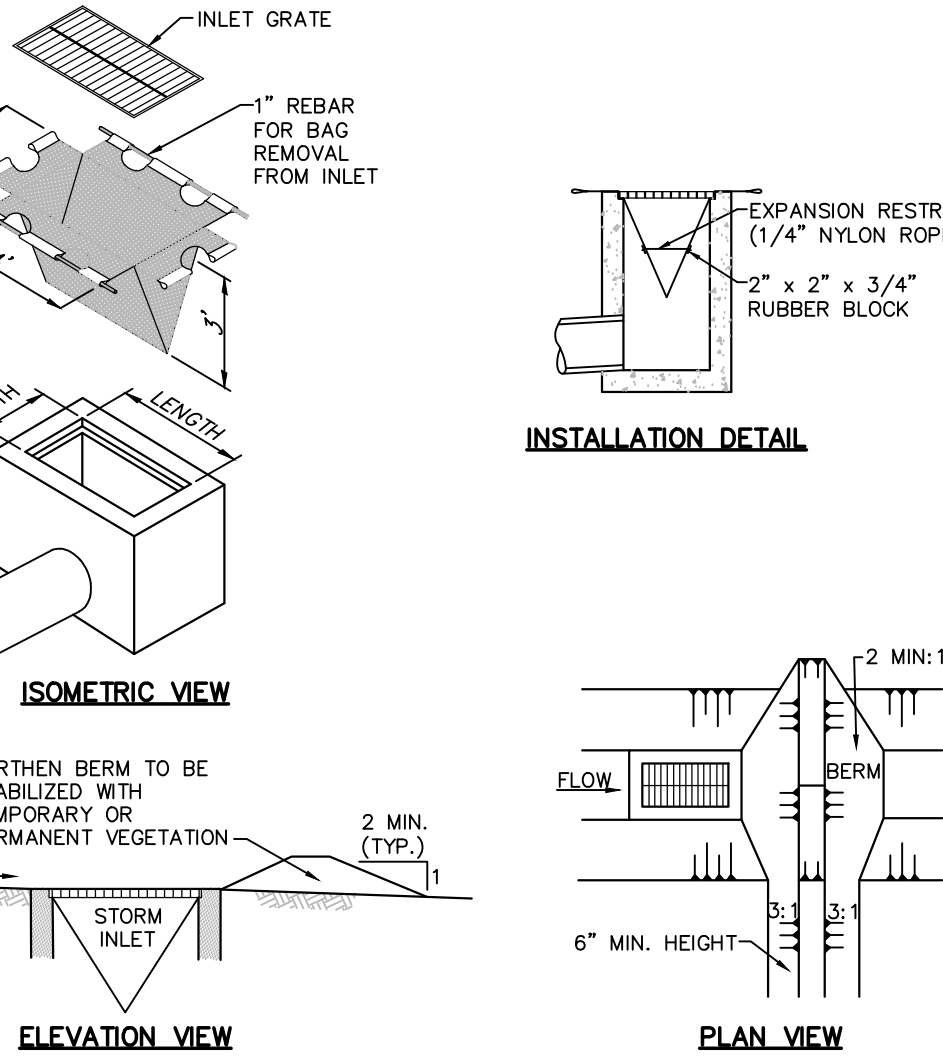
USE NAG S75 WITH STAPLE PATTERN "C"



- NOTES:
1. PLACE STOCKPILES AT LOCATIONS AS SHOWN ON THE EROSION AND SEDIMENTATION CONTROL PLAN.
 2. ALL SIDE SLOPES SHALL BE 2 TO 1 OR FLATTER.
 3. STOCKPILE SHALL RECEIVE A VEGETATIVE COVER IN ACCORDANCE WITH MINIMUM STABILIZATION REQUIREMENTS.
 4. COMPOST FILTER SOCK SHALL BE INSTALLED AS DETAILED HEREON.
 5. LOCATION OF PROPOSED STOCKPILE WHICH AFFECT EROSION CONTROLS ARE SHOWN SCHEMATICALLY ONLY. ACTUAL STOCKPILE LOCATION MAY CHANGE DURING CONSTRUCTION.
 6. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET.

STOCKPILE DETAIL

N.T.S.



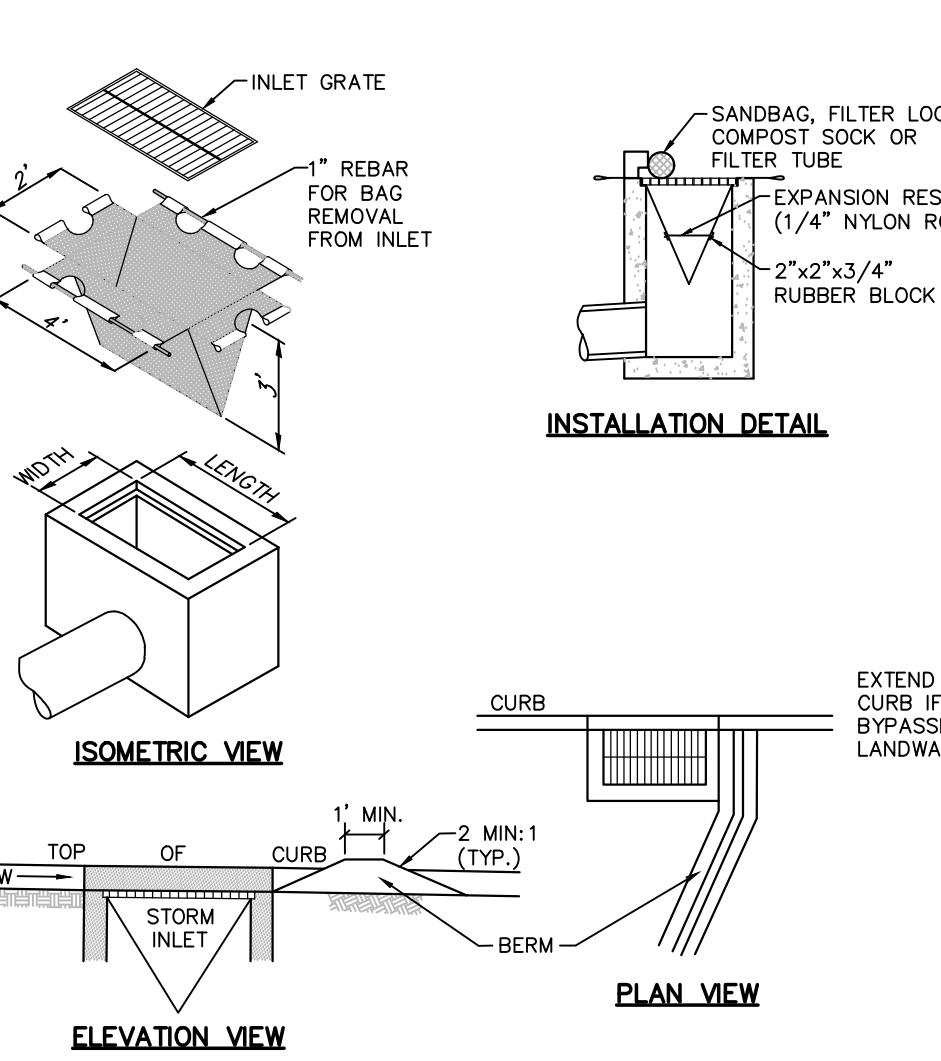
ELEVATION VIEW

FILTER BAG INLET PROTECTION – TYPE M INLET DETAIL

N.T.S.

- NOTES:
1. MAXIMUM DRAINAGE AREA = 1/2 ACRE.
 2. INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
 3. ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.
 4. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZODAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.
 5. INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

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



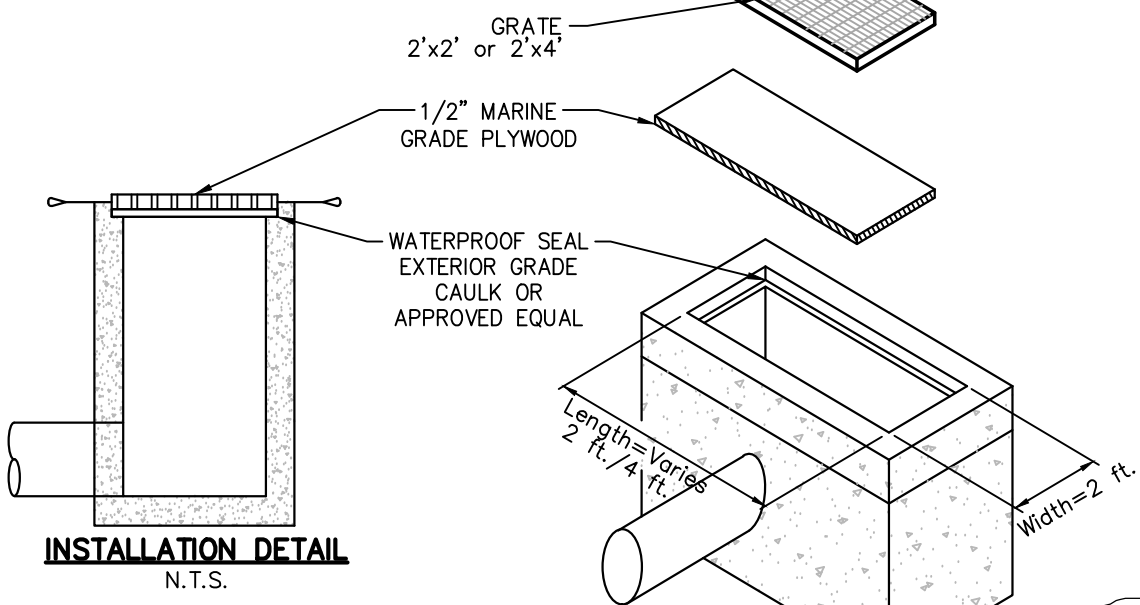
ELEVATION VIEW

FILTER BAG INLET PROTECTION – TYPE C INLET DETAIL

N.T.S.

- NOTES:
1. MAXIMUM DRAINAGE AREA = 1/2 ACRE.
 2. INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
 3. ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
 4. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZODAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.
 5. INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

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

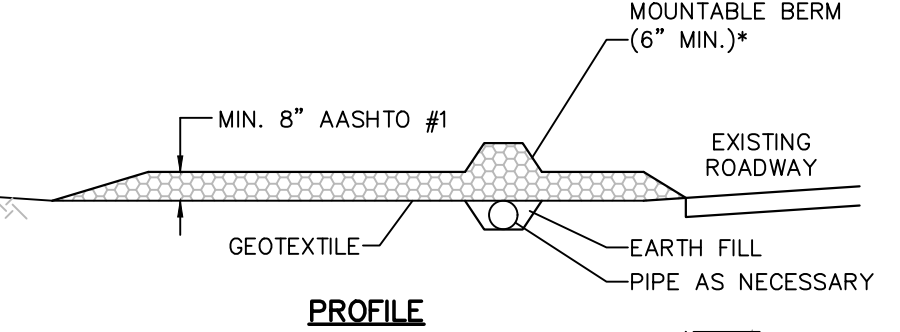


INSTALLATION DETAIL

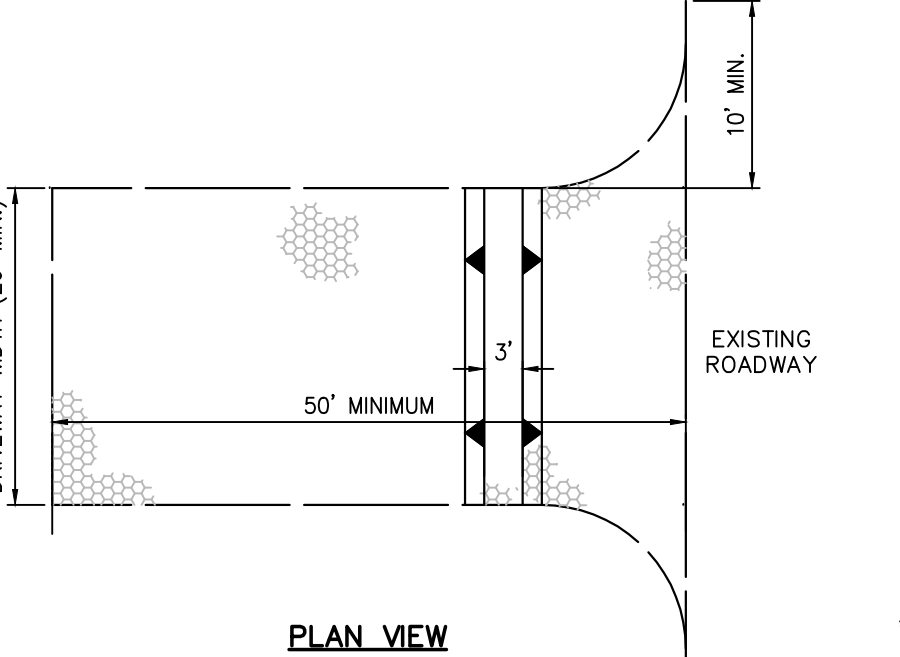
N.T.S.

INLET TEMPORARY SEAL DETAIL

N.T.S.



PROFILE



PLAN VIEW

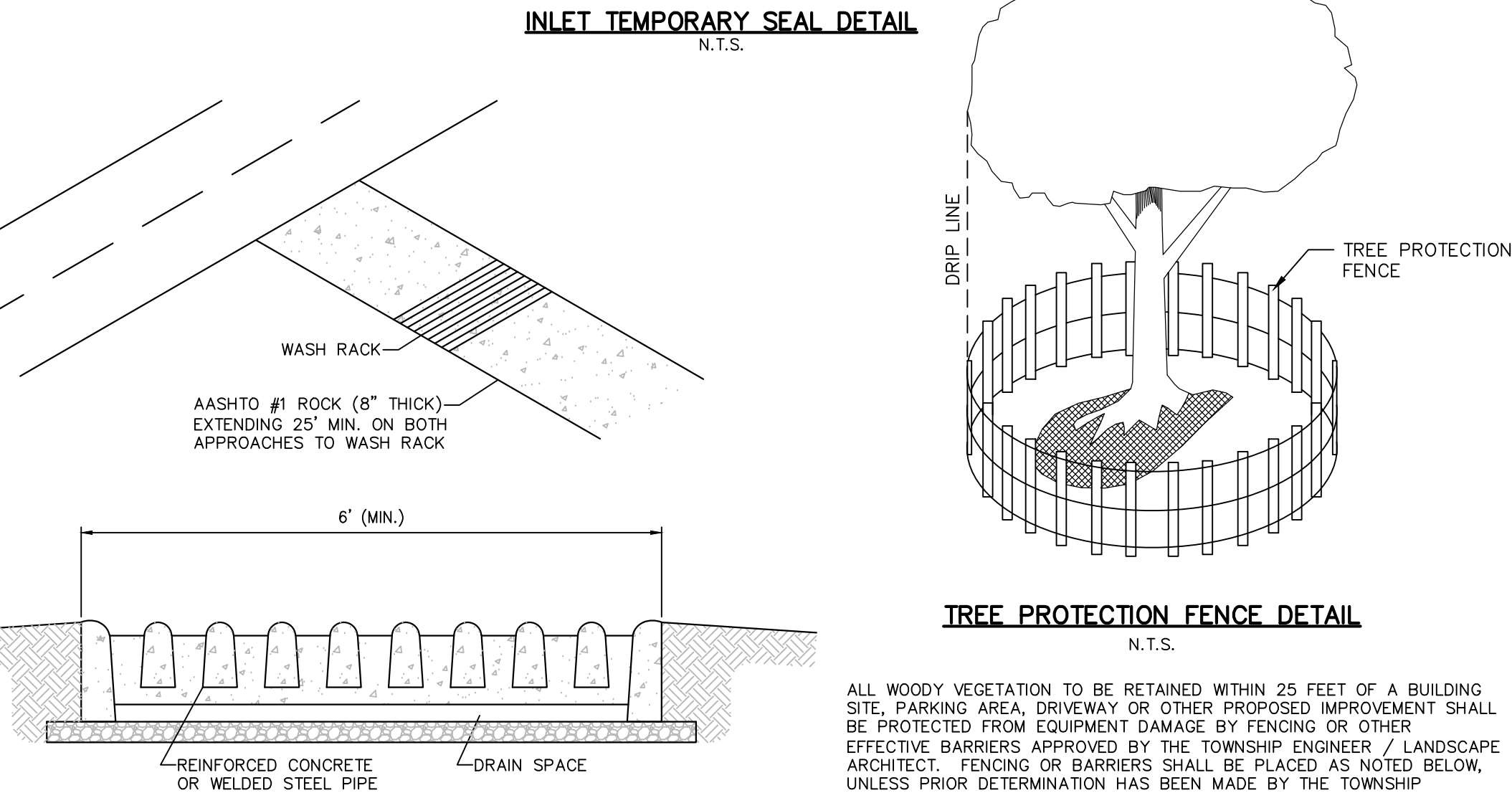
* MOUNTABLE BERM USED TO PROVIDE COVER FOR PIPE.

- NOTES:
1. REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.
 2. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
 3. MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

ROCK CONSTRUCTION ENTRANCE DETAIL

N.T.S.

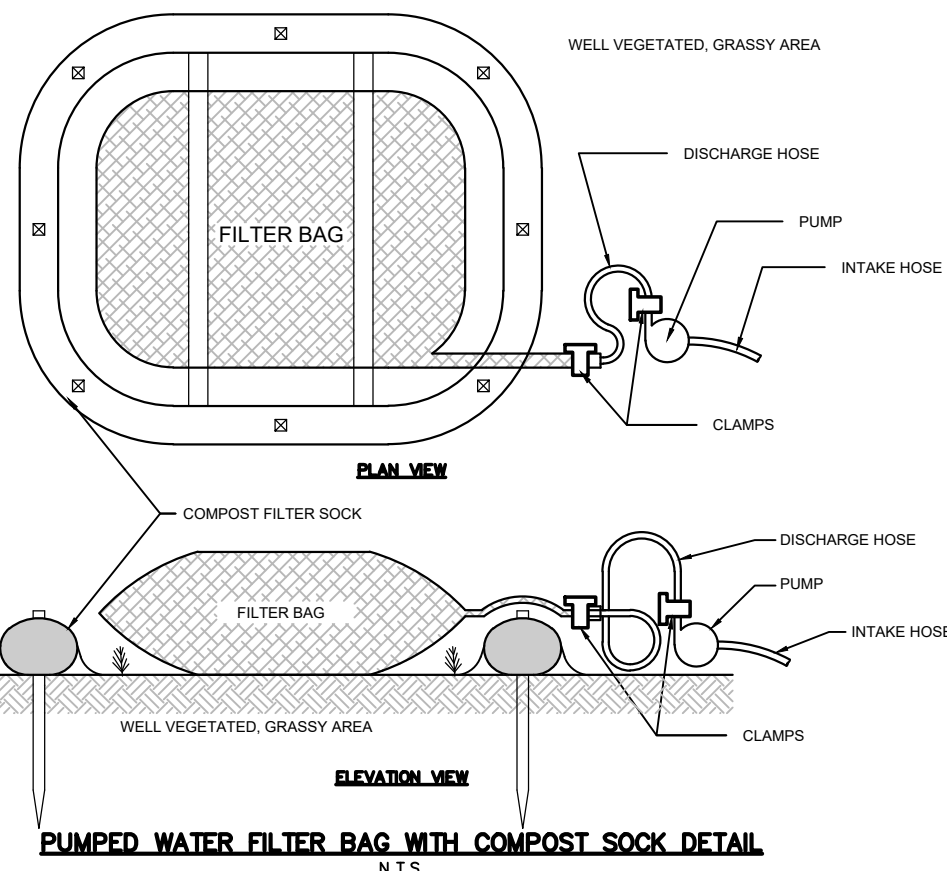


ROCK CONSTRUCTION ENTRANCE WITH WASH RACK DETAIL

N.T.S.

- NOTES:
1. WASH RACK SHALL BE 20 FEET (MIN.) WIDE OR TOTAL WIDTH OF ACCESS.
 2. WASH RACK SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTICIPATED CONSTRUCTION VEHICULAR TRAFFIC.
 3. A WATER SUPPLY SHALL BE MADE AVAILABLE TO WASH THE WHEELS OF ALL VEHICLES EXITING THE SITE.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. DRAIN SPACE UNDER WASH RACK SHALL BE KEPT OPEN AT ALL TIMES. DAMAGE TO THE WASH RACK SHALL BE REPAIRED PRIOR TO FURTHER USE OF THE RACK. ALL SEDIMENT DEPOSITED ON ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

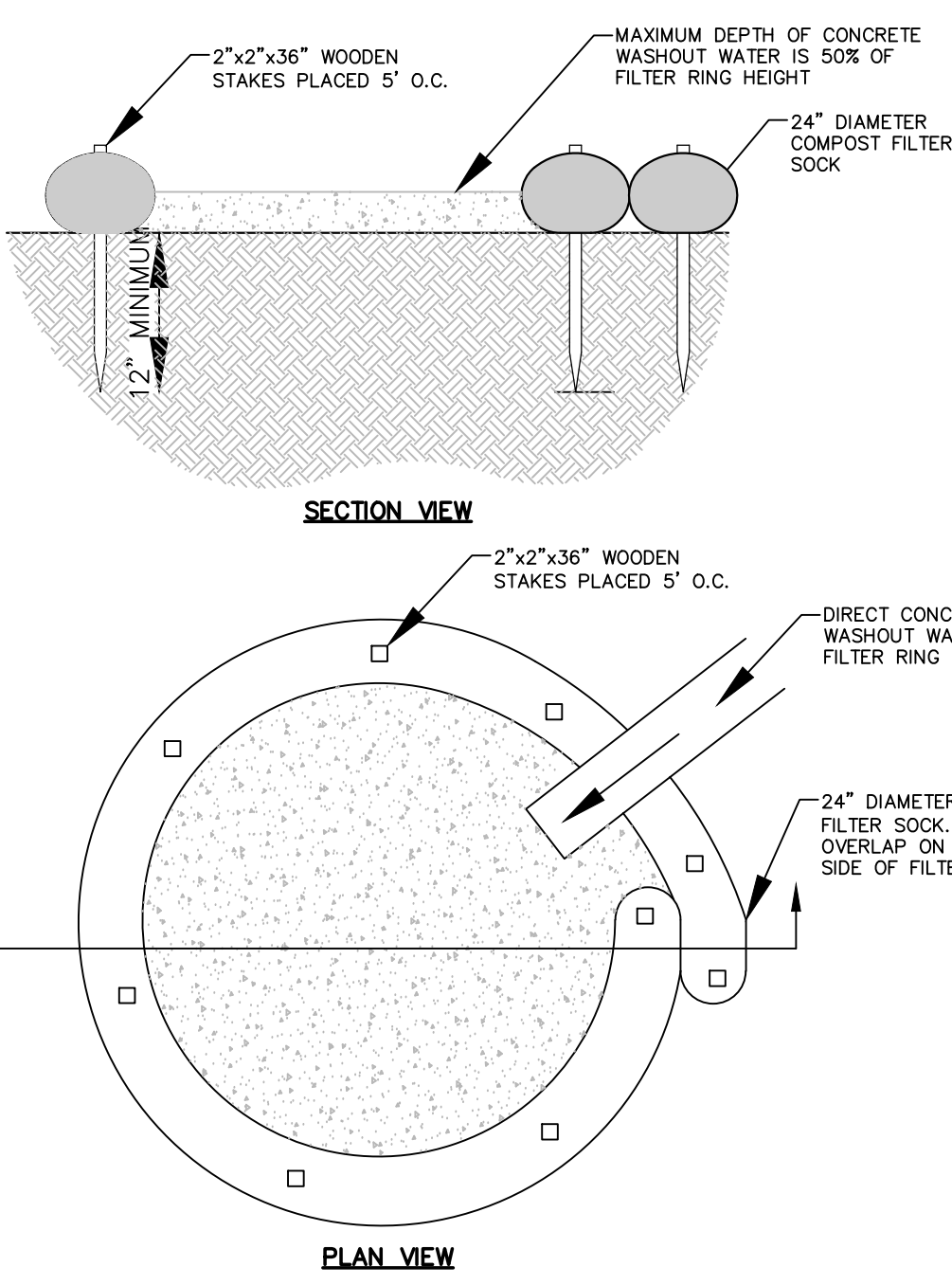


PUMPED WATER FILTER BAG WITH COMPOST SOCK DETAIL

- NOTES:
1. 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-4632	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

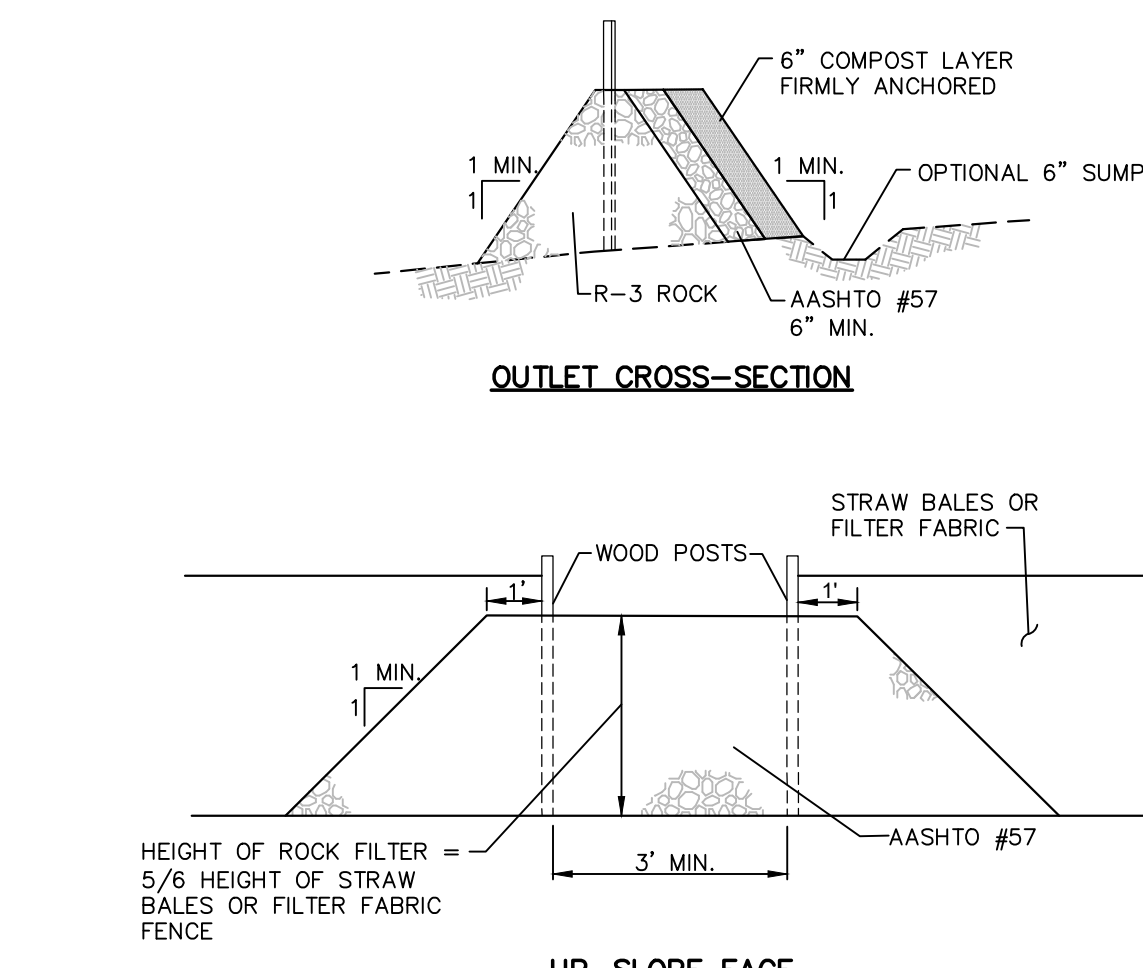
2. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 3/4 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRIPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.
3. 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.
4. 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.
5. 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.
6. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 3/4 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.
7. FILTER BAGS SHALL BE INSPECTED ONLY IF ANY PROBLEM IS DETECTED. PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.



COMPOST FILTER SOCK CONCRETE WASHOUT DETAIL

N.T.S.

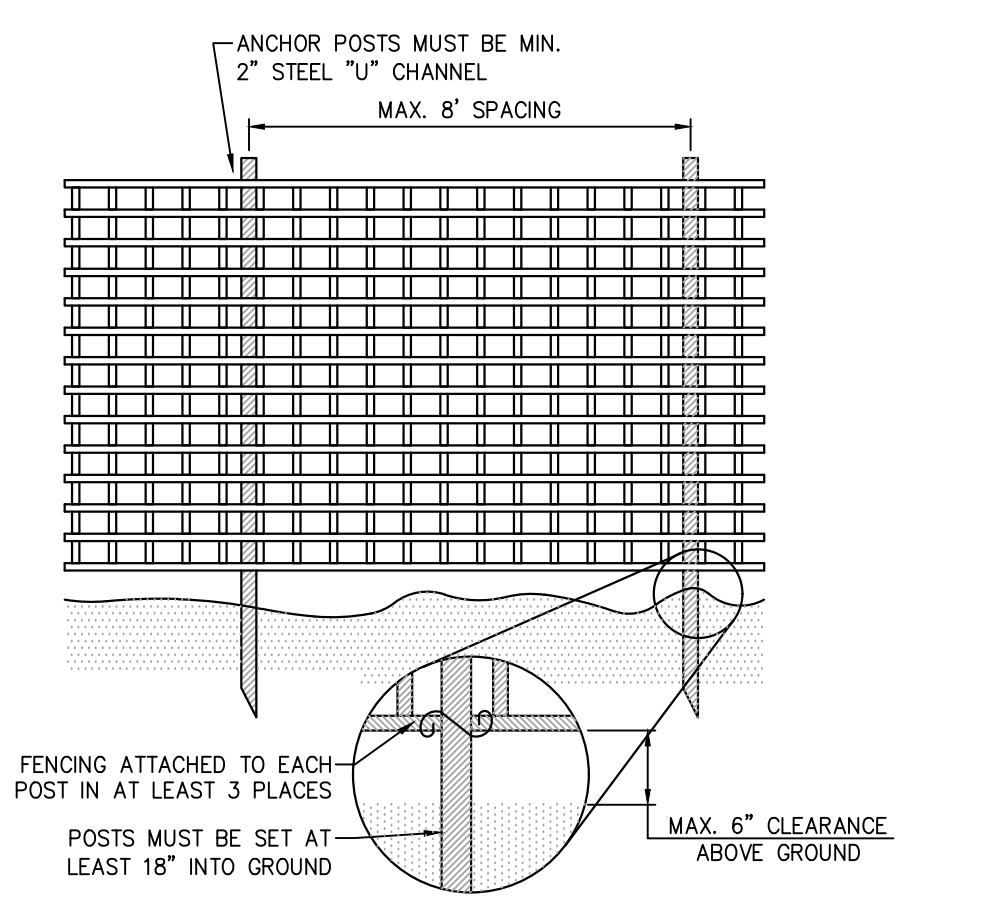
- NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
 2. 18" DIAMETER SILT SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SILT SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.
 3. A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.



UP-SLOPE FACE ROCK FILTER OUTLET DETAIL

N.T.S.

- NOTES:
1. A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.
 2. IF INSTALLED, INSPECT WEEKLY AND AFTER EACH RUNOFF EVENT. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.



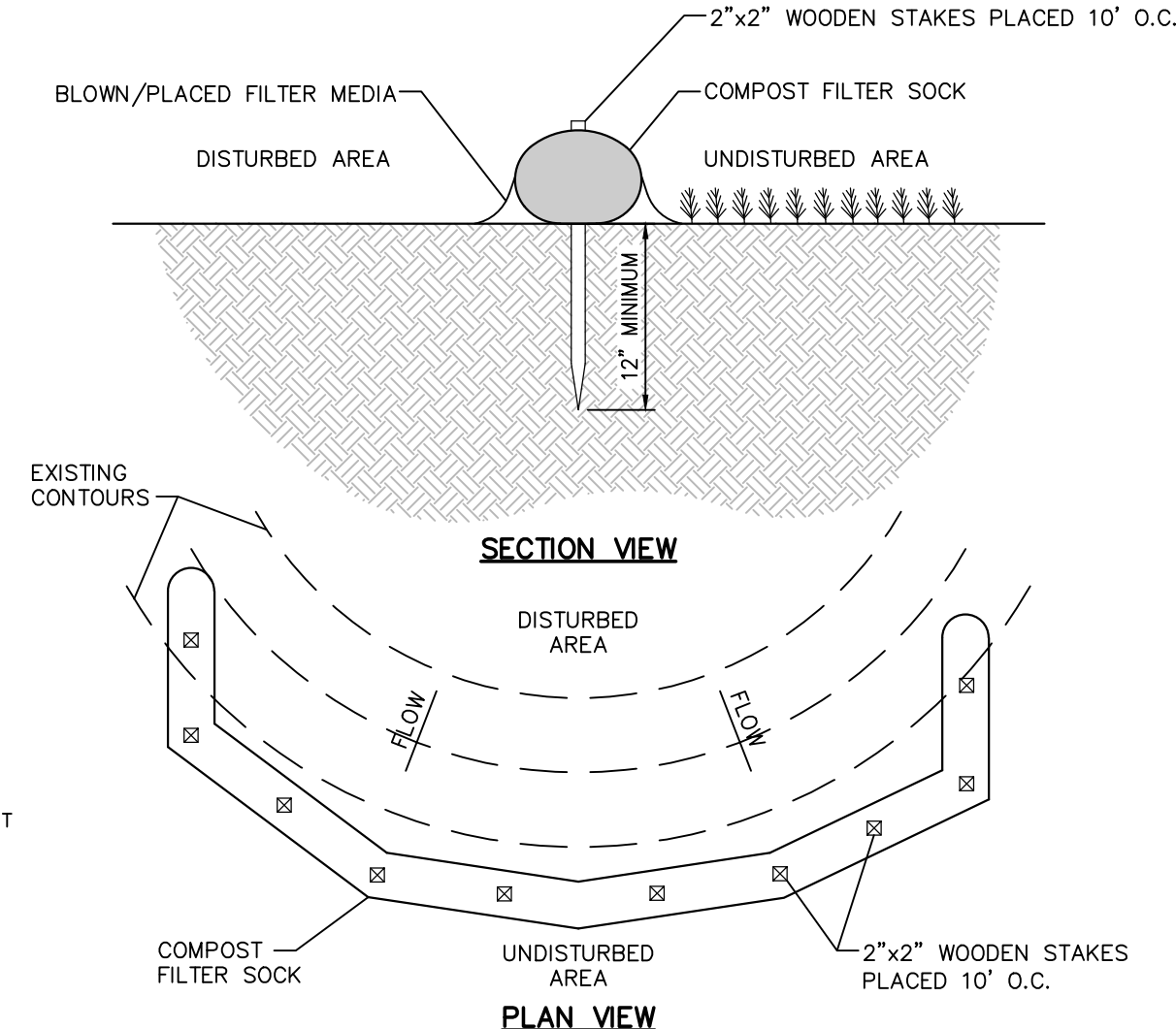
TREE PROTECTION BARRIER FENCE DETAIL

N.T.S.

- NOTES:
1. PROTECTION BARRIER SHALL BE 4 FEET HIGH, CONSTRUCTED OF DURABLE AND HIGHLY VISIBLE MATERIAL (PLASTIC ORANGE CONSTRUCTION FENCE AND/OR SNOW-FENCE MAY BE USED).
 2. PROTECTION BARRIERS SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE WORK AT THE SITE.

TREE PROTECTION BARRIER FENCE DETAIL

N.T.S.



PLAN VIEW

N.T.S.

- NOTES:
1. SOCK FABRIC SHALL MEET THE STANDARDS OF TABLE 4.1. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2.
 2. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.
 3. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
 4. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF TECH SOCK AND DISPOSED IN THE MATTER DESCRIBED ELSEWHERE IN THE PLAN.
 5. 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.
 6. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
 7. 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.
 8. REFER TO E&S PLAN FOR COMPOST SOCK LOCATIONS, SIZE, IDENTIFICATIONS AND CONSTRUCTION SPECIFICATIONS.

COMPOST FILTER SOCK DETAIL

N.T.S.

TABLE 4.1 – COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS

MATERIAL TYPE	3 MIL HDPE	5 MIL HDPE	5 MIL HDPE	MULTI-FILAMENT POLYPROPYLENE (MPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMPP)
MATERIAL CHARACTERISTICS	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE	BIO-DEGRADABLE	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE
SOC DIAMETERS	12"	12"	12"	12"	12"
	12"	18"	18"	18"	18"
	18"	24"	24"	24"	24"
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 D-155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.
MINIMUM FUNCTIONAL LONGETY	6 MONTHS	6 MONTHS	6 MONTHS	1 YEAR	2 YEARS

TWO-PLY SYSTEMS

INNER CONTAMINANT NETTING	HDPE AXIAL NET CONTINUOUSLY WOUND FUSION-WELDING JUNCTURES 3/4" x 3/4" MAX. APERTURE SIZE
OUTER FILTRATION MESH	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.

TABLE 4.2 – COMPOST STANDARDS

ORGANIC MATTER CONTENT	80% – 100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5 – 8.0
MOISTURE CONTENT	35% – 55%
PARTICLE SIZE	98% PASS THROUGH 1" SCREEN
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM

EROSION & SEDIMENTATION CONTROL DETAILS

NO.	DATE	REVISION

PRELIMINARY LAND DEVELOPMENT PLANS
FOR
**GLENSIDE ELEMENTARY SCHOOL-
BUILDING ADDITIONS & RENOVATIONS**
CHELTENHAM TWP. - MONTGOMERY COUNTY - PENNSYLVANIA

**ChesterValley
ENGINEERS, INC.**

112 Moores Road, Suite 200, Malvern, PA 19355
610-644-4623
www.chestervalle.com

PROJECT NO.
22407
F.B.
SCALE
AS NOTED
DATE
2/21/2024
DRAWN BY
RRB
CHECKED BY
JRM
DRAWING

ASSESSMENT MAP BLOCK: 137 UNIT 39

SHEET 10 OF 17

GENERAL NOTES:

- STORMWATER MANAGEMENT DESIGN:
REFER TO THE "POST-CONSTRUCTION STORMWATER MANAGEMENT REPORT", PREPARED BY CHESTER VALLEY ENGINEERS.
- MAINTENANCE NOTES:
 - THE BMP'S LISTED BELOW WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER.
 - DETENTION BED
 - INFILTRATION BED(S)
 - WATER QUALITY FILTER(S)
 - STORM SEWER AND ASSOCIATED STRUCTURES
- DESIGN CONSIDERATIONS:
SUBSURFACE BED(S) DESIGNED TO STORE AND MITIGATE POST-DEVELOPMENT RUNOFF TO RATES LESS THAN THOSE REQUIRED BY TOWNSHIP CODE. SUBSURFACE BED(S) DESIGNED TO MITIGATE THE POST-DEVELOPMENT VOLUME INCREASE DUE TO DEVELOPMENT. WATER QUALITY FILTERS DESIGNED TO FILTER ALL SURFACE RUNOFF.
- THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN HAS BEEN DESIGNED TO MEET THE FOLLOWING GOALS AND GUIDELINES:
 - PRESERVE THE INTEGRITY OF STREAM CHANNELS AND MAINTAIN AND PROTECT THE PHYSICAL, BIOLOGICAL AND CHEMICAL QUALITIES OF RECEIVING STREAMS.
 - PREVENT AN INCREASE IN THE RATE OF STORMWATER RUNOFF.
 - MINIMIZE ANY INCREASE IN STORMWATER RUNOFF VOLUME.
 - MINIMIZE IMPERVIOUS AREAS.
 - MAXIMIZE THE PROTECTION OF EXISTING DRAINAGE FEATURES AND EXISTING VEGETATION.
 - MINIMIZE LAND CLEARING AND GRADING.
 - MINIMIZE SOIL COMPACTION.
 - UTILIZE OTHER STRUCTURAL OR NONSTRUCTURAL BMP'S THAT PREVENT OR MINIMIZE CHANGES IN STORMWATER RUNOFF.
- THE RECEIVING WATER FOR THIS PROJECT IS TACONY CREEK. THE CHAPTER 93 CLASSIFICATION FOR TACONY CREEK IS WARM WATER FISHES, MIGRATORY FISHES (WVF-MF).
- THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE. CONSTRUCTION WASTES MUST BE RECYCLED TO THE EXTENT PRACTICABLE, AND DISPOSAL METHODS MUST COMPLY WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- THE PERMITTEE SHALL PROVIDE ENGINEERING CONSTRUCTION OVERSIGHT FOR THE PROPOSED STORMWATER BMP'S. A LICENSED PROFESSIONAL ENGINEER KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF STORMWATER BMP'S, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.
- AS-BUILT PLANS OF THE STORMWATER BMP'S SHALL BE PROVIDED WITHIN SIX MONTHS FOLLOWING THE COMPLETION OF EACH PHASE. THE AS-BUILT PLANS SHALL BE SIGNED AND SEALED BY A PA REGISTERED PROFESSIONAL ENGINEER.
- A NOTICE OF TERMINATION (NOT) WILL BE REQUIRED TO BE SUBMITTED FOLLOWING APPROVAL OF THE FINAL AS-BUILT PLANS. PRIOR TO ACCEPTING THE NOT, THE DEPARTMENT AND/OR CONSERVATION DISTRICT STAFF WILL PERFORM A FINAL INSPECTION TO ENSURE SITE STABILIZATION AND VERIFY ADEQUATE INSTALLATION AND FUNCTION OF STORMWATER BMP'S.
- PCSM REPORTING AND RECORDKEEPING. THE PCSM PLAN, INSPECTION REPORTS AND MONITORING RECORDS SHALL BE AVAILABLE FOR REVIEW AND INSPECTION BY THE DEPARTMENT OR THE CONSERVATION DISTRICT.
- FINAL CERTIFICATION. THE PERMITTEE SHALL INCLUDE WITH THE NOTICE OF TERMINATION "RECORD DRAWINGS" WITH A FINAL CERTIFICATION STATEMENT FROM A LICENSED PROFESSIONAL, WHICH READS AS FOLLOWS:

"I, (NAME) DO HEREBY CERTIFY PURSUANT TO THE PENALTIES OF 18 P.A.C.S.A. § 4904 TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THE ACCOMPANYING RECORD DRAWINGS ACCURATELY REFLECT THE AS-BUILT CONDITIONS, ARE TRUE AND CORRECT, AND ARE IN CONFORMANCE WITH CHAPTER 102 OF THE RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE PROJECT SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PCSM PLAN, ALL APPROVED PLAN CHANGES AND ACCEPTED CONSTRUCTION PRACTICES."

- THE PERMITTEE SHALL RETAIN A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN.
 - THE PERMITTEE SHALL PROVIDE A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN TO THE PERSON IDENTIFIED IN THIS SECTION AS BEING RESPONSIBLE FOR THE LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP'S.
- UPON PERMANENT STABILIZATION OF THE EARTH DISTURBANCE ACTIVITY UNDER § 102.22(A)(2) (RELATING TO PERMANENT STABILIZATION), AND INSTALLATION OF BMP'S IN ACCORDANCE WITH AN APPROVED PLAN PREPARED AND IMPLEMENTED IN ACCORDANCE WITH §§ 102.4 AND 102.8 (RELATING TO EROSION AND SEDIMENT CONTROL REQUIREMENTS), AND PCSM REQUIREMENTS), THE PERMITTEE OR CO-PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE DEPARTMENT OR CONSERVATION DISTRICT.

THE NOTICE OF TERMINATION MUST INCLUDE:

- THE FACILITY NAME, ADDRESS AND LOCATION.
- THE OPERATOR NAME AND ADDRESS.
- THE PERMIT NUMBER.
- THE REASON FOR PERMIT TERMINATION.
- IDENTIFICATION OF THE PERSONS WHO HAVE AGREED TO AND WILL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP'S IN ACCORDANCE WITH §102.8(M) AND PROOF OF COMPLIANCE WITH § 102.8(M)(2).

PRIOR TO ACCEPTING THE NOT, THE DEPARTMENT AND/OR CONSERVATION DISTRICT STAFF WILL PERFORM A FINAL INSPECTION AND APPROVE OR DENY THE NOTICE OF TERMINATION.

GENERAL CONSERVATION NOTES AND SPECIFICATIONS

INTENT OF CONSERVATION PROGRAM: THE INTENT OF THIS PROGRAM IS TO PREVENT ACCELERATED EROSION OF THE EXPOSED SITE SOILS DURING THE CONSTRUCTION AND PERMANENT LIFE PERIODS OF THE DEVELOPMENT. THE PROGRAM REQUIRES RETENTION OF ALL SEDIMENTS ON THE CONSTRUCTION SITE TO MINIMIZE THE IMPACT OF DEVELOPMENT ON EXISTING STREAMS AND ADJACENT PROPERTY OWNERS. THESE OBJECTIVES WILL BE ACHIEVED BY MINIMIZING THE EXPOSURE TIME OF POTENTIALLY ERODIVE SOILS TO RUNOFF AND INSTALLATION OF THE TEMPORARY CONSTRUCTION. THE INTENT OF THIS PROGRAM SHOULD BE UNDERSTOOD AND IMPLEMENTED THROUGHOUT THE ENTIRE DEVELOPMENT. THE VARIOUS CONSTRUCTION TRADES SHOULD BE APPRAISED OF THIS PROGRAM AND DIRECTED TO PREVENT UNDUE DISTURBANCE OF PREPARED AND PROTECTED SURFACES.

SURFACE STABILIZATION CRITERIA: ALL DISTURBED SOIL SURFACES, INCLUDING SOIL STOCKPILES, ARE SUBJECT TO EROSION AND SHALL BE STABILIZED EITHER TEMPORARILY OR PERMANENTLY, IMMEDIATELY DURING NON-GERMINATION PERIODS. MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. CRUSHED STONE ON PAVEMENT SUBGRADES IS CONSIDERED ADEQUATE PROTECTION. ALL DISTURBED ZONES AND VEGETATED REGIONS SHALL BE STABILIZED. PREFERABLY WITH A PERMANENT TREATMENT.

CRITICAL VEGETATION AREAS (CVA)

CRITICAL VEGETATION AREAS ARE TO BE GRADED, HYDROSEEDDED, AND MULCHED WITHIN 10 DAYS OF THE BEGINNING OF EXCAVATION. IN GENERAL, CRITICAL VEGETATION AREAS ARE DEFINED AS CUT SLOPES STEEPER THAN 3:1, ALL FILL SLOPES STEEPER THAN 4:1 AND IN ALL DRAINAGE SWALES.

DISPOSAL AND RECYCLING

CONTRACTOR IS RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL DEMOLISHED OR UNUSED CONSTRUCTION MATERIALS. GARBAGE SHALL BE COLLECTED ON-SITE UNTIL RETRIEVED BY AN APPROVED DISPOSAL OR RECYCLING COMPANY, CONTRACTOR SHALL NOT INCINERATE EXCESS MATERIALS.

LIKELY WASTE TO BE GENERATED AT THIS SITE:

- EXCESS SILT SOCK AND FENCING MATERIALS;
- GENERAL RUBBISH AND DEBRIS

THERMAL IMPACT

STORMWATER RUNOFF FROM THE DRIVEWAY AND PARKING AREAS DRAIN TO A SUBSURFACE INFILTRATION BED AND UNDERGROUND STORM DRAIN PIPES. THEREFORE, THE INITIAL RUNOFF THAT IS MOST LIKELY TO WARMER IS SENT UNDERGROUND AND NOT DISCHARGED TO THE WATER COURSE. WATER HAS TIME TO COOL PRIOR TO LEAVING THE SITE AND DRAINING TO THE WATER COURSE.

SPECIAL GEOLOGIC AND SOIL CONDITIONS

NO SPECIAL SOIL OR GEOLOGICAL ISSUES ARE KNOWN.

POST CONSTRUCTION STORMWATER MANAGEMENT (PCSWM) LONG-TERM OPERATIONS AND MAINTENANCE REQUIREMENTS

- UNTIL THE PERMITTEE OR CO-PERMITTEE HAS RECEIVED WRITTEN APPROVAL OF A NOTICE OF TERMINATION, THE PERMITTEE OR CO-PERMITTEE WILL REMAIN RESPONSIBLE FOR COMPLIANCE WITH THE PERMIT TERMS AND CONDITIONS INCLUDING LONG-TERM OPERATION AND MAINTENANCE OF ALL PCSWM BMP'S ON THE PROJECT SITE AND IS RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE PROJECT SITE.
- THE PERMITTEE OR CO-PERMITTEE SHALL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF PCSWM BMP'S UNLESS A DIFFERENT PERSON IS IDENTIFIED IN THE NOTICE OF TERMINATION AND HAS AGREED TO LONG-TERM OPERATION AND MAINTENANCE OF PCSWM BMP'S.
- FOR ANY PROPERTY CONTAINING A PCSWM BMP, THE PERMITTEE OR CO-PERMITTEE SHALL RECORD AN INSTRUMENT WITH THE RECORDER OF DEEDS WHICH WILL ASSURE DISCLOSURE OF THE PCSWM BMP AND THE RELATED OBLIGATIONS IN THE ORDINARY COURSE OF A TITLE SEARCH OF THE SUBJECT PROPERTY. THE RECORDED INSTRUMENT MUST IDENTIFY THE PCSWM BMP, PROVIDE FOR NECESSARY ACCESS RELATED TO LONG-TERM OPERATION AND MAINTENANCE FOR PCSWM BMP'S AND PROVIDE NOTICE THAT THE RESPONSIBILITY FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSWM BMP IS A COVENANT THAT RUNS WITH THE LAND THAT IS BINDING UPON AND ENFORCEABLE BY THE SUCCESSOR TO THE PROPERTY AND PROVIDE PROOF OF FILING WITH THE NOTICE OF TERMINATION UNDER § 102.7(b)(5) (RELATING TO PERMIT TERMINATION).
- THE PERSON RESPONSIBLE FOR PERFORMING LONG-TERM OPERATION AND MAINTENANCE MAY ENTER INTO AN AGREEMENT WITH ANOTHER PERSON INCLUDING A CONSERVATION DISTRICT, NONPROFIT ORGANIZATION, MUNICIPALITY, AUTHORITY, PRIVATE CORPORATION OR OTHER PERSON, TO TRANSFER THE RESPONSIBILITY FOR PCSWM BMP'S OR TO PERFORM LONG-TERM OPERATION AND MAINTENANCE AND PROVIDE NOTICE THEREOF TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- A PERMITTEE OR CO-PERMITTEE THAT FAILS TO TRANSFER LONG-TERM OPERATION AND MAINTENANCE OF THE PCSWM BMP OR OTHERWISE FAILS TO COMPLY WITH THIS REQUIREMENT SHALL REMAIN JOINTLY AND SEVERALLY RESPONSIBLE WITH THE LANDOWNER FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSWM BMP'S LOCATED ON THE PROPERTY.
- IN THE EVENT THAT THE BMP IS NOT FUNCTIONING PROPERLY, THE PERSON RESPONSIBLE FOR PERFORMING LONG-TERM OPERATION AND MAINTENANCE SHALL BE REQUIRED TO REPAIR OR REPLACE THE BMP TO ENSURE FUNCTION AND OPERATION.
- THE PERMITTEE SHALL BE REQUIRED TO SUBMIT A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL BMP REPAIR AND MAINTENANCE ACTIVITIES TO THE TOWNSHIP, CONSERVATION DISTRICT, AND THE DEPARTMENT UPON REQUEST.

BMP FAILURE NOTES (PER PROTOCOL 2 OF THE BMP MANUAL)

THE TERM "FAILURE" FOR THE PROPOSED SUBSURFACE BED SHALL BE DEFINED AS:

- THE LOSS OF FUNCTIONALITY OF THE PROPOSED OUTLET STRUCTURE OR DISCHARGE PIPE
- THE LOSS OF STRUCTURAL INTEGRITY OF THE STONE AND PIPES
- THE ACCUMULATION OF SEDIMENT, TRASH OR DEBRIS IN PERIMETER DRAINAGE STRUCTURES
- STANDING WATER IS OBSERVED IN THE BASIN AFTER 72 HOURS

THE PERMITTEE SHALL MAKE THE NECESSARY REPAIRS TO THE OUTLET STRUCTURE, DISCHARGE PIPING, STONE, AND PERFORATED PIPE AS NEEDED. IF STANDING WATER IS OBSERVED AFTER 72 HOURS, CONSULT ENGINEER FOR REMEDIATION OF THE UNDERGROUND BED.

THE TERM "FAILURE" FOR THE PROPOSED WATER QUALITY INLETS (FILTER INSERTS) SHALL BE DEFINED AS:

- DISCOVER EVIDENCE OF DAMAGED FILTER MEDIA
- DISCOVER EVIDENCE OF THE FILTER MEDIA'S INABILITY TO SUPPORT ACCUMULATED SEDIMENT OR DEBRIS.

THE PERMITTEE SHALL REPAIR BMP FAILURE BY REPLACING THE FILTER MEDIA IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.

POST CONSTRUCTION STORMWATER MANAGEMENT REPORTING AND RECORD KEEPING

A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL BMP REPAIR AND MAINTENANCE ACTIVITIES MUST BE PROVIDED TO THE DEPARTMENT AS PART OF THE LONG-TERM OPERATION AND MAINTENANCE PROGRAM.

THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN, INSPECTION REPORTS, AND MONITORING RECORDS SHALL BE AVAILABLE FOR REVIEW AND INSPECTION BY THE DEPARTMENT OR THE CONSERVATION DISTRICT.

WATER QUALITY INLETS (FILTER INSERTS)

IT SHALL BE THE SOLE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN ALL WATER QUALITY INLETS ON SITE.

INSPECTION REQUIREMENTS

- WATER QUALITY INLET INSERTS SHOULD BE INSPECTED THREE TIMES PER YEAR.
 - DURING THE THREE ROUTINE INSPECTIONS, THE FILTER MEDIA SHALL BE CLEANED.
 - ONE REGULAR CHANGE AND DISPOSAL OF THE FILTER MEDIA SHALL OCCUR DURING THE CALENDAR YEAR AS WELL.

BMP FAILURE

- BMP FAILURE IS DEFINED AS DISCOVERING EVIDENCE OF TORN FILTER FABRIC OR FILTER MEDIA INABILITY TO SUPPORT ACCUMULATED SEDIMENT OR DEBRIS.
- REPAIR BMP FAILURE BY REPLACING THE FILTER MEDIA IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.

GENERAL MAINTENANCE NOTES

- WATER QUALITY INLET INSERTS SHALL BE CHECKED TO ENSURE THEY ARE SECURELY FASTENED DURING EACH INSPECTION.
- RECOMMENDED MAINTENANCE IS PERFORMED INCLUDING REMOVAL AND DISPOSAL OF THE FILTER MEDIA OR EXCESS MATERIAL BY PERSONNEL.

DISPOSAL

- DISPOSAL OF REMOVED MATERIAL WILL DEPEND ON THE NATURE OF THE DRAINAGE AREA AND THE INTENT AND FUNCTION OF THE WATER QUALITY INSERT.
- MATERIAL REMOVED FROM WATER QUALITY INSERTS THAT SERVE "HOT SPOTS" SUCH AS FUELING STATIONS THAT RECEIVE A LARGE AMOUNT OF DEBRIS SHOULD BE HANDLING ACCORDING TO DEP REGULATIONS FOR THAT TYPE OF SOLID WASTE, SUCH AS A LANDFILL THAT IS APPROVED BY DEP TO ACCEPT SOLID WASTE. WATER QUALITY INSERTS THAT PRIMARILY CATCH SEDIMENT AND DETRITUS FROM AREAS SUCH AS LAWNS MAY REUSE THE WASTE ON SITE.

CONSTRUCTION SEQUENCE

- REMOVE THE GRATE OF THE INSTALLED INLET AND SET IT TO THE SIDE.
- REMOVE DEBRIS AND LITTER FROM THE INLET.
- CLEAN OFF THE GRATE BEARING LEDGE.
- LOWER THE FILTER ASSEMBLY INTO THE INLET UNTIL THE ASSEMBLY'S SUPPORT FLANGES REST ON THE GRATE BEARING LEDGE.
- INSURE THAT THE FOUR FILTER MEDIUM CARTRIDGES ARE ATTACHED TO THE D-RINGS IN THE BOTTOM CORNERS OF THE FILTER ASSEMBLY.

CRITICAL STAGE OF CONSTRUCTION: CONTACT ENGINEER TO VERIFY INSTALLATION OF WATER QUALITY INSERTS.

- REPLACE THE INLET GRATE.

SUBSURFACE INFILTRATION BEDS (SWM UG15-UG16)

IT SHALL BE THE SOLE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM(S).

SPECIFICATIONS

- AGGREGATE: AGGREGATE FOR BEDS SHALL BE 3/8" INCH TO 3/4" INCH UNIFORMITY GRADED COARSE AGGREGATE, AASHTO NUMBER 57 PER TABLE 4. AASHTO SPECIFICATIONS, PART 1, 13TH ED., 1998 (P. 47).
- NON-WOVEN GEOTEXTILE: SHALL CONSIST OF NEEDLED NON-WOVEN POLYPROPYLENE FIBERS AND MEET THE FOLLOWING PROPERTIES:
 - GRAB TENSILE STRENGTH (ASTM-D4632): 120 LBS.
 - MULLEN BURST STRENGTH (ASTM-D3786): 225 PSI.
 - FLOW RATE (ASTM-D4491): 95 GPM/FT²
 - UV RESISTANCE AFTER 500 HOURS (ASTM-D4355S): 100%
 - HEAT-SET OR HEAT-CALENDARED FABRICS ARE NOT PERMITTED. ACCEPTABLE TYPES INCLUDE MIRAFI 140N, AMOCO 4547, AND GEOTEX 451.
- STORAGE PIPE: SHALL BE CONTINUOUSLY PERFORATED, SMOOTH INTERIOR, HIGH-DENSITY POLYETHYLENE (HDPE) PIPE SHALL MEET AASHTO M252, TYPE S OR AASHTO M294, TYPE S.

INSPECTION REQUIREMENTS

- ALL STORMWATER MANAGEMENT SYSTEMS SHALL BE INSPECTED ANNUALLY, OR AFTER EACH RAINFALL EVENT IN EXCESS OF TWO (2") INCHES (MAJOR STORM EVENT), FOR TRASH AND DEBRIS; ANY DISCOVERED TRASH OR DEBRIS SHALL BE REMOVED IMMEDIATELY.

GENERAL MAINTENANCE NOTES

- ACCESS FOR VIEWING OR VACUUMING IS PROVIDED THROUGH OBSERVATION PORTS AND STORM STRUCTURES.
- REMOVE SEDIMENT/TRASH/DEBRIS FROM PERIMETER DRAINAGE STRUCTURES AND OUTLET STRUCTURE.
- THE OVERLYING VEGETATION OF SUBSURFACE INFILTRATION FEATURES SHOULD BE MAINTAINED IN GOOD CONDITION, AND ANY BARE SPOTS REVEGETATED AS SOON AS POSSIBLE.
- VEHICULAR ACCESS ON SUBSURFACE INFILTRATION AREAS SHOULD BE PROHIBITED IN UNPAVED AREAS, AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS. IF CONTINUAL ACCESS IS NEEDED, USE OF PERMEABLE, TURF REINFORCEMENT SHOULD BE CONSIDERED.
- CONTACT QUALIFIED ENGINEER IMMEDIATELY AFTER DISCOVERY OF SINKHOLE OCCURRENCE, SINKHOLE SHOULD BE PROMPTLY AND PROPERLY REPAIRED.

CONSTRUCTION SEQUENCE

- INSTALL AND MAINTAIN ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
- INSTALL CONSTRUCTION FENCING AROUND PERIMETER OF INFILTRATION AREA TO PREVENT CONSTRUCTION TRAFFIC FROM COMPACTING EXISTING SUBGRADE AREAS.
- INSTALL UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES, CLEANOUTS, STORAGE PIPE, AND ALL OTHER NECESSARY STORMWATER STRUCTURES.
- CRITICAL STAGE OF CONSTRUCTION: CONTACT ENGINEER PRIOR TO PLACEMENT OF GEOTEXTILE, GEOTEXTILE, STORAGE PIPES, AND BED AGGREGATE SHOULD BE PLACED IMMEDIATELY AFTER APPROVAL OF SUB GRADE PREPARATION AND INSTALLATION OF STRUCTURES. GEOTEXTILE SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS.
- CLEAN-WASHED, UNIFORMLY GRADED AGGREGATE SHOULD BE PLACED IN THE BED IN MAXIMUM 6-INCH LIFTS. EACH LAYER SHOULD BE LIGHTLY COMPACTED, WITH CONSTRUCTION EQUIPMENT KEPT OFF THE BED BOTTOM.
- APPROVED SOIL MEDIA OR PAVEMENT BASE COURSES SHOULD BE PLACED OVER DETENTION BED IN MAXIMUM 6-INCH LIFTS. SEED AND STABILIZE AREA IF APPLICABLE.
- DO NOT REMOVE INLET PROTECTION OR OTHER EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

STORM SEWER

INSPECTION REQUIREMENTS:

- ALL STORM COLLECTION STRUCTURES SHALL BE INSPECTED ANNUALLY, OR AFTER EACH RAINFALL EVENT IN EXCESS OF TWO (2") INCHES (MAJOR STORM EVENT), FOR TRASH, DEBRIS OR EVIDENCE OF PIPE LEAKAGE OR SAGGING; REMOVE TRASH OR DEBRIS IMMEDIATELY; IMMEDIATELY REPAIR OR REPLACE LEAKING/SAGGING DRAINAGE FEATURES.

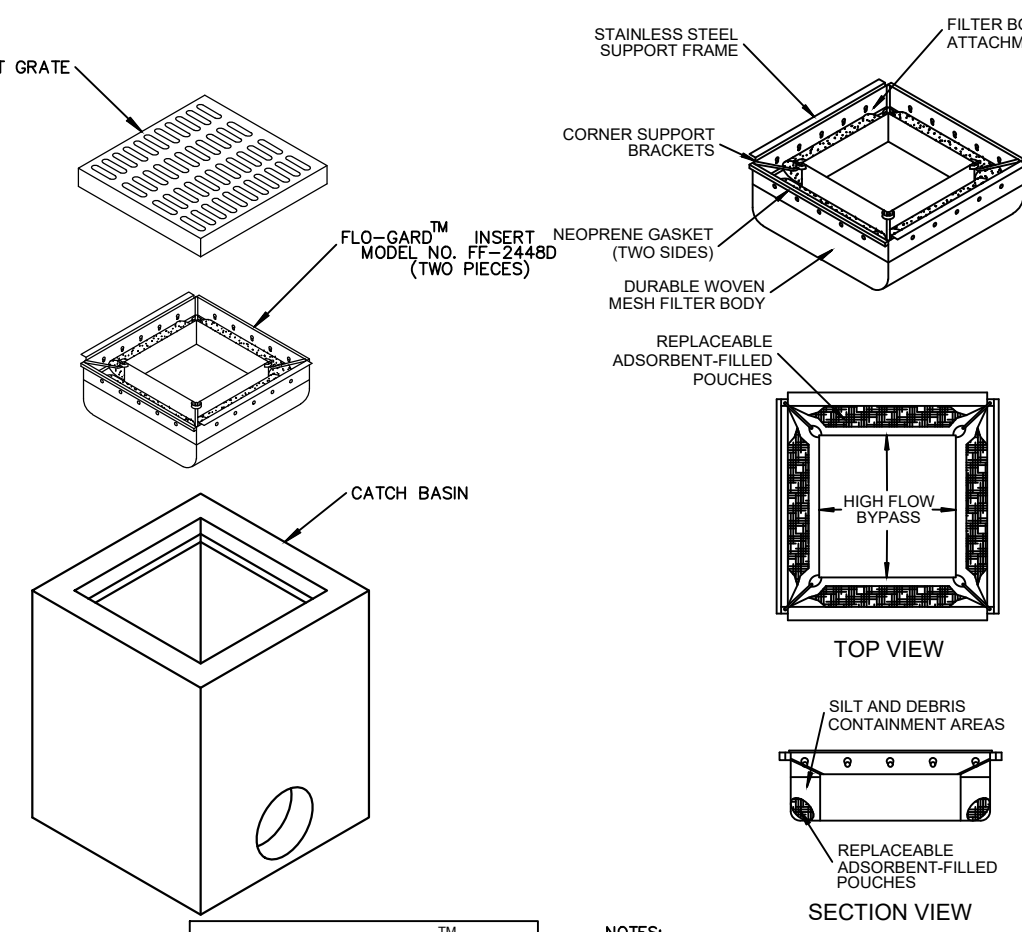
GENERAL MAINTENANCE NOTES:

- ACCESS CAN BE GAINED TO EACH COLLECTION STRUCTURE THROUGH THE REMOVABLE INLET GRATE OR MANHOLE LID. STEEL OR OTHER APPROVED RINGS HAVE BEEN INSTALLED ON THE INSIDE OF EACH STRUCTURE OVER FOUR FEET DEEP FOR ANY NECESSARY ENTRY. GRATES AND LIDS SHALL BE REPLACED SECURELY IMMEDIATELY AFTER MAINTENANCE.
- CONTACT DESIGN ENGINEER IMMEDIATELY AFTER DISCOVERY OF SINKHOLE OCCURRENCE, SINKHOLE SHOULD BE PROMPTLY AND PROPERLY REPAIRED.
- IF SEDIMENT/TRASH/DEBRIS IS FOUND IN THE CONVEYANCE SYSTEM, THE SYSTEM SHALL BE JETTED AND VACUUMED TO REMOVE ALL SEDIMENT/TRASH/DEBRIS AND DISPOSED OF APPROPRIATELY. REFER TO WATER QUALITY INLET MAINTENANCE GUIDELINES FOR ADDITIONAL DETAIL IN CLEANING OF THOSE STRUCTURES WITH WATER QUALITY APPARATUS INSTALLED.

CRITICAL STAGES OF CONSTRUCTION

A LICENSED ENGINEER OR HIS DESIGNEE SHALL BE PRESENT TO OBSERVE AND VERIFY INSTALLATION AND CONSTRUCTION OF THE PCSWM PLAN AT THE FOLLOWING CRITICAL STAGES:

- EXCAVATION AND FINAL GRADING OF SWM UG14-UG16.
- PLACEMENT OF GEOTEXTILE FABRIC, STONE AND DISTRIBUTION PIPE INSIDE SWM UG14-UG16.
- INSTALLATION OF WATER QUALITY INLET FILTERS.
- FOLLOWING CONSTRUCTION, ENGINEER TO VERIFY THAT ALL PCSM BMP'S ARE INSTALLED, FUNCTIONING, AND HAVE NOT BEEN IMPACTED BY CONSTRUCTION ACTIVITIES.

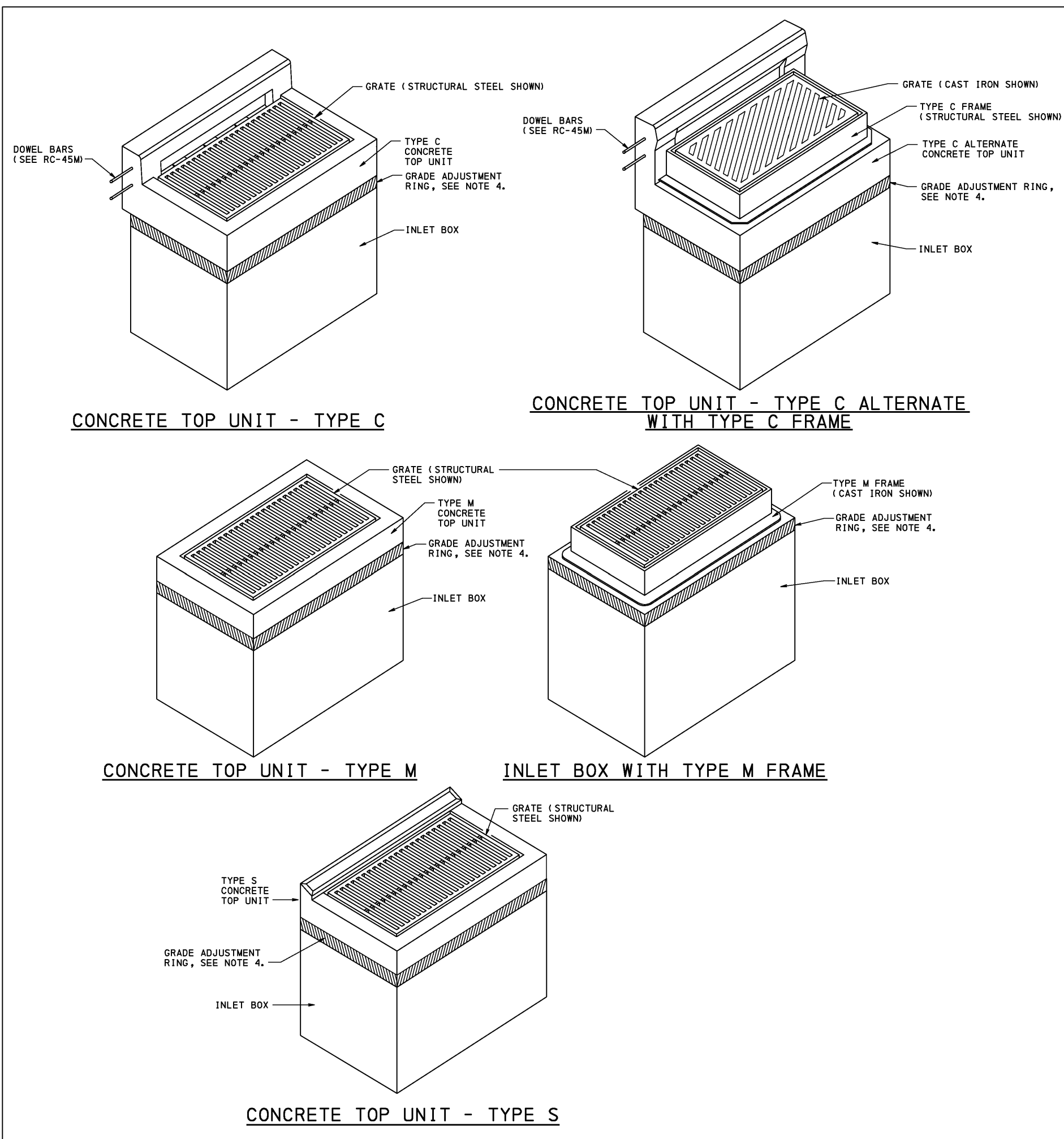


FLO-GARD™ CATCH BASIN FILTER INSERT
(Frame Required)
Flat-Grate Inlet
Kobler Enterprises, Inc. - North Ridge, CA (909) 579-8419
*OR APPROVED EQUAL

NOTE: FILTER INSERTS TO BE INSTALLED INTO ALL PROPOSED INLETS.

WATER QUALITY INSERT DETAIL

N.T.S.



CONCRETE TOP UNIT - TYPE C

CONCRETE TOP UNIT - TYPE C ALTERNATE WITH TYPE C FRAME

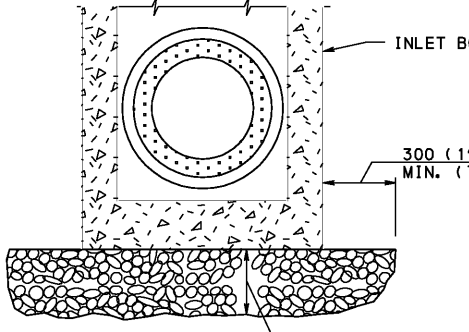
CONCRETE TOP UNIT - TYPE M

INLET BOX WITH TYPE M FRAME

CONCRETE TOP UNIT - TYPE S

NOTES:

- FOR ADDITIONAL NOTES, SEE SHEETS 1 - 3.
- STANDARD INLET BOXES SHOWN, PROVIDE TOP SLABS FOR OTHER INLET BOX TYPES.
- SEE RC-45M FOR DETAILS FOR THE CONCRETE TOP UNITS, FRAMES, AND GRATES.
- PROVIDE GRADE ADJUSTMENT RINGS WHEN REQUIRED. SEE RC-45M FOR DETAILS.

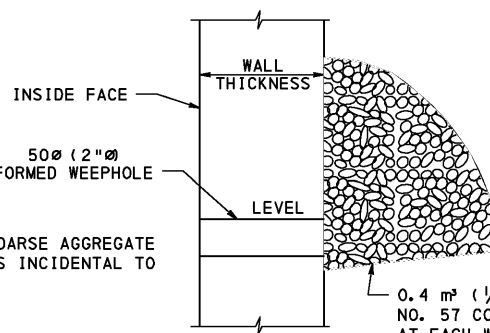


NOTE: COST OF NO. 2A COARSE AGGREGATE IS INCIDENTAL TO THE INLET BOX.

NOTE: COST OF NO. 2A COARSE AGGREGATE IS INCIDENTAL TO THE INLET BOX.

INLET BOX SUBBASE PREPARATION DETAIL

(SEE FIELD CONSTRUCTION NOTES ON SHEET 11)



NOTE: COST OF NO. 57 COARSE AGGREGATE AND GEOTEXTILE IS INCIDENTAL TO THE INLET BOX.

WEEPHOLE DETAIL

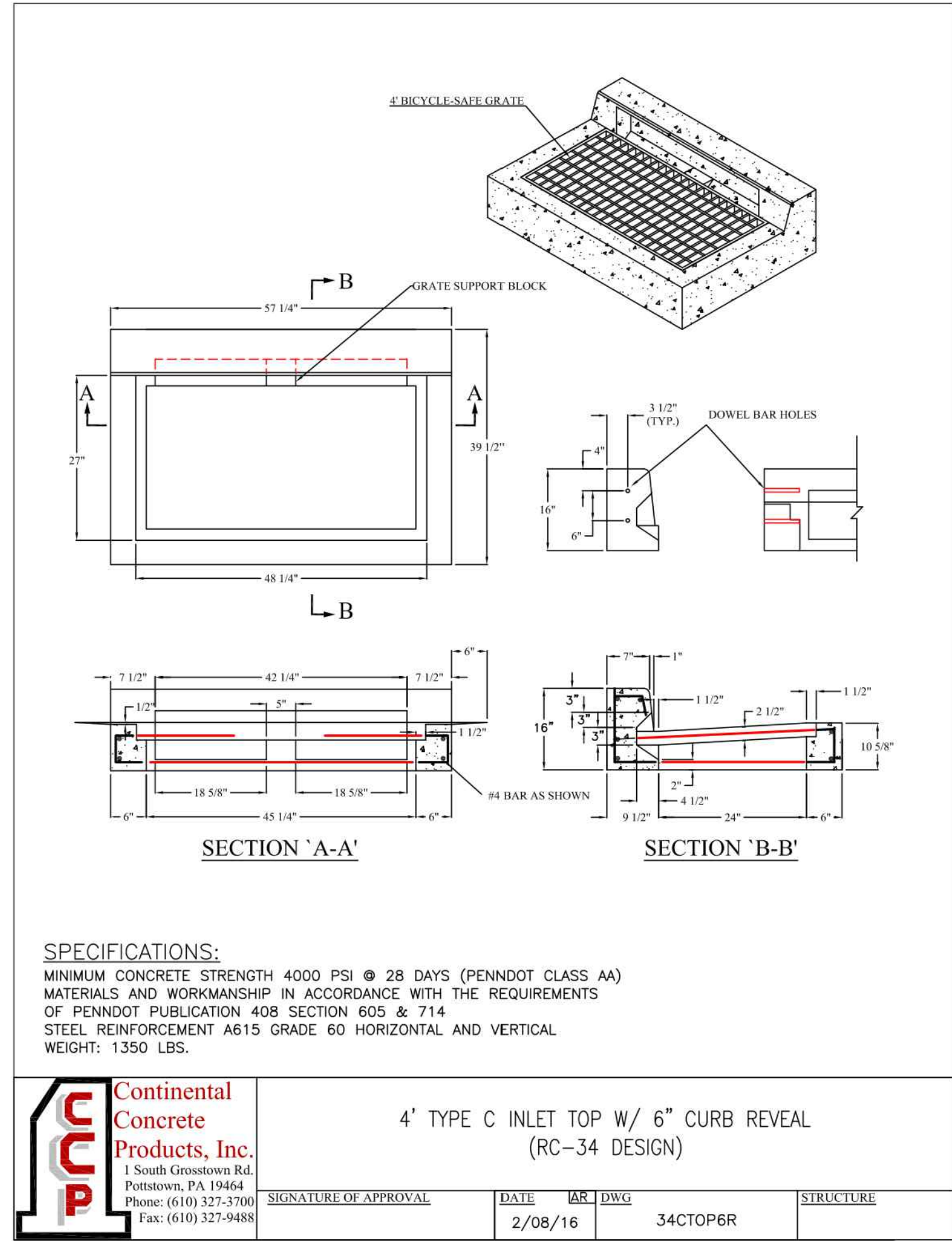
(SEE GENERAL NOTE 15 ON SHEET 11)

NOTE: EITHER ALL METRIC OR ALL ENGLISH VALUES MUST BE USED ON PLANS. METRIC AND ENGLISH VALUES SHOWN MAY NOT BE MIXED.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF DESIGN

INLET BOXES
INLET ASSEMBLIES - 1

RECOMMENDED JUN. 1, 2010 RECOMMENDED JUN. 1, 2010 SHT. 4 OF 48
RC-46M



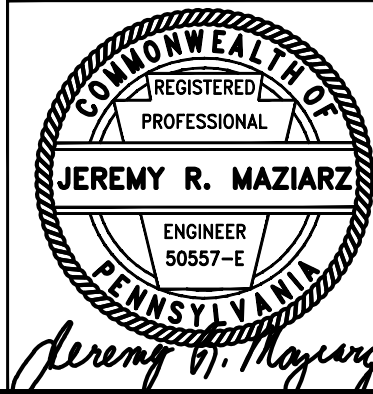
SPECIFICATIONS:

MINIMUM CONCRETE STRENGTH 4000 PSI @ 28 DAYS (PENNDOT CLASS AA) MATERIALS AND WORKMANSHIP IN ACCORDANCE WITH THE REQUIREMENTS OF PENNDOT PUBLICATION 408 SECTION 605 & 714 STEEL REINFORCEMENT A615 GRADE 60 HORIZONTAL AND VERTICAL WEIGHT: 1350 LBS.

4" TYPE C INLET TOP W/ 6" CURB REVEAL
(RC-34 DESIGN)

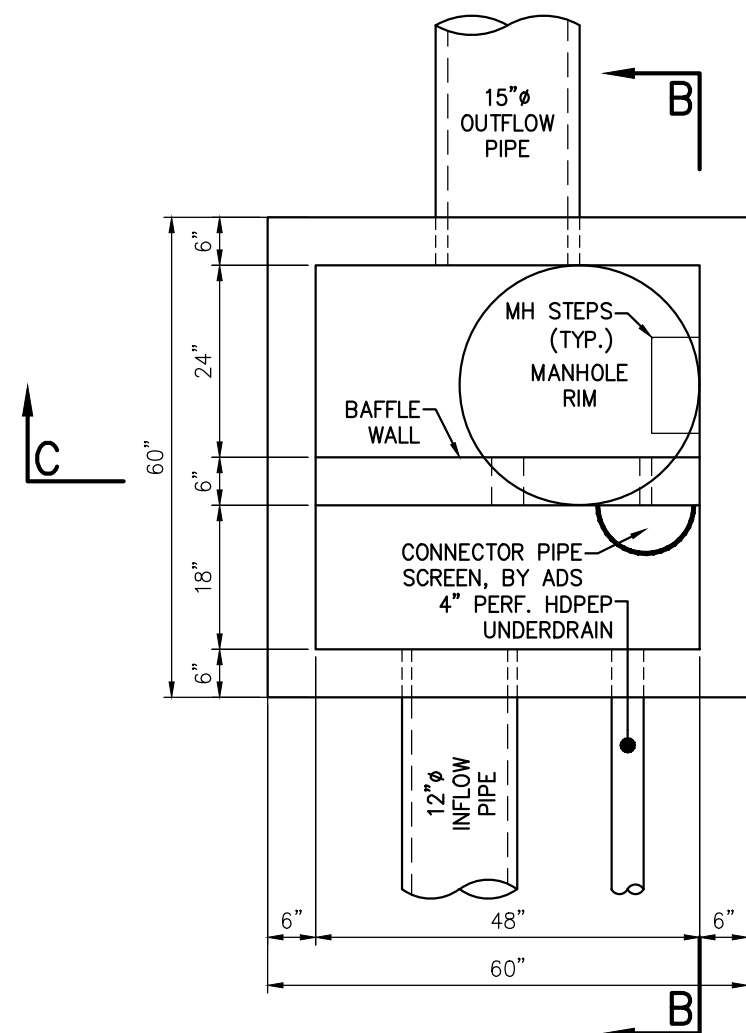


SIGNATURE OF APPROVAL DATE 2/08/16 AS DWG 34CTOP6R STRUCTURE

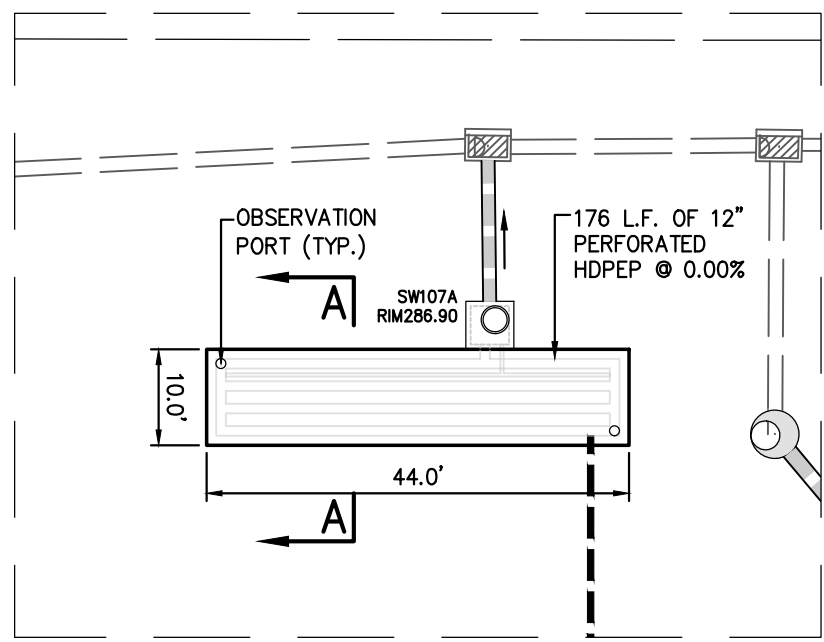


POST-CONSTRUCTION STORMWATER MANAGEMENT NOTES & DETAILS

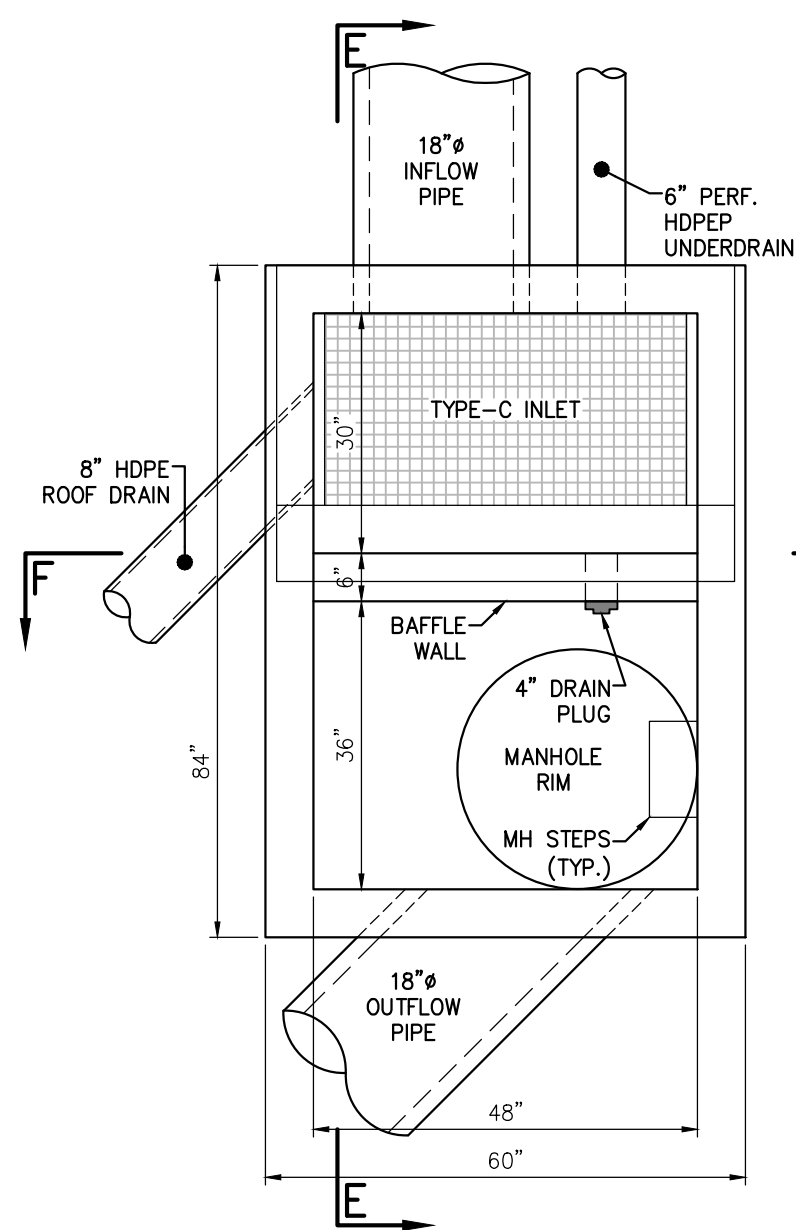
PRELIMINARY LAND DEVELOPMENT PLANS FOR GLENSIDE ELEMENTARY SCHOOL-BUILDING ADDITIONS & RENOVATIONS CHELTENHAM TWP. - MONTGOMERY COUNTY - PENNSYLVANIA			
PROJECT NO.	22407	F.B.	
SCALE	AS NOTED	DATE	2/21/2024
DRAWN BY	RRB	CHECKED BY	JRM
DRAWING			



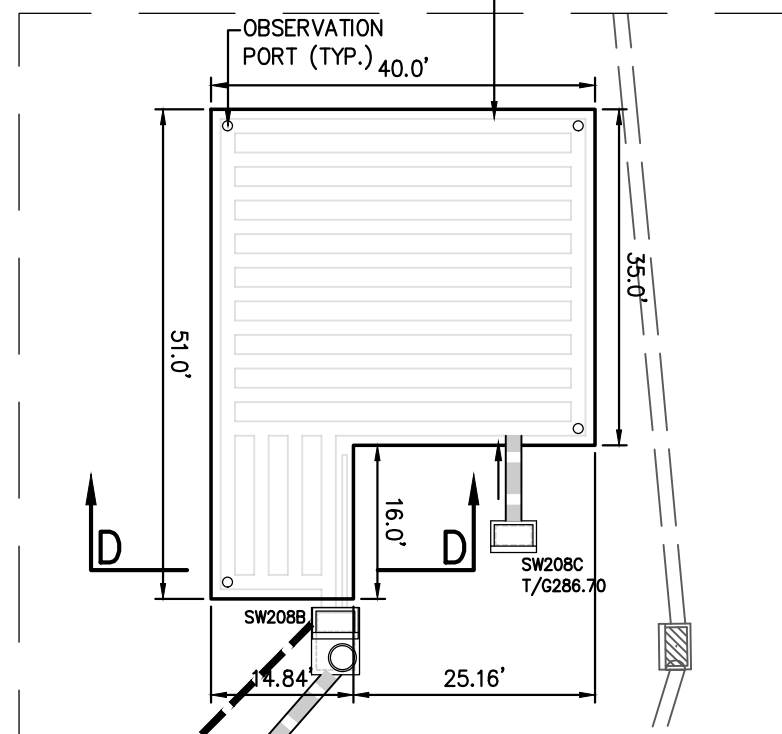
SW#107A – PLAN VIEW DETAIL
SCALE: N.T.S.



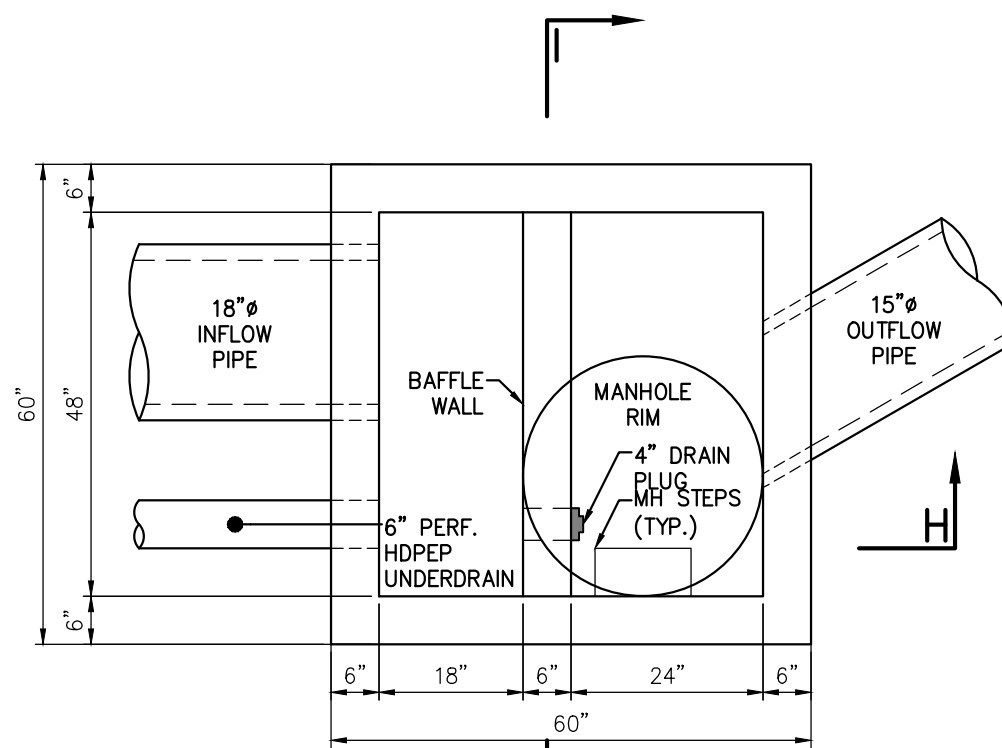
SWM UG14: DETENTION BED (PLAN VIEW)
SCALE: 1" = 20'



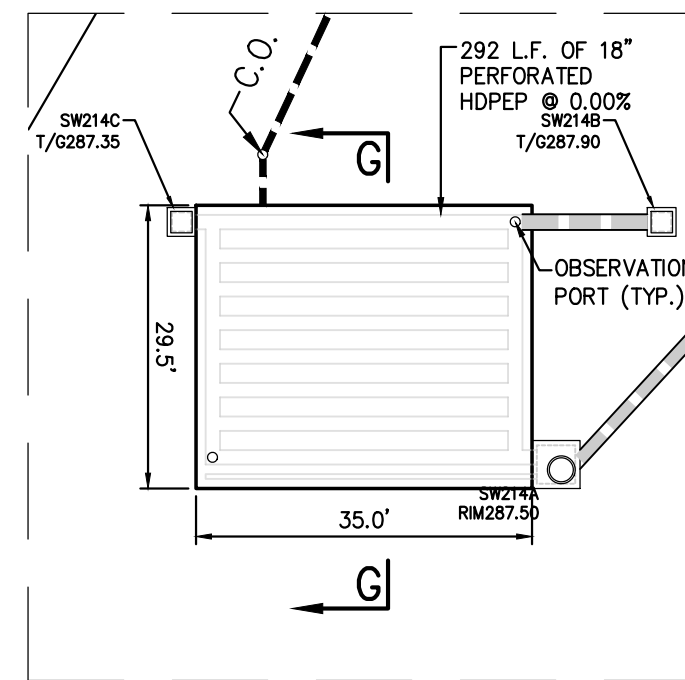
SW#208B – PLAN VIEW DETAIL
SCALE: N.T.S.



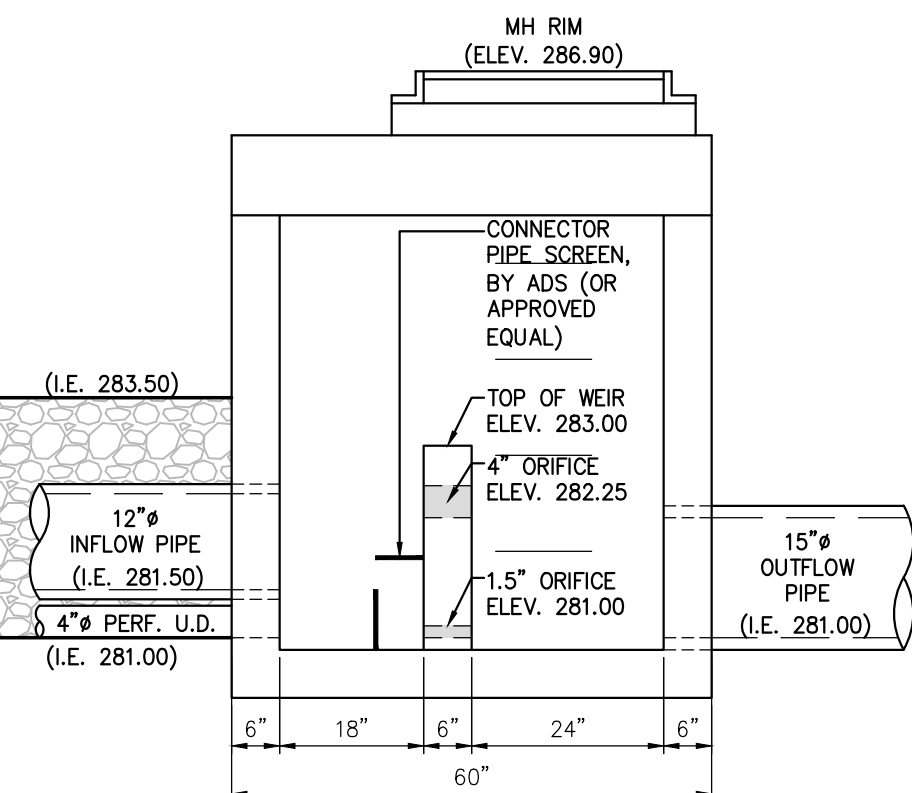
SWM UG15: INFILTRATION BED (PLAN VIEW)
SCALE: 1" = 20'



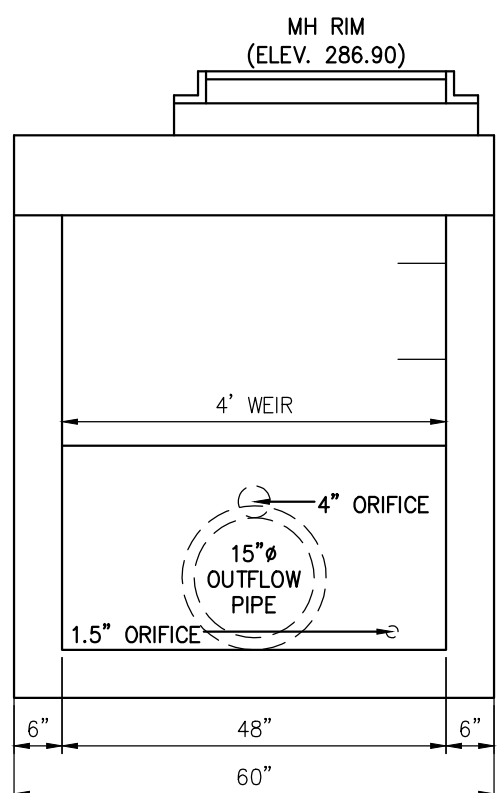
SW#214A – PLAN VIEW DETAIL
SCALE: N.T.S.



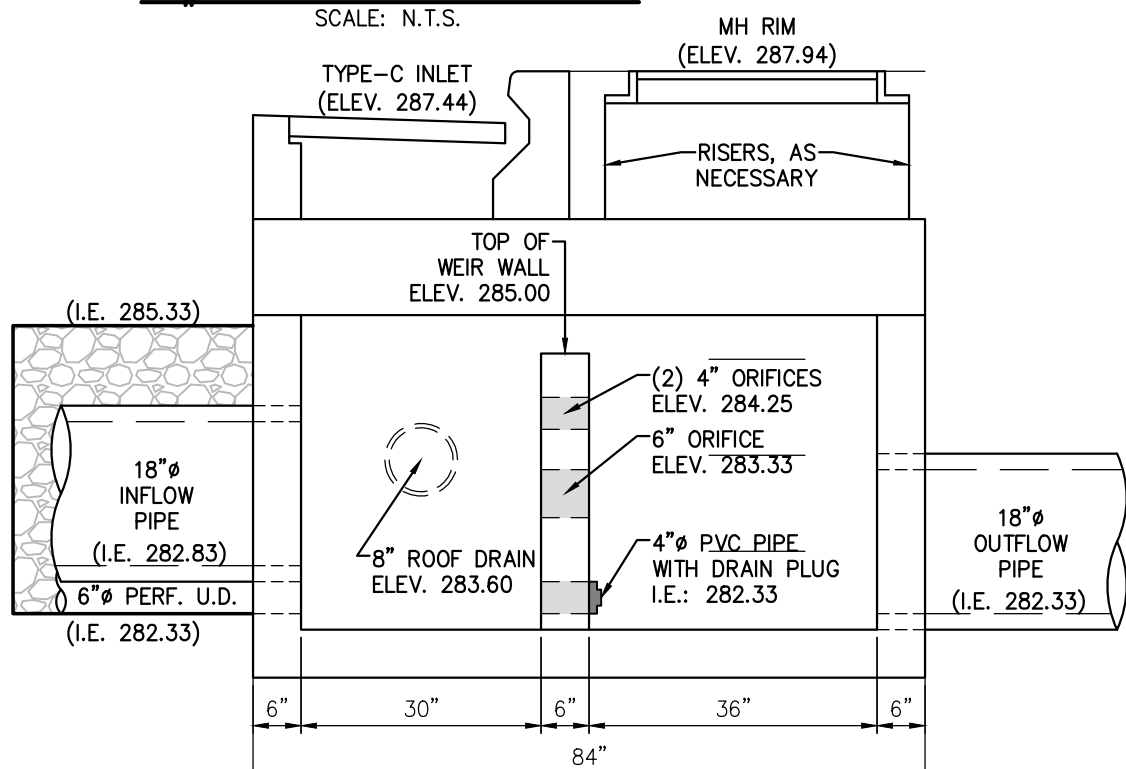
SWM UG16: INFILTRATION BED (PLAN VIEW)
SCALE: 1" = 20'



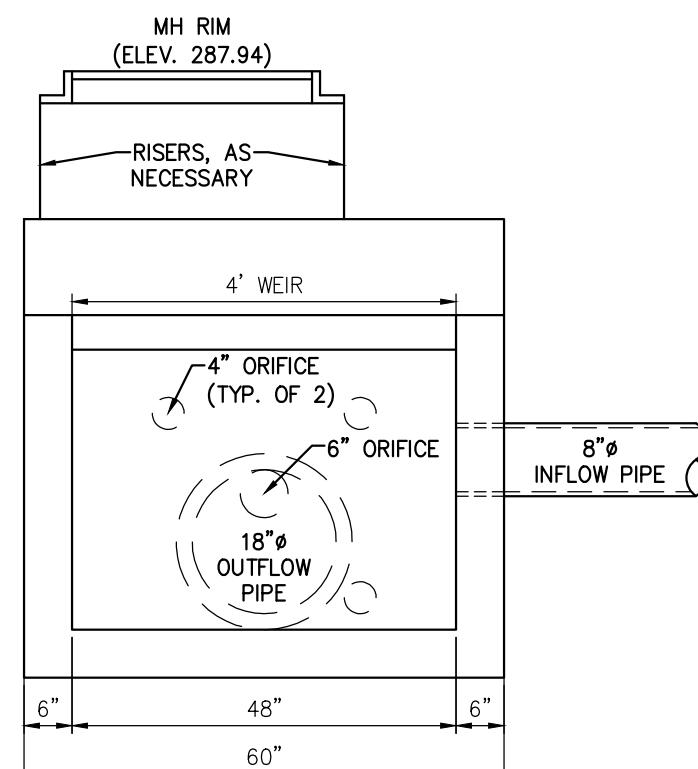
SW#107A SECTION B-B
SCALE: N.T.S.



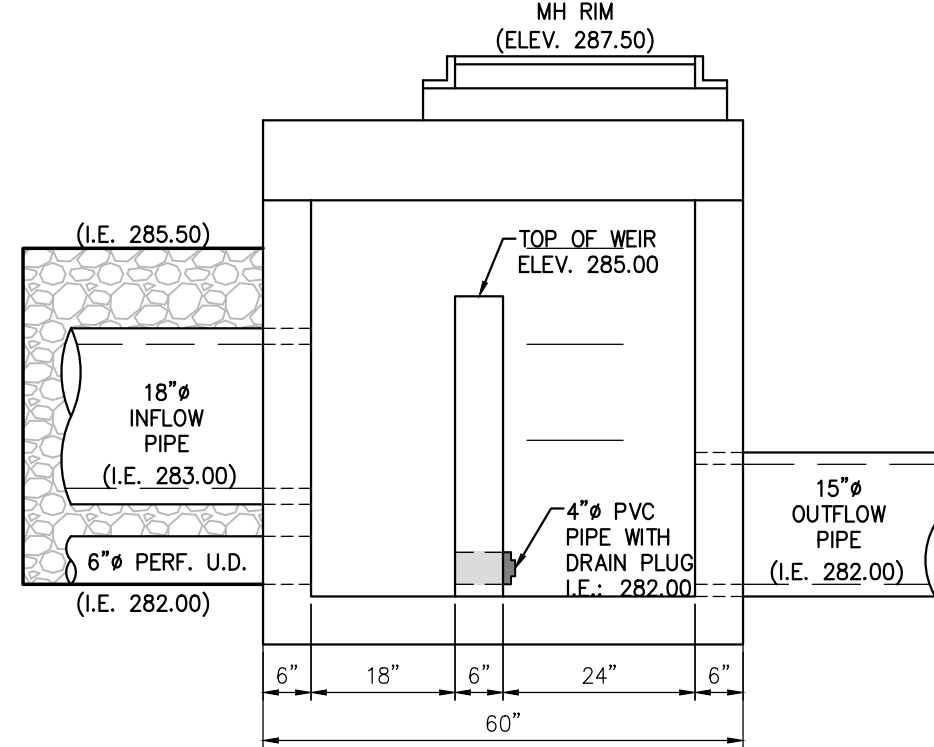
SW#107A SECTION C-C
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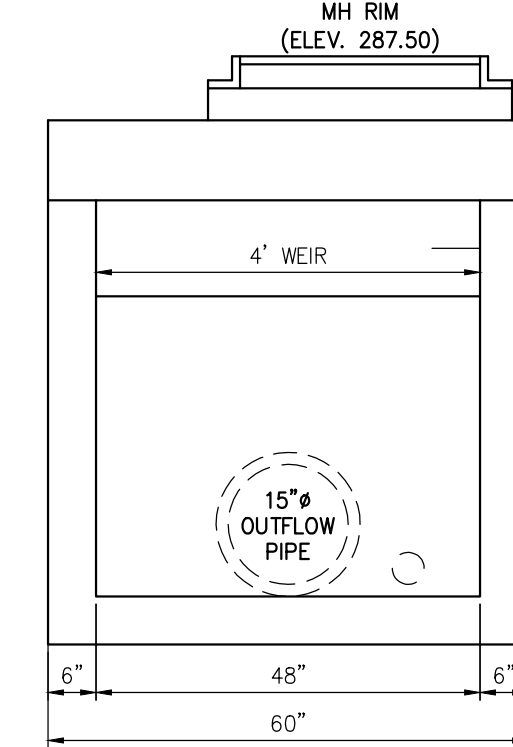
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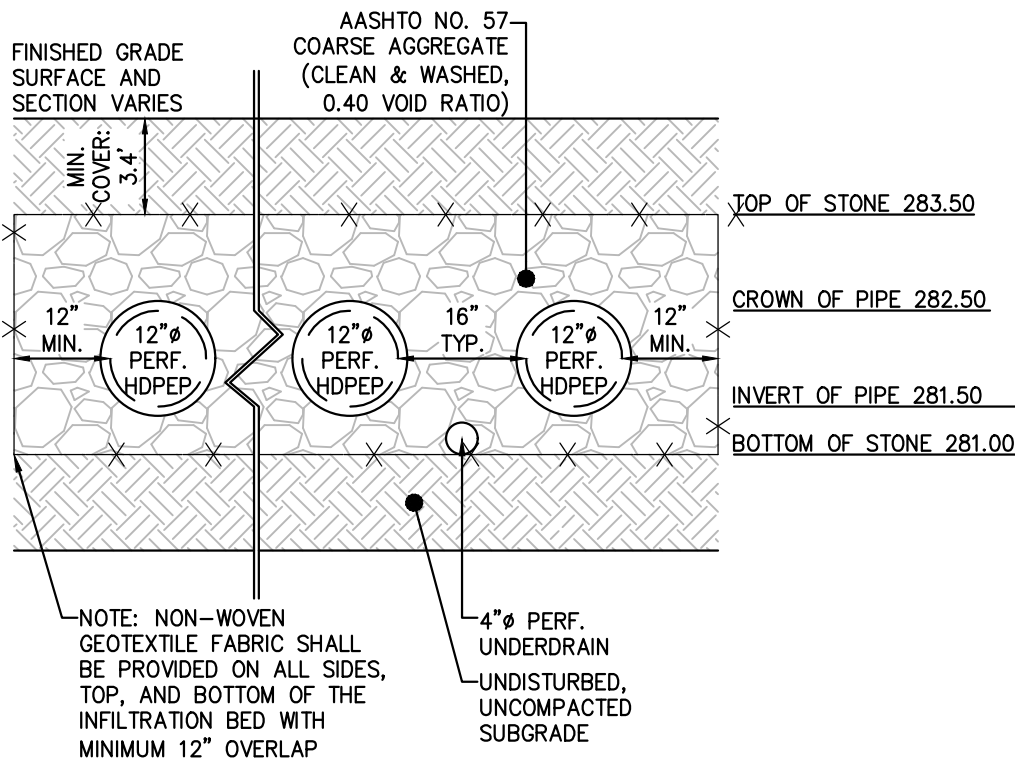
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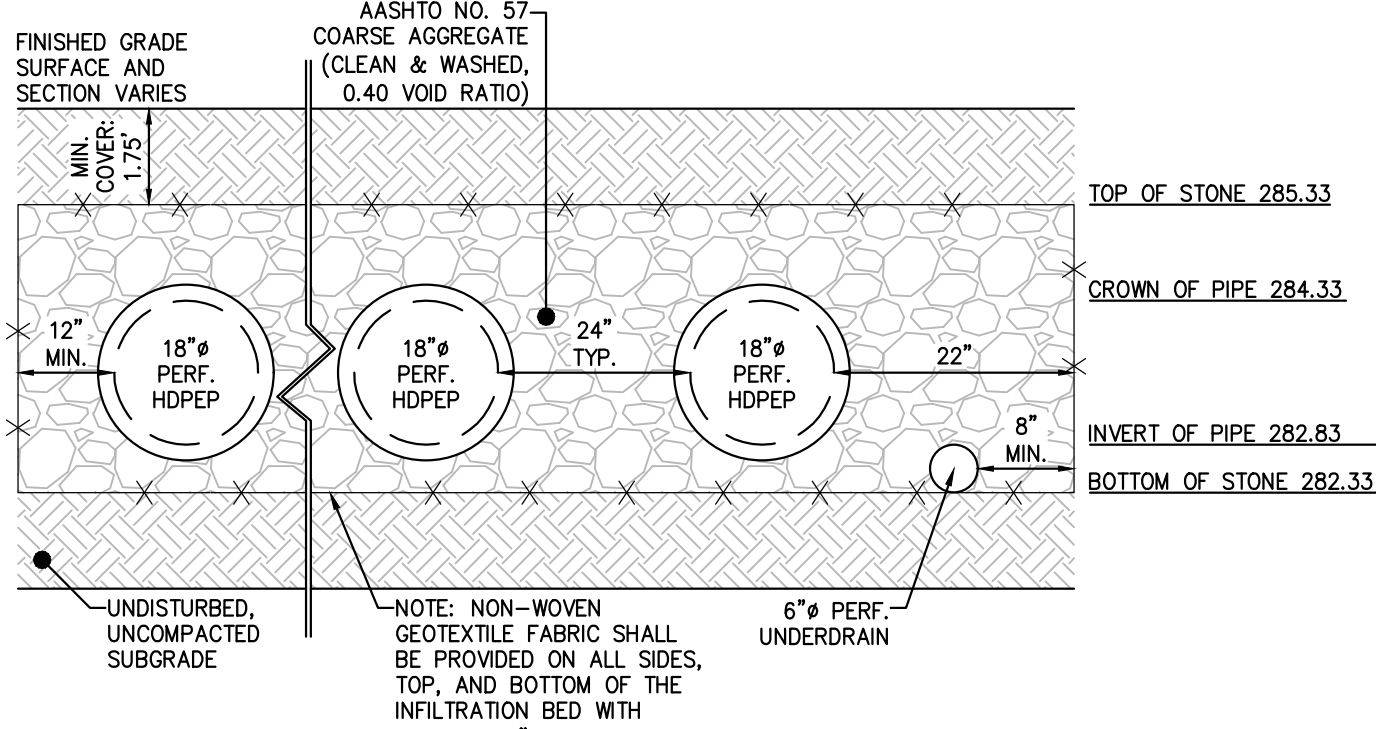
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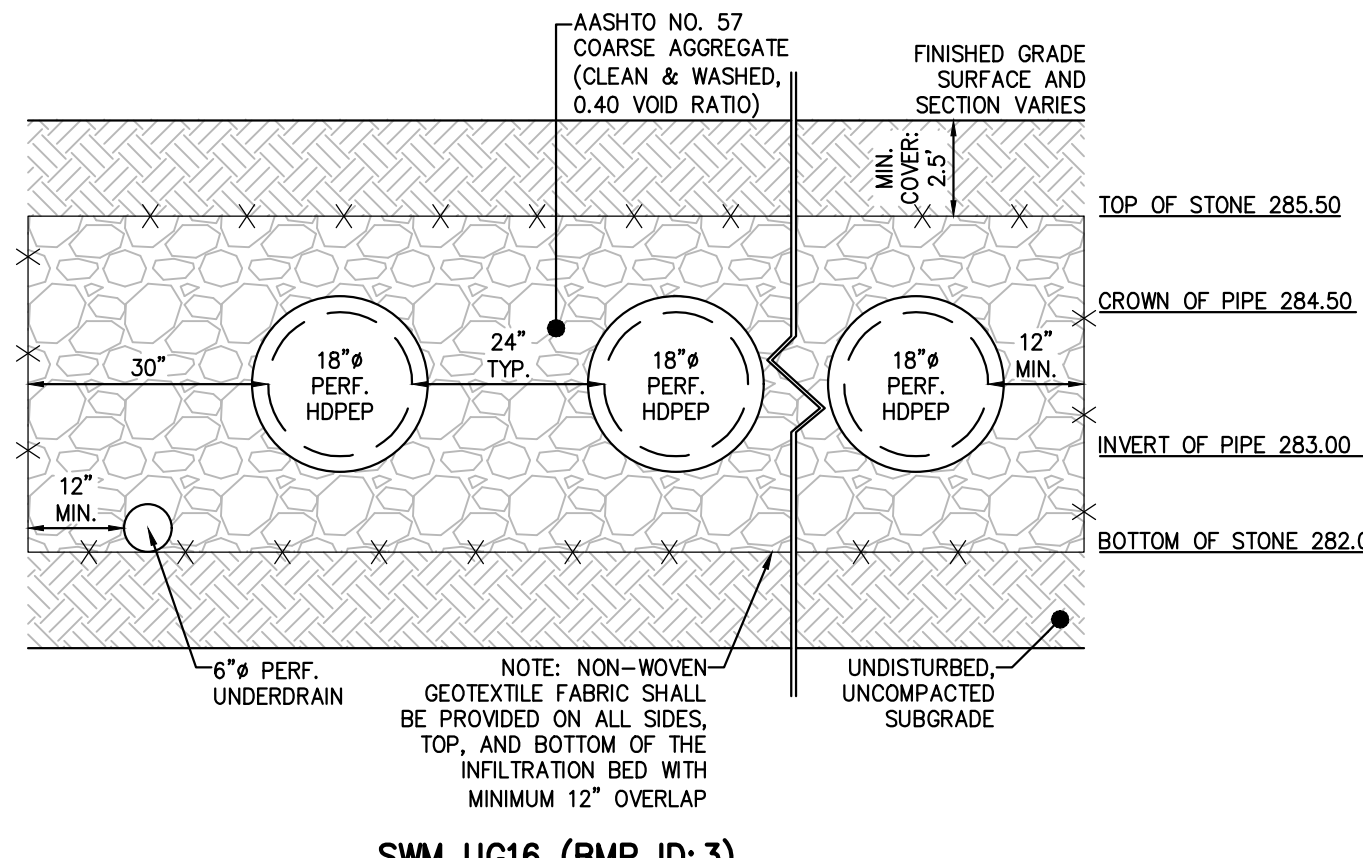
SW#214A SECTION I-I
SCALE: N.T.S.



SWM UG14 (BMP ID: 1) SECTION A-A
N.T.S.



SWM UG15 (BMP ID: 2) SECTION D-D
N.T.S.



SWM UG16 (BMP ID: 3) SECTION G-G
N.T.S.

FlexStorm Connector Pipe Screen (CPS) Specifications

Product Selection

In general, a Connector Pipe Screen (CPS) must be sized appropriately to pass a one-year rain event through the perforated screen material and pass a 10-year rain event through the bypass area if a deflector lid is required. The shape of the screen depends on location of the outlet pipe. ADS will assist in the selection of the appropriate CPS design given the following information:

1. Catch basin length and depth
2. Location of the outlet pipe
3. A completed CPS dimensional form

Materials

Each CPS is comprised entirely of 304 stainless steel and brought to the field pre-configured for easy installation. All models are supplied with vertical upright mounting brackets which accept four 3/4" x 3" (9 x 76 mm) stainless anchor bolts. All bypass lids require two 1/2" x 3" (9 x 76 mm) stainless anchor bolts. Mounting brackets are equipped with slotted holes to allow for varied contours on walls and sloped floors.

Installation

1. Lower the CPS through the manhole opening
2. Position the CPS evenly spaced around the connector pipe ensuring a minimum of 4" (100 mm) spacing away from the corners.
3. Loosen the bolts in the slotted holes which connect the screen to the upright mounting brackets until the bottom is flush with the floor
4. Tighten the bolts and mark the hole locations on the wall for the stainless anchor bolts
5. Drill holes, hammer the bolts in place and secure the connector pipe screen using provided stainless nuts
6. If the bottom of the base exposes more than a 0.197" (5 mm) gap, then an additional base face strip may be fastened to the base channel using stainless 1/8" screws or rivets

Maintenance

ADS advises that catch basins be cleaned out at least two (2) times per year and/or if debris has filled above a 40% level inside of the catch basin. Sites with large amounts of foliage, high sediment loads or smaller CPS devices might need to be cleaned more frequently.

Maintenance Conditions and Maintenance Standards: The following are deficiencies in maintenance conditions and their corresponding maintenance standards which shall apply to the CPS. The clean out of each catch basin shall meet the maintenance standards listed as follows:

1. Clear trash and debris located immediately in front of curb opening or side opening of catch basin and on top or between metal grates of grated catch basin
2. Remove vegetation growing across and/or blocking the basin opening
3. Remove all trash, debris and vegetation from inside the catch basin
4. Remove trash and debris in the connector pipe opening, upstream or downstream
5. Knock off/remove debris that covers the perforated openings of the CPS
6. Ensure there is no standing water inside of catch basin (indicates the device is not draining properly).

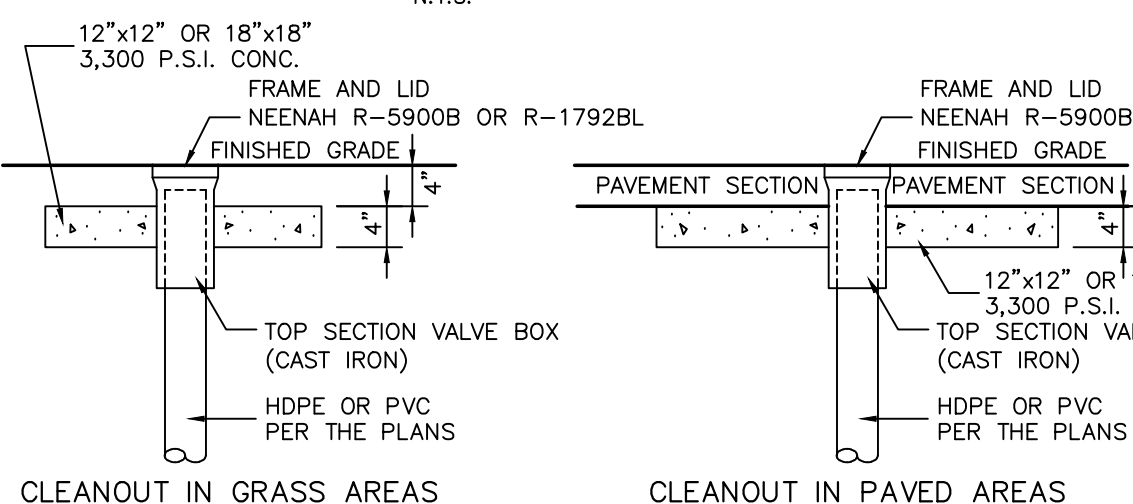
Build America, Buy America (BABA)

For any questions related to Build America, Buy America (BABA) Act compliance contact an ADS representative or email flexstorm@adspipe.com.



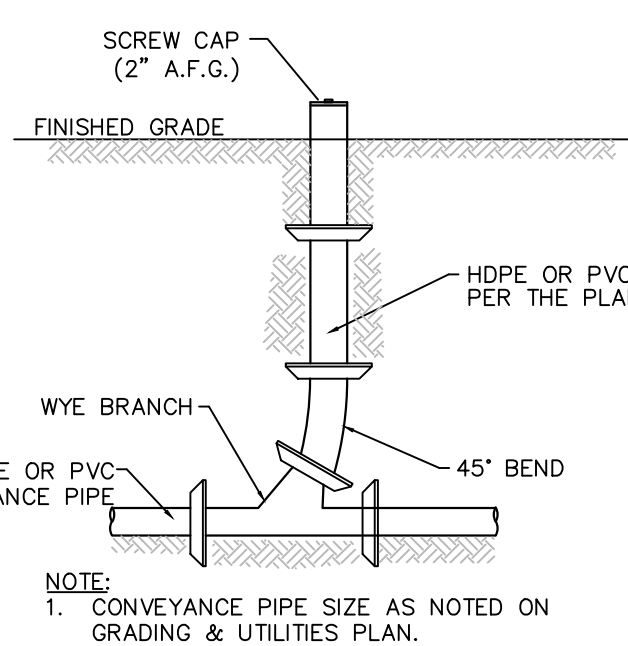
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adspipe.com
800-821-6710



TYPICAL CLEANOUT DETAIL

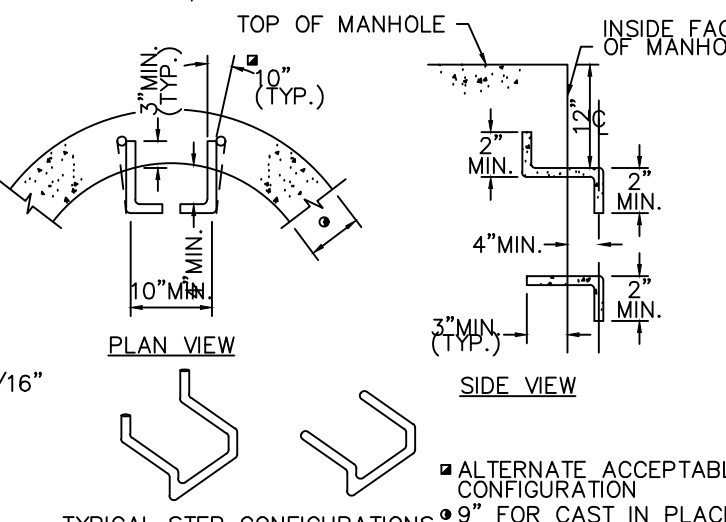
N.T.S.



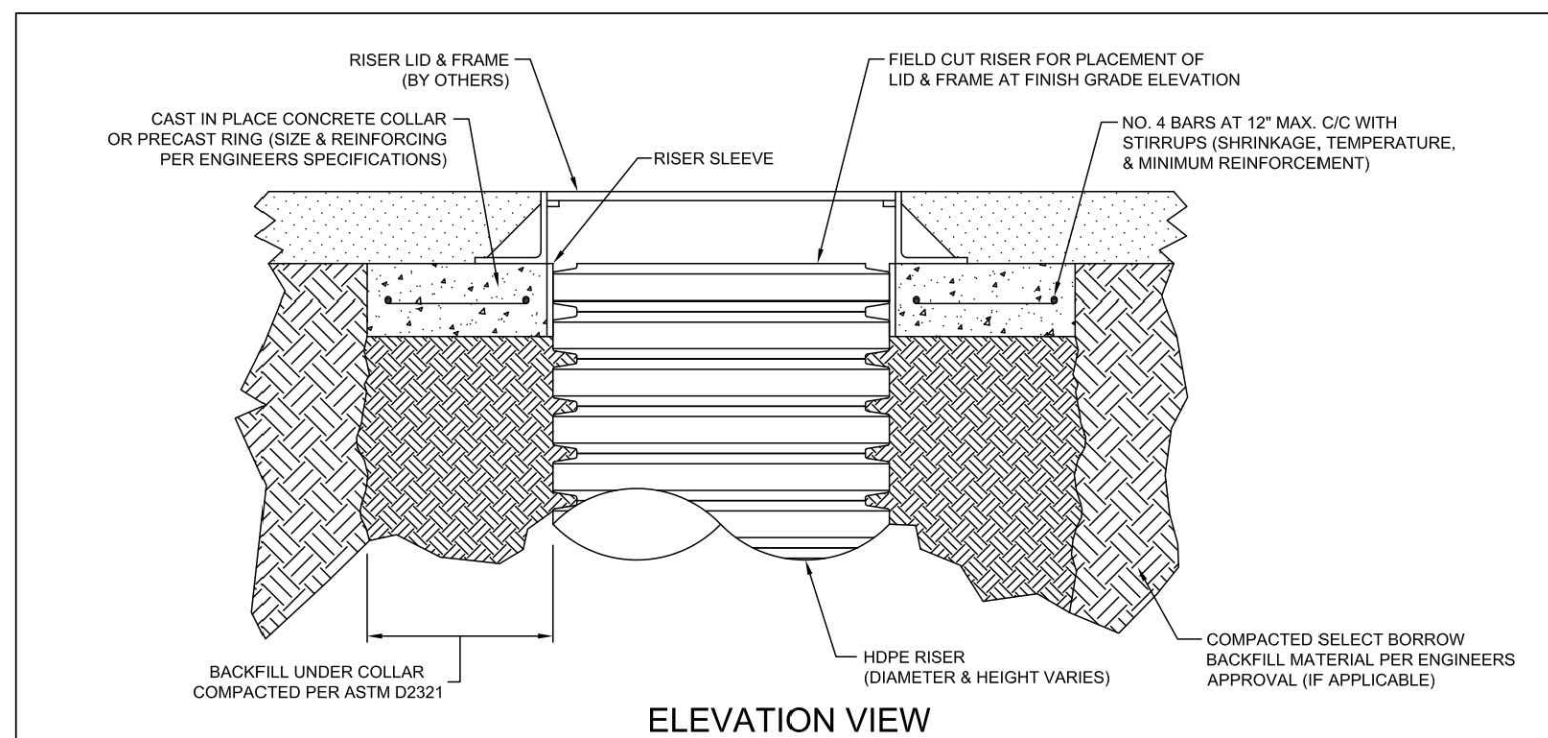
CLEANOUT DETAIL
N.T.S.

	Top Steel Requirements	Bottom Steel Requirements
Pre-cast Manhole Height		
< 30'-0"	#5 Bars @ 12" C. To C. or 0.18 in ² /Ft. WWF	#4 Bars @ 12" C. To C. or 0.28 in ² /Ft. WWF
> 30'-0" to 60'-0"	#6 Bars @ 12" C. To C. or 0.15 in ² /Ft. WWF	#4 Bars @ 6" C. To C. or 0.24 in ² /Ft. WWF

* Provide Welded Wire Fabric Meeting the Requirements of Publication 408 Specifications, Section 709.3.



MANHOLE STEPS
N.T.S.



Notes:

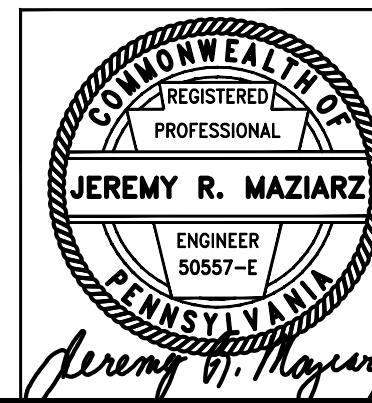
1. HDPE Riser Detail To Be Used For Reference. General Construction and Riser Component Layout. HDPE Riser Detail To Be Reviewed And Modified By Project Engineer As Needed For A Specific Project.
2. Utilize Flexible Joint Material For Riser Sleeve. The Material Shall Be Rigid/Stiff Enough To Avoid Deformation When Concrete Is Placed Against The Sleeve. The Sleeve Will Prevent The Concrete From Forming Or Adhering To HDPE Corrugations. And Allow For Any Minimal Settlement That May Occur With The Concrete Collar Without Transferring Any Of The Load To The HDPE Riser.
3. Riser Lid & Frame To Be Specified By The Engineer For The Design Project Traffic Loadings (If Applicable). It is Also Recommended The Lid & Frame Opening Diameter Exceeds The Outside Diameter Of The HDPE Riser By A Maximum Of 3". Permitting The Load Transfer Be On The Concrete Collar Only.
4. If Leaving Courses Of Brick Are Required Between Riser Frame & Concrete Collar, Ensure The Inside Dimension/Diameter Of The Brick Match The Frame/Concrete Collar Thus Preventing Transfer Of Surface Loads Onto The HDPE Riser.

File Name:	XX	LANE ENTERPRISES, INC.
Page Number:	1 OF 1	
Date Drawn:	4/30/12	
Drawn By:	JDS	



POST-CONSTRUCTION STORMWATER MANAGEMENT DETAILS

NO.		DATE		REVISION	
PRELIMINARY LAND DEVELOPMENT PLANS FOR GLENSIDE ELEMENTARY SCHOOL-BUILDING ADDITIONS & RENOVATIONS CHELTENHAM TWP. - MONTGOMERY COUNTY - PENNSYLVANIA					
PROJECT NO.		22407		F.B.	
		112 Moores Road, Suite 200, Malvern, PA 19355 610-644-4623 www.chestervalley.com		DRAWN BY RRB	
SCALE AS NOTED		DATE 2/21/2024		CHECKED BY JRM	



J:\CVE-23000\22407 Glenside Elementary\Sheets\Sheet 13 - PCSW Details.dwg 2/21/2023 9:23:17 AM.

THIS LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURERS.

- 1.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD VERIFICATION OF ALL EXISTING UNDERGROUND STRUCTURES AND UTILITIES, SUCH AS WATER MAINS, SANITARY AND STORM SEWERS, TELEPHONE AND ELECTRIC CONDUITS, AND GAS LINES, ETC. AND ABOVE GROUND UTILITIES WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION OPERATIONS.
- 2.) DIMENSIONS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL ELEVATIONS, INVERTS, AND DIMENSIONS IN THE FIELD PRIOR TO THE COMMENCEMENT OF WORK.
- 3.) THE PENNSYLVANIA ONE CALL NUMBER IS 1-800-242-1776. THE CONTRACTOR IS REQUIRED TO SUBMIT VERIFICATION TO THE MUNICIPALITY THAT A ONE "ONE-CALL" HAS BEEN PLACED PRIOR TO THE START OF DEMOLITION WORK.
- 4.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS FROM THE MUNICIPALITY RELATIVE TO THE PROPOSED PROJECT.
- 5.) THE CONTRACTOR SHALL REPAIR ALL UTILITY TRENCHING WORK LOCATED WITHIN EXISTING PAVED STREETS.
- 6.) THE CONTRACTOR SHALL COMPLY WITH ALL CITY, STATE, AND FEDERAL REGULATIONS IN EFFECT AT THE TIME OF CONSTRUCTION.
- 7.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL.
- 8.) ALL AREAS DISTURBED AS A RESULT OF THE INSTALLATION OF LIGHTING IMPROVEMENTS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
- 9.) THE LIGHT LEVELS DEPICTED ON THIS PLAN WERE CALCULATED BASED ON THE LFL SHOWN IN THE LUMINAIRE SCHEDULE.
- 10.) THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT GROUND LEVEL UNLESS OTHERWISE NOTED.
- 11.) ILLUMINATION LEVELS ARE SHOWN IN FOOT-CANDELS (FC).

PARKING FACILITY AND VEHICULAR AND PEDESTRIAN WAY LIGHTING (EXCEPT FOR SAFETY AND SECURITY APPLICATIONS AND ALL-NIGHT BUSINESS OPERATIONS), FOR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL USES SHALL BE AUTOMATICALLY EXTINGUISHED NO LATER THAN ONE HOUR AFTER THE CLOSE OF BUSINESS OR FACILITY OPERATION. WHEN SAFETY OR SECURITY LIGHTING IS PROPOSED FOR AFTER-HOURS ILLUMINATION, IT SHALL NOT BE IN EXCESS OF 25% OF NORMAL LIGHT OUTPUT REQUIRED OR PERMITTED.

PLEASE CONTACT INDEPENDENCE LIGHTING FOR PRICING:
KENT LAZOR
DIRECT: 610-363-5271



LEOTEK ARIETA LUMINARE

- MODEL: (SEE LUMINAIRE SCHEDULE)
- IES FULL CUTOFF
- DISTRIBUTION TYPE (SEE LUMINAIRE SCHEDULE)
- COLOR: BLACK
- QTY: 1
- OPTIONS: DIMONOFF PHOTOCELL & RWL-S SURGE DEVICE



TYPE	SYMBOL	MOUNTING	MODEL	VOLTS	QUANTITY
POLE MOUNTED		POLE	Leotek Electronics USA LLC, AR13-CG2-N-MV-30K-T5-WH-115	120V 1P 2W	1

AVERAGE FOOT-CANDLES	0.28
MAXIMUM FOOT-CANDLES	6.9
MINIMUM FOOT-CANDLES	0.0
MINIMUM TO MAXIMUM FC RATIO	0.00
MAXIMUM TO MINIMUM FC RATIO	5872.15
AVERAGE TO MINIMUM FC RATIO	240.45



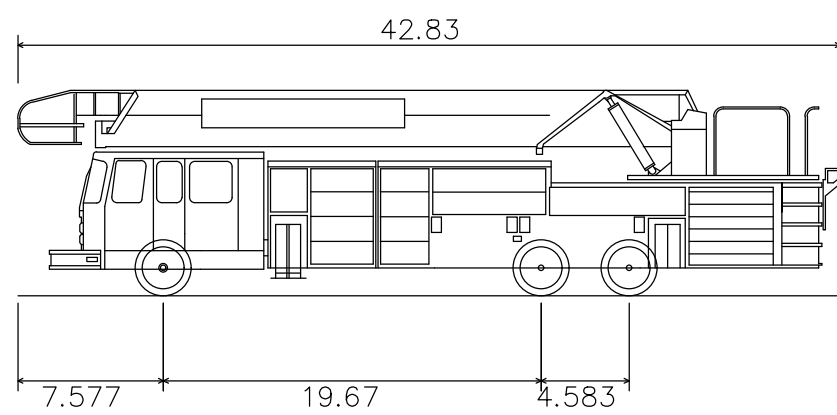
1. THE LANDSCAPE PLAN IS INTENDED TO BE USED FOR LANDSCAPING PURPOSES ONLY.
2. LANDSCAPE CONTRACTOR SHALL CALL PA ONE CALL (1-800-242-1776) OR CONFIRM WITH GENERAL CONTRACTOR THAT THE SITE HAS BEEN MARKED FOR UNDERGROUND UTILITY LOCATIONS. NO PLANTINGS SHALL BE PLACED WITHOUT UNDERGROUND UTILITY MARKINGS.
3. TREES AND SHRUBS SHALL NOT BE PLANTED OVER ANY UNDERGROUND UTILITY NOR WITHIN ANY UNDERGROUND UTILITY EASEMENT (MINIMUM OF 10' FROM THE CENTER OF THE PIRE). CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO STARTING WORK.
4. LANDSCAPE CONTRACTOR SHALL INSPECT THE SITE AND BECOME FAMILIAR WITH THE PLANTING AREA PRIOR TO THE INSTALLATION OF ANY PLANT MATERIAL. THE TOWNSHIP LANDSCAPE ARCHITECT/ENGINEER SHALL BE NOTIFIED PRIOR TO BEGINNING PLANNING OPERATIONS, IN WRITING.
5. THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANTS SHOWN ON THE DRAWINGS, AS SPECIFIED, AND IN QUANTITIES INDICATED ON THE PLANT LIST.
6. PLANT MATERIAL QUANTITIES LISTED FOR THE CONVENIENCE OF THE CONTRACTOR. ACTUAL NUMBERS OF SYMBOLS SHALL TAKE PRECEDENCE OVER QUANTITIES LISTED IN CASES OF CONFLICT.
7. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR SUPPLYING ALL MATERIALS, SUPPLIES, EQUIPMENT AND LABOR REQUIRED TO INSTALL THE LANDSCAPING SHOWN ON THESE PLANS.
8. ALL PLANT MATERIAL SUBJECT TO APPROVAL BY THE OWNER OR OWNERS REPRESENTATIVE PRIOR TO INSTALLATION. PLANT MATERIAL SHALL BE NURSERY GROWN AND FREE OF DISEASE AND PESTS. AND SHALL BE FULL AND WELL SHAPED. ANY MATERIAL FOUND TO BE UNACCEPTABLE SHALL BE REPLACED WITH ACCEPTABLE MATERIAL AT NO COST TO THE OWNER.
9. WHEN PLANTS OF A SPECIFIED KIND OR SIZE ARE NOT AVAILABLE WITHIN A REASONABLE DISTANCE, SUBSTITUTIONS MAY BE MADE UPON REQUEST BY THE GROWER, IF IT IS APPROVED BY THE OWNER'S REPRESENTATIVE AND THE TOWNSHIP. CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING OF ANY PLANT MATERIALS WHICH THEY FEEL WILL NOT BE AVAILABLE OR NOT LIKELY TO THRIVE IN THE LOCATIONS INDICATED ON THE PLAN.
10. ALL PLANT MATERIAL SHALL BE NURSERY GROWN AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK OF THE AMERICAN ASSOCIATION OF NURSERYMEN (A&N) AND WITH THE GENERAL PLANTING SPECIFICATIONS OF THE MUNICIPALITY.
11. ALL PLANT MATERIAL SHALL BE OF THE MINIMUM SIZE NOTED ON THE PLANTING SCHEDULE. PLANT MATERIAL SHALL BE MEASURED IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK AS LAST REVISED.



A cross-sectional diagram of a tree and its root system. The tree has a canopy of leaves and a trunk. The root system is shown extending into the soil. A horizontal line labeled 'MIN.' indicates the minimum depth of the root system. A vertical line labeled '6" MIN.' indicates the minimum width of the root system. The soil is depicted with a hatched pattern.

NTS

[illegible]



42.830ft
8.330ft
10.685ft
0.913ft
8.290ft
6.00s
36.740ft

No.	DATE	REVISION

PROJECT NO. _____

112 Moores Road, Suite 200, Malvern, PA 19355	F.B.
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SHEET 12 OF 12

