



MOUNT JOY TOWNSHIP

LANCASTER COUNTY, PENNSYLVANIA

Application for Consideration of a Subdivision and/or Land Development Plan

For Mount Joy Township Use Only:

M.J.T.P.C. File No.: 24-21-MLDP	Date of Receipt/Filing: October 28, 2024
School District: Donegal	<input checked="" type="checkbox"/> Elizabethtown

The undersigned hereby applies for approval under Chapter 119, Subdivision and Land Development, of the Code of the Township of Mount Joy for the Plan submitted herewith and described below:

Plan & Project Information

Plan Name: BOB BRUBAKER AG OPERATION			
Plan No.:	24000-001	Plan Date:	10/7/2024
Location: 2205 CAMP ROAD, MANHEIM, PA 17545			
Property Owner: ROBERT BRUBAKER			
Owner Address: 2871 N., COLEBROOK ROAD, MANHEIM, PA 17545			
Telephone No.: 717-575-5255			
E-mail:			
Deed Reference: 05409533		Tax Parcel No.: 460-2325921-324722-0-0000	
Plan Type:	<input type="checkbox"/> Sketch	<input type="checkbox"/> Preliminary	<input type="checkbox"/> Final
	<input type="checkbox"/> Lot Line Change	<input checked="" type="checkbox"/> Minor Agricultural or Land Development	
Description: THE EXPANSION OF AN EXISTING AGRICULTURAL OPERATION WITH THE CONSTRUCTION ON AN ADDITIONAL 54' X 600' POULTRY BARN			
Zoning District: AG			
Is a zoning change necessary? NO		If yes, please specify:	
Is/was a zoning variance, special exception, or conditional use approval necessary?			If yes, attach ZHB decision.
Total Acreage: 35			
Name of applicant (if other than owner):			
Address:			
Telephone No.:			
E-mail:			
Firm which prepared plan: NCS, INC.			
Address: 330 WEST ROUTE 897, REINHOLDS, PA 17569			
Phone No.: 717-220-3132			
Person responsible for plan: BERT NYE / ROBERT RUTH			
E-mail: BNYE@NCSINCORP.COM / ROB@NCSINCORP.COM			

◆ SUPERVISORS ◆ PARK & RECREATION BOARD ◆ PLANNING COMMISSION ◆ ZONING HEARING BOARD

8853 ELIZABETHTOWN ROAD, ELIZABETHTOWN, PA 17022

PHONE (717) 367-8917 –FAX (717) 367-9208

www.mtjoytp.org

Proposed Lots and Units

	# of Lots	# of Units		# of Lots	# of Units
Total #			Mixed Use		
Agricultural	1	5	Single Family Detached		
Commercial			Multifamily (attached-sale)		
Industrial			Multifamily (attached-rental)		
Institutional			Other:		
Total Square Feet of Ground Floor Area (building footprint):			32400		
Total Square Feet of Existing Structures (all floors):			129600		
Total Square Feet of Proposed Structures (all floors):			32400		
Total Square Feet (or Acres) of Proposed Parkland/Other Public Use:			0		
Linear feet of new street:			0		
Identify all street(s) not proposed for dedication:			NONE		

Type of water supply proposed:

<input type="checkbox"/>	Public (Live)	<input type="checkbox"/>	Community
<input type="checkbox"/>	Public (Capped)	<input checked="" type="checkbox"/>	Individual

Type of sanitary sewage disposal proposed:

<input type="checkbox"/>	Public (Live)	<input type="checkbox"/>	Community
<input type="checkbox"/>	Public (Capped)	<input checked="" type="checkbox"/>	Individual

The undersigned hereby represents that, to the best of his knowledge and belief, all information listed above is true, correct and complete.

Signature of Landowner of Applicant

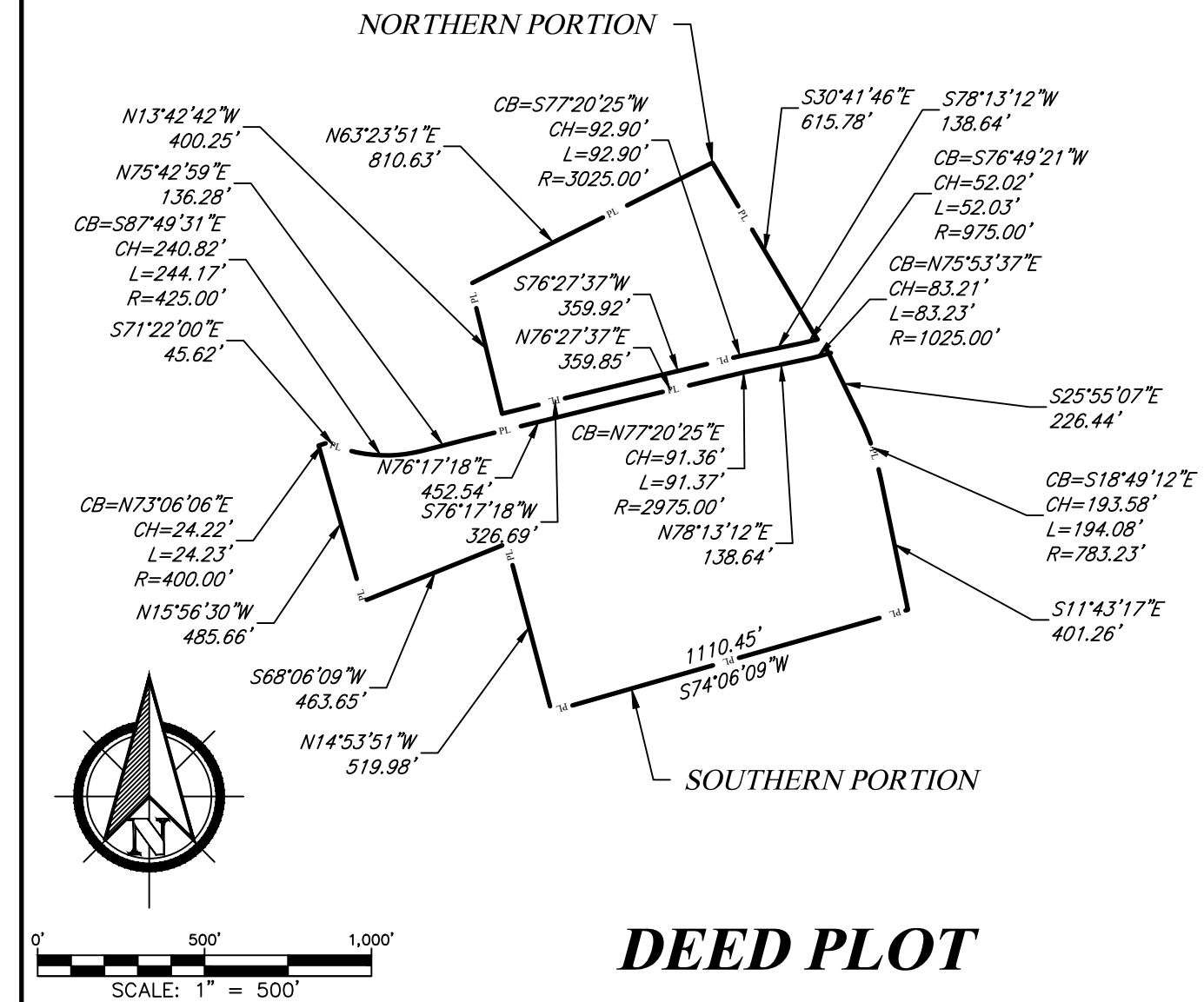
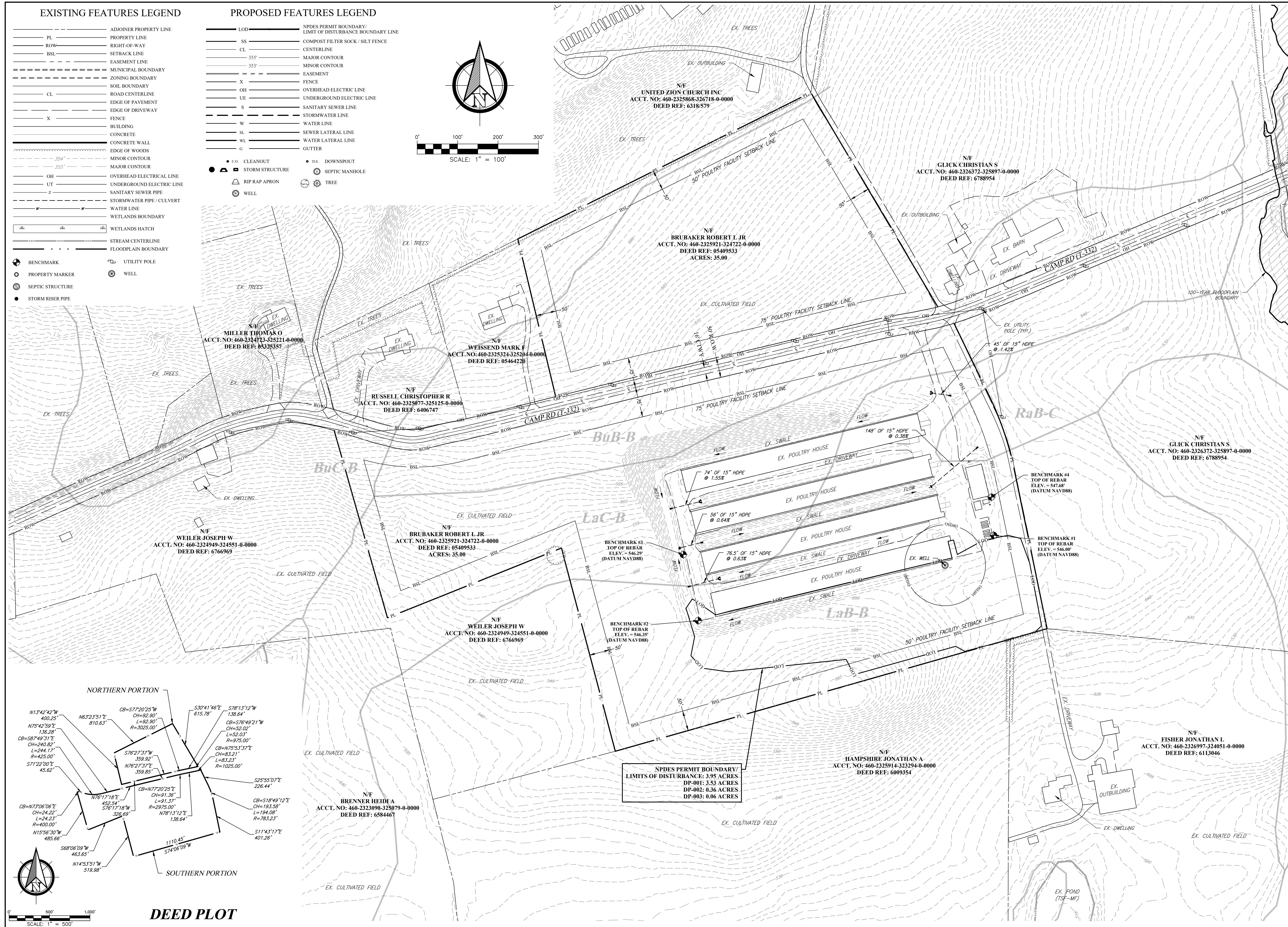
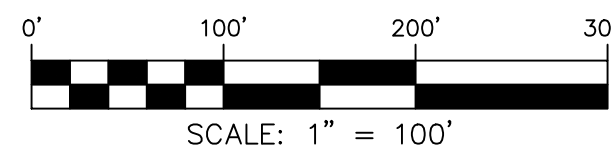
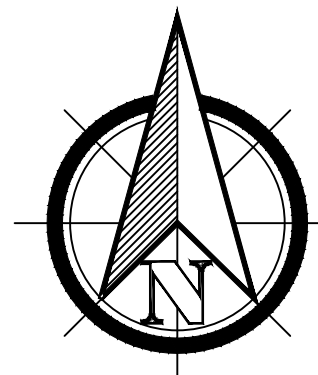
Date

EXISTING FEATURES LEGEND

PROPOSED FEATURES LEGEND

- ADJOINER PROPERTY LINE
- PROPERTY LINE
- RIGHT-OF-WAY
- SETBACK LINE
- EASEMENT LINE
- MUNICIPAL BOUNDARY
- ZONING BOUNDARY
- SOIL BOUNDARY
- ROAD CENTERLINE
- EDGE OF PAVEMENT
- EDGE OF DRIVEWAY
- FENCE
- BUILDING
- CONCRETE
- CONCRETE WALL
- EDGE OF WOODS
- MINOR CONTOUR
- MAJOR CONTOUR
- OH
- UT
- S
- STORMWATER PIPE / CULVERT
- WATER LINE
- WETLANDS BOUNDARY
- WETLANDS HATCH
- STREAM CENTERLINE
- FLOODPLAIN BOUNDARY
- BENCHMARK
- PROPERTY MARKER
- ⊙ SEPTIC STRUCTURE
- STORM RISER PIPE

- LOD
- SS
- CL
- 355'
- 353'
- EASEMENT
- X
- OH
- UE
- S
- W
- SL
- WL
- G
- c.o. CLEANOUT
- STORM STRUCTURE
- △ RIP RAP APRON
- D.S. DOWNSPOUT
- ⊙ SEPTIC MANHOLE
- ⊙ TREE



NCS
NYE CONSULTING SERVICES INC.
 330 WEST ROUTE 897
 REINHOLDS, PA 17569
 P: 717-220-5132

PCSM PLAN: EXISTING RESOURCE MAP

BOB BRUBAKER AG OPERATION

CLIENT: ROBERT L. BRUBAKER JR.
 2871 N COLEBROOK RD
 MANHEIM, PA 17545
 PH: 717-575-5255

REVISION	DATE	DESCRIPTION

SITE ADDRESS: 2205 CAMP RD
 MANHEIM, PA 17545

MUNICIPALITY: MOUNT JOY TOWNSHIP
 COUNTY: LANCASTER COUNTY

SEAL: ROBERT J. RUTH, PROFESSIONAL ENGINEER, PENNSYLVANIA

DRAWN BY: MRR CHECKED BY: RJR

DATE: 10/7/2024

DEED REF: 05409533

UPI: 460-2325921-324722-0-0000

SHEET 3 OF 16

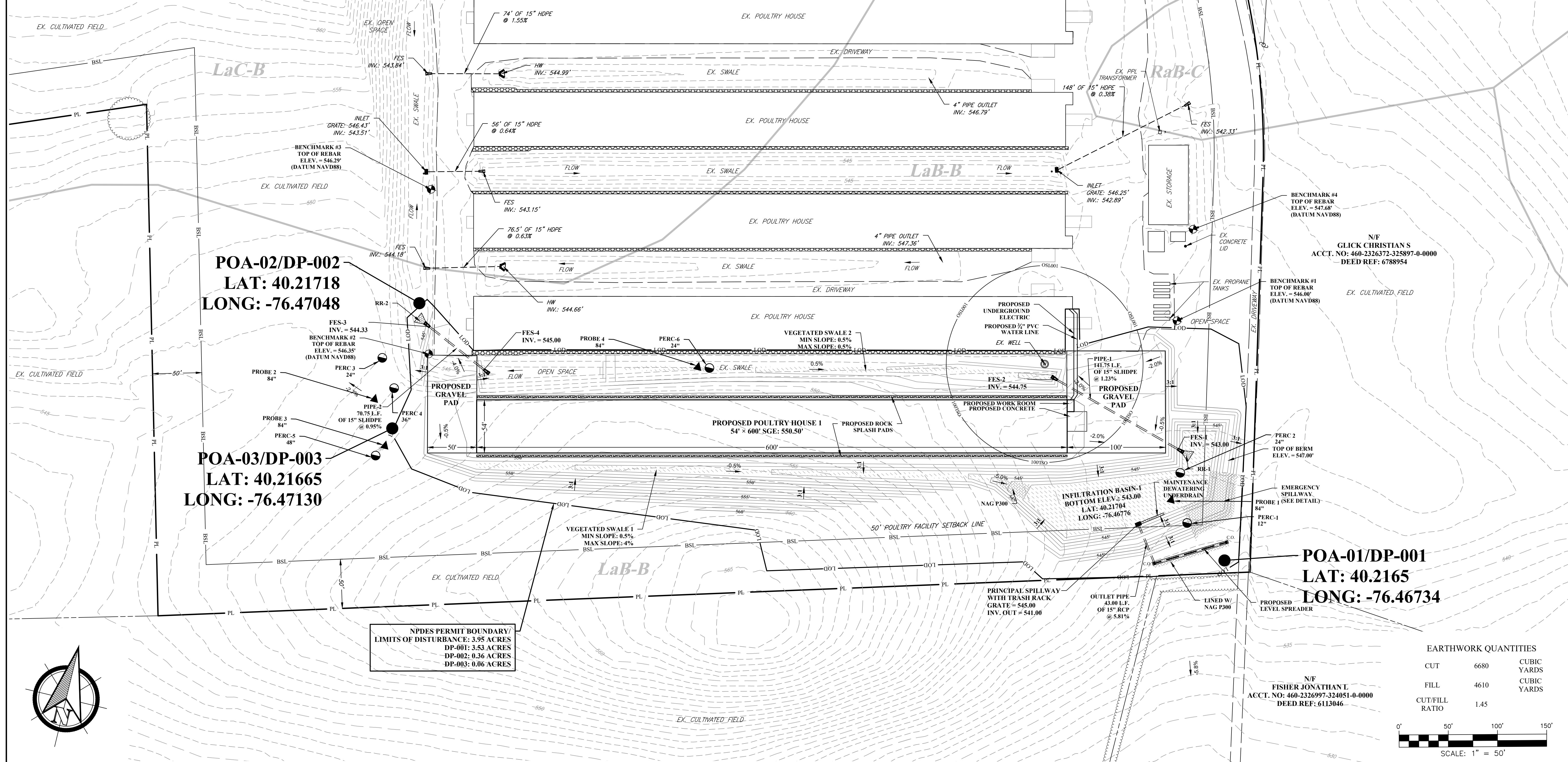
P2 OF 8

EXISTING FEATURES LEGEND

PL	ADJOINER PROPERTY LINE
PL	PROPERTY LINE
ROW	RIGHT-OF-WAY
BSL	SETBACK LINE
---	EASEMENT LINE
---	MUNICIPAL BOUNDARY
---	ZONING BOUNDARY
---	SOIL BOUNDARY
CL	ROAD CENTERLINE
---	EDGE OF PAVEMENT
---	EDGE OF DRIVEWAY
X	FENCE
---	BUILDING
---	CONCRETE
---	CONCRETE WALL
---	EDGE OF WOODS
---	MINOR CONTOUR
---	MAJOR CONTOUR
OH	OVERHEAD ELECTRICAL LINE
UT	UNDERGROUND ELECTRICAL LINE
S	SANITARY SEWER PIPE
---	STORMWATER PIPE / CULVERT
---	WATER LINE
---	WETLANDS BOUNDARY
---	WETLANDS HATCH
---	STREAM CENTERLINE
---	FLOODPLAIN BOUNDARY
B	BENCHMARK
○	PROPERTY MARKER
⊕	SEPTIC STRUCTURE
●	STORM RISER PIPE
○	UTILITY POLE
○	WELL

PROPOSED FEATURES LEGEND

L.O.D.	NPDES PERMIT BOUNDARY / LIMIT OF DISTURBANCE BOUNDARY LINE
SS	COMPOST FILTER SOCK / SILT FENCE
CL	CENTERLINE
355'	MAJOR CONTOUR
353'	MINOR CONTOUR
---	EASEMENT
X	FENCE
OH	OVERHEAD ELECTRICAL LINE
UE	UNDERGROUND ELECTRICAL LINE
S	SANITARY SEWER LINE
---	STORMWATER LINE
W	WATER LINE
SL	SEWER LATERAL LINE
WL	WATER LATERAL LINE
G	GUTTER
○	CLEANOUT
⊕	STORM STRUCTURE
⊕	SEPTIC MANHOLE
⊕	RIP RAP APRON
○	WELL
○	DOWNSPOUT
○	TREE



NCN
NWE CONSULTING SERVICES INC.
330 WEST ROUTE 897
REINHOLDS, PA 17560
P: 717-220-1312

PCSM: CONTROL GRADING PLAN

CLIENT
BOB BRUBAKER AG OPERATION
ROBERT L. BRUBAKER JR.
2871 N COLEBROOK RD
MANHEIM, PA 17545
PH: 717-575-5255

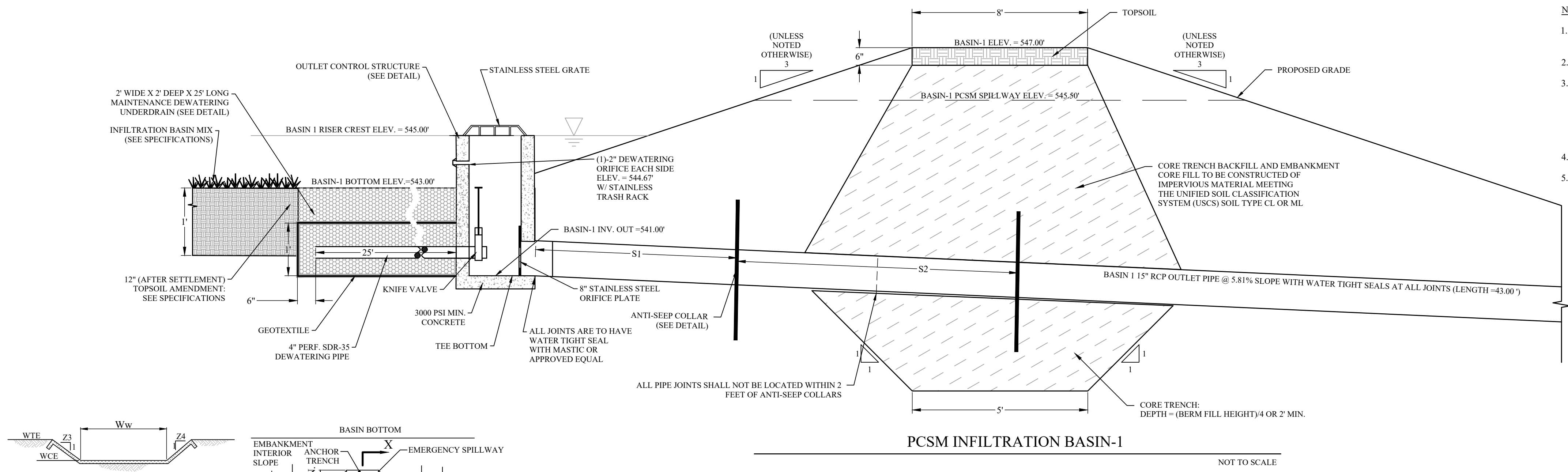
REVISION	DATE	DESCRIPTION

SITE ADDRESS
2205 CAMP RD
MANHEIM, PA 17545

MUNICIPALITY: MOUNT JOY TOWNSHIP
COUNTY: LANCASTER COUNTY

Professional Seal
ROBERT J. RUTH
P.E. 000725
PA 000000

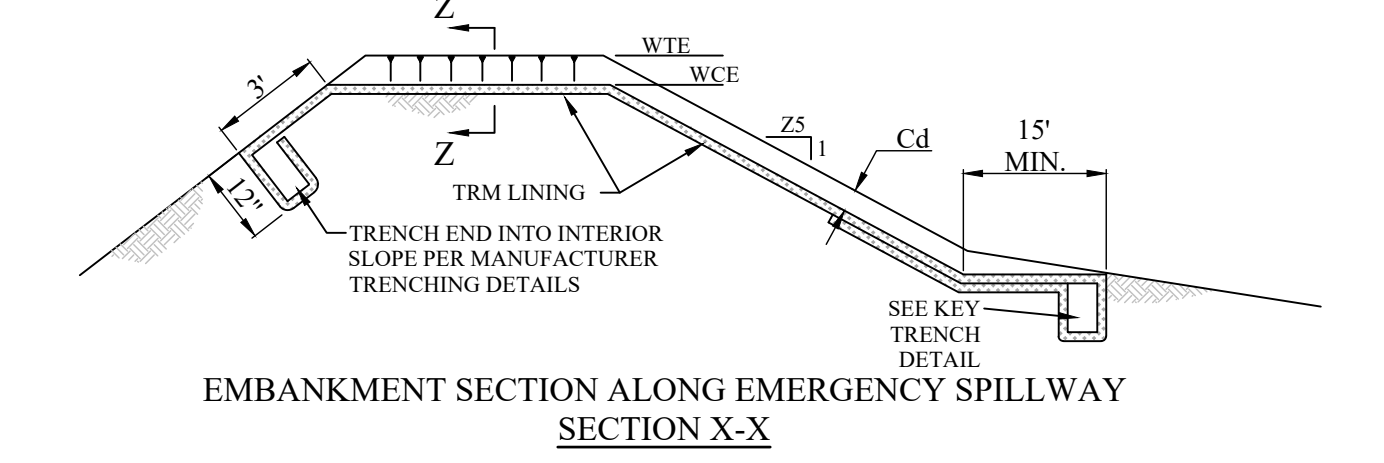
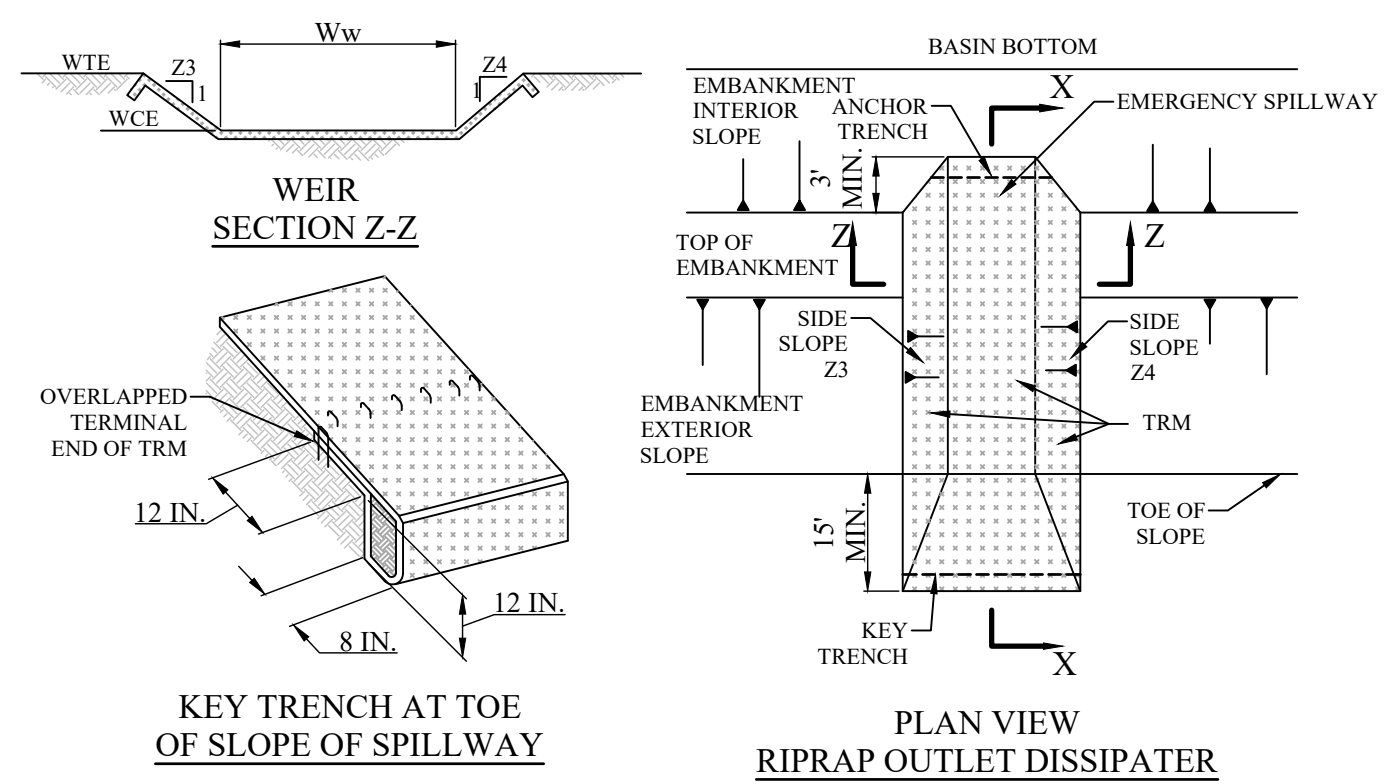
SEAL
DRAWN BY: MRR CHECKED BY: RJR
DATE: 10/7/2024
DEED REF: 05409533
UPI: 460-2325921-324722-0-0000
SHEET 4 OF 16
P3 OF 8



- NOTES:**
- INFILTRATION BASINS SHALL BE KEPT FREE OF ALL TRASH, CONCRETE WASH WATER, AND OTHER DEBRIS THAT POSE THE POTENTIAL FOR POLLUTION TO WATERS OF THE COMMONWEALTH.
 - INFILTRATION BASINS MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES.
 - BASIN EMBANKMENTS SHALL BE CONSTRUCTED OF CLEAN FILL CONSISTING OF UNCONTAMINATED, NON-WATER SOLUBLE, NON-COMPOSTABLE, INERT, SOLID MATERIAL. THIS INCLUDES SOIL, ROCK, STONE, OR FRACTURED SHALE WHICH CAN BE COMPACTED. FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM 6" LAYERED LIFTS AND COMPACTED AT 95% STANDARD PROCTOR.
 - ALL JOINTS ARE TO BE WATERTIGHT SEALS WITH MASTIC OR APPROVED EQUAL.
 - ANTI-SEEP COLLARS SHALL NOT BE LOCATED WITHIN 2 FEET OF A PIPE JOINT.

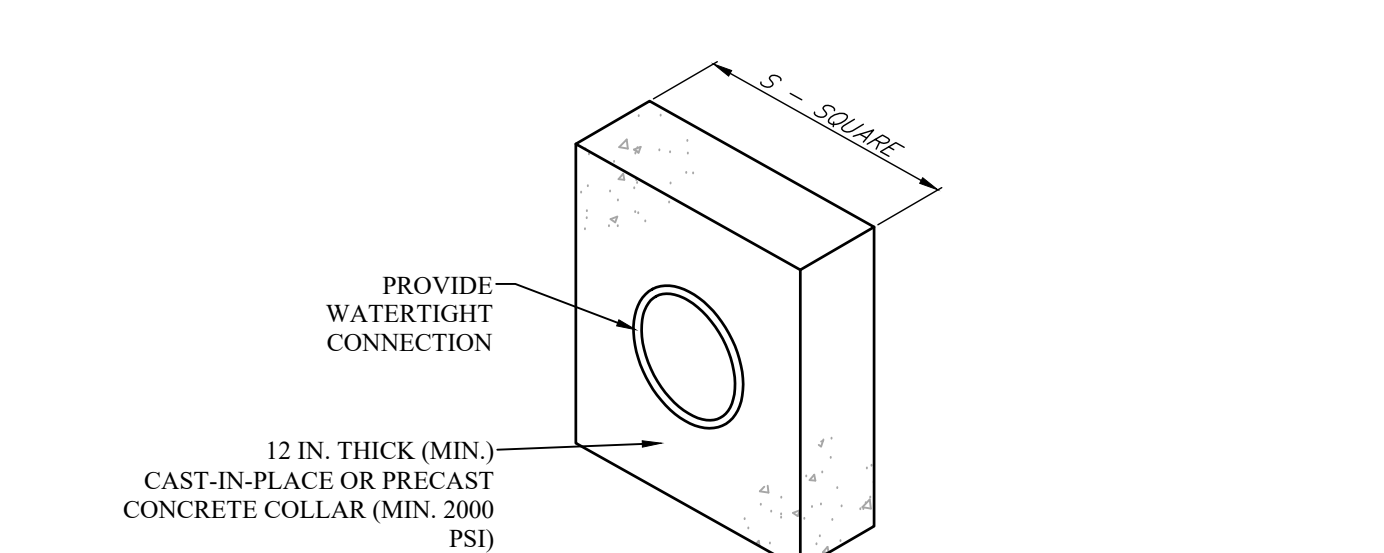
INFILTRATION BASIN-1 - STAGE STORAGE

ELEV.	CONTOUR AREA	TOTAL STORAGE
543.00'	9517 SQ. FT.	0 CU. FT.
544.00'	11383 SQ. FT.	10450 CU. FT.
545.00'	13262 SQ. FT.	22773 CU. FT.
546.00'	15286 SQ. FT.	37047 CU. FT.
547.00'	18900 SQ. FT.	54140 CU. FT.



BASIN NO.	WEIR		TOP ELEV. (FT)	CREST ELEV. (FT)	WIDTH OF WCE (FT)	LINING		CHANNEL DEPTH Cd (FT)
	Z3 (FT)	Z4 (FT)				TRM TYPE	STAPLE PATTERN	
1	3	3	547.00	545.50	50.00	NAG P300	E	3

PCSM: EMERGENCY SPILLWAY WITH TRM LINING
 NOT TO SCALE



BASIN OR TRAP NO.	PIPE SIZE (IN)	S (IN)	NO. OF COLLARS	RISER TO FIRST COLLAR S1 (FT)	L1 TO SECOND COLLAR S2 (FT)
1	12	49	2.00	10.00	8.00

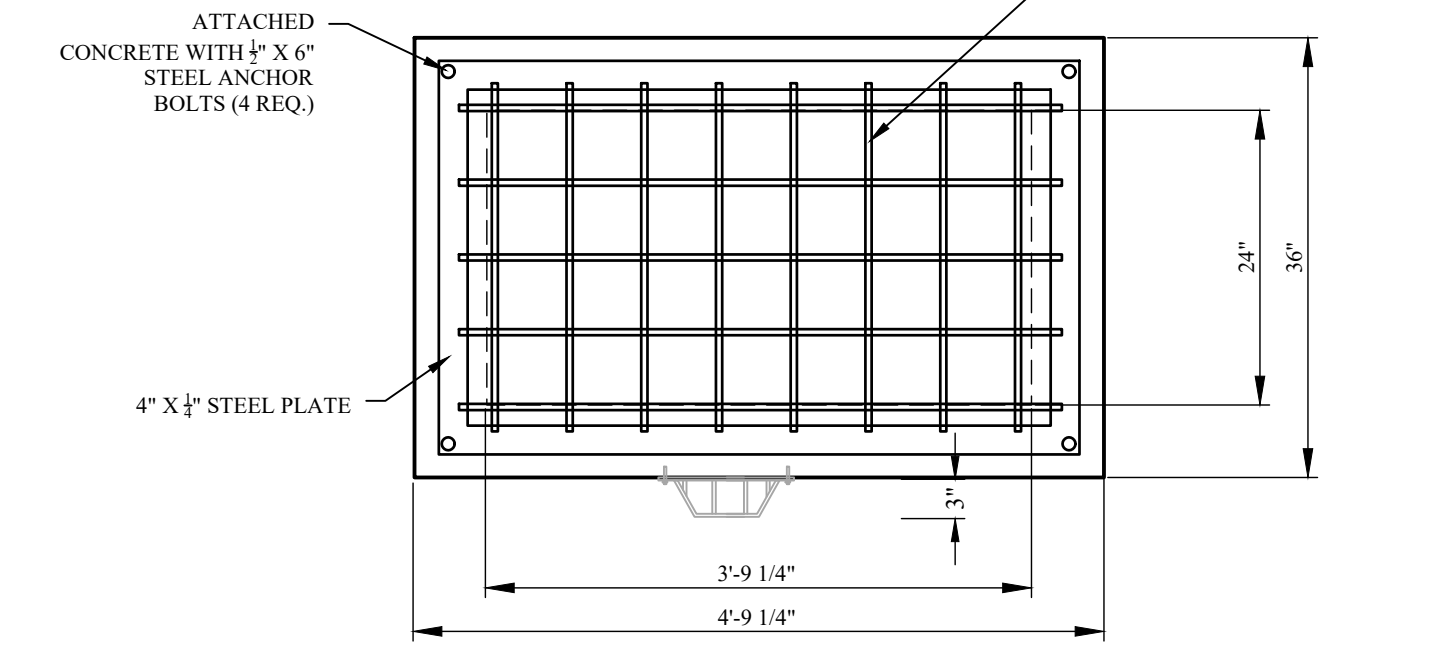
- NOTES:**
- ALL COLLARS SHALL BE INSTALLED SO AS TO BE WATERTIGHT.
 - COLLAR SIZE AND SPACING SHALL BE AS INDICATED WITHIN TABLE.
 - ALL COLLARS SHALL NOT BE LOCATED CLOSER THAN 2 FEET TO ANY PIPE JOINT.

DIMENSIONS, INCHES

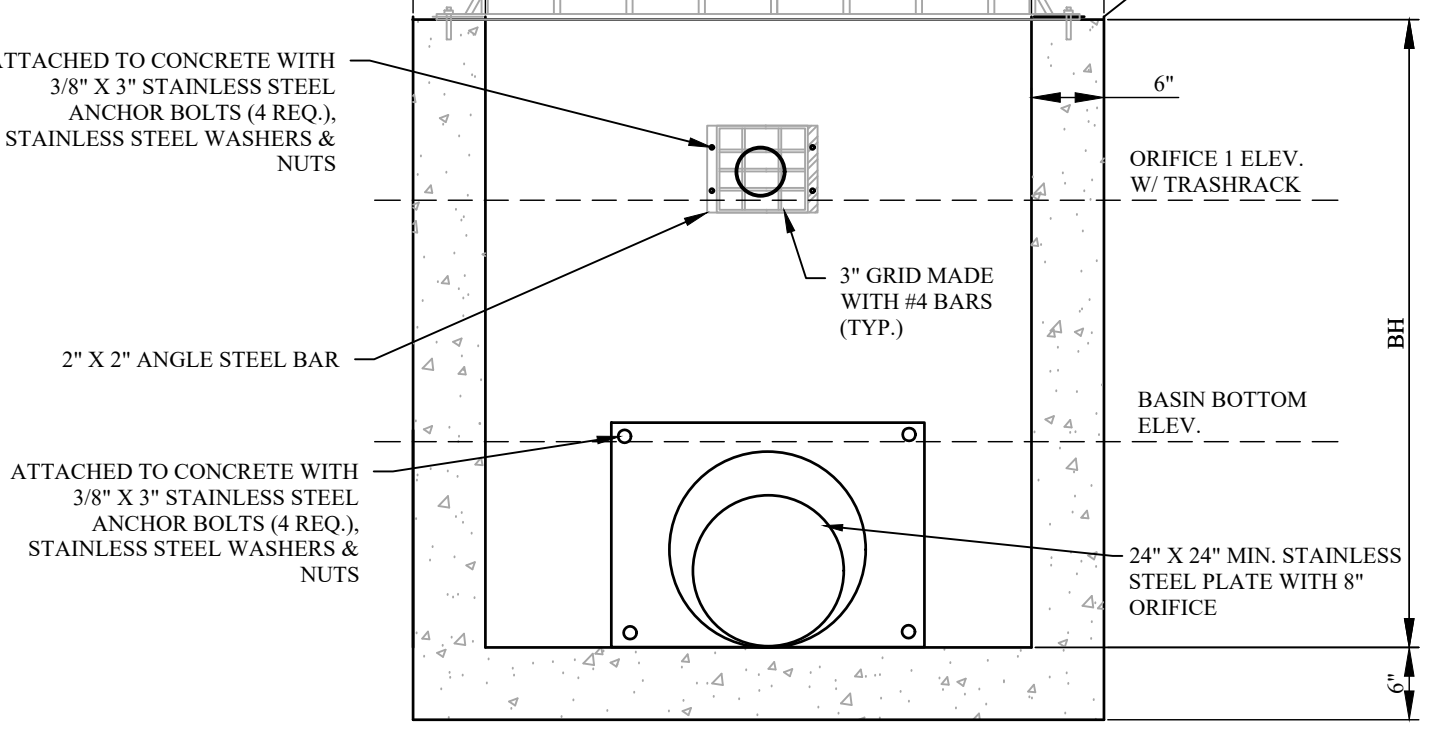
PIPE DIAMETER	DIMENSIONS, INCHES					
	A, ±1	B MAX	H, ±1	L, ±1	W, ±2	
12 & 15	6.5	10	6.5	25	29	
18	7.5	15	6.5	32	35	
24	7.5	18	6.5	36	45	
30 & 36	7.5	25	8.6	58	63	

BASIN	BASIN BOTTOM ELEV. (FT)	RISER		ORIFICE	
		MATL.	HEIGHT (IN)	RISER CREST ELEV. (FT)	ORIFICE ELEV. (FT)
1	543.00	CONC.	48.00	545.00	544.67

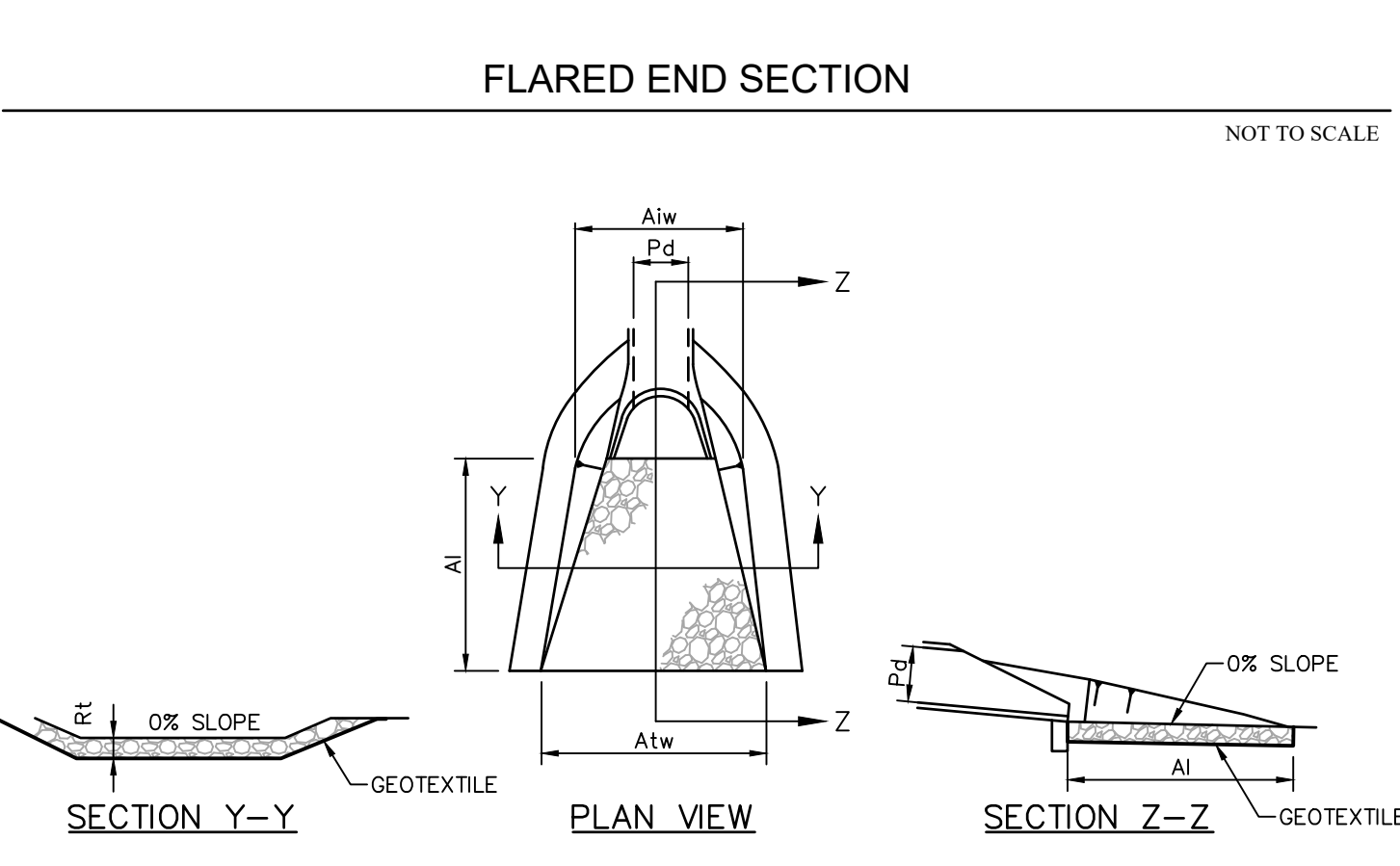
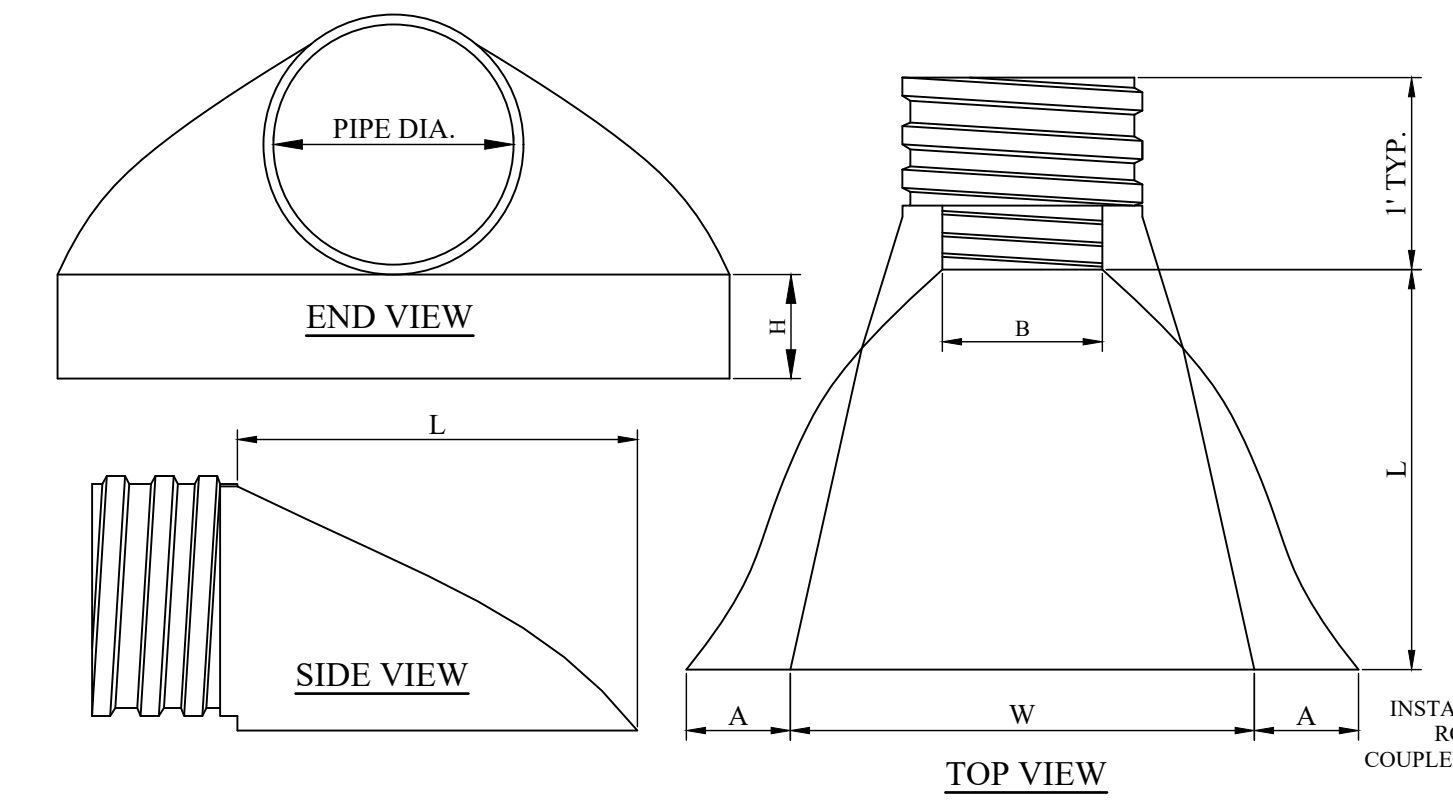
- NOTES:**
- ALL BARS TO BE WELDED TO ANGLE FRAME AND TO EACH OTHER AT ALL CROSSINGS
 - ENTIRE UNIT TO BE HOT DIPPED GALVANIZED AFTER FABRICATION.



MANUFACTURER
 MONARCH PRODUCTS, INC.
 385 SWIPE ROAD
 YORK HAVEN, PA 17370
 717-938-8503
 (OR APPROVED EQUAL)

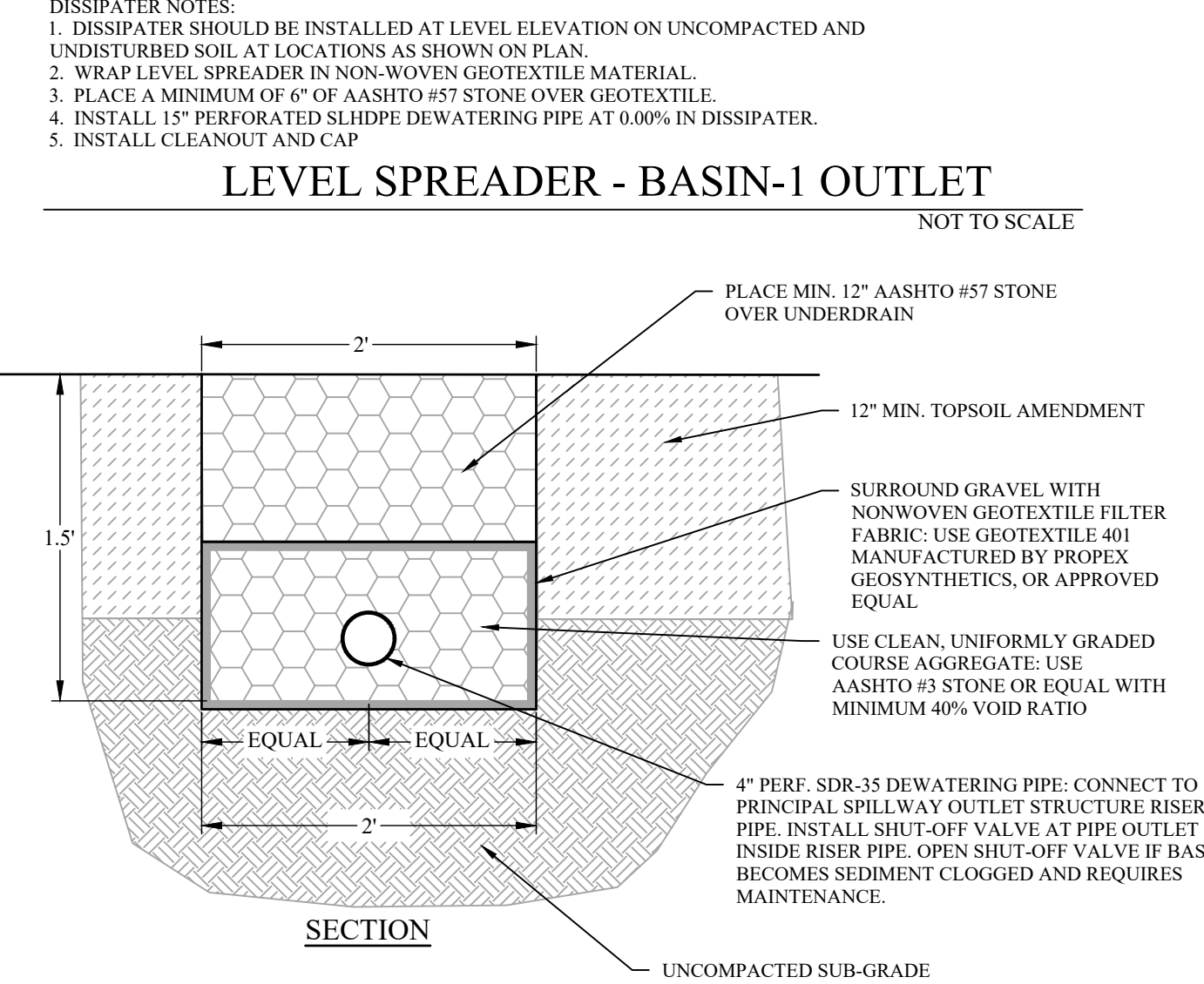
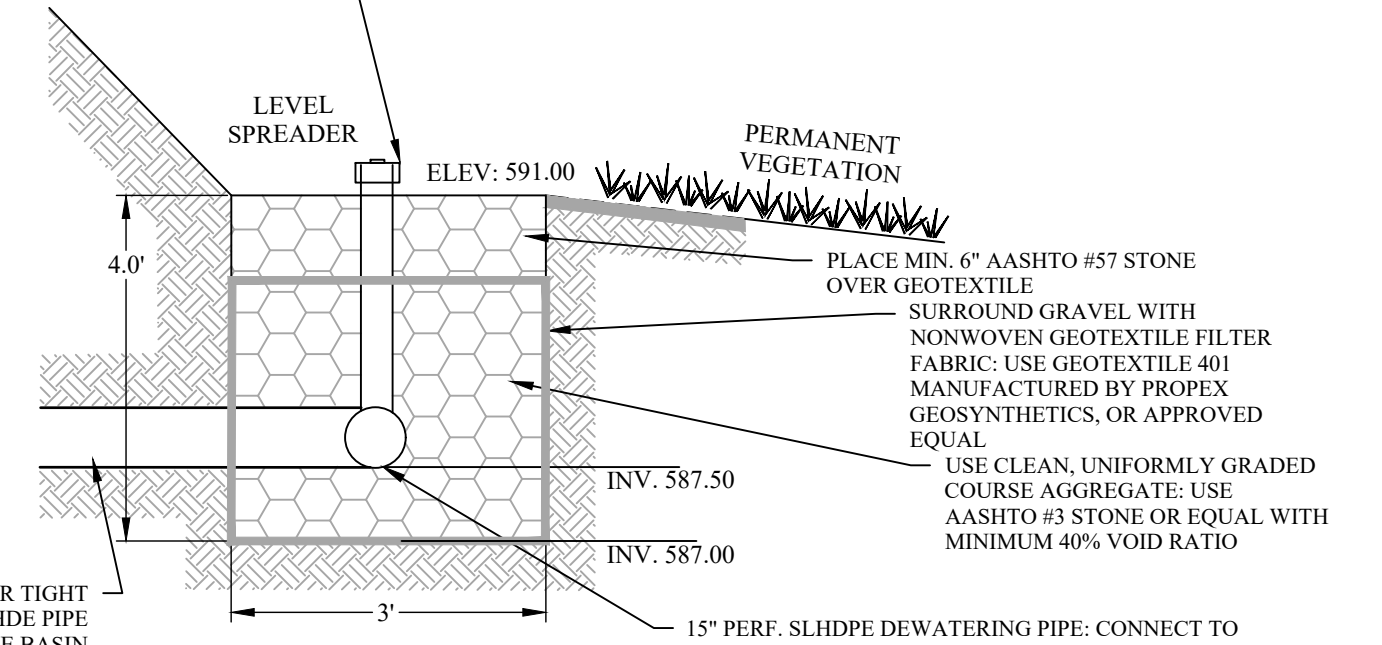
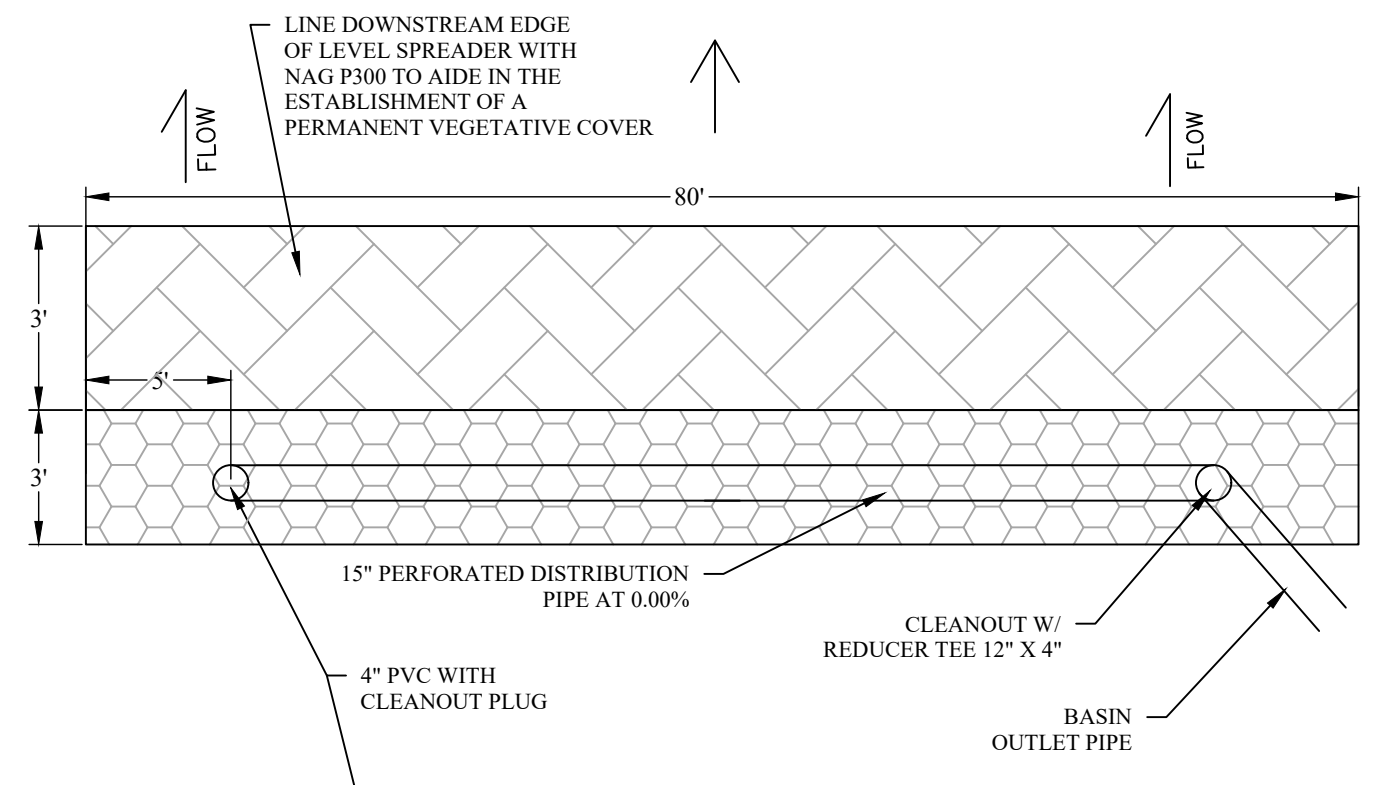


- NOTES:**
- ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.
 - ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

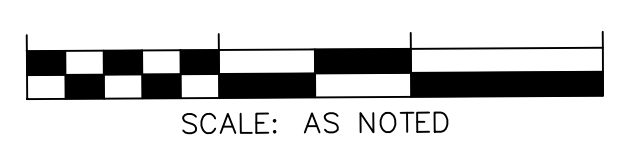


OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP SIZE R- (IN)	RIPRAP THICK. Rt (IN)	LENGTH At (FT)	APRON	
					INITIAL WIDTH Aw (FT)	TERMINAL WIDTH Atw (FT)
RR-1	15	R-4	18	10	4	14
RR-2	15	R-4	18	10	4	14

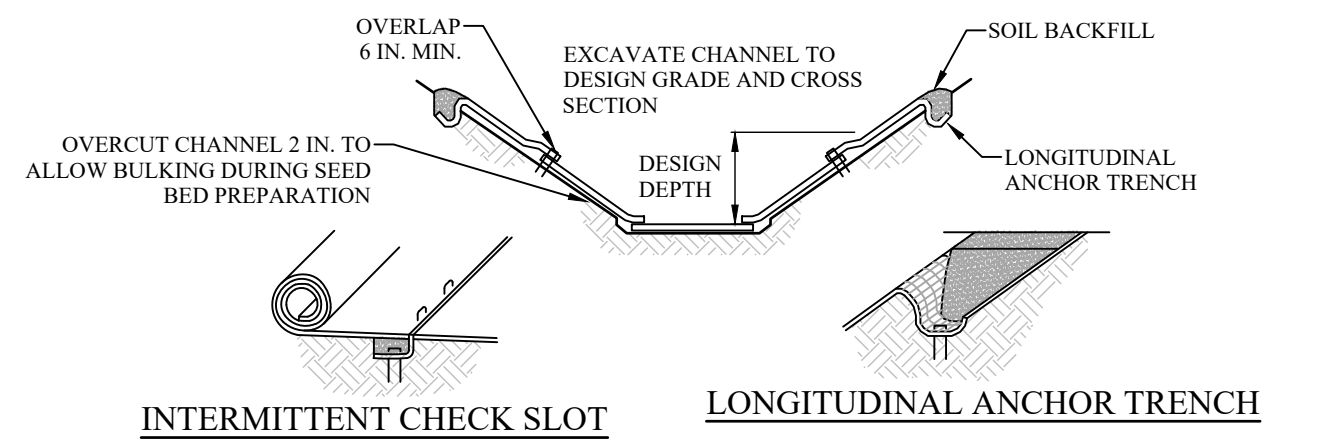
- NOTES:**
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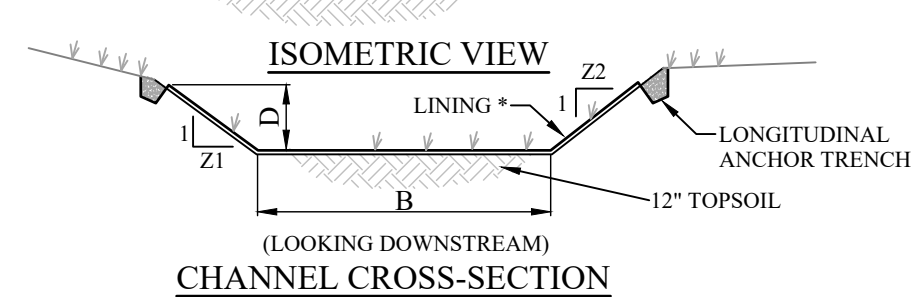
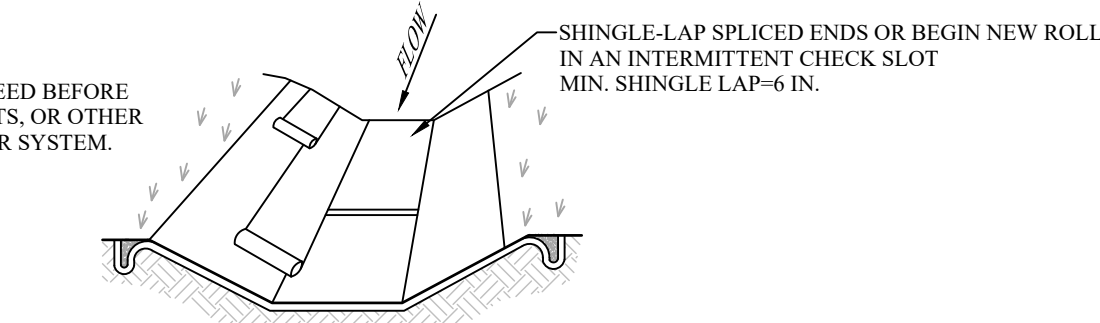
- NOTES:**
- UNDERDRAIN SHOULD BE INSTALLED AT LEVEL ELEVATION ON UNCOMPACTED AND UNDISTURBED SOIL AT LOCATIONS AS SHOWN ON PLAN.
 - WRAP UNDERDRAIN IN NON-WOVEN GEOTEXTILE MATERIAL.
 - PLACE A MINIMUM OF 12" OF AASHTO #57 STONE OVER UNDERDRAIN.
 - INSTALL 4" PERFORATED SCHEDULE 40 PVC DEWATERING PIPE IN UNDERDRAIN.
 - CONNECT TO PRINCIPAL SPILLWAY OUTLET STRUCTURE RISER PIPE. INSTALL SHUT-OFF VALVE AT PIPE OUTLET INSIDE RISER PIPE. OPEN SHUT-OFF VALVE IF BASIN BECOMES SEDIMENT CLOGGED AND REQUIRES MAINTENANCE.



CHANNEL ID.	BOTTOM WIDTH B (FT)	PROPOSED DEPTH	REQ. DEPTH D (FT)	Z1 (FT)	Z2 (FT)	TEMPORARY LINING *	PERMANENT LINING
SWALE-1 MIN.	5	2	2.00	3	3	NAG S150	VEG. CLASS C
SWALE-1 MAX.	3	2	0.98	3	3	NAG P300	VEG. CLASS C
SWALE-2 MIN.	5	1.5	1.48	3	3	NAG S150	VEG. CLASS C
SWALE-2 MAX.	5	1.5	1.48	3	3	NAG S150	VEG. CLASS C



PREPARE SOIL AND APPLY SEED BEFORE INSTALLING BLANKETS, MATS, OR OTHER TEMPORARY CHANNEL LINER SYSTEM.

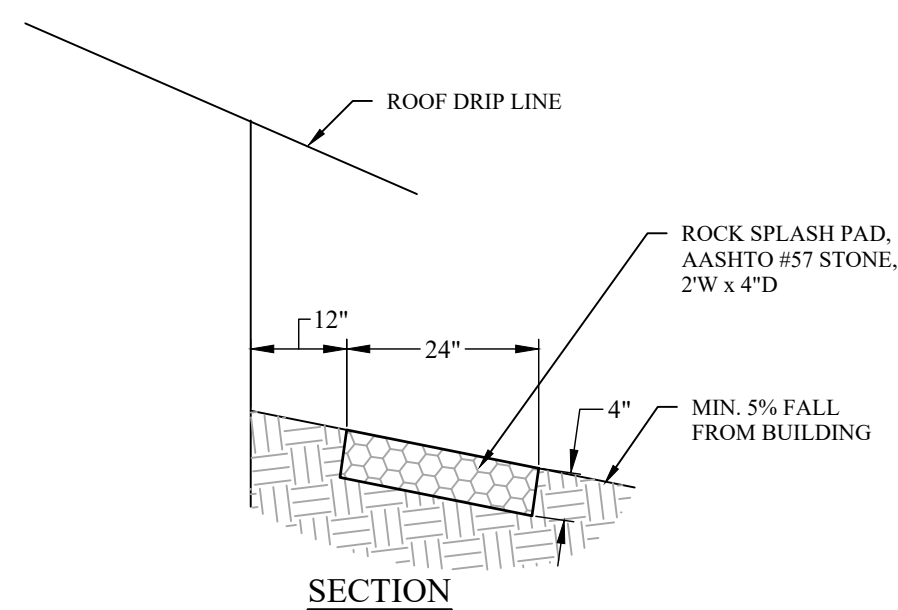


* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

- NOTES:
- ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.
 - CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.
 - PERMANENT LINING (CLASS C) SHALL BE A PERMANENT GRASS SEEDING MIXTURE AND BE MAINTAINED AT A 6" TO 12" STAND.

CHANNEL

STANDARD CONSTRUCTION DETAIL #6-1 NOT TO SCALE

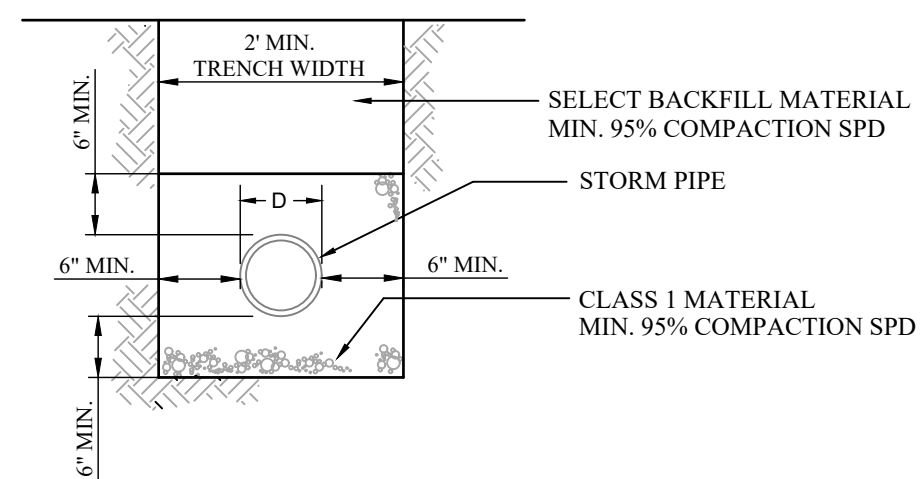


ROCK SPLASH PAD

NOT TO SCALE

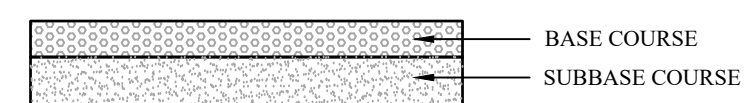
CLASSIFICATION OF MATERIALS:
 CLASS 1 - THIS MATERIAL SHALL CONSIST OF 2A COARSE AGGREGATE OR 2 RC STONE FREE OF SLAG, EXCEPT IN WET OR UNSTABLE AREAS WHERE THE BEDDING MAY BE NO. 8 OR NO. 57 COARSE AGGREGATE. ALL MATERIALS SHALL CONFORM TO PennDOT PUBLICATION 408, SECTION 703.3.

NOTES: - BACKFILL IS TO BE MECHANICALLY TAMPED IN 6" LAYERS.
 D = OUTSIDE DIAMETER OF PIPE
 SPD = STANDARD PROCTOR DENSITY



TRENCH DETAIL

NOT TO SCALE

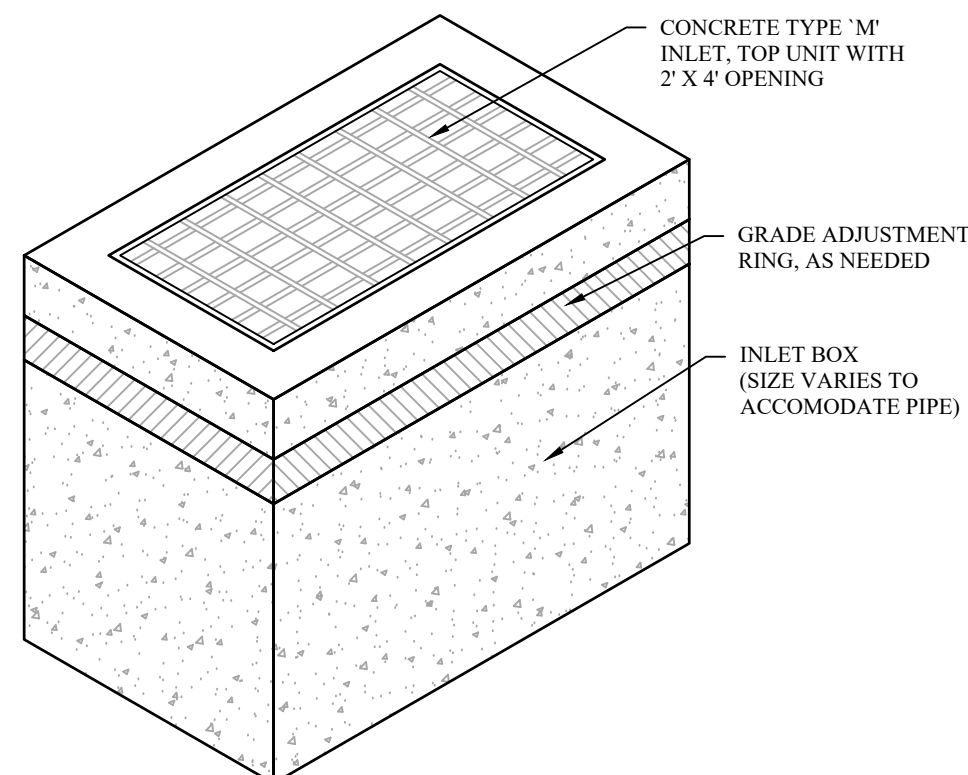


SECTION

DRIVEWAY

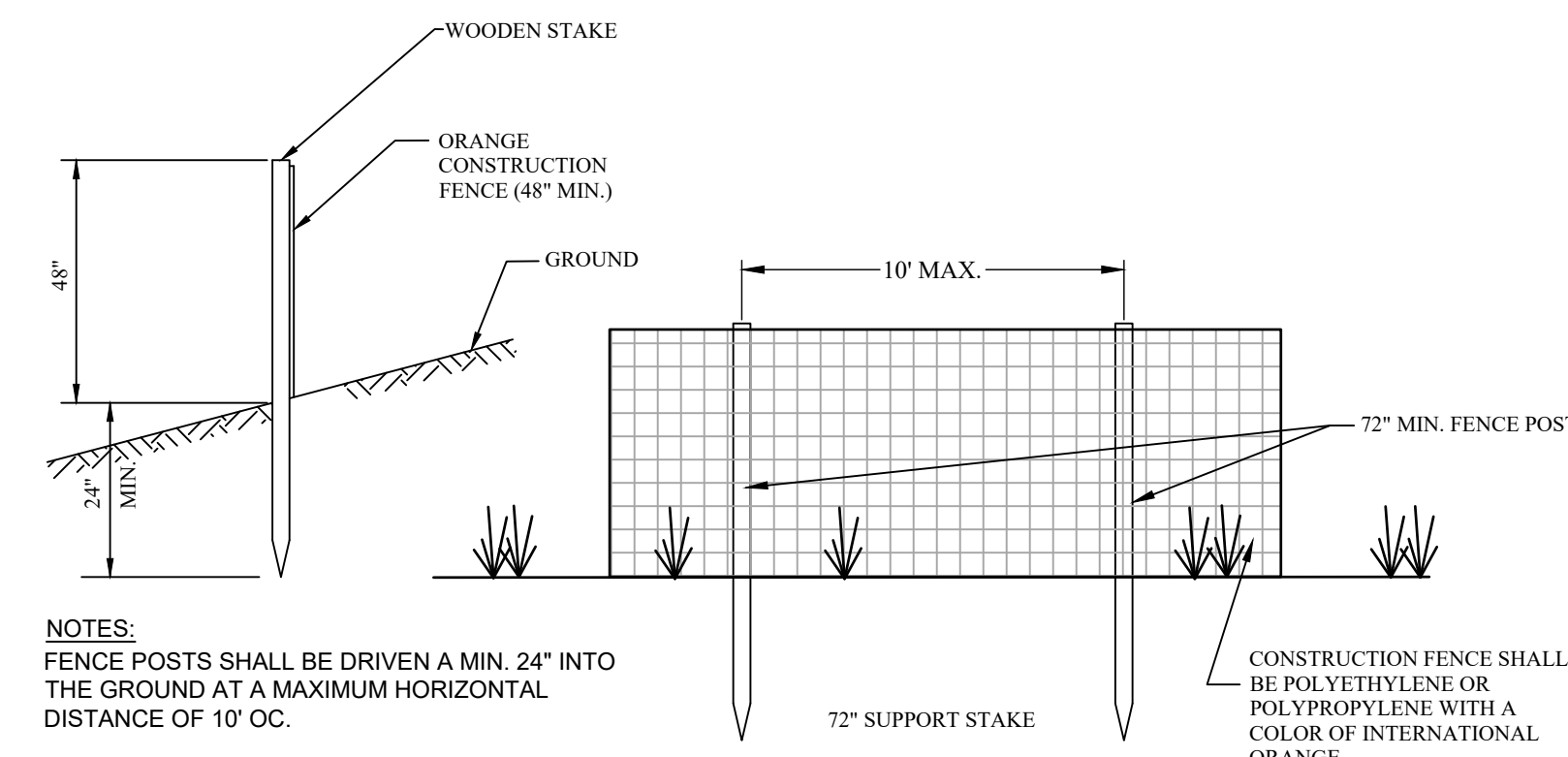
NOT TO SCALE

- NOTES:
- BASE COURSE SHALL BE STONE AGGREGATE MATERIAL CONSISTING OF 8 INCHES OF COMPACTED 2A MODIFIED AND SHALL BE COMPACTED TO THE REQUIRED DEPTH WITH A VIBRATING ROLLER.
 - SUBBASE SHALL BE COMPACTED WITH A VIBRATING ROLLER PRIOR TO APPLYING THE BASE COURSE.



- NOTES:
- MATERIAL AND CONSTRUCTION TO BE BASED ON PENNDOT STANDARDS.
 - ALL JOINTS ARE TO BE WATERTIGHT SEALED WITH MASTIC OR APPROVED EQUAL.

TYPE M INLET



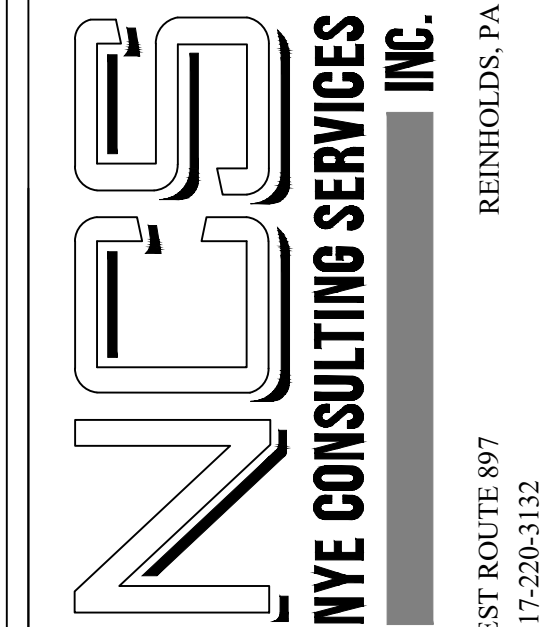
- NOTES:
 FENCE POSTS SHALL BE DRIVEN A MIN. 24" INTO THE GROUND AT A MAXIMUM HORIZONTAL DISTANCE OF 10' OC.
 NOMINAL MESH OPENING SHALL BE NO GREATER THAN 1' x 2'
 CONSTRUCTION FENCE SHALL BE POLYETHYLENE OR POLYPROPYLENE WITH A COLOR OF INTERNATIONAL ORANGE

ORANGE CONSTRUCTION FENCE

NOT TO SCALE



SCALE: AS NOTED



PCSM PLAN :
 SITE DETAILS 2

CLIENT
 BOB BRUBAKER
 AG OPERATION

ROBERT L. BRUBAKER JR.
 2871 N COLEBROOK RD
 MANHEIM, PA 17545
 PH: 717-575-5255

REVISION	DATE	DESCRIPTION

SITE ADDRESS:
 2205 CAMP RD
 MANHEIM, PA 17545

MUNICIPALITY:
 MOUNT JOY TOWNSHIP

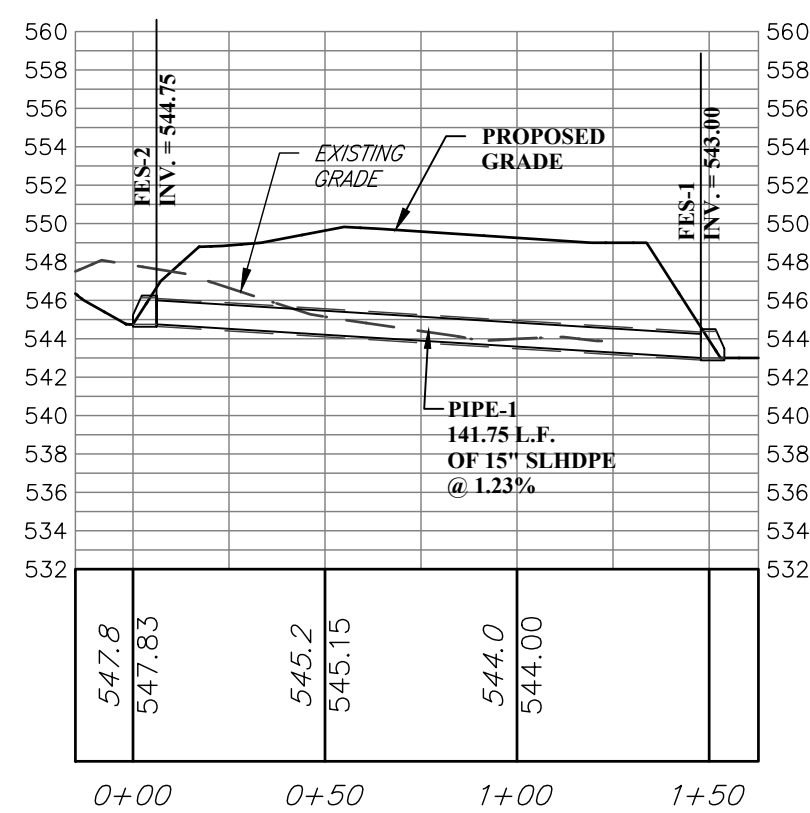
COUNTY
 LANCASTER COUNTY



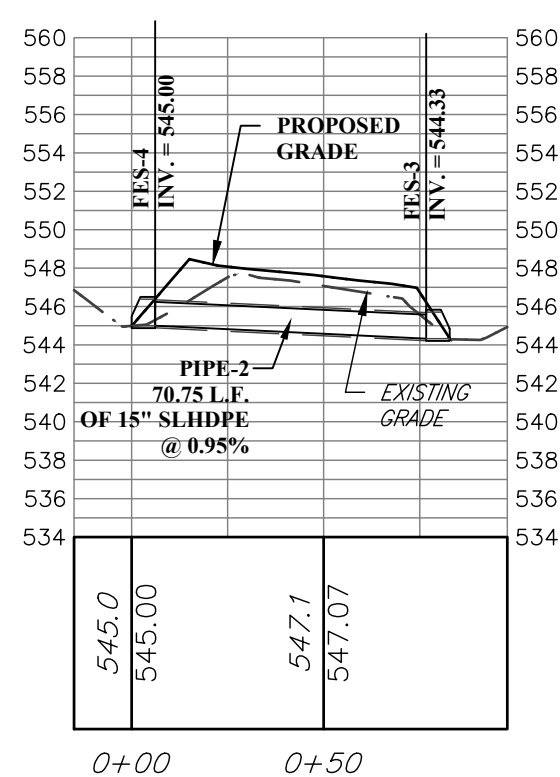
SEAL
 DRAWN BY: MRR CHECKED BY: RJR
 DATE: 10/7/2024
 DEED REF: 05409533
 UPI: 460-2325921-324722-0-0000
 SHEET 6 OF 16
 P5 OF 8

STORMWATER MANAGEMENT EASEMENT NOTE:

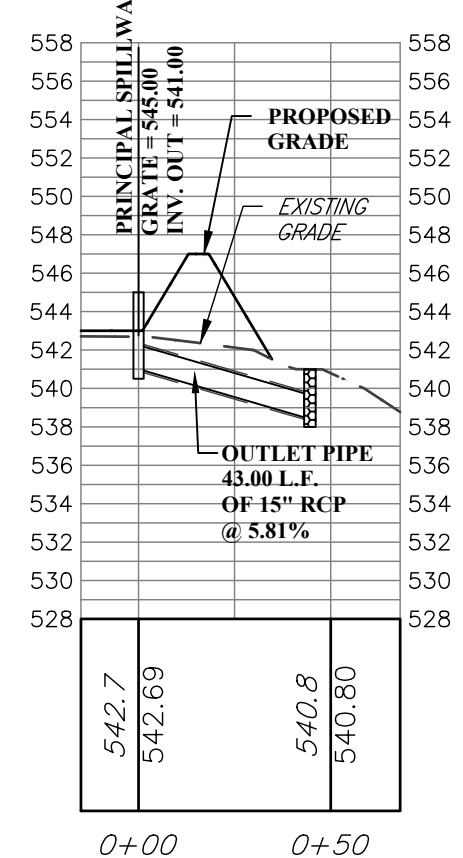
1. THE STORMWATER MANAGEMENT EASEMENT IS TO BE RECORDED AS A COVENANT OF THE DEED. IT IS THE OWNER'S RESPONSIBILITY TO MAINTAIN ALL STORMWATER MANAGEMENT FACILITIES SHOWN AND CONSTRUCTED ON THEIR PROPERTY IN CONFORMANCE WITH THE DESIGN CONDITION. THE STORMWATER MANAGEMENT FACILITIES SHALL BE MAINTAINED IN CONFORMANCE WITH THE OPERATIONS AND MAINTENANCE NOTES ON SHEET P1 OF 8 OF PCSM PLAN SET AND RECORDED AT THE LANCASTER COUNTY COURTHOUSE.
2. DRAINAGE EASEMENTS SHALL BE PROVIDED WHERE THE CONVEYANCE, TREATMENT, OR STORAGE OF STORMWATER, EITHER EXISTING OR PROPOSED, IS IDENTIFIED ON THE SWM SITE PLAN. DRAINAGE EASEMENTS SHALL BE PROVIDED TO CONTAIN AND CONVEY THE ONE-HUNDRED-YEAR FREQUENCY FLOOD.
3. SWM FACILITIES NOT LOCATED WITHIN A PUBLIC RIGHT-OF-WAY SHALL BE CONTAINED IN AND CENTERED WITHIN A MINIMUM TWENTY-FOOT WIDE STORMWATER MANAGEMENT EASEMENT.
4. NOTHING SHALL BE PLACED, PLANTED, SET, OR PUT WITHIN THE AREA OF AN EASEMENT THAT WOULD ADVERSELY AFFECT THE FUNCTION OF THE EASEMENT OR CONFLICT WITH THE EASEMENT AGREEMENT.
5. THE TOWNSHIP HAS ACCESS TO THIS EASEMENT.



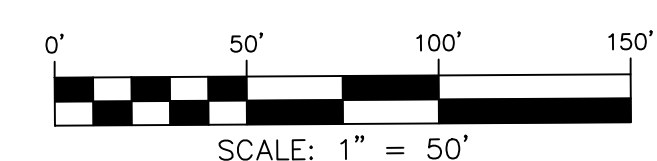
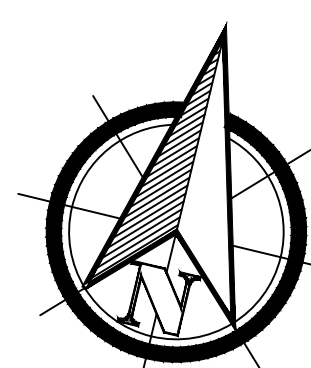
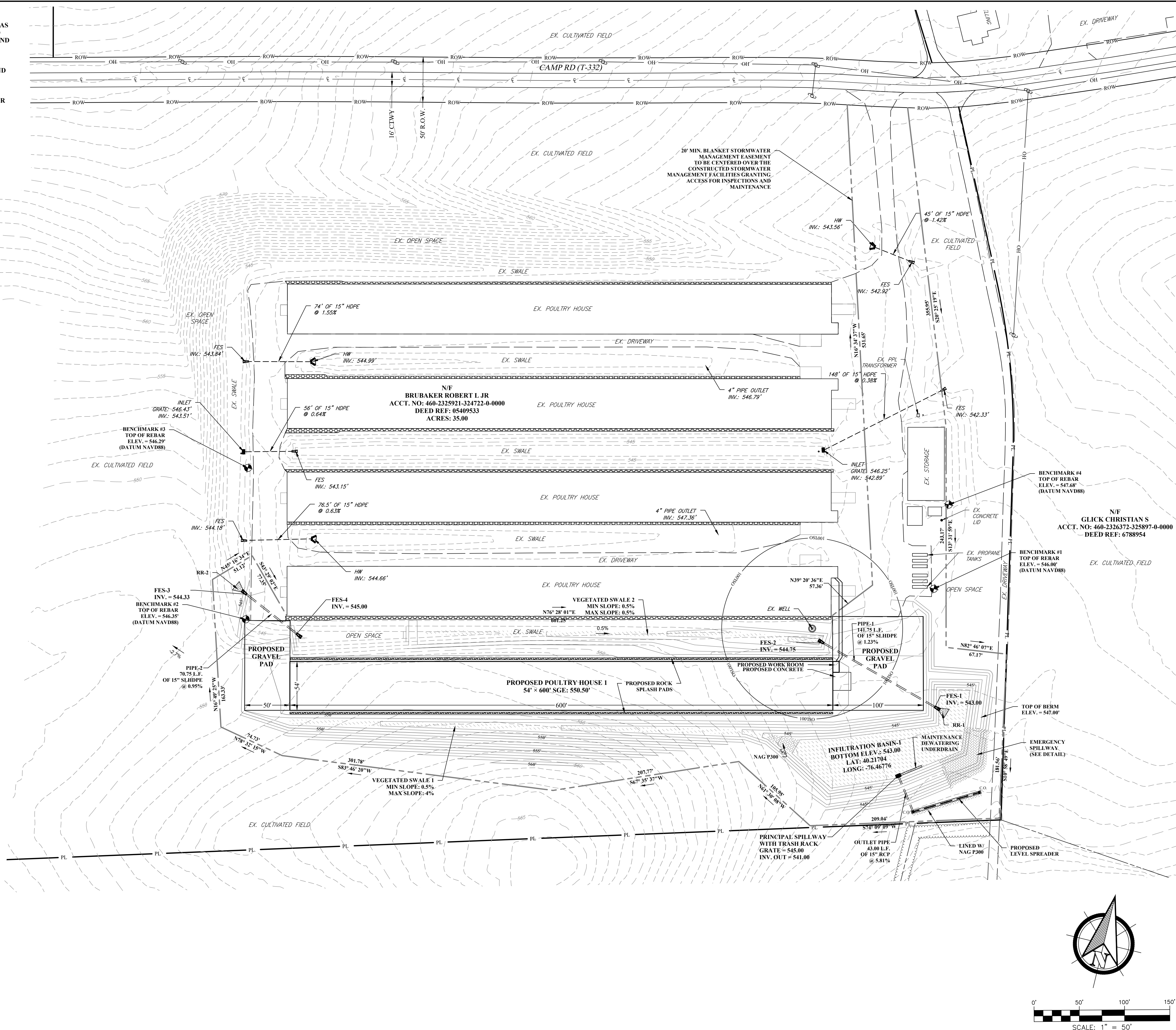
PIPE-1
 HORZ. SCALE: 1"=50'
 VERT. SCALE: 1"=10'



PIPE-2
 HORZ. SCALE: 1"=50'
 VERT. SCALE: 1"=10'



BASIN OUTLET
 HORZ. SCALE: 1"=50'
 VERT. SCALE: 1"=10'



PCS
NYS
INC.
 NYE CONSULTING SERVICES
 330 WEST ROUTE 897
 REINHOLDS, PA 17569
 P: 717-220-1312

**PCSM PLAN :
 PROFILES & EASEMENT**

CLIENT
BOB BRUBAKER
 AG OPERATION

ROBERT L. BRUBAKER JR.
 2871 N COLEBROOK RD
 MANHEIM, PA 17545
 PH: 717-575-5255

REVISION	DATE	DESCRIPTION

SITE ADDRESS
 2205 CAMP RD
 MANHEIM, PA 17545

MUNICIPALITY: MOUNT JOY TOWNSHIP
 COUNTY: LANCASTER COUNTY

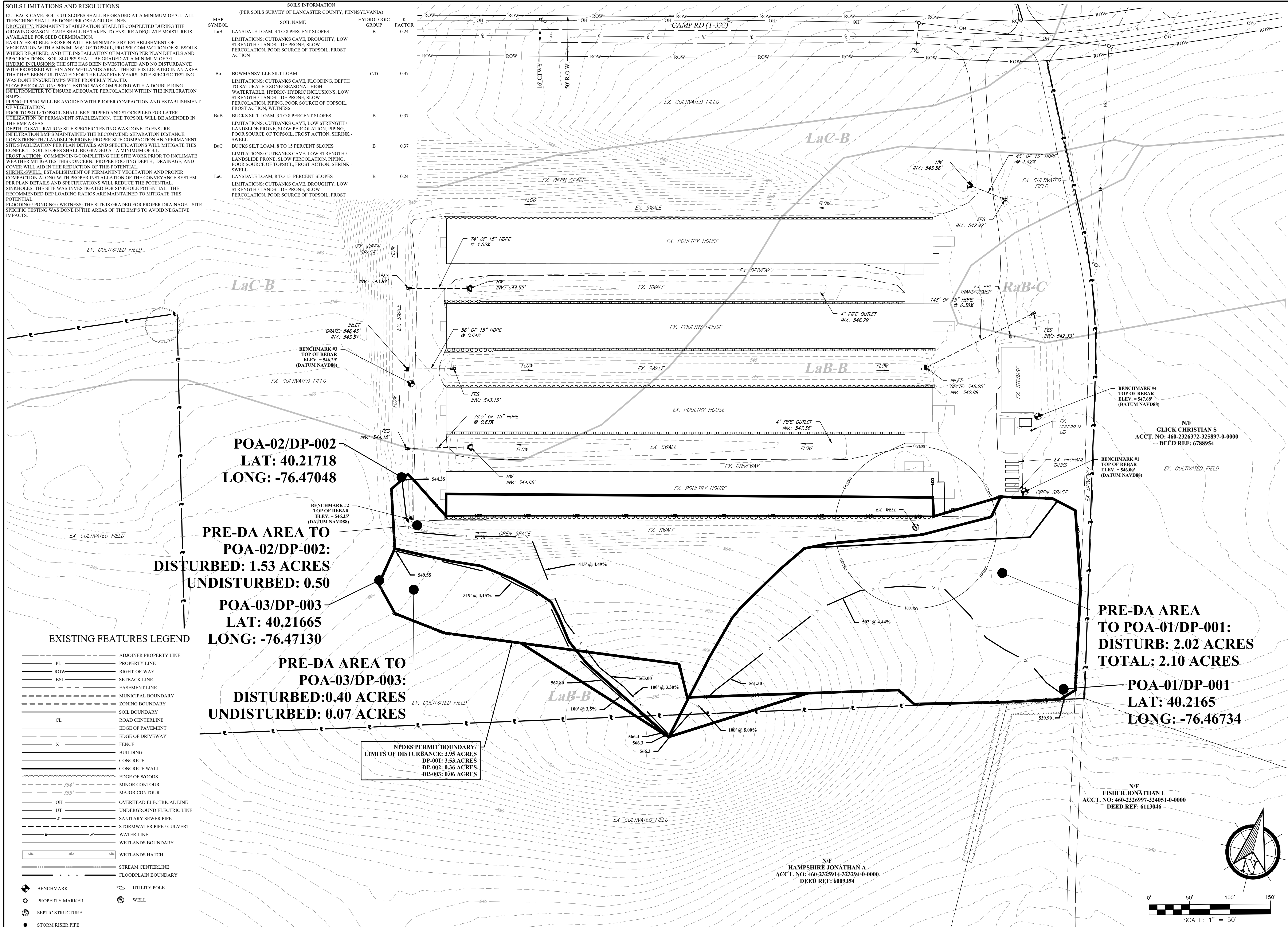
SEAL
 DRAWN BY: MRR CHECKED BY: RJR
 DATE: 10/7/2024
 DEED REF: 05409533
 UPI: 460-2325921-324722-0-0000
 SHEET 7 OF 16
P6 OF 8

SOILS LIMITATIONS AND RESOLUTIONS

CUTBACK CAVE: SOIL CUT SLOPES SHALL BE GRADED AT A MINIMUM OF 3:1. ALL TRENCHING SHALL BE DONE PER OSHA GUIDELINES. DROUGHTY: PERMANENT STABILIZATION SHALL BE COMPLETED DURING THE GROWING SEASON. CARE SHALL BE TAKEN TO ENSURE ADEQUATE MOISTURE IS AVAILABLE FOR SEED GERMINATION. EASILY ERODIBLE: EROSION WILL BE MINIMIZED BY ESTABLISHMENT OF VEGETATION WITH A MINIMUM 6" OF TOPSOIL. PROPER COMPACTION OF SUBSOILS WHERE REQUIRED, AND THE INSTALLATION OF MATTING PER PLAN DETAILS AND SPECIFICATIONS. SOIL SLOPES SHALL BE GRADED AT A MINIMUM OF 3:1. HYDRIC INCLUSIONS: THE SITE HAS BEEN INVESTIGATED AND NO DISTURBANCE WITH PROPOSED WITHIN ANY WETLANDS AREA. THE SITE IS LOCATED IN AN AREA THAT HAS BEEN CULTIVATED FOR THE LAST FIVE YEARS. SITE SPECIFIC TESTING WAS DONE TO ENSURE BMPs WERE PROPERLY PLACED. SLOW PERCOLATION: PERC TESTING WAS COMPLETED WITH A DOUBLE RING INFILTROMETER TO ENSURE ADEQUATE PERCOLATION WITHIN THE INFILTRATION BMPs. PIPING: PIPING WILL BE AVOIDED WITH PROPER COMPACTION AND ESTABLISHMENT OF VEGETATION. POOR TOPSOIL: TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR LATER UTILIZATION OF PERMANENT STABILIZATION. THE TOPSOIL WILL BE AMENDED IN THE BMP AREAS. DEPTH TO SATURATION: SITE SPECIFIC TESTING WAS DONE TO ENSURE INFILTRATION BMPs MAINTAINED THE RECOMMEND SEPARATION DISTANCE. LOW STRENGTH / LANDSLIDE PRONE: PROPER SITE COMPACTION AND PERMANENT SITE STABILIZATION PER PLAN DETAILS AND SPECIFICATIONS WILL MITIGATE THIS CONFLICT. SOIL SLOPES SHALL BE GRADED AT A MINIMUM OF 3:1. FROST ACTION: COMMENCEMENT OF THE SITE WORK PRIOR TO INCLIMATE WEATHER MITIGATES THIS CONCERN. PROPER FOOTING DEPTH, DRAINAGE, AND COVER WILL AID IN THE REDUCTION OF THIS POTENTIAL. SHRINK SWELL: ESTABLISHMENT OF PERMANENT VEGETATION AND PROPER COMPACTION ALONG WITH PROPER INSTALLATION OF THE CONVEYANCE SYSTEM PER PLAN DETAILS AND SPECIFICATIONS WILL REDUCE THE POTENTIAL. SINKHOLES: THE SITE WAS INVESTIGATED FOR SINKHOLE POTENTIAL. THE RECOMMENDED DEP LOADING RATIOS ARE MAINTAINED TO MITIGATE THIS POTENTIAL. FLOODING / PONDING / WETNESS: THE SITE IS GRADED FOR PROPER DRAINAGE. SITE SPECIFIC TESTING WAS DONE IN THE AREAS OF THE BMPs TO AVOID NEGATIVE IMPACTS.

SOILS INFORMATION

MAP SYMBOL	SOIL NAME	HYDROLOGIC GROUP	K FACTOR
LaB	LANSDALE LOAM, 3 TO 8 PERCENT SLOPES	B	0.24
Bo	BOWMANVILLE SILT LOAM	C/D	0.37
BuB	BUCKS SILT LOAM, 3 TO 8 PERCENT SLOPES	B	0.37
BaC	BUCKS SILT LOAM, 8 TO 15 PERCENT SLOPES	B	0.37
LaC	LANSDALE LOAM, 8 TO 15 PERCENT SLOPES	B	0.24



EXISTING FEATURES LEGEND

---	ADJOINER PROPERTY LINE
---	PROPERTY LINE
---	RIGHT-OF-WAY
---	SETBACK LINE
---	EASEMENT LINE
---	MUNICIPAL BOUNDARY
---	ZONING BOUNDARY
---	SOIL BOUNDARY
---	ROAD CENTERLINE
---	EDGE OF PAVEMENT
---	EDGE OF DRIVEWAY
X	FENCE
---	BUILDING
---	CONCRETE
---	CONCRETE WALL
---	EDGE OF WOODS
---	MINOR CONTOUR
---	MAJOR CONTOUR
OH	OVERHEAD ELECTRICAL LINE
UT	UNDERGROUND ELECTRIC LINE
S	SANITARY SEWER PIPE
---	STORMWATER PIPE / CULVERT
---	WATER LINE
---	WETLANDS BOUNDARY
---	WETLANDS HATCH
---	STREAM CENTERLINE
---	FLOODPLAIN BOUNDARY
⊕	BENCHMARK
⊙	PROPERTY MARKER
⊗	SEPTIC STRUCTURE
⊙	STORM RISER PIPE
⊕	UTILITY POLE
⊙	WELL

POA-02/DP-002
LAT: 40.21718
LONG: -76.47048

PRE-DA AREA TO POA-02/DP-002:
DISTURBED: 1.53 ACRES
UNDISTURBED: 0.50

POA-03/DP-003
LAT: 40.21665
LONG: -76.47130

PRE-DA AREA TO POA-03/DP-003:
DISTURBED: 0.40 ACRES
UNDISTURBED: 0.07 ACRES

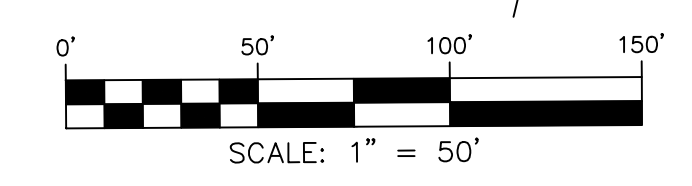
NPDES PERMIT BOUNDARY/ LIMITS OF DISTURBANCE: 3.95 ACRES
DP-001: 3.53 ACRES
DP-002: 0.36 ACRES
DP-003: 0.06 ACRES

PRE-DA AREA TO POA-01/DP-001:
DISTURB: 2.02 ACRES
TOTAL: 2.10 ACRES

POA-01/DP-001
LAT: 40.2165
LONG: -76.46734

N/F
HAMPSHIRE JONATHAN A
 ACCT. NO: 460-2325914-323294-0-0000
 DEED REF: 6009354

N/F
FISHER JONATHAN L
 ACCT. NO: 460-2326997-324051-0-0000
 DEED REF: 6113046



NCS INC.
NYE CONSULTING SERVICES
 REINHOLDS, PA 17569
 330 WEST ROUTE 897
 P: 717-220-1312

PRE-DEVELOPMENT DRAINAGE MAP

BOB BRUBAKER AG OPERATION

CLIENT: **ROBERT L. BRUBAKER JR.**
 2871 N COLEBROOK RD
 MANHEIM, PA 17545
 PH: 717-575-5255

N/F
GLICK CHRISTIAN S
 ACCT. NO: 460-2326372-325897-0-0000
 DEED REF: 6788954

REVISION	DATE	DESCRIPTION

SITE ADDRESS:
 2205 CAMP RD
 MANHEIM, PA 17545

COUNTY: LANCASTER COUNTY

MUNICIPALITY: MOUNT JOY TOWNSHIP

SEAL

ROBERT J. RUTH
 REGISTERED PROFESSIONAL ENGINEER
 PENNSYLVANIA

DRAWN BY: MRR CHECKED BY: RJR

DATE: 10/7/2024

DEED REF: 05409533

UPI: 460-2325921-324722-0-0000

SHEET 8 OF 16

P7 OF 8

PROPOSED FEATURES LEGEND

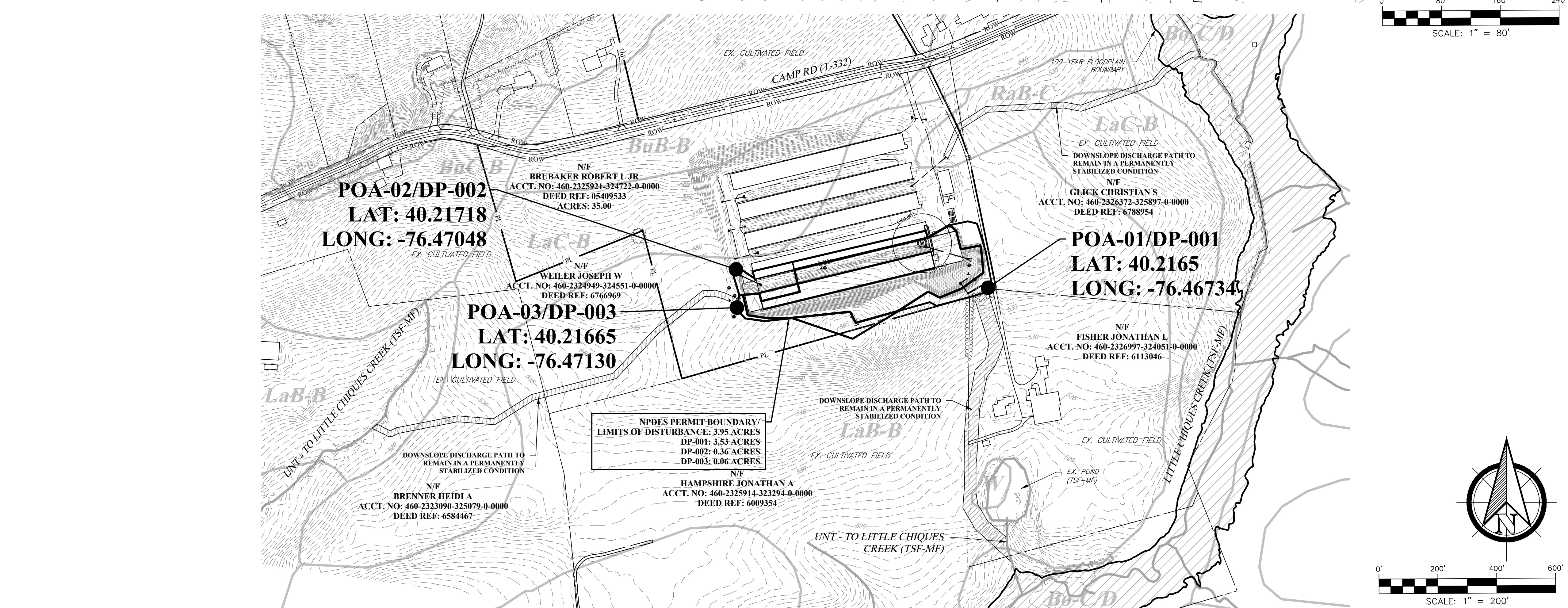
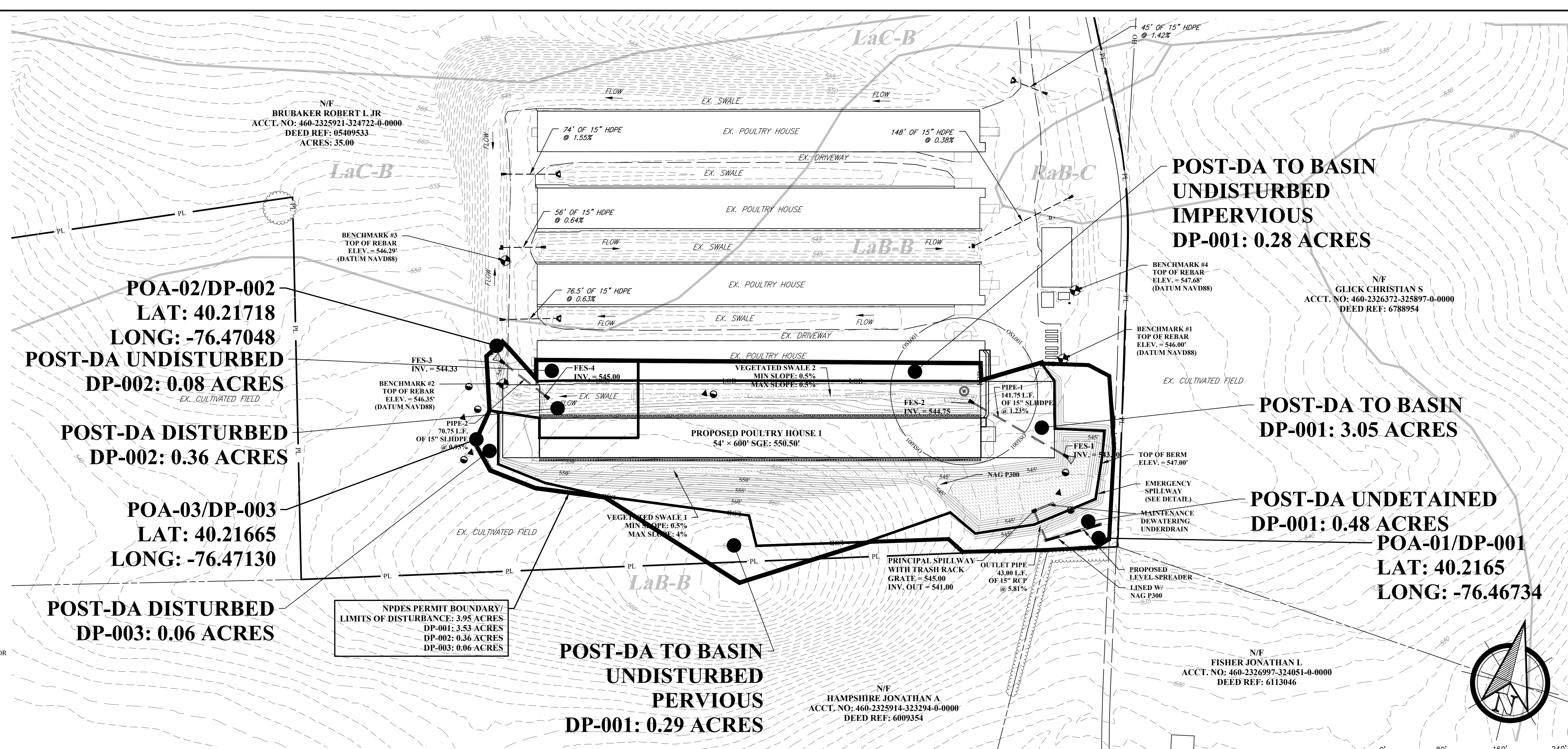
- LOD — NPDES PERMIT BOUNDARY/ LIMIT OF DISTURBANCE BOUNDARY LINE
- SS — COMPOST FILTER SOCK / SILT FENCE
- CL — CENTERLINE
- 355' — MAJOR CONTOUR
- 353' — MINOR CONTOUR
- — EASEMENT
- X — FENCE
- OH — OVERHEAD ELECTRIC LINE
- UE — UNDERGROUND ELECTRIC LINE
- S — SANITARY SEWER LINE
- — STORMWATER LINE
- W — WATER LINE
- SL — SEWER LATERAL LINE
- WL — WATER LATERAL LINE
- G — GUTTER
- C.O. — CLEANOUT
- D.S. — DOWNSPOUT
- — STORM STRUCTURE
- — SEPTIC MANHOLE
- ▲ — RIP RAP APRON
- ⊙ — TREE
- ⊙ — WELL

SOILS LIMITATIONS AND RESOLUTIONS

CUTBACK CAVE: SOIL CUT SLOPES SHALL BE GRADED AT A MINIMUM OF 3:1. ALL TRENCHING SHALL BE DONE PER OSHA GUIDELINES.
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SLOW PERCOLATION: PERC TESTING WAS COMPLETED WITH A DOUBLE RING INFILTROMETER TO ENSURE ADEQUATE PERCOLATION WITHIN THE INFILTRATION BMPs.
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DEPTH TO SATURATION: SITE SPECIFIC TESTING WAS DONE TO ENSURE INFILTRATION BMPs MAINTAINED THE RECOMMEND SEPARATION DISTANCE.
LOW STRENGTH / LANDSLIDE PRONE: PROPER SITE COMPACTION AND PERMANENT SITE STABILIZATION PER PLAN DETAILS AND SPECIFICATIONS WILL MITIGATE THIS CONFLICT. SOIL SLOPES SHALL BE GRADED AT A MINIMUM OF 3:1.
FROST ACTION: COMMENCING COMPLETING THE SITE WORK PRIOR TO INCLIMATE WEATHER MITIGATES THIS CONCERN. PROPER FOOTING DEPTH, DRAINAGE, AND COVER WILL AID IN THE REDUCTION OF THIS POTENTIAL.
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FLOODING / PONDING / WETNESS: THE SITE IS GRADED FOR PROPER DRAINAGE. SITE SPECIFIC TESTING WAS DONE IN THE AREAS OF THE BMPs TO AVOID NEGATIVE IMPACTS.

SOILS INFORMATION
(PER SOILS SURVEY OF LANCASTER COUNTY, PENNSYLVANIA)

MAP SYMBOL	SOIL NAME	HYDROLOGIC GROUP	K FACTOR
LaB	LANSDALE LOAM, 3 TO 8 PERCENT SLOPES LIMITATIONS: CUTBANKS CAVE, DROUGHTY, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, POOR SOURCE OF TOPSOIL, FROST ACTION	B	0.24
Bo	BOWMANVILLE SILT LOAM LIMITATIONS: CUTBANKS CAVE, FLOODING, DEPTH TO SATURATED ZONE/ SEASONAL HIGH WATER TABLE, HYDRIC/ HYDRIC INCLUSIONS, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, POOR SOURCE OF TOPSOIL, FROST ACTION, WETNESS	C/D	0.37
BuB	BUCKS SILT LOAM, 3 TO 8 PERCENT SLOPES LIMITATIONS: CUTBANKS CAVE, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, POOR SOURCE OF TOPSOIL, FROST ACTION, SHRINK - SWELL	B	0.37
BuC	BUCKS SILT LOAM, 8 TO 15 PERCENT SLOPES LIMITATIONS: CUTBANKS CAVE, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, POOR SOURCE OF TOPSOIL, FROST ACTION, SHRINK - SWELL	B	0.37
LaC	LANSDALE LOAM, 8 TO 15 PERCENT SLOPES LIMITATIONS: CUTBANKS CAVE, DROUGHTY, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, POOR SOURCE OF TOPSOIL, FROST ACTION	B	0.24
RaB	READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES LIMITATIONS: CUTBANKS CAVE, EASILY ERODIBLE, DEPTH TO SATURATED ZONE/ SEASONAL HIGH WATER TABLE, HYDRIC/ HYDRIC INCLUSIONS, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, POOR SOURCE OF TOPSOIL, FROST ACTION, WETNESS	C	0.37
W	WATER		



POST-DA TO BASIN UNDISTURBED IMPERVIOUS DP-001: 0.28 ACRES

POST-DA TO BASIN DP-001: 3.05 ACRES

POST-DA UNDETAINED DP-001: 0.48 ACRES

**POA-01/DP-001
LAT: 40.2165
LONG: -76.46734**

POST-DA TO BASIN UNDISTURBED PERVIOUS DP-001: 0.29 ACRES

**POA-02/DP-002
LAT: 40.21718
LONG: -76.47048**

POST-DA UNDISTURBED DP-002: 0.08 ACRES

POST-DA DISTURBED DP-002: 0.36 ACRES

**POA-03/DP-003
LAT: 40.21665
LONG: -76.47130**

POST-DA DISTURBED DP-003: 0.06 ACRES

**NPDES PERMIT BOUNDARY/ LIMITS OF DISTURBANCE: 3.95 ACRES
DP-001: 3.53 ACRES
DP-002: 0.36 ACRES
DP-003: 0.06 ACRES**

**POA-02/DP-002
LAT: 40.21718
LONG: -76.47048**

**POA-03/DP-003
LAT: 40.21665
LONG: -76.47130**

**POA-01/DP-001
LAT: 40.2165
LONG: -76.46734**

**NPDES PERMIT BOUNDARY/ LIMITS OF DISTURBANCE: 3.95 ACRES
DP-001: 3.53 ACRES
DP-002: 0.36 ACRES
DP-003: 0.06 ACRES**

NYE CONSULTING SERVICES INC.
REINHOLDS, PA 17569
330 WEST ROUTE 897
P: 717-220-1312

POST-DEVELOPMENT DRAINAGE MAP

BOB BRUBAKER AG OPERATION

CLIENT
ROBERT L. BRUBAKER JR.
2871 N COLEBROOK RD
MANHEIM, PA 17545
PH: 717-575-5255

COUNTY
LANCASTER COUNTY

REVISION	DATE	DESCRIPTION

SITE ADDRESS
2205 CAMP RD
MANHEIM, PA 17545

MUNICIPALITY:
MOUNT JOY TOWNSHIP

COUNTY
LANCASTER COUNTY

SEAL
DRAWN BY: MRR CHECKED BY: RJR
DATE: 10/7/2024
DEED REF: 05409533
UPI: 460-2325921-324722-0-0000
SHEET 9 OF 16

P8 OF 8

PROJECT NARRATIVE

PLAN PREPARED BY: NCS, INC.
235 VILLAGE SPRING LANE,
REINHOLDS, PA 17569
PHONE: (717) 380-6745

RECENT EROSION AND SEDIMENTATION CONTROL PLANS PREPARED:
NAME OF PROJECT: BOB BRUBAKER AG OPERATION
COUNTY: LANCASTER
MUNICIPALITY: MOUNT JOY TOWNSHIP

PROJECT NARRATIVE:
THE PROPOSAL IS TO CONSTRUCT A NEW POULTRY OPERATION INCLUSIVE OF ONE POULTRY BARN (54' x 600'), GRAVEL PADS, AND ASSOCIATED STORMWATER MANAGEMENT CONTROLS.

SITE INFORMATION
LIMITS OF DISTURBANCE/NPDES PERMIT BOUNDARY IS 3.95 ACRES
DP-001: 1.53 ACRES
DP-002: 0.36 ACRES
DP-003: 0.06 ACRES

LAND USES:
THE PAST AND PRESENT LAND USE HAS BEEN AGRICULTURAL, CULTIVATED FIELDS. THE PROPOSED LAND USE WILL BE AGRICULTURAL AND THE COVERAGE WILL CONSIST OF BUILDINGS, GRAVEL, CONCRETE, AND OPEN SPACE.

- E&S BMPs TO BE USED:**
- **COMPOST FILTER SOCK** - ABACT FERTILIZER DOWNSLOPE AREAS FROM SEDIMENT LADEN RUNOFF DURING THE CONSTRUCTION PROCESS.
 - **ROCK CONSTRUCTION ENTRANCE** - MINIMIZE SEDIMENT DEPOSITS ON THE ROADWAY.
 - **CONCRETE WASHOUT** - ALL CONCRETE WASHWATER SHALL BE COLLECTED IN THE WASHOUT AND RECYCLED PER 25 PA. CODE 260.1 ET SEQ., 271.1 AND 287.1 ET SEQ.
 - **PUMPED WATER FILTER BAG** - TO MANAGE TRENCH OPERATIONS AND MAINTAIN OR CONVERT THE BASIN, ABACT DEWATERING WILL BE UTILIZED.
 - **SITE PROTECTION** - TO PREVENT ACCELERATED EROSION CONDITIONS, THE PROJECT INCLUDES AN EROSION CONTROL BLANKET.
 - **SITE STABILITY** - TO STABILIZE ALL DISTURBED AREAS, A COMBINATION OF PERMANENT SEEDING AND PAVEMENT GRAVEL WILL BE EMPLOYED.

PCSM BMPs TO BE USED:
• **INFILTRATION BASIN** - THE DESIGNED INFILTRATION BASIN SERVES MULTIPLE PURPOSES: CAPTURING, DETAILING, AND INFILTRATING THE INCREASED VOLUME RESULTING FROM PROPOSED IMPROVEMENT. IT CONTRIBUTES TO GROUNDWATER RECHARGE, REDUCES FLOW RATES, MITIGATES THERMAL IMPACTS BY UNDERGROUND WATER INFILTRATION, AND ENHANCES WATER QUALITY.

MAINTENANCE OF EACH BMP-INSPECTION SCHEDULE AND LOG INFO:
REGULAR MAINTENANCE INVOLVES INSPECTING ALL EROSION AND SEDIMENT BMPs AFTER EACH RUNOFF EVENT AND WEEKLY IMMEDIATE PREVENTIVE AND REMEDIAL WORK, INCLUDING CLEANING, REPAIRING, REPLACING, RE-GRADING, RESEEDING, RE-MULCHING, AND RESETTING. INSPECTION LOGS SHOULD BE MAINTAINED AS ANTICIPATED, REPLACEMENT BMPs OR MODIFICATIONS WILL BE NECESSARY.

A COMPREHENSIVE LOG DOCUMENTING INSPECTION DATES FOR EROSION AND SEDIMENT BEST MANAGEMENT PRACTICES (BMPs), ALONG WITH ANY IDENTIFIED DEFICIENCIES AND THE CORRESPONDING CORRECTION DATES, MUST BE KEPT ON-SITE. THIS LOG WILL BE ACCESSIBLE TO REGULATORY AGENCY OFFICIALS DURING INSPECTIONS.

E&S PLAN MINIMIZES THE EXTENT AND DURATION OF EARTH DISTURBANCE
TO MINIMIZE THE EXTENT AND DURATION OF EARTH DISTURBANCE, THE E&S PLAN SEQUENCED THE CONSTRUCTION, IMPLEMENTING APPROPRIATE TEMPORARY STABILIZATION METHODS, NO AREA EXCEEDING 15,000 SQUARE FEET, INTENDED FOR VEGETATION STABILIZATION, SHOULD REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED.
AFTER CLEARING EARTH DISTURBANCE ACTIVITIES IN ANY AREA OR SUBAREA FOR MORE THAN 4 DAYS, IMMEDIATE STABILIZATION IS REQUIRED; THE SITE MUST BE PROMPTLY SEEDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION. DURING NON-GERMINATING MONTHS, PROTECTIVE MULCH OR BLANKET APPLICATION FOLLOWS THE PLAN. AREAS NOT AT FINISHED GRADE TO BE REACTIVATED WITHIN 1 YEAR, MAY FOLLOW TEMPORARY STABILIZATION SPECIFICATIONS. THOSE NOT REACTIVATED WITHIN 1 YEAR MUST ADHERE TO PERMANENT STABILIZATION SPECIFICATIONS.

CLEARING, GRUBBING, AND TOPSOIL STRIPPING ARE LIMITED TO SPECIFIED AREAS IN EACH CONSTRUCTION STAGE. EROSION AND SEDIMENT CONTROL STRUCTURES SHOULD NOT BEGIN UNTIL THE E&S BMPs SPECIFIED FOR THAT STAGE ARE INSTALLED AND FUNCTIONING AS DESCRIBED IN THE E&S PLAN.

THE ENTIRE LIMIT OF DISTURBANCE BOUNDARY MUST BE CLEARLY MARKED WITH STAKES, FLAGGING, OR ORANGE CONSTRUCTION FENCING BEFORE WORK BEGINS. ALL WORK AND EQUIPMENT MUST REMAIN WITHIN THIS BOUNDARY.

E&S PLAN MAXIMIZES PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION.
THE G&S IS BEING MET AND DOWNSTREAM WATERCOURSES WILL NOT BE DEGRADED. COMPOST SOCKS ARE INSTALLED ON UNDISTURBED GROUND AND STORMWATER WILL FLOW THROUGH VEGETATED AREAS.

E&S PLAN MINIMIZES SOIL COMPACTION.
THE PROPOSED IMPROVEMENTS ARE CLUSTERED, LEAVING A LARGER PORTION OF THE LAND UNAFFECTED TO PROTECT INFILTRATION AREAS FROM COMPACTION. COMPOST FILTER SOCKS HAVE BEEN INSTALLED AROUND THE SITE PERIMETER. ALL WORK AND EQUIPMENT MUST REMAIN WITHIN THIS DESIGNATED BOUNDARY.

E&S PLAN UTILIZES OTHER MEASURES OR CONTROLS THAT PREVENT OR MINIMIZE GENERATION OF INCREASED STORMWATER RUNOFF.
AFTER CLEARING EARTH DISTURBANCE ACTIVITIES IN ANY AREA OR SUBAREA FOR MORE THAN 4 DAYS, IMMEDIATE STABILIZATION IS REQUIRED. DISTURBED AREAS MUST BE PROMPTLY SEEDED, MULCHED, OR OTHERWISE PROTECTED TO PREVENT ACCELERATED EROSION AND SEDIMENTATION UNTIL FUTURE EARTH DISTURBANCE ACTIVITIES OCCUR. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING WILL BE APPLIED AS SPECIFIED. AREAS NOT AT FINISHED GRADE TO BE REACTIVATED WITHIN 1 YEAR, MAY FOLLOW TEMPORARY STABILIZATION SPECIFICATIONS. THOSE NOT REACTIVATED WITHIN 1 YEAR MUST ADHERE TO PERMANENT STABILIZATION SPECIFICATIONS.

TO MINIMIZE INCREASED STORMWATER RUNOFF, THE PROJECT INCLUDES A ROCK CONSTRUCTION ENTRANCE AND COMPOST SOCKS (AS NOTED). ADDITIONALLY, A RATE AND VOLUME CONTROL FACILITY WILL FURTHER MITIGATE STORMWATER RUNOFF.

ANTICIPATED CONSTRUCTION WASTES
ANTICIPATED CONSTRUCTION WASTES ARE NORMAL CONSTRUCTION MATERIALS DURING BUILDING.

RECYCLING OR DISPOSAL OF MATERIALS
ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1. NO BUILDING MATERIALS OR WASTES OR UNSPACED COLEMAN MATERIALS SHALL BE BURIED, BURNED, DUMPED, OR DISCHARGED AT THE SITE.

GEOLOGIC/SOIL CONDITIONS ADDRESSSE
THERE ARE NO KNOWN SOIL CONDITIONS OR GEOLOGIC FORMATIONS WHICH HAVE THE POTENTIAL TO CAUSE POLLUTION AFTER EARTH DISTURBANCE ACTIVITIES ARE COMPLETED. THE SITE IS UNDERLAIN WITH KARST GEOLOGY. DISTURBED AREAS ARE TO BE IMMEDIATELY STABILIZED.

WHERE POTENTIAL FOR POLLUTION IDENTIFIED, MEASURES PROVIDED TO AVOID OR MINIMIZE MITIGATE:
DURING THE E&S STAGE, SEVERAL MEASURES ARE IMPLEMENTED TO PREVENT POLLUTION:
1. A ROCK CONSTRUCTION ENTRANCE ENSURES CONTROLLED SITE ACCESS.
2. COMPOST SOCKS (AS SPECIFIED) ARE STRATEGICALLY PLACED ON UNDISTURBED GROUND, ALLOWING STORMWATER TO FLOW THROUGH TO VEGETATED AREAS.
3. A CONCRETE WASHOUT AREA MANAGES CONSTRUCTION WASTE.
4. A TEMPORARY TOPSOIL STOCKPILE FACILITATES FUTURE SOIL MANAGEMENT.
5. ADDITIONALLY, A PUMPED WATER FILTER BAG MAY BE UTILIZED.
THESE COMBINED EFFORTS MINIMIZE POLLUTION RISKS DURING CONSTRUCTION.

THERMAL IMPACTS ADDRESSED:
TO MITIGATE POTENTIAL THERMAL IMPACTS, THE PROJECT INCORPORATES PROPOSED BMPs RUNOFF FROM IMPROVED AREAS WILL FLOW THROUGH VEGETATED ZONES AND ULTIMATELY REACH THE INFILTRATION WHERE WATER RETENTION AND UNDERGROUND INFILTRATION OCCUR. ADDITIONALLY, RUNOFF WILL BE PIPED UNDERGROUND. THE GRAVEL AREAS WILL UNDERGO FILTRATION THROUGH VEGETATED ZONES, MINIMIZING THEIR IMPACT. THE PAVED AREAS HAVE IMPROVED SURFACES, ITS AMBIENT TEMPERATURE WILL PROMPTLY DECREASE.

STREAM CLASSIFICATION:
DP-001: UNT - TO LITTLE CHOQUES CREEK / TSP-MF
DP-002: UNT - TO LITTLE CHOQUES CREEK / TSP-MF
DP-003: UNT - TO LITTLE CHOQUES CREEK / TSP-MF

E&S SHEET INDEX	
E1 OF 7	E&S PLAN: COVER SHEET AND NOTES
E2 OF 7	E&S PLAN: PROJECT AREA MAP
E3 OF 7	E&S PLAN: CONTROL GRADING RETENTION
E4 OF 7	E&S PLAN: DRAINAGE MAP
E5 OF 7	E&S PLAN: SITE DETAILS 1
E6 OF 7	E&S PLAN: SITE DETAILS 2
E7 OF 7	E&S PLAN: SITE DETAILS 3

EARTH DISTURBANCES: ALL EARTH DISTURBANCES, INCLUDING CLEARING, GRUBBING, CUTS, AND FILLS, MUST BE PERFORMED IN LINE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS MUST ALWAYS BE AVAILABLE AT THE PROJECT SITE. ANY CHANGES TO THE APPROVED PLAN MUST BE NOTIFIED TO THE REVIEWING AGENCY BEFORE IMPLEMENTATION.

PRECONSTRUCTION MEETING: AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OWNER/ OPERATOR SHOULD INVITE THE EXCAVATOR, COUNTY CONSERVATION DISTRICT, EAST DONAGAL TOWNSHIP, DMA AND NCS, INC. TO AN ON-SITE PRECONSTRUCTION MEETING. THEY MUST BRING A COPY OF THEIR NPDES PERMIT AND A COPY OF THE STAMPED PLAN TO THE MEETING.

NOTIFICATION TO PENNSYLVANIA ONE CALL SYSTEM: AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN UNMARKED AREA, THE PENNSYLVANIA ONE CALL SYSTEM MUST BE NOTIFIED FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

EARTH DISTURBANCE ACTIVITIES: ALL EARTH DISTURBANCE ACTIVITIES MUST PROCEED ACCORDING TO THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. ANY DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING BY THE LOCAL COUNTY CONSERVATION DISTRICT OR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

NOTIFICATION TO DEPARTMENT: UPON INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMPs AND AT LEAST 3 DAYS BEFORE PROCEEDING WITH THE BULK EARTH DISTURBANCE ACTIVITIES, THE PERMITTEE OR CO-PERMITTEE MUST NOTIFY THE DEPARTMENT OR AUTHORIZED LOCAL COUNTY CONSERVATION DISTRICT.

EROSION AND SEDIMENT BMPs: EROSION AND SEDIMENT BMPs MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPs.

AREAS TO BE FILLED: AREAS TO BE FILLED MUST BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.

CLEARING, GRUBBING, AND TOPSOIL STRIPPING: CLEARING, GRUBBING, AND TOPSOIL STRIPPING MUST BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE.

CONSTRUCTION VEHICLES: AT NO TIME SHOULD CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES AS SHOWN ON THE PLAN MAPS.

LIMITS OF DISTURBANCE: THE LIMITS OF DISTURBANCE (LOD), STREAMS, AND WETLANDS SHOULD BE MARKED PRIOR TO DISTURBANCE ACTIVITIES. TOPSOIL: TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHOULD BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAPS) IN THE NECESSARY AMOUNT TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION.

EROSION CONTROL BLANKETING: EROSION CONTROL BLANKETING SHOULD BE INSTALLED ON ALL SLOPES 3:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.

FINAL STABILIZATION: AFTER FINAL STABILIZATION HAS BEEN ACHIEVED, TEMPORARY E&S BMPs MUST BE REMOVED OR CONVERTED TO PERMANENT POST-CONSTRUCTION STORMWATER MANAGEMENT BMPs.

UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL COUNTY CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPs.

BEFORE DISPOSING OF SOIL OR RECEIVING BORROW FOR THE SITE, THE OPERATOR MUST ASSURE THAT EACH SOIL OR BORROW AREA HAS AN EROSION AND SEDIMENT CONTROL PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT, AND WHICH IS BEING IMPLEMENTED AND MAINTAINED ACCORDING TO CHAPTER 102 REGULATIONS FOR ALL SOIL AND/OR ROCK SPILL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS. THE OPERATOR SHALL ALSO NOTIFY THE LOCAL COUNTY CONSERVATION DISTRICT IN WRITING OF ALL RECEIVING SPOIL AND BORROW AREAS WHEN THEY HAVE BEEN IDENTIFIED.

CONSTRUCTION SEQUENCE

1. PERFORM CONSTRUCTION STAKEOUT AND FIELD MARK ALL E&S CONTROLS AND LIMITS OF DISTURBANCE.
2. INSTALL TEMPORARY ROCK CONSTRUCTION ENTRANCE PER PLAN SPECIFICATIONS AND DETAILS.
3. INSTALL TEMPORARY SILT SOCK PER PLAN SPECIFICATIONS AND DETAILS.
4. INITIAL ROUGH GRADING FOR INSTALLATION OF THE BARN AND DRIVEWAYS. TO THE EXTENT POSSIBLE, DISTURBANCE SHALL BE LIMITED TO THE AREA BEING GRADED AT ANY GIVEN TIME AND STABILIZED IMMEDIATELY.
5. INSTALL CONCRETE WASTE DISPOSAL AREA PER PLAN DETAILS AND SPECIFICATIONS.
6. INITIATE CONSTRUCTION OF THE BARN AND DRIVEWAYS. CONNECT TO EXISTING BARN UTILITIES.
7. INITIATE STRIPPING AND STOCKPILING OF TOPSOIL FROM AREAS WHICH ARE TO BE RE-GRADED FOR THE CONSTRUCTION OF THE INFILTRATION BASIN AND SWALES 1-2 WITH ROCK FILTERS 1-4. STRIPPING SHALL BE LIMITED TO THOSE AREAS WHICH ARE TO BE IMMEDIATELY RE-GRADED. STOCKPILE EXCESS SOIL AND TOPSOIL IN DESIGNATED AREA.
8. INITIATE ROUGH GRADING FOR INSTALLATION OF INFILTRATION BASIN. AVOID HEAVY EQUIPMENT WITHIN THE BASIN BOTTOM TO PREVENT COMPACTION. TO THE EXTENT POSSIBLE, DISTURBANCE SHALL BE LIMITED TO THE AREA BEING GRADED AT ANY GIVEN TIME.
9. INITIAL CONSTRUCTION OF THE INFILTRATION BASIN INCLUDING CRITICAL STAGES DEFINED IN STEPS 12-15. INSTALL PRINCIPAL SPILLWAY WITH ASSOCIATED OUTLET BARREL, ANTI-SEEP COLLARS, FLARED END SECTION, RIP-RAP 1 (RR-1), AND EMERGENCY SPILLWAY, SWALES 1-2. CONVEYANCE PIPES 1 & 2 WITH ASSOCIATED FLARED END SECTIONS AND RR-2 & RR-3. ALL **SIDE SLOPES OF THE SWALES AND BASIN ALONG WITH THE BOTTOM OF THE SWALES SHALL BE IMMEDIATELY STABILIZED WITH EROSION CONTROL, BLANKET AND STABILIZED IN ACCORDANCE WITH THE PLAN.**
10. COMPLETE THE FINAL GRADING/PREFORM AND GRADING REPAIRS OF THE AREA PER THE SITE PLAN. REMOVE ALL SEDIMENT FROM E&S CONTROLS, INCLUDING ALL SILT SOCKS, AND WORK INTO THE FINAL GRADING. E&S CONTROLS ARE TO REMAIN IN PLACE.
11. WHEN FINAL GRADE IS ACHIEVED, PERMANENT VEGETATIVE STABILIZATION SHALL BE IMPLEMENTED ON ALL DISTURBED AREAS. ANY SLOPE EXCEEDING 3:1 SHALL HAVE EROSION CONTROL, BLANKET INSTALLED ON THE SLOPE PER PLAN SPECIFICATIONS AND DETAILS. STABILIZE ALL DRIVEWAYS AND LOADING AREAS WITH GRAVEL.

CRITICAL STAGES

12. BEGIN EXCAVATION FOR INSTALLATION OF THE PCSM TOPSOIL AMENDMENT WITHIN THE BASIN BOTTOM AND PROCEED WITHIN THE BASIN BOTTOM. ONCE SUBGRADE IS EXPOSED TREAT BOTTOM FOR COMPACTION PER PLAN DETAILS AND SPECIFICATIONS.
13. PRIOR TO INSTALLING AMENDED TOPSOIL DESIGN ENGINEER TO PREFORM PERCOLATION TESTING TO ENSURE THE BASIN WILL FUNCTION AS DESIGNED.
14. INSTALL AMENDED TOPSOIL WITHIN THE BASIN BOTTOM TO THE FINAL DESIGN GRADE PER PLAN DETAILS AND SPECIFICATIONS.
15. PERMANENTLY STABILIZE ANY AREAS NOT FULLY ESTABLISHED WITH VEGETATION.
16. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATORS SHALL CONTACT THE LANCASTER COUNTY CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO THE REMOVAL OF THE TEMPORARY BMPs.
17. ONCE THE SITE IS STABILIZED PER THE PERMANENT STABILIZATION SPECIFICATIONS, THE OWNER AND/OR OPERATORS SHALL CONTACT THE LANCASTER COUNTY CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO THE COMMENCEMENT OF PCSM IMPROVEMENTS. PCSM IMPROVEMENTS CAN ONLY COMMENCE ONCE THE LANCASTER COUNTY CONSERVATION DISTRICT HAS BEEN CONTACTED AND THE SITE IS STABILIZED PER THE PERMANENT STABILIZATION SPECIFICATIONS. REMOVE THE SUBMISSION OF A NOTICE OF TERMINATION TO THE LANCASTER COUNTY CONSERVATION DISTRICT.

EROSION AND SEDIMENTATION CONTROL PLAN FOR BOB BRUBAKER AG OPERATION MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA

GENERAL EROSION AND SEDIMENT CONTROL PLAN NOTES

1. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX A, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102 EROSION CONTROL.
2. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
3. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) OR CO-PERMITTEE MUST NOT BE USED AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
4. THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE REVIEWING AGENCY, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.
5. BEFORE INITIATING ANY REVISIONS TO THE EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE REVIEWING AGENCY.
6. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, UNDER UNDISTURBED VEGETATED AREAS. DISCHARGE POINTS SHOULD BE ESTABLISHED TO PROVIDE FOR MAXIMUM DISTANCE TO ACTIVE WATERWAYS.
7. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR THE SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
8. CONCRETE WASHOUT SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS. CONCRETE WASHOUT MUST BE A MINIMUM OF 50 FEET FROM DRAINS, DITCHES AND CHANNELS ON A MAXIMUM SLOPE OF 2%. MATERIAL MUST BE REMOVED WHEN IT REACHES 75% OF TOTAL STORAGE AND LINERS MUST BE REPLACED WITH EACH CLEANING.
9. STAGNANT WATER: PA CODE TITLE 25 ENVIRONMENTAL PROTECTION, CHAPTER 243, NUISANCES, SECTION 243.12 STAGNANT WATER STATES: A PERSON MAY NOT MAINTAIN OR PERMIT TO BE MAINTAINED, A POND, PRIVY VULV, CESSPOOL, WELL, CISTERN, RAIN BARREL OR OTHER STORAGE OF WATER ON A MAXIMUM SLOPE OF 2%. MATERIAL MUST BE REMOVED WHEN IT REACHES 75% OF TOTAL STORAGE AND LINERS MUST BE REPLACED WITH EACH CLEANING.

OPERATION AND MAINTENANCE:

- ALL WASTES REMOVED FROM BMPs MUST BE HANDLED PROPERLY. PLASTICS AND PAPER ITEMS CAN BE RECYCLED. LAWN/YARD WASTE CAN BE PLACED WITH A COMPOST CENTER TO BE MADE INTO COMPOST OR MULCH.
- SEDIMENT REMOVED FROM BMPs CAN BE SPREAD ON SITE AND IMMEDIATELY STABILIZED BY ADDING SEED AND STRAW SO IT CAN BE INCORPORATED INTO THE SOIL STRUCTURE. FINE SOURCE OF SEDIMENT POLLUTION AND STABILIZE IMMEDIATELY.
- OIL AND OTHER DEBRIS SHOULD BE DISPOSED OF PER ENVIRONMENTAL LAWS.
- MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL BMPs AFTER EACH MAJOR RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RESEEDING, RE-MULCHING AND RE-NETTING MUST BE PERFORMED IMMEDIATELY. IF THE BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- A LOG SHOWING DATES THAT 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 THE INSPECTION.
- PLEASE NOTE - IF AFTER PERFORMING MAINTENANCE ROUTINES, THE FOLLOWING DO NOT OPERATE PROPERLY, CONTACT DESIGN ENGINEER.
- FACILITY MAINTENANCE REQUIREMENTS**
- DRIVEWAY/PARKING AREAS
• INSPECT REGULARLY FOR OIL AND DEBRIS ACCUMULATION.
GRASS LAWN AREA
• MOW REGULARLY (WEEKLY). INSPECT GRASS AREAS REGULARY (WEEKLY) FOR GARBAGE/OTHER DEBRIS. REMOVE AS EXPECTED. MAINTAIN EXISTING VEGETATION. RE-VEGETATE ANY BARE SPOTS AS SOON AS POSSIBLE.
- SOIL RESTORATION
MAINTENANCE ACTIVITIES TO BE DONE ANNUALLY AND WITHIN 48 HOURS AFTER EVERY FLOODING EVENT TO BE LIMITED TO SLOPES NO STEEPER THAN 3:1V. THE MACHINERY SHOULD BE OPERATED ON THE HANGOUT. NOTE: CRIMPING OF HAY OR STRAW BY RUNNING OVER IT WITH TRACKED MACHINERY IS NOT RECOMMENDED.

MAINTENANCE:

1. FAILURE TO CORRECTLY INSTALL E&S BMPs, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPs MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
2. 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. REMOVAL CAN BE COMPLETED THROUGH USE OF MECHANICAL OR HAND TOOLS. IN NO CASE SHALL SEDIMENT BE WASHED, SHOVELLED, OR SWEEP INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
3. ALL SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. THE SEDIMENT TRAPPING CONTROLS, AS MAY BE SHOWN, SHALL BE CLEANED OUT AS PER THE CORRESPONDING DETAIL. SEDIMENT SHALL BE DISPOSED OF IN LANDSCAPE AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, OR LONGER DISTANCE FROM THE CONSTRUCTION SITE. SEDIMENT SHOULD BE PLACED IN TOPSOIL STOCKPILES.
4. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR REGIONAL OFFICE OF THE DEPARTMENT. STOCKPILES OF WOOD CHIPS, HAY BALES, CRUSHED STONE OR OTHER MULCHES SHALL BE HELD IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS WITH EROSION.
5. UNTIL THE SITE ACHIEVES FINAL STABILIZATION, ALL EROSION AND SEDIMENT BMPs SHALL BE MAINTAINED PROPERLY. THE OPERATOR SHALL ASSURE THAT THE BEST MANAGEMENT PRACTICES (BMPs) ARE IMPLEMENTED, OPERATED, AND MAINTAINED PROPERLY AND COMPLETELY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RESEEDING, RE-MULCHING AND RE-NETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED. ONLY AFTER DISTURBED AREAS ARE STABILIZED WITH A 70% UNIFORM PERENNIAL GROWTH SHALL TEMPORARY EROSION AND SEDIMENT CONTROL STRUCTURES BE REMOVED.
6. 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 THE INSPECTION.

STORMWATER INLETS, WHICH DO NOT DISCHARGE TO SEDIMENT TRAPS OR BASINS, MUST BE PROTECTED UNTIL THE TRIBUTARY AREAS ARE STABILIZED.

STABILIZATION NOTES:

- COVER SEEDING:**
IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED.
IT IS RECOMMENDED THAT SOIL TESTING BE DONE PRIOR TO SEEDING AND MULCHING TO DETERMINE THE PROPER SOIL AMENDMENTS AND APPLICATION RATES FOR PROPOSED SEED MIXTURES.

SITE PREPARATION

- A. COMPLETE GRADING AND EROSION CONTROL MEASURES.
- B. ALL GRADING AND TILLING OPERATIONS ARE TO BE COMPLETED AT RIGHT ANGLES TO THE SLOPE.
- C. GRADED AREA SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3-5 INCHES TO PERMIT BONDING OF THE TOPSOIL TO UNDERLYING AREAS.
- D. BEFORE SEEDING BEGINS, TOPSOIL SHOULD BE UNIFORMLY DISTRIBUTED ACROSS THE DISTURBED AREA TO A DEPTH OF 4-8 INCHES MINIMUM - 2 INCHES ON FILL OUTSLOPES.
- E. 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.
- F. COMPACTED SOILS SHOULD BE SCARIFIED 6-12 INCHES ALONG CONTOUR WHEREVER APPLICABLE PRIOR TO SEEDING.
- G. APPLY LIME AS SPECIFIED UNDER SOIL CONDITIONING AND FERTILIZATION. APPLY FERTILIZER AS SPECIFIED. (NOTE - THE ACTUAL % OF THE SOIL SHALL BE TESTED FOR THE PROPER APPLICATION OF FERTILIZER TO BE APPLIED TO ENSURE GERMINATION OF SEED BASED ON FIELD CONDITIONS).
- H. APPLY SEED AS SPECIFIED UNDER SEEDING. SEEDING SHOULD COVER THE ENTIRE AREA DISTURBED BY THE WORK OF THIS PROJECT, EXCEPT WHERE NOTED, SHALL BE SEED AS FOLLOWS:

TEMPORARY SEEDING

1. FERTILIZATION - THE FOLLOWING SHALL BE SPREAD AND WORKED INTO TOPSOIL TO A DEPTH OF 3 TO 4 INCHES:
AGRICULTURAL LIME: 1 TON PER ACRE, 40 LBS. PER 1,000 SQ. FT. OR 410 LBS. PER 1,000 SQ. FT.
10-10-10 FERTILIZER: 500 LBS. PER ACRE, 12.5 LBS. 1,000 SQ. FT. OR 100 LBS. PER SQ.YD.
2. TEMPORARY SEEDING (OR MULCHING IN WINTER) SHALL BE DONE IMMEDIATELY.
A SEEDING (TEMPORARY) - ACCORDING TO SEASON, AT RATE OF ONE (1) LB. 1,000 SQ. FT. ANNUAL RYE GRASS - MARCH 1 TO JUNE 15, SUDAN GRASS - MAY 15 TO AUGUST 15 AT RATE OF 55 LBS PER ACRE. WINTER RYE - SEPTEMBER 15 TO OCTOBER 15 AT RATE OF 160 LBS. PER ACRE. APPLY SEED UNIFORMLY. OCTOBER 15 - MARCH 1, USE 2 IN. OF MULCH AS GROUND COVER OVER WINTER. MULCH WITH STRAW.

PERMANENT SEEDING - THE DISTURBED AREAS, DRAINAGE CHANNELS AND SWALES SHALL BE PERMANENTLY SEEDDED (STABILIZED) AS FOLLOWS:
1. FERTILIZATION - THE FOLLOWING SHALL BE SPREAD AND WORKED INTO TOPSOIL TO A DEPTH OF 3 TO 4 INCHES:
AGRICULTURAL LIME: 6 TONS PER ACRE, 240 LB. PER 1,000 SQ. FT. OR 240 LB. PER 1,000 SQ.YD.
10-20-20 FERTILIZER: 1,000 LB. PER ACRE, 25 LB. PER 1,000 SQ. FT OR 210 LB. PER 1,000 SQ.YD.

2. PERMANENT SEEDING SHALL BE DONE IMMEDIATELY.
A. GRASS SEEDING - KY 31 TALL FESCUE 88%, REDTOP 12% - 2 LBS. PER 1,000 SQ. FT. APPLY FROM APRIL, TO JUNE 15 OR EARLIER 15 - OCTOBER. WHEN SEEDINGS ARE WATERED REGULARLY, SEEDING DATES MAY BE EXTENDED FROM JUNE 15 TO AUGUST 15. APPLY SEED UNIFORMLY BY BROADCASTING, HYDRAULIC APPLICATION, COVER GRASS WITH 1/4" OF SOIL AND STRAW MULCH.

MULCHING SPECIFICATIONS

ALL SEEDED AREAS SHOULD BE MULCHED OR BLANKETED TO MINIMIZE POTENTIAL FOR FAILURE TO ESTABLISH ADEQUATE VEGETATIVE COVER.
MULCHING MAY ALSO BE USED AS A TEMPORARY STABILIZATION OF SOME DISTURBED AREAS IN NON-GERMINATING SEASONS.

- MULCHES SHOULD BE APPLIED AS FOLLOWS:
1. STRAW - 3 TONS PER ACRES, 140 LBS. PER 1,000 SQ.FT. OR 1,240 LBS. PER 1,000 SQ.YDS.
EITHER WHEAT OR OAT STRAW. FREE OF WEEDS, NOT CHOPPED OR FINELY BROKEN.
2. HAY - 3 TONS PER ACRES, 140 LBS. PER 1,000 SQ.FT. OR 1,240 LBS. PER SQ.YD. - TIMOTHY, MIXED CLOVER AND TIMOTHY, OR OTHER NATIVE FORAGE GRASSES
3. WOOD CHIPS - 4-6 TONS PER ACRE, 185-275 LBS. PER 1,000 SQ.FT. OR 1,650-2,500 LBS. PER 1,000 SQ. YD. - MAY PREVENT GERMINATION OF GRASSES AND LEGUMES.
4. HYDRUMULCH - 1 TON PER ACRE, 47 LBS. PER 1,000 SQ.FT. OR 415 LBS. PER SQ.YD.

STRAW AND HAY MULCH SHOULD BE ANCHORED OR TACKIED IMMEDIATELY AFTER APPLICATION TO PREVENT WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL - ABOUT 3 INCHES. THIS METHOD SHOULD BE LIMITED TO SLOPES NO STEEPER THAN 3:1V. THE MACHINERY SHOULD BE OPERATED ON THE HANGOUT. NOTE: CRIMPING OF HAY OR STRAW BY RUNNING OVER IT WITH TRACKED MACHINERY IS NOT RECOMMENDED.

POLYMERIC AND GUM TACKIFIERS MIXED AND APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS MAY BE USED TO TACK MULCH. AVOID APPLICATION DURING RAIN AND ON WINDY DAYS. A 24-HOUR CURING PERIOD AND A SOIL TEMPERATURE HIGHER THAN 45°F ARE TYPICALLY REQUIRED. APPLICATION SHOULD GENERALLY BE HEAVIEST AT EDGES OF SEEDED AREAS AND AT CRESTS OF RIDGES AND BANKS TO PREVENT LOSS BY WIND. THE REMAINDER OF THE SOIL SHOULD HAVE BINDER APPLIED UNIFORMLY. BINDERS MAY BE APPLIED AFTER MULCH IS SPREAD OR SPRAYED INTO THE MULCH AS IT IS BEING BLOWN ON TO THE SOIL. APPLYING STRAW AND BINDER TOGETHER IS GENERALLY MORE EFFECTIVE.

SYNTHETIC BINDERS, OR CHEMICAL BINDERS, MAY BE USED AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH PROVIDED SUFFICIENT DOCUMENTATION IS PROVIDED TO SHOW THEY ARE NON-TOXIC TO NATIVE PLANT AND ANIMAL SPECIES.

MULCH ON SLOPES OF 8% OR STEEPER SHOULD BE HELD IN PLACE WITH NETTING. LIGHTWEIGHT PLASTIC, FIBER, OR PAPER NETS MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

SHREDDED PAPER HYDRUMULCH SHOULD NOT BE USED ON SLOPES STEEPER THAN 5%. THE APPLICATION RATE FOR ANY HYDRUMULCH SHOULD BE 2,000 LB./ACRE AT A MINIMUM.

WHERE EXCESSIVE SOIL EROSION, TRACKING OR FLOWING OF SEDIMENT IS EVIDENT OR ANTICIPATED, A MINIMUM OF 4" OF CRUSHED STONE SHALL BE PLACED WITHIN THE AFFECTED AREA AND MAINTAINED UNTIL PERMANENT STABILIZATION IS ACHIEVED. CRUSHED STONE SHALL CONFORM TO AASD DESIGNATION M43. SIZE NO. 22-1/2 TO 1-1/2".

MAINTENANCE - MULCHED AREAS SHALL BE CHECKED PERIODICALLY AND IMMEDIATELY AFTER EACH RAINFALL EVENT FOR DAMAGE, UNTIL THE MULCHING IS NO LONGER NECESSARY FOR PROTECTION. DAMAGED PORTIONS OF THE MULCH OR THE DOWN/MATERIAL SHALL BE REPAIRED AS SOON AS DISCOVERED.

EARTHWORK QUANTITIES

	CUT	FILL	CUT/FILL RATIO
CUBIC YARDS	6680	4610	1.45

CONSTRUCTION WASTE NOTES:
1. EARTH MOVING (CUT/FILL) IS ASSUMED TO BE BALANCED. EXCESS TOPSOIL WILL BE DISTRIBUTED IN SWALES, EMBANKMENTS AND BINS.
2. GRAVEL WILL BE IMPORTED FOR THE ROAD SURFACE.
3. MATERIAL MAY BE IMPORTED FOR SOIL AMENDMENT.
4. BASIC CONSTRUCTION BUILDING MATERIAL WASTE IS ASSOCIATED WITH THIS PROJECT.
5. SEE STANDARD EROSION AND SEDIMENT CONTROL NOTES FOR DISPOSAL OF MATERIALS

RECYCLING

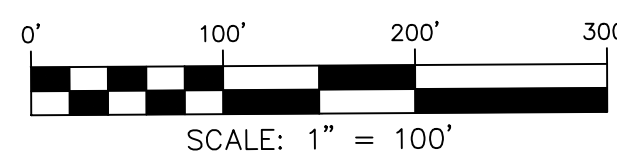
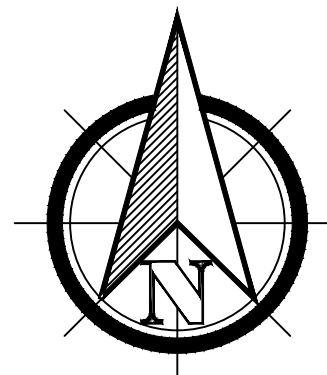
ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, BURNED, DUMPED, OR DISCHARGED AT THE SITE.

EXISTING FEATURES LEGEND

PROPOSED FEATURES LEGEND

- ADJOINER PROPERTY LINE
- PROPERTY LINE
- RIGHT-OF-WAY
- SETBACK LINE
- EASEMENT LINE
- MUNICIPAL BOUNDARY
- ZONING BOUNDARY
- SOIL BOUNDARY
- ROAD CENTERLINE
- EDGE OF PAVEMENT
- EDGE OF DRIVEWAY
- FENCE
- BUILDING
- CONCRETE
- CONCRETE WALL
- EDGE OF WOODS
- MINOR CONTOUR
- MAJOR CONTOUR
- OH
- UT
- S
- W
- SL
- WL
- G
- WETLANDS HATCH
- STREAM CENTERLINE
- FLOODPLAIN BOUNDARY
- BENCHMARK
- PROPERTY MARKER
- ⊙ SEPTIC STRUCTURE
- STORM RISER PIPE
- UTILITY POLE
- ⊙ WELL

- LOD
- SS
- CL
- 355'
- 353'
- X
- OH
- UE
- S
- W
- SL
- WL
- G
- c.o. CLEANOUT
- STORM STRUCTURE
- ▲ RIP RAP APRON
- D.S. DOWNSPOUT
- ⊙ SEPTIC MANHOLE
- ⊙ TREE



HURCH INC
68-326718-0-0000
6318/579

N/F
GLICK CHRISTIAN S
ACCT. NO: 460-2326372-325897-0-0000
DEED REF: 6788954

N/F
BRUBAKER ROBERT L JR
ACCT. NO: 460-2325921-324722-0-0000
DEED REF: 05409533
ACRES: 35.00

N/F
WEISSEND MARK F
ACCT. NO: 460-2325324-325204-0-0000
DEED REF: 05464220

N/F
RUSSELL CHRISTOPHER R
ACCT. NO: 460-2325077-325125-0-0000
DEED REF: 6406747

N/F
WEILER JOSEPH W
ACCT. NO: 460-2324949-324551-0-0000
DEED REF: 6766969

N/F
BRUBAKER ROBERT L JR
ACCT. NO: 460-2325921-324722-0-0000
DEED REF: 05409533
ACRES: 35.00

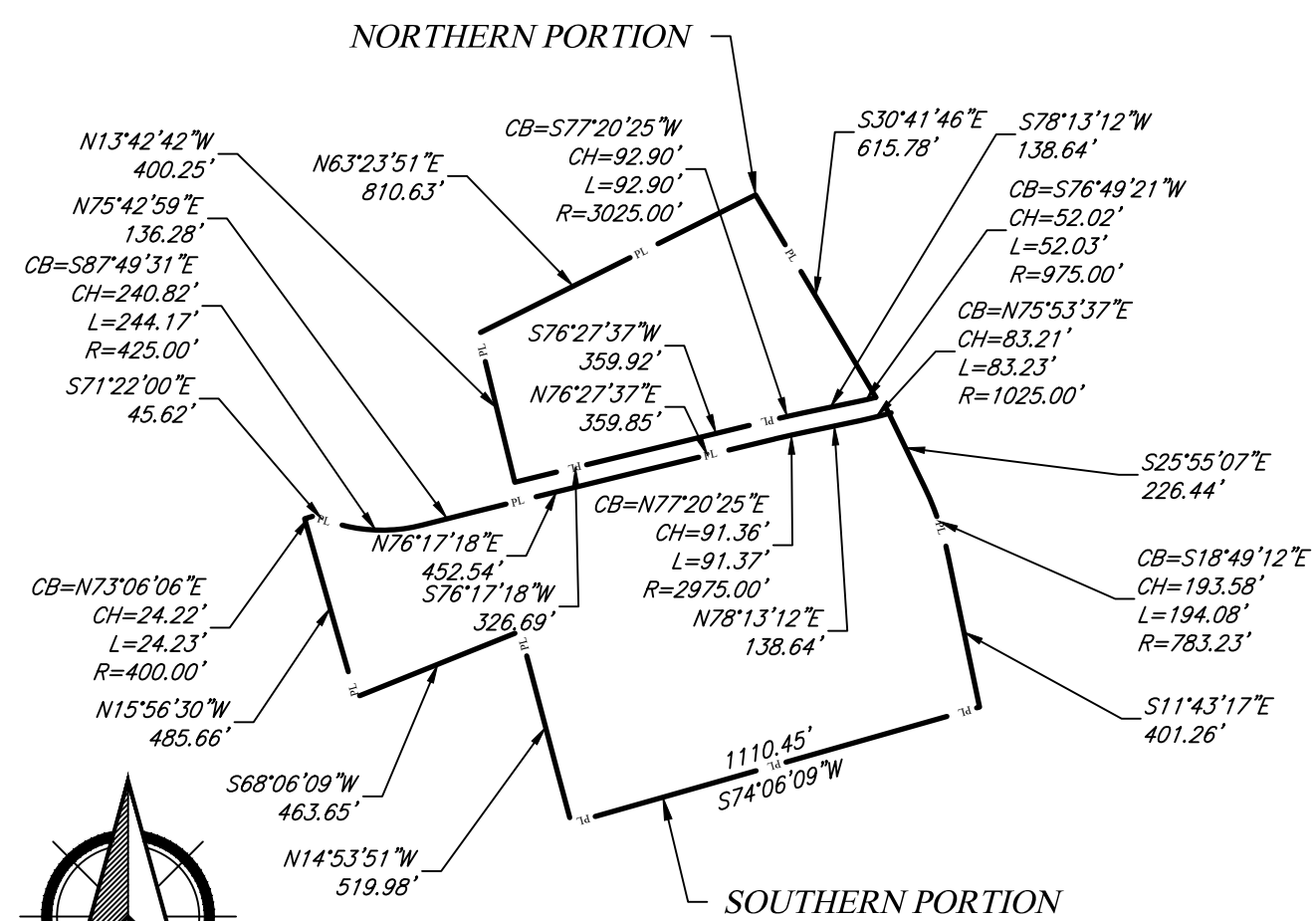
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DEED REF: 6766969

N/F
GLICK CHRISTIAN S
ACCT. NO: 460-2326372-325897-0-0000
DEED REF: 6788954

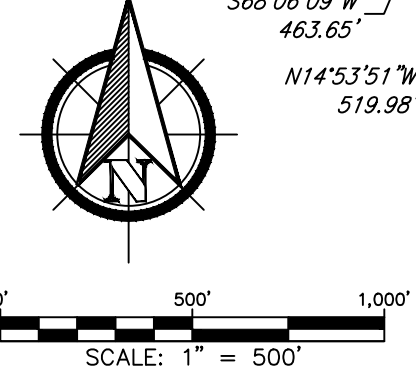
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HAMPSHIRE JONATHAN A
ACCT. NO: 460-2325914-323294-0-0000
DEED REF: 6009354

N/F
FISHER JONATHAN L
ACCT. NO: 460-2326997-324051-0-0000
DEED REF: 6113046

NPDES PERMIT BOUNDARY/
LIMITS OF DISTURBANCE: 3.95 ACRES
DP-001: 3.53 ACRES
DP-002: 0.36 ACRES
DP-003: 0.06 ACRES



DEED PLOT



NCS
NYE CONSULTING SERVICES
INC.
REINHOLDS, PA 17569
330 WEST ROUTE 897
P: 717-220-1332

**E & S PLAN :
PROJECT AREA MAP**

**BOB BRUBAKER
AG OPERATION**

CLIENT
ROBERT L. BRUBAKER JR.
2871 N COLEBROOK RD
MANHEIM, PA 17545
PH: 717-575-5255

REVISION	DATE	DESCRIPTION

SITE ADDRESS
2205 CAMP RD
MANHEIM, PA 17545

MUNICIPALITY: MOUNT JOY TOWNSHIP
COUNTY: LANCASTER COUNTY

SEAL
DRAWN BY: MRR CHECKED BY: RJR
DATE: 10/7/2024
DEED REF: 05409533
UPI: 460-2325921-324722-0-0000
SHEET 11 OF 16
E2 OF 7

SOILS INFORMATION (PER SOILS SURVEY OF LANCASTER COUNTY, PENNSYLVANIA)			
MAP SYMBOL	SOIL NAME	HYDROLOGIC GROUP	K FACTOR
LaB	LANSDALE LOAM, 3 TO 8 PERCENT SLOPES	B	0.24
Bo	BOWMANVILLE SILT LOAM	C/D	0.37
BaB	BUCKS SILT LOAM, 3 TO 8 PERCENT SLOPES	B	0.37
BaC	BUCKS SILT LOAM, 8 TO 15 PERCENT SLOPES	B	0.37
LaC	LANSDALE LOAM, 8 TO 15 PERCENT SLOPES	B	0.24
RaB	READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES	C	0.37
W	WATER		

SOILS LIMITATIONS AND RESOLUTIONS

CUTBACK CAVE: SOIL CUT SLOPES SHALL BE GRADED AT A MINIMUM OF 3:1. ALL TRENCHING SHALL BE DONE PER OSHA GUIDELINES.

DROUGHTY: PERMANENT STABILIZATION SHALL BE COMPLETED DURING THE GROWING SEASON. CARE SHALL BE TAKEN TO ENSURE ADEQUATE MOISTURE IS AVAILABLE FOR SEED GERMINATION.

EASILY ERODIBLE: EROSION WILL BE MINIMIZED BY ESTABLISHMENT OF VEGETATION WITH A MINIMUM 6" OF TOPSOIL. PROPER COMPACTION OF SUBSOILS WHERE REQUIRED, AND THE INSTALLATION OF MATTING PER PLAN DETAILS AND SPECIFICATIONS. SOIL SLOPES SHALL BE GRADED AT A MINIMUM OF 3:1.

HYDRIC INCLUSIONS: THE SITE HAS BEEN INVESTIGATED AND NO DISTURBANCE WITH PROPOSED WITHIN ANY WETLANDS AREA. THE SITE IS LOCATED IN AN AREA THAT HAS BEEN CULTIVATED FOR THE LAST FIVE YEARS. SITE SPECIFIC TESTING WAS DONE ENSURE BMPs WERE PROPERLY PLACED.

SLOW PERCOLATION: PERC TESTING WAS COMPLETED WITH A DOUBLE RING INFILTRATOR TO ENSURE ADEQUATE PERCOLATION WITHIN THE INFILTRATION BMPs.

PIPING: PIPING WILL BE AVOIDED WITH PROPER COMPACTION AND ESTABLISHMENT OF VEGETATION.

POOR TOPSOIL: TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR LATER UTILIZATION OF PERMANENT STABILIZATION. THE TOPSOIL WILL BE AMENDED IN THE BMP AREAS.

DEPTH TO SATURATION: SITE SPECIFIC TESTING WAS DONE TO ENSURE INFILTRATION BMPs MAINTAINED THE RECOMMEND SEPARATION DISTANCE.

LOW STRENGTH / LANDSLIDE PRONE: PROPER SITE COMPACTION AND PERMANENT SITE STABILIZATION PER PLAN DETAILS AND SPECIFICATIONS WILL MITIGATE THIS CONFLICT. SOIL SLOPES SHALL BE GRADED AT A MINIMUM OF 3:1.

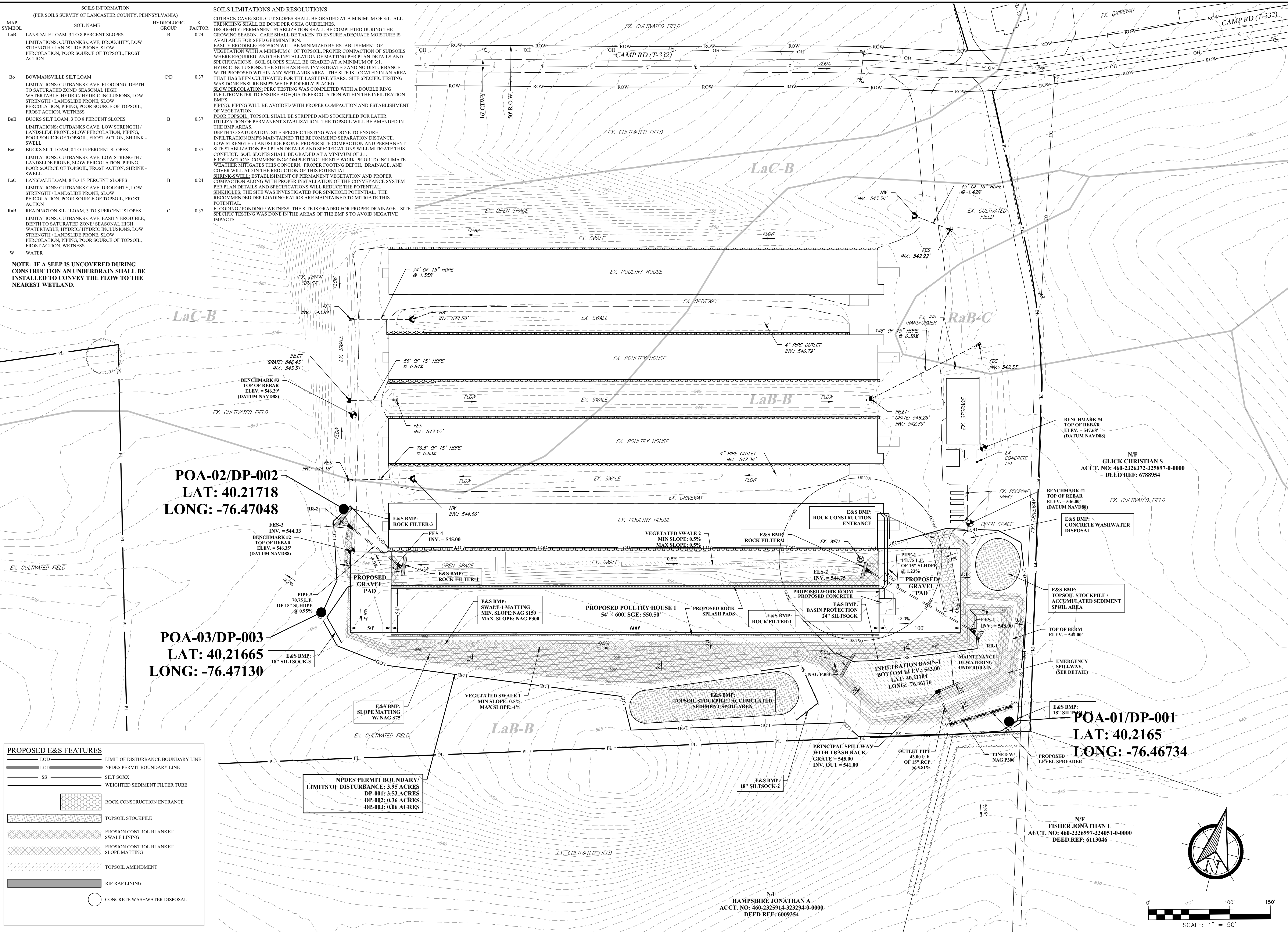
FROST ACTION: COMMENCING COMPLETING THE SITE WORK PRIOR TO INCLIMATE WEATHER MITIGATES THIS CONCERN. PROPER FOOTING DEPTH, DRAINAGE AND COVER WILL AID IN THE REDUCTION OF THIS POTENTIAL.

SHRINK-SWELL: ESTABLISHMENT OF PERMANENT VEGETATION AND PROPER COMPACTION ALONG WITH PROPER INSTALLATION OF THE CONVEYANCE SYSTEM PER PLAN DETAILS AND SPECIFICATIONS WILL REDUCE THE POTENTIAL.

SINKHOLES: THE SITE WAS INVESTIGATED FOR SINKHOLE POTENTIAL. THE RECOMMENDED DEP LOADING RATIOS ARE MAINTAINED TO MITIGATE THIS POTENTIAL.

FLOODING / PONDING / WETNESS: THE SITE IS GRADED FOR PROPER DRAINAGE. SITE SPECIFIC TESTING WAS DONE IN THE AREAS OF THE BMPs TO AVOID NEGATIVE IMPACTS.

NOTE: IF A SEEP IS UNCOVERED DURING CONSTRUCTION AN UNDERDRAIN SHALL BE INSTALLED TO CONVEY THE FLOW TO THE NEAREST WETLAND.



PROPOSED E&S FEATURES

LOD	LIMIT OF DISTURBANCE BOUNDARY LINE
LOP	NPDES PERMIT BOUNDARY LINE
SS	SILT SOXX
(Symbol)	WEIGHTED SEDIMENT FILTER TUBE
(Symbol)	ROCK CONSTRUCTION ENTRANCE
(Symbol)	TOPSOIL STOCKPILE
(Symbol)	EROSION CONTROL BLANKET
(Symbol)	SWALE LINING
(Symbol)	EROSION CONTROL BLANKET
(Symbol)	SLOPE MATTING
(Symbol)	TOPSOIL AMENDMENT
(Symbol)	RIP-RAP LINING
(Symbol)	CONCRETE WASHWATER DISPOSAL

NPDES PERMIT BOUNDARY/ LIMITS OF DISTURBANCE: 3.95 ACRES
DP-001: 3.53 ACRES
DP-002: 0.36 ACRES
DP-003: 0.06 ACRES

NCS INC.
NYE CONSULTING SERVICES
 REINHOLDS, PA 17569
 330 WEST ROUTE 897
 P: 717-220-5132

E&S PLAN: CONTROL GRADING PLAN

CLIENT: BOB BRUBAKER JR.
 2871 N COLEBROOK RD
 MANHEIM, PA 17545
 PH: 717-575-5255

REVISION	DATE	DESCRIPTION

SITE ADDRESS:
 2205 CAMP RD
 MANHEIM, PA 17545

MUNICIPALITY: MOUNT JOY TOWNSHIP
COUNTY: LANCASTER COUNTY

ROBERT J. RUTH
 REGISTERED PROFESSIONAL ENGINEER
 PE#7712

SEAL

DRAWN BY: MRR CHECKED BY: RJR

DATE: 10/7/2024

DEED REF: 05409533

UPI: 460-2325921-324722-0-0000

SHEET 12 OF 16

E3 OF 7

PROPOSED FEATURES LEGEND

- LOD ——— NPDES PERMIT BOUNDARY / LIMIT OF DISTURBANCE BOUNDARY LINE
- SS ——— COMPOST FILTER SOCK / SILT FENCE
- CL ——— CENTERLINE
- 355' ——— MAJOR CONTOUR
- 353' ——— MINOR CONTOUR
- — — — — EASEMENT
- X ——— FENCE
- OH ——— OVERHEAD ELECTRIC LINE
- UE ——— UNDERGROUND ELECTRIC LINE
- S ——— SANITARY SEWER LINE
- STORMWATER LINE
- W ——— WATER LINE
- SL ——— SEWER LATERAL LINE
- WL ——— WATER LATERAL LINE
- G ——— GUTTER
- ——— CLEANOUT
- ——— DOWNSPOUT
- ▲ ——— STORM STRUCTURE
- ——— SEPTIC MANHOLE
- ▲ ——— RIP RAP APRON
- ——— TREE
- ——— WELL

POA-02/DP-002
LAT: 40.21718
LONG: -76.47048

DA-VEGETATED SWALE 3
0.45 ACRES

POA-03/DP-003
LAT: 40.21665
LONG: -76.47130

NPDES PERMIT BOUNDARY / LIMITS OF DISTURBANCE: 3.95 ACRES
 DP-001: 3.53 ACRES
 DP-002: 0.36 ACRES
 DP-003: 0.06 ACRES

DA-VEGETATED SWALE 1
1.67 ACRES

DA-VEGETATED SWALE 2
1.26 ACRES

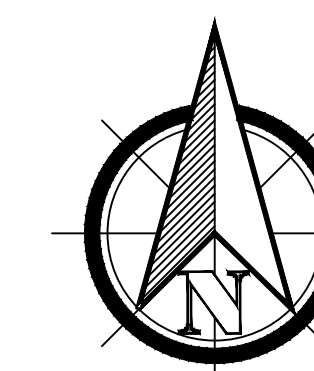
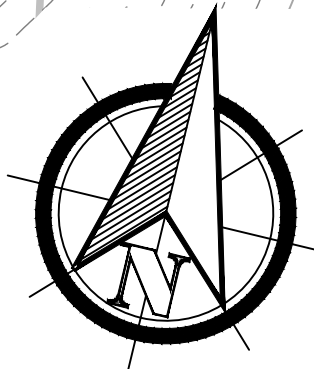
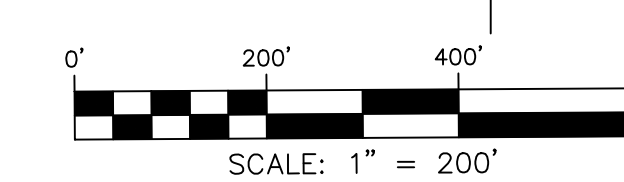
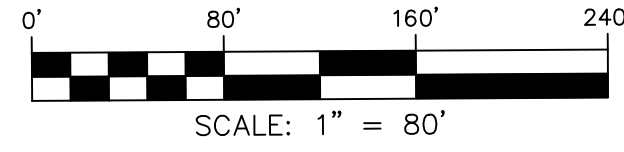
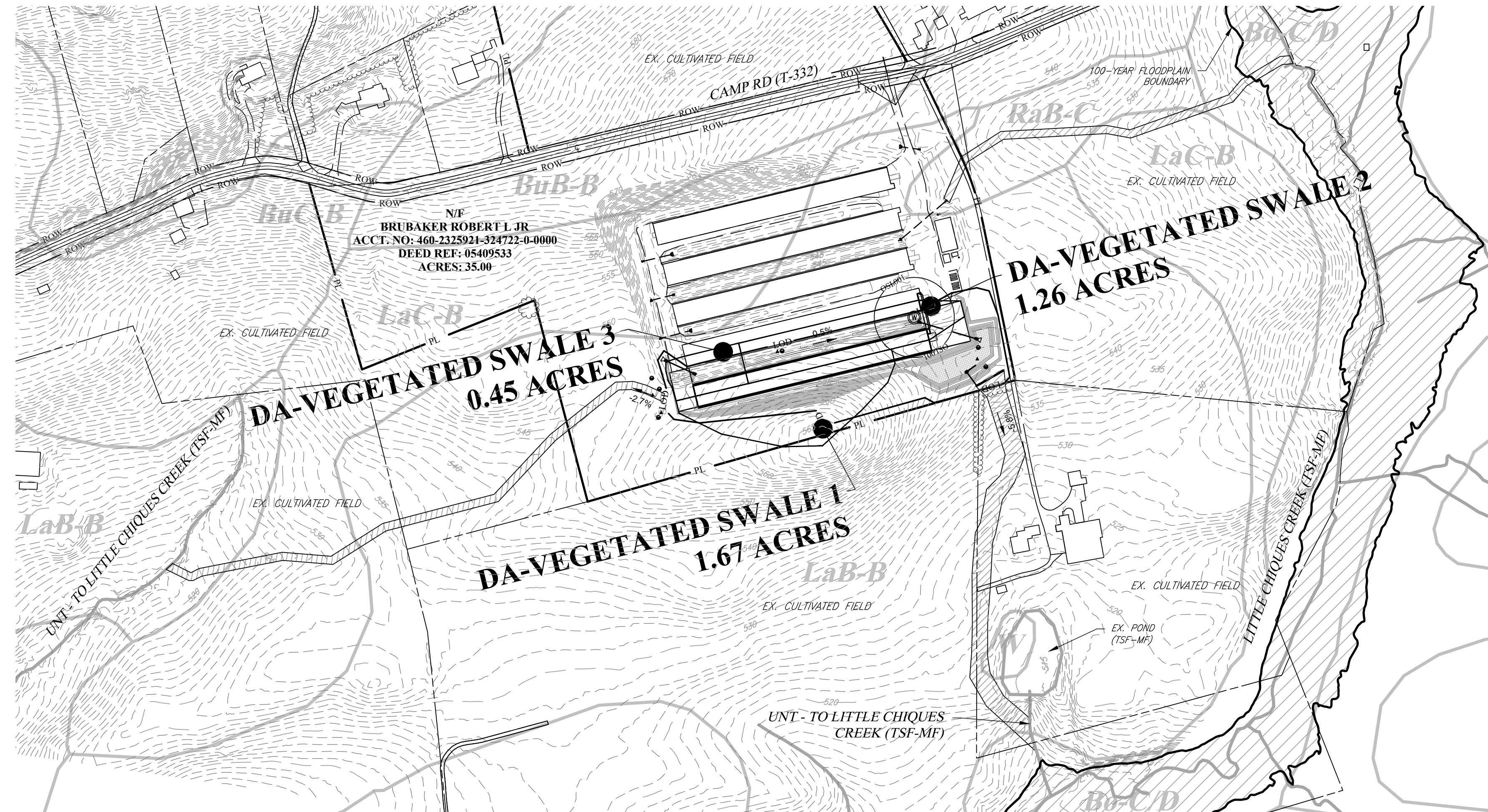
POA-01/DP-001
LAT: 40.2165
LONG: -76.46734

SOILS LIMITATIONS AND RESOLUTIONS

CUTBACK CAVE: SOIL CUT SLOPES SHALL BE GRADED AT A MINIMUM OF 3:1. ALL TRENCHING SHALL BE DONE PER OSHA GUIDELINES.
DROUGHTY: PERMANENT STABILIZATION SHALL BE COMPLETED DURING THE GROWING SEASON. CARE SHALL BE TAKEN TO ENSURE ADEQUATE MOISTURE IS AVAILABLE FOR SEED GERMINATION.
EASILY ERODIBLE: EROSION WILL BE MINIMIZED BY ESTABLISHMENT OF VEGETATION WITH A MINIMUM 6" OF TOPSOIL. PROPER COMPACTION OF SUBSOILS WHERE REQUIRED, AND THE INSTALLATION OF MATTING PER PLAN DETAILS AND SPECIFICATIONS. SOIL SLOPES SHALL BE GRADED AT A MINIMUM OF 3:1.
HYDRIC INCLUSIONS: THE SITE HAS BEEN INVESTIGATED AND NO DISTURBANCE WITH PROPOSED WITHIN ANY WETLANDS AREA. THE SITE IS LOCATED IN AN AREA THAT HAS BEEN CULTIVATED FOR THE LAST FIVE YEARS. SITE SPECIFIC TESTING WAS DONE TO ENSURE BMP'S WERE PROPERLY PLACED.
SLOW PERCOLATION: PERC TESTING WAS COMPLETED WITH A DOUBLE RING INFILTRMETER TO ENSURE ADEQUATE PERCOLATION WITHIN THE INFILTRATION BMP'S.
PIPING: PIPING WILL BE AVOIDED WITH PROPER COMPACTION AND ESTABLISHMENT OF VEGETATION.
POOR TOPSOIL: TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR LATER UTILIZATION OF PERMANENT STABILIZATION. THE TOPSOIL WILL BE AMENDED IN THE BMP AREAS.
DEPTH TO SATURATION: SITE SPECIFIC TESTING WAS DONE TO ENSURE INFILTRATION BMP'S MAINTAINED THE RECOMMEND SEPARATION DISTANCE.
LOW STRENGTH / LANDSLIDE PRONE: PROPER SITE COMPACTION AND PERMANENT SITE STABILIZATION PER PLAN DETAILS AND SPECIFICATIONS WILL MITIGATE THIS CONFLICT. SOIL SLOPES SHALL BE GRADED AT A MINIMUM OF 3:1.
FROST ACTION: COMMENCING COMPLETING THE SITE WORK PRIOR TO INCLIMATE WEATHER MITIGATES THIS CONCERN. PROPER FOOTING DEPTH, DRAINAGE, AND COVER WILL AID IN THE REDUCTION OF THIS POTENTIAL.
SHRINK-SWELL: ESTABLISHMENT OF PERMANENT VEGETATION AND PROPER COMPACTION ALONG WITH PROPER INSTALLATION OF THE CONVEYANCE SYSTEM PER PLAN DETAILS AND SPECIFICATIONS WILL REDUCE THE POTENTIAL.
SINKHOLES: THE SITE WAS INVESTIGATED FOR SINKHOLE POTENTIAL. THE RECOMMENDED DEP LOADING RATIOS ARE MAINTAINED TO MITIGATE THIS POTENTIAL.
FLOODING / PONDING / WETNESS: THE SITE IS GRADED FOR PROPER DRAINAGE. SITE SPECIFIC TESTING WAS DONE IN THE AREAS OF THE BMP'S TO AVOID NEGATIVE IMPACTS.

SOILS INFORMATION

MAP SYMBOL	SOIL NAME	HYDROLOGIC GROUP	K FACTOR
LaB	LANSDALE LOAM, 3 TO 8 PERCENT SLOPES LIMITATIONS: CUTBANKS CAVE, DROUGHTY, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, POOR SOURCE OF TOPSOIL, FROST ACTION	B	0.24
Bo	BOWMANVILLE SILT LOAM LIMITATIONS: CUTBANKS CAVE, FLOODING, DEPTH TO SATURATED ZONE / SEASONAL HIGH WATER TABLE, HYDRIC / HYDRIC INCLUSIONS, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, POOR SOURCE OF TOPSOIL, FROST ACTION, WETNESS	CD	0.37
BaB	BUCKS SILT LOAM, 3 TO 8 PERCENT SLOPES LIMITATIONS: CUTBANKS CAVE, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, POOR SOURCE OF TOPSOIL, FROST ACTION, SHRINK-SWELL	B	0.37
BaC	BUCKS SILT LOAM, 8 TO 15 PERCENT SLOPES LIMITATIONS: CUTBANKS CAVE, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, POOR SOURCE OF TOPSOIL, FROST ACTION, SHRINK-SWELL	B	0.37
LaC	LANSDALE LOAM, 8 TO 15 PERCENT SLOPES LIMITATIONS: CUTBANKS CAVE, DROUGHTY, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, POOR SOURCE OF TOPSOIL, FROST ACTION	B	0.24
RaB	READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES LIMITATIONS: CUTBANKS CAVE, EASILY ERODIBLE, DEPTH TO SATURATED ZONE / SEASONAL HIGH WATER TABLE, HYDRIC / HYDRIC INCLUSIONS, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, POOR SOURCE OF TOPSOIL, FROST ACTION, WETNESS	C	0.37
W	WATER		



NCS
NYE CONSULTING SERVICES INC.
 REINHOLDS, PA 17569
 330 WEST ROUTE 897
 P: 717-220-1332

E&S PLAN: SOILS AND DRAINAGE AREA PLAN

CLIENT: BOB BRUBAKER JR.
 2871 N COLEBROOK RD
 MANHEIM, PA 17545
 PH: 717-575-5255

BOB BRUBAKER AG OPERATION

REVISION	DATE	DESCRIPTION

SITE ADDRESS: 2205 CAMP RD
 MANHEIM, PA 17545

COUNTY: LANCASTER COUNTY

MUNICIPALITY: MOUNT JOY TOWNSHIP

SEAL: ROBERT J. RUTH
 REGISTERED PROFESSIONAL ENGINEER
 P.E. # 77715

SEAL: ROBERT J. RUTH
 REGISTERED PROFESSIONAL ENGINEER
 P.E. # 77715

DRAWN BY: MRR **CHECKED BY:** RJR

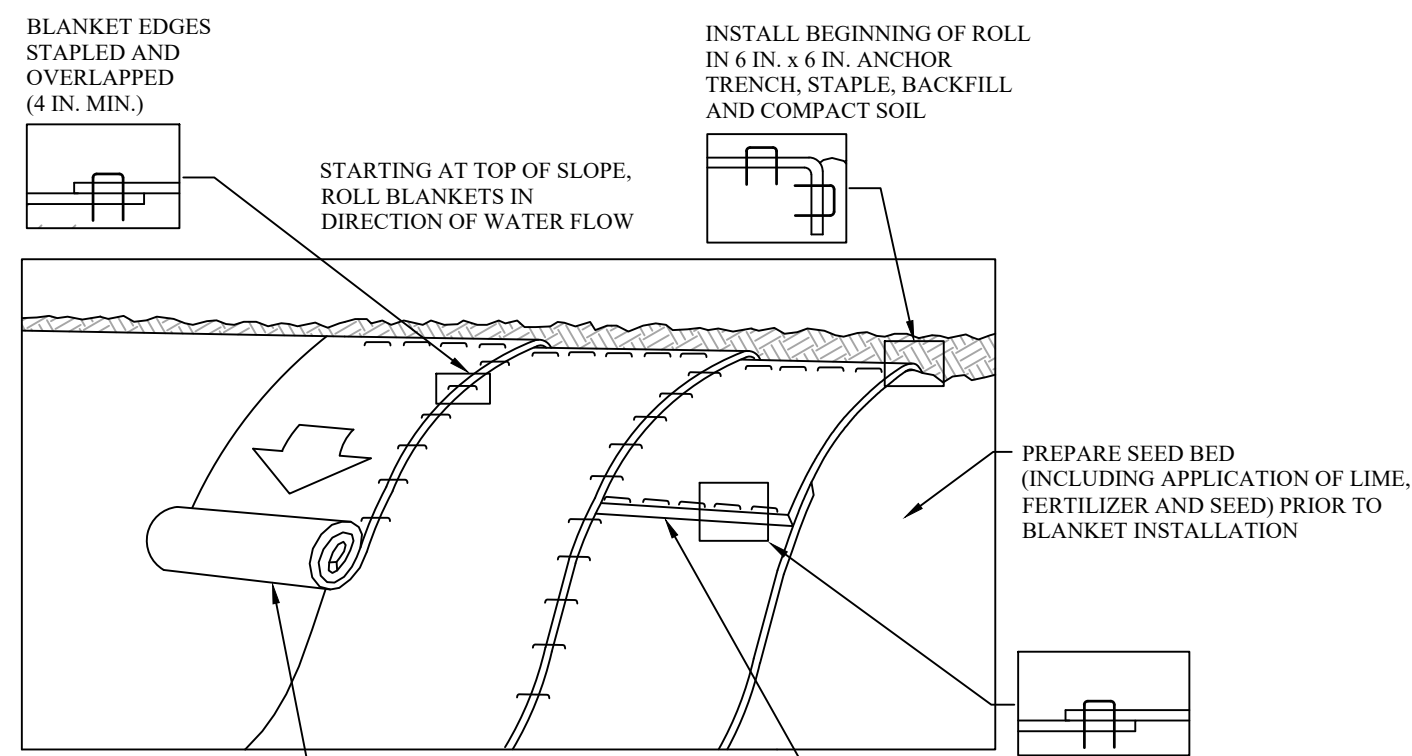
DATE: 10/7/2024

DEED REF: 05409533

UPI: 460-2325921-324722-0-0000

SHEET 13 OF 16

E4 OF 7



EROSION CONTROL BLANKET INSTALLATION
STANDARD CONSTRUCTION DETAIL #11-1

BLANKET EDGES STAPLED AND OVERLAPPED (4 IN. MIN.)

INSTALL BEGINNING OF ROLL IN 6 IN. x 6 IN. ANCHOR TRENCH, STAPLE, BACKFILL AND COMPACT SOIL

STARTING AT TOP OF SLOPE, ROLL BLANKETS IN DIRECTION OF WATER FLOW

PREPARE SEED BED (INCLUDING APPLICATION OF LIME, FERTILIZER AND SEED) PRIOR TO BLANKET INSTALLATION

REFER TO MANU. RECOMMENDED STAPLING PATTERN FOR STEEPNESS AND LENGTH OF SLOPE BEING BLANKETED

THE BLANKET SHOULD NOT BE STRETCHED. IT MUST MAINTAIN GOOD SOIL CONTACT

OVERLAP BLANKET ENDS 6 IN. MIN. WITH THE UPSLOPE BLANKET OVERLYING THE DOWNSLOPE BLANKET (SINGLE STYLE), STAPLE SECURELY.

SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

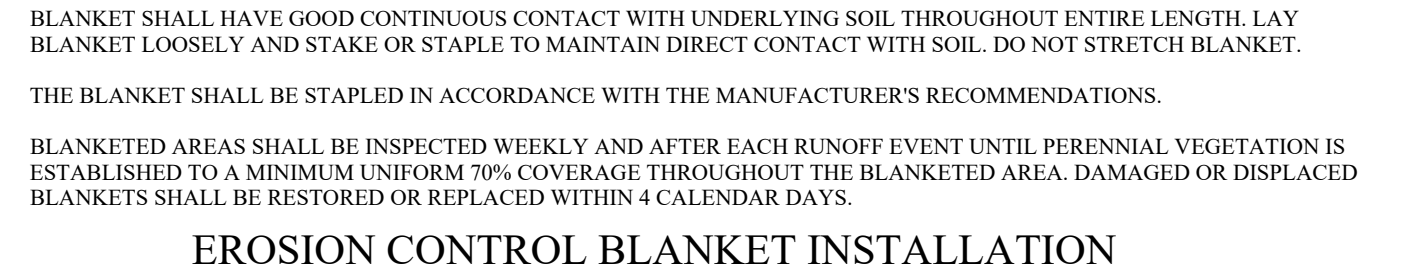
PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

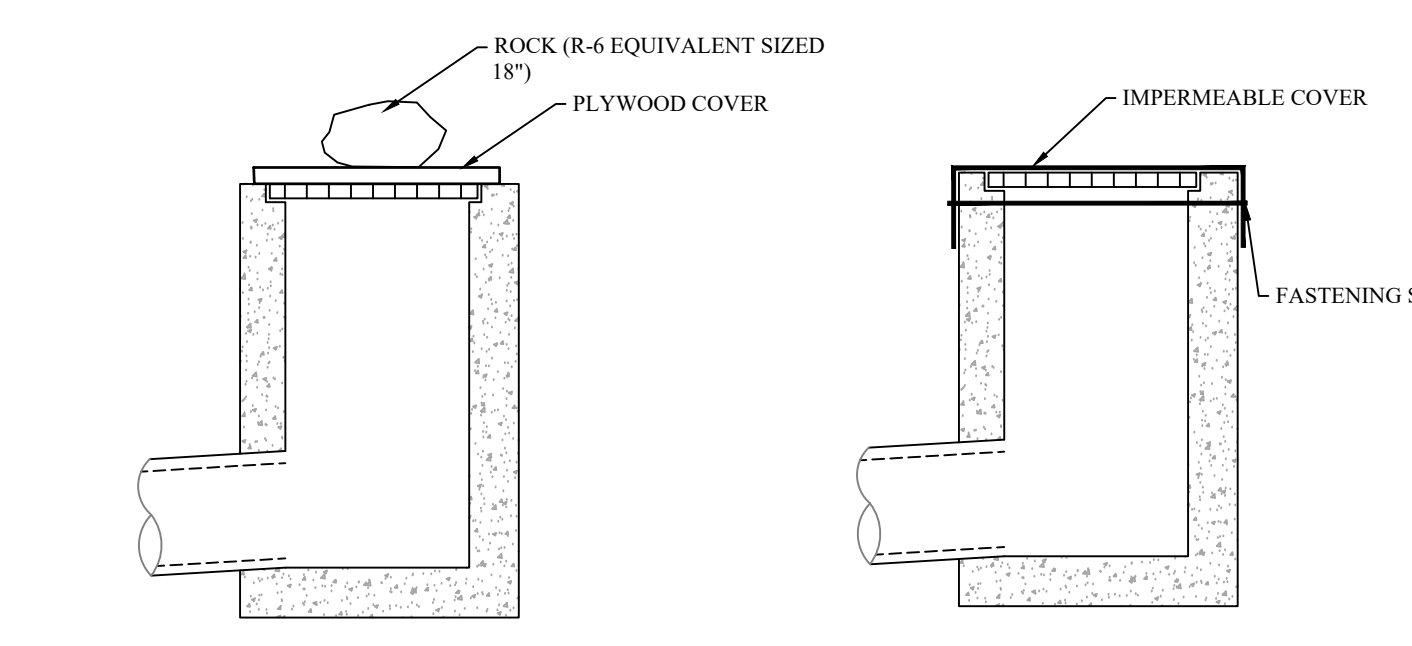
BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

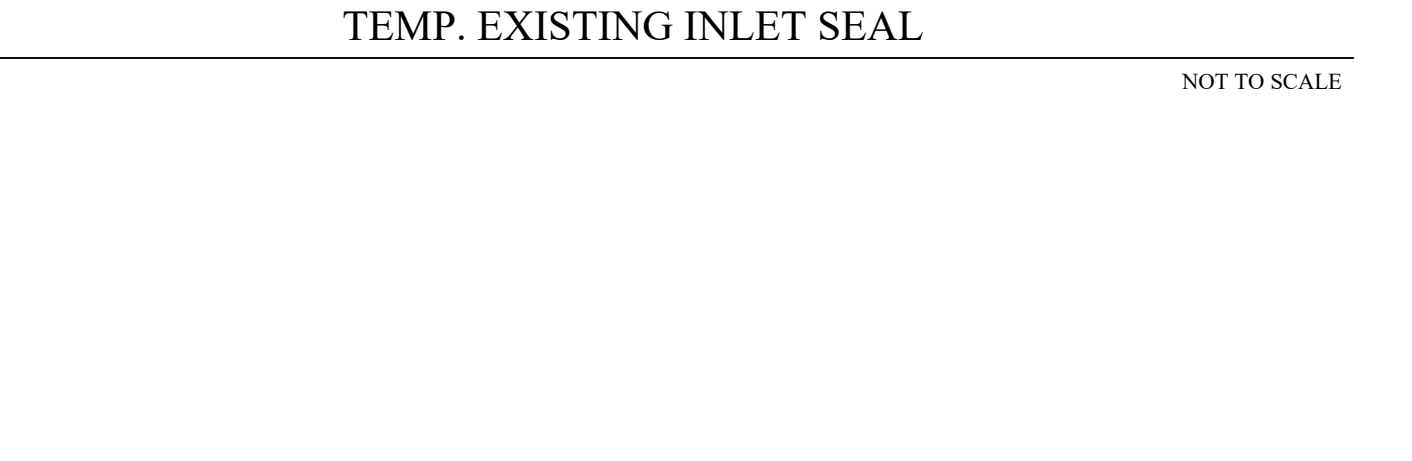
BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.



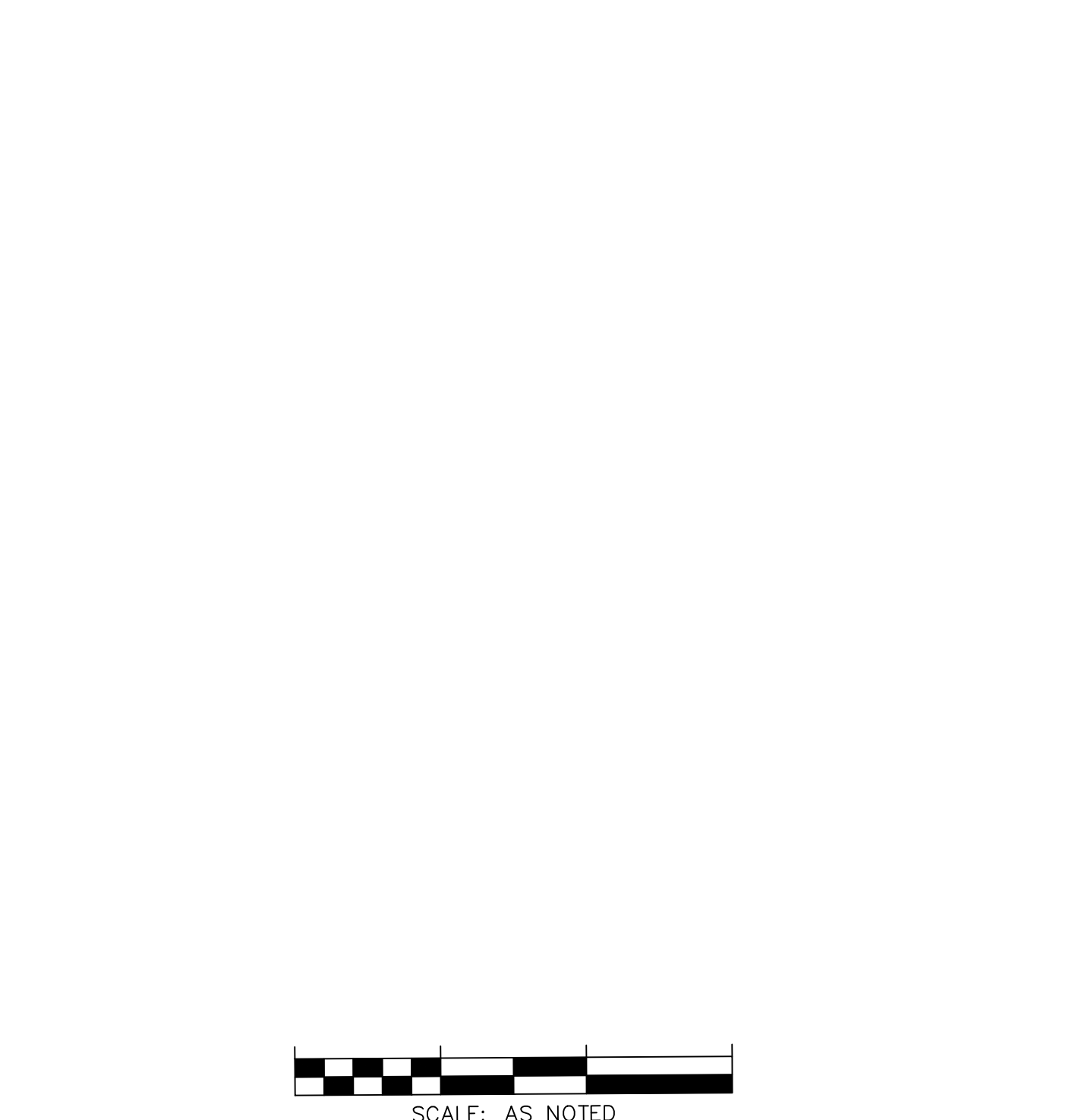
TEMP. EXISTING INLET SEAL
NOT TO SCALE



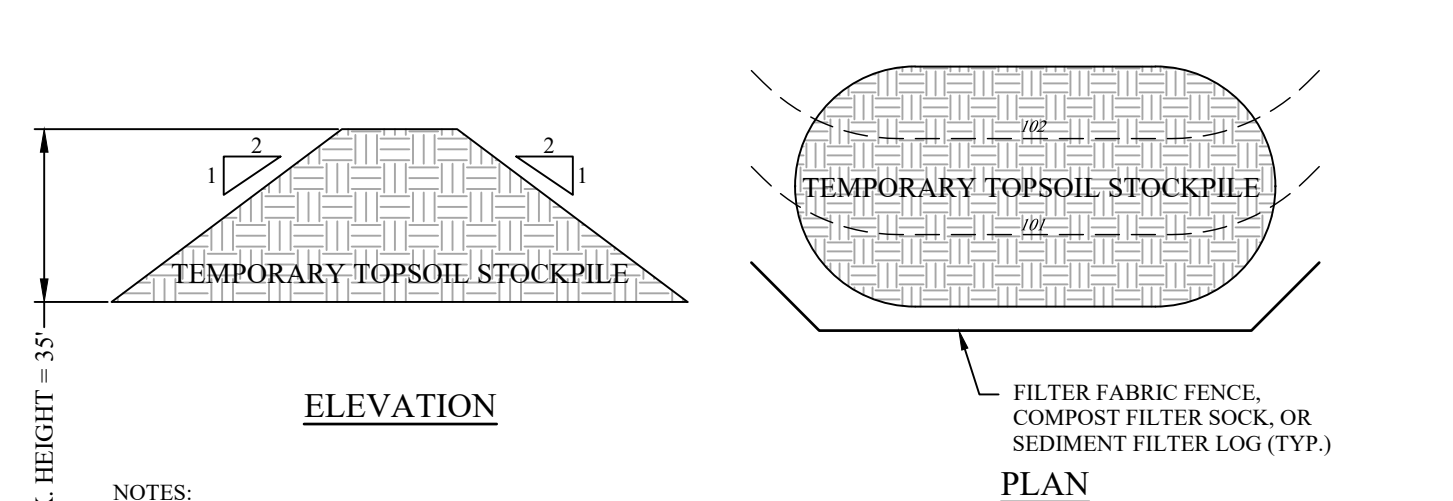
FILTER SOCK CONCRETE WASH WATER DISPOSAL AREA
NOT TO SCALE



COMPOST FILTER SOCK ABACT STANDARD CONSTRUCTION DETAIL #4-1
NOT TO SCALE



ROCK FILTER STANDARD CONSTRUCTION DETAIL #4-14
NOT TO SCALE



TEMPORARY TOPSOIL STOCKPILE
NOT TO SCALE

NOTES:

TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION.

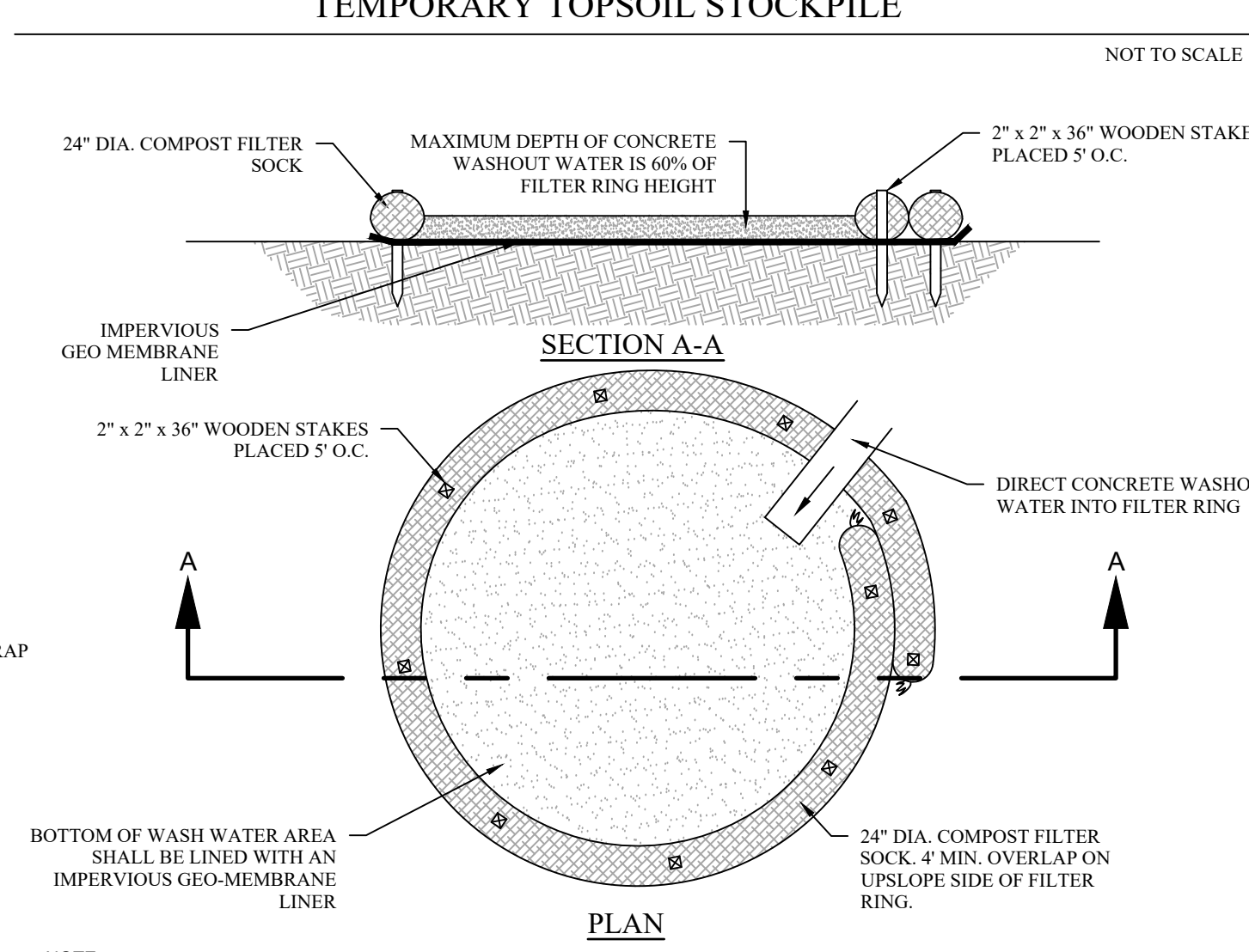
STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET IN HEIGHT. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.

STOCKPILE AREAS SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE SEDIMENT BARRIER PROTECTION BMP'S, SUCH AS FILTER FABRIC FENCE, COMPOST FILTER SOCK OR SEDIMENT FILTER LOGS, SHALL BE MAINTAINED IN ACCORDANCE WITH THE PLAN DETAILS AND SPECIFICATIONS.

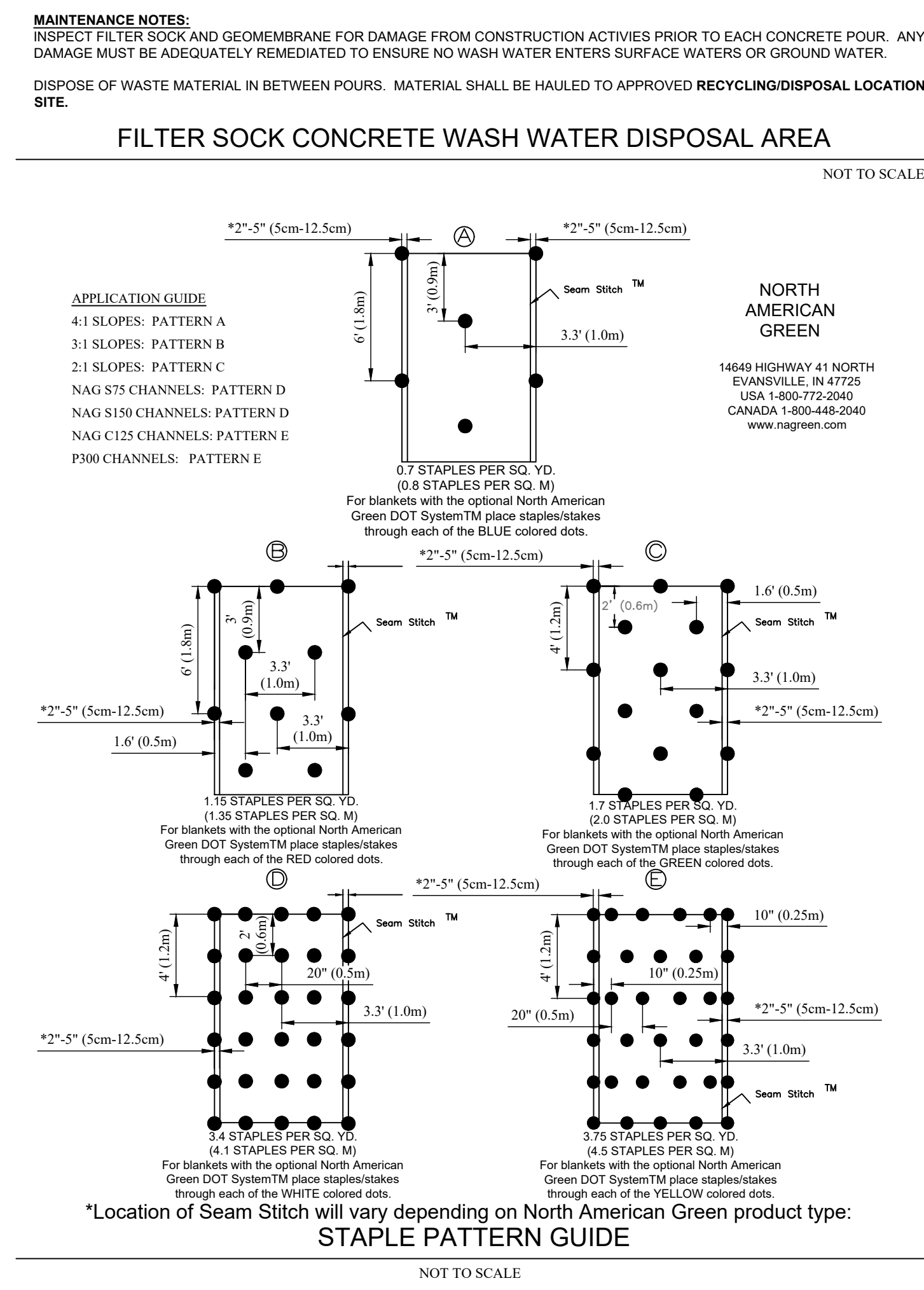
ALL STOCKPILE SEDIMENT BARRIER PROTECTION BMP'S SHALL REMAIN IN PLACE UNTIL TOPSOIL STOCKPILE AREAS HAVE BEEN REMOVED.

STOCKPILE SEDIMENT BARRIER PROTECTION BMP'S SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SEDIMENT BARRIERS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS, PLAN DETAILS AND SPECIFICATIONS, OR REPLACED WITHIN 24 HOURS OF INSPECTION.

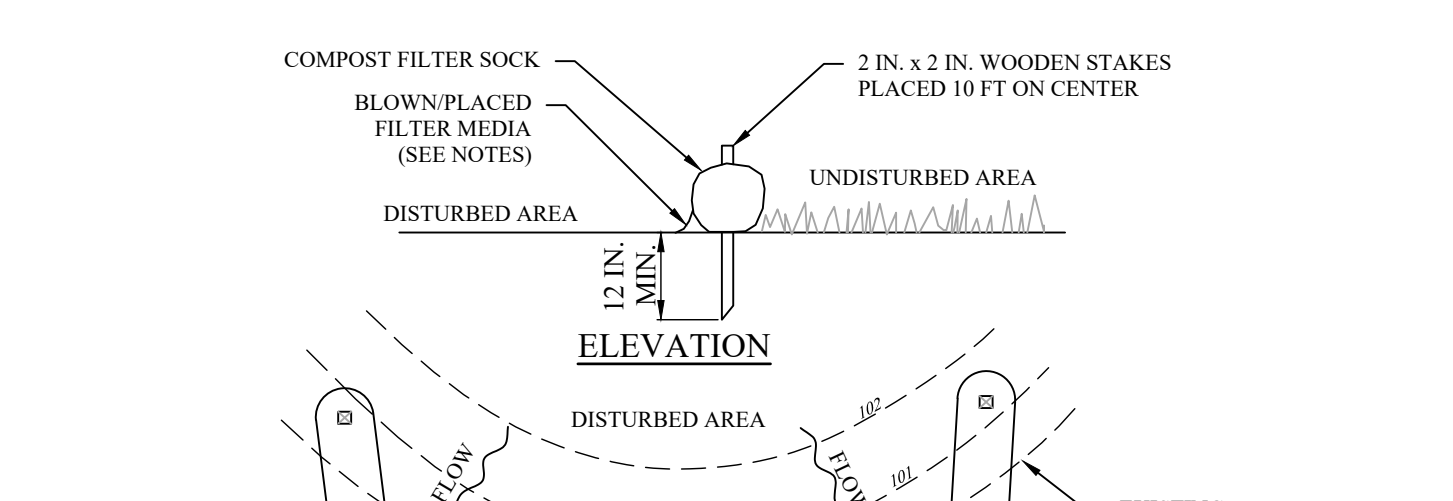
TOPSOIL STOCKPILE AREAS WHICH WILL BE RE-DISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS.



PUMPED WATER FILTER BAG-ABACT STANDARD CONSTRUCTION DETAIL #3-16
NOT TO SCALE



ROCK CONSTRUCTION ENTRANCE STANDARD CONSTRUCTION DETAIL #3-1
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.

TABLE 4.1 COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS

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

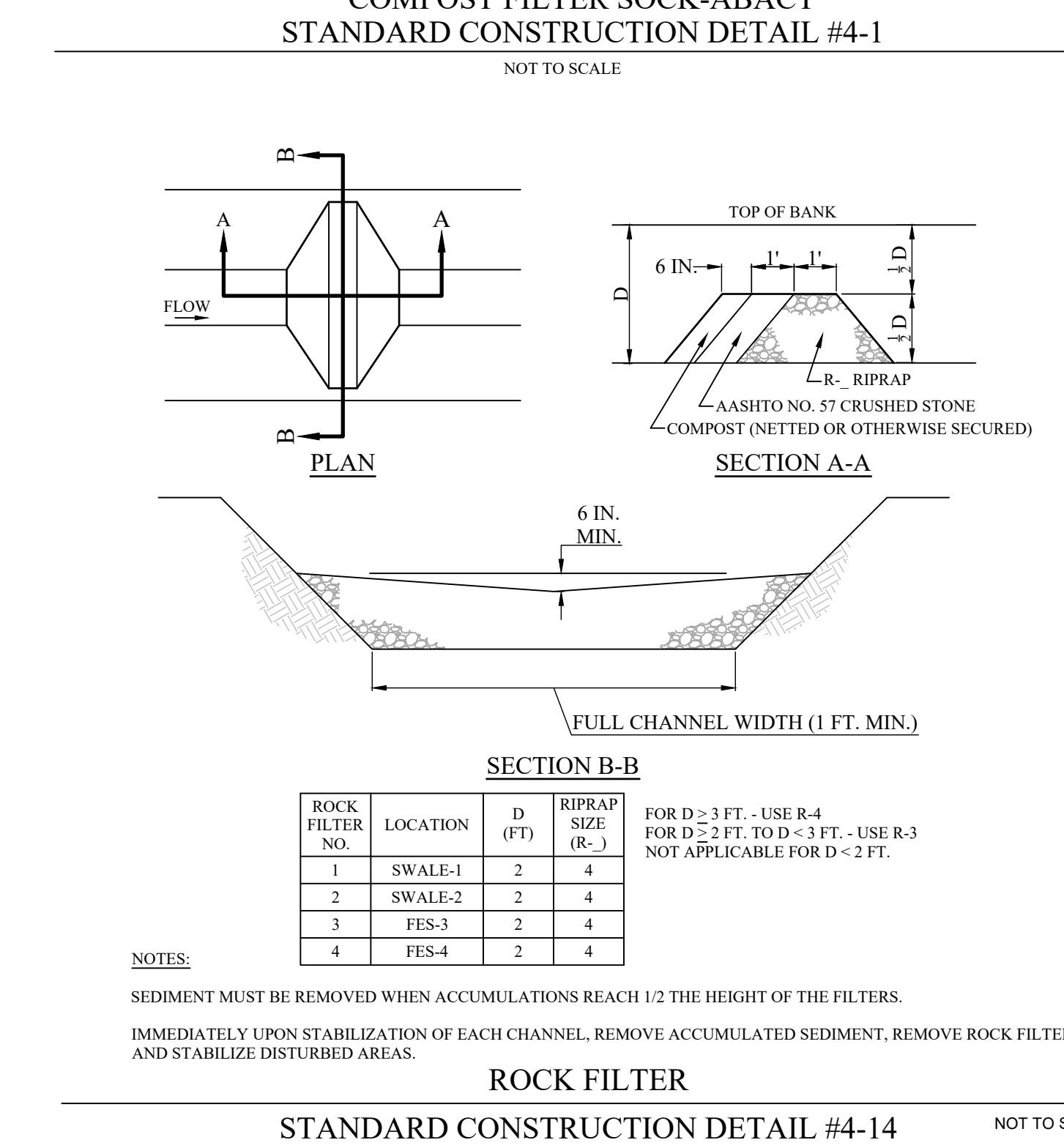
INNER CONTAINMENT NETTING

- TWO-PLY SYSTEMS
 - SLHDPE BIAXIAL NET
 - CONTINUOUSLY WOUND
 - FUSION WELDED JUNCTIONS
 - 3/4" X 3/4" MAX. APERTURE SIZE
- COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER AND NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH)
 - 3/16" MAX. APERTURE SIZE

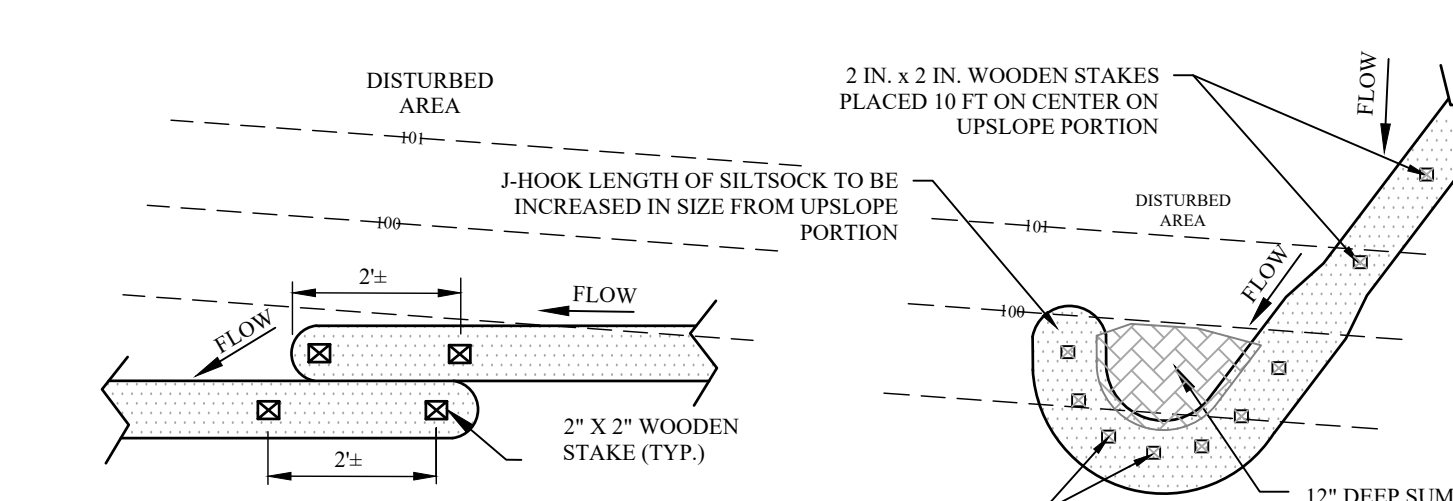
SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS.

TABLE 4.2: COMPOST STANDARDS

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



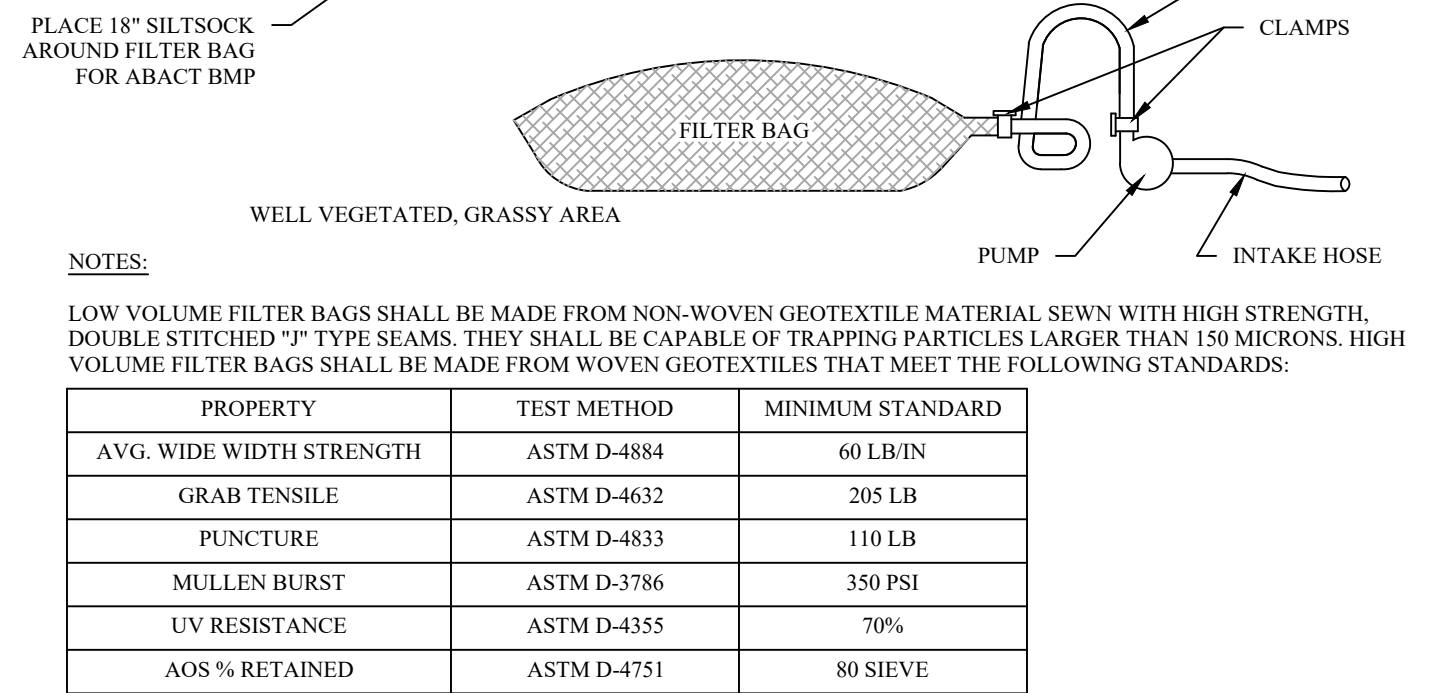
ROCK CONSTRUCTION ENTRANCE STANDARD CONSTRUCTION DETAIL #3-1
NOT TO SCALE



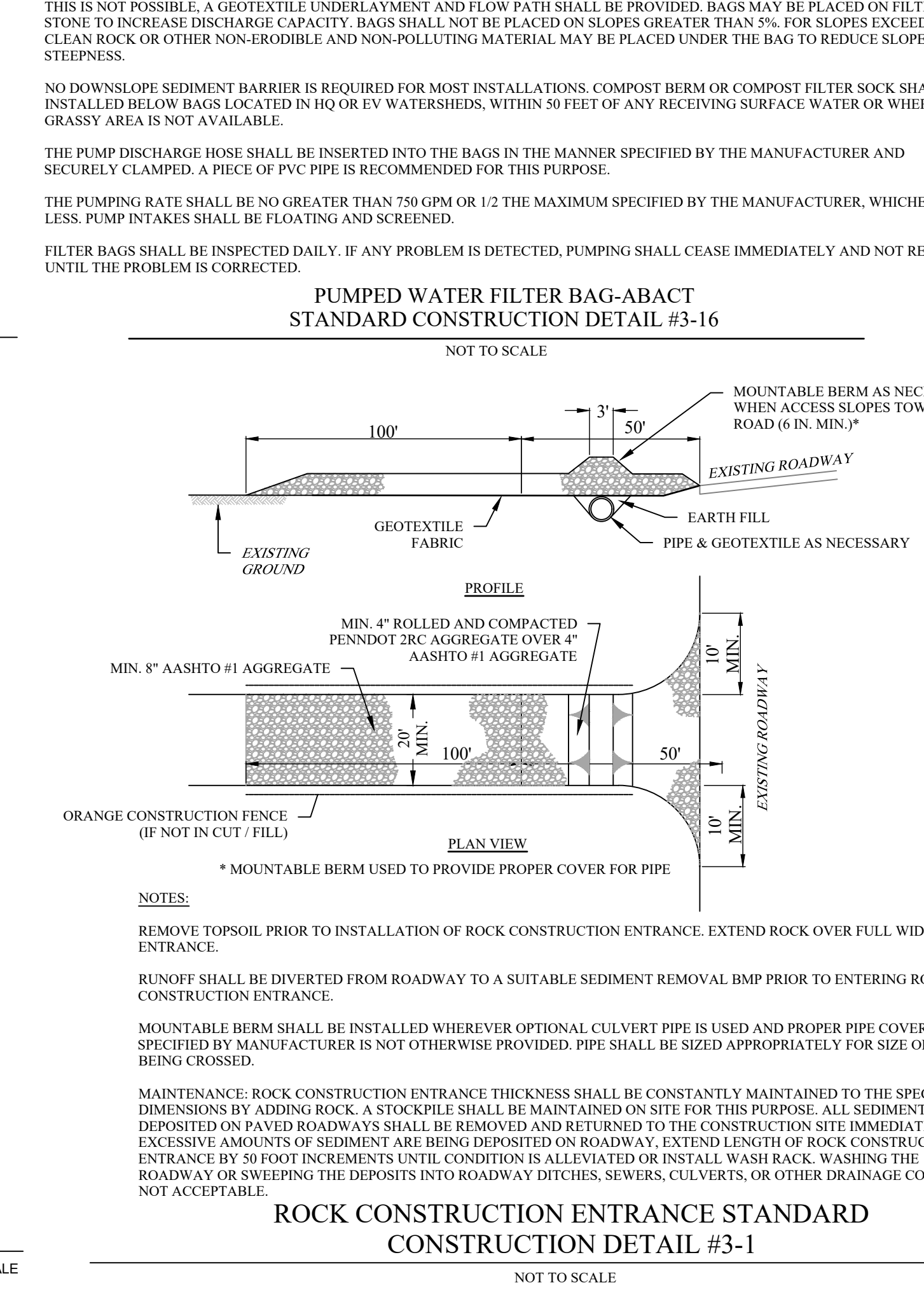
NOTES:

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

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



COMPOST FILTER SOCK ABACT STANDARD CONSTRUCTION DETAIL #4-1
NOT TO SCALE



ROCK CONSTRUCTION ENTRANCE STANDARD CONSTRUCTION DETAIL #3-1
NOT TO SCALE

CONSULTING SERVICES INC.
NYE CONSULTING SERVICES

REINHOLDS, PA 17569
330 WEST ROUTE 897
P: 717-220-3132

E & S PLAN: SITE DETAILS 1

BOB BRUBAKER AG OPERATION

CLIENT: ROBERT L. BRUBAKER JR.
2871 N COLEBROOK RD
MANHEIM, PA 17545
PH: 717-575-5255

COUNTY: LANCASTER COUNTY
MUNICIPALITY: MOUNT JOY TOWNSHIP

REVISION	DATE	DESCRIPTION

SEAL

DRAWN BY: MRR CHECKED BY: RJR

DATE: 10/7/2024

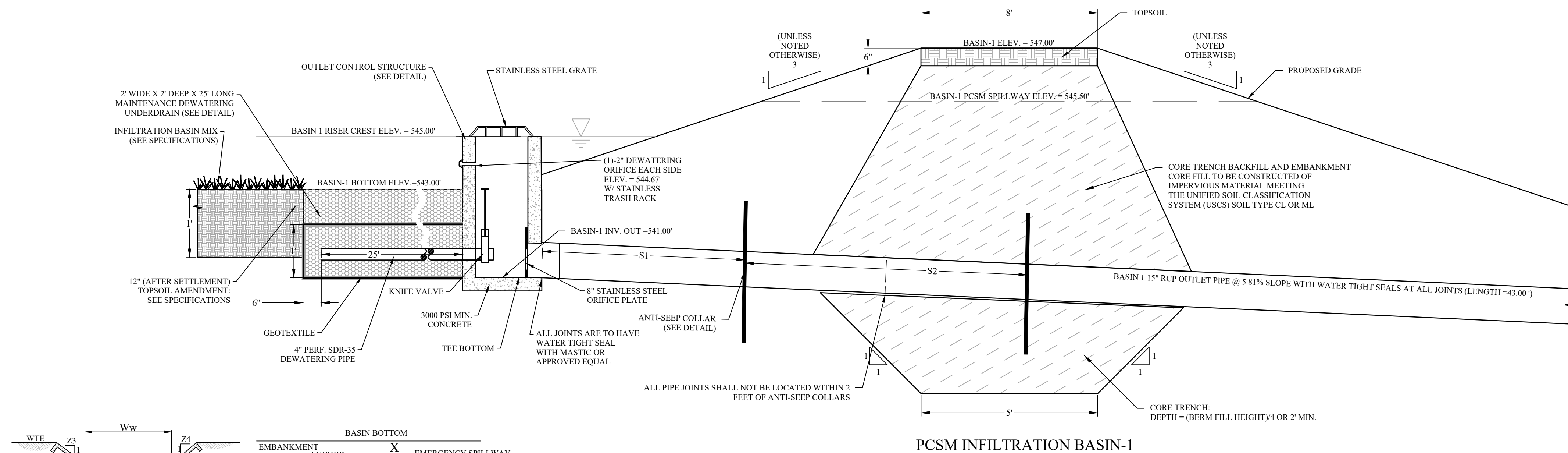
DEED REF: 05409533

UPI: 460-2325921-324722-0-0000

SHEET 14 OF 16

E5 OF 7

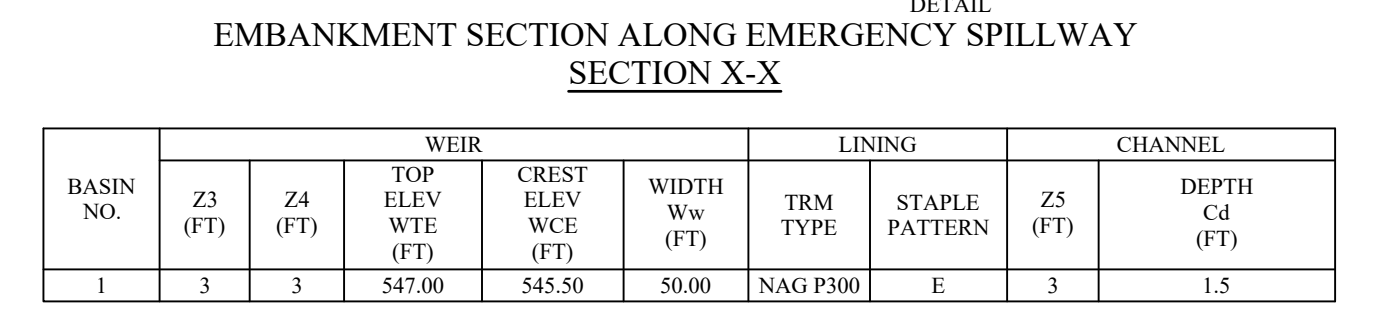
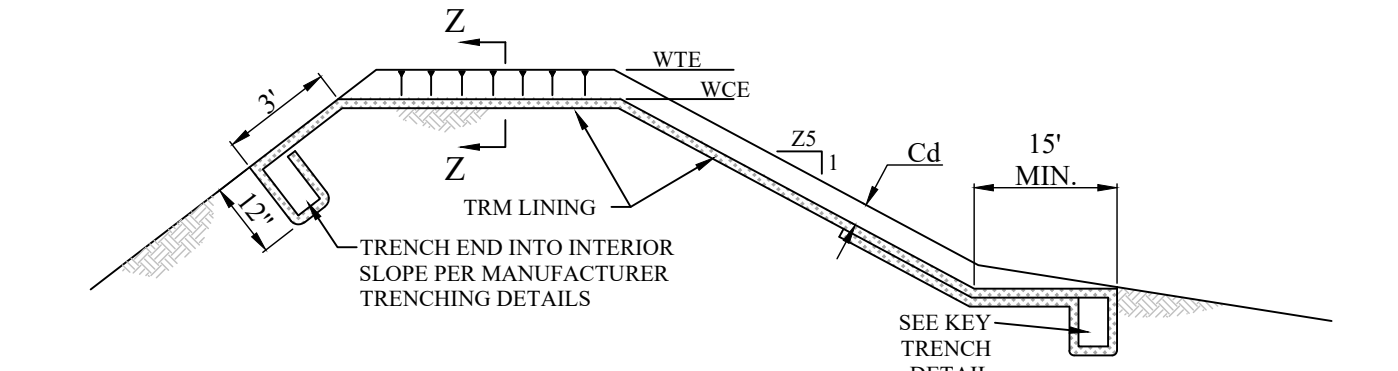
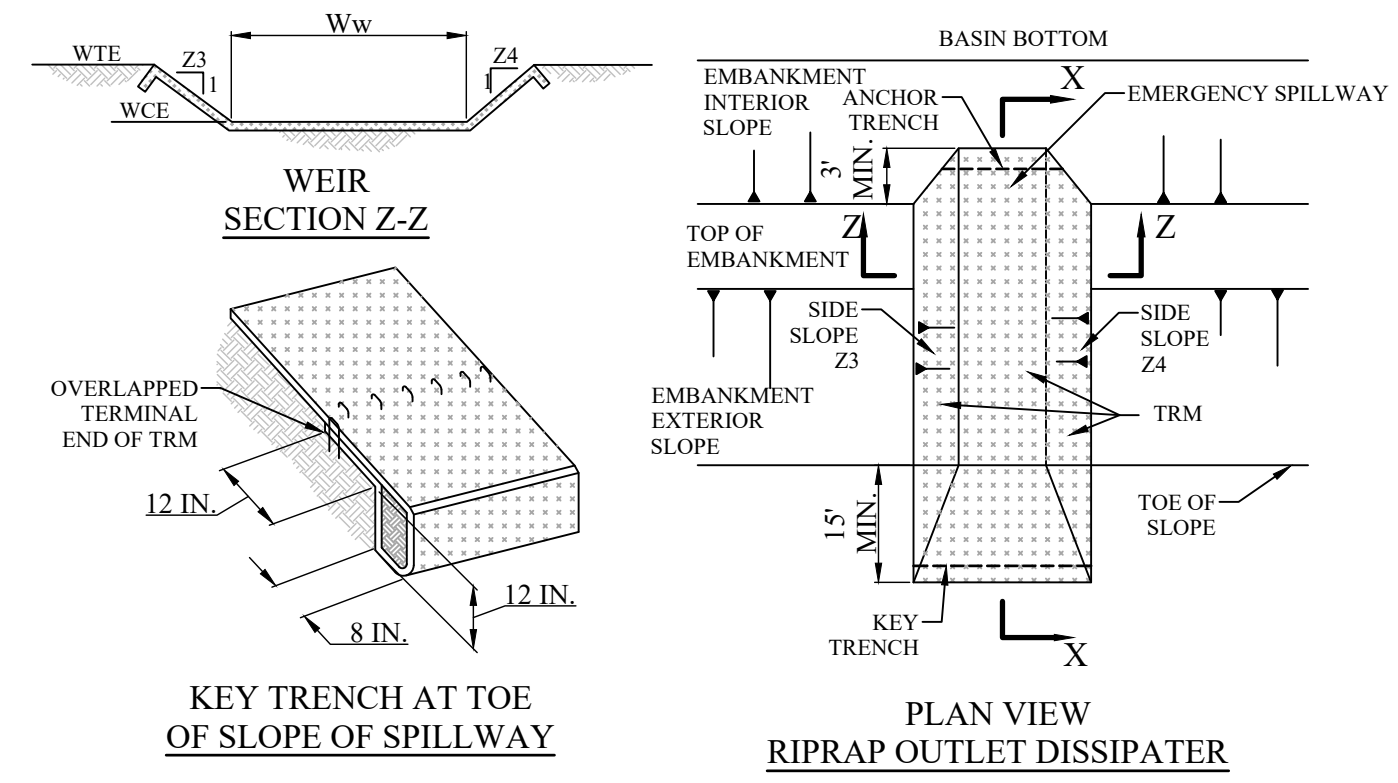
ROBERT J. RUTH
PROFESSIONAL ENGINEER
REGISTERED



- NOTES:**
- INFILTRATION BASINS SHALL BE KEPT FREE OF ALL TRASH, CONCRETE WASH WATER, AND OTHER DEBRIS THAT POSE THE POTENTIAL FOR POLLUTION TO WATERS OF THE COMMONWEALTH.
 - INFILTRATION BASINS MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES.
 - BASIN EMBANKMENTS SHALL BE CONSTRUCTED OF CLEAN FILL CONSISTING OF UNCONTAMINATED, NON-WATER SOLUBLE, NON-COMPOSTABLE, INERT, SOLID MATERIAL. THIS INCLUDES SOIL, ROCK, STONE, OR FRACTURED SHALE WHICH CAN BE COMPACTED. FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM 6" LAYERED LIFTS AND COMPACTED AT 95% STANDARD PROCTOR.
 - ALL JOINTS ARE TO BE WATERTIGHT SEALS WITH MASTIC OR APPROVED EQUAL.
 - ANTI-SEEP COLLARS SHALL NOT BE LOCATED WITHIN 2 FEET OF A PIPE JOINT.

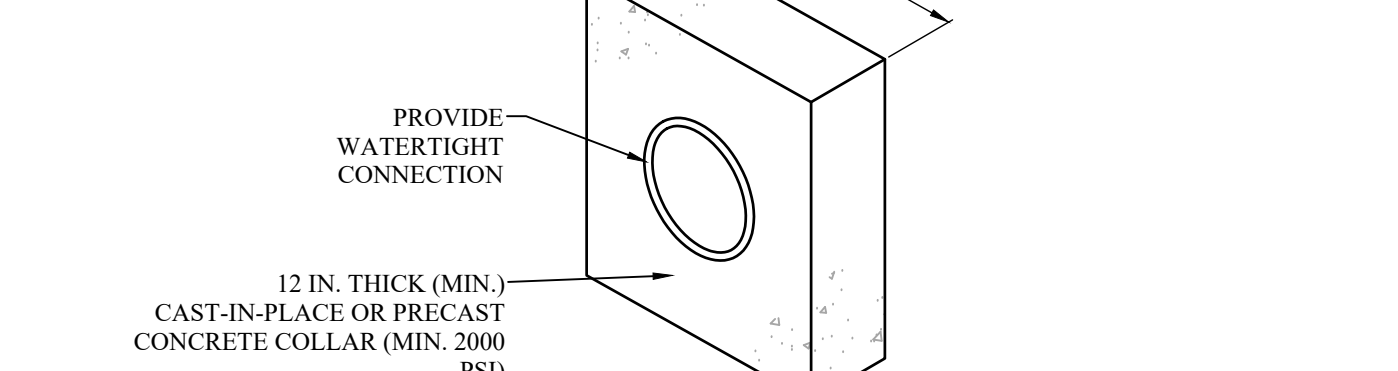
INFILTRATION BASIN-1 - STAGE STORAGE

ELEV.	CONTOUR AREA	TOTAL STORAGE
543.00'	9517 SQ. FT.	0 CU. FT.
544.00'	11383 SQ. FT.	10450 CU. FT.
545.00'	13262 SQ. FT.	22773 CU. FT.
546.00'	15286 SQ. FT.	37047 CU. FT.
547.00'	18900 SQ. FT.	54140 CU. FT.



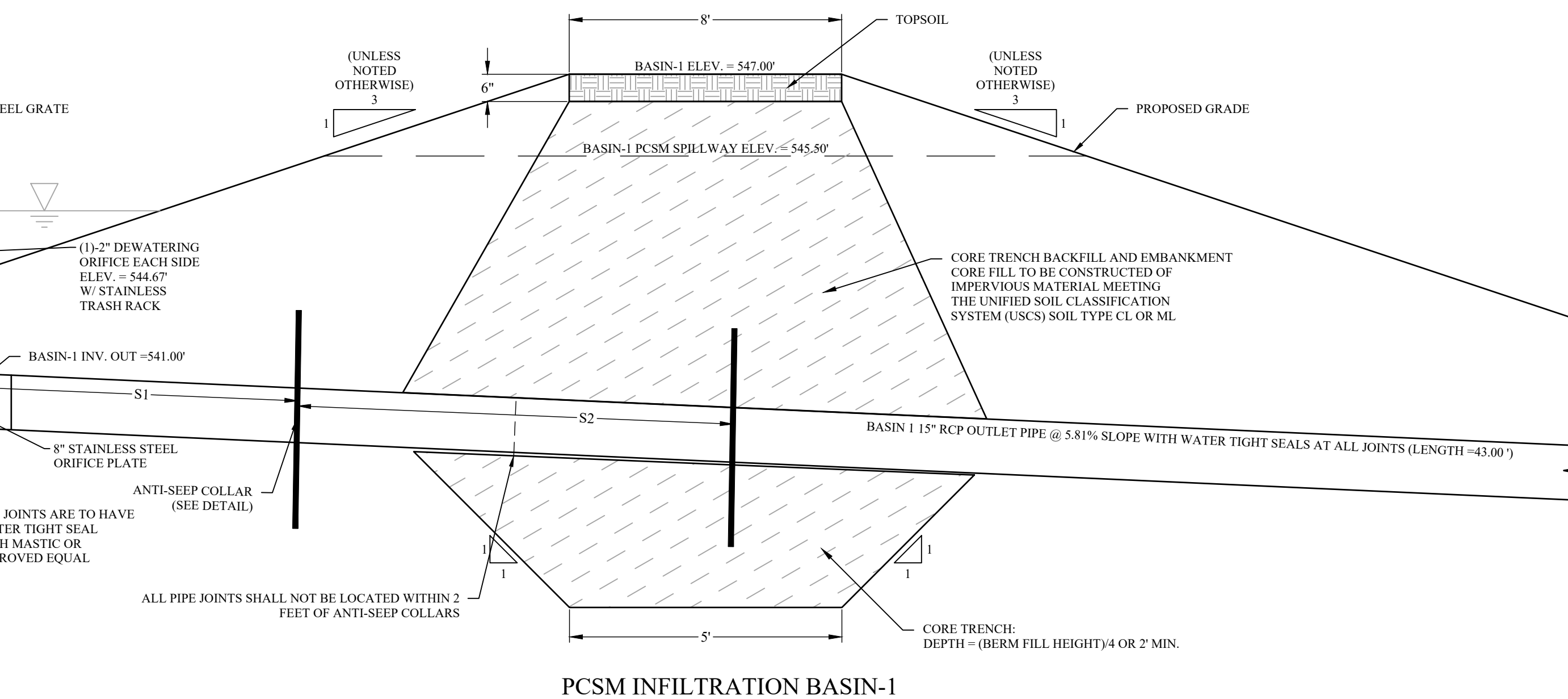
BASIN NO.	WEIR		CREST		WIDTH Ww (FT)	TRM TYPE	STAPLE PATTERN	Z5 (FT)	DEPTH Cd (FT)
	Z3 (FT)	Z4 (FT)	ELEV (FT)	WCE (FT)					
1	3	3	547.00	545.50	50.00	NAG P300	E	3	1.5

PCSM: EMERGENCY SPILLWAY WITH TRM LINING
NOT TO SCALE



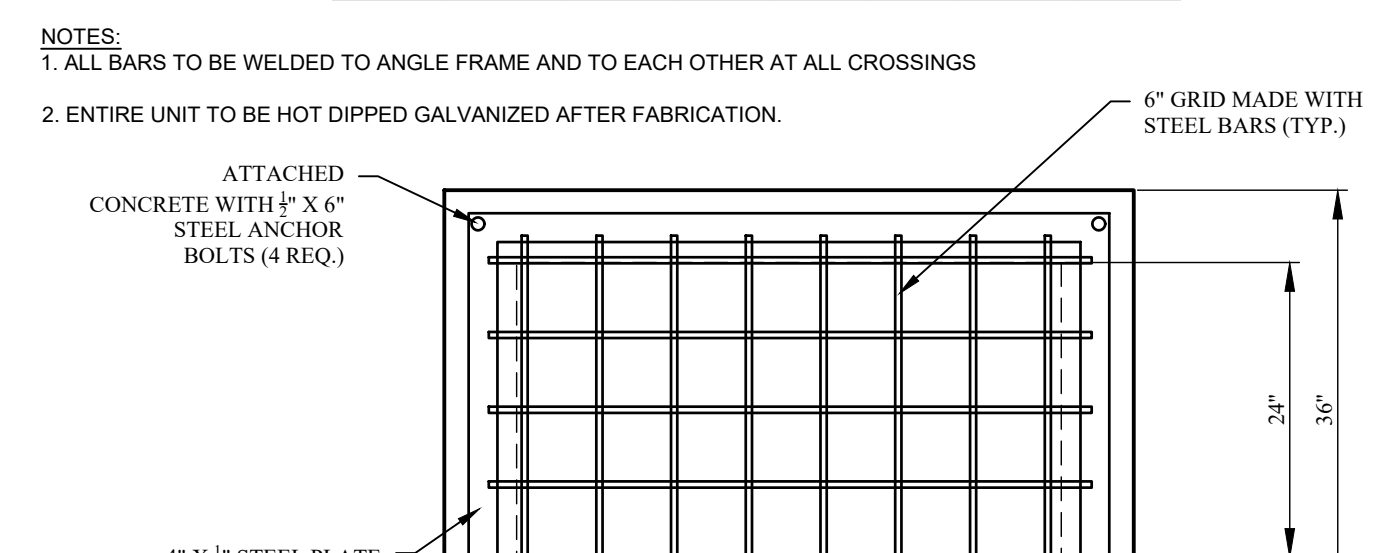
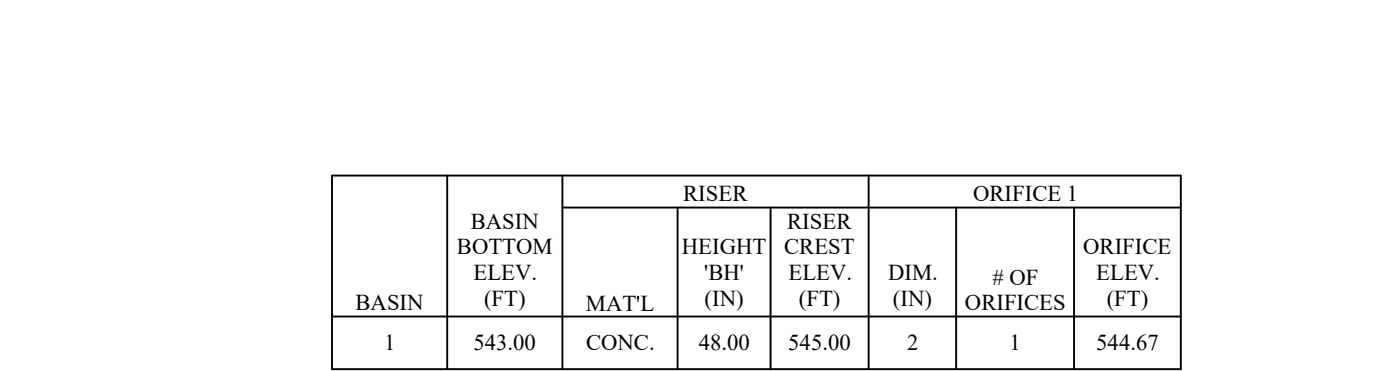
BASIN OR TRAP NO.	PIPE SIZE (IN)	S (IN)	NO. OF COLLARS	RISER TO FIRST COLLAR S1 (FT)	L1 TO SECOND COLLAR S2 (FT)
1	12	49	2.00	10.00	8.00

- NOTES:**
- ALL COLLARS SHALL BE INSTALLED SO AS TO BE WATERTIGHT.
 - COLLAR SIZE AND SPACING SHALL BE AS INDICATED WITHIN TABLE.
 - ALL COLLARS SHALL NOT BE LOCATED CLOSER THAN 2 FEET TO ANY PIPE JOINT.



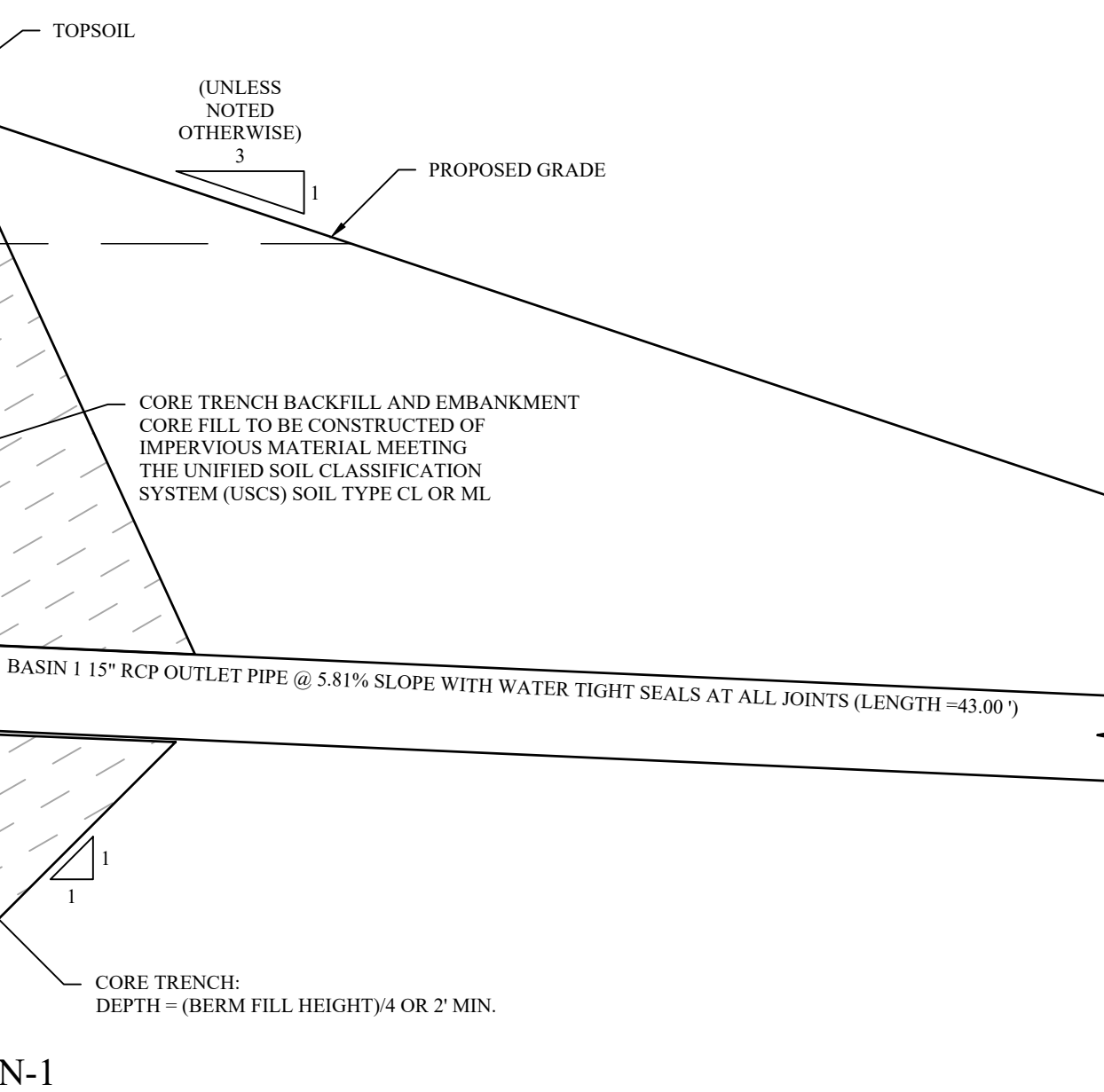
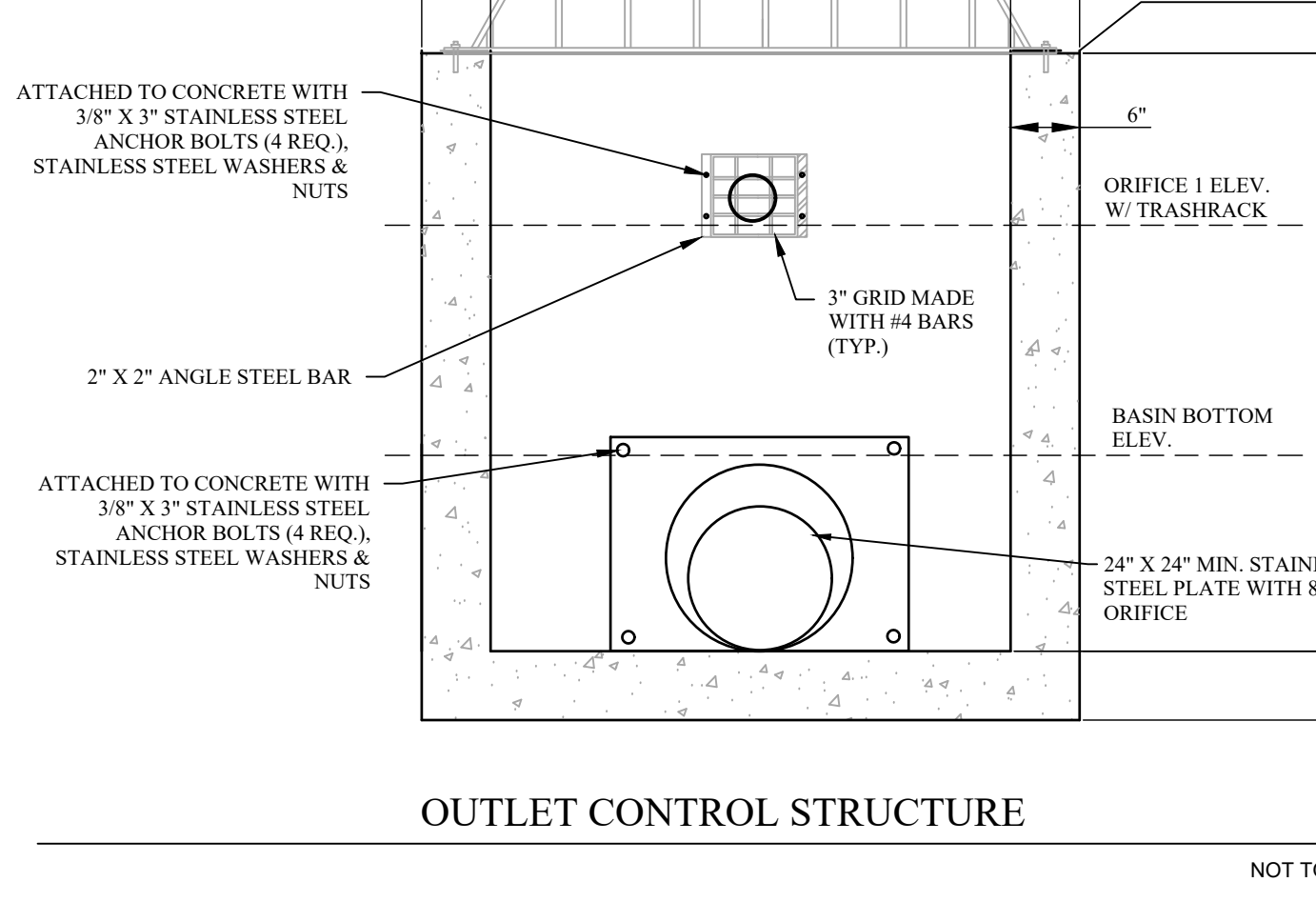
MANUFACTURER
MONARCH PRODUCTS, INC.
385 SWIRE ROAD
YORK HAVEN, PA 17370
717-938-8303
(OR APPROVED EQUAL)

BASIN	BASIN BOTTOM ELEV. (FT)	RISER		ORIFICE			
		MATL.	HEIGHT "BH" (IN)	RISER CREST ELEV. (FT)	DIM. (IN)	# OF ORIFICES	ORIFICE ELEV. (FT)
1	543.00	CONC.	48.00	545.00	2	1	544.67



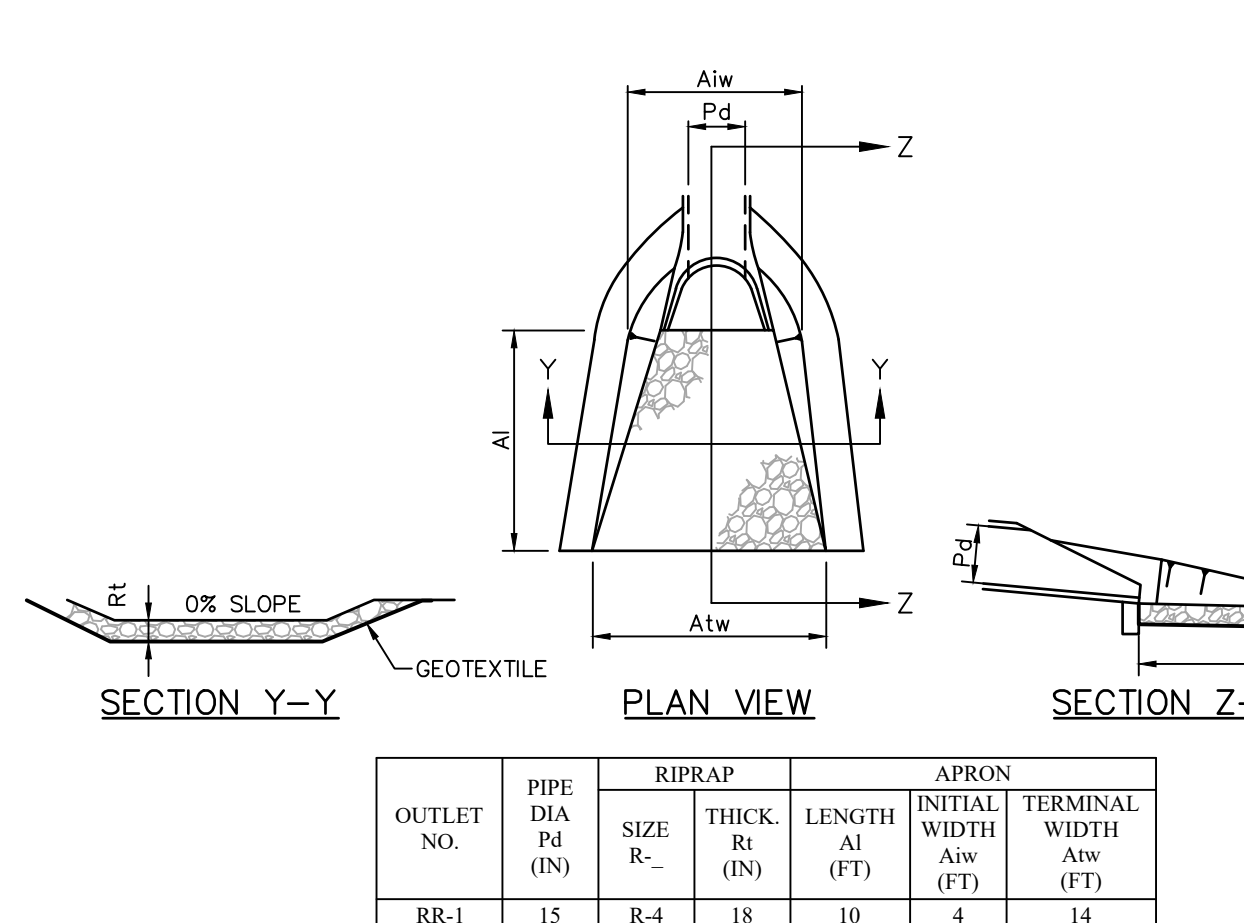
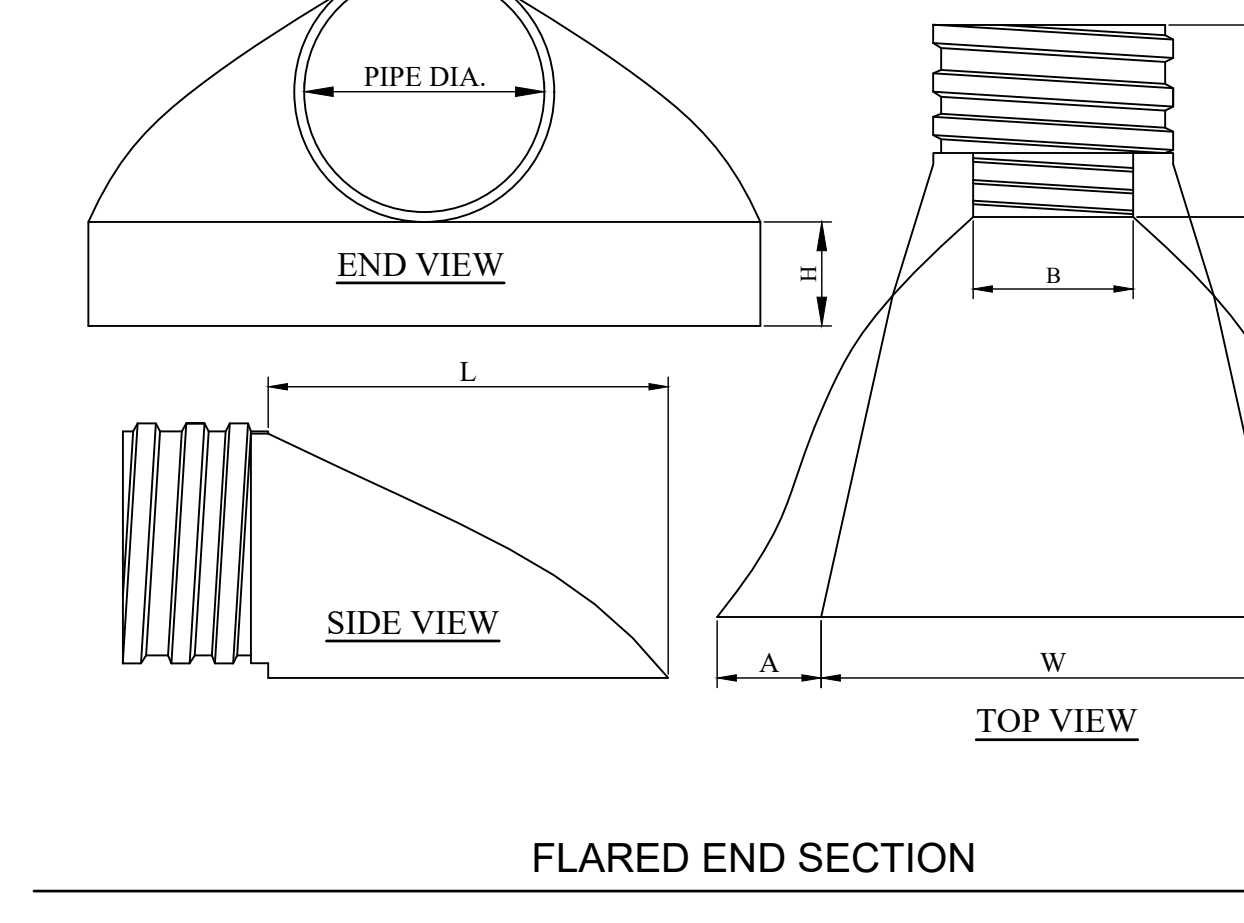
NOTES:

- 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.



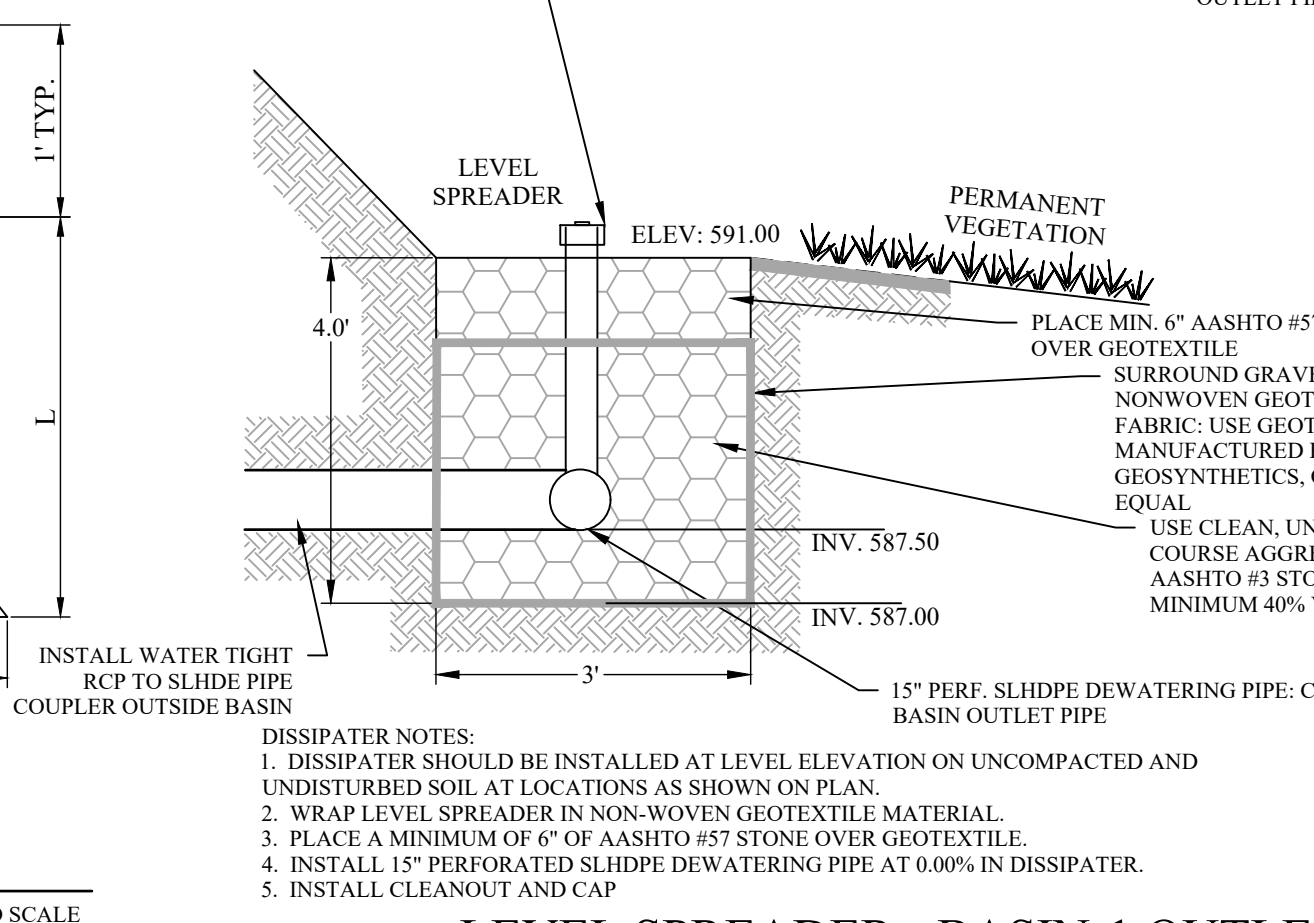
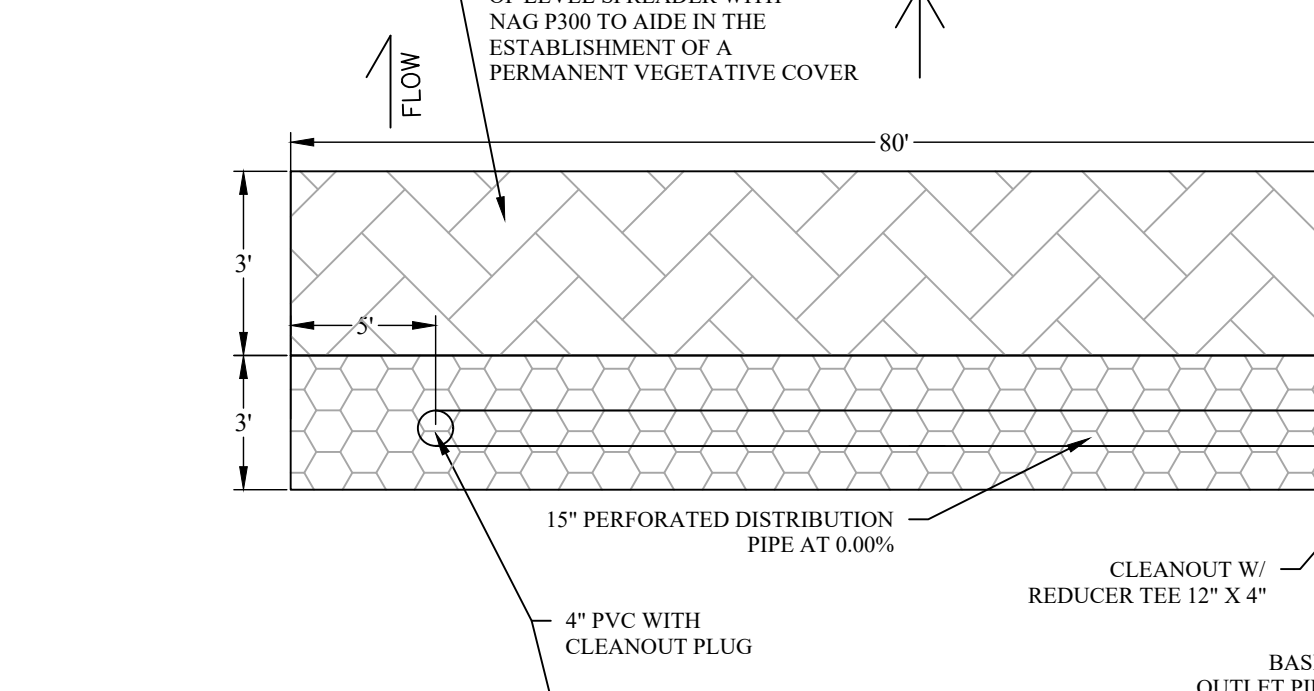
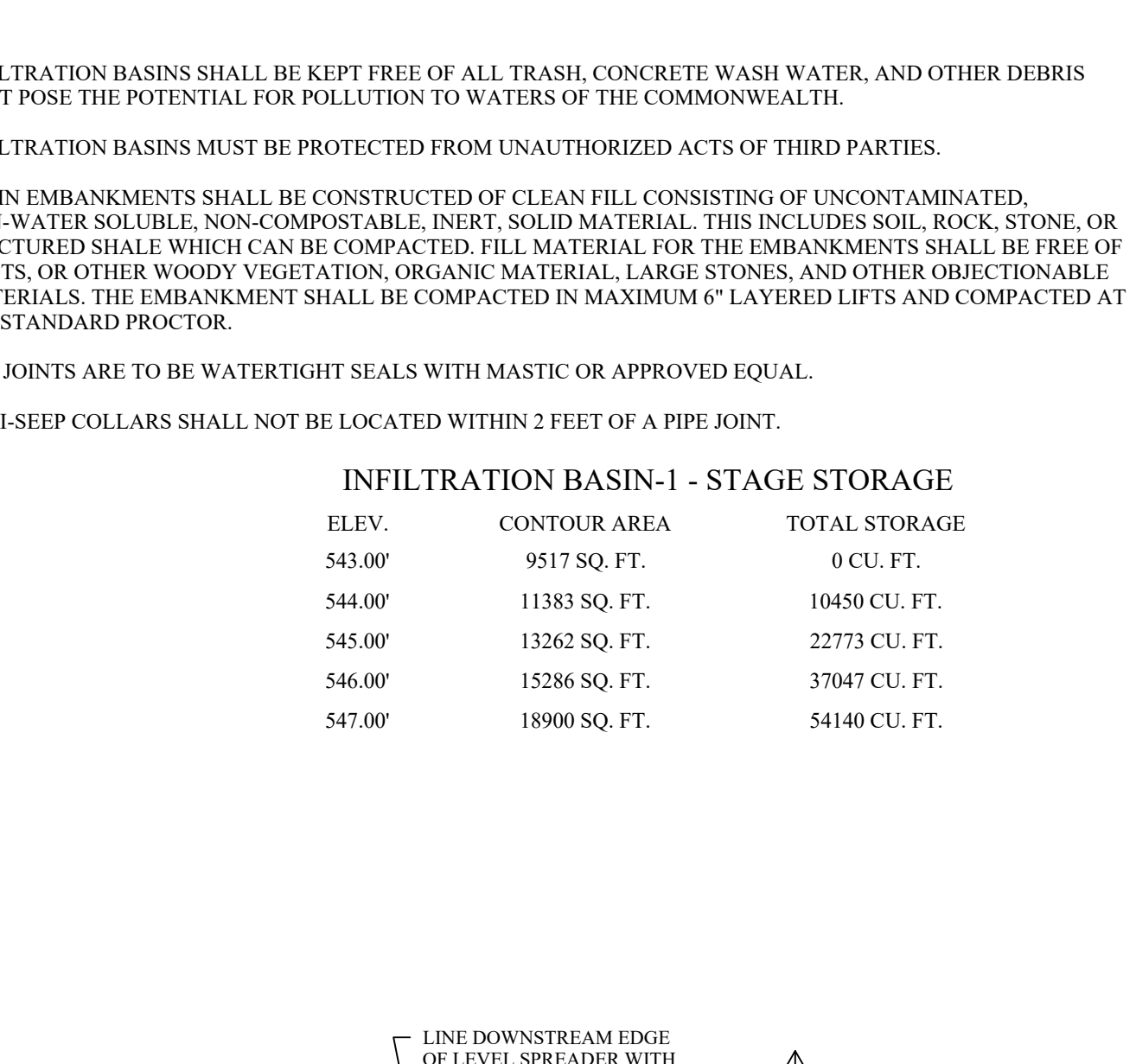
DIMENSIONS, INCHES

PIPE DIAMETER	A, ±1	B MAX	H, ±1	L, ±1	W, ±2
12 & 15	6.5	10	6.5	25	29
18	7.5	15	6.5	32	35
24	7.5	18	6.5	36	45
30 & 36	7.5	25	8.6	58	63



NOTES:

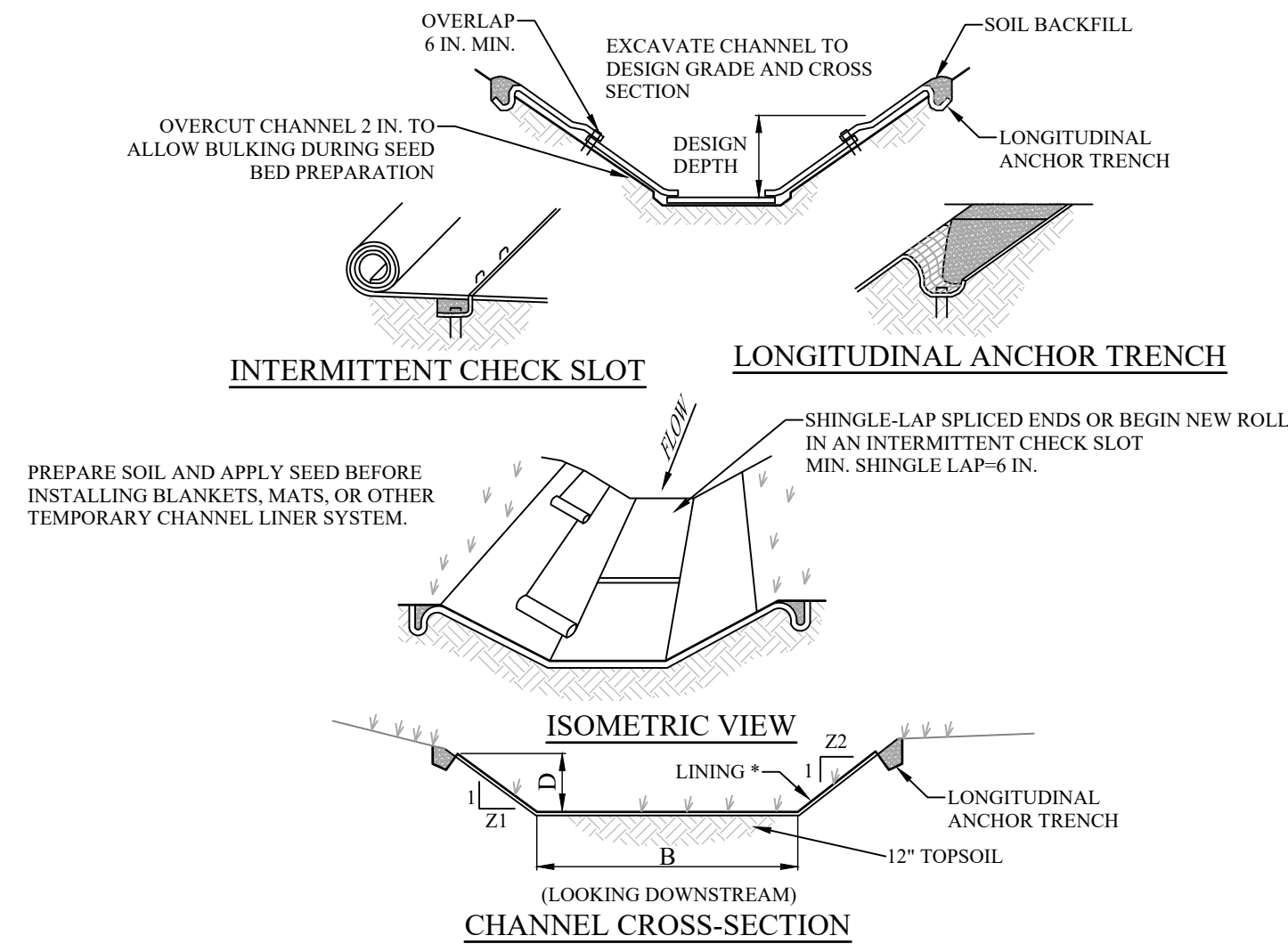
- UNDERDRAIN SHOULD BE INSTALLED AT LEVEL ELEVATION ON UNCOMPACTED AND UNDISTURBED SOIL AT LOCATIONS AS SHOWN ON PLAN.
- WRAP UNDERDRAIN IN NON-WOVEN GEOTEXTILE MATERIAL.
- PLACE A MINIMUM OF 12" OF AASHTO #57 STONE OVER UNDERDRAIN.
- INSTALL 4" PERFORATED SCHEDULE 40 PVC DEWATERING PIPE IN UNDERDRAIN.
- CONNECT TO PRINCIPAL SPILLWAY OUTLET STRUCTURE RISER PIPE. INSTALL SHUT-OFF VALVE AT PIPE OUTLET INSIDE RISER PIPE. OPEN SHUT-OFF VALVE IF BASIN BECOMES SEDIMENT CLOGGED AND REQUIRES MAINTENANCE.



NOTES:

- UNDERDRAIN SHOULD BE INSTALLED AT LEVEL ELEVATION ON UNCOMPACTED AND UNDISTURBED SOIL AT LOCATIONS AS SHOWN ON PLAN.
- WRAP UNDERDRAIN IN NON-WOVEN GEOTEXTILE MATERIAL.
- PLACE A MINIMUM OF 12" OF AASHTO #57 STONE OVER UNDERDRAIN.
- INSTALL 4" PERFORATED SCHEDULE 40 PVC DEWATERING PIPE IN UNDERDRAIN.
- CONNECT TO PRINCIPAL SPILLWAY OUTLET STRUCTURE RISER PIPE. INSTALL SHUT-OFF VALVE AT PIPE OUTLET INSIDE RISER PIPE. OPEN SHUT-OFF VALVE IF BASIN BECOMES SEDIMENT CLOGGED AND REQUIRES MAINTENANCE.

CHANNEL ID.	BOTTOM WIDTH B (FT)	PROPOSED DEPTH	REQ. DEPTH D (FT)	Z1 (FT)	Z2 (FT)	TEMPORARY LINING *	PERMANENT LINING
SWALE-1 MIN.	5	2	2.00	3	3	NAG S150	VEG. CLASS C
SWALE-1 MAX.	3	2	0.98	3	3	NAG P300	VEG. CLASS C
SWALE-2 MIN.	5	1.5	1.48	3	3	NAG S150	VEG. CLASS C
SWALE-2 MAX.	5	1.5	1.48	3	3	NAG S150	VEG. CLASS C

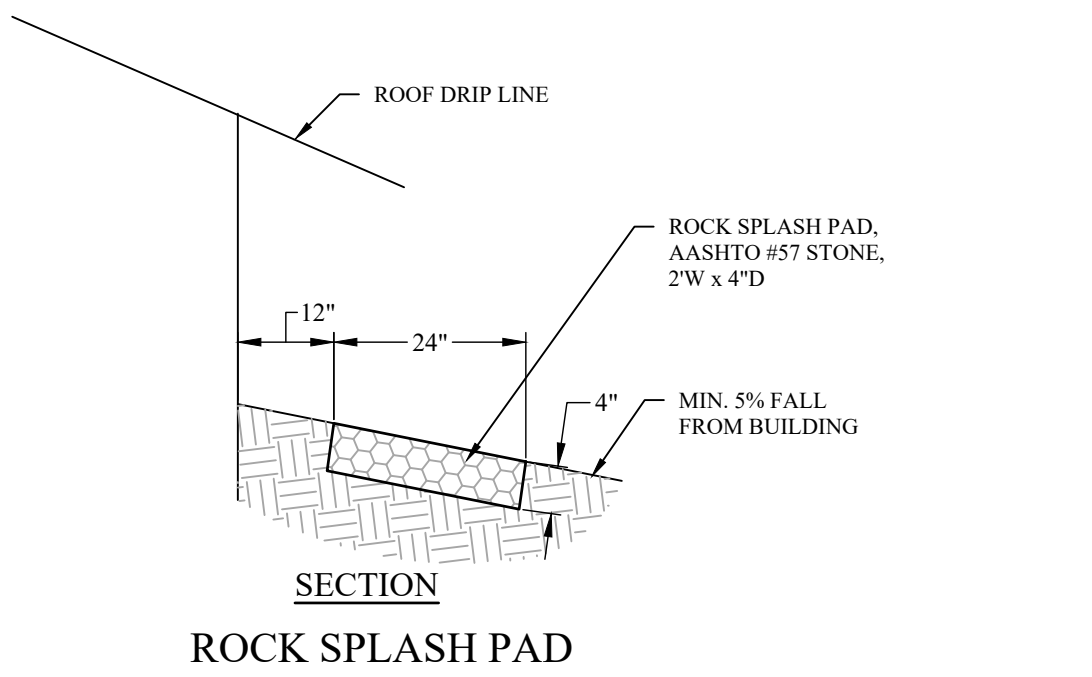


* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

NOTES:

- ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.
- CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.
- PERMANENT LINING (CLASS C) SHALL BE A PERMANENT GRASS SEEDING MIXTURE AND BE MAINTAINED AT A 6" TO 12" STAND.

CHANNEL
STANDARD CONSTRUCTION DETAIL #6-1 NOT TO SCALE

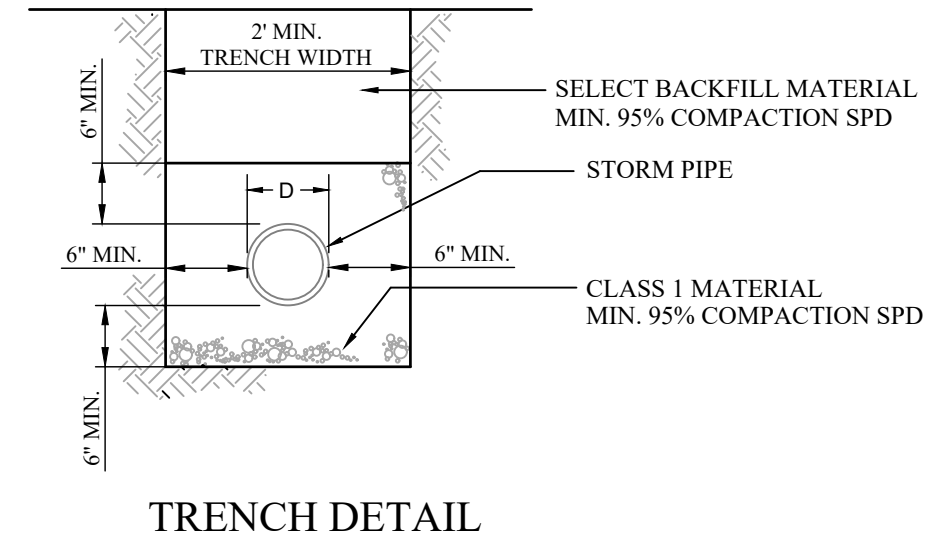


NOT TO SCALE

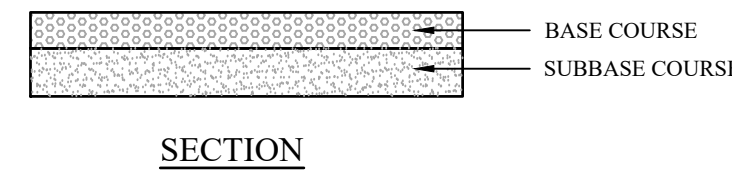
CLASSIFICATION OF MATERIALS:

CLASS 1 - THIS MATERIAL SHALL CONSIST OF 2A COARSE AGGREGATE OR 2 RC STONE FREE OF SLAG, EXCEPT IN WET OR UNSTABLE AREAS WHERE THE BEDDING MAY BE NO. 8 OR NO. 57 COARSE AGGREGATE. ALL MATERIALS SHALL CONFORM TO PennDOT PUBLICATION 408, SECTION 703.3.

NOTES: - BACKFILL IS TO BE MECHANICALLY TAMPED IN 6" LAYERS.
D = OUTSIDE DIAMETER OF PIPE
SPD = STANDARD PROCTOR DENSITY

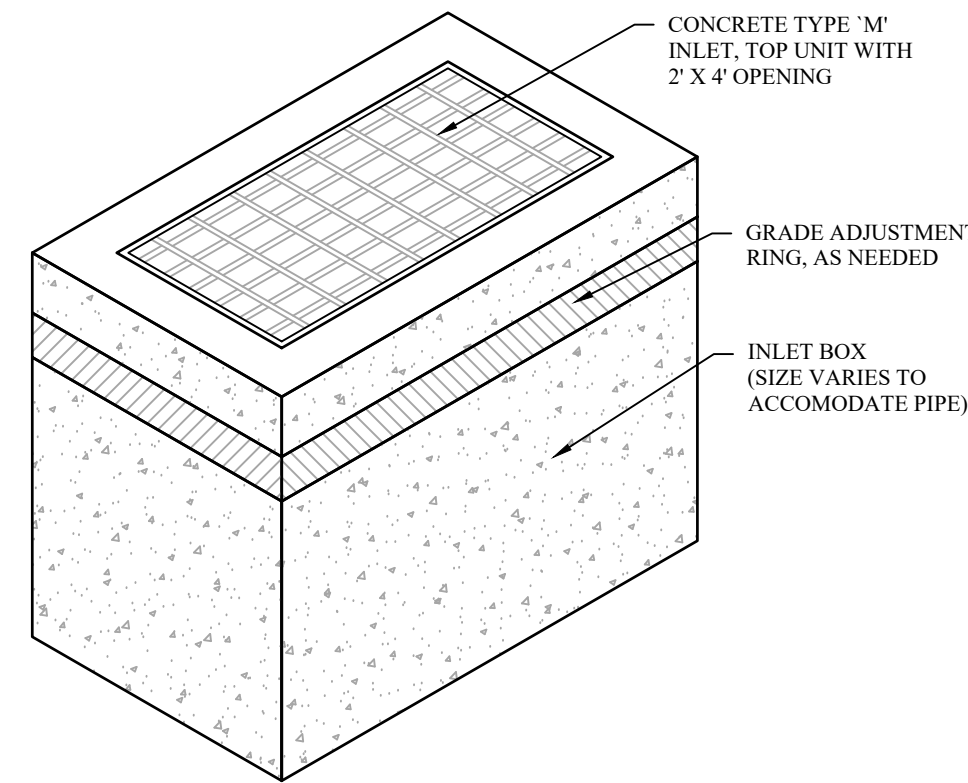


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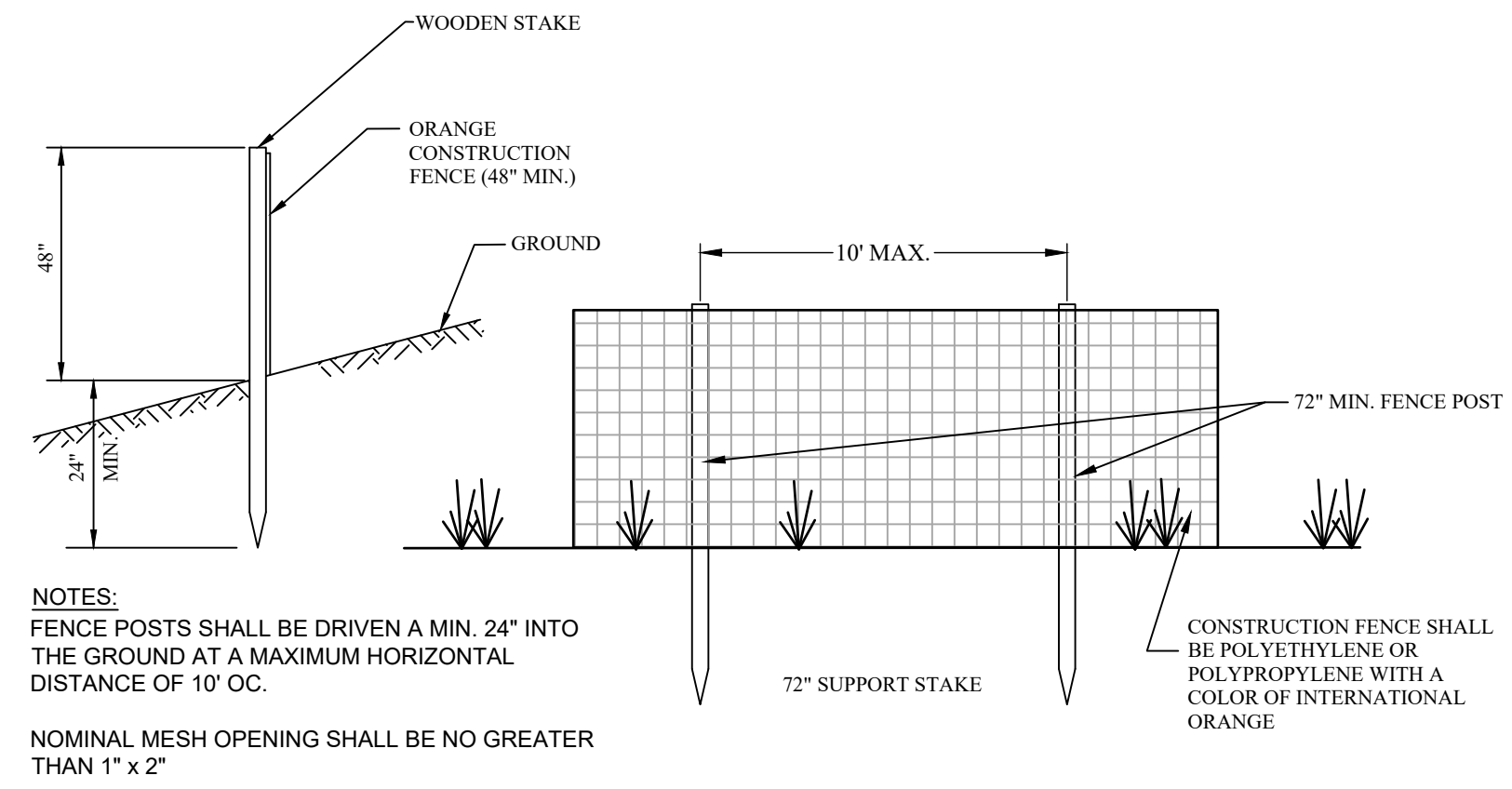
- NOTES:**
- BASE COURSE SHALL BE STONE AGGREGATE MATERIAL CONSISTING OF 8 INCHES OF COMPACTED 2A MODIFIED AND SHALL BE COMPACTED TO THE REQUIRED DEPTH WITH A VIBRATING ROLLER.
 - SUBBASE SHALL BE COMPACTED WITH A VIBRATING ROLLER PRIOR TO APPLYING THE BASE COURSE.

DRIVEWAY
NOT TO SCALE



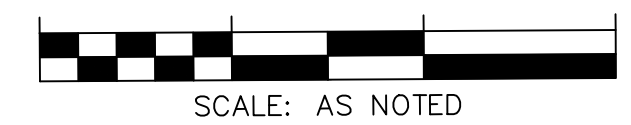
- NOTES:**
- MATERIAL AND CONSTRUCTION TO BE BASED ON PENNDOT STANDARDS.
 - ALL JOINTS ARE TO BE WATERTIGHT SEALED WITH MASTIC OR APPROVED EQUAL.

TYPE M INLET



ORANGE CONSTRUCTION FENCE

NOT TO SCALE



E & S PLAN:
SITE DETAILS 3

BOB BRUBAKER
AG OPERATION

CLIENT
ROBERT L. BRUBAKER JR.
2871 N COLEBROOK RD
MANHEIM, PA 17545
PH: 717-575-5255

REVISION | DATE | DESCRIPTION

SITE ADDRESS:
2205 CAMP RD
MANHEIM, PA 17545

MUNICIPALITY: MOUNT JOY TOWNSHIP
COUNTY: LANCASTER COUNTY



SEAL
DRAWN BY: MRR CHECKED BY: RJR
DATE: 10/7/2024
DEED REF: 05409533
UPI: 460-2325921-324722-0-0000
SHEET 16 OF 16
E7 OF 7

November 21, 2024

Kim Kaufman
Township Manager
Mount Joy Township
8853 Elizabethtown Road
Elizabethtown, PA 17022

Via email: kkaufman@mtjoytwp.org

Re: Robert Brubaker
Minor Land Development Plan
Township Permit No. 24-21-MLDP
LCEC Project No: 25-182



LANCASTER CIVIL
★ ★ engineering company ★ ★
p.o. box 8972, lancaster, pa 17604-8972
www.lancastercivil.com

Dear Mr. Kaufman,

We have received a minor land development plan submission from Nye Consulting Services Inc. for the above-referenced project. The submission consisted of the following documents:

- Application for Consideration of Subdivision and/or Land Development Plan undated
- Minor Land Development Plan dated October 7, 2024
- Stormwater Management Report dated October 7, 2024
- Erosion and Sedimentation Control Plan dated October 7, 2024
- Erosion and Sedimentation Control Report dated October 7, 2024
- Chapter 102 Permit Review Application and Fee Schedule undated
- NPDES NOI Checklist undated
- NPDES PAG-02 Notice of Intent dated October 16, 2024
- Discharges of Stormwater Associated With Construction Activities Erosion and Sediment Control (E&S) Module 1 dated October 11, 2024
- Discharges of Stormwater Associated With Construction Activities Erosion and Sediment Control (E&S) Module 2 dated October 11, 2024
- Erosion Potential Analysis for Ch. 102 Permits dated October 11, 2024
- PNDI municipal notification undated
- Draft PNDI Receipt dated October 14, 2024
- Ch. 102 Municipal Notification of Planned Land Development for Ch. 102 Permits October 1, 2024

Based upon my review of the submitted information, I offer the following comments for the Township to consider:

Zoning Ordinance

1. The maximum height requirements for buildings devoted to agricultural uses are exempt from height regulations (135-85.A). The maximum building height in the Bulk Siting Data table shall be revised to reflect this.
2. The minimum lot size listed in the Bulk Siting Data table shall be 25 acres (135-85.C(3)).

3. The minimum lot width listed in the Bulk Siting Data table shall be 100 feet (135-85.D).
4. The minimum lot depth shall be added to the Bulk Siting Data table (135-85.E).
5. The maximum building coverage shall be added to the Bulk Siting Data table (135-85.I(1)).
6. The “total impervious coverage” value under the “Proposed Features” on the Cover Sheet is inconsistent with the impervious coverage shown on the plans (135-85.I(2)).
7. The landowner shall provide written evidence from the Conservation District/PADEP of an approved, pending, or nonapplicable conservation and nutrient management plan, as well as confirmation from the relevant authority whether the proposed activity is regulated as a concentrated animal feeding operation (135-212.D).
8. An exterior lighting plan shall be submitted if site lighting is proposed (135-298.D).
9. Slopes greater than 15% shall be shown on the plans, as well as a differentiation of slopes between 15% and 25% and those greater than 25% (135-305.A).
10. Cross access easements shall be provided for all joint-use driveways (135-321.C).

Subdivision and Land Development Ordinance

11. The plans shall be signed and sealed by a registered engineer, surveyor or landscape architect (119-31.A(5)).
12. The subdivision plan book and page shall be shown on the plan for the subject tract (119-31.B(10)).
13. The plan shall identify the parent tract and all prior subdivisions of the parent tract, including the recording reference of each prior plan for the parent tract (119-31.B(13)).
14. The plan shall identify all prior plans, including all notes or restrictions affecting the current development, with a verification signed by the design professional that such list is complete and correct (119-31.B(14)).
15. The plan book record numbers of all adjacent landowners shall be shown on the plan (119-31.C(2)).
16. The existing driveways shall be dimensioned (119-31.C(3)(a)).
17. The location and size of the existing stormwater management facilities within Camp Road shall be added to the plan (119-31.C(3)(d)).
18. The existing drainage easement and replacement easement for on-lot septic as shown on the subdivision plan recorded in Book J-214, page 106 for Joseph B. and Barbara K. Zook and Elam B. and Sarah F. Zook shall be shown on the plans (119-31.C(4)(b)).
19. The existing sewage disposal system shall be shown on the plans (119-31.C(4)(b)).
20. The existing sanitary sewer lateral and water service lines shall be shown (119-31.C(4)(b) & 113-43.I(2)).
21. The total number of lots, units of occupancy and density shall be provided on the plans (119-31.D(3)).
22. The proposed area and bulk requirements shall be added to the Bulk Siting Data table for the Agricultural District (119-31.D(9)).
23. A water and sewer feasibility report shall be provided (119-32.A & 119-35.E(3)(b)).

24. A wetlands study shall be provided (119-32.B & 119-34.E(3)(c)).
25. The Recorder of Deeds Certificate shall be removed. The Lancaster Recorder of Deeds will apply a header along the top of the plan (typically within the first inch) when it is recorded. It is advised to leave a 1¼" margin along the top of the plan sheet to avoid having information covered by this header (119-35.A).
26. All certificates shall be executed prior to final plan approval (119-35.E).
27. Written notice shall be provided from the DEP that approval of the sewer planning module has been granted or notice from the Department that such approval is not required (119-35.E(2)(a) & 119-60.A).
28. Written notices from the emergency service providers that will serve as the primary responders for the land development shall be submitted indicating that the building layout is satisfactory and will not present any obstacles or other problems for emergency responders to the land development (119-35.E.(2)(h)).
29. Legal descriptions for easements to be dedicated to the Township shall be provided (119-35.E(4)(a)).
30. A Stormwater Management Agreement and Declaration of Easement in a form acceptable to the Township Solicitor shall be executed and recorded (119-35.E(4)(c), 119-56.E & 113-62).
31. A land development agreement in a form acceptable to the Township Solicitor shall be executed (119-35.E(4)(f)).
32. A construction cost estimate and financial security shall be provided (119-41 & 113-60).
33. The frontage along Camp Road shall be improved in accordance with 119-52.J or as indicated on the Township Official Map, whichever is greater. (119-52.J(3)(a) & 119-53.B(2) / 119-53.C). The required cartway width for a local street outside of the urban growth area is 24 feet.
34. If the Township determines that the road improvements required by 119-52.J(3)(a) are not feasible at the time of development, the developer shall deposit funds with the Township in the amount of 110% of the cost of improvements, or the applicant shall enter into an agreement that would defer road improvements to a time the Township would deem such road improvements as feasible (119-52.J(3)(d)).
35. The clear sight triangle for the existing driveway shown on Sheet 4 of the plans shall be consistent with Appendix No. 14 (119-52.L(1)).
36. Drainage easements shall be provided for the existing stormwater facilities on the existing Lot 1. Drainage easements shall be a minimum of 30 feet wide. The applicant shall be responsible for completing a declaration of easement and stormwater management agreement in a form that is acceptable to the Township Solicitor (119-56.E).
37. Evidence of approval of the NPDES Permit and Erosion and Sedimentation Control Plan by the Lancaster County Conservation District shall be provided (119-58.A, 113-31.D, 113-45.C & 113-45.B).
38. Any action taken on waiver requests, dates, and any conditions of approval shall be added to the cover sheet (119-91.C & 113-96).

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39. Compost filter sock shall be provided between the northern topsoil stockpile and Infiltration Basin-1 (113-31.E & 113-43.K).
40. The “Underlain Geology” certificate on the Cover Sheet shall be revised to be consistent with the carbonate geology certificate (113-31.J.(4)).
41. The test location names shown in the Soil Field Sheets and in the Data Collection Chart for 6 & 12 Inch Infiltration Rings worksheets in the Stormwater Management Report are inconsistent with the infiltration test and probe names shown on the plans (113-31.L).
42. The stabilized infiltration rate is to be determined within the same soil horizon as the bottom of the infiltration facility (113-31.L(2)(a)). The depth of percolation of test location “p2” is inconsistent with the depth of “Perc 2” shown on Sheet 4 of the plans. Due to this inconsistency, it is unclear if this requirement has been met.
43. To the maximum extent practicable, areas proposed for infiltration BMPs shall be protected from sedimentation and compaction during the construction phase to maintain maximum infiltration capacity. Staging of earthmoving activities and selection of construction equipment shall consider this protection (113-31.O). The plan shall show the provisions for protecting the infiltration basin during construction (e.g. construction fence around infiltration area).
44. Calculations shall be provided to show that the volume control requirements have been met (113-32.A(1)). Evidence (i.e. Worksheet 4 or DEP PCSM Spreadsheets) shall be provided for the volume control information (i.e. Infiltration Requirement, Infiltration Credit, 2-yr Pre-Development Volume, 2-yr Post-Development Volume, etc.) shown in Tables 4-6 (pages 8-10) in the Stormwater Management Report.
45. The Ordinance requires the loading ratio for the total drainage area to infiltration area to be less than 8:1 (113-32.A.(2)(c)). A total loading ratio of 9:1 is proposed. Per Ordinance 312-2017 the Township Engineer can approve higher loading ratios (no modification is necessary).

Approval response: The loading ratio guideline is a recommendation intended to prevent infiltration of a substantial volume of water in a very small area (especially in Karst areas), to limit excessive depth of water in infiltration facilities and to avoid lengthy dewatering/drawdown times. The proposed impervious drainage area to infiltration area loading ratio meets the ordinance requirements and the total loading ratio is just over the recommended ratio. In addition, the proposed Infiltration Basin 1 is not in a Karst area and has been designed to capture a depth of 0.86 feet for the 2 year storm with a dewatering time of 24 hours, which will mitigate each of the risk factors described above. Given these considerations, I have no objection to the higher ratios.

46. The post-development Post-DA to Basin DP-001 drainage area boundaries should be revised to reflect the existing and proposed contours (113-35.B).
47. The hydrographs shown in the Hydrograph Return Period Recap worksheet for the proposed conveyance facilities shall be provided (113-35.F).
48. The pipe diameter shown in the Standard Construction #7-16 detail is inconsistent with the pipe diameter shown in the PCSM Infiltration Basin-1 detail (113-37.A(1)(b)[2]).
49. The impervious core shall provide a minimum trench depth of two feet below existing grade (113-37.A.(3)(a)[2][a]). The location of the key trench/clay core shall be shown on the plans.

50. The core shall extend four feet below any pipe penetrations through the impervious core (113-37.A.(3)(a)[2][c]).
51. The side slopes of the proposed aboveground impervious core/key trench shall be 1H:1V or flatter (113-37.A.(3)(a)[2][a]).
52. Note 3 of PCSM Infiltration Basin-1 shall be revised to include the specification that the embankment fill material be free of rubbish, stones greater than six inches, or frozen material (113-37.A.(3)(c)).
53. A note shall be added to the plan to specify that embankments/clay core shall be compacted by sheepsfoot or padfoot roller. The loose lift thickness shall be nine inches or less, depending on roller size, and the maximum particle size is six inches or less 2/3 of the lift thickness. Five passes of the compaction equipment over the entire surface of each lift is required. Embankment compaction to visible nonmovement is also required (113-37.A.(3)(d)).
54. The minimum slope for swales shall be 1.0% (113-37.C(1)(d)[4]). Vegetated Swales 1 and 2 shall meet this requirement.
55. There are inconsistent maximum slopes shown in the Vegetated Swale 1 labels on Sheets 4 and 12 of the plans (113-37.C(1)(d)[4]).
56. The Trench Detail shall specify the backfill material above the Class 1 material (113-37.C(3)(a)).
57. A note shall be added to the plan to specify that backfill material be free of large (not exceeding six inches in any dimension), objectionable, or detritus material. Select non-aggregate material should be indigenous to the surrounding material for non-vehicular areas (113-37.C.(3)(a)).
58. Watertight joints shall be specified for the SLHDPE pipes (113-37.C(3)(d)).
59. The grading for Vegetated Swale 1 and 2 does not appear to match several of the values shown in the Channel Cross Section detail (113-37.C(5)).
60. Swales shall be evaluated for stability based upon an "n" value equal to 0.03 (113-37.C.(5)(c)[1][a]).
61. Flared end sections shall be the same material as the connecting pipe (113-37.C(9)(a)). The material of the flared end section shown in the Flared End Section detail shall be specified.
62. The landowner shall execute the final documents prior to final plan approval (113-41.B).
63. A SWM site plan approval certification shall be added to the plans (113-43.E).
64. Elevation labels shall be added to the existing minor contours (113-43.I.(1)).
65. A note identifying any recorded stormwater management agreements affecting the subject property (or that none exist) shall be included on the plans (113-43.I(6)).
66. The proposed 447 contour within Swale 2 shall be corrected (113-43.J(1)).
67. The proposed downspout locations shall be shown on the plans (113-43.J(5)).
68. The location of the inlet shown in the Type 'M' Inlet detail shall be shown on the plans (113-43.J(5)).
69. The location of the fence shown in the Orange Construction Fence detail shall be shown on the plans (113-43.J(5)).

70. The expected project schedule shall be added to the plans (113-44.E).
71. A note shall be added to the plans to specify that following approval of the as-built plan by the Township Engineer, the applicant shall submit the SWM site plan for recordation in the office of the Recorder of Deeds (113-58.C).
72. An operation and maintenance (O&M) agreement shall be provided and recorded with the final plan (113-62).

If you should have any questions or need additional information, please do not hesitate to contact me at bencraddock@lancastercivil.com or via telephone at 717-799-8599.

Sincerely,



Benjamin S. Craddock, PE, President

LANCASTER CIVIL

cc: Justin Evans, AICP, Community Development Director/Zoning Officer (via email)
Patricia Bailey, Township Secretary (via email)
Josele Cleary, Esquire, Township Solicitor (via email)
Bert Nye, Nye Consulting Services, Inc. (via email)
Robert Ruth, Nye Consulting Services, Inc. (via email)
Renee Addleman, Planner, LCPC (via email)