ALLOY5 ARCHITECTURE

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ADDENDUM #01

PROJECT: **UPPER POTTSGROVE TOWNSHIP NEW MUNICIPAL COMPLEX**
PROJECT #: 22-0058
ISSUE DATE: April 14, 2024

BIDS DUE TO: UPLOAD TO PENBID

BIDS DUE: Thursday, May 22, 2025

The following clarifications, amendments, additions, deletions, revisions and modifications in this Addendum forms a part of the Contract Documents and modifies the original Bidding Documents as noted below. This addendum must be acknowledged in the form of proposal in the space provided for this purpose. Failure to acknowledge this addendum may subject the Bidder to disqualifications.

GENERAL

1. Project Manual Table of Contents has been updated to coordinate with **Addendum 01** changes.
2. Civil engineering ADD#01 responses included as attached document.

ADDED SPECIFICATIONS

1. The following specifications issued with this addendum shall be added from the Contract Documents
    a. **SECTION 011100.01** – MILESTONE CONSTRUCTION SCHEDULE
    b. **SECTION 004300.01** – A312 PAYMENT BOND – 2010
    c. **SECTION 004300.02** – A312 PERFORMANCE BOND – 2010
    d. **SECTION 004300.03** – A310 BID BOND - 2010

REVISED SPECIFICATIONS

1. The following revised specifications issued with this addendum shall be made a part of the Contract Documents
    a. **SECTION 00.0110** – TABLE OF CONTENTS

REMOVED SPECIFICATIONS

1. The following removed specifications issued with this addendum shall be removed from the Contract Documents
    a. **NONE**

ADDED DRAWINGS

1. The following added drawings issued with this addendum shall be made a part of the Contract Documents

ADMIN & POLICE BUILDING

a. **G3.00** ARCHITECTURAL SITE PLAN

PUBLIC WORKS

a. **NONE**

CIVIL DRAWINGS

a. **14.P-1** PROFILES

REVISED DRAWINGS

1. The following revised drawings issued with this addendum shall be made a part of the Contract Documents

ADMIN & POLICE BUILDING

a. **C.0.00** COVER SHEET
b. **G0.00** COVER SHEET
c. **A6.00** DOOR SCHEDULE & DETAILS
d. **A6.20** WINDOW TYPES AND DETAILS
e. **A9.00** BID ALTERNATE – SALLY PORT
f. **E3.0** POWER PLAN
g. **E4.0** FIRE ALARM PLAN

PUBLIC WORKS

a. **NONE**

CIVIL DRAWINGS

a. **01.C-1** COVER SHEET
b. **02.N-1** NOTES
c. **03.EX-1** EXISTING FEATURES PLAN
d. **04.D-1** DEMOLITION PLAN
e. **05.S-1** SITE PLAN & DETAILS
f. **06.ES-1** EROSION AND SEDIMENT CONTROL PLAN
g. **07.ES-2** EROSION AND SEDIMENT CONTROL NOTES
h. **08.ES-3** EROSION AND SEDIMENT CONTROL DETAILS
i. **09.U-1** UTILITY PLAN
j. **10.U-2** UTILITY DETAILS (SANITARY)
k. **11.U-3** UTILITY DETAILS (WATER & ELECTRIC)
l. **12.U-4** UTILITY DETAILS (ELECTRIC & GAS)
m. **13.SWM-1** GRADING/STORMWATER MANAGEMENT PLAN
n. **15.SWM-2** POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN

o. **16.SWM-3** POST-CONSTRUCTION STORMWATER MANAGEMENT NOTES/DETAILS
p. **17.SWM-4** POST-CONSTRUCTION STORMWATER MANAGEMENT DETAILS
q. **18.L-1** LANDSCAPE PLAN/DETAILS
r. **19.LI-1** LIGHTING PLAN/NOTES
s. **20.LI-2** LIGHTING DETAILS
t. **21.CD-1** CONSTRUCTION DETAILS
u. **22.CD-2** CONSTRUCTION DETAILS
v. **23.CD-3** CONSTRUCTION DETAILS

PennBid Questions and Answers:

Q1: Is there an estimated value for each of the contracts?
A1:
Site - $1.5M
GC – $3.6M
Plumbing - $355,000
Mechanical - $545,000
Electrical - $925,000

Q2: Why are there (2) Fire Alarm panels show on E4.0 (Rms 019 & 001A)? Only (1) should be required. Also, there should be a Smoke Detector shown above the FACP
A2: Addressed on sheet E4.0 of this addendum (2) FACP panels will remain, Smoke detectors above each have been added.

Q3: Please confirm that there is no Fire Protection for this project. There are no documents or specifications, but Spec section 01.1000-1 says it is part of the Plumbing Contract.
A3: There is no Fire Protection

Q4: We are having difficulties locating the Liquidated damage amounts for this project. It is referenced multiple times in the first manual. Are we missing them?
A4: To be addressed in addendum 2

Q5: There is a copy of a Maintenance Bond in the documents, but, there does not seem to be a form for the Bid, Performance or Payment Bonds. Are AIA format documents acceptable or did we miss something.
A5: Yes attached AIA documents should be us

Q7: Does the estimated value of $3.6 for the GC include the alternates?
A7: No

Q8: Is propane tanks and generators part of BASE Bid?
A8: Admin/PD generator will be purchased by the Owner through costars but EC will be responsible for transporting to the site, generator pad and complete install and hookup as part of base bid. Public works generator will be purchased by the Owner through costars but EC will be responsible for transporting to the site, generator pad and complete install and hookup as part of alternate bid.

Propane tanks are part of base bid.

Q9: Is well including electric part of BASE Bid?
A9: Yes

Q11: Who is responsible for the electric work associated with the grinder pump?
A11: Electrical Contractor

Q12: Is there a new holding tank on this project? Detail on page 11 of 33 Please let me know where we can find the location it will be installed.

A12: Shown on plans and in base bid

ChesterValley ENGINEERS, INC.

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

April 14, 2025

Upper Pottsgrove Township
New Municipal Complex
2290 Gilbertsville Road
Pottstown, PA 19464

General Notes and Bid Document Revisions

Questions and Answers:

Below are the responses to the questions and answers from bidders. The responses are provided in bold and italics for clarity.

Q6: Please label all pipe runs, size and type of pipe, or tell me where it can be found. Please also add missing profiles of inlets and pipe. (ex OS # 102). Please add elevations for all FES end sections

Please see the attached document for all stormwater info.

Q10: Where can we find information on the type of 4 " sanitary sewer line? SDR ?

All sanitary gravity piping shall be constructed of Schedule 40 Polyvinyl Chloride (PVC), as outlined in the construction specifications and shown on sanitary sewer profile.

Q13: Please label all sewer pipe runs with the size and type. Example page 9 of 11 sewer line coming out of two story stucco bldg.

All proposed sewer pipe runs are labeled excluding the connection to existing stucco building. The contractor shall be responsible for connection the proposed sewer to the existing sewer located within the basement of the building with a minimum slope of 2%.

Prepared by:
Chester Valley Engineers, Inc.
112 Moores Road, Suite 200
Malvern, PA 19355

Upper Pottsgrove Municipal Building Complex
CVE # 22096-2000

Storm Drain Design

Date: 02/14/2025, Revised:

PIPE DATA

Pipe Run		Invert Elevations			Length	So	Diameter, D
FROM US SW	TO DS SW	US	DS	DELTA			
(#)	(#)	(feet)	(feet)	(feet)	(feet)	(%)	(inches)
RD1	**CO2A**	441.80	441.75	0.05	5	1.00	6
RD2	**CO2A**	441.80	441.75	0.05	5	1.00	6
CO2A	**RD3**	441.75	441.47	0.28	28	1.00	6
RD3	**RD4**	441.47	441.08	0.39	39	1.00	6
RD4	**RD5**	441.08	440.76	0.32	32	1.00	6
RD5	**RD6**	440.76	440.01	0.75	60	1.25	6
RD6	**RD7**	440.01	439.86	0.15	30	0.50	8
RD7	**CO8A**	439.86	439.74	0.12	23	0.50	8
RD8	**CO8A**	440.06	439.74	0.32	32	1.00	6
CO8A	**FES100**	439.74	439.50	0.24	48	0.50	8
OS102	**FES200**	436.72	436.50	0.21	43	0.50	15
RD9	**RD10**	437.91	437.38	0.53	53	1.00	6
RD10	**CO12A**	437.38	437.24	0.14	14	1.00	6
RD11	**RD12**	437.24	437.06	0.18	18	1.00	6
RD12	**CO12A**	437.06	436.89	0.17	17	1.00	6
CO12A	**RD13**	436.89	436.68	0.21	42	0.50	10
RD13	**RD14**	438.31	438.22	0.09	9	1.00	6
RD14	**CO19A**	437.00	436.68	0.32	32	1.00	6
RD15	**CO16A**	438.22	438.17	0.05	5	1.00	6
RD16	**CO16A**	438.22	438.17	0.05	5	1.00	6
CO16A	**RD17**	438.17	438.04	0.13	13	1.00	6
RD17	**CO18A**	438.04	437.78	0.26	26	1.00	6
RD18	**CO18A**	437.55	437.47	0.08	8	1.00	6
CO18A	**RD19**	437.78	436.97	0.81	81	1.00	6
RD19	**CO19A**	437.04	436.97	0.07	7	1.00	6
CO19A	**FES201**	436.68	436.50	0.18	36	0.50	10
SW204	**SW203**	437.47	436.97	0.50	99	0.50	15
SW203	**FES202**	436.97	436.50	0.47	94	0.50	15
RD20	**RD21**	438.33	438.04	0.29	29	1.00	6
RD21	**RD22**	438.04	437.81	0.23	23	1.00	6

Prepared by:
Chester Valley Engineers, Inc.
112 Moores Road, Suite 200
Malvern, PA 19355

Upper Pottsgrove Municipal Building Complex
CVE # 22096-2000

Storm Drain Design

Date: 02/14/2025, Revised:

PIPE DATA

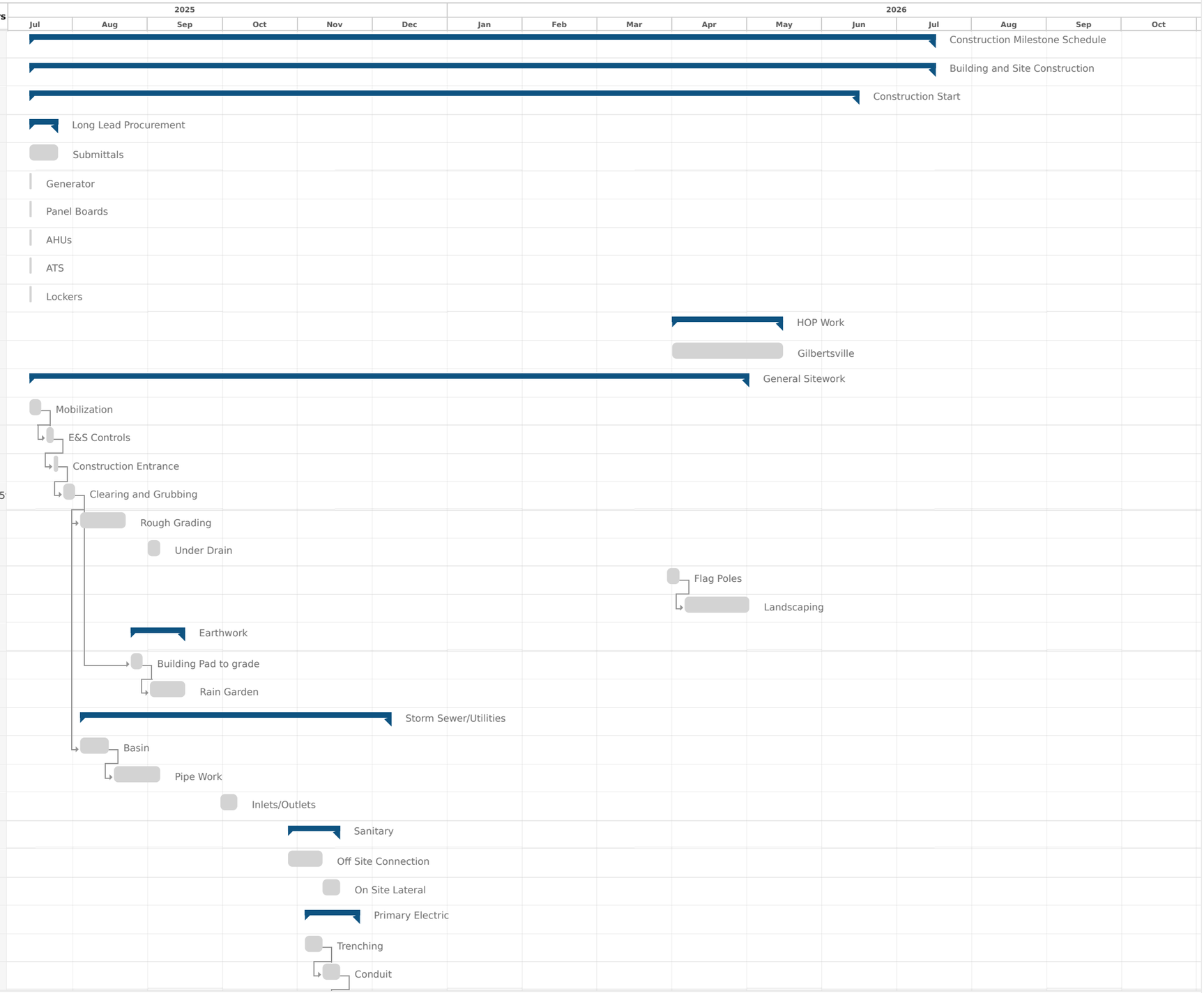
Pipe Run		Invert Elevations			Length	So	Diameter, D
FROM US SW	TO DS SW	US	DS	DELTA			
(#)	(#)	(feet)	(feet)	(feet)	(feet)	(%)	(inches)
RD22	**RD23**	437.81	437.61	0.20	20	1.00	6
RD23	**RD24**	437.61	437.37	0.24	24	1.00	6
SW207	**RD24**	437.49	437.37	0.12	23	0.50	10
RD24	**RD25**	437.37	437.16	0.21	43	0.50	10
RD25	**RD26**	437.16	437.06	0.10	19	0.50	10
RD26	**RD27**	437.06	436.95	0.11	22	0.50	10
RD27	**CO32A**	436.95	436.83	0.12	24	0.50	10
RD28	**RD29**	439.77	439.50	0.27	27	1.00	6
RD29	**RD30**	437.87	437.68	0.19	19	1.00	6
RD30	**RD31**	437.68	437.35	0.33	33	1.00	6
RD31	**RD32**	437.35	437.16	0.19	19	1.00	6
RD32	**CO32A**	437.16	436.83	0.33	33	1.00	6
CO32A	**FES206**	436.83	436.50	0.33	66	0.50	12
OS208	**SW209**	430.96	429.90	1.06	71	1.49	15
SW209	**SW210**	429.65	428.67	0.98	195	0.50	18

Boyle CONSTRUCTION MANAGEMENT

Upper Pottsgrove Township Admin/PD/PW Facility

UPT Bid Construction Schedule

ID	Activity	Start	Duration	End	Progress	Predecesso	Successors
0	**– Construction Milestone Schedule**	**07/14/25**	**264 days**	**07/16/26**	**0.00%**		
1	**– Building and Site Construction**	**07/14/25**	**264 days**	**07/16/26**	**0.00%**		
2	**– Construction Start**	**07/14/25**	**241 days**	**06/15/26**	**0.00%**		
3	**– Long Lead Procurement**	**07/14/25**	**10 days**	**07/25/25**	**0.00%**		
4	Submittals	07/14/25	10 days	07/25/25	0.00%		
5	Generator	07/14/25	1 day	07/14/25	0.00%		
6	Panel Boards	07/14/25	1 day	07/14/25	0.00%		
7	AHUs	07/14/25	1 day	07/14/25	0.00%		
8	ATS	07/14/25	1 day	07/14/25	0.00%		
9	Lockers	07/14/25	1 day	07/14/25	0.00%		
10	**– HOP Work**	**04/01/26**	**33 days**	**05/15/26**	**0.00%**		
11	Gilbertsville	04/01/26	33 days	05/15/26	0.00%		
12	**– General Sitework**	**07/14/25**	**210 days**	**05/01/26**	**0.00%**		
13	Mobilization	07/14/25	5 days	07/18/25	0.00%		14fs+0d
14	E&S Controls	07/21/25	3 days	07/23/25	0.00%	13fs+0d	15fs+0d
15	Construction Entrance	07/24/25	2 days	07/25/25	0.00%	14fs+0d	16fs+0d
16	Clearing and Grubbing	07/28/25	5 days	08/01/25	0.00%	15fs+0d	17fs+0d;25
17	Rough Grading	08/04/25	15 days	08/22/25	0.00%	16fs+0d	
18	Under Drain	09/01/25	5 days	09/05/25	0.00%		
19	Flag Poles	03/30/26	5 days	04/03/26	0.00%		20fs+0d
20	Landscaping	04/06/26	20 days	05/01/26	0.00%	19fs+0d	
21	**– Earthwork**	**08/25/25**	**16 days**	**09/15/25**	**0.00%**		
22	Building Pad to grade	08/25/25	5 days	08/29/25	0.00%	16fs+0d	23fs+0d
23	Rain Garden	09/02/25	10 days	09/15/25	0.00%	22fs+0d	
24	**– Storm Sewer/Utilities**	**08/04/25**	**91 days**	**12/08/25**	**0.00%**		
25	Basin	08/04/25	10 days	08/15/25	0.00%	16fs+0d	26fs+0d
26	Pipe Work	08/18/25	15 days	09/05/25	0.00%	25fs+0d	
27	Inlets/Outlets	09/30/25	5 days	10/06/25	0.00%		
28	**– Sanitary**	**10/28/25**	**15 days**	**11/17/25**	**0.00%**		
29	Off Site Connection	10/28/25	10 days	11/10/25	0.00%		
30	On Site Lateral	11/11/25	5 days	11/17/25	0.00%		
31	**– Primary Electric**	**11/04/25**	**16 days**	**11/25/25**	**0.00%**		
32	Trenching	11/04/25	5 days	11/10/25	0.00%		33fs+0d
33	Conduit	11/11/25	5 days	11/17/25	0.00%	32fs+0d	34fs+0d



Outbuild

General

Parent Activity
Child Activity
Baseline
(+# days) Delay
Milestone
Links

Status

Completed
Overdue
Ahead
Uninitiated

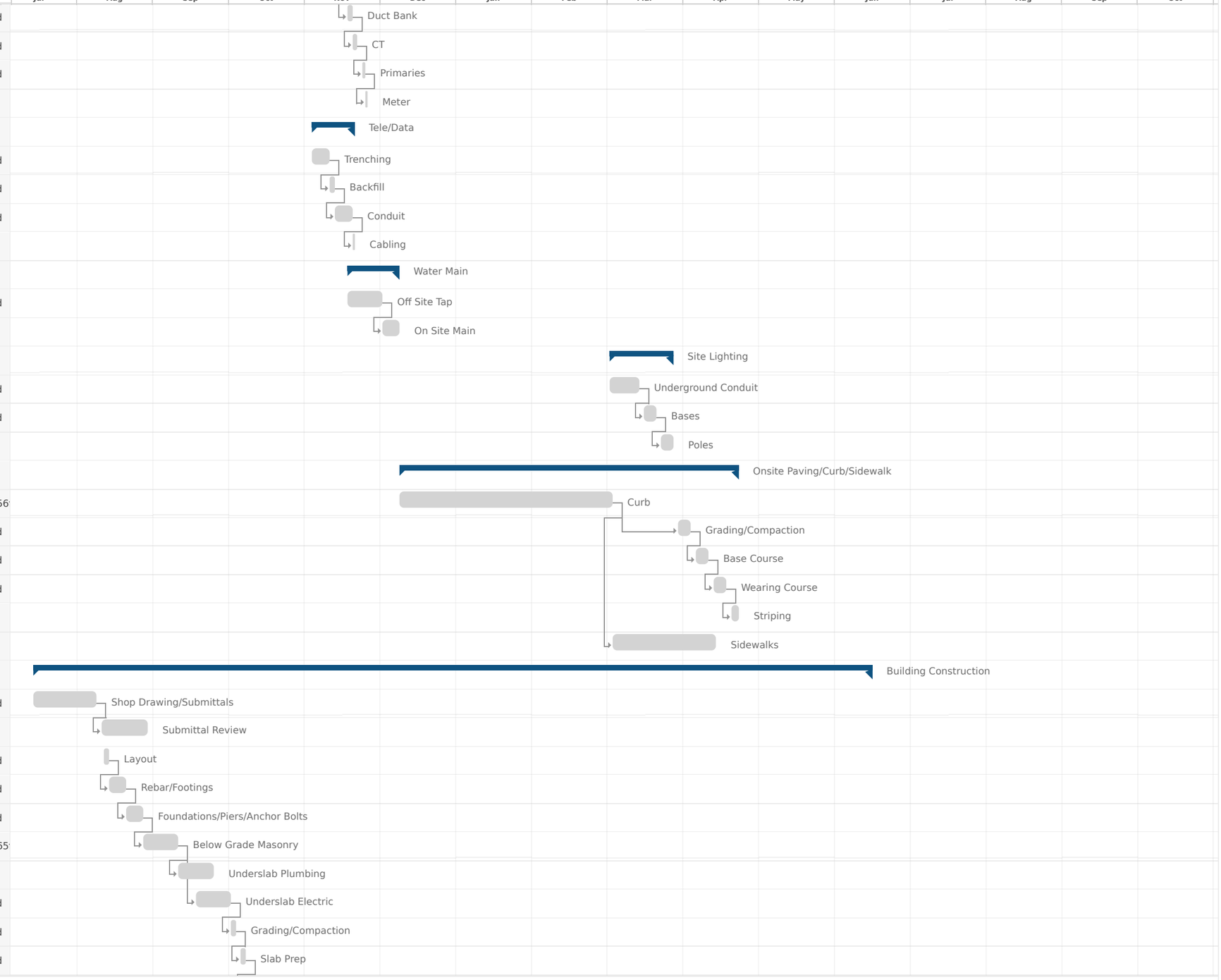
Printed on: 02/17/25

Boyle CONSTRUCTION MANAGEMENT

Upper Pottsgrove Township Admin/PD/PW Facility

UPT Bid Construction Schedule

ID	Activity	Start	Duration	End	Progress	Predecesso	Successors
34	Duct Bank	11/18/25	2 days	11/19/25	0.00%	33fs+0d	35fs+0d
35	CT	11/20/25	2 days	11/21/25	0.00%	34fs+0d	36fs+0d
36	Primaries	11/24/25	1 day	11/24/25	0.00%	35fs+0d	37fs+0d
37	Meter	11/25/25	1 day	11/25/25	0.00%	36fs+0d	
38	**– Tele/Data**	**11/04/25**	**13 days**	**11/20/25**	**0.00%**		
39	Trenching	11/04/25	5 days	11/10/25	0.00%		40fs+0d
40	Backfill	11/11/25	2 days	11/12/25	0.00%	39fs+0d	41fs+0d
41	Conduit	11/13/25	5 days	11/19/25	0.00%	40fs+0d	42fs+0d
42	Cabling	11/20/25	1 day	11/20/25	0.00%	41fs+0d	
43	**– Water Main**	**11/18/25**	**15 days**	**12/08/25**	**0.00%**		
44	Off Site Tap	11/18/25	10 days	12/01/25	0.00%		45fs+0d
45	On Site Main	12/02/25	5 days	12/08/25	0.00%	44fs+0d	
46	**– Site Lighting**	**03/02/26**	**20 days**	**03/27/26**	**0.00%**		
47	Underground Conduit	03/02/26	10 days	03/13/26	0.00%		48fs+0d
48	Bases	03/16/26	5 days	03/20/26	0.00%	47fs+0d	49fs+0d
49	Poles	03/23/26	5 days	03/27/26	0.00%	48fs+0d	
50	**– Onsite Paving/Curb/Sidewalk**	**12/09/25**	**97 days**	**04/22/26**	**0.00%**		
51	Curb	12/09/25	60 days	03/02/26	0.00%		52fs+0d;56
52	Grading/Compaction	03/30/26	5 days	04/03/26	0.00%	51fs+0d	53fs+0d
53	Base Course	04/06/26	5 days	04/10/26	0.00%	52fs+0d	54fs+0d
54	Wearing Course	04/13/26	5 days	04/17/26	0.00%	53fs+0d	55fs+0d
55	Striping	04/20/26	3 days	04/22/26	0.00%	54fs+0d	
56	Sidewalks	03/03/26	30 days	04/13/26	0.00%	51fs+0d	
57	**– Building Construction**	**07/14/25**	**241 days**	**06/15/26**	**0.00%**		
58	Shop Drawing/Submittals	07/14/25	20 days	08/08/25	0.00%		59fs+0d
59	Submittal Review	08/11/25	15 days	08/29/25	0.00%	58fs+0d	
60	Layout	08/12/25	2 days	08/13/25	0.00%		61fs+0d
61	Rebar/Footings	08/14/25	5 days	08/20/25	0.00%	60fs+0d	62fs+0d
62	Foundations/Piers/Anchor Bolt	08/21/25	5 days	08/27/25	0.00%	61fs+0d	63fs+0d
63	Below Grade Masonry	08/28/25	10 days	09/10/25	0.00%	62fs+0d	64fs+0d;65
64	Underslab Plumbing	09/11/25	10 days	09/24/25	0.00%	63fs+0d	
65	Underslab Electric	09/18/25	10 days	10/01/25	0.00%	63fs+0d	66fs+0d
66	Grading/Compaction	10/02/25	2 days	10/03/25	0.00%	65fs+0d	67fs+0d
67	Slab Prep	10/06/25	2 days	10/07/25	0.00%	66fs+0d	68fs+0d



Outbuild

General

Parent Activity
Child Activity
Baseline
(+# days) Delay
Milestone
Links

Status

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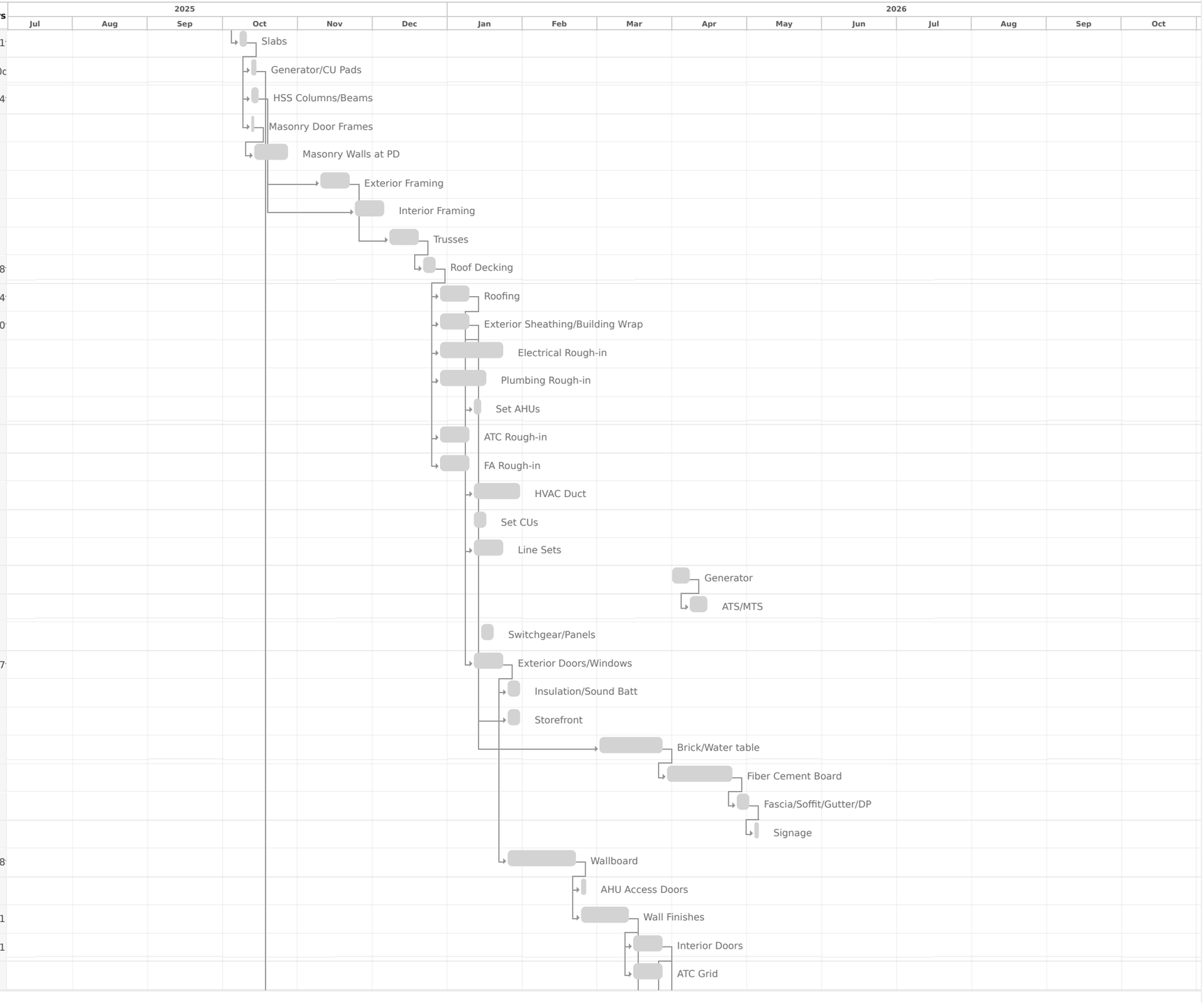
Printed on: 02/17/25

Boyle CONSTRUCTION MANAGEMENT

Upper Pottsgrove Township Admin/PD/PW Facility

UPT Bid Construction Schedule

ID	Activity	Start	Duration	End	Progress	Predecesso	Successors
68	Slabs	10/08/25	3 days	10/10/25	0.00%	67fs+0d	70fs+0d;71
69	Generator/CU Pads	10/13/25	2 days	10/14/25	0.00%	68fs+0d	230fs+120d
70	HSS Columns/Beams	10/13/25	3 days	10/15/25	0.00%	68fs+0d	73fs+0d;74
71	Masonry Door Frames	10/13/25	1 day	10/13/25	0.00%	68fs+0d	72fs+0d
72	Masonry Walls at PD	10/14/25	10 days	10/27/25	0.00%	71fs+0d	
73	Exterior Framing	11/10/25	10 days	11/21/25	0.00%	70fs+0d	75fs+0d
74	Interior Framing	11/24/25	10 days	12/05/25	0.00%	70fs+0d	
75	Trusses	12/08/25	10 days	12/19/25	0.00%	73fs+0d	76fs+0d
76	Roof Decking	12/22/25	5 days	12/26/25	0.00%	75fs+0d	77fs+0d;78
77	Roofing	12/29/25	10 days	01/09/26	0.00%	76fs+0d	81fs+0d;84
78	Exterior Sheathing/Building W	12/29/25	10 days	01/09/26	0.00%	76fs+0d	86fs+0d;90
79	Electrical Rough-in	12/29/25	20 days	01/23/26	0.00%	76fs+0d	
80	Plumbing Rough-in	12/29/25	15 days	01/16/26	0.00%	76fs+0d	
81	Set AHUs	01/12/26	3 days	01/14/26	0.00%	77fs+0d	
82	ATC Rough-in	12/29/25	10 days	01/09/26	0.00%	76fs+0d	
83	FA Rough-in	12/29/25	10 days	01/09/26	0.00%	76fs+0d	
84	HVAC Duct	01/12/26	15 days	01/30/26	0.00%	77fs+0d	
85	Set CUs	01/12/26	5 days	01/16/26	0.00%		
86	Line Sets	01/12/26	10 days	01/23/26	0.00%	78fs+0d	
87	Generator	04/01/26	5 days	04/07/26	0.00%		88fs+0d
88	ATS/MTS	04/08/26	5 days	04/14/26	0.00%	87fs+0d	
89	Switchgear/Panels	01/15/26	3 days	01/19/26	0.00%		
90	Exterior Doors/Windows	01/12/26	10 days	01/23/26	0.00%	78fs+0d	91fs+0d;97
91	Insulation/Sound Batt	01/26/26	5 days	01/30/26	0.00%	90fs+0d	
92	Storefront	01/26/26	5 days	01/30/26	0.00%	78fs+0d	
93	Brick/Water table	03/02/26	20 days	03/27/26	0.00%	78fs+0d	94fs+0d
94	Fiber Cement Board	03/30/26	20 days	04/24/26	0.00%	93fs+0d	95fs+0d
95	Fascia/Soffit/Gutter/DP	04/27/26	5 days	05/01/26	0.00%	94fs+0d	96fs+0d
96	Signage	05/04/26	2 days	05/05/26	0.00%	95fs+0d	
97	Wallboard	01/26/26	20 days	02/20/26	0.00%	90fs+0d	99fs+0d;98
98	AHU Access Doors	02/23/26	2 days	02/24/26	0.00%	97fs+0d	
99	Wall Finishes	02/23/26	15 days	03/13/26	0.00%	97fs+0d	100fs+0d;1
100	Interior Doors	03/16/26	10 days	03/27/26	0.00%	99fs+0d	102fs+0d;1
101	ATC Grid	03/16/26	10 days	03/27/26	0.00%	99fs+0d	



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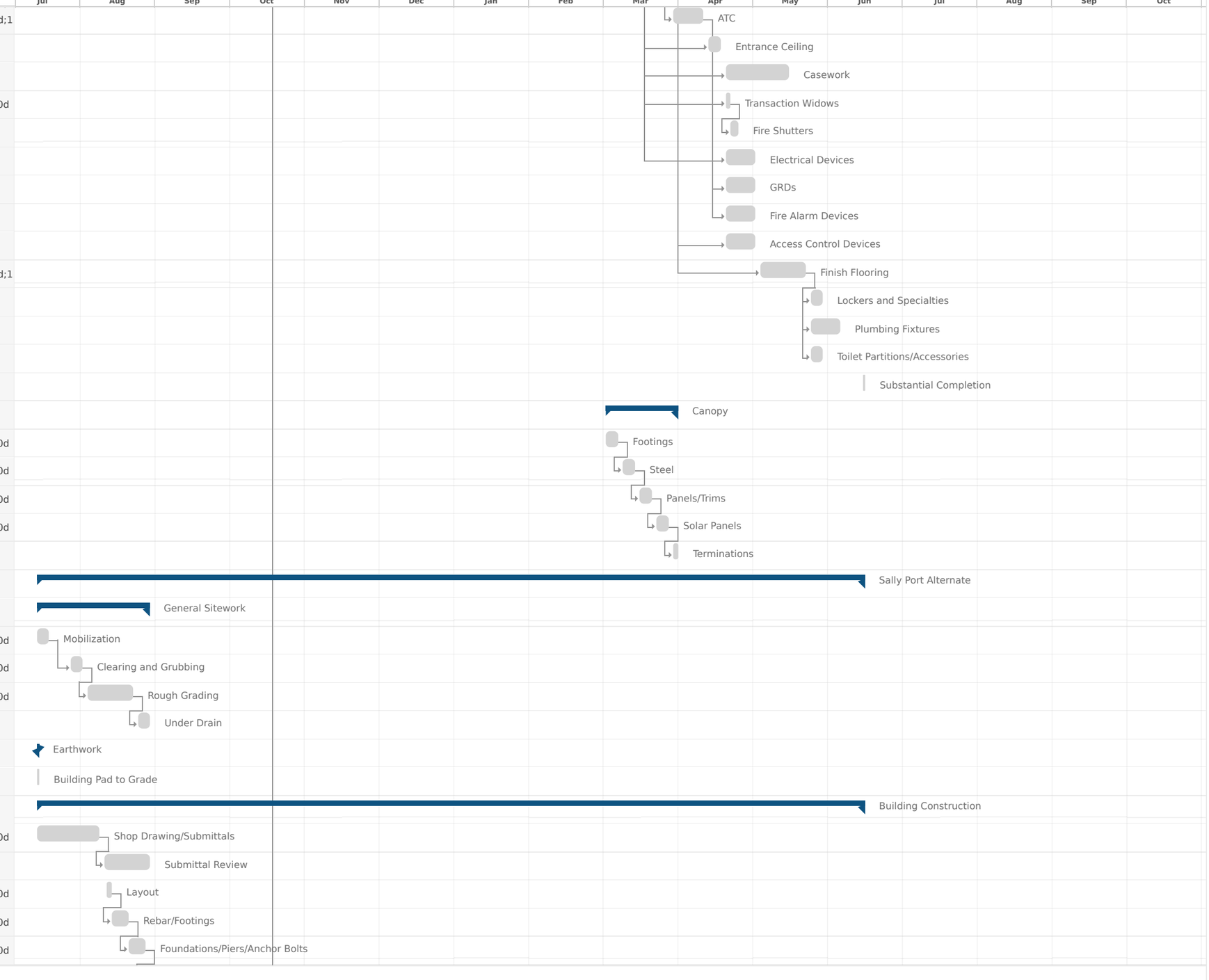
Ahead
Uninitiated

Printed on: 02/17/25

ID	Activity	Start	Duration	End	Progress	Predecesso	Successors
102	ATC	03/30/26	10 days	04/10/26	0.00%	100fs+0d	108fs+0d;1
103	Entrance Ceiling	04/13/26	5 days	04/17/26	0.00%	99fs+0d	
104	Casework	04/20/26	20 days	05/15/26	0.00%	99fs+0d	
105	Transaction Widows	04/20/26	2 days	04/21/26	0.00%	99fs+0d	106fs+0d
106	Fire Shutters	04/22/26	3 days	04/24/26	0.00%	105fs+0d	
107	Electrical Devices	04/20/26	10 days	05/01/26	0.00%	99fs+0d	
108	GRDs	04/20/26	10 days	05/01/26	0.00%	102fs+0d	
109	Fire Alarm Devices	04/20/26	10 days	05/01/26	0.00%	102fs+0d	
110	Access Control Devices	04/20/26	10 days	05/01/26	0.00%	100fs+0d	
111	Finish Flooring	05/04/26	15 days	05/22/26	0.00%	100fs+0d	114fs+0d;1
112	Lockers and Specialties	05/25/26	5 days	05/29/26	0.00%	111fs+0d	
113	Plumbing Fixtures	05/25/26	10 days	06/05/26	0.00%	111fs+0d	
114	Toilet Partitions/Accessories	05/25/26	5 days	05/29/26	0.00%	111fs+0d	
115	Substantial Completion	06/15/26	1 day	06/15/26	0.00%		
116	**– Canopy**	**03/02/26**	**22 days**	**03/31/26**	**0.00%**		
117	Footings	03/02/26	5 days	03/06/26	0.00%		118fs+0d
118	Steel	03/09/26	5 days	03/13/26	0.00%	117fs+0d	119fs+0d
119	Panels/Trims	03/16/26	5 days	03/20/26	0.00%	118fs+0d	120fs+0d
120	Solar Panels	03/23/26	5 days	03/27/26	0.00%	119fs+0d	121fs+0d
121	Terminations	03/30/26	2 days	03/31/26	0.00%	120fs+0d	
122	**– Sally Port Alternate**	**07/14/25**	**241 days**	**06/15/26**	**0.00%**		
123	**– General Sitework**	**07/14/25**	**35 days**	**08/29/25**	**0.00%**		
124	Mobilization	07/14/25	5 days	07/18/25	0.00%		125fs+0d
125	Clearing and Grubbing	07/28/25	5 days	08/01/25	0.00%	124fs+0d	126fs+0d
126	Rough Grading	08/04/25	15 days	08/22/25	0.00%	125fs+0d	127fs+0d
127	Under Drain	08/25/25	5 days	08/29/25	0.00%	126fs+0d	
128	**– Earthwork**	**07/14/25**	**1 day**	**07/14/25**	**0.00%**		
129	Building Pad to Grade	07/14/25	1 day	07/14/25	0.00%		
130	**– Building Construction**	**07/14/25**	**241 days**	**06/15/26**	**0.00%**		
131	Shop Drawing/Submittals	07/14/25	20 days	08/08/25	0.00%		132fs+0d
132	Submittal Review	08/11/25	15 days	08/29/25	0.00%	131fs+0d	
133	Layout	08/12/25	2 days	08/13/25	0.00%		134fs+0d
134	Rebar/Footings	08/14/25	5 days	08/20/25	0.00%	133fs+0d	135fs+0d
135	Foundations/Piers/Anchor B	08/21/25	5 days	08/27/25	0.00%	134fs+0d	136fs+0d

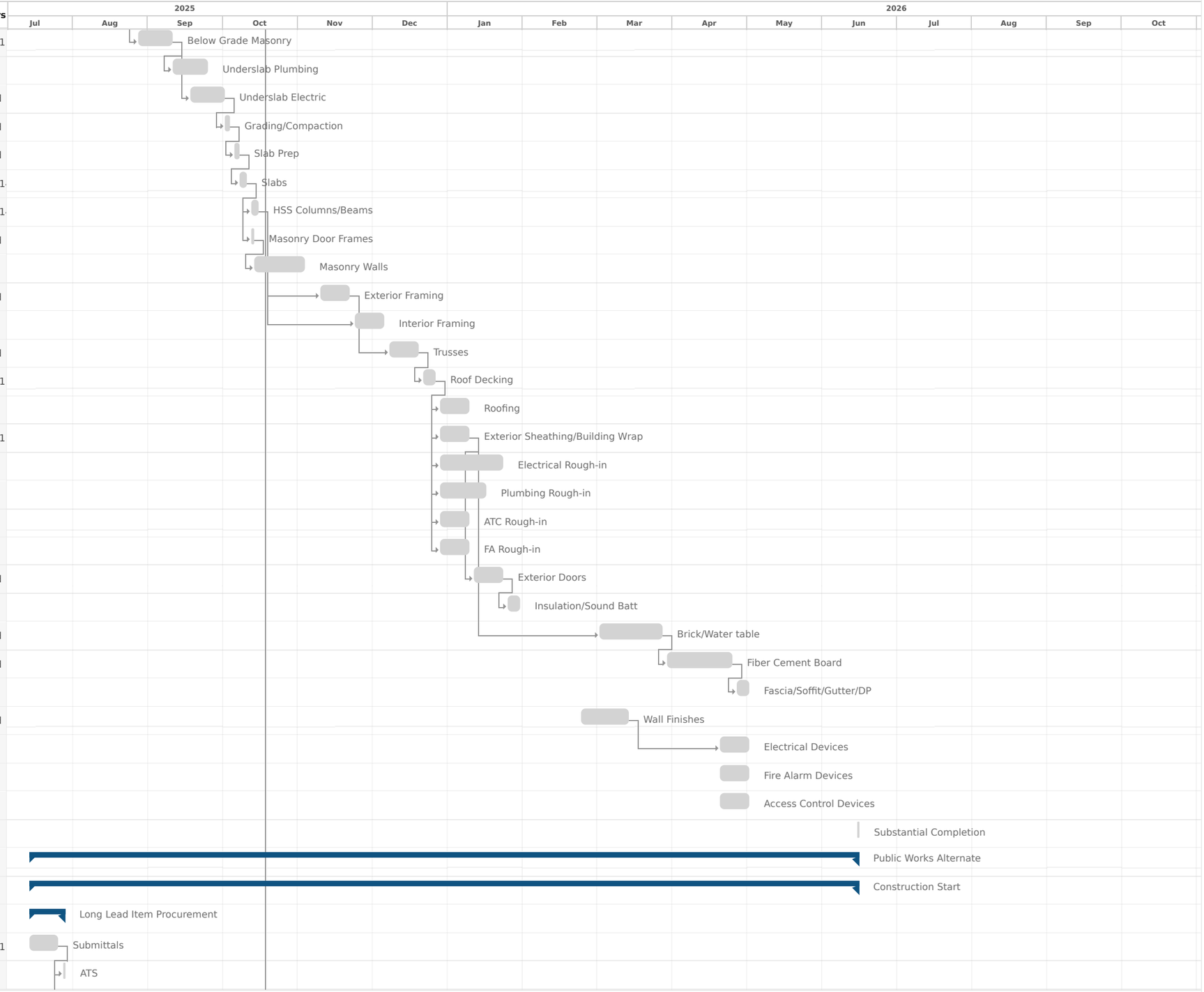


Boyle CONSTRUCTION MANAGEMENT

Upper Pottsgrove Township Admin/PD/PW Facility

UPT Bid Construction Schedule

ID	Activity	Start	Duration	End	Progress	Predecesso	Successors
136	Below Grade Masonry	08/28/25	10 days	09/10/25	0.00%	135fs+0d	138fs+0d;1
137	Underslab Plumbing	09/11/25	10 days	09/24/25	0.00%	136fs+0d	
138	Underslab Electric	09/18/25	10 days	10/01/25	0.00%	136fs+0d	139fs+0d
139	Grading/Compaction	10/02/25	2 days	10/03/25	0.00%	138fs+0d	140fs+0d
140	Slab Prep	10/06/25	2 days	10/07/25	0.00%	139fs+0d	141fs+0d
141	Slabs	10/08/25	3 days	10/10/25	0.00%	140fs+0d	143fs+0d;1
142	HSS Columns/Beams	10/13/25	3 days	10/15/25	0.00%	141fs+0d	146fs+0d;1
143	Masonry Door Frames	10/13/25	1 day	10/13/25	0.00%	141fs+0d	144fs+0d
144	Masonry Walls	10/14/25	15 days	11/03/25	0.00%	143fs+0d	
145	Exterior Framing	11/10/25	10 days	11/21/25	0.00%	142fs+0d	147fs+0d
146	Interior Framing	11/24/25	10 days	12/05/25	0.00%	142fs+0d	
147	Trusses	12/08/25	10 days	12/19/25	0.00%	145fs+0d	148fs+0d
148	Roof Decking	12/22/25	5 days	12/26/25	0.00%	147fs+0d	154fs+0d;1
149	Roofing	12/29/25	10 days	01/09/26	0.00%	148fs+0d	
150	Exterior Sheathing/Building	12/29/25	10 days	01/09/26	0.00%	148fs+0d	157fs+0d;1
151	Electrical Rough-in	12/29/25	20 days	01/23/26	0.00%	148fs+0d	
152	Plumbing Rough-in	12/29/25	15 days	01/16/26	0.00%	148fs+0d	
153	ATC Rough-in	12/29/25	10 days	01/09/26	0.00%	148fs+0d	
154	FA Rough-in	12/29/25	10 days	01/09/26	0.00%	148fs+0d	
155	Exterior Doors	01/12/26	10 days	01/23/26	0.00%	150fs+0d	156fs+0d
156	Insulation/Sound Batt	01/26/26	5 days	01/30/26	0.00%	155fs+0d	
157	Brick/Water table	03/02/26	20 days	03/27/26	0.00%	150fs+0d	158fs+0d
158	Fiber Cement Board	03/30/26	20 days	04/24/26	0.00%	157fs+0d	159fs+0d
159	Fascia/Soffit/Gutter/DP	04/27/26	5 days	05/01/26	0.00%	158fs+0d	
160	Wall Finishes	02/23/26	15 days	03/13/26	0.00%		161fs+0d
161	Electrical Devices	04/20/26	10 days	05/01/26	0.00%	160fs+0d	
162	Fire Alarm Devices	04/20/26	10 days	05/01/26	0.00%		
163	Access Control Devices	04/20/26	10 days	05/01/26	0.00%		
164	Substantial Completion	06/15/26	1 day	06/15/26	0.00%		
165	**– Public Works Alternate**	**07/14/25**	**241 days**	**06/15/26**	**0.00%**		
166	**– Construction Start**	**07/14/25**	**241 days**	**06/15/26**	**0.00%**		
167	**– Long Lead Item Procure**	**07/14/25**	**11 days**	**07/28/25**	**0.00%**		
168	Submittals	07/14/25	10 days	07/25/25	0.00%		169fs+0d;1
169	ATS	07/28/25	1 day	07/28/25	0.00%	168fs+0d	



Outbuild

General

Parent Activity
Child Activity
Baseline
(+# days) Delay
Milestone
Links

Status

Completed
Overdue
Ahead
Uninitiated

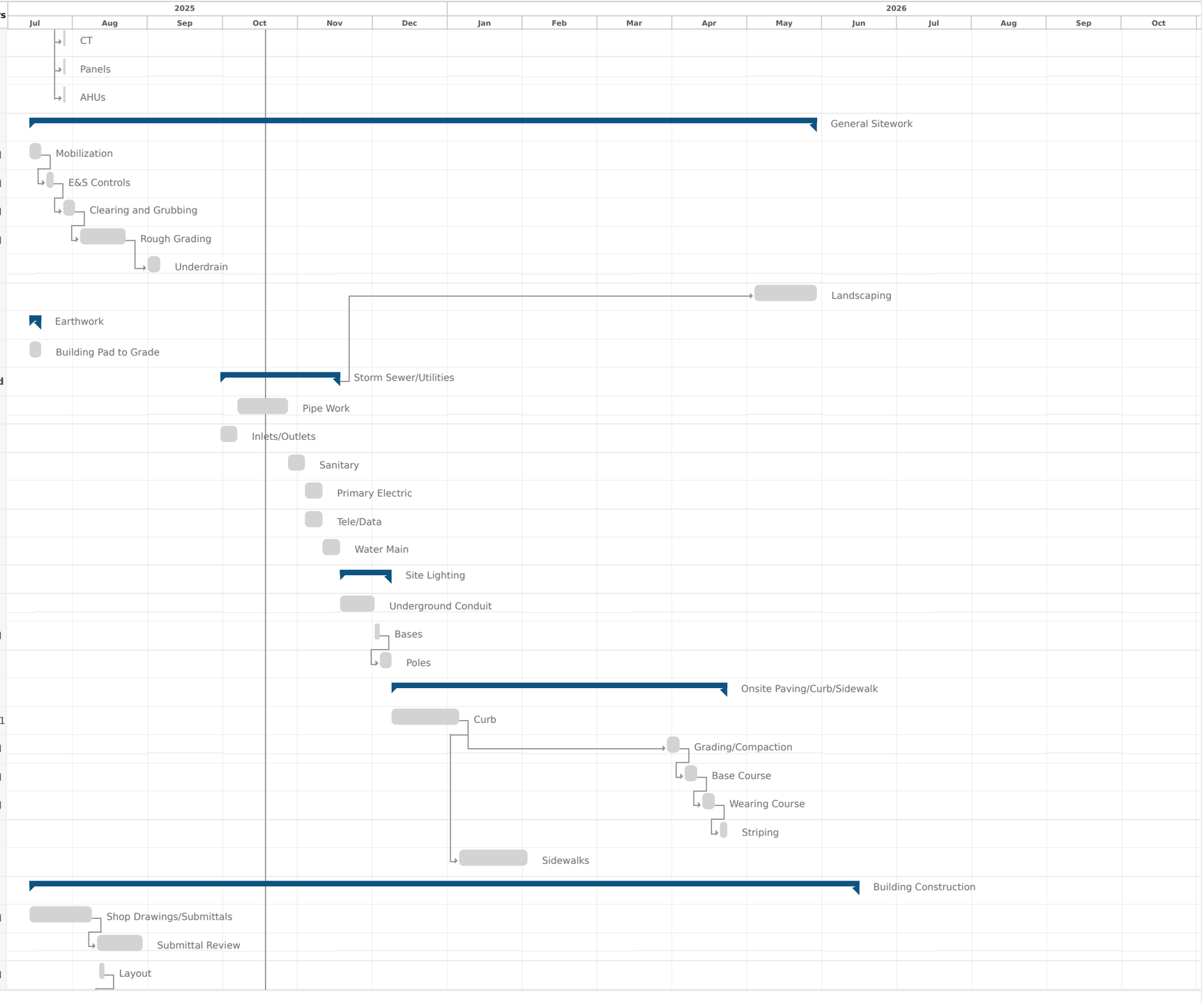
Printed on: 02/17/25

Boyle CONSTRUCTION MANAGEMENT

Upper Pottsgrove Township Admin/PD/PW Facility

UPT Bid Construction Schedule

ID	Activity	Start	Duration	End	Progress	Predecesso	Successors
170	CT	07/28/25	1 day	07/28/25	0.00%	168fs+0d	
171	Panels	07/28/25	1 day	07/28/25	0.00%	168fs+0d	
172	AHUs	07/28/25	1 day	07/28/25	0.00%	168fs+0d	
173	**– General Sitework**	**07/14/25**	**230 days**	**05/29/26**	**0.00%**		
174	Mobilization	07/14/25	5 days	07/18/25	0.00%		175fs+0d
175	E&S Controls	07/21/25	3 days	07/23/25	0.00%	174fs+0d	176fs+0d
176	Clearing and Grubbing	07/28/25	5 days	08/01/25	0.00%	175fs+0d	177fs+0d
177	Rough Grading	08/04/25	15 days	08/22/25	0.00%	176fs+0d	178fs+0d
178	Underdrain	09/01/25	5 days	09/05/25	0.00%	177fs+0d	
179	Landscaping	05/04/26	20 days	05/29/26	0.00%	182fs+0d	
180	**– Earthwork**	**07/14/25**	**5 days**	**07/18/25**	**0.00%**		
181	Building Pad to Grade	07/14/25	5 days	07/18/25	0.00%		
182	**– Storm Sewer/Utilities**	**09/30/25**	**35 days**	**11/17/25**	**0.00%**		**179fs+0d**
183	Pipe Work	10/07/25	15 days	10/27/25	0.00%		
184	Inlets/Outlets	09/30/25	5 days	10/06/25	0.00%		
185	Sanitary	10/28/25	5 days	11/03/25	0.00%		
186	Primary Electric	11/04/25	5 days	11/10/25	0.00%		
187	Tele/Data	11/04/25	5 days	11/10/25	0.00%		
188	Water Main	11/11/25	5 days	11/17/25	0.00%		
189	**– Site Lighting**	**11/18/25**	**15 days**	**12/08/25**	**0.00%**		
190	Underground Conduit	11/18/25	10 days	12/01/25	0.00%		
191	Bases	12/02/25	2 days	12/03/25	0.00%		192fs+0d
192	Poles	12/04/25	3 days	12/08/25	0.00%	191fs+0d	
193	**– Onsite Paving/Curb/Side**	**12/09/25**	**97 days**	**04/22/26**	**0.00%**		
194	Curb	12/09/25	20 days	01/05/26	0.00%		195fs+0d;1
195	Grading/Compaction	03/30/26	5 days	04/03/26	0.00%	194fs+0d	196fs+0d
196	Base Course	04/06/26	5 days	04/10/26	0.00%	195fs+0d	197fs+0d
197	Wearing Course	04/13/26	5 days	04/17/26	0.00%	196fs+0d	198fs+0d
198	Striping	04/20/26	3 days	04/22/26	0.00%	197fs+0d	
199	Sidewalks	01/06/26	20 days	02/02/26	0.00%	194fs+0d	
200	**– Building Construction**	**07/14/25**	**241 days**	**06/15/26**	**0.00%**		
201	Shop Drawings/Submitta	07/14/25	20 days	08/08/25	0.00%		202fs+0d
202	Submittal Review	08/11/25	15 days	08/29/25	0.00%	201fs+0d	
203	Layout	08/12/25	2 days	08/13/25	0.00%		204fs+0d



Outbuild

General

Parent Activity
Child Activity
Baseline
(+# days) Delay
Milestone
Links

Status

Completed
Overdue
Ahead
Uninitiated

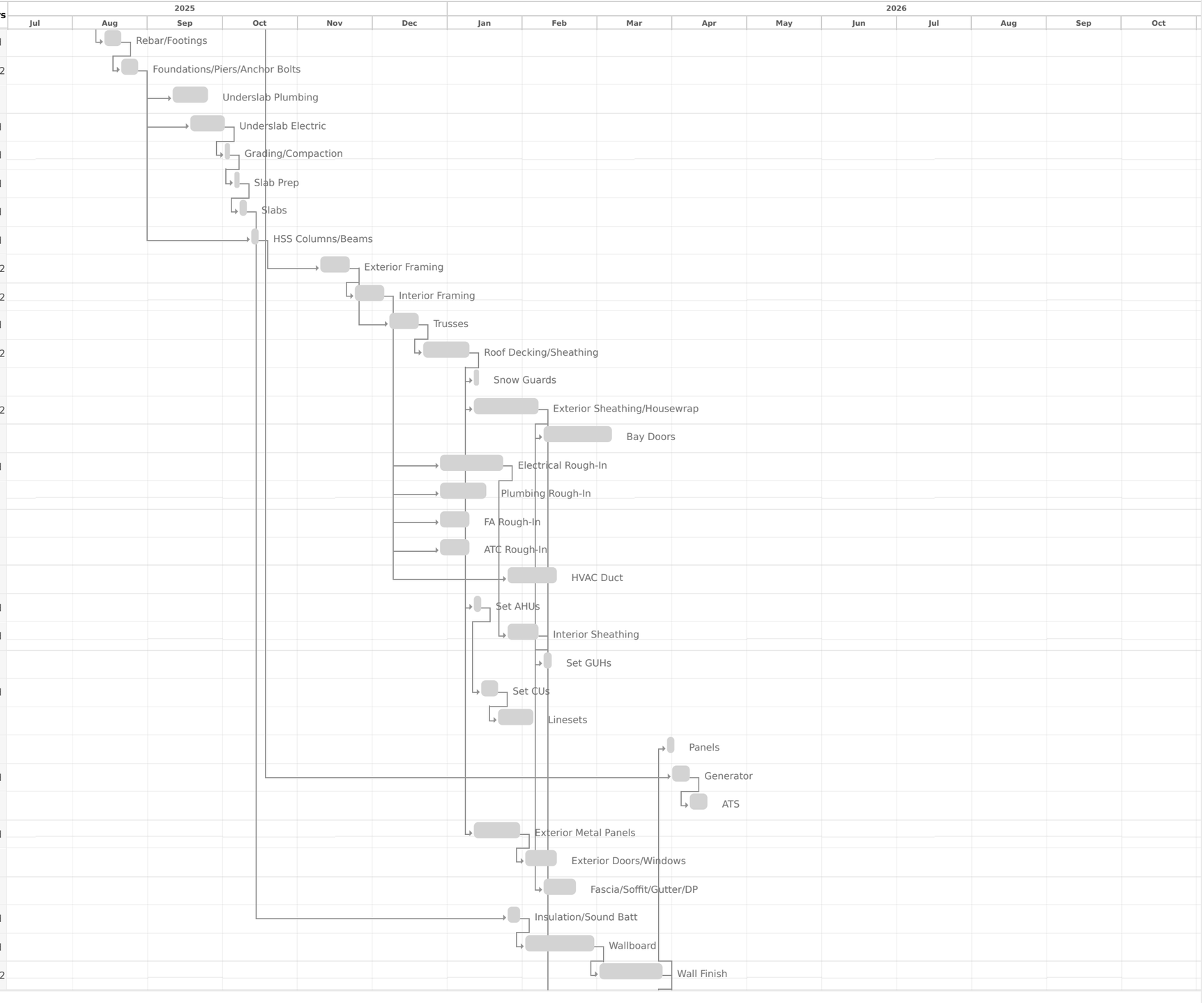
Printed on: 02/17/25

Boyle CONSTRUCTION MANAGEMENT

Upper Pottsgrove Township Admin/PD/PW Facility

UPT Bid Construction Schedule

ID	Activity	Start	Duration	End	Progress	Predecesso	Successors
204	Rebar/Footings	08/14/25	5 days	08/20/25	0.00%	203fs+0d	205fs+0d
205	Foundations/Piers/Anchor	08/21/25	5 days	08/27/25	0.00%	204fs+0d	206fs+0d;2
206	Underslab Plumbing	09/11/25	10 days	09/24/25	0.00%	205fs+0d	
207	Underslab Electric	09/18/25	10 days	10/01/25	0.00%	205fs+0d	208fs+0d
208	Grading/Compaction	10/02/25	2 days	10/03/25	0.00%	207fs+0d	209fs+0d
209	Slab Prep	10/06/25	2 days	10/07/25	0.00%	208fs+0d	210fs+0d
210	Slabs	10/08/25	3 days	10/10/25	0.00%	209fs+0d	235fs+0d
211	HSS Columns/Beams	10/13/25	3 days	10/15/25	0.00%	205fs+0d	212fs+0d
212	Exterior Framing	11/10/25	10 days	11/21/25	0.00%	211fs+0d	213fs+0d;2
213	Interior Framing	11/24/25	10 days	12/05/25	0.00%	212fs+0d	219fs+0d;2
214	Trusses	12/08/25	10 days	12/19/25	0.00%	212fs+0d	215fs+0d
215	Roof Decking/Sheathing	12/22/25	15 days	01/09/26	0.00%	214fs+0d	216fs+0d;2
216	Snow Guards	01/12/26	2 days	01/13/26	0.00%	215fs+0d	
217	Exterior Sheathing/House	01/12/26	20 days	02/06/26	0.00%	215fs+0d	218fs+0d;2
218	Bay Doors	02/09/26	20 days	03/06/26	0.00%	217fs+0d	
219	Electrical Rough-In	12/29/25	20 days	01/23/26	0.00%	213fs+0d	225fs+0d
220	Plumbing Rough-In	12/29/25	15 days	01/16/26	0.00%	213fs+0d	
221	FA Rough-In	12/29/25	10 days	01/09/26	0.00%	213fs+0d	
222	ATC Rough-In	12/29/25	10 days	01/09/26	0.00%	213fs+0d	
223	HVAC Duct	01/26/26	15 days	02/13/26	0.00%	213fs+0d	
224	Set AHUs	01/12/26	3 days	01/14/26	0.00%	215fs+0d	227fs+0d
225	Interior Sheathing	01/26/26	10 days	02/06/26	0.00%	219fs+0d	226fs+0d
226	Set GUHs	02/09/26	3 days	02/11/26	0.00%	225fs+0d	
227	Set CUs	01/15/26	5 days	01/21/26	0.00%	224fs+0d	228fs+0d
228	Linesets	01/22/26	10 days	02/04/26	0.00%	227fs+0d	
229	Panels	03/30/26	3 days	04/01/26	0.00%	237fs+0d	
230	Generator	04/01/26	5 days	04/07/26	0.00%	69fs+120d	231fs+0d
231	ATS	04/08/26	5 days	04/14/26	0.00%	230fs+0d	
232	Exterior Metal Panels	01/12/26	15 days	01/30/26	0.00%	215fs+0d	233fs+0d
233	Exterior Doors/Windows	02/02/26	10 days	02/13/26	0.00%	232fs+0d	
234	Fascia/Soffit/Gutter/DP	02/09/26	10 days	02/20/26	0.00%	217fs+0d	
235	Insulation/Sound Batt	01/26/26	5 days	01/30/26	0.00%	210fs+0d	236fs+0d
236	Wallboard	02/02/26	20 days	02/27/26	0.00%	235fs+0d	237fs+0d
237	Wall Finish	03/02/26	20 days	03/27/26	0.00%	236fs+0d	229fs+0d;2



Outbuild

General

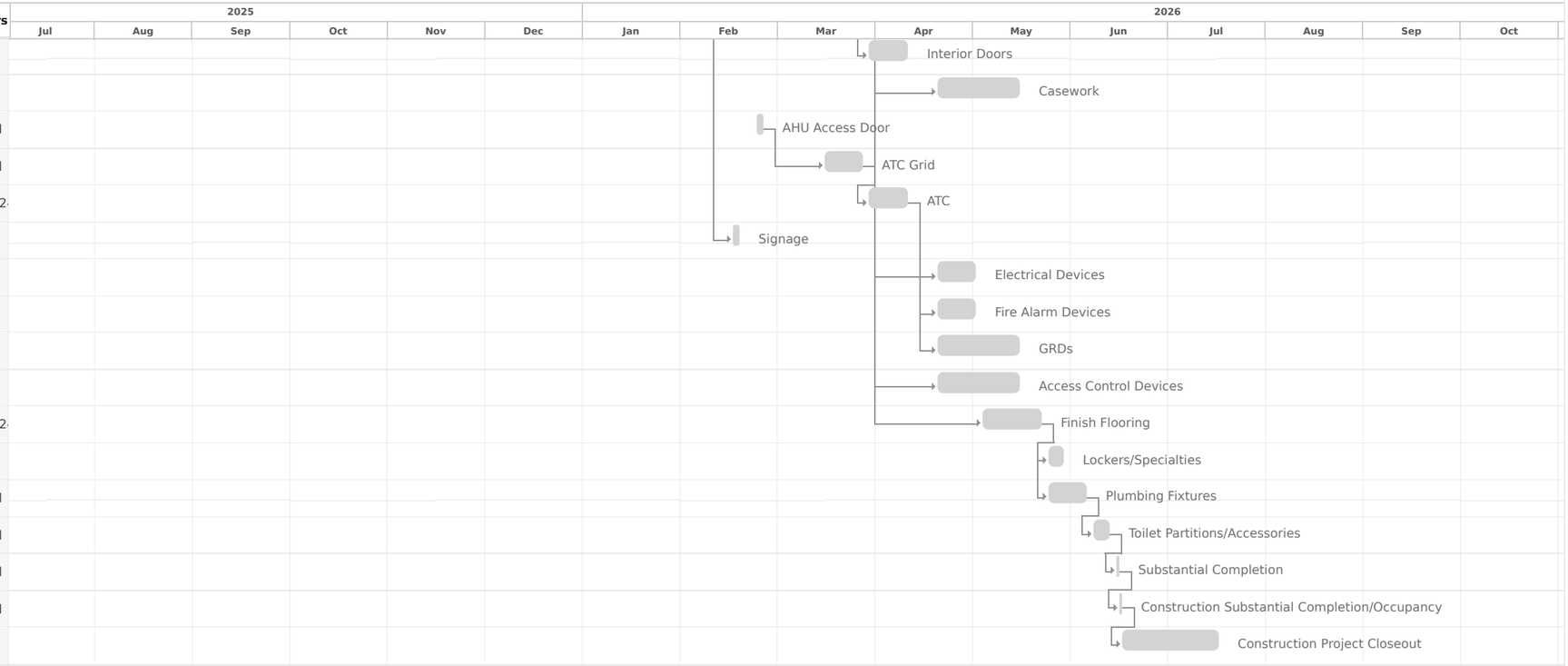
Parent Activity
Child Activity
Baseline
(+# days) Delay
Milestone
Links

Status

Completed
Overdue
Ahead
Uninitiated

Printed on: 02/17/25

ID	Activity	Start	Duration	End	Progress	Predecesso	Successors
238	Interior Doors	03/30/26	10 days	04/10/26	0.00%	237fs+0d	
239	Casework	04/20/26	20 days	05/15/26	0.00%	237fs+0d	
240	AHU Access Door	02/23/26	2 days	02/24/26	0.00%		241fs+0d
241	ATC Grid	03/16/26	10 days	03/27/26	0.00%	240fs+0d	242fs+0d
242	ATC	03/30/26	10 days	04/10/26	0.00%	241fs+0d	246fs+0d;2
243	Signage	02/16/26	2 days	02/17/26	0.00%	217fs+0d	
244	Electrical Devices	04/20/26	10 days	05/01/26	0.00%	237fs+0d	
245	Fire Alarm Devices	04/20/26	10 days	05/01/26	0.00%	242fs+0d	
246	GRDs	04/20/26	20 days	05/15/26	0.00%	242fs+0d	
247	Access Control Devices	04/20/26	20 days	05/15/26	0.00%	237fs+0d	
248	Finish Flooring	05/04/26	15 days	05/22/26	0.00%	237fs+0d	250fs+0d;2
249	Lockers/Specialties	05/25/26	5 days	05/29/26	0.00%	248fs+0d	
250	Plumbing Fixtures	05/25/26	10 days	06/05/26	0.00%	248fs+0d	251fs+0d
251	Toilet Partitions/Accessor	06/08/26	5 days	06/12/26	0.00%	250fs+0d	252fs+0d
252	Substantial Completion	06/15/26	1 day	06/15/26	0.00%	251fs+0d	253fs+0d
253	Construction Substantial Completi	06/16/26	1 day	06/16/26	0.00%	252fs+0d	254fs+0d
254	Construction Project Closeout	06/17/26	22 days	07/16/26	0.00%	253fs+0d	



CONTRACTOR:
(Name, legal status and address)

« »« »
« »

SURETY:
(Name, legal status and principal place of business)
« »« »
« »

OWNER:
(Name, legal status and address)
« »« »
« »

CONSTRUCTION CONTRACT
Date: « »
Amount: $ « »
Description:
(Name and location)
« »
« »

BOND
Date:
(Not earlier than Construction Contract Date)
« »
Amount: $ « »
Modifications to this Bond: | « » | None | « » | See Section 18

CONTRACTOR AS PRINCIPAL		**SURETY**	
Company:	*(Corporate Seal)*	Company:	*(Corporate Seal)*
Signature:		Signature:	
Name and Title:	« »« »	Name and Title:	« »« »

(Any additional signatures appear on the last page of this Payment Bond.)

(FOR INFORMATION ONLY — Name, address and telephone)

AGENT or **BROKER:**

« »
« »
« »

OWNER'S REPRESENTATIVE:
(Architect, Engineer or other party:)
« »
« »
« »
« »
« »
« »

§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

§ 2 If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Section 13) of claims, demands, liens or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety.

§ 4 When the Owner has satisfied the conditions in Section 3, the Surety shall promptly and at the Surety's expense defend, indemnify and hold harmless the Owner against a duly tendered claim, demand, lien or suit.

§ 5 The Surety's obligations to a Claimant under this Bond shall arise after the following:

§ 5.1 Claimants, who do not have a direct contract with the Contractor,

.1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and

.2 have sent a Claim to the Surety (at the address described in Section 13).

§ 5.2 Claimants, who are employed by or have a direct contract with the Contractor, have sent a Claim to the Surety (at the address described in Section 13).

§ 6 If a notice of non-payment required by Section 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Section 5.1.1.

§ 7 When a Claimant has satisfied the conditions of Sections 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

§ 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

§ 7.2 Pay or arrange for payment of any undisputed amounts.

§ 7.3 The Surety's failure to discharge its obligations under Section 7.1 or Section 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Section 7.1 or Section 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

§ 8 The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Section 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

§ 9 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the

performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

§ 10 The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.

§ 11 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 12 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Section 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 13 Notice and Claims to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

§ 14 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 15 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

§ 16 Definitions

§ 16.1 Claim. A written statement by the Claimant including at a minimum:

- **.1** the name of the Claimant;
- **.2** the name of the person for whom the labor was done, or materials or equipment furnished;
- **.3** a copy of the agreement or purchase order pursuant to which labor, materials or equipment was furnished for use in the performance of the Construction Contract;
- **.4** a brief description of the labor, materials or equipment furnished;
- **.5** the date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
- **.6** the total amount earned by the Claimant for labor, materials or equipment furnished as of the date of the Claim;
- **.7** the total amount of previous payments received by the Claimant; and
- **.8** the total amount due and unpaid to the Claimant for labor, materials or equipment furnished as of the date of the Claim.

§ 16.2 Claimant. An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other

items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

§ 16.3 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

§ 16.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 16.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.

§ 17 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 18 Modifications to this bond are as follows:

« »

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL		**SURETY**	
Company:	*(Corporate Seal)*	Company:	*(Corporate Seal)*
Signature:		Signature:	
Name and Title:	« »« »	Name and Title:	« »« »
Address:	« »	Address:	« »

CONTRACTOR:
(Name, legal status and address)

« »« »
« »

SURETY:
(Name, legal status and principal place of business)
« »« »
« »

OWNER:
(Name, legal status and address)
« »« »
« »

CONSTRUCTION CONTRACT
Date: « »
Amount: $ « »
Description:
(Name and location)
« »
« »

BOND
Date:
(Not earlier than Construction Contract Date)
« »
Amount: $ « »
Modifications to this Bond: « » None « » See Section 16

CONTRACTOR AS PRINCIPAL		**SURETY**	
Company:	*(Corporate Seal)*	Company:	*(Corporate Seal)*
Signature:		Signature:	
Name and Title:	« »« »	Name and Title:	« »« »

(Any additional signatures appear on the last page of this Performance Bond.)

(FOR INFORMATION ONLY — Name, address and telephone)

AGENT or **BROKER:**

« »
« »
« »

OWNER'S REPRESENTATIVE:
(Architect, Engineer or other party:)

« »
« »
« »
« »
« »
« »

§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

§ 2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Section 3.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after

.1 the Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Section 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

.2 the Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

.3 the Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

§ 4 Failure on the part of the Owner to comply with the notice requirement in Section 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

§ 5 When the Owner has satisfied the conditions of Section 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

§ 5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

§ 5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

§ 5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Section 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

§ 5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

§ 6 If the Surety does not proceed as provided in Section 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Section 5.4, and the Owner refuses the pay-

ment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

§ 7 If the Surety elects to act under Section 5.1, 5.2 or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for

.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

.2 additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Section 5; and

.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

§ 8 If the Surety elects to act under Section 5.1, 5.3 or 5.4, the Surety's liability is limited to the amount of this Bond.

§ 9 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors and assigns.

§ 10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 11 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

§ 13 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 14 Definitions

§ 14.1 Balance of the Contract Price. The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

§ 14.2 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

§ 14.3 Contractor Default. Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

§ 14.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 14.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.

§ 15 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 16 Modifications to this bond are as follows:

« »

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL		**SURETY**	
Company:	*(Corporate Seal)*	Company:	*(Corporate Seal)*
Signature:		Signature:	
Name and Title:	« »« »	Name and Title:	« »« »
Address:	« »	Address:	« »

CONTRACTOR:
(Name, legal status and address)

« »« »
« »

SURETY:
(Name, legal status and principal place of business)
« »« »
« »

OWNER:
(Name, legal status and address)
« »« »
« »

BOND AMOUNT: $ « »

PROJECT:
(Name, location or address, and Project number, if any)
« »
« »
« »

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this « » day of « » , « »

	« »
	(Contractor as Principal) *(Seal)*
	« »
(Witness)	*(Title)*
	« »
	(Surety) *(Seal)*
	« »
(Witness)	*(Title)*

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UPPER POTTSGROVE TOWNSHIP
1409 FARMINGTON AVE, POTTSTOWN, PA 19464
MONTGOMERY COUNTY

BASE BID

NEW ADMINISTRATION & POLICE DEPARTMENT BUILDING

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PROJECT:
NEW MUNICIPAL COMPLEX

2290 GILBERTSVILLE ROAD
POTTSTOWN, PA 19464

OWNER:
UPPER POTTSGROVE TOWNSHIP

1409 FARMINGTON AVE
POTTSGTOWN, PA 19464

PROJECT TEAM:

ARCHITECT:
ALLOY5
ARCHITECTURE

CIVIL:
CHESTER VALLEY
ENGINEERS, INC.
112 MOORES ROAD
SUITE 200
MALVERN, PA 19355
610-644-4623

STRUCTURAL:
SLATE STRUCTURAL ENGINEERS
40 SOUTH MAIN STREET NAZARETH, PA
18064 610-365-7634

MEPF:
PROJECTX DESIGN GROUP
2433 BLUEJAY DRIVE
NAZARETH, PA 18064
610-365-2436

SUBMISSIONS:

NO.	ISSUE DESCRIPTION	DATE
	BID DOCUMENTS	03/31/2025
1	Revision 2	Date 2

KEY PLAN:

REGISTRATION:

ALLOY5
ARCHITECTURE
530 WEST BROAD ST BETHLEHEM, PA 18018
610.419.4055

SHEET TITLE:
COVER SHEET

1

DATE: 03/31/2025
SCALE:
DRAWN BY: TB
CHECKED BY: RG
PROJ NO: 22-0058

G0.00

NEW ADMINISTRATION AND POLICE DEPARTMENT BUILDING

2290 GILBERTSVILLE ROAD, POTTSTOWN, PA 19464

UPPER POTTSGROVE TOWNSHIP

1409 FARMINGTON AVE, POTTSTOWN, PA 19464
MONTGOMERY COUNTY

GENERAL CONDITIONS

1. IN CASE OF CONFLICT BETWEEN NOTES, DETAILS, AND SPECIFICATIONS, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.
2. PERFORM ALL WORK INCLUDING CONSTRUCTION PRACTICES, USE AND DISPOSAL OF MATERIALS, AND QUALITIES OF WORKMANSHIP, IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE GOVERNING LOCAL, STATE, AND NATIONAL CODES AND SPECIFICATIONS FOR THIS CONSTRUCTION PROJECT. PROVIDE APPROPRIATE SAFETY MEASURES SATISFYING ALL OSHA REQUIREMENTS.
3. QUALITY OF MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE BEST STANDARDS AND PRACTICES OF THE TRADES INVOLVED.
4. THE CONTRACTOR SHALL FILE ALL REQUIRED INSURANCE CERTIFICATES AND OBTAIN ALL REQUIRED BUILDING PERMITS PRIOR TO COMMENCEMENT OF THE WORK. COSTS OF PERMITS TO BE PAID BY OWNER, APPROVED PERMIT TO BE POSTED.
5. A COMPLETE SET OF PROJECT DOCUMENTS, INCLUDING AN ORIGINAL STAMPED SET OF DRAWINGS AND ALL SUBSEQUENT CHANGES AND CLARIFICATIONS SHALL BE KEPT ON SITE AT ALL TIMES. ALL PROPOSED CHANGES TO ORIGINAL PROJECT DOCUMENT BID SET ARE TO BE SUBMITTED BY CONTRACTOR IN THE FORM OF CHANGE ORDERS, INCLUDING ALL BACKUP INFORMATION, FOR APPROVAL BY OWNER/ARCHITECT/CONSTRUCTION MANAGER.
6. PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR, OWNER, AND ARCHITECT SHALL HOLD A PRE-CONSTRUCTION CONFERENCE TO CONFIRM SITE ACCESS ROUTE, SCHEDULE, AND SEQUENCE OF WORK.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SECURITY AND PROTECTION OF ALL CONDITIONS AND MATERIALS WITHIN THE PROPOSED CONSTRUCTION AREA. THE CONTRACTOR SHALL HAVE SOLE RESPONSIBILITY FOR ANY DAMAGE OR INJURY CAUSED BY OR DURING THE EXECUTION OF WORK.
8. SECTIONS AND DETAILS SHOWN, WHILE DRAWN FOR SPECIFIC LOCATIONS, ARE INTENDED TO ESTABLISH THE GENERAL TYPES OF DETAILS TO BE USED THROUGHOUT. WORK NOT INDICATED ON A PART OF THE DRAWINGS BUT REASONABLY IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING PLACES, SHALL BE REPEATED. MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT REQUIRED FOR PROPER CONSTRUCTION OF ANY PART OF THE WORK SHALL BE INCLUDED AS IF THEY WERE INDICATED IN THE DRAWINGS.
9. CONTRACTOR TO VERIFY AND/OR ESTABLISH ALL EXISTING CONDITIONS AND DIMENSIONS AT THE SITE AND TO NOTIFY THE OWNER/ARCHITECT OF ANY DISCREPANCIES AND/OR DEVIATIONS FROM DRAWINGS. PROPOSED REMEDIES, IF REQUIRING ADDITIONAL WORK, ARE TO BE SUBMITTED FOR APPROVAL IN THE FORM OF WRITTEN CHANGE ORDERS TO THE OWNER IN ACCORDANCE WITH THE TERMS OF THE CONTRACT BEFORE ORDERING MATERIAL OR COMMENCING WITH WORK.
10. CONTRACTOR TO VERIFY LOCATION OF ALL BELOW GRADE UTILITIES AND STORM WATER SYSTEMS PRIOR TO EXCAVATION. NOTIFY ARCHITECT OF ANY CONFLICTS WITH PROPOSED CONSTRUCTION.
11. ARCHITECT/ENGINEER IS NOT RESPONSIBLE FOR WORK THAT THE ARCHITECT/ENGINEER'S DOES NOT REVIEW AND/OR WORK NOT COMPLETED IN ACCORDANCE WITH ARCHITECT/ENGINEER'S PLAN AND/OR INSTRUCTIONS. NO DEVIATION FROM DESIGN DRAWINGS IS PERMITTED WITHOUT WRITTEN APPROVAL.
12. PROVIDE DAILY CLEAN-UP OF AREAS ADJACENT TO CONSTRUCTION AS WELL AS PERIODIC CLEAN-UP OF CONSTRUCTION AREAS.
13. AT JOB COMPLETION, BESIDES FINAL GENERAL CLEANING, REMOVE ALL STAINS AND PAINT FROM ALL NEW GLASS, TILE, AND OTHER FINISHES AND WASH AND POLISH STONE.

GENERAL DRAWING NOTES

1. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS.
2. ITEMS NOT NOTED AS EXISTING ARE NEW. DOORS AND WINDOWS NOT NUMBERED ON THE FLOOR PLAN OR ELEVATIONS ARE EXISTING TO REMAIN, UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS TO EXISTING SURFACES ARE TO FINISH, AND ALL DIMENSIONS TO NEW CONSTRUCTION ARE TO FACE OF STUD OR MASONRY, UNLESS NOTED OTHERWISE.
4. MECHANICAL, ELECTRICAL, PLUMBING & FIRE PROTECTION SYSTEMS INDICATED ON ARCHITECTURAL DRAWINGS ARE FOR REFERENCE ONLY. COORDINATE WITH MEPF DRAWINGS.
5. ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE WALLS AND SOFFITS PROTECTED BY 5/8" FIRE RATED GWB UNLESS NOTED OTHERWISE.

MATERIALS

- GYPSUM WALLBOARD
- FOAM INSULATION
- BATT INSULATION
- RIGID INSULATION
- LOOSE FILL INSULATION
- WOOD BLOCKING
- ROUGH WOOD
- FINISH WOOD
- PLYWOOD/SHEATHING
- MDO/MDF
- ORIENTED STRAND BOARD (OSB)
- CORK
- GLASS
- BRICK
- CONCRETE
- CONCRETE UNIT MASONRY
- STONE
- TILE
- TERRAZZO
- EARTH
- GRAVEL
- CLAY
- STEEL
- ALUMINUM

SYMBOLS

- XX — KEYED NOTE IDENTIFIER
- XX — KEYED NOTE (DEMOLITION)
- xx — CASEWORK/MILLWORK IDENTIFIER
- XX — REVISION IDENTIFIER
- NO. / NO. — COLUMN LINE OR GRID IDENTIFIER
- NO. / DWG, SIM — DETAIL INDICATOR
- NO. / DWG, SIM — SECTION INDICATOR
- NO. / DWG, SIM — EXTERIOR ELEVATION INDICATOR
- XX / DWG / XX / XX — INTERIOR ELEVATION INDICATOR
- ROOM NAME / NO. / 150 SF — ROOM IDENTIFIER
- DOOR NO. / DR NO. / THK — DOOR & RATING IDENTIFIER
- NO — WINDOW / GLAZING IDENTIFIER
- NO. — PARTITION TYPE IDENTIFIER
- NO — ACCESSORIES IDENTIFIER
- NO. / MATL — CEILING HEIGHT & MATERIAL IDENTIFIER
- GLAZING PANEL IDENTIFIER
- NO. — FURNITURE IDENTIFIER
- WALL FINISH / BASE MATL / FLOOR FINISH — FLOOR FINISH PLAN - FLOOR/WALL/BASE FINISH IDENTIFIER
- EL NO. — SPOT ELEVATION INDICATOR
- NORTH INDICATOR
- LEVEL NAME / ELEVATION — LEVEL INDICATOR
- NO. / NO. — SLOPE INDICATOR
- 0" - 0" — DIMENSION STRING
- EXISTING DOOR TO REMAIN (SWING @ 45 DEGREES)
- DOOR TO BE DEMOLISHED
- DOOR NO. — NEW DOOR AS SCHEDULED (SWING @ 90 DEGREES)

LINE TYPES

- EXISTING CONSTRUCTION
- ITEM / WALL TO BE DEMOLISHED
- NEW CONSTRUCTION
- HIDDEN ITEM
- ITEM ABOVE
- CENTERLINE
- GRID LINE
- BREAK LINE
- VIEW NO. / SHEET NO. / VIEW NO. / SHEET NO. — MATCH LINE
- MOISTURE / VAPOR BARRIER
- DAMPROOFING / WATER PROOFING

DRAWING LIST

NO.	SHEET NAME	REVISION NO.
GENERAL		
G0.00	COVER SHEET	1
G1.00	GENERAL INFORMATION	
G1.01	CODE DATA	
G1.11	LIFE SAFETY PLAN	
G2.00	PARTITION DETAILS	
G3.00	ARCHITECTURAL SITE PLAN	1
STRUCTURAL		
S1.00	FOUNDATION PLAN	
S1.01	ROOF FRAMING PLAN	
S2.00	GENERAL NOTES	
S2.01	SCHEDULES	
S3.00	TYPICAL FOUNDATION DETAILS	
S3.01	FOUNDATION SECTIONS	
S4.00	TYPICAL FRAMING DETAILS	
S4.01	TYPICAL FRAMNG DETAILS	
S4.02	FRAMING SECTIONS	
ARCHITECTURE		
A1.01	FLOOR PLAN	
A1.21	REFLECTED CEILING PLAN	
A1.22	CEILING DETAILS	
A1.40	ROOF PLAN & DETAILS	
A1.80	FINISH PLAN	
A1.81	FURNITURE & EQUIPMENT PLAN	
A2.00	EXTERIOR ELEVATIONS	
A3.00	BUILDING SECTIONS	
A3.01	BUILDING SECTIONS	
A4.00	WALL SECTIONS	
A4.01	WALL SECTIONS	
A4.02	WALL SECTIONS	
A4.03	WALL SECTIONS	
A4.40	DETAILS	
A4.41	DETAILS	
A5.00	ENLARGED PLANS & INTERIOR ELEVATIONS	
A5.01	CANOPY DETAILS	
A5.40	PLAN DETAILS	
A6.00	DOOR SCHEDULE & DETAILS	1
A6.01	DOOR SCHEDULE & DETAILS	
A6.20	WINDOW TYPES AND DETAILS	1
A7.00	INTERIOR ELEVATIONS	
A7.01	INTERIOR ELEVATIONS	
A7.40	MILLWORK SECTIONS & DETAILS	
A9.00	BID ALTERNATE - SALLY PORT	1
PLUMBING		
P1.0	SCHEDULES, NOTES, DETAILS	
P2.0	SANITARY PLAN	
P2.1	DOMESTIC WATER PLAN	
MECHANICAL		
M1.0	SCHEDULES, SPECIFICATIONS	
M1.1	MECHANICAL DETAILS	
M1.2	MECHANICAL DETAILS	
M2.0	MECHANICAL PLAN	
ELECTRICAL		
E1.0	ELECTRICAL DETAILS	
E2.0	LIGHTING PLAN	
E3.0	POWER PLAN	1
E4.0	FIRE ALARM PLAN	1

PROJECT:
ADMINISTRATION AND POLICE DEPARTMENT BUILDING
2290 GILBERTSVILLE ROAD
POTTSTOWN, PA 19464

OWNER:
UPPER POTTSGROVE TOWNSHIP
1409 FARMINGTON AVENUE
POTTSTOWN, PA 19464

PROJECT TEAM:

ARCHITECT:
ALLOY5
ARCHITECTURE

CIVIL:
CHESTER VALLEY
ENGINEERS, INC.
112 MOORES ROAD
SUITE 200
MALVERN, PA 19355
610-644-4623

STRUCTURAL:
SLATE STRUCTURAL ENGINEERS
40 SOUTH MAIN STREET
NAZARETH, PA 18064
610-365-7634

MEPF:
PROJECTX DESIGN GROUP
2433 BLUEJAY DRIVE
NAZARETH, PA 18064
610-365-2436

SUBMISSIONS:

NO.	ISSUE DESCRIPTION	DATE
	BID DOCUMENTS	03/31/25
1	ADDENDUM #01	04/14/25

KEY PLAN:

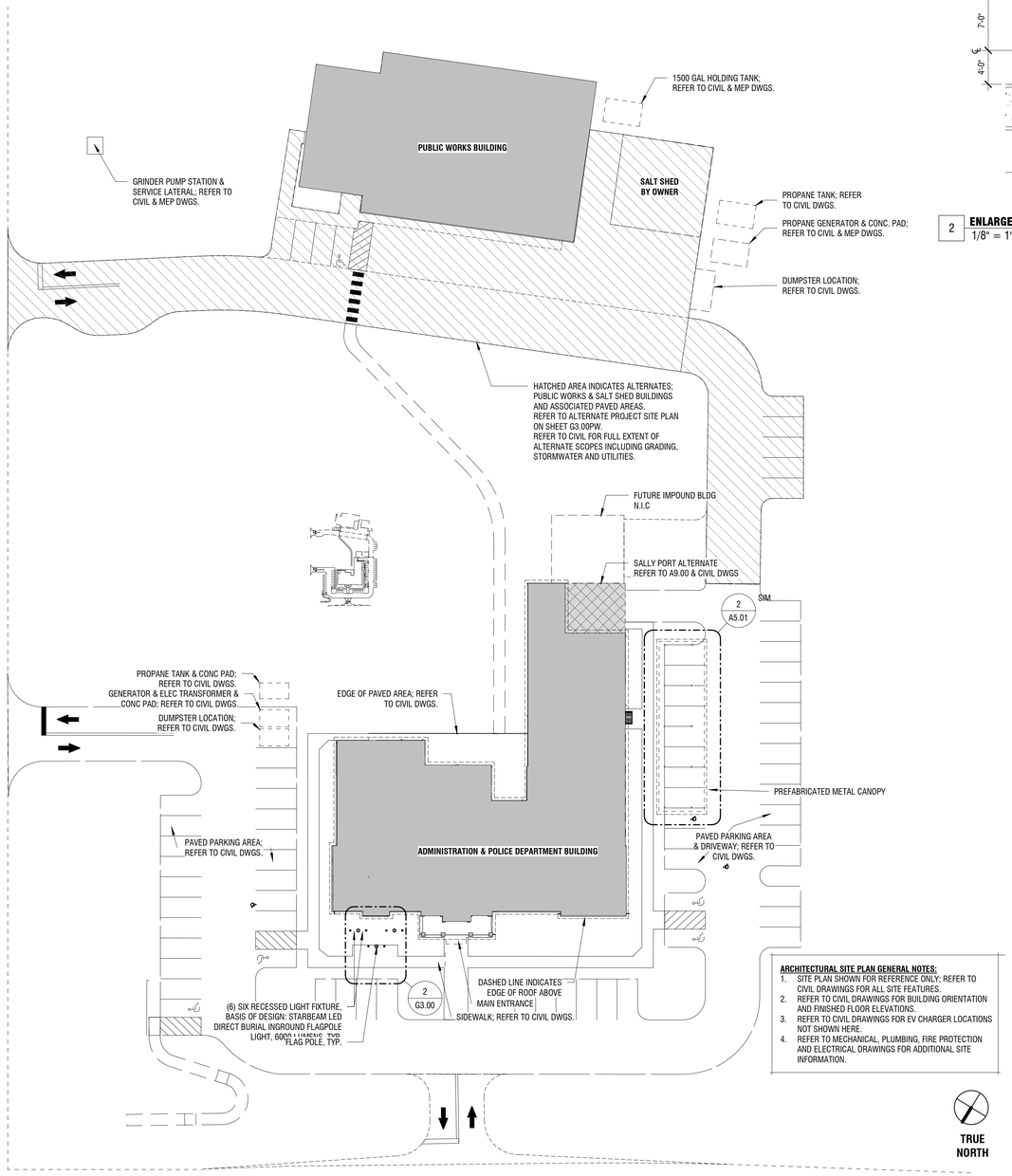
REGISTRATION:

ALLOY5
ARCHITECTURE
530 WEST BROAD ST BETHLEHEM, PA 18018
610.419.4055

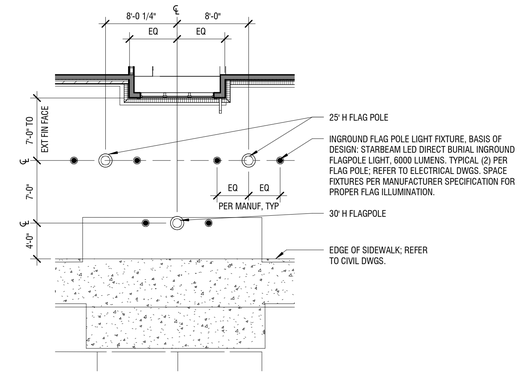
SHEET TITLE:
COVER SHEET

DATE: 03/31/2025
SCALE: 12" = 1'-0"
DRAWN BY: Author
CHECKED BY: Checker
PROJ NO: 22-0058

G0.00



1 **SITE PLAN**
1" = 30'-0"



2 **ENLARGED SITE PLAN - FLAG POLE LOCATION & LIGHTING**
1/8" = 1'-0"

ARCHITECTURAL SITE PLAN GENERAL NOTES:

1. SITE PLAN SHOWN FOR REFERENCE ONLY; REFER TO CIVIL DRAWINGS FOR ALL SITE FEATURES.
2. REFER TO CIVIL DRAWINGS FOR BUILDING ORIENTATION AND FINISHED FLOOR ELEVATIONS.
3. REFER TO CIVIL DRAWINGS FOR EV CHARGER LOCATIONS NOT SHOWN HERE.
4. REFER TO MECHANICAL, PLUMBING, FIRE PROTECTION AND ELECTRICAL DRAWINGS FOR ADDITIONAL SITE INFORMATION.

PROJECT:

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	BID DOCUMENTS	03/31/25
1	ADDENDUM #01	04/14/25

KEY PLAN:

REGISTRATION:

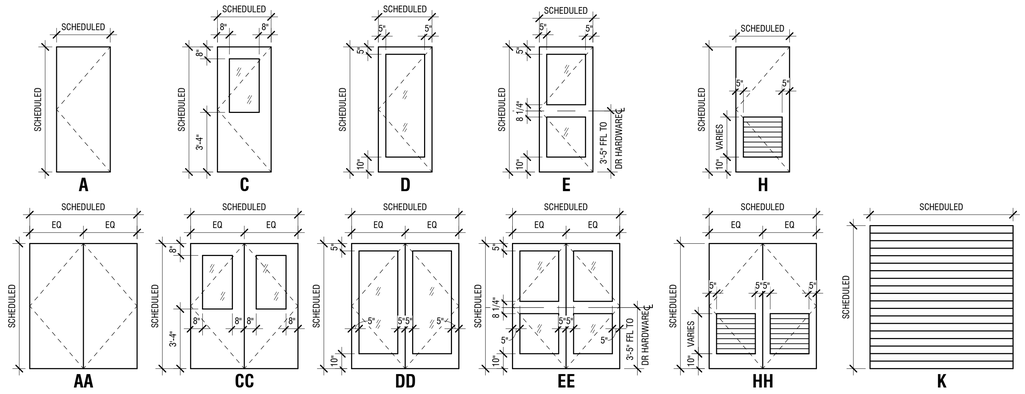
ALLOY5
ARCHITECTURE
530 WEST BROAD ST BETHLEHEM, PA 18018
610.419.4055

SHEET TITLE:

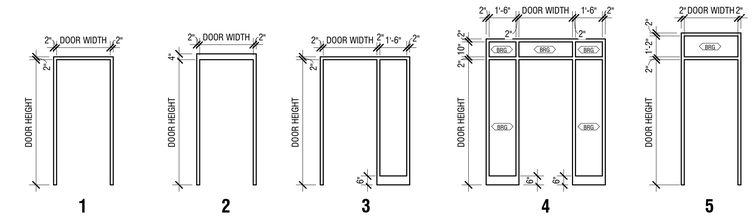
ARCHITECTURAL SITE PLAN

DATE:	03/31/2025
SCALE:	As indicated
DRAWN BY:	Author
CHECKED BY:	Checker
PROJ NO:	22-0058

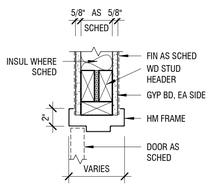
G3.00



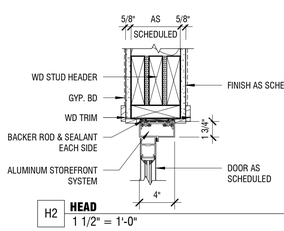
DOOR ELEVATIONS
1/4" = 1'-0"



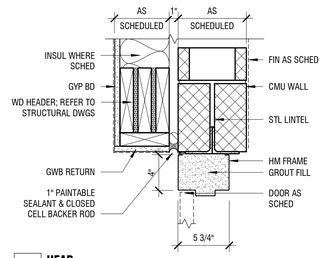
FRAME ELEVATIONS
1/4" = 1'-0"



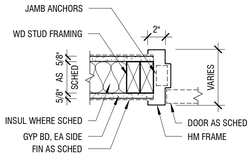
H1 HEAD
1 1/2" = 1'-0"



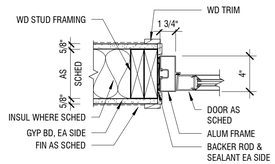
H2 HEAD
1 1/2" = 1'-0"



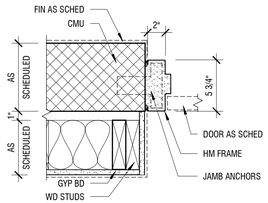
H3 HEAD
1 1/2" = 1'-0"



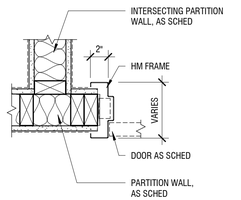
J1 JAMB
1 1/2" = 1'-0"



J2 JAMB
1 1/2" = 1'-0"



J3 JAMB
1 1/2" = 1'-0"



J1A TYPICAL HINGE SIDE-WD FRAME
1 1/2" = 1'-0"

DOOR & FRAME SCHEDULE

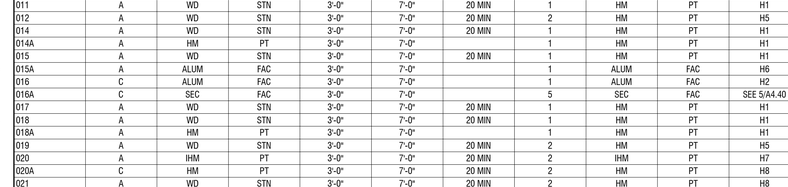
NO.	TYPE	MATERIAL	FINISH	SIZE WIDTH	SIZE HEIGHT	LABEL & RATING	FRAME DATA: FRAME TYPE	FRAME MATERIAL	FRAME FINISH	DETAILS: HEAD	DETAILS: SILL	DETAILS: JAMB	HARDWARE SET	NOTES
001	A	WD	STN	3'-0"	7'-0"	90 MIN	2	HM	PT	H3	S2	J3		3, 9
002	A	WD	STN	3'-0"	7'-0"	90 MIN	2	HM	PT	H3	S1	J3		5, 12
003	A	WD	STN	3'-0"	7'-0"	90 MIN	2	HM	PT	H3	S2	J3		5, 9
003A	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H4	S2	J4		5, 9
004	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	S4	J1		9
005	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	S3	J1		13
006	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H4	S2	J4		5, 9
007	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H4	S2	J4		5, 9
008	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H4	S2	J4		5, 9
009A	D	WD	STN	3'-0"	7'-0"	20 MIN	3	HM	PT	H1	S2	J1		9
009B	D	WD	STN	3'-0"	7'-0"	20 MIN	3	HM	PT	H1	S2	J1		
010	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	-	J1		5, 9
011	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	-	J1		5, 9
012	A	WD	STN	3'-0"	7'-0"	20 MIN	2	HM	PT	H5	S4	J5		5, 9
014	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	S3	J1		9
014A	A	HM	PT	3'-0"	7'-0"		1	HM	PT	H1	S1	J1		9
015	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	-	J1		9
015A	A	ALUM	FAC	3'-0"	7'-0"		1	ALUM	FAC	H6	SEE 4/A4.40	J6		5
016	C	ALUM	FAC	3'-0"	7'-0"		1	ALUM	FAC	H2	S2	J2		10
016A	C	SEC	FAC	3'-0"	7'-0"		5	SEC	FAC	SEE 5/A4.40	SEE 4/A4.40	J6		5, 6, 10
017	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	-	J1		5, 9
018	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	S3	J1A		9
018A	A	HM	PT	3'-0"	7'-0"		1	HM	PT	H1	S1	J1A		9
019	A	WD	STN	3'-0"	7'-0"	20 MIN	2	HM	PT	H5	S1	J5		9
020	A	IHM	PT	3'-0"	7'-0"	20 MIN	2	IHM	PT	H7	SEE 11/4.02	J7		5, 6, 8, 10
020A	C	HM	PT	3'-0"	7'-0"	20 MIN	2	HM	PT	H8	S1	J9		5, 6, 8, 9
021	A	WD	STN	3'-0"	7'-0"	20 MIN	2	HM	PT	H8	S1	J8		5, 9
022	A	WD	STN	3'-0"	7'-0"	20 MIN	2	HM	PT	H8	S1	J8		5, 9
023	A	WD	STN	3'-0"	7'-0"	20 MIN	2	HM	PT	H8	S1	J8		5, 13
024	A	WD	STN	3'-0"	7'-0"	20 MIN	2	HM	PT	H8	S1	J8		5, 9
025	A	HM	PT	3'-0"	7'-0"		2	HM	PT	H8	-	J8		5, 9
026	A	IHM	PT	3'-0"	7'-0"		2	IHM	PT	H7	SEE 11/4.02	J7		5, 6, 8, 10
026A	K	STL	FAC	12'-0"	10'-0"		2	STL	FAC	SEE 7/A9.00	SEE 6/A9.00	J12		5, 6, 7, 8
027	A	WD	STN	3'-0"	7'-0"	90 MIN	2	HM	PT	H9	S2	J9		5, 9
102	D	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H4	S2	J4		5, 9
103	D	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H4	S2	J4		5, 9
104	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	S3	J1A		13
105	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	-	J1A		5, 9
106	D	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	S2	J1		5, 9
108	D	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	S2	J1A		5, 9
109	D	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H4	S2	J4		9
109A	A	WD	STN	3'-0"	7'-0"		1	HM	PT	H4	S1	J4		5, 9, 11
110	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	S4	J1A		5, 9
111	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	-	J1		9
111A	A	ALUM	FAC	3'-0"	7'-0"		1	ALUM	FAC	H6	SEE 4/A4.40	J6/J10		5
112A	C	ALUM	FAC	3'-0"	7'-0"		5	ALUM	FAC	SEE 5/A4.40	SEE 4/A4.40	J6/J10		10
113	EE	SEC	FAC	6'-0"	7'-0"		4	SEC	FAC	H11	S2	J11		2, 5, 6, 12
113A	EE	SEC	FAC	6'-0"	7'-0"		4	SEC	FAC	SEE 5/A4.40	SEE 4/A4.40	J11		2, 5, 6, 12
114A	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	-	J1A		5, 9
114B	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	-	J1A		5, 9, 10
115	DD	ALUM	FAC	6'-0"	7'-0"	20 MIN	4	ALUM	FAC	H11	S2	J11		2, 9, 10, 11
115A	A	ALUM	FAC	3'-0"	7'-0"		1	ALUM	FAC	H6	SEE 4/A4.40	J6		4, 5, 10
116	AA	WD	STN	5'-0"	7'-0"		1	HM	PT	H1	-	J1		1, 9
117	AA	WD	STN	5'-0"	7'-0"		1	HM	PT	H1	-	J1		1, 9
118	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	S3	J1A		15
119	A	WD	STN	3'-0"	7'-0"	20 MIN	1	HM	PT	H1	S3	J1		14
120	A	HM	PT	3'-0"	7'-0"		1	HM	PT	H1	S4	J1A		9

HARDWARE SET: SEE SPECIFICATION SECTION 087100 HARDWARE

SIGN TYPE 01
TYPICAL ROOM ID

SIGN TYPE 02
EXIT ACCESS

SIGN TYPE 03
ASSEMBLY MAX OCCUPANCY



SIGN TYPE 04
ACCESSIBLE EXIT ACCESS

SIGN TYPE 05
ACCESSIBLE RESTROOM

SIGN TYPE 06
RESTROOM

SIGN TYPE 07
RESTROOM

1 **A5_TYPICAL SIGNAGE DETAILS**
3" = 1'-0"

GENERAL DOOR NOTES

1. ALL HARDWARE TO BE ACCESSIBLE AND COMPLY WITH ANSI A117.1-2009
2. PROVIDE CLOSERS & SMOKE SEALS ON ALL RATED DOORS
3. ABBREVIATION SEC ON DOOR SCHEDULE REFERS TO SECURITY ALUMINUM ENTRANCE SYSTEM PER SPECIFICATION SECTION 084213

DOOR SCHEDULE NOTES

1. (2) 2'-6" DOOR PANELS
2. (2) 3'-0" DOOR PANELS
3. MAGNETIC HOLD OPEN & TIED TO FIRE ALARM
4. EMERGENCY EXIT ONLY & TIED TO FIRE ALARM
5. ACCESS CONTROLLED DOOR
6. BULLET RESISTANT DOOR & FRAME
7. OVERHEAD COILING DOOR
8. SEE BID ALTERNATE ON SHEET A9.00
9. PROVIDE SIGN TYPE 01
10. PROVIDE SIGN TYPE 02
11. PROVIDE SIGN TYPE 03
12. PROVIDE SIGN TYPE 04
13. PROVIDE SIGN TYPE 05
14. PROVIDE SIGN TYPE 06
15. PROVIDE SIGN TYPE 07

WINDOW GENERAL NOTES

1. REFERENCE SHEET A6.20 FOR STOREFRONT DETAILS.
2. REFERENCE DOOR SCHEDULE FOR DOOR INFORMATION.
3. ALL DIMENSIONS SHOULD BE VERIFIED IN FIELD PRIOR TO FABRICATION

GLAZING TYPES

BRG	CLEAR INSULATED BULLET RESISTANT GLASS
CG	CLEAR GLASS
CT	CLEAR TEMPERED GLASS
CIG	CLEAR INSULATED GLASS
CIT	CLEAR INSULATED TEMPERED GLASS
LIG	LAMINATED INSULATED GLASS
SP	SPANDREL GLASS

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MEPF:
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NAZARETH, PA 18064
610-365-2436

SUBMISSIONS:

NO.	ISSUE DESCRIPTION	DATE
	BID DOCUMENTS	03/31/25
1	ADDENDUM #01	04/14/25

KEY PLAN:

REGISTRATION:

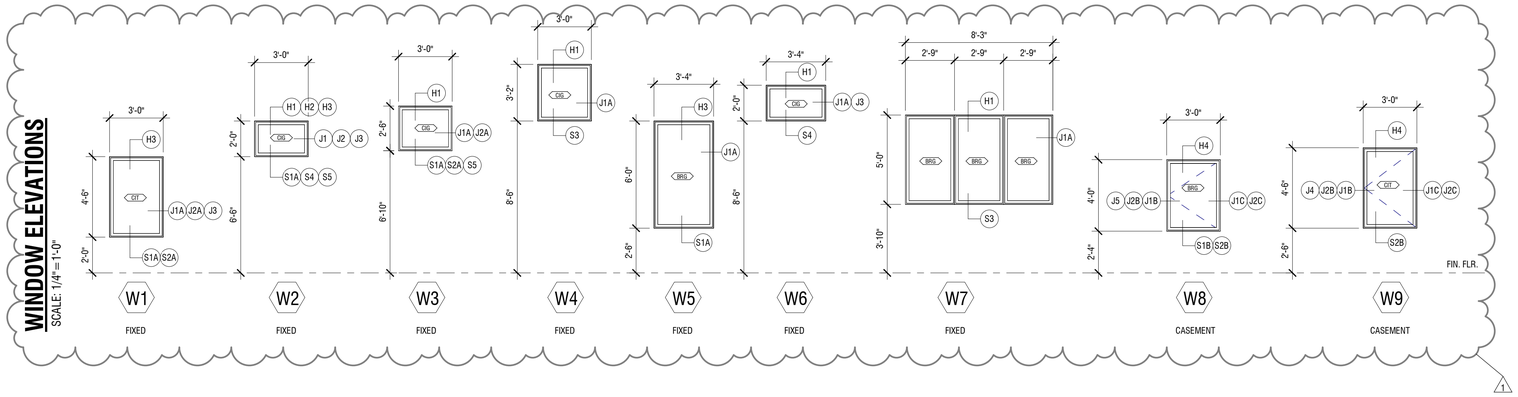
ALLOY5 ARCHITECTURE
530 WEST BROAD ST BETHLEHEM, PA 18018
610.419.4055

SHEET TITLE:
DOOR SCHEDULE & DETAILS

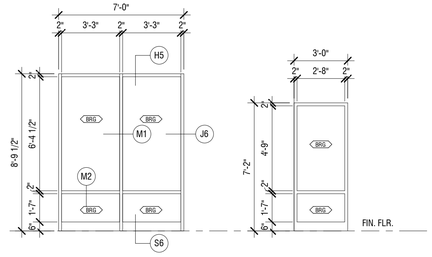
DATE: 03/31/2025
SCALE: As indicated
DRAWN BY: Author
CHECKED BY: Checker
PROJ NO: 22-0058

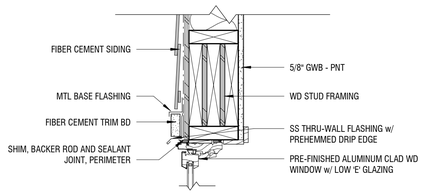
A6.00

WINDOW ELEVATIONS
SCALE: 1/4" = 1'-0"

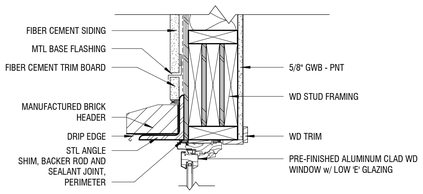


STOREFRONT ELEVATIONS
SCALE: 1/4" = 1'-0"

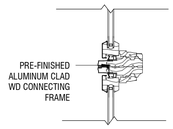




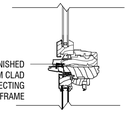
H1 12 / A4.40 FOR MORE INFORMATION



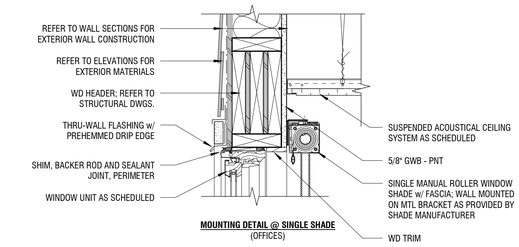
H2



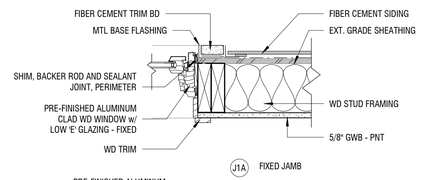
H3 S4 FIXED OVER FIXED



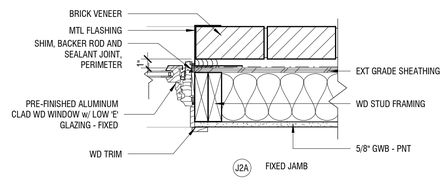
H4 S5 FIXED OVER CASEMENT



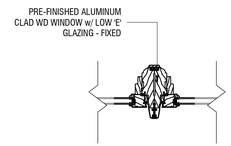
MOUNTING DETAIL @ SINGLE SHADE
(OFFICES)



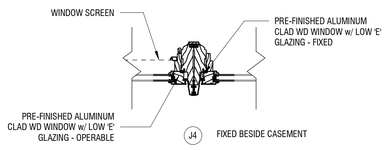
J1A FIXED JAMB



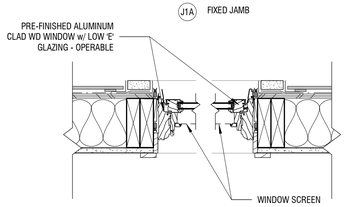
J2A FIXED JAMB



J3 FIXED BESIDE FIXED

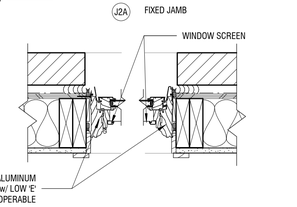


J4 FIXED BESIDE CASEMENT



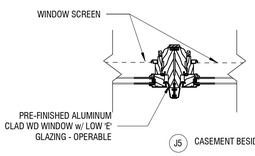
J1B LOCK JAMB
REFER TO J1A FOR NOTES

J1C HINGE JAMB
REFER TO J1A FOR NOTES

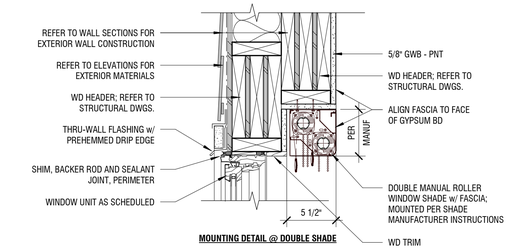


J2B LOCK JAMB
REFER TO J2A FOR NOTES

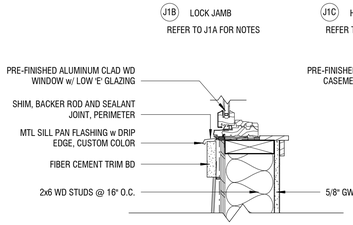
J2C HINGE JAMB
REFER TO J2A FOR NOTES



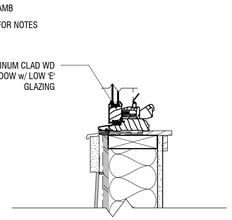
J5 CASEMENT BESIDE CASEMENT



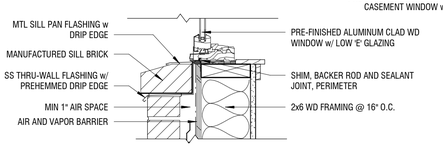
MOUNTING DETAIL @ DOUBLE SHADE



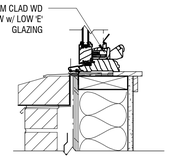
S1A 11 / A4.40 FOR MORE INFORMATION



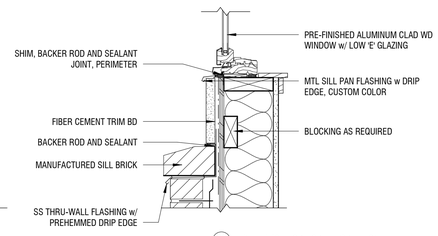
S1B CASEMENT
REFER TO S1A FOR NOTES



S2A 22 / A4.41 FOR MORE INFORMATION



S2B 22 / A4.41
REFER TO S2A FOR NOTES



S3 2 / A4.40 FOR MORE INFORMATION

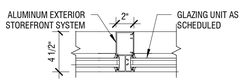
1 DETAIL - WINDOW SHADES
1 1/2" = 1'-0"

WINDOW GENERAL NOTES

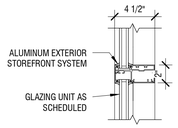
1. REFERENCE SHEET A6.20 FOR STOREFRONT DETAILS.
2. REFERENCE DOOR SCHEDULE FOR DOOR INFORMATION.
3. ALL DIMENSIONS SHOULD BE VERIFIED IN FIELD PRIOR TO FABRICATION

GLAZING TYPES

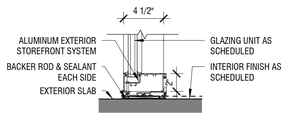
BRG	CLEAR INSULATED BULLET RESISTANT GLASS
CG	CLEAR GLASS
CT	CLEAR TEMPERED GLASS
CIG	CLEAR INSULATED GLASS
CIT	CLEAR INSULATED TEMPERED GLASS
LIG	LAMINATED INSULATED GLASS
SP	SPANDREL GLASS



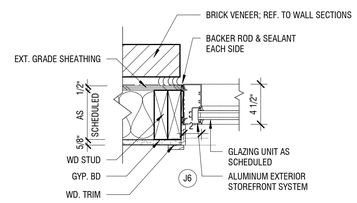
M1



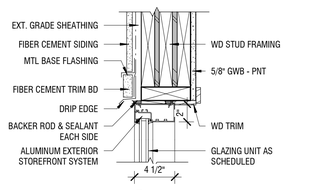
M2



S6



J6



H5 9 / A4.40 FOR MORE INFORMATION

WINDOW DETAILS
1 1/2" = 1'-0"

PROJECT:
ADMINISTRATION AND POLICE DEPARTMENT BUILDING

2290 GILBERTSVILLE ROAD
POTTSTOWN, PA 19464

OWNER:
UPPER POTTSGROVE TOWNSHIP

1409 FARMINGTON AVENUE
POTTSTOWN, PA 19464

PROJECT TEAM:

ARCHITECT:
ALLOY5
ARCHITECTURE

CIVIL:
CHESTER VALLEY ENGINEERS, INC.
112 MOORES ROAD
SUITE 200
MALVERN, PA 19355
610-644-4623

STRUCTURAL:
SLATE STRUCTURAL ENGINEERS
40 SOUTH MAIN STREET
NAZARETH, PA 18064
610-365-7634

MEPF:
PROJECTX DESIGN GROUP
2433 BLUEJAY DRIVE
NAZARETH, PA 18064
610-365-2436

SUBMISSIONS:

NO.	ISSUE DESCRIPTION	DATE
	BID DOCUMENTS	03/31/25
1	ADDENDUM #01	04/14/25

KEY PLAN:

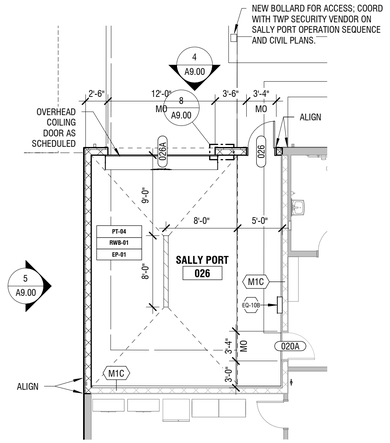
REGISTRATION:

ALLOY5
ARCHITECTURE
530 WEST BROAD ST BETHLEHEM, PA 18018
610.419.4055

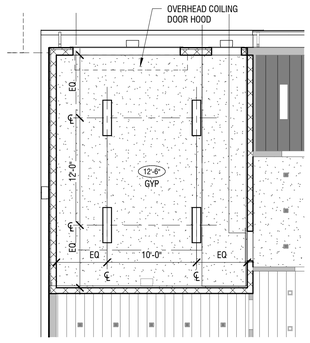
SHEET TITLE:
WINDOW TYPES AND DETAILS

DATE: 03/31/2025
SCALE: As indicated
DRAWN BY: Author
CHECKED BY: Checker
PROJ NO: 22-0058

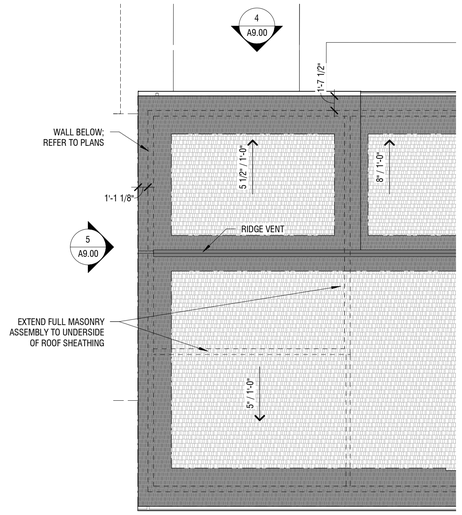
A6.20



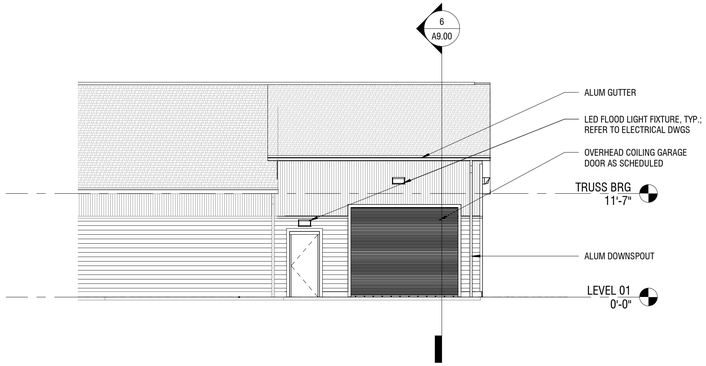
1 **FLOOR PLAN - BID ALT - SALLY PORT**
1/8" = 1'-0"



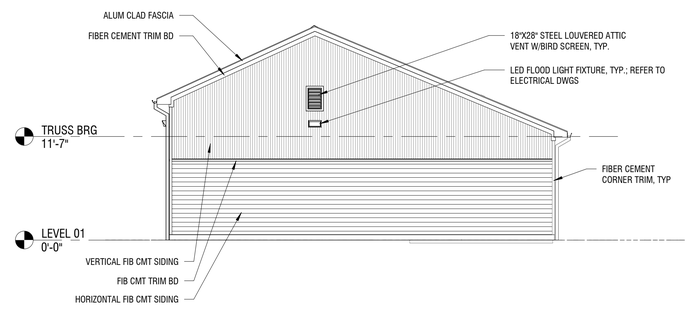
2 **RCP - BID ALT - SALLY PORT**
1/8" = 1'-0"



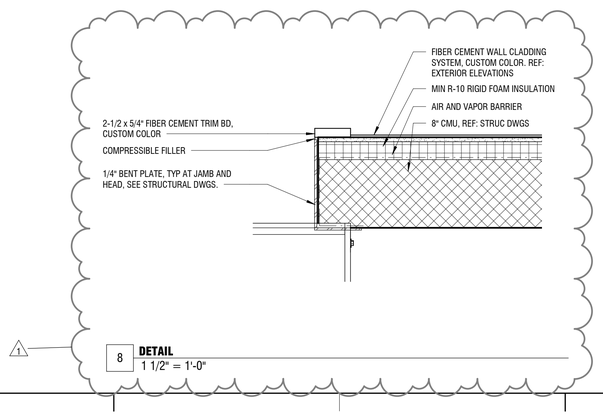
3 **TRUSS BRG - BID ALT - SALLY PORT**
1/8" = 1'-0"



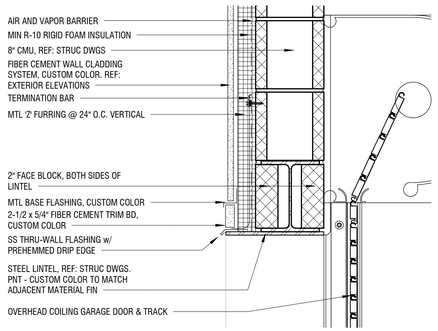
4 **PARTIAL EXTERIOR ELEVATION - WEST - BID ALT - SALLY PORT**
1/8" = 1'-0"



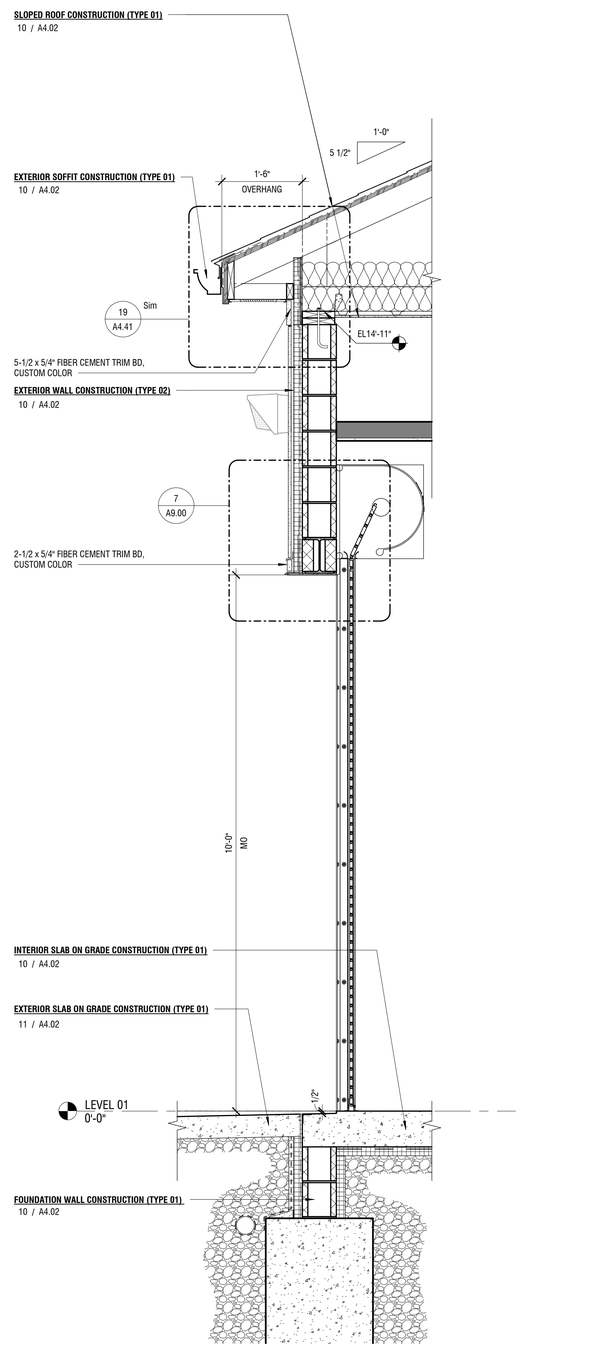
5 **PARTIAL EXTERIOR ELEVATION - SOUTH - BID ALT - SALLY PORT**
1/8" = 1'-0"



8 **DETAIL**
1 1/2" = 1'-0"



7 **DETAIL**
1 1/2" = 1'-0"



6 **WALL SECTION - BID ALT - SALLY PORT**
3/4" = 1'-0"

PROJECT:

ADMINISTRATION AND POLICE DEPARTMENT BUILDING

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POTTSTOWN, PA 19464

OWNER:

UPPER POTTSGROVE TOWNSHIP

1409 FARMINGTON AVENUE
POTTSTOWN, PA 19464

PROJECT TEAM:

ARCHITECT:
ALLOY5
ARCHITECTURE

CIVIL:
CHESTER VALLEY
ENGINEERS, INC.
112 MOORES ROAD
SUITE 200
MALVERN, PA 19355
610-644-4623

STRUCTURAL:
SLATE STRUCTURAL ENGINEERS
40 SOUTH MAIN STREET
NAZARETH, PA 18064
610-365-7634

MEPF:
PROJECTX DESIGN GROUP
2433 BLUEJAY DRIVE
NAZARETH, PA 18064
610-365-2436

SUBMISSIONS:

NO.	ISSUE DESCRIPTION	DATE
	BID DOCUMENTS	03/31/25
1	ADDENDUM #01	04/14/25

KEY PLAN:

REGISTRATION:

ALLOY5
ARCHITECTURE
530 WEST BROAD ST BETHLEHEM, PA 18018
610.419.4055

SHEET TITLE:

BID ALTERNATE - SALLY PORT

DATE: 03/31/2025
SCALE: As indicated
DRAWN BY: Author
CHECKED BY: Checker
PROJ NO: 22-0058

A9.00

PROJECTX DESIGN GROUP
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2433 BLUE JAY DRIVE
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TEL: 610-365-2436, 610-905-1195
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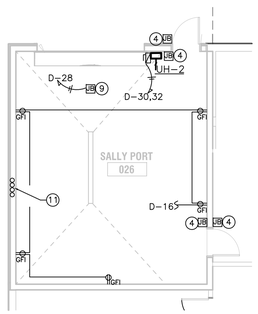
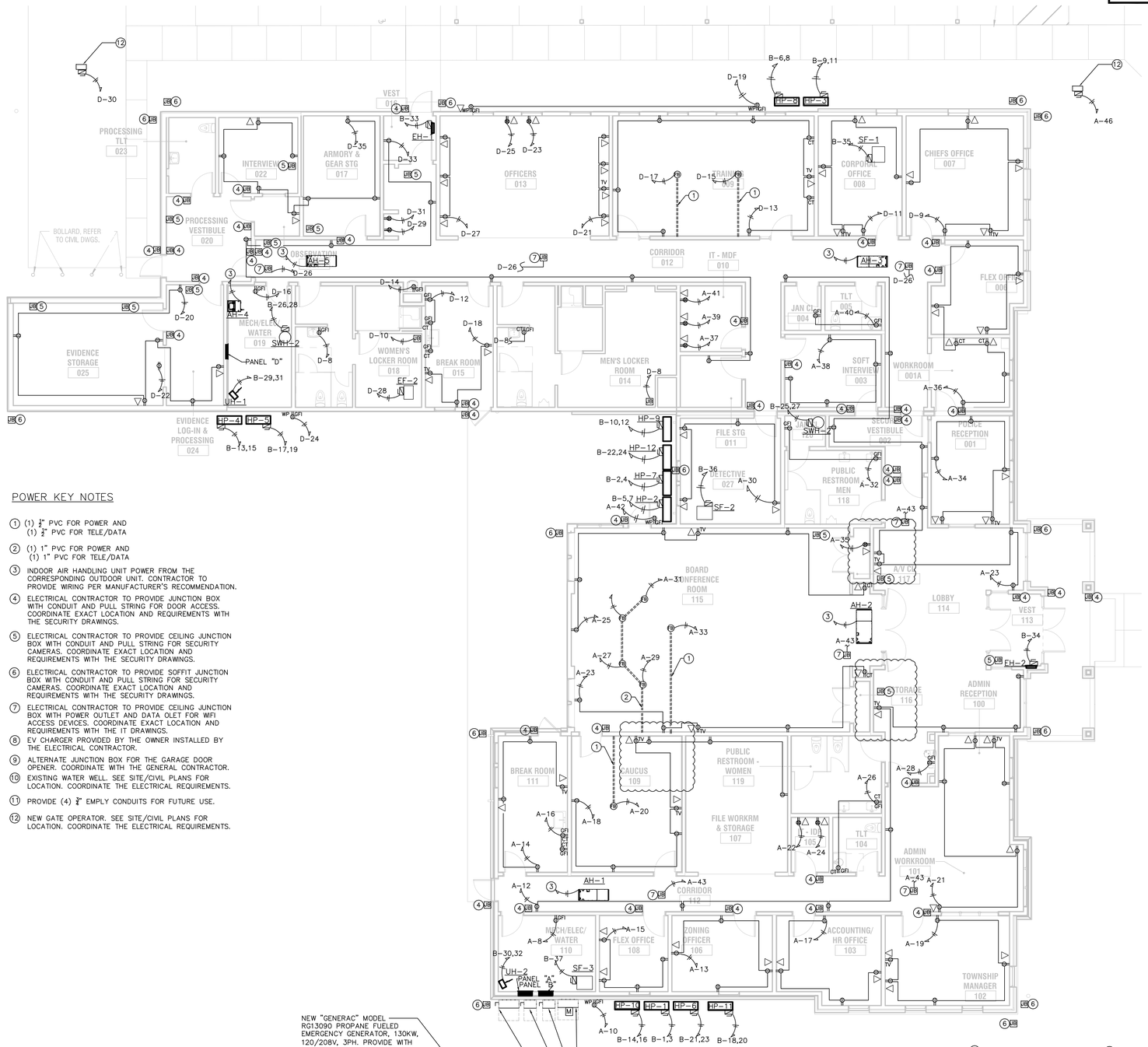
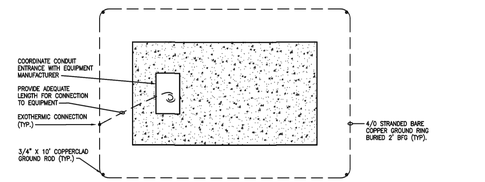


ALTERNATE SALLY PORT POWER PLAN
SCALE: ⅛"= 1'-0"



POWER KEY NOTES

1. (1) ¾" PVC FOR POWER AND (1) ½" PVC FOR TELE/DATA
2. (1) 1" PVC FOR POWER AND (1) 1" PVC FOR TELE/DATA
3. INDOOR AIR HANDLING UNIT POWER FROM THE CORRESPONDING OUTDOOR UNIT. CONTRACTOR TO PROVIDE WIRING PER MANUFACTURER'S RECOMMENDATION.
4. ELECTRICAL CONTRACTOR TO PROVIDE JUNCTION BOX WITH CONDUIT AND PULL STRING FOR DOOR ACCESS. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH THE SECURITY DRAWINGS.
5. ELECTRICAL CONTRACTOR TO PROVIDE CEILING JUNCTION BOX WITH CONDUIT AND PULL STRING FOR SECURITY CAMERAS. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH THE SECURITY DRAWINGS.
6. ELECTRICAL CONTRACTOR TO PROVIDE SOFFIT JUNCTION BOX WITH CONDUIT AND PULL STRING FOR SECURITY CAMERAS. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH THE SECURITY DRAWINGS.
7. ELECTRICAL CONTRACTOR TO PROVIDE CEILING JUNCTION BOX WITH POWER OUTLET AND DATA OLET FOR WIFI ACCESS DEVICES. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH THE IT DRAWINGS.
8. EV CHARGER PROVIDED BY THE OWNER INSTALLED BY THE ELECTRICAL CONTRACTOR.
9. ALTERNATE JUNCTION BOX FOR THE GARAGE DOOR OPENER. COORDINATE WITH THE GENERAL CONTRACTOR.
10. EXISTING WATER WELL. SEE SITE/CIVIL PLANS FOR LOCATION. COORDINATE THE ELECTRICAL REQUIREMENTS.
11. PROVIDE (4) 3" EMPLY CONDUITS FOR FUTURE USE.
12. NEW GATE OPERATOR. SEE SITE/CIVIL PLANS FOR LOCATION. COORDINATE THE ELECTRICAL REQUIREMENTS.



NOTES:
1. PROVIDE COMPLETE EQUIPMENT PAD EXCAVATION, TRENCHING, BACKFILL, CONCRETE WORK, CONDUITS, ASSOCIATED SITE RESTORATION, ETC.
2. DETAIL OF PAD IS INDICATED AS A BASIS FOR VAULT CONSTRUCTION. COORDINATE THE EXACT PAD SIZE AND CONSTRUCTION WITH THE EQUIPMENT MANUFACTURER AND THE ENGINEER APPROVED SHOP DRAWINGS.
3. PAD SHALL BE INSTALLED SMOOTH LEVEL. USE 95% COMPACTED 2B CRUSHED STONE (12" MIN. DEPTH) UNDER PAD.
4. PROVIDE EQUIPMENT PAD WITH 2" CHAMFER THAT IS 4" LARGER IN SIZE, ALL AROUND EQUIPMENT.
5. E.C. TO PROVIDE TRENCHING AND BACKFILL AROUND FOUNDATION FOR GROUND RING.
6. E.C. SHALL INSTALL GROUND RING AND SUFFICIENT SLACK GROUND CONDUCTORS FOR CONNECTION TO EQUIPMENT.

EMERGENCY GENERATOR PAD DETAIL
SCALE: NTS

NEW "GENERAC" MODEL RG13090 PROPANE FUELED EMERGENCY GENERATOR, 130KW, 120/208V, 3PH. PROVIDE WITH LEVEL 2 ACOUSTIC ENCLOSURE. NEW GENERATOR IS FURNISHED BY THE OWNER AND INSTALLED BY THE ELECTRICAL CONTRACTOR.

EMERGENCY GENERATOR CONCRETE PAD BY ELECTRICAL CONTRACTOR. COORDINATE WITH THE OWNER/VENDOR. SEE DETAIL ON THIS SHEET.

NEW 800A CT CABINET/UTILITY METER PER UTILITY COMPANY REQUIREMENTS.
NEW 600A 120/208V, 3PH DISCONNECT CONTRACTOR TO MARK AS SERVICE SHUT-OFF PER 2017 NEC 230.66.
NEW 200A 120/208V, 3PH DISCONNECT CONTRACTOR TO MARK AS SERVICE SHUT-OFF PER 2017 NEC 230.66.
NEW A.T.S. 120/208V, 3PH

POWER PLAN
SCALE: ⅛"= 1'-0"

PROJECT:

ADMINISTRATION AND POLICE DEPARTMENT BUILDING

2280 GILBERTSVILLE ROAD
POTTSTOWN, PA 19464

OWNER:

UPPER POTTSGROVE TOWNSHIP

1409 FARMINGTON AVENUE
POTTSTOWN, PA 19464

PROJECT TEAM:

ARCHITECT:
ALLOYS
ARCHITECTURE

CIVIL:
CHESTER VALLEY ENGINEERS, INC.
112 MOORES ROAD
SUITE 200
MALVERN, PA 19355
610-644-4623

STRUCTURAL:
SLATE STRUCTURAL ENGINEERS
40 SOUTH MAIN STREET
NAZARETH, PA 18064
610-365-7834

PROJECTX DESIGN GROUP
2433 BLUEJAY DRIVE
NAZARETH, PA 18064
610-365-2436

SUBMISSIONS:

NO.	ISSUE DESCRIPTION	DATE
	BID DOCUMENTS	03/28/25
	ADDENDUM #01	04/14/25

KEY PLAN:

REGISTRATION:

ALLOY5
ARCHITECTURE
530 WEST BROAD ST BETHLEHEM, PA 18018
610.419.4055

SHEET TITLE:

POWER PLAN

DATE:	03/31/2025
SCALE:	As Indicated
DRAWN BY:	
CHECKED BY:	
PROJ NO:	

E3.0

PROJECTX DESIGN GROUP
MEP CONSULTING
2433 BLUE JAY DRIVE
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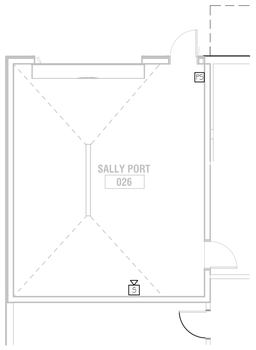
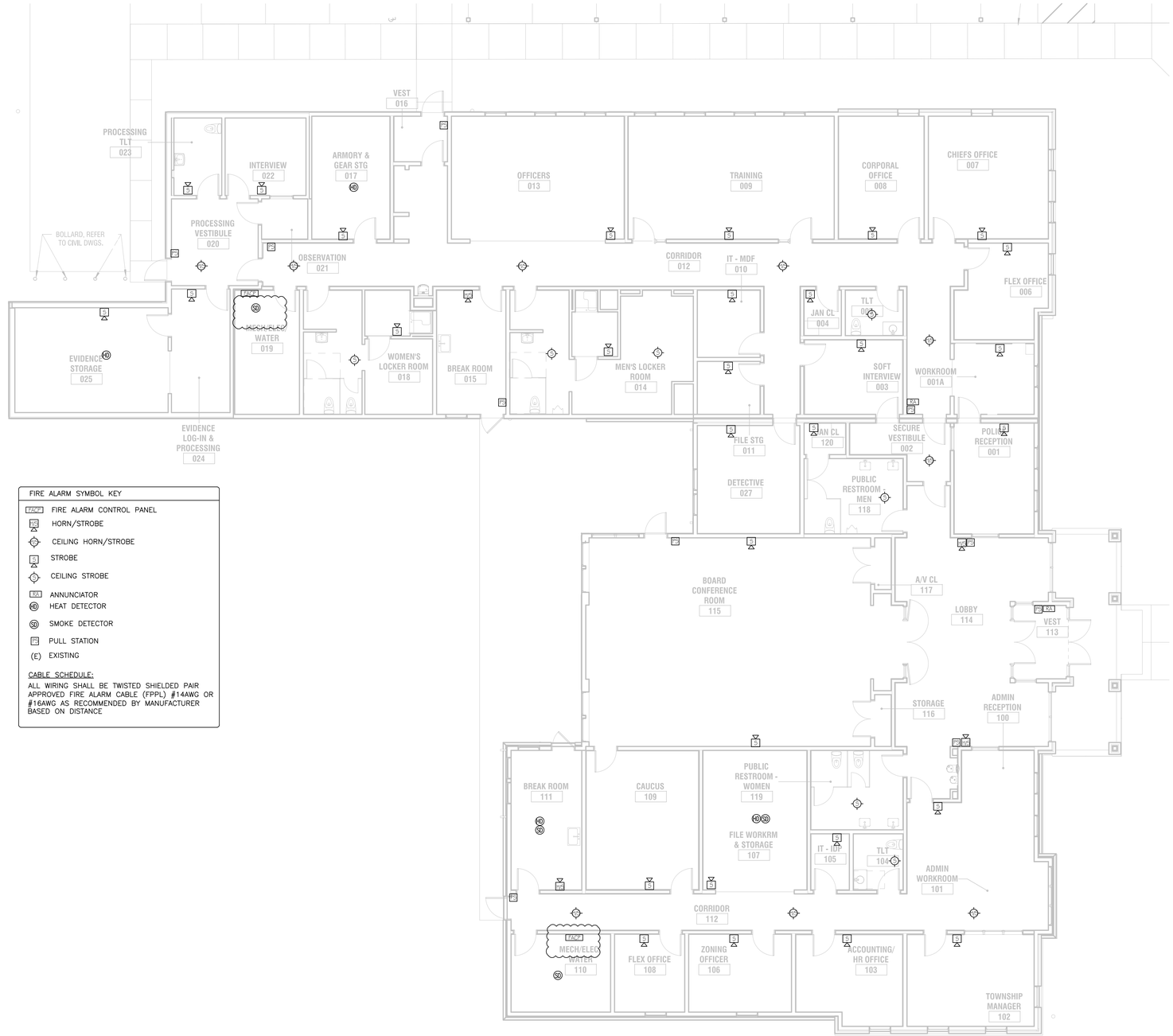
TEL: 610-365-2436, 610-905-1195
EMAIL: RAZGULEA@PROJECTXDG.COM



ALTERNATE SALLY PORT
FIRE ALARM PLAN
SCALE: ⅛"= 1'-0"



FIRE ALARM SYMBOL KEY	
FACP	FIRE ALARM CONTROL PANEL
H/S	HORN/STROBE
	CEILING HORN/STROBE
S	STROBE
	CEILING STROBE
ANN	ANNUNCIATOR
HD	HEAT DETECTOR
SD	SMOKE DETECTOR
PS	PULL STATION
(E)	EXISTING

CABLE SCHEDULE:
ALL WIRING SHALL BE TWISTED SHIELDED PAIR APPROVED FIRE ALARM CABLE (FPPL) #14AWG OR #16AWG AS RECOMMENDED BY MANUFACTURER BASED ON DISTANCE

FIRE ALARM PLAN
SCALE: ⅛"= 1'-0"

PROJECT:

ADMINISTRATION AND POLICE DEPARTMENT BUILDING

2280 GILBERTSVILLE ROAD
POTTSTOWN, PA 19464

OWNER:

UPPER POTTSGROVE TOWNSHIP

1409 FARMINGTON AVENUE
POTTSTOWN, PA 19464

PROJECT TEAM:

ARCHITECT:
ALLOYS
ARCHITECTURE

CIVIL:
CHESTER VALLEY ENGINEERS, INC.
112 MOORES ROAD
SUITE 200
MALVERN, PA 19355
610-644-4623

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40 SOUTH MAIN STREET
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610-365-2436

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KEY PLAN:

REGISTRATION:

ALLOY5
ARCHITECTURE
530 WEST BROAD ST BETHLEHEM, PA 18018
610.419.4055

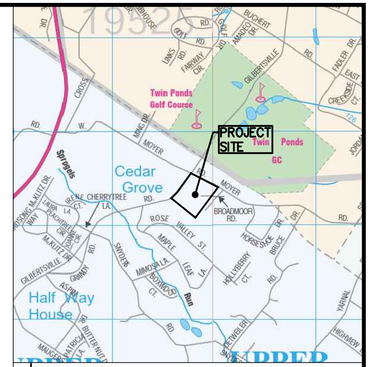
SHEET TITLE:

FIRE ALARM PLAN

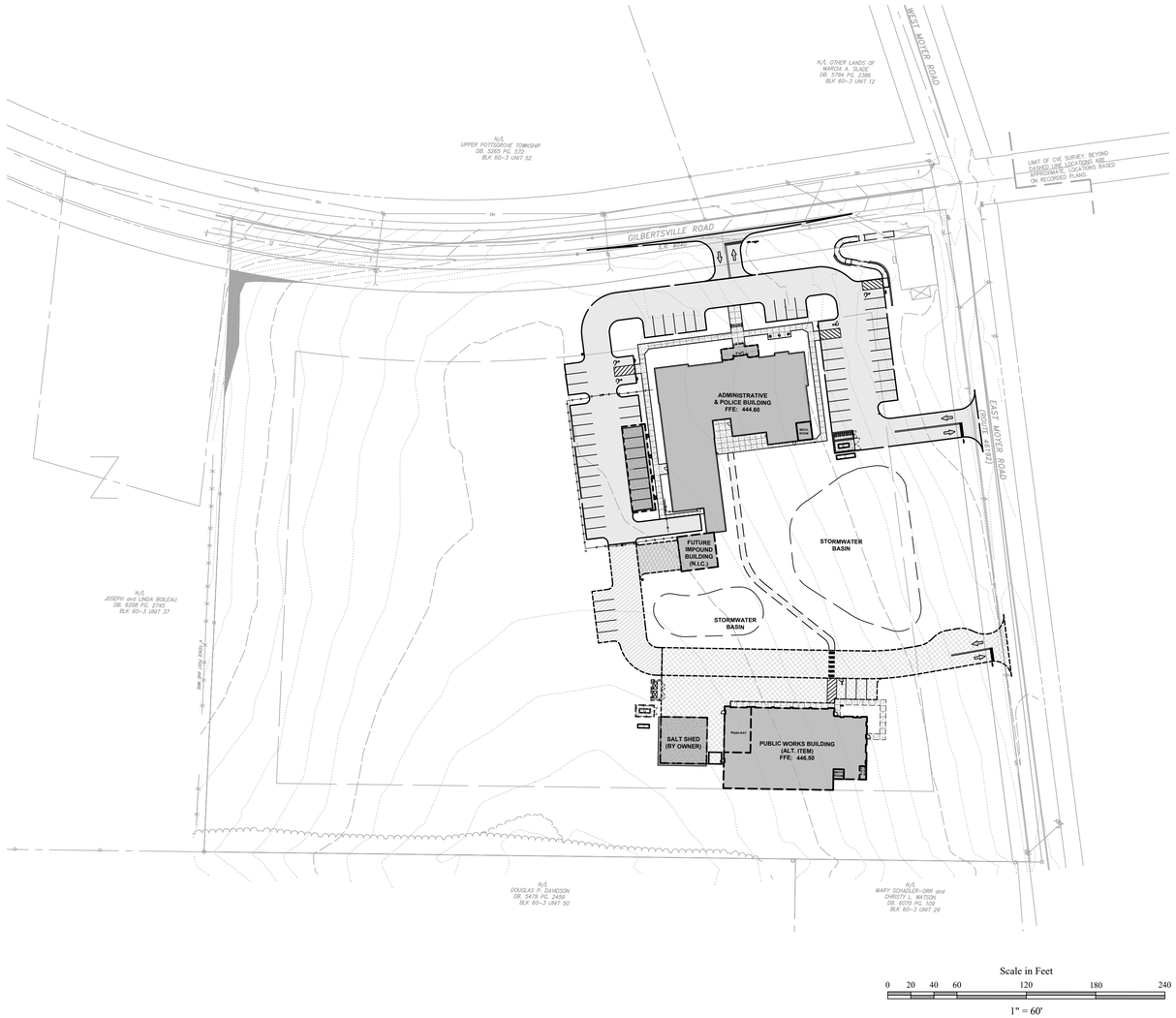
DATE: 03/31/2025
SCALE: As Indicated
DRAWN BY:
CHECKED BY:
PROJ NO:

E4.0

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA



LOCATION MAP SCALE: 1" = 2000'



Scale in Feet
0 20 40 60 120 180 240
1" = 60'

SHEET INDEX

SHEET NO.	LAST REVISED	TITLE
01	04/11/2025	COVER SHEET
02	04/11/2025	NOTES
03	04/11/2025	EXISTING FEATURES PLAN
04	04/11/2025	DEMOLITION PLAN
05	04/11/2025	SITE PLAN & DETAILS
06	04/11/2025	EROSION AND SEDIMENTATION CONTROL PLAN
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08	04/11/2025	EROSION AND SEDIMENTATION CONTROL DETAILS
09	04/11/2025	UTILITY PLAN
10	04/11/2025	UTILITY DETAILS (SANITARY)
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13	04/11/2025	GRADING/ STORMWATER MANAGEMENT PLAN
14	04/11/2025	PROFILES
15	04/11/2025	POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN
16	04/11/2025	POST-CONSTRUCTION STORMWATER MANAGEMENT NOTES/DETAILS
17	04/11/2025	POST-CONSTRUCTION STORMWATER MANAGEMENT DETAILS
18	04/11/2025	LANDSCAPE PLAN/ DETAILS
19	04/11/2025	LIGHTING PLAN/ NOTES
20	04/11/2025	LIGHTING DETAILS
21	04/11/2025	CONSTRUCTION DETAILS
22	04/11/2025	CONSTRUCTION DETAILS
23	04/11/2025	CONSTRUCTION DETAILS

(23 SHEETS TOTAL)

ChesterValley ENGINEERS, INC.
112 Moores Road, Suite 200,Malvern, PA 19355
610-644-4623 | 610-889-3143 Fax
www.chesterv.com

SITE ADDRESS:
2290 GILBERTSVILLE RD,
POTTSTOWN, PA 19464

OWNER:
UPPER POTTSGROVE TOWNSHIP
1409 FARMINGTON AVENUE,
POTTSTOWN , PA, 19464
PHONE - (610) 323-8675

CONSTRUCTION PLANS FOR
UPPER POTTSGROVE
MUNICIPAL COMPLEX
ISSUED: MARCH 31, 2025
LAST REVISED: APRIL 11, 2025
CVE PROJECT #: 22096-2000

PLANTING NOTES

1. THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANTS SHOWN ON THE THE DRAWINGS, AS SPECIFIED, AND IN QUANTITIES INDICATED ON THE PLANT LIST.
2. ALL PLANTS SHALL BE NURSERY GROWN.
3. ALL PLANTS SHALL BE IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION.
4. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OR GROWTH. THEY SHALL BE SOUND, HEALTHY AND VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF DISEASE AND INSECT PESTS, EGGS OR LARVAE. THEY SHALL HAVE HEALTHY, WELL DEVELOPED ROOT SYSTEMS.
5. SUBSTITUTIONS: WHEN PLANTS OF A SPECIFIED KIND OR SIZE ARE NOT AVAILABLE WITHIN A REASONABLE DISTANCE, SUBSTITUTIONS MAY BE MADE UPON REQUEST BY THE CONTRACTOR, IF APPROVED BY THE OWNER OR HIS REPRESENTATIVE AND THE TOWNSHIP. CONTRACTOR SHALL NOTIFY THE OWNER, IN WRITING OF ANY PLANT MATERIALS WHICH THEY FEEL WILL NOT BE AVAILABLE OR LIKELY TO THRIVE IN THE LOCATIONS INDICATED ON THE PLAN.
6. MEASUREMENT: DIMENSIONS OF TREES AND SHRUBS SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION.
7. SIZE: ALL PLANTS SHALL CONFORM TO THE MEASUREMENT SPECIFIED ON THE PLANT LIST, UNLESS AUTHORIZED IN WRITING BY AND THE TOWNSHIP LANDSCAPE ARCHITECT/ENGINEER.
8. BALLED AND BURLAPPED PLANTS SHALL BE DUG WITH FIRM NATURAL BALLS OF EARTH, OF DIAMETER AND DEPTH TO INCLUDE MOST OF THE FIBROUS ROOTS. CONTAINER GROWN STOCK SHALL HAVE BEEN GROWN IN A CONTAINER LONG ENOUGH FOR THE ROOT SYSTEM TO HAVE DEVELOPED SUFFICIENTLY TO HOLD ITS SOIL TOGETHER FIRM & WHOLE. NO PLANTS SHALL BE LOOSE IN THE CONTAINER.
9. PLANT MATERIALS NOT PLANTED THE DAY OF DELIVERY ARE TO BE HEALED IN SO THAT ROOT SYSTEMS ARE PROTECTED FROM THE DRYING FORCES OF THE WIND AND SUN. TEMPORARY WATER SYSTEMS ARE TO BE USED FOR PLANT MATERIALS WHICH WILL BE STORED FOR MORE THAN ONE WEEK.
10. THE TOWNSHIP LANDSCAPE ARCHITECT/ENGINEER SHALL BE NOTIFIED PRIOR TO BEGINNING PLANTING OPERATIONS, IN WRITING.
11. PLANTS WITH DAMAGED OR BROKEN ROOT BALLS OR EXCESSIVE DAMAGE TO THE CROWN AS DETERMINED BY THE TOWNSHIP LANDSCAPE ARCHITECT/ENGINEER WILL NOT BE ACCEPTED AND ARE TO BE REMOVED FROM THE SITE AND REPLACED WITH ACCEPTABLE MATERIAL.
12. TREE STAPLING SHALL BE INSTALLED ACCORDING TO THE PLANTING DETAILS. TREE STAPLES SHALL BE INSTALLED ON ALL DECIDUOUS AND EVERGREEN TREES. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ASSURING THAT TREES ARE MAINTAINED STRAIGHT AND UPRIGHT THROUGHOUT THE GUARANTEE PERIOD. THE TREE STAPLES REMAIN INSTALLED AS THEY WILL DETERIORATE WITHIN THE SUBGRADE.
13. EACH TREE AND SHRUB SHALL BE PRUNED IN ACCORDANCE WITH THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (ANLA) STANDARDS TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ONLY DEAD WOOD OR SUCKERS AND ALL BROKEN OR BADLY BRUISED BRANCHES SHALL BE REMOVED AT TIME OF PLANTING. TREES AND SHRUBS ARE TO BE PRUNED ONE YEAR AFTER PLANTING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PRUNE TREES AND SHRUBS AT THE APPROPRIATE TIME.
14. MULCH FOR TREES, SHRUBS AND GROUND COVER SHALL BE FINELY SHREDDED OAK BARK, DARK BROWN IN COLOR: AGED AT LEAST ONE YEAR AND CLEAN AND FREE OF WEEDS. PRE-EMERGENT WEED KILLER SHALL BE 'TREFLAN' OR APPROVED EQUAL. APPLY WEED KILLER TO TOPSOIL PRIOR TO MULCHING BED PLANTINGS. ALL SHRUBS TO BE PLANTED IN CONTINUOUS BEDS UNLESS OTHERWISE NOTED. ALL SHRUB BEDS TO RECEIVE 3" DEEP CONTINUOUS MULCH COVER. MULCH MAY NOT TOUCH THE TRUNKS OF TREES OR THE MAIN STEMS OF SHRUBS.
15. TREES IN LEAF WHEN PLANTED SHALL BE TREATED WITH ANTI-DESICANT SUCH AS WILT-PROOF.
16. PREPARATION OF PLANTING SOIL - BEFORE MIXING, CLEAN TOPSOIL OF ROOTS, PLANTS, STONES, CLAY LUMPS, AND OTHER EXTRANEOUS MATERIALS HARMFUL OR TOXIC TO PLANT GROWTH. SOIL (BACKFILL) FOR TREES, SHRUBS, AND GROUNDCOVER SHALL BE A MIXTURE BY VOLUME OF THE FOLLOWING MATERIALS IN QUANTITIES SPECIFIED: 20% PEAT MOSS, 75% TOPSOIL AND 5% ORGANIC MATTER. ADD AN ORGANIC FERTILIZER TO THE ABOVE MIXTURE AT THE RATES SPECIFIED BY THE MANUFACTURER, FOR NEW TREES AND SHRUBS.
17. WARRANT TREES AND SHRUBS FOR A PERIOD OF 12 MONTHS AFTER WRITTEN DATE OF ACCEPTANCE BY THE TOWNSHIP LANDSCAPE ARCHITECT AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH. PLANTS THAT DIE DURING THE WARRANTY PERIOD SHALL BE REMOVED IMMEDIATELY. REPLACEMENTS SHALL BE PLACED UNDER WARRANTY AN ADDITIONAL 12 MONTH PERIOD. A PLANT SHALL BE CONSIDERED DEAD IF 25% OR MORE OF THE PLANT HAS DIED.
18. CONDITIONS DETRIMENTAL TO PLANTS: THE CONTRACTOR SHALL NOTIFY THE PROJECT REPRESENTATIVE AND THE TOWNSHIP ENGINEER IN WRITING OF ALL SOIL OR DRAINAGE CONDITIONS WHICH THE CONTRACTOR CONSIDERS DETRIMENTAL TO THE GROWTH OF PLANTS. HE SHALL STATE THE CONDITIONS AND SUBMIT A PROPOSAL FOR CORRECTING THE CONDITIONS, INCLUDING ANY CHANGE IN COST FOR REVIEW AND ACCEPTANCE BY THE PROJECT REPRESENTATIVE.
19. MINOR ADJUSTMENTS TO TREE LOCATION MAY BE NECESSARY DUE TO FIELD CONDITIONS AND FINAL GRADING. THE CONTRACTOR SHALL NOTIFY THE TOWNSHIP'S REPRESENTATIVE IF MAJOR ADJUSTMENTS ARE REQUIRED.
20. TOPSOIL SHALL BE REPLACED AT A THICKNESS OF APPROXIMATELY EIGHT (8) INCHES. MINIMUM OF SIX (6) INCHES IN ALL NEWLY ESTABLISHED LAWN AREAS AND A MINIMUM OF TWELVE (12) INCHES IN FOUNDATION PLANTING AREAS. THE MATERIAL MUST MEET THE REQUIREMENTS OF THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION FORM 408 SPECIFICATIONS, AS AMENDED. ANY EXCAVATED ROCK DUE TO LANDSCAPE INSTALLATION MUST BE DISPOSED OF OFF SITE.
21. THE CONTRACTOR SHALL CONTACT THE TOWNSHIP IN WRITING TO REQUEST A FINAL INSPECTION FOR ACCEPTANCE AT THE END OF THE GUARANTEE PERIOD. THESE INSPECTIONS WILL BE PERFORMED WHEN MATERIALS ARE IN FULL LEAF ONLY (MAY 1 THROUGH NOVEMBER 15). ALL GUARANTEE ESCROW FUNDS WILL BE RELEASED UPON ACCEPTANCE AT THE END OF THE GUARANTEE PERIOD. THE GUARANTEE WILL BE EXTENDED UNTIL THIRTY (30) DAYS AFTER RECEIPT OF THE REQUEST LETTER FOLLOWING MAY 1. SHOULD THE END OF THE GUARANTEE PERIOD OCCUR AFTER NOVEMBER 15, THE GUARANTEE SHALL BE EXTENDED TO MAY 15.
22. PERMANENT SEED MIX SHALL BE AS NOTED ON EROSION AND SEDIMENTATION NOTES. THE FALL PLANTING SEASON SHALL EXTEND FROM SEPTEMBER 1 TO OCTOBER 15. THE SPRING PLANTING SEASON SHALL EXTEND FROM APRIL 1 TO MAY 15.

CONSTRUCTION NOTES

1. WORK IN THE SITEWORK CONSTRUCTION CONTRACT INCLUDES ALL LABOR, MATERIALS EQUIPMENT, AND SERVICES NECESSARY FOR THE CIVIL CONSTRUCTION. WORK SHALL BE DEFINED IN THE CIVIL (C-SERIES) AND HIGHWAY OCCUPANCY PERMIT (HOP) DRAWINGS, AS DESCRIBED IN THE GENERAL CONDITIONS AND SPECIFICATIONS DIVISIONS 01, 31, 32, AND 33. WORK OF THIS CONTRACT INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:
   - 1.1. SITE PREPARATION, INCLUDING CLEARING, EARTHWORK, DEMOLITION, AND GRADING.
   - 1.2. IMPORT AND/OR EXPORT OF FILL MATERIAL.
   - 1.2.1. THIS INCLUDES LOADING, HAULING, INSTALLATION, IMPORT, EXPORT, AND DISPOSAL OF FILL MATERIAL LOCATED ON THE FARM PROPERTY ACROSS MOYER ROAD AT THE EVANS SITE.
   - 1.2.2. THIS INCLUDES IMPORT OF FILL MATERIAL TO THE EVANS SITE, AND EXPORT OF FILL MATERIAL FROM THE GILBERTSVILLE SITE. SITE CONTRACTOR IS RESPONSIBLE FOR TEMPORARILY STOCKPILING APPROXIMATELY 3,800CY OF MATERIAL AND THE APPROPRIATE E&S MEASURES AT THE GILBERTSVILLE SITE AS SHOWN ON THE CVE CIVIL PLANS. IN LATE FALL OR WINTER, AS DIRECTED BY THE CONSTRUCTION MANAGER, THE SITE CONTRACTOR IS RESPONSIBLE FOR LOADING, HAULING AND DUMPING ALL MATERIAL TO 370 EVANS ROAD, POTTSTOWN, PA.
   - 1.3. SITE IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO, ROADWAYS, PARKING LOTS, PEDESTRIAN PAVING WHERE NOT ASSIGNED TO THE GC, SITE DEVELOPMENT FURNISHINGS, EQUIPMENT, AND LANDSCAPING. ALL CURBS, ISLANDS, ACCESS ROADS, RETAINING WALLS, FENCING, OPERABLE GATES, RAIN GARDENS, UTILITY INSTALLATION UP TO WITHIN 5 FEET OF THE BUILDING.
   - 1.4. ESTABLISHMENT OF BUILDING PAD TO BE PROVIDED AT FINISH FLOOR MINUS CONCRETE STAB AND STONE THICKNESS.
   - 1.5. SANITARY, STORM, AND WATER PIPING TO WITHIN 5 FEET OUTSIDE THE BUILDING FOOTPRINT, INCLUDING EXCAVATION, PATCHING IF REQUIRED, AND BACKFILL.
   - 1.6. AQUA AMERICA WILL INSTALL THE PROPOSED COPPER WATER SUPPLY PIPE, LOCATED BETWEEN THE CONNECTION WITH THE MAIN AND THE PROPOSED WATER METER, ALONG WITH MAKING THE CONNECTION AT THE MAIN. THE SITE CONTRACTOR SHALL PERFORM ALL OTHER WATER RELATED UTILITY WORK IN SUPPORT OF AQUA AMERICA'S WORK INCLUDING BUT NOT LIMITED TO: ROADWAY AND NON-ROADWAY EXCAVATION/REPAIR, METER PIT/BACKFLOW PREVENTER INSTALLATION, AND ALL ON SITE WATER COMPONENTS. SITE CONTRACTOR WILL BE RE-SPONSIBLE FOR ALL SAW CUTTING, TRENCH EXCAVATION, BACKFILLING OF TRENCH, AND RESTORE EITHER IN GRASS OR PAVED AREAS FROM THE MAIN CONNECTION TO THE METER PIT. THE SITE CONTRACTOR IS RESPONSIBLE FOR FULL INSTALLATION METHODS OF THE WATER FROM THE METER PIT TO 5 FEET FROM THE BUILDING
2. 2. THE PUBLIC WORKS AND IMPOUND BUILDINGS, ALONG WITH THE ASSOCIATED ENTRY DRIVE AND PARKING LOT, ARE DESIGNATED AS ALTERNATE BID ITEMS; HOWEVER, ALL UTILITIES, STORMWATER MANAGEMENT FACILITIES, AND FINAL GRADING SHALL BE COMPLETED AS PART OF THE BASE BID.
3. ALL CONTRACTORS 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, FOR RESOLUTION.
4. COST OF BUILDING REPAIRS ASSESSED TO CONTRACTOR RESPONSIBLE FOR BUILDING & FACADE DAMAGE DURING CONSTRUCTION.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SUBMIT SEALED DRAWINGS AND CALCULATIONS FOR THE RETAINING WALL TO THE TOWNSHIP AND LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL. ALL SUCH DOCUMENTS SHALL BE SEALED BY A PENNSYLVANIA-LICENSED STRUCTURAL ENGINEER.

DEMOLITION NOTES:

1. REMOVAL OF EXISTING SANITARY INCLUDES THE REMOVAL OF THE ENTIRE SEPTIC SYSTEM AND ANY UNSUITABLE SOILS.
2. 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.
3. IF REQUIRED, CONTRACTOR IS RESPONSIBLE FOR GRADE ADJUSTMENT OF ALL SURFACE UTILITIES, INCLUDING BUT NOT LIMITED TO VALVES, LIDS, GRATES, RIMS, CAPS, STORM AND SANAITARY 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. DEMOLITION OF TREES AND OTHER VEGETATION INCLUDES REMOVAL OF ALL STUMPS AND ROOT SYSTEMS WITHIN 24" OF EXISTING GRADE.

GRADING NOTES:

1. ALL GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THE APPROVED PLANS.
2. ADA RAMP TO EXISTING RESIDENCE IS AN ALTERNATE ITEM. IF NOT SELECTED, A 3:1 FILL SLOPE AND SWALE AT BUILDING SHALL BE INSTALLED AS PART OF THE BASE BID.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTING SITE AND SUBSURFACE CONDITIONS PRIOR TO PROCEEDING AND WHILE PROGRESSING WITH THE WORK.
4. CLASSIFICATION OF EXCAVATION: IF ROCK AS HEREIN DEFINED, IS ENCOUNTERED WITHIN THE LIMITS OF EXCAVATION, THE CONTRACT PRICE WILL BE ADJUSTED UPON AN AGREED UNIT PRICE PER CUBIC YARD AND INFORM THE TOWNSHIP REPRESENTATIVE IMMEDIATELY. ROCK EXCAVATION WILL CONSIST OF THE REMOVAL AND DISPOSAL OF BOULDERS ONE CUBIC YARD OR MORE IN VOLUME; SOLID ROCK; MATERIALS THAT CANNOT BE REMOVED WITHOUT SYSTEMATIC DRILLING AND BLASTING SUCH AS ROCK MATERIAL IN LEDGES OR AGGREGATE CONGLOMERATE DEPOSITS THAT ARE SO FIRMLY CEMENTED AS TO POSSESS THE CHARACTERISTICS OF SOLID ROCK; AND CONCRETE OR MASONRY STRUCTURES EXCEEDING ONE CUBIC YARD IN VOLUME, EXCEPT SIDEWALKS AND PAVING.
5. HARD AND COMPACT MATERIALS SUCH AS CEMENTED-GRAVEL, GLACIAL TILL, AND RELATIVELY SOFT OR DISINTEGRATED ROCK THAT CAN BE REMOVED WITHOUT CONTINUOUS AND SYSTEMATIC DRILLING AND BLASTING WILL NOT BE CONSIDERED AS ROCK EXCAVATION. ROCK EXCAVATION WILL NOT BE CONSIDERED SUCH BECAUSE OF INTERMITTENT DRILLING AND BLASTING THAT IS PERFORMED MERELY TO INCREASE PRODUCTION. EXCAVATION OF THE MATERIAL CLAIMED AS ROCK WILL NOT BE PERFORMED UNTIL THE MATERIAL HAS BEEN CROSS-SECTIONED AND CLASSIFIED BY THE ENGINEER.
6. ALL PROPOSED SLOPES SHALL BE ROUNDED INTO THE EXISTING TERRAIN TO PRODUCE A CONTOURED TRANSITION FROM CUT OR FILL FACES TO NATURAL GROUND AND ABUTTING CUT OR FILL SURFACES.
7. ALL PROPOSED CONTOUR GRADES AND SPOT ELEVATIONS SHOWN ARE TO TOP OF PAVING, FINISHED FLOOR OR FINISH GRADE IN LANDSCAPED AREAS.

PA ONE CALL OWNERS LIST:

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:762 LANCASTER AVE.
BRYN MAWR, PA. 19010
CONTACT:THOMAS WADDY
EMAIL:TBWADDY@AQUAAMERICA.COM
PHONE:610-525-1400 EXT. 52105

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:FIRSTENERGY CORPORATION
ADDRESS:21 S MAIN ST.
AKRON, OH. 44308
CONTACT:MELLYSSA ADAMS
EMAIL:MADAMS@FIRSTENERGYCORP.COM
PHONE:330-604-4073

COMPANY:UGI UTILITIES INC
ADDRESS:225 MORGANTOWN RD.
READING, PA. 19611
CONTACT:KURT ZIELASKOWSKI
EMAIL:KZIELASKOWSKI@UGI.COM
PHONE:610-736-5571

COMPANY:UPPER POTTSGROVE TOWNSHIP
ADDRESS:1409 FARMINGTON AVE.
POTTSTOWN, PA. 19464
CONTACT:KEVIN SNYDER
EMAIL:PUBLICWORKS@UPTOWNSHIP.ORG
PHONE:610-326-9938

LEGENDS

PROPOSED GRADING FEATURES

- PROPOSED SPOT ELEVATION (× 443.50)
- PROPOSED SLOPE (2%)
- PROPOSED 1' CONTOURS (443)
- PROPOSED 5' CONTOURS (445)

PROPOSED STORMWATER FEATURES

- PROPOSED STORM PIPE
- PROPOSED YARD DRAIN
- PROPOSED TYPE 'M' INLET BOX
- PROPOSED TRENCH DRAIN
- PROPOSED STORM MANHOLE
- PROPOSED FLARED END SECTION & RIPRAP APRON

PROPOSED LANDSCAPING FEATURES

- PROPOSED DECIDUOUS TREE
- PROPOSED EVERGREEN TREE
- PROPOSED SHRUB
- PROPOSED PERENNIAL & GRASS

LIGHTING LEGEND

- SITE LIGHT POLE
- ORNAMENTAL LIGHT POLE
- WALL SCONCE LIGHT
- BOLLARD LIGHT
- 2" PVC ELECTRIC CONDUIT (c)
- ELECTRIC PULL BOX

PROPOSED UTILITY FEATURES

- PROPOSED WATER LINE (W)
- PROPOSED SANITARY LINE (S)
- PROPOSED ELECTRIC LINE (E)
- PROPOSED GAS LINE (G)
- PROPOSED XFMR VAULT
- PROPOSED GENERATOR (G)
- PROPOSED PROPANE TANK (P)

EXISTING FEATURES

- EXISTING 1' CONTOURS (201)
- EXISTING 5' CONTOURS (205)
- EXISTING SPOT ELEVATION (× 212.20)
- EXISTING PROPERTY BOUNDARY
- EXISTING RIGHT OF WAY (LEGAL R/W)
- BUILDING SETBACK
- EXISTING FENCE LINE
- EXISTING EDGE OF PAVING (E.O.P.)
- SOILS LINE AND DESCRIPTION (EcB2 / BdA)
- EXISTING OVERHEAD WIRES (OH)
- EXISTING WATER LINE (W)
- EXISTING HDPE PIPE
- EXISTING WETLAND BOUNDARY (WL)
- EXISTING FIRE HYDRANT
- EXISTING INLETS
- EXISTING UTILITY POLE
- EXISTING TRAFFIC CONTROL SIGNS
- INFILTRATION TESTING LOCATION (TP1)
- EXISTING DECIDUOUS TREE
- EXISTING CONIFEROUS TREE
- EDGE OF BRUSH
- EXISTING MANHOLE (SAN, STORM, GAS, WATER, WATER, ELECTRIC, TELEPHONE, ETC.)
- STEEP SLOPES 15–>

PROPOSED DEMOLITION FEATURES

- EXISTING PAVING TO BE DEMOLISHED
- EXISTING PLANTS TO BE DEMOLISHED

PROPOSED SITE FEATURES

- PROPOSED STANDARD ASPHALT PAVING
- PROPOSED STANDARD BITUMINOUS PAVEMENT (ALT. ITEM)
- PROPOSED HEAVY DUTY BITUMINOUS PAVEMENT (ALT. ITEM)
- FUTURE STANDARD BITUMINOUS PAVEMENT (N.I.C.)
- PROPOSED CONCRETE PAVING
- PROPOSED BUILDING
- PROPOSED PARKING OVERHANG
- PROPOSED PATIO
- PROPOSED PAVEMENT MARKING
- PROPOSED FENCE/GATE
- PROPOSED SPARE CONDUIT
- PROPOSED DRIVE PAVEMENT MARKING
- PROPOSED DUMPSTER
- PROPOSED SIGN
- PROPOSED WHEEL STOP
- PROPOSED HANDICAP MARKING
- PROPOSED BOLLARD
- PROPOSED FLAG POLE
- PARKING STALL QUANTITY (1)
- FUTURE E.V. CHARGING STATION
- PROPOSED POLICE PARKING ACCESS KEY PAD

PROPOSED E&S FEATURES

- PROPOSED CONSTRUCTION ENTRANCE
- PROPOSED CONCRETE WASHOUT
- PROPOSED TEMPORARY TOPSOIL STOCKPILE
- PROPOSED EROSION CONTROL BLANKET
- PROPOSED LIMIT OF DISTURBANCE (LOD)
- NPDES PROJECT SITE AREA
- PROPOSED TREE PROTECTION FENCE/ ORANGE CONSTRUCTION FENCE
- PROPOSED COMPOST FILTER SOCK
- PROPOSED INLET PROTECTION
- PROPOSED TEMPORARY INLET SEAL
- DISCHARGE POINT (SP 001)

ITEMS INCLUDED IN 04/11/2025 REVISIONS:

– LIGHTING LEGEND ITEMS ADDED

NOTES

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX
2290 GILBERTSVILLE ROAD
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

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

PROJECT NO. 22096-2000
F.B.

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
As Noted	03/31/2025	HL	AG	

MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

PENNSYLVANIA ACT 187 REQUIREMENTS
UNDERGROUND UTILITIES SERIAL NOs. 20243300770
CHESTER VALLEY ENGINEERS, INC. DOES NOT GUARANTEE THE ACCURACY OF THE LOCATIONS 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 UNITED STATES DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION PUBLICATIONS OR THE LATEST REVISIONS THERETO:

(1) CONSTRUCTION INDUSTRY STANDARDS AND INTERPRETATIONS (OSHA 2207), SUBPART "P", PART 1926/1910 – "EXCAVATIONS, TRENCHING AND SHORING".

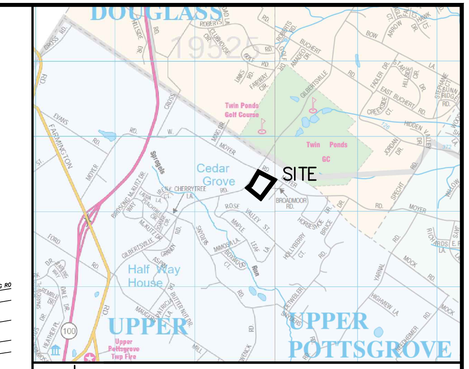
(2) "EXCAVATIONS AND TRENCHING OPERATIONS" (OSHA 2226) DATED 1985 (REVISED).

PENNSYLVANIA ONE CALL SYSTEM, INC.
CALL 3 WORKING DAYS BEFORE YOU DIG
1-800-242-1776
POCS SERIAL NUMBER: 20243300770

SEE SHEET 02 FOR FACILITY OWNER'S DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.

REFERENCE PLANS

1. PLAN OF PROPERTY FOR HOFFMAN, WALSH AND BOYLES(SLADE) OF PARCEL ID#60-00-01093-00-8, BLOCK 3 UNIT 12. PREPARED BY ASTON SURVEYORS/ENGINEERS, INC. DATED AUGUST 6,2008.
2. BROADMOOR RIDGE SUBDIVISION PLAN PREPARED FOR JOSEPH I. KULP, JR. PREPARED BY RALPH E. SHANER & SON ENGINEERING CO. DATED MARCH 3. 1994 AND RECORDED IN THE OFFICE FOR RECORDING OF DEEDS IN MONTGOMERY COUNTY IN PLAN BOOK A55 PAGE 93.
3. APPROXIMATE EXISTING SANITARY SEWER DATA GRAPHICALLY SHOWN ON WEST MOYER ROAD OBTAINED FROM A PLAN PREPARED BY LTL CONSULTANTS, LTD. (DATED AUGUST 2020).
4. APPROXIMATE EXISTING WATER MAIN DATA GRAPHICALLY SHOWN ON GILBERTSVILLE ROAD, OBTAINED FROM A PLAN BY CONVER AND SMITH ENGINEERING, INC. (PLAN NO. C-07-004 SHEET 03 AND 04 DATED MARCH 13, 2008).



LOCATION MAP
SCALE 1"=2000'

EXISTING FEATURES LEGEND

- 201 — EXISTING 1' CONTOURS
- 205 — EXISTING 5' CONTOURS
- × 212.20 — EXISTING SPOT ELEVATION
- EXISTING PROPERTY BOUNDARY
- EXISTING RIGHT OF WAY (LEGAL R/W)
- BUILDING SETBACK
- EXISTING FENCE LINE
- E.O.P. — EXISTING EDGE OF PAVING
- EcB2 / BdA — SOILS LINE AND DESCRIPTION
- OH — EXISTING OVERHEAD WIRES
- W — EXISTING WATER LINE
- EXISTING HDPE PIPE
- WL — WL — EXISTING WETLAND BOUNDARY
- EXISTING FIRE HYDRANT
- EXISTING INLETS
- EXISTING UTILITY POLE
- EXISTING TRAFFIC CONTROL SIGNS
- TP1 — INFILTRATION TESTING LOCATION
- EXISTING DECIDUOUS TREE
- EXISTING CONIFEROUS TREE
- EDGE OF BRUSH
- EXISTING MANHOLE (SAN, STORM, GAS, WATER, WATER, ELECTRIC, TELEPHONE, ETC.)
- STEEP SLOPES 15->

NOTES:

BEING MONTGOMERY COUNTY UPI #23-5-22
2290 GILBERTSVILLE ROAD, POTTSTOWN, PA. 19464.

1. DEED REFERENCE: DEED BOOK 5794 PAGE 2385
2. THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT.
3. THE DWELLING IS SERVICED BY PRIVATE WATER AND PRIVATE SEWER.
4. ELEVATIONS BASED UPON NAVD88 ESTABLISHED BY GPS OBSERVATIONS PERFORMED BY CHESTER VALLEY ENGINEERS, INC. UTILIZING THE OPUS SOLUTION TO GPS OBSERVATION.
5. BEARINGS ARE BASED ON NAD83 PENNSYLVANIA STATE PLANE, SOUTH ZONE, COORDINATE SYSTEM BY GPS OBSERVATION PERFORMED BY CHESTER VALLEY ENGINEERS.
6. UTILITIES SHOWN FROM ABOVE GROUND OBSERVATIONS ONLY.
7. TOPOGRAPHY AND IMPROVEMENTS SHOWN FROM PHYSICAL FIELD SURVEY PREFORMED IN NOVEMBER, 2024 BY CHESTER VALLEY ENGINEERS, INC.
8. BY GRAPHIC PLOTTING ONLY, THE PREMISES SHOWN HEREON DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD ZONE. THE PREMISES LIES WITHIN AN AREA DESIGNATED AS ZONE X AS SHOWN ON FLOOD INSURANCE RATE MAPS (FIRM) 42029C0067C, MAP REVISED: MARCH 2, 2016, AND MAP 42029C0086G MAP REVISED: MARCH 2, 2016.
9. RIGHT OF WAY INFORMATION: FROM DEPARTMENT OF HIGHWAYS FINAL DRAWINGS FOR CONSTRUCTION AND CONDEMNATION OF RIGHT OF WAY, ROUTE NO. 46179, IN MONTGOMERY COUNTY FROM STATION 0+1416 TO STATION 150+96.7. SHEET 6 OF 14. APPROVED AUGUST 8, 1938.
10. SOILS INFORMATION TAKEN FROM USDA WEB SOIL SURVEY WEB SITE.
11. ULTIMATE RIGHT OF WAYS DERIVED FROM TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT INFORMATION, CHAPTER 310, SECTION 5, DEFINITIONS.

ZONING INFORMATION:

R-1 RESIDENTIAL DISTRICT

ZONING REQUIREMENTS:	REQUIRED	EXISTING
MIN. LOT AREA(GROSS)	5 ACRES	8.133 AC. DEED (CALC. 8.569 AC.) 7.603 AC. TO ULT. R/W(CALC.)
MIN. LOT WIDTH	150 FT.	342.2 FT.
MIN. FRONT YARD	40 FT.(LOCAL STREET) 60 FT.(COLLECTOR STREETS) 100 FT.(ARTERIAL STREETS)	0 FT.*
MIN. SIDE YARD SETBACK	25/60 FT. AGG.	584 FT.(GILBERTSVILLE RD.)
MIN. SIDE YARD SETBACK	40 FT.	485 FT.(MOYER RD.)
MIN. REAR YARD SETBACK	40 FT.	
MAX. BUILDING HEIGHT	35 FT.	<35 FT.
ACCESSORY BUILDING	15 FT.	NA
BUILDING COVERAGE MAX.	5%	0.48%
IMPERVIOUS MAX.	25%	0.94% (3,107 S.F.)

* EXISTING NON-CONFORMING

MONTGOMERY COUNTY BLOCK 60-3 UNIT12

SOILS LIST

SYMBOL	DESCRIPTION	DEPTH TO SEASONALLY HIGH WATER TABLE	DEPTH TO BEDROCK	FREQUENCY OF: FLOODING	FREQUENCY OF: PONDING	HYDROLOGIC SOIL GROUP	HYDRIC SOIL RATING
LEHIGH SILT LOAM							
LhA	0% TO 3% SLOPES	6" - 36"	40"-60"	NONE	NONE	C/D	YES
LhB	3% TO 8% SLOPES	6" - 36"	40"-60"	NONE	NONE	C/D	YES

Scale in Feet
0 10 20 30 40 80 120 160
1" = 40'

NOTE TO USER OF THESE PLANS:
WARNING: THE INFORMATION CONTAINED ON THIS PLAN MAY NOT BE CONSISTENT WITH CONDITIONS IN THE FIELD. ANY PERSON OR ORGANIZATION USING OR RELYING ON THESE PLANS MUST CONTACT CVE FOR VERIFICATION OF ANY APPARENT DISCREPANCY BEFORE PROCEEDING OR RELYING UPON THESE PLANS FOR ANY PURPOSE. NO CONSTRUCTION OR INSTALLATION OF IMPROVEMENTS SHOULD OCCUR UNTIL ALL DISCREPANCIES HAVE BEEN VERIFIED WITH CHESTER VALLEY ENGINEERS. CHESTER VALLEY ENGINEERS, THEIR OFFICERS, EMPLOYEES AND REPRESENTATIVES SHALL NOT BE LIABLE FOR DAMAGES OF ANY KIND RESULTING FROM THE USERS FAILURE TO OBTAIN CURRENT VERIFICATION AND VALIDATION OF THE INFORMATION CONTAINED ON THIS FILE TO THE USER OR ANY THIRD PARTY. THE USER ASSUMES ANY RISK OF ANY AND ALL PROPERTY OR FINANCIAL LOSS OR DAMAGES OF ANY KIND RESULTING FROM THE USE OF THIS DOCUMENT WITHOUT FIRST OBTAINING FULL VERIFICATION AND VALIDATION OF THE INFORMATION CONTAINED IN THIS FILE.

PENNSYLVANIA ACT 187 REQUIREMENTS
UNDERGROUND UTILITIES SERIAL NOs.
CHESTER VALLEY ENGINEERS, INC. DOES NOT GUARANTEE THE ACCURACY OF THE LOCATIONS 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 UNITED STATES DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION PUBLICATIONS OR THE LATEST REVISIONS THERETO:
(1) CONSTRUCTION INDUSTRY STANDARDS AND INTERPRETATIONS (OSHA 2207) SUBPART "P", PART 1926/1910 - "EXCAVATIONS, TRENCHING AND SHORING".
(2) "EXCAVATIONS AND TRENCHING OPERATIONS" (OSHA 2226) DATED 1985 (REVISED).

PENNSYLVANIA ONE CALL SYSTEM, INC.
CALL 3 WORKING DAYS BEFORE YOU DIG
1-800-242-1776
POCS SERIAL NUMBER: 20243309770

SEE SHEET ___ FOR FACILITY OWNERS DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.

ITEMS INCLUDED IN 04/11/2025 REVISIONS:
- PROFESSIONAL SEAL ADDED TO PLAN.
- SOIL LIST CHART UPDATED.

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOSEPH H. BLACKBURN, III — LAND SURVEYOR — No. SU061639

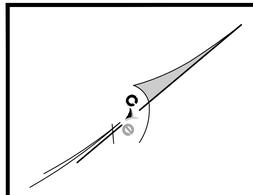
EXISTING FEATURES PLAN

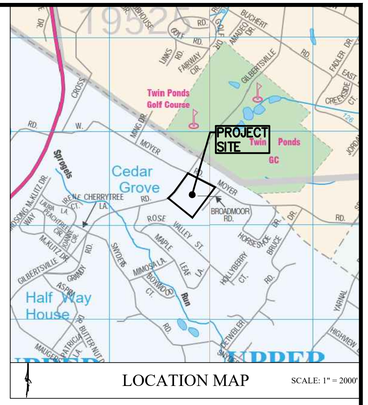
NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

EXISTING CONDITIONS PLAN
FOR
UPPER POTTSGROVE TOWNSHIP
2290 GILBERTSVILLE ROAD
UPPER POTTSGROVE TOWNSHIP- MONTGOMERY COUNTY - PENNSYLVANIA

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

PROJECT NO.	F.B.	SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
22096-2000	D.C.	1"=40'	12-09-2024	RJW	JHB	





LOCATION MAP SCALE: 1" = 2000'

DEMOLISH AND REMOVE EXISTING CONCRETE WALK

DEMOLISH AND REMOVE EXISTING DRIVEWAY

REMOVE EXISTING FUEL OIL TANK

DEMOLISH AND REMOVE EXISTING CONCRETE PAD

TREE TO REMAIN

DEMOLISH AND REMOVE EXISTING TREES AND SHRUBS

APPROX. AREA OF SEPTIC FIELD

LOCATE, DEMOLISH AND REMOVE EXISTING SEPTIC TANK AND FIELD (LIMIT OF TANK AND FIELD ARE UNKNOWN)

N/L UPPER POTTSGROVE TOWNSHIP DB. 5265 PG. 572 BLK 60-3 UNIT 52

EXCEPTION #2 15.35 ACRES

EXCEPTION #1 0.849 ACRES

EXCEPTION #4 3.028 ACRES

N/L JOSEPH and LINDA BOILEAU DB. 6208 PG. 2745 BLK 60-3 UNIT 37

N/L MARCIA A. SLADE DB. 5794 PG. 2386 BLK 60-3 UNIT 12

N/L DOUGLAS P. DAVIDSON DB. 5479 PG. 2459 BLK 60-3 UNIT 50

N/L MARY SCHADLER-ORR and CHRISTY L. WATSON DB. 6070 PG. 109 BLK 60-3 UNIT 29

GILBERTSVILLE ROAD S.R. 4040

WEST MOYER ROAD

EAST MOYER ROAD (ROUTE 461)92)

60' FRONT YARD SETBACK

ITEMS INCLUDED IN 04/11/2025 REVISIONS:

- PROFESSIONAL SEAL ADDED TO PLAN.
- SOIL LIST CHART UPDATED.

SOILS LIST

SYMBOL	DESCRIPTION	DEPTH TO SEASONALLY HIGH WATER TABLE	DEPTH TO BEDROCK	FREQUENCY OF: FLOODING	FREQUENCY OF: PONDING	HYDROLOGIC SOIL GROUP	HYDRIC SOIL RATING
LEHIGH	SILT LOAM						
LhA	0% TO 3% SLOPES	6" – 36"	40"–60"	NONE	NONE	C/D	YES
LhB	3% TO 8% SLOPES	6" – 36"	40"–60"	NONE	NONE	C/D	YES

Scale in Feet

0 10 20 30 40 80 120 160

1" = 40'

DEMOLITION PLAN

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX
2290 GILBERTSVILLE ROAD
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

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

PROJECT NO. 22096-2000

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
1"=40'	03/31/2025	HL	AG	F.B.

MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

PENNSYLVANIA ACT 187 REQUIREMENTS
UNDERGROUND UTILITIES SERIAL NOs. 20243300770
CHESTER VALLEY ENGINEERS, INC. DOES NOT GUARANTEE THE ACCURACY OF THE LOCATIONS 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.

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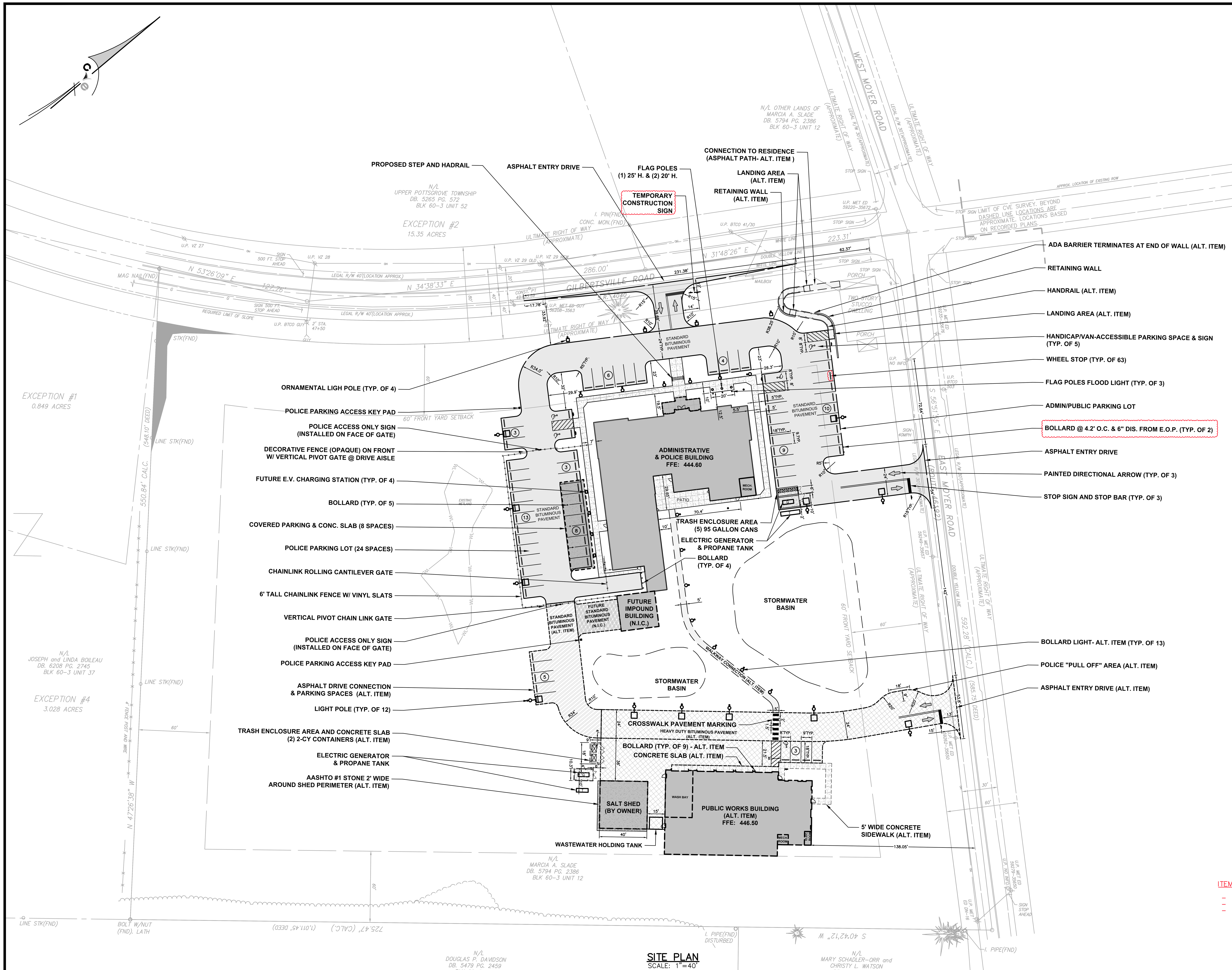
(1) CONSTRUCTION INDUSTRY STANDARDS AND INTERPRETATIONS (OSHA 2207) SUBPART "P", PART 1926/1910 – "EXCAVATIONS, TRENCHING AND SHORING".

(2) "EXCAVATIONS AND TRENCHING OPERATIONS" (OSHA 2226) DATED 1985 (REVISED).

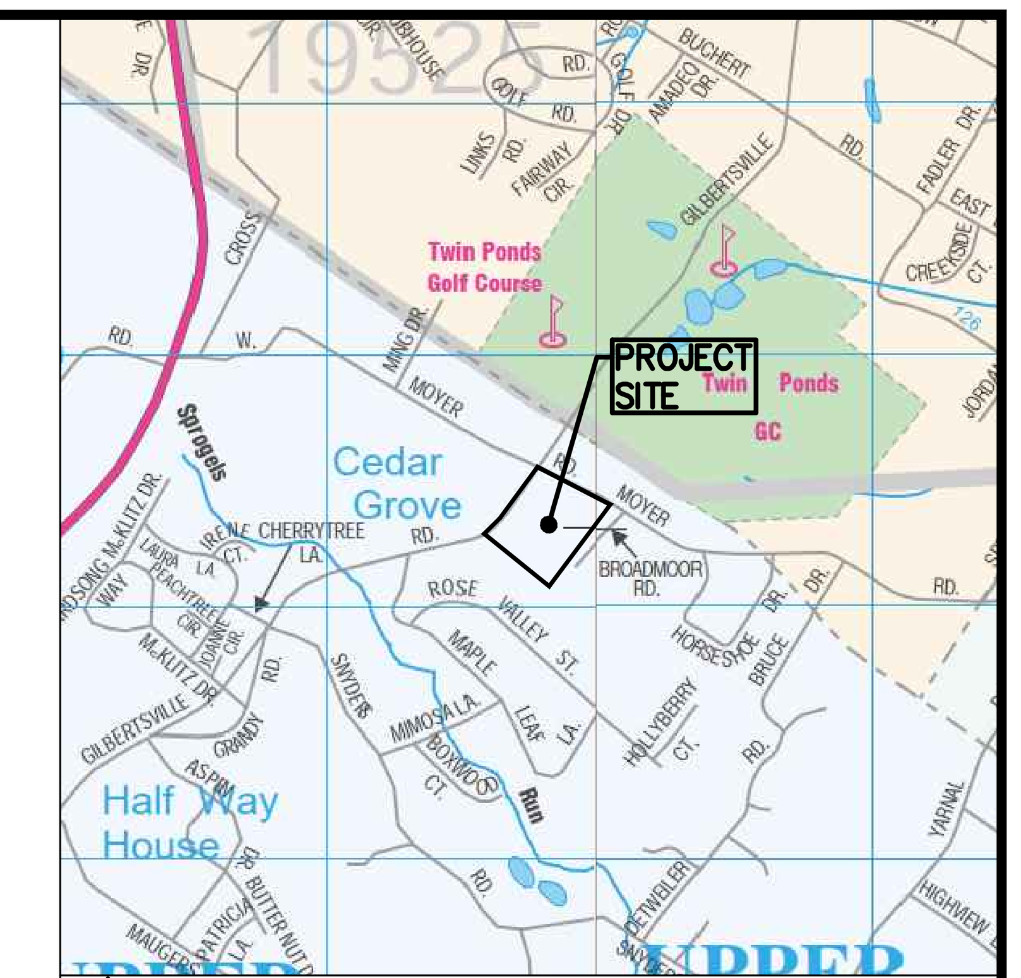
SEE SHEET 02 FOR FACILITY OWNER'S DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.

PENNSYLVANIA ONE CALL SYSTEM, INC.
CALL 3 WORKING DAYS BEFORE YOU DIG
1-800-242-1776
POCS SERIAL NUMBER: 20243300770

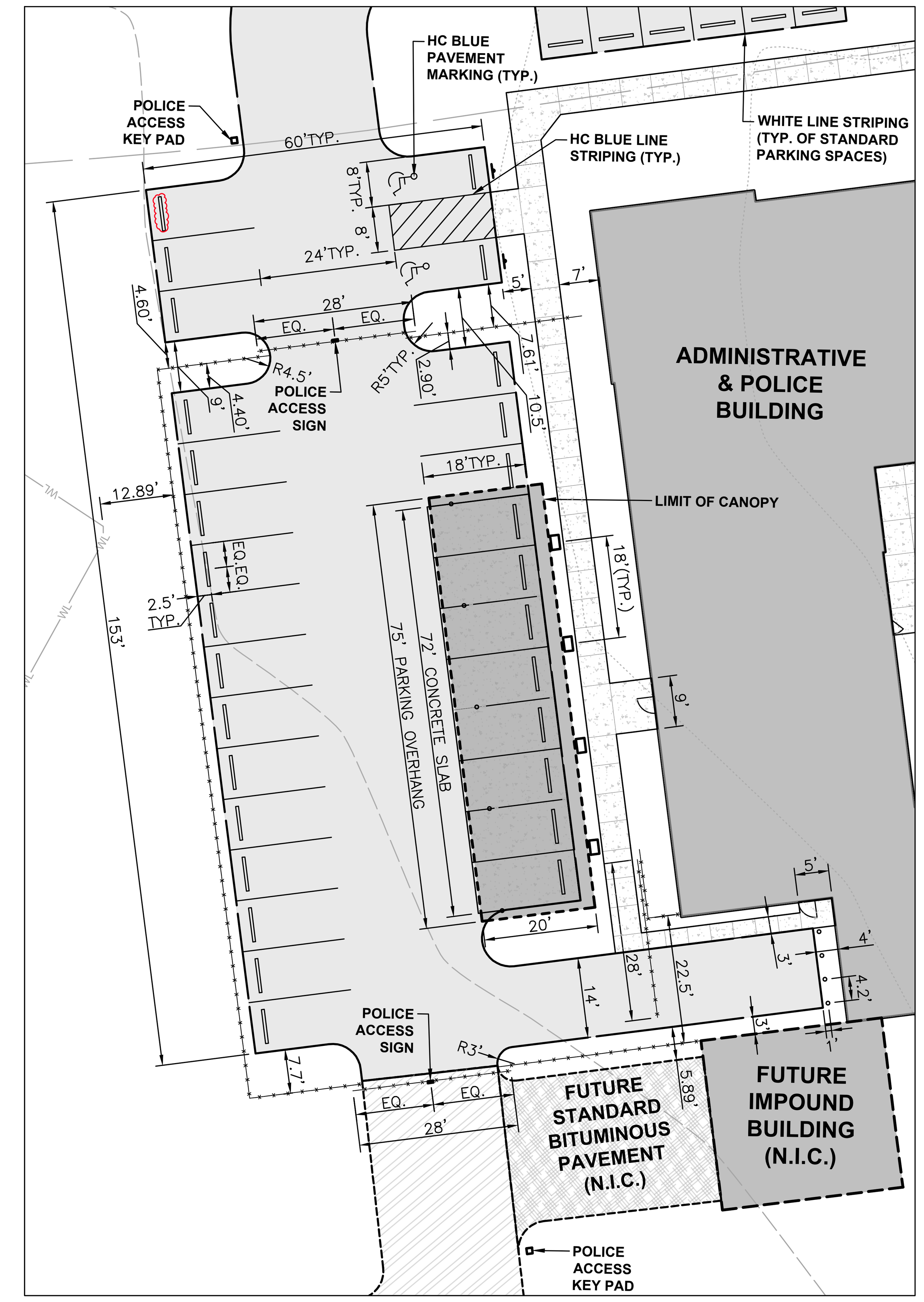


SITE PLAN
SCALE: 1"=40'

Scale in Feet
0 10 20 30 40 80 120 160
1" = 40'



LOCATION MAP SCALE: 1" = 2000'



POLICE PARKING LOT FENCING DETAIL
SCALE: 1"=20'

Scale in Feet
0 5 10 15 20 40 60 80
1" = 20'

ITEMS INCLUDED IN 04/11/2025 REVISIONS:

- PROFESSIONAL SEAL ADDED TO PLAN.
- BUMPER BLOCK LOCATIONS ADDED TO THE PLAN.
- TEMPORARY CONSTRUCTION SIGN LOCATION ADDED TO THE PLAN.

NOTE TO USER OF THESE PLANS:
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PENNSYLVANIA ACT 187 REQUIREMENTS
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CALL 3 WORKING DAYS BEFORE YOU DIG
1-800-242-1776
POCS SERIAL NUMBER: 20243300770

MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

SITE PLAN AND DETAILS

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

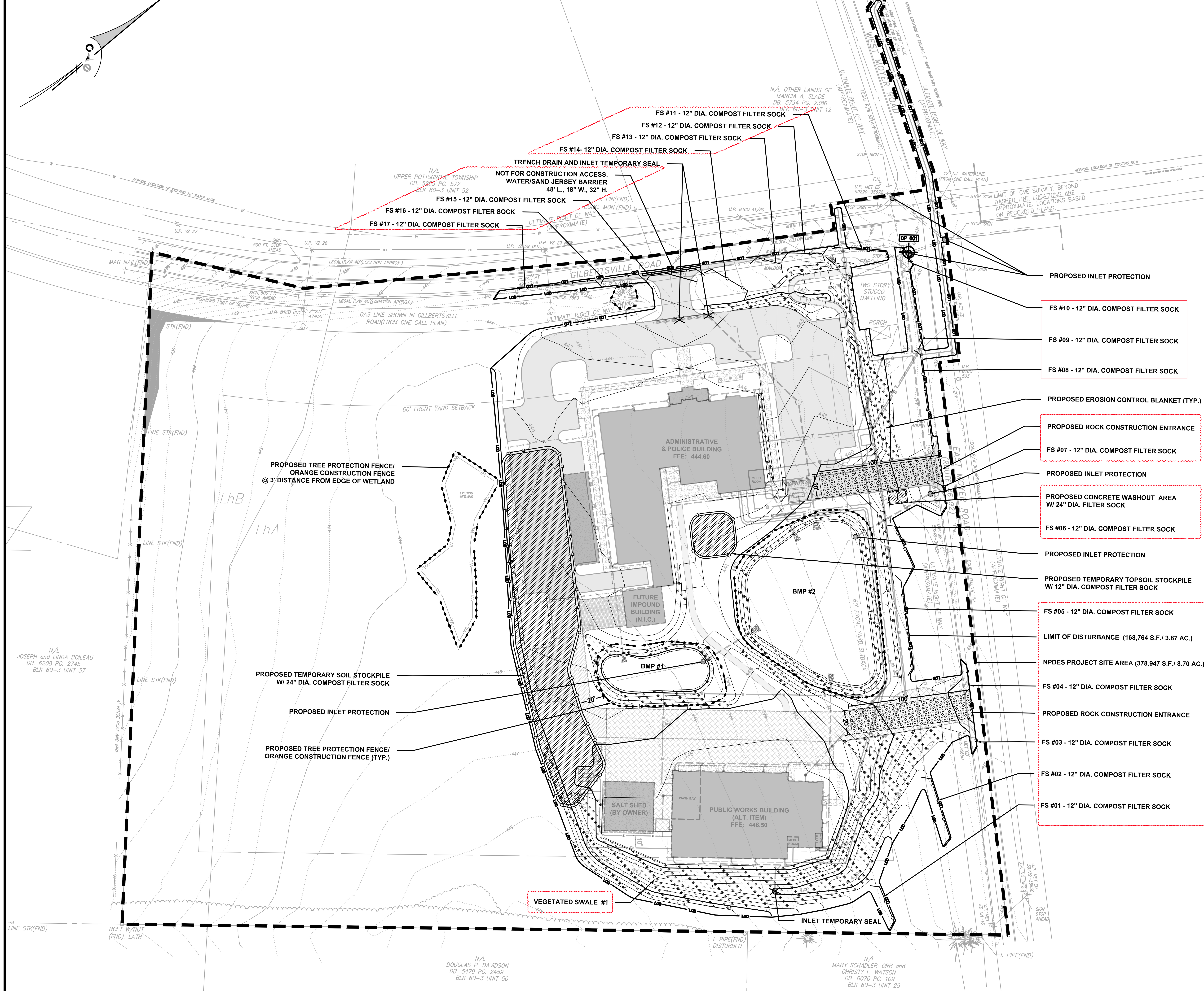
CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX
2290 GILBERTSVILLE ROAD
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

PENNSYLVANIA ALOYSIUS T. GRYGA REGISTRATION NUMBER LA001517 REGISTERED LANDSCAPE ARCHITECT

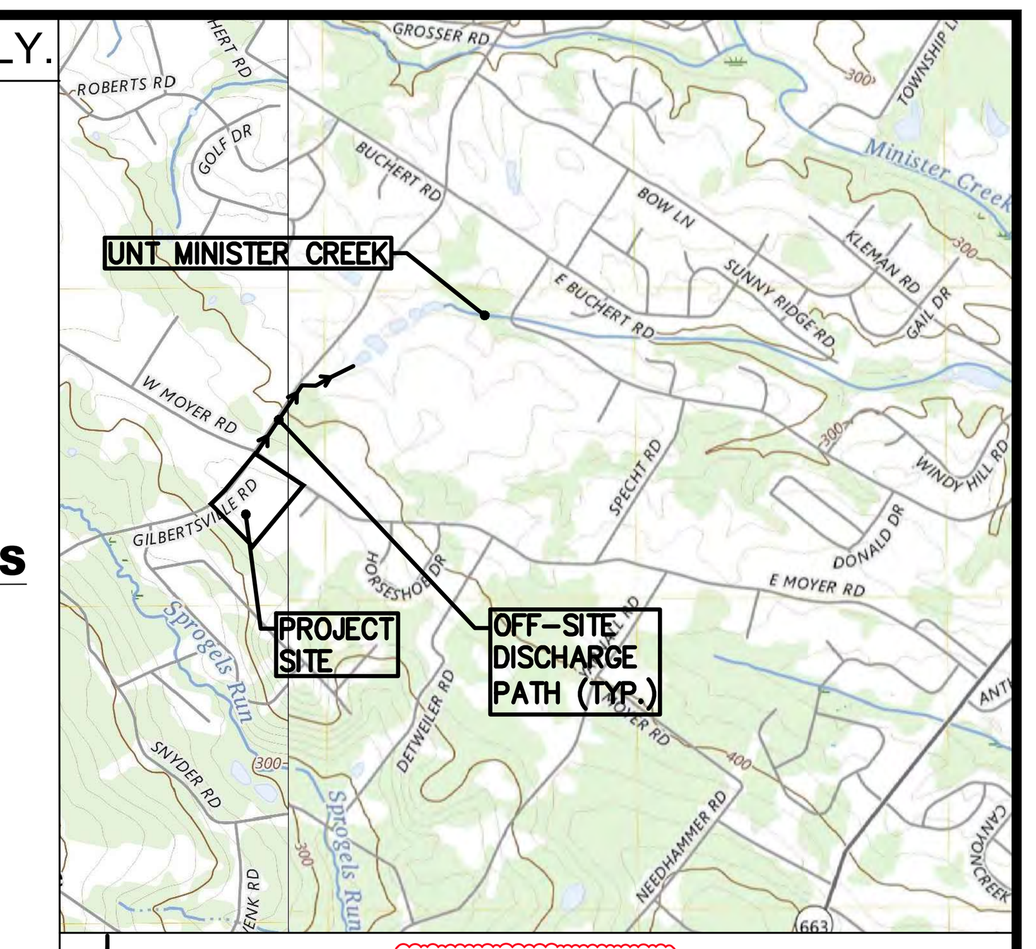
ChesterValley ENGINEERS, INC.
112 Moores Road, Suite 200, Malvern, PA 19355
610-644-4623
www.chesterv.com

SCALE	DATE	DRAWN BY	CHECKED BY	PROJECT NO.	F.B.	DRAWING
As Noted	03/31/2025	HL	AG	22096-2000		

THIS PLAN IS FOR EROSION & SEDIMENTATION CONTROL PURPOSE ONLY.



SURFACE WATER FROM THE SITE ENTERS AN UNNAMED TRIBUTARY OF MINISTER CREEK (TSF-MF)



USGS MAP SCALE: 1" = 2000'

NPDES PROJECT SITE IMPERVIOUS AREAS

EX. BUILDING	1,804 S.F.	
EX. CONCRETE SURFACES*	907 S.F.	
EX. STONE DRIVEWAY	1,650 S.F.	
EX. ROAD	16,998 S.F.	
TOTAL PRE-CONSTRUCTION IMPERVIOUS	21,359 S.F.	(0.49 ACRES)
*INCLUDES :CONCRETE PAD, WALKWAY, AND STEPS		
PROP. ASPHALT DRIVEWAY/PARKING/TRAIL	45,864 S.F.	
PROP. CONCRETE SURFACES	6,634 S.F.	
PROP. BUILDINGS	22,823 S.F.	
PROP. STONE	164 S.F.	
TOTAL PROPOSED IMPERVIOUS	75,485 S.F.	(1.73 ACRE)
TOTAL POST CONSTRUCTION IMPERVIOUS	94,287 S.F.	(2.16 ACRE)

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, TOWNSHIP ENGINEER/INSPECTOR, MONTGOMERY COUNTY CONSERVATION DISTRICT AND LICENSED PROFESSIONAL ENGINEER OR DESIGNEE TO AN ON-SITE PRE-CONSTRUCTION MEETING.

UPON INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMPS 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 LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION. EACH STEP OF THE SEQUENCE SHALL BE COMPLETED BEFORE PROCEEDING TO THE NEXT STEP, EXCEPT WHERE NOTED.

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

1. FIELD DELINEATE LIMITS OF DISTURBANCE PRIOR TO EARTH MOVING ACTIVITIES.
2. PLACE ALL FILTER SOCKS SHOWN ON THE PLANS AT THE TOE/DOWNSIDE OF EXISTING/PROPOSED SLOPES (PARALLEL WITH EXISTING CONTOURING, PERPENDICULAR WITH EXISTING SLOPES AND AT TERMINUS ENDS).
3. PLACE THE ROCK CONSTRUCTION ENTRANCE. INSTALL FILTER SOCKS AND PERFORM SITE GRADING WITHIN THIS AREA, ONLY AS NEEDED TO INSTALL THE CONSTRUCTION ENTRANCES. INSTALL FILTER SOCKS #13 AND #14 ALONG THE EDGE OF PAVING ON GILBERTSVILLE ROAD TO FACILITATE THE EFFICIENT REMOVAL OF THE EXISTING DRIVEWAY.
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. INSTALL ORANGE CONSTRUCTION FENCE PRIOR TO ANY EARTH DISTURBANCE WITHIN AREAS OF PROPOSED STORMWATER MANAGEMENT FACILITIES TO PREVENT SOIL COMPACTION AS SHOWN ON THE PLAN.
6. MARK AND INSTALL TEMPORARY TOPSOIL/SOIL STOCKPILE AND CONCRETE WASH AREAS AND FINISH INSTALLING ALL EROSION AND SEDIMENTATION CONTROL MEASURE.
7. PERFORM SITE DEMOLITION PER DEMOLITION PLAN AND NOTES.
8. RELOCATE FILTER SOCKS #13 AND #14 TO THE DESIGNATED AREA SHOWN ON THIS PLAN.
9. STRIP AND STORE TOPSOIL AT DESIGNATED TEMPORARY TOPSOIL STOCKPILE LOCATION.
10. EXCAVATE FOR BUILDING FOUNDATION, SEWER MAIN (INCL. MANHOLE), ASPHALT PAVING, SIDEWALKS, CULVERT, DRAIN BASIN, ALL PIPES, SWALES AND INCIDENTALS.
11. THE CONTRACTOR RESPONSIBLE FOR TEMPORARILY STOCKPILING APPROXIMATE 3,600 CY OF MATERIAL AND THE APPROPRIATE E&S MEASURES AT THE GILBERTSVILLE SITE AS SHOWN ON THE E&S PLAN. IN LATE FALL OR WINTER, SITE CONTRACTOR IS RESPONSIBLE FOR LOADING, HAULING AND DUMPING ALL MATERIAL AT 370 EVANS ROAD, POTTSTOWN, PA. A SEPARATE CONTRACTOR SHALL BE RESPONSIBLE FOR SPREADING AND COMPACTING MATERIAL
12. CONSTRUCT BUILDINGS AND ALL ARCHITECTURAL ELEMENTS.
13. INSTALL SEWER MAIN AND MANHOLES AND CONNECT TO EXISTING SEWER LATERAL.
14. PERFORM AND FINISH ALL SITE GRADING INCLUDING; SUB-BASE FOR PARKING LOT, CONCRETE PADS AND WALKWAYS.
15. INSTALL ALL PROPOSED UTILITIES, EXCLUDING STORM SEWER PIPING AND STRUCTURES WITHIN LIMITS OF STORMWATER MANAGEMENT FACILITIES BMP#1 AND BMP#2. ALL INLETS INSTALLED DURING THIS STEP SHALL BE TEMPORARILY SEALED.
16. INSTALL ALL SITE LIGHTING ELEMENTS.
17. INSTALL FLAG POLES FOUNDATION AND COVERED PARKING POSTS' FOOTINGS.
18. INSTALL ALL CONCRETE PAVING, STAIRS, AND BOLLARDS.
19. INSTALL ASPHALT BASE COURSE.
20. FINE GRADE/REDISTRIBUTE TOPSOIL THROUGHOUT DISTURBED AREAS.
21. INSTALL EROSION CONTROL BLANKET FOR STEEP SLOPES AS REQUIRED.
22. CONSTRUCT ASPHALT PARKING TACK AND WEARING COURSE.
23. PERFORM LINE STRIPING.
24. INSTALL PARKING LOT BUMPER BLOCKS.
25. INSTALL FENCING AND GATES.
26. INSTALL ALL LANDSCAPING INCLUDING TREES, SHRUBS, GROUNDCOVER.
27. INSTALL ALL SIGNS, FLAG POLES AND COVERED PARKING STRUCTURE.
28. ****CRITICAL STAGE** - UPON STABILIZATION OF UPLSOPE DISTURBED AREAS, CONSTRUCT STORMWATER MANAGEMENT FACILITIES (TO INCLUDE BIORETENTION AREA BMP#1, MANAGED RELEASE BIORETENTION AREA BMP#2, OUTLET STRUCTURES, PIPES) AND CONTACT PROJECT ENGINEER PRIOR TO FINAL GRADING TO VERIFY THAT ALL BMPS ARE INSTALLED, FUNCTIONING, AND HAVE NOT BEEN IMPACTED BY CONSTRUCTION ACTIVITIES. REFER TO PCSM BMP CONSTRUCTION SEQUENCES ON SHEET 12 FOR CRITICAL STAGES FOR EACH SPECIFIC BMP.**
29. FINE GRADE BIORETENTION AREAS WITH AMENDED SOIL. ALL PREVIOUSLY DISTURBED AREAS THAT ARE READY FOR FINAL STABILIZATION SHALL BE STABILIZED IMMEDIATELY WITH SEEDING AND HAY OR STRAW MULCH CONSISTENT WITH IMMEDIATE STABILIZATION CRITERIA.
30. COMPLETE FINAL GRADING OF THE BIORETENTION AREAS AFTER THE TOP LAYER OF SOIL IS ADDED.
31. INSTALL SEED MIX WITHIN BIORETNETION AREAS AND STABILIZE SLOPES WITH EROSION BLANKET.
32. REINSTALL THE CONSTRUCTION FENCE AROUND THE BIORETENTION AREAS.
33. INSTALL ANY ANTI-GRAZING MEASURES FOR BIORETENTION AREAS, IF NECESSARY.
34. ****CRITICAL STAGE** REMOVE COVERS FROM INLETS TRIBUTARY TO BMP#2 AND INSTALL WATER QUALITY INSERTS**.
35. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, REMOVE ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL DEVICES AND TREE PROTECTION/CONSTRUCTION FENCING FROM THE BASIN. FINAL STABILIZATION IS DEFINED AS A UNIFORM 70% PERENNIAL VEGETATION COVER.
36. SUBMIT A NOTICE OF TERMINATION TO THE COUNTY CONSERVATION DISTRICT ONCE ALL TEMPORARY E&S BMPS HAVE BEEN REMOVED AND THE ENTIRE PROJECT SITE IS PERMANENTLY STABILIZED.

INFILTRATION TESTING RESULTS

TEST ID	EX. GROUND ELEVATION	TEST DEPTH (IN)	TEST ELEVATION	MEASURED INF. RATE	LIMITING ZONE	LIMITING ZONE ELEVATION	BMP NAME	BMP BOTTOM ELEVATION
TP1	440.22	23	438.30	0.05 IN/HR	ROCK	437.30	BMP #2	436.50
TP2	439.51	32	436.84	0.10 IN/HR	ROCK	435.84	BMP #2	436.50
TP3	442.18	40	438.85	0.44 IN/HR	ROCK	437.84	–	–
TP4	442.03	19	440.45	0.00 IN/HR	ROCK	439.44	–	–

EROSION & SEDIMENTATION CONTROL PLAN

ITEMS INCLUDED IN 04/11/2025 REVISIONS:

- PROFESSIONAL SEAL ADDED TO PLAN.
- SOIL LIST CHART UPDATED.
- LOCATION MAP REPLACED WITH USGS MAP.
- CONSTRUCTION SEQUENCE REVISED.
- FILTER SOCK LOCATION, LENGTH, AND DIAMETER REVISED.
- ROCK CONSTRUCTION ENTRANCE CHANGED.
- LIMIT OF DISTURBANCE AREA EXPANDED.
- NPDES PROJECT SITE AREA DECREASED.
- CONCRETE WASHOUT AREA SLIGHTLY MOVED.
- WATER/SAND JERSEY BARRIER ADDED TO THE PLAN.
- VEGETATED SWALE #1 CALLOUT ADDED TO THE PLAN.

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

NOTE TO USER OF THESE PLANS:

WARNING! THE INFORMATION CONTAINED ON THIS PLAN MAY NOT BE CONSISTENT WITH CONDITIONS IN THE FIELD. ANY PERSON OR ORGANIZATION USING OR RELYING ON THESE PLANS MUST CONTACT CVE FOR VERIFICATION OF ANY APPARENT DISCREPANCY BEFORE PROCEEDING OR RELYING UPON THESE PLANS FOR ANY PURPOSE. NO CONSTRUCTION OR INSTALLATION OF IMPROVEMENTS SHOULD OCCUR UNTIL ALL DISCREPANCIES HAVE BEEN VERIFIED WITH CHESTER VALLEY ENGINNERS. CHESTER VALLEY ENGINEERS, THEIR OFFICERS, EMPLOYEES AND REPRESENTATIVES SHALL NOT BE LIABLE FOR DAMAGES OF ANY KIND RESULTING FROM THE USERS FAILURE TO OBTAIN CURRENT VERIFICATION AND VALIDATION OF THE INFORMATION CONTAINED ON THIS FILE TO THE USER OR ANY THIRD PARTY. THE USER ASSUMES ANY RISK OF ANY AND ALL PROPERTY OR FINANCIAL LOSS OR DAMAGES OF ANY KIND RESULTING FROM THE USE OF THIS DOCUMENT WITHOUT FIRST OBTAINING FULL VERIFICATION AND VALIDATION OF THE INFORMATION CONTAINED IN THIS FILE.

MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

PENNSYLVANIA ACT 187 REQUIREMENTS

UNDERGROUND UTILITIES SERIAL NOs. 20243300770

CHESTER VALLEY ENGINEERS, INC. DOES NOT GUARANTEE THE ACCURACY OF THE LOCATIONS 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 UNITED STATES DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION PUBLICATIONS OR THE LATEST REVISIONS THERETO:

(1) CONSTRUCTION INDUSTRY STANDARDS AND INTERPRETATIONS (OSHA 2207) SUBPART "P", PART 1926/1910 – "EXCAVATIONS, TRENCHING AND SHORING".

(2) "EXCAVATIONS AND TRENCHING OPERATIONS" (OSHA 2226) DATED 1985 (REVISED).

SEE SHEET 02 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: 20243300770

SOILS LIST

SYMBOL	DESCRIPTION	DEPTH TO SEASONALLY HIGH WATER TABLE	DEPTH TO BEDROCK	FREQUENCY OF: FLOODING	FREQUENCY OF: PONDING	HYDROLOGIC SOIL GROUP	HYDRIC SOIL RATING
LEHIGH SILT LOAM							
LhA	0% TO 3% SLOPES	6" – 36"	40"–60"	NONE	NONE	C/D	YES
LhB	3% TO 8% SLOPES	6" – 36"	40"–60"	NONE	NONE	C/D	YES

Scale in Feet: 0 10 20 30 40 80 120 160
1" = 40'

PENNSYLVANIA ALOYSIUS T. GRYGA REGISTRATION NUMBER LA001517 REGISTERED LANDSCAPE ARCHITECT

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX
2290 GILBERTSVILLE ROAD
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

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

PROJECT NO.	F.B.
22096-2000	

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
1"=40'	03/31/2025	HL	AG	

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 EROSIVE 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 APPRISED OF THIS PROGRAM AND DIRECTED TO PREVENT UNDUE DISTURBANCE OF PREPARED AND PROTECTED SURFACES.

SURFACE STABILIZATION CRITERIA: ALL DENUDED 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 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 AS FOLLOWS:

EROSION AND SEDIMENT CONTROL PLAN OBJECTIVES:
1. FIT THE LAND-DISTURBING ACTIVITY TO THE TERRAIN THROUGH MATCHING PROPOSED GRADES AS CLOSE TO EXISTING AS POSSIBLE.
2. MINIMIZE BARE SOIL EXPOSURE AND THE EXTENT AND DURATION OF EARTH DISTURBANCE THROUGH THE USE OF TEMPORARY STABILIZATION TECHNIQUES AND A DETAILED CONSTRUCTION SEQUENCE.
3. RETAIN EXISTING VEGETATION WHENEVER FEASIBLE AND APPROPRIATE BY MAXIMIZING PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION.
4. MINIMIZE SOIL COMPACTION BY DELINEATING LIMITS OF DISTURBANCE IN ONLY THOSE AREAS NECESSARY FOR CONSTRUCTION.
5. STABILIZE DISTURBED AREAS IMMEDIATELY AFTER GRADING WITH TEMPORARY SEEDING AND MULCHING.
6. DIRECT RUNOFF AWAY FROM BARE SOIL AREAS.
7. MINIMIZE LENGTH AND STEEPNESS OF SLOPES BY IMPLEMENTING THE APPROPRIATE TEMPORARY E&S BMP.
8. UTILIZE OTHER MEASURES OR CONTROLS THAT PREVENT OR MINIMIZE GENERATION OF INCREASED STORMWATER RUNOFF.
9. PREPARE DRAINAGE WAYS AND OUTLETS TO HANDLE INCREASED RUNOFF AND CONCENTRATION FLOWS.
10. REDUCE SEDIMENTATION BY APPLYING EROSION CONTROL AND WATER QUALITY PRACTICES ON-SITE.
11. AVOID, MINIMIZE OR MITIGATE THERMAL IMPACTS.

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

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

THE MONTGOMERY COUNTY CONSERVATION DISTRICT (MCCD)
143 LEVEL ROAD
COLLEGEVILLE, PA 19426
PHONE: (610) 489-4506
FAX: (610) 489-9795

CHAPTER 93 CLASSIFICATION OF WATERBODIES: THE RECEIVING WATERCOURSE FOR THIS PROJECT IS AN UNNAMED TRIBUTARY OF MINISTER CREEK (TSF-MF). MINISTER CREEK IS A TRIBUTARY WITHIN THE SWAMP CREEK WATERSHED WHICH IS NOT DESIGNATED AS A SPECIAL PROTECTION WATERSHED

NOTIFY THE LOCAL COUNTY CONSERVATION DISTRICT AND ARRANGE A PRE-CONSTRUCTION MEETING FOR ALL INVOLVED PARTIES (INCLUDING MCCD, APPLICANT, ENGINEER, AND TOWNSHIP OFFICIALS).

NOTIFY THE TOWNSHIP ENGINEER AT LEAST 48 HOURS PRIOR TO ANY EARTH DISTURBANCE ACTIVITIES.

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.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES

1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (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 IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
2. 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 E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.
3. 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.
4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAPS(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET.
9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.
10. 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.
11. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEG. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
12. 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.
13. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-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.
14. VEHICLES AND EQUIPMENT MUST ONLY ENTER THE SITE DIRECTLY FROM MOYER ROAD AT THE SHOWN CONSTRUCTION ENTRANCES.
15. 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. ALL SITE INSPECTIONS, THE COMPLIANCE INSPECTIONS, AND THE DATE, TIME, AND NAME OF THE PERSON CONDUCTING THE INSPECTION WILL BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE. THE INSPECTION LOG WILL BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, 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 SEDIMENT POLLUTION THE PERMITTEE OR CO-PERMITTEE SHALL INCLUDE THE FOLLOWING INFORMATION:
   - 15.1. THE LOCATION AND SEVERITY OF THE BMP'S FAILURE AND ANY POLLUTION EVENTS.
   - 15.2. ALL STEPS TAKEN TO REDUCE, ELIMINATE AND PREVENT THE RECURRENCE OF THE NON-COMPLIANCE.
   - 15.3. THE TIME FRAME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP'S MUST BE REMOVED. AREAS DISTURBED DURING THEIR REMOVAL OF THE BMP'S MUST BE STABILIZED IMMEDIATELY.
16. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
17. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE SITE IMMEDIATELY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
18. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
19. AREAS WHICH ARE TO BE TOP SOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES -- 6 TO 12 INCHES ON COMPACTED SOILS -- PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
20. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
21. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 8 INCHES IN THICKNESS.
22. 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 FILLS.
23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
25. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
26. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
27. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.
28. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
29. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
30. E&S BMPS 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.
31. E&S BMP'S MUST BE CONSTRUCTED, STABILIZED AND FUNCTIONAL BEFORE SITE DISTURBANCE WITHIN THE TRIBUTARY AREAS OF THOSE BMP'S.
32. 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 BMPS.
33. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
34. 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.
35. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO $10,000 PER DAY IN CIVIL PENALTIES, UP TO $10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO $25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
36. SHOULD ANY MEASURES CONTAINED WITHIN THIS PLAN PROVE INCAPABLE OF ADEQUATELY REMOVING SEDIMENT FROM ON-SITE FLOWS PRIOR TO DISCHARGE OR STABILIZING THE SURFACES INVOLVED, ADDITIONAL MEASURES MUST BE IMMEDIATELY IMPLEMENTED BY THE CONTRACTOR TO ELIMINATE ALL SUCH PROBLEMS. THE MONTGOMERY COUNTY CONSERVATION DISTRICT MUST BE NOTIFIED BY THE DEVELOPER OF ANY AND ALL CHANGES OR MODIFICATIONS TO THE CONTROLS.
37. ALL COMPOST FILTER SOCK MUST BE INSTALLED ON UNDISTURBED GROUND, AT LEAST 8 FEET BELOW THE TOE OF THE SLOPE, AND PARALLEL TO EXISTING ELEVATION CONTOURS WITH BOTH ENDS EXTENDING UP SLOPE AT LEAST 8' AT A 45 DEGREE ANGLE.
38. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISION OF APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION SUB-PART C, PROTECTION OF NATURAL RESOURCES. ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.
39. THE PROPOSED CONSERVATION MEASURES MUST BE IN COMPLIANCE WITH PADEP CHAPTER 102 REGULATIONS.
40. A COPY OF THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
41. UPON THE INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMPS AND AT LEAST 3 DAYS PRIOR TO PROCEEDING WITH THE BULK EARTH DISTURBANCE ACTIVITIES, THE PERMITTEE OR CO-PERMITTEE SHALL PROVIDE NOTIFICATION TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT.
42. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE). CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULA TED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1A AND FP-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".
    ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL. ENVIRONMENTAL DUE DILIGENCE: THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".
43. FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA. CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. THESE REGULATIONS ARE AVAILABLE ON-LINE AT www.pacode.com.
44. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.
45. ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIAL/WASTES.
46. CHANNELS HAVING RIPRAP, RENO MATTRESS, OR GABION LININGS MUST SUFFICIENTLY OVER-EXCAVATED SO THAT THE DESIGN DIMENSIONS WILL BE PROVIDED AFTER PLACEMENT OF THE PROTECTIVE LINING.
47. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO PROCEDURES DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
48. UNDERGROUND UTILITIES CUTTING THROUGH ANY ACTIVE CHANNEL SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL RESTORED TO ITS ORIGINAL CROSS-SECTION AND PROTECTIVE LINING. ANY BASE FLOW WITHIN THE CHANNEL SHALL BE CONVEYED PAST THE WORK AREA IN THE MANNER DESCRIBED IN THIS PLAN UNTIL SUCH RESTORATION IS COMPLETE.
49. SEDIMENT BASINS AND/OR TRAPS SHALL BE KEPT FREE OF ALL CONSTRUCTION WASTE, WASH WATER, AND OTHER DEBRIS HAVING POTENTIAL TO CLOG THE BASIN/TRAP OUTLET STRUCTURES AND/OR POLLUTE THE SURFACE WATERS.
50. SEDIMENT BASIN TRAPS SHALL BE PROTECTED FROM UNAUTHORIZED ACTS BY THIRD PARTIES.
51. ANY DAMAGE THAT OCCURS IN WHOLE OR IN PART AS A RESULT OF BASIN OR TRAP DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE PERMITTEE IN A PERMANENT MANNER SATISFACTORY TO THE MUNICIPALITY, LOCAL CONSERVATION DISTRICT, AND THE OWNER OF THE DAMAGED PROPERTY.
52. FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM 8 INCH LAYERED LIFTS AT 95% DENSITY.
53. THE PROJECT WILL MINIMIZE THE EXTENT AND DURATION OF DISTURBANCE BY SEQUENCING THE THE CONSTRUCTION SUCH THAT THE ENTIRE SITE IS NOT DISTURBED AT ONE TIME AND BY STABILIZING DISTURBANCE AS SOON AS PRACTICAL.
54. POST-CONSTRUCTION RUNOFF FROM THE PROPOSED IMPROVEMENTS WILL BE ROUTED THROUGH BMPS TO REDUCE RUNOFF VOLUME AND RATE. REDUCTION IN POST-DEVELOPMENT VOLUMES AND RATES WILL ASSIST IN MAINTAINING THE INTEGRITY OF THE RECEIVING WATERWAYS.
55. SOIL COMPACTION WILL BE MINIMIZED TO THE EXTENT PRACTICAL, AIDED BY THE REDUCTION IN IMPERVIOUS SURFACE AREA.
56. MAINTENANCE OF ALL SEDIMENT AND EROSION CONTROL DEVICES IS THE RESPONSIBILITY OF THE CONTRACTOR DURING CONSTRUCTION.
57. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING DIVERSION TRENCHES, EROSION CHECKS, BERMS, ETC., OR OTHER MEANS OF ACCEPTED PRACTICE AS REQUIRED ON THE SITE TO PREVENT ACCELERATED RUNOFF AND EROSION, WHICH MAY NOT BE INDICATED, BUT IS WITHIN THE INTENT OF THIS PLAN.
58. THE CONTRACTOR MUST ENSURE THE PROPER OPERATION OF THE DEVICES IS NOT HINDERED DUE TO EXCESSIVE SEDIMENT BUILDUP OR UNAUTHORIZED ACTS OF THIRD PARTIES.
59. A LOG SHOWING DATES THAT E&S BMP'S WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
60. UPON REQUEST, THE APPLICANT OR HIS CONTRACTOR SHALL PROVIDE AN AS-BUILT (RECORD DRAWING) FOR ANY SEDIMENT BASIN OR TRAP TO THE MUNICIPAL INSPECTOR, LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.

MAINTENANCE PROGRAM FOR TEMPORARY SEDIMENTATION CONTROLS STRUCTURES

1. MAINTENANCE OF ALL TEMPORARY SEDIMENTATION CONTROL STRUCTURES SHALL BE IN ACCORDANCE WITH THESE PLANS AND THE "EROSION AND CONTROL CONTROL NARRATIVE." INSPECTION AND MAINTENANCE OF ALL FACILITIES SHALL BE MADE AFTER EACH RAIN STORM EVENT AND ON A WEEKLY BASIS.
2. 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 SOCK SHALL BE KEPT ON SITE AT ALL TIMES. AND MADE AVAILABLE TO THE TOWNSHIP UPON REQUEST.
3. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS OR MODIFICATIONS OF THOSE INSTALLED WILL BE NEEDED.
4. SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH ONE-HALF THE EFFECTIVE HEIGHT OF COMPOST FILTER SOCKS.
5. SEDIMENT MUST BE REMOVED FROM SEDIMENT TRAP WHEN THE SEDIMENT REACHES THE DESIGNATED CLEANOUT ELEVATION.
6. SEDIMENT MUST BE REMOVED FROM ROCK FILTERS WHEN COLLECTED SEDIMENT BEGINS TO AFFECT THE FILTER'S FUNCTION.
7. INLET PROTECTION FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RAINFALL 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.
8. SEDIMENT REMOVED FROM THE FACILITIES MAY BE REINCORPORATED INTO THE SITE'S EARTHWORK AS FILL OR TAKEN TO A SAFE, APPROVED LOCATION.UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION CONTROLS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL CONTROLS AFTER EACH STORM EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY.
9. ALL SILT AND FOREIGN MATTER SHALL BE REMOVED FROM THE TOP OF THE BINDER COURSE AND PROPERLY DISPOSED OF BEFORE WEARING SURFACE IS INSTALLED.
10. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SUMP PIT AND A PUMPED WATER FILTER BAG, DISCHARGING WATER OVER NON-DISTURBED AREAS.
11. SEDIMENT REMOVED FROM BMP'S SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED OR PLACED IN TOPSOIL STOCKPILES.

DUST CONTROL
DUST AND OTHER PARTICULATES SHALL BE KEPT WITHIN TOLERABLE LIMITS BY USING WATER. APPLICATION SHALL BE AS NEEDED OR AS DIRECTED BY THE TOWNSHIP ENGINEER OR THE CONSERVATION DISTRICT.

CRITICAL VEGETATION AREAS (C.V.A.):
CRITICAL VEGETATION AREAS ARE TO BE GRADED, HYDROSEEDED 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.

ITEMS INCLUDED IN 04/11/2025 REVISIONS:

- PROFESSIONAL SEAL ADDED TO PLAN.
- CHAPTER 93 NOTE REVISED TO INCLUDE WATERSHED INFORMATION.

MONITORING, INSPECTION, AND REPORTING REQUIREMENTS

A. VISUAL INSPECTIONS
THE PERMITTEE AND CO PERMITTEE(S) MUST ENSURE THAT VISUAL SITE INSPECTIONS ARE CONDUCTED WEEKLY, AND WITHIN 24 HOURS AFTER EACH MEASURABLE RAINFALL EVENT THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL THE RECEIPT AND ACKNOWLEDGEMENT OF THE NOT BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE VISUAL SITE INSPECTIONS AND REPORTS SHALL BE COMPLETED IN A FORMAT PROVIDED BY THE DEPARTMENT, AND CONDUCTED BY QUALIFIED PERSONNEL, TRAINED AND EXPERIENCED IN EROSION AND SEDIMENT CONTROL, TO ASCERTAIN THAT E&S BMPS AND PCSM BMPS ARE PROPERLY CONSTRUCTED AND MAINTAINED TO EFFECTIVELY MINIMIZE POLLUTION TO THE WATERS OF THIS COMMONWEALTH. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT AND INCLUDE AT A MINIMUM:
1. A SUMMARY OF SITE CONDITIONS, E&S BMP AND PCSM BMP, IMPLEMENTATION AND MAINTENANCE AND COMPLIANCE ACTIONS
2. THE DATE, TIME, NAME AND SIGNATURE OF THE PERSON CONDUCTING THE INSPECTION.

B. NONCOMPLIANCE REPORTING
WHERE E&S, PCSM OR PPC BMPS ARE FOUND TO BE INOPERATIVE OR INEFFECTIVE DURING AN INSPECTION, OR ANY OTHER TIME, THE PERMITTEE AND COPERMITTEE(S) SHALL, WITHIN 24 HOURS, CONTACT THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT, BY PHONE OR PERSONAL CONTACT, FOLLOWED BY THE SUBMISSION OF A WRITTEN REPORT WITHIN 5 DAYS OF THE INITIAL CONTACT.NONCOMPLIANCE REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:
1. ANY CONDITION ON THE PROJECT SITE WHICH MAY ENDANGER PUBLIC HEALTH, SAFETY, OR THE ENVIRONMENT, OR INVOLVE INCIDENTS WHICH CAUSE OR THREATEN POLLUTION.
2. THE PERIOD OF NONCOMPLIANCE, INCLUDING EXACT DATES AND TIMES AND/OR ANTICIPATED TIME WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.
3. STEPS BEING TAKEN TO REDUCE, ELIMINATE, AND PREVENT RECURRENCE OF THE NONCOMPLIANCE.
4. THE DATE OR SCHEDULE OF DATES, AND IDENTIFYING REMEDIES FOR CORRECTING NONCOMPLIANCE CONDITIONS.

WHERE BMPS 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 RECURRENCE OF THE NON-COMPLIANCE.
C. THE TIME FRAME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.

D. TERMINATION OF COVERAGE
UPON PERMANENT STABILIZATION OF EARTH DISTURBANCE ACTIVITIES ASSOCIATED WITH CONSTRUCTION ACTIVITY THAT ARE AUTHORIZED BY THIS PERMIT AND WHEN BMPS IDENTIFIED IN THE PCSM PLAN HAVE BEEN PROPERLY INSTALLED, THE PERMITTEE AND/OR CO PERMITTEE OF THE FACILITY MUST SUBMIT A NOT FORM THAT IS SIGNED IN ACCORDANCE WITH PART B, SECTION 1.C, SIGNATORY REQUIREMENTS, OF THIS PERMIT. ALL LETTERS CERTIFYING DISCHARGE TERMINATION ARE TO BE SENT TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE NOT MUST CONTAIN THE FOLLOWING INFORMATION: FACILITY NAME, ADDRESS, AND LOCATION, OPERATOR NAME AND ADDRESS, PERMIT NUMBER, IDENTIFICATION AND PROOF OF ACKNOWLEDGMENT FROM THE PERSON(S) WHO WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE PCSM BMPS IN ACCORDANCE WITH THE APPROVED PCSM PLAN, AND THE REASON FOR PERMIT TERMINATION. UNTIL THE PERMITTEE HAS RECEIVED WRITTEN ACKNOWLEDGEMENT OF THE NOT, THE PERMITTEE WILL REMAIN AND WILL BE RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE PROJECT SITE. FOR OPERATING AND MAINTAINING ALL E&S BMPS AND PCSM BMPS ON THE PROJECT SITE.

E. COMPLETION CERTIFICATE AND FINAL PLANS
WITHIN 30 DAYS AFTER THE COMPLETION OF EARTH DISTURBANCE ACTIVITIES AUTHORIZED BY THIS PERMIT, INCLUDING THE PERMANENT STABILIZATION OF THE SITE AND PROPER INSTALLATION OF PCSM BMPS IN ACCORDANCE WITH THE APPROVED PCSM PLAN, OR UPON SUBMISSION OF THE NOT IF SOONER, THE PERMITTEE SHALL FILE WITH THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT A STATEMENT SIGNED BY A LICENSED PROFESSIONAL AND BY THE PERMITTEE CERTIFYING THAT WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT AND THE APPROVEDE&S AND PCSM PLANS.

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. **ACIDITY:** 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. **POOR SOURCE OF TOPSOIL:** 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. **EASILY ERODIBLE :** 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. VEGETATIVE RETARDANCE INFORMATION IS PROVIDED IN TABLES 6 AND 7 OF THE EROSION AND SEDIMENT POLLUTION CONTROL MANUAL PUBLISHED BY PADEP.
5. **WETNESS:** 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. **DROUGHTY:** 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. **POTENTIAL SINKHOLE:** 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. **PIPING:** 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 SLOPE STEEPNESS AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.
9. **FROST ACTION:** 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 SOILS TYPES, NOT CONSTRUCTING EMBANKMENTS DURING PERIODS PRONE TO FROST AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.

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, THAT PORTION OF 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 SPRAYED ON TOP OF THE SEED. THIS IS TO ENSURE THAT THE SEED MAKES CONTACT WITH THE UNDERLYING SOIL. SOIL 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.

SEEDING SPECIFICATIONS

1. SEEDING SHALL BE PLACED IN ACCORDANCE WITH PENNDOT PUBL. 408, SECTION 804.
2. SEED FORMULAS:

FORMULA AND SPECIES	% BY WT	MIN. % PURITY	MIN. % GERMIN-ATION	MAX. % WEED	SEEDING RATE LBS/1000 SQ.YDS
FORMULA B					21.0 TOTAL
• PERENNIAL RYEGRASS MIXTURE	20	98	90	0.15	4.0
• CREEPING RED FESCUE OR CHEWINGS FESCUE	30	98	85	0.15	6.0
• KENTUCKY BLUEGRASS MIXTURE	50	98	80	0.20	11.0
FORMULA C (NOT APPROVED FOR USE)					9.0 TOTAL
• CROWNVETCH	45	99	70	0.10	4.0
• ANNUAL RYEGRASS	55	98	90	0.15	5.0
FORMULA D					21.0 TOTAL
• TALL FESCUE	70	98	85	0.15	15.0
• CREEPING RED FESCUE OR CHEWINGS FESCUE	30	98	85	0.15	6.0
FORMULA E					10.0 TOTAL
• ANNUAL RYEGRASS	100	98	90	0.15	10.0
FORMULA L					24.0 TOTAL
• HARD FESCUE MIXTURE	55	98	85	0.15	13.0
• CREEPING RED FESCUE	35	98	85	0.15	8.5
• ANNUAL RYEGRASS	10	98	90	0.15	2.5
FORMULA W					10.5 TOTAL
• TALL FESCUE	70	98	85	0.15	7.5
• BIRDSFOOT TREFOIL MIXTURE	20	98	80*	0.10	2.0
• REDTOP	10	92	80	0.15	1.0

*MINIMUM 20% HARD SEED AND 60% NORMAL SPROUTS.

3. APPLICATION DATES:

FORMULA B, D, & L - MARCH 15 TO JUNE 1
AUGUST 1 TO OCTOBER 15
FORMULA C - NOT PERMITTED
FORMULA E - MARCH 15 TO OCTOBER 15
FORMULA W - APRIL 1 TO JUNE 15
AUGUST 16 TO SEPTEMBER 15

4. SOIL SUPPLEMENTS MAY BE ADDED IN ACCORDANCE WITH SECTION 804 OR AS FOLLOWS:

FERTILIZER - STANDARD QUALITY
0-20-20 BASIC FERTILIZER 200 LBS. PER 1000 S.Y.
10-10-10 STARTER FERTILIZER 100 LBS. PER 1000 S.Y.

LIME - AGRICULTURAL LIMESTONE
90% MINIMUM OF CARBONATES 500 LBS. PER 1000 S.Y.

5. **FORMULA B SHALL BE USED TO ESTABLISH PERMANENT STABILIZATION AND FORMULA E SHALL BE USED TO ESTABLISH TEMPORARY STABILIZATION.**

MULCHING SPECIFICATION
1. MULCHING OF DISTURBED OR SEEDED AREA SHALL BE FURNISHED, PLACED, ANCHORED AND MAINTAINED IN ACCORDANCE WITH PENNDOT PUBL. 408, SECTION 805.
2. MULCHING SHALL BE PLACED IMMEDIATELY AFTER SEEDING OR WITHIN 48 HOURS AFTER SEEDING IS COMPLETE.
3. HAY OR STRAW SHALL BE UNIFORMLY PLACED IN A CONTINUOUS BLANKET, AT A MINIMUM RATE OF 3.0 TONS PER ACRE.
4. STRAW MULCH SHOULD BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.

SEEDING AND MULCHING SCHEDULE
1. THE DIVERSIONS, CHANNELS, SEDIMENT BASINS, SEDIMENT TRAPS, AND STOCKPILES, WHEN USED, MUST BE STABILIZED IMMEDIATELY.
2. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
3. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.

TOPSOIL APPLICATION NOTES

1. GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SURFACE AREAS AND TO PROVIDE A ROUGHENED SURFACE TO PREVENT TOPSOIL FROM SLIDING DOWN SLOPE.
2. TOPSOIL SHOULD BE UNIFORMLY DISTRIBUTED ACROSS THE DISTURBED AREA TO A DEPTH OF SIX (6) INCHES MINIMUM. SPREADING SHOULD BE DONE IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL PREPARATION OR TILLAGE. IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOIL PLACEMENT SHOULD BE CORRECTED IN ORDER TO PREVENT FORMATION OF DEPRESSIONS UNLESS SUCH DEPRESSIONS ARE PART OF THE PCSM PLAN.
3. TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDED PREPARATION. COMPACTED SOILS SHOULD BE SCARIFIED 6 TO 12 INCHES ALONG CONTOUR WHEREVER POSSIBLE PRIOR TO SEEDING.

SOIL AMENDMENT APPLICATION RATE EQUIVALENTS

SOIL AMENDMENT	PERMANENT SEEDING APPLICATION RATE (MIN.)			
	PER ACRE	PER 1,000 SF	PER 1,000 SY	
AGRICULTURAL LIME	6 TONS	240 LB.	2,480 LB.	OR AS PER SOIL TEST; MAY NOT BE REQUIRED IN AGRICULTURAL FIELDS
10-10-20 FERTILIZER	1,000 LB	25 LB.	210 LB.	OR AS PER SOIL TEST; MAY NOT BE REQUIRED IN AGRICULTURAL FIELDS
	TEMPORARY SEEDING APPLICATION RATE (MIN.)			
AGRICULTURAL LIME	1 TON	40 LB.	410 LB.	TYPICALLY NOT REQUIRED FOR TOPSOIL STOCKPILES
10-10-10 FERTILIZER	500 LB.	12.5 LB.	100 LB.	TYPICALLY NOT REQUIRED FOR TOPSOIL STOCKPILES

MULCH APPLICATION RATES

MULCH TYPE	APPLICATION RATE (MIN.)			
	PER ACRE	PER 1,000 SF	PER 1,000 SY	
STRAW	3 TONS	140 LB.	1,240 LB.	EITHER WHEAT OR OAT STRAW, FREE OF WEEDS, NOT CHOPPED OR FINELY BROKEN
HAY	3 TONS	140 LB.	1,240 LB.	TIMOTHY, MIXED CLOVER AND TIMOTHY OR OTHER NATIVE FORAGE GRASSES
WOOD CHIPS	4-6 TONS	185-275 LB.	1,650-2,500 LB.	MAY PREVENT GERMINATION OF GRASSES AND LEGUMES
HYDROMULCH	1 TON	47 LB.	415 LB.	SEE LIMITATIONS ABOVE

TOPSOIL APPLICATION RATES

DEPTH (IN)	PER 1,000 SF	PER ACRE
1	3.1 CY	134 CY
2	6.2 CY	268 CY
3	9.3 CY	403 CY
4	12.4 CY	537 CY
5	15.5 CY	672 CY
6	18.6 CY	806 CY
7	21.7 CY	940 CY
8	24.8 CY	1,074 CY

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 DURING CONSTRUCTION ON THIS SITE:
- CONCRETE, ASPHALT, STONE AND BASE COURSE FROM DEMOLITION PROCESS;
- EXISTING PLANTS FROM DEMOLITION PROCESS;
- EXCESS SILT SOCK;
- MISCELLANEOUS SCRAP MATERIALS FROM BUILDING CONSTRUCTION;
- GENERAL RUBBISH AND DEBRIS.

SPECIAL GEOLOGIC AND SOIL CONDITIONS

NO SPECIAL SOIL OR GEOLOGICAL ISSUES ARE KNOWN.

THERMAL IMPACTS-

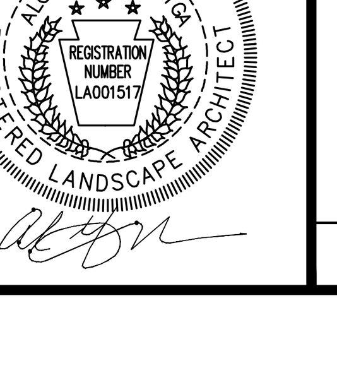
THE RUNOFF FROM THE PROJECT AREA THAT OUTLETS TO SURFACE WATERS FLOWS THROUGH COMPOST FILTER SOCKS, AND RIPRAP APRON.

COMPOST FILTER SOCKS HELP MITIGATE THERMAL IMPACTS BY SLOWING STORMWATER FLOW, ALLOWING NATURAL INFILTRATION TO PREVENT HEATED RUNOFF FROM REACHING WATERWAYS. THEY ACT AS AN INSULATING BUFFER, REDUCING DIRECT SUNLIGHT EXPOSURE AND RETAINING SOIL MOISTURE, WHICH HELPS KEEP SURROUNDING AREAS COOLER. THE ORGANIC MATERIAL HOLDS WATER, PREVENTING SOIL FROM DRYING OUT AND REDUCING HEAT STRESS ON PLANTS AND WILDLIFE. BY STABILIZING SOIL AND MINIMIZING SEDIMENT TRANSPORT, THEY PREVENT HEAT-ABSORBING PARTICLES FROM ENTERING WATER BODIES. ADDITIONALLY, THEY SUPPORT VEGETATION GROWTH, WHICH FURTHER PROVIDES SHADE AND NATURAL COOLING OVER TIME.
RIPRAP APRONS MITIGATE THERMAL IMPACTS BY REDUCING HEAT RETENTION, PROVIDING PARTIAL SHADING TO WATER, AND PROMOTING INFILTRATION THROUGH VOID SPACES BETWEEN STONES. UNLIKE IMPERVIOUS SURFACES, RIPRAP ALLOWS AIR CIRCULATION, MINIMIZING TEMPERATURE SPIKES IN RUNOFF. IT ALSO SLOWS WATER VELOCITY, PREVENTING THE RAPID TRANSPORT OF HEATED STORMWATER INTO STREAMS, WHILE STABILIZING BANKS TO REDUCE SEDIMENT TRANSPORT, WHICH CAN CONTRIBUTE TO TEMPERATURE INCREASES. THESE COMBINED EFFECTS HELP REGULATE WATER TEMPERATURE AND PROTECT AQUATIC ECOSYSTEMS FROM THERMAL STRESS.

EROSION & SEDIMENTATION CONTROL NOTES

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA



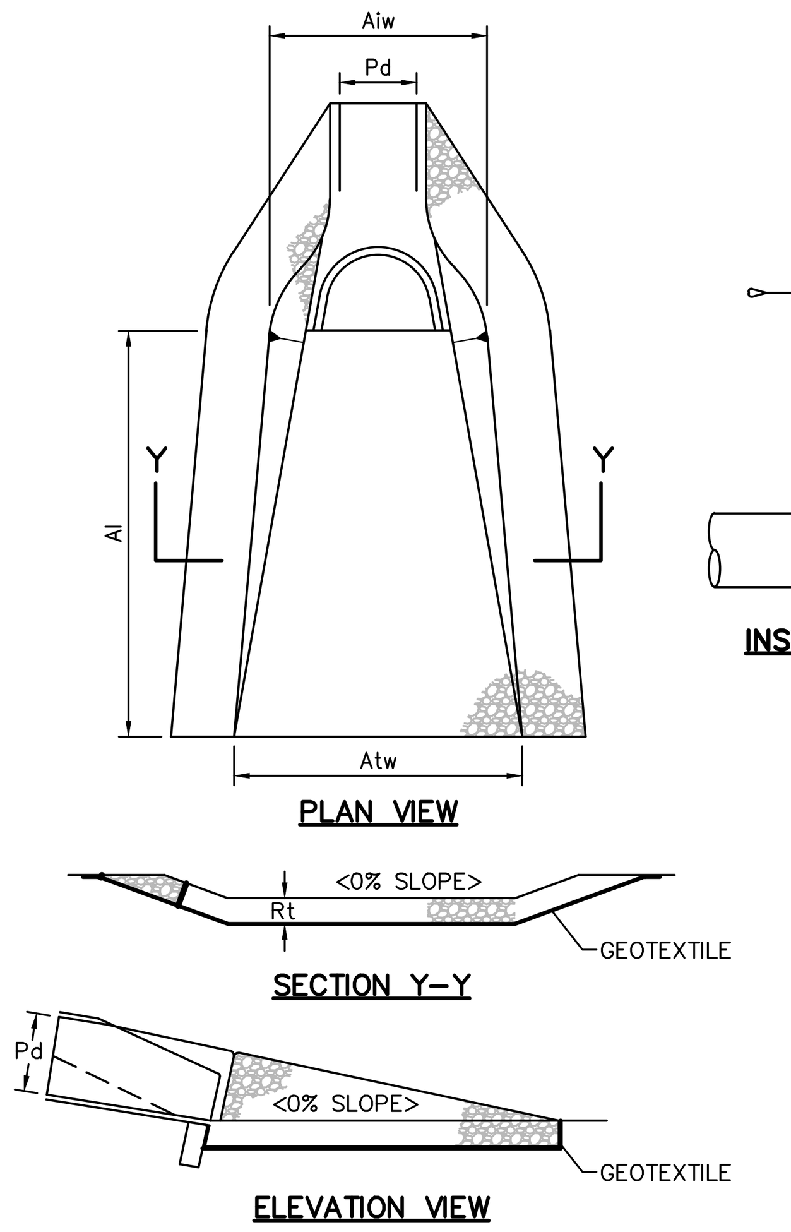
ChesterValley ENGINEERS, INC.
112 Moores Road, Suite 200, Malvern, PA 19355
610-644-4623
www.chesterv.com

PROJECT NO. 22096-2000
F.B.

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
As Noted	03/31/2025	HL	AG	

MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

THIS PLAN IS FOR EROSION & SEDIMENTATION CONTROL PURPOSE ONLY.

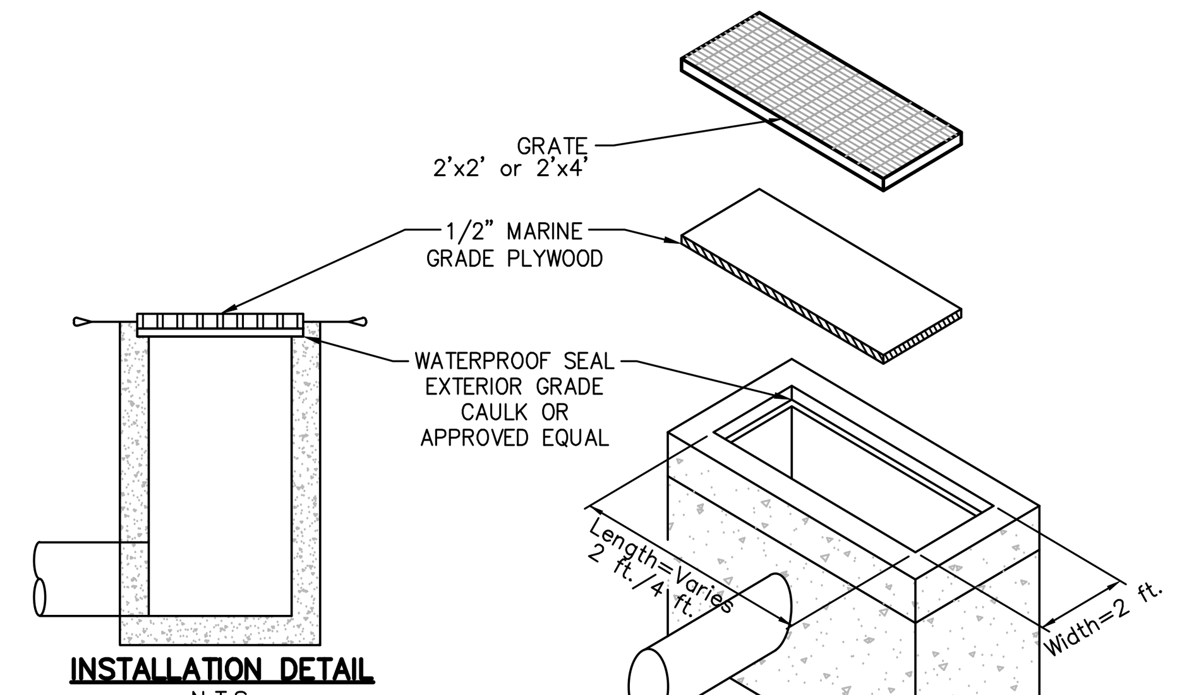


RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL DETAIL

N.T.S.

OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP SIZE (R-_)	RIPRAP THICK. Rt (IN)	APRON LENGTH Al (FT)	APRON INITIAL WIDTH Aiw (FT)	APRON TERMINAL WIDTH Atw (FT)
FES100	8"	3	9	6	2	4.4
FES200	15"	3	9	6	3.75	6.15
FES201	10"	3	9	6	2.5	4.9
FES202	15"	3	9	6	3.75	6.15
FES206	12"	3	9	6	3	5.4
FES300	8"	3	9	6	2	4.4

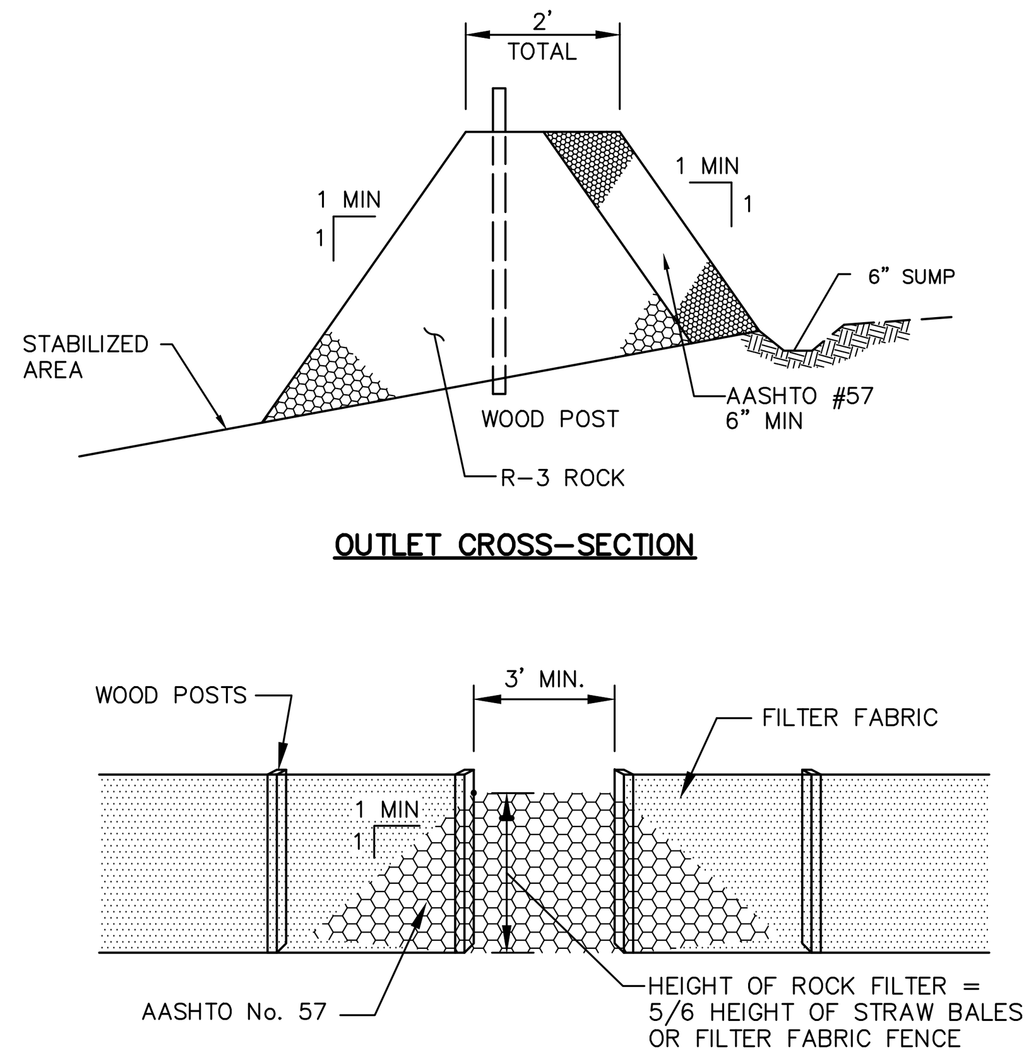
NOTES:
1. ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.
2. ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.



INLET TEMPORARY SEAL DETAIL

N.T.S.

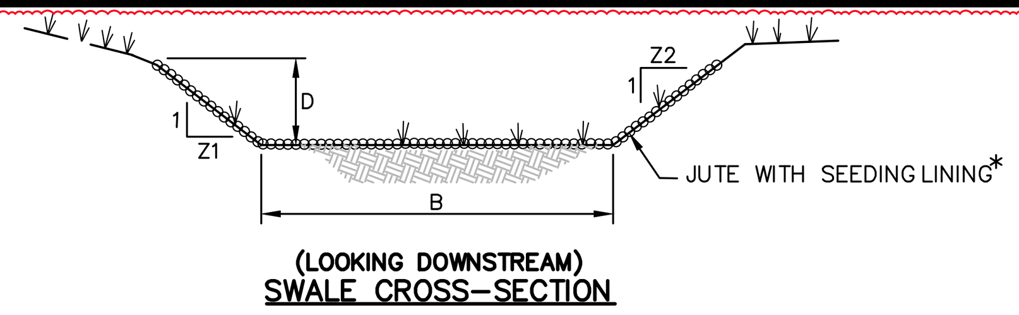
ITEMS INCLUDED IN 04/11/2025 REVISIONS:
- PROFESSIONAL SEAL ADDED TO PLAN.
- NEW ROCK CONSTRUCTION ENTRANCE DETAIL ADDED TO THIS SHEET.
- VEGETATED SWALE DETAIL ADDED TO THIS SHEET.
- ROCK FILTER OUTLET DETAIL REVISED.



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.

ROCK FILTER OUTLET DETAIL

N.T.S.



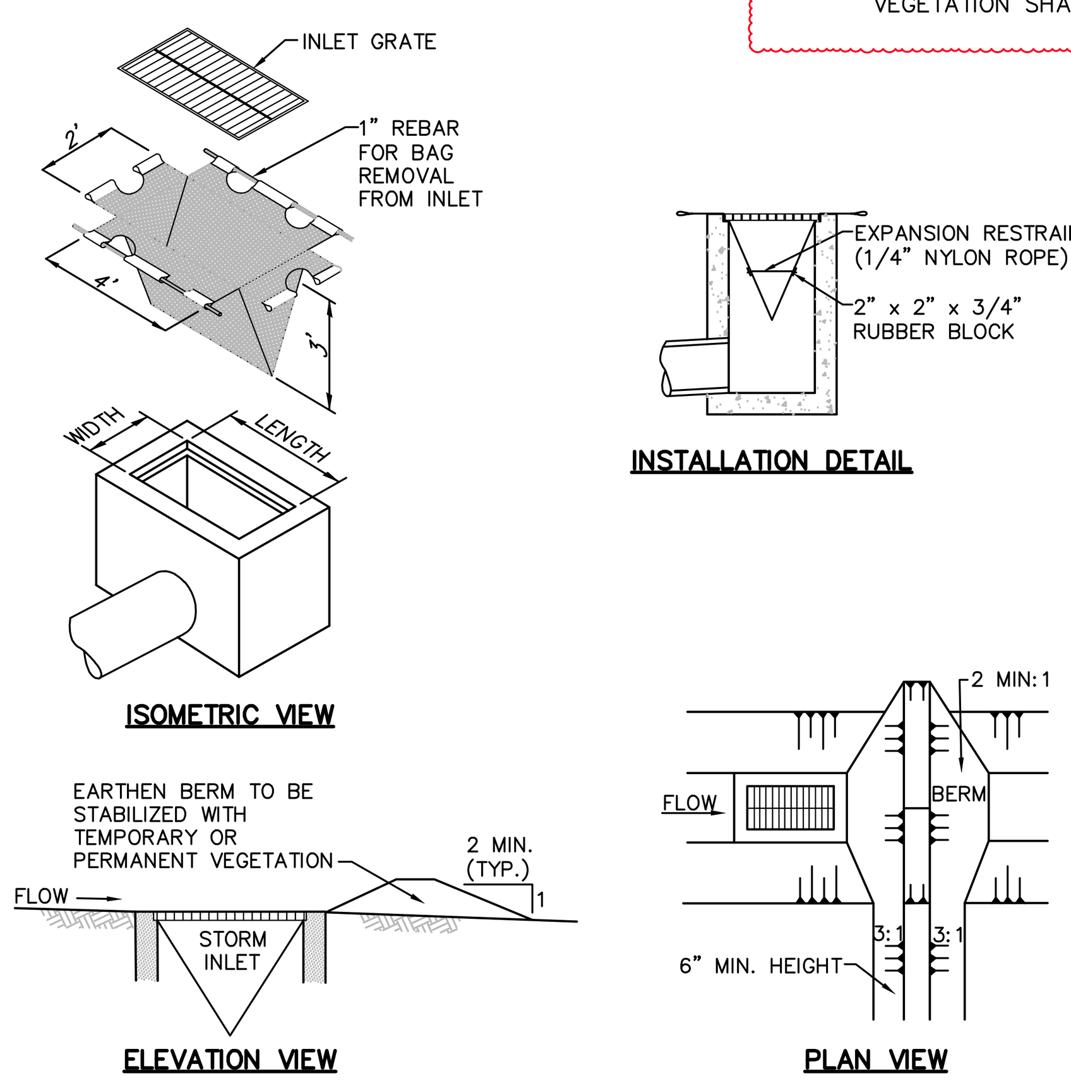
*SEE EROSION CONTROL BLANKET DETAIL FOR STAPLE PATTERNS, SEED MIX SHALL BE RAIN GARDEN MIX #ERNMX-180 FROM ERNST CONSERVATION SEEDS

VEGETATED SWALE DETAIL

N.T.S.

CHANNEL NO.	BOTTOM WIDTH B (FT)	SLOPE (%)	DEPTH D (FT)	TOP WIDTH W (FT)	Z1 (FT)	Z2 (FT)
1	6	2.0	1.5	15.00	3	3

NOTES:
1. CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.
2. NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. EXCESS VEGETATION SHALL BE REMOVED FROM PERMANENT CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY.

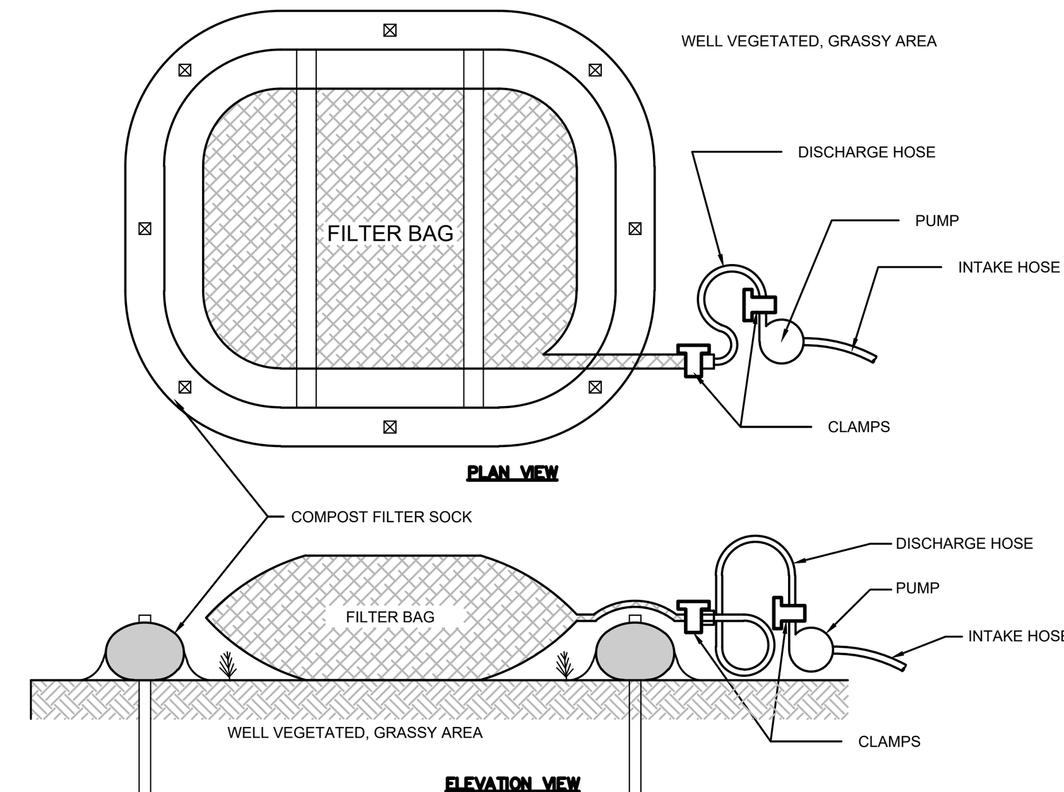


FILTER BAG INLET PROTECTION – TYPE M INLET DETAIL

N.T.S.

NOTES:
1. MAXIMUM DRAINAGE AREA = ½ 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 TRAPEZOIDAL 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.



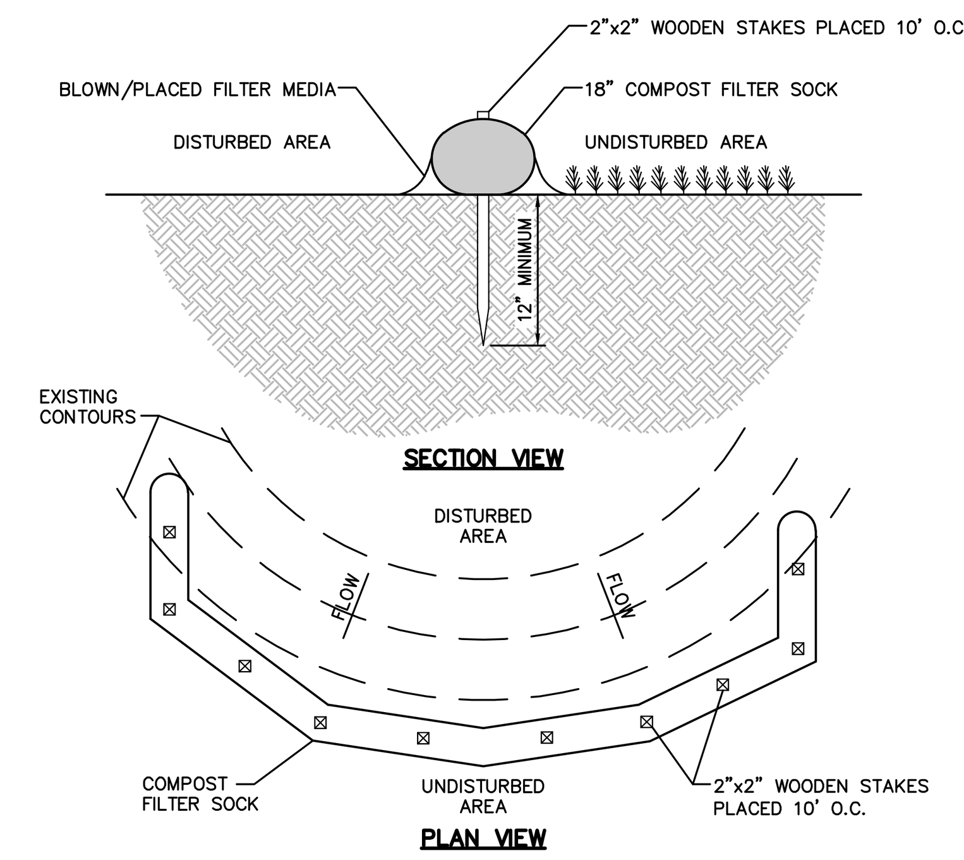
PUMPED WATER FILTER BAG WITH COMPOST SOCK DETAIL

N.T.S.

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 ½ FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.
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 ½ THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.
7. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.



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

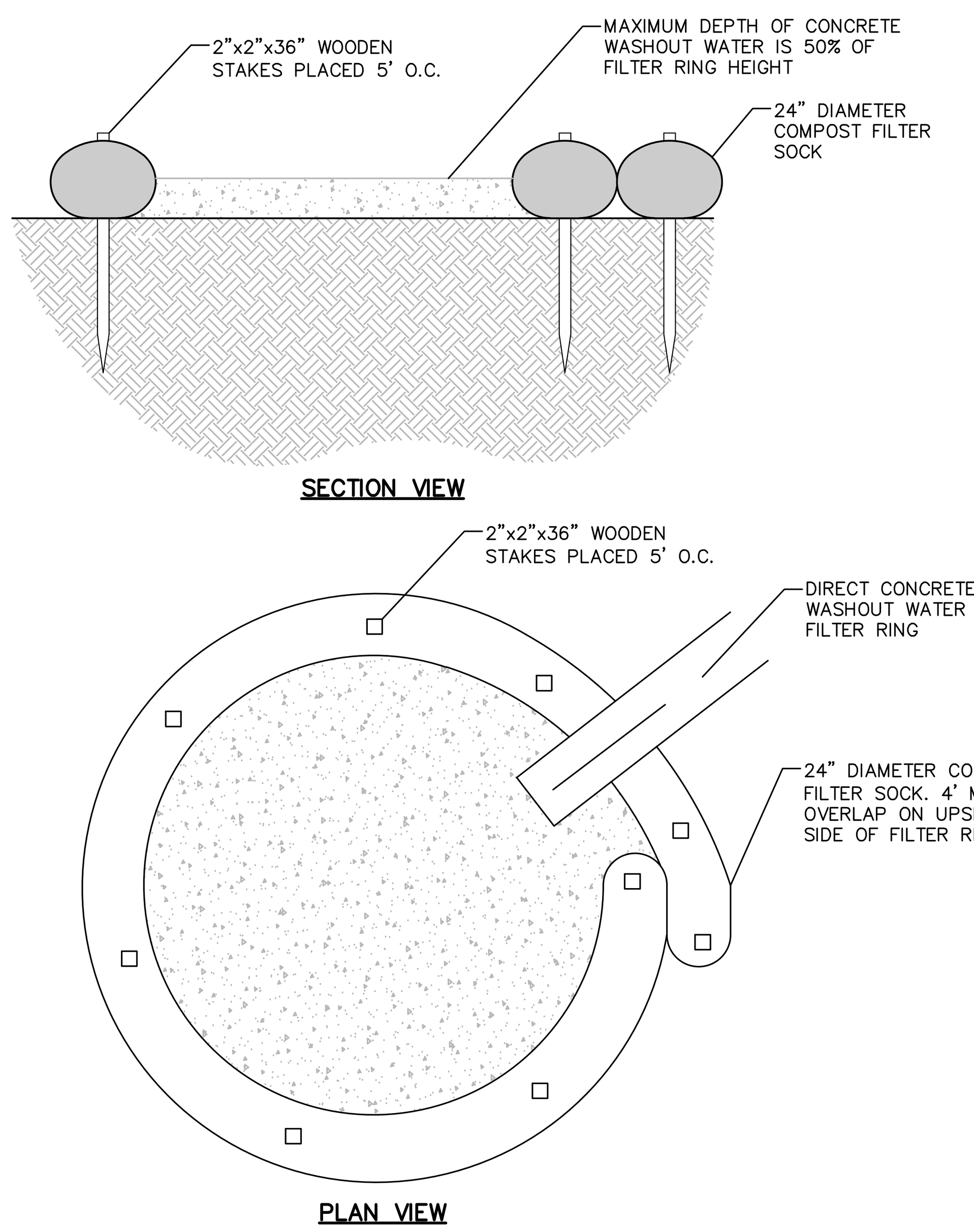
N.T.S.

TABLE 4.1 – COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS

MATERIAL TYPE	3 MIL HDPE	5 MIL HDPE	5 MIL HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMFPP)
MATERIAL CHARACTERISTICS	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE	BIO-DEGRADABLE	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE
SOC DIAMETERS		12"	12"	12"	12"
	12"	18"	18"	18"	18"
	18"	24"	24"	24"	24"
		32"	32"	32"	32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"
TENSILE STRENGTH		26 PSI	26 PSI	44 PSI	202 PSI
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	6 MONTHS	6 MONTHS	1 YEAR	2 YEARS
TWO-PLY SYSTEMS					
INNER CONTAMINANT NETTING			HDPE BIAXIAL 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

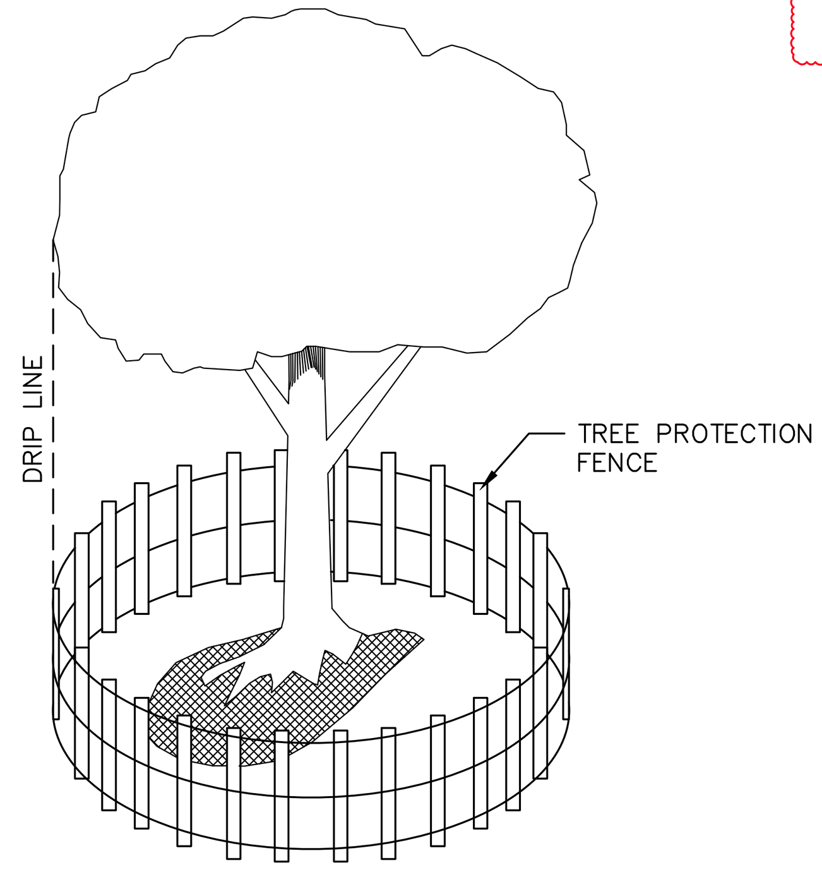
ORGANIC MATTER CONTENT	80% – 100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5 – 8.0
MOISTURE CONTENT	35% – 55%
PARTICLE SIZE	98% PASS THROUGH 1" SCREEN
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM



TYPICAL COMPOST SOCK WASHOUT INSTALLATION 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 SILK 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.



TREE PROTECTION FENCE DETAIL

N.T.S.

ALL WOODY VEGETATION TO BE RETAINED WITHIN 25 FEET OF A BUILDING SITE, PARKING AREA, DRIVEWAY OR OTHER PROPOSED IMPROVEMENT SHALL BE PROTECTED FROM EQUIPMENT DAMAGE BY FENCING OR OTHER EFFECTIVE BARRIERS APPROVED BY THE TOWNSHIP ENGINEER / LANDSCAPE ARCHITECT. FENCING OR BARRIERS SHALL BE PLACED AS NOTED BELOW, UNLESS PRIOR DETERMINATION HAS BEEN MADE BY THE TOWNSHIP ENGINEER / LANDSCAPE ARCHITECT REGARDING A MORE APPROPRIATE LOCATION.

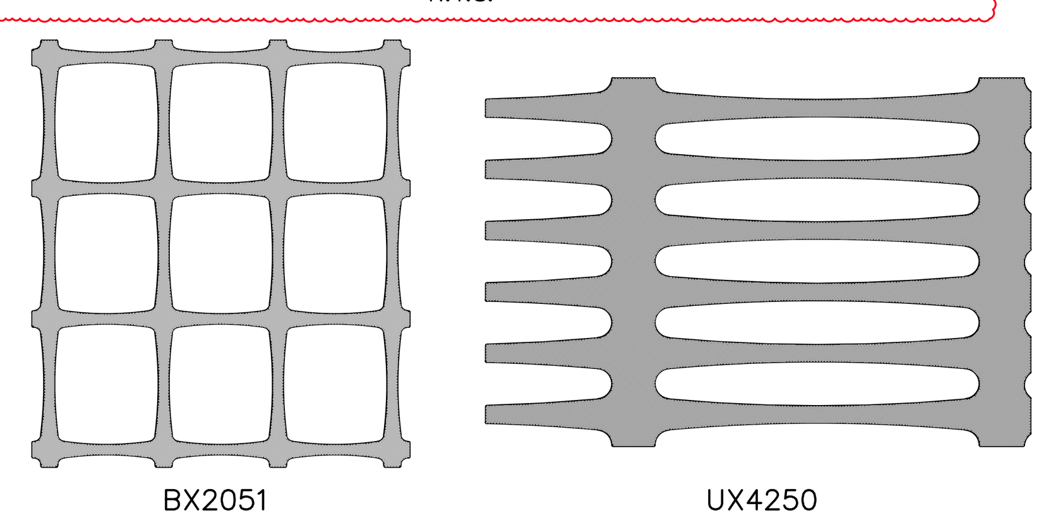
DESCRIPTION: TREES ARE OFTEN DAMAGED BY MOVING CONSTRUCTION EQUIPMENT OR BY SEDIMENT BUILDUP AROUND THE ROOTS. TREE PROTECTION FENCING, WHEN PLACED ALONG OR AROUND TREES, SERVES AS A BOUNDARY MARKER TO INDICATE THAT CLEARING AND STOCKPILING ARE NOT PERMITTED BEYOND THAT POINT.

WHEN USED: TREE PROTECTION FENCE MAY BE USED WHENEVER THERE ARE SPECIFIC TREES OR WOODED AREAS THAT MUST BE PROTECTED.

REQUIREMENTS FOR INSTALLATION: THE TREE PROTECTION FENCE IS INSTALLED BY HAMMERING WOOD OR METAL STAKES INTO THE GROUND AND CONNECTING THE FENCING MATERIAL SECURELY TO THE POSTS PER THE MANUFACTURERS' INSTRUCTIONS.

PLACE THE TREE PROTECTION FENCE ALONG THE DRIPLINES OF TREES OR 1 FOOT FROM THE TREE TRUNK FOR EVERY INCH OF TRUNK DIAMETER, WHICHEVER IS GREATER. A DRIPLINE IS AN IMAGINARY LINE EXTENDING DOWN FROM THE OUTER-MOST BRANCHES OF A TREE TO THE GROUND. THIS IS GENERALLY THE OUTER BOUNDARY FOR TREE ROOTS. IF THE TREE PROTECTION FENCE IS PLACED ANY CLOSER TO A TREE, ITS PURPOSE MAY BE DEFEATED.

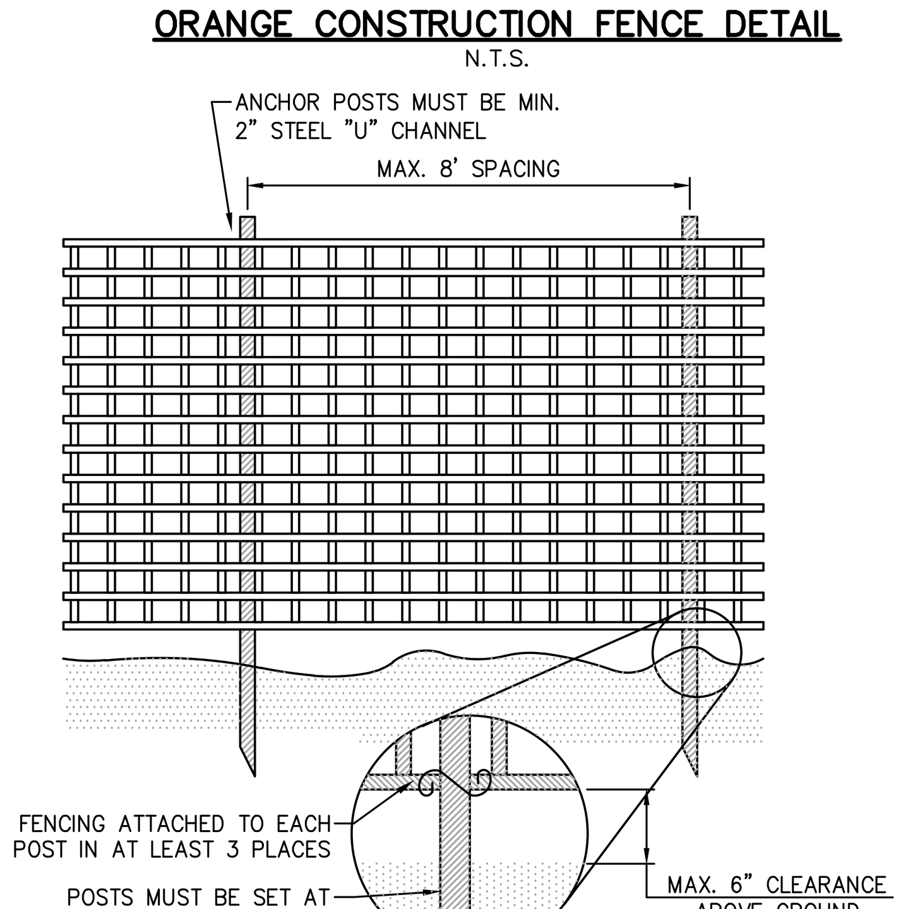
MAINTENANCE: INSPECT THE TREE PROTECTION FENCING PERIODICALLY DURING CONSTRUCTION TO MAKE SURE THAT IT IS POSITIONED SECURELY.



FOR GENERAL USE:
TENSAR SAFETY FENCE BX 2051, 4' HT., ORANGE
FOR EXTRA PROTECTION:
TENSAR SAFETY FENCE UX 4250, 4' HT., ORANGE
INSTALLATION: ATTACH FENCE TO 2" x 2" PINE STAKES DRIVEN AT LEAST 18" INTO THE GROUND, SPACED 8' ON CENTER, WITH WIRE FASTENERS IN 3 PLACES PER STAKE.

ORANGE CONSTRUCTION FENCE DETAIL

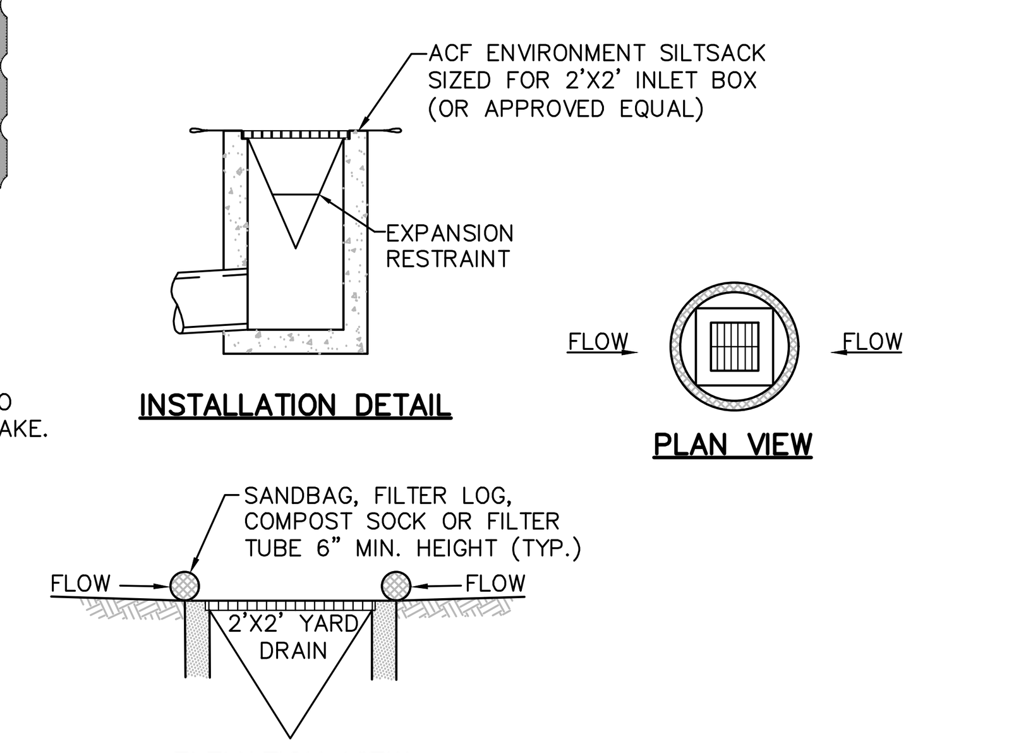
N.T.S.



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.

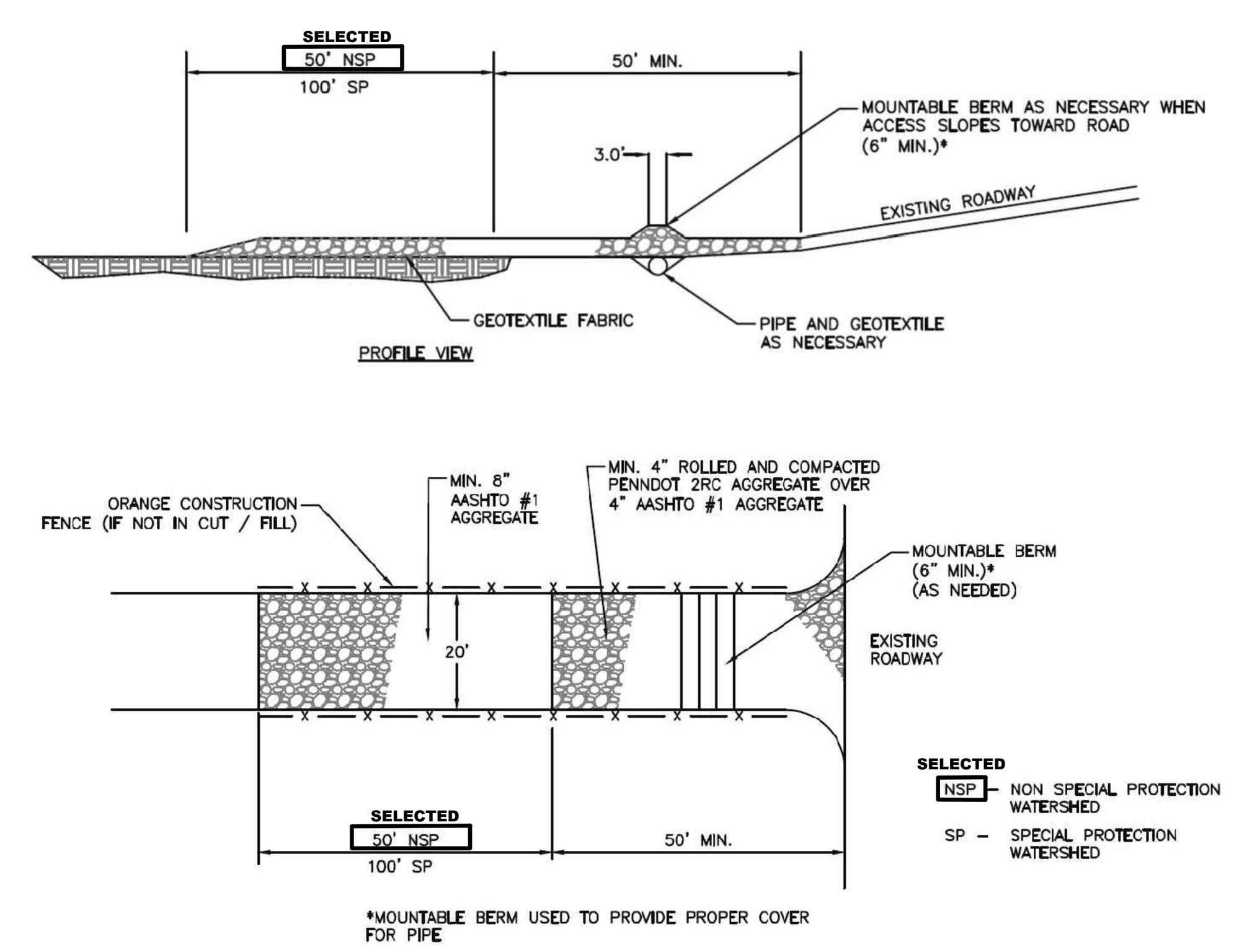


FILTER BAG INLET PROTECTION – 2'X2' YARD DRAIN DETAIL

N.T.S.

NOTES:
1. MAXIMUM DRAINAGE AREA = ½ 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 TRAPEZOIDAL 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.

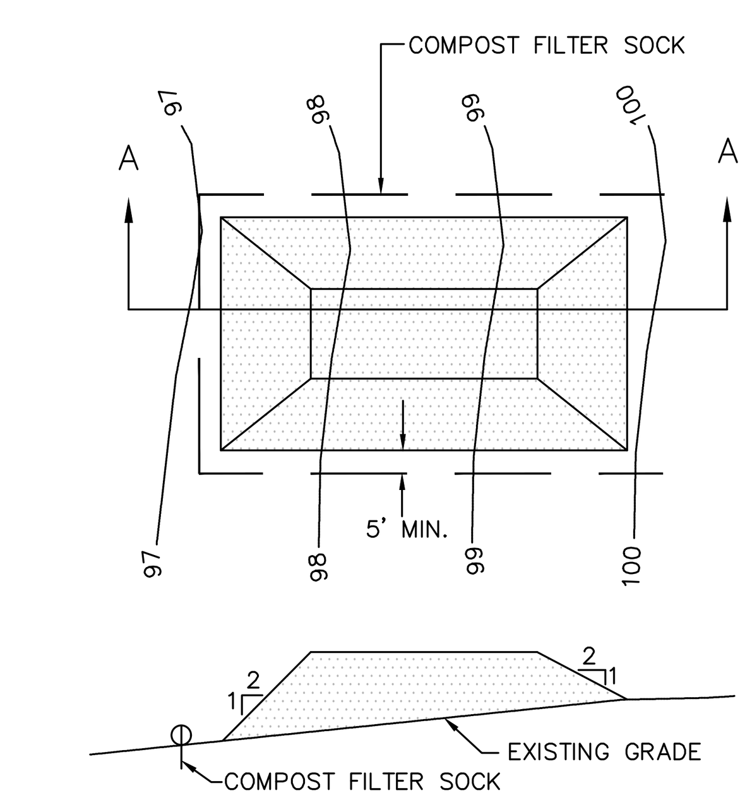


NOTES:
1. THE PROJECT SITE IS LOCATED IN NON SPECIAL PROTECTION WATERSHED. CONTRACTOR SHALL CONSTRUCT THE TOTAL LENGTH OF 100 FT FOR ALL CONSTRUCTION ENTRANCES PER THIS DETAIL.
2. REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE OR MINIMUM OF 20 FEET.
3. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
4. 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. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

ROCK CONSTRUCTION ENTRANCE DETAIL

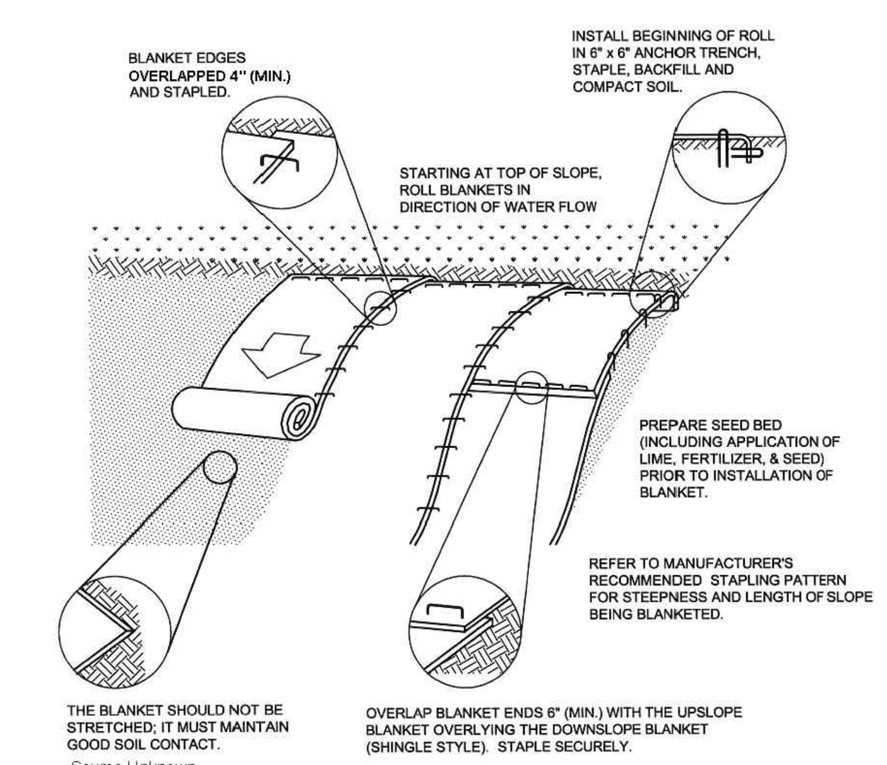
N.T.S.

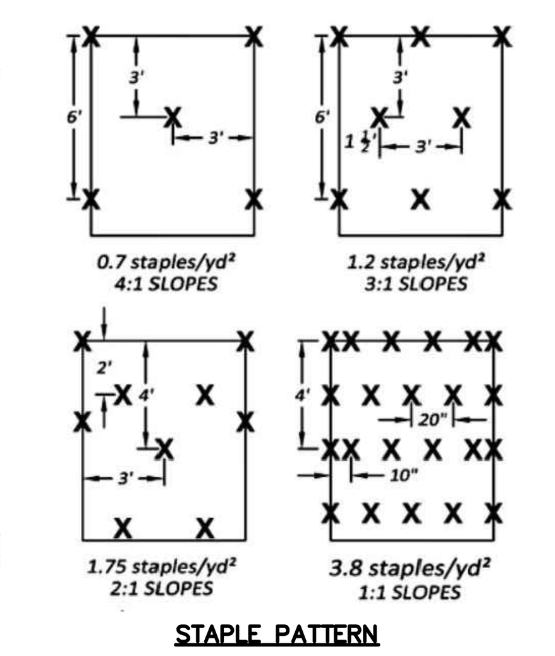


NOTES:
1. PLACE STOCKPILES AT LOCATIONS AS SHOWN ON THE EROSION AND SEDIMENTATION CONTROL PLAN.
2. ALL SIDE SLOPES SHALL BE 2 TO 1 OR FLATTER.
3. STOCKPILE SHALL RECEIVE A VEGETATIVE COVER IN ACCORDANCE WITH MINIMUM STABILIZATION REQUIREMENTS.
4. COMPOST FILTER SOCK SHALL BE INSTALLED AS DETAILED HEREON.
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.
7. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FORE MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS).

STOCKPILE DETAIL

N.T.S.





STAPLE PATTERN

Seed and soil amendments shall be applied according to the rates in the plan drawings prior to installing the blanket.

Provide anchor trench at toe of slope in similar fashion as at top of slope.

Slope surface shall be free of rocks, clods, sticks, and grass.

Blanket shall have good continuous contact with underlying soil throughout entire length. Lay blanket loosely and stake or staple to maintain direct contact with soil. Do not stretch blanket.

The blanket shall be stapled in accordance with the manufacturer's recommendations.

Blanketed areas shall be inspected weekly and after each runoff event until perennial vegetation is established to a minimum uniform 70% coverage throughout the blanketed area. Damaged or displaced blankets shall be restored or replaced within 4 calendar days.

NOTES:
1. USE JUTE OR COIR MATTING W/ WOOD STAKES.
2. NO PLASTIC/ POLYPROPYLENE MATERIALS ARE ALLOWED.

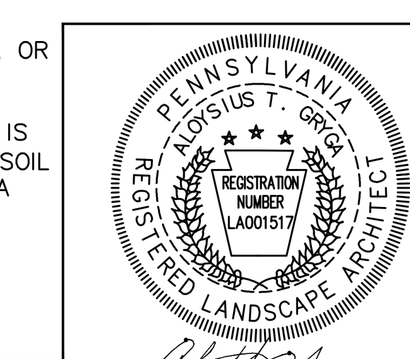
EROSION CONTROL BLANKET DETAIL

N.T.S.

EROSION & SEDIMENTATION CONTROL DETAILS

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA



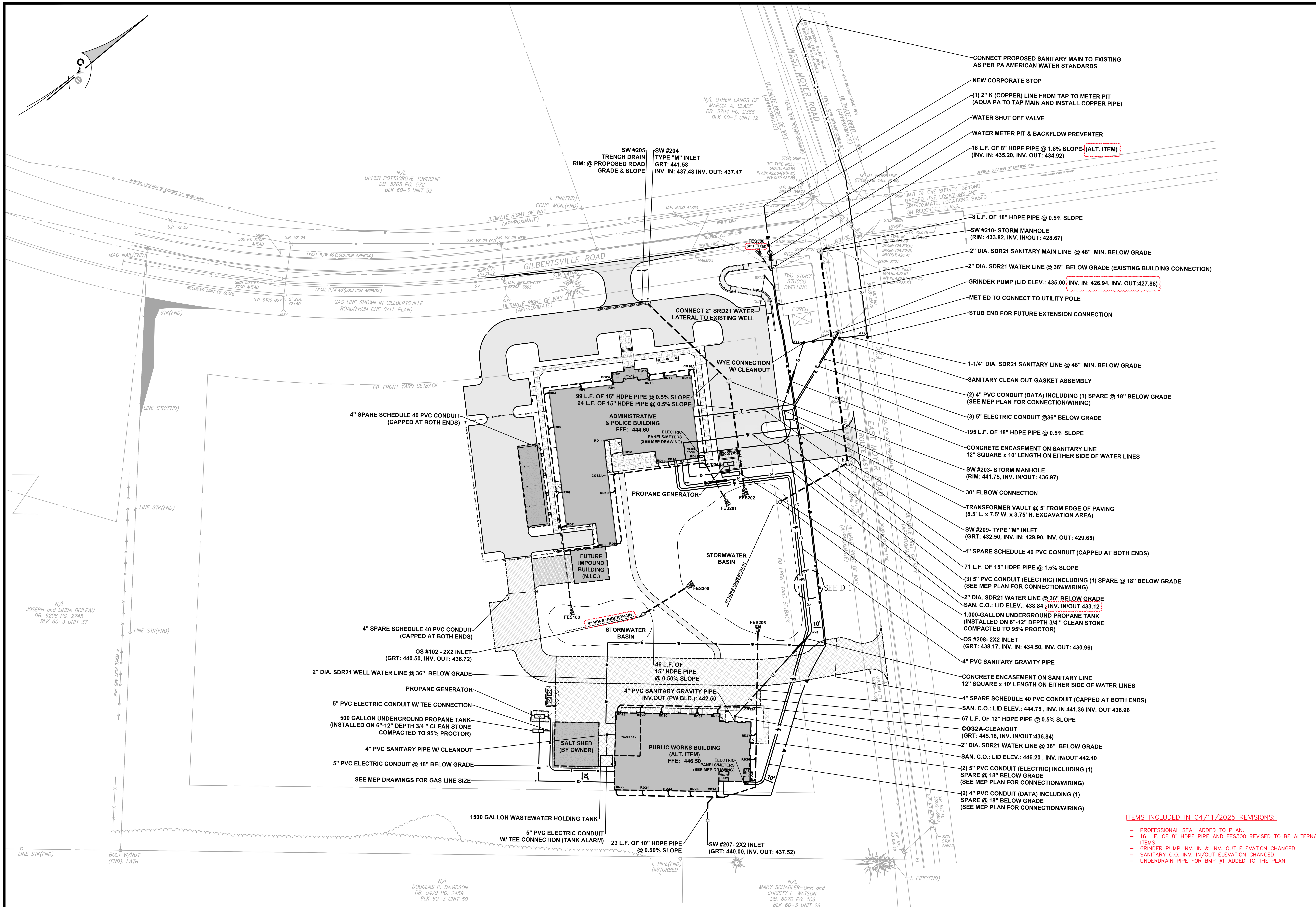
ChesterValley ENGINEERS, INC.
112 Moores Road, Suite 200, Malvern, PA 19355
610-644-4623
www.chesterv.com

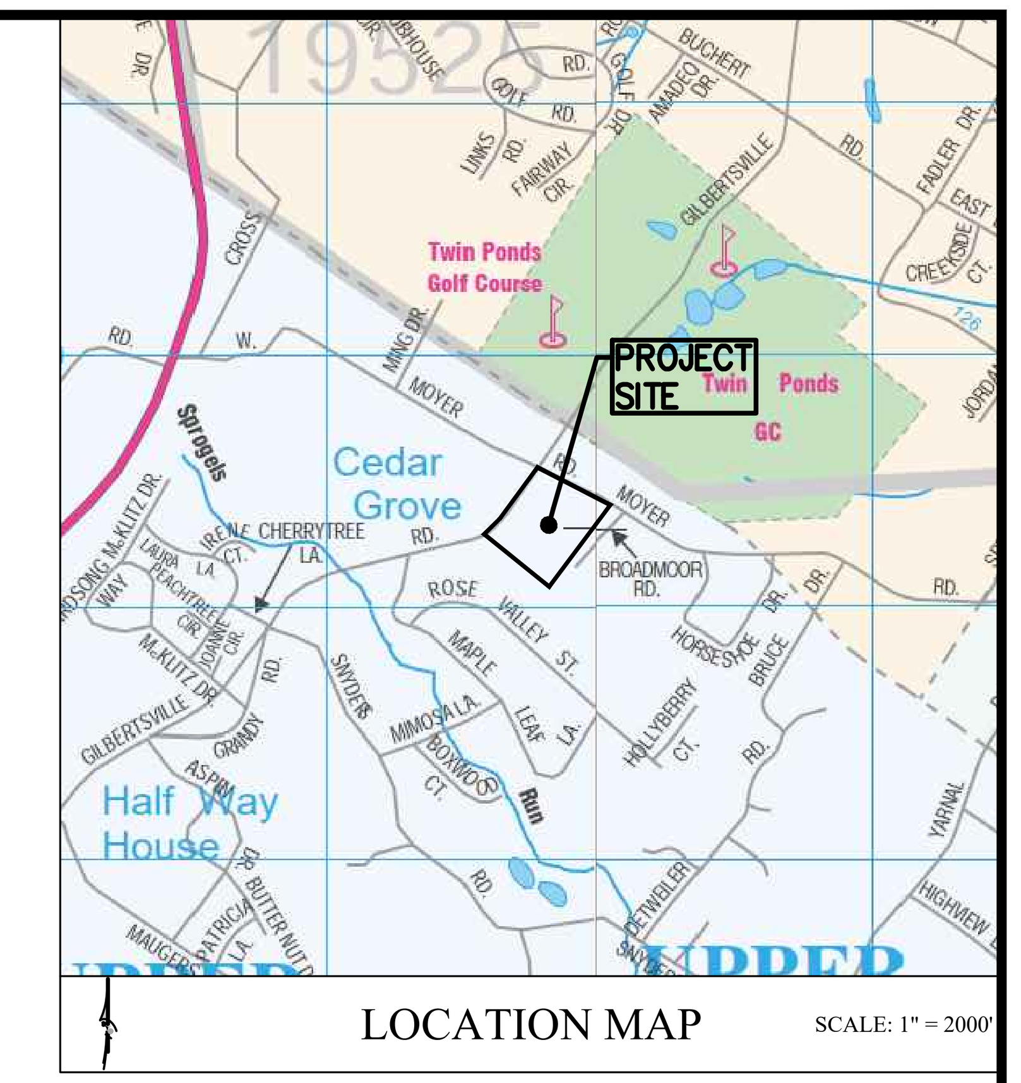
PROJECT NO. 22096-2000
F.B.

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
As Noted	03/31/2025	HL	AG	

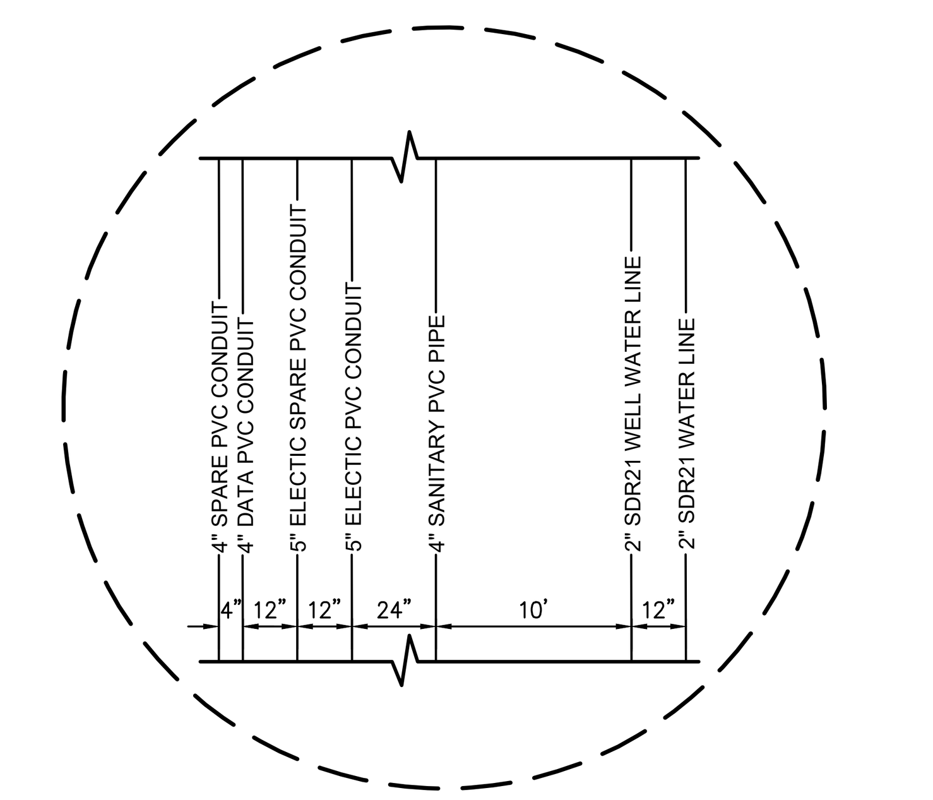
MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

THIS PLAN IS FOR EROSION & SEDIMENTATION CONTROL PURPOSE ONLY.





LOCATION MAP SCALE: 1" = 2000'



D-1: UTILITY LAYOUT DETAIL
N.T.S.

ITEMS INCLUDED IN 04/11/2025 REVISIONS:

- PROFESSIONAL SEAL ADDED TO PLAN.
- 16 L.F. OF 8" HDPE PIPE AND FES300 REVISED TO BE ALTERNATE ITEMS.
- GRINDER PUMP INV. IN & INV. OUT ELEVATION CHANGED.
- SANITARY C.O. INV. IN/OUT ELEVATION CHANGED.
- UNDERDRAIN PIPE FOR BMP #1 ADDED TO THE PLAN.

UTILITY PLAN

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS FOR

UPPER POTTSGROVE MUNICIPAL COMPLEX
2290 GILBERTSVILLE ROAD
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

ChesterValley ENGINEERS, INC.
112 Moores Road, Suite 200, Malvern, PA 19355
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PENNSYLVANIA REGISTERED LANDSCAPE ARCHITECT ALOYSIUS T. GRIGAS REGISTRATION NUMBER LA001517

SCALE	DATE	DRAWN BY	CHECKED BY	PROJECT NO.	F.B.	DRAWING
1"=40'	03/31/2025	HL	MJ	22096-2000		

NOTE TO USER OF THESE PLANS:
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PENNSYLVANIA ACT 187 REQUIREMENTS
UNDERGROUND UTILITIES SERIAL NOs. 20243300770
CHESTER VALLEY ENGINEERS, INC. DOES NOT GUARANTEE THE ACCURACY OF THE LOCATIONS 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.

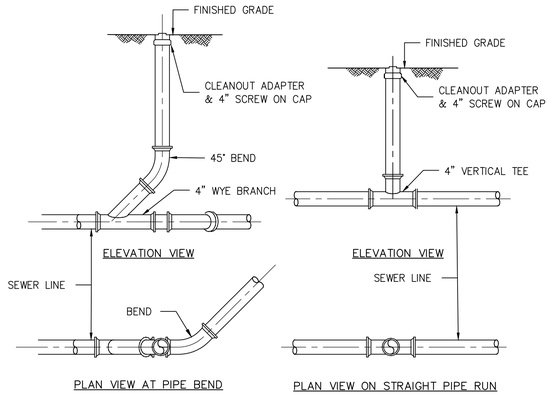
EXCAVATIONS, TRENCHING, AND SHORING
ALL EXCAVATIONS, TRENCHING, AND SHORING OPERATIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING UNITED STATES DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION PUBLICATIONS OR THE LATEST REVISIONS THERETO:

(1) CONSTRUCTION INDUSTRY STANDARDS AND INTERPRETATIONS (OSHA 2207) SUBPART "P", PART 1926/1910 – "EXCAVATIONS, TRENCHING AND SHORING".
(2) "EXCAVATIONS AND TRENCHING OPERATIONS" (OSHA 2226) DATED 1985 (REVISED).

SEE SHEET 02 FOR FACILITY OWNER'S DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.

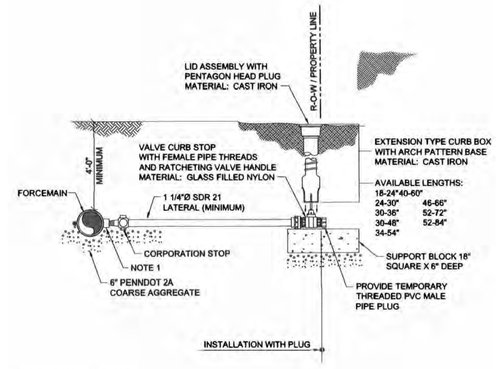
PENNSYLVANIA ONE CALL SYSTEM, INC.
CALL 3 WORKING DAYS BEFORE YOU DIG
1-800-242-1776
POCS SERIAL NUMBER: 20243300770

MONTGOMERY COUNTY BLOCK 60-3 UNIT 12



SANITARY CLEAN OUT DETAILS – GRAVITY PIPES

N.T.S.



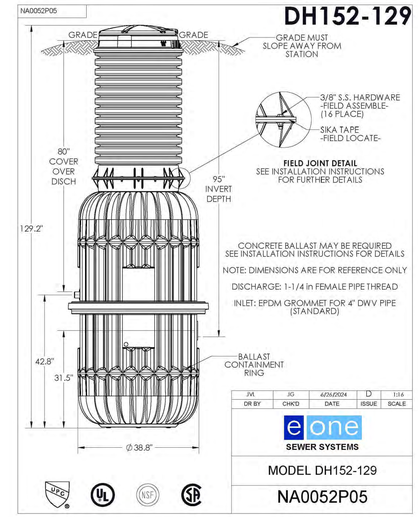
DRAWING NOTES:

1. FOR CONNECTION TO EXISTING FORCEMAIN PROVIDE WET SADDLE TAP.

   FOR CONNECTION TO NEW FORCEMAIN PROVIDE SANITARY PRESSURE WYE FITTING AND 45° BEND ON LATERAL.

SANITARY FORCE MAIN DETAIL

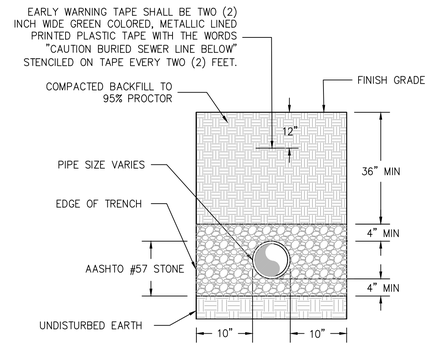
N.T.S.



NOTES:
1. MANUFACTURER: E-ONE SEWER SYSTEMS
2. MODEL: DH152-93

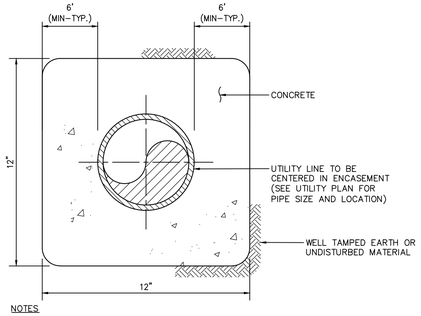
GRINDER PUMP DETAILS

N.T.S.



STANDARD SANITARY SEWER PIPE BEDDING DETAIL

N.T.S.

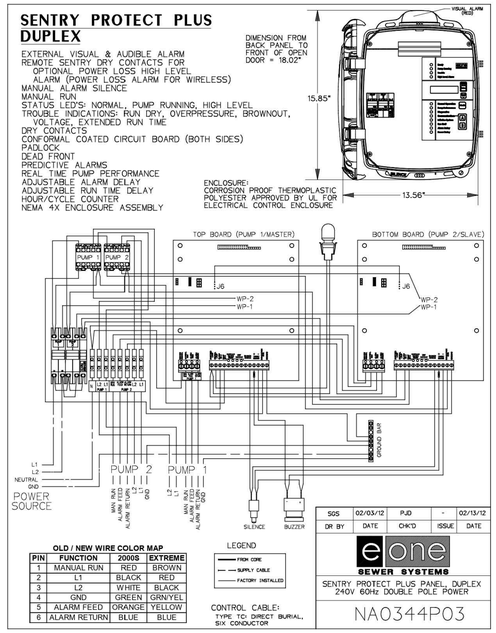


NOTES

1. 20 FT. LONG ENCASEMENT SHALL BE CENTERED OVER CROSSING UTILITY.

UTILITY PIPE CONCRETE ENCASEMENT DETAIL

N.T.S.



OLD / NEW WIRE COLOR MAP

PIN	FUNCTION	2000S	EXTREME
1	MANUAL RUN	RED	BROWN
2	L1	BLACK	RED
3	L2	WHITE	BLACK
4	GND	GREEN	GRN/YEL
5	ALARM FEED	ORANGE	YELLOW
6	ALARM RETURN	BLUE	BLUE

LEGEND
- ITEM CORE
- SUPPLY CABLE
- FACTORY INSTALLED

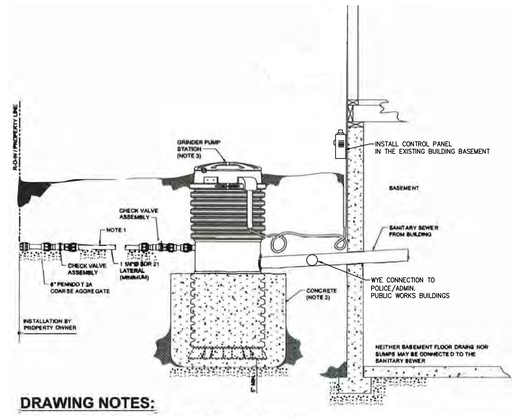
CONTROL CABLE:
TYPE TC: DIRECT BURIAL, SIX CONDUCTOR

NOTES

1. MANUFACTURER: E-ONE SEWER SYSTEMS
2. MODEL: SENTRY PROTECT PLUS PANEL, DUPLEX, 240V, 60Hz, DOUBLE POLE POWER

GRINDER PUMP ALARM PANEL DETAILS

N.T.S.



DRAWING NOTES:

1. PROVIDE CONTINUOUS UPWARD SLOPE TO THE LATERAL ASSEMBLY CONNECTION.
2. INSTALL CONCRETE AS REQUIRED TO PROPERLY ANCHOR THE UNIT. MINIMUM DIMENSIONS: 50 INCHES DIAMETER, AS HIGH AS THE FLUTED SECTIONS OF THE STATION. INSTALL TWO EMBEDDED LIFT HOOKS INTO THE TOP OF THE CONCRETE AT 180°.

   TO PROVIDE THE MINIMUM 6-INCH CONCRETE FOUNDATION, PRECAST CONCRETE BASES MAY ALSO BE USED. THEY MUST BE AT LEAST 6 INCHES THICK BY 50 INCHES IN DIAMETER, AND CAST WITH AT LEAST 6 NUMBER 4 REBARS EXTENDING AT LEAST 4 INCHES (AND HOOKED) INTO THE BASE AND AT LEAST 8 INCHES (AND HOOKED) INTO THE COLLAR.
3. GRINDER PUMP SHALL BE SIZED TO EXCEED THE PRESSURE IN THE SANITARY SEWER FORCEMAIN.

GRINDER PUMP INSTALLATION DETAIL

N.T.S.

ITEMS INCLUDED IN 04/11/2025 REVISIONS:

- PROFESSIONAL SEAL ADDED TO PLAN.

UTILITY DETAILS (SANITARY)

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX
2290 GILBERTSVILLE ROAD
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

ChesterValley ENGINEERS, INC.
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610-644-4623
www.chestervalley.com

PROJECT NO. 22096-2000
F.B.

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
1"=40'	03/31/2025	HL	MJ	

PENNSYLVANIA REGISTERED LANDSCAPE ARCHITECT — REGISTRATION NUMBER LA001517

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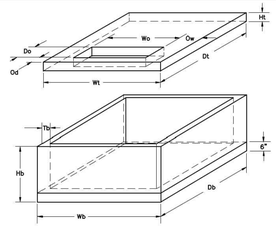
SEE SHEET 02 FOR FACILITY OWNER'S DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.

MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

General Notes:

1. The contractor shall contact the Company prior to beginning work to discuss the details of the transformer foundation such as position, orientation, working clearances, barrier protection, construction specifications, and inspection procedures. The contractor is responsible for purchasing,as well as , installing, and maintaining the pre-cast transformer foundation and associated secondary rack equipment (if needed). The contractor/developer shall coordinate site preparations with the desired delivery date. The contractor shall provide a clear and firm (e.g., concrete, asphalt, or grasscrete) approach to within ten (10) feet of the point of delivery and keep the area clear of obstructions that may block the use of delivery vehicles or Company vehicles (e.g., crane access to the transformer).
2. The developer /contractor is responsible for the excavation to install the transformer foundation and for backfilling afterward. The excavation shall be two (2) feet wider than the vault dimensions (shown Exhibit 25, page 2). The excavation depth shall be 45- inches deep for 42-inch high foundations bases or 57-inches deep for 54-inch high foundation bases. Six (6) inches of AASHTO #57 crushed stone shall be leveled and compacted in the bottom of the excavation as a base. Pavement (concrete, asphalt, or grass-crete) shall be provided to within ten (10) feet of the installation for Company trucks. The contractor should provide three (3) pieces of 4" X 4" X 8' lumber off to the side for temporarily unloading the foundation top at delivery time.
3. Conduits shall enter near the corners of the foundation (refer to Exhibit 25, page 1) through knockouts to provide for proper cable bending radius and pulling set-up and to facilitate cable racking (when needed). Conduits shall have end bells and shall be terminated flush with the inside surface of the foundation. The customer/contractor shall re-mortar the knockout area around the conduit penetration into transformer foundation to prevent water migration.
4. The developer /contractor will furnish and install all service cables as required per Exhibit 1. The developer /contractor shall allow sufficient slack, approximately five (5) feet, in the service lateral cables after they are racked. The slack allows the service cables to be trained so that the weight of the cables is supported by the cable racks and not supported by the transformer bushings. When requested, the developer /contractor shall supply and install cable racks (e.g., 30-inch rack made by A. B. Chance (Hubbell), using the inserts, on the side(s) of the foundation to support the service cables a minimum of 12 inches above floor level (per NEC Article 300.32). Refer to ANSI C135.35 for galvanized cable rack and hooks, and ASTM A153 for zinc coating (hot dip) on iron and steel hardware.
5. The contractor shall seal around the service cables inside the conduits (with approved foam) to prevent migration of water or gases. All unused ducts shall also be caped.
6. Backfill on all sides up to finish grade with 6" minimum of AASHTO #57 crushed stone to form a reservoir to contain the transformer oil in case of a leak.
7. The contractor shall install a continuous loop of #2 bare, seven (7) strand, soft drawn copper ground wire connected to two (2) 5/8" X 8' ground rods installed in opposite corners of the vault excavation in undisturbed earth (refer to Exhibit 25, page 1). Both ends of the ground wire shall enter the foundation through a one (1) inch diameter hole to be drilled or chiseled in the upper right-hand corner of the knockout panel. Each ground wire tail shall extend fifteen (15) feet inside the vault beyond the knockout point.
8. The decision to open the sump drainage or leave it closed will be made by the Company based on field conditions. The contractor is responsible for taking corrective action (improve drainage, sump pump, etc.) for a foundation that fills with water and water is leaking through service conduits into the customer's building. The area surrounding the foundation shall be graded so that ground water will not collect.
9. The contractor shall install protective barriers when the transformer is located in an area exposed to vehicular traffic (refer to Exhibit 30), consult the Company for details.
10. The deeper base for the 1500-2000 kVA transformer is used when secondary conduit configuration requires a deeper wall to maintain NEC/NESC minimum cover over the conduit.
11. Foundation for 34.5 kV live-front transformer includes a six-inch thick dividing wall between the high voltage and the low voltage compartments centered 55-1/2" from the inside edge of the low voltage compartment side wall.

TRANSFORMER PRE-CAST CONCRETE FOUNDATION AND VAULT NOTES



SELECTED

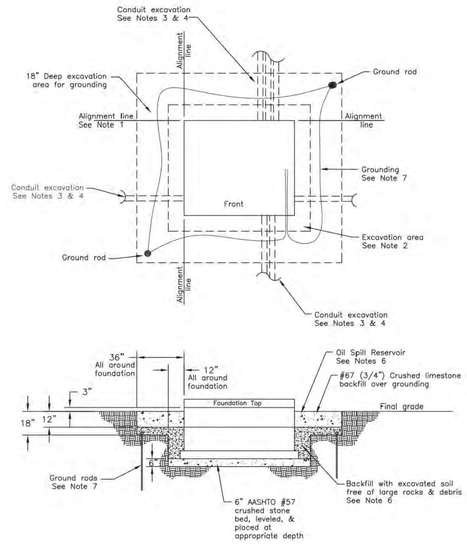
Transformer Size (kVA)	Found. Code	Base Wb	Base Db	Base Hb	Base Tb	Base WT.	Top Wt	Top Dt	Top Ht	Top WT.	Opening in Top Wo	Opening in Top Do	Opening in Top Ow	Opening in Top Od
22,940 GrdY/14,400 Volt & Below														
45 – 150	J1	72"	54"	42"	4"	4,275#	72"	54"	6"	1,725#	55"	14"	8.5"	6"
225 – 1000	J2	78"	66"	42"	4"	8,000#	78"	66"	6"	2,400#	60"	19"	9"	6"
1500 – 2500	J3	96"	96"	42"	6"	12,000#	96"	96"	9"	6,400#	60"	19"	18"	9"
1500 – 2500 (Note 7)	J4	96"	96"	54"	6"	14,000#	96"	96"	9"	6,400#	60"	19"	18"	9"
34,500 GrdY/19,920 Volt														
1500 – 2500	J3	96"	96"	42"	6"	12,000#	96"	96"	9"	6,400#	60"	19"	18"	9"
1500 – 2500 (Note 7)	J4	96"	96"	54"	6"	14,000#	96"	96"	9"	6,400#	60"	19"	18"	9"
34,500 Delta Volt Live-Front (Includes CE) 36 kV System)														
All Sizes (Note 8)	J5	138"	120"	54"	6"	24,655#	138"	120"	9"	10,270#	102"	36"	18"	18"

Transformer Size (kVA)	Found. Code	Width	Depth	Height	Stone Base
22,940 GrdY/14,400 Volt & Below					
45 – 150	J1	96"	78"	45"	6"
225 – 1000	J2	102"	90"	45"	6"
1500 – 2500	J3	120"	120"	45"	6"
1500 – 2500 (Note 7)	J4	120"	120"	57"	6"
34,500 GrdY/19,920 Volt					
1500 – 2500	J3	120"	120"	45"	6"
1500 – 2500 (Note 7)	J4	120"	120"	57"	6"
34,500 Delta Volt Live-Front (Includes CE) 36 kV System)					
All Sizes (Note 8)	J5	162"	144"	57"	6"

NOTES:
1. SELECTED: 225 - 1000 kVa

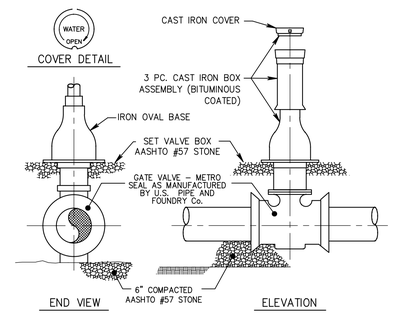
TRANSFORMER PRE-CAST CONCRETE FOUNDATION AND VAULT DETAIL

N.T.S.



TRANSFORMER PRE-CAST CONCRETE FOUNDATION AND VAULT DETAIL

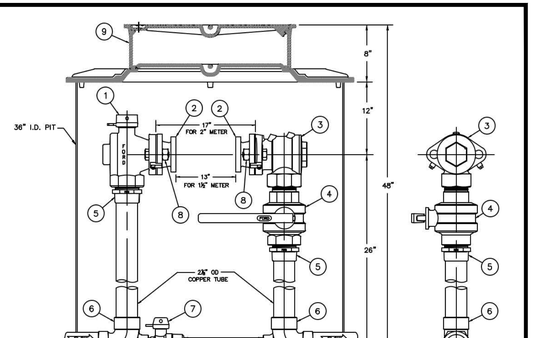
N.T.S.



NOTES:
1. FOR STANDARD 2" CONNECTION, PROVIDE A TAPPED COUPLING WITH THREADED INSERT OR DOUBLE-STRAPPED SADDLE CLAMP.
2. DO NOT PLACE CURB BOX IN PAVED AREAS.
3. ALL SERVICE CONNECTIONS SHALL BE LOCATED AT THE MIDPOINT BETWEEN SIDE LOT LINES.
4. WHERE SIDEWALK PARALLELS ROADWAY, THE CURB BOX SHALL BE PLACED BETWEEN THE CURB AND SIDEWALK. ALL OTHER LOCATIONS, CURB BOX TO BE PLACED WHERE DIRECTED BY AUTHORITY.

GATE VALVE DETAILS

N.T.S.



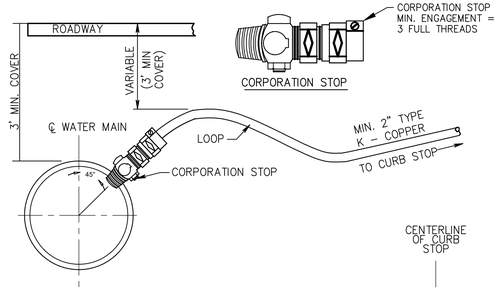
NOTES:
1. CATALOG NUMBERS SHOWN ARE AS MANUFACTURED BY THE FORD METER BOX COMPANY, INC. "X" IN CATALOG NUMBERS SHOULD BE REPLACED PER THE FORD CATALOG TO INDICATE THE TYPE OF INLET AND OR OUTLET REQUIRED.
2. PROVIDE TWO (2) COPPER OR BRASS REDUCERS AT INLET AND OUTLET FOR 1-1/2" SERVICE.
3. METER PIT SHALL BE 36" I.D. PVC SDR0-LOC AS MANUFACTURED BY SOHOCO PRODUCTS, OR APPROVED EQUAL.
4. METER PIT COVER SHALL BE MONITOR COVER WITH INNER LID, MC-36-MB, AS MANUFACTURED BY THE FORD METER BOX COMPANY, INC. OR APPROVED EQUAL.
5. DOMESTIC SERVICE REQIRES BACKFLOW DEVICE, BACKFLOW DEVICE TO BE LOCATED ON SERVICE LINE AT ENTRY POINT INTO BLDG. BEFORE ANY CONNECTIONS.
6. MARK INLET, OUTLET, & DIRECTION OF FLOW ON LINT.
7. ALL BRASS OF 85-5-5-5 RED BRASS AWWA C800-89 ASTM B62-93.

ITEM	DESCRIPTION	QTY.	CAT. NO.
1	ANGLE BALL VALVE	1	BFAX3-777W-MSB
2	METER ADAPTERS/PAIR	1	A87
3	ANGLE DUAL CHK VALVE (NSF) 1024	1	HPFA3X-777-MSB
4	BALL VALVE	1	BXK-777-HB-87
5	SOLDER BUSHING	2	CSB-77
6	TEE	2	CSTEE-78-T
7	BALL VALVE	1	BXK-455W
8	BOLT & NUT / PR	2	PSB
9	MONITOR COVER W/ INNER LID *	1	MC-36-MB

* ORDERED SEPARATELY

WATER METER PIT DETAIL

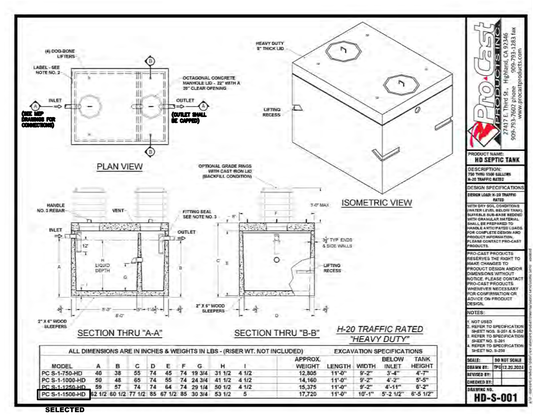
N.T.S.



NOTES:
1. FOR STANDARD 2" CONNECTION, PROVIDE A TAPPED COUPLING WITH THREADED INSERT OR DOUBLE-STRAPPED SADDLE CLAMP.
2. DO NOT PLACE CURB BOX IN PAVED AREAS.
3. ALL SERVICE CONNECTIONS SHALL BE LOCATED AT THE MIDPOINT BETWEEN SIDE LOT LINES.
4. WHERE SIDEWALK PARALLELS ROADWAY, THE CURB BOX SHALL BE PLACED BETWEEN THE CURB AND SIDEWALK. ALL OTHER LOCATIONS, CURB BOX TO BE PLACED WHERE DIRECTED BY AUTHORITY.

CORPORATION STOP DETAILS

N.T.S.



MODEL	A	B	C	D	E	F	G	H	J	APPROX. WEIGHT	LENGTH	WIDTH	INLET	HEIGHT
PC S-1-750-HD	66	38	55	74	45	74	19 3/4	31 1/2	4 1/2	14,800	11'-0"	9'-2"	4'-4"	6'-2"
PC S-1-1000-HD	78	48	67	74	54	74	19 3/4	31 1/2	4 1/2	16,160	11'-0"	9'-2"	4'-3"	6'-0"
PC S-1-1500-HD	96	57	74	74	64	74	23 1/4	50 1/2	4 1/2	18,375	11'-0"	9'-2"	4'-11"	6'-2"
PC S-1-1500-HD	1 1/2	60 1/2	77 1/2	85	67 1/2	85	30 3/4	53 1/2	5	17,720	11'-0"	10'-1"	5'-2 1/2"	6'-5 1/2"

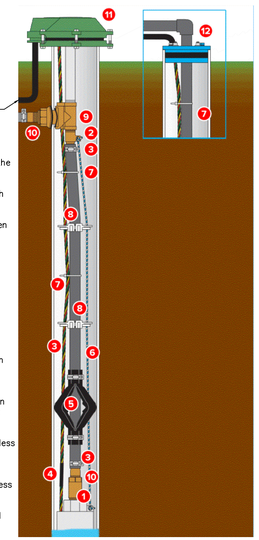
SELECTED

ALL DIMENSIONS ARE IN INCHES & WEIGHTS IN LBS - (RISER WT. NOT INCLUDED) EXCAVATION SPECIFICATIONS

NOTES:
1. TANK SHALL BE INSTALLED SUBSURFACE AND SHALL BE H-20 TRAFFIC RATED "HEAVY DUTY".
2. BACK FILLING SHALL BE 8" LIFTS TO 95% COMPACTION WITH NATIVE SOIL.
3. TANKS TO BE INSTALLED AS PER MANUFACTORIES' SPECIFICATIONS.

HOLDING TANK DETAIL

N.T.S.



NOTES:
1. CHECK VALVE
   Located at the top of the pump. It prevents backflow into the pump and holds the head of the water in the system.
2. BRASS ROPE ADAPTER
   Connects the Pitless Adapter and the Submersible Pump with Safety Rope.
3. IDEAL CLAMPS
   All-stainless steel clamps for dependable connections between Pip and Insert Fittings or Torque Arrestor.
4. 3M HEAT SHRINK SLICE KIT
   For waterproof electric cable splices in submersible pump installations.
5. TORQUE ARRESTOR
   Installed directly above Submersible Pumps to protect pump and well components from starting torque damage.
6. SAFETY ROPE
   A safety line from the top of the well to the pump.
7. CABLE TIE
   Fastens cable to Drop Pipe.
8. CABLE GUARD
   US Patent #6,595,284. Protects submersible cable wires from abrading against sides of well. Two styles available. Self-clamping snap in.
9. PITLESS ADAPTER
   Provides a watertight, sanitary, removable connection between the pump and the house. Installed in casing below the frost line to prevent freezing.
10. BRASS INSERT FITTING
    Provides connection between poly pip and pipe thread of Pitless Adapter.
11. WATER TIGHT WELL CAP
    Inner gasket compresses to outside diameter of casing to provide a watertight seal. Top of cap removed easily to access well for service.
12. WELL SEAL
    Used in above-ground installations to provide a positive seal inside casing.

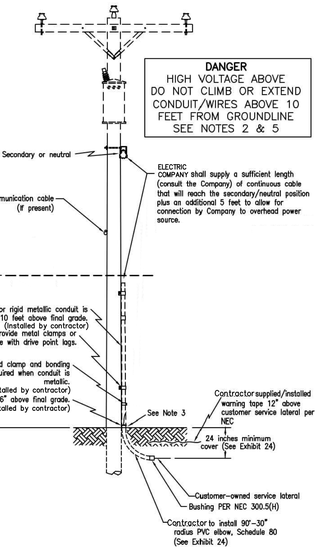
WELL WATER CONNECTION DETAIL

N.T.S.

NOTES:
1. Double check valve assemblies are not permitted for health hazard applications.
2. RP devices must not be installed in a pit or other area subject to flooding. The relief vent will create a cross connection if submerged.
3. If occasional spillage from the relief vent will cause damage or be a nuisance, the vent must be equipped with an air gap fitting and indirectly drained to an acceptable point of disposal.

BACKFLOW PREVENTER DETAILS – IN METER PIT

N.T.S.



NOTES:
1. MET-ED IS RESPONSIBLE FOR ALL UTILITIES ABOVE 10 FT. ELEVATION. INCLUDING INSTALLING ELECTRIC WIRES FROM POLE TO TRANSFORMER.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF ALL PROPOSED UTILITY IMPROVEMENTS BELOW 10 FT. ELEVATION.
3. MET-ED SHALL CONNECT ALL WIRES TO THE TRANSFORMER, INCLUDING TRANSFORMER INSTALLATION.
4. CAUTION: ONLY QUALIFIED PERSONNEL ARE PERMITTED TO INSTALL ELECTRICAL EQUIPMENT IN THE VICINITY OF ENERGIZED ELECTRICAL LINES AS DESCRIBED IN OSHA 1910 SUBPART R. AND S.
5. THE ELECTRIC COMPANY SHALL DETERMINE THE LOCATION/POSITION OF VERTICAL RISERS ON THE POLE BASED ON TRAFFIC FLOW AND LOCATION OF CATV, OR TELEPHONE CO. ATTACHMENTS.
6. ALL SERVICE INSTALLATIONS SHALL MEET NEC, STATE, AND LOCAL CODES AND REGULATIONS.
7. THE ELECTRIC COMPANY SHALL PROVIDE THE CONDUIT, BRACKETS, WEATHERHEAD(S), IF REQUIRED BY EXHIBIT 1 OF THE MET ED CUSTOMER GUIDE FOR ELECTRIC SERVICE. THE FIRST TEN (10) FEET OF CONDUIT SHALL BE SCHEDULE 80 PVC OR RIGID METALLIC CONDUIT. IF REQUIRED BY EXHIBIT 1. THE ELECTRIC COMPANY W COMPLETE THE INSTALLATION. CUSTOMER SHALL COORDINATE THE INSTALLATION WITH THE COMPANY
8. CONDUIT SIZE LIMITED TO 4" DIAMETER CONDUIT SI; FOR CONDUIT DIAMETER GREATER THAN 4", SEE EX 10A OF THE MET ED CUSTOMER GUIDE FOR ELECTR SERVICE.
9. PENN POWER CUSTOMERS SHALL CONTEXT ENGINEEI

DIRECT ATTCHEMENT OF CUSTOMER-OWNED UNDERGROUND SECONDARY SERVICE LATERAL(S) ON PA OPERATING COMPANY'S POLES DETAIL

N.T.S.

MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

PENNSYLVANIA ACT 187 REQUIREMENTS
UNDERGROUND UTILITIES SERIAL NOs. 20243300770
CHESTER VALLEY ENGINEERS, INC. DOES NOT GUARANTEE THE ACCURACY OF THE LOCATIONS 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 UNITED STATES DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION PUBLICATIONS OR THE LATEST REVISIONS THERETO:
(1) CONSTRUCTION INDUSTRY STANDARDS AND INTERPRETATIONS (OSHA 2207) SUBPART "P", PART 1926/1910 – "EXCAVATIONS, TRENCHING AND SHORING".
(2) "EXCAVATIONS AND TRENCHING OPERATIONS" (OSHA 2226) DATED 1985 (REVISED).

PENNSYLVANIA ONE CALL SYSTEM, INC.
CALL 3 WORKING DAYS BEFORE YOU DIG
1-800-242-1776
POCS SERIAL NUMBER: 20243300770

SEE SHEET 02 FOR FACILITY OWNER'S DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.

UTILITY DETAILS (WATER & ELECTRIC)

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

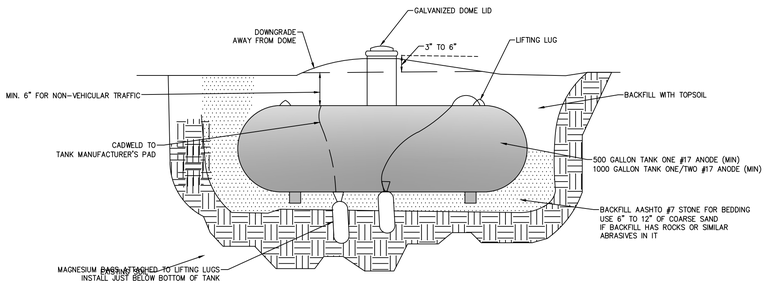
CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX
2290 GILBERTSVILLE ROAD
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

PROJECT NO. 22096-2000

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

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
1"=40'	03/31/2025	HL	MJ	F.B.

ITEMS INCLUDED IN 04/11/2025 REVISIONS:
– PROFESSIONAL SEAL ADDED TO PLAN.



UNDERGROUND PROPANE TANK BEDDING DETAIL

N.T.S.

STANDBY POWER RATING

Model RG10090 - 100 kW, 60 Hz Emergency Standby Power Generator

NOTES

1. MANUFACTURER: GENERAC
2. MODEL: PROTECTOR SERIES, RG10090– 100 kW, 60Hz EMERGENCY STANDBY POWER GENERATOR

GAS GENERATOR BOX DETAIL

N.T.S.

Notes:

1. Contractor shall provide trenching, conduit, and backfill to Company specifications.
2. The contractor shall contact the Company for placement of both Company and customer electrical facilities and the approved trench route for connecting them.
3. The contractorshall not deviate from the Company's approved trench route unless expressly approved in writing by the Company's engineering group representative. It shall be thecontractor's responsibility to notify the Company of any conflicts that the proposed electrical design creates with obstacles, other facilities, or easements. Changes requested following the design acceptance by the contractor may require the Company to be compensated if facilities need to be relocated or project delays.
4. Before excavation begins, the excavator shall mark the proposed facilities (in white) and then notify the appropriate state One-Call agency to mark other underground facilities (refer to Sections 3.13 and 3.14).
5. Thecontractor shall also coordinate the installation of all other buried utilities that are installing their facilities nearby, jointly occupying the trench (with Company approval), or crossing the electrical supply trench.
6. Below are the Company's required minimum clearances between electric supply lines and the following utility lines:
   - Steam or cryogenic lines - six (6) feet (use of an approved thermal barrier may reduce this clearance).
   - Fuel lines: four (4) feet for low-pressure natural gas, oil, propane, or other like fuels or ten (10) feet for gas lines that are high-pressure lines or are greater than four (4) inches in diameter.
   - Water, sewer, and telecommunication (i.e., telephone & CATV) lines - one (1) foot.
   - Clearances from telephone and CATV lines may be reduced to zero (0) feet or no deliberate separation (a.k.a. – random lay) if all involved parties agree and NESC [2017] Rule 354 is met.
   - Other utility companies (e.g., local steam, water, communication, sewer, and fuel companies) may require greater clearances than stated above.
   - If required clearances cannot be met (e.g., trenching through solid rock), clearances may be reduced to one (1) foot minimum if all involved parties agree.
   - Other facilities are prohibited from running above/below and parallel to the electrical cable without specific Company's approval.
7. The Company's minimum cover requirements for the primary (> 600 V) and secondary (< 600 V) conduits are based on providing adequate cover per NESC Code (depth). It shall be the responsibility of the customer to ensure that the minimum required coverages over the conduits are always maintained. Any necessary corrections to the depth of cover or required mechanical protection to prevent damage to the conduits from surface activity shall be the responsibility of the customer. Minimum cover over the conduits shall be maintained until all stages of the construction are completed.

Minimum Cover Requirements

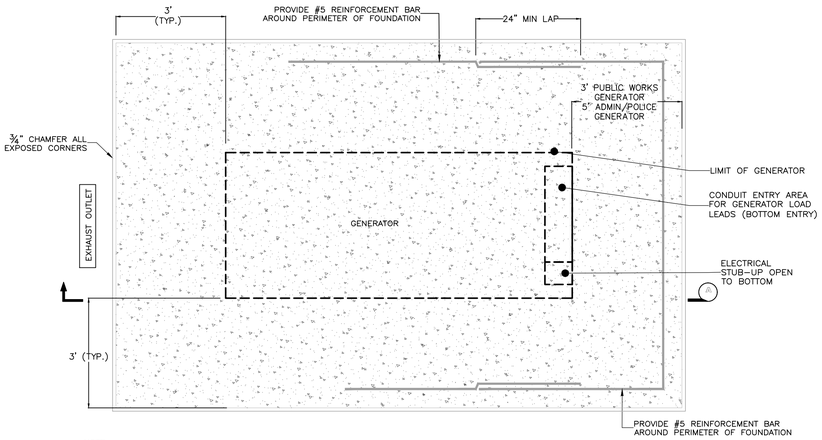
VoltageV (Φ- Φ)	Minimum Cover Over Conduit(s)
< 600 V	24 inches
> 600 V to 50 kV	30 inches

8. When primary (> 600 V to 50 kV) and secondary (< 600 V) conduits share the same trench and are located side-by-side, the depth of cover for both conduits shall be to the primary conduit requirement with a minimum of two (2) inches of separation. If the conduits are stacked, the primary conduit(s) shall be on the bottom at the required primary depth. The secondary/service conduit(s) shall be on top of the primary conduit(s) with a minimum separation of two (2) inches between the conduits.
9. See Exhibit 24, page 1 for details on the trench dimensions (width and depth requirements). Contractor shall contact the Company representative if the trench must be more than four (4) feet deep.
10. The contractor shall clear the cable route of trees, tree stumps, boulders, or other obstructions at and below grade. The excavator shall grade the trench route to final grade level. The contractor shall be responsible for any damage caused by the excavator. This includes damage to any tree whose root system is subsequently damaged from the trenching operations. The excavator shall grade all trench routes to final grade.
11. The contractor shall not use power-excavating equipment within 18 inches of any existing buried cables or other electrical or communications facilities.
12. Excavated material ("spoils") should be placed on the field side of the trench (unless directed by the Company otherwise), two (2) feet from the edge of excavations (per OSHA Standard 1926.651(j) (2)).
13. Standing water in the trench should be removed by pumping or draining (per OSHA Standard 1926.651(h)).
14. The bottom of the trench shall be relatively smooth, undisturbed earth, sand, or well-tamped earth which is free of rock, cinders, or sharp objects. Trench excavations in rocky soil may require a two-inch layer of select backfill on the bottom of the trench as determined by the Company.
15. Buried conduits shall be rigid PVC, heavy wall, sunlight resistant, listed and labeled, Schedule 40 conduit per NEMA TC2 (i.e., electrical grade). Additional requirements, such as concrete encasement of elbows or galvanized steel elbows, may be specified by the Company based on the specific design parameters of the conduit system and will be detailed in the electrical layout drawing. Contractor shall contact the Company for the proper minimum conduit diameters.

Conduit Requirements

	Conduit Size	Conduit Type	Conduit Bend Radius
UTILITY POLE TO TRANSFORMER	6" - 8"	Sch40 PVC	48"
TRANSFORMER TO BUILDINGS	3" - 5"	Sch40 PVC	36"
	1-1/2" or 2"	Sch40 PVC	18"

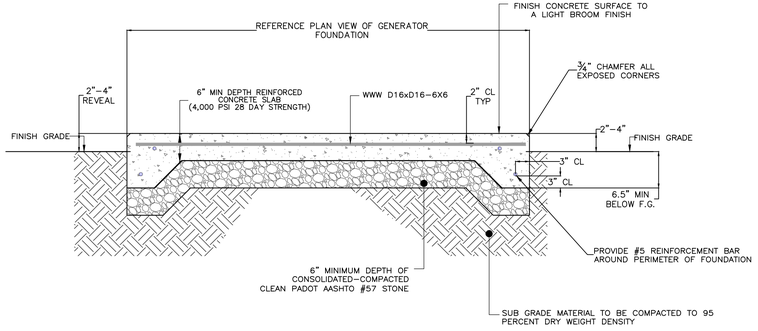
16. Customer-owned service lateral conduits (if used) shall be sized per NEC. Those conduits shall be supplied, installed, and covered by thecontractor. Conduit for service laterals shall be a minimum of 3-inch diameter conduit.
17. Secondary/service conduit elbows shall have a minimum radius of 30 inches. Service riser conduit shall be rigid PVC, heavy wall, sunlight resistant, listed and labeled, Schedule 80 conduit per NEMA TC2. Primary conduit elbows shall have a minimum radius of 36 inches for sizes from 3" to 5". For conduits 6 inch and larger, the elbows shall have a minimum radius of 48 inches.
18. All joints shall be glued together. Conduit shall be cleaned and confirmed with a mandrel 1/2 inch smaller than the conduit inside diameter. Unused conduits shall be plugged at each end to keep water and dirt out. When conduit runs are greater than twenty (20) feet, a ¼-inch unbroken nylon or polypropylene pulling rope shall be installed in each conduit. If the Company cannot pull conductors through the conduit run, or if the pulling rope is broken or unusable because it is glued to the conduit, the contractor shall make the necessary repairs.
19. Before backfilling, the contractor shall verify that the Company and local electrical inspector have completed all required inspections of the trench and conduit. In addition, the customer shall verify other utilities that were approved to use joint trench have completed their work.
20. The contractor shall backfill around all conduits with six (6) inches of select backfill. Select backfill shall be graded sand, stone dust, limestone dust, rock free earth or topsoil. Materials that "set up" such as fly ash, culm and foundry waste are not acceptable. The remainder of the trench shall be backfilled with native soil and not contain large rocks (greater than two (2) inch diameter), rocks with sharp edges or other debris. An additional six (6) inches of mounded backfill is recommended to allow for settling.
21. Backfill should be compacted in six-inch layers by hand or using a pneumatic or vibrating tamping equipment to lessen the effects of settling. Note: machine compaction should not be used within six inches of the conduit (per NESC Rule 353A). Do not run wheels or tracks of equipment along the trench to compact the backfill as this could damage the conduits.
22. The contractor shall provide and bury a red "electrical" warning tape at least three (3) inches wide directly above all conduits twelve (12) inches below final grade as shown in Exhibit 24 (refer to NEC 300.5(D)(3).
24 For cables located beneath roads under PennDOT jurisdiction, cables shall be installed in conduit, have a minimum of 36 inches of cover, and shall be completely backfilled with #2 RC aggregate.



NOTE:
CONTRACTOR TO VERIFY THE CONDUIT STUB-UP AREAS, CONDUIT ENTRY AREA AND GENERATOR DIMENSIONS PRIOR TO PLACING CONCRETE.

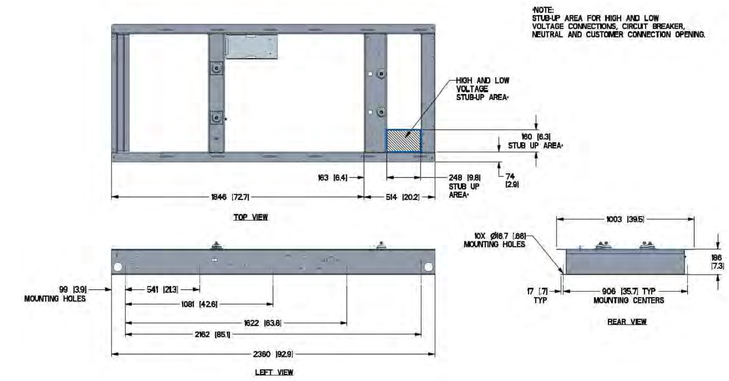
PLAN VIEW GENERATOR SLAB

N.T.S.



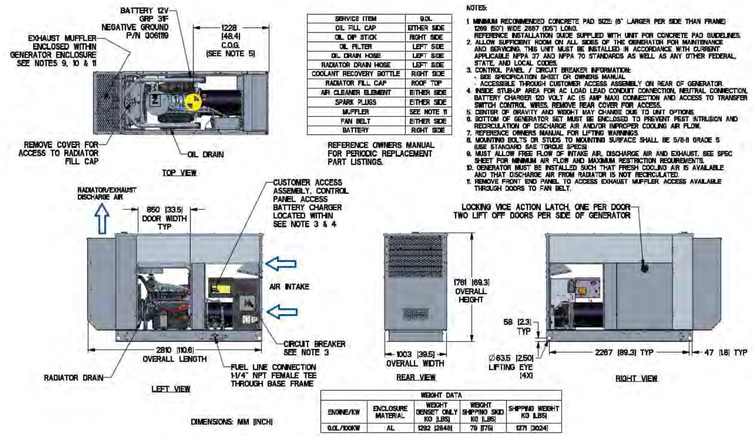
SECTION A–A GENERATOR SLAB (POLICE/ADMIN)

N.T.S.



GAS GENERATOR INSTALLATION LAYOUT DETAIL

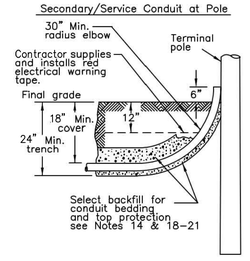
N.T.S.



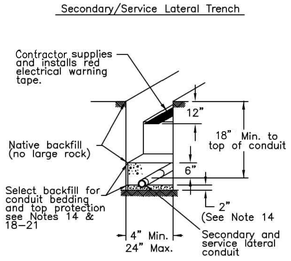
GAS GENERATOR INSTALLATION LAYOUT DETAIL

N.T.S.

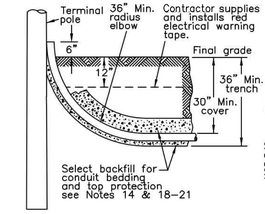
Secondary/Service Conduit at Pole



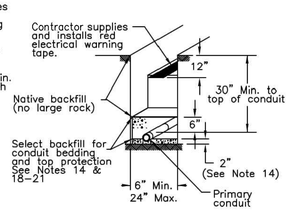
Secondary/Service Lateral Trench



Primary Conduit at Pole



Primary Trench



ELECTRIC CONDUIT TRENCHING AND BACKFILL DETAIL AND NOTES

N.T.S.

ITEMS INCLUDED IN 04/11/2025 REVISIONS:

- PROFESSIONAL SEAL ADDED TO PLAN.

UTILITY DETAILS (ELECTRIC & GAS)

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX
2290 GILBERTSVILLE ROAD
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

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

PROJECT NO. 22096-2000
F.B.

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
1"=40'	03/31/2025	HL	MJ	

NOTE TO USER OF THESE PLANS:
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MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

PENNSYLVANIA ACT 187 REQUIREMENTS
UNDERGROUND UTILITIES SERIAL NO. 20243300770
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.

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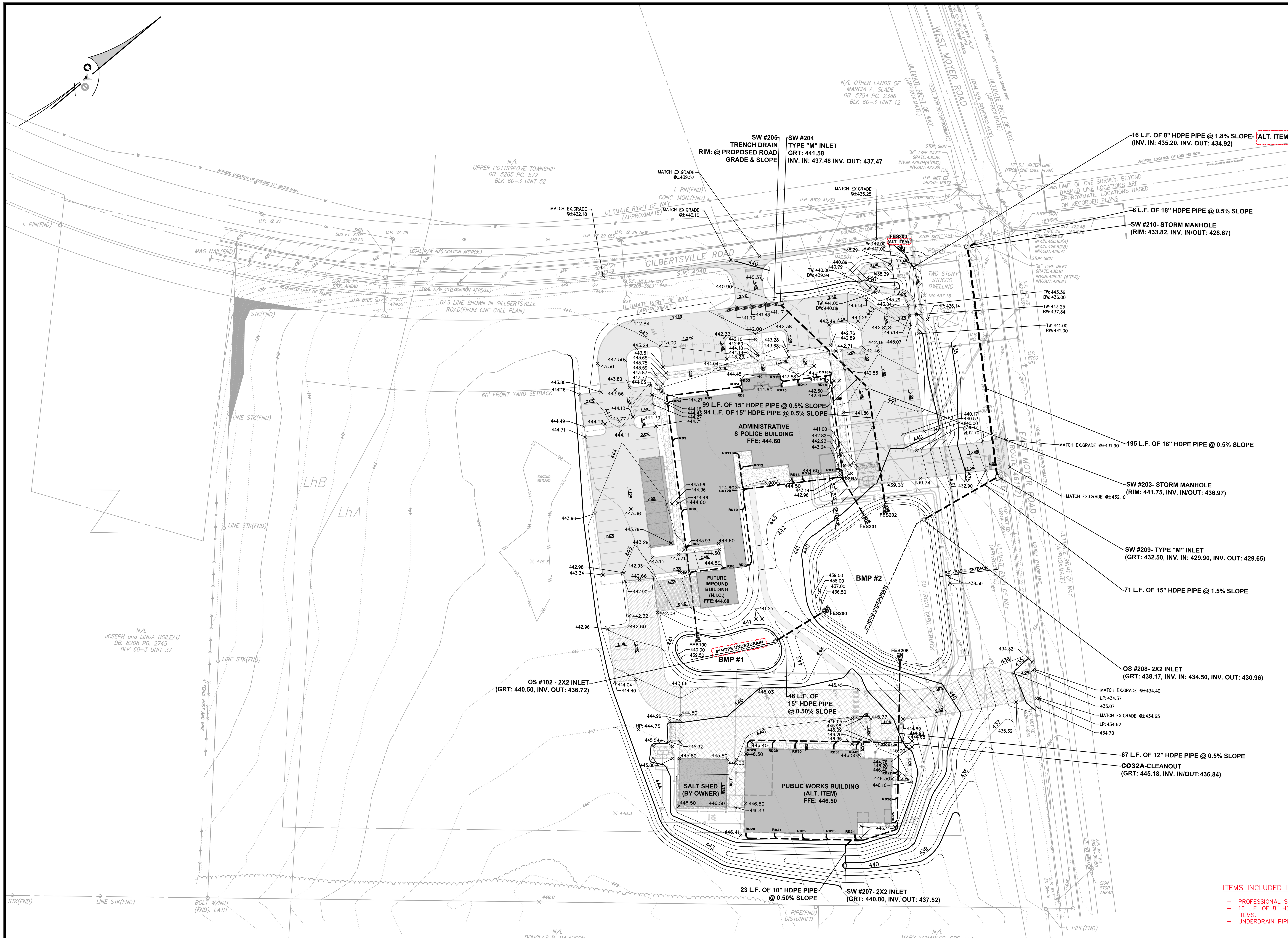
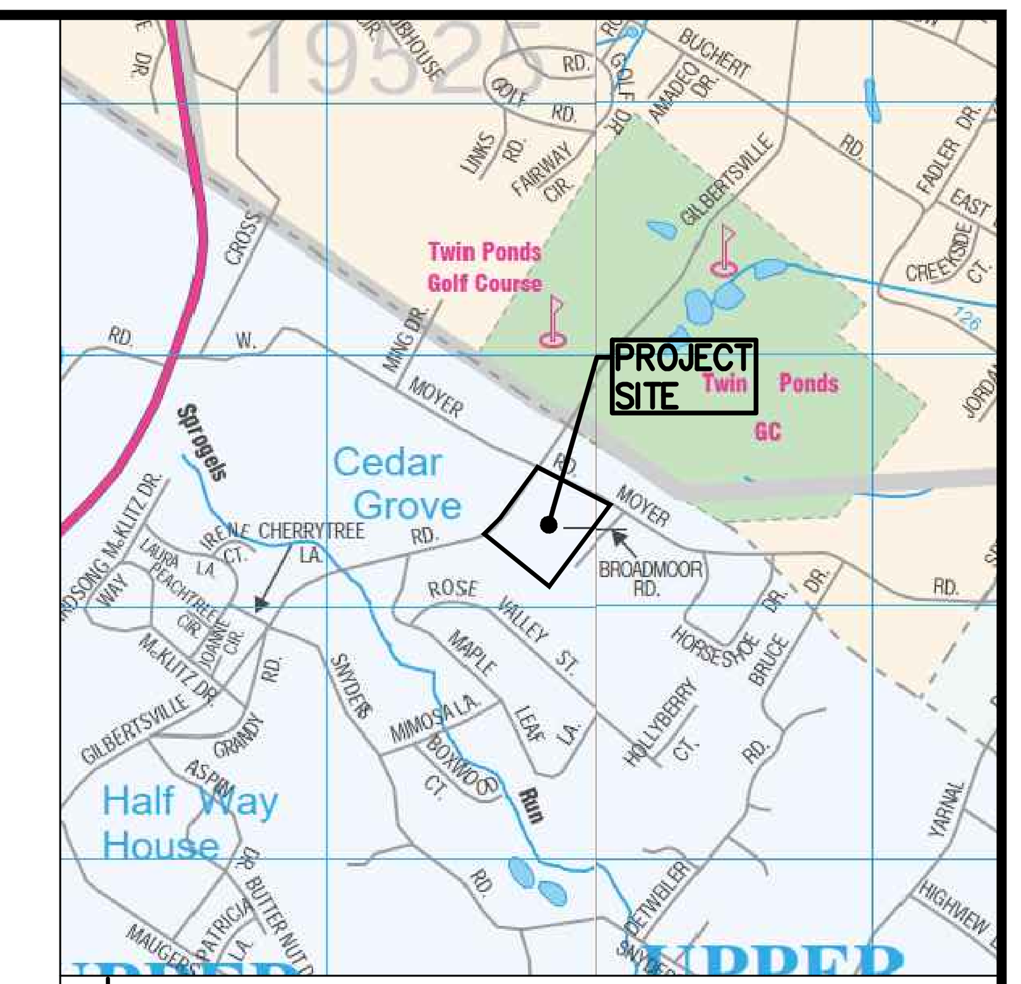
(1) CONSTRUCTION INDUSTRY STANDARDS AND INTERPRETATIONS (OSHA 2207) SUBPART "P", PART 1926/1910 – "EXCAVATIONS, TRENCHING AND SHORING".
(2) "EXCAVATIONS AND TRENCHING OPERATIONS" (OSHA 2226) DATED 1985 (REVISED).

PENNSYLVANIA ONE CALL SYSTEM, INC.
CALL 3 WORKING DAYS BEFORE YOU DIG
1-800-242-1776
POCS SERIAL NUMBER: 20243300770

SEE SHEET 02 FOR FACILITY OWNER'S DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.





LOCATION MAP

SCALE: 1" = 2000'

ITEMS INCLUDED IN 04/11/2025 REVISIONS:

- PROFESSIONAL SEAL ADDED TO PLAN.
- 16 L.F. OF 8" HDPE PIPE AND FES300 REVISED TO BE ALTERNATE ITEMS.
- UNDERDRAIN PIPE FOR BMP #1 ADDED TO THE PLAN.

GRADING/STORMWATER MANAGEMENT PLAN

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX 2290 GILBERTSVILLE ROAD
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

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

PROJECT NO. 22096-2000

F.B.

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
1"=40'	03/31/2025	HL	MJ	

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MICHAEL JOYCE ENGINEER PE079950

Scale in Feet
0 10 20 30 40 80 120 160
1" = 40'

SOILS LIST

SYMBOL	DESCRIPTION	DEPTH TO SEASONALLY HIGH WATER TABLE	DEPTH TO BEDROCK	FREQUENCY OF: FLOODING	FREQUENCY OF: PONDING	HYDROLOGIC SOIL GROUP	HYDRIC SOIL RATING
LEHIGH SILT LOAM							
LhA	0% TO 3% SLOPES	6" – 36"	40"–60"	NONE	NONE	C/D	YES
LhB	3% TO 8% SLOPES	6" – 36"	40"–60"	NONE	NONE	C/D	YES

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MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

PENNSYLVANIA ACT 187 REQUIREMENTS

UNDERGROUND UTILITIES SERIAL NOs. 20243300770

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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 OR THE LATEST REVISIONS THERETO:

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PENNSYLVANIA ONE CALL SYSTEM, INC. 1-800-242-1776 STOP CALL BEFORE YOU DIG!

SEE SHEET 02 FOR FACILITY OWNER'S DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.

PENNSYLVANIA ONE CALL SYSTEM, INC.
CALL 3 WORKING DAYS BEFORE YOU DIG
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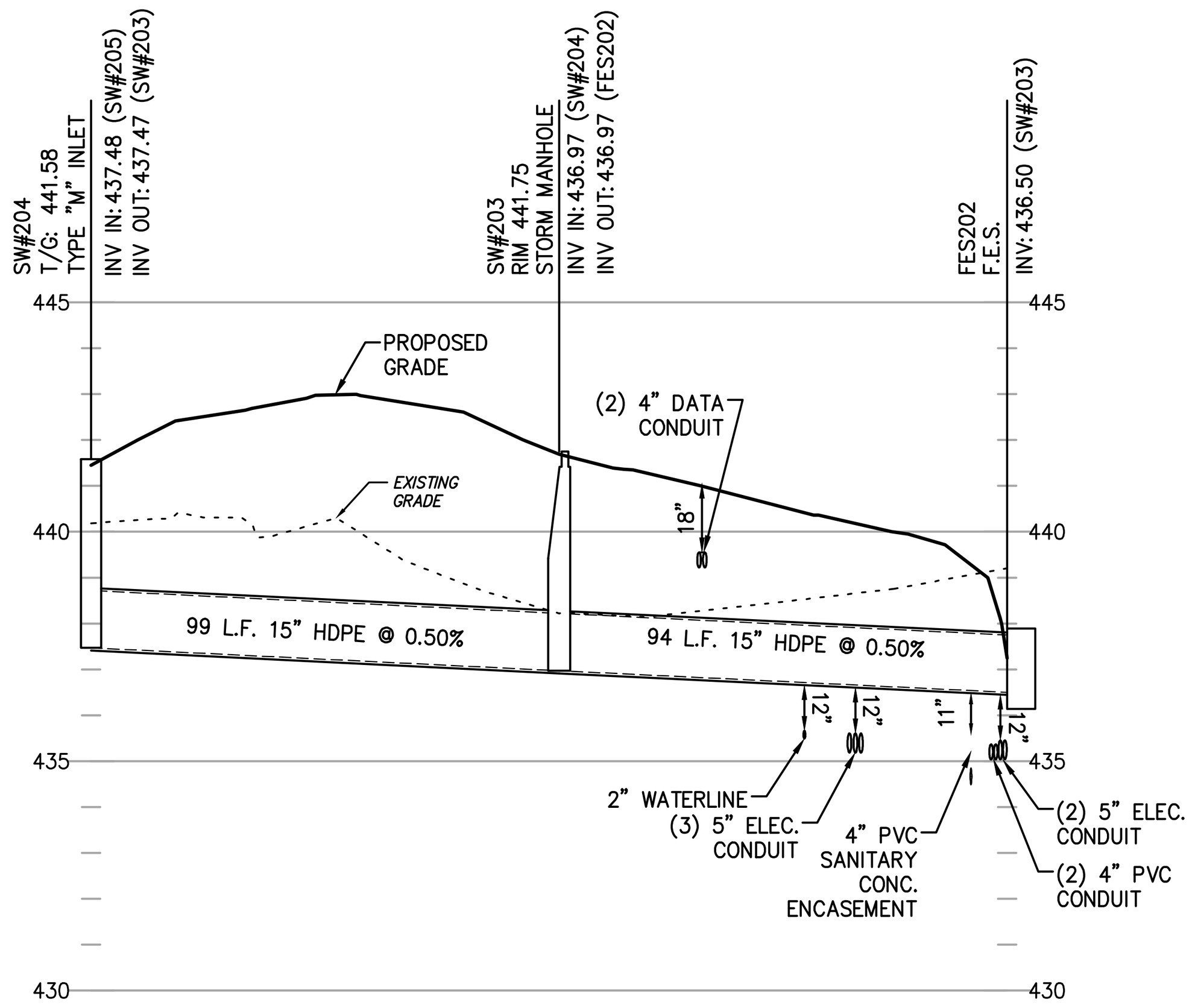
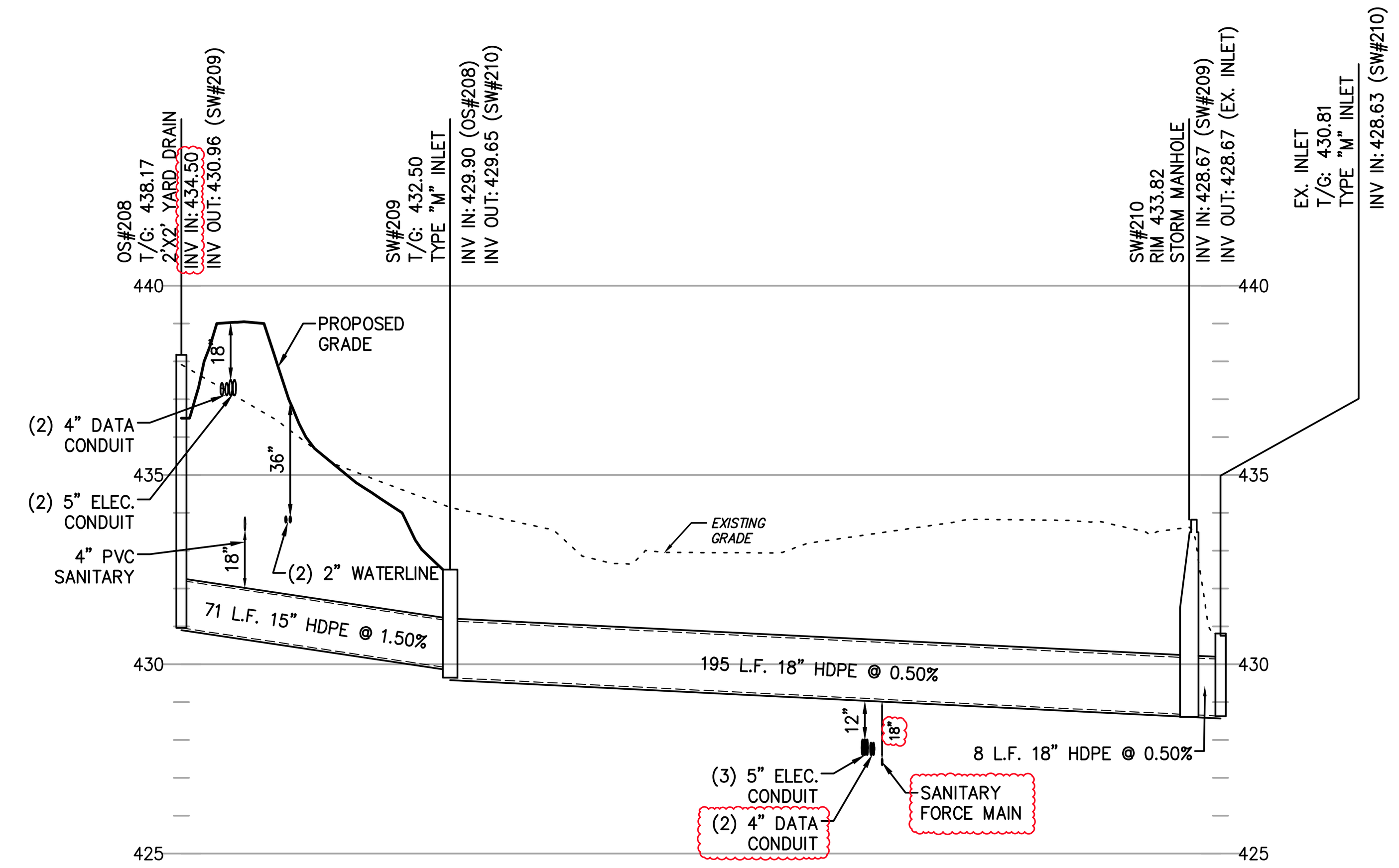
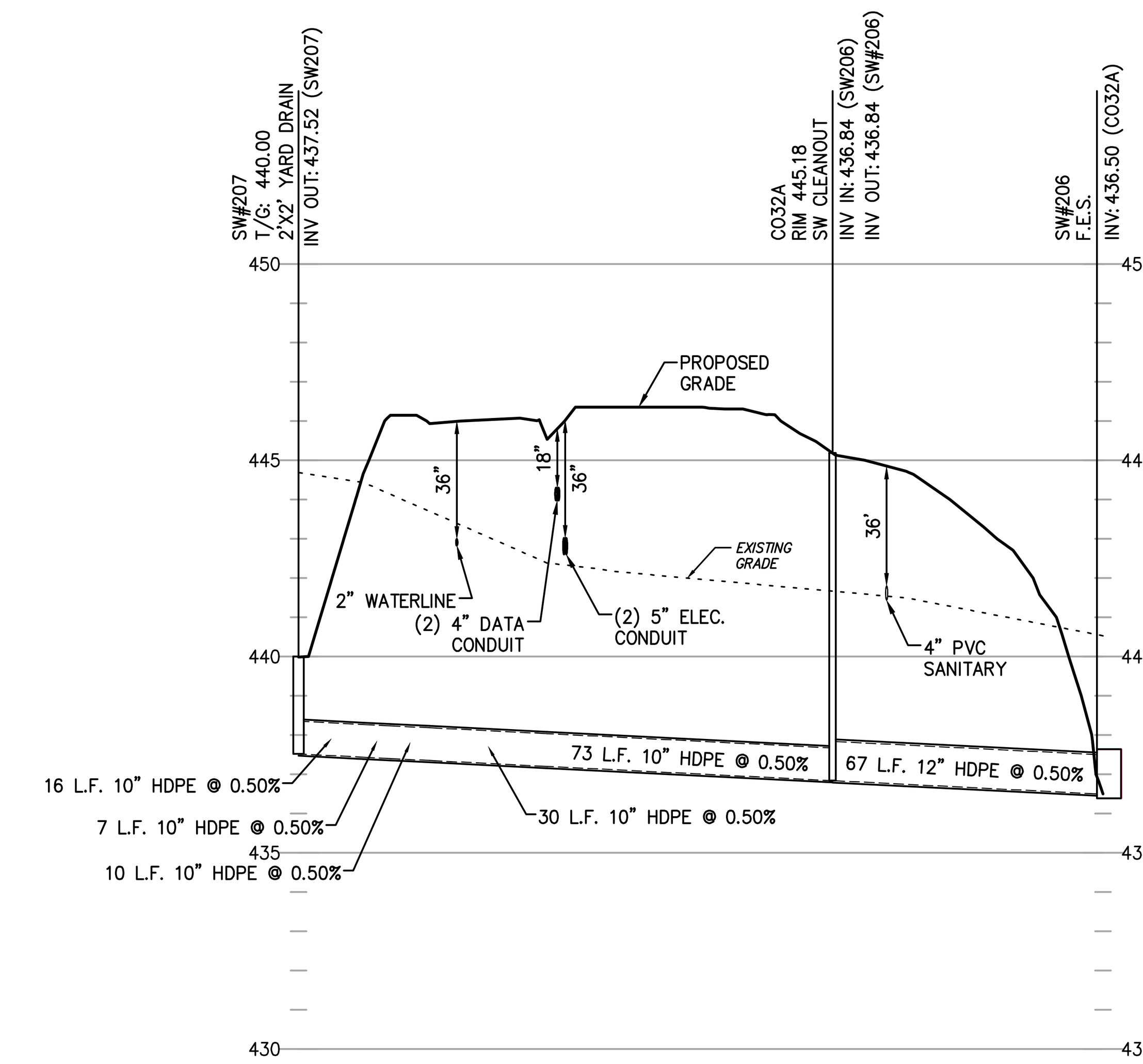


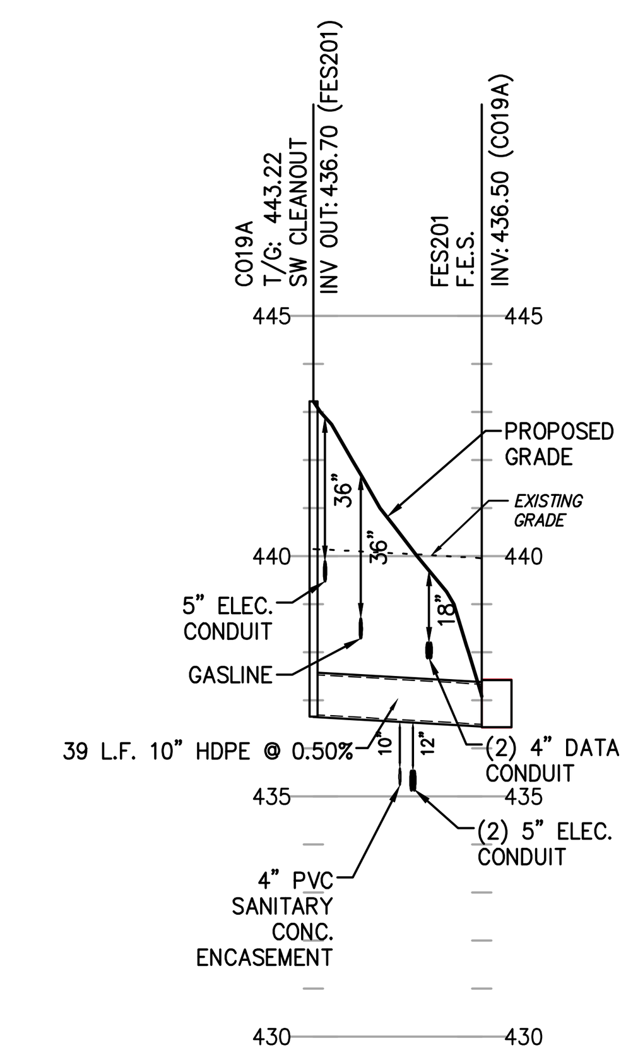
STORMWATER PROFILE
FROM SW205 TO SW202
SCALE: 1"=40' HORIZ. 1"=4' VERT.



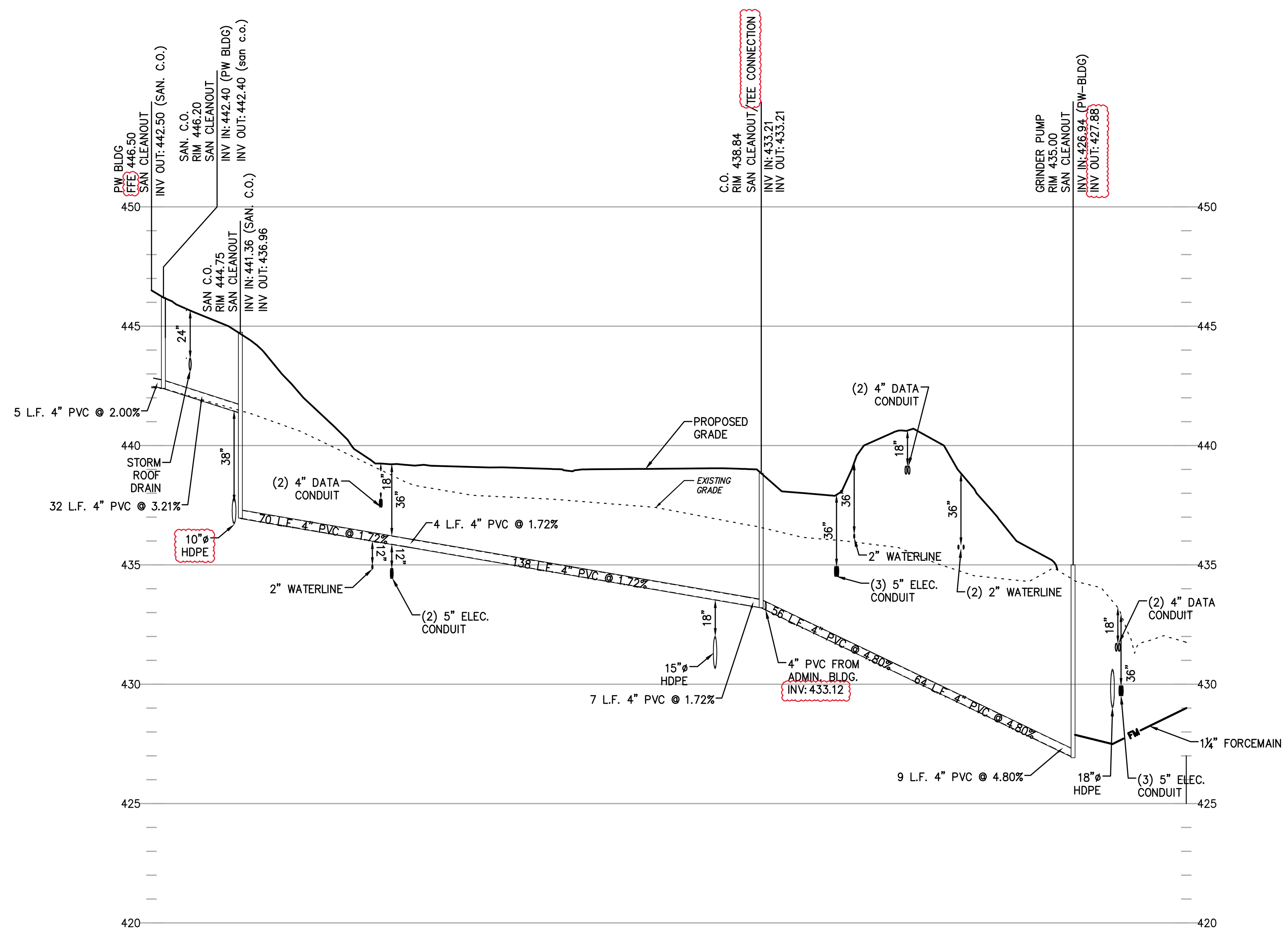
STORMWATER PROFILE
FROM OS#208 TO SW210
SCALE: 1"=40' HORIZ. 1"=4' VERT.



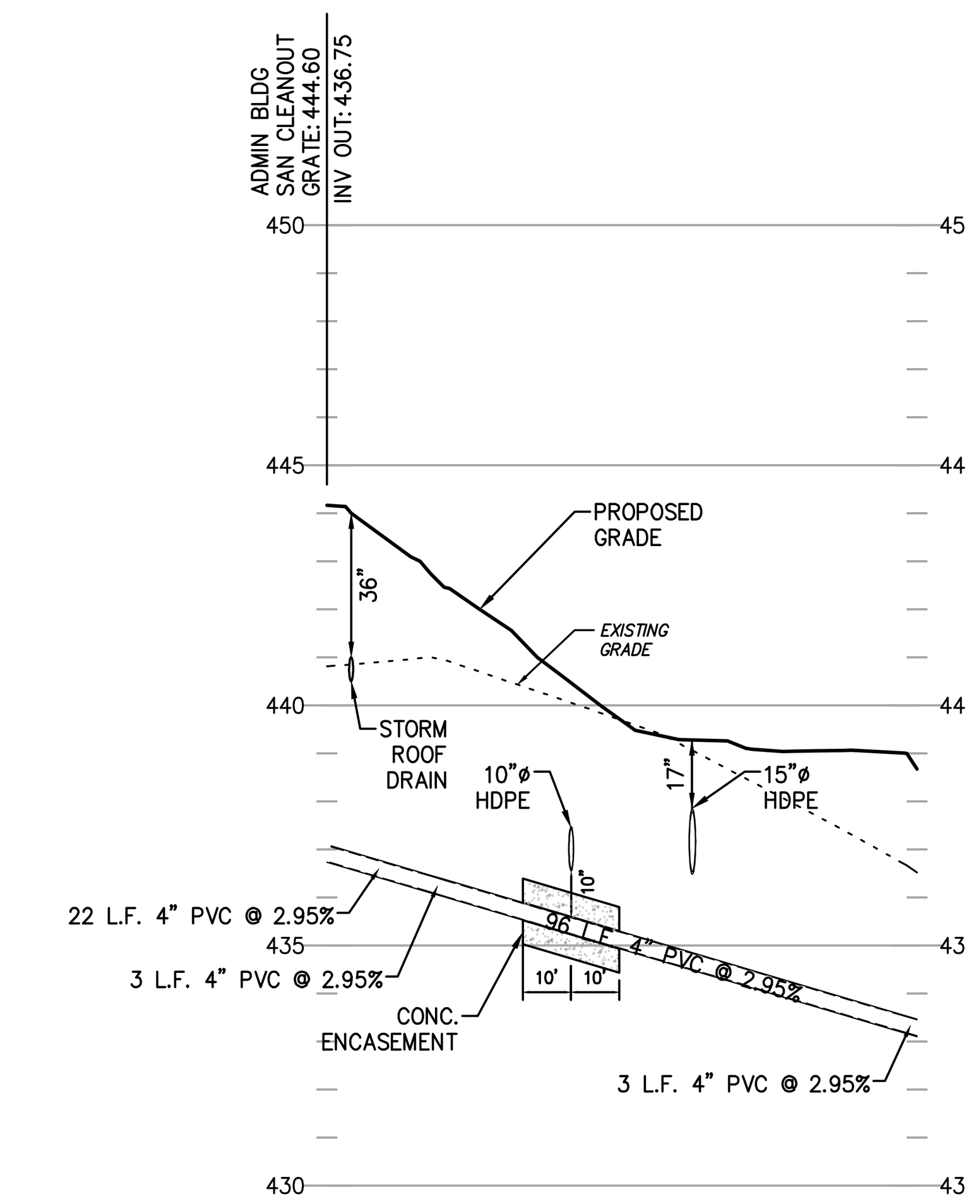
STORMWATER PROFILE
FROM SW207 TO SW206
SCALE: 1"=40' HORIZ. 1"=4' VERT.



STORMWATER PROFILE
FROM C019A TO FES201
SCALE: 1"=40' HORIZ. 1"=4' VERT.



SANITARY SEWER PROFILE
FROM PUBLIC WORKS BUILDING
SCALE: 1"=40' HORIZ. 1"=4' VERT.



SANITARY SEWER PROFILE
FROM ADMIN. BUILDING
SCALE: 1"=40' HORIZ. 1"=4' VERT.

ITEMS INCLUDED IN 04/11/2025 REVISIONS:
- PROFESSIONAL SEAL ADDED TO PLAN.
- UTILITY LOCATIONS & INFORMATION REVISED

PROFILES

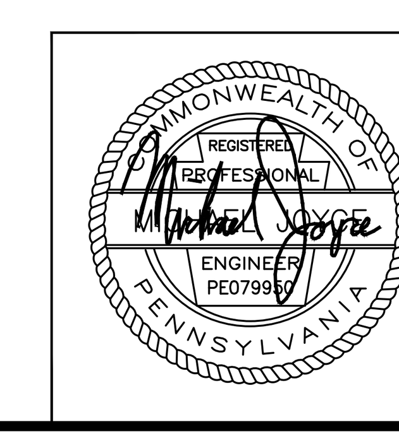
NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX
2290 GILBERTSVILLE ROAD
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

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

PROJECT NO. 22096-2000
F.B.

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
1"=40'	03/31/2025	PT	MJ	



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MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

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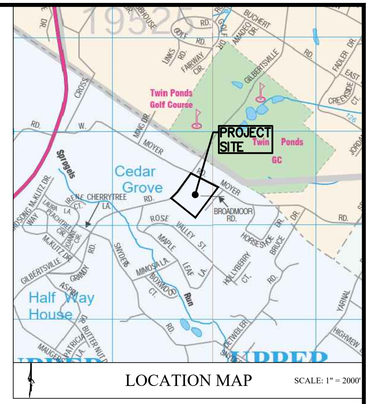
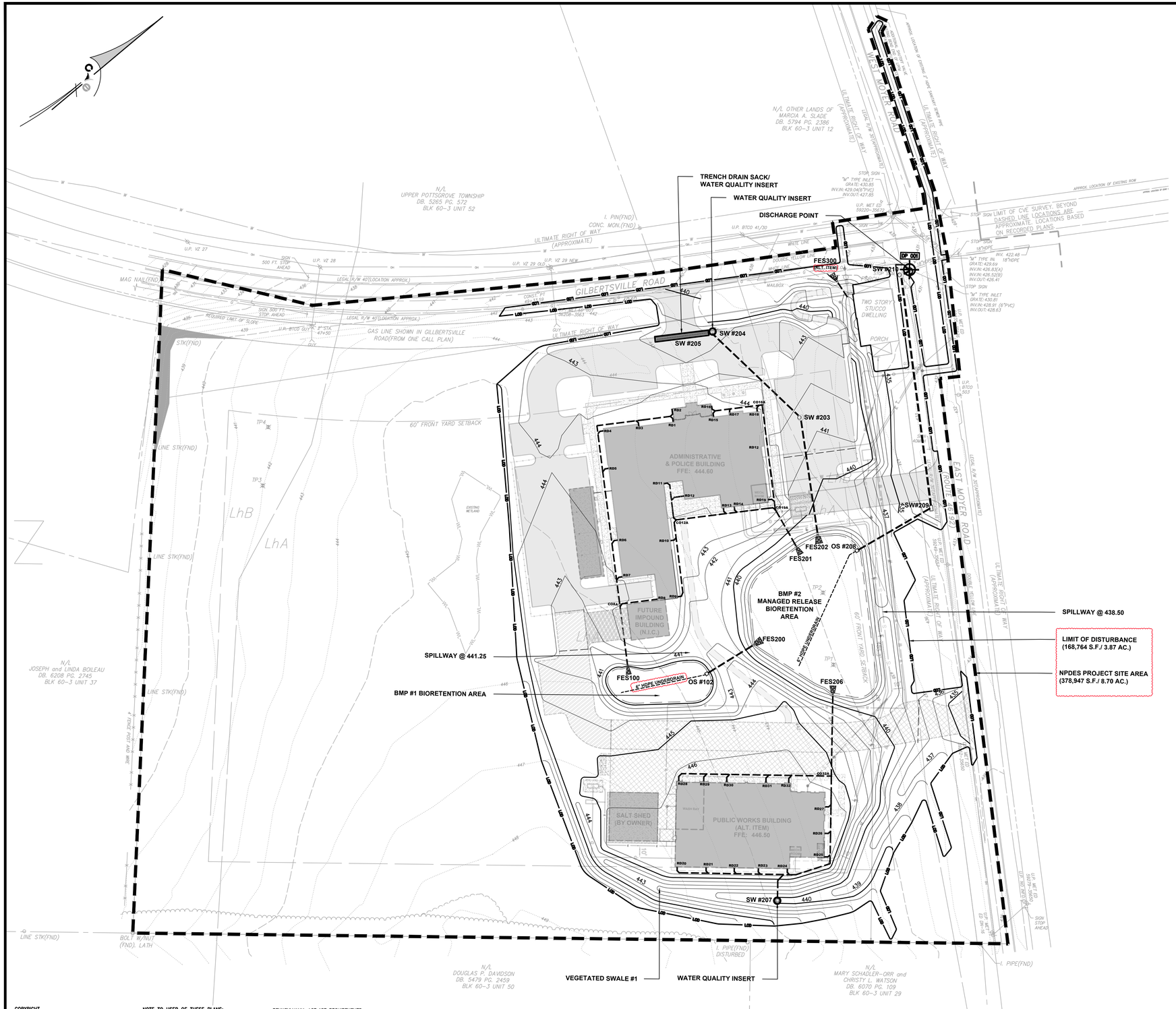
PENNSYLVANIA ONE CALL SYSTEM, INC.
CALL 3 WORKING DAYS BEFORE YOU DIG
1-800-242-1776
POCS SERIAL NUMBER: 20243300770

SURFACE WATER FROM THE SITE ENTERS AN UNNAMED TRIBUTARY OF MINISTER CREEK (TSF-MF)



LOCATION MAP SCALE: 1" = 2000'



INFILTRATION TESTING RESULTS

TEST ID	EX. GROUND ELEVATION	TEST DEPTH (IN)	TEST ELEVATION	MEASURED INF. RATE	LIMITING ZONE	LIMITING ZONE ELEVATION	BMP NAME	BMP BOTTOM ELEVATION
TP1	440.22	23	438.30	0.05 IN/HR	ROCK	437.30	BMP #2	436.50
TP2	439.51	32	436.84	0.10 IN/HR	ROCK	435.84	BMP #2	436.50
TP3	442.18	40	438.85	0.44 IN/HR	ROCK	437.84	–	–
TP4	442.03	19	440.45	0.00 IN/HR	ROCK	439.44	–	–

SOILS LIST

SYMBOL	DESCRIPTION	DEPTH TO SEASONALLY HIGH WATER TABLE	DEPTH TO BEDROCK	FREQUENCY OF: FLOODING	FREQUENCY OF: PONDING	HYDROLOGIC SOIL GROUP	HYDRIC SOIL RATING
LEHIGH SILT LOAM							
LhA	0% TO 3% SLOPES	6" – 36"	40"–60"	NONE	NONE	C/D	YES
LhB	3% TO 8% SLOPES	6" – 36"	40"–60"	NONE	NONE	C/D	YES

Scale in Feet
0 10 20 30 40 80 120 160
1" = 40'

POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN

ITEMS INCLUDED IN 04/11/2025 REVISIONS:

- PROFESSIONAL SEAL ADDED TO PLAN.
- SOIL LIST CHART UPDATED.
- LIMIT OF DISTURBANCE AREA EXPANDED.
- NPDES PROJECT SITE AREA DECREASED.
- UNDERDRAIN PIPE FOR BMP #1 ADDED TO THE PLAN.
- FES300 REVISED TO BE AN ALTERNATE ITEM.

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX
2290 GILBERTSVILLE ROAD
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL ENGINEER — PE079907

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

PROJECT NO. 22096-2000
F.B.

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
1"=40'	03/31/2025	HL	MJ	

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MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

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PENNSYLVANIA ONE CALL SYSTEM, INC.
CALL 3 WORKING DAYS BEFORE YOU DIG
1-800-242-1776
POCS SERIAL NUMBER: 20243300770

SEE SHEET 02 FOR FACILITY OWNER'S DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.

GENERAL NOTES:

1. IT SHALL BE THE SOLE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN THE POST CONSTRUCTION STORMWATER MANAGEMENT FACILITIES.

2. STORMWATER MANAGEMENT DESIGN:
REFER TO "POST-CONSTRUCTION STORMWATER MANAGEMENT REPORT FOR PROPOSED MUNICIPAL COMPLEX," PREPARED BY CHESTER VALLEY ENGINEERS.

3. EROSION AND SEDIMENTATION CONTROL:
REFER TO "EROSION AND SEDIMENTATION CONTROL PLAN", PREPARED BY CHESTER VALLEY ENGINEERS.

4. MAINTENANCE NOTES:
   A. THE BMP'S LISTED BELOW WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER.
      - BIORETENTION AREAS
      - STORM SEWER AND ASSOCIATED STRUCTURES

   B. THE PARTY RESPONSIBLE FOR THE LONG TERM OPERATIONS AND MAINTENANCE OF STORMWATER MANAGEMENT FACILITIES SHALL MAKE RECORDS OF THE INSTALLATION AND ALL MAINTENANCE AND REPAIRS, AND SHALL RETAIN THE RECORDS FOR AT LEAST TEN (10) YEARS. THESE RECORDS SHALL BE SUBMITTED TO THE TOWNSHIP AS ESTABLISHED BY THE OPERATION AND MAINTENANCE PLAN OR IF OTHERWISE REQUIRED BY THE TOWNSHIP

4. THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN HAS BEEN DESIGNED TO MEET THE FOLLOWING GOALS AND GUIDELINES:

   A. PRESERVE THE INTEGRITY OF STREAM CHANNELS AND MAINTAIN AND PROTECT THE PHYSICAL, BIOLOGICAL AND CHEMICAL QUALITIES OF RECEIVING STREAMS THROUGH THE IMPLEMENTATION OF WATER QUALITY BMP's TO TREAT THE RUNOFF PRODUCED BY THE PROPOSED DEVELOPMENT BEFORE DISCHARGING FROM THE SITE.
   B. PREVENT AN INCREASE IN THE RATE OF STORMWATER RUNOFF AT THE DISCHARGE POINTS.
   C. MINIMIZE ANY INCREASE IN STORMWATER RUNOFF VOLUME.
   D. MINIMIZE IMPERVIOUS AREAS TO ONLY THOSE WHICH ARE NECESSARY FOR THE SITE TO FUNCTION AS INTENDED.
   E. MAXIMIZE THE PROTECTION OF EXISTING DRAINAGE FEATURES AND EXISTING VEGETATION.
   F. MINIMIZE LAND CLEARING AND GRADING.
   G. MINIMIZE SOIL COMPACTION.
   H. UTILIZE OTHER STRUCTURAL OR NONSTRUCTURAL BMP'S TO PREVENT OR MINIMIZE CHANGES IN STORMWATER RUNOFF RESULTING FROM THE CHANGE IN IMPERVIOUS AREA.

5. THE RECEIVING WATERCOURSE FOR THIS PROJECT IS AN UNNAMED TRIBUTARY OF MINISTER CREEK (TSF-MF) .

6. 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.

7. THE PERMITTEE SHALL PROVIDE ENGINEERING CONSTRUCTION OVERSIGHT FOR THE PROPOSED STORMWATER BMPS. A LICENSED PROFESSIONAL ENGINEER KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF STORMWATER BMPS, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.

8. 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.

9. 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.

10. 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.

11. 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 PA.C.S.A. § 4904 TO THE BEST OF MY KNOWLEDGE, INFORMATION AND RELIEF, 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."

(1) THE PERMITTEE SHALL RETAIN A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN.
(2) 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 BMPS.

12. UPON PERMANENT STABILIZATION OF THE EARTH DISTURBANCE ACTIVITY UNDER § 102.22(A)(2) (RELATING TO PERMANENT STABILIZATION), AND INSTALLATION OF BMPS 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:
(1) THE FACILITY NAME, ADDRESS AND LOCATION.
(2) THE OPERATOR NAME AND ADDRESS.
(3) THE PERMIT NUMBER.
(4) THE REASON FOR PERMIT TERMINATION.
(5) IDENTIFICATION OF THE PERSONS WHO HAVE AGREED TO AND WILL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPS 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 EROSIVE 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.

DISPOSAL AND RECYCLING

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

SILT REMOVED FROM POST CONSTRUCTION STORMWATER MANAGEMENT FACILITIES SHALL BE DISPOSED OF ON-SITE IN LANDSCAPED AREAS LOCATED OUTSIDE OF VEGETATED RAIN GARDEN AREAS. AREAS OF SEDIMENT DISPOSAL SHALL BE CONSIDERED CRITICAL VEGETATION AREAS (CVA).

LIKELY WASTE TO BE GENERATED DURING MAINTENANCE OF THE POST-CONSTRUCTION BMP'S ARE:
- ACCUMULATED SEDIMENT IN THE BIORETENTION AREAS AND STORM SYSTEM.
- ACCUMULATED GARBAGE AND DEBRIS IN THE BIORETENTION AREAS AND STORM SEWER.

CRITICAL STAGES OF CONSTRUCTION

THE PROFESSIONAL DESIGN ENGINEER, GEOTECHNICAL ENGINEER, OR SOILS PROFESSIONAL MUST BE PRESENT ON-SITE FOR THE ENTIRE INSTALLATION AND INSPECTION OF THE STORMWATER BMPs. THE SPECIFIC CRITICAL STAGES OF CONSTRUCTION FOR EACH BMP ARE:
1. FOR BIORETENTION AREAS: EXCAVATION OF BIORETENTION AREA, PREPARATION OF THE SUBGRADE, PLACEMENT OF THE GEOTEXTILE FABRIC, INSTALLATION OF THE UNDERDRAIN, INSTALLATION OF AMENDED SOILS, CONSTRUCTION OF THE BIORETENTION BERM, AND INSTALLATION OF THE OUTLET STRUCTURE.
2. FOR ALL WATER QUALITY INLETS: VERIFY INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS.

CRITICAL VEGETATION AREAS (CVA)

CRITICAL VEGETATION AREAS ARE TO BE GRADED, HYDROSEEDED, 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, IN ALL DRAINAGE SWALES, BASIN AND RAIN GARDEN AREAS.

POST CONSTRUCTION STORMWATER MANAGEMENT REPORTING AND RECORD KEEPING

A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL BMP REPAIRS AND MAINTENANCE ACTIVITIES MUST BE PROVIDED 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.

MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

BIORETENTION AREAS
- BMP #1 & BMP #2, AS INDICATED ON PCSM PLAN

PLANTING NOTES AND SPECIFICATIONS:

1. DEVELOP A PLANTING MEDIUM IN ACCORDANCE WITH THE APPROVED DETAIL SHOWN ON POST-CONSTRUCTION STORMWATER MANAGEMENT DETAIL SHEET.

INSPECTION REQUIREMENTS
1. ALL STORMWATER MANAGEMENT SYSTEMS SHALL BE INSPECTED ANNUALLY FOR THE FIRST FIVE (5) YEARS AND ONCE EVERY THREE (3) YEARS THEREAFTER, FOR ACCUMULATION OF SEDIMENT, TRASH AND DEBRIS, DAMAGE TO OUTLET STRUCTURES, EROSION, SIGNS OF CONTAMINATION OR SPILLS AND BERM STABILITY.

MAINTENANCE/REPAIR INSTRUCTIONS
1. THE SUGGESTED ITEMS IN THIS SECTION INCLUDE, BUT ARE NOT LIMITED TO THE THOSE LISTED BELOW:
   - ACCUMULATED SEDIMENT SHALL BE RESPREAD ON-SITE AS DESCRIBED IN THE DISPOSAL AND RECYCLING SECTION OF THIS PLAN SHEET;
   - ANY DISCOVERED TRASH OR DEBRIS SHALL BE REMOVED IMMEDIATELY;
   - REPAIR OR REPLACE OUTLET STRUCTURE AS NEEDED;
   - STABILIZE ERODED AREAS IN ACCORDANCE WITH APPROVED E&S SEEDING AND MULCHING NOTES;
   - IN THE EVENT OF CONTAMINATION OR SPILL, IMMEDIATELY CONTACT AN ENVIRONMENTAL PROFESSIONAL QUALIFIED TO IDENTIFY AND EXECUTE THE REQUIRED CLEANUP METHODS THAT ADHERE TO LOCAL, STATE AND FEDERAL REGULATIONS;
   - IMMEDIATELY AFTER DISCOVERY OF BERM INSTABILITY, CONTACT A GEOTECHNICAL ENGINEER AND SITE CONTRACTOR TO DETERMINE AND EXECUTE METHODS TO REMEDY THE UNSTABLE BERM.

GENERAL MAINTENANCE NOTES:

1. INSPECT BMP FOR SEDIMENT BUILDUP, EROSION, VEGETATIVE CONDITIONS, ETC.

2. WHILE VEGETATION IS BEING ESTABLISHED, PRUNING AND WEEDING MY BE REQUIRED.

3. RE-SPREAD MULCH WHEN EROSION IS EVIDENT AND REPLENISH AS NEEDED. REPLENISH MULCH ONCE EVERY 2 TO 3 YEARS.

4. INSPECT AND CORRECT EROSION PROBLEMS, DAMAGE TO VEGETATION, AND SEDIMENT AND DEBRIS ACCUMULATION (ADDRESS WHEN > 3 INCHES AT ANY SPOT OR COVERING VEGETATION).

5. WATER AS NEEDED DURING PERIODS OF EXTENDED DROUGHT.

6. INSPECT VEGETATION ON SIDE SLOPES FOR EROSION AND FORMATION OF RILLS OR GULLIES, CORRECT AS NEEDED.

7. INSPECT FOR POOLS OF STANDING WATER; DEWATER AND DISCHARGE TO AN APPROVED LOCATION AND RESTORE TO DESIGN GRADE.

8. TRIM VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER SWALE OPERATION, OR TO SUPPRESS WEEDS AND INVASIVE VEGETATION; DISPOSE OF CUTTINGS IN A LOCAL COMPOSTING FACILITY, MOW ONLY WHEN SWALE IS DRY TO AVOID RUTTING.

9. INSPECT FOR LITTER; REMOVE PRIOR TO TRIMMING.

10. INSPECT FOR UNIFORMITY IN CROSS-SECTION, CORRECT AS NEEDED.

11. INSPECT INFLOW POINTS (CURB CUTS, INLETS, PIPES, ETC.) AND OUTLET FOR SIGNS OF EROSION OR BLOCKAGE, CORRECT AS NEEDED.

12. CONTACT DESIGN ENGINEER IMMEDIATELY AFTER DISCOVERY OF SINKHOLE OCCURRENCE, SINKHOLE SHOULD BE PROMPTLY AND PROPERLY REPAIRED.

13. THE VEGETATION (FOR BMP CONTRIBUTING DRAINAGE AREA) SHOULD BE MAINTAINED IN GOOD CONDITION, AND ANY BARE SPOTS REVEGETATED.

14. CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS. MOW ONLY AS APPROPRIATE FOR VEGETATIVE SPECIES.

15. INSPECT BMP #2 AT LEAST TWO TIMES PER YEAR AFTER RUNOFF EVENTS GREATER THAN 0.8 INCH AND MAKE SURE THAT RUNOFF DRAINS DOWN WITHIN THE DESIGN PARAMETERS (THE LICENSED PROFESSIONAL ENGINEER SHOULD CLEARLY IDENTIFY WHAT THESE PARAMETERS ARE).

16. ALL CATCH BASINS AND INLETS SHOULD BE INSPECTED AND CLEANED AT LEAST TWO (2) TIMES PER YEAR.

17. AS NEEDED, REMOVE ACCUMULATED SEDIMENT AS REQUIRED TO MAINTAIN INFILTRATION THROUGH THE MRC STONE MEDIA AND TO MAINTAIN WATER QUALITY FUNCTIONALITY. RESTORE ORIGINAL CROSS SECTION. PROPERLY DISPOSE OF SEDIMENT.

18. ALL MRC BMP COMPONENTS SHOULD BE MAINTAINED AS INDICATED IN THE STORMWATER BMP MANUAL.

19. AT LEAST TWO TIMES PER YEAR, OR MORE IF HISTORICAL MAINTENANCE INDICATE IT IS NECESSARY, INSPECT FOR ACCUMULATION OF SEDIMENT, DAMAGE TO OUTLET CONTROL STRUCTURES, EROSION, SIGNS OF WATER CONTAMINATION/SPILLS, AND INSTABILITY.

20. LEAF LITTER NEEDS TO BE REMOVED ANNUALLY.

WINTER MAINTENANCE NOTES:
21. BMP SHOULD BE INSPECTED IMMEDIATELY AFTER THE SPRING MELT, REMOVE RESIDUALS AND REPLACE DAMAGED VEGETATION.

22. IF ROADSIDE OR PARKING LOT RUNOFF IS DIRECTED TO THE BMP, MULCHING AND/OR SOIL AERATION/MANIPULATION MAY BE REQUIRED IN THE SPRING TO RESTORE SOIL STRUCTURE AND MOISTURE CAPACITY AND TO REDUCE THE IMPACTS OF DEICING AGENTS.

23. USE NONTOXIC, ORGANIC DEICING AGENTS, APPLIED EITHER AS BLENDED, MAGNESIUM CHLORIDE-BASED LIQUID PRODUCTS OR AS PRETREATED SALT.

24. USE SALT-TOLERANT VEGETATION.

25. CLOSE MOW OR TRIM PERENNIAL MATERIAL TO ALLOW PROPER GERMINATION AND TO CONTROL INVASIVE SPECIES (TO BE DONE ONCE IN LATE FALL, WINTER OR EARLY SPRING).

26. REPLENISH MULCH IN AREAS WHERE EROSION IS EVIDENT. REPLENISH MULCH IN ENTIRE INFILTRATION AREA AT LEAST EVERY 2 TO 3 YEARS.

CONSTRUCTION SEQUENCING
1. INSTALL FILTER SOCK AND/OR OR OTHER APPROPRIATE TEMPORARY EROSION CONTROL DEVICES TO PREVENT SEDIMENT FROM LEAVING OR ENTERING THE PRACTICE DURING CONSTRUCTION.

2. PRIOR TO CONSTRUCTION, BIORETENTION AREA/BIO-FILTRATION AREAS SHALL BE MARKED OFF IN THE FIELD. THE AREAS SHALL BE DELINEATED WITH CONSTRUCTION FENCING OR TAPE IN SUCH A MANNER AS TO PREVENT THE PARKING OR REPEATED MOVEMENT OF CONSTRUCTION TRAFFIC.

3. ALL DOWN-GRADIENT PERIMETER SEDIMENT CONTROL BMP'S MUST BE IN PLACE BEFORE ANY UP GRADIENT LAND DISTURBING ACTIVITY BEGINS.

4. PERFORM CONTINUOUS INSPECTIONS OF EROSION CONTROL PRACTICES.

5. INSTALL UTILITIES (WATER, SANITARY SEWER, ELECTRIC, PHONE, FIBER OPTIC, ETC) PRIOR TO SETTING FINAL GRADE OF BIORETENTION DEVICE.

6. ROUGH GRADE THE SITE. IF BIORETENTION AREAS ARE BEING USED AS TEMPORARY SEDIMENT BASINS LEAVE A MINIMUM OF 1 FOOT OF COVER OVER THE PRACTICE TO PROTECT THE UNDERLYING SOILS FROM CLOGGING.

7. PERFORM ALL OTHER SITE IMPROVEMENTS.

8. TRIM AND MULCH ALL AREAS AFTER DISTURBANCE.

9. CONSTRUCT BIORETENTION DEVICE UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA.

10. CONSTRUCT CURB CUTS OR OTHER INFLOW BUT PROVIDE PROTECTION TO PROHIBIT SEDIMENT LADEN WATER FROM ENTERING THE BMP.

11. CRITICAL STAGE OF CONSTRUCTION: CONTACT ENGINEER TO VERIFY INSTALLATION OF BIORETENTION AREA.

12. IMPLEMENT TEMPORARY AND PERMANENT EROSION CONTROL PRACTICES.

13. PLANT AND MULCH BIORETENTION DEVICE.

14. REMOVE TEMPORARY EROSION CONTROL DEVICES AFTER THE CONTRIBUTING DRAINAGE AREA IS ADEQUATELY VEGETATED.

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

THE TERM "FAILURE' FOR THE PROPOSED BIORETENTION AREAS SHALL BE DEFINED AS:
1) THE LOSS OF FUNCTIONALITY OF THE PROPOSED OUTLET STRUCTURE, DISCHARGE PIPE, UNDERDRAIN SYSTEM OR ANY OTHER DRAINAGE STRUCTURE/PIPE WITHIN THE BMP
2) THE LOSS OF STRUCTURAL INTEGRITY OF THE PROPOSED BERM
3) THE INABILITY OF THE BIORETENTION AREA TO SUPPORT SURFACE VEGETATION DUE TO TOO MUCH OR TOO LITTLE WATER
4) EXCESSIVE EROSION OR ACCUMULATION OF SEDIMENT OR DEBRIS
5) STANDING WATER IS OBSERVED IN THE BIORETENTION AREA AFTER 72-HOURS.

THE PERMITTEE SHALL MAKE THE NECESSARY REPAIRS TO THE OUTLET STRUCTURE, DISCHARGE PIPING, UNDERDRAIN SYSTEM, OTHER DRAINAGE STRUCTURES/PIPES WITHIN THE BMP, SURFACE VEGETATION, AND BERM AS NEEDED. REMOVE SEDIMENT OR DEBRIS THAT HAS ACCUMULATED IN THE BMP BOTTOM AND STABILIZE EROSION USING PERMANENT STABILIZATION TECHNIQUES INDICATED ON THE EROSION AND SEDIMENT POLLUTION CONTROL PLAN. DEWATER BIORETENTION AREAS.

THE TERM "FAILURE' FOR THE PROPOSED WATER QUALITY INLETS (FILTER INSERTS) SHALL BE DEFINED AS:
1) DISCOVER EVIDENCE OF DAMAGED FILTER MEDIA
2) 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.

THERMAL IMPACT

THERE ARE SEVERAL PROPOSED/IN PLACE MEASURES INTENDED TO TREAT RUNOFF FOR THERMAL IMPACTS. FIRSTLY, THE PROPOSED LANDSCAPING TREES WITHIN AND BORDERING THE NEW BUILDING AND SIDEWALK AREAS WILL SHADE THE ADJACENT IMPERVIOUS SURFACES WHICH WILL KEEP THE AREAS COOL. SECONDLY, THE STORMWATER RUNOFF COLLECTED BY THE STORM SEWER SYSTEM WILL BE COOLED BY THE LOWER UNDERGROUND TEMPERATURE AS THE RUNOFF FLOWS THROUGH THE SYSTEM. THIRDLY, THE WATER DETAINED IN THE BIORETENTION AMENDED SOILS WILL BE COOLED AS IT IS SLOWLY RELEASED AS A RESULT OF THE LOWER UNDERGROUND TEMPERATURE.
AS THE POST DEVELOPMENT FLOWS ARE LOWER THAN THE PRE-DEVELOPMENT FLOWS THE REDUCED RATE MEANS THE RUNOFF WILL HAVE MORE TIME TO COOL IN THE PROPOSED BMPS. THE COOLING INFLUENCES OF THE ONSITE BMPS WILL NEUTRALIZE/REMOVE THE HEAT ENERGY ABSORBED BY THE PROJECT SITE RUNOFF PRIOR TO DISCHARGE INTO THE RECEIVING WATERCOURSE.

STORM SEWER

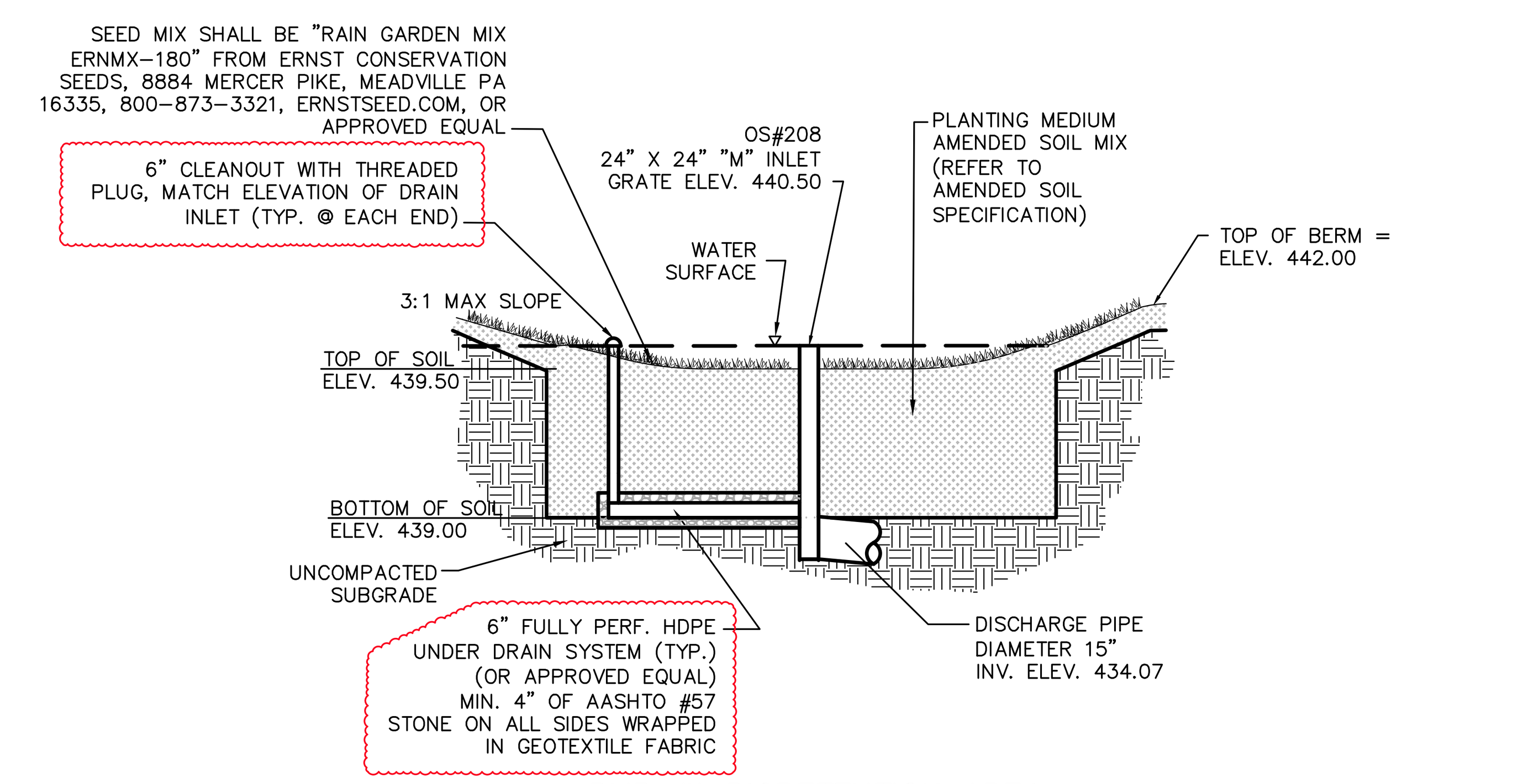
INSPECTION REQUIREMENTS:
1. ALL DRAINAGE COLLECTION STRUCTURES SHALL BE INSPECTED ANNUALLY FOR THE FIRST FIVE (5) YEARS AND ONCE EVERY THREE (3) YEARS THEREAFTER, FOR TRASH, DEBRIS OR EVIDENCE OF PIPE LEAKAGE OR SAGGING; REMOVE TRASH OR DEBRIS IMMEDIATELY; IMMEDIATELY REPAIR OR REPLACE LEAKING/SAGGING DRAINAGE FEATURES.

GENERAL MAINTENANCE NOTES:
1. ACCESS CAN BE GAINED TO EACH COLLECTION STRUCTURE THROUGH THE REMOVABLE INLET GRATE OR MANHOLE LID. STEEL OR OTHER APPROVED RUNGS 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.
2. CONTACT DESIGN ENGINEER IMMEDIATELY AFTER DISCOVERY OF SINKHOLE OCCURRENCE, SINKHOLE SHOULD BE PROMPTLY AND PROPERLY REPAIRED.
3. 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.
4. REFER TO WATER QUALITY INLET MAINTENANCE GUIDELINES FOR ADDITIONAL DETAIL IN CLEANING OF THOSE STRUCTURES WITH WATER QUALITY APPARATUS INSTALLED.

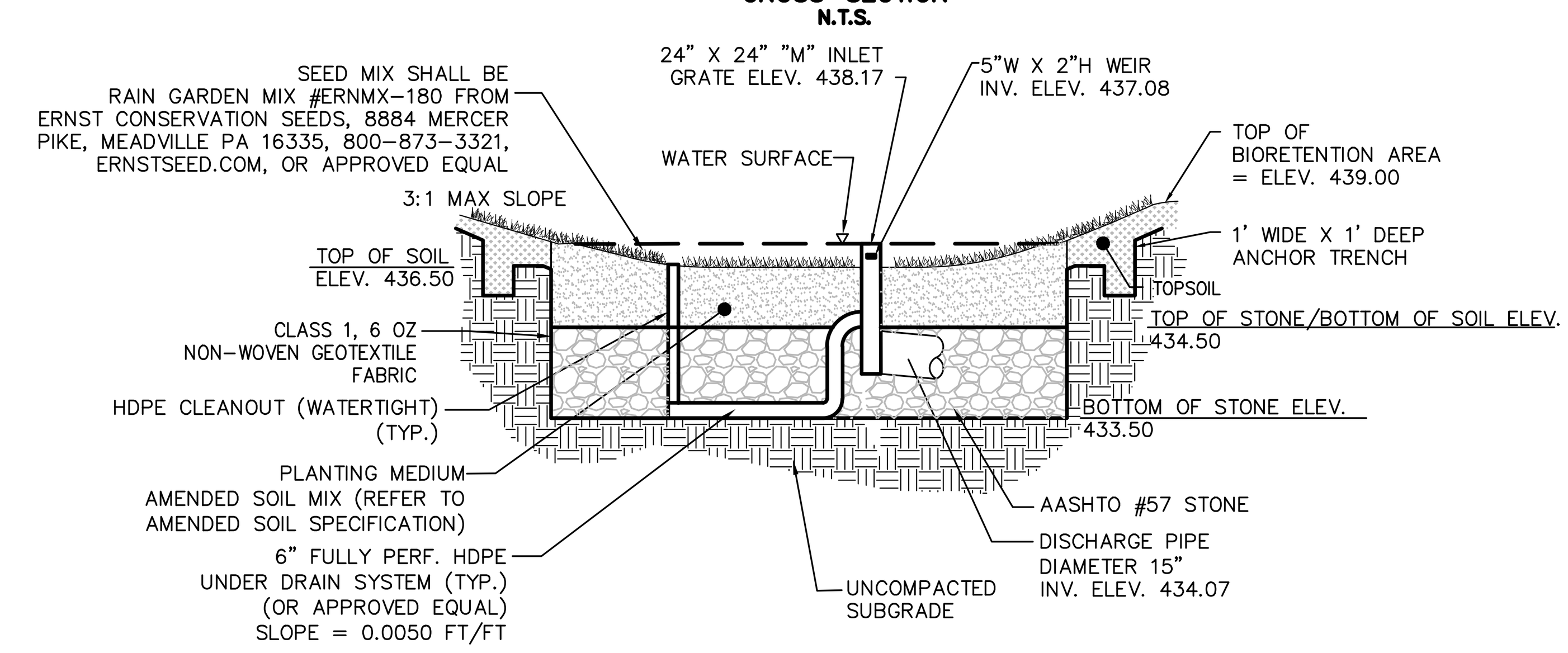
SITE RESTORATION O&M REQUIREMENTS

ESTABLISH AND MAINTAIN VEGETATIVE COVER IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.

PERFORM ROUTINE INSPECTIONS AND CORRECT EROSION PROBLEMS, IF ENCOUNTERED.



BMP #1 BIORETENTION AREA
CROSS-SECTION
N.T.S.



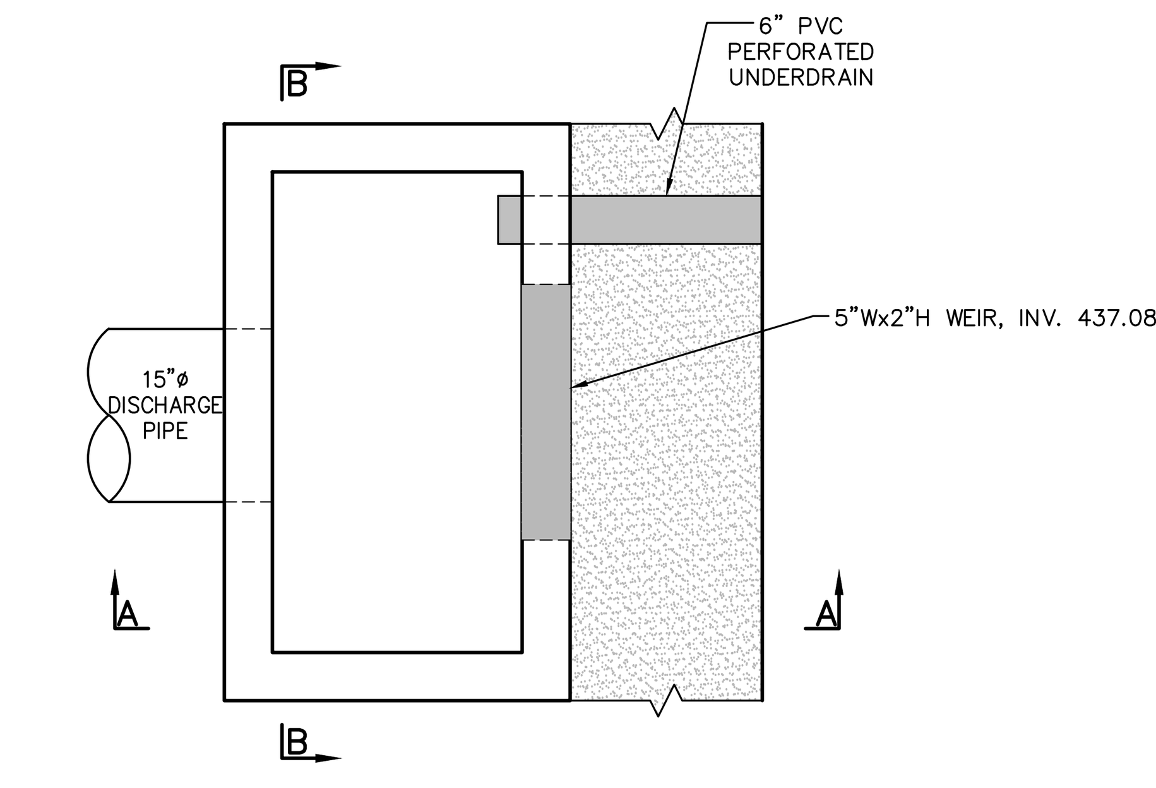
AMENDED SOILS SPECIFICATION:
A WELL BLENDED MIXTURE (BY VOLUME):
40-60% ORGANIC LEAF COMPOST
40-60% NATIVE TOPSOIL

0.50 IN/HR (MIN.) TO 1.00 IN/HR (MAX.)*
*THE AMENDED SOIL MIX SHALL BE INSPECTED AND TESTED DURING INSTALLATION BY A GEOTECHNICAL ENGINEER TO VERIFY ACCEPTABILITY OF THE MIXTURE AND PERMEABILITY.

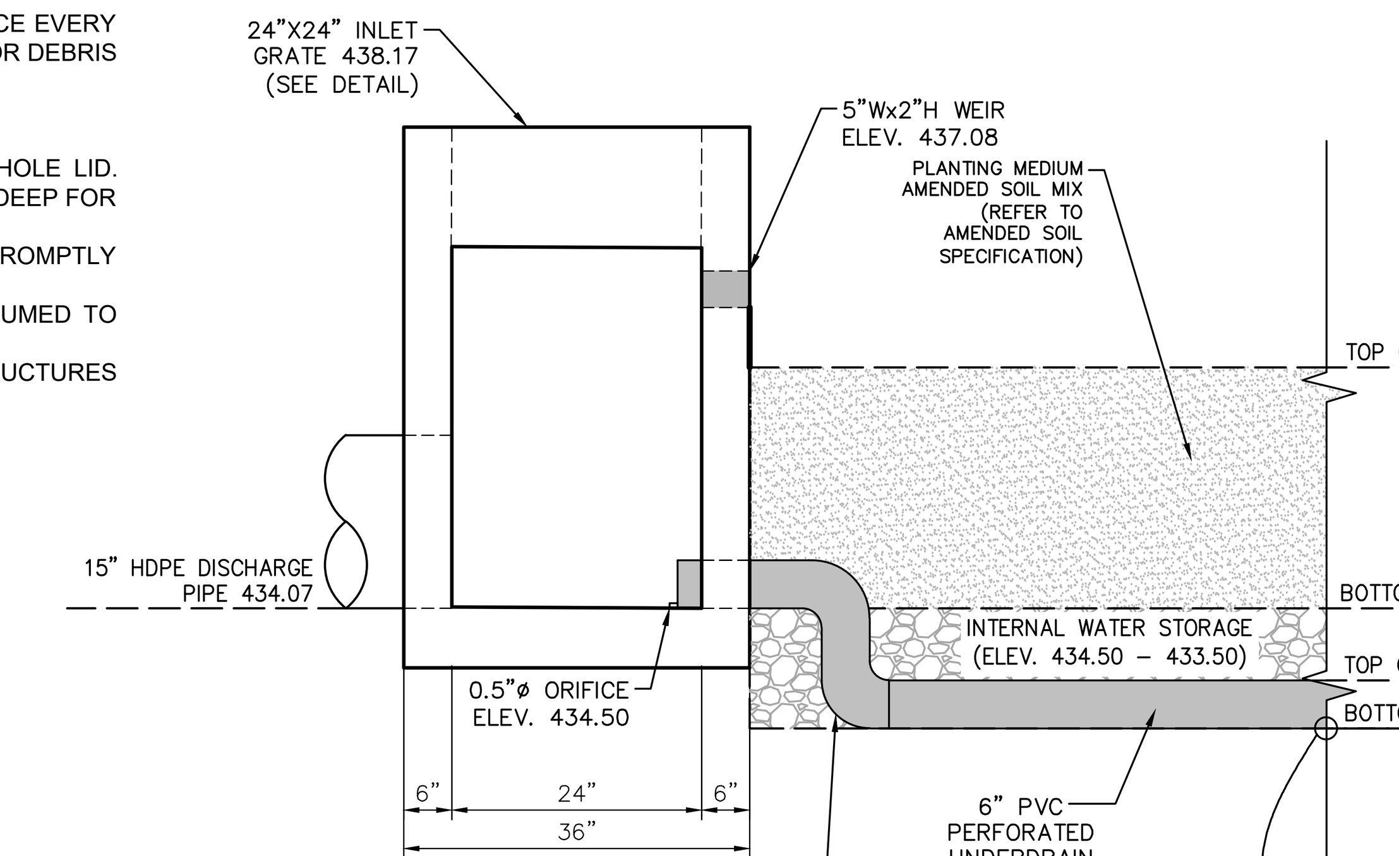
BMP #2 M.R. BIORETENTION AREA
CROSS-SECTION
N.T.S.

TYPICAL BIORETENTION AREA NOTES:

1. CONTRACTOR SHALL TREAT COMPACTED SUBGRADE SOILS AS SPECIFIED IN THE SOIL AMENDMENT SPECIFICATION PRIOR TO PLACEMENT OF THE UNDERDRAIN AND SOIL AMENDMENT SHOWN ON SHEET 9F.
2. IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE BMP DURING OR IMMEDIATELY FOLLOWING EXCAVATION, THIS MATERIAL SHALL BE REMOVED FROM THE PRACTICE PRIOR TO CONTINUING CONSTRUCTION.
3. GRADING OF AREAS SHALL BE ACCOMPLISHED USING LOW-COMPACTION EARTH-MOVING EQUIPMENT TO PREVENT COMPACTION OF UNDERLYING SOILS.
4. ALL SUB MATERIALS BELOW THE SPECIFIED BIORETENTION DEPTH (ELEVATION) SHALL BE UNDISTURBED, UNLESS OTHERWISE NOTED.
5. CONTRACTOR SHOULD PROVIDE A ONE-YEAR 100% CARE AND REPLACEMENT WARRANTY FOR ALL PLANTING BEGINNING AFTER INSTALLATION AND INSPECTION OF ALL PLANTS.
6. REFER TO OPERATIONS AND MAINTENANCE PLAN FOR POST-DEVELOPMENT CONSTRUCTION SEQUENCING AND MAINTENANCE SPECIFICATIONS.
7. ALL CONNECTIONS TO INLET/OUTLET STRUCTURES AND CLEANOUT PIPES SHALL HAVE WATERTIGHT SEALS.

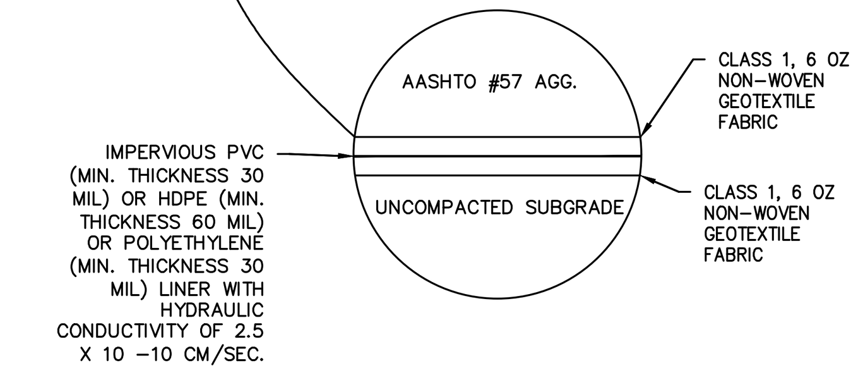


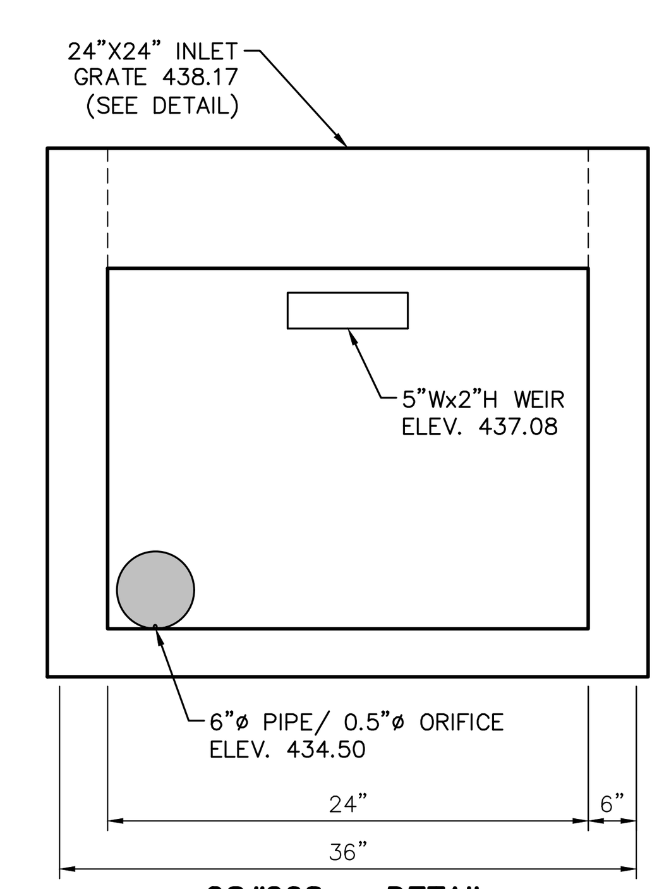
OS#208 – DETAIL
PLAN VIEW: N.T.S.



OS#208 – DETAIL
SECTION A–A: N.T.S.

6" PVC SOLID UNDERDRAIN





OS#208 – DETAIL
SECTION B–B: N.T.S.

ITEMS INCLUDED IN 04/11/2025 REVISIONS:
- PROFESSIONAL SEAL ADDED TO PLAN.
- BMP #1 DETAIL REVISED TO INCLUDE UNDERDRAIN, STONE, GEOTEXTILE FABRIC, AND CLEANOUT.

POST-CONSTRUCTION STORMWATER MANAGEMENT NOTES/DETAILS

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
MICHAEL JOYCE
PE079950

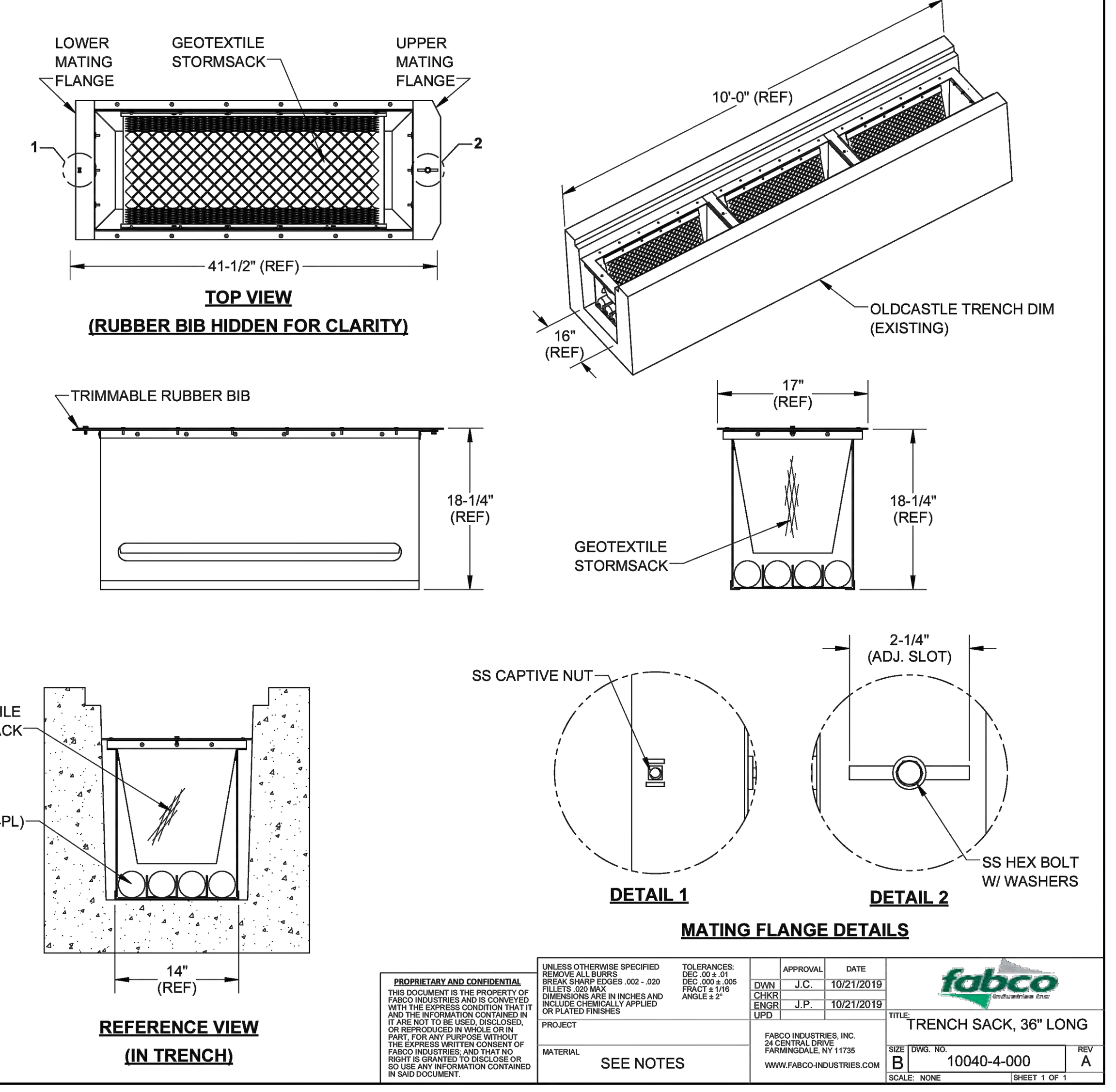
ChesterValley ENGINEERS, INC.
112 Moores Road, Suite 200, Malvern, PA 19355
610-644-4623
www.chesterv.com

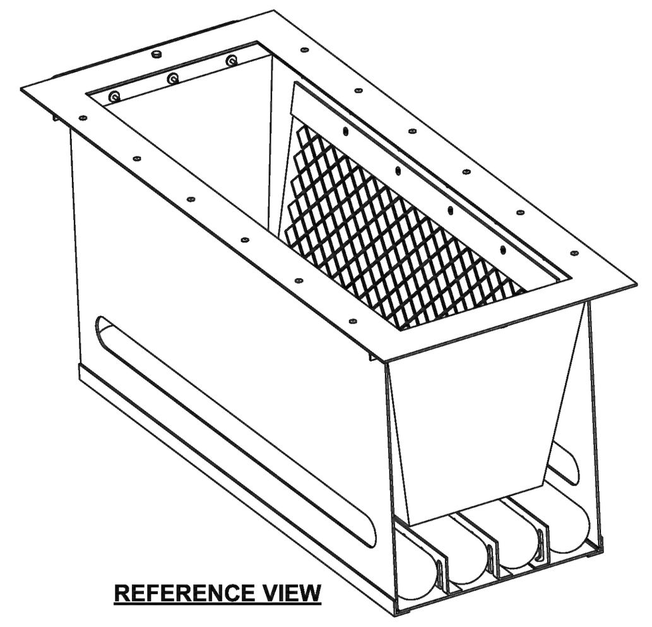
PROJECT NO.	F.B.	DRAWING
22096-2000		

SCALE	DATE	DRAWN BY	CHECKED BY
As Noted	03/31/2025	HL	MJ

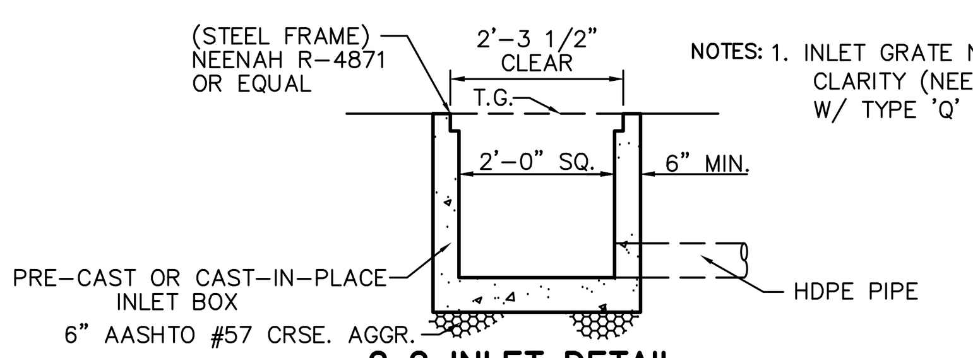
NOTES:

1. WEIGHT (EMPTY): 30 LB MAX
2. MATERIAL:
   A) ALUMINUM FRAME: ALUM. ALLOY SHEET, 5000 SERIES
   B) STORMSACK: GEOTEXTILE, 20 US MESH
   C) MESH LINER (INNER): HDPE, 1" DIAMOND CONFIGURATION
   D) SUPPORT HARDWARE: STAINLESS STEEL
   E) OIL BOOM: 100% POLYPROPYLENE
3. PERFORMANCE CHARACTERISTICS (TYP):
   A) DEBRIS CAPACITY: 3.0 CU-FT
   B) FILTERED (CLEAN) FLOW RATE: 3250 GPM (8.7 CFS)
4. FRAMES ARE DESIGNED WITH MATING FLANGES AND CAN BE BOLTED TOGETHER (END-TO-END) IF MORE THAN ONE FILTER UNIT IS REQUIRED, SEE DETAILS.
5. TYPICAL MAINTENANCE: REMOVE EACH TRENCH FILTER SEGMENT, EMPTY AND HOSE CLEAN. ALTERNATE METHOD: VACUUM AND POWER-WASH.
6. FABCO REPLACEABLE OIL BOOM, P/N: 10040-4-730.
7. DESIGNED SPECIFICALLY TO FIT OLDCASTLE TRENCH DIM WITH "A" = 16", SECTION LENGTH IS 10'



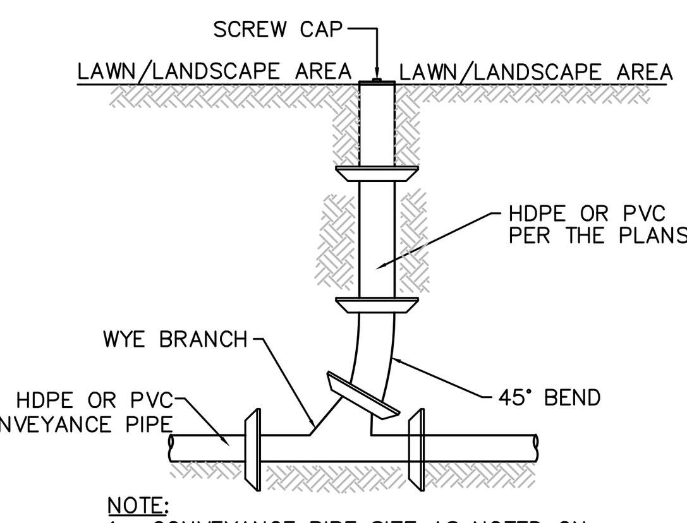


REFERENCE VIEW



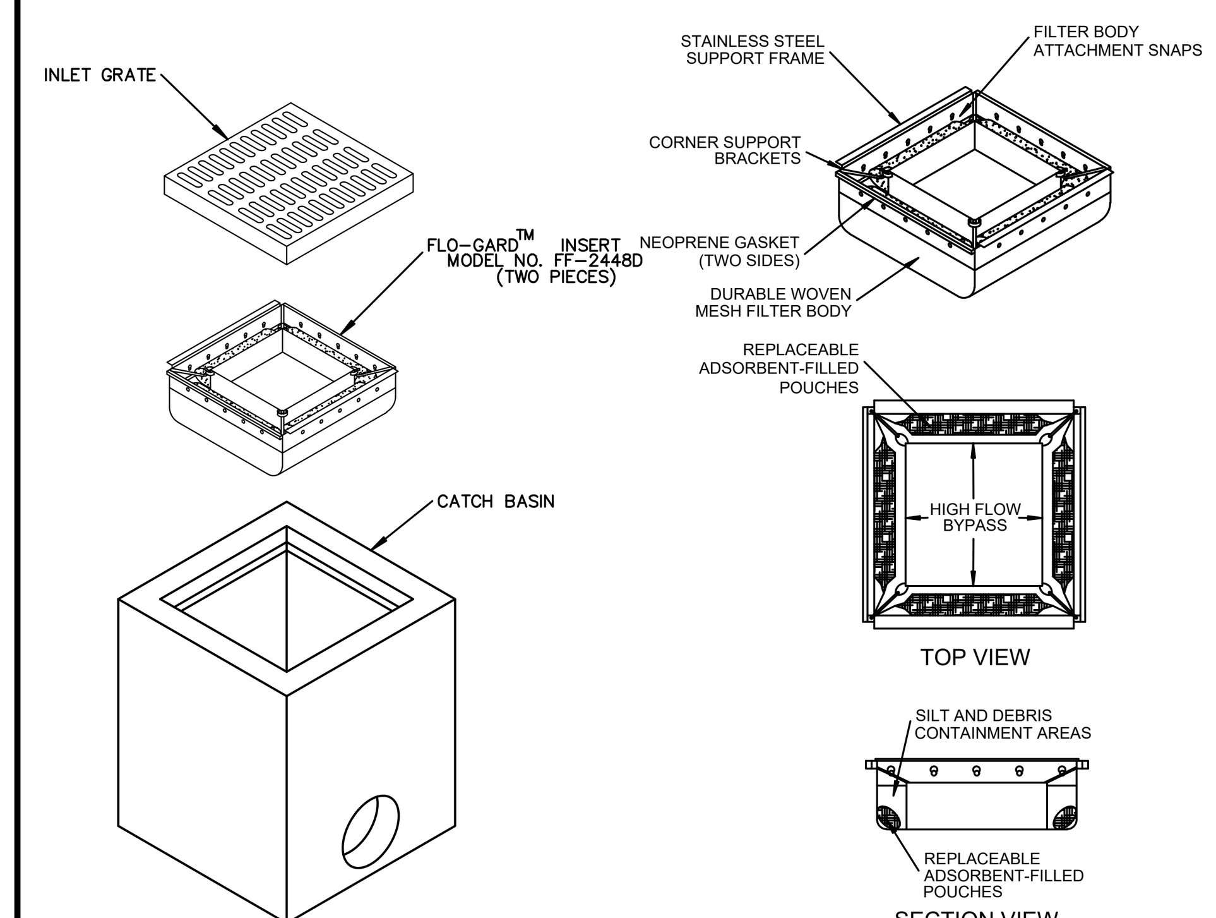
NOTES: 1. INLET GRATE NOT SHOWN FOR CLARITY (NEENAH R-4859 W/ TYPE 'Q' GRATE, OR EQUAL.)

2x2 INLET DETAIL
N.T.S.



NOTE:
1. CONVEYANCE PIPE SIZE AS NOTED ON GRADING & UTILITIES PLAN.

CLEANOUT DETAIL
N.T.S.



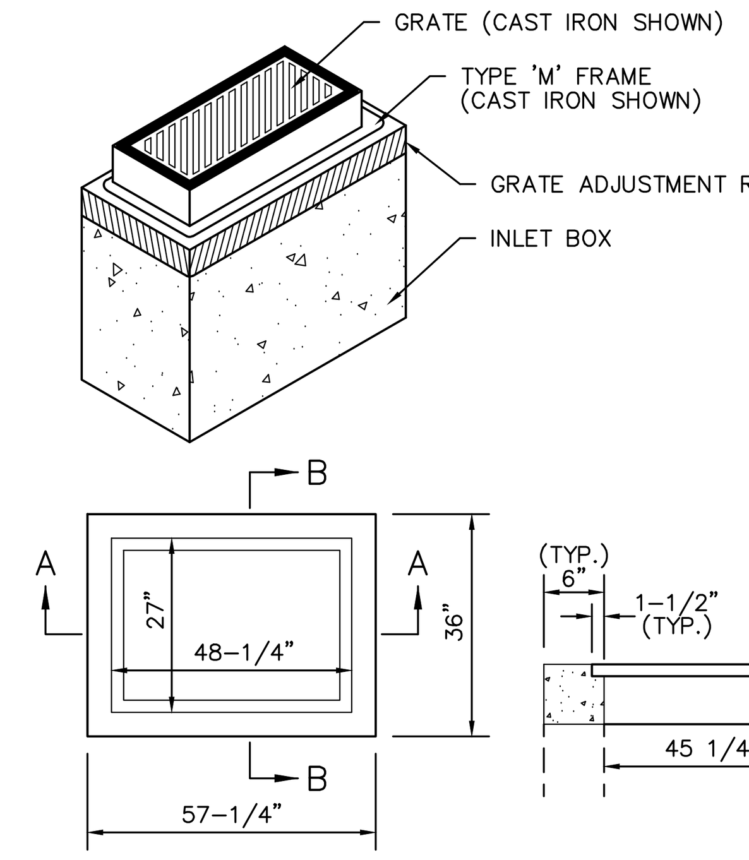
FLO-GARD™
CATCH BASIN FILTER INSERT
(Frame Mount)
FLAT-GRATED INLET
KriStar Enterprises, Inc., Santa Rosa, CA (800) 579-8819

***OR APPROVED EQUAL**

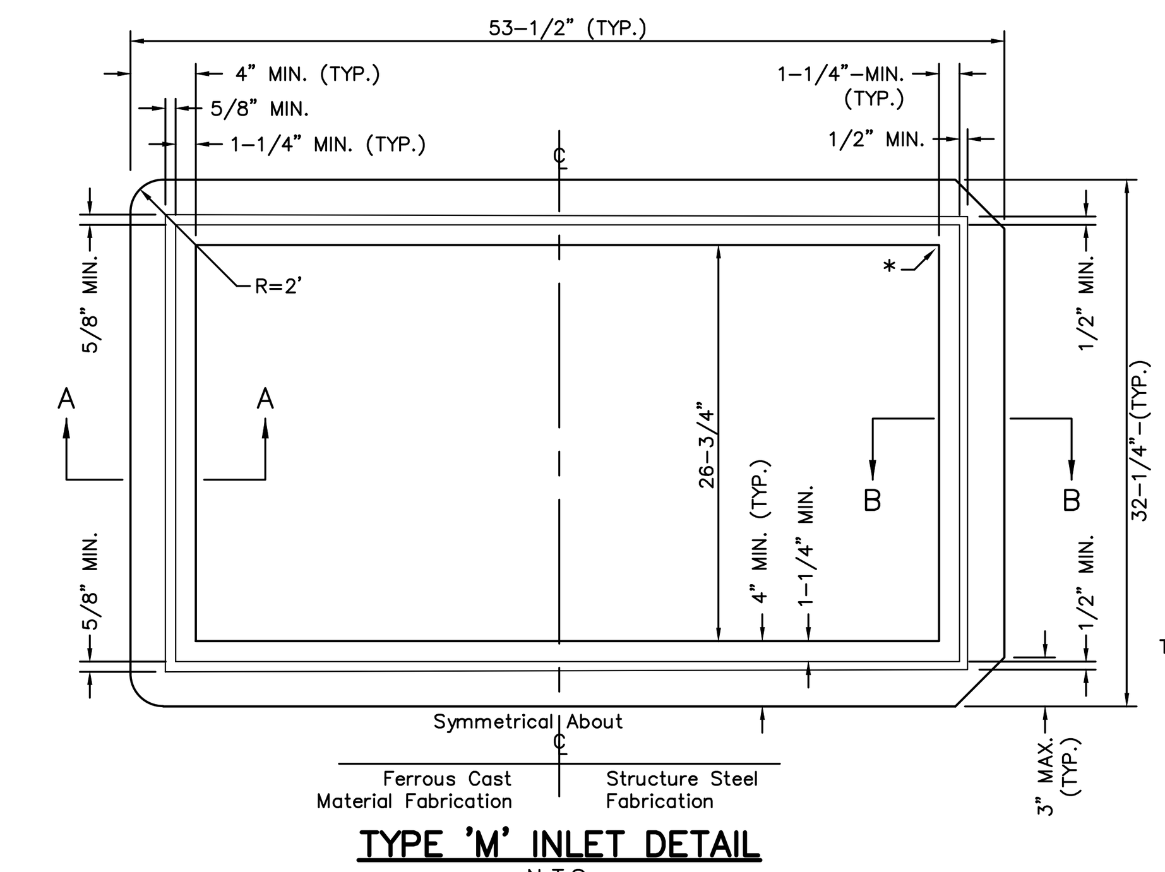
NOTE: FILTER INSERTS TO BE INSTALLED INTO ALL PROPOSED INLETS.

NOTES:
1. FLO-GARD FILTER BODY IS PREFABRICATED FROM POLYPROPYLENE WOVEN MONOFILAMENT GEOTEXTILE.
2. ALL METAL COMPONENTS SHALL BE STAINLESS STEEL (TYPE 304).
3. REFER TO SPECIFIER CHART FOR CATCH BASIN AND FILTER SIZING.
4. FILTER INSERTS ARE SUPPLIED WITH OPTIONAL "CLIP-IN" FILTER POUCHES UTILIZING FOSSIL ROCK FILTER MEDIUM FOR THE COLLECTION AND RETENTION OF PETROLEUM HYDROCARBONS (OILS & GREASES).
5. FLO-GARD FILTER INSERTS AND FOSSIL ROCK FILTER MEDIUM POUCHES MUST BE MAINTAINED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
6. CATCH BASIN DEPTH MUST NOT ALLOW FILTER BODY TO OBSTRUCT OUTLET PIPE.

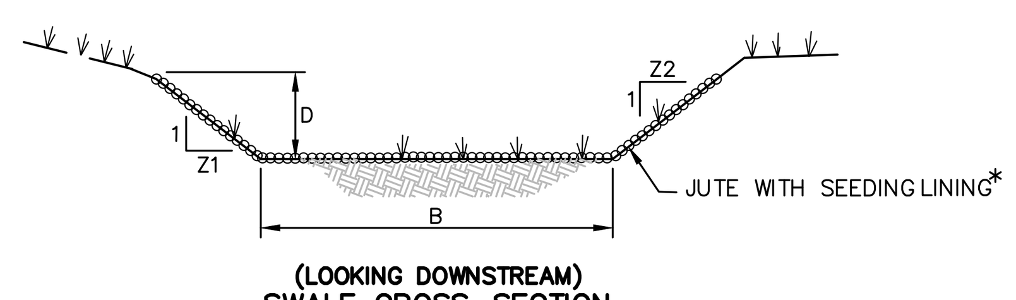
WATER QUALITY INSERT DETAIL
N.T.S.



NOTES:
1. THIS SHEET DEPICTS THE DIMENSIONS REQUIRED FOR UNIFORMITY AND INTERCHANGABILITY. IT DOES NOT INCLUDE DETAILS REQUIRED FOR FABRICATION OR MANUFACTURING. ONLY FRAMES SUPPLIED BY A MANUFACTURER LISTED IN BULLETIN 15 SHALL BE PERMITTED. FOR A BULLETIN 15 LISTING, SUBMIT A 22" x 36" REPRODUCIBLE SHOP DRAWING TO THE MATERIALS AND TESTING DIVISION, BUREAU OF CONSTRUCTION AND MATERIALS FOR REVIEW AND APPROVAL.
2. PROVIDE EITHER GRAY, MALLEABLE OR DUCTILE IRON CASTING OR STRUCTURAL STEEL FRAMES.
3. WELD STRUCTURAL STEEL GRATES IN ACCORDANCE WITH THE REQUIREMENTS OF PUBLICATION 408, SECTION 1105.03(R). WELDING SHOPS ARE NOT REQUIRED TO BE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) CERTIFIED.



TYPE 'M' INLET DETAIL
N.T.S.

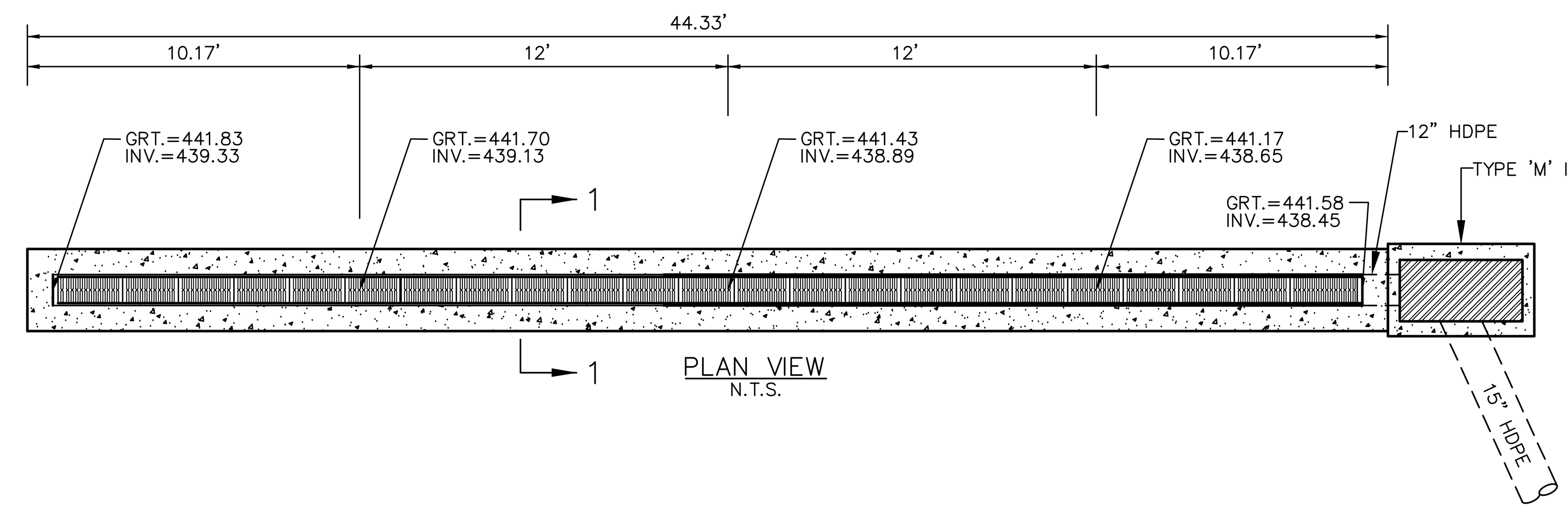


*SEE EROSION CONTROL BLANKET DETAIL FOR STAPLE PATTERNS, SEED MIX SHALL BE RAIN GARDEN MIX #ERNMX-180 FROM ERNST CONSERVATION SEEDS

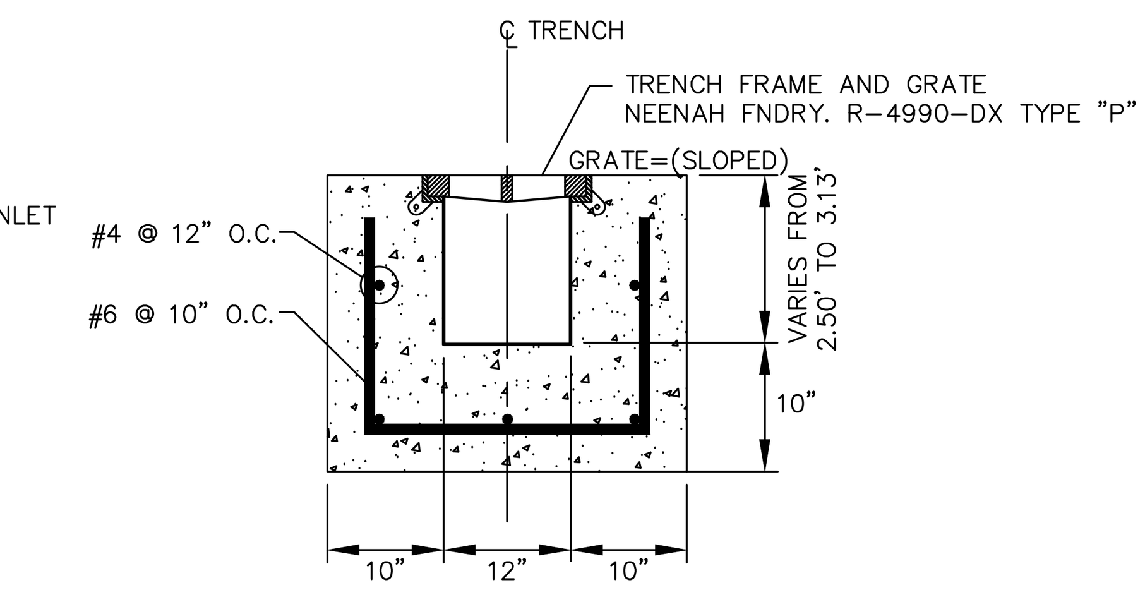
VEGETATED SWALE DETAIL
N.T.S.

CHANNEL NO.	BOTTOM WIDTH B (FT)	SLOPE (%)	DEPTH D (FT)	TOP WIDTH W (FT)	Z1 (FT)	Z2 (FT)
1	6	2.0	1.5	15.00	3	3

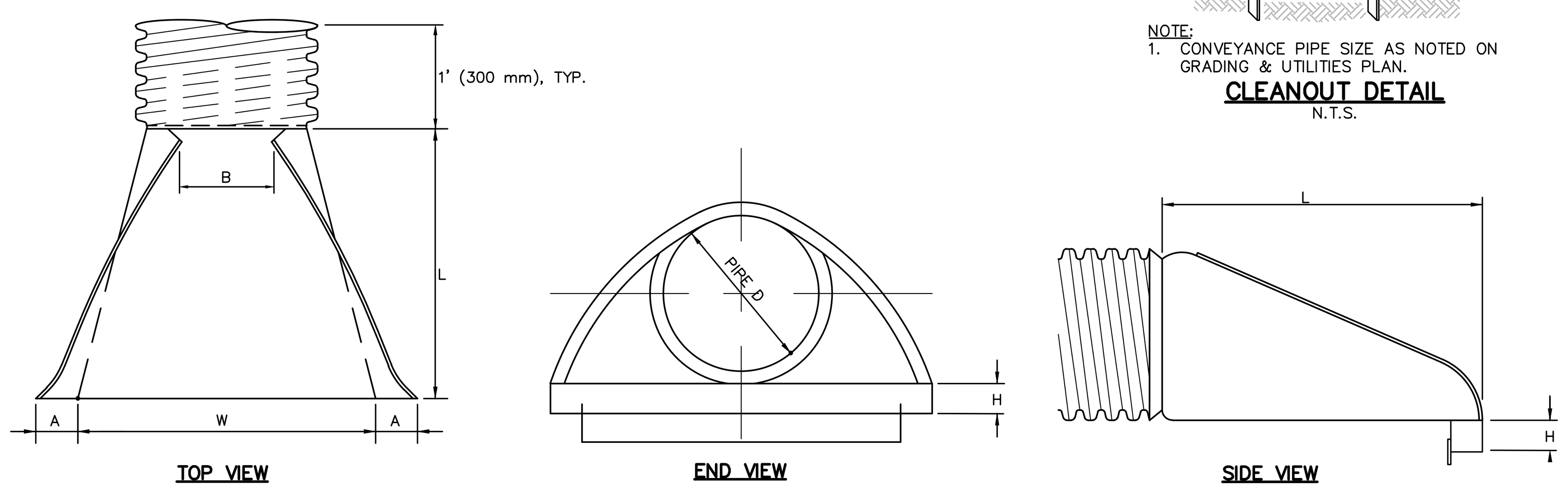
NOTES:
1. CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.
2. NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. EXCESS VEGETATION SHALL BE REMOVED FROM PERMANENT CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY.



TRENCH DRAIN DETAIL
N.T.S.

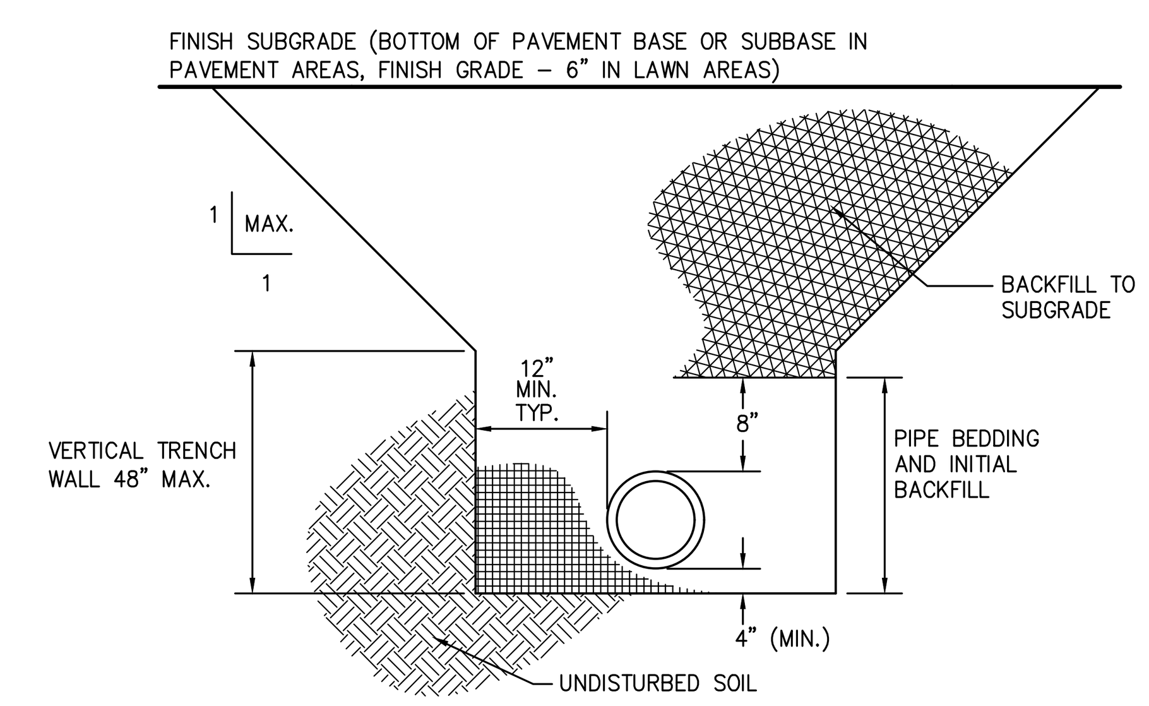


SECTION 1-1
N.T.S.

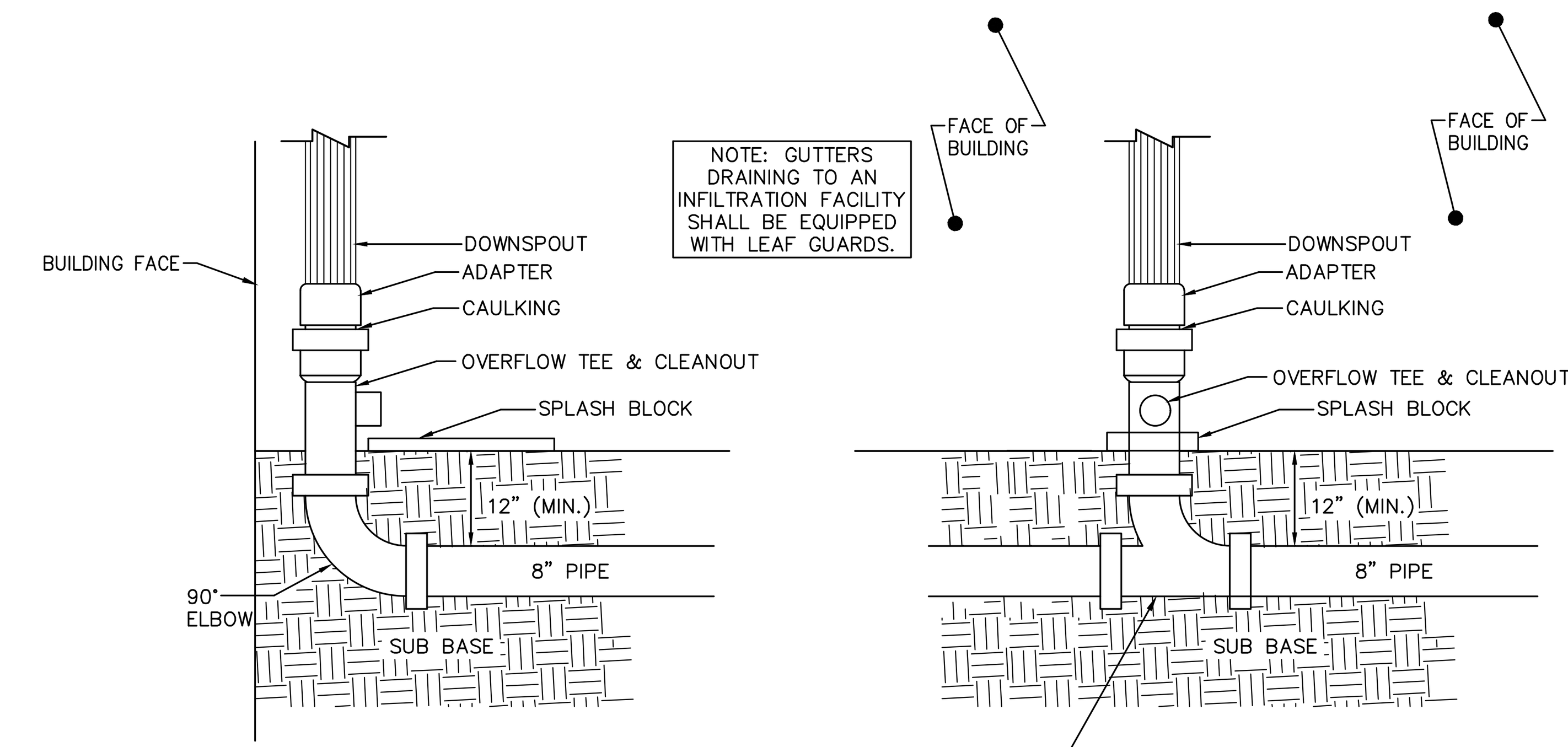


PIPE DIAMETER	DIMENSIONS, INCHES (mm)					
	PART NO.	A, ±1 (25)	B MAX	H, ±1 (25)	L, ±1/2 (13)	W, ±2 (50)
10 (250)	1015 NP	3.5 (95)	10 (254)	6.5 (168)	28 (711)	34.5 (876)
12, 15 (300, 375)	1215 NP	6.5 (165)	10 (254)	6.5 (165)	25 (635)	29 (736)

FLARED END SECTION DETAIL
N.T.S.

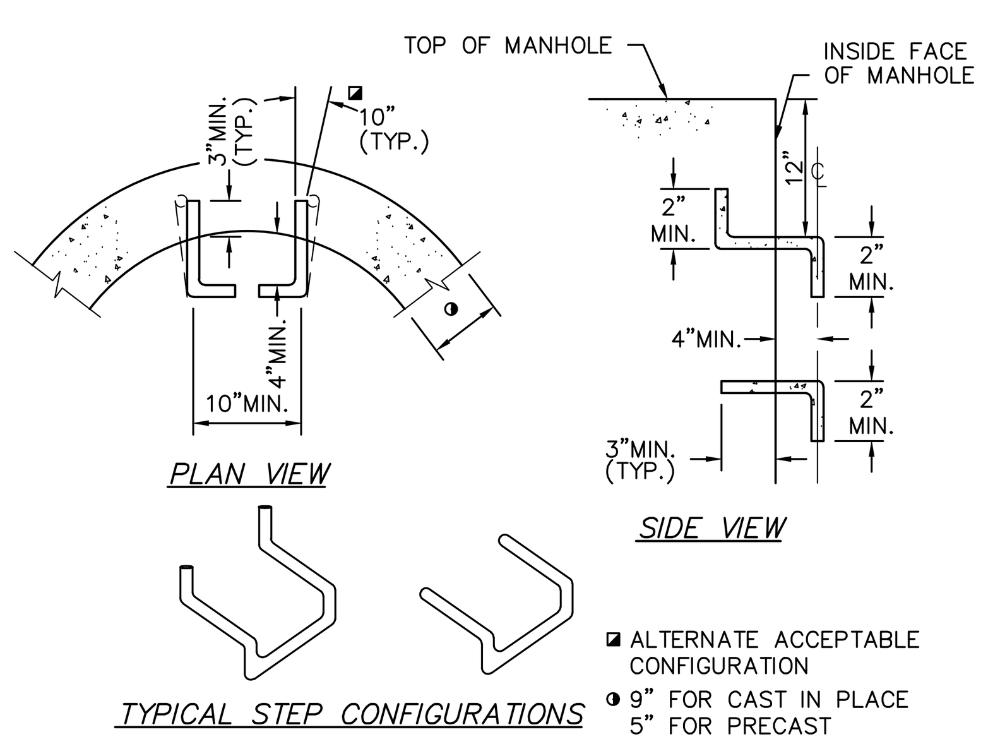


TYPICAL PIPE TRENCH DETAIL
N.T.S.



DOWNSPOUT DETAIL
N.T.S.

DOWNSPOUT DETAIL
N.T.S.

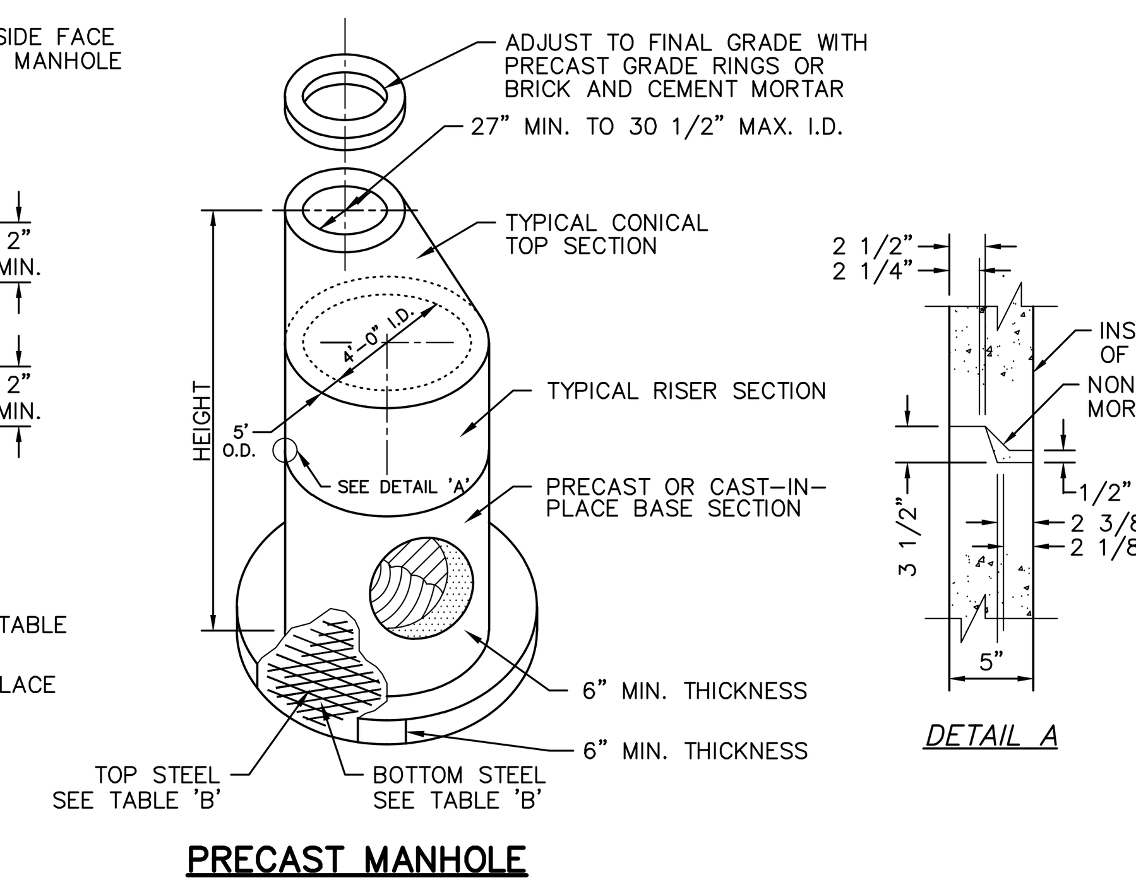


■ ALTERNATE ACCEPTABLE CONFIGURATION
◑ 9" FOR CAST IN PLACE 5" FOR PRECAST

MANHOLE STEPS
N.T.S.

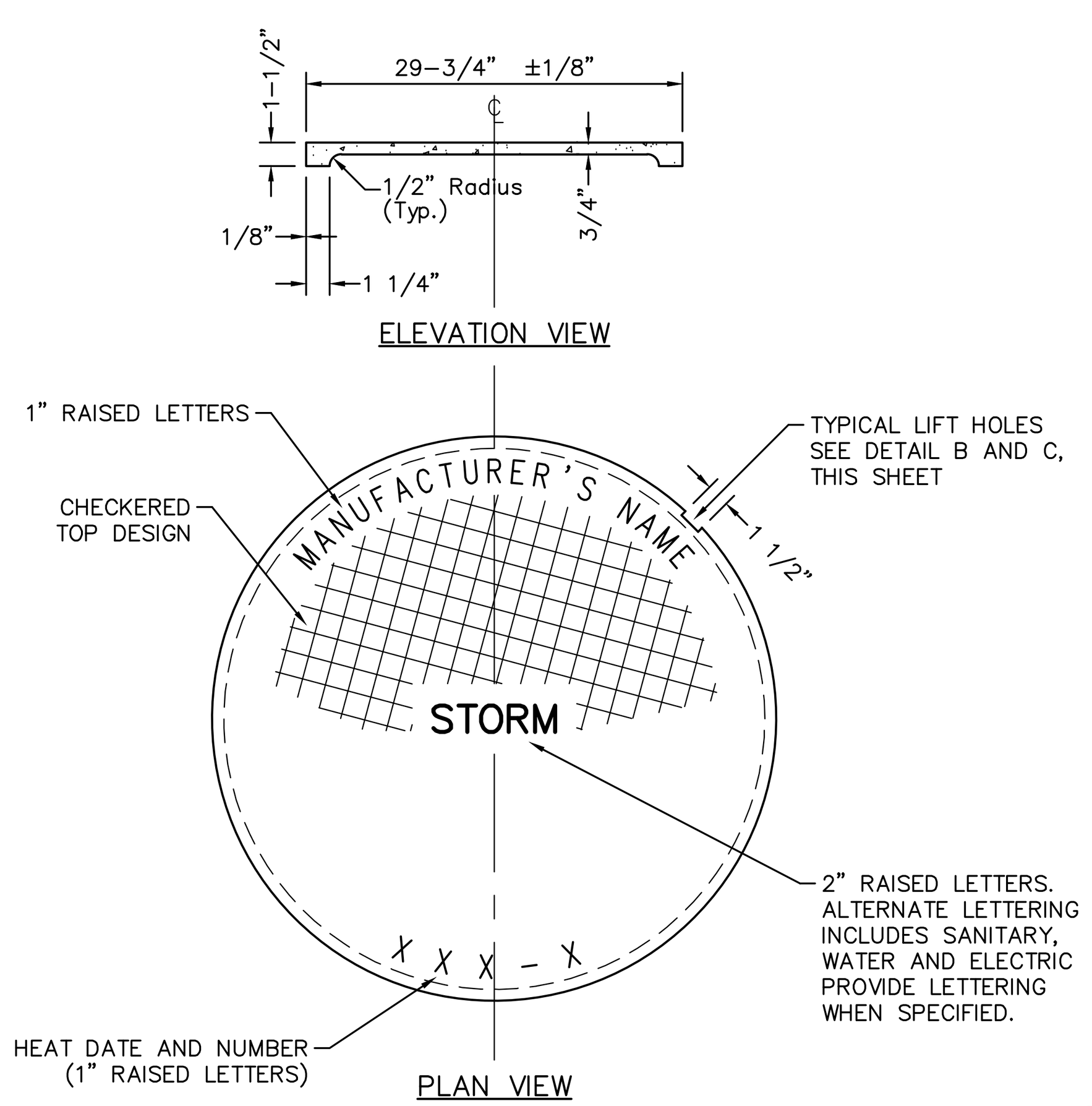
TABLE B		
Precast Manhole Height	Top Steel Requirements	Bottom Steel Requirements
< 30'–0"	#5 Bars @ 12" ℄. To ℄. or 0.18 In²/Ft. WWF	#4 Bars @ 12" ℄. To ℄. or 0.28 In²/Ft. WWF *
> 30'–0" To 60'–0"	#6 Bars @ 12" ℄. To ℄. or 0.15 In²/Ft. WWF *	#4 Bars @ 6" ℄. To ℄. or 0.24 In²/Ft. WWF *

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

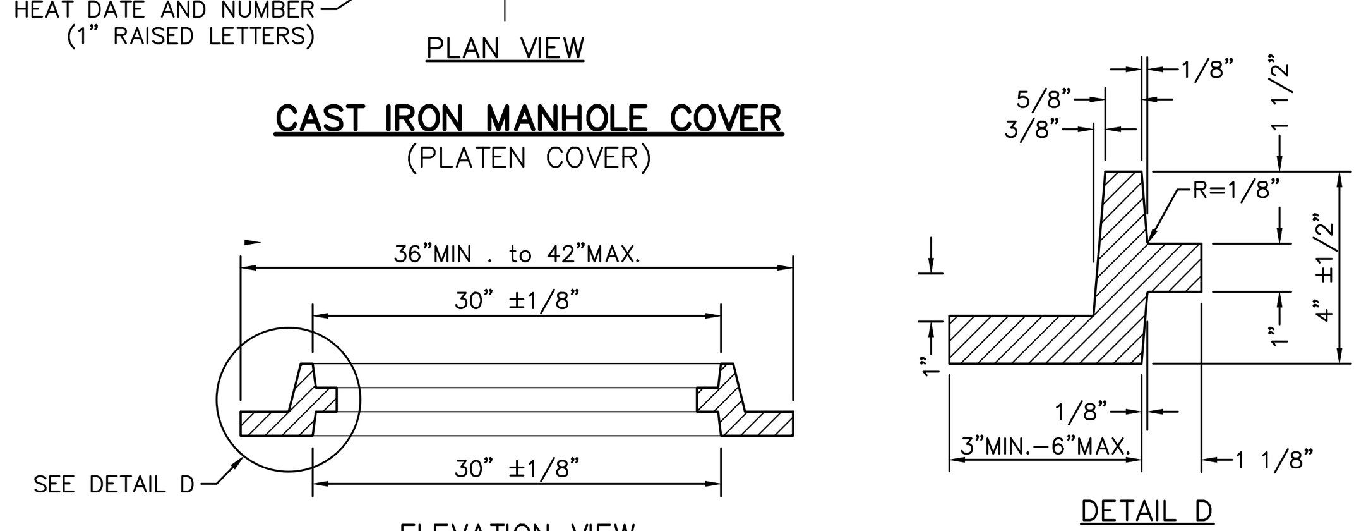


PRECAST MANHOLE
N.T.S.

NOTES
1. Precast manholes meeting the requirements of publication 408 specifications, section 605.2(C), may be substituted for type 'A' and 'B' manholes.
2. Provide manhole steps meeting the requirements of publication 408 specifications, section 605.2(C). Alternate configurations and dimensions, as approved by the engineer, may be used.



CAST IRON MANHOLE COVER
(PLATEN COVER)



CAST IRON MANHOLE FRAME
(MAKE ALL ROUNDS AND FILLETS 1/4" UNLESS OTHERWISE NOTED)

SUITABLE MATERIAL

SUITABLE MATERIAL – CLEAN SOIL CONTAINING NOT MORE THAN 30% SILT/CLAY PARTICLES FINER THAN THE NO. 200 SIEVE (BY WEIGHT), AS DETERMINED BY SOIL LABORATORY TESTING AND METHOD OF ASTM D-2487, WHICH IS CAPABLE OF BEING COMPACTED TO THE REQUIRED DENSITY AT THE PROPER MOISTURE CONTENT, AND WHICH IS FREE OF TOPSOIL, ROOTS, TRASH, DEBRIS, FROZEN MATERIAL, ORGANIC MATTER, EXCESS MOISTURE (WATER CONTENT AT COMPACTION MUST BE WITHIN 2% OF OPTIMUM) AND OTHER DELETERIOUS INCLUSIONS. THE LIMITS OF ROCK AS SUITABLE MATERIAL SHALL NOT EXCEED 4 INCHES (4") IN SIZE. THE REMAINDER OF ROCK SHALL BE CLASSED AS UNSUITABLE. THE PERCENTAGE OF ROCK IN SUITABLE MATERIAL SHALL BE LIMITED TO THAT WHICH WILL PERMIT COMPACTION OF FILL TO THE REQUIRED DENSITY. SUITABLE FILL SHALL BE APPROVED BY THE ON-SITE GEOTECHNICAL ENGINEER AND TOWNSHIP PRIOR TO PLACEMENT AND COMPACTION.

SUITABLE FILL

1. PLACEMENT OF BACKFILL MATERIAL IN 8 INCH LAYERS (LIFTS) SHALL BE PERMITTED WHEN USING VIBRATORY COMPACTION EQUIPMENT.

TRENCH REQUIREMENTS (SEE NOTES)

PIPE TYPE	BEDDING	INITIAL BACKFILL	BACKFILL TO SUBGRADE	
			BENEATH BITUMINOUS PAVEMENT (EXISTING TO REMAIN OR PROPOSED), CONCRETE SIDEWALK OR PAVERS	BENEATH OTHER AREA
ANY PIPE WITHIN PUBLIC ROW	AASHTO #57 COARSE AGGREGATE	PA DOT NO. 2A COARSE AGGR.	PA DOT NO. 2A COARSE AGGREGATE	PA DOT NO. 2A COARSE AGGR.
STORM (METAL)	AASHTO #57 COARSE AGGREGATE	PA DOT NO. 2A COARSE AGGR.	PA DOT NO. 2A COARSE AGGREGATE	SUITABLE MATERIAL
STORM (RCP)	AASHTO #57 COARSE AGGREGATE	PA DOT NO. 2A COARSE AGGR.	PA DOT NO. 2A COARSE AGGREGATE	PA DOT NO. 2A COARSE AGGR.
STORM (OTHER)	AASHTO #57 COARSE AGGR.	PA DOT NO. 2A COARSE AGGR.	PA DOT NO. 2A COARSE AGGREGATE	SUITABLE MATERIAL
SANITARY	AASHTO #57 COARSE AGGREGATE	PA DOT NO. 2A COARSE AGGR.	SUITABLE MATERIAL	SUITABLE MATERIAL
WATER (PIPE)	NONE REQUIRED	PA DOT NO. 2A COARSE AGGR.	SUITABLE MATERIAL	SUITABLE MATERIAL
WATER (TUBING)	CEMENT CONCRETE SAND, TYPE A, PA DOT, PUB. 408, § 703.1	CEMENT CONCRETE SAND, TYPE A, PA DOT, PUB. 408, § 703.1	SUITABLE MATERIAL	SUITABLE MATERIAL
OTHER PIPE, CONDUIT	AASHTO #57 COARSE AGGREGATE	PA DOT NO. 2A COARSE AGGR.	SUITABLE MATERIAL	SUITABLE MATERIAL

NOTE:

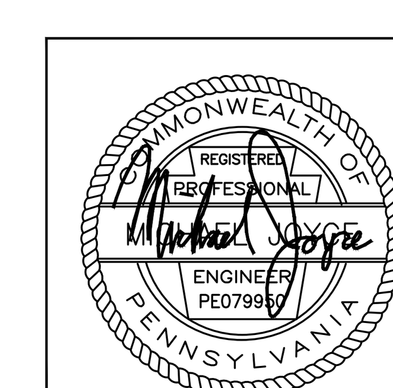
1. ALL STORM SEWERS SHALL BE CONSTRUCTED PER PENNDOT SPECIFICATIONS AS OUTLINED IN PUBLICATION 408 DESIGN MANUAL, PART 2, HIGHWAY DESIGN AND STANDARDS FOR ROADWAY CONSTRUCTION, RC-SERIES UNLESS OTHERWISE DICTATED BY THE TOWNSHIP CODE.
2. ALL STORM SEWER UTILITIES BENEATH A PAVED SURFACE SHALL BE BEDDED AND BACKFILLED WITH PENNDOT 2A STONE. THE BACKFILL SHALL BE PLACED IN SIX-INCH LIFTS AND SOLIDLY COMPACTED TO THE SATISFACTION OF THE TOWNSHIP.

ITEMS INCLUDED IN 04/11/2025 REVISIONS:
– PROFESSIONAL SEAL ADDED TO PLAN.

POST-CONSTRUCTION STORMWATER MANAGEMENT DETAILS

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

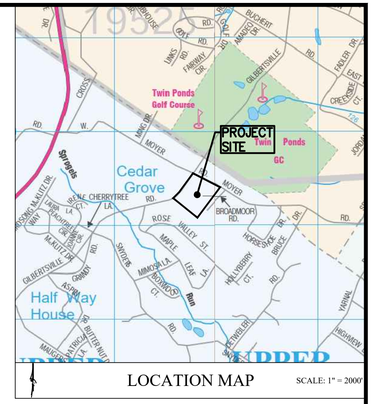


ChesterValley ENGINEERS, INC.
112 Moores Road, Suite 200, Malvern, PA 19355
610-644-4623
www.chesterv.com

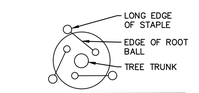
PROJECT NO. 22096-2000
F.B.

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
As Noted	03/31/2025	HL	MJ	

MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

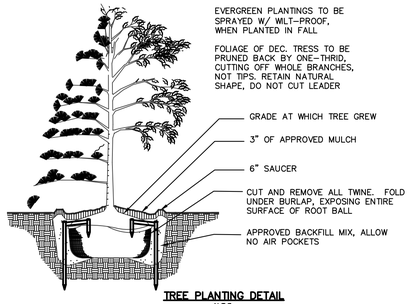


LOCATION MAP SCALE: 1" = 2000'

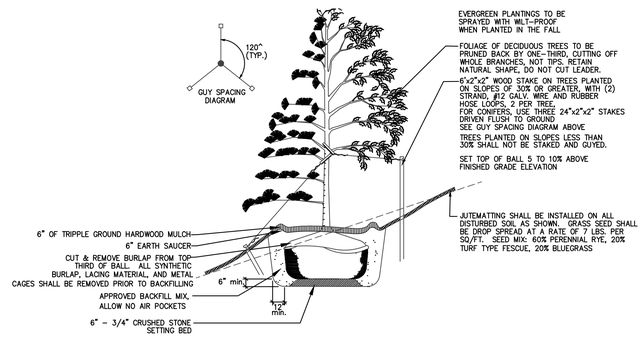


STAPLE SPACING DIAGRAM

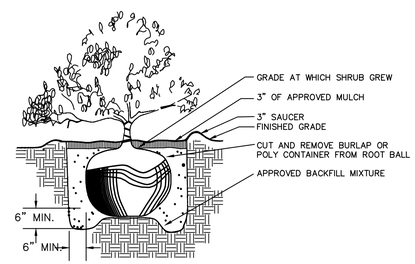
TREE STAPLE CHART		
TREE CALIPER	TREE STAPLE MODEL	NO. OF STAPLE PER TREE
1 – 2"	TS24 (24")	2 with up to 16" Root Ball
2 – 4"	TS36 (36")	2 with a 24" Root Ball
4 – 6"	TS42 (42")	3 with a 30" + Root Ball



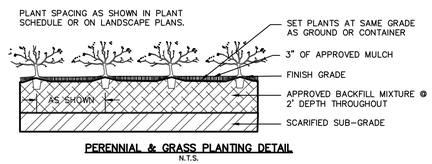
TREE PLANTING DETAIL
N.T.S.



TREE PLANTING DETAIL 30% SLOPE OR GREATER
N.T.S.



SHRUB PLANTING DETAIL
N.T.S.



PERENNIAL & GRASS PLANTING DETAIL
N.T.S.

TREES

KEY	BOTANICAL NAME	COMMON NAME	SIZE	QTY	ZONE	DISTANCE
AG	*Acer griseum*	PAPERBARK MAPLE	2"-2.5" CAL.	2	4-8	AS SHOWN
AR	*Acer rubrum*	RED MAPLE	2"-2.5" CAL.	6	3-9	AS SHOWN
BN	*Betula nigra*	RIVER BIRCH	2"-2.5" CAL.	6	4-9	AS SHOWN
CC	*Cercis canadensis*	EASTERN REDBUD	2"-2.5" CAL.	5	4-9	AS SHOWN
CK	*Cornus kousa*	KOUSA DOGWOOD	2"-2.5" CAL.	2	5-8	AS SHOWN
CP	*Crataegus phaenopyrum*	WASHINGTON HAWTHORN	2"-2.5" CAL.	3	4-8	AS SHOWN
JV	*Juniperus virginiana*	EASTERN RED CEDAR	2"-2.5" CAL.	1	3-9	AS SHOWN
KP	*Koelreuteria paniculata*	GOLDEN RAIN TREE	2"-2.5" CAL.	9	6-9	AS SHOWN
QP	*Quercus phellos*	WILLOW OAK	2"-2.5" CAL.	6	6-9	AS SHOWN

SHRUBS

KEY	BOTANICAL NAME	COMMON NAME	SIZE	QTY	ZONE	DISTANCE
AA	*Aronia arbutifolia*	RED CHOKEBERRY	5 GAL.	13	3-9	6' O.C.
AP	*Aesculus parviflora*	BOTTLEBRUSH BUCKEYE	3 GAL.	8	4-8	10' O.C.
CA	*Clethra alnifolia*	SWEET PEPPERBUSH	4 GAL.	21	3-9	6' O.C.
CS	*Cornus sericea 'Kelseyi'*	REDTWIG DOGWOOD	2 GAL.	7	3-8	8' O.C.
HS	*Hydrangea macrophylla 'Endless summer'*	ENDLESS SUMMER HYDRANGEA	3 GAL.	15	4-9	5' O.C.
IC	*Ilex crenata 'Compacta'*	COMPACT JAPANESE HOLLY	2 GAL.	23	3-9	4' O.C.
IV	*Ilex verticillata*	WINTERBERRY	3 GAL.	6	3-9	6' O.C.
RA	*Rhus aromatica 'Gro-Low'*	GRO-LOW SUMAC	2 GAL.	51	3-9	AS SHOWN
RW	*Rhododendron 'White Lights'*	AZALEA WHITE LIGHTS	3 GAL.	7	4-8	6' O.C.
SJ	*Spiraea jarnpica*	JAPANESE SPIREA	3 GAL.	17	4-9	5' O.C.
SV	*Spiraea x vanhouttei*	VANHOUTTE SPIREA	4 GAL.	10	3-8	7' O.C.

PERENNIALS & GRASSES

KEY	BOTANICAL NAME	COMMON NAME	SIZE	QTY	ZONE	DISTANCE
AC	*Astilbe 'Chocolate Cherry'*	CHINESE ASTILBE 'CHOCOLATE CHERRY'	1 GAL.	32	3-8	2' O.C
HM	*Hakonechloa macra*	HAKONE GRASS	1 GAL.	86	5-9	2' O.C.
LI	*Lavandula x intermedia*	PHENOMENAL LAVENDER	1 GAL.	28	5-9	2' O.C.
LM	*Liriope Muscari 'Silvery Sunproof'*	SILVERY SUNPROOF LILYTURF	1 GAL.	133	5-10	1.5' O.C.
NR	*Nepeta racemosa*	CATMINT	1 GAL.	10	4-8	2' O.C.
PV	*Panicum virgatum 'Purple Tears'*	PURPLE TEARS SWITCHGRASS	1 GAL.	27	4-9	2' O.C

ITEMS INCLUDED IN 04/11/2025 REVISIONS:

- PROFESSIONAL SEAL ADDED TO PLAN.
- SOIL LIST CHART UPDATED.

SOILS LIST

SYMBOL	DESCRIPTION	DEPTH TO SEASONALLY HIGH WATER TABLE	DEPTH TO BEDROCK	FREQUENCY OF: FLOODING	FREQUENCY OF: PONDING	HYDROLOGIC SOIL GROUP	HYDRIC SOIL RATING
LEHIGH SILT LOAM							
LhA	0% TO 3% SLOPES	6" – 36"	40"–60"	NONE	NONE	C/D	YES
LhB	3% TO 8% SLOPES	6" – 36"	40"–60"	NONE	NONE	C/D	YES

Scale in Feet
0 10 20 30 40 80 120 160
1" = 40'

LANDSCAPE PLAN/ DETAILS

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX
2290 GILBERTSVILLE ROAD
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

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

PROJECT NO. 22096-2000
F.B.

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
1"=40'	03/31/2025	ND	AG	

NOTE TO USER OF THESE PLANS:
WARNING! THE INFORMATION CONTAINED ON THIS PLAN MAY NOT BE CONSISTENT WITH CONDITIONS IN THE FIELD. ANY PERSON OR ORGANIZATION USING OR RELYING ON THESE PLANS MUST CONTACT CVE FOR VERIFICATION OF ANY APPARENT DISCREPANCY BEFORE PROCEEDING OR RELYING UPON THESE PLANS FOR ANY PURPOSE. NO CONSTRUCTION OR INSTALLATION OF IMPROVEMENTS SHOULD OCCUR UNTIL ALL DISCREPANCIES HAVE BEEN VERIFIED WITH CHESTER VALLEY ENGINEERS. CHESTER VALLEY ENGINEERS, THEIR OFFICERS, EMPLOYEES AND REPRESENTATIVES SHALL NOT BE LIABLE FOR DAMAGES OF ANY KIND RESULTING FROM THE USERS FAILURE TO OBTAIN CURRENT VERIFICATION AND VALIDATION OF THE INFORMATION CONTAINED ON THIS FILE TO THE USER OR ANY THIRD PARTY. THE USER ASSUMES ANY RISK OF ANY AND ALL PROPERTY OR FINANCIAL LOSS OR DAMAGES OF ANY KIND RESULTING FROM THE USE OF THIS DOCUMENT WITHOUT FIRST OBTAINING FULL VERIFICATION AND VALIDATION OF THE INFORMATION CONTAINED IN THIS FILE.

PENNSYLVANIA ACT 187 REQUIREMENTS
UNDERGROUND UTILITIES SERIAL NOs. 20243300770
CHESTER VALLEY ENGINEERS, INC. DOES NOT GUARANTEE THE ACCURACY OF THE LOCATIONS 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 UNITED STATES DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION PUBLICATIONS OR THE LATEST REVISIONS THERETO.
(1) CONSTRUCTION INDUSTRY STANDARDS AND INTERPRETATIONS (OSHA 2207) SUBPART "P", PART 1926/1910 – "EXCAVATIONS, TRENCHING AND SHORING".
(2) "EXCAVATIONS AND TRENCHING OPERATIONS" (OSHA 2226) DATED 1985 (REVISED).

PENNSYLVANIA ONE CALL SYSTEM, INC.
CALL 3 WORKING DAYS BEFORE YOU DIG
1-800-242-1776
POCS SERIAL NUMBER: 20243300770

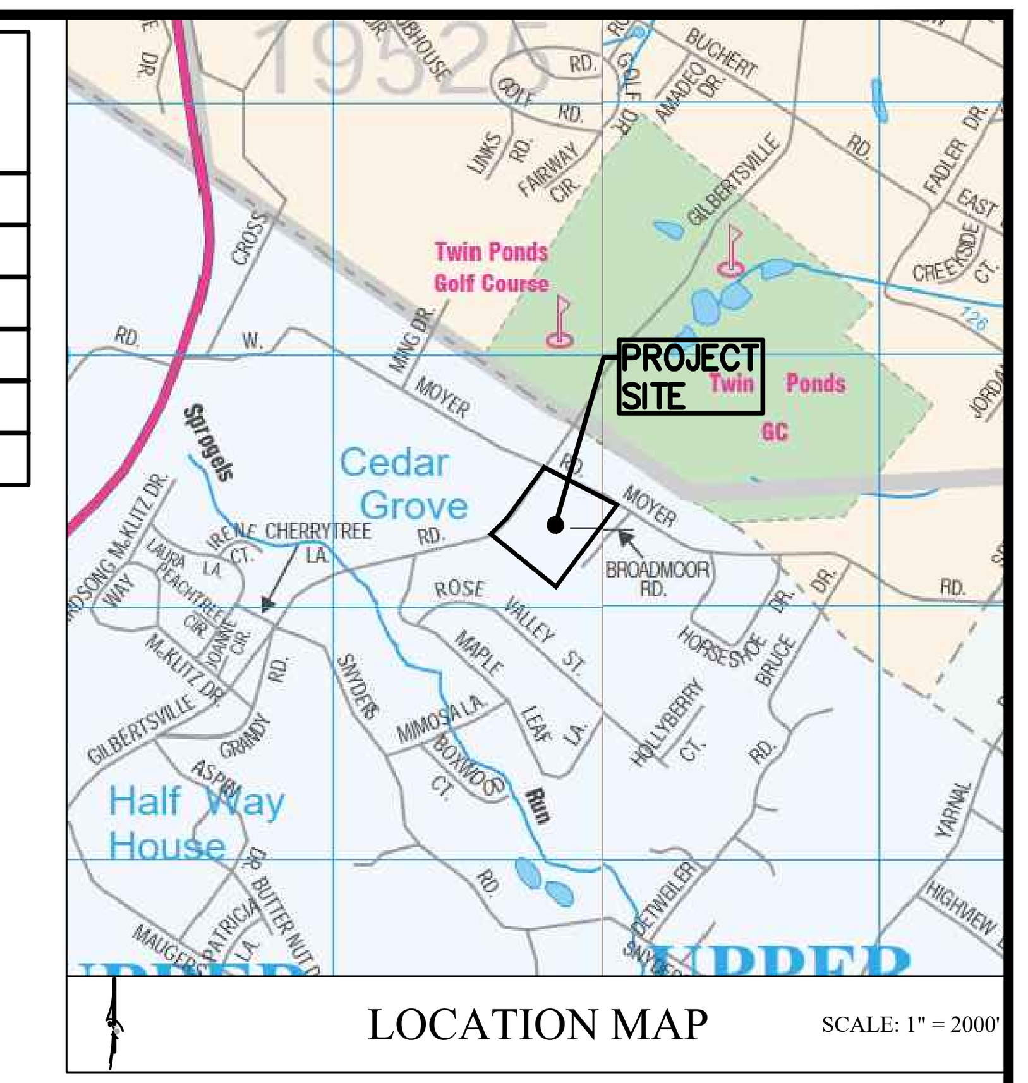
SEE SHEET 02 FOR FACILITY OWNER'S DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.

MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

COMMONWEALTH OF PENNSYLVANIA AUGUSTUS T. GRISA REGISTERED LANDSCAPE ARCHITECT REGISTRATION NUMBER LA001517

GENERAL PHOTOMETRIC SCHEDULE

AVERAGE FOOT-CANDLES	0.30
MAXIMUM FOOT-CANDLES	8.93
MINIMUM FOOT-CANDLES	0.00
MINIMUM TO MAXIMUM FC RATIO	0.00
MAXIMUM TO MINIMUM FC RATIO	8.93 / 0.00
AVERAGE TO MINIMUM FC RATIO	0.30 / 0.00



GENERAL LIGHTING NOTES

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

INSTALLATION NOTES:

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 LLF 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-CANDLES (FC).
12.) THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO ENSURE THAT SHIELDING AND OR ROTATED OPTICS ARE INSTALLED AS INDICATED ON THE PLAN IN ORDER TO ACHIEVE THE LIGHTING LEVELS THE REVIEWING AGENCY APPROVED.

LIGHTING CONTROLS AND SURGE PROTECTION: ALL NEW FIXTURES ARE TO BE EQUIPPED WITH DIMONOFF RME-XBP PHOTOCELLS AND ABLE POWER PRODUCTS RWL-S SURGE DEVICE. FIXTURES MUST BE EQUIPPED WITH ALL-MODE PROTECTION (L-N, L-G, N-G). SURGE PROTECTION INTEGRAL TO THE PHOTOCONTROL SHOULD HAVE 3 MODES OF PROTECTION, LINE-TO-NEUTRAL, LINE-TO-GROUND AND NEUTRAL-TO-GROUND. THE MINIMUM SURGE PROTECTION SPECIFICATIONS SHOULD BE 10KA IN, 25KA IMAX AND 20KV UOC.

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 33% OF THE NUMBER OF FIXTURES REQUIRED OR PERMITTED FOR ILLUMINATION DURING REGULAR BUSINESS HOURS, OR IN AN AMOUNT JUDGED NECESSARY BY THE TOWNSHIP ENGINEER.

SET ONE SMART PHOTOCELL TO CONTROL ALL OTHER SITE LIGHTING FIXTURES (DIMONOFF #RME-XBP).

PLEASE CONTACT INDEPENDENCE LIGHTING FOR PRICING:

KENT LAZOR

DIRECT: 610-363-5271

LUMINAIRE SCHEDULE

TYPE	SYMBOL	MOUNTING	MODEL	VOLTS	QUANTITY	LLD	LDD	LLF
SITE		POLE	Leotek Electronics USA LLC, AR13–CG2–N–MV–30K–T3–BK–120	120V 1P 2W	12	0.9	0.9	0.810
ORNAMENTAL		POLE	Spring City Electrical Manufacturing Co, CLW–LE100–2F2–30–CR3–YPLF	120V 1P 2W	4	0.9	0.9	0.810
BOLLARD		SURFACE	LIGMAN, MC–10013–W–W30	120V 1P 2W	13	0.9	0.9	0.810
FLOOD (FLAG POLE)		SURFACE	LIGMAN, OD–50161–VN–8040	120V 1P 2W	3	0.9	0.9	0.810

ITEMS INCLUDED IN 04/11/2025 REVISIONS:

- PROFESSIONAL SEAL ADDED TO PLAN.
- 2" PVC ELECTRIC CONDUIT AND PULL BOX ADDED TO THE PLAN.

LIGHTING PLAN/ NOTES

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX
2290 GILBERTSVILLE ROAD
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

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

PROJECT NO. 22096-2000
F.B.

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
1"=40'	03/31/2025	ND	AG	

NOTE TO USER OF THESE PLANS:
WARNING! THE INFORMATION CONTAINED ON THIS PLAN MAY NOT BE CONSISTENT WITH CONDITIONS IN THE FIELD. ANY PERSON OR ORGANIZATION USING OR RELYING ON THESE PLANS MUST CONTACT CVE FOR VERIFICATION OF ANY APPARENT DISCREPANCY BEFORE PROCEEDING OR RELYING UPON THESE PLANS FOR ANY PURPOSE. NO CONSTRUCTION OR INSTALLATION OF IMPROVEMENTS SHOULD OCCUR UNTIL ALL DISCREPANCIES HAVE BEEN VERIFIED WITH CHESTER VALLEY ENGINNERS. CHESTER VALLEY ENGINEERS, THEIR OFFICERS, EMPLOYEES AND REPRESENTATIVES SHALL NOT BE LIABLE FOR DAMAGES OF ANY KIND RESULTING FROM THE USERS FAILURE TO OBTAIN CURRENT VERIFICATION AND VALIDATION OF THE INFORMATION CONTAINED ON THIS FILE TO THE USER OR ANY THIRD PARTY. THE USER ASSUMES ANY RISK OF ANY AND ALL PROPERTY OR FINANCIAL LOSS OR DAMAGES OF ANY KIND RESULTING FROM THE USE OF THIS DOCUMENT WITHOUT FIRST OBTAINING FULL VERIFICATION AND VALIDATION OF THE INFORMATION CONTAINED IN THIS FILE.

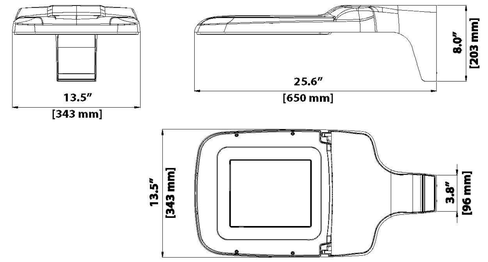
MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

PENNSYLVANIA ACT 187 REQUIREMENTS
UNDERGROUND UTILITIES SERIAL NOs. 20243300770
CHESTER VALLEY ENGINEERS, INC. DOES NOT GUARANTEE THE ACCURACY OF THE LOCATIONS 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 UNITED STATES DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION PUBLICATIONS OR THE LATEST REVISIONS THERETO:
(1) CONSTRUCTION INDUSTRY STANDARDS AND INTERPRETATIONS (OSHA 2207) SUBPART "P", PART 1926/1910 – "EXCAVATIONS, TRENCHING AND SHORING".
(2) "EXCAVATIONS AND TRENCHING OPERATIONS" (OSHA 2226) DATED 1985 (REVISED).

SEE SHEET 02 FOR FACILITY OWNER'S DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.

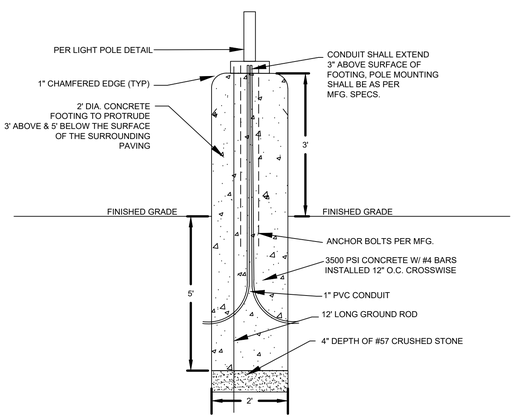
PENNSYLVANIA ONE CALL SYSTEM, INC.
CALL 3 WORKING DAYS BEFORE YOU DIG
1-800-242-1776
POCS SERIAL NUMBER: 20243300770



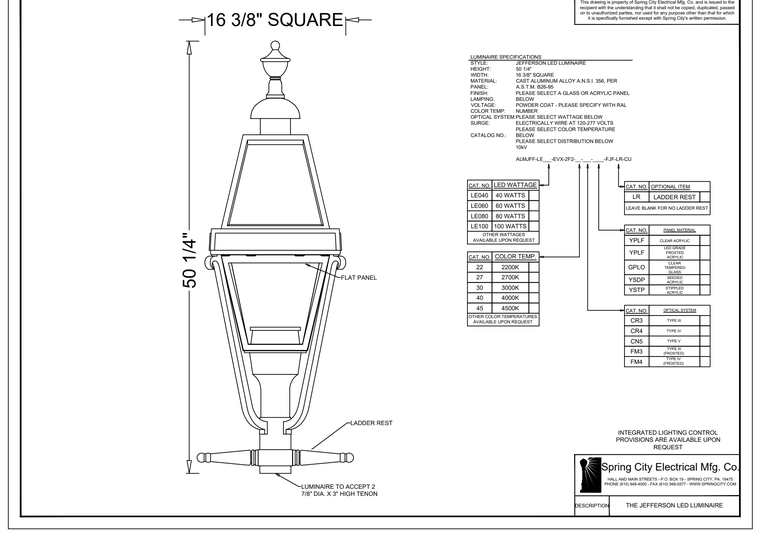
PARKING LIGHT FIXTURE DETAIL
N.T.S.

PARKING LOT LUMINARY SPECIFICATIONS

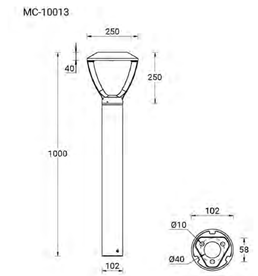
LEOTEK ARIETA LUMINARE
- MODEL: (SEE LUMINAIRE SCHEDULE)
- IES FULL CUTOFF
- DISTRIBUTION TYPE (SEE LUMINAIRE SCHEDULE)
- COLOR: BRONZE
- QTY: 12
- OPTIONS: DIMONOFF PHOTOCELL & RWL-S SURGE DEVICE



PARKING LIGHT POLE FOOTING DETAIL
N.T.S.



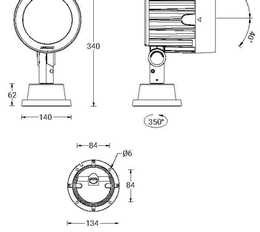
ORNAMENTAL LIGHT FIXTURE DETAIL
N.T.S.



BOLLARD LIGHT DETAIL
N.T.S.

BOLLARD LIGHT SPECIFICATIONS

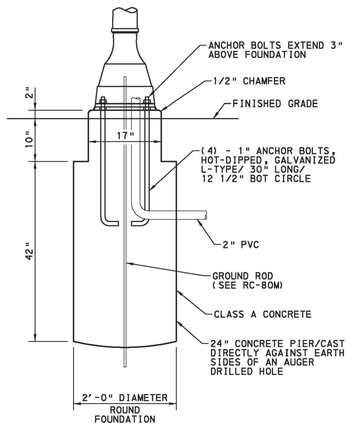
LIGMAN - MACARON 5 BOLLARD LIGHT
- MODEL: (SEE LUMINAIRE SCHEDULE)
- IES FULL CUTOFF
- DISTRIBUTION TYPE (SEE LUMINAIRE SCHEDULE)
- COLOR: BRONZE
- QTY: 13
- OPTIONS: DIMONOFF PHOTOCELL & RWL-S SURGE DEVICE



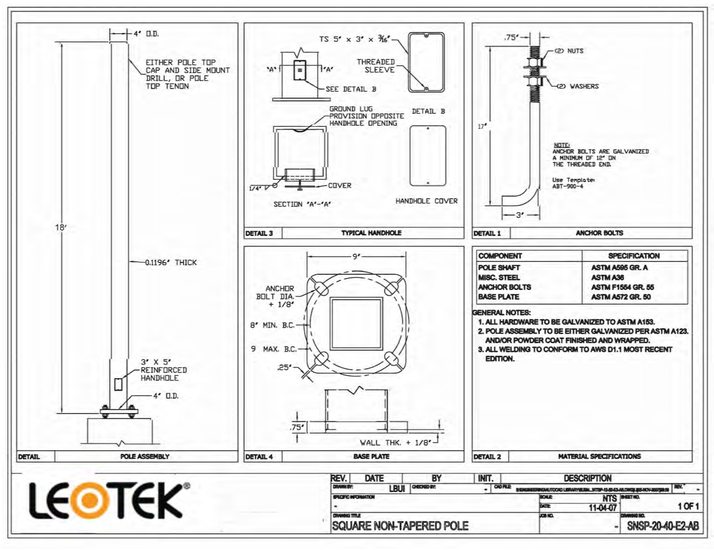
FLOOD LIGHT (FLAG POLE) DETAIL
N.T.S.

FLOOD LIGHT (FLAG POLE) SPECIFICATIONS

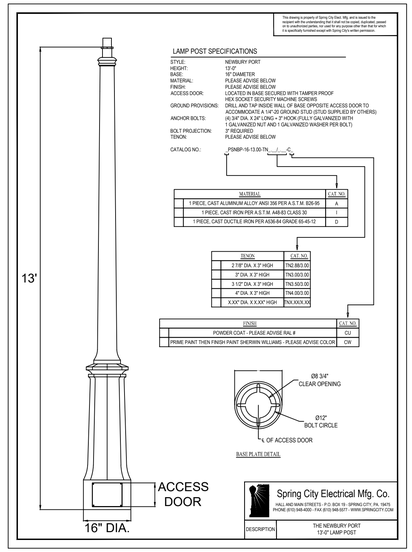
LIGMAN - ODESSA 14 OUTDOOR FLOODLIGHT
- MODEL: (SEE LUMINAIRE SCHEDULE)
- HIGH EFFICIENCY PMMA LENS
- DISTRIBUTION TYPE: VN
- COLOR: BRONZE
- QTY: 3
- OPTIONS: ANTI GLARE VISOR (A54431)



ORNAMENTAL LIGHT POLE FOOTING DETAIL
N.T.S.



PARKING LIGHT POLE DETAILS
N.T.S.



ORNAMENTAL LIGHT POLE DETAIL
N.T.S.

ITEMS INCLUDED IN 04/11/2025 REVISIONS:

- PROFESSIONAL SEAL ADDED TO PLAN.

LIGHTING DETAILS

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX

UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

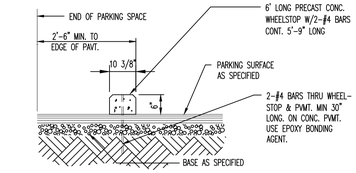
PENNSYLVANIA REGISTERED LANDSCAPE ARCHITECT REGISTRATION NUMBER LA001517

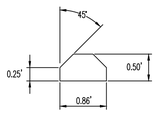
ChesterValley ENGINEERS, INC.
112 Moores Road, Suite 200, Malvern, PA 19355
610-644-4623
www.chestervy.com

PROJECT NO. 22096-2000
F.B.

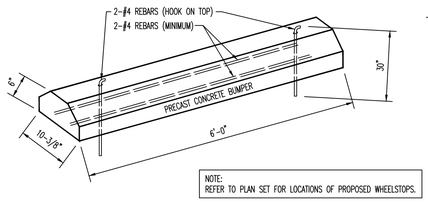
SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
As Noted	03/31/2025	ND	AG	

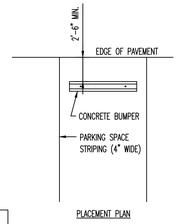
MONTGOMERY COUNTY BLOCK 60-3 UNIT 12





SECTION

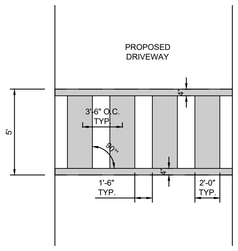




PLACEMENT PLAN

NOTE:
REFER TO PLAN SET FOR LOCATIONS OF PROPOSED WHEELSTOPS.

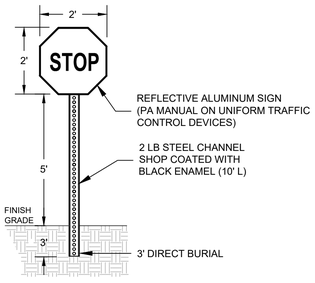
CONCRETE WHEEL STOP DETAIL
N.T.S.



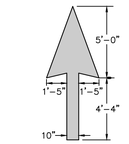
PLAN

NOTES:
1. PAVEMENT MARKINGS SHALL BE PAINTED IN ACCORDANCE WITH PA DOT FORM 408, SECTION 962, LATEST REVISION.
2. ALL STRIPING SHALL BE COMPRISED OF HOT THERMOPLASTIC PAVEMENT MARKINGS IN ACCORDANCE WITH PA DOT FORM 408, SECTION 961, LATEST REVISION.

CROSSWALK PAVEMENT MARKING DETAIL
N.T.S.

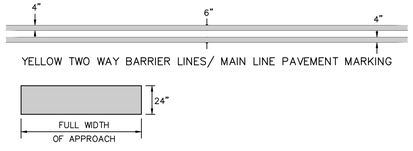


STOP SIGN DETAIL
N.T.S.

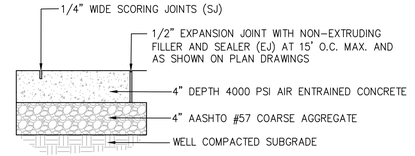


PAVEMENT LEGENDS
N.T.S.

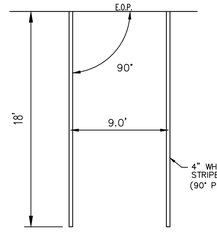
NOTE: ALL LEGENDS SHALL BE WHITE.



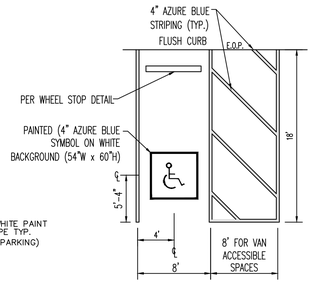
STOP BAR MARKING DETAIL
N.T.S.



CONCRETE SIDEWALK DETAIL
N.T.S.



TYPICAL PARKING STALL STRIPING
N.T.S.

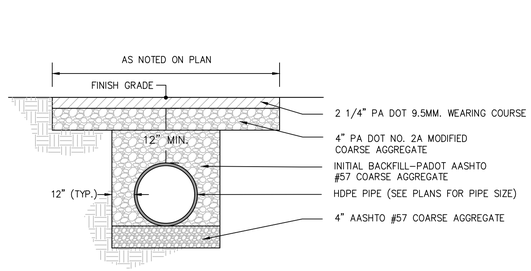


NOTES:
1.) CURB RAMPS MAY NOT EXTEND INTO ANY PORTION OF THE PARKING SPACE OR ASSOCIATED STRIPED ISLAND.

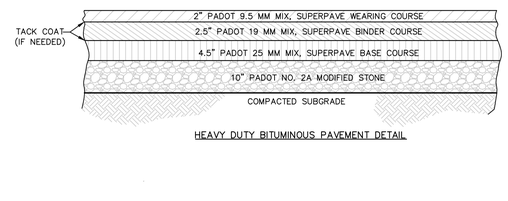
2.) CURB RAMPS, PAVEMENT MARKINGS, & APPLICABLE SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST A.D.A. ACCESSIBILITY GUIDELINES.

3.) ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH A SLOPE OF NO MORE THAN 2% IN ALL DIRECTIONS. THIS INCLUDES BOTH "RUNNING SLOPES" AND "CROSS SLOPES".

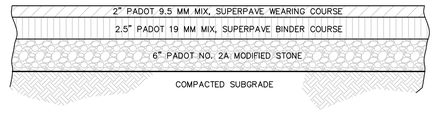
A.D.A ACCESSIBLE PARKING STRIPING
N.T.S.



ASPHALT TRAIL AND PIPE DETAIL
N.T.S.



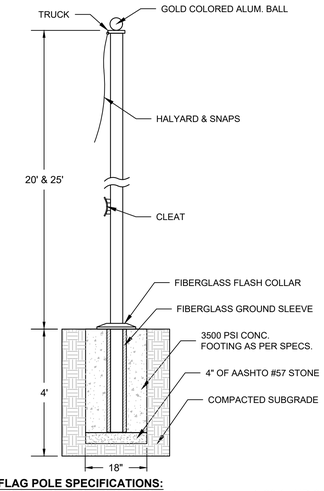
HEAVY DUTY BITUMINOUS PAVEMENT DETAIL



STANDARD BITUMINOUS PAVEMENT DETAIL

NOTE:
1. GEOTEXTILE FABRIC WITH R-3 RIPRAP STONE SHALL BE INSTALLED OVER COMPACTED SUBGRADE WHERE UNSUITABLE SOILS EXISTS.
2. PAVEMENT SHOULD BE INSTALLED LATE IN CONSTRUCTION WHEN MOST HEAVY CONSTRUCTION TRAFFIC WILL NO LONGER BE ON-SITE. PRIOR TO PAVING, THE SITE SHOULD BE PROOFROLLED AGAIN, NEW SOFT AREAS TREATED IN ACCORDANCE WITH SOIL REMEDIATION NOTES, THE BASE LEVELED AND THICKENED AS REQUIRED, AND THE SITE PAVED AT THE END OF CONSTRUCTION.
3. FOR PAVEMENT WHERE UNCURBED, EXTEND SUBBASE AND/OR BASE COURSE EIGHT INCHES BEYOND EACH REQUIRED EDGE OF THE BINDER AND SURFACE COURSES.
4. AGGREGATE BASE SHOULD BE COMPACTED TO 100% OF THE MATERIAL'S MAXIMUM DRY DENSITY AS PER MODIFIED PROCTOR (ASTM D-1557).
5. PAVEMENT MUST BE PLACED OVER WELL PREPARED SUBRADE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR (ASTM D-698) DENSITY IN THE UPPER 2' BELOW SUBGRADE AND TO AT LEAST 95% OF THE STANDARD PROCTOR (ASTM D-698) MAXIMUM DRY DENSITY ELSEWHERE.
6. SEALING MATERIAL FOR FILLING PAVEMENT JOINTS SHALL MEET THE REQUIREMENTS OF ASTM D3405 OR D1190. ALTERNATIVELY, LOW MODULUS MATERIALS SUCH AS SILICONE, HOT OR COLD-POURED RUBBERIZED ASPHALT OR NITRILE RUBBER MEETING THE MANUFACTURER'S SPECIFICATIONS MAY BE USED.
7. CAR TRAFFIC SHOULD SHOULD NOT BE ALLOWED ON THE NEW PAVEMENT FOR AT LEAST 3-DAYS; SIMILARLY NO TRUCK TRAFFIC FOR 7-DAYS.

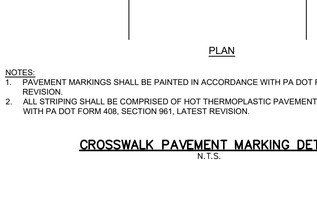
BITUMINOUS PAVEMENT DETAIL
N.T.S.



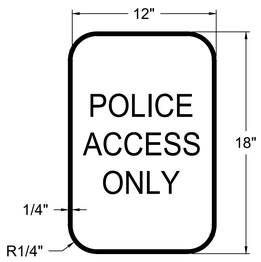
FLAG POLE SPECIFICATIONS:
MODEL NO: AEOLUS SERIES, External Groundset, 20X AND 25X
QUANTITY: (2) 20' H. & (1) 25' H.
COLOR: BRONZE
MANUFACTURER: PLP COMPOSITE TECHNOLOGIES
Address: 57 Creamery Road, PO Box 429,
Fitzwilliam, New HampShire 03447
Phone: 800-262-6075 Fax: 603-585-3470
Email: info@plpcomp.com

NOTE:
1. SEE MANUFACTURER SPECIFICATION FOR INSTALLATION AND ACCESSORIES.

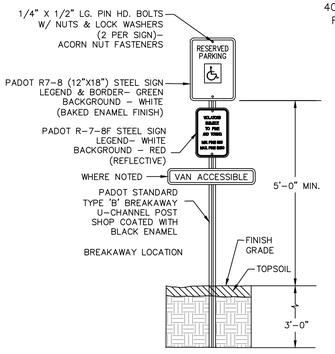
FLAG POLE DETAIL
N.T.S.



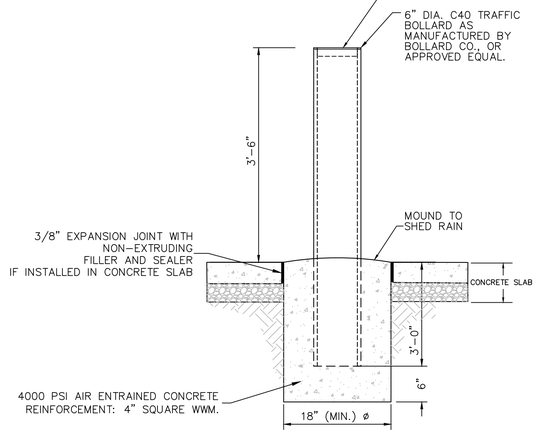
AASHTO #1 STONE TRENCH DETAIL
N.T.S.



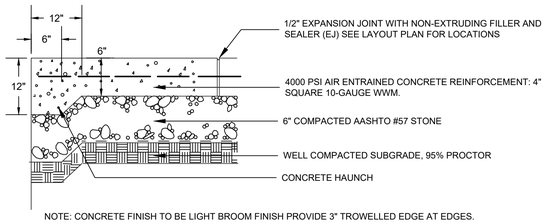
POLICE ACCESS ONLY SIGN DETAIL (POLICE PARKING GATES)
N.T.S.



HANDICAP/VAN ACCESSIBLE SIGN DETAIL
N.T.S.



BOLLARD DETAIL
N.T.S.



NOTE: CONCRETE FINISH TO BE LIGHT BROOM FINISH PROVIDE 3" TROWELLED EDGE AT EDGES.

CONCRETE SLAB DETAIL (COVERED PARKING & PUBLIC WORK BUILDING ENTANCE)
N.T.S.

ITEMS INCLUDED IN 04/11/2025 REVISIONS:

- PROFESSIONAL SEAL ADDED TO PLAN.

CONSTRUCTION DETAILS

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX

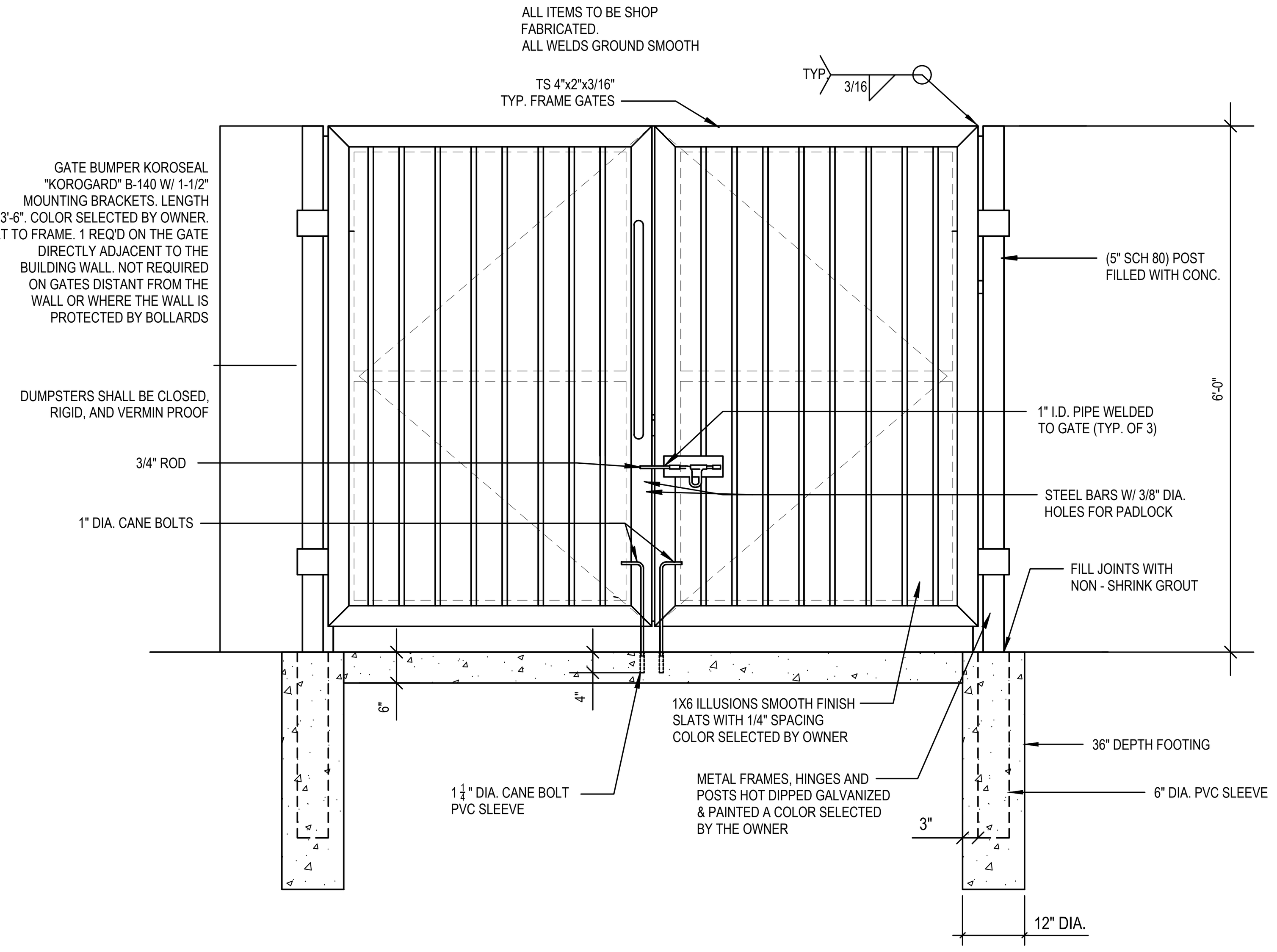
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

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

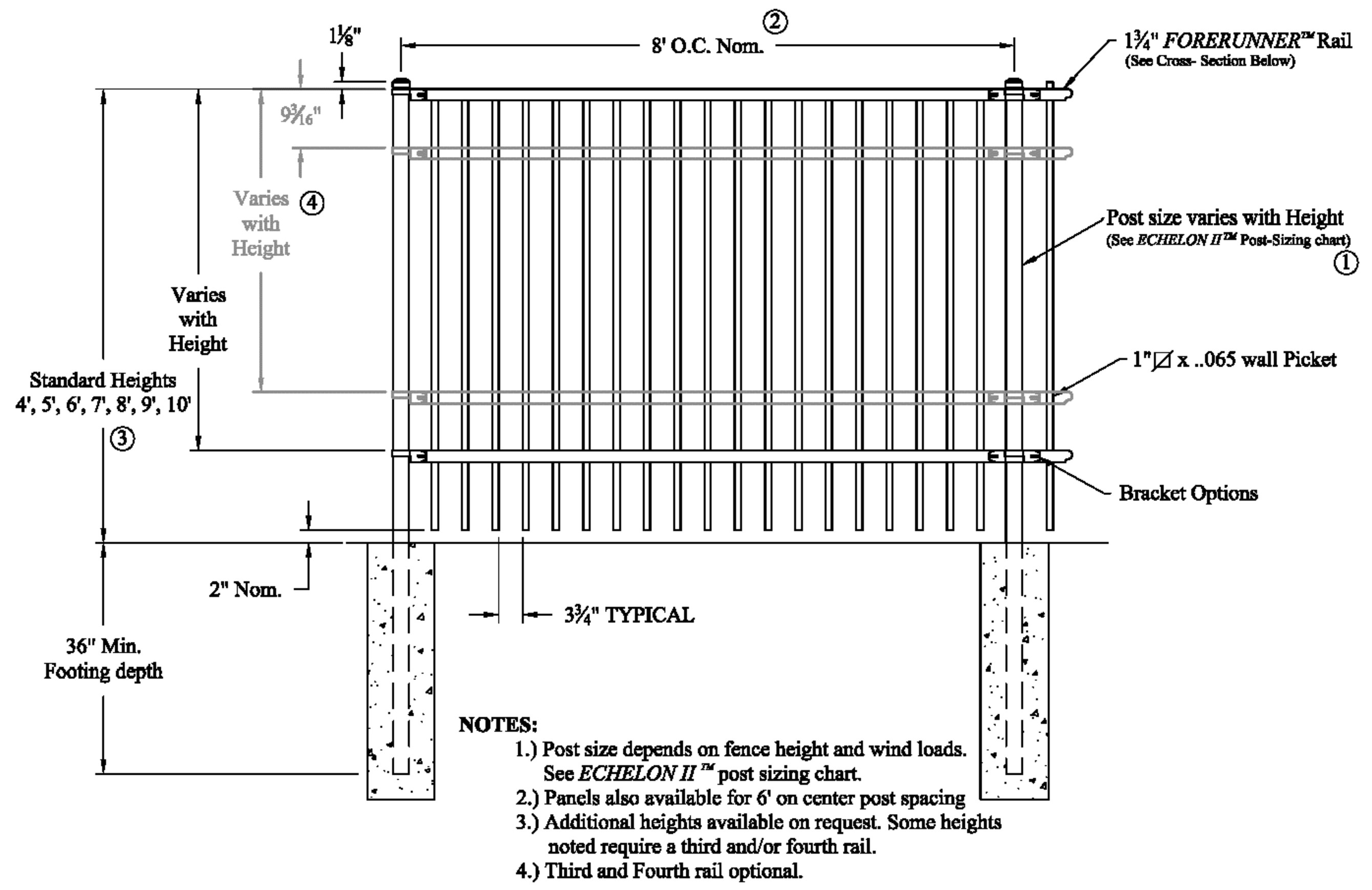
PROJECT NO. 22096-2000
F.B.

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
As Noted	03/31/2025	HL	AG	

MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

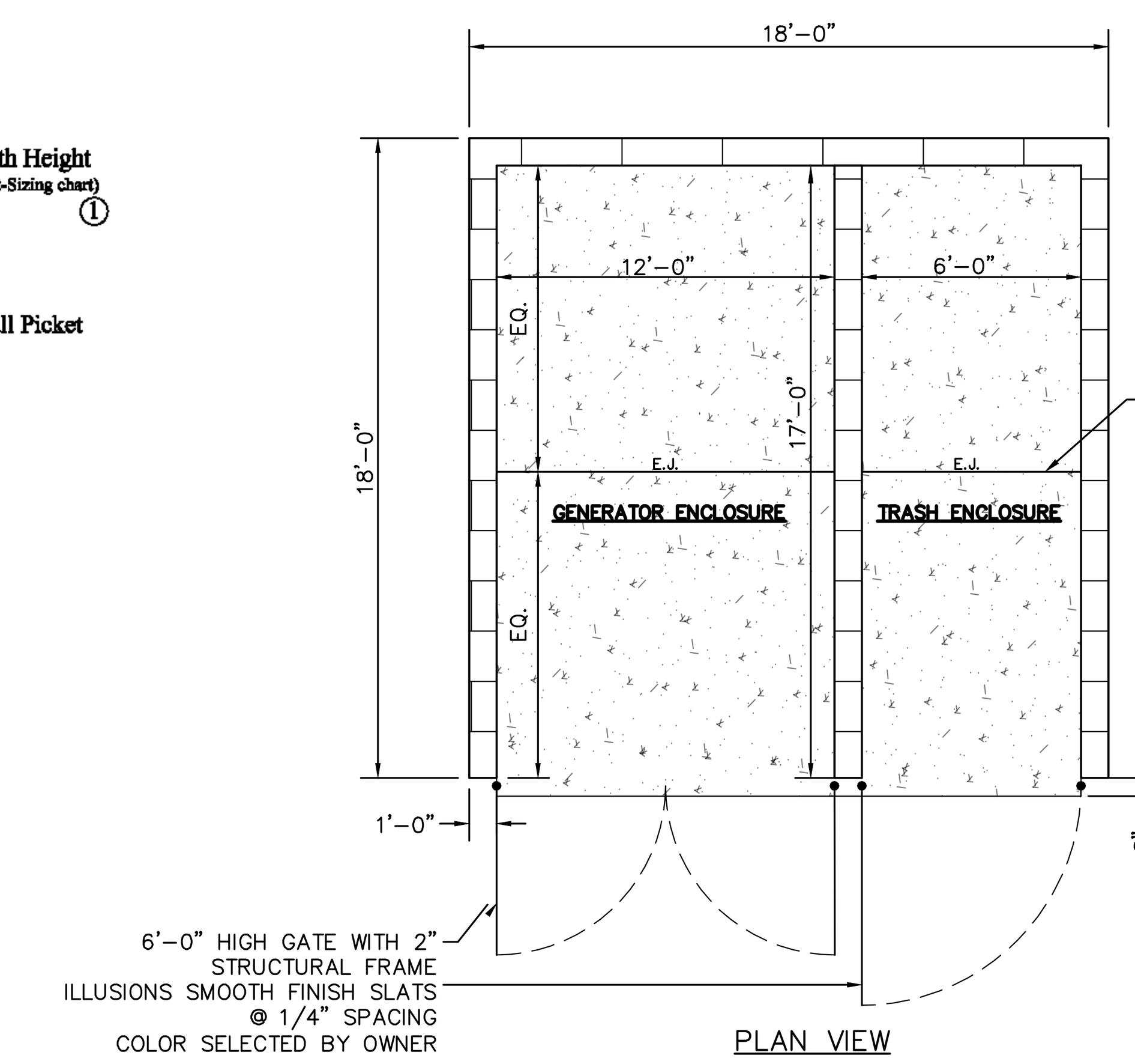


GATE DETAIL FOR TRASH ENCLOSURE & GENERATOR
N.T.S.

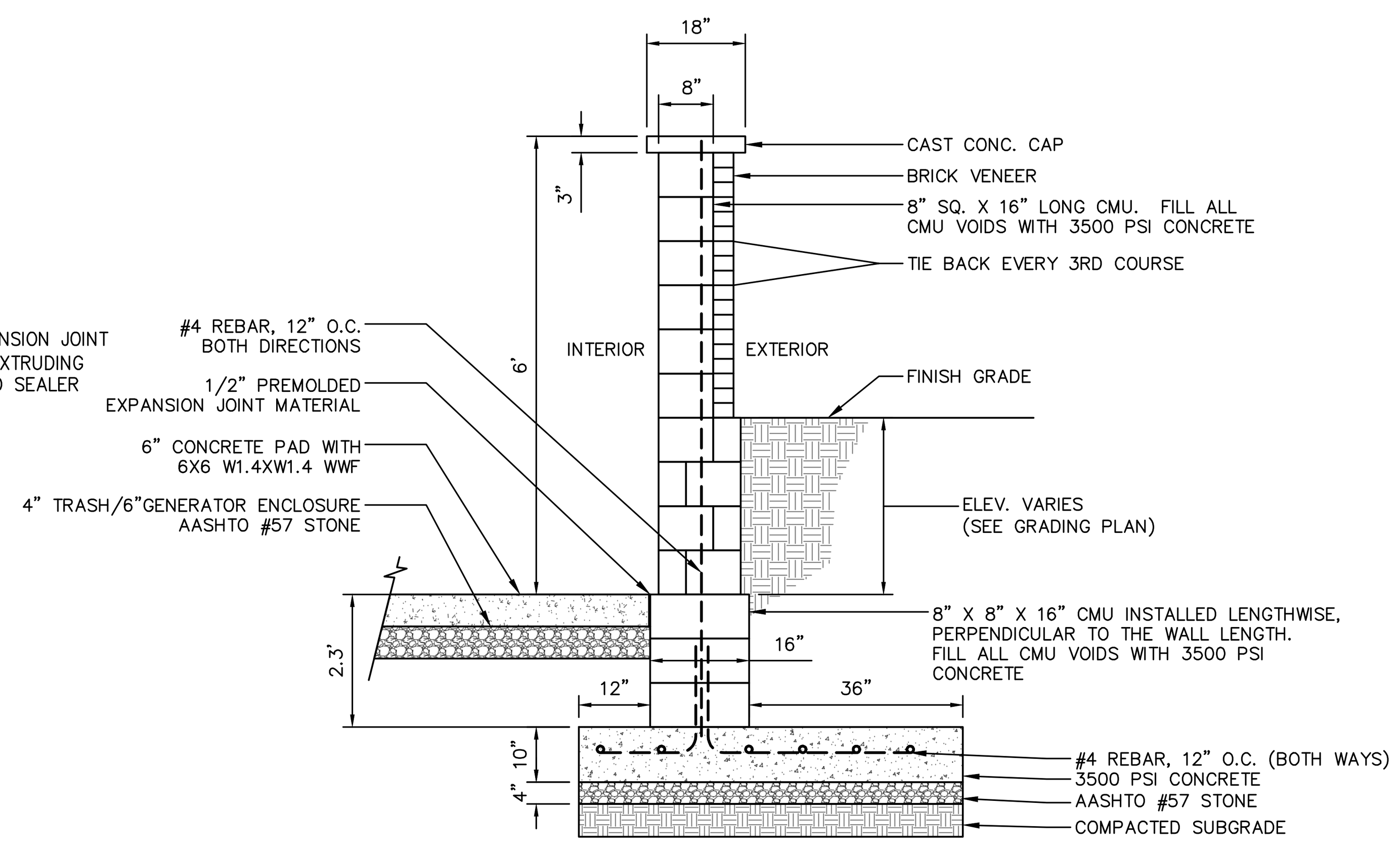


NOTES:
1. FENCE TO BE FITTED WITH BARRIER SCREEN

ORNAMENTAL SECURITY FENCE DETAIL
N.T.S.

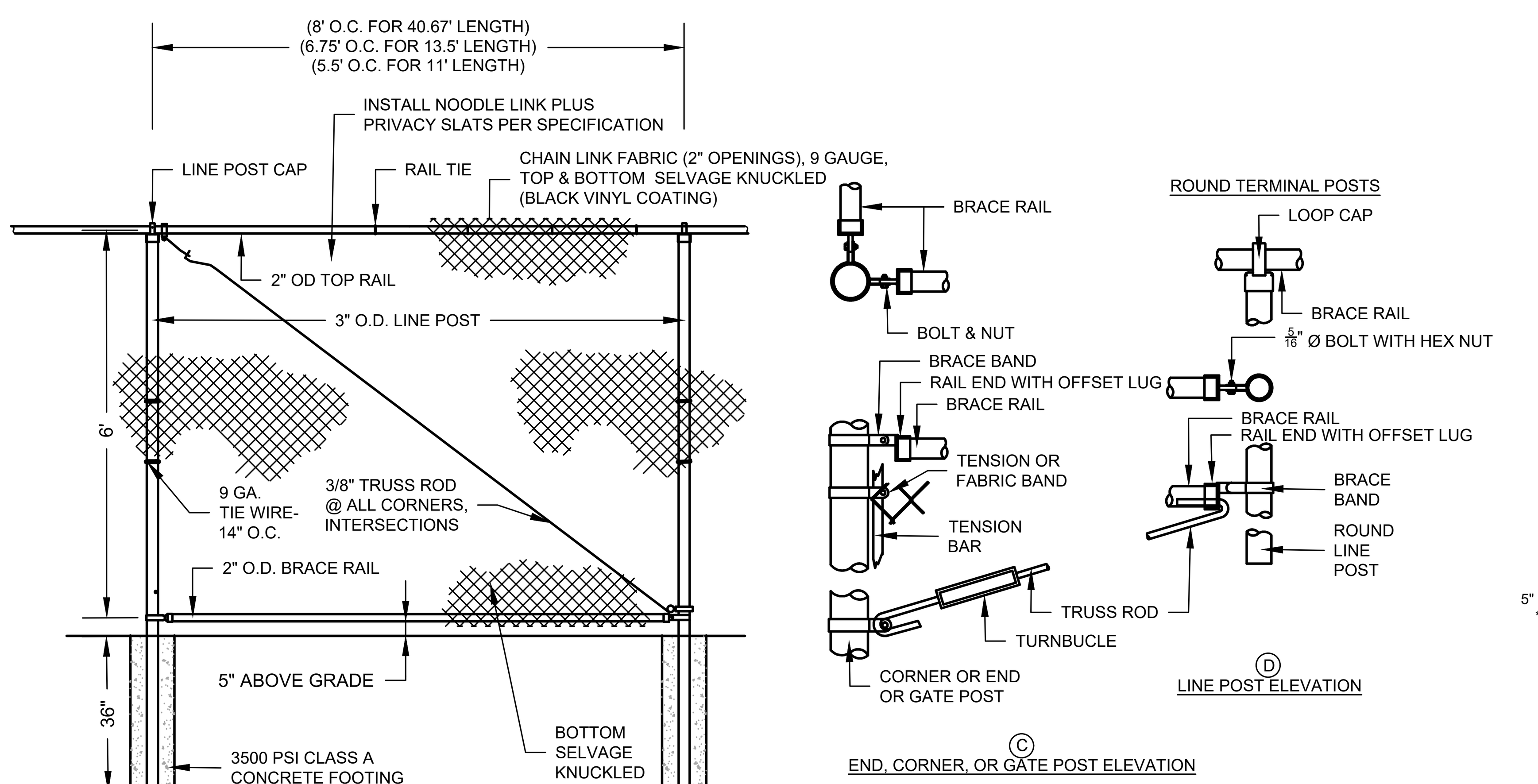


PLAN VIEW



ELEVATION VIEW

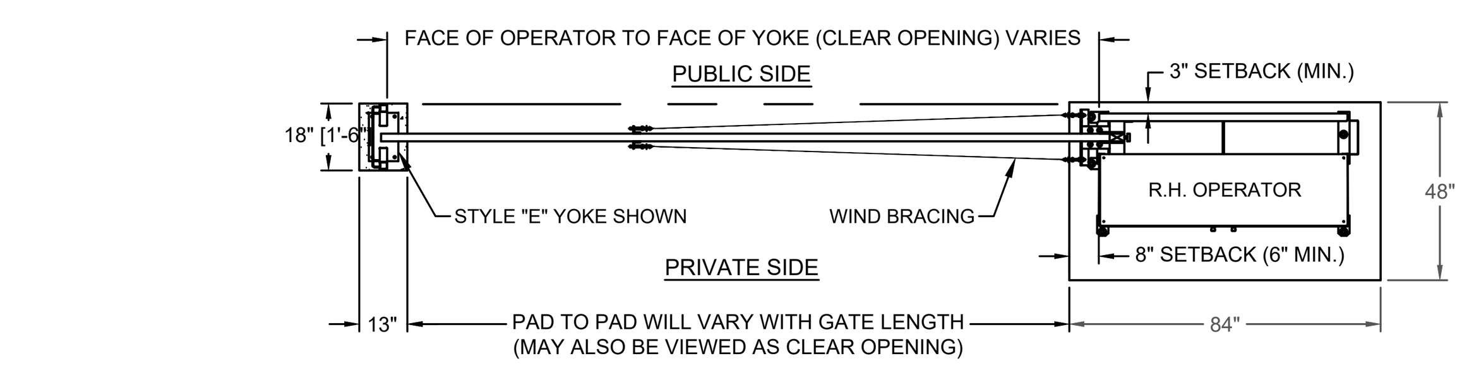
TRASH/GENERATOR ENCLOSURE WALL DETAIL (POLICE/ADMIN BUILDING)
N.T.S.



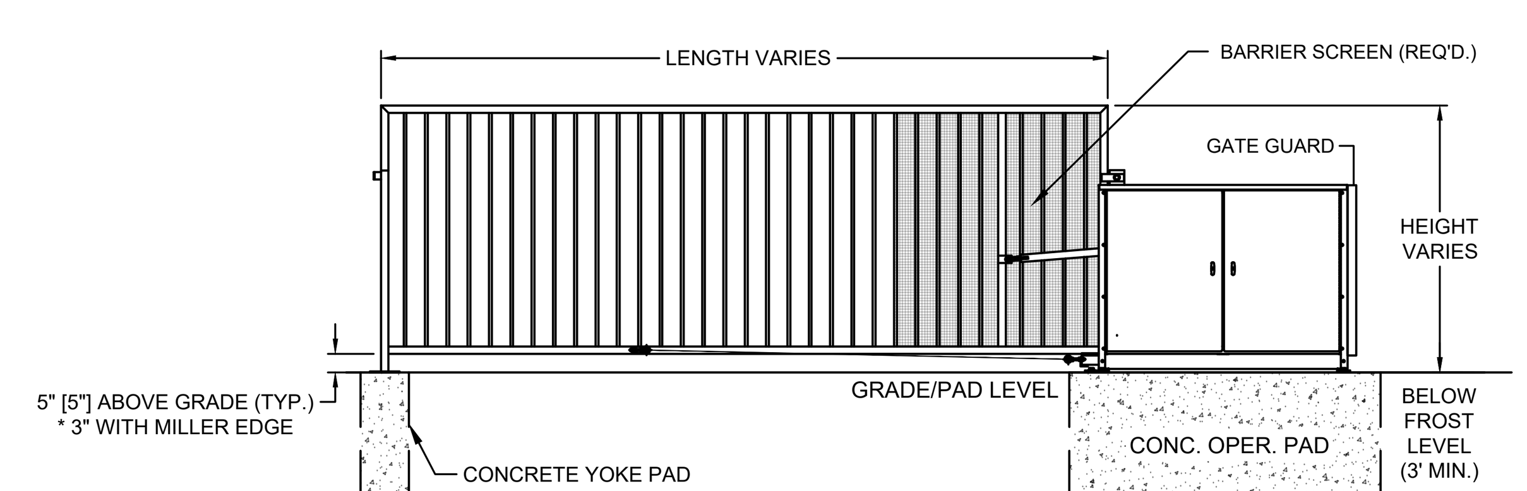
NOTES:
1. ALL MATERIAL TO CONFORM TO FEDERAL SPEC RR-F-191G (1-25-74).
2. ALL GALVANIZED FITTINGS TO CONFORM TO ASTM-A153.

NOTES:
1. FOOTING WIDTH TO BE (4)X POST WIDTH. MINIMUM DEPTH 36".
2. FENCE TO BE FITTED WITH BARRIER SCREEN

FENCE SECTION ELEVATION AND DETAILS-ROUND END POST
N.T.S.



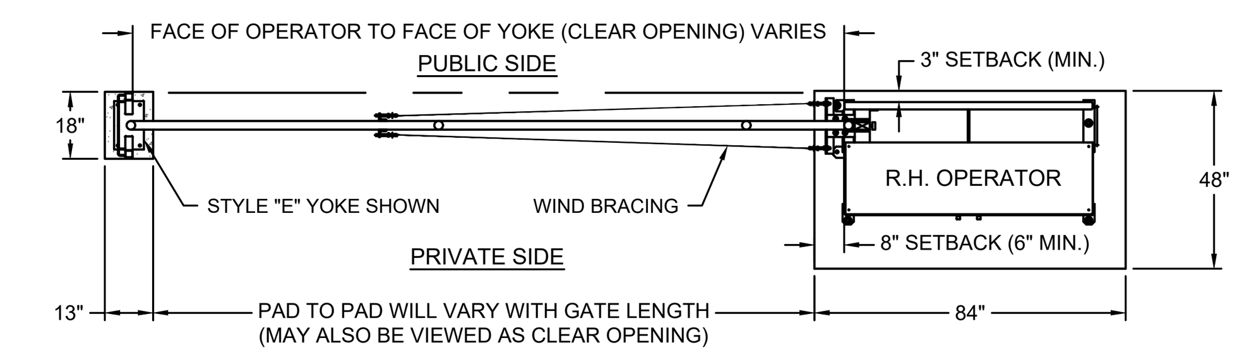
PLAN VIEW



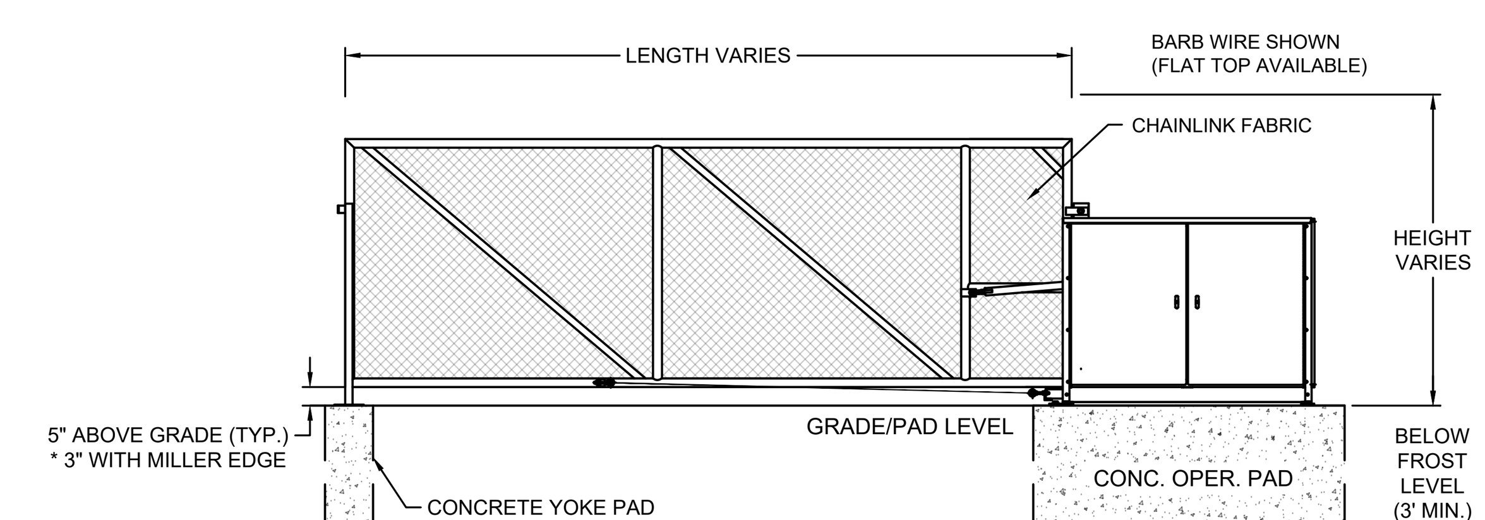
ELEVATION VIEW
VIEWED FROM PRIVATE SIDE

NOTES:
1) ALL OF OUR GATES ARE TYPICALLY DRAWN FROM THE PRIVATE SIDE LOOKING OUT.
2) LENGTH AND HEIGHT VARIES, CONSULT WITH AUTOGATE SALES FOR MORE INFORMATION.
3) SHOWN WITH STANDARD 5' STYLE "E" YOKE. SEE DRAWING #105 FOR YOKE STYLES.
4) CONTOURS AND CURBS WILL REQUIRE CUSTOM DRAWINGS. (CONSULT WITH AUTOGATE).

ORNAMENTAL VERTICAL PIVOT GATE DETAIL
N.T.S.



PLAN VIEW



ELEVATION VIEW
VIEWED FROM PRIVATE SIDE

NOTES:
1) ALL OF OUR GATES ARE TYPICALLY DRAWN FROM THE PRIVATE SIDE LOOKING OUT.
2) LENGTH AND HEIGHT VARIES, CONSULT WITH AUTOGATE SALES FOR MORE INFORMATION.
3) SHOWN WITH STANDARD 5' STYLE "E" YOKE. SEE DRAWING #105 FOR YOKE STYLES.
4) CONTOURS AND CURBS WILL REQUIRE CUSTOM DRAWINGS. (CONSULT WITH AUTOGATE).

NOTES:
1. FENCE TO BE FITTED WITH BARRIER SCREEN

CHAINLINK VERTICAL PIVOT GATE DETAIL
N.T.S.

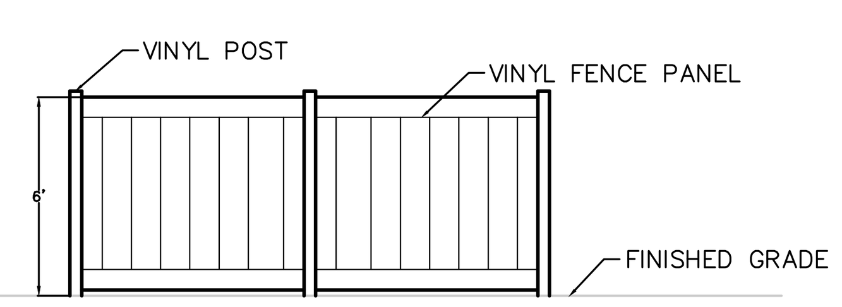
RECEIVER
NOTES
1. MANUFACTURER: HIVE
2. MODEL: 300/310 MHz RECEIVER
3. FREQUENCY: 300 MHz

TRANSMITTER
NOTES
1. MANUFACTURER: STINGER
2. OPTIONS: SINGLE BUTTON, DOUBLE BUTTON
3. MODEL: 300MCD22V2 (DOUBLE BUTTON), 300MCD21V2 (SINGLE BUTTON)
4. FREQUENCY: 300 MHz

KEYPAD
NOTES
1. MANUFACTURER: DOLPHIN ACCESS SYSTEMS
2. MODEL: DOLKWP300318
3. FREQUENCY: 300 MHz

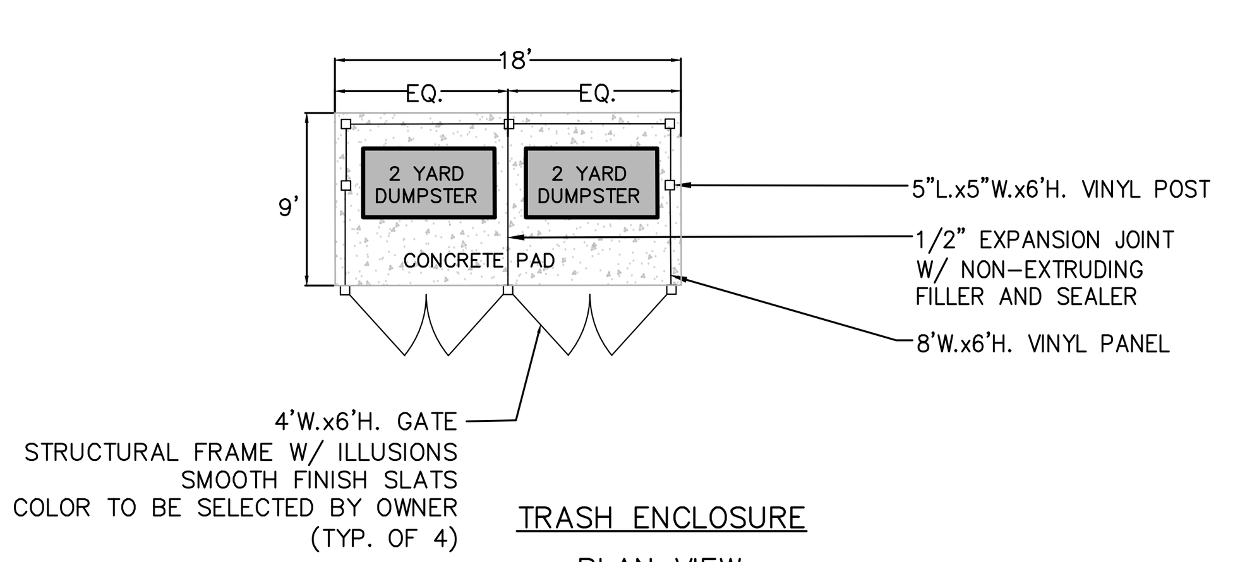
ITEMS INCLUDED IN 04/11/2025 REVISIONS:
- PROFESSIONAL SEAL ADDED TO PLAN.

ACCESS CONTROL OPTIONS

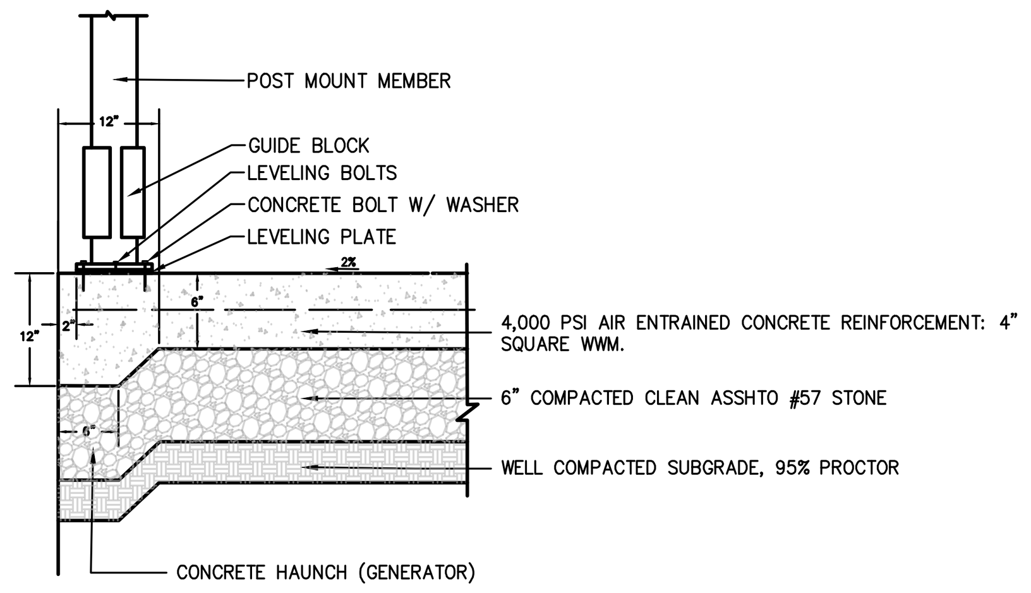


FENCE ELEVATION

NOTES:
1. MANUFACTURER: ILLUSIONS VINYL FENCE OR EQUAL. MANUFACTURED AND NATIONALLY DISTRIBUTED BY: EASTERN WHOLESALE FENCE LLC 266 MIDDLE ISLAND RD. MEDFORD, NY 11763ALL
2. FASTENERS TO BE GALVANIZED.
3. FENCE PANEL PATTERN SHOWN IS TYPICAL. FENCE COLOR TO BE SELECTED BY OWNER.
4. GATES TO BE EQUIPPED WITH HARDWARE TO SECURELY CLOSE THE GATES.
5. CONCRETE FINISH TO BE LIGHT BROOM FINISH PROVIDE 3" TROWELLED EDGE AT EDGES.
6. CONTACTOR SHALL PURCHASE HARDWARE #VRPMHC (POST MOUNT HARDWARE FOR CONCRETE INSTALLATION) FOR EACH POST.
7. CONTRACTOR SHALL INSTALL FENCING PER MANUFACTURERS SPECIFICATION.

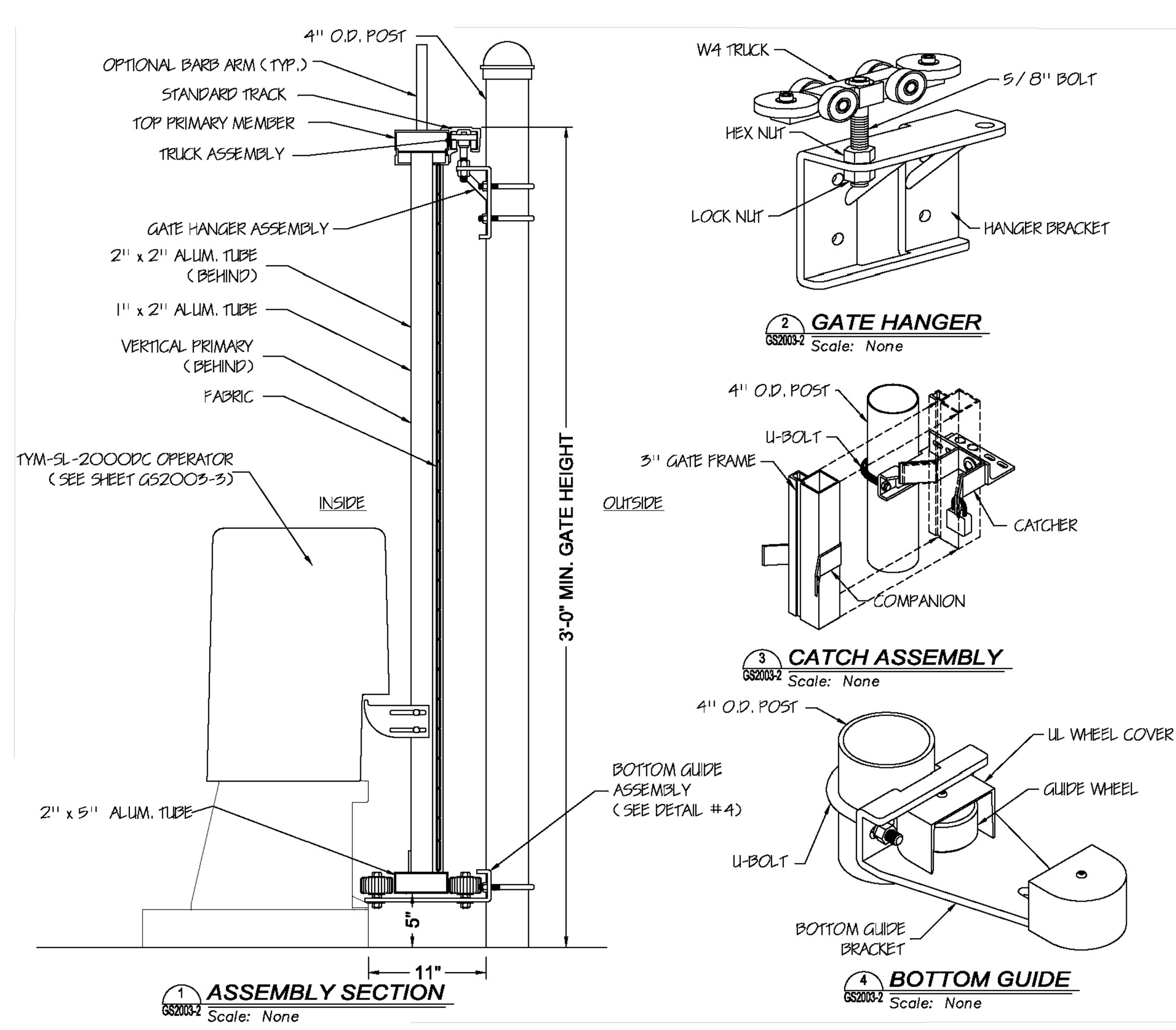


TRASH ENCLOSURE
PLAN VIEW

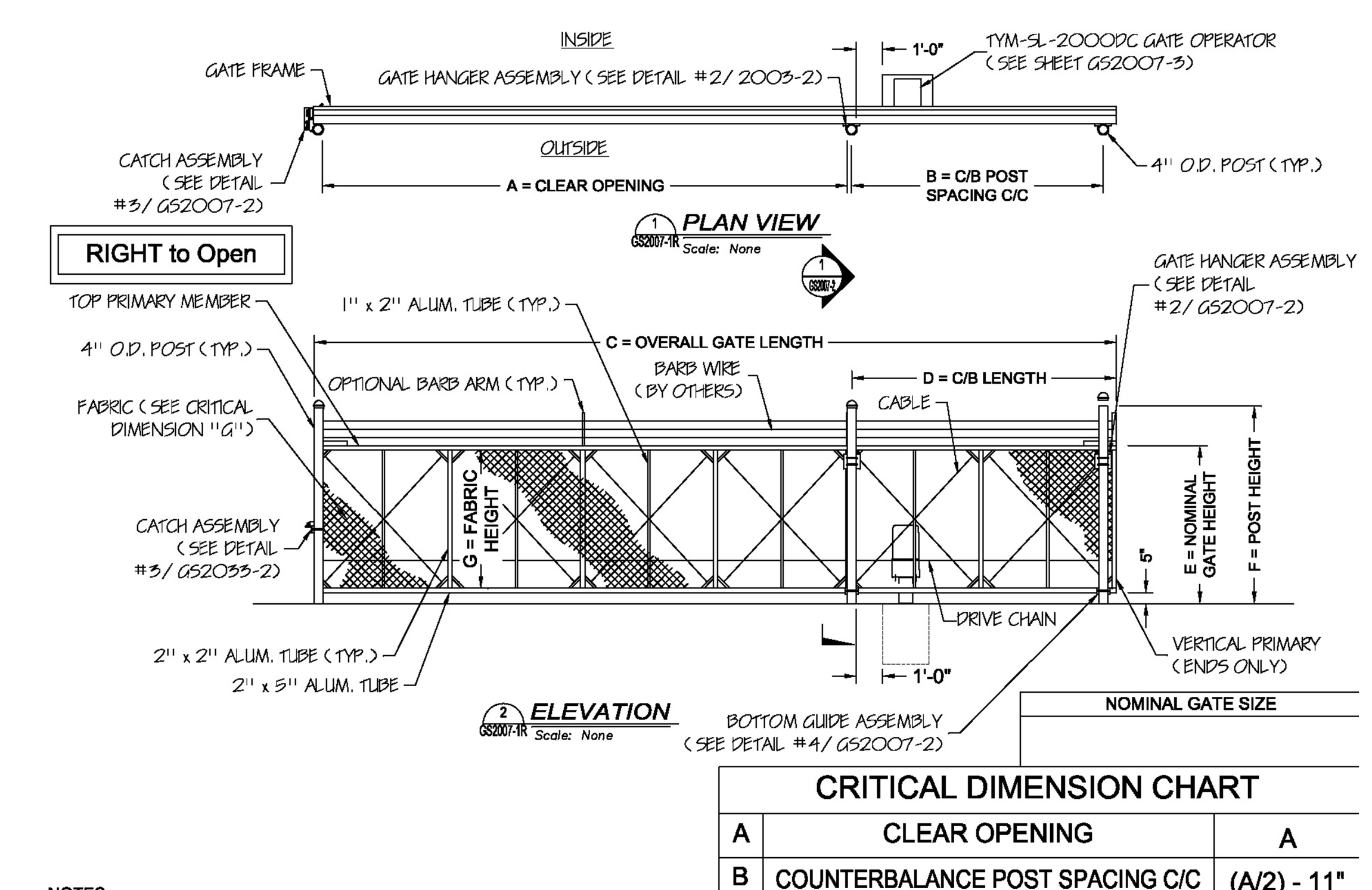


SECTION (TRASH ENCLOSURE & GENERATOR)

TRASH ENCLOSURE DETAIL (PUBLIC WORKS BUILDING)
N.T.S.



CHAINLINK CANTILEVER GATE UTILITY DETAILS
N.T.S.



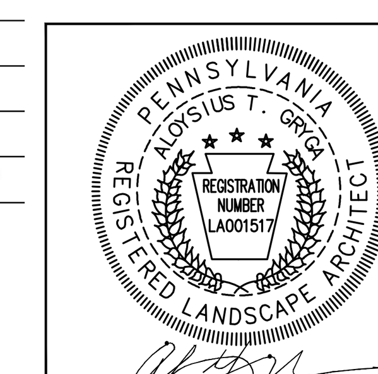
NOMINAL GATE SIZE

CRITICAL DIMENSION CHART

A	CLEAR OPENING	A
B	COUNTERBALANCE POST SPACING C/C	(A/2) - 11"
C	OVERALL GATE LENGTH	A x 1.5
D	COUNTERBALANCE LENGTH	A x 0.5
E	NOMINAL GATE HEIGHT	E
F	POST HEIGHT	E + 1'-6"
G	FABRIC HEIGHT	E - 1'-0"

NOTES:
1. ALL FITTINGS PROVIDED FOR 4" O.D. POSTS. OTHER SIZES ARE AVAILABLE UPON REQUEST.
2. GATE ELEVATION IS VIEWED FROM OUTSIDE OF THE SECURE AREA LOOKING IN.
3. BARB ARMS ARE OPTIONAL.
4. THIS GENERIC DRAWING SHOWS A TYPICAL GATE. GATE MANUFACTURED MAY NOT BE EXACTLY AS SHOWN.
5. GATE TO HAVE MILL FINISH.
6. FOR GATES THAT REQUIRE TWO PIECE FABRICATION, A 5" ALUMINUM CHANNEL WILL BE SUBSTITUTED FOR THE 2" x 5" ALUMINUM TUBE.

CHAINLINK CANTILEVER GATE DETAIL
N.T.S.



CONSTRUCTION DETAILS

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX
UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

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

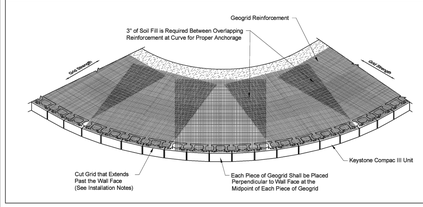
PROJECT NO. 22096-2000
F.B.

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
As Noted	03/31/2025	HL	AG	

MONTGOMERY COUNTY BLOCK 60-3 UNIT 12

Convex (Outside) Curves: Installation Details

C:17 - TYPICAL OUTSIDE CURVE GEOGRID PLAN



NOTES:

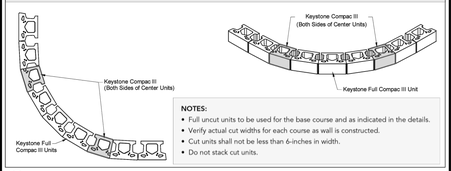
- Drainage zone and backfill materials should be placed and compacted up to the geogrid elevation prior to geogrid being installed at design elevation. Place geogrid in strength direction, perpendicular to wall face
- Measure, cut and orient the geogrid, as per the engineer's design, in the correct strength direction.
- Place the geogrid over the Keystone units within 1-inch of the front block face, then place next course units over grid to hold grid in place. Next, tension the geogrid by pulling it back away from the wall. Place a stake through the geogrid at the back to tension the geogrid in place.
- Proceed with placement of additional Keystone units, then drainage zone and backfill material. Starting at the wall and moving away from the wall, place the drainage zone and backfill materials over the geogrid to hold the geogrid in place under tension.
- Compact the backfill materials in 8-inch lifts up to the next reinforcement elevation.
- Cut grid that extends beyond curved wall face 1-inch back from wall face. The minimum geogrid length must match design length.
- Where geogrid tail overlap naturally occurs, place 3-inches of rock or soil between the overlapping layers.

Convex (Outside) Curves: Installation Details

Keystone units can be easily integrated with multiple curves within the same wall. However, convex curves require attention to details during construction. Every wall system has a minimum radius that can be built before the tails of the units come into contact with each other. This minimum radius is unique to the shape of each individual block system. In convex curves, the tightest radius will always be the top course of the wall. This means that the radius at the base course of a convex curve wall will be larger than the desired radius at the top of the wall. Care should be taken when laying out a wall horizontal location in the field given these wall batter and radius relationships.

The minimum radius of an outside curve should not be less than 5-feet. When constructing an outside curve, we recommend performing the following steps to maintain running bond configuration. It is recommended to construct the wall into the curve, maintaining a running bond pattern in the straight sections of the wall on either side of the curve. ***(See Figure C:15, below.)*** Due to the unit setback, the radius change in a curved wall will cause the units to migrate off from running bond. When this occurs, it will be necessary to cut a block to maintain running bond; cut unit width shall be no smaller than 6-inches. Use exterior grade concrete adhesive to secure the partial unit. When coming out of the radius, do not stack cut units. Cutting of another block may be required to maintain a more precise running bond on the straight wall extending away from the curve.

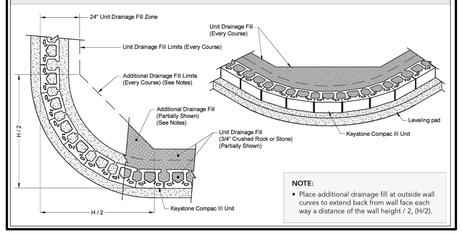
C:15 - OUTSIDE CURVE RUNNING BOND



NOTES:

- Full uncut units to be used for the base course and as indicated in the details.
- Verify actual cut widths for each course as wall is constructed.
- Cut units shall not be less than 6-inches in width.
- Do not stack cut units.

C:16 - OUTSIDE CURVE ADDITIONAL DRAINAGE FILL



NOTE:

- Place additional drainage fill at outside wall curves to extend back from wall face each way a distance of the wall height / 2, (H/2).

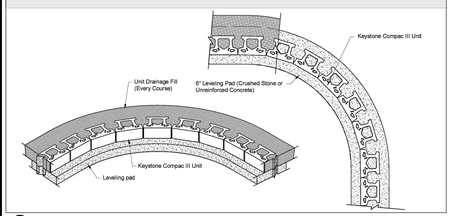
Concave (Inside) Curves: Installation Details

Inside curves for moderately tall Keystone walls are more difficult to construct than a straight wall due to the complex geometry resulting from a battered wall face in a curve. Inside curves allow good access for compaction and the wall face units tend to support each other like an arch when the soil strain associated with the active earth pressure condition develops. As the wall gets taller, inside curves will result in the top of the wall becoming longer than the base. For wall systems to maintain the desired running bond configuration, gaps between units tend to form.

The following is an outline to a process of constructing inside curves in taller walls. See the illustrations below.

1. Units can be moved laterally to remove gapping. Eventually, cutting partial units will be necessary to get the coursing back on the running bond pattern.
2. The minimum inside radius at the base of the wall course should not be less than 6 feet.

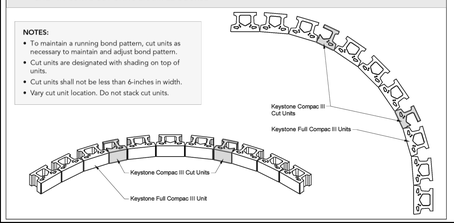
C:11 - TYPICAL UNIT INSTALLATION FOR INSIDE CURVE



C:12 - IN CURVE CUT UNITS EXAMPLE COURSE

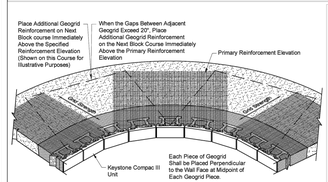
NOTES:

- To maintain a running bond pattern, cut units as necessary to maintain and adjust bond pattern.
- Cut units are designated with shading on top of units.
- Cut units shall not be less than 6-inches in width.
- Vary cut unit location. Do not stack cut units.



Concave (Inside) Curves: Installation Details

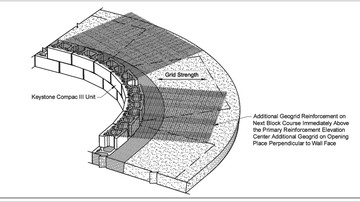
C:13 - INSIDE CURVE GEOGRID INSTALLATION (PRIMARY ELEVATION)



NOTES:

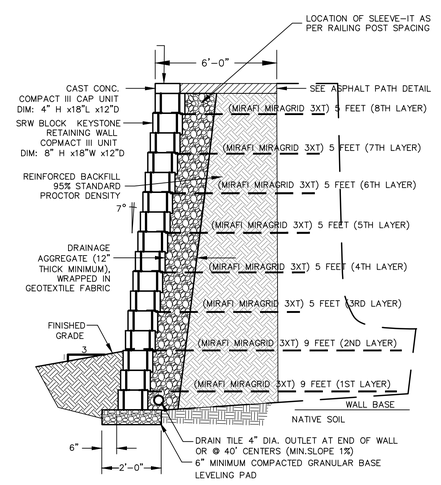
- Drainage zone and backfill materials should be placed and compacted up to the primary geogrid elevation prior to geogrid installation.
- Measure, cut and orient the geogrid, as per the engineer's design, in the correct strength direction.
- Place the geogrid over the Keystone units within 1-inch of the front block face, then place next course units over grid to hold grid in place. Next, tension the geogrid by pulling it back away from the wall. Place a stake through the geogrid at the back to tension the geogrid in place.

C:14 - INSIDE CURVE TYPICAL GEOGRID INSTALLATION (SECONDARY ELEVATION)



NOTES:

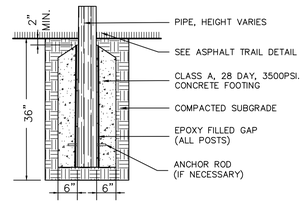
- Proceed with placement of additional Keystone units and unit drainage fill. Start backfilling nearest the Keystone units and then move away from the wall placing backfill materials over the geogrid.
- Compact the backfill materials in 8-inch lifts up to the next reinforcement elevation.
- If the radius of the wall creates a gap between adjacent primary elevation geogrid layers ***(see Figure C:13, above)*** of greater than 20 degrees, mark the wall units in the center of the gap, then place an additional secondary elevation on the course above the primary elevation geogrid, with the middle of the secondary elevation geogrid centered on the mark made in the center of the gapped geogrid below.
- The use of 12-foot wide rolls of geogrid will not be possible in walls with anything tighter than a gradual inside radius curve. Very tight inside radius curves may even require cutting the width of the roll to maintain the geogrid being as perpendicular as possible to the wall units.



NOTE:
CONTRACTOR SHALL SUBMIT DETAILED DRAWINGS (SIGNED & SEALED BY REGISTERED ENGINEER) FOR REVIEW APPROVAL PRIOR TO INSTALLING PROPOSED WALLS. DETAILS SHALL INCLUDE THE PROPOSED SLEEVE AT ANCHORING SYSTEM.

KEYSTONE RETAINING WALL COMPACT III UNIT DETAIL

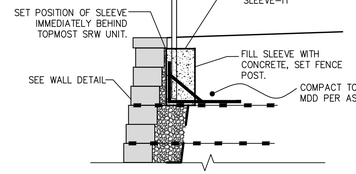
N.T.S.



NOTE:
THIS DETAIL SHALL BE USED WHEN INSTALLING RAILING BEYOND WALL AREAS.

RAILING FOOTING DETAIL

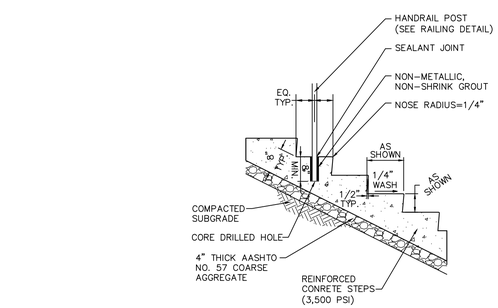
N.T.S.



NOTES:
1. FENCING SYSTEMS APPROVED FOR USE WITH SLEEVE–IT ARE LIMITED TO THE FOLLOWING HEIGHTS: CHAIN LINK – UP TO 8–FT, PRIVACY – UP TO 6–FT (WOODEN, PVC, METAL). POST SIZE 4"X4" MAX.
2. THIS DETAIL SHALL BE USED FOR FENCE/RAILING INSTALLED BEHIND RETAINING WALL.

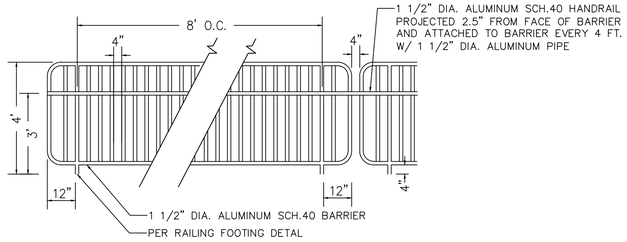
FENCE SLEEVE–IT DETAIL

N.T.S.



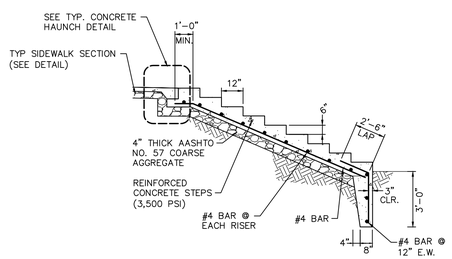
TYPICAL HANDRAIL POST DETAIL

N.T.S.



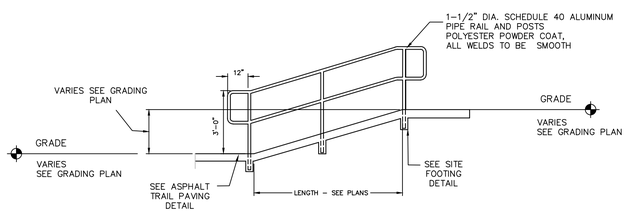
ADA ALUMINUM BARRIER AND HANDRAIL DETAIL

N.T.S.



TYPICAL STEPS STRUCTURAL DETAIL

N.T.S.



NOTES:
1. ALL RAMPS, LANDINGS AND RAILINGS SHALL COMPLY WITH THE APPROPRIATE BUILDING CODE.

TYPICAL HC RAMP & RAILING DETAIL

N.T.S.

ITEMS INCLUDED IN 04/11/2025 REVISIONS:

- PROFESSIONAL SEAL ADDED TO PLAN.
- SEAL NOTE ADDED.

CONSTRUCTION DETAILS

NO.	DATE	REVISION
01	04/11/2025	REVISED PER MCCD REVIEW LETTER DATED 03/25/2025

CONSTRUCTION PLANS
FOR
UPPER POTTSGROVE MUNICIPAL COMPLEX

UPPER POTTSGROVE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

SEAL DOES NOT APPLY TO WALL DETAILS.

PENNSYLVANIA – COMMONWEALTH OF – REGISTERED LANDSCAPE ARCHITECT – REGISTRATION NUMBER LA001517

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

PROJECT NO. 22096-2000
F.B.

SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
As Noted	03/31/2025	HL	AG	

MONTGOMERY COUNTY BLOCK 60-3 UNIT 12