

FINAL SUBDIVISION PLAN FOR STRAY WINDS FARM PHASE 8

LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

GENERAL NOTES:

- The purpose of this plan is to provide a Final Subdivision Plan for Phase 8 of Stray Winds Farm. This Phase consists of 40 dwelling lots.
- A jurisdictional determination of the wetlands on this site was performed by the Department of the Army Corps of Engineers on 4/26/06, and approved 4/28/06, see ACOE file # CENAB-OP-RPA (Stray Winds Farm), 2006-01144-7.
- Future proposed common open space (OS lots) shall be owned and maintained by condominium and/or homeowners associations established for the development, and shall be for the private use by residents and their guests of this development only, unless otherwise indicated herein. The associations shall also maintain all private common access drives, designated public nature trails, common storm drainage facilities and drainage easements not dedicated to the Township, and sidewalks along the frontage of OS lots. Accessory recreational or maintenance structures are permitted provided they meet applicable setbacks and regulations. Installation and maintenance of utilities is permitted, as necessary to serve this development.
- Each dwelling shall have a minimum of 2 parking spaces located in the garage and/or in the private driveway in front of the garage.
- All proposed streets shall be local/minor roads with a posted speed limit of 25 MPH.
- The applicant shall pay a fee-in-lieu of recreation land in the amount of \$2,000.00 per dwelling unit.
- All proposed streets shall be offered for dedication to public use, to the Township in which the street is located. Sanitary sewer mains shall be offered for dedication to the Susquehanna Township Authority where located in Susquehanna Township. Other than the items described above, no other lands or facilities are proposed to be dedicated to public use.
- The water system design shown hereon is preliminary, and will be revised by the water company.
- The applicant shall comply with all applicable Township ordinances in effect at the time of submission and approval of the Preliminary Plan. This Final Plan will remain consistent with the approved Preliminary Plan.
- All public improvements will comply with the Township's construction specifications, for the applicable Township in which work is located.
- The developer shall be responsible for the cost of the installation of all street name signs and traffic control signs, and shall be installed in a manner specified by the Township Engineer.
- Within clear sight triangles shown hereon, no permanent walls, fences, signs, structures, obstructions, grading and/or plant materials over 30 inches high shall be placed or maintained, so that the vision of motorists is not obscured.
- Future Lot OS-14 as shown in the Preliminary Plan is designated as a snow dump easement, for emergency use only by personnel of Susquehanna Township to pile excess snow from street clearing during extreme storm events.
- Drainage facilities located outside of accepted public street rights-of-way shall be owned and maintained by the developer, until turned over to a homeowners and/or condominium association(s). The developer or association(s) shall maintain the drainage facilities to the design, dimensions and elevations indicated on these drawings, and such facilities shall be permanent unless and until a revised stormwater management plan is approved by the applicable Township. Required maintenance tasks shall include removal of debris and sediment, and repair of any erosion.
- All construction shall conform to PennDOT Publications 408 and 72 standards. All frames, concrete top units, and grade adjustment rings shall be set in a bed of full mortar according to Publication 408. All storm pipe and structures shall be installed and backfilled in accordance to the specifications set forth in the Pennsylvania Department of Transportation, Publication 408, as amended.
- Lot numbers and phase numbers run consecutively through the entire stray winds development in both Townships.
- Street address numbers shall be provided in accordance with SALDO Section 22-1112.
- Minimum vertical clearance between a water line and storm sewer pipe must be 18".
- Private driveways on corner lots shall be located at least 40 feet from the point of intersection of the nearest street right of way lines.
- Susquehanna Township staff are granted permission to access the drainage easements from the nearest right-of-way.
- Roof drains shall not be connected to streets, sanitary, or storm sewers, or roadside ditches in order to promote overland flow and infiltration/percolation of stormwater.
- All stormwater conveyance piping shall have watertight joints.
- Inlets are sized to accept the specified pipe sizes without knocking out any of the inlet corners. All pipes entering or existing inlets shall be cut flush with the inlet wall.
- The Operation and Maintenance Agreement shall be recorded with the Stormwater Management Plan.
- The recording drawings will be provided prior to occupancy and the release of the financial security.
- Street lights will be installed at all intersections. In lieu of streetlights along the street, individual lot photocell light posts will be installed in all yards.
- Accessory structures shall be consistent with the design of the principle structure.
- Per Section 27.2049(A),(1)(i) of the Zoning Ordinance, low decorative fences, walls and hedges shall be installed and maintained in front yards on a per lot basis.
- Garages shall not extend more than four feet from the buildings front facade and width cannot exceed 50% of the total facade length. Garage doors shall be almond in color.

PLAN APPROVAL BLOCKS

THIS PLAN RECOMMENDED FOR APPROVAL BY THE SUSQUEHANNA TWP PLANNING COMMISSION THIS _____ DAY OF _____ 20__

CHAIRMAN _____
SECRETARY _____

THIS PLAN APPROVED BY THE SUSQUEHANNA TOWNSHIP BOARD OF COMMISSIONERS AND ALL CONDITIONS IMPOSED WITH RESPECT TO SUCH APPROVAL WERE COMPLETED ON THIS _____ DAY OF _____ 20__

PRESIDENT _____
SECRETARY _____

REVIEWED BY THE SUSQUEHANNA TOWNSHIP ENGINEER
REVIEWED THIS _____ DAY OF _____ 20__

TOWNSHIP ENGINEER _____

THIS PLAN REVIEWED BY THE DAUPHIN COUNTY PLANNING COMMISSION
THIS _____ DAY OF _____ 20__

CHAIRMAN _____
SECRETARY _____

OWNER CERTIFICATION

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF DAUPHIN

ON THIS THE _____ DAY OF _____ 20__ BEFORE ME THE UNDERSIGNED PERSONALLY APPEARED MARK X. DISANTO AND JOHN M. DISANTO.

WHO BEING DULY SWORN ACCORDING TO LAW, DEPOSE AND SAY THAT THEY ARE THE OWNERS OF THE PROPERTY SHOWN ON THIS PLAN AND THAT THEY ACKNOWLEDGE THE SAME TO BE THEIR ACT AND DEED AND DESIRE THE SAME TO BE RECORDED AS SUCH ACCORDING TO LAW.

NOTARY PUBLIC _____ MY COMMISSION EXPIRES _____

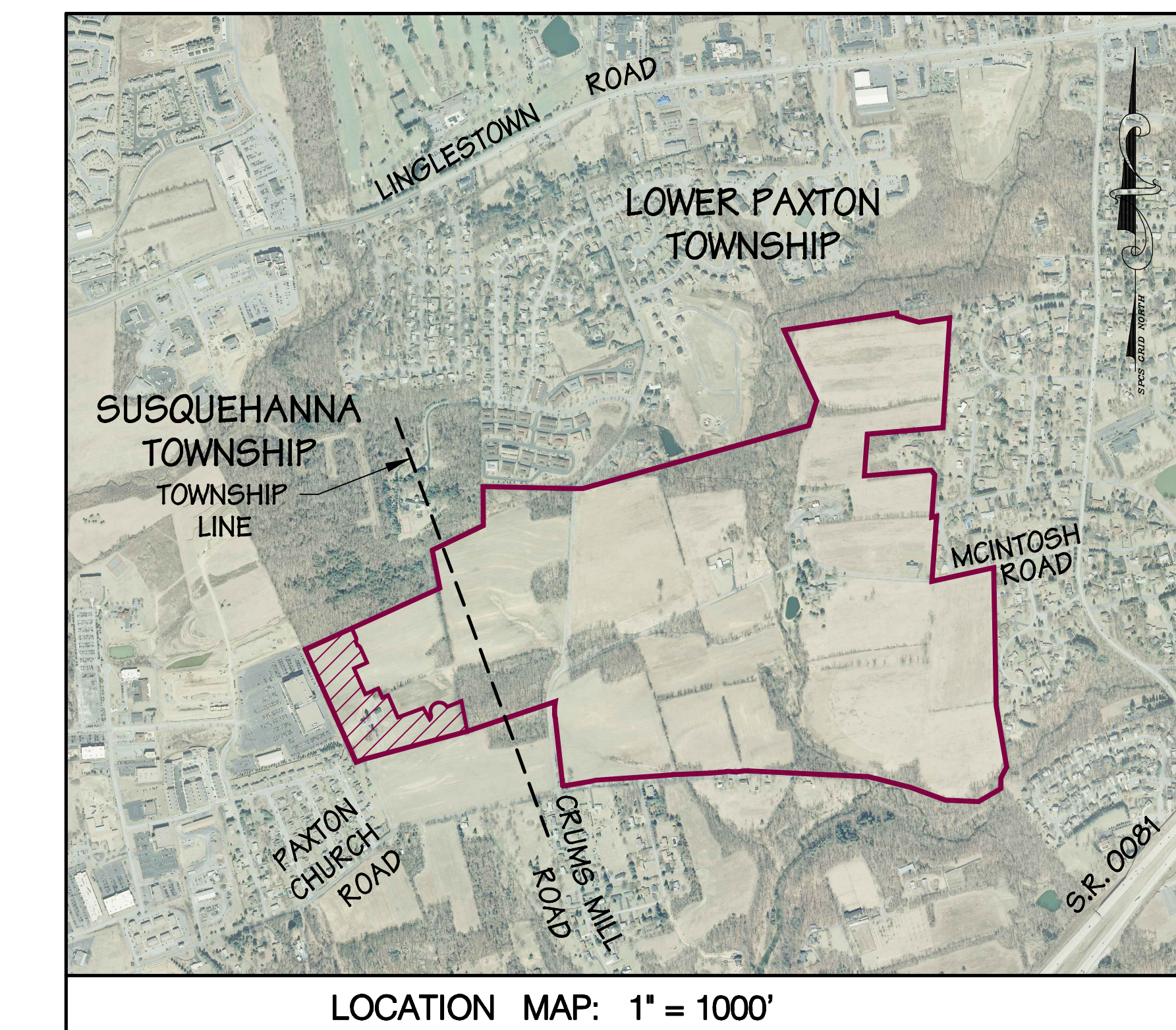
IT IS HEREBY CERTIFIED THAT THE UNDERSIGNED ARE THE OWNERS OF THE PROPERTY SHOWN ON THIS PLAN AND THAT ALL STREETS OR PARTS THEREOF, IF NOT PREVIOUSLY DEDICATED, ARE HEREBY TENDERED FOR DEDICATION TO PUBLIC USE.

OWNER: MARK X. DISANTO

OWNER: JOHN M. DISANTO

SITE DATA:

Record Owner:
Mark X. DiSanto, and John M. DiSanto
5351 Jaycee Avenue
Harrisburg, PA 17112
Phone: (717) 657-5729
Applicant: Triple Crown Corporation
C/O Mark DiSanto, CEO
5351 Jaycee Avenue
Harrisburg, PA 17112
Phone: (717) 657-5729
Tax Parcel Number: 62-021-043
Susquehanna Township remaining tract: 12.25 Acres
Site Area in Phase 8: 12.25 Acres
Proposed Lots: 40 single family detached
Existing Dwelling Units: 1 (To Be Removed)
Existing Use: Agricultural
Proposed Use: Single Family Detached Dwellings (One Per Lot)
Existing Water Supply: Private
Proposed Water Supply: Public (SUEZ)
Existing Sewage Disposal: On-Lot
Proposed Sewage Disposal: Public (Susquehanna Township Authority)
Linear Feet of New Public Street: 1,672
Linear Feet of New Storm Sewer: 1,278



ZONING DATA:

Existing Zoning: Residential (R-2) Medium Density Residential District
Proposed Use: Residential (R-2) Medium Density Residential District - Neighborhood Design Development
Maximum Density: 5 du/ac. ATA
Proposed Density: 2.8 du/ac. ATA
Minimum Lot Area: 6,000 s.f.
Proposed Minimum Lot Area: 6,000 s.f.
Minimum Lot Width At Building Line: 45 ft.
Proposed Minimum Lot Width At Building Line: 45 ft.
Minimum Street Frontage: 20 ft.
Minimum Setback, Front Yard: 5 ft.
Maximum Setback, Front Yard: 25 ft.
Minimum Setback, Rear Yard (Accessory Building): 15 ft.
Minimum Setback, Side Yard: 7 ft.
All New Dwelling Units Shall Meet The Following Setback Requirements:
From Cropland Or Pasture Land: 100 feet
From Limited Access Expressway: 100 feet
From Active Recreation Areas Such As Courts Or Playing Fields (Not Including Tot Lots): 150 feet
Maximum Height: 35 ft.
Maximum Lot Impervious Cover: 75%
Maximum Building Coverage: 65%
Minimum Vegetative Coverage: 25%
Proposed Lot Maximum Impervious Cover: 47%
Proposed Lot Maximum Building Coverage: 35%
Proposed Lot Minimum Vegetative Coverage: 53%



PENNSYLVANIA ACT 287 OF 1974, AS AMENDED BY ACT 50 OF 2017, REQUIRES NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE COMMONWEALTH.

SERIAL NO. 20180182117 IN SUSQUEHANNA TOWNSHIP

LIST OF UTILITIES

SUEZ WATER PENNSYLVANIA INC
8189 ADAMS DRIVE
HUMMELSTOWN, PA 17036
CONTACT: LOUISE DOLAN
EMAIL: LOUISE.DOLAN@SUEZ.COM

VERIZON PENNSYLVANIA LLC
1026 HAY STREET
PITTSBURGH, PA 15221
CONTACT: DEBORAH BARUM
EMAIL: DEBORAH.D.DELIA@VERIZON.COM

PPL ELECTRIC UTILITIES CORPORATION
503 NEW MARKET STREET
WILKES BARRE, PA 18702
CONTACT: MARK SANTAYANA
EMAIL: MCSANTAYANA@PPLWEB.COM

COMCAST
4601 SMITH STREET
HARRISBURG, PA 17109
CONTACT: MICHAEL SWEIGARD
EMAIL: MIKE_SWEIGARD@COMCAST.COM

SUSQUEHANNA TOWNSHIP AUTHORITY
SUSQUEHANNA TOWNSHIP
1900 LINGLESTOWN ROAD
HARRISBURG, PA 17110
CONTACT: NATHAN SPRIGGS
EMAIL: NSPRIGGS@SUSQUEHANNA.TWP.PA.GOV

CENTURYLINK
122 BALTIMORE STREET
PO BOX 898
HANOVER, PA 17331
CONTACT: LEO HILBERT
EMAIL: LEO.HILBERT@CENTURYLINK.COM

UGS UTILITIES INC
1301 AIP DRIVE
MIDDLETOWN, PA 17057
CONTACT: STEPHEN BATEMAN
EMAIL: SBATEMAN@UG.COM

Sheet List Table	
Sheet Number	Sheet Title
1	Cover Sheet
2	Overall Phase Plan
3	Existing Conditions Plan
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6	Subdivision Plan
7	Grading & PCSM Plan
8	Grading & PCSM Plan
9	Streetscape Plan
10	Streetscape Plan
11	Lighting Plan
12	Lighting Plan
13	Erosion & Sediment Control
14	Erosion & Sediment Control
15	Citation Drive Profile
16	Antonella Way Profile
17	Miscellaneous Details
18	PCSM Details
19	PCSM Details
20	Sanitary Sewer Details
21	Sanitary Sewer Details
22	E & S Control Details
23	E & S Control Details
24	Sanitary Index Map

Lot #	Address	Parcel #
215	3202 Antonella Drive	62-021-476
216	3204 Antonella Drive	62-021-477
217	3206 Antonella Drive	62-021-478
218	3215 Antonella Drive	62-021-479
219	3213 Antonella Drive	62-021-480
220	3211 Antonella Drive	62-021-481
221	3209 Antonella Drive	62-021-482
222	3207 Antonella Drive	62-021-483
223	3205 Antonella Drive	62-021-484
224	3203 Antonella Drive	62-021-485
225	3201 Antonella Drive	62-021-486
226	3100 Antonella Drive	62-021-487
227	3102 Antonella Drive	62-021-488
228	3104 Antonella Drive	62-021-489
229	3390 Gallant Fox Drive	62-021-490
230	3392 Gallant Fox Drive	62-021-491
231	3394 Gallant Fox Drive	62-021-492
232	3396 Gallant Fox Drive	68-021-493
236	3404 Gallant Fox Drive	62-021-494
237	3406 Gallant Fox Drive	62-021-495
238	3119 Citation Drive	62-021-496
239	3115 Citation Drive	62-021-497
240	3109 Citation Drive	62-021-498
241	3107 Citation Drive	62-021-499
242	3105 Citation Drive	62-021-500
243	3103 Citation Drive	62-021-501
244	3101 Citation Drive	62-021-502
245	3100 Citation Drive	62-021-503
246	3102 Citation Drive	62-021-504
247	3104 Citation Drive	62-021-505
248	3106 Citation Drive	62-021-506
249	3108 Citation Drive	62-021-507
250	3110 Citation Drive	62-021-508
251	3112 Citation Drive	62-021-509
252	3114 Citation Drive	62-021-510
253	3116 Citation Drive	62-021-511
254	3118 Citation Drive	62-021-512
255	3120 Citation Drive	62-021-513
256	3122 Citation Drive	62-021-514
257	3124 Citation Drive	62-021-515

PREVIOUSLY APPROVED WAIVERS:

The following waivers were requested from the Susquehanna Township Subdivision and Land Development Ordinance (Chapter 22):

WAIVER SECTION	REQUIREMENT	DATE REQUESTED	DATE OF WAIVER APPROVAL
22-620.6.F.(3)	Pertaining to type of inlet top; slant top is proposed	2/9/07	7/12/07
22-1004.	Pertaining to slopes	2/9/07	7/12/07
22-405.2.E.	Pertaining to preliminary erosion control plan	6/8/07	7/12/07
22-502.4.C.	Pertaining to a temporary cul-de-sac at the end of Gallant Fox Drive.	6/8/07	7/12/07

ON-LOT BMPS

The following BMP are on-lot BMPS.

LOT ID	BMP NAME
LOT 250	INFILTRATION PIT 2
LOT 249	INFILTRATION PIT 3
LOT 254	RAIN GARDEN 3
LOT 252	RAIN GARDEN 4
LOT 226	RAIN GARDEN 5

APPLICANT

TRIPLE CROWN CORPORATION
5351 JAYCEE AVENUE
HARRISBURG PA 17112
PHONE: 717-657-5729
WWW.TRIPLECROWNCORP.COM

I HEREBY ACKNOWLEDGE THAT STORMWATER MANAGEMENT FACILITIES AND BMPS ARE TO BE PERMANENT FIXTURES THAT CAN BE ALTERED OR REMOVED ONLY AFTER APPROVAL OF A REVISED PLAN BY THE MUNICIPALITY.

MARK X. DISANTO, CEO DATE _____

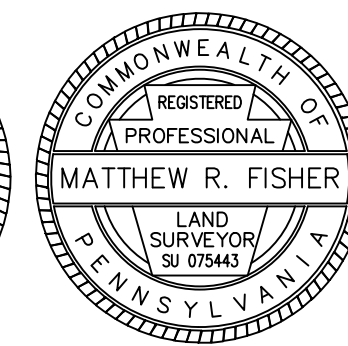
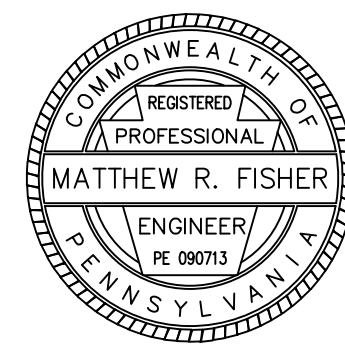
DESIGN ENGINEER

R.J. FISHER & ASSOCIATES, INC.
1546 BRIDGE STREET
NEW CUMBERLAND, PA 17070
PHONE: (717) 774-7534
E-MAIL: RJF@RJFISHERENGINEERING.COM

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAN SHOWN AND DESCRIBED HEREBON IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY THE SUSQUEHANNA TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT SITE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA REQUIRED BY THE SUSQUEHANNA TOWNSHIP STORMWATER MANAGEMENT ORDINANCE.

MATTHEW R. FISHER, P.L.S., P.E. DATE _____



R. J. FISHER & ASSOCIATES, INC.

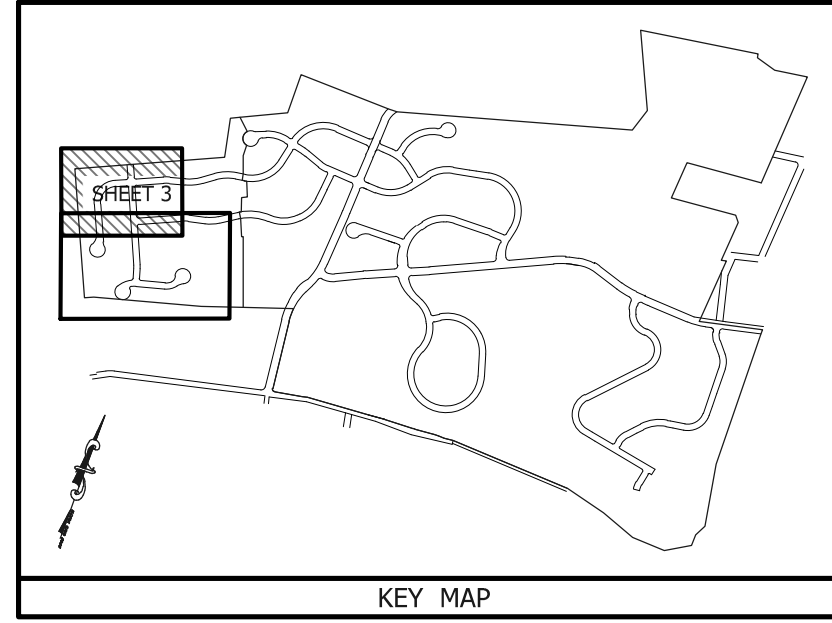
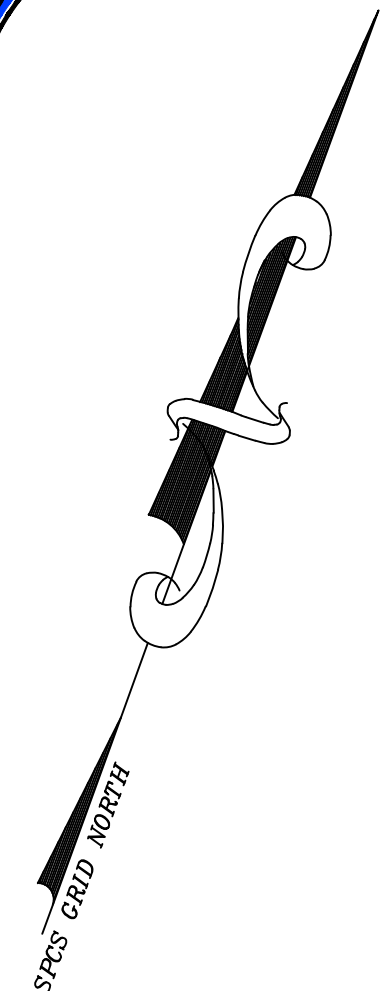
SITE PLANNING CIVIL ENGINEERING LAND SURVEYS

1546 BRIDGE STREET, NEW CUMBERLAND, PA. 17070

PHONE: (717) 774-7534 FAX: (717) 774-7190

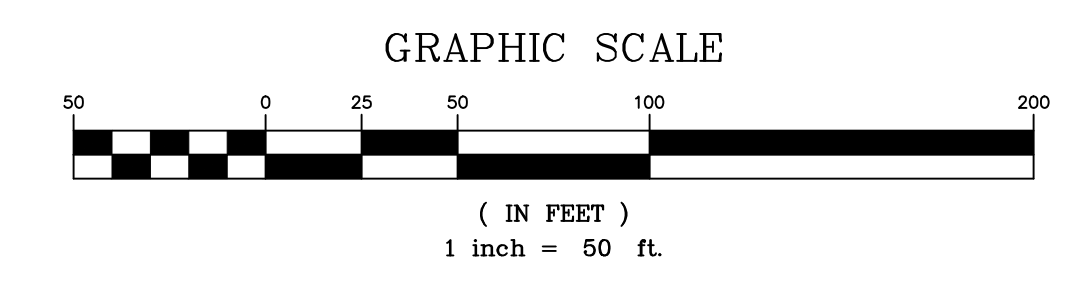
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No.	REVISION	DATE	DRAWING ID:
1	----	----	222020-01-COV
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3	----	----	DATE: 5/6/2022
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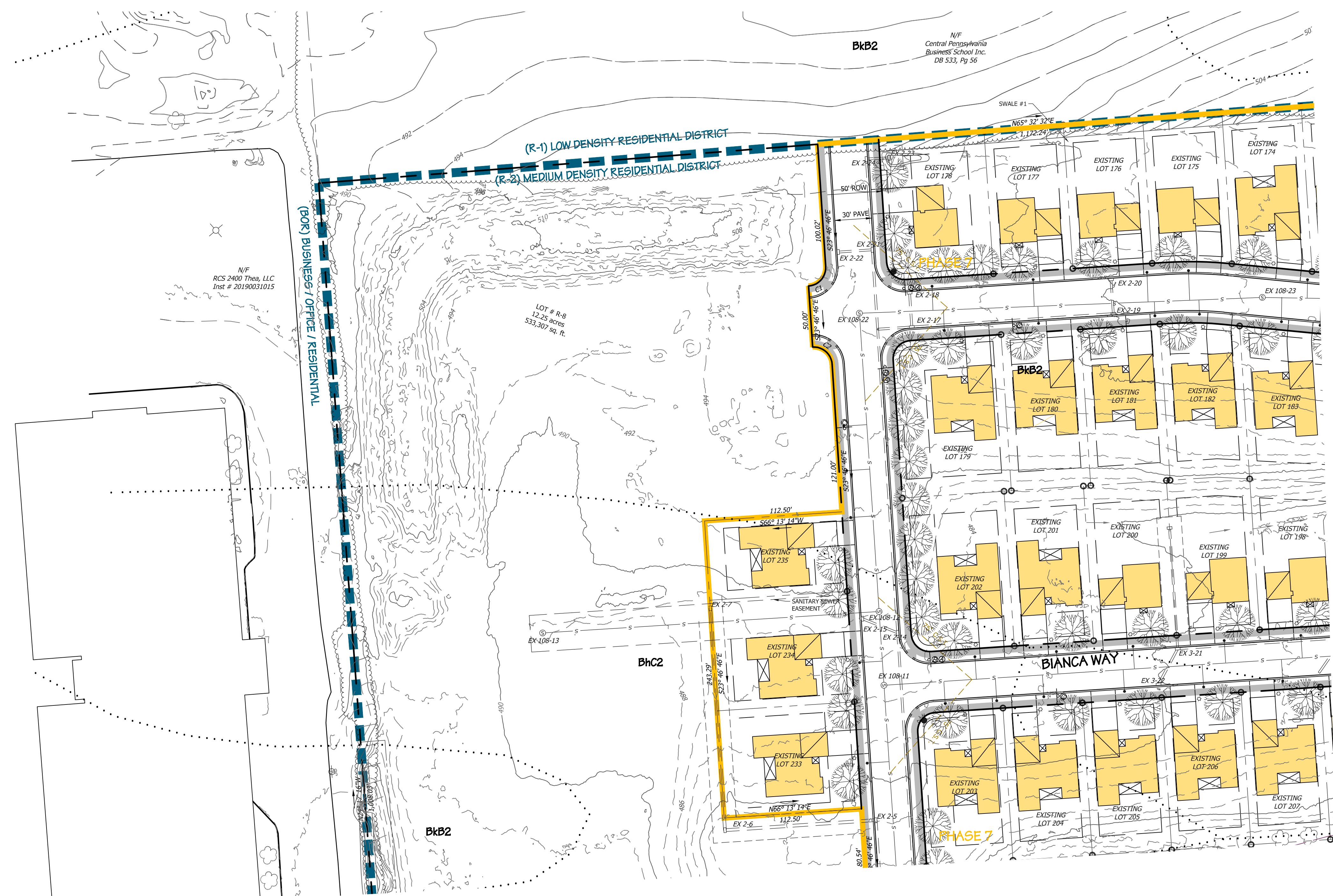
Existing Conditions Legend

	Existing 100 Year Floodplain		Existing Soils Boundary		Existing Sanitary Sewer Easement
	Existing Adjacent Property Line		CL Existing Stream / Limit Of Waterway		Existing Sanitary Lateral
	Existing Benchmark		Existing Deciduous Tree		Existing Force Main
	Existing Boundary Line		Existing Coniferous Tree		Existing Storm Sewer Line, Inlet, MH
	Existing Right-Of-Way Line		Existing Sidewalk		Existing Storm Sewer Easement
	Existing Building Setback Line		Existing Treeline		Existing Water Main, MH, Hydrant, Valve
	Existing Street Centerline		Existing Trenchline		Existing Water Lateral, Meter, Service Shut-off
	Existing Edge Of Pavement		Existing Overhead Utility Wire, Utility Pole, Guy Pole, Guy Wire		Existing Water Easement
	Existing Curb		Existing Utility Easement		Existing Wetlands
	Existing Paint Line		Existing Communications Box		Conservation Easement
	Existing Minor Contour		Existing Underground Electric Transformer		Precautionary Slopes (15% To 25%)
	Existing Major Contour		Existing Gas Easement		Prohibitive Slopes (>25%)
	Existing Fence		Existing Sanitary Sewer Line, MH		
	Existing Gully/Drill		Soil Probe		
	Existing Property Line Marker				
	Existing Concrete Monument				
	Existing Sign				



Existing Boundary Curve Table

Curve #	Radius	Length	Chord Bearing	Chord
C1	15.00	23.56	S21° 13' 14"W	21.21
C2	15.00	23.56	S68° 46' 46"E	21.21
C3	225.00	31.02	S19° 49' 47"E	31.00
C4	50.00	57.10	N13° 41' 02"E	54.05
C5	60.00	184.79	N69° 11' 46"E	119.94



SEE SHEET 4

R. J. FISHER & ASSOCIATES, INC.
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 1546 BRIDGE STREET, NEW CUMBERLAND, PA. 17070
 PHONE: (717) 774-7534 FAX: (717) 774-7190
 WWW.RJFISHERENGINEERING.COM



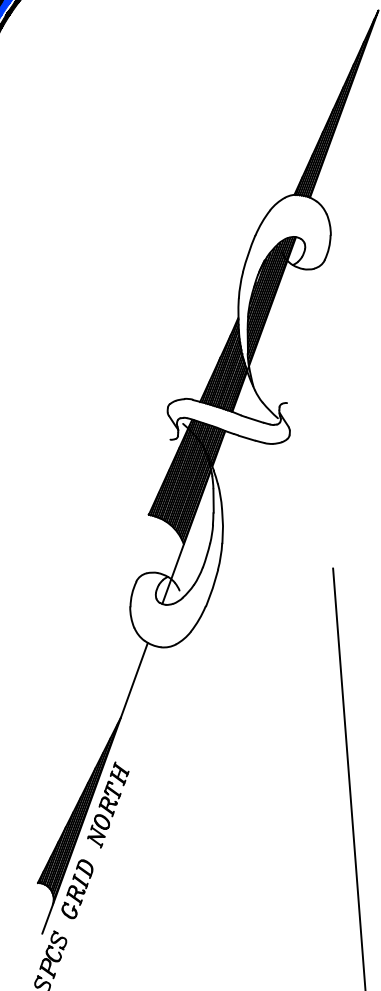
EXISTING CONDITIONS PLAN
 FOR
STRAY WINDS FARM PHASE 8
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:
222020-03-EXC
 DATE: 5/6/2022
 SHEET: 3 OF 24

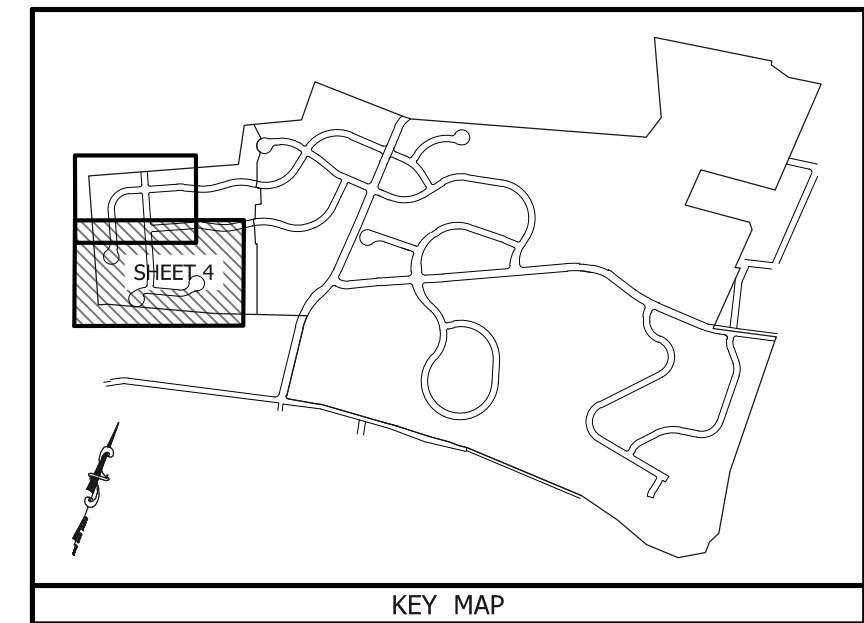
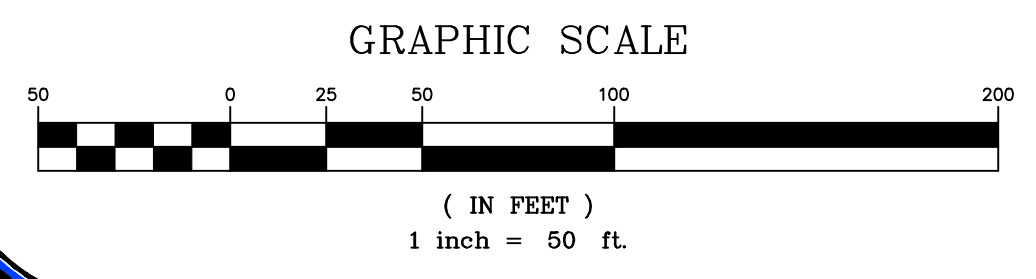
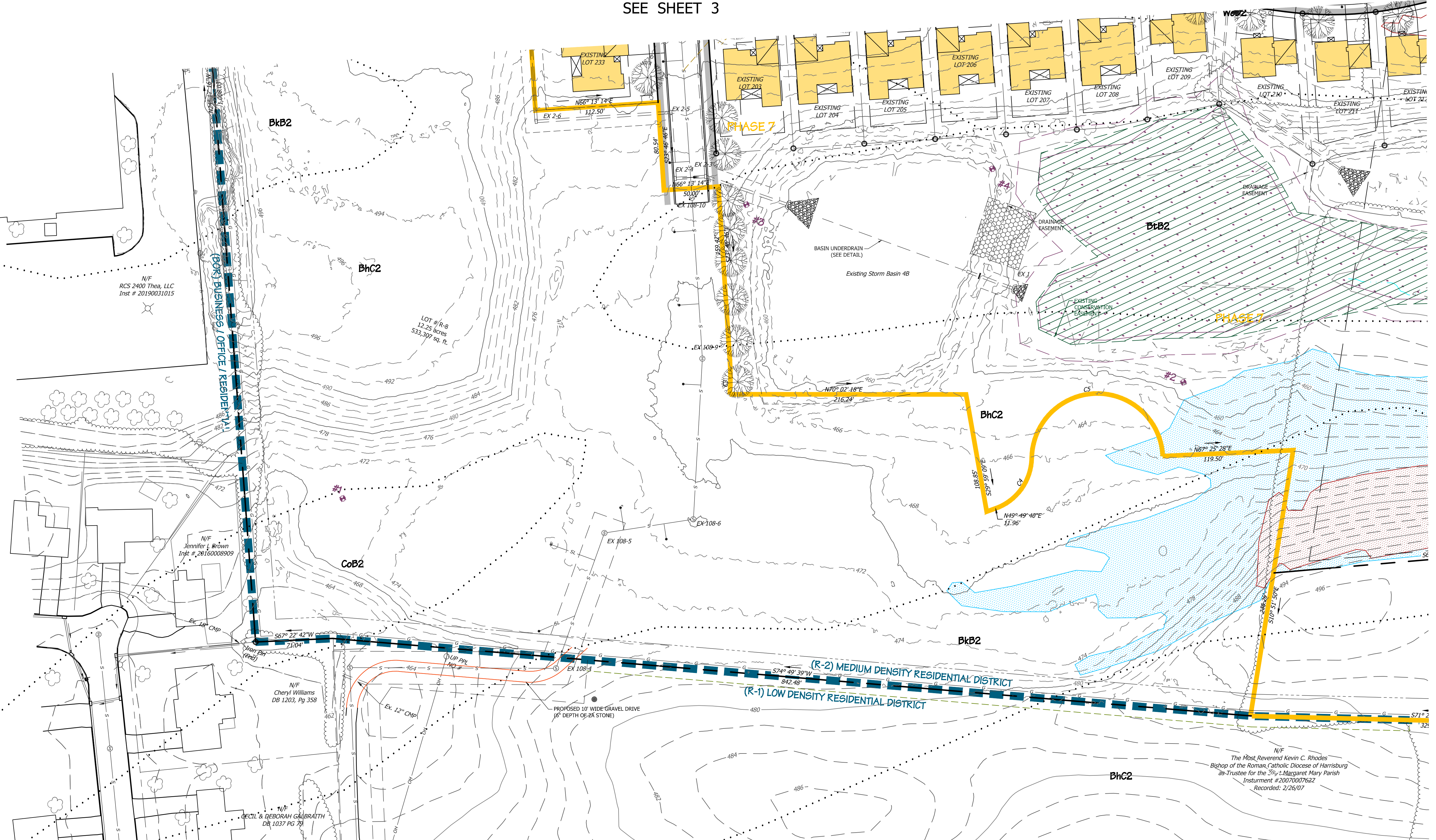
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 3. EXISTING CONDITIONS PLAN



SEE SHEET 3



Existing Conditions Legend

<ul style="list-style-type: none"> --- Existing 100 Year Floodplain --- Existing Adjacent Property Line --- Existing Benchmark --- Existing Boundary Line --- Existing Right-Of-Way Line --- Existing Building Setback Line --- Existing Street Centerline --- Existing Edge Of Pavement --- Existing Curb --- Existing Paint Line --- Existing Minor Contour --- Existing Major Contour --- Existing Fence --- Existing Gullderrail --- Existing Property Line Marker --- Existing Concrete Monument --- Existing Sign 	<ul style="list-style-type: none"> --- Existing Soils Boundary --- Existing Stream / Limit Of Waterway --- Existing Deciduous Tree --- Existing Coniferous Tree --- Existing Sidewalk --- Existing Treeline --- Existing Overhead Utility Wire, Utility Pole, Guy Pole, Guy Wire --- Existing Utility Easement --- Existing Communications Box --- Existing Underground Electric Transformer --- Existing Gas Easement --- Existing Sanitary Sewer Line, MH --- Soil Probe 	<ul style="list-style-type: none"> --- Existing Sanitary Sewer Easement --- Existing Sanitary Lateral --- Existing Force Main --- Existing Storm Sewer Line, Inlet, MH --- Existing Storm Sewer Easement --- Existing Water Main, MH, Hydrant, Valve --- Existing Water Lateral, Meter, Service Shut-off --- Existing Water Easement --- Existing Wetlands --- Conservation Easement --- Precautionary Slopes (15% To 25%) --- Prohibitive Slopes (>25%)
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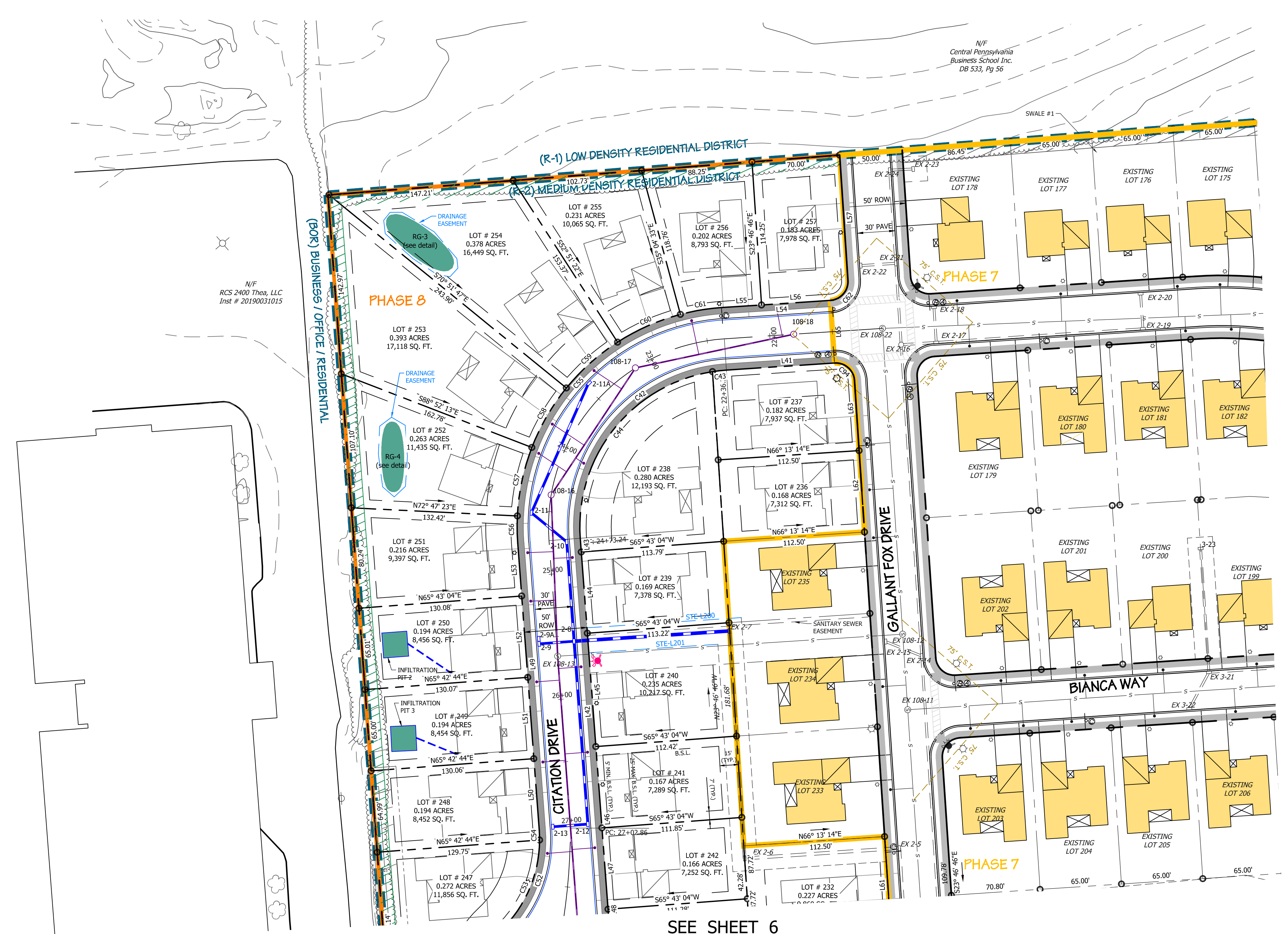
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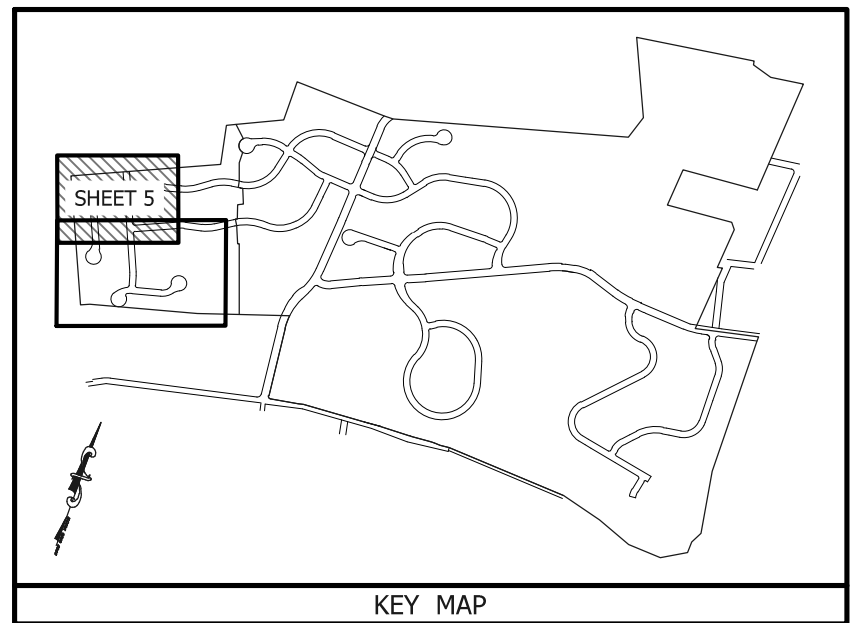
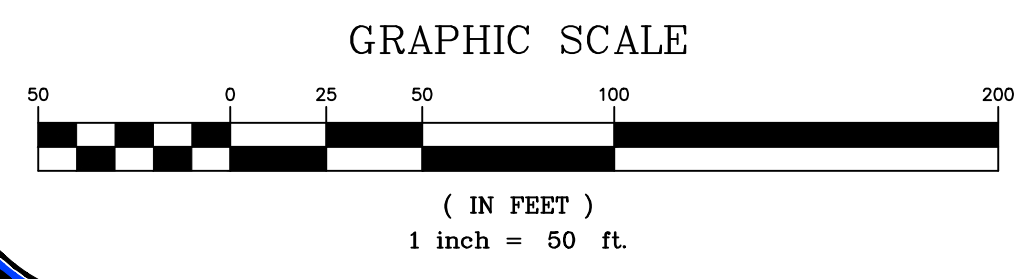
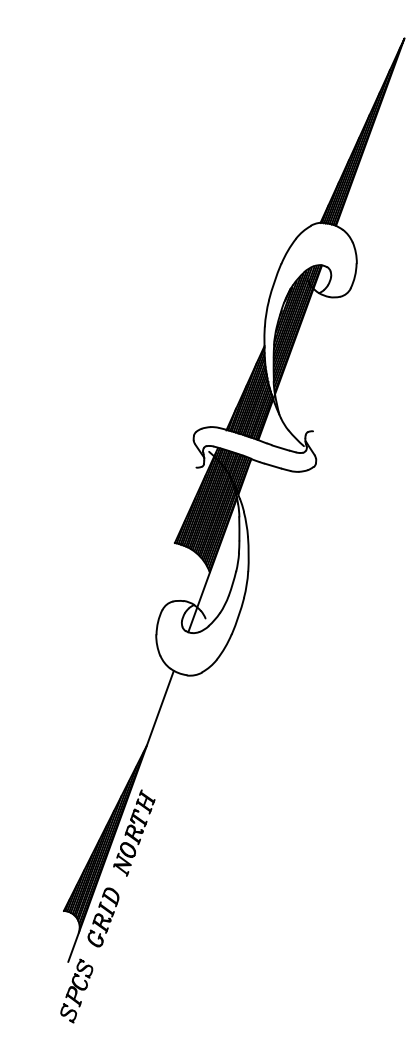
EXISTING CONDITIONS PLAN
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 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 222020-03-EXC
 DATE: 5/6/2022
 SHEET: 4 OF 24

1: N:\Projects\2022\222020-03-EXC\Drawings\222020-03-EXC.dwg
 2: R. J. FISHER & ASSOCIATES, INC.
 3: 5/6/2022
 4: R.J.F.



SEE SHEET 6



Proposed Conditions Legend

	Proposed Property Line
	Proposed Right-Of-Way
	Proposed Edge Of Pavement
	Proposed Curb
	Proposed Sidewalk
	Proposed Building Setback Line
	Proposed Street Centerline
	Proposed Sanitary Sewer Lateral
	Proposed Sanitary Sewer Line, MH
	Proposed Storm Sewer Line, Inlet, MH
	Proposed Roof Drain
	Proposed Water Line, Hydrant
	Proposed Sign
	Proposed Light
	Proposed Pedestrian Ramp Location (See Detail)

SUBDIVISION PLAN
 FOR
STRAY WINDS FARM PHASE 8
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:
 222020-04-SUB
 DATE: 5/6/2022
 SHEET: 5 OF 24

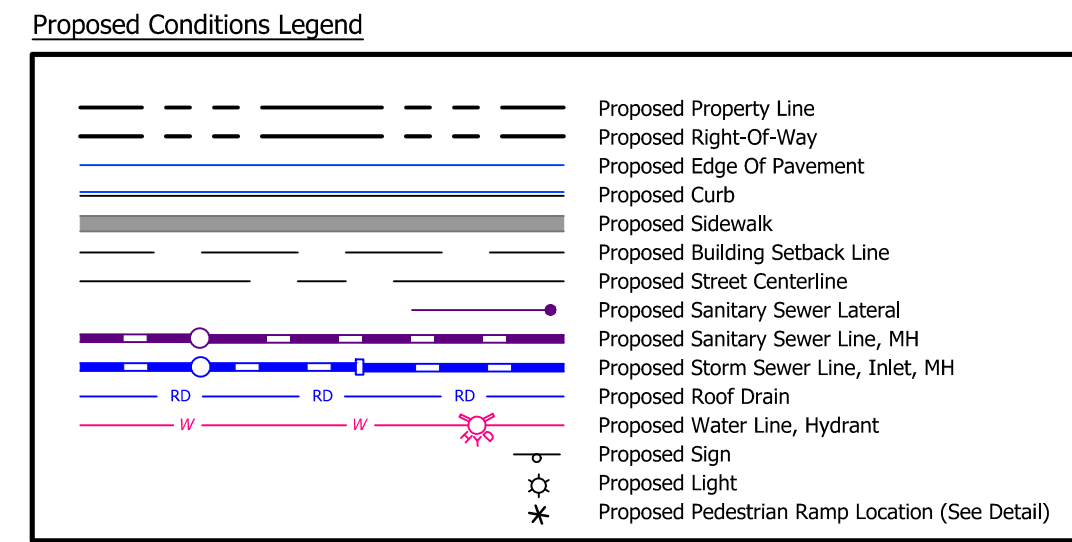
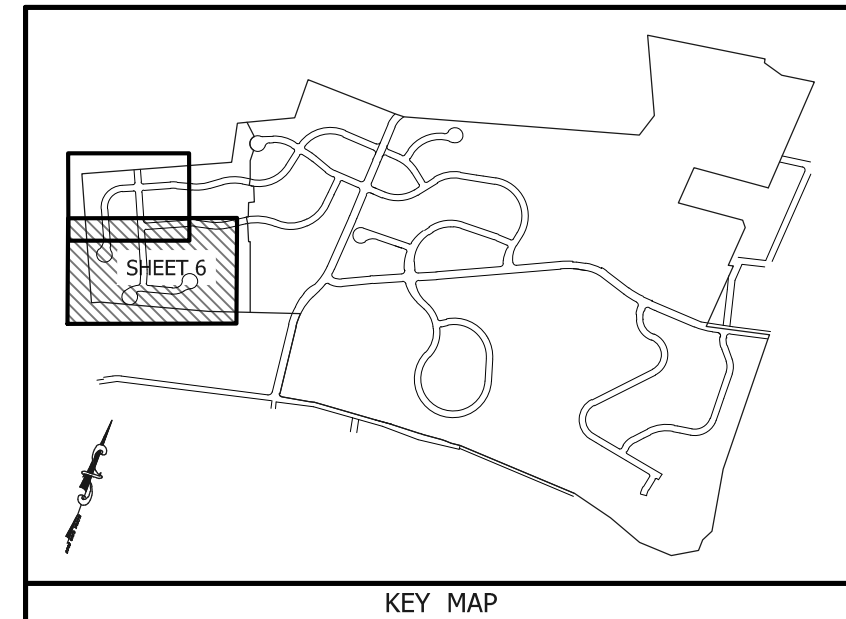


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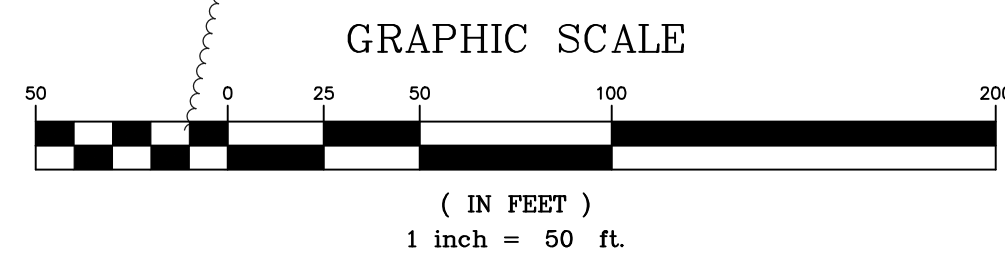
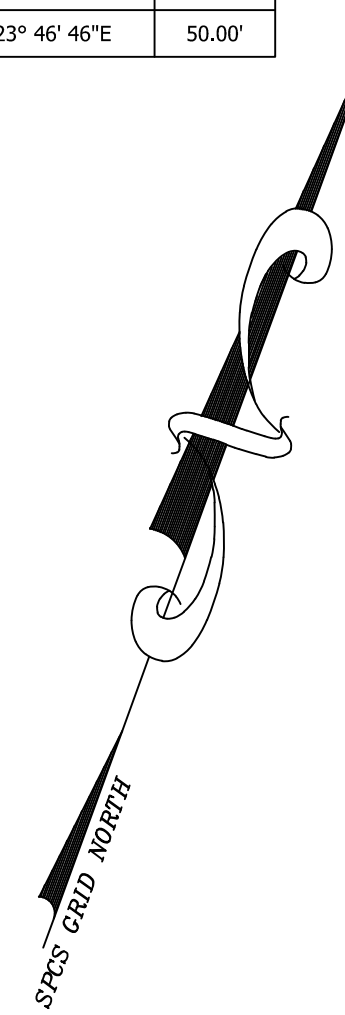
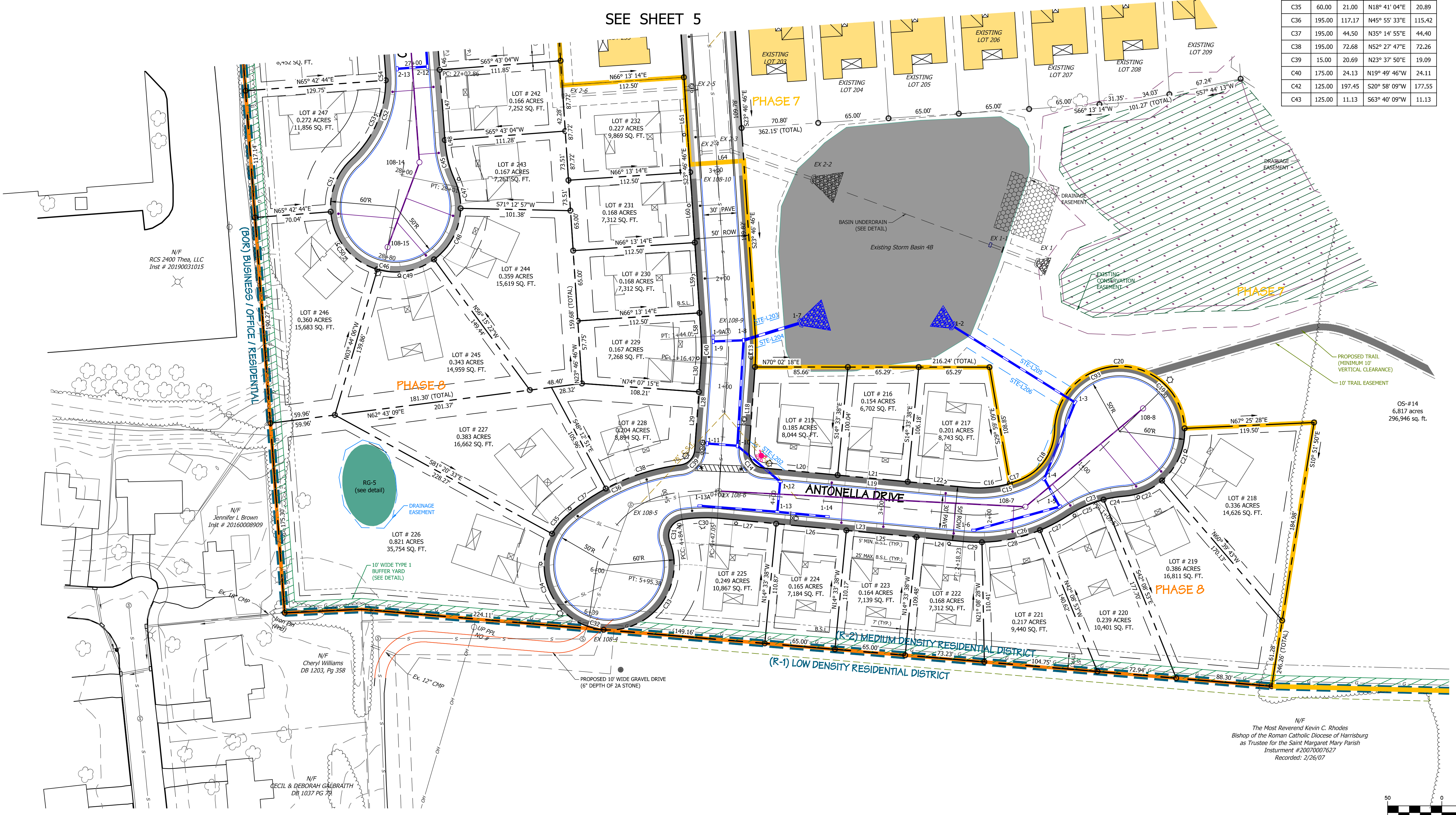
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 SUBDIVISION PLAN



Line #	Direction	Length
STE-L200	N66° 13' 14"E	123.25
STE-L201	N66° 13' 14"E	103.06
STE-L202	S70° 22' 22"E	41.84
STE-L203	N53° 03' 39"E	23.38
STE-L204	N53° 03' 39"E	25.07
STE-L205	N77° 59' 49"W	102.04
STE-L206	N77° 59' 49"W	101.30

Curve #	Radius	Length	Chord Bearing	Chord	Curve #	Radius	Length	Chord Bearing	Chord
C13	225.00	31.02	S19° 49' 46"E	31.00	C44	125.00	186.31	S18° 25' 04"W	169.54
C14	15.00	23.22	S60° 13' 12"E	20.97	C45	100.00	35.54	S34° 27' 51"E	35.36
C15	100.00	50.68	N60° 55' 11"E	50.14	C46	60.00	263.56	S81° 11' 41"W	97.28
C16	100.00	38.72	N64° 20' 51"E	38.48	C47	60.00	27.08	S31° 42' 55"E	26.85
C17	100.00	11.96	N49° 49' 40"E	11.96	C48	60.00	55.01	S07° 28' 48"W	53.10
C18	50.00	57.10	N13° 41' 02"E	54.05	C49	60.00	55.00	S60° 00' 16"W	53.09
C19	60.00	277.16	S66° 41' 55"E	88.71	C50	60.00	72.72	N59° 00' 41"W	68.35
C20	60.00	184.79	N69° 11' 46"E	119.94	C51	60.00	53.75	N01° 22' 26"E	51.97
C21	60.00	54.36	S03° 22' 52"W	52.52	C52	100.00	89.57	N01° 22' 37"E	86.60
C22	60.00	38.01	S47° 29' 12"W	37.38	C53	100.00	81.80	N03° 36' 10"E	79.54
C23	110.00	55.65	S51° 08' 32"W	55.06	C54	100.00	7.77	N22° 03' 22"W	7.77
C24	110.00	19.61	S60° 31' 38"W	19.59	C55	175.00	242.61	N15° 26' 04"E	223.65
C25	110.00	36.04	S46° 02' 03"W	35.88	C56	175.00	21.60	N20° 44' 46"W	21.59
C26	150.00	101.55	S56° 02' 39"W	99.62	C57	175.00	56.02	N08° 02' 24"W	55.78
C27	150.00	29.33	S42° 15' 01"W	29.28	C58	175.00	55.00	N10° 08' 00"E	54.77
C28	150.00	55.00	S58° 21' 20"W	54.69	C59	175.00	55.00	N28° 08' 25"E	54.77
C29	150.00	17.23	S72° 08' 57"W	17.22	C60	175.00	55.00	N46° 08' 50"E	54.77
C30	145.00	35.22	S68° 28' 53"W	35.13	C61	175.00	33.81	N60° 41' 09"E	33.76
C31	15.00	26.90	S10° 09' 13"W	23.44	C62	15.00	23.56	N21° 13' 14"E	21.21
C32	60.00	261.72	S83° 44' 52"W	98.34	C93	60.00	184.79	S69° 11' 46"W	119.94
C33	60.00	121.52	S16° 48' 21"W	101.79	C94	15.00	23.56	N68° 46' 46"W	21.21
C34	60.00	119.20	N48° 15' 27"W	100.54					
C35	60.00	21.00	N18° 41' 04"E	20.89					
C36	195.00	117.17	N45° 55' 33"E	115.42					
C37	195.00	44.50	N35° 14' 55"E	44.40					
C38	195.00	72.68	N52° 27' 47"E	72.26					
C39	15.00	20.69	N23° 37' 50"E	19.09					
C40	175.00	24.13	N19° 49' 46"W	24.11					
C42	125.00	197.45	S20° 58' 09"W	177.55					
C43	125.00	11.13	S63° 40' 09"W	11.13					

Line #	Direction	Length
L18	S15° 52' 45"E	77.34'
L19	N75° 26' 22"E	189.70'
L20	N75° 26' 22"E	68.51'
L21	N75° 26' 22"E	65.00'
L22	N75° 26' 22"E	56.19'
L24	S75° 26' 22"W	43.38'
L25	S75° 26' 22"W	65.00'
L26	S75° 26' 22"W	65.00'
L27	S75° 26' 22"W	51.49'
L41	S66° 13' 14"W	86.38'
L42	S24° 16' 56"E	298.84'
L43	S24° 16' 56"E	10.90'
L44	S24° 16' 56"E	65.00'
L45	S24° 16' 56"E	90.56'
L46	S24° 16' 56"E	65.00'
L47	S24° 16' 56"E	65.00'
L49	N24° 16' 56"W	229.62'
L50	N24° 16' 56"W	57.23'
L51	N24° 16' 56"W	65.00'
L52	N24° 16' 56"W	65.00'
L53	N24° 16' 56"W	42.39'
L54	N66° 13' 14"E	86.38'
L55	N66° 13' 14"E	31.38'
L57	N23° 46' 46"E	100.08'
L58	S23° 46' 46"E	22.25'
L59	S23° 46' 46"E	65.00'
L60	S23° 46' 46"E	65.00'
L61	S23° 46' 46"E	87.72'
L62	S23° 46' 46"E	65.00'
L63	S23° 46' 46"E	56.00'
L64	N66° 13' 14"E	50.00'
L65	S23° 46' 46"E	50.00'



NO.	REVISION	DATE
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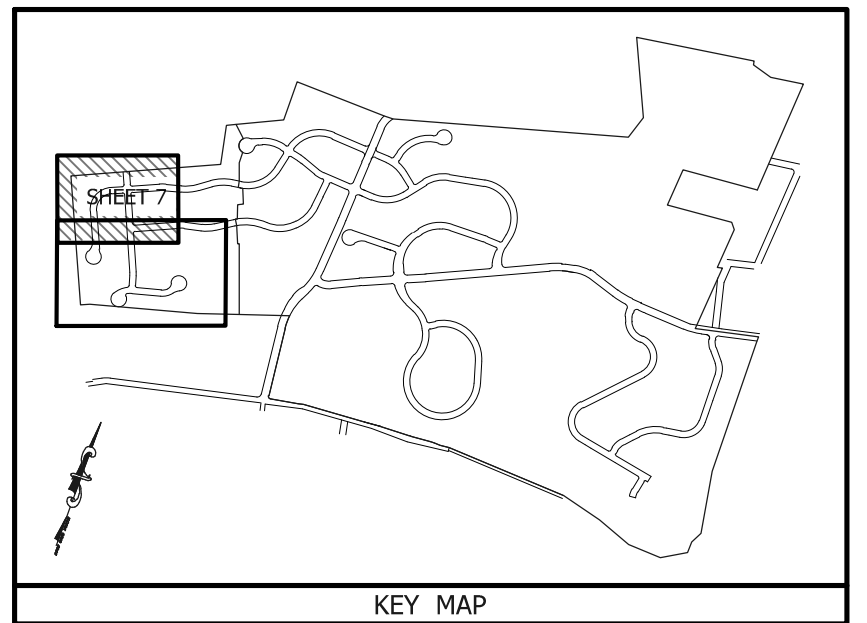
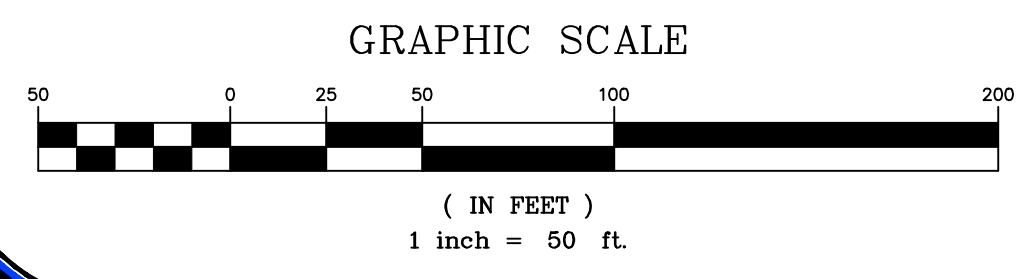
SUBDIVISION PLAN
 FOR
STRAY WINDS FARM PHASE 8
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 222020-04-SUB
 DATE: 5/6/2022
 SHEET: 6 OF 24

6 SUBDIVISION PLAN
 DATE: 5/6/2022 10:47:22 AM
 1:7487.02222020-04-01



SEE SHEET 8



Proposed Conditions Legend

	Proposed Property Line
	Proposed Right-Of-Way
	Proposed Edge Of Pavement
	Proposed Curb
	Proposed Sidewalk
	Proposed Sanitary Sewer Line, MH
	Proposed Storm Sewer Line, Inlet, MH
	Proposed Water Line, Hydrant
	Proposed Minor Contour
	Proposed Major Contour
	NPDES Boundary
	Proposed Roof Drain
	Proposed Sign
	Proposed Light
	Proposed Pedestrian Ramp Location (See Detail)
	Proposed Rip-Rap Apron (See Detail)
	Proposed Spot Elevation
	Proposed Street Tree (See Details)
	Soil Probe

1:10/12/2022 10:52:00 AM C:\Users\jfisher\OneDrive\Desktop\222020-05-GRD\222020-05-GRD.dwg
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 7 GRADING & PCSM PLAN

GRADING & PCSM PLAN
 FOR
STRAY WINDS FARM PHASE 8
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

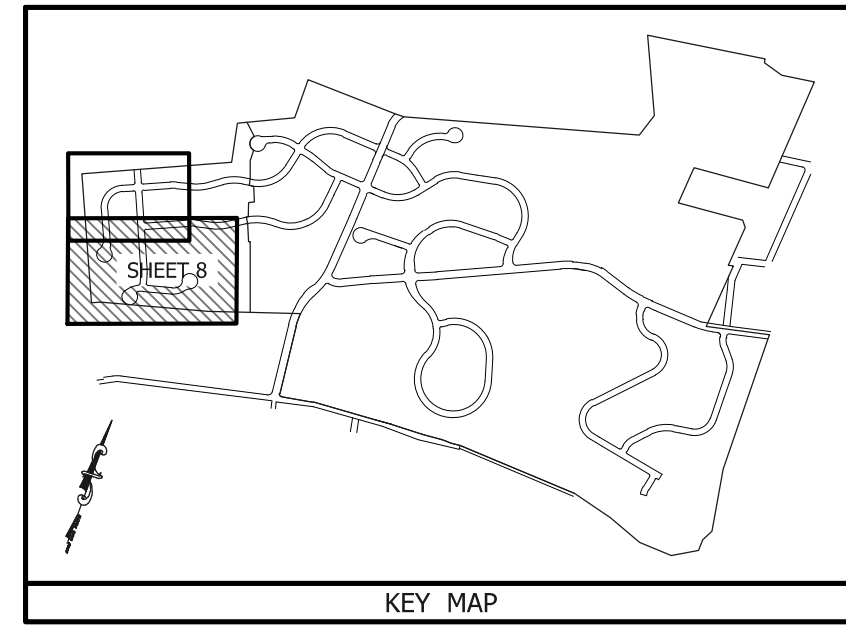
DRAWING ID: 222020-05-GRD
 DATE: 5/6/2022
 SHEET: 7 OF 24



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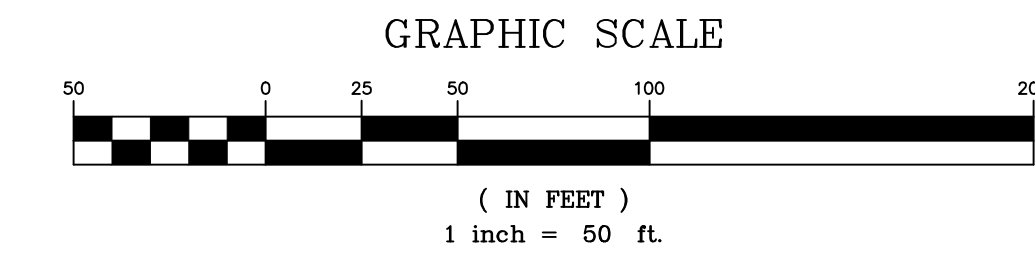
NO.	REVISION	DATE
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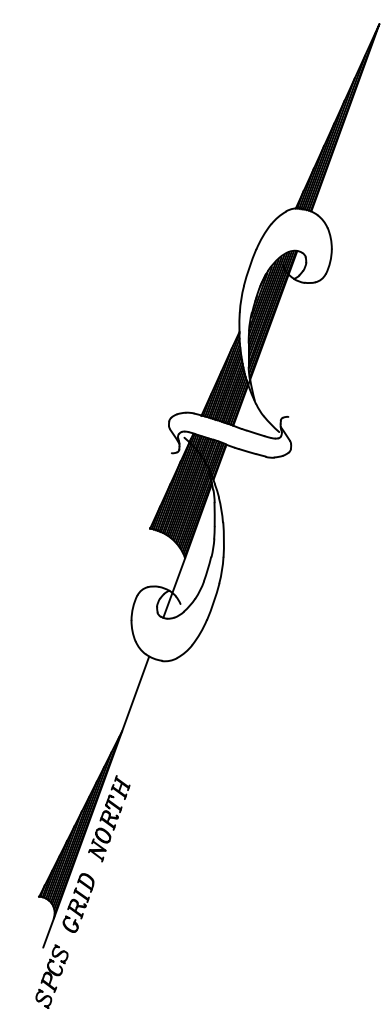
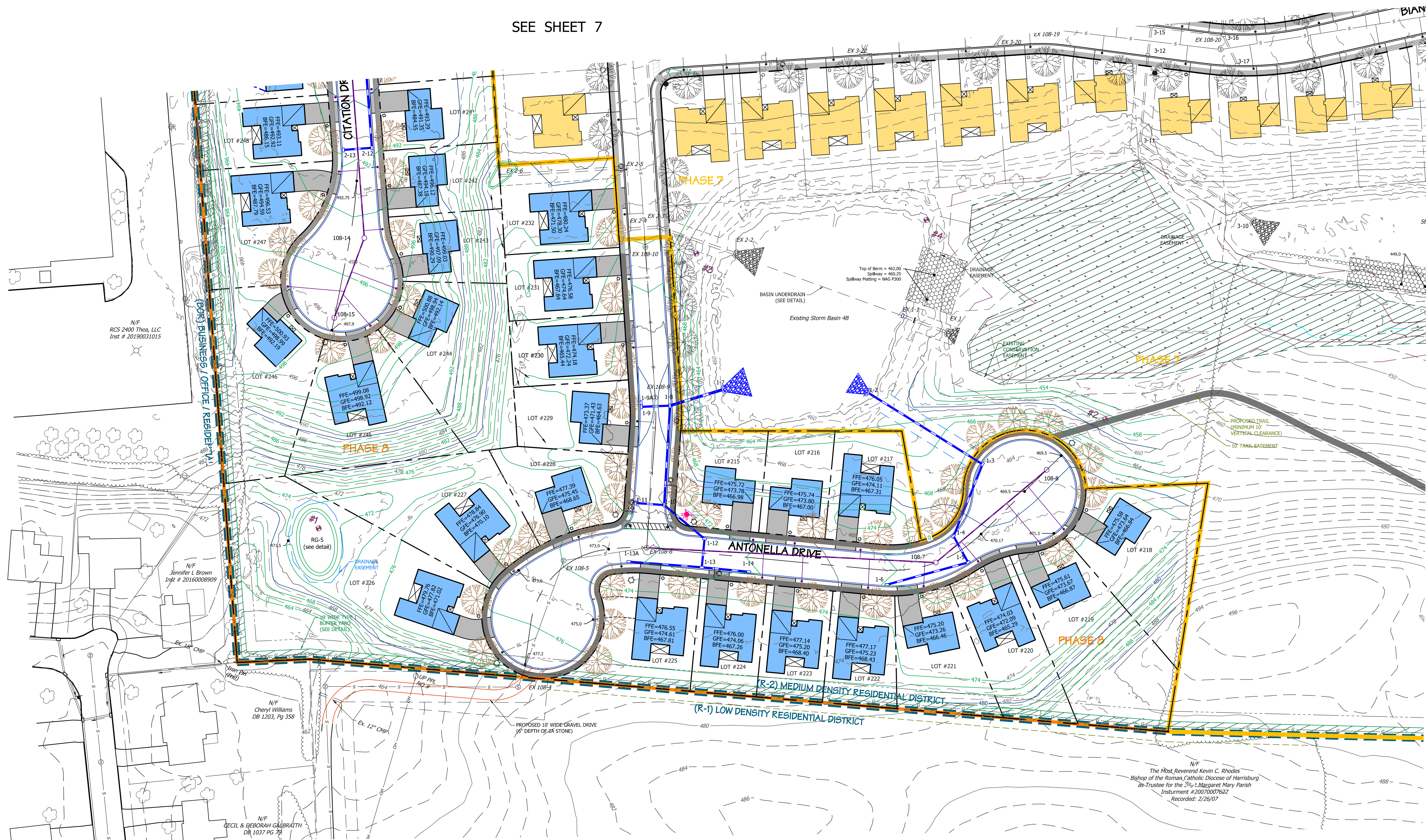


Proposed Conditions Legend

	Proposed Property Line
	Proposed Right-Of-Way
	Proposed Edge Of Pavement
	Proposed Curb
	Proposed Sidewalk
	Proposed Sanitary Sewer Line, MH
	Proposed Storm Sewer Line, Inlet, MH
	Proposed Water Line, Hydrant
	Proposed Minor Contour
	Proposed Major Contour
	NPDES Boundary
	Proposed Roof Drain
	Proposed Sign
	Proposed Light
	Proposed Pedestrian Ramp Location (See Detail)
	Proposed Rip-Rap Apron (See Details)
	Proposed Spot Elevation
	Proposed Street Tree (See Details)
	Soil Probe



SEE SHEET 7



NO.	REVISION	DATE
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GRADING & PCSM PLAN
 FOR
STRAY WINDS FARM PHASE 8
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 222020-05-GRD
 DATE: 5/6/2022
 SHEET: 8 OF 24

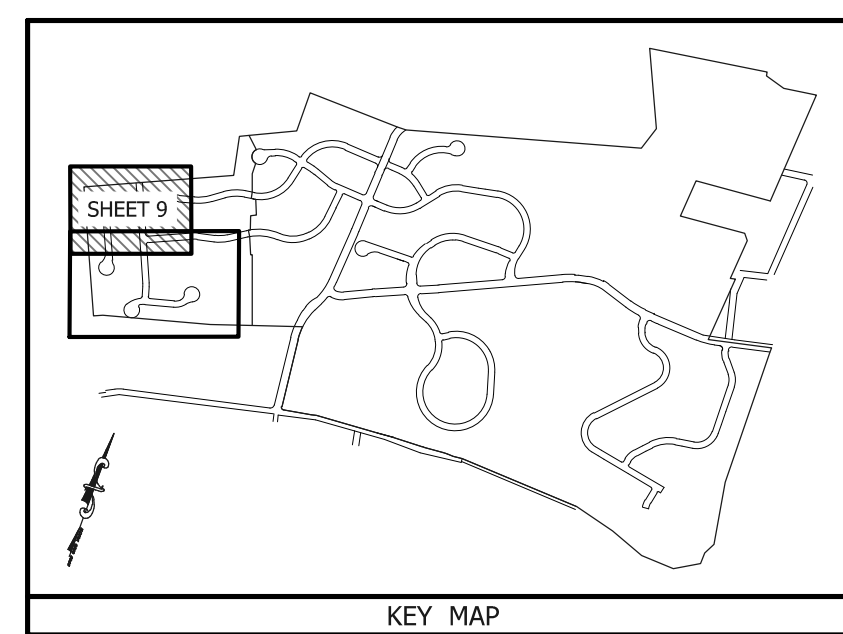
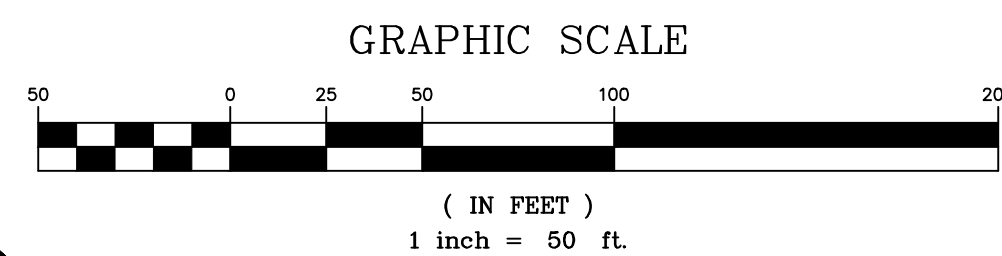
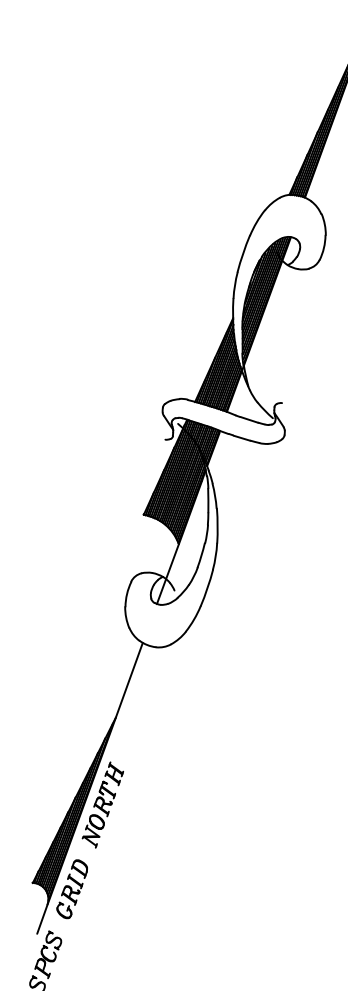
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 2. THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL DATA PROVIDED TO THE ENGINEER.
 3. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY EASEMENTS AND RIGHTS-OF-WAY.
 4. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY UTILITIES INFORMATION.
 5. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY SURVEYING INFORMATION.
 6. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY LEGAL OPINIONS.
 7. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY CONTRACTS.
 8. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INSURANCE.
 9. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY BONDS.
 10. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY FEES.
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 12. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY RECORDS.
 13. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY ARCHIVES.
 14. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY BACKUPS.
 15. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY RESTORES.
 16. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY RECOVERIES.
 17. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY MIGRATIONS.
 18. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY DELETIONS.
 19. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY ARCHIVES.
 20. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY BACKUPS.
 21. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY RESTORES.
 22. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY RECOVERIES.
 23. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY MIGRATIONS.
 24. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY DELETIONS.



SEE SHEET 10

N/F
RCS 2400 Thea, LLC
Inst # 20190031015

N/F
Central Pennsylvania
Business School Inc.
DB 533, Pg 56



Proposed Conditions Legend

	Proposed Property Line
	Proposed Right-Of-Way
	Proposed Edge Of Pavement
	Proposed Curb
	Proposed Sidewalk
	Proposed Water Line, Hydrant
	Proposed Sign
	Proposed Street Light
	Proposed Decorative Light Post
	Proposed Pedestrian Ramp Location (See Detail)
	Proposed Street Tree (See Details)
	Proposed Paint Crosswalk

TRAFFIC SIGN CHART

PLAN SYMBOL	PENNDOT DESIGNATION	SIGN DESCRIPTION	SIZE
	R1-1	STOP	30" X 30"
	R2-1	25 MPH SPEED LIMIT	24" X 30"
	R4-7	KEEP RIGHT	24" X 30"
	W14-2	NO OUTLET	30" X 30"
	D3-1	STREET NAME	VARIES

NOTE: SIGN MATERIALS, COLORS, LETTERING, HEIGHT, CLEARANCE, POST AND MOUNTING SHALL CONFORM TO PENNDOT PUBLICATION TITLE 67, CHAPTER 212: "OFFICIAL TRAFFIC-CONTROL DEVICES".

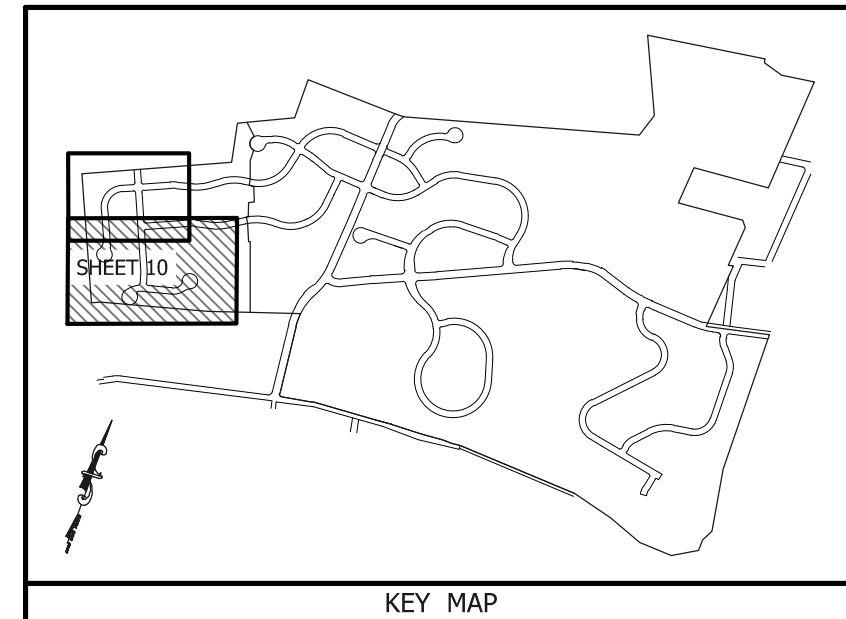
STREETSCAPE PLAN
FOR
STRAY WINDS FARM PHASE 8
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA



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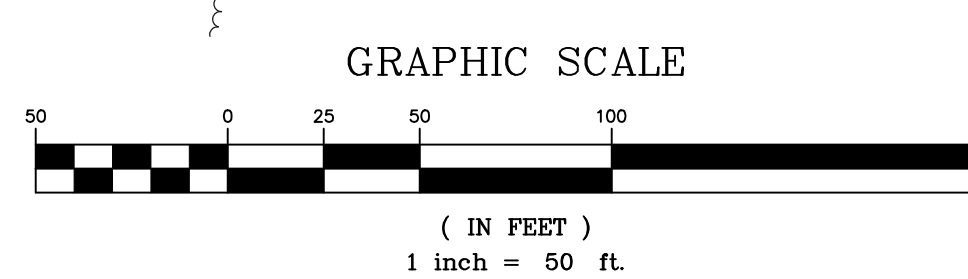
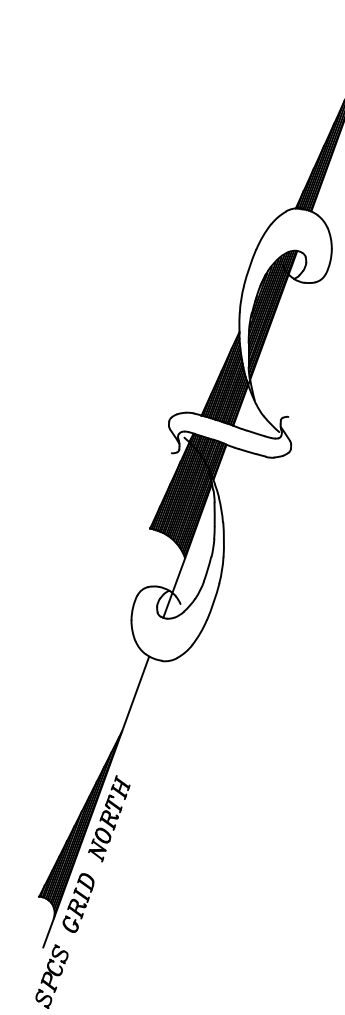
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DRAWING ID:
222020-06-STREETSCAPE
DATE: 5/6/2022
SHEET: 9 OF 24



Proposed Conditions Legend

	Proposed Property Line
	Proposed Right-Of-Way
	Proposed Edge Of Pavement
	Proposed Curb
	Proposed Sidewalk
	Proposed Water Line, Hydrant
	Proposed Sign
	Proposed Street Light
	Proposed Decorative Light Post
	Proposed Pedestrian Ramp Location (See Detail)
	Proposed Street Tree (See Details)
	Proposed Paint Crosswalk



NO.	REVISION	DATE
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STREETSCAPE PLAN
 FOR
STRAY WINDS FARM PHASE 8
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:
222020-06-STREETSCAPE
 DATE: 5/6/2022
 SHEET: 10 OF 24

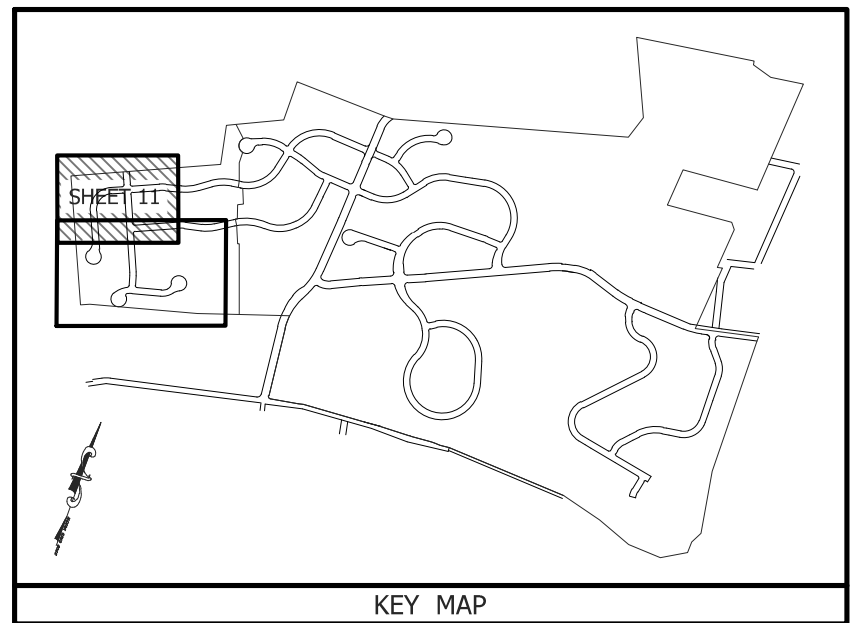
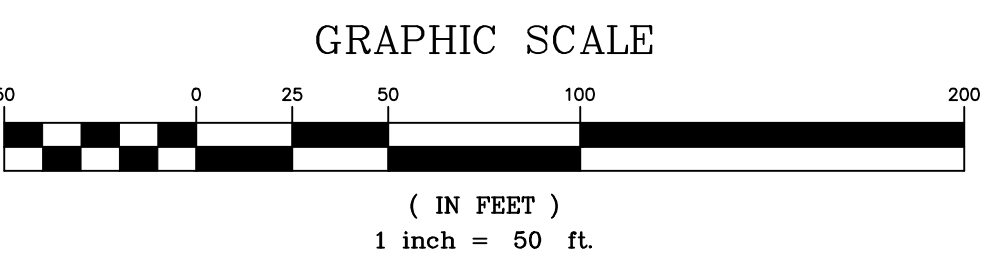
10 STREETScape PLAN



SEE SHEET 12

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage	Efficiency
	Streetlight	7	Cyclone Lighting	CART4x-GAC-3-34W-3K	Cartier Post Top	34 LEDs - 350 mA	1	3722	0.9	38	100%
	LP	40	PROGRESS	P5445-3130K9	Outdoor Post Lantern (7' x 4.5' cone shape fixture)	20 - NICHIA 3000K LEDs (9W -HAL Module)	1	356	0.88	7.5	100%

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Intersection		1.2 fc	2.1 fc	0.6 fc	3.5:1	2.0:1
Street		0.1 fc	1.8 fc	0.0 fc	N/A	N/A



LIGHTING PLAN
FOR
STRAY WINDS FARM PHASE 8
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:
222020-07-LIGHT
DATE: 5/6/2022
SHEET: 11 OF 24

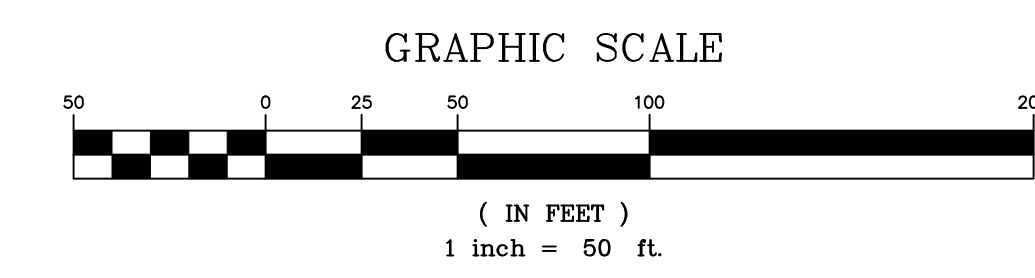
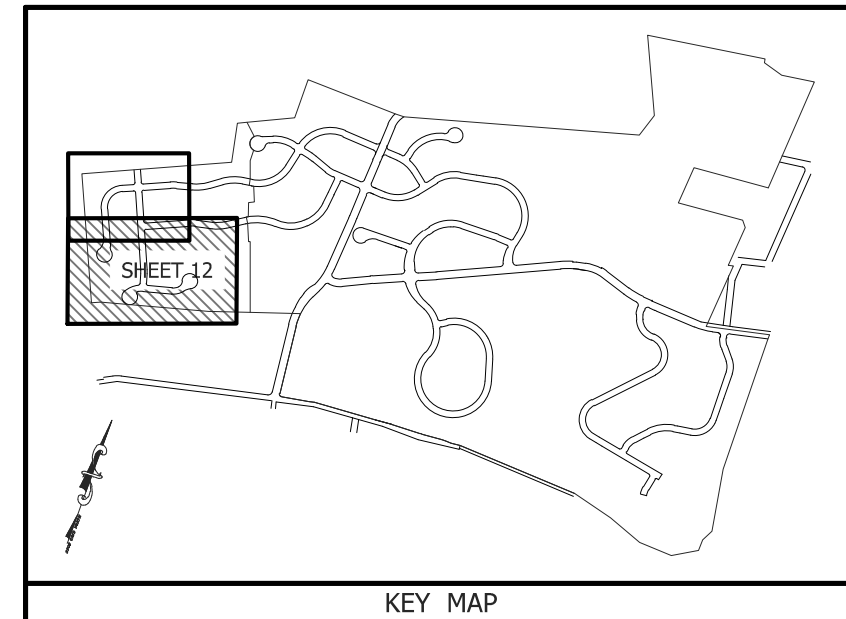


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I:\Projects\222020-07-LIGHT\Drawings\222020-07-LIGHT-11.dwg
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 11 LIGHTING PLAN



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LIGHTING PLAN
 FOR
STRAY WINDS FARM PHASE 8
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 222020-07-LIGHT
 DATE: 5/6/2022
 SHEET: 12 OF 24

OUTDOOR LIGHTING

Traditional

LUMINAIRE: Traditional, black

FIXTURE SIZE: 2,600 lumen (36 watt) or 3,800 lumen (53 watt)

FIXTURE TYPE: Light-Emitting Diode (LED)

POLE: Black fiberglass, round, 14 feet above ground, directly embedded 3 feet in the ground

ALTERNATE POLE: 14 foot round black steel or spun aluminum, or 11 or 13 foot black boulevard

ELECTRIC SUPPLY: Underground

RATE: Low-mount underground, Rate Schedule SLE Light-Emitting Diode (LED)

Want to know more about the PPL Electric Utilities Outdoor Lighting Program? Call your PPL Electric Utilities representative or PPL Electric Utilities Customer Service Business Accounts 1-888-220-9991, option 4 on IVR during business hours 8 a.m. to 5 p.m.

Incandescent	Westport		Outdoor
	White	Black	
Catalog No.	-30	-31	Type
P5445			-30 -31 P5445
	Finish	Lamping	Dimensions (inches)
	White Black	1 (m) 100w	A B
			9 16-114

Specifications:

General:

- Clear seeded glass.
- Ribbed details with ribbed finials
- Die cast aluminum construction
- Painted finishes
- Companion chain hung, and wall units

Mounting:

- Post mount outdoor
- Fits a 3" post or pedestal mount (order separately)

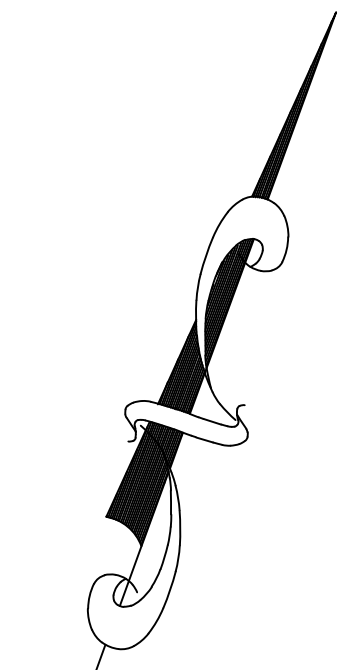
Electrical:

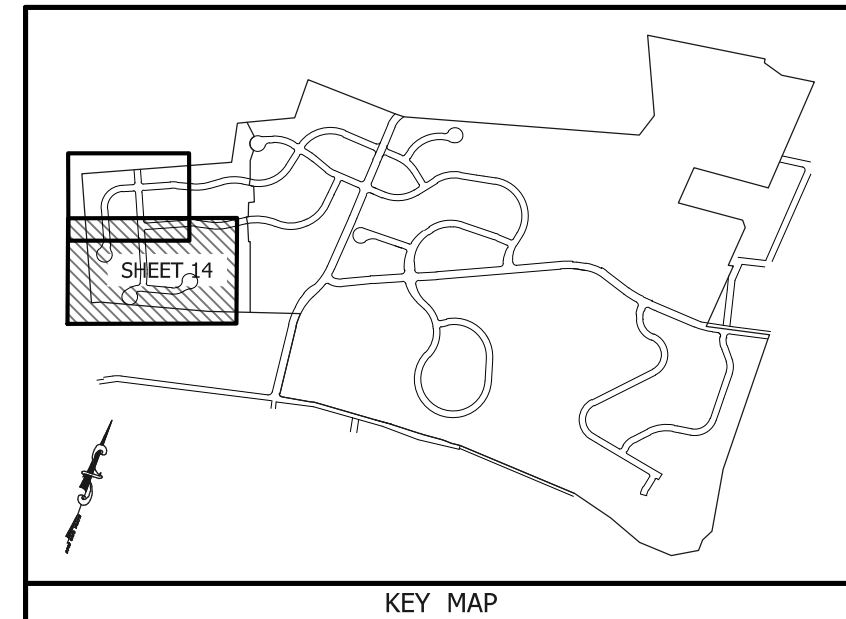
- Ceramic medium based sockets
- Pre-wired

Labeling:

- UL-CUL listed for wet location.

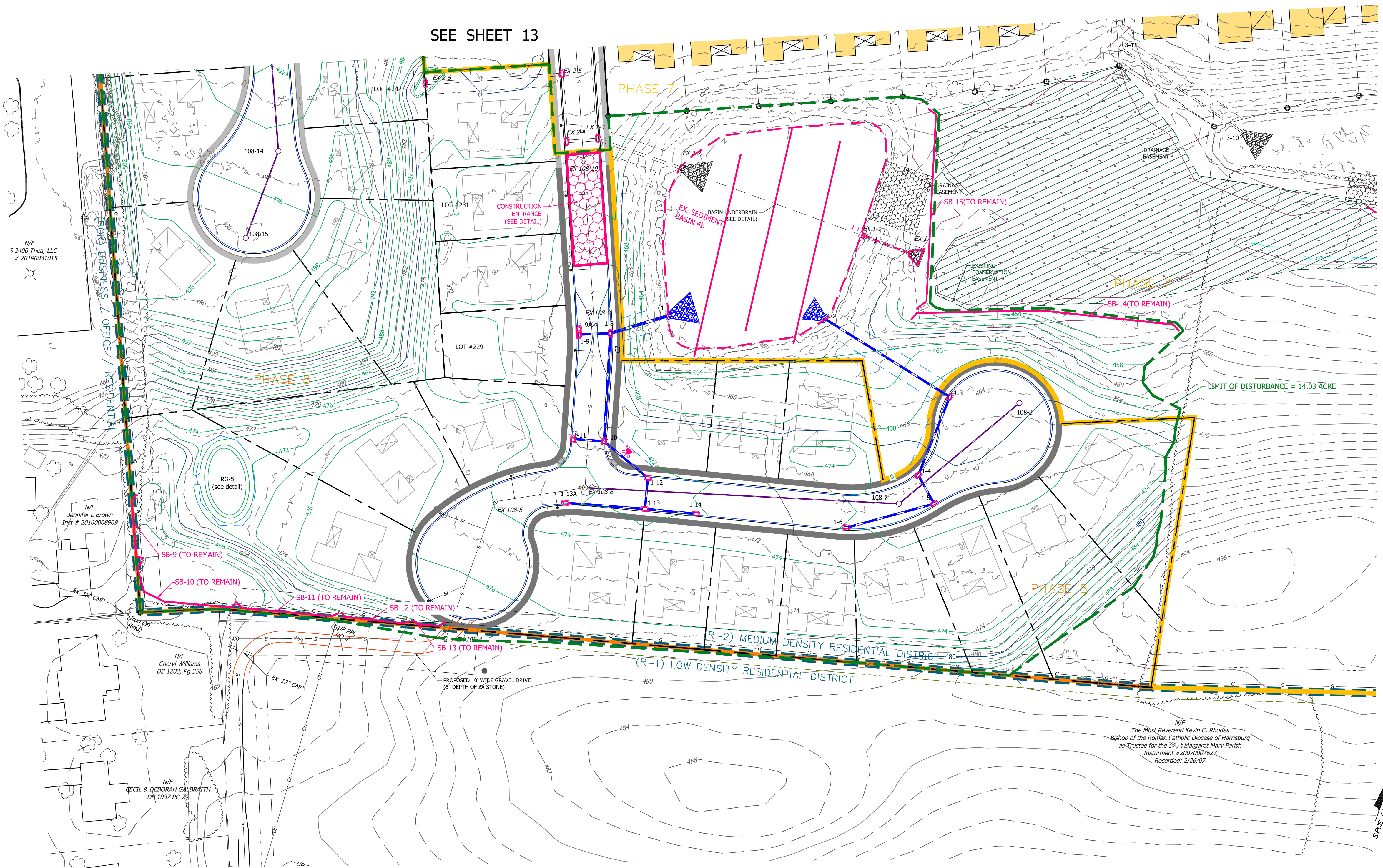
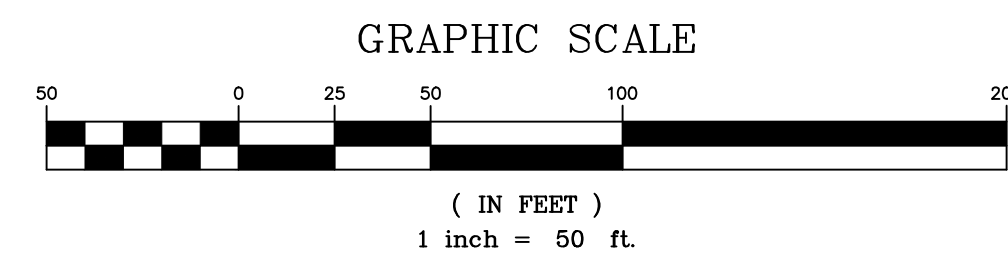
INDIVIDUAL LOT DECORATIVE LIGHT POST
 *As shown or equivalent lighting fixtures to be used in all yards.





Proposed Conditions Legend

	Existing Minor Contour
	Existing Major Contour
	Existing Treeline
	Proposed Minor Contour
	Proposed Major Contour
	Limit of Disturbance/NPDES Boundary
	Proposed Silt Sock
	Proposed Inlet Protection
	Existing Wetlands
	Conservation Easement



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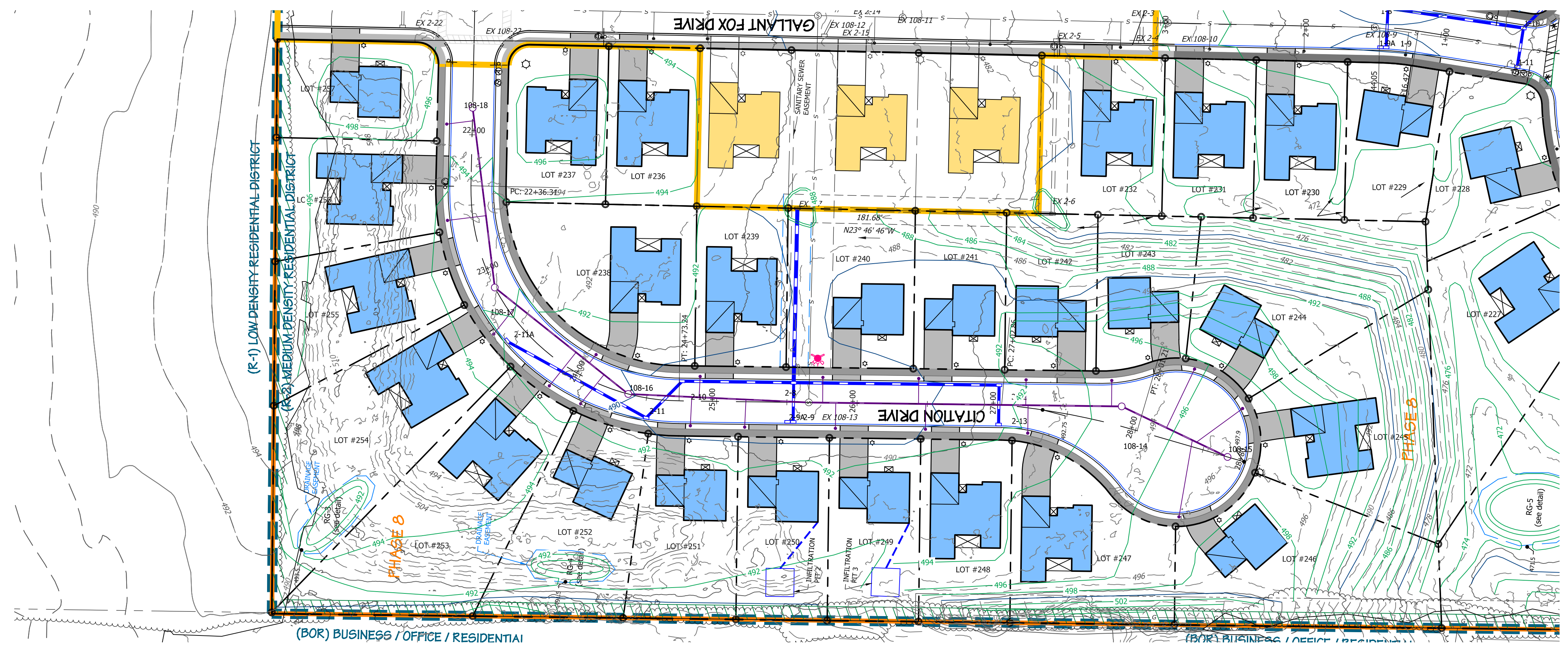
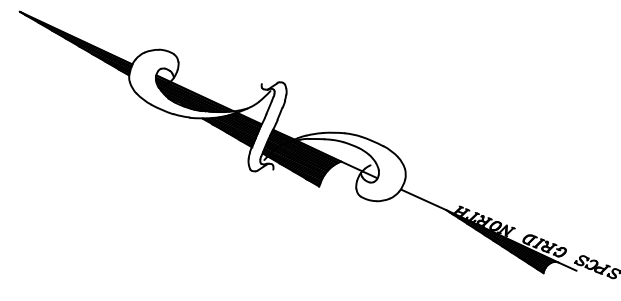
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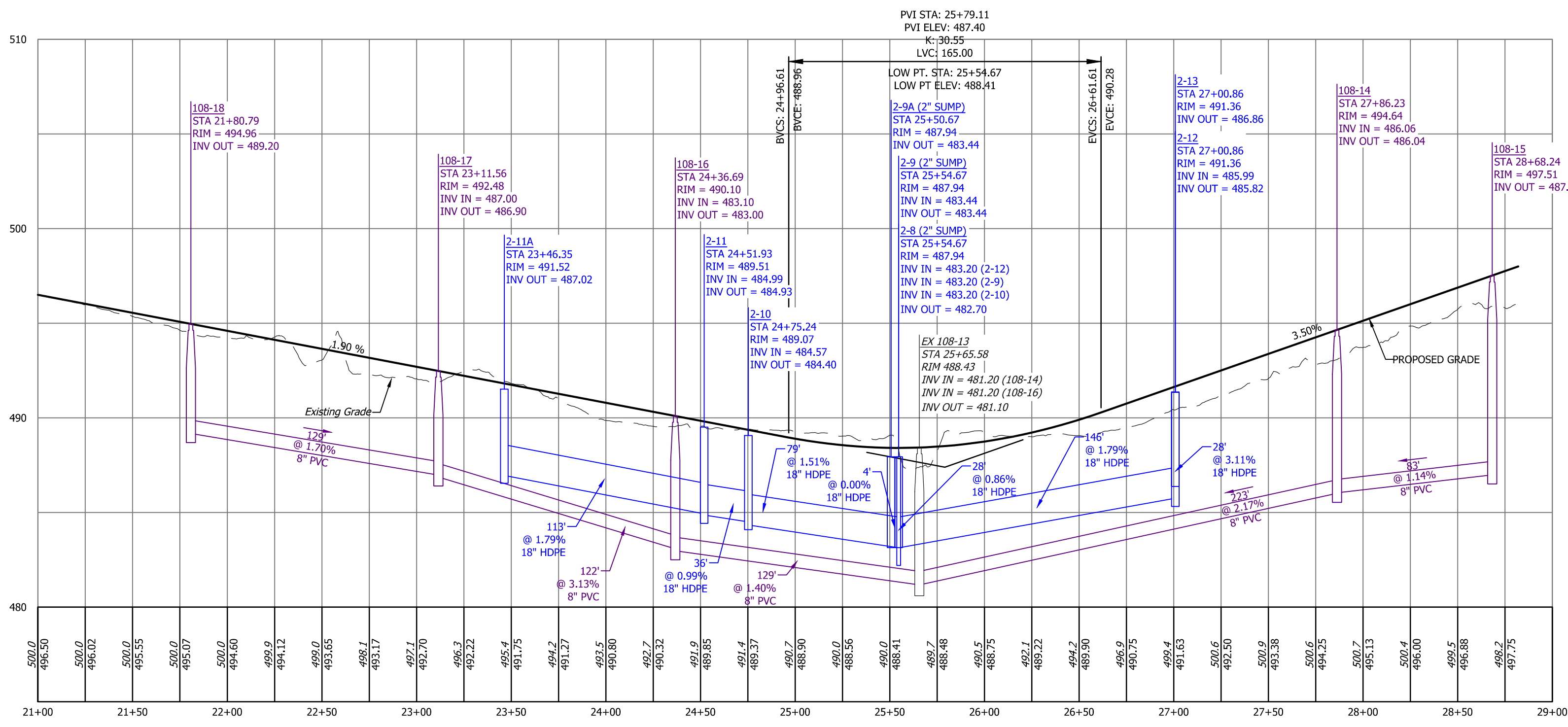
EROSION & SEDIMENT CONTROL
 FOR
STRAY WINDS FARM PHASE 8
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:
 222020-08-ENS
 DATE: 5/6/2022
 SHEET: 14 OF 24

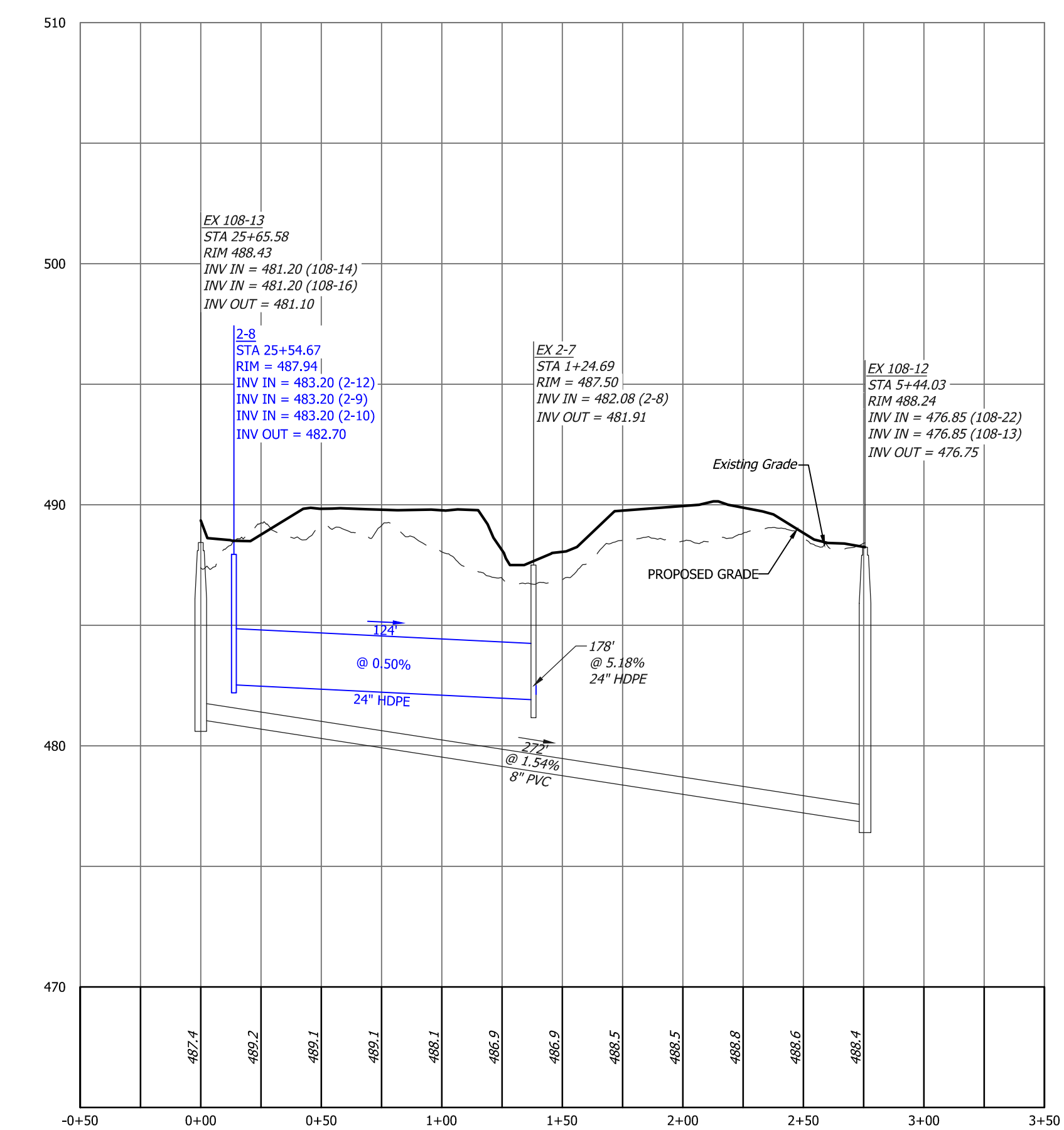
14 EROSION & SEDIMENT CONTROL
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 R. J. FISHER & ASSOCIATES, INC.



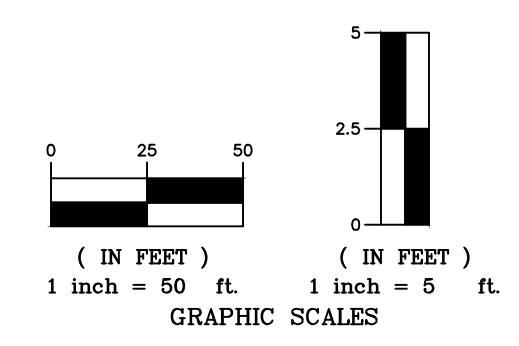
Plan View Of Citation Drive
Scale: 1" = 50'



Profile View Of Citation Drive Sta: 21+00.00 To 29+00.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Profile View Of MH 108-13 to MH 108-12 Sta: -0+50.00 To 3+50.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



CITATION DRIVE PROFILE
FOR
STRAY WINDS FARM PHASE 8
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:
222020-09-PRO
DATE: 5/6/2022
SHEET: 15 OF 24



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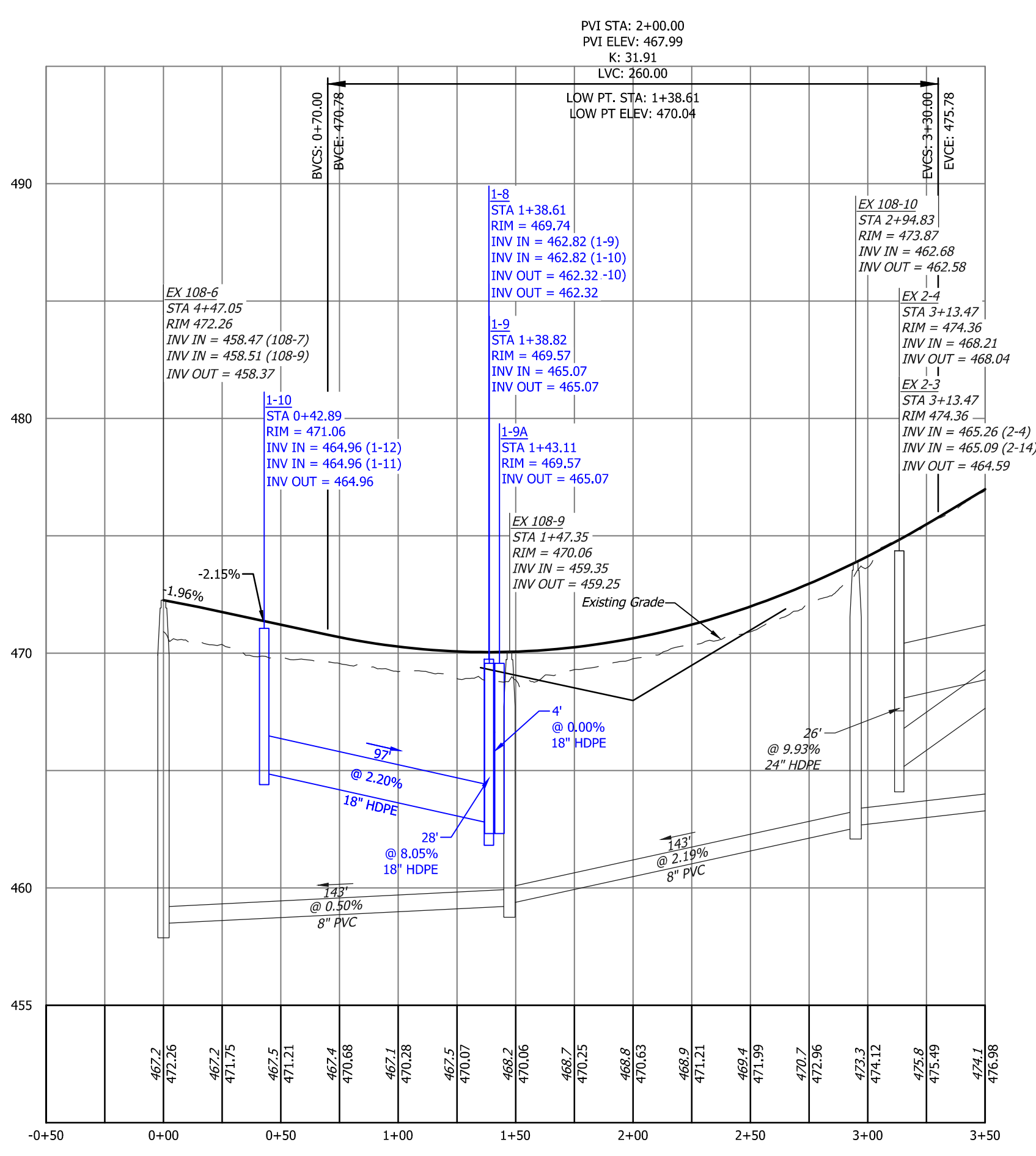
NO.	REVISION	DATE
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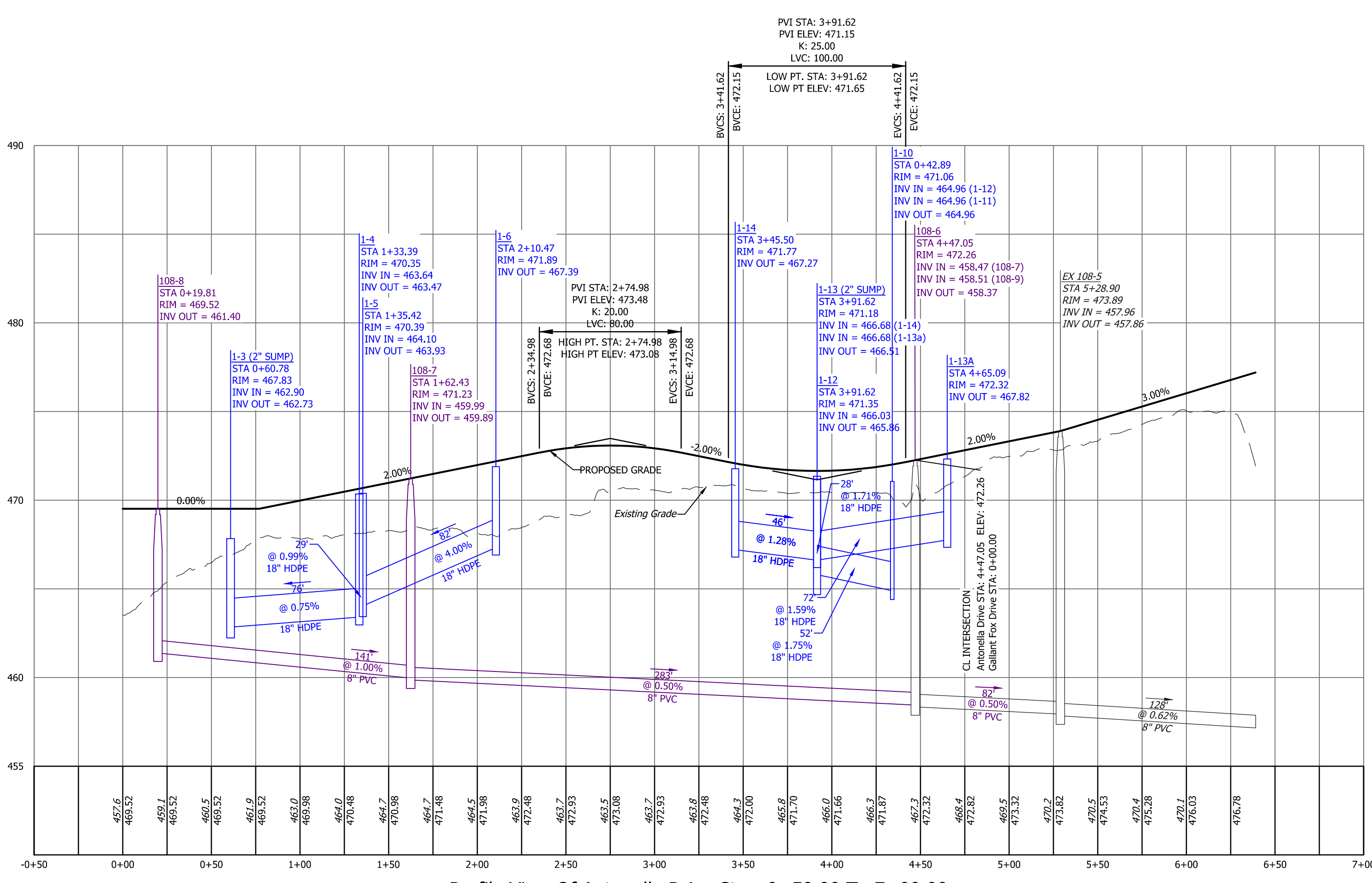
15 CITATION DRIVE PROFILE



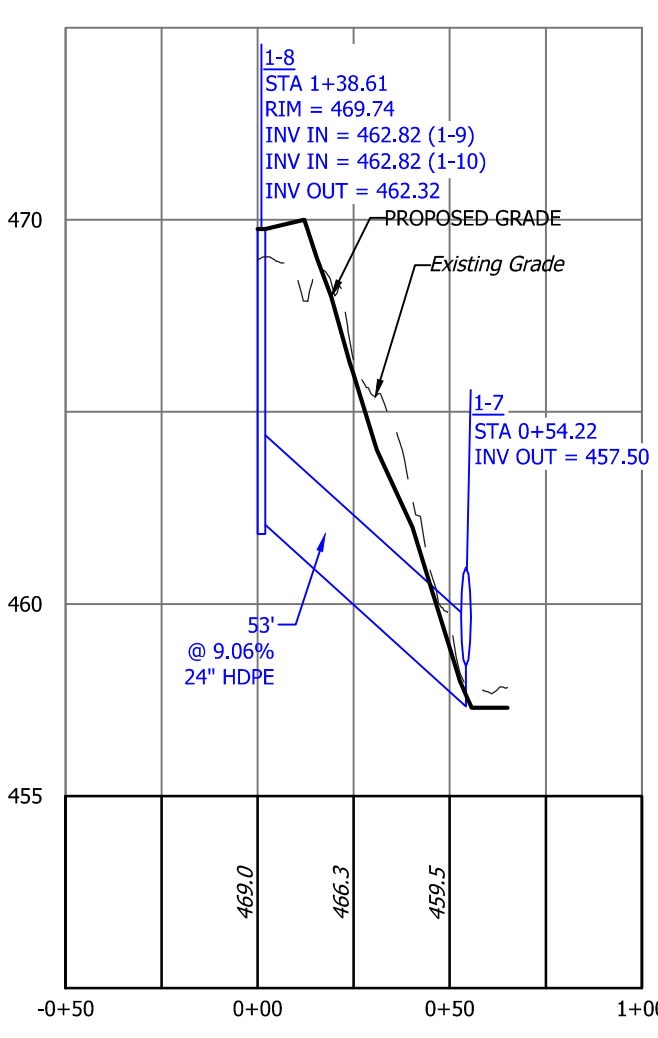
Plan View Of Antonella Way
Scale: 1" = 50'



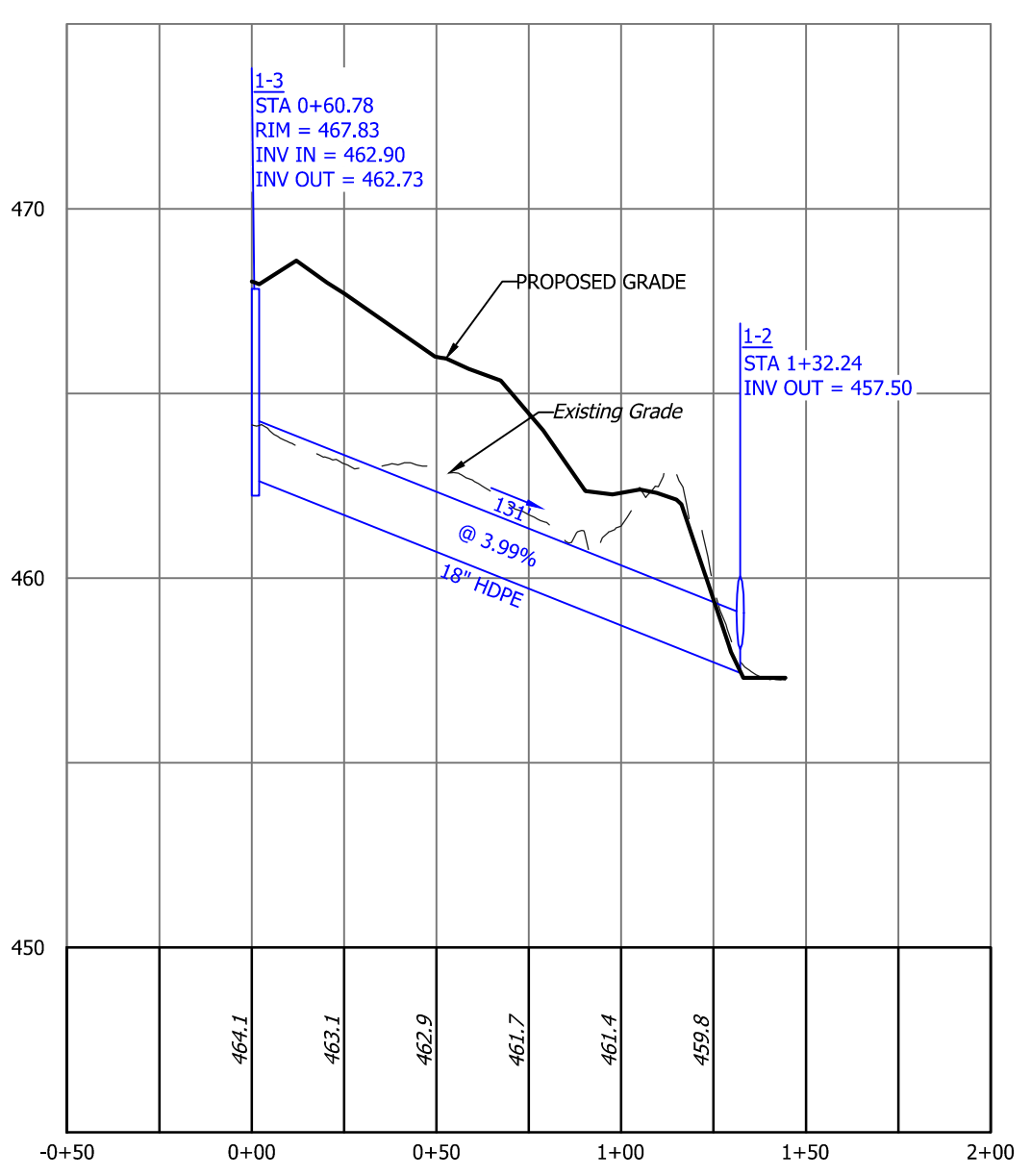
Profile View Of Gallant Fox Drive Sta: -0+50.00 To 3+50.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



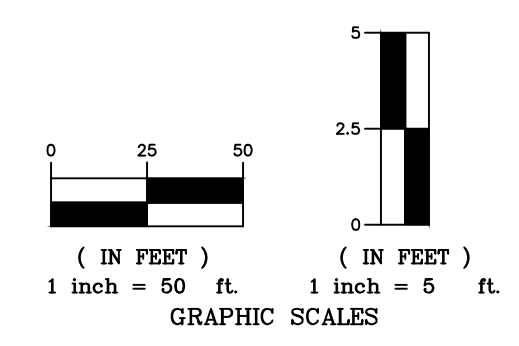
Profile View Of Antonella Drive Sta: -0+50.00 To 7+00.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Profile View Of 1-8 to 1-7 Sta: -0+50.00 To 1+00.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Profile View Of 1-3 to 1-2 Sta: -0+50.00 To 2+00.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



NO.	REVISION	DATE
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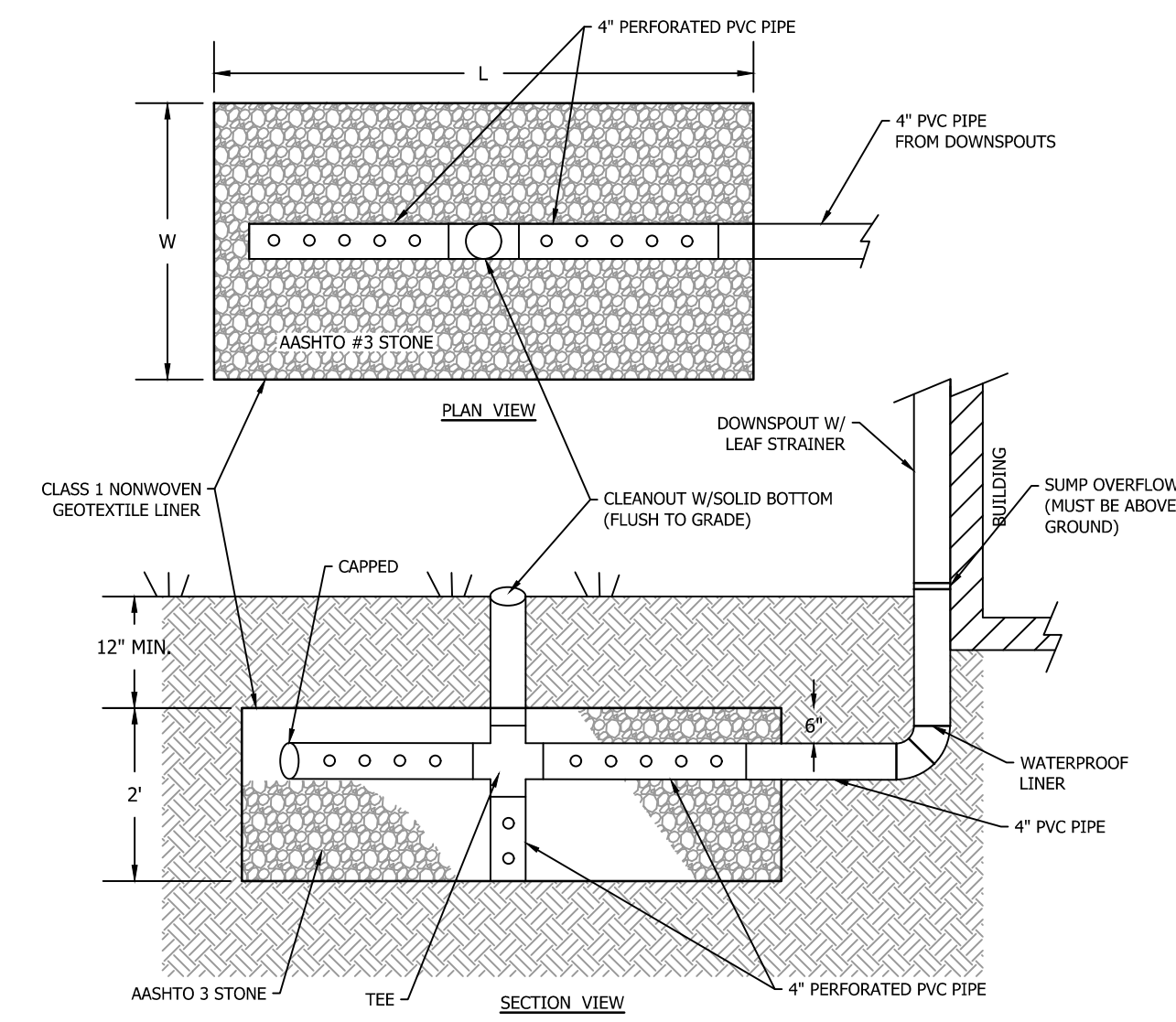


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ANTONELLA WAY PROFILE
 FOR
STRAY WINDS FARM PHASE 8
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 222020-09-PRO
 DATE: 5/6/2022
 SHEET: 16 OF 24

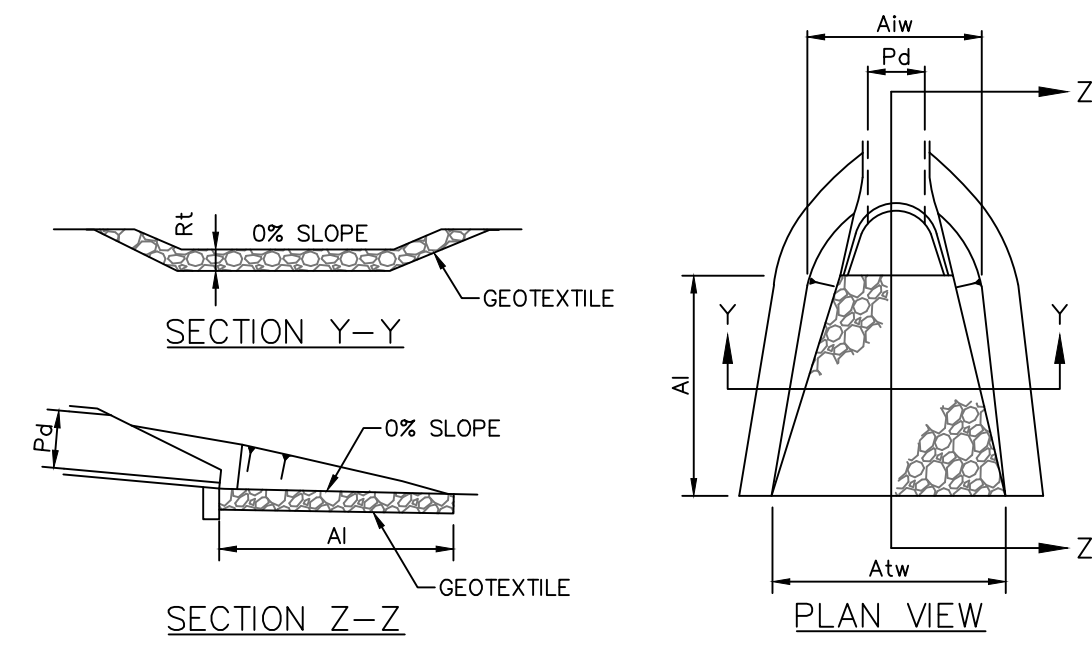
16 ANTONELLA WAY PROFILE



INFILTRATION PIT INFORMATION					
NUMBER	DRAINAGE AREA	LENGTH (L)	WIDTH (W)	DEPTH	40% VOID STORAGE VOL.
INFILTRATION PIT 2	827 s.f.	20 ft.	20 ft.	3 ft.	480 c.f.
INFILTRATION PIT 3	827 s.f.	20 ft.	20 ft.	3 ft.	480 c.f.

- NOTES:
- THE LOCATION OF THE INFILTRATION PITS ARE PROVIDED IN LAND DEVELOPMENT PLAN.
 - PROTECT INFILTRATION AREA FROM COMPACTION PRIOR TO INSTALLATION.
 - EXCAVATE INFILTRATION PIT BOTTOM TO A UNIFORM LEVEL AND UNCOMPACTED GRADE, FREE FROM ROCKS AND DEBRIS. DO NOT COMPACT SUBGRADE. ALL EXCAVATION AND COMPACTION WITHIN THE PIT AREA SHOULD BE PERFORMED WITH THE LIGHTEST PRACTICAL EQUIPMENT. EXCAVATION SHOULD PREFERABLY OCCUR FROM EQUIPMENT PLACED OUTSIDE THE LIMITS OF THE PIT.
 - COMPLETELY WRAP INFILTRATION PIT WITH NONWOVEN GEOTEXTILE FABRIC. GEOTEXTILE ROLLS SHOULD OVERLAP BY A MINIMUM OF 24 INCHES WITHIN THE TRENCH. FOLD BACK AND SECURE EXCESS GEOTEXTILE DURING STONE PLACEMENT.
 - INSTALL CONTINUOUSLY PERFORATED PIPE, OBSERVATION WELLS AND ALL OTHER INFILTRATION PIT STRUCTURES.
 - CONNECT ROOF LEADERS TO STRUCTURES AS INDICATED ON PLANS.
 - PLACE UNIFORMLY GRADED, CLEAN-WASHED AASHTO #3 STONE IN 6-INCH LIFTS, LIGHTLY COMPACTING BETWEEN LIFTS.
 - FOLD AND SECURE NONWOVEN GEOTEXTILE OVER TRENCH WITH MINIMUM OVERLAP OF 12 INCHES.
 - PLACE 12-INCH MINIMUM OF APPROVED TOPSOIL OVER TRENCH, AS INDICATED ON THE PLANS.
 - SEED AND STABILIZE TOPSOIL.
 - A SUMP OVERFLOW MUST BE PROVIDED THROUGH THE CONNECTION BETWEEN THE ROOF DOWNSPOUT AND THE 4" PVC PIPE LEADING TO THE INFILTRATION PIT.
 - INSPECT DOWNSPOUT LEAF STRAINER AFTER ANY RAINFALL EVENT OF 1" OF GREATER FOR ACCUMULATED DEBRIS.

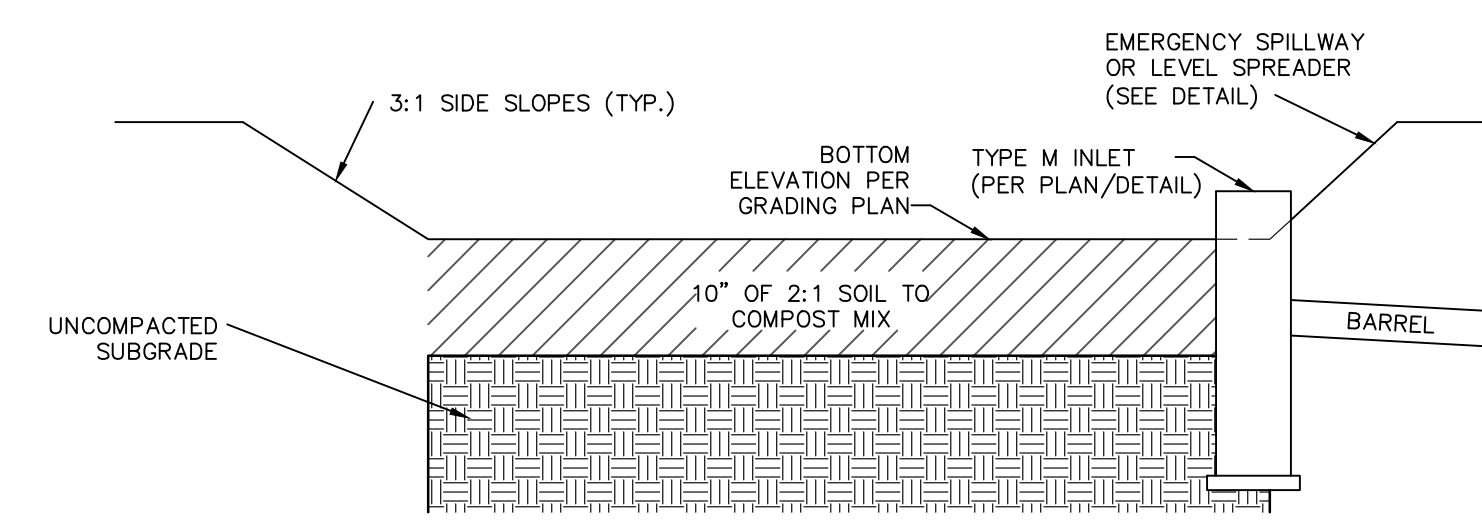
INFILTRATION PIT DETAIL
N.T.S.



OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP		APRON		
		SIZE R _s	THICK. R _t (IN)	LENGTH A _i (FT)	INITIAL WIDTH A _{iw} (FT)	TERMINAL WIDTH A _{tw} (FT)
1	24	R-4	18	11	6	17
1-2	18	R-5	27	18	4.5	22.5
2-2	18	R-6	36	25	4.5	29.5
1-7	18	R-6	36	25	4.5	29.5

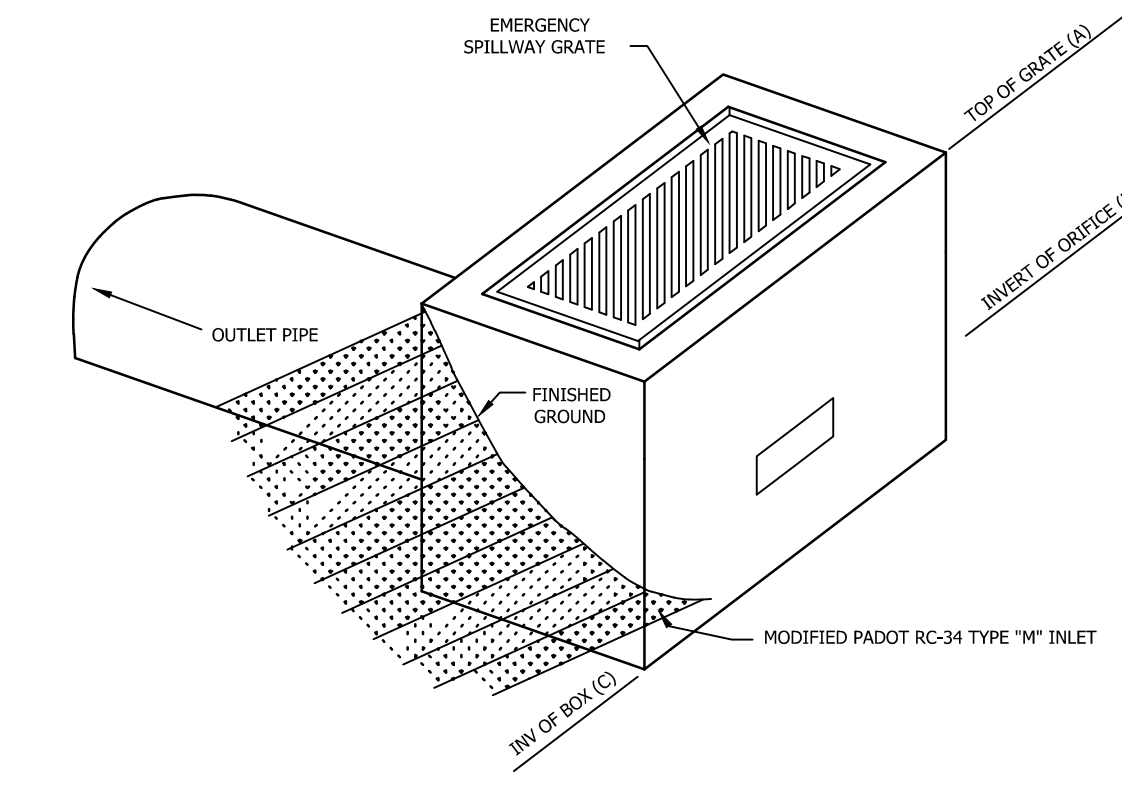
- NOTES:
- ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.
- ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL
NOT TO SCALE



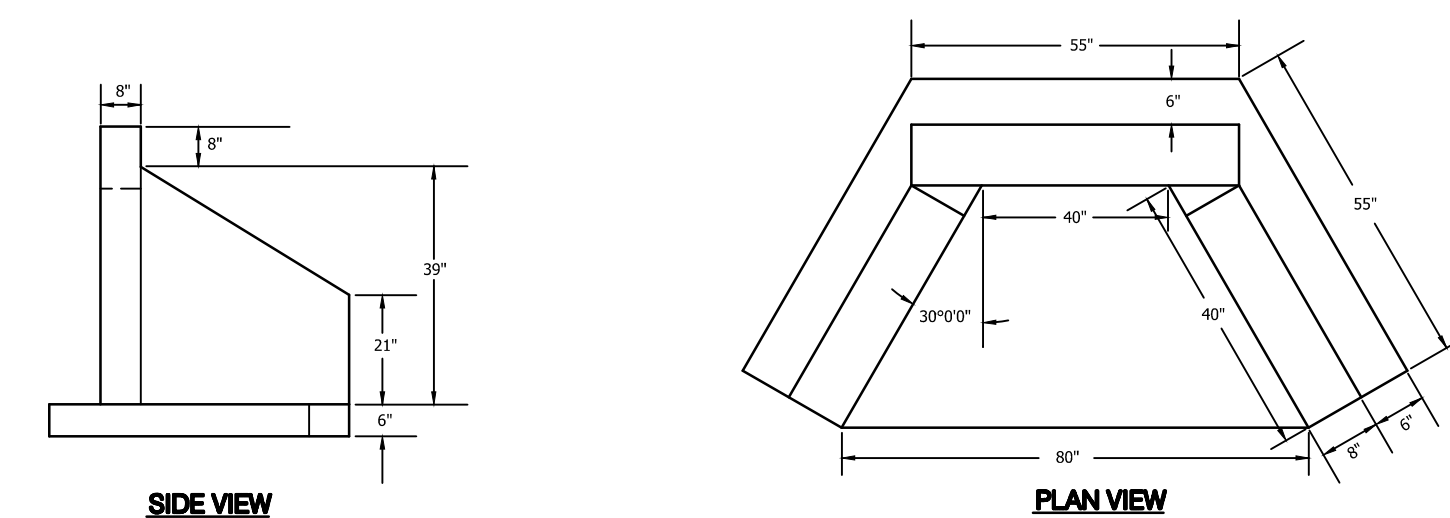
- NOTES:
- EVACUATE INFILTRATION AREA / BASIN TO PROPOSED INVERT DEPTH AND SCARIFY THE EXISTING SOIL SURFACES. DO NOT COMPACT IN-SITU SOILS.
 - INSTALL BASIN UNDERDRAIN AS SHOWN ON PLAN.
 - BACKFILL INFILTRATION AREA / BASIN WITH AMENDED SOIL AS SHOWN ON THE PLANS AND SPECIFICATIONS. OVERFILLING IS RECOMMENDED TO ACCOUNT FOR SETTLEMENT. LIGHT HAND TAMPING IS ACCEPTABLE IF NECESSARY.
 - PRESOAK THE PLANTING SOIL PRIOR TO PLANTING VEGETATION TO AID IN SETTLEMENT.
 - COMPLETE THE FINAL GRADING TO ACHIEVE PROPOSED DESIGN ELEVATIONS, LEAVING SPACE FOR UPPER LAYER OF COMPOST, MULCH OR TOPSOIL AS SPECIFIED ON PLANS.
 - PLANT VEGETATION ACCORDING TO PLANTING PLAN.
 - MULCH AND INSTALL EROSION PROTECTION AT SURFACE FLOW ENTRANCES WHERE NECESSARY.
- SOIL AMENDMENT SPECIFICATIONS:**
- SOIL AMENDMENT MEDIA MAY CONSIST OF COMPOST (CHOPPED STRAW, LEAVES, GRASS CLIPPINGS AND OTHER PLANT REFUSE), COMPOSTED OR DRIED MANURES, WOOD PRODUCTS (SAWDUST, WOOD SHAVINGS, SHREDDED WOOD PULVERIZED BARK AND WOOD CHIPS), PEAT MOSS, MUSHROOM SOIL, OR SAND.
 - COMPOST SHOULD BE ADDED AT A RATE OF 2:1 (SOIL:COMPOST).
 - ON-SITE TOPSOILS CAN BE PROPERLY STOCKPILED AND REUSED FOR SOIL PORTION OF THE 2:1 SOIL:COMPOST MIX.

RAIN GARDEN / INFILTRATION BASIN DETAIL
NOT TO SCALE

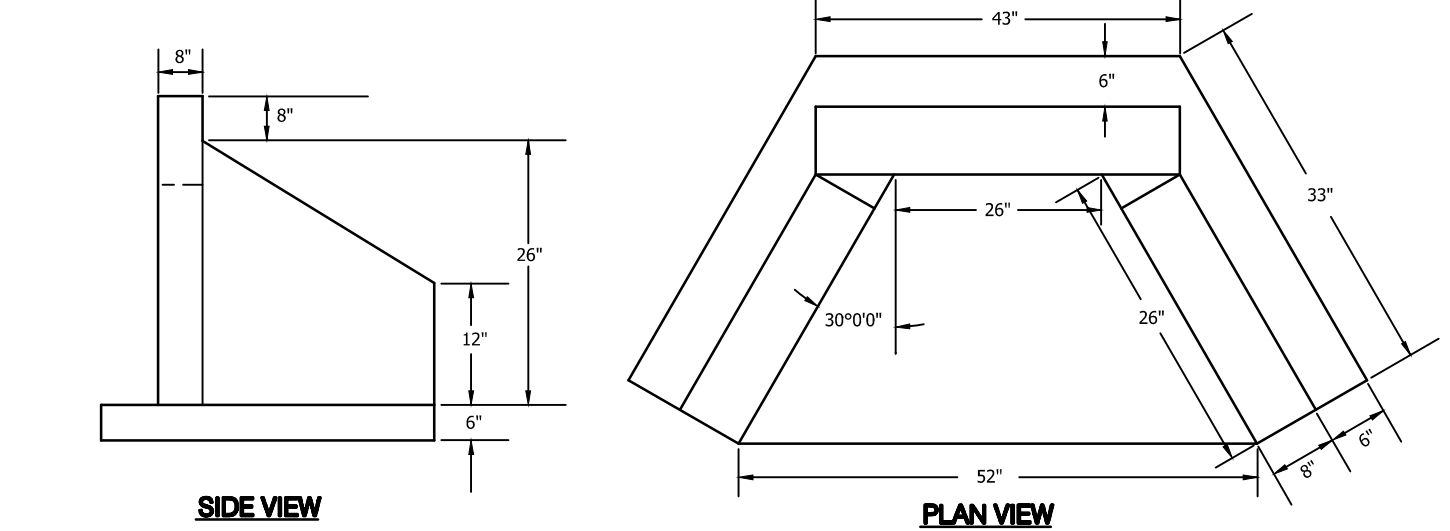


DETENTION BASIN OUTLET STRUCTURE				
DETENTION BASIN #	A (FT)	B (FT)	C (FT)	Orifice Size
4b	459.8	458.7	456.9	12" x 24"

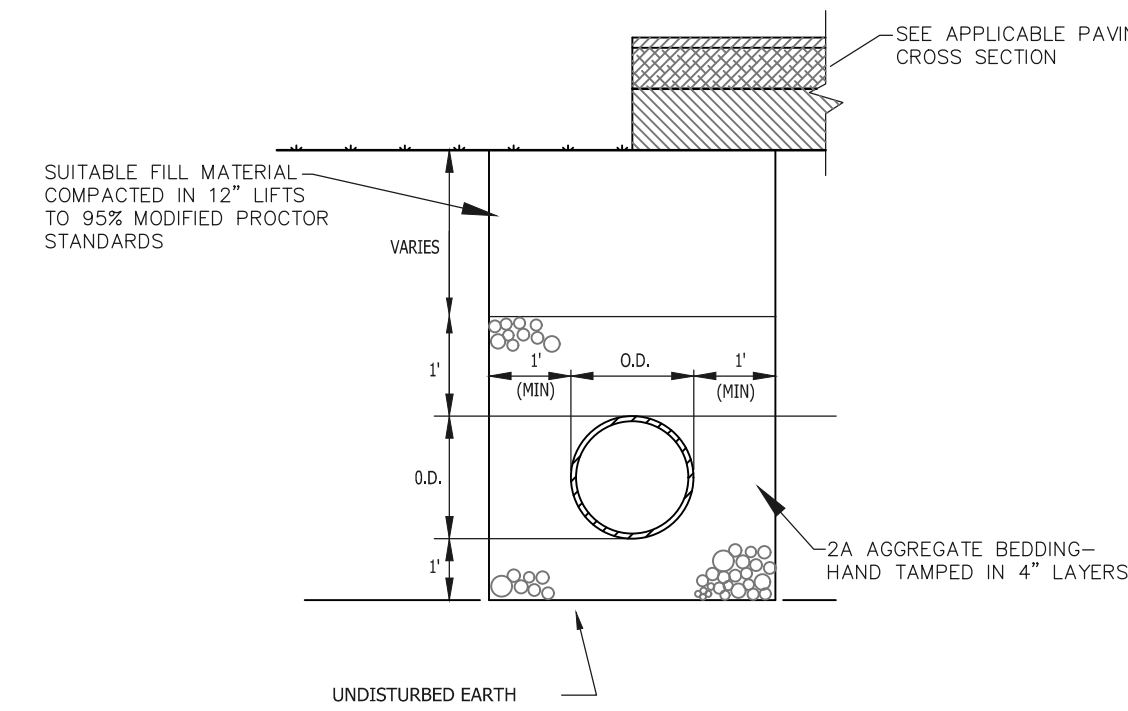
INFILTRATION BASIN OUTLET STRUCTURE
N.T.S.



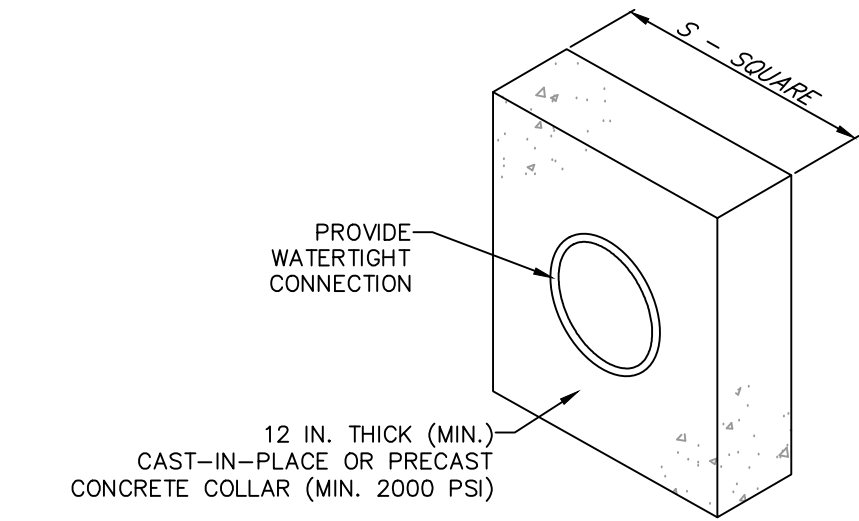
TYPE D-W ENDWALL (MAX. PIPE SIZE 36\"/>



TYPE D-W ENDWALL (MAX. PIPE SIZE 21\"/>



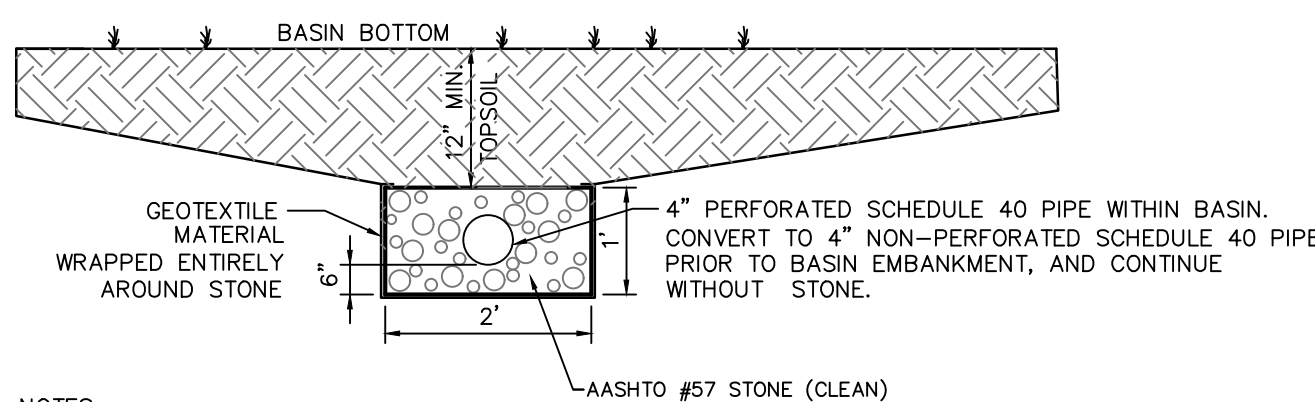
STORM SEWER TRENCH IN STREET
N.T.S.



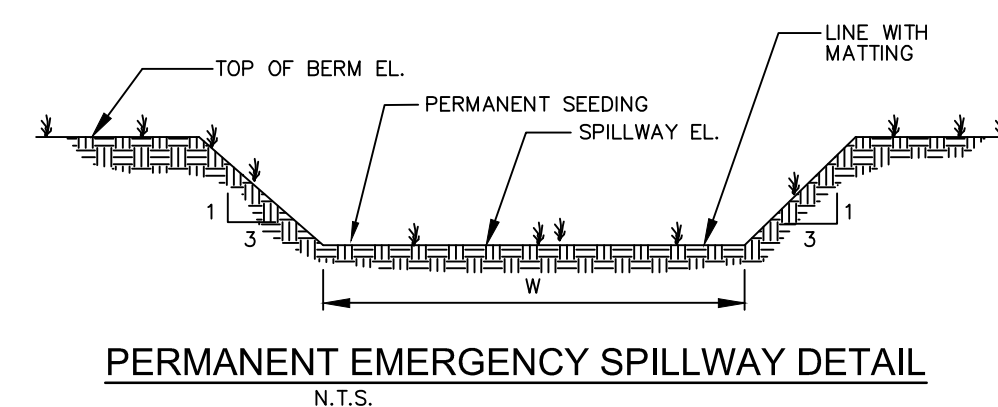
- NOTES:
- ALL COLLARS SHALL BE INSTALLED SO AS TO BE WATERTIGHT.
- COLLAR SIZE AND SPACING SHALL BE AS INDICATED WITHIN TABLE.

BASIN OR TRAP NO.	PIPE SIZE (IN)	S (IN)	NO. OF COLLARS	RISER TO FIRST COLLAR (FT)	COLLAR SPACING (FT)
Basin 4b	18	60	1	11.0	N/A

STANDARD CONSTRUCTION DETAIL #7-16 CONCRETE ANTI-SEEP COLLAR FOR PERMANENT BASINS OR TRAPS
N.T.S.

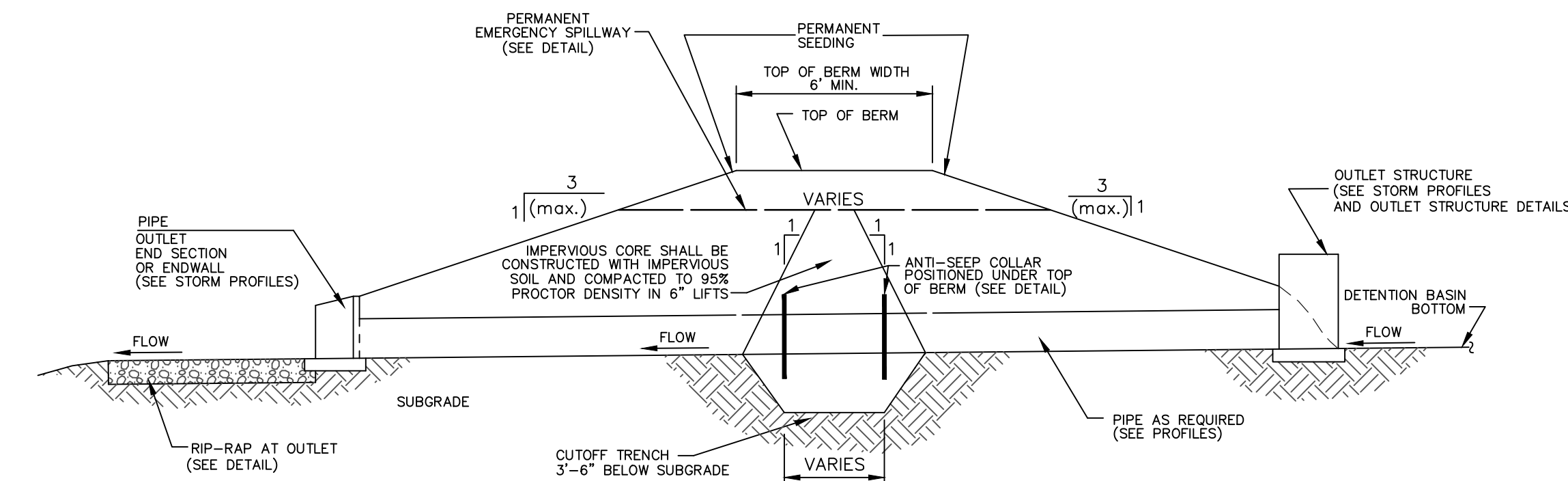


- NOTES:
- TERMINATE UNDERDRAIN IN BASIN OUTLET BOX; SEE OUTLET STRUCTURE DETAIL.
 - SEE GRADING PLANS FOR UNDERDRAIN LOCATIONS.
- INFILTRATION/DETENTION BASIN UNDERDRAIN DETAIL**
N.T.S.



PERMANENT EMERGENCY SPILLWAY DETAIL
N.T.S.

BASIN DESIGNATION	TOP OF BERM ELEVATION (FT)	SPILLWAY ELEVATION (FT)	WIDTH (W) (FT)	MATTING
4b	462	460.25	55	NAG P300
RG-3	494	493.5	5	NG SC250
RG-4	492	491.5	5	N/A
RG-5	472	471.5	5	NAG C350



TYPICAL DETENTION BASIN BERM
N.T.S.

PCSM DETAILS

FOR
STRAY WINDS FARM PHASE 8
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:
222020-10-DTL
DATE: 2/07/2020
SHEET: 18 OF 24

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GENERAL PCSM NOTES

SITE PRESERVATION ANALYSIS:

There is a stream tributary and wetlands located on the west side of the site. The impervious areas were minimized to the best of our ability by designing an efficient street and lot layout that doesn't propose unnecessary pavement, long driveways or oversized homes. It was not possible to protect all of the existing drainage features and vegetation, due to the necessary grading on the site. The entire site must be cleared in order to maintain an earthwork balance that doesn't require the import or export of fill. The soil will experience some compaction in all of the areas where grading will occur, however compaction will be kept to a minimum in the areas of the Rain Gardens. A number of BMPs including the Stormwater Basin, Rain Gardens and Infiltration Pits have been utilized to minimize changes in stormwater runoff.

PCSM BMP INSTALLATION SEQUENCE:

- The Storm Basins shall be converted from their respective sediment basins and the rain gardens shall be constructed before homes are built when the time comes to convert the site to the PCSM condition as approved by the Conservation District. Infiltration Pits shall be constructed along with the homes on the lots that they sit, when the time comes to convert the site to the PCSM condition as approved by the Conservation District.

INDIVIDUAL BMP INSTALLATION SEQUENCES:

Storm Basins:

- 1. Complete upstream site grading and construction.
2. Prepare site for excavation and/or embankment construction.
3. Excavate bottom of basin to desired elevation (if necessary).
4. Install surrounding embankments and inlet and outlet control structures. Retrofit used in temporary conditions as applicable.
5. Grade subsoil in bottom of basin. Compact surrounding embankment areas and around inlet and outlet structures.
6. Apply and grade planting soil.
7. Apply geo-textiles and other erosion-control measures were applicable.
8. Seed the basins.
9. Install anti-grazing measures, if necessary.
10. Follow required maintenance and monitoring guidelines.

Rain Gardens:

- 1. Install temporary sediment control BMPs as shown on the plans.
2. Complete site grading.
3. Stabilize grading within the limit of disturbance except with the Rain Garden area.
4. Excavate Rain Garden to proposed invert depth and scarify the existing soil surfaces. Do not compact in-situ soils.
5. Presoak the planting soil prior to planting vegetation to aid in settlement.
6. Complete final grading to achieve proposed design elevations, leaving space for upper layer of compost, mulch or topsoil as specified on plans.
7. Plant vegetation according to planting plan.

Infiltration Pit

- 1. Infiltration Pits can be installed with the homes on the lots they are proposed per details provided in this plan.
2. Care shall be taken that access sediment does not enter the pit during construction.

CRITICAL STAGES OF BMP INSTALLATION:

- Storm Basin 4b Clay Core and Key Trench
Storm Basin 4b Anti-seep Collars
Storm Basin 4b Underdrains

- Any stormwater BMP that is damaged in a way that keeps it from functioning as designed must be repaired or replaced as soon as possible.

RECYCLING OR DISPOSAL OF MATERIALS:

Disposal of removed material is dependant on the nature of the drainage area and the intent and function of the BMP. BMPs that primarily catch sediment and detritus from areas such as lawns may reuse the waste on the site. Pollutants such as man made trash and other non-reusable materials must be removed and deposited in an approved recycling facility or landfill.

STORMWATER BMP OPERATION AND MAINTENANCE PLAN

The stormwater Best Management Practices (BMPs) as shown on this plan shall be maintained to function as designed as per the procedures described below. Facilities located outside the public right-of-ways shall be owned and maintained by the Homeowners Association of the development.

The facilities are to remain permanent and can only be removed or altered after approval by one or more of the following entities which may have jurisdiction: Susquehanna Township; Lower Paxton Township; Dauphin County Conservation District; and/or PA DEP.

The following facilities located outside the public right-of-ways shall be maintained to the original design and dimensions shown on the design plans, approved by Susquehanna Township, until such a time as an amended plan is approved by the Township.

- Storm Basins, Emergency Spillways & Outlet Structures
Infiltration Pits
Rain Gardens
Stormwater Inlets, Manholes, Pipes & Swales
Riprap Aprons

For any structure facility (pipe, inlet, manhole), it must be repaired or replaced if damaged more than superficially, in a way that is a safety hazard, if structurally unsound, or if not substantially performing as it is intended per the original design. The responsible owners shall keep a record of any repaired or replaced facility, including costs, dates, materials removed, materials placed, and the contractor(s) information.

Inspection and maintenance tasks for infiltration basins, emergency spillways & outlet structures:

- Inspect annually at a minimum.
The bottom of the stormwater infiltration basin can be maintained as mowed grass, maintained meadow, or natural brush succession, per the desires and budget of the lot owner. The basin berms shall be maintained as turf grass or meadow, being mowed at least several times per year. Removal of sediment / debris shall take place when the basin bottom has dried, if possible. Man-made trash shall be disposed of properly in containers collected by a licensed commercial trash hauler.
Examine for and clean out the outlet structure and trash rack, of accumulated trash, grit and the like.
Remove grit, sand, soil or organic matter if it accumulates to a depth of 3" or more, so that storage volume is maintained.
Infiltration Basin underdrain is to remain closed unless standing water problems occur. If standing water is present for greater than 72 hours after the last rainfall the underdrain may be opened in order to drain the basin to perform the following remediation:
Remove 10" below the proposed basin bottom, replace with a 2:1 soil to compost mix and fill up to 20".
If further problems persist contact Dauphin County Conservation District and/or Susquehanna Township for a suitable solution.

Inspection and maintenance tasks for Storm Basins, Rain & outlet structures:

- While vegetation is being established, pruning and weeding may be required. Weeds should be removed thereafter by hand.
Detritus may also need to be removed approximately twice a year. Perennial plantings may be cut down at the end of the growing season.
Mulch should be re-spread when erosion is evident and be replenished annually. Once every 2 to 3 years the entire area may require mulch replacement.
Rain Gardens should be inspected at least two times per year for sediment buildup, erosion, vegetative conditions, etc.

Inspection and maintenance tasks for stormwater inlets, manholes, pipes & swales:

- Examine annually at a minimum. Remove man-made trash and dispose of properly.
Examine inlet bottoms via grates, for accumulated debris. Remove accumulated grit and debris. Check for any obvious structural deterioration.
The swales shall be maintained as turf grass or meadow, being mowed at least several times per year.
Any erosion shall be re-stabilized with rock, or seeding (seed, mulch and matting), or sod that is watered until established; rock should be placed in non-growing seasons, even if temporary.
All inlets, storm piping, swales and drainage structures shall be kept free of any obstructions and foreign material that would cause disruption of water flow in a manner not designed for the facility, such as sediment, vegetation, wood, sand, debris, or vegetative growth in excess of 12 inches if not part of the landscape design. Removal of sediment/debris shall take place when the area has dried, if possible. Man-made trash shall be disposed of properly in containers collected by a licensed commercial trash hauler.
All impervious surfaces shall be maintained clean of oil, fuel or other toxic spills, in accordance with State, Federal or local regulations.

Inspections and maintenance tasks for riprap aprons:

- Inspect annually at a minimum.
Remove any accumulated debris and trash, and remove promptly. Dislodged rock should be reset in place. Any scouring of earth at or below the apron should be re-stabilized with rock, or seeding (seed, mulch and matting), or sod that is watered until established; rock should be placed in non-growing seasons, even if temporary.

TEMPORARY SEEDING SCHEDULE

The contractor shall immediately temporarily stabilize any rough graded area, topsoil stockpile or unused excavated fill material that will be left idle for less than 1 year. The grass will provide interim protection against the impact of precipitation, running water and wind. Permanently seed any area that will be idle for more than 1 year.

Temporary seeding schedule is as follows:

- Species: annual rye grass
% Live Seed: 98%
Application rate: 10 lbs./1,000 sq. yds.
Fertilizer type: general purpose granular, 5-5-5
Fertilizer application rate: 11 lbs./1,000 sq. yds.
Lining rate: per soil test; minimum of 1 ton per acre.
Seeding dates: any time
Strawable mulch rate: 3 tons per acre
Mulch anchoring: Asphalt, either emulsified or cut-back, containing no solvents or other diluting agents toxic to plant or animal life, uniformly applied at the rate of 31 gallons per 1,000 square yards. Synthetic binders (chemical binders) may be used per manufacturer's recommendation provided they are non-toxic to plant and animal species.

When seeding is not possible due to the time of year or other limitations, disturbed area shall be mulched with strawables at the rate above. An erosion control blanket must be installed on all disturbed slopes steeper than 3:1, and all areas with concentrated flows. Matting can be North American Green 'S75', jute, or approved equal.

Maintenance procedure:

- 1) Maintain a minimum 70% soil surface coverage with grass and/or mulch.
2) If a washout, slope failure or similar disturbance occurs, correct drainage problem if necessary, then reapply soil to the proper grade, reapply soil amendments, seed and mulch.

PERMANENT LAWN SEEDING SCHEDULE--

- Species: 30% Kentucky bluegrass
40% Perennial Ryegrass
20% Norela Perennial Ryegrass
10% annual ryegrass
% Pure live seed: 98%
Application rate: 6 lbs./1,000 sq. ft.
Fertilizer type: general purpose granular, 10-20-20
Fertilizer application rate: 11 lbs./100 sq. yds.
Lining rate: per soil test; minimum of 6 tons per acre
Seeding dates: between 4/1 and 10/15
Strawable mulch rate: 3 tons per acre.

Erosion control matting must be placed on slopes exceeding 3:1. Matting can be North American Green 'S75', jute, or approved equal.

Maintenance procedure:

- 1) Maintain a minimum 70% uniform soil surface coverage with grass, meadow vegetation and/or mulch.
2) If a washout, slope failure or similar disturbance occurs, correct drainage problem if necessary, then reapply soil to the proper grade, reapply soil amendments, seed and mulch.

STEEP SLOPE SEEDING SCHEDULE--

The following seed mix can be planted on steep slopes of greater than 3:1 that will only be mowed several times per year, and on detention basin berms.

- Species: 100% Tall fescue, varieties such as K-31, Altro, or other recently released variety
% Pure live seed: 98
Application rate: 6 lbs./1,000 sq. ft.
Fertilizer type: general purpose granular, 10-20-20
Fertilizer application rate: 11 lbs./1,000 sq. yds.
Lining rate: per soil test; minimum of 4 tons per acre
Seeding dates: between 4/1 and 10/15
Strawable mulch rate: 3 tons per acre.

Erosion control matting must be placed on slopes exceeding 3:1. Matting can be North American Green 'S75', jute, or approved equal.

Maintenance procedure:

- 1) Maintain a minimum 70% uniform soil surface coverage with grass, meadow vegetation and/or mulch.
2) If a washout, slope failure or similar disturbance occurs, correct drainage problem if necessary, then reapply soil to the proper grade, reapply soil amendments, seed and mulch.

The following seed mix shall be planted within detention basins and retention areas, as indicated on the plans. Seeding shall not take place until after the watershed tributary to the site is permanently stabilized and no erosion is expected to occur, and the basin has been converted to its permanent stormwater configuration.

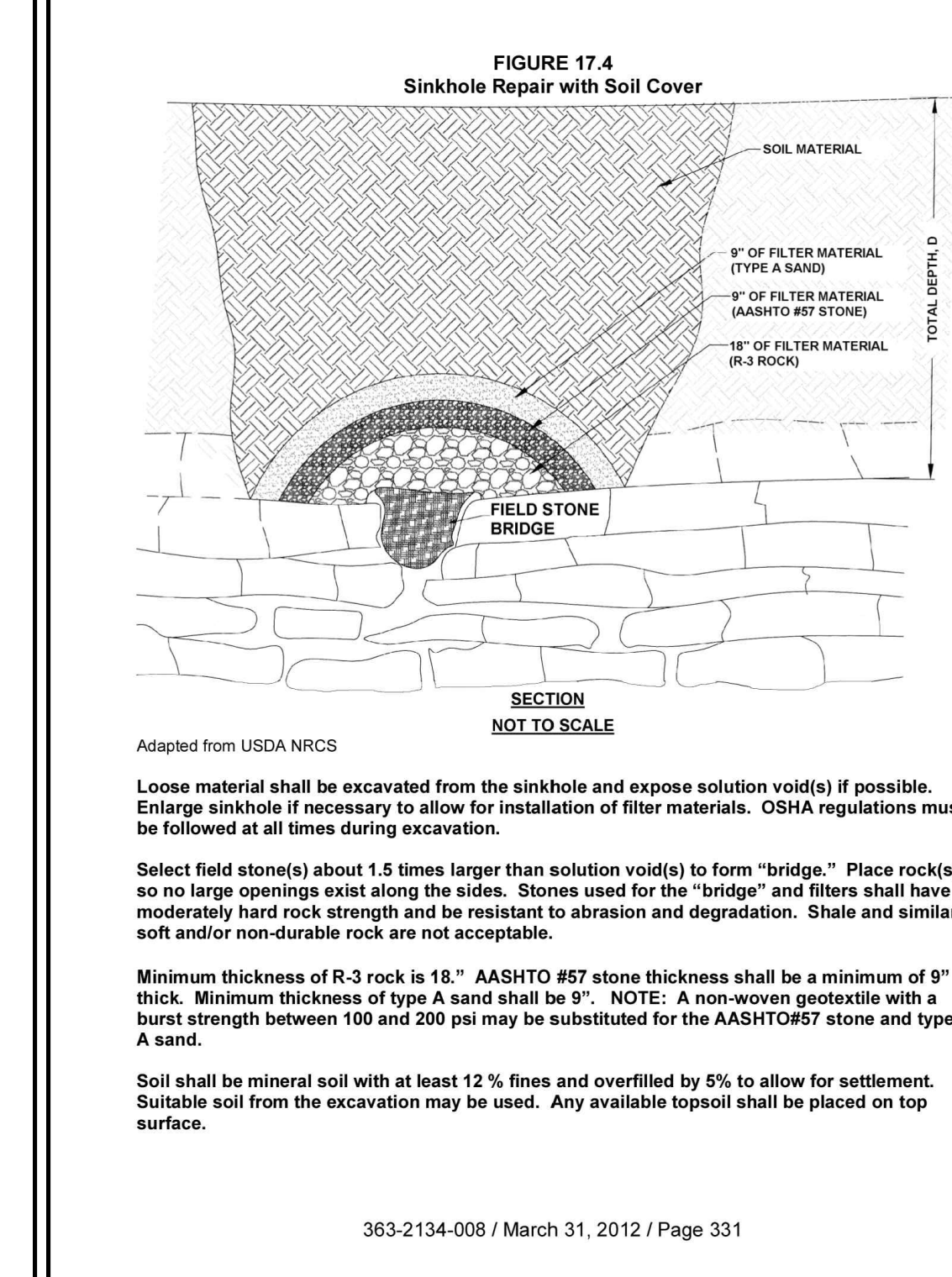
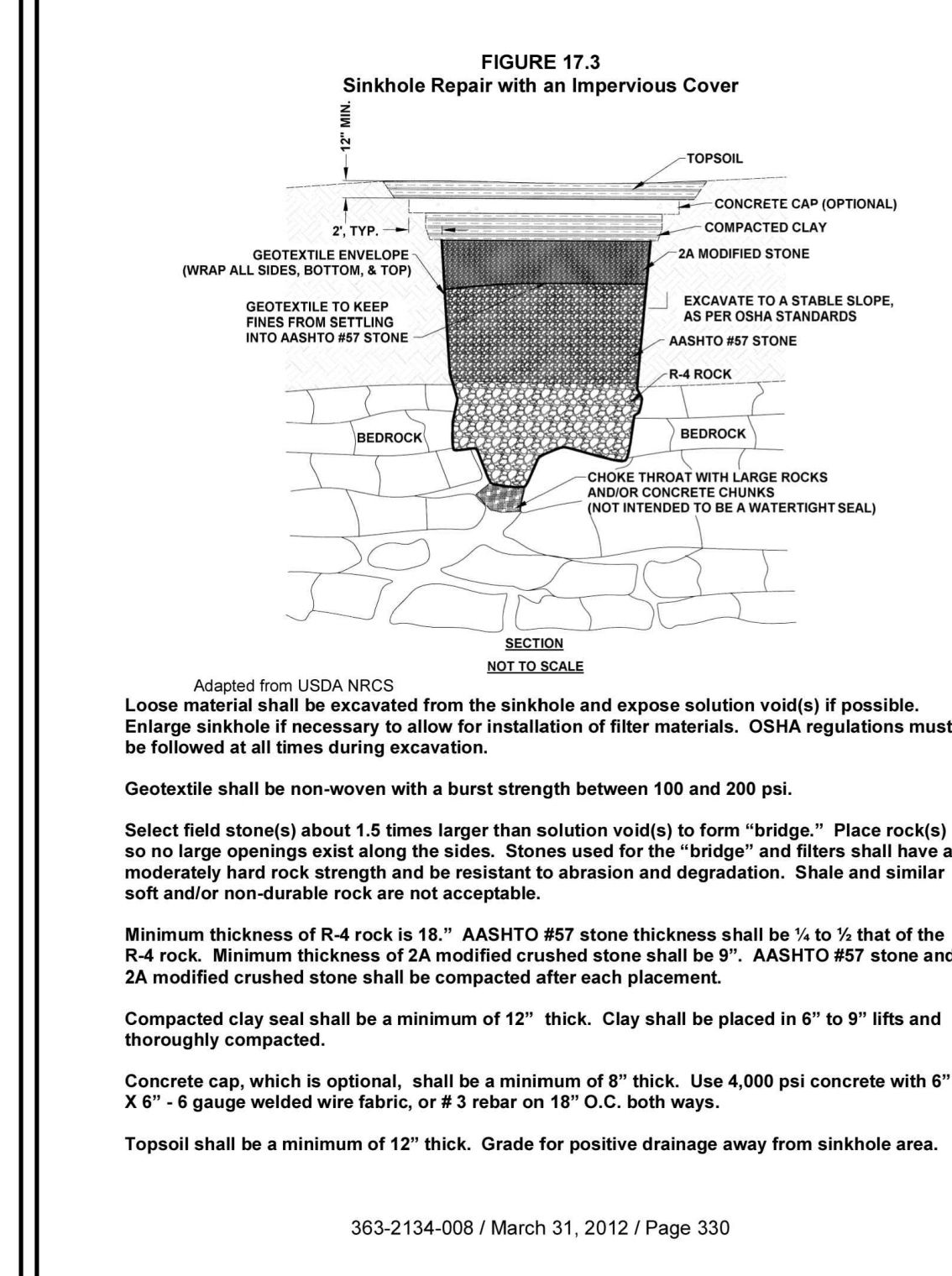
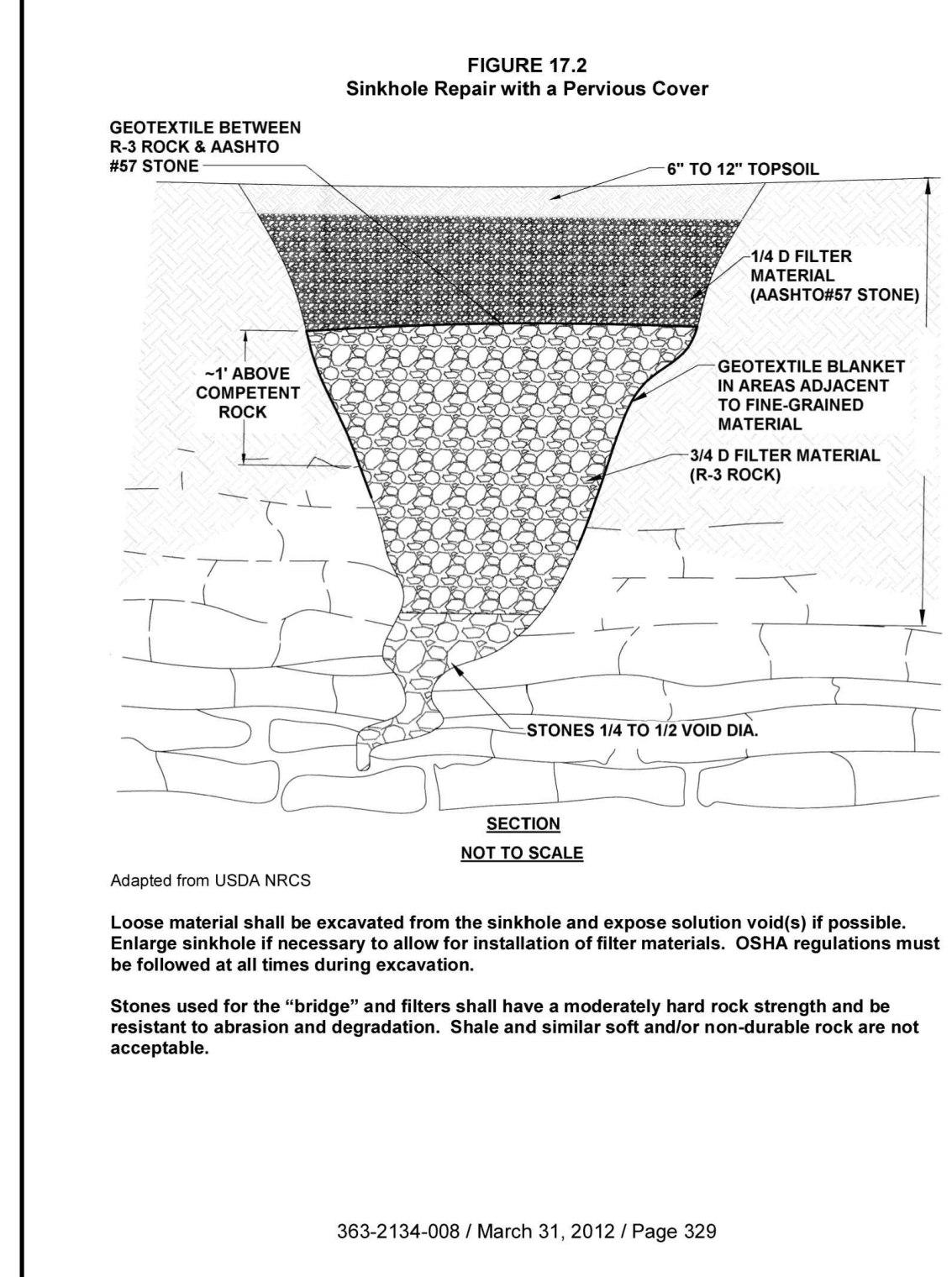
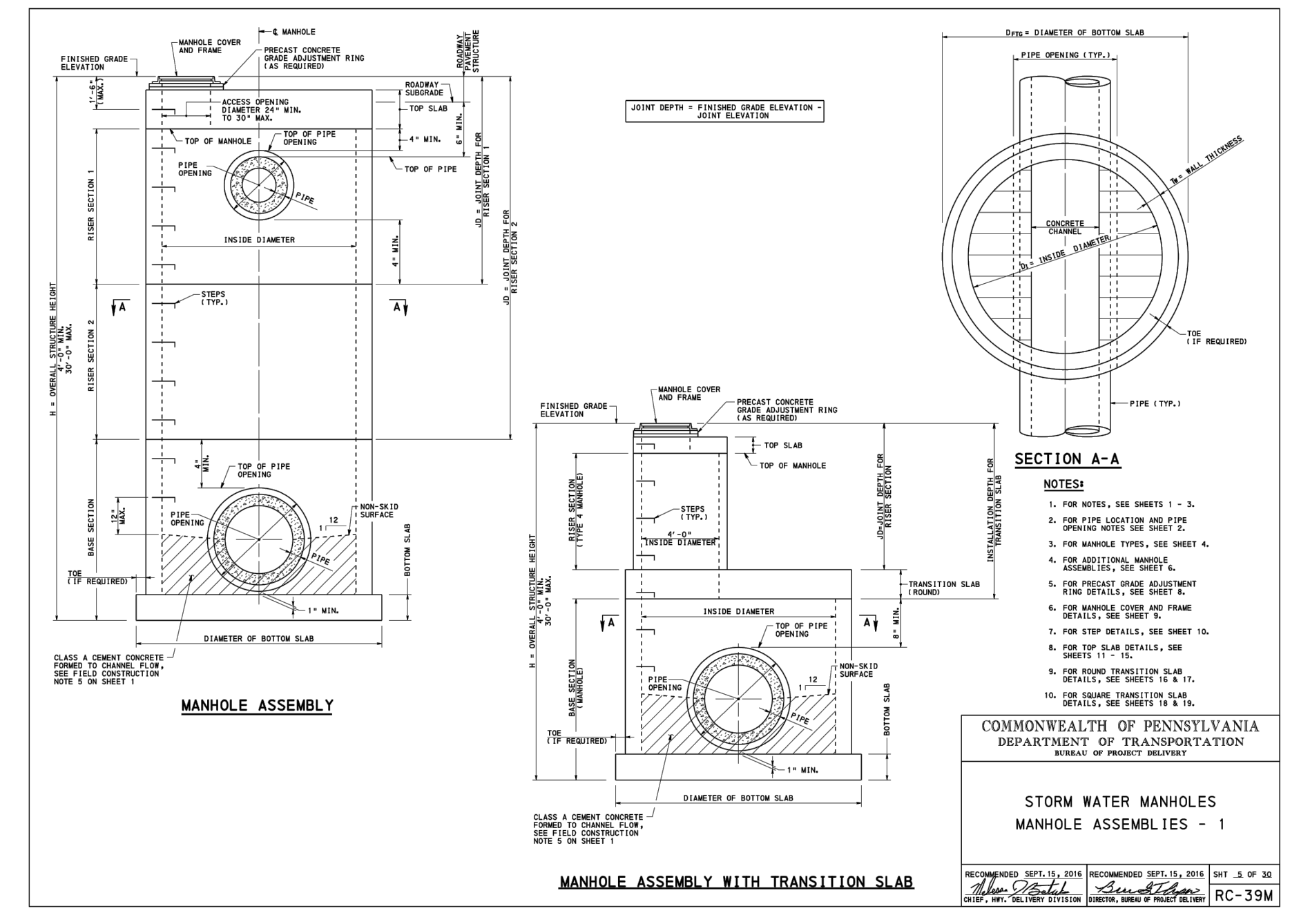
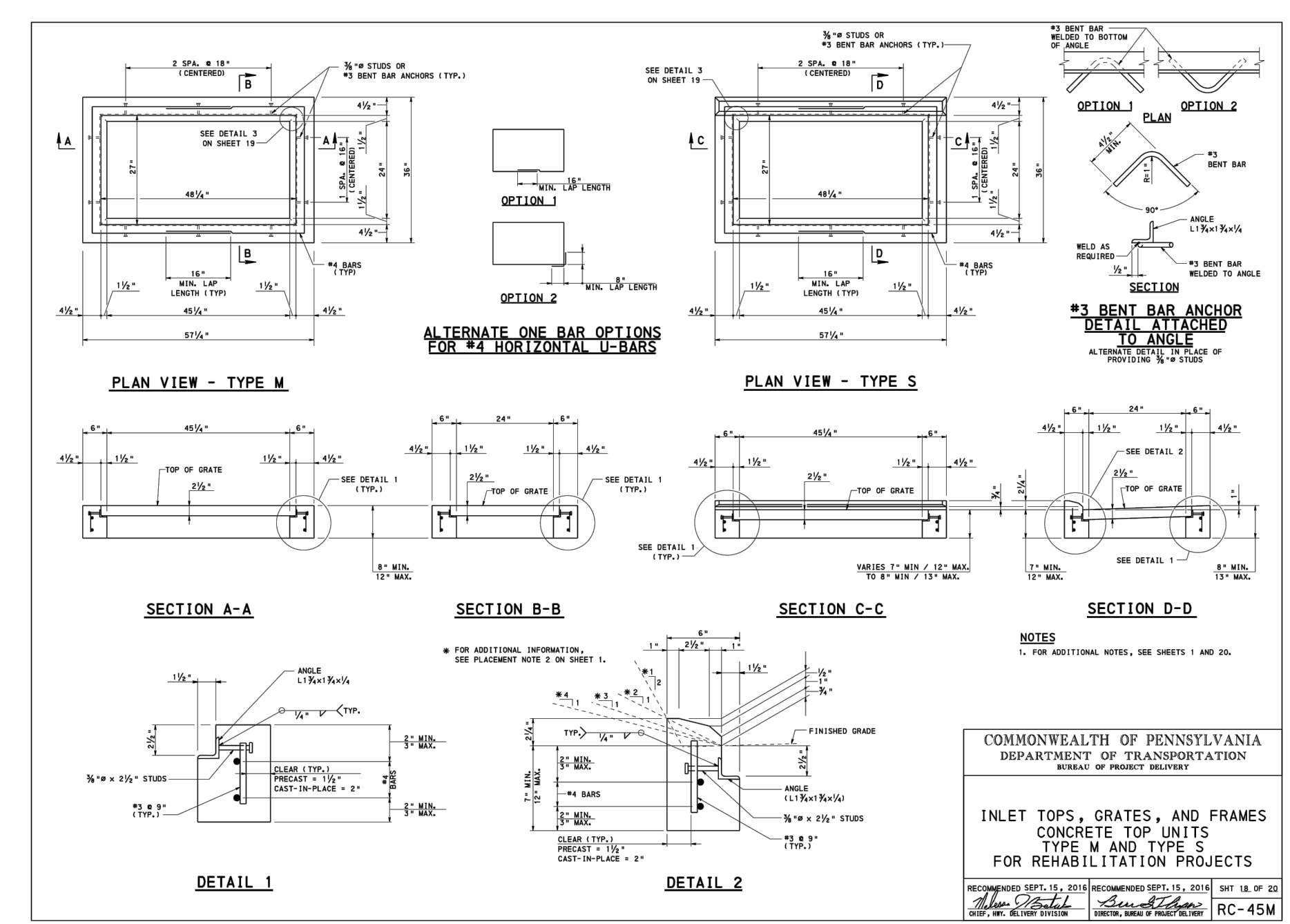
RAIN GARDEN GRASS MIX

- % of # seeds Scientific Name Common Name
45% Schizanthium scaparium Little Bluestem 'Comper'
20% Elymus virginicus Virginia Wildgrass, PA Ecotype
11% Panicum clandestinum Deertongue, Hoag
6% Panicum sphaerocarpon Roundseed Panicgrass
4% Panicum rigidulum Redtop Panicgrass
4.5% Carex vulpinoidea Fox Sedge
1.0% Juncus effusus Soft Rush
0.5% Carex scoparia Blunt Broom Sedge

Seeding rate: 15 pounds per acre with cover crop of grain rye at 30lb. The above mix can be obtained from ERNST Seeds; an equal of similar mix can be substituted from another company depending on availability and price.

Maintenance procedure:

- 1) If a washout, slope failure or similar disturbance occurs, correct drainage problem if necessary, then reapply soil to the proper grade, seed and mulch.



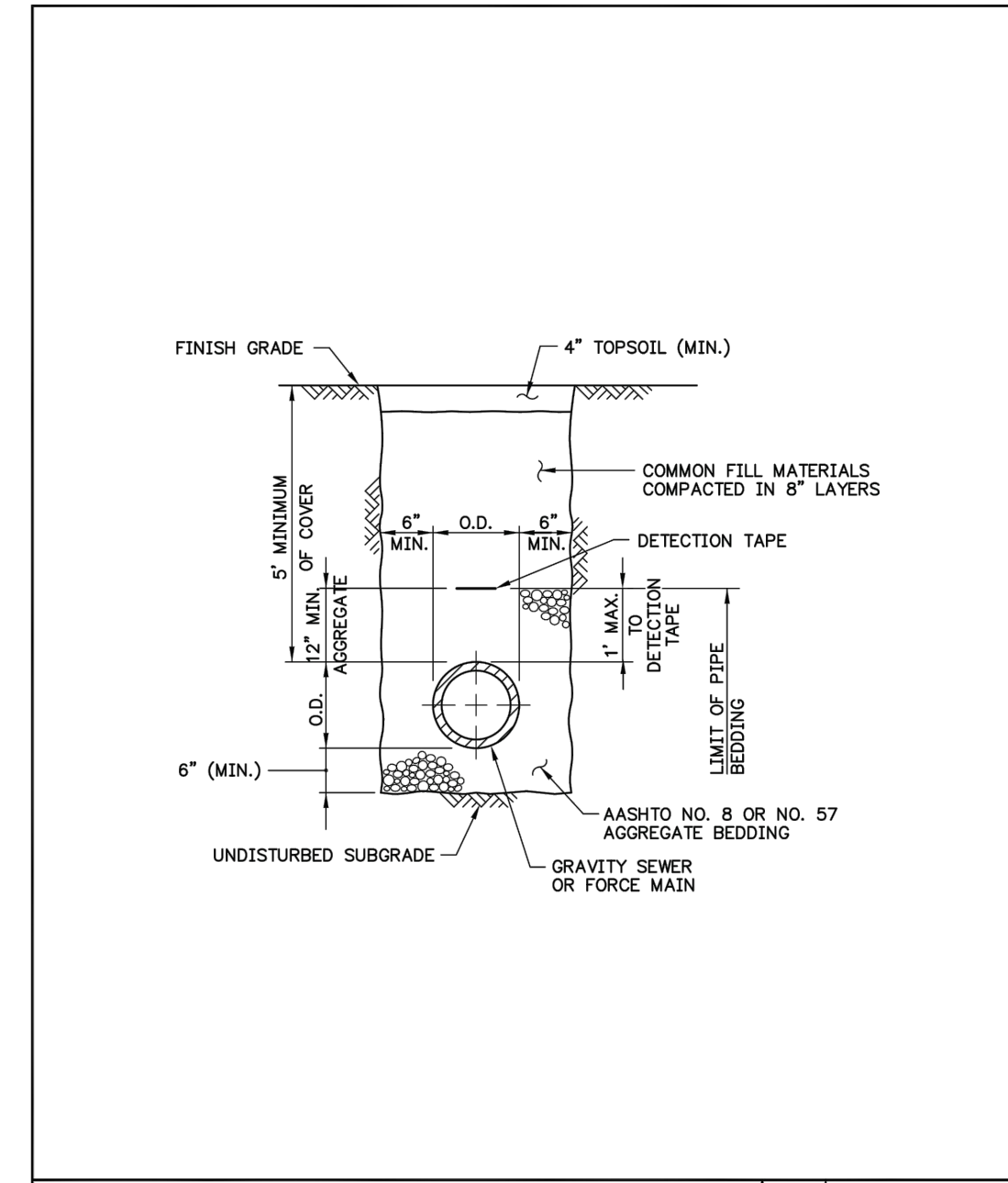
- GENERAL SINKHOLE REPAIR POLICIES:
1. THE AREA OF THE SINKHOLE SHOULD BE EXCAVATED UNTIL THE "THROAT" OF THE SINKHOLE IS DISCOVERED.
2. ALL LOOSE SOIL OR MATERIAL SHOULD BE REMOVED.
3. THE THROAT OF THE SINKHOLE SHOULD BE EVALUATED FOR STABILITY AND/OR THE PRESENCE OF ADDITIONAL FRACTURES.
4. THE SINKHOLE SHOULD THEN BE BACKFILLED USING A GEOTEXTILE FILTER FABRIC FIRST, N06 GEOTEXTILE CLASS 1 TYPE B. THEN USE R-5 STONE UP TO ABOUT 36" FROM FINISHED GRADE.
5. FOLD THE GEOTEXTILE FILTER FABRIC OVER ITSELF TO CREATE A "BAG."
6. ADD ABOUT 24" OF 2A MODIFIED STONE TO AROUND A FOOT BELOW FINAL GRADE DEPENDING ON WHERE THE SINKHOLE IS AND WHAT MATERIAL IS NEEDED TO FINISH BACKFILLING.

SINKHOLE AND SINKHOLE AREA TREATMENT
N.T.S.

363-2134-008 / March 31, 2012 / Page 330

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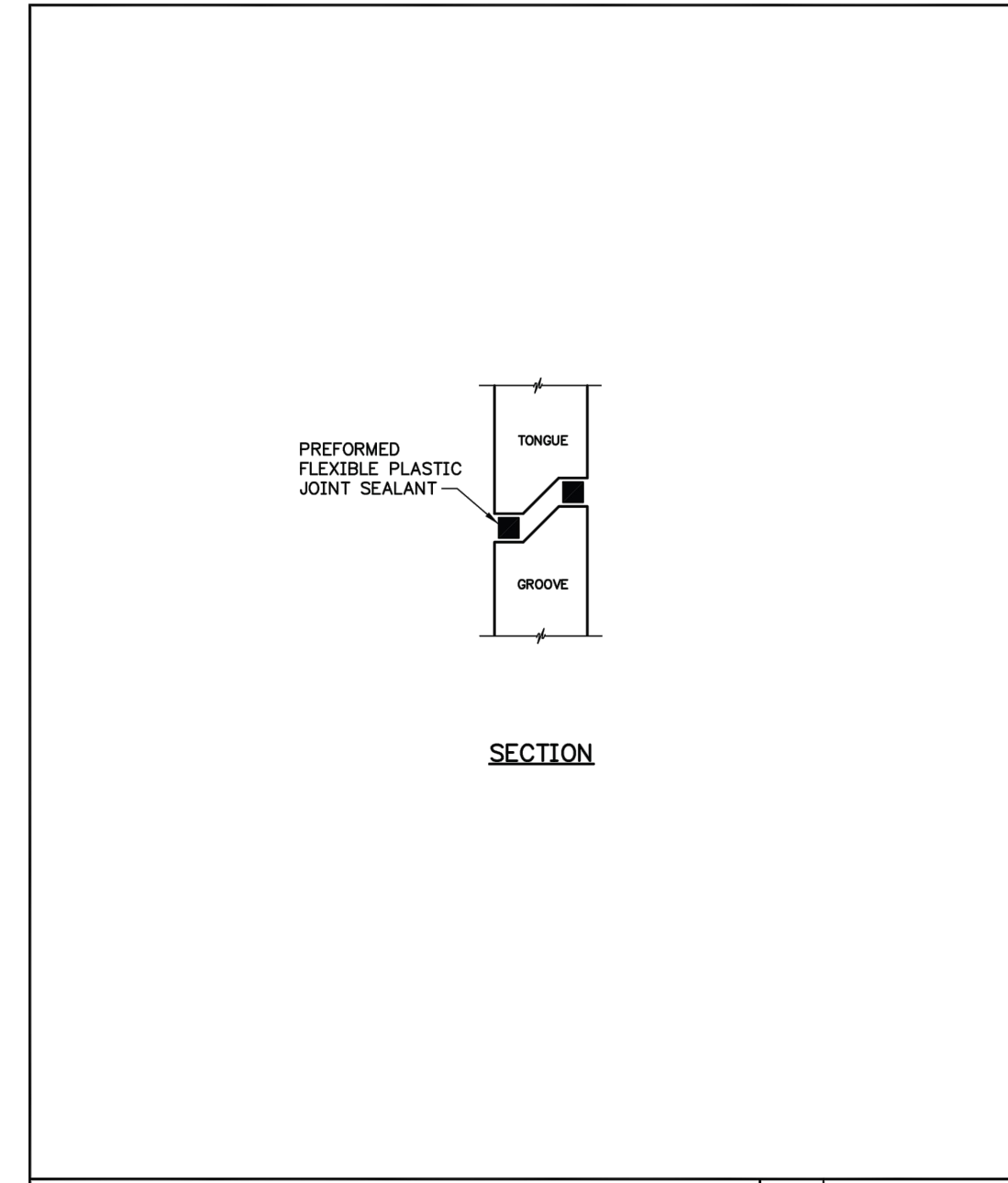
PCSM DETAILS
FOR
STRAY WINDS FARM PHASE 8
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA
DRAWING ID: 22020-10-DTL
DATE: 2/07/2020
SHEET: 19 OF 24



TRENCH DETAIL IN UNPAVED AREAS

DATE	REVISIONS

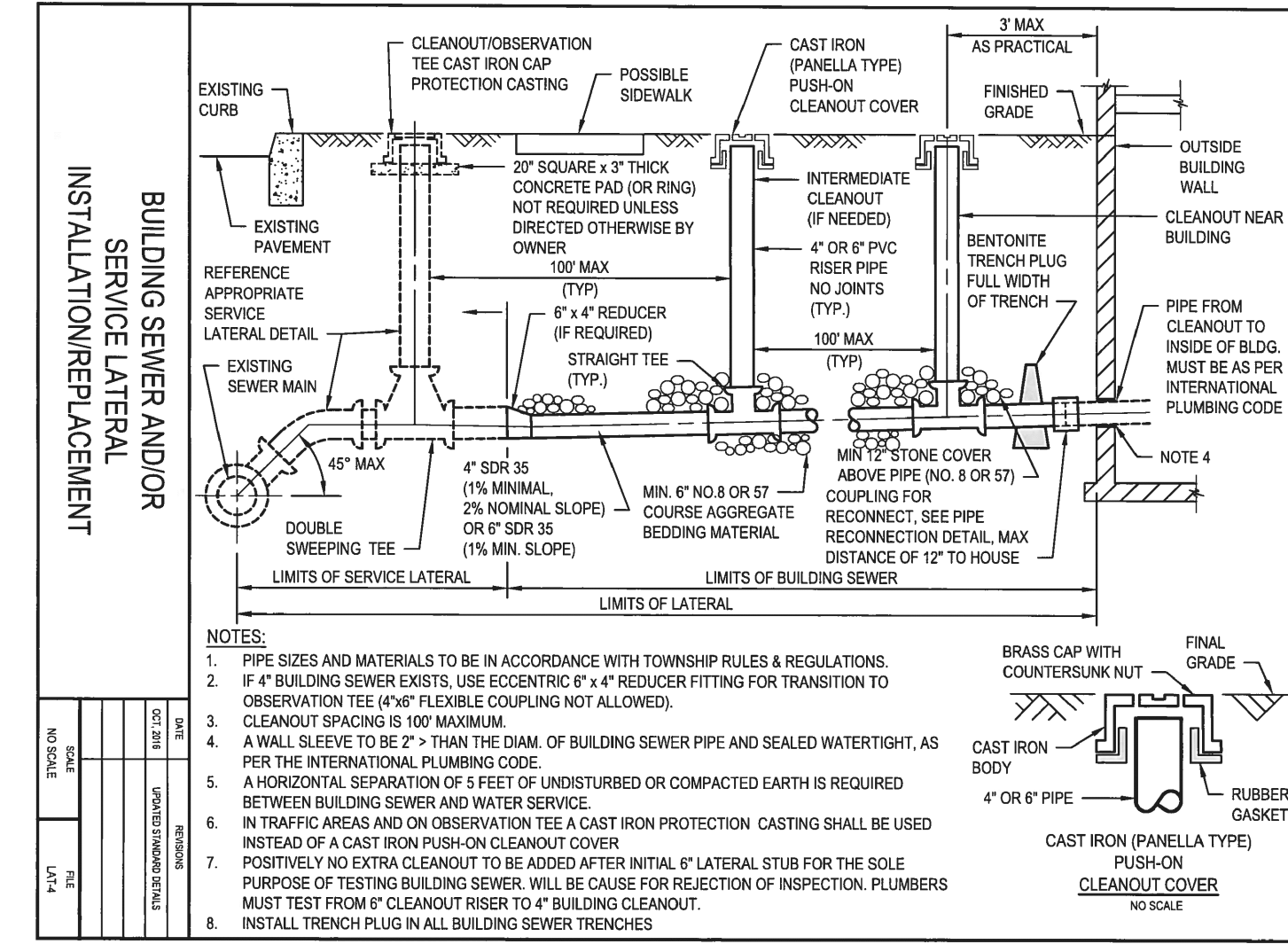
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MANHOLE GASKET

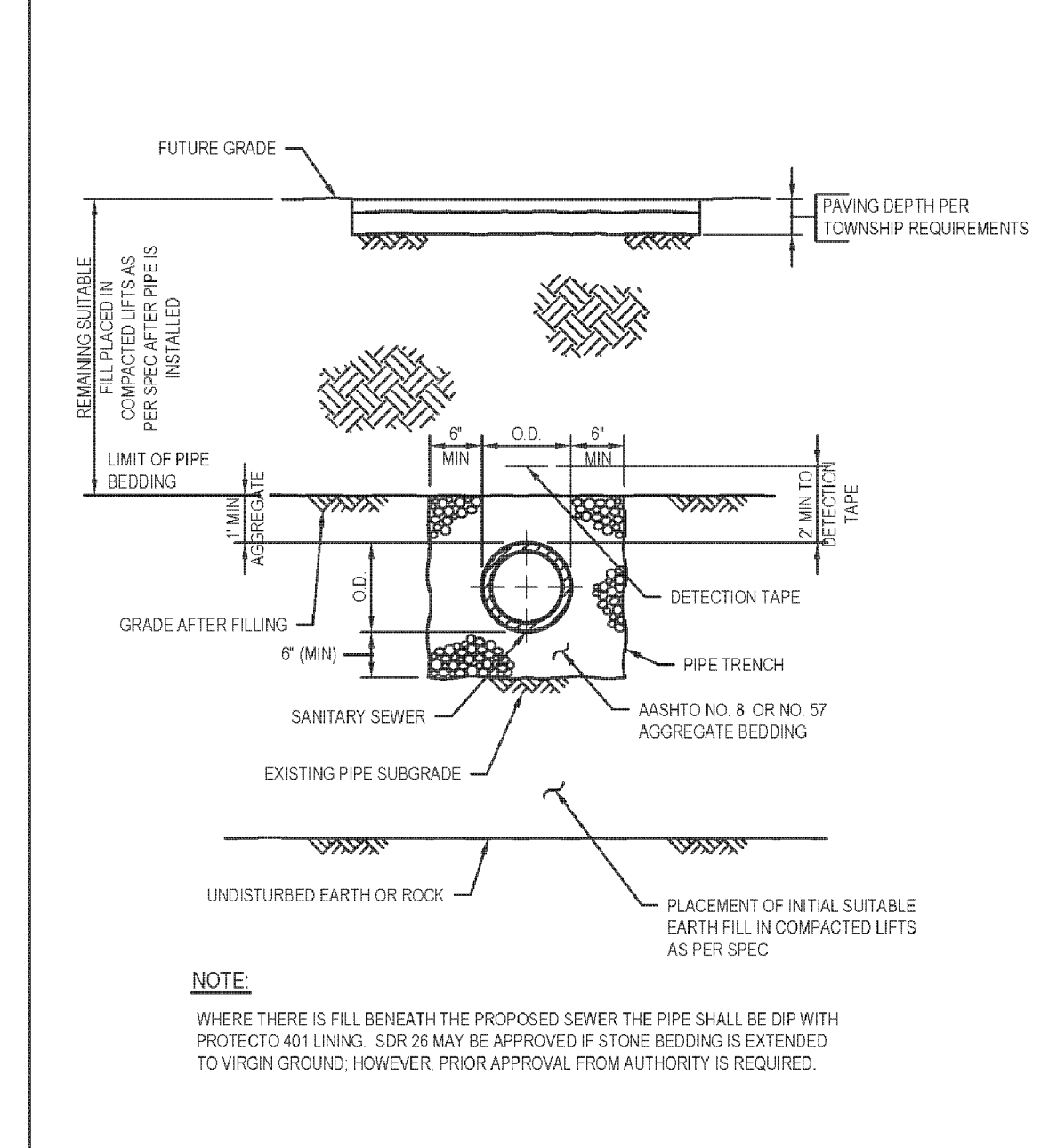
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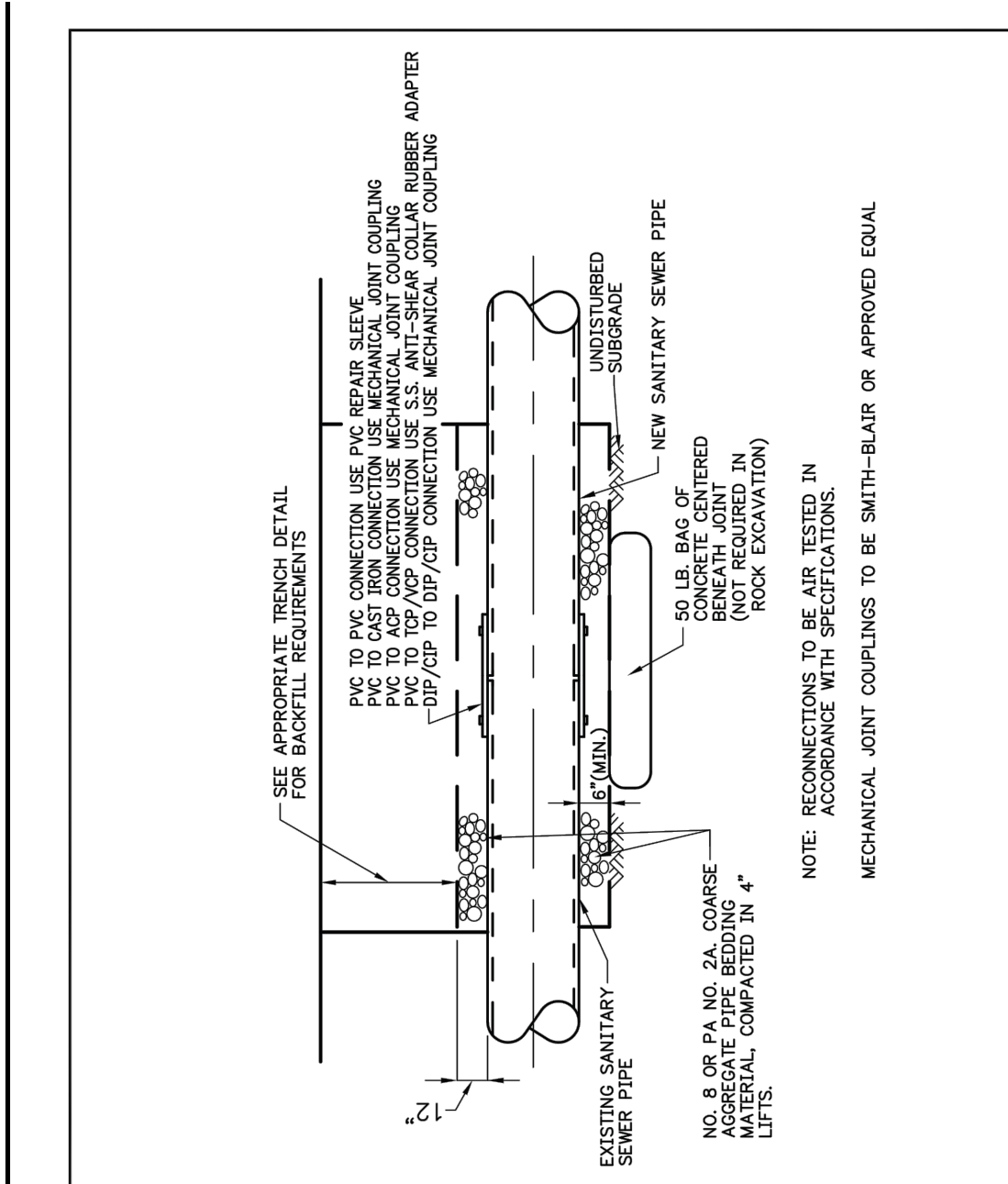
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TRENCH DETAIL FOR NEW PUBLIC / PRIVATE STREETS ONLY WHEN MASS GRADING / FILL IS INVOLVED

DATE	REVISIONS

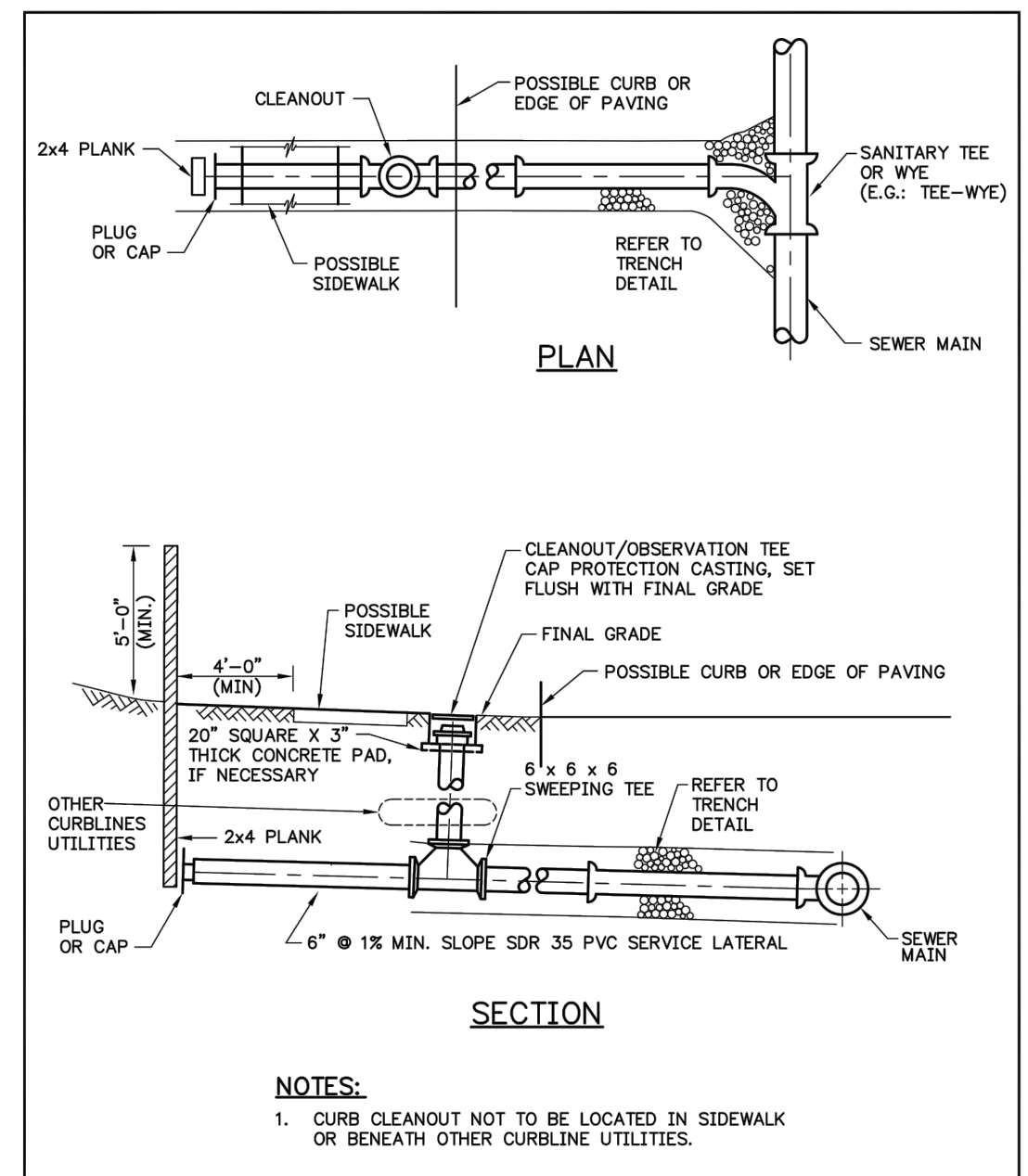
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PIPE RECONNECTION DETAIL

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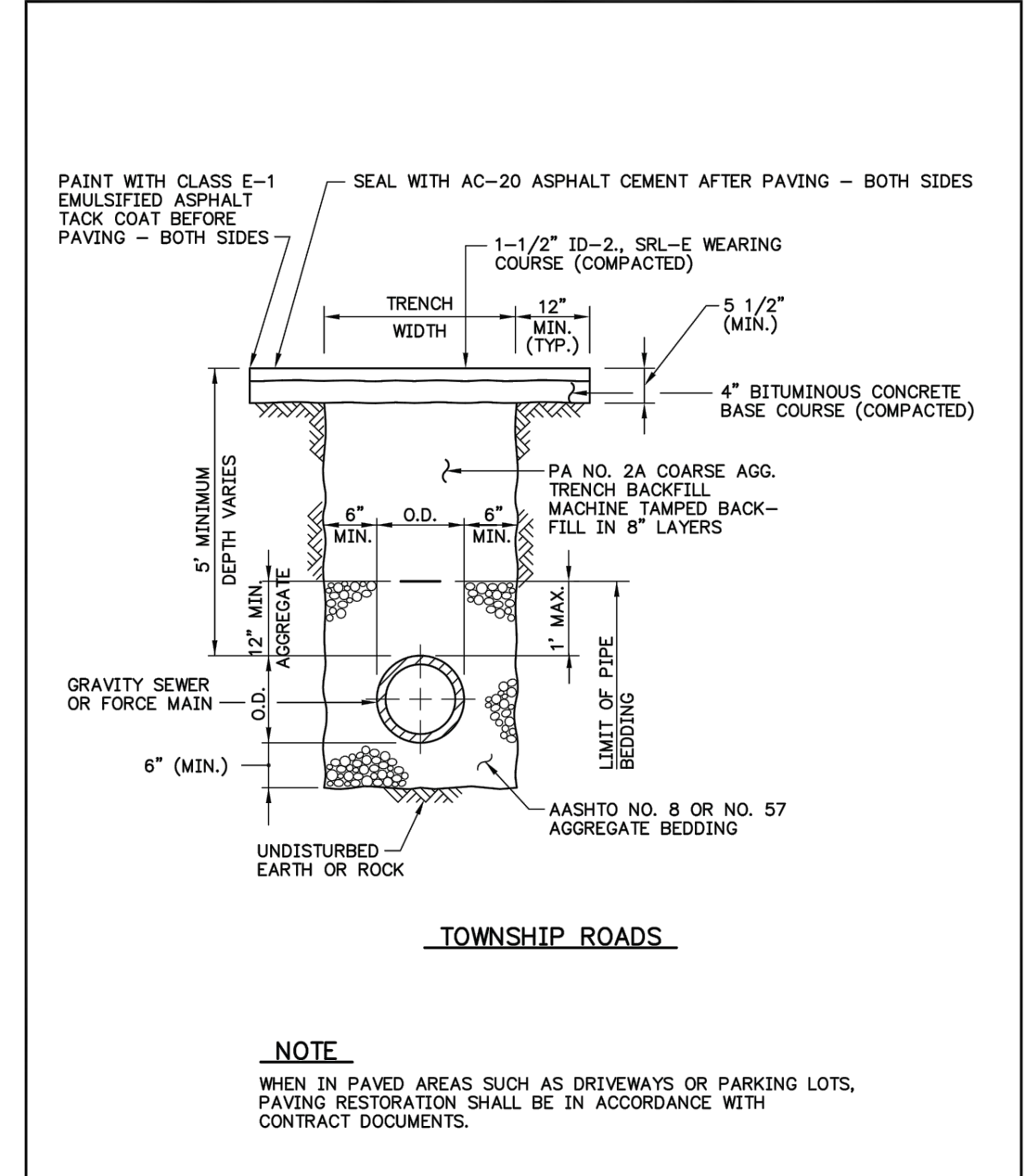
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SERVICE LATERAL - NORMAL DEPTH

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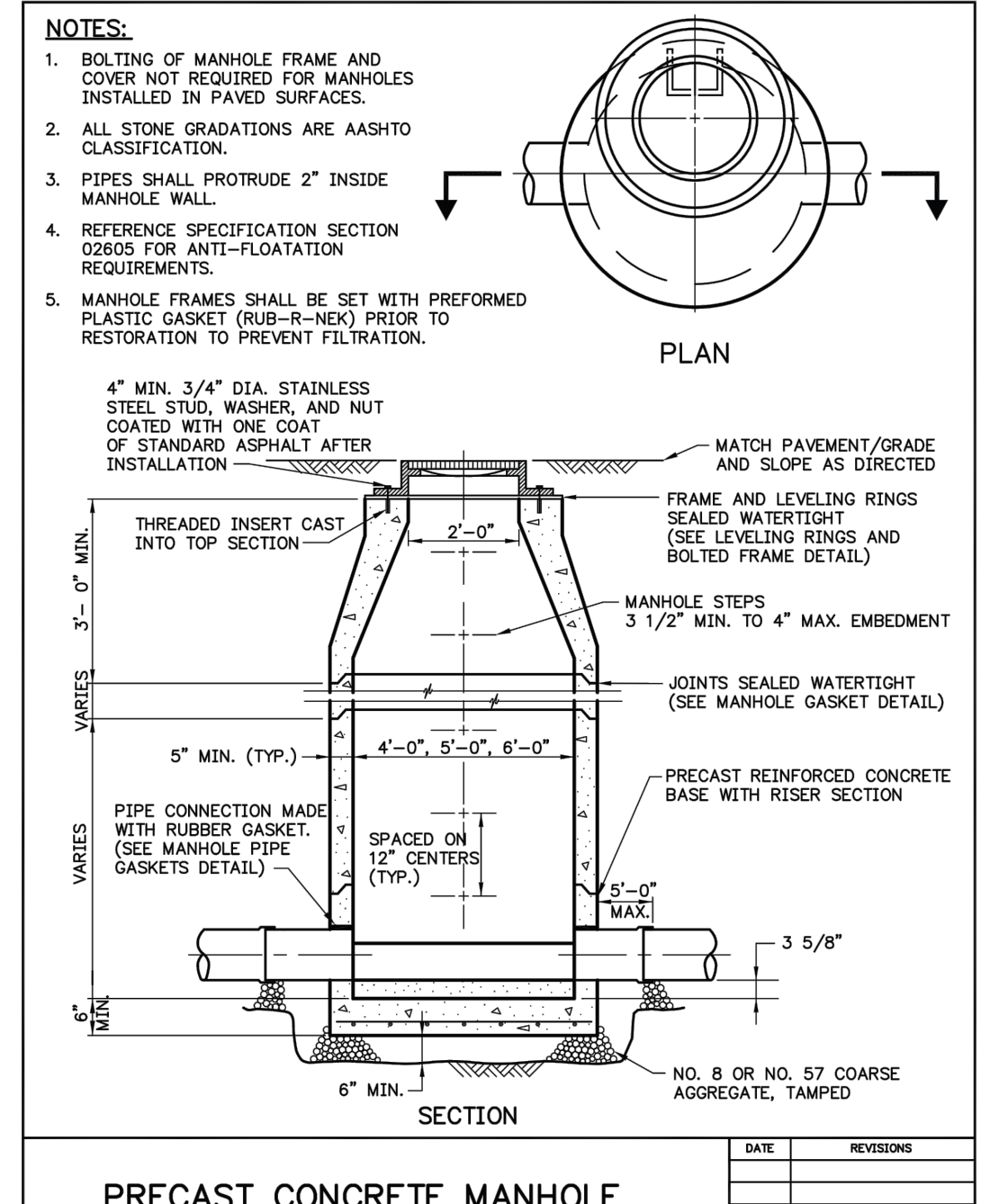
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TRENCH DETAIL IN PAVED AREAS

DATE	REVISIONS

SCALE	FILE
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PRECAST CONCRETE MANHOLE WITH PRECAST CONCRETE BASE

DATE	REVISIONS

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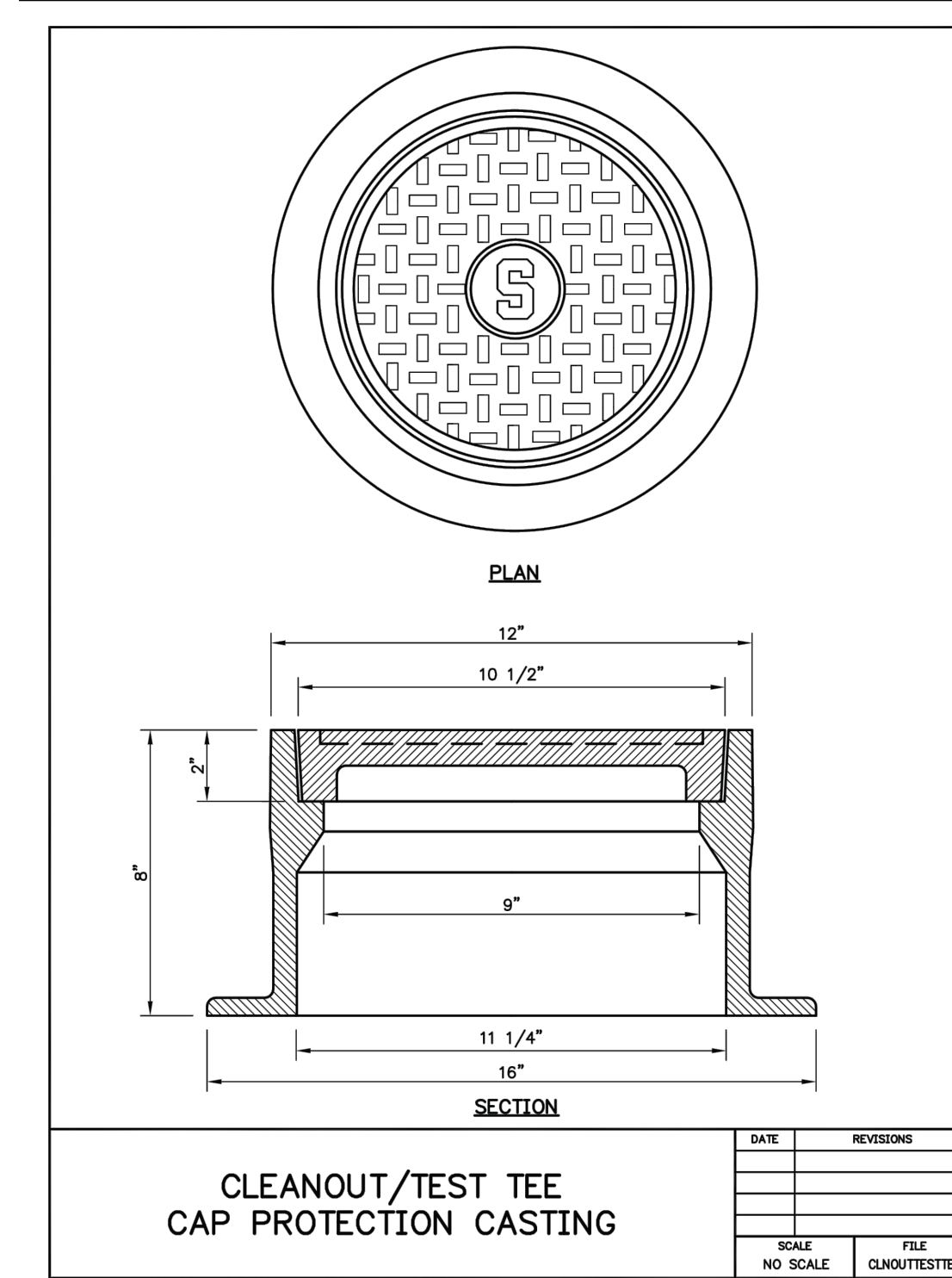
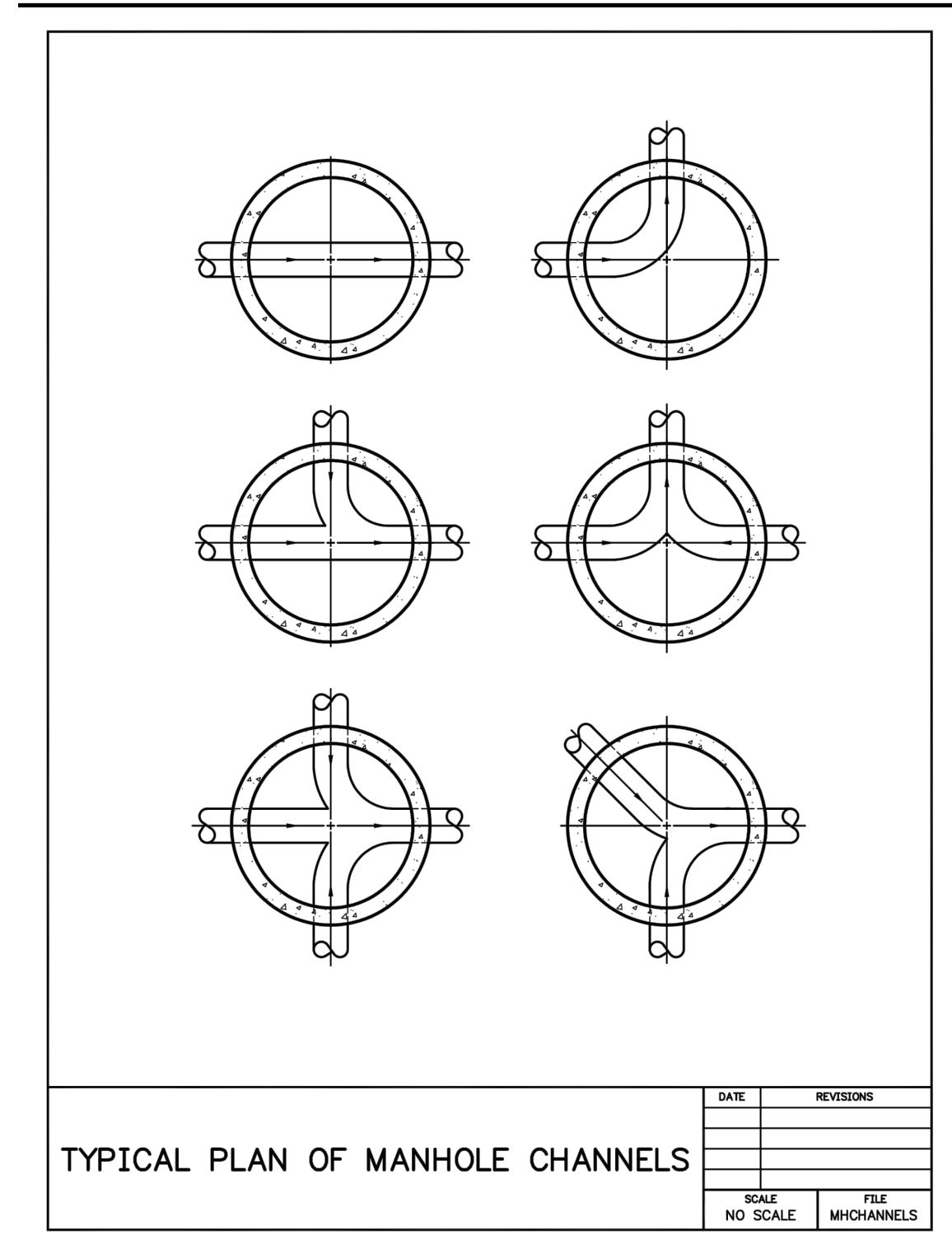
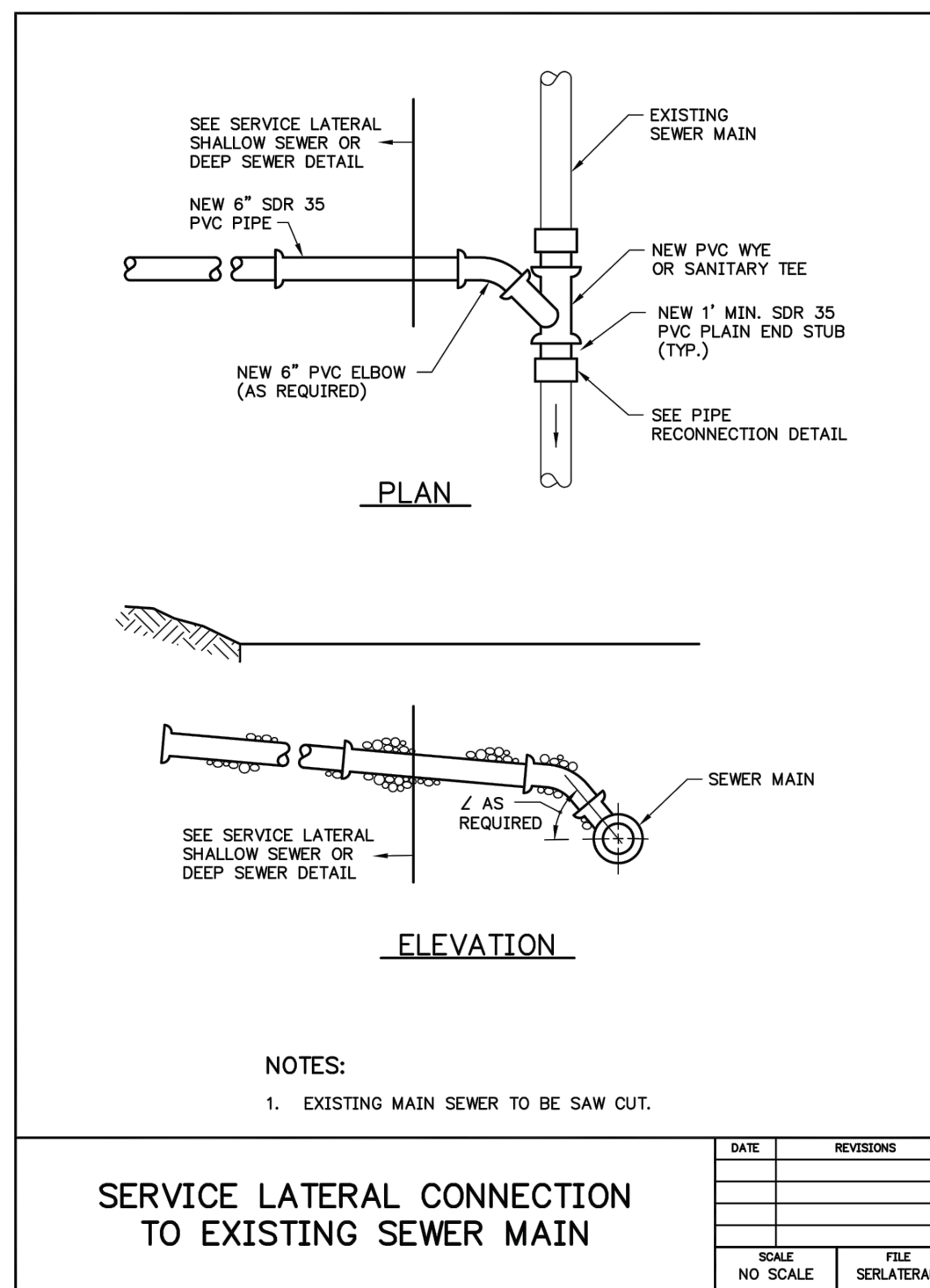
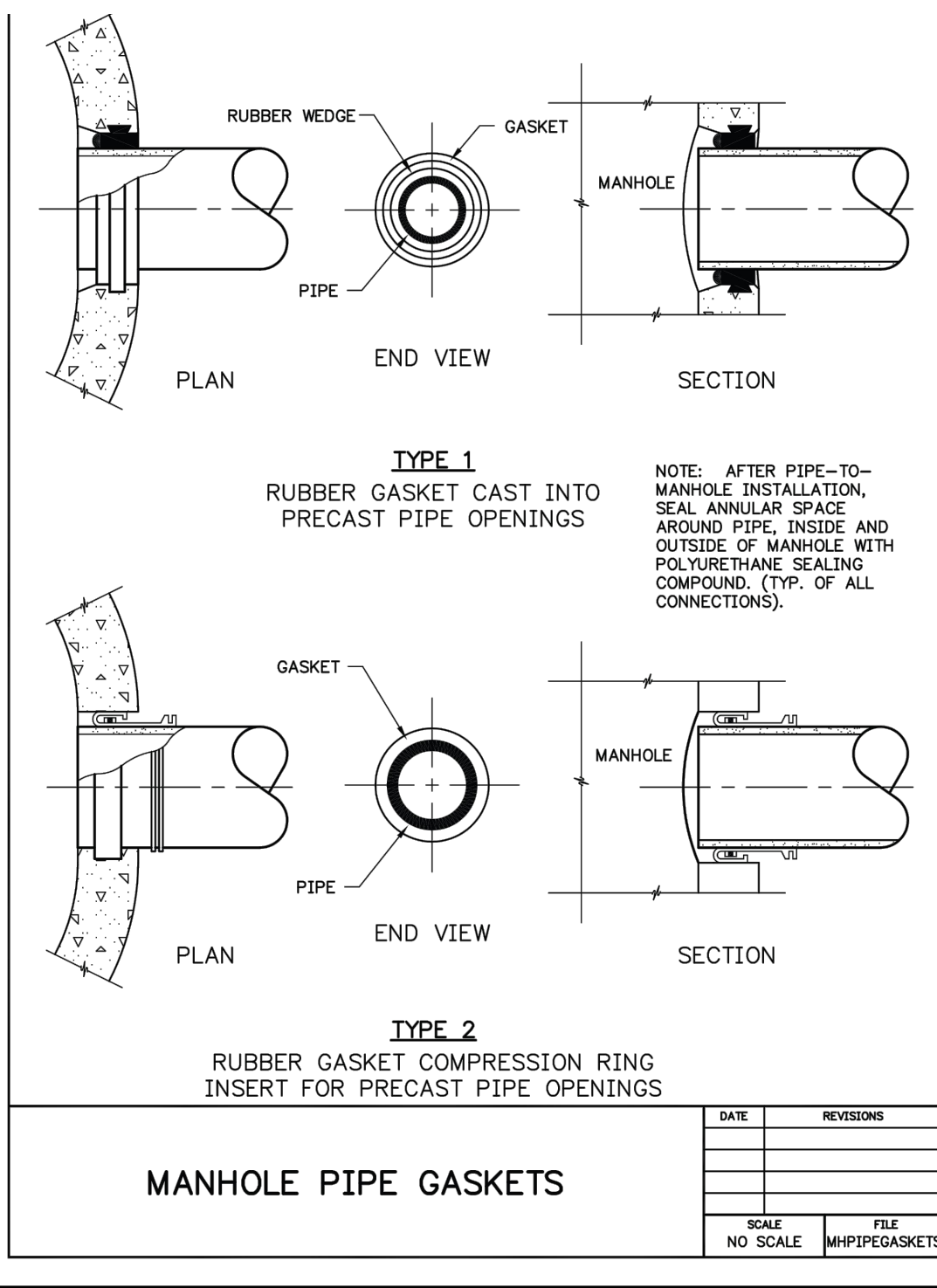
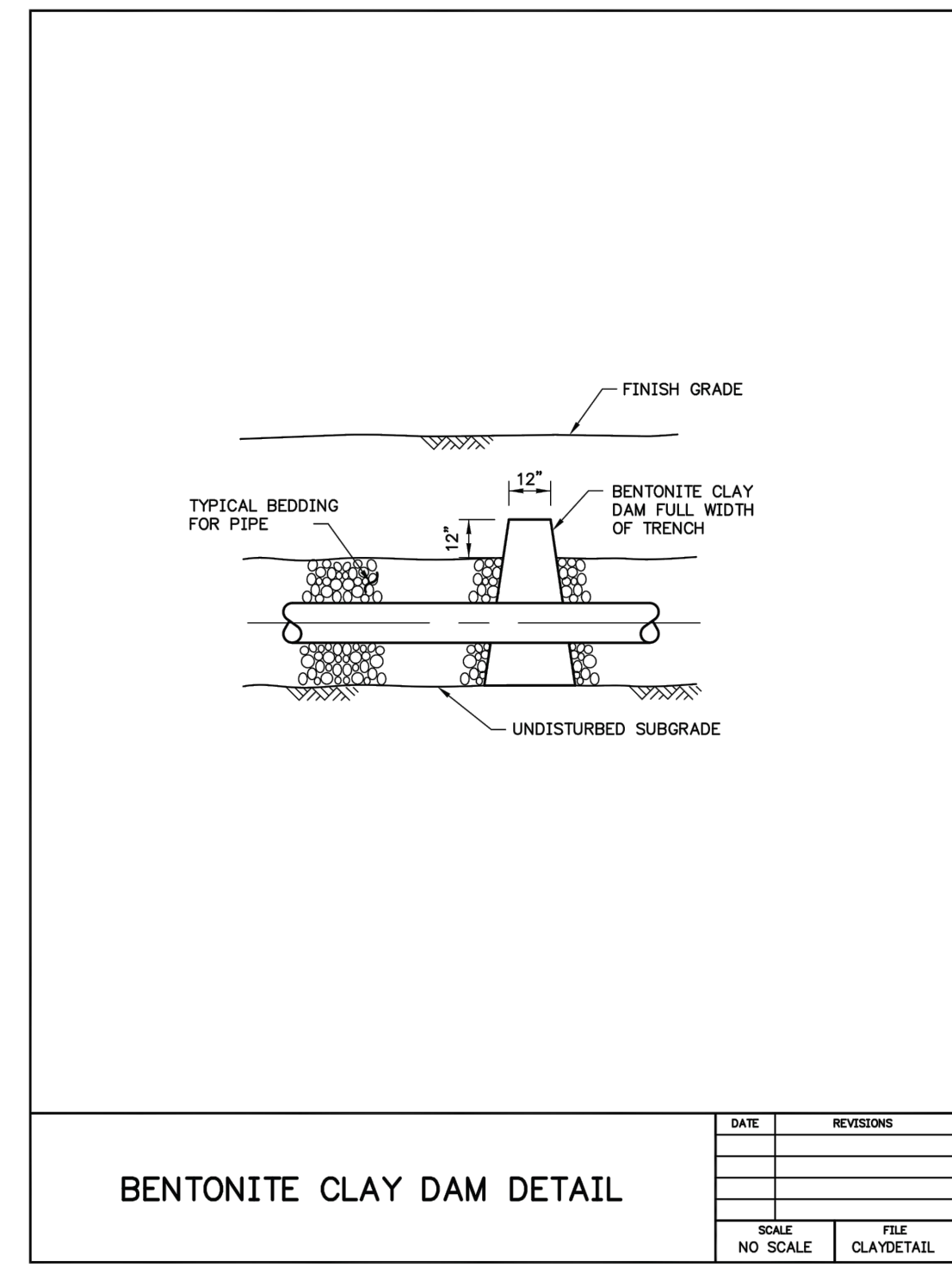
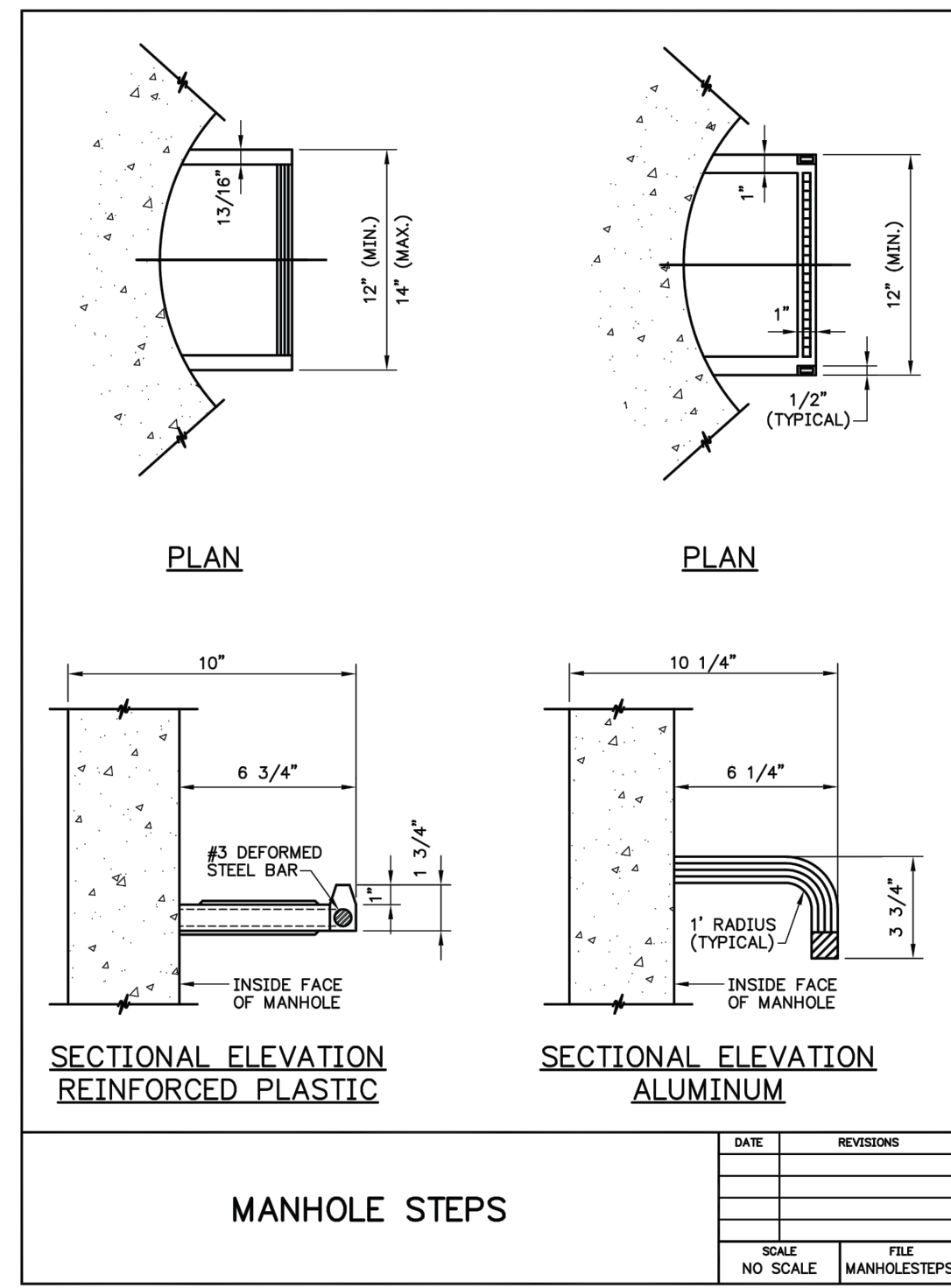
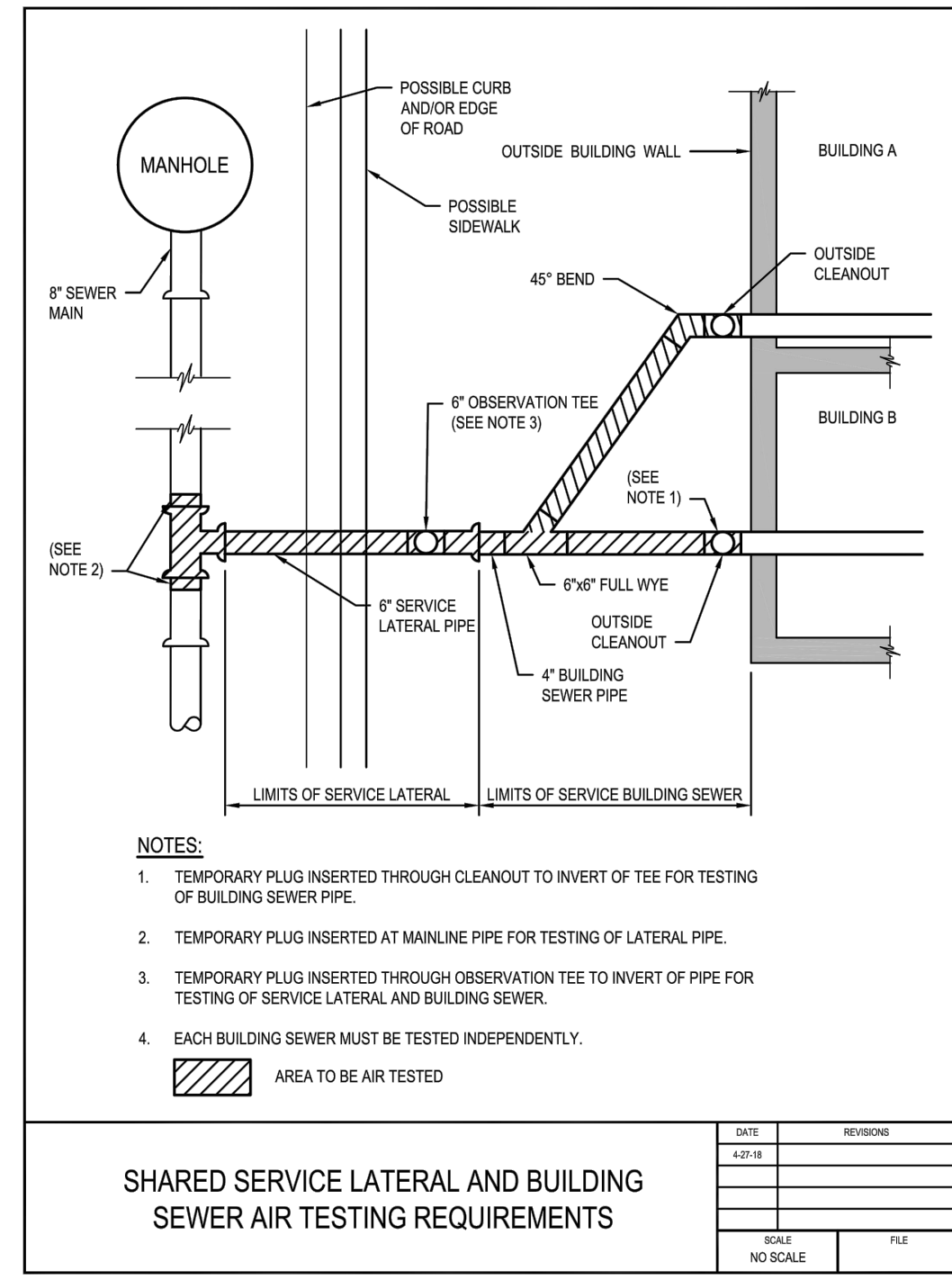
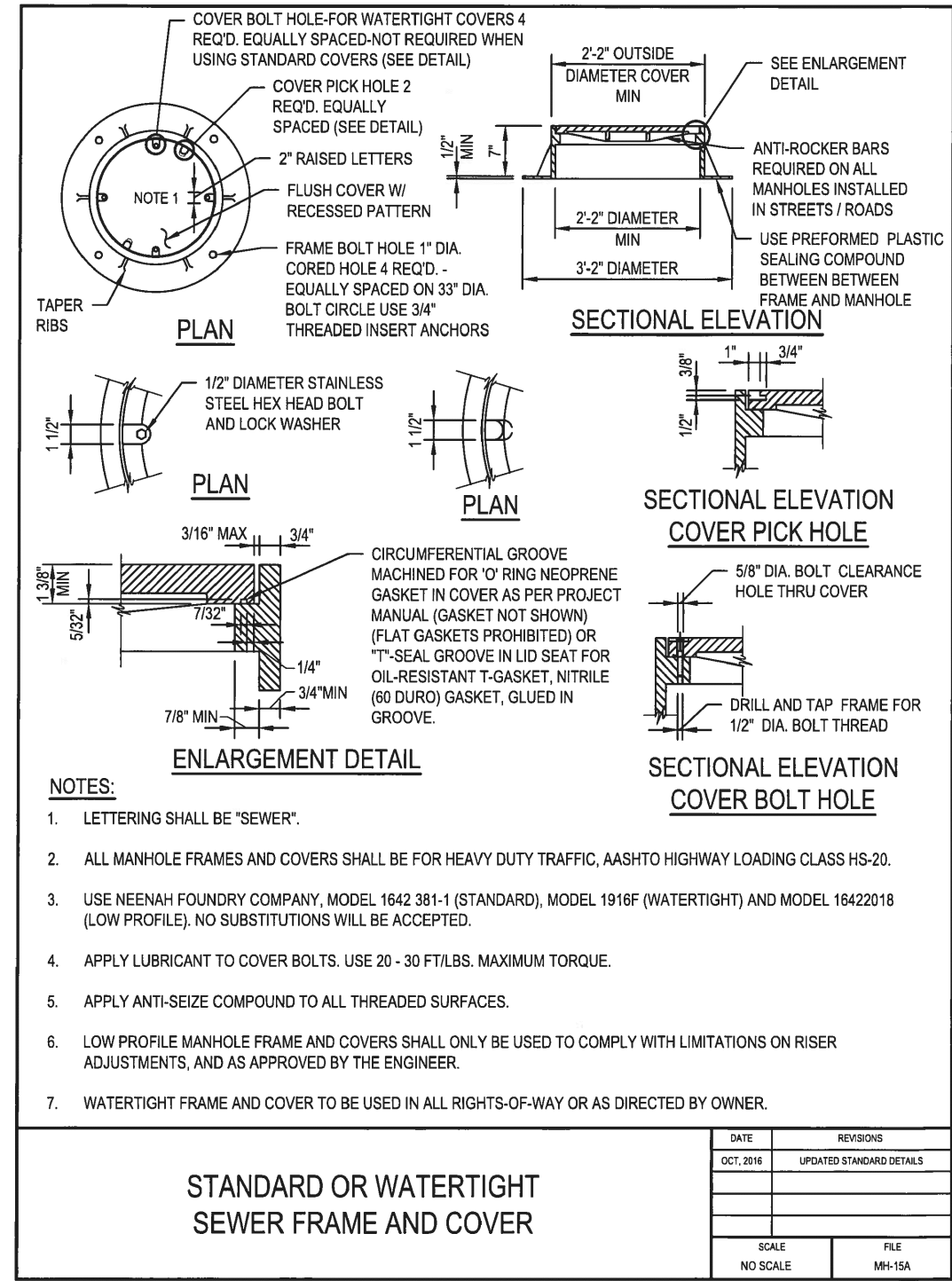
SANITARY SEWER DETAILS
 FOR
STRAY WINDS FARM PHASE 8
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA



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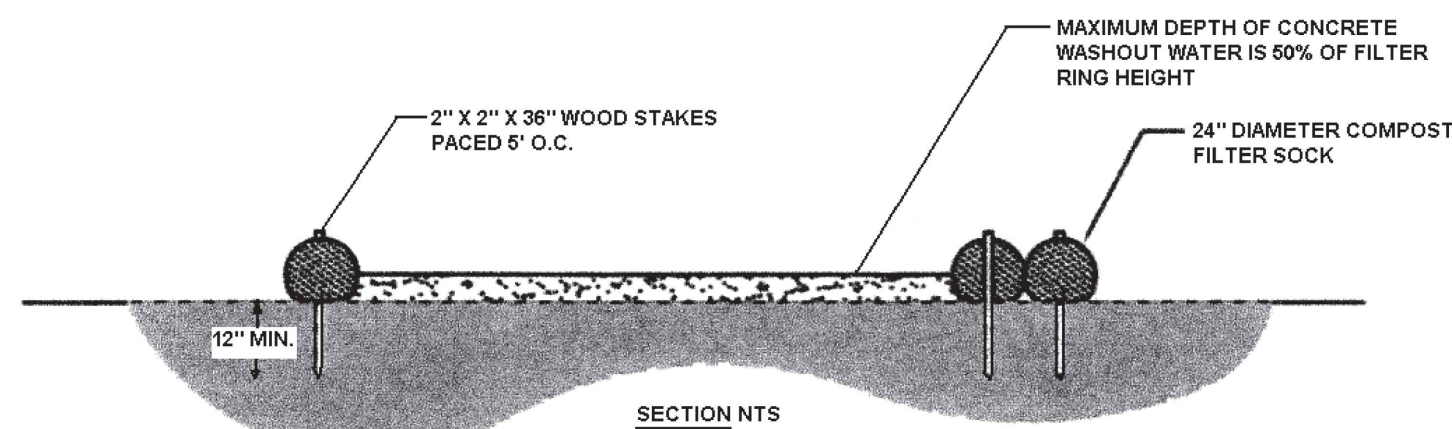
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 FOR
STRAY WINDS FARM PHASE 8
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

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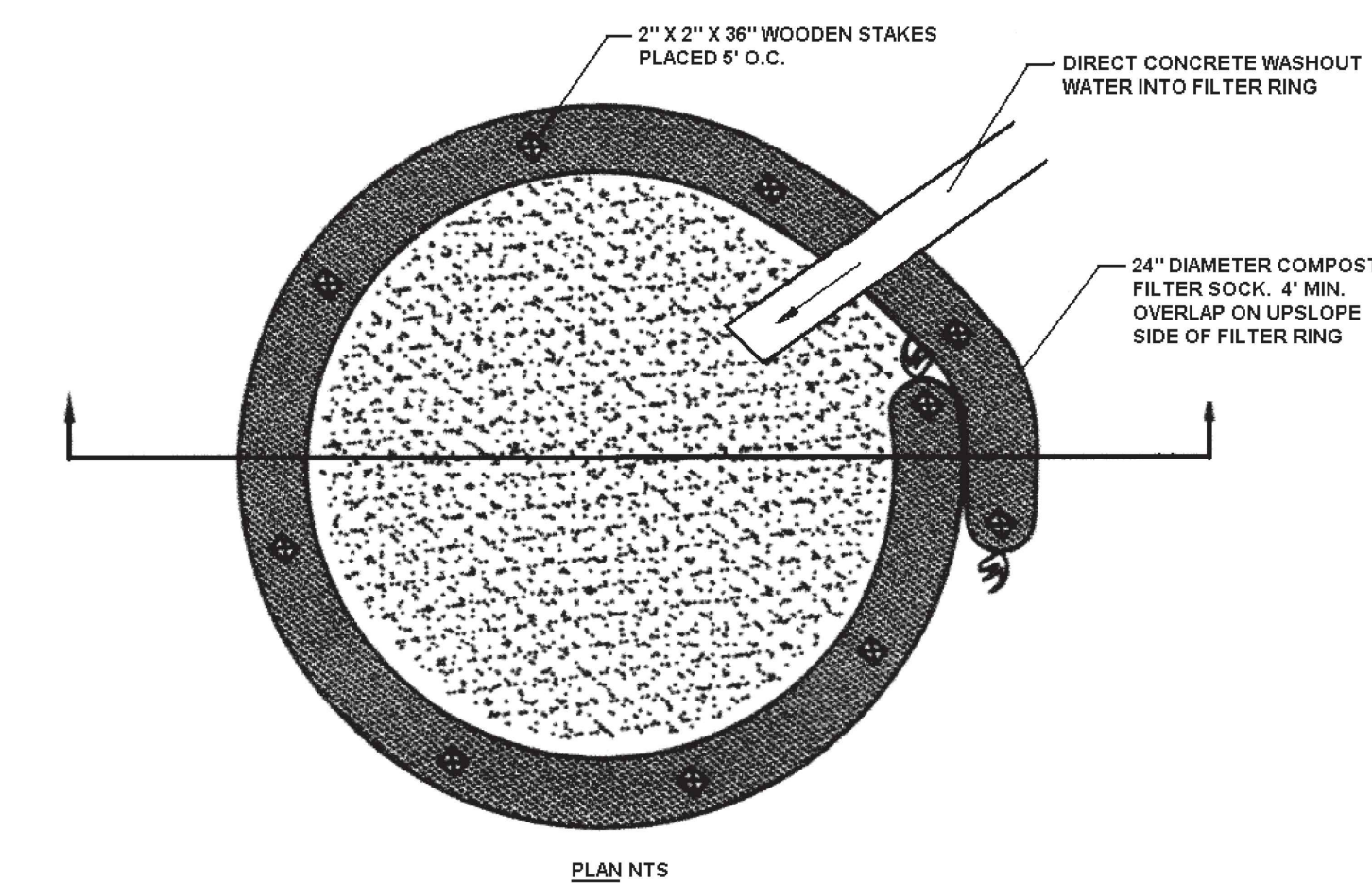


Filtrex

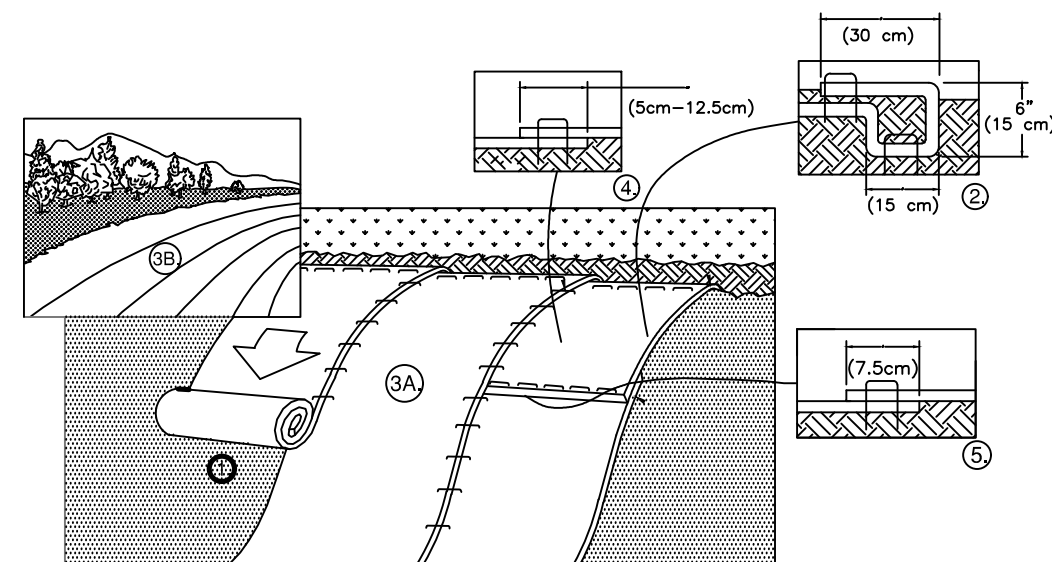
FIGURE 3.18
Typical Compost Sock Washout Installation



- NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
 2. 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.



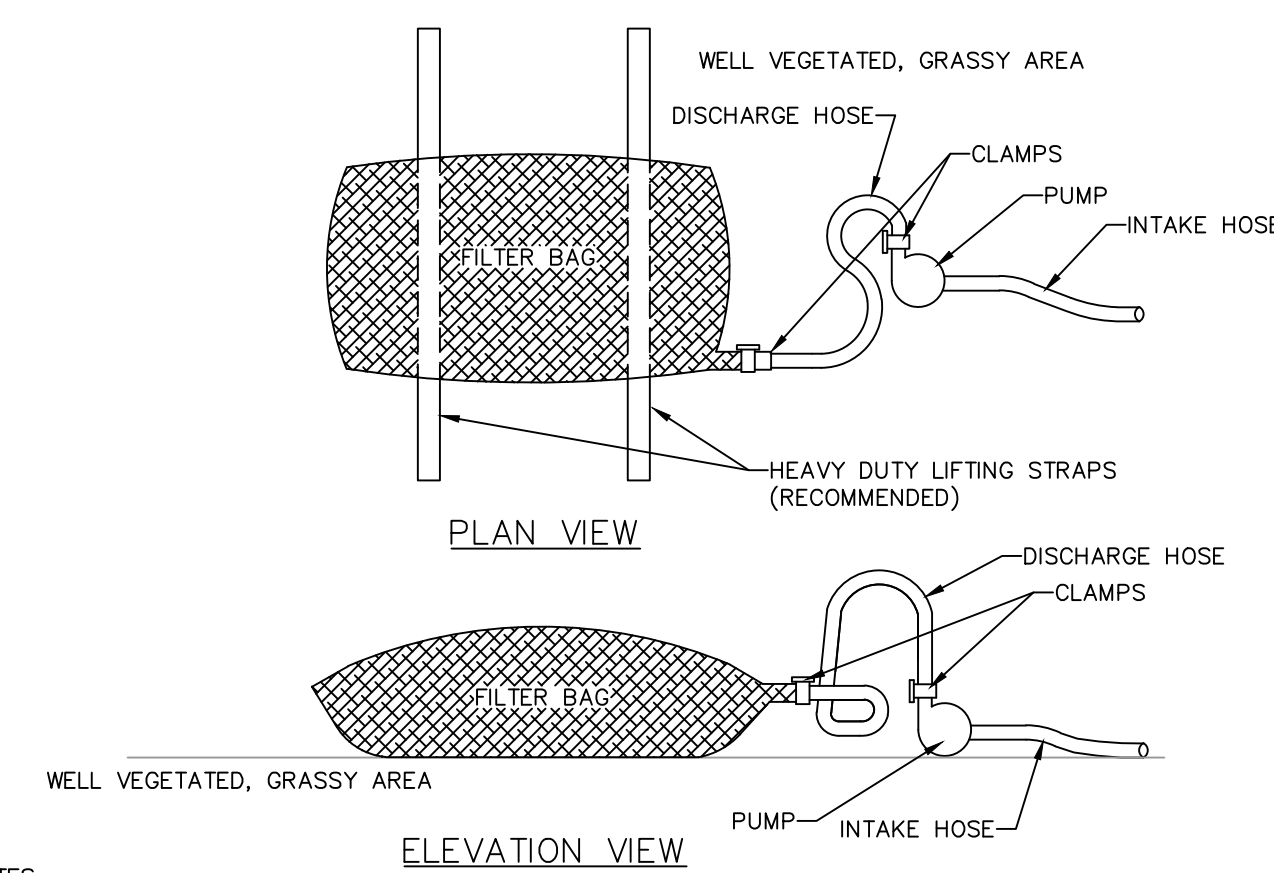
A suitable impervious geomembrane shall be placed at the location of the washout prior to installing the socks.
Adapted from Filtrex



- NOTE: EROSION CONTROL MATTING SHALL BE NORTH AMERICAN GREEN S75, OR APPROVED EQUAL.
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP x 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
 3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
 4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
 5. CONSECUTIVE BLANKETS SPUNCE DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.6cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.

NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

EROSION CONTROL MATTING ON SLOPE
NTS



NOTES:

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

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-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

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

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

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

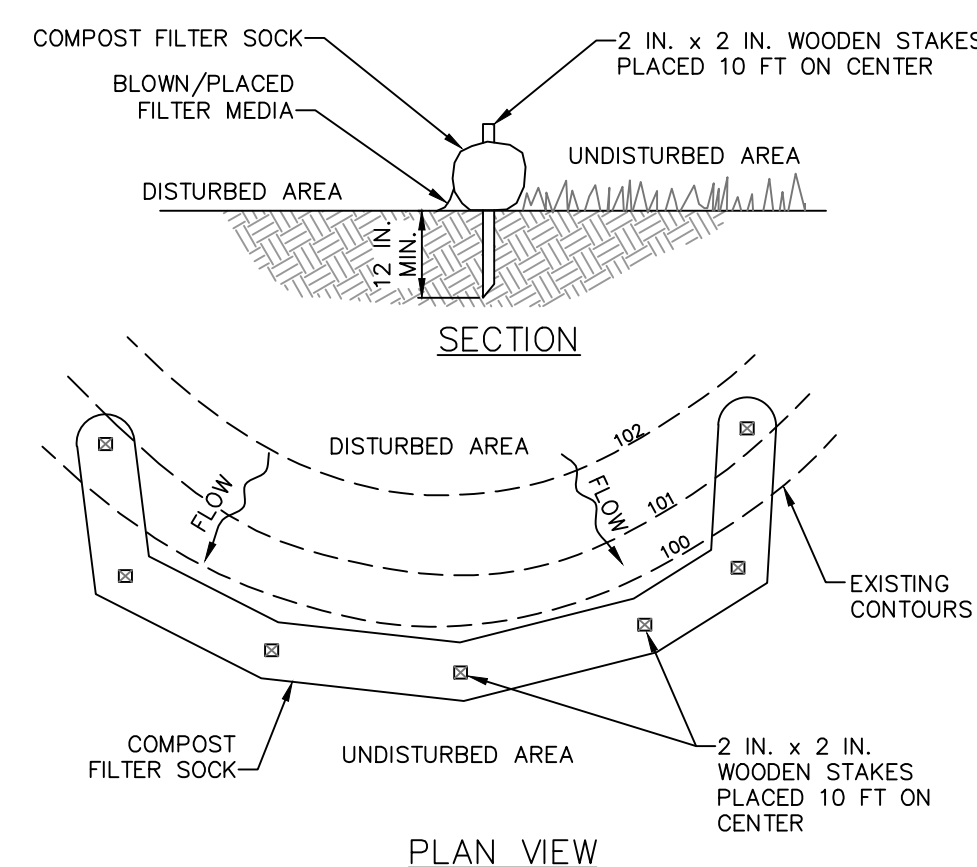
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

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

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

STANDARD CONSTRUCTION DETAIL #3-16
PUMPED WATER FILTER BAG

N.T.S.



COMPOST FILTER SOCK

NOT TO SCALE

NOTES:

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

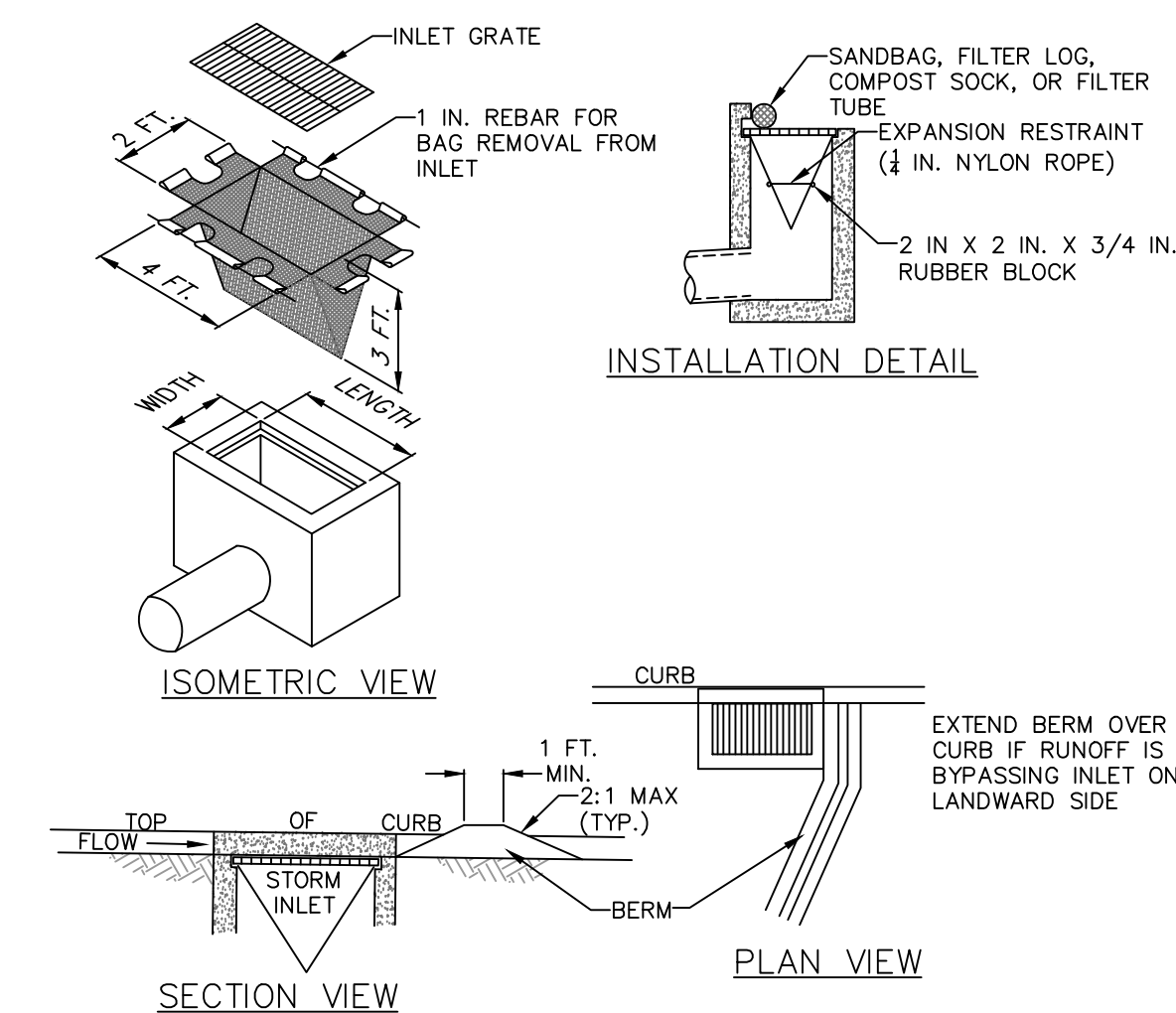
ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS. PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

COMPOST FILTER SOCK TABLE				
SOCK NO.	DIA.(IN)	LOCATION	SLOPE PERCENT	SLOPE LENGTH ABOVE BARRIER (FT)
6	12	Shown on E&S Control Plan	4.9	41
7	12	Shown on E&S Control Plan	1.2	161
8	12	Shown on E&S Control Plan	10.9	55
9	12	Shown on E&S Control Plan	16.9	59
10	12	Shown on E&S Control Plan	13.3	83
11	12	Shown on E&S Control Plan	10.6	113
12	12	Shown on E&S Control Plan	12.1	83
13	12	Shown on E&S Control Plan	25.0	23
14	12	Shown on E&S Control Plan	25.4	55
15	12	Shown on E&S Control Plan	19.2	31



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

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

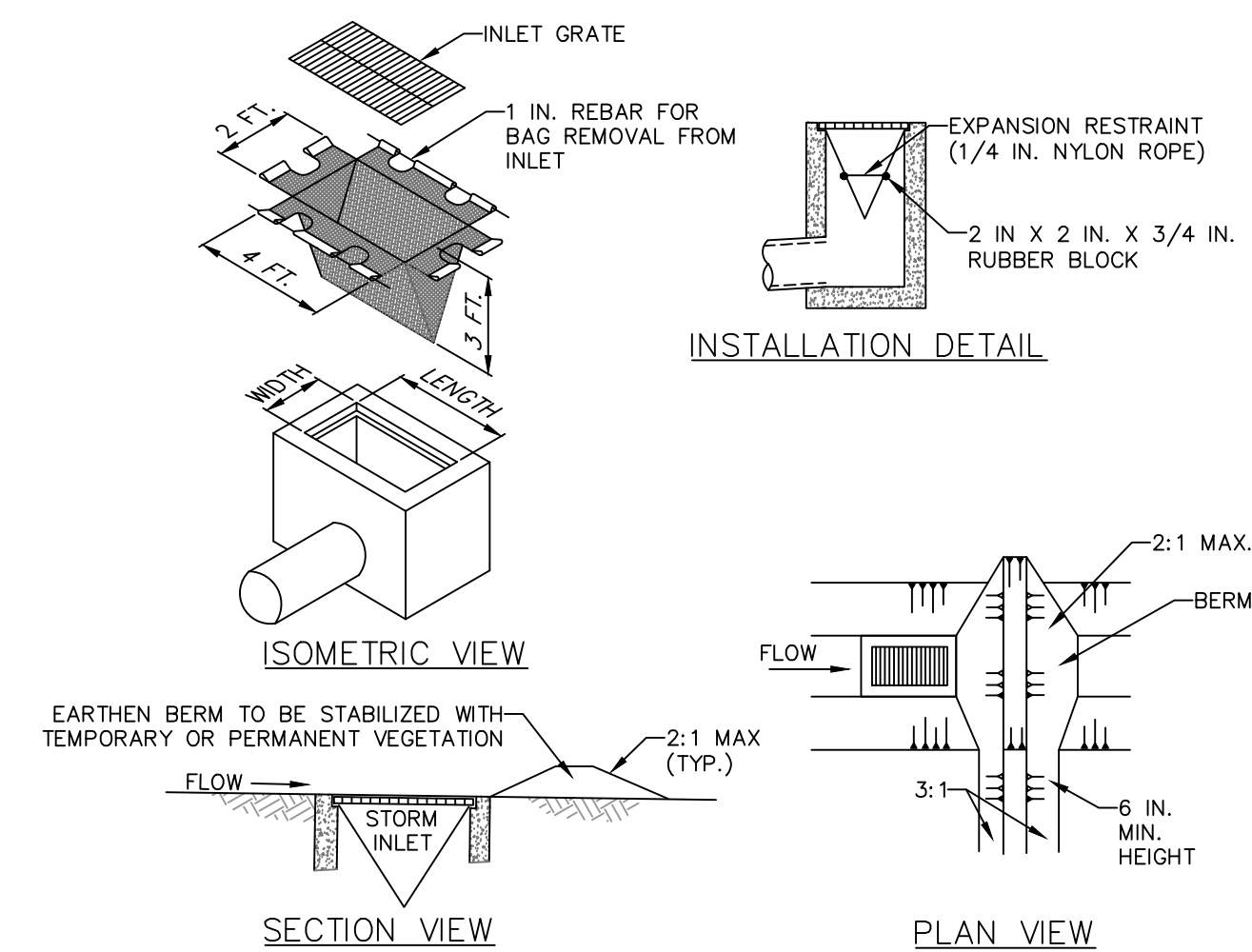
ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS. A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

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 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.

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

N.T.S.



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

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

ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

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.

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 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.

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

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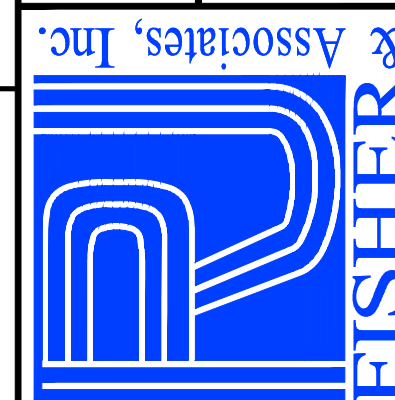
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E & S CONTROL DETAILS

FOR

STRAY WINDS FARM PHASE 8

LOCATED IN DAUPHIN COUNTY, PA

DRAWING ID: 22020-11-DTL-E&S

DATE: 5/6/2022

SHEET: 22 OF 24

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EROSION CONTROL PLAN

GENERAL NOTES

- The site contractor and their designers shall familiarize themselves with this Erosion Control Plan. The site contractor shall be responsible for implementation of this Erosion Control Plan.
- The site contractor shall not disturb more area than is necessary for the task to be done, so that potential for erosion is minimized.
- The site contractor shall ensure that earth disturbance activities are planned and implemented to the extent practicable in the following:
 - Minimize the extent and duration of the earth disturbance.
 - Maximize protection of existing drainage features and vegetation.
 - Minimize soil compaction.
 - Utilize other measures or controls that prevent or minimize the generation of increased stormwater runoff.
- Erosion and sedimentation controls must be constructed, stabilized, and functional before site disturbance within the tributary areas to the controls.
- A copy of the approved Erosion and Sediment Control Plan / Drawings (stamped, signed and dated by the reviewing agency) must be available at the project site at all times.
- Clearing, grubbing, and topsoil stripping shall be limited to those areas described in each stage of the construction sequence. General site clearing and topsoil stripping may not commence in any stage or phase of the project until the E & S BMPs specified by the Construction Sequence for that stage or phase have been installed and are functioning as described in this document.
- 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 operation begin.
- Topsoil stockpile heights shall not exceed 35 feet. Stockpile side slopes must be 2:1 or flatter.
- Solids, trash and other pollutants shall be disposed in accordance with federal and state regulations in order to prevent any pollutant in such materials from adversely affecting the environment. All building materials and wastes must be removed from the site and recycled or disposed in accordance with the Department of Environmental Protection's Solid Waste Management Regulations at 25 Pa. Code 260.1 et seq., 271.1, and 287.1 et seq. No building materials or wastes or unused building materials shall be burned, buried, dumped, or discharged at the site.
- All off-site waste and borrow areas must have an E & S Plan approved by the Conservation District or DEP, and fully implemented prior to being activated.
- The contractor will be responsible for the removal of any excess material and make sure the site(s) receiving the excess has an approved and fully implemented erosion and sediment control plan that meets the conditions of Chapter 102 and/or other State or Federal regulations.
- The contractor is responsible for ensuring that any material brought onto the 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.
- Areas which are to be topsoiled shall be scarified to a minimum depth of 4 inches 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 outcrops shall have a minimum of 2 inches of topsoil.
- All graded areas shall be permanently stabilized immediately upon reaching finished grade. Cut slopes in competent bedrock and rock fills need not be vegetated.
- Cut and fill slopes shall be capable of resisting failure due to slumping, sliding, or other movements.
- All E & S BMPs must remain functional as such until all areas tributary to them are permanently stabilized or until they are replaced by another BMP approved by the Conservation District or PA DEP.
- After final site stabilization has been achieved, temporary E & S BMPs must be removed or converted to permanent post construction stormwater management BMPs. Areas disturbed during removal or conversion of BMPs must be stabilized immediately. In order to ensure rapid revegetation of disturbed areas, such removal / conversions should be done only during the germinating season.
- 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 Pennsylvania Department of Environmental Protection 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.
- Only limited disturbance will be permitted to initially access and acquire borrow to construct control facilities, before general site alteration begins.
- If fuel or other dangerous chemicals are stored on site, then a Preparedness, Prevention and Contingency (PPC) Plan must be developed and kept on site.
- 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 in the manner described in this plan until such restoration is complete.
- All channels must be kept free of obstructions such as fill ground, fallen leaves & woody debris, accumulated construction materials/wastes, and construction materials. Channels should be kept mowed and/or free of all weeds, brushy or woody growth. Any underground utilities running across/through the channel(s) shall be immediately backfilled and the channel(s) repaired and stabilized per the channel cross-section detail.
- Vegetated channels shall be constructed free of rocks, tree roots, stumps or other projections that will impede normal channel flow and/or prevent good lining to soil contact. The channel shall be initially over-excavated to allow for the placement of topsoil.
- Sediment basins/traps shall be kept free of all trash, concrete wash water and other debris that pose the potential for clogging the basin/trap outlet structures and/or pose the potential for pollution to waters of the Commonwealth.
- All building materials and wastes shall be removed from the site and recycled or disposed in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code 260.1 et seq., 271.1, and 287.1 et seq. No building materials or wastes or unused building materials shall be burned, buried, dumped, or discharged at the site.
- Fill Materials:
 - The NPDES Permit covers the "moving, depositing, stockpiling, or storing of soil rock or earth materials. If the site will need to have fill imported from an off-site location, the responsibility for performing environmental due diligence and the determination of clean fill will in most cases reside with the Operator. If the site will have excess fill that will need to be exported to an off-site location, the responsibility of clean fill determination and the environmental due diligence rests on the applicant. If all cut and fill materials will be used on the site, a clean fill determination is not required by the operator unless there is a belief that a spill or release of a regulated substance occurred on site. The contractor is responsible for ensuring that any material brought onto the 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.
 - Applicants and/or operators must use environmental due diligence to ensure that the fill material associated with this project qualifies as Clean Fill. Definitions of Clean Fill and Environmental Due Diligence are provided below. All fill material must be used in accordance with the Department's policy "Management of Fill", document number 258-2182-773. A copy of this policy is available online at www.depweb.state.pa.us. Under the heading Quick Access on the left side of the screen, click on "Forms and Publications." On the left side of the screen click on "Technical Guidance Documents- Final". Then type the document number 258-2182-773 into the search window and conduct the search. Click on "Management of Fill."
 - 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 regulated 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."
 - Environmental due diligence: Investigative techniques, including, but not limited to, visual property inspections, electronic data base searches, review of property ownership, review of properly 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 a 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."
 - 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 residential waste regulations based on 25 Pa. Code Chapters 287 Residential Waste Management or 271 Municipal Waste Management, whichever is applicable.
- The potential for thermal impacts exists in the temporary condition as the existing vegetation on the site is disturbed, and un-shaded water will sit in the sediment traps. The thermal impacts will be minimized by infiltrating a portion of the runoff and temporary seeding disturbed areas as soon as possible.

SOIL LIMITATIONS & RESOLUTIONS

The soils on this site tend to be easily erodible, and may be susceptible to piping. A solution to this limitation is to grade the site at acceptable slopes (2:1 cut, 3:1 fill), and to stabilize the slopes as soon as they've been graded. The soils on this site are also corrosive to concrete, which the use of plastic pipes will help to alleviate. As are most soils in PA, the soils on this site can lead to cut banks that may cave. Proper stabilization will be utilized when digging pipe trenches and foundations. The soils on this site also have issues with slow percolation. Test pits and infiltration tests were performed in the area of the basins and underground infiltration beds to ensure that these limitations were analyzed for this site. These tests also allowed us to analyze the amount of topsoil present, which may be a limitation on the site.

SITE PRESERVATION ANALYSIS

There is a stream channel located on the north side of this site. In order to preserve, maintain and protect it, grading will be minimized at the location of the stream and silt socks will be placed along the stream's border to ensure that sediment laden runoff does not pollute the stream. Soil compaction will be kept to a minimum around the stream. Due to the nature of the development, which includes homes and surrounding streets, it was not possible to minimize the impervious areas on the site. There are no significant drainage features and vegetation to protect on this site. Most of the site area will have to be cleared and graded in order to construct the proposed improvements. The soil will experience some compaction in all of the areas where grading will occur, however compaction will be kept to a minimum in the areas of the basin and retention/infiltration area built in previous phases. The increase in the stormwater runoff volume in the 2-year storm will be infiltrated through the bottom of the existing Storm Basin.

STABILIZATION SPECIFICATIONS

- Upon temporary cessation of an earth disturbance activity or any stage or phase of an activity where a cessation of earth disturbance activities will exceed 4 days, the site shall be immediately seeded, mulched, or otherwise protected from accelerated erosion and sedimentation pending future earth disturbance activities.
- Permanent stabilization is defined as 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 required for the establishment of vegetation shall be stockpiled at the location(s) shown on the plan drawings 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. Topsoil stockpile heights shall not exceed 35 feet. Stockpile side slopes must be 2:1 or flatter.
- Areas which are to be topsoiled 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 outcrops shall have a minimum of 2 inches of topsoil.
- 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 seedbed preparation. Compacted soils should be scarified 6 to 12 inches along contour whenever possible prior to seeding.
- An erosion control blanket will be installed on all disturbed slopes 3:1 or steeper, all areas of concentrated flows, and disturbed areas within 50' of a surface water.

TEMPORARY SEEDING SCHEDULE

The contractor shall immediately temporarily stabilize any rough graded area, topsoil stockpile or unused excavated fill material that will be left idle for less than 1 year. The grass will provide interim protection against the impact of precipitation, running water and wind. Permanently seeded any area that will be idle for more than 1 year.

Temporary seeding schedule is as follows:

Species: annual rye grass
 % Live Seed: 98%
 Application rate: 10 lbs./1,000 sq. yds.
 Fertilizer type: general purpose granular, 10-20-20
 Fertilizer application rate: 11 lbs./1,000 sq. yds.
 Powdered Liming rate: per soil test; minimum of 4 tons per acre.
 Straw/mulch rate: 1,200 lbs./1,000 sq. yds.
 Seeding dates: no seeding between 11/1 and 3/15
 Mulch anchoring: Asphalt, either emulsified or cut-back, containing no solvents or other diluting agents toxic to plant or animal life, uniformly applied at the rate of 31 gallons per 1,000 square yards. Synthetic binders (chemical binders) may be used per manufacturer's recommendation provided they are non-toxic to plant and animal species.

When seeding is not possible due to the time of year or other limitations, disturbed area shall be mulched with straw at the rate above. An erosion control blanket may be installed on all disturbed slopes steeper than 3:1, and all areas with concentrated flows. Matting can be North American Green 'S75' or approved equal.

PERMANENT SEEDING SCHEDULE

All disturbed soil not to be covered with impervious surfaces, riprap or landscaping mulch shall be permanently seeded to provide protection against the impact of precipitation, running water and wind. Permanent seeding schedule for the general project area is as follows:

Species: 30% Kentucky bluegrass
 40% Pennwax Creeping Red Fescue
 20% Norela Perennial ryegrass
 10% annual ryegrass
 % Pure live seed: 98%
 Application rate: 6 lbs./1,000 sq. ft.
 Fertilizer application rate: 11 lbs./1,000 sq. yds.
 Powdered Liming rate: per soil test; minimum of 6 tons per acre
 Seeding dates: between 4/1 and 10/15
 Straw/mulch rate: 3 tons per acre
 Mulch anchoring: Asphalt, either emulsified or cut-back, containing no solvents or other diluting agents toxic to plant or animal life, uniformly applied at the rate of 31 gallons per 1,000 square yards. Synthetic binders (chemical binders) may be used per manufacturer's recommendation provided they are non-toxic to plant and animal species.

An erosion control blanket must be installed on all disturbed slopes steeper than 3:1, and all areas with concentrated flows. Matting can be North American Green 'S75' or approved equivalent.

A minimum of 6" of topsoil shall be placed prior to seeding.

MAINTENANCE PLAN

- Until the site is stabilized, all erosion and sediment control BMPs must be maintained properly. Responsibility for implementing and maintaining erosion and sedimentation control measures shall be designated to a minimum of one individual who will be present at the project site each working day. Maintenance must include inspections of all erosion and sediment control BMPs after each runoff event and on a weekly basis, to ensure that they are in place, stable, and functioning properly. All preventative and remedial maintenance work, including clean out, repair, replacement, re-seeding, re-planting, re-netting must be performed immediately, to restore the control measure to the original design. If erosion and sediment control BMPs fail to perform as expected, replacement BMPs, or modifications of those installed, will be required.
- A log showing dates that E & S BMPs 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.
- Any sediment removed from BMPs during construction shall be returned to upland areas within the project area, and incorporated into the site grading, or in the manner described on the plan drawings.
- See the construction details and seeding specifications for maintenance procedures for the various control measures.
- Mud must be removed from vehicle tires before they exit the site. Sediment tracked onto any public roadway or sidewalk shall be returned to the construction site by the end of each work day 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.

STAGING OF EARTH MOVING ACTIVITIES

- At least 3 days before starting any earth disturbance activities, all contractors involved in those activities shall notify the Pennsylvania One Call system incorporated at 1-800-242-1776 for the location of existing underground utilities.
- All earth disturbance activities shall proceed in accordance with the following specific sequencing. Each stage shall be completed and immediately stabilized before any following stage is initiated. Clearing, grubbing and topsoil stripping shall be limited only to those areas described in each stage. Any deviation from the following sequence must be approved in writing from the County Conservation District.
- Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices to eliminate the potential for accelerated erosion and/or sediment pollution.
- At least 7 days before starting any earth disturbance activities, the owner and/or operator shall invite all contractors involved in those activities, the lot owner, all appropriate municipal officials, and a representative of the County Conservation District to an on-site pre-construction meeting.
- Immediately after earth disturbance activities cease, the operator shall stabilize the disturbed areas. During non-germinating periods, mulch must be applied at the specified rates. Disturbed areas which are not at finished grade and which will be re-disturbed within 1 year must be stabilized in accordance with the temporary seeding vegetative stabilization specifications. Disturbed areas which are not at final grade or which will not be re-disturbed within 1 year must be stabilized in accordance with the permanent seeding vegetative stabilization specifications.
- All pumping of sediment laden water shall be through a sediment control BMP, such as a pumped water filter bag or equivalent sediment removal facility, over undisturbed vegetated areas.
- The permanent stormwater retention area shown on the drawings shall be delineated by the land surveyor prior to beginning of earthmoving activities, and this area shall be fenced off during construction so that it is not disturbed until it is time for permanent final grading and seeding, and that time it can be shaped per the grading plan. No vehicles should be driven over the retention area except as necessary for final shaping and seeding.

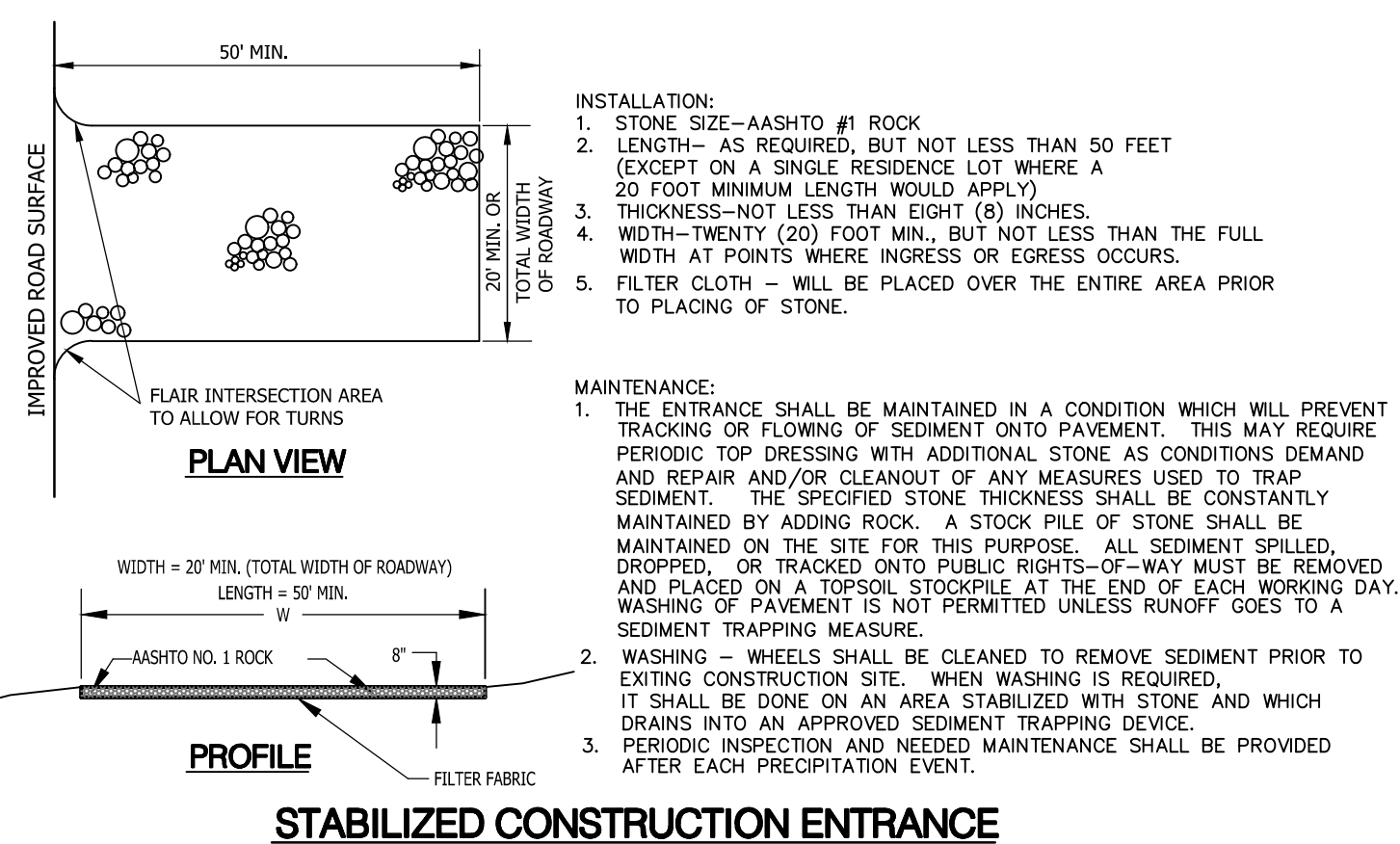
SPECIFIC STAGING OF EARTHMOVING ACTIVITIES FOR MASS GRADING AND INSTALLATION OF COMMON IMPROVEMENTS

PHASE 8

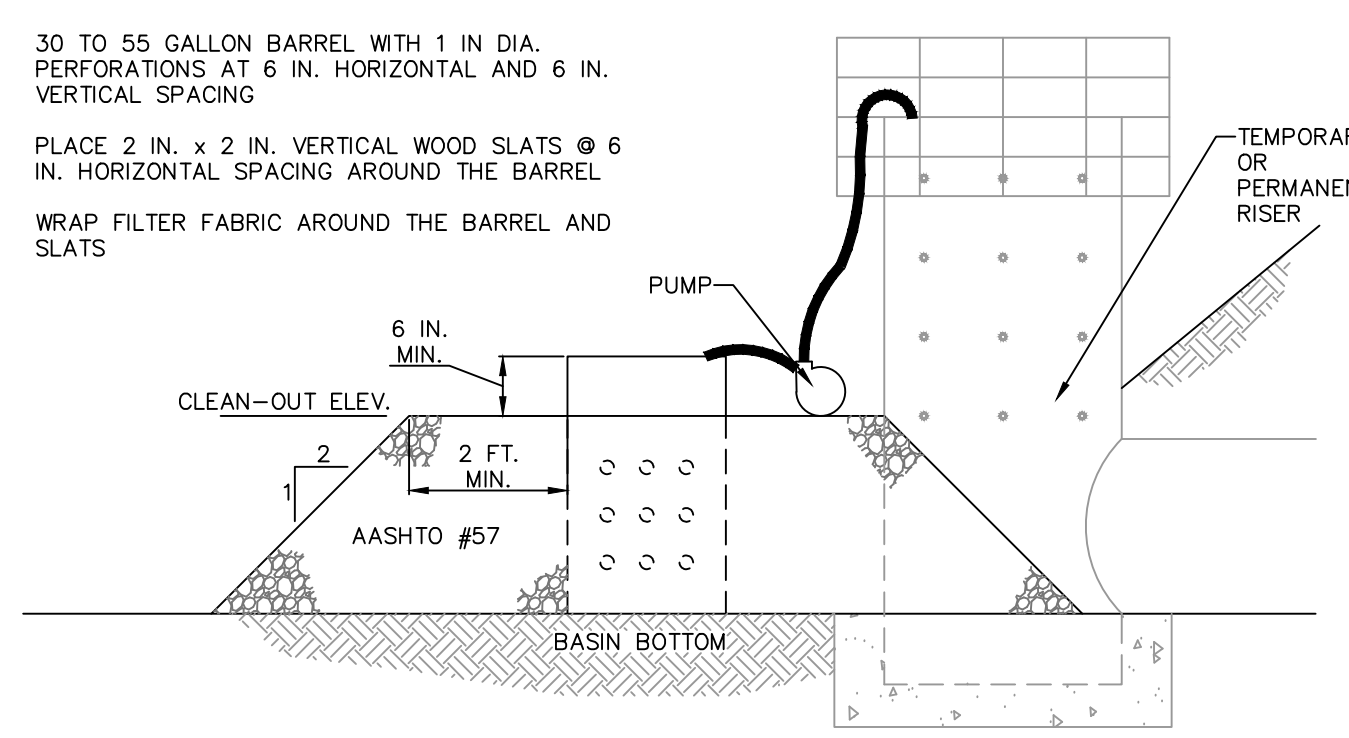
- No earth disturbance should be started until the E&S BMP's treating the disturbed area are installed and functioning.
- Clearly field mark the limits of disturbance. Install the rock construction entrances. The rock construction entrances shall be continually maintained to the specified dimensions. A stockpile of AASHTO #1 coarse aggregate shall be on the site for this purpose. At the end of each workday, any sediment deposited on paved roadways shall be removed and returned to the construction site. Field mark the topsoil stockpile locations. Topsoil stockpiles shall be stabilized utilizing the temporary seeding schedule and shall have sediment barriers located downstream to capture any sediment laden runoff. Stockpiles shall not exceed 35' in height and side slopes must be 2:1 or flatter. Field mark the locations of the wetlands of the Commonwealth located within the NPDES boundary including wetland boundaries and streams.
- Verify that all Erosion & Sediment Controls proposed in Phase 7 that are intended for use in Phase 8 are present and functional.
- Sediment Barriers 6-13 installed with Phase 7 shall remain at the locations shown on the E&S Plan. Adjust as necessary. Disturbance shall be restricted to that which is only necessary to access and install the designated sediment barriers.
- Sediment Basin 4b constructed with Phase 7 shall remain functional until the completion of Phase 8 or at a time the Conservation District deems conversion appropriate.
- Strip the topsoil within the remaining area that will be graded. Clear and grub as necessary.
- Complete any mass grading that did not occur with Phase 7. Minimize soil compaction within the undisturbed areas. Stabilize soil immediately and install temporary seeding as soon as possible.
- Rain Gardens 3, 4 and 5 shall be constructed during final grading. Infiltration Pits 2 and 3 shall be installed with home construction. Ensure care is taken to minimize compaction and protect rain gardens and infiltration pits from sediment laden runoff. Stabilization shall occur as soon as possible.

CONVERSION TO PCSM

- Temporary control measures can only be removed when the watershed draining to the measure is permanently stabilized and removal is authorized by the County Conservation District. Permanently stabilized is defined as a minimum uniform 70% perennial vegetative cover or other permanent non-vegetative cover with a density capable to resist accelerated surface erosion, and subsurface characteristics sufficient to resist sliding and other movements. The location of the control measure must be immediately permanently stabilized upon its removal. All areas to be permanently seeded shall have a minimum depth of 6" of topsoil before seeding.
- Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operators shall contact the County Conservation District for an inspection prior to the removal of the E&S BMP's.
- Upon approval from the County Conservation District, all silt barriers shall be properly removed.
- Any areas disturbed during the removal of the temporary BMPs shall be immediately repaired and permanently stabilized.
- Dauphin County Conservation District shall be notified in order to determine if an inspection of the BMP is necessary before conversion. Dewater the Sediment Basin and remove accumulated sediment, regrade to subgrade elevation, and fill basin perimeter to final grades. Remove trash rack and anti-vortex device and replace with permanent top unit structure. All temporary orifices in the permanent outlet structure shall be capped. A temporary erosion control blanket shall be installed with the permanent seed and mulch over the entire interior of the basin. Permanently stabilize all areas disturbed during removal of E&S Controls. As this is a critical stage, a licensed professional must be present to oversee.
- Upon completion of all earth disturbance activities, removal of all temporary BMPs, the owner/operators shall contact the County Conservation District for a final inspection.



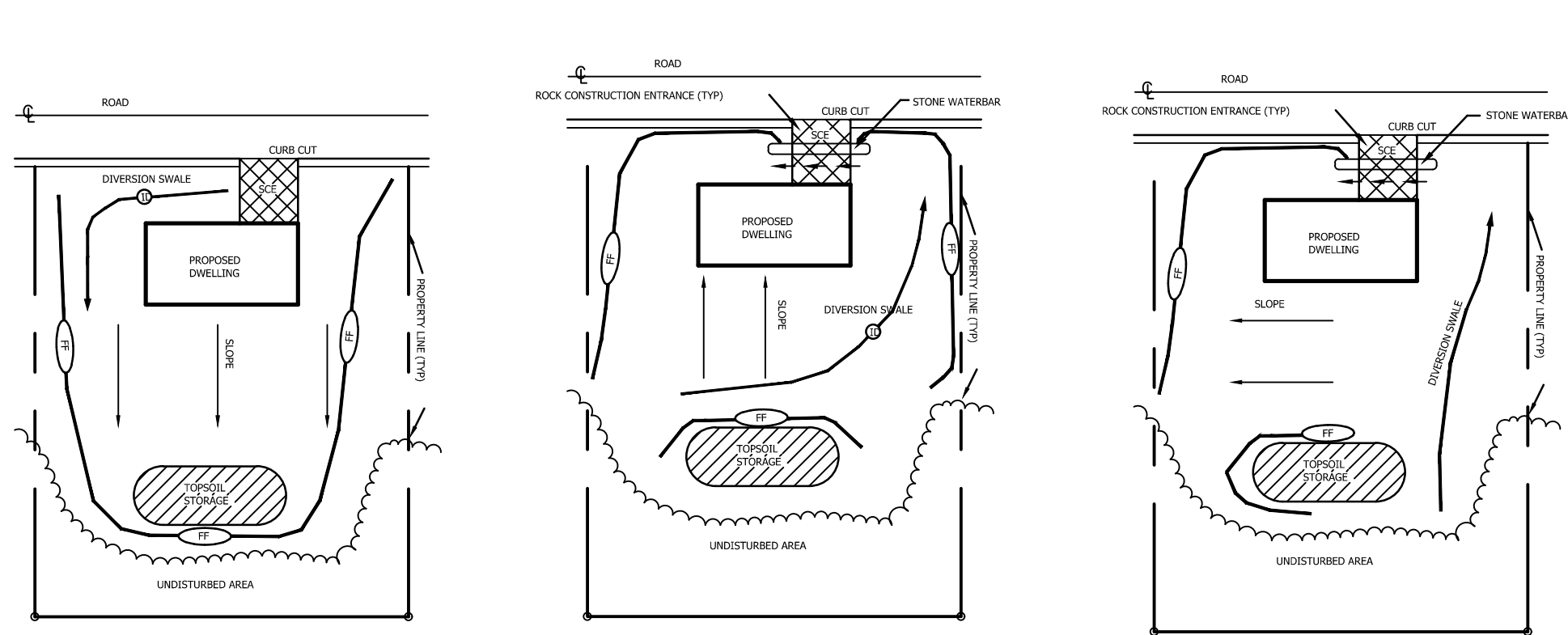
- INSTALLATION:**
- STONE SIZE-AASHTO #1 ROCK
 - LENGTH- AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDING LOT WHERE A 20 FOOT MINIMUM LENGTH WOULD APPLY)
 - THICKNESS-NOT LESS THAN EIGHT (8) INCHES
 - WIDTH-TWENTY (20) FEET MIN. BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
 - FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- MAINTENANCE:**
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. THE SPECIFIED STONE THICKNESS SHALL BE CONSTANTLY MAINTAINED BY ADDING ROCK. A STOCKPILE OF STONE SHALL BE MAINTAINED ON THE SITE FOR THIS PURPOSE. ALL SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED AND PLACED ON A TOPSOIL STOCKPILE AT THE END OF EACH WORKING DAY. WASHING OF PAVEMENT IS NOT PERMITTED UNLESS RUNOFF GOES TO A SEDIMENT TRAPPING MEASURE.
 - IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
 - PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH PRECIPITATION EVENT.



- NOTES:**
- DEWATERING FACILITY SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF BASIN/TRAP.
 - PRIOR TO INITIATING OPERATION OF DEWATERING FACILITY, ALL ACCUMULATED SEDIMENT SHALL BE CLEANED FROM THE INSIDE OF THE BARREL.
 - DEWATERING FACILITY SHALL BE CONTINUOUSLY MONITORED DURING OPERATION. IF FOR ANY REASON THE DEWATERING FACILITY CEASES TO FUNCTION PROPERLY, IT SHALL BE IMMEDIATELY SHUT DOWN AND NOT RESTARTED UNTIL THE PROBLEM HAS BEEN CORRECTED.

**STANDARD CONSTRUCTION DETAIL #7-18
 SEDIMENT BASIN OR SEDIMENT TRAP
 SEDIMENT STORAGE DEWATERING FACILITY**

NOT TO SCALE



EACH HOUSE CONSTRUCTION SHALL BE TREATED AS A SELF-CONTAINED EROSION CONTROL PROJECT SO THAT ONLY CLEAN WATER LEAVES THE LOT BOUNDARY. SEE THE GENERAL NOTES AND MAINTENANCE NOTES ON THE GRADING PLAN. TYPICAL STAGING OF EARTHMOVING ACTIVITIES FOR INDIVIDUAL HOME CONSTRUCTION IS AS FOLLOWS:

- INSTALL TEMPORARY CONTROL MEASURES BEFORE ANY EXCAVATION. INSTALL THE MINIMUM 20 FOOT LONG ROCK CONSTRUCTION ENTRANCE OFF THE STREET AT THE PERMANENT DRAINAGE LOCATION. IF SLOPE IS TOWARDS THE STREET, GENTLY HUMP THE STONE ENTRANCE TO DIVERT WATER TO ONE SIDE AND INTO A SILT FENCE. INSTALL SILT FENCE ON THE DOWNHILL PERIMETER OF THE LOT SO ALL DRY WATER PASSES THROUGH IT. SEE THE ADJACENT CHART FOR SIZING OF SILT FENCE. INSTALL DIVERSION SWALE TO CARRY RUNOFF AROUND THE EXCAVATION AREA AND TO THE SILT FENCE. TEMPORARY SEED THE SWALE UPON CONSTRUCTION.
- STRIP TOPSOIL AND STOCKPILE; TEMPORARY SEED THE PILE.
- CONSTRUCT THE HOUSE AND UTILITY CONNECTIONS. BACKFILL AND FINAL GRADE LOT. ELIMINATE THE DIVERSION SWALE. FINAL GRADE AND STABILIZE ALL PERMANENT SWALES ACCORDING TO GRADING PLAN. PLACE AND SHAPE STONE FOR DRIVEWAY AS SOON AS POSSIBLE. AS SOON AS CONSTRUCTION AND GRADING IS COMPLETE, REPLACE TOPSOIL AND PERMANENTLY SEED OR LANDSCAPE ON ALL REMAINING DISTURBED SOIL.
- WHEN THE LOT IS AT LEAST 70% UNIFORMLY STABILIZED, REMOVE SILT FENCE AND PERMANENTLY SEED ITS LOCATION.

SLOPE - %	MAXIMUM SLOPE LENGTHS FOR FILTER FABRIC (FT) LENGTH			
	18" fence	30" fence	Super silt fence	300
2 (OR LESS)	150	500	1,000	1,000
5	100	250	500	500
10	50	150	300	300
15	35	100	250	250
20	25	70	200	200
25	20	55	150	150
30	15	45	100	100
35	15	40	80	80
40	15	35	75	75
45	10	30	60	60
50	10	25	50	50

TYPICAL INDIVIDUAL ON-LOT E&S CONTROL PLAN

N.T.S. NOTE: THIS CONTROL MUST BE USED IF RUNOFF FROM THE LOT WILL NOT BE TREATED BY SEDIMENT BASIN OR TRAP

NO.	REVISION	DATE
1		
2		
3		
4		


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 CIVIL ENGINEERING & LAND SURVEYS
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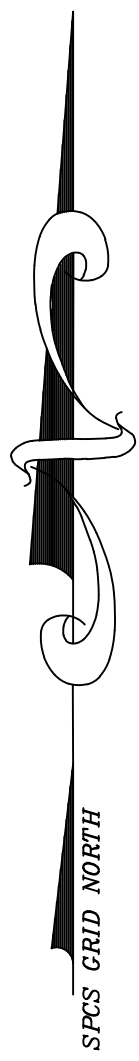


E & S CONTROL DETAILS
 FOR
STRAY WINDS FARM PHASE 8
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 222020-11-DTL-E&S
 DATE: 5/6/2022
 SHEET: 23 OF 24

PHASE 7 SANITARY SEWER INDEX MAP
SCALE 1:100

EXISTING SANITARY 
PROPOSED SANITARY 



NO.	REVISION	DATE
1		
2		
3		
4		

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SANITARY INDEX MAP
FOR
STRAY WINDS FARM PHASE 8
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:
222020-12-SAN INDEX
DATE: 5/6/2022
SHEET: 24 OF 24

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