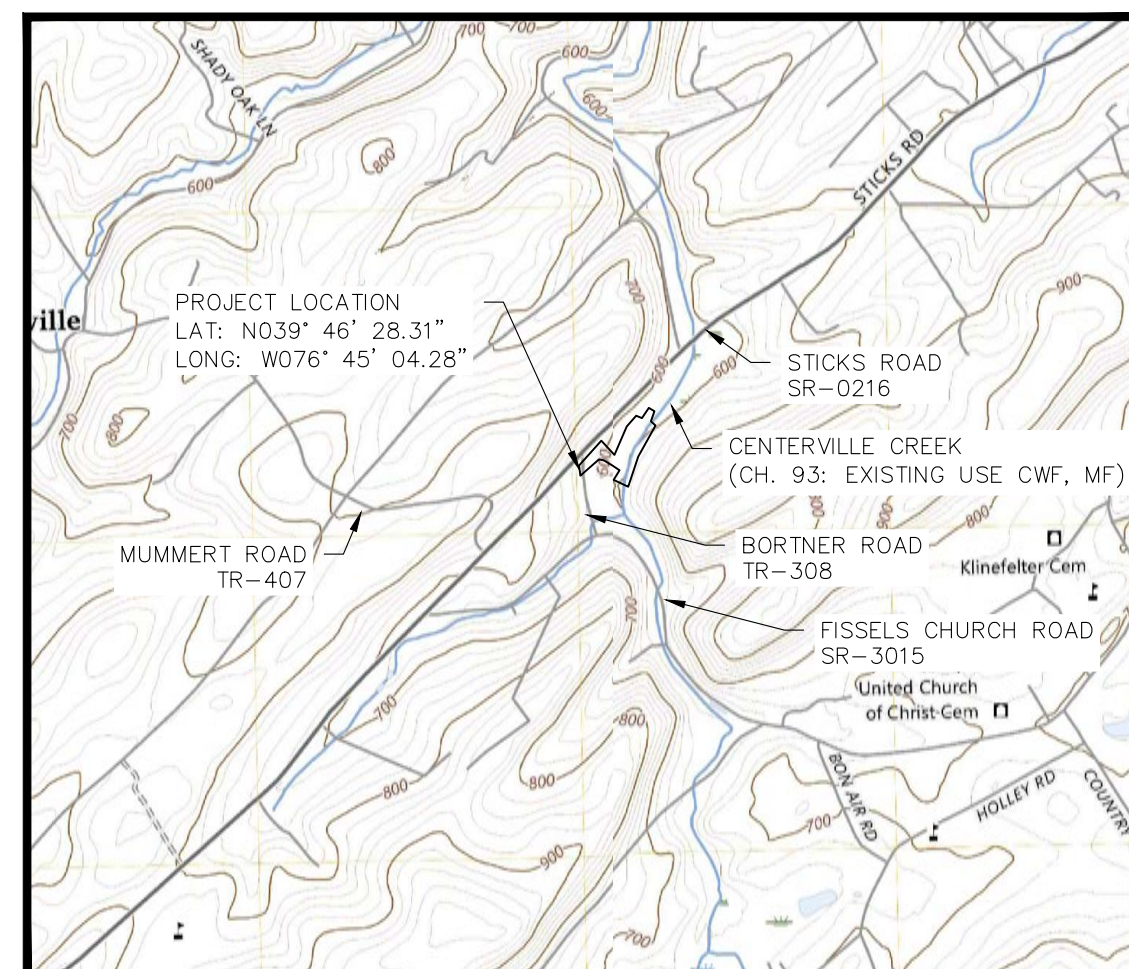


FOR
CENTERVILLE CREEK RESTORATION
CODORUS AND SHREWSBURY TOWNSHIP, YORK COUNTY, PA

DECEMBER 2025

PREPARED BY:



LOCATION MAP

USGS QUAD: SEVEN VALLEYS & GLEN ROCK, PA



PENNCORE CONSULTING LLC
999 MAIN STREET
SOUTH WILLIAMSPORT, PA 17702
PHONE: (570) 980-3994



THOMPSON ENVIRONMENTAL
SURVEYS AND PERMITTING, LLC
1110 CREEK ROAD
CARLISLE, PA 17015
PHONE: (717) 609-3301

REFERENCE (ALL SHEETS):

1. SOILS INFORMATION FROM UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY (CURRENT).
2. LIDAR TOPOGRAPHIC DATA AND BACKGROUND IMAGERY OBTAINED FROM PENNSYLVANIA SPATIAL DATA ACCESS (PASDA) WEB SITE ([HTTP://WWW.PASDA.PSU.EDU/](http://www.pasda.psu.edu/)).
3. EXISTING GRADE AND FEATURES HAVE BEEN OBTAINED FROM PENNSYLVANIA SPATIAL DATA ACCESS (PASDA), AND SUPPLEMENTED WITH DATA PROVIDED BY THOMPSON ENVIRONMENTAL SURVEYS AND PERMITTING LLC.
4. PROPERTY BOUNDARY INFORMATION OBTAINED FROM COUNTY TAX PARCEL DATA AND GIS DATA.
5. HORIZONTAL DATUM IS NAD83. VERTICAL DATUM IS NAVD88.
6. ALL NORTHING AND EASTING COORDINATES SHOWN IN PENNSYLVANIA STATE PLANE SOUTH NAD83.

SHEET	DESCRIPTION	NO.
—	COVER	1
EX-1	EXISTING CONDITIONS PLAN	2
ES-1	EROSION AND SEDIMENT CONTROL PLAN	3
ES-2	STREAM PROFILES	4
ES-3	E&S CONTROL DETAILS	5
ES-4	E&S CONTROL DETAILS	6
ES-5	E&S CONTROL NOTES	7
ES-6	SITE IMPACTS	8

REVISÉ: MAY 2026

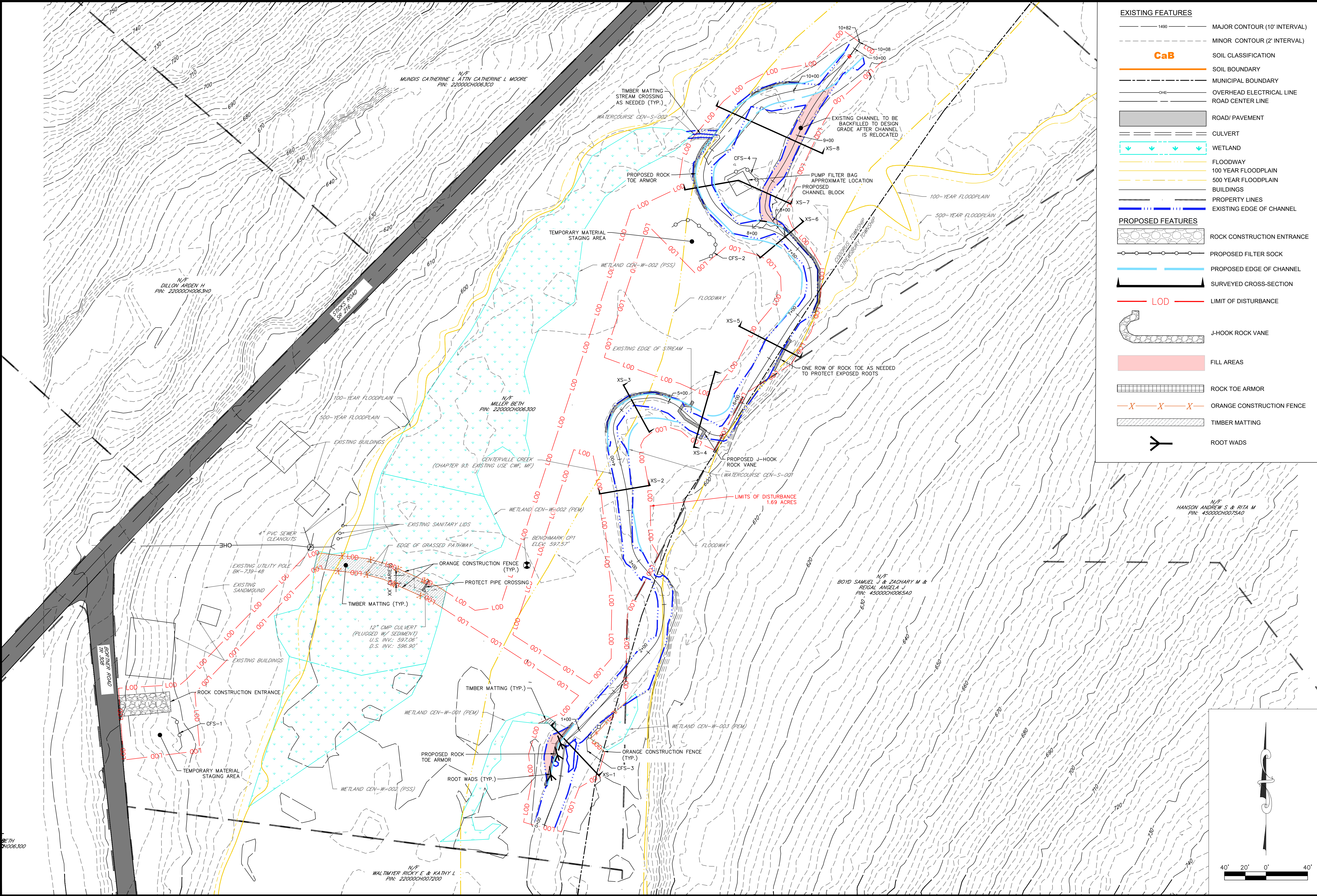


THE LOCATION OF ALL UTILITIES (ABOVE OR BELOW GROUND) SHOWN ON THESE DRAWINGS ARE APPROXIMATE & WERE OBTAINED FROM USGS TOPO MAPS AND/OR UTILITY OWNERS. PENNCO CONSULTING LLC DOES NOT GUARANTEE THAT LOCATION SHOWN ON THE DRAWINGS ARE CORRECT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE LOCATIONS OF EXISTING UTILITIES (ABOVE OR BELOW GROUND) & TO NOTIFY THE RESPECTIVE UTILITY OWNERS BEFORE BEGINNING CONSTRUCTION.

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL
Pennsylvania One Call System Inc.
1-800-242-1776



I DO HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THAT THE EROSION AND SEDIMENT CONTROL PLAN, STORMWATER MANAGEMENT PLAN AND POST CONSTRUCTION BMPs ARE TRUE AND CORRECT, REPRESENT ACTUAL FIELD CONDITIONS AND ARE IN ACCORDANCE WITH THE 25 PA. CODE CHAPTERS 78 AND 102 OF THE DEPARTMENT'S RULES AND REGULATIONS. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.



EXISTING FEATURES

1490

MAJOR CONTOUR (10' INTERVAL)

MINOR CONTOUR (2' INTERVAL)

SOIL CLASSIFICATION

SOIL BOUNDARY

MUNICIPAL BOUNDARY

OVERHEAD ELECTRICAL LINE

ROAD CENTER LINE

ROAD/PAVEMENT

CULVERT

WETLAND

FLOODWAY

100 YEAR FLOODPLAIN

500 YEAR FLOODPLAIN

BUILDINGS

PROPERTY LINES

EXISTING EDGE OF CHANNEL

PROPOSED FEATURES

ROCK CONSTRUCTION ENTRANCE

PROPOSED FILTER SOCK

PROPOSED EDGE OF CHANNEL

SURVEYED CROSS-SECTION

L O D

LIMIT OF DISTURBANCE

J-HOOK ROCK VANE

FILL AREAS

ROCK TOE ARMOR

ORANGE CONSTRUCTION FENCE

TIMBER MATTING

ROOT WADS

CENTERVILLE CREEK RESTORATION
CODORUS & SHREWSBURY TOWNSHIP, YORK COUNTY, PA

EROSION AND SEDIMENT CONTROL PLAN

APPROVED

BPS

REVISIONS

DATE

03/04/2026

05/15/2026

DESCRIPTION

COMMENTS FROM YCCD

COMMENTS FROM KELLY THOMPSON

APPROVED

BPS

DATE

03/04/2026

05/15/2026

DESCRIPTION

COMMENTS FROM YCCD

COMMENTS FROM KELLY THOMPSON

DRAWN BY:

AKS

DRAFTING CK:

BPS

ENGINEERING CK:

BPS

CONSTRUCTION CK:

N/A

ENVIRONMENTAL CK:

N/A

DATE:

DECEMBER 2025

DRAWING NO.:

ES-1

SHEET 3 OF 8

REV. 0

THE ENGINEER'S SEAL

PHILLIP SCHULTZ

REGISTERED PROFESSIONAL ENGINEER

PA 0407

PHILLIP SCHULTZ

REGISTERED PROFESSIONAL ENGINEER

PA 0407

APPROVED

BPS

999 MAIN STREET

SOUTH WILLIAMSPORT, PA 17702

(570) 980-3994

THE ENGINEER'S SEAL

PHILLIP SCHULTZ

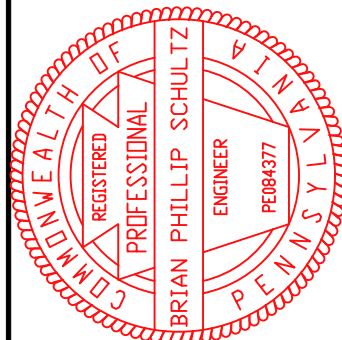
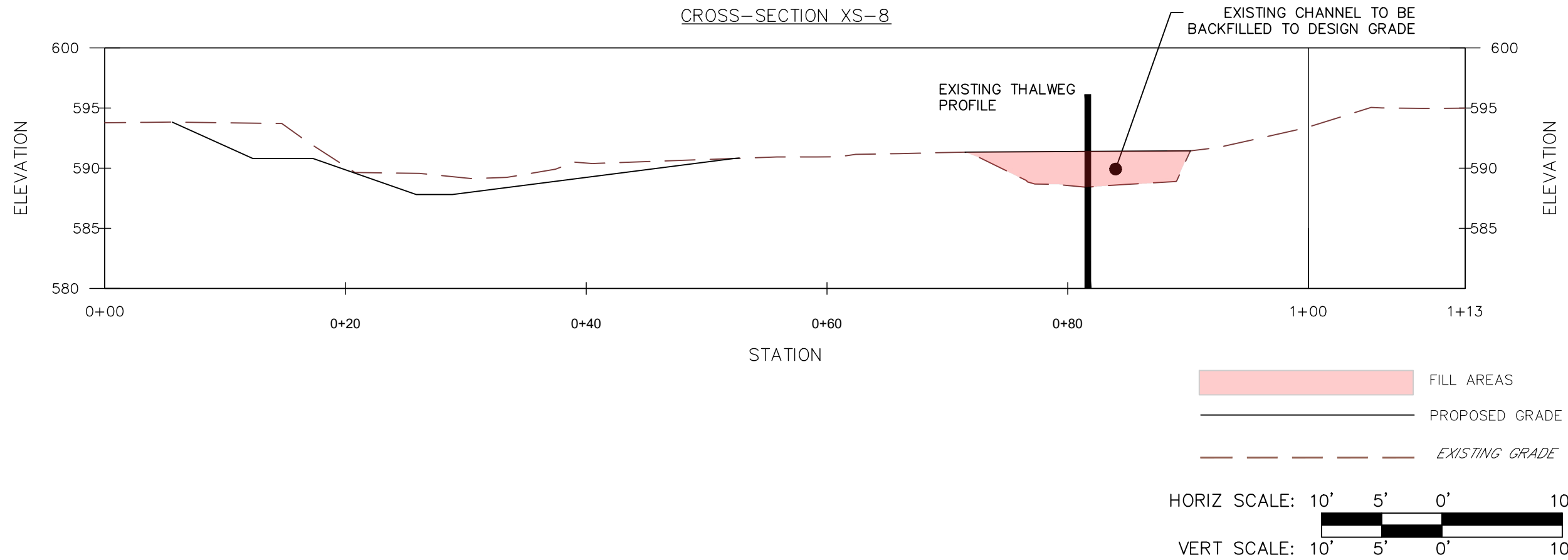
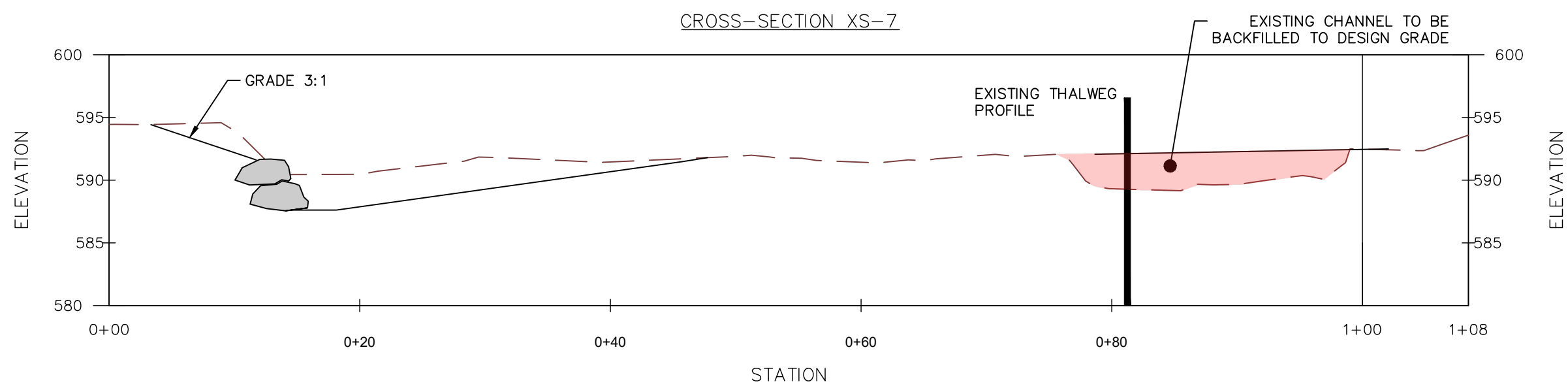
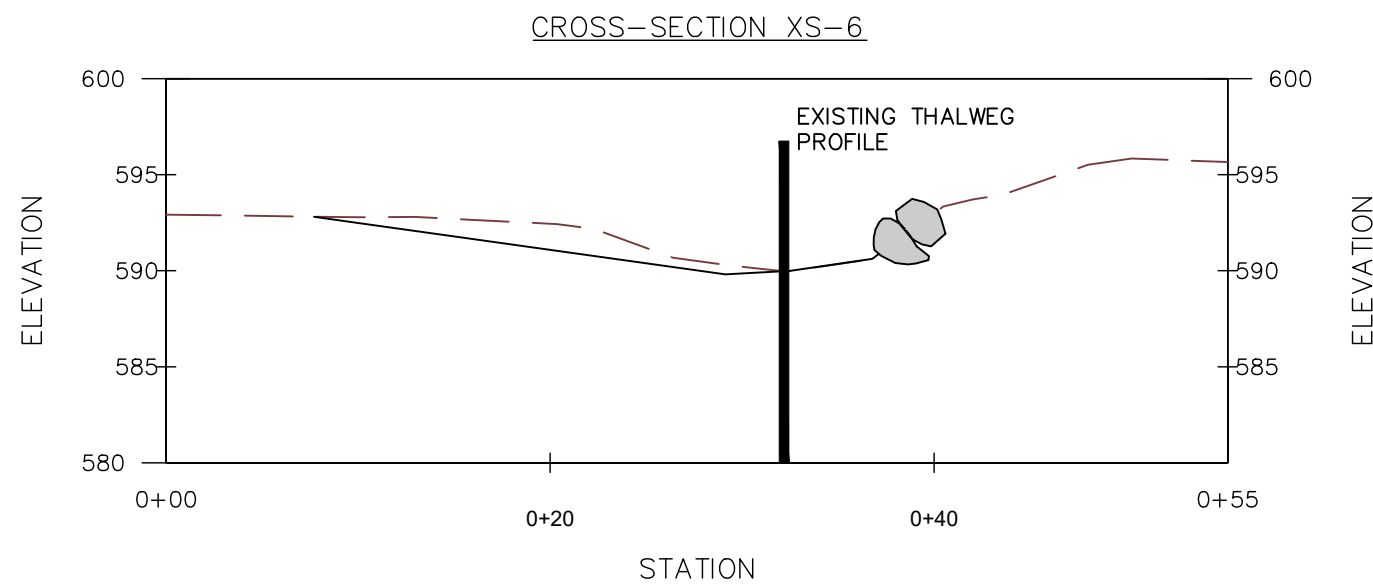
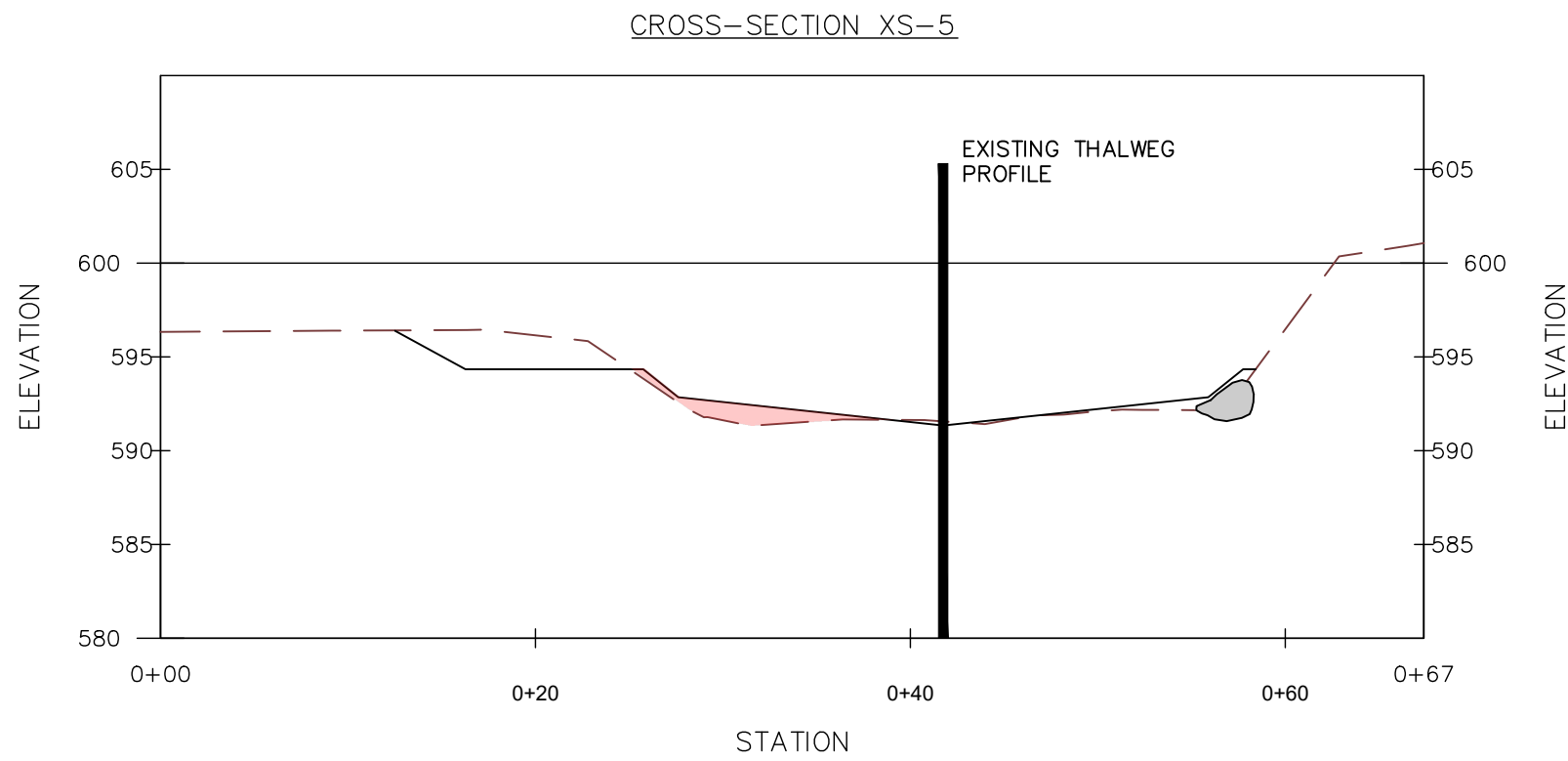
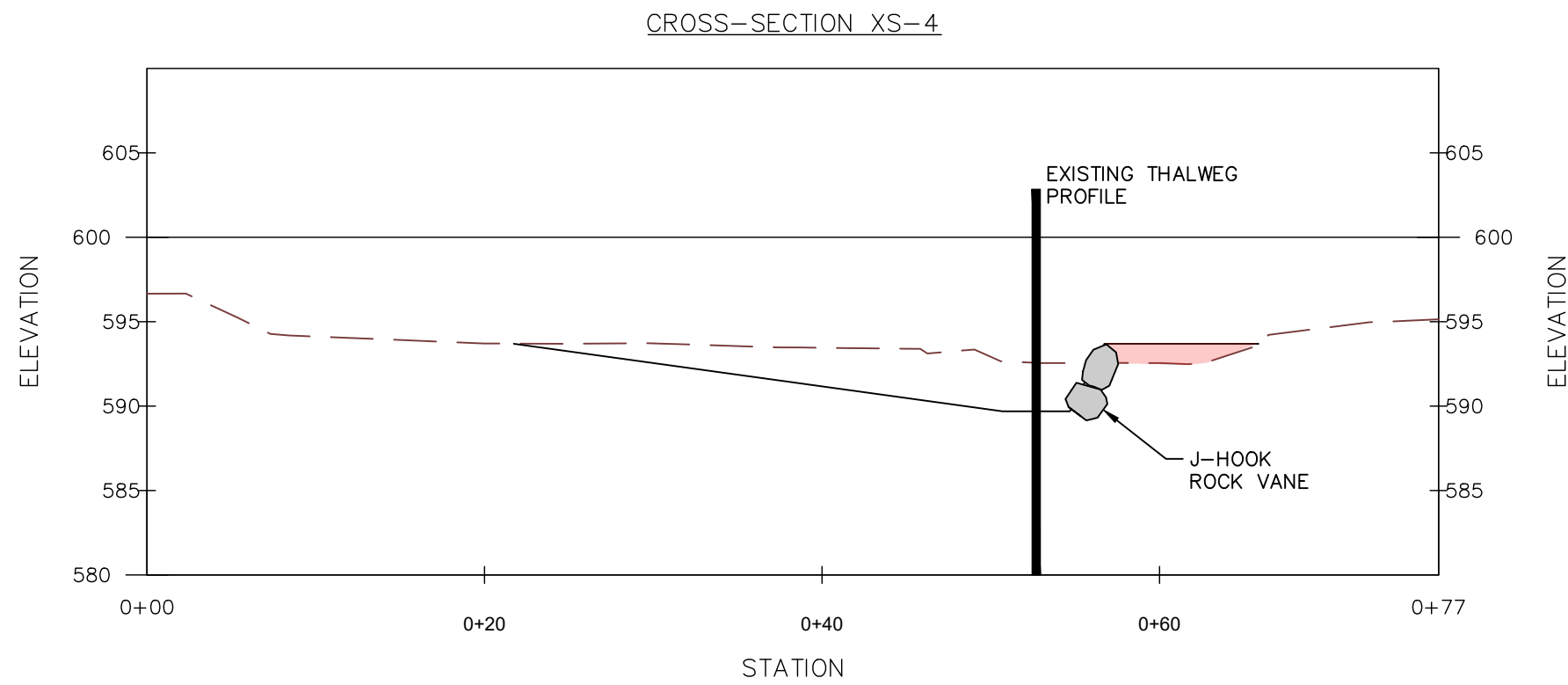
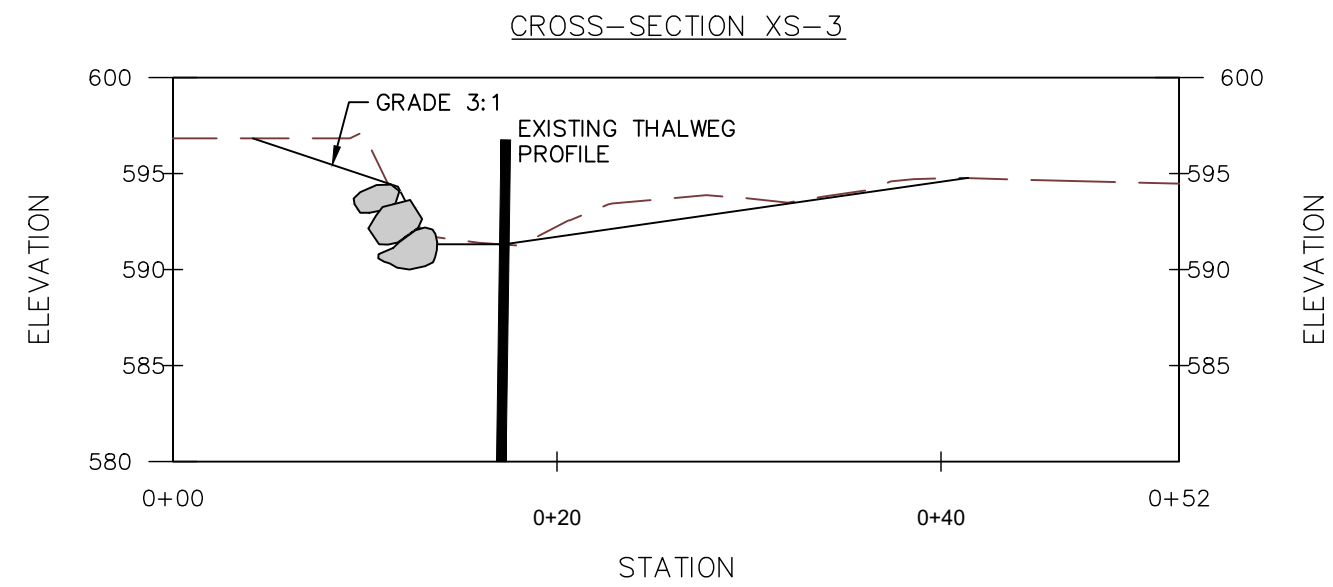
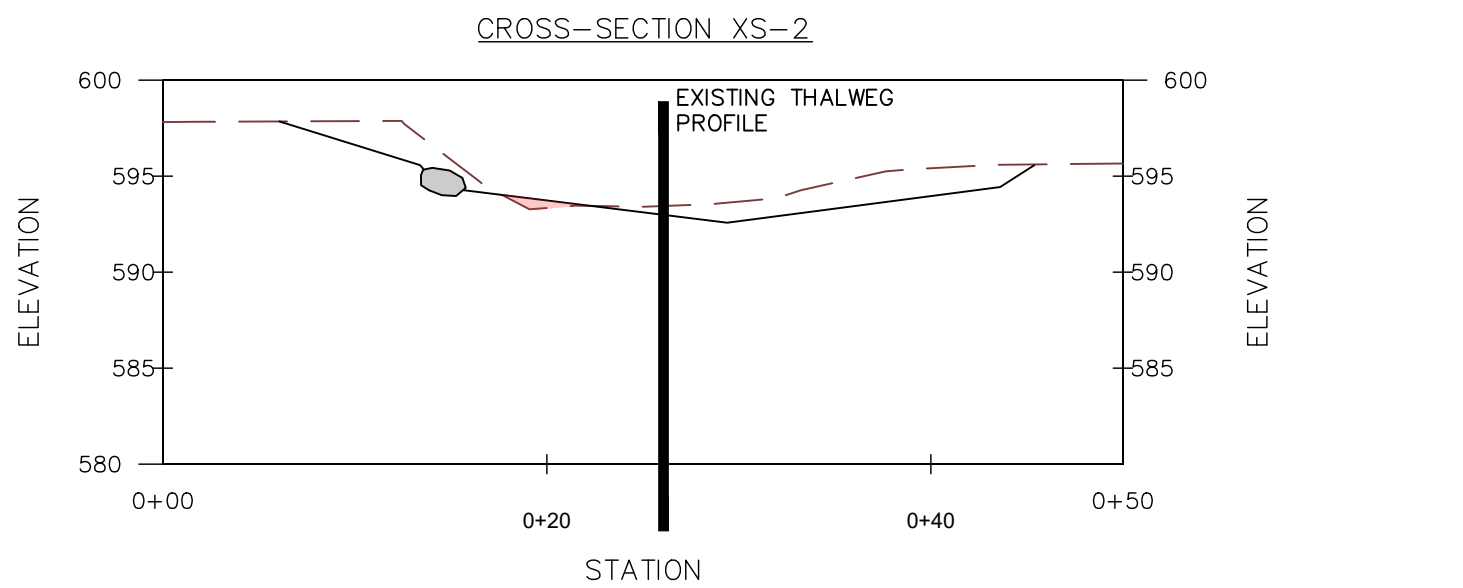
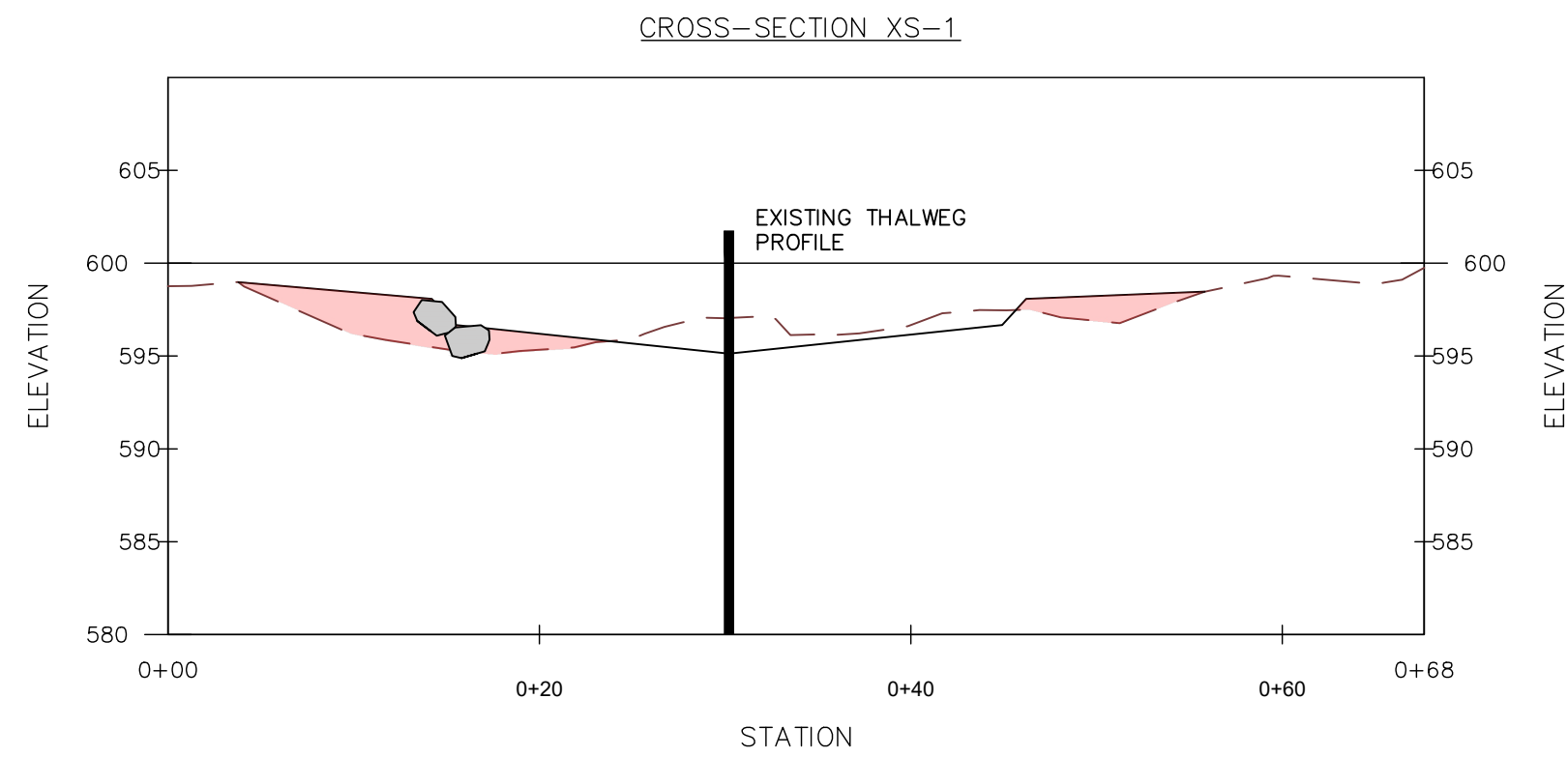
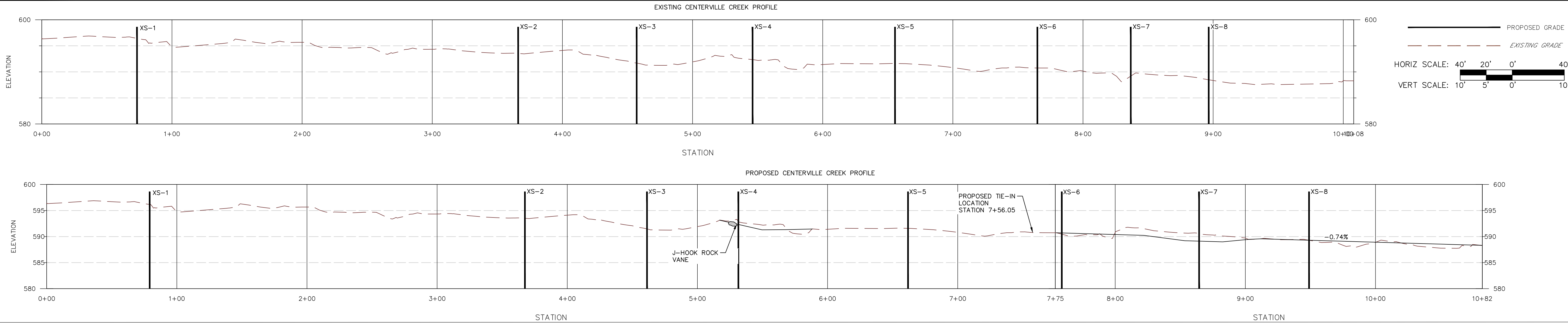
REGISTERED PROFESSIONAL ENGINEER

PA 0407

PHILLIP SCHULTZ

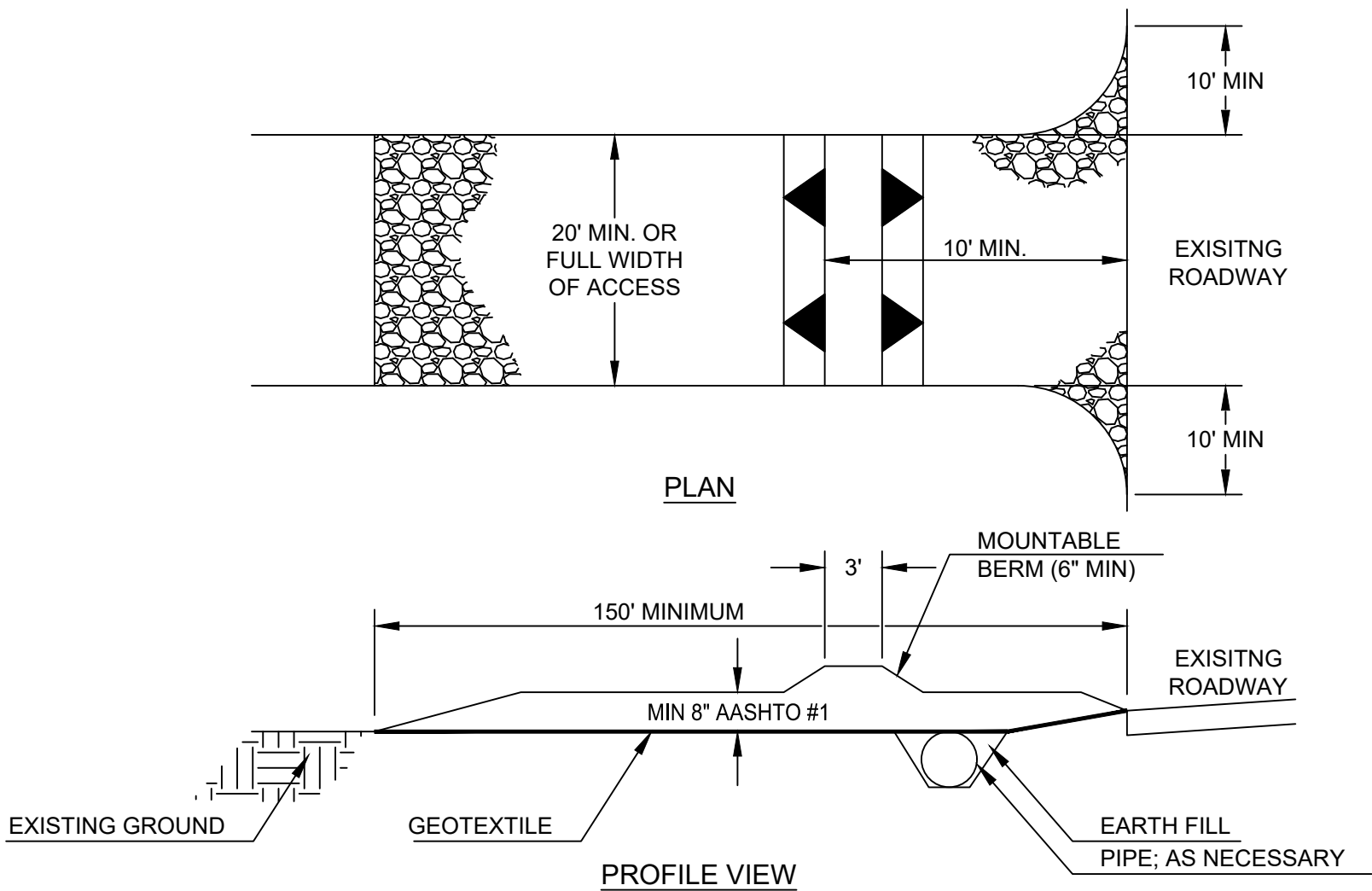
REGISTERED PROFESSIONAL ENGINEER

PA 0407



REVISIONS	DATE	DESCRIPTION	APPROVED
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	05/15/2026	COMMENTS FROM KELLY THOMPSON	BPS

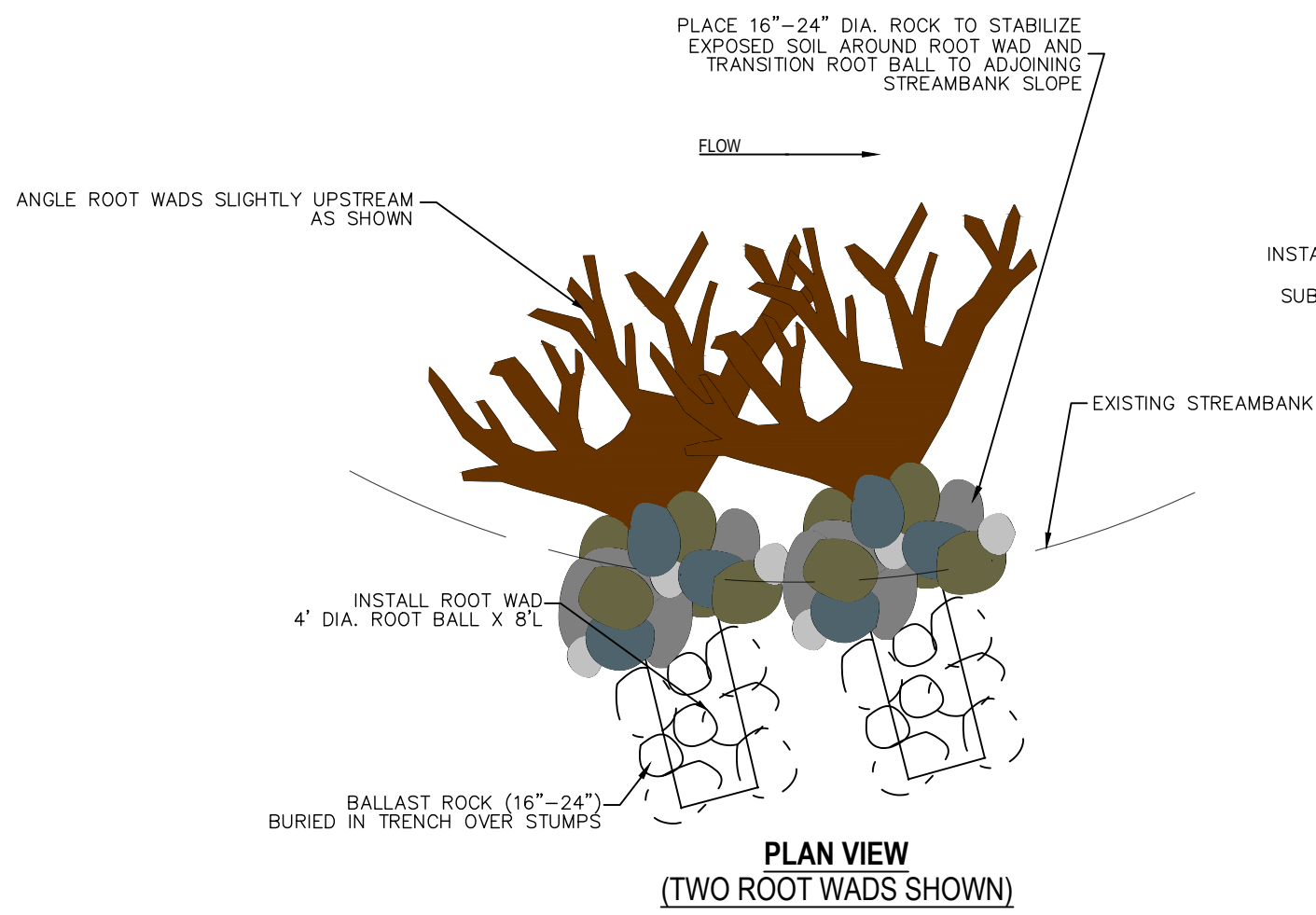
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DRAFTING CK:	BPS
ENGINEERING CK:	BPS
CONSTRUCTION CK:	N/A
ENVIRONMENTAL CK:	N/A
DATE:	DECEMBER 2025
DRAWING NO.:	ES-2
SHEET 4 OF 8	REV. 0



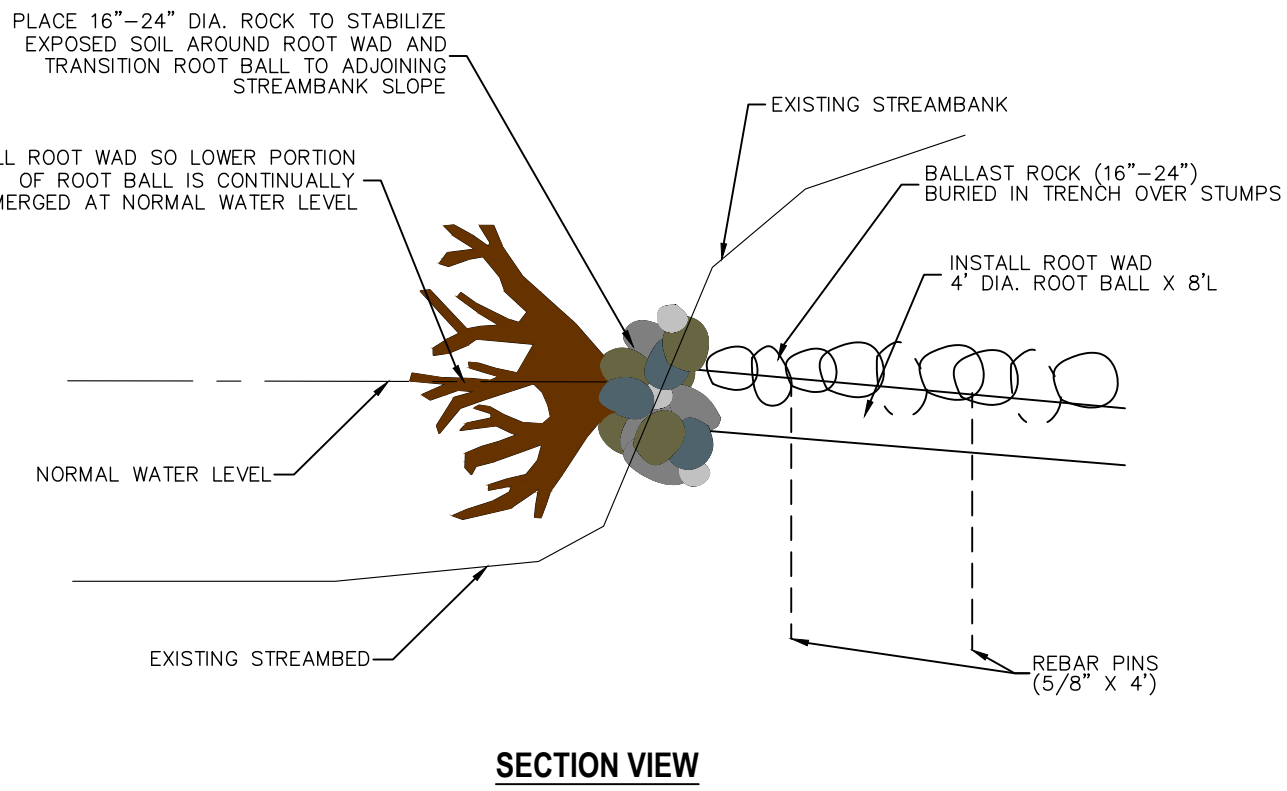
- INSTALLATION
1. TOPSOIL SHOULD BE REMOVED PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE.
 2. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.
 3. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
 4. MOUNTABLE BERM SHOULD BE INSTALLED WHENEVER OPTIONAL CULVERT PIPE IS USED. PIPE TO BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

- MAINTENANCE
1. THE STRUCTURE'S THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK.
 2. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE.
 3. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY.
 4. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FEET INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK.
 5. WASHING OF THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWER, CULVERTS OR OTHER DRAINAGEWAYS IS NOT ACCEPTABLE.

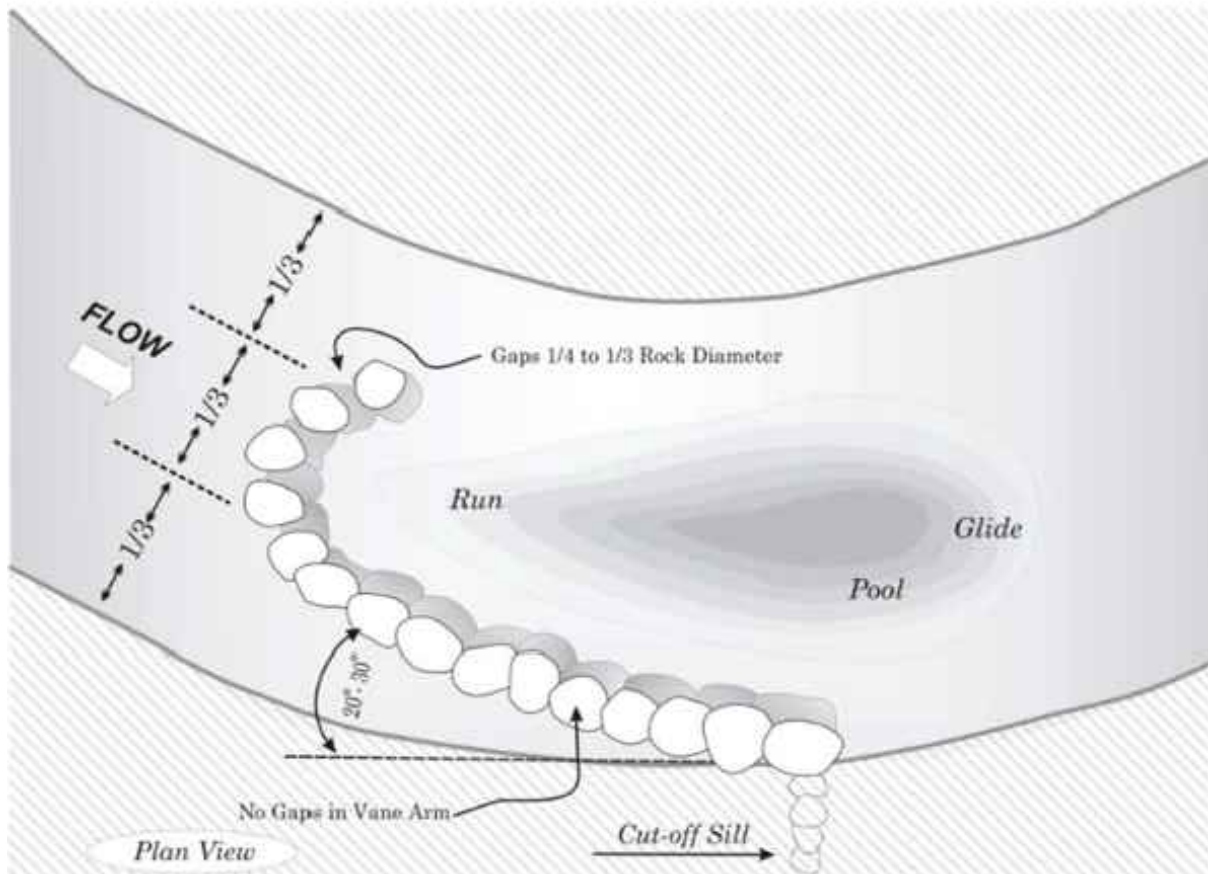
ROCK CONSTRUCTION ENTRANCE
N.T.S.



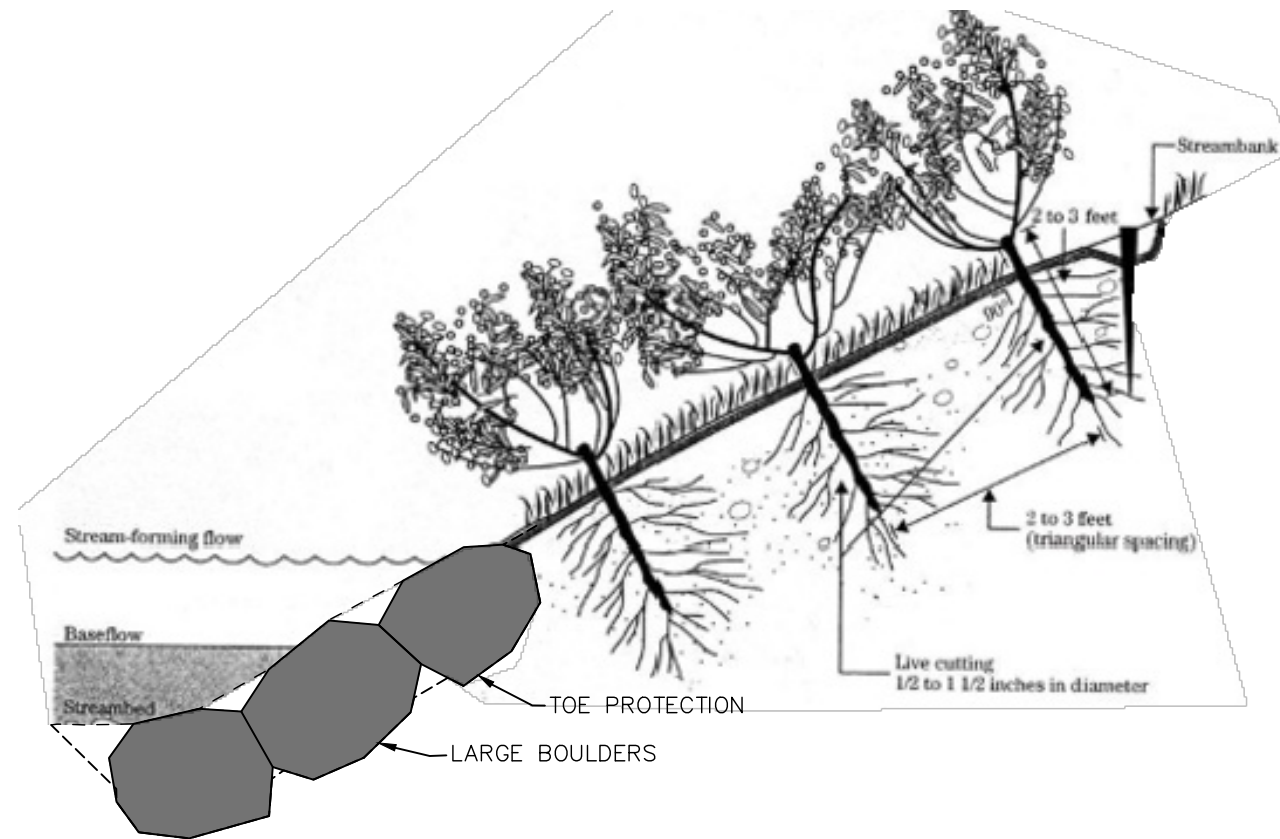
ROOT WAD DEFLECTOR
N.T.S.



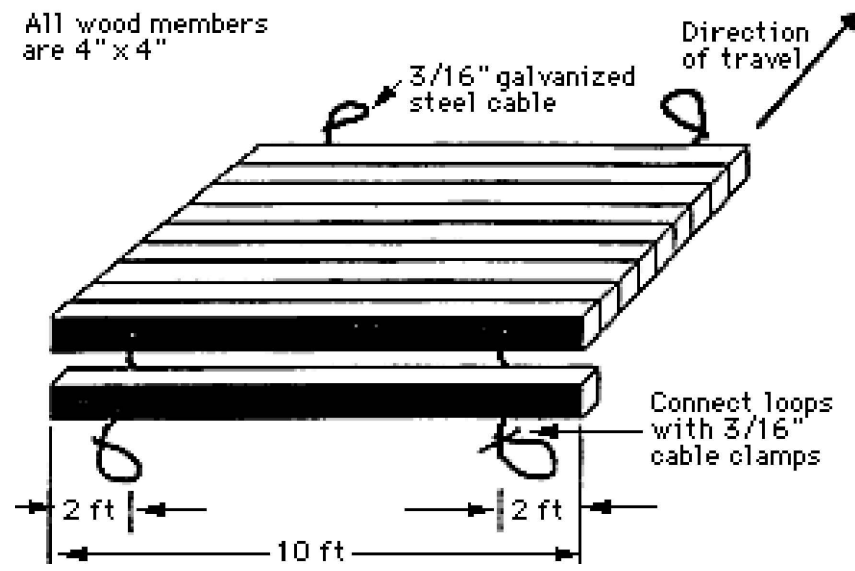
SECTION VIEW



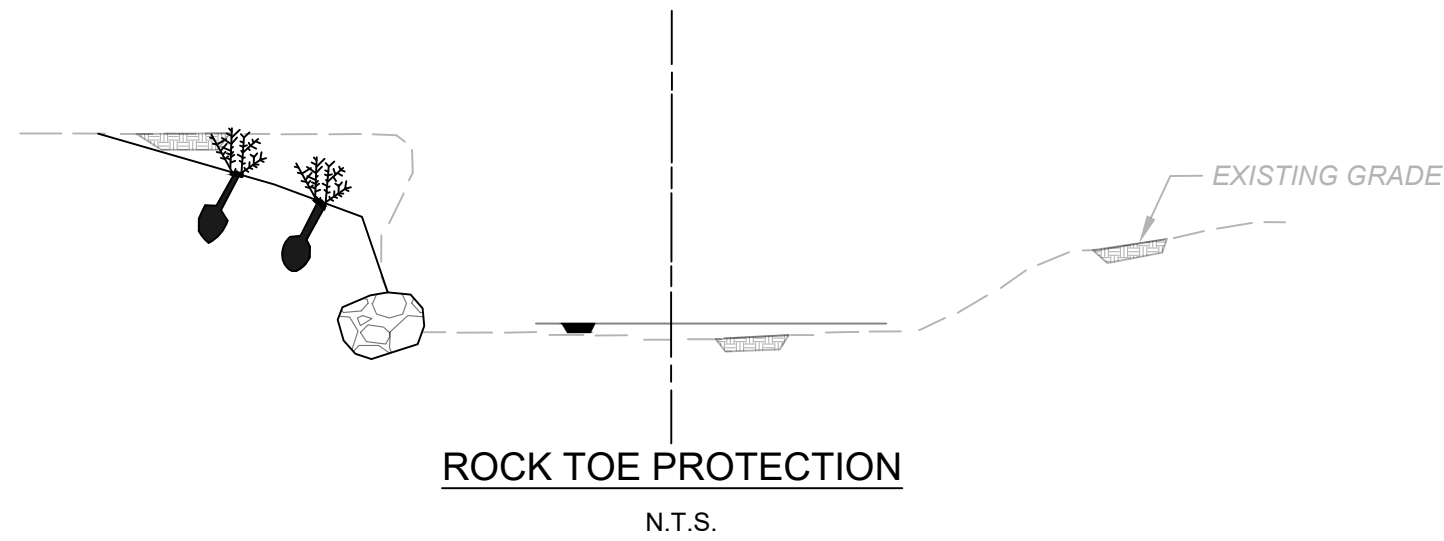
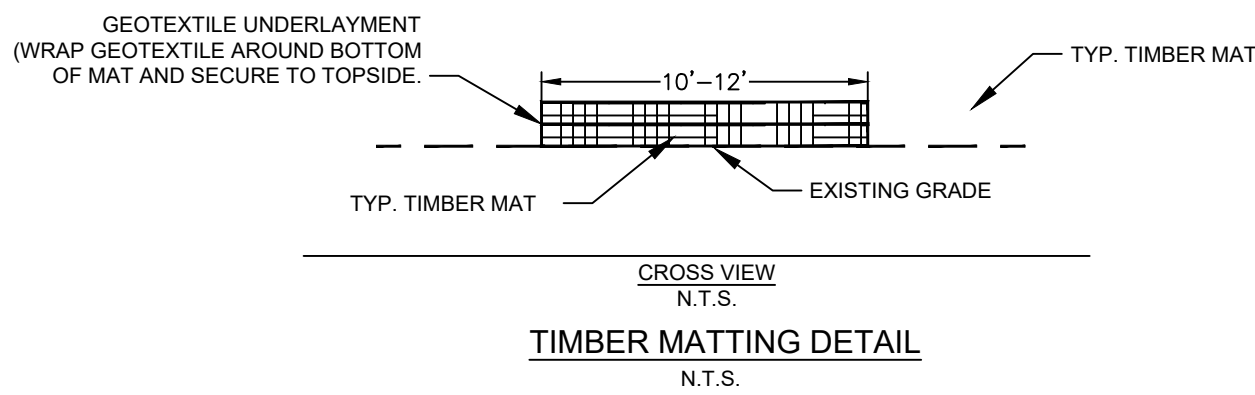
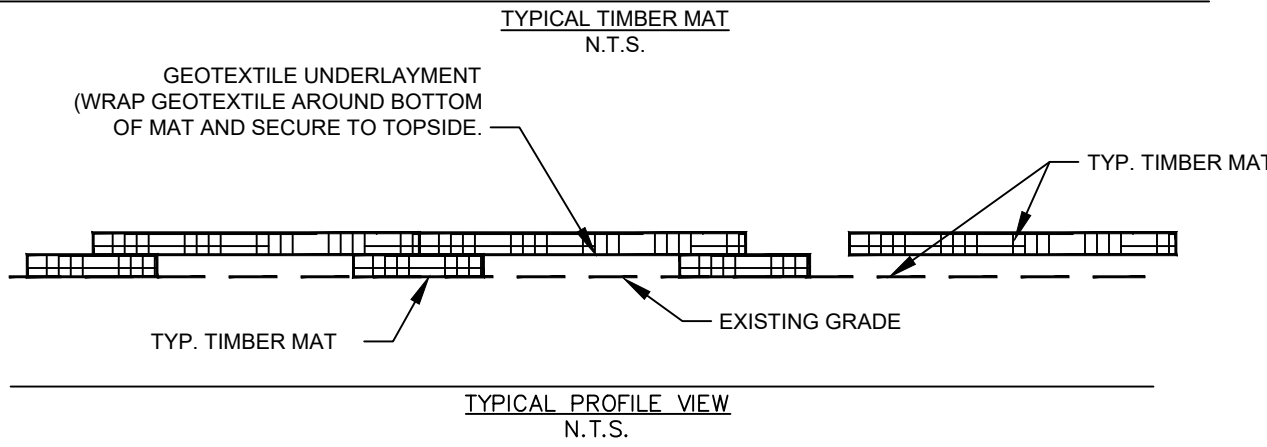
J-HOOK ROCK VANE DETAIL
N.T.S.



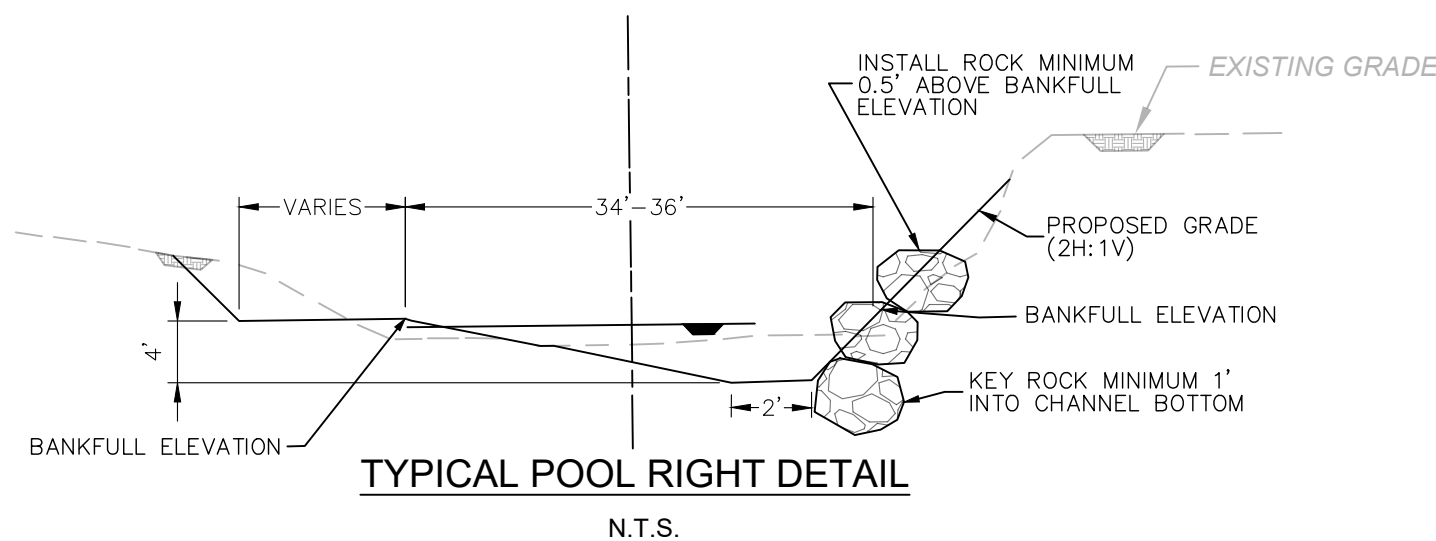
LIVE STAKING DETAIL
N.T.S.



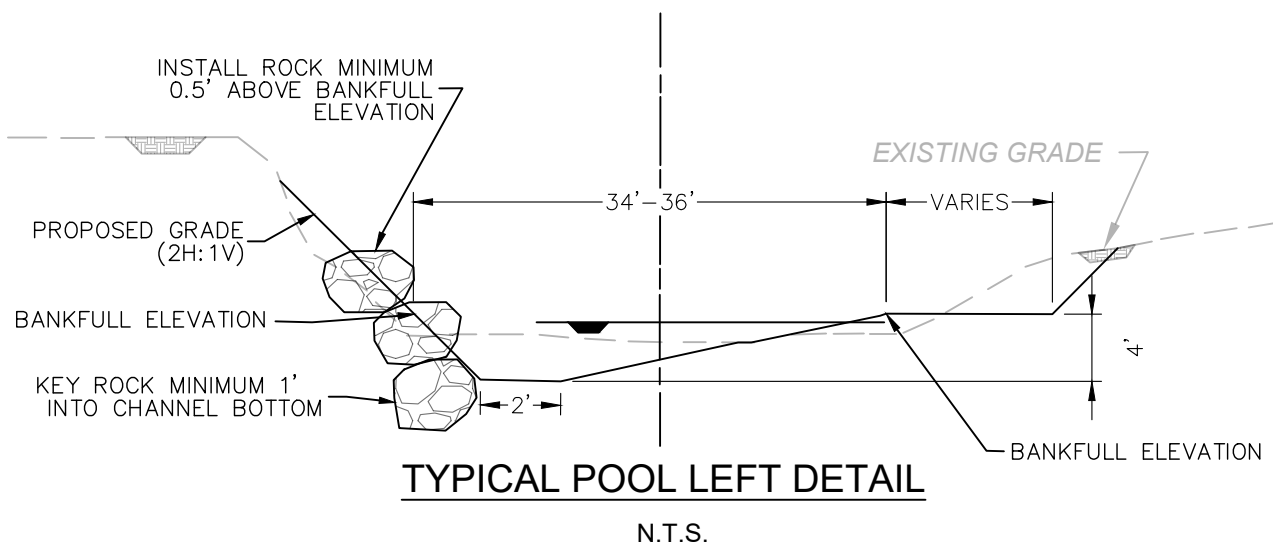
- NOTES:
1. A GEOTEXTILE UNDERLAYMENT SHALL BE USED UNDER THE TIMBER MAT.
 2. E&S PROTECTION IS RECOMMENDED ON THE SIDES TO PREVENT SEDIMENT FROM ENTERING ANY RESOURCES



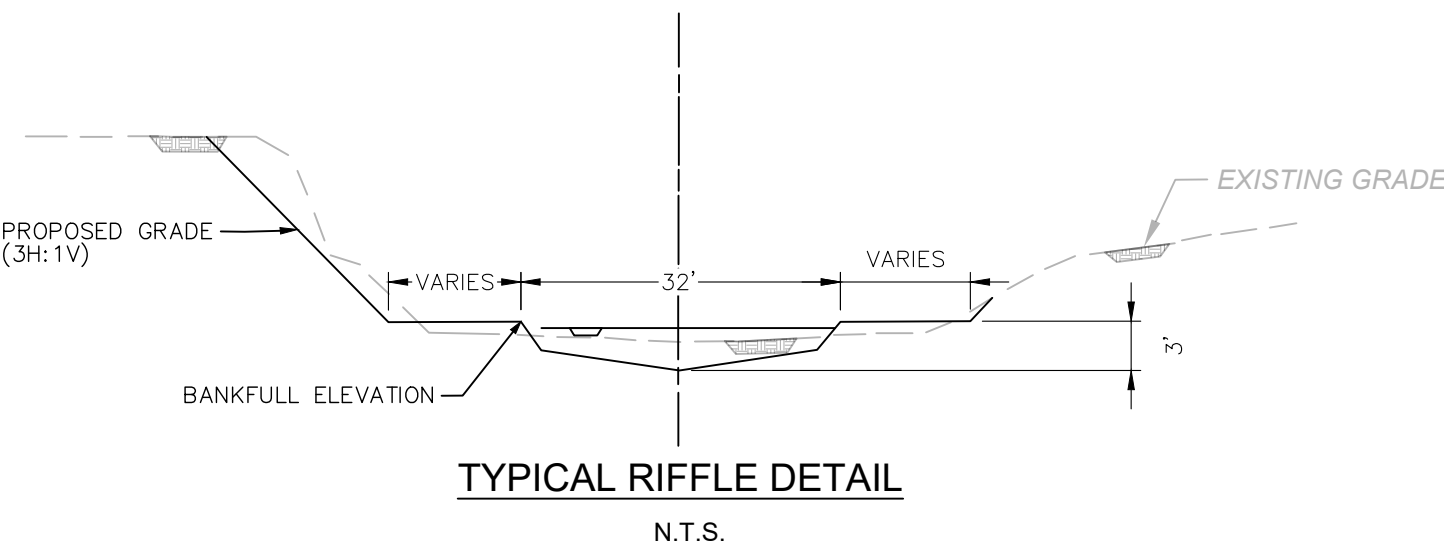
ROCK TOE PROTECTION
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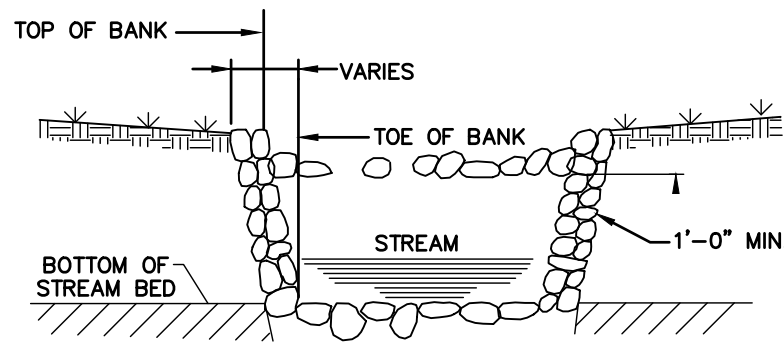
TYPICAL POOL RIGHT DETAIL
N.T.S.



TYPICAL POOL LEFT DETAIL
N.T.S.

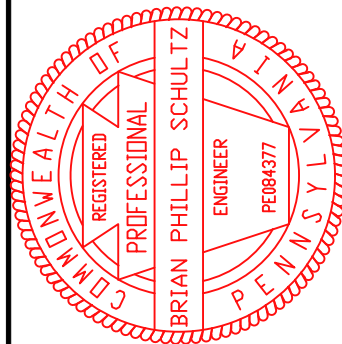


TYPICAL RIFFLE DETAIL
N.T.S.



STREAM CROSSING DETAIL (AS NEEDED)
N.T.S.

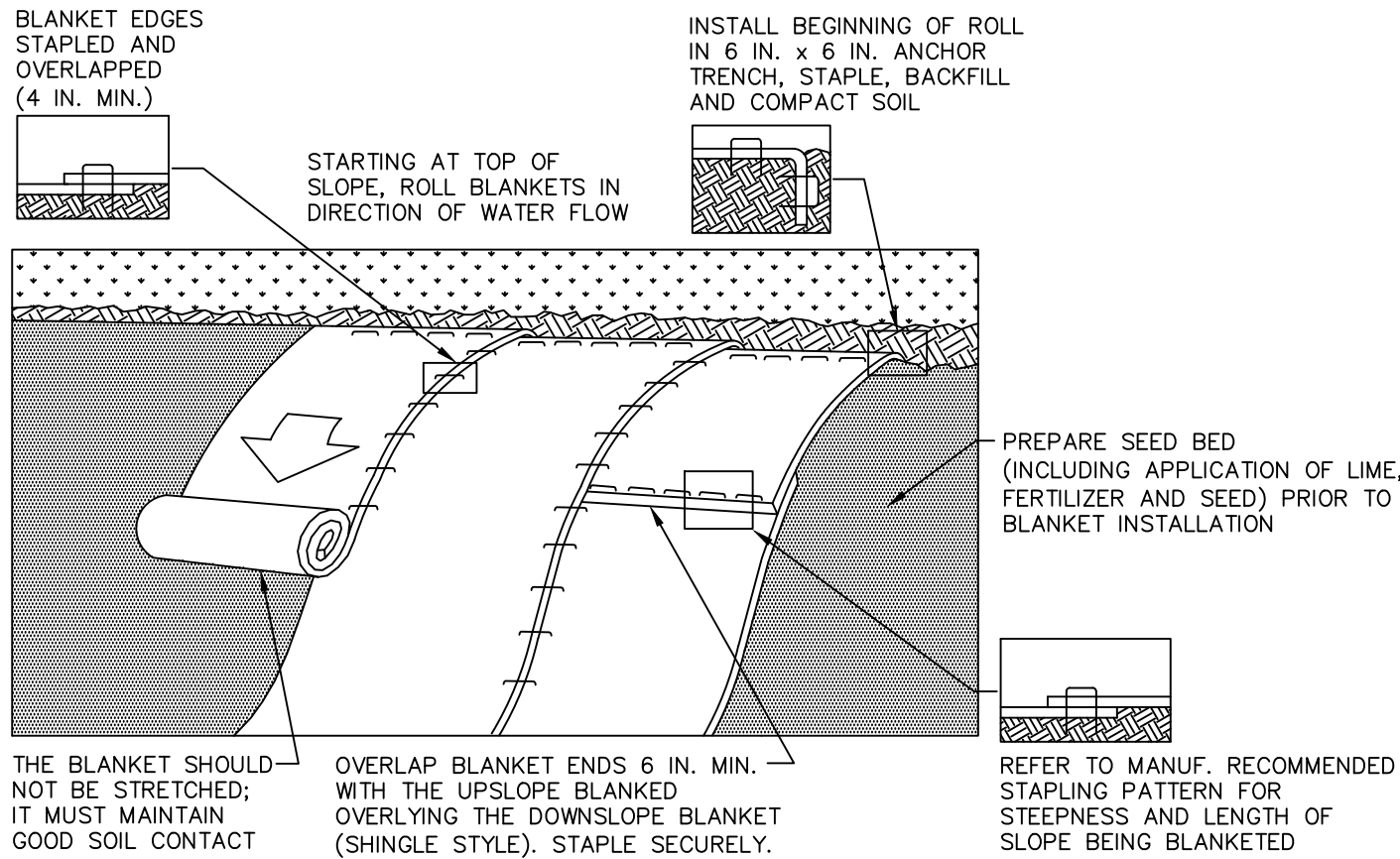
STREAMBANK RESTORATION DETAILS
N.T.S.



REVISIONS	DESCRIPTION	APPROVED
	COMMENTS FROM YCCD	BPS
	COMMENTS FROM KELLY THOMPSON	BPS
DATE	03/04/2026	
DATE	05/15/2026	
DRAWN BY:	AKS	
DRAFTING CK:	BPS	
ENGINEERING CK:	BPS	
CONSTRUCTION CK:	N/A	
ENVIRONMENTAL CK:	N/A	
DATE:	DECEMBER 2025	
DRAWING NO.:	ES-3	
SHEET 5 OF 8	REV. 0	

Compost Sock Fabric Minimum Specifications					
Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropylene (HDMFPP)
Material Characteristics	Photo-degradable	Photo-degradable	Bio-degradable	Photo-degradable	Photo-degradable
Sock Diameters	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years
Two-ply Systems					
Inner Containment Netting			HDPE biaxial net		
			Continuously wound		
			Fusion-welded junctures		
			3/4" X 3/4" Max. aperture size		
Outer Filtration Mesh			Composite Polypropylene Fabric (Woven layer and non-woven fleece mechanically fused via needle punch)		
			3/16" Max. aperture size		
Sock fabrics composed of burlap may be used on projects lasting 6 months or less.					
Filtrexx & JMD					

TABLE 4.2 Compost Standards	
Organic Matter Content	25% - 100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5 - 8.5
Moisture Content	30% - 60%
Particle Size	30% - 50% pass through 3/8" sieve
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum



NOTES:

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, CLOUDS, STICKS, AND GRASS.

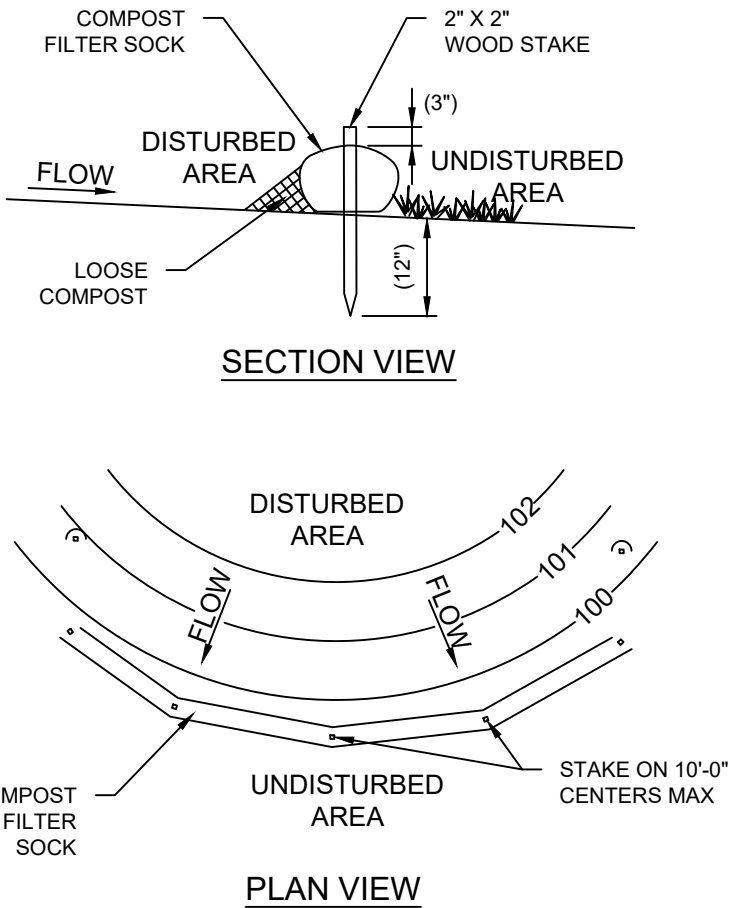
BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

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.

STANDARD CONSTRUCTION DETAIL #11-1
EROSION CONTROL BLANKET INSTALLATION

NOT TO SCALE

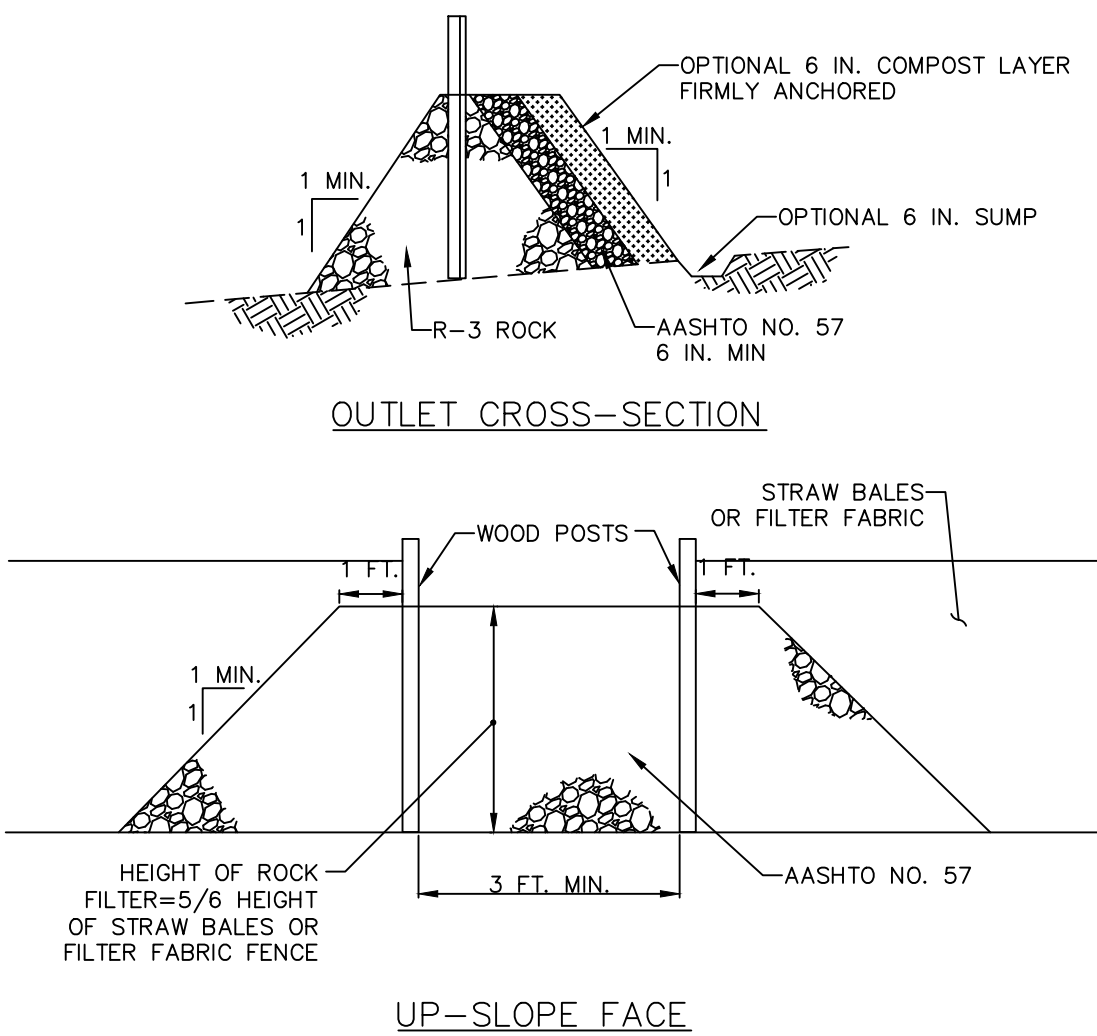


NOTES:

- COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT (SEE ABOVE). MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN ON FIGURE 4.2 IN APPENDIX A OF THE E&S PLAN.
- TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
- 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 FILTER SOCK 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.

SOCK NO.	DIA. (IN)	SOCK LENGTH (FT)
CSF-1	12	37
CSF-2	12	80
CSF-3	12	38
CFS-4	12	48

COMPOST FILTER SOCK DETAIL
N.T.S.



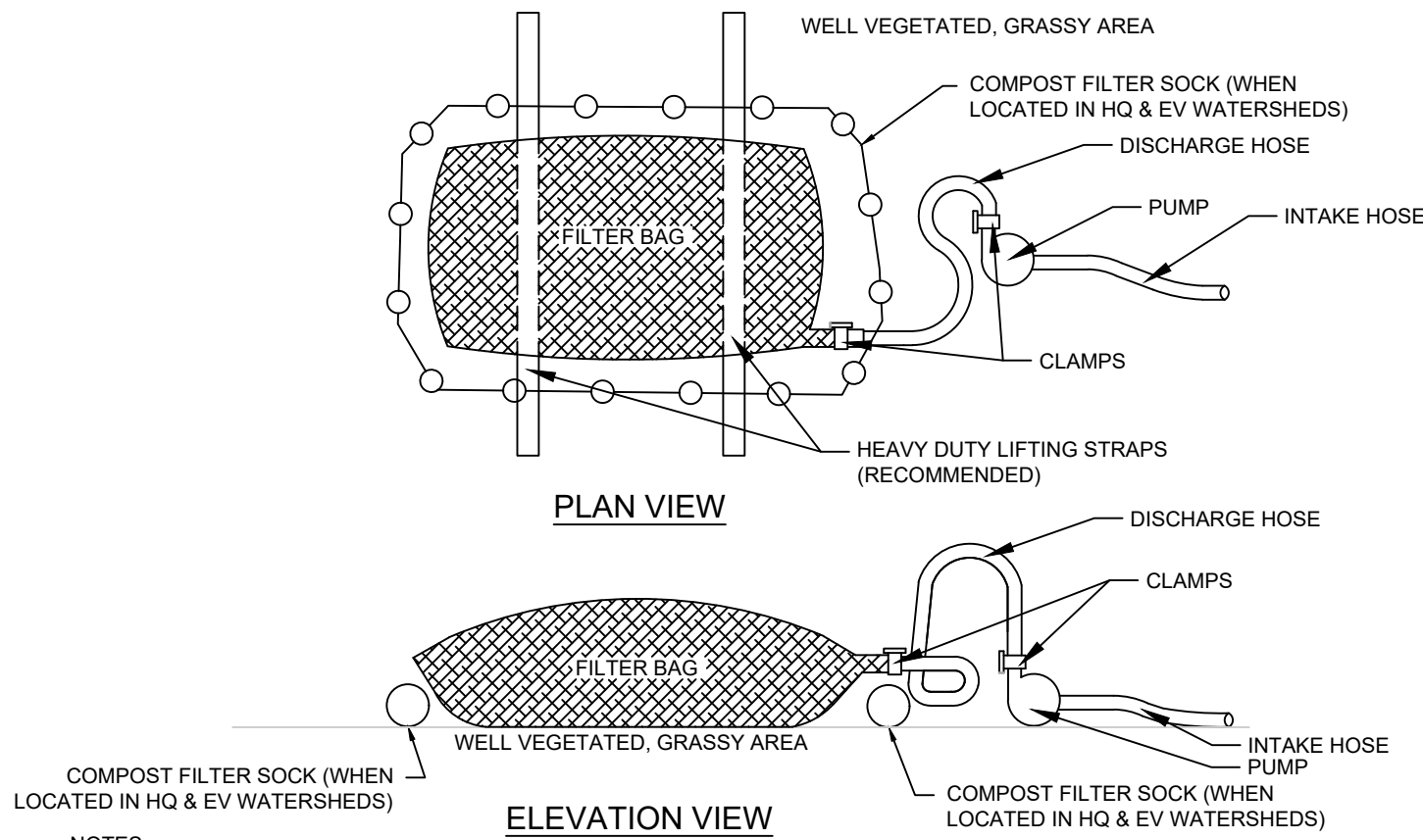
NOTES:

A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

STANDARD CONSTRUCTION DETAIL #4-6
ROCK FILTER OUTLET

NOT TO SCALE



NOTES:

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

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WDTN STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

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

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

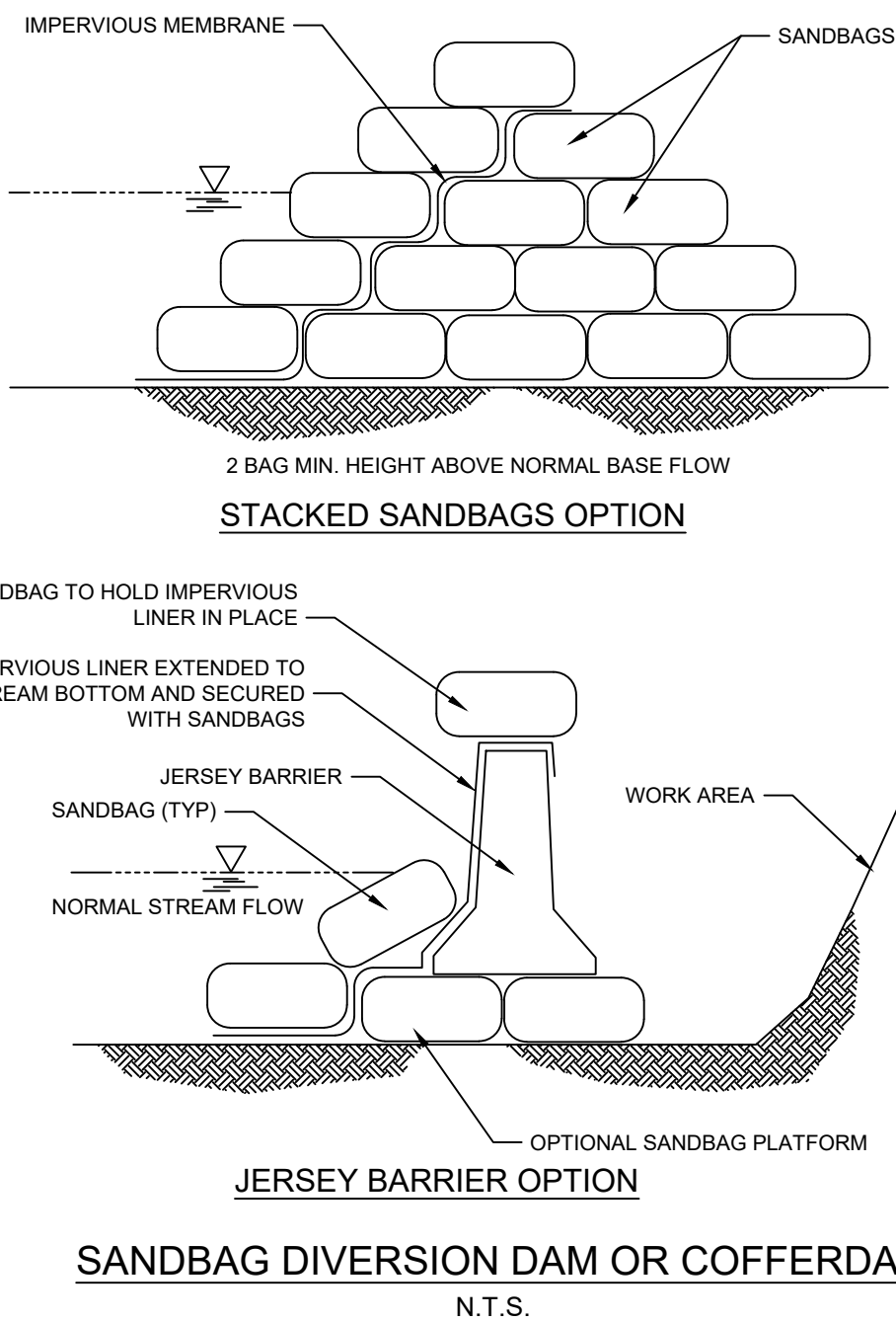
NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

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

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

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

PUMPED WATER FILTER BAG DETAIL
N.T.S.



SANDBAG DIVERSION DAM OR COFFERDAM
N.T.S.

REVISIONS	DATE	DESCRIPTION	APPROVED
	03/04/2026	COMMENTS FROM YCCD	BPS
	05/15/2026	COMMENTS FROM KELLY THOMPSON	BPS

DRAWN BY:	AKS
DRAFTING CK:	BPS
ENGINEERING CK:	BPS
CONSTRUCTION CK:	N/A
ENVIRONMENTAL CK:	N/A
DATE:	DECEMBER 2025
DRAWING NO.:	ES-4
SHEET 6 OF 8	REV. 0

RECOMMENDED PERMANENT SEED MIXTURES

TAKEN FROM PADEP OIL AND GAS OPERATORS MANUAL					
MIXTURE NUMBER	SEASON	SPECIES	SEEDING RATE lb./ac.		
1	COOL	TALL FESCUE*, OR	79		
		FINE FESCUE, PLUS	46		
		REDDTOP, OR	4		
		PERENNIAL RYEGRASS, PLUS BIRDSFOOT TREFOIL	19 8		
2	COOL	BIRDSFOOT TREFOIL, PLUS TALL FESCUE*	8 40		
		3	COOL	ORCHARDGRASS, OR SMOOTH BROMEGRASS, PLUS BIRDSFOOT TREFOIL	26 33 8
4	WARM			FLATPEA, PLUS TALL FESCUE*, OR PERENNIAL RYEGRASS	27 26 25
		5	WARM	DEERTONGUE, PLUS BIRDSFOOT TREFOIL	21 8
				6	WARM

* USE ONLY ENDOPHYTE FREE VARIETIES SUCH AS JOHNSTONE, BARCEL, OR FESTORINA.

SEED MIXTURES FOR STABILIZING DISTURBED AREAS

SITE CONDITION	SEED MIXTURE (SELECT ONE MIXTURE)
CUT SLOPES AND FILLS (NOT MOWED) WELL-DRAINED VARIABLE DRAINAGE	2, 4, OR 6 2
CUT SLOPES AND FILLS (MOWED)	1
CUT SLOPES AND FILLS (GRAZED/HAY)	1, 2, OR 3
GULLIES AND ERODED AREAS	2 OR 6
EROSION CONTROL BMPS CHANNELS, DRAINAGE DITCHES, TRAP EMBANKMENTS, ETC. FOR HAY OR SILAGE	1 OR 2 2 OR 3
RIGHT-OF-WAY WELL-DRAINED VARIABLE DRAINAGE WELL-DRAINED AREAS FOR GRAZING / HAY	4 OR 6 2 2 OR 3
STRIP MINED AREAS SPOILS, WASTE AREAS, FLY ASH, SLAG, ETC FOR GRAZING / HAY.	2, 4, OR 5 2, 3, OR 6

GENERAL MAINTENANCE NOTES FOR ALL BMPS:

ROUTINE MAINTENANCE INSPECTIONS WILL BE REQUIRED TO ENSURE THE PERFORMANCE OF ALL THE SEDIMENT CONTROL BMP DEVICES UNTIL SITE STABILIZATION HAS BEEN REACHED. AT A MINIMUM, ALL STRUCTURES AND DEVICES SHALL BE INSPECTED ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM WATER EVENT. THIS INSPECTION SHALL BE FOLLOWED WITH A REPAIR SCHEDULE OF ALL NOTED DEFICIENCIES. VEGETATION PROGRESS SHALL ALSO BE INCLUDED IN THIS INSPECTION. VOID AREAS SHALL PROMPTLY BE RESEEDD AND MULCHED TO ESTABLISH PROTECTION.

UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING, MUST BE DONE IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS TO THOSE INSTALLED, WILL BE REQUIRED.

SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF WITHIN THE LIMIT OF DISTURBANCE IN LANDSCAPE AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN STOCKPILES AREAS.

A LOG SHOWING THE DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THAT THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO THE YORK COUNTY CONSERVATION DISTRICT OR OTHER REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.

COMPOST FILTER SOCK MAINTENANCE SCHEDULE:

- SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER.
- ANY SECTION OF THE BARRIER WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET.
- CHECK COMPOST FILTER SOCK FOR TORN OR OTHERWISE DAMAGED SECTIONS ALLOWING WATER TO FLOW UNDER OR AROUND THE BARRIER.
- REPAIR ANY DEFICIENCIES IMMEDIATELY.
- REPLACE BIODEGRADABLE COMPOST FILTER SOCKS 6 MONTHS AFTER INSTALLATION AND REPLACE PHOTODEGRADABLE COMPOST FILTER SOCKS 12 MONTHS AFTER INSTALLATION.

SEEDING AND MULCHING:

- REPAIR AND RE-SEED ANY ERODED AREAS DISTURBED BY EROSION OR SLOPE MOVEMENT IMMEDIATELY.

E&S CONTROL BMP REMOVAL:

- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPS MUST BE STABILIZED IMMEDIATELY.

CLEAN FILL IS UNCONTAMINATED, NONWATER-SOLUBLE, NONDECOMPOSABLE INERT SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND RECOGNIZABLE AS SUCH. (25 PA. CODE 271.101 AND 287.101) THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED.

TO DETERMINE WHETHER A FILL IS CLEAN OR REGULATED, A PERSON MUST PERFORM ENVIRONMENTAL DUE DILIGENCE. ANALYTICAL ASSESSMENT, TESTING OR SAMPLING IS ONLY REQUIRED IF VISUAL INSPECTION OR REVIEWS OF HISTORIC PROPERTY USE INDICATES EVIDENCE OF THE RELEASE OF A REGULATED SUBSTANCE.

THE USE OF CLEAN FILL IS REGULATED UNDER ENVIRONMENTAL LAWS AND REGULATIONS. THE USE OF MATERIALS AS CLEAN FILL UNDER DEP'S CLEAN FILL POLICY, MUST COMPLY WITH ALL APPLICABLE REQUIREMENTS GOVERNING PLACEMENT, SUCH AS CHAPTER 102 (EROSION AND SEDIMENT CONTROL) AND CHAPTER 105 (DAM SAFETY AND WATERWAY MANAGEMENT).

ANY PERSON PLACING CLEAN FILL WHICH HAS BEEN AFFECTED BY A RELEASE OF A REGULATED SUBSTANCE ON A PROPERTY MUST CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL ON FORM FP-001. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL.

BEST MANAGEMENT PRACTICES (BMP) MUST BE FOLLOWED PRIOR TO DEMOLITION ACTIVITIES TO REMOVE MATERIALS LIKE LEAD BASED PAINT SURFACE, FRIABLE ASBESTOS AND HAZARDOUS MATERIALS SUCH AS MERCURY SWITCHES, PCB BALLASTS AND FLORESCENT LIGHT BULBS FROM A BUILDING IF THE BRICK, BLOCK OR CONCRETE IS USED AS CLEAN FILL.

CLEAN FILL MAY NOT CONTAIN ANY FREE LIQUIDS BASED ON VISUAL INSPECTION, AND SHALL NOT CREATE NUISANCES (FOR EXAMPLE OBJECTIONABLE ODORS) TO USERS OF RECEIVING PROPERTY OR ADJACENT PROPERTY OWNERS.

RECOMMENDED TEMPORARY COVER OR NURSE CROPS

SPECIES	NURSE CROP SEEDING RATE (LB/ACRE)	TEMPORARY COVER SEEDING RATE (LB/ACRE)
FOR SPRING SEEDING (UP TO JUNE 15)		
ANNUAL RYEGRASS, OR SPRING OATS, OR WINTER WHEAT, OR WINTER RYE, OR SPRING OATS PLUS RYEGRASS (ANNUAL OR PERENNIAL)	5	40
	64	96
	30	180
	56	168
	64 (OATS) 10 (RYE)	64 (OATS) 20 (RYE)
FOR LATE SPRING & SUMMER SEEDING (JUNE 16 - AUGUST 15)		
ANNUAL RYEGRASS, OR JAPANESE OR FOXTAIL MILLET, OR SUDANGRASS, OR SPRING OATS, OR WINTER RYE, OR WINTER RYE	5	40
	12	35
	10	40
	64	96
	30	180
	56	168
FOR LATE SUMMER & FALL SEEDING (AUGUST 16 AND LATER)		
ANNUAL RYEGRASS, OR WINTER WHEAT, OR WINTER RYE	5	40
	56	168
	30	180

NOTES:

- SEEDING APPLICATION RATES ARE STATED AS POUNDS PER ACRE OF PURE LIVE SEED (PERCENTAGE OF PURE SEED MULTIPLIED BY THE PERCENTAGE OF GERMINATION) FOR EACH SPECIES. APPLIED SEEDING RATES SHALL MEET, OR EXCEED, THE HIGHEST CALCULATED INDIVIDUAL SPECIES SEEDING RATE BASED ON THE SEED MIX UTILIZED.
- CONTRACTOR SHALL SELECT SEED MIXTURES APPROPRIATE FOR SITE SPECIFIC CONDITIONS INCLUDING SLOPE OF THE WORK AREA, SOIL PH AND FERTILITY, AVAILABLE SUNLIGHT AND ANTICIPATED USE OF THE WORK AREA.
- AREAS THAT MAY BE SUBJECT TO EARTHMOVING WITHIN 12 MONTHS MAY BE STABILIZED WITH TEMPORARY SEED MIXTURES. ALL OTHERS SHOULD BE STABILIZED WITH PERMANENT SEED MIXTURES.
- CONTRACTOR SHALL MAKE PREPARATIONS FOR SEEDING AND MULCHING AS DISTURBED AREAS APPROACH FINAL GRADE. 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.
- CONTRACTOR SHALL APPLY TOPSOIL AND PREPARE THE SEED BED IN CONFORMANCE WITH PROJECT SPECIFICATIONS PRIOR TO APPLICATION OF SEED FOR PERMANENT STABILIZATION.

STABILIZATION DURING NON-GROWING SEASONS:

ALL CONSTRUCTION SHOULD BE PLANNED FOR COMPLETION WITHIN THE RECOMMENDED DATES FOR THE APPLICATION OF PERMANENT SEEDING AND ESTABLISHMENT OF A PERMANENT VEGETATIVE COVER, HOWEVER, WHEN CONSTRUCTION MUST BE DONE AND IS COMPLETED DURING A NON-GROWING SEASON (WINTER TIME, ETC.), TEMPORARY STABILIZATION BMPS MUST BE IMPLEMENTED AND ADEQUATELY MAINTAINED. THE APPLICATION OF STRAW MULCH AT THE RATE OF THREE (3) TONS PER ACRE IS RECOMMENDED. THE BMPS SHOULD BE CHECKED WEEKLY (UNLESS SNOW COVERED) TO IDENTIFY AREAS THAT BECOME BARE. THESE BARE AREAS SHOULD BE COVERED WITH A PROPERLY INSTALLED EROSION CONTROL MATTING OR MULCH.

ALL TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROLS MUST BE MAINTAINED UNTIL 70% PERENNIAL VEGETATIVE COVER IS ACHIEVED.

SOIL EROSION AND SEDIMENTATION CONTROL PLAN NOTES

A. GENERAL EROSION AND SEDIMENTATION CONTROL GUIDELINES CONTRACTOR'S RESPONSIBILITIES

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE YORK COUNTY CONSERVATION DISTRICT 72 HOURS PRIOR TO CONSTRUCTION AND 72 HOURS PRIOR TO LEAVING THE SITE.

YORK COUNTY CONSERVATION DISTRICT
2401 PLEASANT VALLEY ROAD, SUITE #101 RM #139,
YORK, PA 17402
(717) 840-7430
- A COPY THE EROSION AND SEDIMENTATION CONTROL PLAN MUST BE AVAILABLE AT THE SITE OF THE EARTHMOVING ACTIVITY DURING CONSTRUCTION AND UNTIL THE SITE IS STABILIZED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ANY EXCESS MATERIAL AND SHALL MAKE SURE THAT SITE(S) RECEIVING THE EXCESS HAVE AN APPROVED EROSION CONTROL PLAN THAT MEETS THE CONDITIONS OF CHAPTER 102 AND/OR OTHER STATE AND FEDERAL REGULATIONS.

THE CONTRACTOR SHALL NOT PERMIT MUD OR SEDIMENT-LADEN WATER TO EXIT THE CONSTRUCTION SITE. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO DOWNSTREAM PROPERTIES AS A RESULT OF HIS FAILURE TO PREVENT SUCH DAMAGES.
- THE INTENT OF THE PLAN/NARRATIVE IS TO INDICATE GENERAL MEANS OF COMPLIANCE WITH THE REQUIREMENTS OF THE RULES AND REGULATIONS OF CHAPTER 102 OF THE PENNSYLVANIA CLEAN STREAMS LAW. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IMPLEMENT THESE METHODS PLUS ADDITIONAL METHODS AS MAY BE NECESSARY BECAUSE OF THE CONDITIONS, AND OR CONSTRUCTION PROCEDURES IN ORDER TO ASSURE COMPLIANCE WITH THE APPLICABLE LAW. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL SEDIMENT AND EROSION CONTROL FACILITIES SO THAT THEY PERFORM AS REQUIRED BY LAW.

B. GENERAL SEDIMENT AND EROSION CONTROL METHODS/PROCEDURES

- ALL WORK SHALL BE CONDUCTED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AND ON-SITE AT ALL TIMES.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN DRAWINGS IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SIDE SLOPES MUST BE 2H:1V OR FLATTER.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES WITH POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES.
- THE CONTRACTOR SHALL ASSURE THAT AN APPROVED EROSION AND SEDIMENT CONTROL PLAN IS BEING IMPLEMENTED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF LOCATION.
- ALL EARTH DISTURBANCE ACTIVITY SHALL PROCEED IN ACCORDANCE WITH THE CONSTRUCTION SEQUENCE.
- THE OPERATOR SHALL INSPECT ALL EROSION CONTROL BMPS WEEKLY AND AFTER EACH RUNOFF EVENT. IF BMPS FAIL TO PERFORM AS EXPECTED, MODIFICATIONS OR REPLACEMENT BMPS SHALL BE IMPLEMENTED.
- DISTURBED AREAS WILL BE CONSIDERED STABILIZED WHEN A UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES HAS BEEN ACHIEVED.
- THE CONTRACTOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE PA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY,DUMP, OR DISCHARGE ANY BUILDING MATERIALS OR WASTES AT THE SITE.

MULCH APPLICATION RATE DETAIL

MULCH TYPE	RATE	NOTES
STRAW	3 TON/ACRE	EITHER WHEAT OR OAT STRAW, FREE OF WEEDS, NOT CHOPPED
HAY	3 TON/ACRE	TIMOTHY, MIXED CLOVER, OR OTHER NATIVE FORAGE GRASSES
WOOD FIBER HYDROMULCH	VARIABLE	APPLY PER PRODUCT MANUFACTURER RECOMMENDATIONS
HYDRAULIC EROSION CONTROL PRODUCTS	VARIABLE	APPLY PER PRODUCT MANUFACTURER RECOMMENDATIONS

NOTES:

- PLACE MULCH IMMEDIATELY AFTER SEEDING OR, AT A MAXIMUM, WITHIN 48 HOURS AFTER SEEDING IS COMPLETED.
- LOOSE MULCH SHALL BE ANCHORED IN CONFORMANCE WITH PROJECT SPECIFICATIONS IMMEDIATELY AFTER APPLICATION.
- DURING PERIODS OF NON-GERMINATION, THE ABOVE LISTED MULCH TYPES (APPLIED AT THE SPECIFIED RATE) MAY BE USED FOR TEMPORARY STABILIZATION.
- EROSION CONTROL MATTING SHALL BE INSTALLED IN PLACE OF MULCHING AT ALL LOCATIONS SPECIFIED IN THE EROSION CONTROL MATTING DETAIL AND ALL OTHER DISTURBED AREAS SPECIFICALLY IDENTIFIED ON THE PLAN DRAWINGS.

GENERAL NOTES:

- THE CONTRACTOR MUST CALL PA ONE-CALL (1-800-242-1776) AT LEAST THREE (3), BUT NOT MORE THAN TEN (10) BUSINESS DAYS PRIOR TO BEGINNING ON-SITE WORK.
- CLEARLY MARK AND PROTECT ALL UTILITIES WITHIN THE WORK AREA.
- ALL REFUELING AND EQUIPMENT MAINTENANCE WILL OCCUR IN THE DESIGNATED MATERIAL AND EQUIPMENT LAYDOWN AREA.
- THE CONTRACTOR SHALL PROCEED IN ACCORDANCE WITH THE CONSTRUCTION SEQUENCE. ANY DEVIATION FROM THE SEQUENCE MUST BE AUTHORIZED BY THE DESIGN ENGINEER.
- STREAM BANKS ARE REFERRED TO AS LEFT AND RIGHT FROM A VIEW PERSPECTIVE LOOKING DOWNSTREAM.

CONSTRUCTION NOTES:

- ACCESS TO THE PROJECT IS FROM BORTNER ROAD. ROCK SHALL BE DELIVERED TO THE TEMPORARY STAGING AREA AND SHUTTLED TO THE WORK AREA AS NEEDED. CONTRACTOR SHALL PROTECT WETLANDS AND DRAINAGE PIPE WITH TIMBER MATS.
- CONSTRUCTION SHOULD BE COMPLETED DURING LOW FLOW CONDITIONS.
- CONSTRUCTION SHALL START DOWNSTREAM AND PROCEED UPSTREAM. ALL DISTURBED AREAS SHALL BE STABILIZED AS WORK PROCEEDS UPSTREAM. WORK INCLUDES RESTORING FLOW TO THE ABANDONED CHANNEL AT THE DOWNSTREAM END OF THE PROJECT. THIS SHALL BE COMPLETED IN DRY CONDITIONS PRIOR TO RESTORING FLOW TO THE CHANNEL..
- ALL WORK SHALL BE COMPLETED FROM THE STREAM BANKS OR EDGE OF CHANNEL.
- ANY LARGE WOOD OR ROOTS WADS WITHIN THE LIMIT OF DISTURBANCE SHALL BE SALVAGED AND USED AS HABITAT.
- THE MINIMUM SIZE OF ROCK FOR STREAM BANK PROTECTION, CHANNEL BLOCKS, AND HABITAT STRUCTURE SHALL BE R-6. FOOTER ROCK SHALL BE KEYED INTO THE CHANNEL A MINIMUM OF 1'.
- THE PROPOSED CHANNEL BLOCK SHALL CONSIST OF LARGE ROCK AND/OR WOOD TO DIVERT FLOW INTO THE NEWLY RESTORED CHANNEL. BACKFILL OF AVULSION CHANNEL SHALL CONSIST OF MATERIAL SALVAGED DURING BANK GRADING AND CHANNEL SHAPING AND MAY INCLUDE WOODY SLASH SALVAGED DURING SITE PREPARATION. FILL SHALL BE PLACED IN 1' LIFTS AND COMPACTED. FILL PLACEMENT SHALL START UPSTREAM AND PROCEED DOWNSTREAM.
- BIOENGINEERING MATERIAL (WILLOWS/DOGWOODS) ARE PRESENT WITHIN PROJECT LIMITS. DEPENDING ON TIME CONSTRUCTION, THIS MATERIAL SHALL BE SALVAGED AND USED FOR LIVE STAKING.
- DURING CONSTRUCTION MULTIPLE SOIL TYPES AND CONDITIONS WILL BE ENCOUNTERED. THE CONTRACTOR SHALL HAVE EXPERIENCE IN WORKING WITH ALLUVIAL AND FLUVIAL SOILS. THE CONTRACTOR SHALL SEGREGATE ENCOUNTERED SOILS BASED ON THE OVERALL SCOPE OF WORK FOR THE PROJECT AND UTILIZE SOIL TYPES BASED ON THE BEST SUITED APPLICATIONS, I.E. GRAVEL FOR STREAM BED AND STREAM STRUCTURE BACKFILL, COHESIVE SOILS FOR GRADING AND SHAPING, TOPSOIL FOR STREAM BANKS AND FLOODPLAINS. SOIL SUCH AS MUD/ORGANIC SEDIMENTS SHALL BE PLACED AND UTILIZED ON THE FLOODPLAIN OR IN OTHER LOCATIONS SUCH AS CONSTRUCTED FLOODPLAIN WETLANDS. PROBLEM SOILS SHALL NOT BE UTILIZED WERE THERE IS A HIGH RISK FOR REINTRODUCTION INTO THE STREAM CHANNEL. THE CONTRACTOR SHALL UNDERSTAND THAT VARIATIONS OF SOILS AND GROUNDWATER ELEVATION MAY IMPACT SITE AND SOILS CONDITIONS AND SHALL IMPLEMENT ADAPTIVE MANAGEMENT TO BEST HANDLE ON-SITE CONDITIONS.

CONSTRUCTION SEQUENCE:

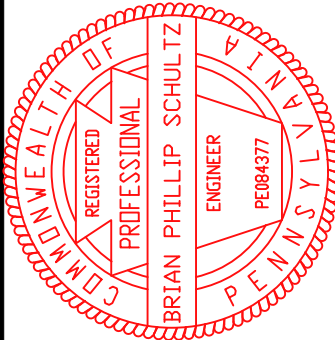
- INSTALL CONSTRUCTION ENTRANCE AND USE EXISTING ACCESS TRAIL TO STREAM. CLEAR AND GRUB AS NEEDED TO IMPROVE ACCESS INSTALL EROSION AND SEDIMENT CONTROL MEASURES. INSTALL CULVERT PROTECTION OVER WETLAND CULVERT CROSSING.
- MOBILIZE EQUIPMENT AND MATERIALS TO THE DOWNSTREAM EXTENT OF THE PROJECT. RESTORE THE ABANDONED CHANNEL BETWEEN PROPOSED PROFILE STATIONS 7+56 AND 10+82 TO DESIGN GRADES. TEMPORARILY STOCKPILE SOIL MATERIAL IN DESIGNATED AREAS.
- SLOWLY DIVERT FLOW INTO NEWLY RESTORED CHANNEL BY SETTING FOOTER ROCKS FOR CHANNEL BLOCK AT EXISTING PROFILE 8+00. CONTINUE BUILDING CHANNEL BLOCK UNTIL FLOW IS COMPLETELY DIVERTED INTO NEW CHANNEL. BEGIN BACKFILLING OLD CHANNEL WORKING UPSTREAM TO DOWNSTREAM.
- STABILIZE ALL DISTURBED AREAS BETWEEN STATIONS 7+56 AND 10+82.
- MOBILIZE EQUIPMENT AND MATERIALS TO STATION 4+20. COMPLETE ROCK TOE ARMOR, AND BANK GRADING ALONG LEFT BANK TO STATION 5+00.
- CONSTRUCT MINOR CHANNEL SHIFT BETWEEN STATION 5+00 AND 6+00 AND INSTALL J-HOOK ROCK VANE ON RIGHT BANK
- INSTALL ROCK TOE ARMOR ON RIGHT BANK BETWEEN STATIONS 6+00 AND 6+75. DO NOT DISTURB ROOT MASS ALONG THE BOTTOM OF THE SLOPE. COMPLETE MINOR CHANNEL SHAPING AS NEEDED TO DESIGN GRADES.
- COMPLETE ROCK TOE ARMOR AND BANK GRADING ALONG RIGHT BANK BETWEEN STATION 7+10 AND 8+00.
- COMPLETE FINAL GRADING AND STABILIZATION BETWEEN STATION 4+20 AND 8+00.
- COMPLETE BANK GRADING AND CHANNEL SHAPING ALONG LEFT BANK BETWEEN STATIONS 3+00 AND 4+20 AND TEMPORARILY STOCKPILE SOIL MATERIAL AS NEEDED.
- COMPLETE ROCK TOE ARMOR ON LEFT BANK BETWEEN STATIONS 0+40 AND 1+00. COMPLETE CHANNEL SHAPING BETWEEN STATION 0+00 AND 1+80.
- COMPLETE FINAL STABILIZATION. RESTORE TEMPORARY CROSSING OF WETLAND AREA.



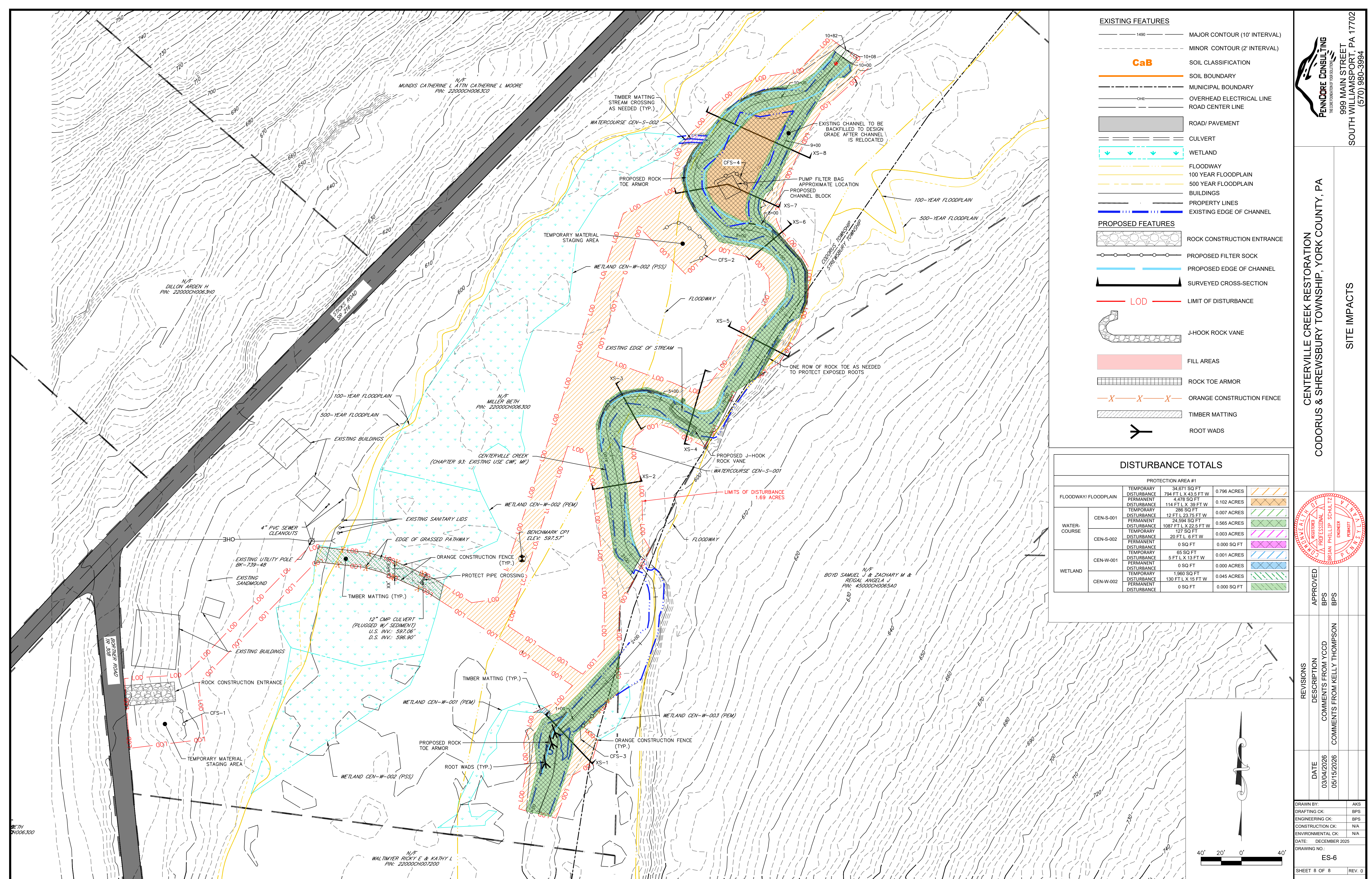
999 MAIN STREET
SOUTH WILLIAMSPORT, PA 17702
(570) 980-3994

CENTERVILLE CREEK RESTORATION
CODORUS & SHREWSBURY TOWNSHIP, YORK COUNTY, PA

E&S CONTROL NOTES



REVIEWS	DESCRIPTION	DATE	APPROVED	COMMENTS FROM YCCD	COMMENTS FROM KELLY THOMPSON
			BPS		
		03/04/2026			
		05/15/2026			
DRAWN BY:			AKS		
DRAFTING CK:			BPS		
ENGINEERING CK:			BPS		
CONSTRUCTION CK:			N/A		
ENVIRONMENTAL CK:			N/A		
DATE: DECEMBER 2025					
DRAWING NO.:			ES-5		
SHEET 7 OF 8			REV. 0		



**CENTERVILLE CREEK
RESTORATION PROJECT
STREAMBANK AND FLOODPLAIN
PLANTING AND MONITORING PLAN**



Prepared by:

Thompson Environmental Surveys & Permitting, LLC.

February 2025

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Appendices

Appendix A Planting Notes

Appendix B Planting Plan

1 Introduction

Stephen Miller is proposing to restore and stabilize portions of a roughly 800 feet of stream bank along the Centerville Creek in Codorus and Shrewsbury Townships, York County, PA. Watershed Alliance of York (WAY) has assisted Mr. Miller in securing a PADEP Section 319 Nonpoint Source Management Grant C990004785 for this project. As part of the project, WAY proposes to plant approximately 2.5 acres of the adjacent streambank and floodplain following construction. This planting and monitoring plan has been developed as part of the Waiver 16 Permit Authorization Package for the project.

2 Background

The Project is located within the United States Geological Survey (USGS) Glen Rock and Seven Valleys, PA 7.5-minute series topographical quadrangles (USGS, 2013). Land cover within the Study Area consists of forested land, open fields, and wetland/riparian areas. Land uses in the vicinity of the Project consisted of forested floodplain, forested slopes, agricultural properties, wetlands, watercourses, and secondary roadways.

2.1 Existing Soils

Three soil map units are located within the Project Study Area. Each soil map unit has a hydric soil rating given by the Natural Resources Conservation Service (NRCS) (**Table 1**).

Table 1. Soil Map Units by Study Area

Soil Map Unit	Description	Hydric Rating
MOD	Mt. Airy and Manor soils, 15 to 25 percent slopes	0
Cm	Codorus silt loam	11
MRF	Mt. Airy and Manor soils, 25 to 60 percent slopes, extremely stony	0

2.2 Existing Hydrology

The Project area drains north via Centerville Creek which is in the South Branch Codorus Creek watershed and the lower Susquehanna River Basin. Centerville Creek and its unnamed tributaries have a PA Code, Title 25, Chapter 93 designated protected aquatic life uses of Warm-Water Fishery, Migratory Fishes (WWF, MF) (Commonwealth of PA, 2025a). The Pennsylvania Department of Environmental Protection (PADEP) lists Centerville Creek as having an Existing Use Classification of Cold-Water Fishery, Migratory Fishes (CWF, MF) (PADEP, 2025). The Pennsylvania Fish and Boat Commission (PFBC) lists Centerville Creek as Wild Trout Waters (PFBC, 2025). According to the 2024 Final Pennsylvania Integrated Water Quality Monitoring and Assessment Report, Centerville Creek does not have an existing impairment (PADEP, 2024).

The primary source of hydrology for the existing wetlands is provided by a seasonal high-water table, surface water retention, and Centerville Creek. The hydrology will not be altered to the onsite wetlands.

It is anticipated that the project will result in improved water quality to the surrounding floodplain and adjacent wetlands.

2.3 Existing Plant Communities

The current vegetative community of the floodplain is primarily mowed meadow.

3 Planting Design

Design plans for 2.5 acres of stream bank stabilization and floodplain and wetland enhancement are located in Appendix B. The proposed site seeding, planting and stabilization, and construction sequencing necessary for the planting plan are detailed in the following discussion.

3.1 Proposed Planting and Stabilization

After construction all disturbed areas will be permanently seeded and stabilized with the specified seed mixture. The stream corridor and adjacent floodplain will be planted with willow live stakes and a diversity of native tree and shrub species including sycamore (*Platanus occidentalis*), river birch (*Betula nigra*), pin oak (*Quercus palustris*), swamp white oak (*Quercus bicolor*), red maple (*Acer rubrum*), silky dogwood (*Cornus amomum*), southern arrowwood (*Viburnum dentatum*), and winterberry (*Ilex verticillata*). Woody material will be planted at a density of 100 stems/acre for trees and 300 stems/acre for shrubs.

Any temporarily disturbed wetland areas will be seeded with a wetland seed mix (Ernst 122 FACW Wetland Meadow Mix) seeded at a rate of 20 lb/acre (or ½ pound/1,000 sf) with a cover crop of grain rye (*Secale cereal*) seeded at a rate of 30 lb/acre. The wetland seed mix includes fox sedge (*Carex vulpinoidea*, 23%), lurid sedge (*Carex lurida*, 22%), Virginia wildrye (*Elymus virginicus*, 20%), blunt broom sedge (*Carex scoparia*, 14%), soft rush (*Juncus effuses*, 3%), blue vervain (*Verbena hastata*, 3%), swamp milkweed (*Asclepias incarnata*, 2.0%), star sedge (*Carex intumescens*, 2%), golden alexanders (*Zizia aurea*, 2%), New England aster (*Aster novae-angliae*, 1%), path rush (*Juncus tenuis*, 1%), white vervain (*Verbena urticifolia*, 1%), wrinkleleaf goldenrod (*Solidago rugosa*, 0.7%), lance leaved aster (*Aster lanceolatus*, 0.5%), purplestem aster (*Aster puniceus*, 0.2%), nodding bur marigold (*Bidens cernua*, 0.5%), fringed sedge (*Carex criniata*, 0.5%), great blue lobelia (*Lobelia siphilitica*, 0.5%), square stemmed monkeyflower (*Mimulus ringens*, 0.5%), awl sedge (*Carex stipata*, 0.4%), boneset (*Eupatorium perfoliatum*, 0.4%), common sneezeweed (*Helenium autumnale*, 0.3%), American water horehound (*Lycopus americanus*, 0.3%), green bulrush (*Scirpus atrovirens*, 0.3%), woolgrass (*Scirpus cyperinus*, 0.3%), bigleaf mountainmint (*Pycnanthemum muticum*, 0.3%), and mud plantain (*Alisma subcordatum*, 0.1%). Spring seeding should be completed between March 1 and June 1 and fall seeding should be completed between September 1 and November 1.

4 Performance Standards

The following performance standards are applicable to the Project stream restoration and floodplain enhancement areas. The Project will be monitored and maintained in accordance with the Permits, There are no permanent wetland impacts or wetland conversion impacts to PSS and PFO wetland

habitats proposed with the Project.

The nature of this Project is restoration of aquatic habitats and sediment loading due to stream bank erosion. Compensatory mitigation is not required as this activity is considered to be self-crediting. The site will be monitored for a period of three years to ensure that the restoration activities do not adversely affect hydrology and significantly decrease the size of on-site wetlands.

5 Monitoring Plan

The project will be monitored and maintained in accordance with the Water Obstruction and Encroachment (WO&E) Permit terms and conditions. Any observed problems will be summarized in an annual monitoring memo report.

To ensure the long-term sustainability of the restoration project, the applicant or their consultant will initially perform annual evaluations of the restoration areas. The permittee anticipates that these activities will be minimal as the project is designed to be self-sustaining with limited management activities. Annual inspections will be conducted during the growing season to identify any issues. Walk-through surveys will be conducted annually to qualitatively monitor the general conditions of the habitats on the site. Notes to be made may include observations of species encountered, water quality, general extent of wetland and streams, and any occurrences of erosion, structure failure, or invasive or non-native species establishment. If there are any noted items that require maintenance, this should be recorded and submitted in an annual report to the PADEP.

The proposed monitoring period will begin the following year after completion of construction and will be conducted in accordance with the Permits. It is anticipated that the monitoring will be required for a period of three growing seasons.

6 Project Development Schedule

The start of construction of the stream restoration wetland enhancement project is proposed to begin in 2027. A mixture of bare root and containerized trees and shrubs is proposed for planting between May 15th and July 15th 2027. Seeding with the specified native wetland seed mix is proposed as a final step and expected to occur early fall 2027. Monitoring of the project will be initiated in late spring of 2028. The results from the yearly monitoring will be submitted to PA DEP.

Appendix A

Planting Notes

**PERMANENT SEEDING AND STABILIZATION (WETLAND/FLOODPLAIN
ENHANCEMENT AREAS)**

1. The temporary impacted wetland areas will be permanently seeded and stabilized with the specified seed mixture following site preparation.
 2. Organic (non-woody) debris should remain within the wetland and floodplain enhancement areas.
 3. Fall seeding should be completed between September 1 and November 1.
 4. Broadcast fertilizer and lime should not be applied to any wetland area.
 5. The areas of temporary wetland impact will be seeded with Ernst 122 FACW Wetland Meadow Mix seeded at a rate of 20 lb/acre (or ½ pound/1,000 sf) with a cover crop of grain rye (*Secale cereal*) seeded at a rate of 30 lb/acre. The wetland meadow mix includes fox sedge (*Carex vulpinoidea*, 23%), lurid sedge (*Carex lurida*, 22%), Virginia wildrye (*Elymus virginicus*, 20%), blunt broom sedge (*Carex scoparia*, 14%), soft rush (*Juncus effuses*, 3%), blue vervain (*Verbena hastata*, 3%), swamp milkweed (*Asclepias incarnata*, 2.0%), star sedge (*Carex intumescens*, 2%), golden alexanders (*Zizia aurea*, 2%), New England aster (*Aster novae-angliae*, 1%), path rush (*Juncus tenuis*, 1%), white vervain (*Verbena urticifolia*, 1%), wrinkleleaf goldenrod (*Solidago rugosa*, 0.7%), lance leaved aster (*Aster lanceolatus*, 0.5%), purplestem aster (*Aster puniceus*, 0.2%), nodding bur marigold (*Bidens cernua*, 0.5%), fringed sedge (*Carex criniata*, 0.5%), great blue lobelia (*Lobelia siphilitica*, 0.5%), square stemmed monkeyflower (*Mimulus ringens*, 0.5%), awl sedge (*Carex stipata*, 0.4%), boneset (*Eupatorium perfoliatum*, 0.4%), common sneezeweed (*Helenium autumnale*, 0.3%), American water horehound (*Lycopus americanus*, 0.3%), green bulrush (*Scirpus atrovirens*, 0.3%), woolgrass (*Scirpus cyperinus*, 0.3%), bigleaf mountainmint (*Pycnanthemum muticum*, 0.3%), and mud plantain (*Alisma subcordatum*, 0.1%).
 6. The floodplain enhancement areas (2.5 acres) will be planted at an average of 300 shrubs per acre or 100 trees per acre and at a spacing of 8ft x 8ft for shrubs and 10ft x 10 ft for trees. The plantings will include Pennsylvania native species such as (but not limited to) pin oak (*Quercus palustris*), red maple (*Acer rubrum*), swamp white oak (*Quercus bicolor*), river birch (*Betula nigra*), sycamore (*Platanus occidentalis*), southern arrowwood (*Viburnum dentatum*), silky dogwood (*Cornus amomum*), and winterberry (*Ilex verticillata*). Species composition will depend on availability.
-

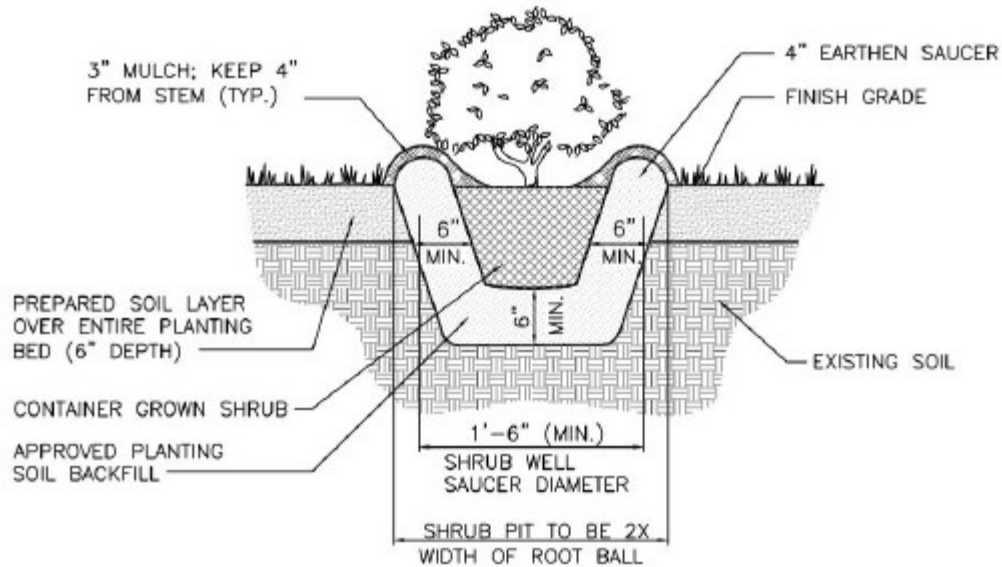
LIVE PLANTINGS

PLANTING NOTES: SPECIFIC SPECIES HAVE NOT BEEN FINALIZED. PLANTINGS WILL INCLUDE LIVE STAKES, TREES AND SHRUBS NATIVE TO PENNSYLVANIA.

1. SHRUBS OR LIVE STAKES SHALL BE PLANTED IN THE DESIGNATED AREAS ALONG THE STREAMBANKS AS SHOWN ON THE PLAN AT A MAXIMUM SPACING OF 8' ON CENTER. SHRUBS ARE TO BE PLANTED ABOVE BANKFULL ELEVATION, IN TWO ROWS APPROXIMATELY 8' APART.
2. TREES SHALL BE PLANTED ALONG FLOODWAY ABOVE BANKFULL IN ROWS APPROXIMATELY 10' APART AT A MAXIMUM SPACING OF 10-FOOT ON CENTER USING SPECIES FROM THE LIST PROVIDED UNLESS AS OTHERWISE NOTED ON PLAN.
3. TREES AND SHRUBS SHALL BE A MINIMUM OF ONE GALLON CONTAINER SIZE.
4. TREES AND SHRUBS SHALL NOT BE PLANTED CLOSER THAN 4' FROM ANY EXISTING WOODY VEGETATION PRESENT.

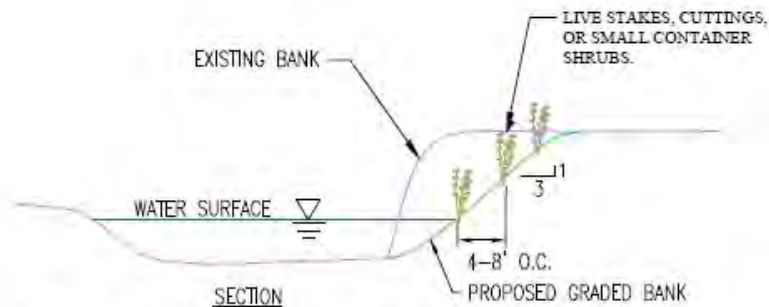
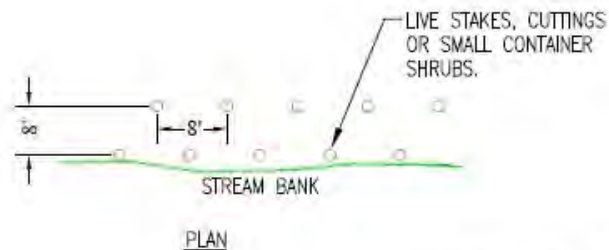
HERBIVORE DEFENSE PROTECTION SHALL BE INSTALLED FOR EACH PLANTED TREE

SHRUB PLANTING DETAILS



SHRUB PLANTING DETAIL

SCALE: NTS

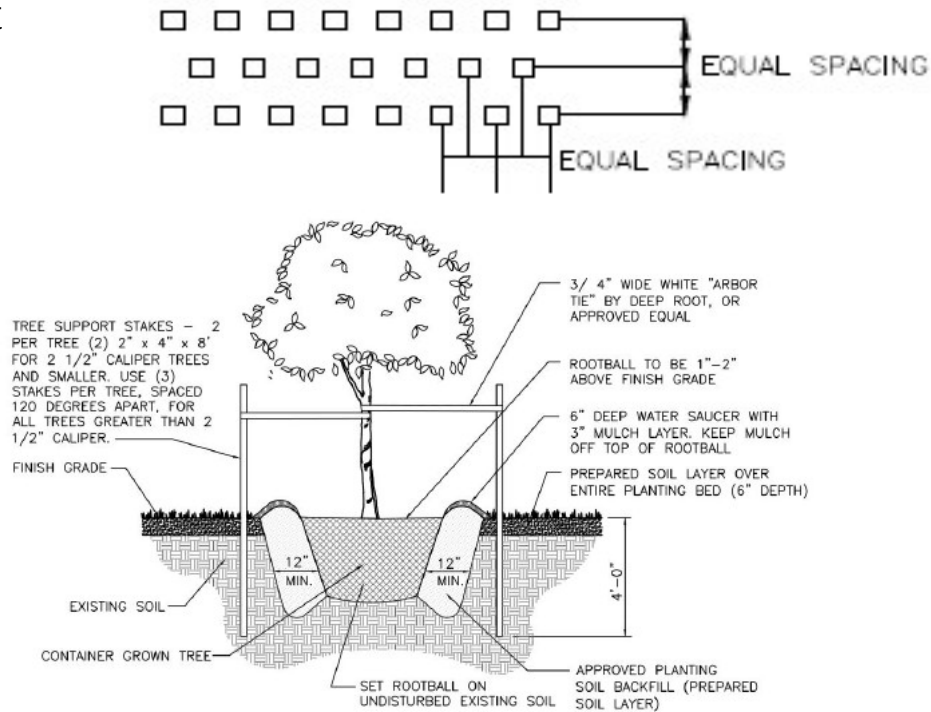


RIPARIAN PLANTING DETAIL FOR GRADED STREAM BANK

NOT TO SCALE

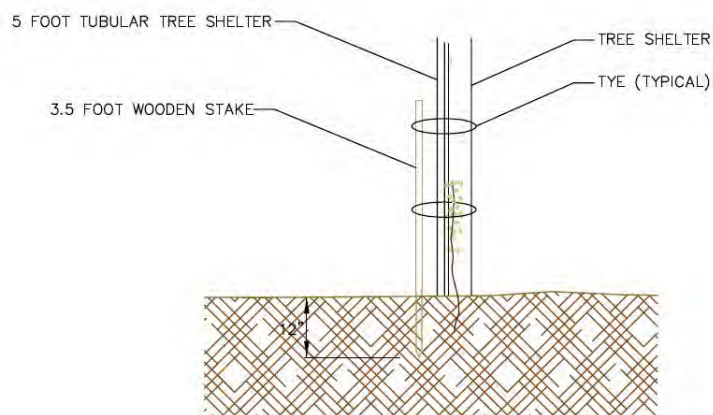
TREE PLANTING DETAILS

10ft x10ft



TREE PLANTING DETAIL

SCALE: NTS



NOTE: TREE SHELTERS ARE TO BE MADE FROM BIODEGRADABLE PLASTIC TUBING.

Appendix B

Planting Plan

CENTERVILLE CREEK STREAM RESTORATION PROJECT



- Legend**
-  Proposed Tree Planting Area
 -  Proposed Shrub Planting Area
 -  Delineated Watercourses Area
- Delineated Wetland Cowardin Classifications
-  Palustrine Emergent (PEM)
 -  Palustrine Scrub Shrub (PSS)
 -  Open End

Shrub Planting Area : 0.22 ac
Tree Planting Area : 2.28 ac



0 40 80
Feet

Created By: JTR

Date: 12/5/2025



Pennsylvania
**Department of
Environmental Protection**

July 21, 2026

Stephen Miller
3137 Sticks Road
Glen Rock, PA 17327

Re: Environmental Assessment
Centerville Creek Streambank Restoration Project
DEP File No. EA6703226-001
APS ID No. 1154810
Shrewsbury and Codorus Townships, York County

Dear Mr. Miller:

We have reviewed the Environmental Assessment form you submitted to our office, dated January 27, 2026. The information submitted relates to your proposal to conduct a stream restoration project along Centerville Creek (CWF, MF) and an unnamed tributary to Centerville Creek (CWF, MF) including 1.) the backfill and maintenance of 195 linear feet of stream channel; 2.) the construction and maintenance of 265 feet of stream; 3.) the grading and maintenance of 1,315 linear feet of streambank; 4.) the installation and maintenance of 420 feet of rock toe protection; 5.) the installation and maintenance of a J-hook rock vane; 6.) the installation and maintenance of three root wads; and 7.) The construction and maintenance of a temporary timber mat access road impacting 0.046 acres of exceptional value palustrine emergent wetlands, all for the purposes of stabilizing the streambanks and enhancing habitat. The project is located at 3137 Sticks Road (Latitude: 39.7752°N; Longitude: 76.7464°W) in Codorus Township, York County. Wetland impacts are temporary, and replacement is not required.

The proposed structures and/or activity is regulated in accordance with the provisions of Section 4 of the Dam Safety & Encroachments Act, the Act of November 26, 1978, P.L. 1375, No 325 (as amended by Act 70). However, the requirements for a Water Obstruction and Encroachment permit are waived for this type of structure and/or activity, in accordance with Section 7(a) of the Dam Safety & Encroachments Act and the provisions of Section 105.12 of Chapter 105 rules and regulations, Dam Safety & Waterways Management, as amended on October 12, 1991.

The waiver of permit requirements does not give any property rights, either in real estate or material, nor any exclusive privileges; nor shall it be construed to grant or confer any right, title, easement or interest, in, to, or over any land belonging to the Commonwealth of Pennsylvania; nor does it authorize any injury to private property or invasion of property rights.

The Environmental Assessment required by Section 105.15 for this project has been approved and deemed by the Department of Environmental Protection (DEP) to be satisfied. Additionally, DEP has granted 401 Water Quality Certification for this project.

The following conditions are included as part of this authorization:

1. In response to Question #28 of the US Fish and Wildlife Service Northern Long-eared Bat and/or Tricolored Bat determination key, you committed to no tree cutting, clearing, or trimming. Therefore, to protect the bat(s), no tree cutting, clearing or tree trimming shall occur at this site for this project.
2. Since this stream is a wild trout stream, no work shall be done in the stream channel between October 1 and December 31 without the prior written approval of the Pennsylvania Fish and Boat Commission's Division of Environmental Services, 595 East Rolling Ridge Drive, Bellefonte, PA 16823-9685; telephone 814. 359.5147.
3. You shall monitor the project for at least 5 years. Reports shall be submitted to DEP every year after construction. The reports shall contain information describing the success of the site at the time of inspection, stability of the banks, photographs of the stream with plans showing location and orientation of the photographs, an inventory of surviving plantings, and a written plan to correct any deficiencies identified during the monitoring.

It is recommended that you contact the Pennsylvania Fish and Boat Commission prior to starting work, and that the work be performed in such a manner so as to protect fish and other aquatic life.

You are required to secure all other approvals that may be necessary under federal, state or local regulations and meet the construction, operation, maintenance or other requirements of Chapter 105.

Proper erosion and sedimentation control measures are required during and after construction and the adequacy of these measures can be determined by contacting your local county conservation district.

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (Board), pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A. The Board's address is:

Environmental Hearing Board
Rachel Carson State Office Building, Second Floor
400 Market Street
P.O. Box 8457
Harrisburg, PA 17105-8457

TDD users may contact the Environmental Hearing Board through the Pennsylvania Relay Service, 800.654.5984.

Appeals must be filed with the Board within 30 days of receipt of notice of this action unless the appropriate statute provides a different time. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at www.eab.pa.gov or by contacting the Secretary to the Board at 717.787.3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717.787.3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN 30 DAYS OF RECEIPT OF NOTICE OF THIS ACTION.

If you have any questions, please call Jason Shirey at 717.705.4818.

Sincerely,

**Scott R.
Williamson**

Digitally signed by
Scott R. Williamson
Date: 2026.07.21
11:32:12 -04'00'

Scott R. Williamson
Program Manager
Waterways & Wetlands Program

cc: U.S. Army Corps of Engineers
PA Fish & Boat Commission
York County Conservation District
Shrewsbury Township
Codus Township



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, NAB
STATE COLLEGE FIELD OFFICE
1631 SOUTH ATHERTON STREET, SUITE 101
STATE COLLEGE, PENNSYLVANIA 16801-6260

June 17, 2026

Regulatory Division

Stephen Miller
3137 Sticks Road
Glen Rock, PA 17327

Dear Mr. Miller:

This is in reference to your application, identified by this office as NAB-2026-00174-P33 (Centerville Creek Stream Restoration), dated April 7, 2026, wherein you requested Department of the Army authorization to restore approximately 800-linear-feet of Centerville Creek which will include floodplain reconnection, stream bank regrading, installation of a riparian forest buffer and installation of in-stream habitat improvements. The project will permanently impact 24,594-square-feet of stream channel and temporarily impact 413-square-feet of stream channel and 2,025-square-feet of wetlands. The project is located in Codorus and Shrewsbury Townships, York County, Pennsylvania.

In accordance with Section 404 of the Clean Water Act, a Department of the Army authorization is required for the discharge of dredged and/or fill material into waters of the United States, including jurisdictional wetlands. Section 10 of the Rivers and Harbors Act also requires Department of the Army authorization for any work or structures in, over, or under a navigable water of the United States.

We have determined that your proposed work, if accomplished in accordance with the enclosed terms and conditions and the information included in your application, is authorized under the Pennsylvania State Programmatic General Permit-6 (PASPGP-6). This PASPGP-6 verification is provided pursuant to Section 10 of the Rivers and Harbors Act of 1899 and/or Section 404 of the Clean Water Act. This authorization may be subject to modification, suspension, or revocation if any of the information contained in the application, including the plan(s), is later found to be in error.

The enclosed list of conditions must be followed for purposes of the PASPGP-6 (Enclosure 1). In accordance with General Condition 34 of PASPGP-6 you are required to submit a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. An example of the information that is required is posted on the Baltimore District webpage at:
<https://www.nab.usace.army.mil/Missions/Regulatory/Permits-PA>.

You and your contractor are also requested to sign, date, and return enclosure 2 of this verification letter whereby you are acknowledging and agreeing to comply with the terms and conditions, including the special conditions, of this PASPGP-6 verification. These documents should be submitted to the following email address: nab-regulatory@usace.army.mil, with the United States Army Corps of Engineers (Corps) permit number NAB-2026-00174-P33 included in the subject line.

In addition, the following special conditions are incorporated as part of the PASPGP-6 authorization(s):

1. The authorized permanent impacts will not exceed 24,594-square-feet of stream channel and temporary impacts will not exceed 2,025-square-feet of wetland impacts and 413-square feet of stream impacts.
2. The work shall be conducted in accordance with the project plans prepared by Thompson Environmental and Penncore Consulting LLC, Sheets 1-8 dated December 2025.
3. The permittee shall require its contractors and/or agent to comply with the terms and conditions of this permit in the construction and maintenance of this project and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit.
4. The permittee must prepare an invasive species eradication and maintenance plan to remove non-native invasive plant species within the project site if annual site visits document their presence. The plan must be submitted to the Corps for approval along with the annual monitoring report.
5. To the extent possible, areas graded to create a floodplain bench shall be scarified to introduce microtopography components to create conditions for greater habitat and vegetative native wetland diversity.
6. The permittee shall have a qualified professional, with prior experience with stream restoration projects, on-site during project construction to:
 - a. Ensure that in-stream structures are installed properly;
 - b. That sediment and control measures are properly implemented; and
 - c. That all practicable steps are taken to minimize all temporary and permanent adverse impacts to the aquatic environment.

7. As-built plans of the Stream Restoration Project shall be submitted to nab-regulatory@usace.army.mil. Please include on the subject line "As-built Plans for NAB-2026-00174-P33," within 60-days of completion of construction.
8. The permittee shall monitor the stream restoration and floodplain areas once annually for five years after completion of the project with monitoring reports provided electronically by email to nab-regulatory@usace.army.mil with a subject line of "NAB-2026-00174-P33 Monitoring Reports," by December 31 of each monitoring year. Annual monitoring should occur during the growing season and reports must include an evaluation of project integrity, brief analysis of the monitoring and inspection results, photographic documentation and proposed remedial measures, if needed. The photographic documentation should be clear and should show as much of the in-stream work as required to verify whether the site is stable or if modification or maintenance is necessary.

In accordance with PASPGP-6, Part V, A, 29, state authorization from the Pennsylvania Department of Environmental Protection is required to be obtained prior to commencement of any work authorized by PASPGP-6.

This verification is valid for the length of the Pennsylvania Department of Environmental Protection permit, including 401 Water Quality Certification, or until the PASPGP-6 expires (June 30, 2026), is modified, reissued, suspended, or revoked, whichever occurs sooner. You must remain informed of changes to the PASPGP-6. We will issue (a) public notice(s) announcing the changes as they occur.

Activities authorized under PASPGP-6 that have commenced construction or are under contract to commence construction, will remain authorized provided the activity is completed within 12 months of the date of the PASPGP-6 expiration (June 30, 2026), modification, or revocation, or until the expiration date of the project specific PASPGP-6 verification or Pennsylvania Department of Environmental Protection permit, including 401 Water Quality Certification, whichever is less.

Be advised that this verification authorizes the work as a single and complete (one time only) activity. If additional work is to be performed, you must notify this office. Subsequent work in this area may require a separate letter of authorization from this office.

Please note that as of the date of this authorization, your project follows Section 7 of the Endangered Species Act. However, new species may be listed, or additional populations found. Therefore, it is your responsibility to ensure that construction of the authorized work does not adversely affect any existing or newly listed federally endangered or threatened species. Information on threatened and endangered species

and their critical habitat can be obtained from the offices of the United States Fish and Wildlife Service and National Marine Fisheries Service or their web pages at:
<https://ecos.fws.gov/ipac> and
<https://www.greateratlantic.fisheries.noaa.gov/protected/section7/guidance/maps/index.html> respectively.

This verification does not obviate the need for obtaining other federal, state, or local authorizations, nor does it address or include any consideration for geographic jurisdiction on aquatic resources and shall not be interpreted as such.

You have not requested a jurisdictional determination (JD) for this proposed project. If you believe the Corps does not have jurisdiction over all or portions of your project, you may request a preliminary or approved JD. If one is requested, please be aware that we may require the submittal of additional information to complete the JD and work authorized in this letter may not occur until the JD has been completed.

When the structures or work authorized by this PASPGP-6 are still in existence at the time the property is transferred, the terms and conditions of this PASPGP-6, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this PASPGP-6 and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date enclosure 3. A copy of this PASPGP-6 verification signed by the transferee must be submitted to the Baltimore District to validate the transfer.

A copy of this letter is being provided to the Pennsylvania Department of Environmental Protection's Southcentral office and consultant Thompson Environmental for informational purposes.

If you have any questions concerning this matter, please contact my office, at (814) 235-1764 or email at alicia.e.palmer@usace.army.mil.

Sincerely,

A handwritten signature in black ink, appearing to be 'Alicia Stoup', written over a horizontal line.

Alicia Stoup
Biologist, Pennsylvania Branch

Enclosures

To identify how we can better serve you, we need your help. Please take the time to fill out our customer service survey at: <https://regulatory.ops.usace.army.mil/customer-service-survey/>

PENNSYLVANIA STATE PROGRAMMATIC GENERAL PERMIT – 6
(PASPGP-6)
July 1, 2021

Please note: the full text of the PASPGP-6 may be viewed on the Baltimore District web site at <http://www.nab.usace.army.mil/Missions/Regulatory/PermitTypesandProcess.aspx> or by calling the Corps at 814-235-0570

Permittee:

Date of PASPGP-6 Verification:

State Authorization(s):

Corps District:

☒ **Baltimore District**

U.S. Army Corps of Engineers State College Field Office
1631 South Atherton Street
Suite 101
State College, Pennsylvania 16801-6260
Email: nab-regulatory@usace.army.mil

☐ **Philadelphia District**

U.S. Army Corps of Engineers
Regulatory Branch
1650 Arch Street
Philadelphia, Pennsylvania 19103
Email: PhiladelphiaDistrictRegulatory@usace.army.mil

☐ **Pittsburgh District**

U.S. Army Corps of Engineers, Regulatory Branch
William S. Moorhead Federal Building, 20th floor
1000 Liberty Avenue
Pittsburgh, Pennsylvania 15222-4186
Email: Regulatory.Permits@usace.army.mil

It has been determined that your proposed project, which includes the discharge of dredged and/or fill material and/or the placement of structures into waters of the United States, including wetlands, qualifies for federal authorization under the provisions of Section 404 of the Clean Water Act and /or Section 10 of the River and Harbor Act of 1899, under the terms and conditions of the PASPGP-6.

All activities authorized under PASPGP-6 must comply with all conditions of the authorization, including General, Procedural, and Special Conditions. Failure to comply with all the conditions of the authorization, including project special conditions, will constitute a permit violation and may be subject to criminal, civil, or administrative penalties, and /or restoration.

The authorized activity must be performed in compliance with the following General Conditions to be authorized under PASPGP-6:

General Conditions:

1. Permit Conditions: The permittee shall conduct all work and activities in waters of the United States, including jurisdictional wetlands, in strict compliance with the approved authorization/verification including all final maps, plans, profiles, and design specifications.
2. 401 State Water Quality Certification (SWQC) Conditions: The permittee shall comply with the following conditions unless a project specific SWQC is required as identified below:
 - a. Prior to beginning any activity authorized by the Corps under PASPGP-6, the applicant shall obtain from the Department all necessary environmental permits, authorizations or approvals, and submit to the Department environmental assessments and other information necessary to obtain the permits and approvals, as required under state law, including The Clean Streams Law (35 P.S. §§ 691.1—691.1001), the Dam Safety and Encroachments Act (32 P.S. §§ 693.1—693.27), the Surface Mining Conservation and Reclamation Act (52 P.S. §§ 1396.1—1396.19b), the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. §§ 3301—3326), the Bituminous Mine Subsidence and Land Conservation Act (52 P.S. §§ 1406.1—1406.21), the Coal Refuse Disposal Control Act (52 P.S. §§ 30.51—30.66), the Solid Waste Management Act (35 P.S. §§ 6018.101—6018.1003), the Hazardous Sites Cleanup Act (35 P.S. §§ 6020.101—6020.1305), the Land Recycling and Environmental Remediation Standards Act (35 P.S. §§ 6026.101—6026.908), 58 Pa.C.S. §§ 3201—3274 (related to development), the Air Pollution Control Act (35 P.S. §§ 4001—4015), the Storage Tank and Spill Prevention Act (35 P.S. §§ 6021.101—6021.2104) and the regulations promulgated thereunder, including 25 Pa. Code Chapters 16, 71, 77, 78, 78a, 86—91, 92a, 93, 95, 96, 102, 105, 106, 127, 245 and 260a—299.
 - b. Fill material may not contain any wastes as defined in the Solid Waste Management Act.
 - c. Applicants and projects eligible for the PASPGP-6 must obtain all state permits or approvals, or both, necessary to ensure that the project meets the state's applicable water quality standards, including a project-specific SWQC.

Note: As part of PADEP's issuance of 401 SWQC for PASPGP-6 on February 12, 2021, the following was included to clarify the meaning of this condition:

This 401 SWQC is only available for projects that do not require any federal authorization other than authorization from the Corps under Section 404 of the Act or Section 10 of the Rivers and Harbors Act of 1899. Applicants seeking authorization for activities not eligible for coverage under PASPGP-6, or for activities that require another federal authorization (such as an interstate natural gas pipeline, a gas storage field or a nuclear or hydroelectric project requiring authorization by another federal agency), must submit a request to the Department for a project-specific SWQC. The scope of the issuance of this SWQC is related only to the scope and applicability of the proposed PASPGP-6. Any activity or project requiring the Department to

issue 401 SWQC that is beyond the scope of the proposed PASPGP-6 or other programmatically issued SWQC (e.g. Nationwide Permits) will require the applicant to obtain a project-specific SWQC from the Department. This would include any activity or project requiring a SWQC associated with an authorization, permit or license issued by a federal agency, such as Federal Energy Regulatory Commission or Nuclear Regulatory Commission. Such activities or projects include, but are not limited to, an interstate natural gas pipeline, a gas storage field or a nuclear or hydroelectric project.

3. Terms and Conditions Related to Coastal Zone Management Act (CZMA) Certification: For those projects located within Pennsylvania's Coastal Zones, Non-Reporting Activities have General CZMA consistency determination and Reporting Activities must obtain individual CZMA consistency determination (see General Condition 30(b)).
4. Aquatic Life Movements: No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless crossing cannot be used, then culverts should be designed, constructed, and appropriately depressed, if possible, below the stream invert to minimize adverse effects to aquatic life movements.
5. Threatened and Endangered Species: By signing the Pennsylvania Natural Diversity Inventory (PNDI) receipt, the permittee has agreed to comply with all avoidance measures identified by the PNDI receipt. The applicant may also agree in writing to comply with all avoidance measures identified in U.S. Fish and Wildlife Service (USFWS) correspondence, including IPaC, as part of the application. To ensure compliance with the Endangered Species Act (ESA), those avoidance measures associated with federally listed, threatened, or endangered species are a condition of the PASPGP-6 verification, unless modified by the Corps.

If an activity is verified under the PASPGP-6, and a federally listed, threatened, or endangered species, or proposed species, is subsequently found to be present, all work must cease, and the Corps and USFWS (or National Marine Fisheries Service (NMFS)) must be notified by telephone immediately (contact information below). The PASPGP-6 verification is automatically suspended without additional notification to the permittee and will not be re-issued until consultation pursuant to Section 7 of the ESA is concluded and adverse effects to federally listed, threatened, endangered, and proposed species are avoided, or incidental take authorization issued.

Furthermore, persons have an independent responsibility under Section 9 of the ESA to avoid any activity that could result in the "take" of a federally listed species.

USFWS:
Pennsylvania Field Office
110 Radnor Rd; Suite 101
State College, PA 16801
office phone: 814 234-4090
fax: 814-234-0748 or 814 206-7452

NMFS:
Ms. Jennifer Anderson
Assistant Regional Administrator
Protected Resources Division NOAA Fisheries
55 Greater Republic Drive
Gloucester, Massachusetts 01930

6. Spawning Areas: The permittee shall comply with all time-of-year-restrictions (see below) associated with spawning areas as set forth by the Pennsylvania Fish and Boat Commission (PFBC) or other designated agency. Discharges or structures in spawning or nursery areas shall not occur during spawning seasons unless written approval is obtained from the PFBC or another designated agency. In addition, work in areas used for other time sensitive life span activities of fish and wildlife (such as hibernation or migration) may necessitate the use of seasonal restrictions for avoidance of adverse impacts to vulnerable species. Impacts to these areas shall be avoided or minimized to the maximum extent practicable during all other times of the year.

Wild Trout	October 1 - December 31
Class A Wild Trout	October 1 - April 1

List of Trout Streams found at:

<https://www.fishandboat.com/Fish/PennsylvaniaFishes/Trout/Pages/TroutWaterClassifications.aspx>.

7. Shellfish Production: No discharge of dredged and/or fill material and/or the placement of structures may occur in areas of concentrated shellfish production, unless the discharge is directly related to an authorized shellfish harvesting activity.
8. Adverse Effects From Impoundment: If the regulated activity creates an impoundment of water, the adverse effects on the aquatic system caused by the accelerated passage of water and/or the restriction of its flow, including impacts to wetlands, shall be minimized to the maximum extent practicable.
9. Management of High Flows: To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity,

and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Erosion and Sediment Controls: Appropriate soil erosion and sediment controls, in accordance with state regulations, must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States, including jurisdictional wetlands, during periods of low-flow or no-flow, or during low tides.
11. Suitable Material: No activities, including discharges of dredged and/or fill material or the placement of structures, may consist of unsuitable material (i.e., asphalt, trash, debris, car bodies, etc.). No material discharged shall contain toxic pollutants in amounts that would violate the effluent limitation standards of § 307 of the Clean Water Act (CWA).
12. Temporary Fill and Structures: Temporary fill (i.e., access roads and cofferdams) and structures in waters and/or wetlands authorized by PASPGP-6 shall be properly constructed and stabilized during use to prevent erosion and accretion. Temporary fill in wetlands shall be placed on geotextile fabric laid on existing wetland grade, unless such requirement is specifically waived by the Corps. Whenever possible, rubber or wooden mats should be used for equipment access through wetlands to the project area. Temporary fills and structures shall be removed, in their entirety, to an upland site, and suitably contained to prevent erosion and transport to a waterway or wetland. Temporarily impacted areas shall be restored to their preconstruction contours, elevations, and hydrology, and revegetated with a wetland seed mix that contains non-invasive, native species, to the maximum extent practicable. Unless approved by the Corps, the restoration work must be completed within 30 days of the date the temporary fill/structure is no longer needed.
13. Equipment Working in Wetlands: Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
14. Installation and Maintenance: Any regulated structure or fill authorized by PASPGP-6 shall be properly installed and maintained to ensure public safety.
15. PASPGP-6 Authorization:
 - a. PASPGP-6 expires June 30, 2026, unless suspended or revoked.
 - b. Verifications of PASPGP-6 expire June 30, 2026, unless the PASPGP-6 permit is suspended, revoked, or the PADEP authorization expires, whichever date occurs sooner. Activities authorized under PASPGP-6 that have commenced construction or are under contract to commence construction will remain authorized provided the activity is completed within 12 month of the date of the PASPGP-6 expiration, modification, or revocation; or until the expiration date of the project specific verification, whichever is sooner.

16. One-Time Use: A PASPGP-6 verification is valid to construct the project, or perform the activity, one time only, except for PASPGP-6 verifications specifically issued for reoccurring maintenance activities.
17. Water Supply Intakes: No regulated activity may occur in the proximity of a public water supply intake and adversely impact the public water supply. In order to minimize the effects of intakes on anadromous fish eggs and larvae, and oyster larvae, intake structures should be equipped with screening (with mesh size no larger than 2 mm) of wedge wire or another material of equal or better performance. Where feasible, intakes should be located away from spawning or nursery grounds, or to minimize the impingement on, or entrainment of, eggs or larvae. In addition, intake velocities should not exceed 0.5 ft/sec.
18. Historic Properties: For all activities verified under a PASPGP-6, upon the unanticipated discovery of any previously unknown historic properties (historic or archeological), all work must cease immediately, and the permittee must notify the State Historic Preservation Officer (SHPO) and the Corps. The Corps will contact the tribes with whom they routinely consult, within 24 hours in accordance with each District's tribal consultation process. PASPGP-6 may be re-verified, and special conditions added if necessary, after an effect's determination on historic properties and/or tribal resources is made, in consultation with the SHPO, the tribes and other interested parties. The PASPGP-6 verification may be modified and/or rescinded for the specific activity if an adverse effect on the historic property cannot be avoided, minimized, or mitigated.
19. Tribal Rights: No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
20. Corps Civil Works Projects: The PASPGP-6 does not authorize any work which will interfere with an existing or proposed Corps Civil Works project, or any Corps-owned or managed property or easement (i.e., flood control projects, dams, reservoirs, and navigation projects), unless specifically approved by the Corps in writing. Pursuant to 33 U.S.C 408, a review by, or permission from the Corps is required for activities that will alter or temporarily or permanently occupy or use a Corps federally authorized Civil Works project. Any activity that requires Section 408 permission and/or review is not authorized by PASPGP-6 until the appropriate Corps office issues the Section 408 permission or completes its review to alter, occupy, or use the Corps Civil Works project, and Corps issues a written PASPGP-6 verification.
21. Navigation: No activity verified under PASPGP-6 may cause more than minimal adverse effect on navigation. No attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized herein. In addition, activities that require temporary causeways that prohibit continued navigational use of a waterway (i.e., temporary causeways extending greater than $\frac{3}{4}$ the width across the waterway) shall be removed in their entirety upon completion of their use. Any safety lights and signals prescribed by the U.S. Coast Guard (USCG), through regulation or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States. The permittee understands and agrees that, if further operations by the United States require the removal, relocation, or other alteration, of the

structure or work herein authorized, or if, in the opinion of the Secretary of the Army or an authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

22. Inspections: The permittee shall allow a District Engineer or an authorized representative(s) to make periodic inspections at any time deemed necessary in order to ensure that the work is being performed in accordance with all the terms and conditions of PASPGP-6. The District Engineer may also require post-construction engineering drawings (as-built plans) for completed work.
23. Modifications of Prior Verifications: Any proposed modification of a previously verified Single and Complete project that results in a change in the verified impact to, or use of waters of the United States, including jurisdictional wetlands, must be approved by PADEP, or the Corps if applicable. Corps written approval is required if the prior verification was reviewed by the Corps, or if the proposed modification is a Reporting Activity under PASPGP-6. Project modifications that cause a Single and Complete Project to exceed 0.5 acre of loss of waters of the United States, including jurisdictional wetlands (except those identified in Part II A.2. a. and b.), or greater than 1,000 linear feet of permanent jurisdictional stream loss (except those identified in Part II A.2. a and b.), are not eligible for PASPGP-6 and will be forwarded to the Corps for review under an alternative permit review procedure.
24. Recorded Conservation Instruments: As per Part III.D.27 and Part III.E.8 of this permit, proposed Draft Conservation Instruments may be submitted by the applicant as part of the permit application package for review and approval. When such proposed Conservation Instruments are submitted by the applicant, proof of the recorded deed restriction, conservation easement, or deed restricted open space area shall be forwarded to the appropriate Corps District and appropriate PADEP offices, prior to the initiation of any permitted work, unless specifically waived by the Corps in writing. Conservation Instrument templates can be found at:
<http://www.nab.usace.army.mil/Missions/Regulatory/PermitTypesandProcess.aspx>
25. Property Rights: PASPGP-6 does not obviate the need to obtain other federal, state, or local authorizations required by law, nor does the permit grant any property rights or exclusive privileges or authorize any injury to the property or rights of others.
26. Navigable Waters of the United States (Section 10 Waters):

In addition to the other general conditions, the following conditions are applicable for activities in the eligible navigable waters of the United States identified in Appendix B:

- a. For aerial transmission lines, the following minimum clearances are required for aerial electric power transmission lines crossing navigable waters of the United States. These clearances are related to the clearances over the navigable channel provided by the

existing fixed bridges, or the clearances which would be required by the USCG for new fixed bridges, in the vicinity of the proposed aerial transmission line. These clearances are based on the low point of the line under conditions producing the greatest sag, taking into consideration temperature, load, wind, length of span, and type of supports as outlined in the National Electric Safety Code:

Nominal System Voltage (kV)	Minimum Additional Clearance (ft.) Above Clearance Required for Bridges
115 and below	20
138	22
161	24
230	26
350	30
500	35
700	42
750-765	45

- i. Clearances for communication lines, stream gauging cables, ferry cables, and other aerial crossings must be a minimum of ten feet above clearances required for bridges, unless specifically authorized otherwise by the District Engineer.
 - ii. Corps regulation ER 1110-2-4401 prescribes minimum vertical clearances for power communication lines over Corps lake projects. In instances where both regulation and ER 1110-2-4401 apply, the greater minimum clearance is required.
- b. Encasement: The top of any cable, encasement, or pipeline shall be located a minimum of three feet below the existing bottom elevation of the streambed and shall be backfilled with suitable heavy material to the preconstruction bottom elevation. Where the cable, encasement, or pipeline is placed in rock, a minimum depth of one foot from the lowest point in the natural contour of the streambed shall be maintained. When crossing a maintained navigation channel, the requirements are a minimum of eight feet between the top of the cable, encasement, or pipeline and the authorized depth of the navigation channel. For maintained navigational channels, where the utility line is placed in rock, a minimum depth of two feet from the authorized depth of the navigation channel shall be maintained.
- c. As-Built Drawings: Within 60 days of completing an activity that involves an aerial transmission line, submerged cable, or submerged pipeline across a navigable water of the United States (i.e., Section 10 waters), the permittee shall furnish the Corps and National Oceanic and Atmospheric Administration, Nautical Data Branch, N/CS26, Station 7317, 1315 East-West Highway, Silver Spring, Maryland, 20910 with professional, certified as-built drawings, to scale, with control (i.e., latitude/longitude, state plane coordinates), depicting the alignment and minimum clearance of the aerial wires above the mean high water line at the time of survey or depicting the elevations and alignment of the buried cable or pipeline across the navigable waterway.

d. Aids to Navigation: The permittee must prepare and provide for USCG approval, a Private Aids to Navigation Application (CG-2554). The application can be found at: https://media.defense.gov/2017/Nov/20/2001846135/-1/-1/0/CG_2554.pdf. The completed application must be sent to the appropriate USCG office as indicated below:

- i. Baltimore/Philadelphia Districts: Commander Fifth Coast Guard District, 431 Crawford Street, Room 100, Portsmouth, VA 23704-5504, Attn: Mr. Matthew Creelman; by email to Matthew.K.Creelman2@uscg.mil; or by FAX to (757) 398-6303.
- ii. Pittsburgh District: Eighth Coast Guard District, Sector Ohio Valley, USCGC Osage, 300 McKown Ln, Sewickley, PA 15143; phone (412) 741-1180

Within 30 days of the date of receipt of the USCG approval, the permittee must provide a copy to the appropriate Corps district office.

27. PADEP Waiver: If the Corps determines a specific activity, which is eligible for a PADEP Non-reporting Waiver, has a significant adverse impact on life, property or important aquatic resources, the Corps may require the owner to modify the activity to eliminate the adverse condition or to obtain a Corps Individual Permit. In accordance with 33 CFR 325.7(a), "The District Engineer may reevaluate the circumstances and conditions of any permit, including regional permits, either on his own motion, at the request of the permittee, or a third party, or as the result of periodic progress inspections, and initiate action to modify, suspend, or revoke a permit as may be made necessary by considerations of the public interest. In the case of regional permits, this reevaluation may cover individual activities, categories of activities, or geographic areas."
28. Corps Water Releases: For projects located downstream of a Corps dam, the permittee should contact the appropriate Corps, Area Engineer Office, to obtain information on potential water releases and to provide contact information for notification of unscheduled water releases. It is recommended that no in-water work be performed during periods of high-water flow velocities. Any work performed at the project site is at the permittee's own risk.
29. State Authorization: The activity must receive state authorization. For the purpose of this requirement, any one of the following is considered as a state authorization:
 - a. A PADEP Chapter 105 Water Obstruction and Encroachment Permit, including PADEP approved Environmental Assessment pursuant to 25 Pa. Code § 105.15; or
 - b. A PADEP GP issued pursuant to 25 Pa. Code §§ 105.441-105.449; or
 - c. A PADEP approved Environmental Assessment for activities not otherwise requiring a PADEP permit pursuant to 25 Pa. Code § 105.12; or
 - d. A PADEP Dam Permit, including maintenance or repairs of existing authorized dams, including maintenance dredging; or

- e. A PADEP Emergency Permit issued pursuant to 25 Pa. Code § 105.64; or
 - f. A PADEP permit for the construction of a bridge or culvert which allows for maintenance activities of bridges and culverts; or
 - g. A PADEP Chapter 105 Dam Safety and Encroachment Enforcement Action.
30. Other Authorizations: Additional federal, state, and/or local authorizations or approvals may be required and where applicable must be secured by the applicant, prior to initiating any discharge of dredged and/or fill material, and/or the placement of structures into waters of the United States, including jurisdictional wetlands. These approvals include, but are not limited to:
- a. A project specific 401 SWQC issued by PADEP or considered waived, consistent with Section 401 of the CWA.
- PADEP has issued 401 SWQC for activities authorized by PASPGP-6 with conditions. See General Condition 2 for conditions and for identification when a project specific 401 SWQC or a waiver thereof is required. If the permittee cannot comply with all of the conditions of the 401 SWQC previously issued for PASPGP-6, then the permittee must obtain a project specific 401 SWQC or waiver for the proposed discharge in order for the activity to be authorized by PASPGP-6. The Corps or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality; and
- b. Reporting Activities located within the designated CZM Areas. Require a CZMA consistency determination issued by PADEP or a presumption of concurrence pursuant to Section 307 of the Federal Coastal Zone Management Act.
- The District Engineer or PADEP may require additional measures to ensure that the authorized activity is consistent with state CAM requirements; and
- c. Fills within the 100-year floodplains. This activity must comply with applicable Federal Emergency Management Agency approved state or local floodplain management requirements.
31. Federal Liability: In issuing this permit and any subsequent activity verification, the federal government does not assume any liability, including but not limited to the following:
- a. Damages to permitted project or users, thereof, as a result of other permitted or unpermitted activities or from natural causes;
 - b. Damages to the permitted project or uses, thereof, as a result of current or future activities undertaken by or on behalf of the United States in the public interest;
 - c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit;

- d. Design or construction deficiencies associated with the permitted work; and
- e. Damage claims associated with any future modification, suspension, or revocation of the PASPGP-6.

32. False and Incomplete Information: The Corps may modify or rescind a previously issued project specific verification, if it determines that the original verification was issued based on false, incomplete and/or inaccurate information; or other information becomes available whereby such action is necessary to ensure compliance with other federal laws and regulations.

33. Anadromous Fish Waters: To protect anadromous fish during their migration and spawning, no work can take place in the following anadromous fish waterways listed in the table below from March 15 to June 30 unless approved in writing by the Corps. Questions on the applicability of this condition should be directed to the Corps, Philadelphia District.

<u>Waterway</u>	<u>Downstream extent</u>	<u>Upstream extent</u>	<u>Upstream Latitude (N)</u>	<u>Upstream Longitude (E)</u>
<u>Delaware River in Pennsylvania (including W. Branch)</u>	<u>Rte. 220 Bridge</u>	<u>PA/NY Border</u>	<u>41.999448</u>	<u>-75.359573</u>
<u>Lehigh River and adjacent canals</u>	<u>confluence with Delaware River</u>	<u>500 feet upstream of the Cementon Dam</u>	<u>40.690275</u>	<u>-75.503800</u>
<u>Little Lehigh Creek</u>	<u>confluence with Lehigh River</u>	<u>500 feet upstream of the lowermost dam</u>	<u>40.596318</u>	<u>-75.475570</u>
<u>Hokendauqua Creek</u>	<u>confluence with Lehigh River</u>	<u>State Route 4014 (West Scenic Drive)</u>	<u>40.793273</u>	<u>-75.439262</u>
<u>Bushkill Creek</u>	<u>confluence with Delaware River</u>	<u>500 feet upstream of the lowermost dam</u>	<u>40.694859</u>	<u>-75.212406</u>
<u>Waterway</u>	<u>Downstream extent</u>	<u>Upstream extent</u>	<u>Upstream Latitude (N)</u>	<u>Upstream Longitude (E)</u>
<u>Brodhead Creek</u>	<u>confluence with Delaware River</u>	<u>500 feet upstream of the Stroudsburg Water Co. Dam</u>	<u>41.018667</u>	<u>-75.201063</u>
<u>Bush Kill</u>	<u>confluence with Delaware River</u>	<u>500 feet upstream of Resica Falls</u>	<u>41.111235</u>	<u>-75.095824</u>
<u>Lackawaxen River</u>	<u>confluence with Delaware River</u>	<u>500 feet upstream of the Woolen Mill Dam</u>	<u>40.984304</u>	<u>-75.191569</u>
<u>Dyberry Creek</u>	<u>confluence with Lackawaxen River</u>	<u>Jadwin Dam</u>	<u>41.612088</u>	<u>-75.263391</u>
<u>Darby Creek</u>	<u>Confluence with Delaware River</u>	<u>500 feet upstream of the confluence of Cobbs Creek and Darby Creek</u>	<u>39.907278</u>	<u>-75.255432</u>

Schuylkill River	Fairmount Dam	500 feet upstream of the Bingaman St. Bridge in Reading, Pennsylvania	40.326411	-75.934417
Neshaminy Creek	Confluence with Delaware River	500 feet upstream of the lowermost dam	40.143369	-74.915828

34. Compliance Certification: Each permittee who receives a written PASPGP-6 verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. This certification should indicate if the success of any required permittee-responsible mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits. The signature of the permittee is also required to certify the completion of the activity and mitigation. The completed certification document must be submitted to the District Engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.
35. Migratory Birds and Bald and Golden Eagles: The permittee is responsible for ensuring that an action authorized by PASPGP-6 complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the USFWS to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity. The permittee should contact the appropriate local office of the USFWS to determine if such authorizations are required for a particular activity. Information on the conservation of migratory birds and Bald and Golden Eagles can be found at the following USFWS web site:
<http://www.fws.gov/northeast/pafo/>
36. Migratory Bird Breeding Areas: Activities in waters of the United States, including jurisdictional wetlands, that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable. Recommendations pertaining to the conservation of migratory birds can be found at the following USFWS web site:
<http://www.fws.gov/northeast/pafo/>

By Authority of the Secretary of the Army:

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Date: 2021.06.24 16:54:15 -04'00'

John T. Litz
Colonel, U.S. Army
Commander and District Engineer
Baltimore District

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David C. Park
Lieutenant Colonel, Corps of Engineers
District Commander
Philadelphia District



Andrew J. Short
Colonel, Corps of Engineers
District Engineer
Pittsburgh District

**Acknowledgment and Agreement for Compliance with Terms &
Conditions of PASPGP-6**

Project Number: NAB-2026-00174-P33 (Centerville Creek Stream Restoration)

Project Location: Centerville Creek, York County, Pennsylvania

I hereby accept and agree to comply with the terms and conditions, of the PASPGP-6 authorizations, as stated.

Applicant's Signature

Date

I hereby accept and agree to comply with the terms and conditions, of the PASPGP-6 authorizations, as stated.

Applicant's Contractor's Signature

Date

Contractor Name (please print)

AREA CODE/TELEPHONE NO.

ADDRESS

Please return form by email to nab-regulatory@usace.army.mil. The Corps permit number NAB-2026-00174-P33 must be included in the subject line.

Permit Transfer

Project Number: NAB-2026-00174-P33 (Centerville Creek Stream Restoration)

Project Location: Centerville Creek, York County, Pennsylvania

Project Description: Restoration activity for stream.

TRANSFeree SIGNATURE

DATE

AREA CODE/TELEPHONE NO.

PRINTED NAME

ADDRESS

Please return form by email to nab-regulatory@usace.army.mil. The Corps permit number NAB-2026-00174-P33 must be included in the subject line.



**YORK COUNTY
CONSERVATION DISTRICT**

Conserving Natural Resources for Our Future

March 20, 2026

Watershed Alliance of York
Emily Neideigh
28 East Market Street
York, PA 17401

RE: E&S Plan Approval
Centerville Creek Restoration
Codorus & Shrewsbury Townships
York County

Dear Ms. Neideigh:

The erosion and sediment control (E&S) plan dated 3/4/2026 has been reviewed and is adequate to meet the minimum requirements of the DEP's PA Title 25, Chapter 102 Erosion and Sediment Control regulations and the PA Clean Streams Law provided that all Best Management Practices (BMPs) are properly implemented and maintained until the project has been completed and permanently stabilized. **Please ensure that the stamped approved E&S plan is fully implemented and available at the project site at all times.**

The District's E&S plan approval is valid for the duration of the project construction if no revisions are made to the approved E&S plans. If the above-referenced project has not commenced earth disturbance activities, the E&S plan approval expires 5 years from the date of this letter. This authorization does not relieve the applicant and/or operators from applying for and obtaining any and all additional permits or approvals from local, state or federal agencies.

The Conservation District has only reviewed the E&S plan to determine compliance with Chapter 102 regulations. By determining that the E&S plan is adequate to meet Chapter 102 regulations, neither the Conservation District nor the County assumes any responsibility for the implementation of the E&S plan or the implementation and maintenance of Best Management Practices (BMPs) contained in the E&S plan. The design, structural integrity, and installation of the BMPs are the responsibility of the applicant and/or operator(s).

If you have any questions regarding this authorization, please contact me at ph. # 717-840-7430.



Sincerely,

A handwritten signature in black ink, appearing to read 'Matthew Hall', written in a cursive style.

Matthew Hall
E&S Control Technician I

Enclosures:

Stamped approved E&S plans

cc: Brian Schultz – PennCore Consulting, LLC
Codorus & Shrewsbury Townships

File: mjs