3150-PM-BWEW0500 Rev. 6/2024 Form

pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATERWAYS ENGINEERING AND WETLANDS

# CHAPTER 105 WATER OBSTRUCTIONS AND ENCROACHMENT GENERAL PERMIT REGISTRATION

	SECTION A. APPLICANT INFORMATION					
Applicant's Name / Client Sunoco Pipeline LP	DEP Client II	<b>O#</b> (if known)		Employer ID# 23-3102656	ŧ (EIN)	
Client Information - Please selec	t Client Type / Co	de from drop dowr	n box under the correct e	ntity shown belo	w. (or may be written in) ↓	
Government		Non-Go	vernment		Individual	
		PARTL Par	tnership-Limited			
Mailing Address		City		State	ZIP + 4	
7 East Sixth Avenue		Trenton		NJ	08619	
Contact Person – Last Name Greblunas		irst ohn	MI Suffix	<b>Telephone</b> (302) 383-602	25	
Email Address john.greblunas@energytransfer.com						
	SECTION B. CO	ONSULTANT INFO	ORMATION (If applicabl	e)		
Contact Person – Last Name	First	MI Suffix	Consultants Title	Consultin	_	
Gaskins	Peter		Sr Environmental Scient	T	gy Services LLC	
Mailing Address 1105 Berkshire Blvd, Suite 320		<b>City</b> Wyomissing		<b>State</b> PA	<b>ZIP + 4</b> 19610	
<b>Telephone</b> (610) 780-1559	<b>Fax</b> ( )			Employer ID# 93-2964460	ŧ (EIN)	
Email pgaskins@aedenergyservices.com	1					
	SE	CTION C. PROJI	ECT INFORMATION			
Project / Site Name SPLP Dig 4			DEP Site ID# (if known or leave blank)			
Client Relationship - Please select Site-to-Client Relationship / Code from drop down box to the right. (or may be written in) →			Double-click on shaded area below to select correct Site-to-Client Relationship / Code ↓  OWNOP Owner/Operator			
County     Municipality     □ City     □ Borough       Delaware     Middletown			⊠ Township	Note: Munici	pal & County Notification is Required	
Site Location / Address	City		State	ZIP + 4		
(see coordinates below)		Media		PA	19063	
Latitude: <u>39.89395</u>			Longitude: -75.43196	3	<u> </u>	

#### SECTION D. REGISTRATION CHECKLIST AND REQUIREMENTS

PLEASE PLACE AN "X" NEXT TO EACH ITEM (1-11) TO ENSURE IT IS COMPLETED AND/OR PROVIDED. Unless otherwise specified, ALL ITEMS are <u>required</u> to ensure a complete Registration package. See <u>GP Registration Instructions</u> (3150-PM-BWEW0500) for additional details.

1. Registering a General Permit (GP): Check all GPs which you are registering. Enter project details to calculate applicable fee. See Chapter 105 Fee Calculation Worksheet (3150-PM-BWEW0553) for additional details

APPLICANT ENTRY						
Federal, State, county or municipal agency or municipal authority:	EXEMPT fro	om fees				
☐ <b>GP-1</b> Fish Habitat Enhancement Structures	\$ 50 =	\$				
☐ <b>GP-2</b> Small Docks and Boat Launching Ramps Per Dock / Ramp (#) x	\$ 175 =	\$				
GP-3 Bank Rehabilitation, Bank Protection and Gravel Bar Removal	\$ 250 =	\$				
☐ <b>GP-4</b> Intake and Outfall Structures	\$ 200 =	\$				
☐ <b>GP-5</b> Utility Line Stream CrossingsUtility Lines (#) x Per Crossing (#) x	\$ 250 =	\$				
☐ <b>GP-6</b> Agricultural Crossings and RampsPer Crossing / Ramp (#) x	\$ 50 =	\$				
☐ <b>GP-7</b> Minor Road Crossings	\$ 350 =	\$				
☐ <b>GP-8</b> Temporary Road Crossings	\$ 175 =	\$				
☐ GP-9 Agricultural Activities	\$ 50 =	\$				
☐ <b>GP-10</b> Abandoned Mine Reclamation	\$ 500 =	\$				
	\$ 750 =	\$ <u>750</u>				
☐ Temporary Disturbance (\$400/0.1ac) <u>0.1</u> acres x	\$4,000 =	+ \$ <u>400</u>				
☐ Permanent Disturbance (\$800/0.1ac) 0.0 acres x	\$8,000 =	+ \$				
GP	-11 subtotal	= \$				
☐ GP-15 Private Residential Construction in Wetlands	\$ 750 =	\$				
☐ Temporary Disturbance (\$400/0.1ac) acres x	\$4,000 =	+\$				
☐ Permanent Disturbance (\$800/0.1ac) acres x	\$8,000 =	+ \$				
GP-15 subtotal						
TOTAL OF A	LL GP FEES	= \$ <u>1,150</u>	<b>\$</b>			

	APPLICANT ENTRY		DEP ONLY			
2.	Location Map with project site marked: (Note: PNDI Search Receipt Map is sufficient)	$\boxtimes$	$\square$			
3.	Color Photographs showing proposed activity and resource area, as recommended in the instructions.	$\boxtimes$				
4.	<b>Project Description</b> including proposed impacts and potential coordination with the Federal Energy Regulatory Commission (FERC) or a separate/individual 401 Water Quality Certification.	$\boxtimes$				
5.	Site Plan & Other Drawings showing all proposed project activities. <u>Sample Drawings</u> are available.  NOTE - For registrations of a GP-7 or GP-11, some activities for use by the general public may require a Professional Engineer Seal and Certification. See <u>GP Registration Instructions</u> for specific details.		✓			
6.	6. Chapter 102 (Erosion and Sediment Control): Select ONE option to indicate how compliance is being obtained.  See GP Registration Instructions for more information.					
	a. For GP-9: Has a Conservation Plan been approved by the county conservation district?					
	b. For GP-11: The E&S Plan is attached.		A			
	c. For Oil & Gas activities: The E&S Plan is attached OR a separate E&S permit (ESCGP) has been submitted.					
	d. All Other GPs: Will obtain an approved E&S Plan prior to commencement of construction.					
7.	Changes in Waterway Opening and Registration of Multiple Structures: Is this a GP-11? ☐ Yes ☑ No If Yes, provide the information below:					
	a. <u>Bridge Or Culvert Replacement Projects or Projects That Change the Waterway Opening</u> form (3150-PM-BWEW0552B) or equivalent.					
	b. Registrations of multiple structures: Project Inventory form (3150-PM-BWEW0552A) or equivalent.					
8.	Pennsylvania Natural Diversity Inventory (PNDI): PNDI Search Receipt AND clearance letters.  NOTE - Concurrent review does not apply to Chapter 105 GPs. See GP Registration Instructions for more information.	$\boxtimes$				
9.	Wetlands: Are wetlands present at the project site?					
	a. A wetland delineation report following the method as detailed in the GP Registration Instructions.	$\boxtimes$	$\square$			
	b. Method to provide <u>Compensatory Mitigation</u> for impacts <u>which require compensatory mitigation</u> , as detailed in the <u>GP Registration Instructions</u> .					
10.	. Proposed Impacts: General Permit Aquatic Resource Impact Table form (3950-PM-BWEW0560) or equivalent.	$\boxtimes$				
11.	1. Submerged Lands of the Commonwealth: In certain situations, a Submerged Lands License Agreement (SLLA) is required, but not all waters are Submerged Lands of the Commonwealth. The final determination is made by DEP.  See GP Registration Instructions for more information. Select ONE option to indicate how an SLLA is being addressed.					
	a. I believe an SLLA is required and have attached plans including the facility area information. <b>OR</b>					
	b. I believe an SLLA is not required or I am unsure.	$\boxtimes$	✓			



# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATERWAYS ENGINEERING AND WETLANDS

Applicant's Name / Client Sunoco Pipeline LP

## GENERAL PERMIT AQUATIC RESOURCE IMPACT TABLE FOR PENNSYLVANIA CHAPTER 105 WATER OBSTRUCTION AND ENCROACHMENT GENERAL PERMIT REGISTRATION

	Project / Si	te Name: SI	PLP Dig 4	Date: Marc	ch 2025	-				
DEP USE ONLY		Project Information							PA DEP / 105	
PADEP Permit Number	Structure / Activity Unique Identifier	Activity Water Ourse / Work						Facility / Impact Type (temp / perm)	Impact Area in Square Feet	Impact Length in feet
	GP-11	Chester Creek (floodway)	39.8939	-75.43194	Chester Creek	TSF.MF	Temporary access, limit of disturbance, excavation	Temp	2,446	82

**DEP USE ONLY** 

3150-PM-BWEW0560 6/2024 Application Example



# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATERWAYS ENGINEERING AND WETLANDS

US Army Corps of Engineers impacts for PASPGP determination	TOTAL linear feet of stream impacts	
03 Aimy Corps of Engineers impacts for PASPGP determination	TOTAL acres of waters impacted	

SECT	ION	F	CERT	IFICA	TION

I certify under penalty of law that the information provided in this permit registration is true and correct to the best of my knowledge and information and that I possess the authority to undertake the proposed action. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (If any of the information and/or plans is found to be in error, falsified, and/or incomplete, this authorization/verification may be subject to modification, suspension, or revocation in accordance with applicable regulations.) I further certify that this project complies with all the conditions of the general permit.

Applicant / Owner Signature

Date 7 1 24

Typed / Printed Name

This General Permit shall not be effective until the owner has had their E&S Plan reviewed by the appropriate Regional Office or District, and, where required, obtained an SLLA from DEP.

Please provide a copy of the Registration form to the Municipality & County in which the work will be performed.

Proof of receipt is not required to be provided to DEP.

THIS ACKNOWLEDGED COPY OF THIS GENERAL PERMIT REGISTRATION PACKAGE AND THE E&S PLAN MUST BE AVAILABLE AT THE PROJECT SITE DURING CONSTRUCTION.



#### STOP! THE REMAINDER OF THIS FORM WILL BE COMPLETED BY DEP STAFF.



	_							
	SECTION F. DECISION / DISPOSITION - COMPLETED BY DEP							
Decis	sion Review:							
	Abdel Nassani		_		GP	GP112301225-003		
	DEP / District Reviewer Signature				GP			
	Abdel Nassani & Abe Koul				GP			
-	Reviewer's Typed / Printed Name				OI.			
Disp	osition Status:					Comments		
abla	ACKNOWLEDGED	Date	4/3/2	025		OK to be issued		
	SLLA Required	☐ Yes A	\ttached	No		PNDI is clear with Phase I study		
	ELIGIBILITY DEFICIENCY *	Date						
	EXTENSION REQUEST *	Date	-					
	WITHDRAWN	Date						
re-su	ne GP registration information is incomplete/defice in the state of th	ient a cop led by the	oy of this i extension	egistration date listed	form and dabove.	requested additional information <b>must be</b> See <u>GP Registration Instructions</u> for more		
FEDE	ERAL AUTHORIZATION:							
	As proposed, this General Permit does not require	e Federal /	Authorizati	on.				
abla'	Non-reporting PASPGP verification / authorization attached.							
	Reporting * – A copy of this General Permit registration package has been sent to the U.S. Army Corps of Engineers. Separate federal authorization may be required.							

\* If the reporting box is checked **you do not have Federal authorization** for this project and **such authorization may be required prior to starting your project**. In accordance with procedures established with the U.S. Army Corps of Engineers, you will be contacted directly by the Corps regarding Federal Authorization.

# 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 <a href="http://www.nab.usace.army.mil/Missions/Regulatory/PermitTypesandProcess.aspx">http://www.nab.usace.army.mil/Missions/Regulatory/PermitTypesandProcess.aspx</a> or by calling the Corps at 814-235-0570

Permittee: Sunoco Pipeline LP

Date of PASPGP-6 Verification: 4/3/2025 State Authorization(s): GP 112301225-003

#### **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
Wanamaker Building
100 Penn Square East Regulatory Branch
Philadelphia, Pennsylvania 19107-3390

Email: PhiladelphiaDistrictRegulatory@usace.army.mil

#### Pittsburgh District

U.S. Army Corps of Engineers, Regulatory Branch William S. Moorhead Federal Building, 20<sup>th</sup> 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:

 $\underline{https://www.fishandboat.com/Fish/PennsylvaniaFishes/Trout/Pages/TroutWaterClassifications.aspx.}$ 

- 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 ¾ 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: <a href="https://media.defense.gov/2017/Nov/20/2001846135/-1/-1/0/CG\_2554.pdf">https://media.defense.gov/2017/Nov/20/2001846135/-1/-1/0/CG\_2554.pdf</a>. The completed application must be sent to the appropriate USCG office as indicated below:
  - Baltimore/Philadelphia Districts: Commander Fifth Coast Guard District, 431 Crawford Street, Room 100, Portsmouth, VA 23704-5504, Attn: Mr. Matthew Creelman; by email to <u>Matthew.K.Creelman2@uscg.mil</u>; 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.

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

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

- 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(1)(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: <a href="http://www.fws.gov/northeast/pafo/">http://www.fws.gov/northeast/pafo/</a>

By Authority of the Secretary of the Army:

LITZ.JOHN.THOMAS.1106467079 Digitally signed by LITZ.JOHN.THOMAS.1106467079 Date: 2021.06.24 16:54:15 -04'00'

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

# PARK.DAVID.CHON Digitally signed by PARK.DAVID.CHONGWOO.1044560808 Date: 2021.06.14 10:26:03 -04'00'

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

Andrew J. Short

Colonel, Corps of Engineers

District Engineer Pittsburgh District



525 FRITZTOWN ROAD SINKING SPRING, PA 19608

# 11010 - 14-INCH TWIN OAKS TO NEWARK

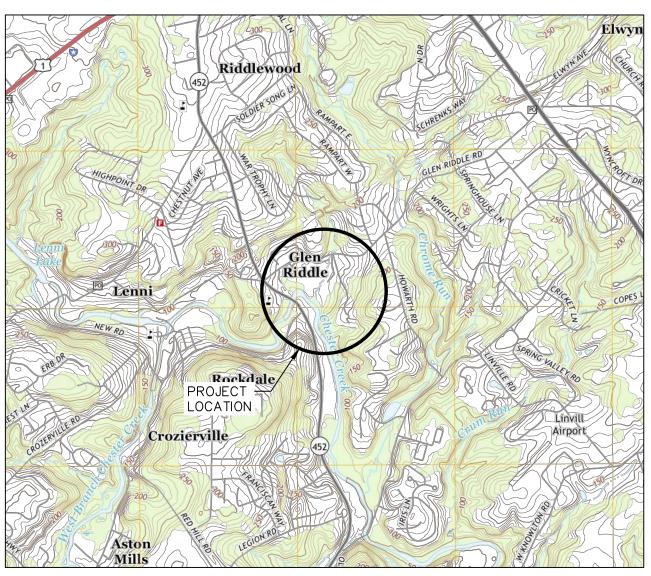
DIG 4 PIPELINE REPAIR MIDDLETOWN TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA CIVIL CONSTRUCTION PLANS ISSUED FOR PERMIT



AED ES PROJECT NO. 44-44116

MARCH 2025





PROJECT LOCATION MAP SCALE: 1"=2,000'

MAP REFERENCES: USGS MEDIA, PA (2016)

## INDEX OF DRAWINGS

ACCESS AND OVERALL SITE PLAN 44-44116-D37-101 44-44116-D37-102 PLAN AND PROFILE 44-44116-D37-103 EROSION AND SEDIMENTATION CONTROL PLAN 44-44116-D37-104 RESTORATION PLAN 44-44116-D37-105 EROSION AND SEDIMENTATION CONTROL DETAILS 44-44116-D37-106 EROSION AND SEDIMENTATION CONTROL NOTES 44-44116-D37-107 EROSION AND SEDIMENTATION CONTROL NOTES

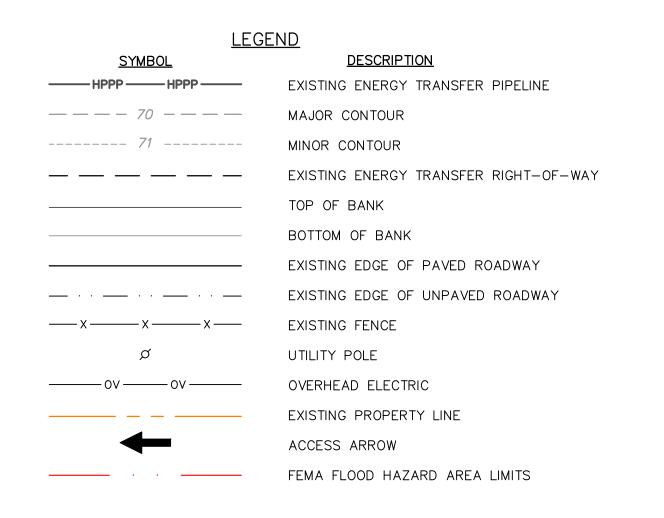
Approved by PA DEP, A. Nassani, and Abe Koul 4/3/2025





GENERAL NOTES:

- 1. THE CONTRACTOR SHALL CONTACT PENNSYLVANIA 811. AT 811 OR 1-800-272-1000 AT LEAST THREE (3) WORKING DAYS PRIOR TO ANY EARTH DISTURBANCE.
- 2. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING BURIED UTILITIES, BOTH HORIZONTALLY AND VERTICALLY, PRIOR TO CONSTRUCTION.
- 3. THE PLANS ARE BASED ON THE FOLLOWING:
- a. TOPOGRAPHIC SURVEY PERFORMED BY AEDES IN FEBURARY, 2025.
- b. NO BOUNDARY SURVEY WAS PERFORMED AS A PART OF THIS PROJECT. PROPERTY LINES BASED ON COUNTY GIS DATA.
- c. EXISTING SUNOCO RIGHT-OF-WAY IS ASSUMED TO BE 30 FEET TOTAL WIDTH ..
- 4. THE PROJECT IS LOCATED IN PENNSYLVANIA STATE PLANE SOUTH, US FOOT, NAD83. THE VERTICAL DATUM
- 5. THE CONTRACTOR SHALL USE TIMBER MATS TO PREVENT RUTTING AND TO PROTECT EXISTING BURIED UTILITIES AS NECESSARY.
- 6. LIMIT OF DISTURBANCE AREAS:
- TOTAL LOD = 6,972 S.F.  $(0.160 \text{ AC}\pm)$
- 7. WORK AREA SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS WITH REGARDS TO LAND COVER AND GRADES.
- 8. AT NO TIME SHALL WORK CAUSE SEDIMENT TO ENTER A SURFACE WATER BODY OR ALLOW EXCESSIVE
- 9. WORK TO BE CONDUCTED IN DRY CONDITIONS TO THE EXTENT POSSIBLE.
- 10. SEDIMENT TRACKED OR CONVEYED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE REMOVED AND REDEPOSITED INTO THE LIMIT OF DISTURBANCE BY THE END OF EACH WORKING DAY. REMOVAL CAN BE COMPLETED THROUGH USE OF MECHANICAL OR HAND TOOLS. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELLED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER. IF REMOVAL AT THE END OF EACH WORKING DAY IS NOT EFFECTIVE, STREET SWEEPING SHALL BE USED.
- 11. THE RECEIVING WATER IS CHESTER CREEK. IT HAS A DESIGNATED USE OF TROUT STOCK FISHES (TSF) AND NO EXISTING USE.





Know what's below. Call before you dig.

NOTES/REFERENCE DRAWINGS AED **Energy Services** Powered by ARGTH THE LOCATION OF THE PIPELINE FACILITIES AS SHOWN HEREON MUST BE CONSIDERED AS APPROXIMATE ONLY. BEFORE DIGGING OR FOR AN EXACT LOCATION PLEASE CONTACT YOUR STATES UNDERGROUND UTILITY LOCATION SERVICE. AED ES PROJECT No.: 44-44116 REV

CONSTRUCTION YEAR: DATE 02/2025 DRAWN CNN CHECK SPG 02/2025 PPROVED WKS 02/2025 DESCRIPTION DATE CHK'D APP'D SCALE: AS NOTED

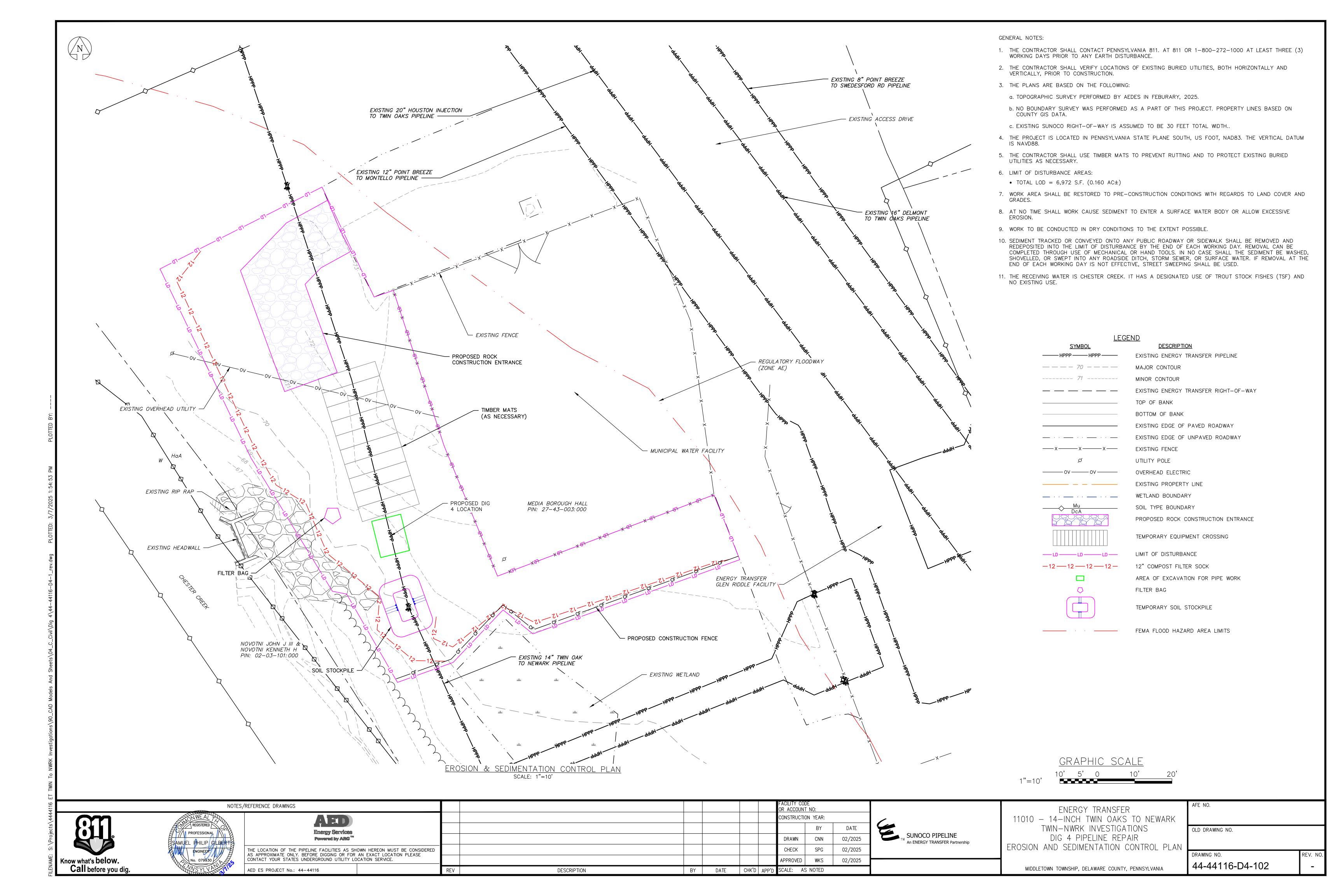
SUNOCO PIPELINE An ENERGY TRANSFER Partnership

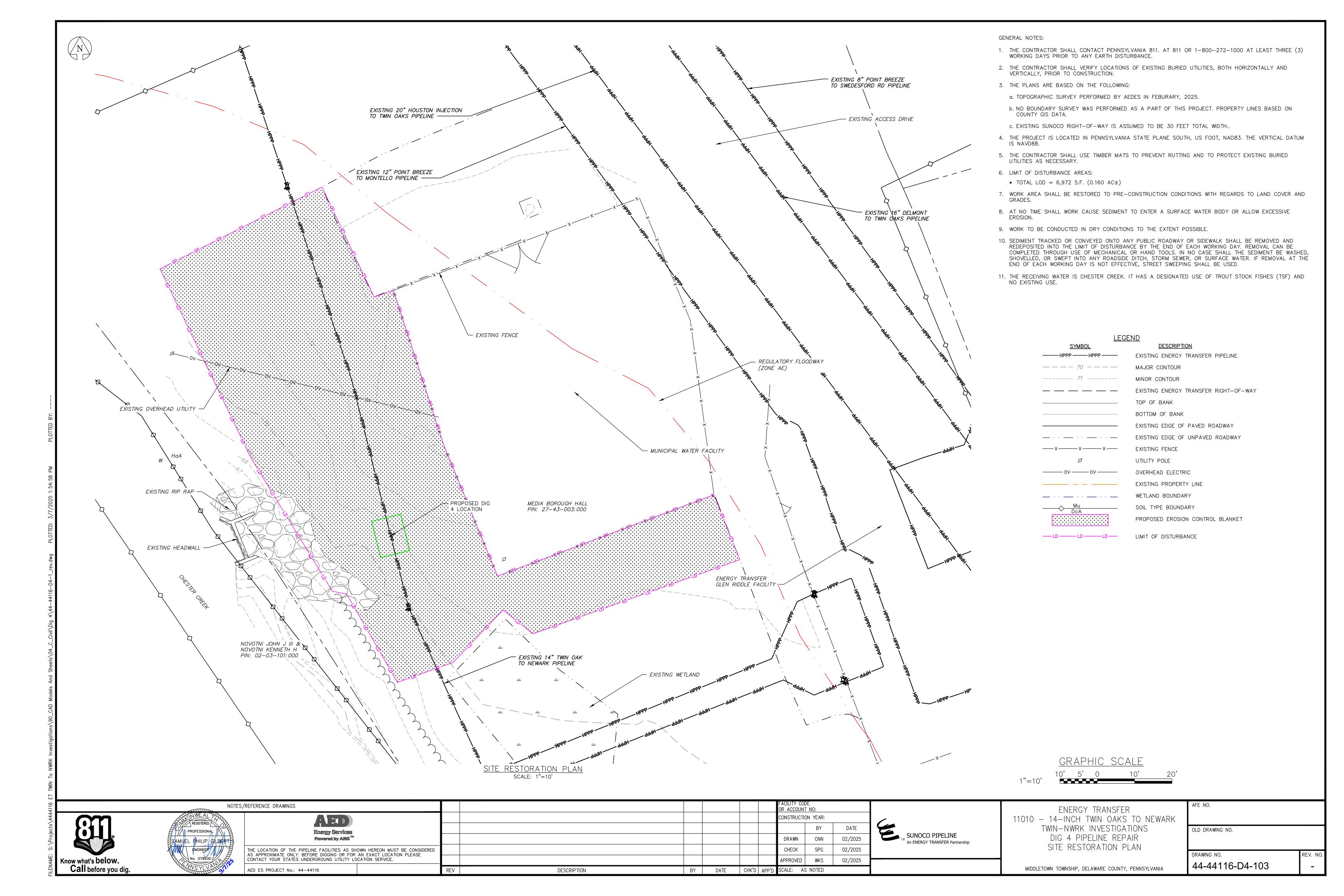
ENERGY TRANSFER 11010 - 14-INCH TWIN OAKS TO NEWARK TWIN-NWRK INVESTIGATIONS DIG 4 PIPELINE REPAIR ACCESS AND OVERALL SITE PLAN

MIDDLETOWN TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA

OLD DRAWING NO. DRAWING NO. 44-44116-D4-101

AFE NO.







1. TOPSOIL AND SUBSOIL MUST BE KEPT IN SEPARATE STOCKPILES.

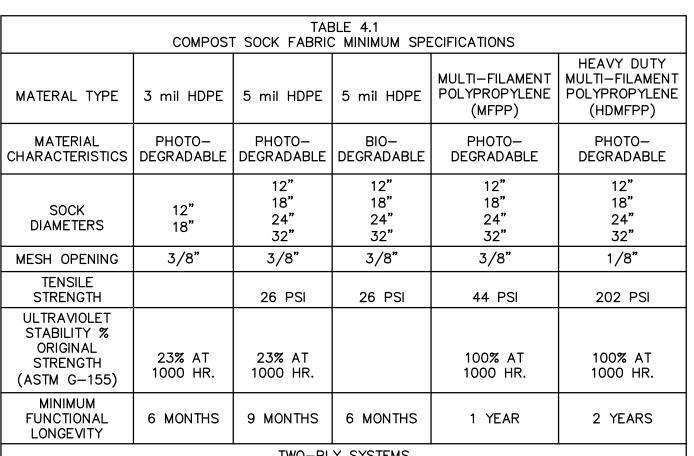
MAX.

2. EXCAVATED TOPSOIL (WITH THE VEGETATIVE ROOT MASS) SHALL BE CAREFULLY REMOVED AND STOCKPILED SEPARATELY FROM THE SUBSOIL (UNLESS THERE IS STANDING WATER OR THE SOIL IS TOO SATURATED TO SEGREGATE).

MAX.

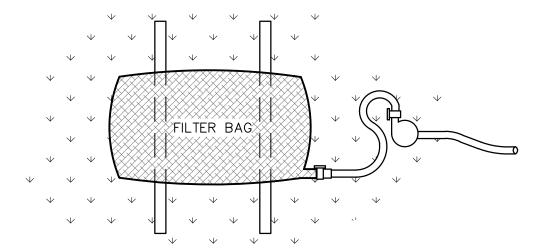
— GEOTEXTILE

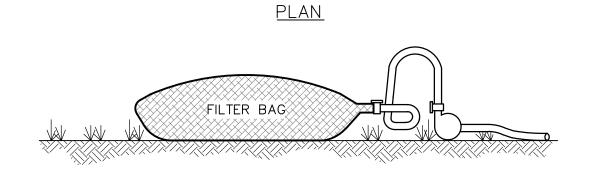
- 3. IF THE VERTICAL HEIGHT OF A STOCKPILE EXCEEDS 20' FOR 2:1 SLOPES OR 30' FOR 3:1 SLOPES, BENCHING MUST BE PROVIDED.
- 4. TOPSOIL STOCKPILES SHALL BE STABILIZED PER COUNTY SOIL CONSERVATION DISTRICT REQUIREMENTS.



FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS			
	TWO-PLY SYSTEMS							
				HDPE BIAXIAL N	ET			
				CONTINUOUSLY WO	DUND			
INNED CO	NTAINMENT NE	TTINO	FUSION-WELDED JUNCTURES					
INNER CO	NTAINMENT NE	TING	3/4" X 3/4" MAX. APERTURE SIZE					
OLITED	FILTRATION ME	·cu	COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER AND NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEDDLE PUNCH)					
OOTER	FILIKATION ME	.SIT	3/16" MAX. APERTURE SIZE					
SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR								

FILTREXX & JMD





#### **ELEVATION**

NOT TO SCALE

— 18" COMPOST FILTER SOCK

GRADE

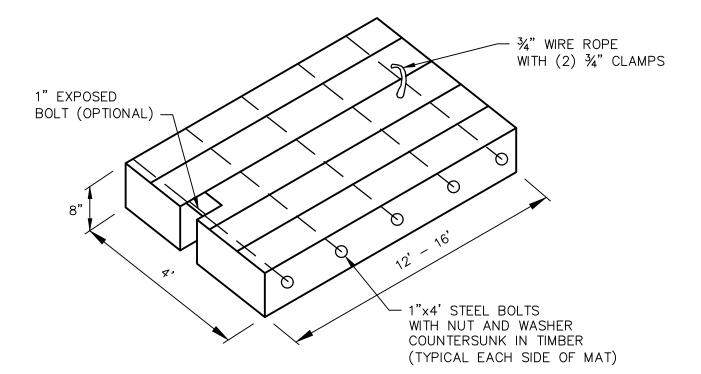
AROUND PERIMETER (TYP)

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

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

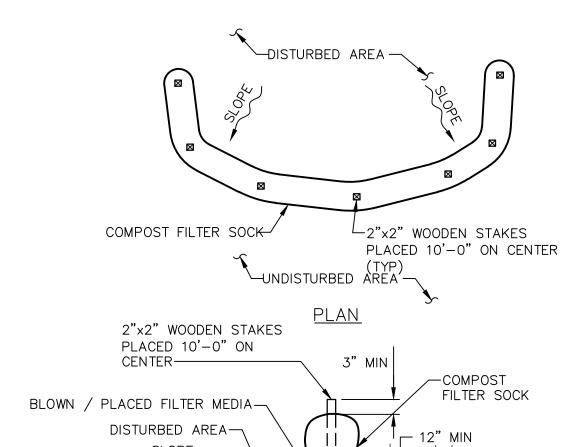
- 2. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE ON SITE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY
- 3. BAGS SHALL BE LOCATED IN WELL VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND AN EROSION RESISTANT FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.
- 4. A DOWNSLOPE SEDIMENT BARRIER IS NOT REQUIRED FOR MOST INSTALLATIONS. HOWEVER, COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.
- 5. THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A
- PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE. 6. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 OF THE MAXIMUM RATE SPECIFIED BY THE MANUFACTURER, WHICHEVER IS
- LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED. 7. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

TABLE 4.2						
COMPOS	T STANDARDS					
ORGANIC MATTER CONTENT	25% - 100% (DRY WEIGHT BASIS)					
ORGANIC PORTION	FIBROUS AND ELONGATED					
рН	5.5 - 8.5					
MOISTURE CONTENT	30% - 60%					
PARTICLE SIZE	30%-50% PASS THROUGH 3 SIEVE					
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM					



# TYPICAL TIMBER MAT DETAIL

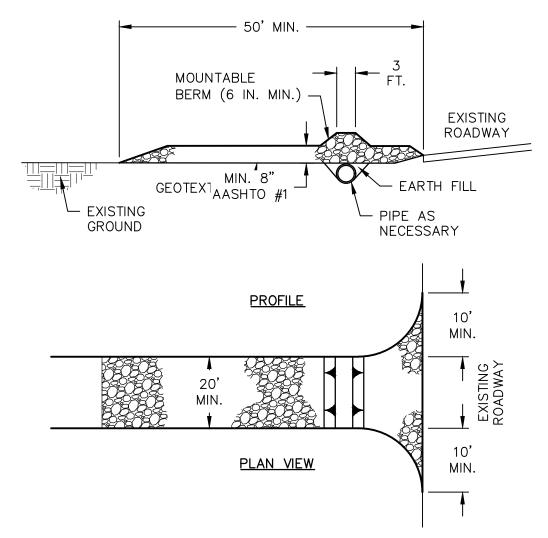
- 1. MATS ARE BUILT WITH WIRE ROPE TYPICAL EACH END OR EXPOSED BOLT TYPICAL EACH END FOR HANDLING, CONSTRUCTED OF ROUGH CUT HARDWOOD.
- 2. TIMBER MATS SHALL BE USED IN SOFT AREAS ALONG THE PIPELINE ROUTE AS NEEDED.
- 3. CONTRACTOR TO PLACE GEOTEXTILE FABRIC (TENCATE MIRAFI 500X OR EQUIVALENT) UNDER TIMBER MATS.



## <u>SECTION</u> COMPOST FILTER SOCK NOT TO SCALE

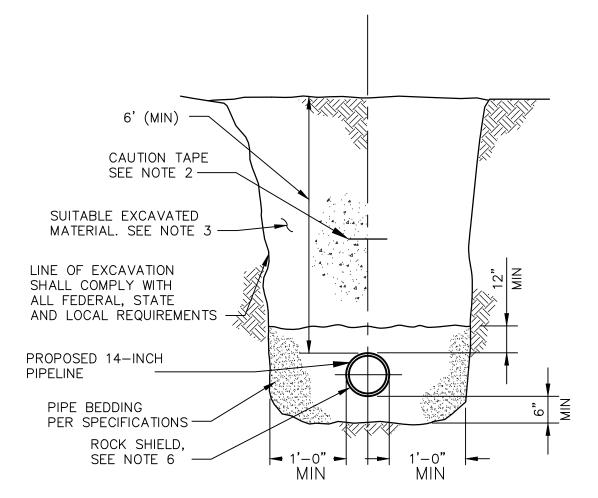
UNDISTURBED □

- 1. SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PADEP EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PADEP EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL.
- 2. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.
- 3. TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER
- 4. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE COMPOST FILTER
- 5. COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
- 6. BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS, PHOTODEGRADABLE SOCKS SHALL BE REPLACED AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- 7. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE COMPOST FILTER SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IF THE SOCK IS LEFT IN PLACE THEN THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.



- \* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE
- 1. REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF
- 2. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
- 3. MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.
- 4. MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

ROCK CONSTRUCTION ENTRANCE NO SCALE



## TYPICAL PIPE TRENCH (UNPAVED AREAS)

NO SCALE

- 1. THE PIPELINE SHALL BE ADEQUATELY SUPPORTED IN THE DITCH WITH SPANS NOT GREATER THAN 25 FEET PRIOR TO BACKFILLING.
- 2. CAUTION TAPE SHALL BE INSTALLED AT DEPTH OF 2 FEET BELOW THE SURFACE.
- 3. THE OWNER'S REPRESENTATIVE WILL DETERMINE IF THE BACKFILL IS SUITABLE MATERIAL.
- 4. LIFTS NOT TO EXCEED 6-INCHES, FOR DEPTHS 0 TO 2 FEET, COMPACT TO 85% SPD. FOR DEPTHS BELOW 2FEET, COMPACT TO 90% SPD.
- 5. PIPELINE SHALL TYPICALLY HAVE A MINIMUN OF 4' OF COVER.



REGISTERED PROFESSIONAL SAMUEL PHILIP GILBERT ENGINEER No. 079930

NOTES/REFERENCE DRAWINGS AED) **Energy Services** Powered by ARG AS APPROXIMATE ONLY. BEFORE DIGGING OR FOR AN EXACT LOCATION PLEASE CONTACT YOUR STATES UNDERGROUND UTILITY LOCATION SERVICE. AED ES PROJECT No.: 44-44116

THE LOCATION OF THE PIPELINE FACILITIES AS SHOWN HEREON MUST BE CONSIDERED REV

ONSTRUCTION YEAR: DATE DRAWN CNN 02/2025 CHECK SPG 02/2025 PPROVED | WKS 02/2025 DESCRIPTION DATE CHK'D APP'D SCALE: AS NOTED



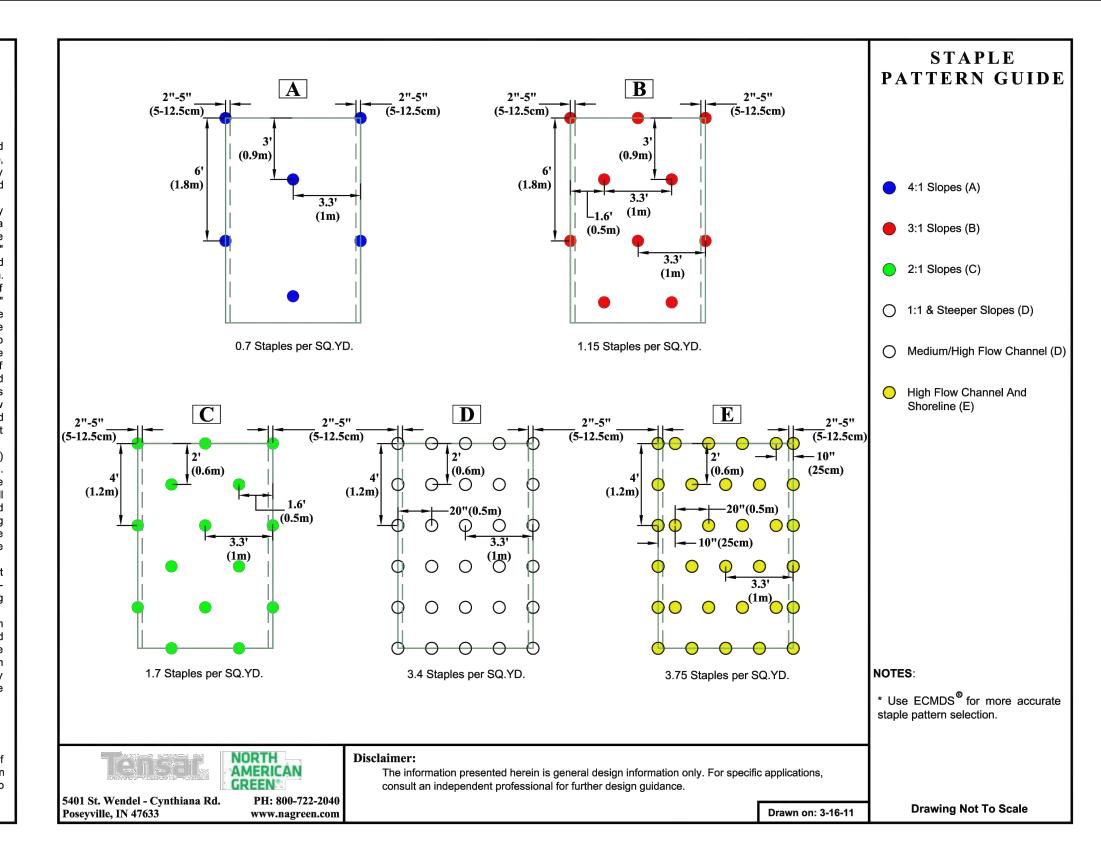
ENERGY TRANSFER 11010 - 14-INCH TWIN OAKS TO NEWARK TWIN-NWRK INVESTIGATIONS DIG 4 PIPELINE REPAIR EROSION AND SEDIMENTATION CONTROL DETAILS

OLD DRAWING NO. DRAWING NO.

AFE NO.

44-44116-D4-104

MIDDLETOWN TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA



**TABLE 11.4** 

Mixture		Seeding Rate -	Seeding Rate - Pure Live Seed <sup>1</sup>					
Number	Species	Most Sites	Adverse Sites					
	Spring oats (spring), or	64	96					
	Annual ryegrass (spring or fall), or	10	15					
1 <sup>2</sup>	Winter wheat (fall), or	90	120					
	Winter rye (fall)	56	112					
	Tall fescue, or	60	75					
	Fine fescue, or	35	40					
2³	Kentucky bluegrass, plus	25	30					
	Redtop <sup>4</sup> , or	3	3					
	Perennial ryegrass	15	20					
	Birdsfoot trefoil, plus	6	10					
3	Tall fescue	30	35					
	Birdsfoot trefoil, plus	6	10					
4	Reed canarygrass	10	15					
	Crownvetch, plus	10	15					
5 <sup>8</sup>	Tall fescue, or	20	25					
-	Perennial ryegrass	20	25					
	Crownvetch, plus	10	15					
6 <sup>5,8</sup>	Annual ryegrass	20	25					
	Birdsfoot trefoil, plus	6	10					
<b>7</b> <sup>8</sup>	Crownvetch, plus	10	15					
	Tall fescue	20	30					
	Flatpea, plus	20	30					
8	Tall fescue, or	20	30					
	Perennial ryegrass	20	25					
	Serecia lespedeza, plus	10	20					
9 <sup>6</sup>	Tall fescue, plus	20	25					
_	Redtop <sup>4</sup>	3	3					
	Tall fescue, plus	40	60					
10	Fine fescue	10	15					
	Deertongue, plus	15	20					
11	Birdsfoot trefoil	6	10					
	Switchgrass, or	15	20					
12 <sup>7</sup>	Big Bluestem, plus	15	20					
	Birdsfoot trefoil	6	10					
	Orchardgrass, or	20	30					
13	Smooth bromegrass, plus	25	35					
10	Di la cara di Cara	20	100					

Birdsfoot trefoil Penn State, "Erosion Control and Conservation Plantings on Noncropland"

- 1. PLS is the product of the percentage of pure seed times percentage germination divided by 100. For example, to secure the actual planting rate for switchgrass, divide 12 pounds PLS shown on the seed tag. Thus, if the PLS content of a given seed lot is 35%, divide 12 PLS by 0.35 to obtain 34.3 pounds of seed
- required to plant one acre. All mixtures in this table are shown in terms of PLS. 2. If high-quality seed is used, for most sites seed spring oats at a rate of 2 bushels per acre, winter wheat at 11.5 bushels per acre, and winter rye at 1 bushel per acre. If germination is below 90%, increase these
- suggested seeding rates by 0.5 bushel per acre.
- 3. This mixture is suitable for frequent mowing. Do not cut shorter than 4 inches. 4. Keep seeding rate to that recommended in table. These species have many seeds per pound and are very competitive. To seed small quantities of small seeds such as weeping lovegrass and redtop, dilute with dry
- 5. Use for highway slopes and similar sites where the desired species after establishment is crownvetch.
- 6. Use only in extreme southeastern or extreme southwestern Pennsylvania. Serecia lespedeza is not well
- adapted to most of PA. 7. Do not mow shorter than 9 to 10 inches.

sawdust, sand, rice hulls, buckwheat hulls, etc.

8. Seed mixtures containing crown vetch should not be used in areas adjacent to wetlands or stream channels due to the invasive nature of this species.

**TABLE 11.3 Plant Tolerances of Soil Limitation Factors** 

				Tolerates		Minimum Seed Specifications <sup>3</sup>						
Species	Growth Habit <sup>1</sup>	Wet Soil	Dry Site	Low Fertility	Acid Soil (pH 5-5.5) <sup>2</sup>	Purity (%)	Ready Germ (%)	Hard Seed (%)	Total Germ (%)	Seeds/lb (1,000s)		
Warm-Season Grass	ses											
Deertongue	bunch	yes	yes	yes	yes	95	75		75	250		
Weeping lovegrass	bunch	no	yes	yes	yes	97	75		75	1,500		
Switchgrass⁴ Big bluestem	bunch bunch	yes no	yes yes	yes yes	yes yes			PLS) PLS)		390 150		
Cool-Season Grasse	es											
Tall Fescue	bunch	yes	no	yes	no	95	80		80	227		
Redtop	sod	yes	yes	yes	yes	92	80		80	5,000		
Fine fescues	sod	no	no	yes	no	95	80		80	400		
Perennial ryegrass	bunch	yes	no	no	no	95	85		85	227		
Annual ryegrass	bunch	yes	no	yes	no	95	85		85	227		
Kentucky bluegrass	sod	no	no	no	no	85	75		75	2,200		
Reed canarygrass	sod	yes	yes	yes	no	95	70		70	520		
Orchardgrass	bunch	yes	yes	yes	yes	95	80		80	654		
Timothy	bunch	yes	no	yes	yes	95	80		80	1,230		
Smooth bromegrass	sod	no	yes	yes	no	95	80		80	136		
Legumes <sup>5</sup>				•								
Crownvetch	sod	no	yes	yes	no	98	40	30	65	120		
Birdsfoot trefoil <sup>6</sup>	bunch	yes	no	yes	yes	98	60	20	80	400		
Flatpea	sod	no	no	yes	yes	98	55	20	75	10		
Serecia lespedeza	bunch	no	yes	yes	yes	98	60	20	80	335		
Cereals												
Winter wheat	bunch	no	no	no	no	98	85		85	15		
Winter rye	bunch	no	no	yes	yes	98	85		85	18		
Spring oats	bunch	no	no	no	no	98	85		85	13		
Sundangrass	bunch	no	yes	no	no	98	85		85	55		
Japanese millet	bunch	yes	no	yes	yes	98	80		80	155		

- Growth habit refers to the ability of the species to either form a dense sod by vegetative means (stolons, rhizomes, or roots) or remain in a bunch or single plant form. If seeded heavily enough, even bunch formers can produce a very dense stand. This is sometimes called a sod, but not in the sense of a sod formed by vegetative means.
- <sup>2</sup> Once established, plants may grow at a somewhat lower pH, but cover generally is only adequate at pH 6.0 or above.
- <sup>3</sup> Minimum seed lots are truly minimum, and seed lots to be used for revegetation purposes should equal or exceed these standards. Thus, deertongue grass should germinate 75% or better. Crownvetch should have at least 40% readily germinable seed and 30% hard seed. Commonly, seed lots are available that equal or exceed minimum specifications. Remember that disturbed sites are adverse for plant establishment. Ready germination refers to seed that germinates during the period of the germination test and that would be expected, if conditions are favorable, to germinate rapidly when planted. The opposite of ready germination is dormant seed, of which hard seed is one type.
- <sup>4</sup> Switchgrass seed is sold only on the basis of PLS.
- <sup>5</sup> Need specific legume inoculant. Inoculant suitable for garden peas and sweetpeas usually is
- satisfactory for flatpea.
- <sup>6</sup> Birdsfoot trefoil is adapted over the entire state, except in the extreme southeast where crown and root rots may injure stands.

Penn State, "Erosion Control and Conservation Plantings on Noncropland,"

**TABLE 11.2** Soil Amendment Application Rate Equivalents

	Perma						
Soil Amendment	Per Acre	Per 1,000 sq. ft.	Per 1,000 sq. yd.	Notes			
Agricultural lime	6 tons	240 lb.	2,480 lb.	Or as per soil test; may not be required in agricultural fields			
10-10-20 fertilizer	1,000 lb.	210 lb.	Or as per soil test; may not be required in agricultural fields				
	Tempo	orary Seeding App	lication Rate				
Agricultural lime	1 ton	40 lb.	410 lb.	Typically not required for topsoil stockpiles			
10-10-10 fertilizer	500 lb.	12.5 lb.	100 lb.	Typically not required for topsoil stockpiles			

Adapted from Penn State, "Erosion Control and Conservation Plantings on Noncropland"

NOTE: A compost blanket which meets the standards of this chapter may be substituted for the soil amendments shown in Table 11.2.

#### **TABLE 11.6 Mulch Application Rates**

Mulch Type	Per Acre	Per 1,000 sq. ft.	Per 1,000 sq. yd.	Notes		
Straw	3 tons	140 lb.	1,240 lb.	Either wheat or oat straw, free of weeds, not chopped or finely broken		
Hay	3 tons	140 lb.	1,240 lb.	Timothy, mixed clover and timothy or other native forage grasses		
Wood Chips	4 - 6 tons	185 - 275 lb.	1,650 - 2,500 lb.	May prevent germination of grasses and legumes		
Hydromulch	1 ton	47 lb.	415	See limitations above		

#### **TABLE 11.5 Recommended Seed Mixtures for Stabilizing Disturbed Areas**

	Nurse	Seed Mixture
Site Condition	Crop	(Select one mixture)
Slopes and Banks (not mowed)		
Well-drained	1 plus	3, 5, 8, or 12 <sup>1</sup>
Variable drainage	1 plus	3 or 7
Slopes and Banks (mowed)		
Well-drained	1 plus	2 or 10
Slopes and Banks (grazed/hay)	•	
Well-drained	1 plus	2, 3, or 13
Gullies and Eroded Areas	1 plus	3, 5, 7, or 12 <sup>1</sup>
Erosion Control Facilities (BMPs)	•	
Sod waterways, spillways, frequent water flow areas	1 plus	2, 3, or 4
Drainage ditches	•	
Shallow, less than 3 feet deep	1 plus	2, 3, or 4
Deep, not mowed	1 plus	5 or 7
Pond banks, dikes, levees, dams, diversion channels,		
And occasional water flow areas		
Mowed areas	1 plus	2 or 3
Non-mowed areas	1 plus	5 or 7
For hay or silage on diversion channels and	-	
occasional water flow areas	1 plus	3 or 13
Highways <sup>2</sup>		
Non-mowed areas		
Pure crownvetch <sup>3</sup>	1 plus	5 or 6
Well-drained	1 plus	5, 7, 8, 9, or 10
Variable drained	1 plus	3 or 7
Poorly drained	1 plus	3 or 4
Areas mowed several times per year	1 plus	2, 3, or 10
Utility Right-of-way		
Well-drained	1 plus	5, 8, or 12 <sup>1</sup>
Variable drained	1 plus	3 or 7
Well-drained areas for grazing/hay	1 plus	2, 3, or 13
Effluent Disposal Areas	1 plus	3 or 4
Sanitary Landfills	1 plus	3, 5, 7, 11 <sup>1</sup> , or 12 <sup>1</sup>
Surface mines		
Spoils, mine wastes, fly ash, slag, settling basin		
Residues and other severely disturbed areas	1 plus	3, 4, 5, 7, 8, 9, 11 <sup>1</sup> , or 12 <sup>1</sup>
(lime to soil test)		
Severely disturbed areas for grazing/hay	1 plus	3 or 13

- 1. For seed mixtures 11 and 12, only use spring oats or weeping lovegrass (included in mix) as nurse crop.
- 2. Contact the Pennsylvania Department of Transportation district roadside specialist for specific suggestions on
- treatment techniques and management practices. 3. Seed mixtures containing crown vetch should not be used in areas adjacent to wetlands or stream channels

due to the invasive nature of this species.

NOTES/REFERENCE DRAWINGS R ACCOUNT NO: CONSTRUCTION YEAR: AED REGISTERED DATE BY PROFESSIONAL / **Energy Services** 02/2025 Powered by ARG DRAWN CNN SAMUEL PHILIP GILBERT ENGINEER CHECK SPG 02/2025 THE LOCATION OF THE PIPELINE FACILITIES AS SHOWN HEREON MUST BE CONSIDERED AS APPROXIMATE ONLY. BEFORE DIGGING OR FOR AN EXACT LOCATION PLEASE No. 079930 CONTACT YOUR STATES UNDERGROUND UTILITY LOCATION SERVICE. Know what's below. 02/2025 APPROVED WKS Call before you dig. BY DATE CHK'D APP'D SCALE: AS NOTED AED ES PROJECT No.: 44-44116 REV DESCRIPTION



ENERGY TRANSFER 11010 - 14-INCH TWIN OAKS TO NEWARK TWIN-NWRK INVESTIGATIONS DIG 4 PIPELINE REPAIR

AFE NO. OLD DRAWING NO. DRAWING NO.

EROSION AND SEDIMENTATION CONTROL DETAILS 44-44116-D4-105 MIDDLETOWN TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA

THE CONTRACTOR MAY STORE EQUIPMENT AND MATERIALS WITHIN THE LOD AND ON OTHER EXISTING, STABILIZED AREAS. IF ADDITIONAL AREAS OF DISTURBANCE ARE NECESSARY TO SUPPORT CONSTRUCTION ACTIVITIES, THE E&S CONTROL PLAN SHALL BE UPDATED, AND REGULATORY APPROVAL SHALL BE REQUIRED.

ALL CONTROL MEASURES WILL BE INSTALLED, MAINTAINED, AND REMOVED IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN THE "EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL," PUBLISHED BY PADEP, BUREAU OF SOIL AND WATER CONSERVATION AND CHAPTER 102 REQUIREMENTS.

THE ANTICIPATED SEQUENCE OF CONSTRUCTION IS DESCRIBED BELOW.

#### GENERAL RIGHT-OF-WAY PREPARATION MEASURES

- 1. AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM AT 811 OR 1-800-242-1776 FOR BURIED UTILITY LOCATIONS.
- 2. BEFORE IMPLEMENTING ANY REVISIONS TO THE APPROVED E&S CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S PLAN, THE CONTRACTOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE APPROPRIATE REGULATORY ENTITIES.
- BEFORE DISPOSING OF SOIL OR RECEIVING BORROW FOR THE SITE, THE CONTRACTOR MUST ASSURE THAT EACH SPOIL OR BORROW AREA HAS AN APPROVED EROSION AND SEDIMENTATION CONTROL PLAN, WHICH WAS DEVELOPED IN ACCORDANCE WITH PADEP CHAPTER 102 REGULATIONS.
- 4. THE CONTRACTOR SHALL REMOVE, RECYCLE OR DISPOSE OF ALL MATERIALS AND WASTES FROM THE REPAIR SITE IN ACCORDANCE WITH PADEP'S SOLID WASTE MANAGEMENT REGULATIONS AT PA CODE 260.1 ET. SEQ. AND 287.1 ET. SEQ. THE CONTRACTOR SHALL NOT BURY, DUMP OR DISCHARGE ANY WASTES OTHER THAN SOIL IN THOSE AREAS SO DESIGNATED BY THIS PLAN.
- 5. HAZARDOUS OR POLLUTANT MATERIAL STORAGE AREAS SHALL BE LOCATED AT LEAST 100 FEET BACK FROM THE TOP OF STREAM BANK OR WETLAND AREAS AS APPLICABLE.
- 6. SURVEYORS WILL STAKE OUT THE LIMIT OF DISTURBANCE, ROCK CONSTRUCTION ENTRANCE LOCATIONS, AND APPROXIMATE ANOMALY LOCATION.
- 7. INSTALL ROCK CONSTRUCTION ENTRANCE(S) AS SHOWN ON THE PLAN. (AS NECESSARY)
- 8. PLACE TIMBER MATS AS NEEDED TO PROTECT EXISTING BURIED UTILITIES AS DIRECTED BY SITE REPRESENTATIVES.TIMBER MATS SHALL ALSO BE USED IN THE WETLAND AREA WITHIN THE LIMIT OF DISTURBANCE.
- 9. INSTALL COMPOST FILTER SOCKS AND ALL OTHER PERIMETER EROSION AND SEDIMENT CONTROL MEASURES WITHIN THE PROJECT AREA AS INDICATED ON THE DRAWINGS. ONCE PERIMETER CONTROLS ARE IN PLACE, INSTALL ANY OTHER REMAINING EROSION CONTROL BMPs.
- 10. TOPSOIL SHALL BE SEGREGATED FROM SUBSURFACE MATERIAL DURING ANY EXCAVATION, EARTHMOVING, OR GRADING OPERATIONS.
- 11. WETLAND SOIL, TOPSOIL, SUBSOIL SHALL BE STOCKPILED SEPARATELY.
- 12. TEMPORARILY SEED AND MULCH ANY DISTURBED AREAS AND STOCKPILES. DO NOT TEMPORARILY SEED CONSTRUCTION ACCESS AREAS. CESSATION OF ACTIVITY REQUIRES IMMEDIATE STABILIZATION DUE TO THE WORK TAKING PLACE WITHIN A SPECIAL PROTECTION WATERSHED.

#### PIPELINE REPAIR

- 1. VERIFY LOCATION AND DEPTH OF EXISTING PIPELINE.
- 2. EXCAVATE APPROXIMATELY 8'X 10' PIT, ENSURING TO LOCATE KNOWN WELDS AND/OR ANOMALY. HAND DIGGING AS NECESSARY AROUND EXISTING PIPELINE.
- 3. DE-WATER AS NECESSARY, UTILIZING A PUMPED WATER FILTER BAG SURROUNDED BY COMPOST FILTER SOCK.
- 4. EXPOSE PIPELINE, SUPPORT AS NECESSARY IN EXCAVATION.
- 5. INSPECT PIPELINE AND LOCATE SLEEVE.
- 6. MAKE APPROPRIATE REPAIRS OF PIPELINE.
- BACKFILL EXCAVATION AND COMPACT. BACKFILL CAN BE SUITABLE NATIVE MATERIAL. BACKFILL SHOULD BE FREE OF DEBRIS, ROCKS, AND ORGANIC MATTER.

RESTORATION AND POST CONSTRUCTION MEASURES

- TOPSOIL WILL BE GRADED BACK TO ORIGINAL LOCATION AND THE SITE WILL BE RETURNED TO EXISTING CONDITIONS. WETLAND SOILS SHALL BE REPLACED.
- 2. ALL DISTURBED AREAS SHALL BE RETURNED TO EXISTING GRADE, PERMANENTLY SEEDED AND MULCHED.
- 3. UPON STABILIZATION, REMOVE ALL PERIMETER SILT SOCKS AND ALL OTHER EROSION CONTROL MEASURES.
- 4. PERMANENTLY SEED AND MULCH ALL REMAINING DISTURBED AREAS.
- 5. ALL TEMPORARY ROCK CONSTRUCTION ENTRANCES SHALL BE REMOVED AND IMMEDIATELY PERMANENTLY SEEDED AND MULCHED. ANY AREAS OF SETTLEMENT, WASHOUT, OR ACCELERATED EROSION SHALL BE REPAIRED.
- ANY EXISTING DRIVEWAYS/ACCESS RAMPS USED SHALL BE CHECKED FOR ANY DAMAGES AND LEFT IN AT LEAST EXISTING CONDITIONS.

#### TEMPORARY CONTROL MEASURES

THE TEMPORARY CONTROL MEASURES AND FACILITIES FOR USE DURING CONSTRUCTION AND EARTHMOVING ACTIVITIES ARE DISCUSSED BELOW. REFER TO THE E&S CONTROL PLAN DRAWINGS (BOUND SEPARATELY) PREPARED BY AED ES.

THE TYPE OF MEASURES EMPLOYED PREVENTS EXCESSIVE E&S AND FACILITATES CONSTRUCTION BY PROVIDING MEANS OF MANAGING EROSION AND SEDIMENT POLLUTION CONTROL. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN A MANNER THAT MINIMIZES EROSION AND WATER/AIR POLLUTION. STATE, COUNTY, AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT SHALL BE FOLLOWED.

COMPOST FILTER SOCKS WILL BE PLACED ON THE DOWNGRADE SIDE OF SLOPES AND DISTURBED AREAS. THE DIAMETER OF THE FILTER SOCK IS DIFFERENT DEPENDING ON THE SLOPE OF THE LAND AND THE MAXIMUM UPSLOPE LENGTH. WOODEN POSTS WILL BE INSTALLED THROUGH THE FILTER SOCKS TWELVE INCHES BELOW GRADE AND MUST BE AT LEAST THIRTY-SIX INCHES HIGH. STAKES WILL BE 10 FEET ON CENTER. ENDS OF AND DETAILED IN THE E&S CONTROL PLANS, WILL BE INSTALLED, MAINTAINED AND THE FILTER SOCK SHOULD EXTEND UPSLOPE AT 45 DEGREES. SEE APPENDICES FOR REMOVED IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN THE PADEP EROSION COMPOST FILTER SOCK SIZE CALCULATIONS. COMPOST SHALL MEET PADEP OR PENNDOT

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED OF PROPERLY WITHIN THE LIMIT OF DISTURBANCE. SOCKS SHOULD 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.

#### PUMPED WATER FILTER BAGS

PUMPED WATER FILTER BAGS ARE USED TO FILTER WATER THAT IS PUMPED FROM BELOW GRADE AREAS AS NECESSARY. GEOTEXTILE FABRIC-FILTER BAGS WILL BE PLACED ON A LEVEL, STABILIZED AREA. SILT FENCE SHALL BE PLACED ENTIRELY AROUND THE FILTER BAG. HOSES WILL BE WIRED TO THE ENTRANCE OF THE BAG TO SECURE IT IN PLACE. FILTER BAGS SHALL NOT BE PLACED ON SLOPES EXCEEDING 5%. IF A FILTER BAG IS REQUIRED ON SLOPES GREATER THAN 5%, NON-ERODIBLE MATERIAL MAY BE PLACED UNDER THE BAG, SUCH AS CLEAN STONE OR WOOD CHIPS, TO REDUCE STEEPNESS.

BAGS WILL BE REPLACED WHEN THEY REACH 1/2 CAPACITY. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

#### DUST CONTROL

AREAS SUBJECT TO BLOWING DUST SHALL BE CONTROLLED BY SPRINKLING WITH WATER UNTIL THE SURFACE IS DAMP.

#### ROCK CONSTRUCTION ENTRANCES

ROCK CONSTRUCTION ENTRANCES SHOULD BE USED WHEREVER IT IS ANTICIPATED THAT CONSTRUCTION TRAFFIC WILL EXIT THE PROJECT SITE ONTO ANY STABILIZED ROADWAY. CONSTRUCTION TRAFFIC ACCESS SHOULD BE LIMITED TO CONSTRUCTION ENTRANCES TO THE GREATEST EXTENT FEASIBLE. CONSTRUCTION ENTRANCES WILL BE CONSTRUCTED OF EIGHT INCHES OF AASHTO #1 STONE OVER GEOTEXTILE FABRIC (AMOCO WOVEN FABRIC TYPE 2002 OR EQUIVALENT) AND WILL BE LOCATED AS DESIGNATED ON THE CONSTRUCTION PLAN DRAWINGS. REFER TO DRAWING DETAIL SHEETS FOR ADDITIONAL NOTES AND DIMENSIONS.

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCES. ROCK CONSTRUCTION ENTRANCES THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF CONSTRUCTION ENTRANCE UNTIL CONDITION IS ALLEVIATED OR USE A WASH RACK. CONSTRUCTION ENTRANCES WILL BE CLEANED EVERY WORKING DAY.

#### TEMPORARY SEEDING:

UPON CESSATION OF WORK FOR FOUR (4) DAYS, TEMPORARILY SEED AND STABILIZED DISTURBANCE IN ACCORDANCE WITH THE PADEP EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE (BMP) MANUAL (MARCH 2012 ED) OR PENNDOT PUBLICATION 408, FORMULA E. STOCKPILES SHALL ALSO BE SEEDED.

## PENNDOT FORMULA E:

SPECIES: ANNUAL RYEGRASS (LOLIUM MULTIFLORUM)

% BY WEIGHT: 100 MINIMUM PURITY: 98 MINIMUM GERMINATION: 90

MAX % WEED SEED: 0.15 SEEDING RATE (LB/1000YD2): 10

SEEDING DATES: MARCH 15TH TO JUNE 1ST & AUGUST 1ST TO OCTOBER 15TH MULCHES: FREE FROM FOREIGN MATERIAL COARSE STEMS, MOLD, SUBSTANCES TOXIC TO PLANT GROWTH, AND MATURE SEED BEARING STALKS OR ROOTS OF PROHIBITED AND NOXIOUS WEEDS. AS DEFINED BY LAW, PLACE HAY OR STRAW UNIFORMLY, IN A CONTINUOUS BLANKET, AT A MINIMUM RATE OF 1,200 POUNDS PER 1,000 SQUARE

DURING NON-GERMINATING PERIODS, TEMPORARY SEED AND MULCH MUST BE APPLIED AT THE RECOMMENDED RATES OVER THE DISTURBED AREA. THE DISTURBED AREA WILL NOT BE PERMANENTLY SEEDED UNTIL THE BEGINNING OF THE RECOMMENDED GERMINATION PERIOD. AT THAT TIME, THE DISTURBED AREA WILL BE PERMANENTLY SEEDED AND RE-MULCHED.

## PERMANENT CONTROL MEASURES

THE PURPOSE OF THE PERMANENT CONTROL MEASURES AND FACILITIES IS TO PREVENT EROSION OF THE PROJECT SITE AFTER CONSTRUCTION IS COMPLETE. THE CONTROL MEASURES TO BE UTILIZED FOR ALL AREAS INCLUDE EROSION CONTROL BLANKET, PERMANENT SEEDING, TRENCH PLUGS, AND CHANNEL STABILIZATION. THE LOCATIONS OF THE MEASURES AND FACILITIES ARE DEPICTED ON THE E&S CONTROL PLAN DRAWINGS.

#### PERMANENT SEEDING:

DISTURBED WORK SHALL BE PERMANENTLY STABILIZED IN ACCORDANCE WITH THE PADEP EROSION AND SEDIMENT POLLUTION CONTROL MANUAL (MARCH, 2012 ED.) OR PENNDOT PUBLICATION 408. REFER TO THE FOLLOWING TABLES FROM THE ABOVE-REFERENCED PADEP MANUAL FOR ALL APPROPRIATE SEEDING INFORMATION.

#### ACCORDING TO DEP TABLE 11.5:

APPLICATION: UTILITY RIGHT-OF-WAY DRAINAGE CLASS: WELL DRAINED

SEED MIX: 1 PLUS 8 (DEP TABLE 11.4) OR APPROVED EQUAL FROM TABLES USING PURE LIVE SEED, EXCLUDING TALL FESCUE. NOTE THAT CROWNVETCH SHOULD NOT BE USED ADJACENT TO WETLANDS.

THE CONTRACTOR SHALL AVOID RUNNING HEAVY EQUIPMENT OVER THE RESTORED

THE CONTENT OF THE COMPOST FILTER SOCKS MAY BE DISPERSED ON SITE WHEN THE FILTER SOCKS ARE NO LONGER REQUIRED SO LONG AS IT IS WITHIN THE LOD AND DOES 2025. NOT INTERFERE WITH DRAINAGE.

#### EROSION CONTROL BLANKET

EROSION CONTROL BLANKET (ECB) WILL BE INSTALLED, AS SHOWN ON THE DRAWINGS. GENERALLY, ECB SHALL BE INSTALLED ON SLOPES GREATER THAN 3:1, WITHIN 50 FEET OF SURFACE WATERS, AND WITHIN 100 FEET OF SURFACE WATERS IN SPECIAL PROTECTION WATERSHEDS. SEE APPENDICES FOR FURTHER DETAILS.

ALL TEMPORARY CONTROL MEASURES, AS DESCRIBED IN THIS REPORT, AND AS NOTED AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE (BMP) MANUAL (MARCH, 2012

CONTROL MEASURES AND FACILITIES, BOTH TEMPORARY AND PERMANENT, WILL BE MAINTAINED DURING THE PROGRESS OF THE WORK. THIS WILL BE PERFORMED BY IMPLEMENTING A PROGRAM OF PROPER DISPOSAL OF MATERIALS AND FREQUENT REMOVAL OF MATERIALS ACCUMULATED AT THE CONTROL FACILITIES. TEMPORARY CONTROL MEASURES WILL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS ACHIEVED.

MATERIALS NOT USED IN CONSTRUCTION WILL BE REMOVED FROM THE SITE AS EARLY AS POSSIBLE. ANY SOILS REMOVED FROM THE SITE MUST BE TRANSPORTED TO A SITE THAT HAS AN ADEQUATE AND IMPLEMENTED EROSION AND SEDIMENT POLLUTION CONTROL PLAN. DEWATERED SEDIMENT CLEANED FROM COMPOST FILTER SOCK AND PUMPED WATER FILTER BAGS WILL BE DISPOSED ON SITE AND WILL BE REUSED IN FINAL GRADING OPERATIONS, OR DISPOSED OF AT A LOCATION WITH AN APPROVED E&S CONTROL PLAN.

MAINTENANCE WILL INCLUDE THE INSPECTION OF EROSION AND SEDIMENT CONTROL FACILITIES AFTER ANY MEASURABLE STORM EVENT AND ON A WEEKLY BASIS. FACILITIES WILL BE CLEANED, REPAIRED OR REPLACED AS NEEDED FOLLOWING THE NOTES ON THE DETAILS. SEE BMP LIST FOR ADDITIONAL ROUTINE MAINTENANCE REQUIREMENTS.

DELAWARE COUNTY, PENNSYLVANIA

MAP UNIT: HAA--HATBORO SILT LOAM, O TO 3 PERCENT SLOPES, FREQUENTLY FLOODED

#### COMPONENT: HATBORO, FREQUENTLY FLOODED (95%)

THE HATBORO, FREQUENTLY FLOODED COMPONENT MAKES UP 95 PERCENT OF THE MAP UNIT. SLOPES ARE 0 TO 3 PERCENT. THIS COMPONENT IS ON FLOOD PLAINS ON NORTHERN PIEDMONTS. THE PARENT MATERIAL CONSISTS OF LOAMY ALLUVIUM DERIVED FROM SCHIST AND/OR PHYLLITE AND/OR QUARTZITE AND/OR GREENSTONE. DEPTH TO A ROOT RESTRICTIVE LAYER IS GREATER THAN 60 INCHES. THE NATURAL DRAINAGE CLASS IS POORLY DRAINED. WATER MOVEMENT IN THE MOST RESTRICTIVE LAYER IS MODERATELY LOW. AVAILABLE WATER TO A DEPTH OF 60 INCHES (OR RESTRICTED DEPTH) IS HIGH. SHRINK-SWELL POTENTIAL IS LOW. THIS SOIL IS FREQUENTLY FLOODED. IT IS NOT PONDED. A SEASONAL ZONE OF WATER SATURATION IS AT 11 INCHES DURING JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, AUGUST, SEPTEMBER, OCTOBER, NOVEMBER, DECEMBER. ORGANIC MATTER CONTENT IN THE SURFACE HORIZON IS ABOUT 3 PERCENT. THIS COMPONENT IS IN THE F148XY030PA HYDRIC, PIEDMONT — FELSIC, RIPARIAN ZONE, SWAMP MEADOW-SHRUB-FOREST ECOLOGICAL SITE. NONIRRIGATED LAND CAPABILITY CLASSIFICATION IS 5W. THIS SOIL MEETS HYDRIC CRITERIA.

## COMPONENT: GLENVILLE (5%)

GENERATED BRIEF SOIL DESCRIPTIONS ARE CREATED FOR MAJOR SOIL COMPONENTS. THE GLENVILLE SOIL IS A MINOR COMPONENT.

#### SOIL LIMITATION RESOLUTIONS

DISTURBED WORKSPACE WILL BE MINIMIZED AND IF CONSTRUCTION TAKES PLACE DURING SIGNIFICANT DRY PERIODS. HEAVILY TRAVELED AREAS WILL BE SPRINKLED WITH WATER TO DAMPEN THE SURFACE. ALTERNATIVE METHODS, SUCH AS MULCHING, CAN BE USED IN CERTAIN AREAS.

## UNSTABLE EXCAVATION WALLS

THE INSTABILITY OF STEEP EXCAVATION OF SIDE SLOPES AND WALLS IS ANTICIPATED DUE TO THE COMPOSITION OF THE SOILS WITHIN THE PROJECT AREA. TRENCH BOXES AND SLOPING-BACK OF THE TRENCH WALLS WILL BE PERFORMED AT THE DISCRETION OF THE CONTRACTOR IN ACCORDANCE WITH OSHA REGULATIONS.

## PONDING/FLOODING

FOR AREAS SUSCEPTIBLE TO PONDING/FLOODING DURING CONSTRUCTION, WORK SHALL BE DONE IN OPTIMAL DRY CONDITIONS. IF ADDITIONAL STABILIZATION IS NECESSARY, STONE OR TIMBER MATS MAY BE USED TO CROSS THE WET AREAS. THE CONTRACTOR SHALL ENSURE THAT THE E&S PLANS ARE FOLLOWED FOR ANY AND ALL WETLAND CROSSINGS TO ENSURE PROPER BMP'S ARE UTILIZED.

#### SHALLOW DEPTH TO SATURATED ZONE

EXCAVATION SHALL BE DEWATERED AS NECESSARY USING PUMPED WATER FILTER BAGS SURROUNDED BY COMPOST FILTER SOCKS ON A FLAT, VEGETATED AREA. THE DOWN SLOPE SIDE OF THE DEWATERING SITES WILL BE LOCATED AN AMPLE DISTANCE FROM DRAINAGE CHANNELS TO ALLOW NATURAL FILTERING OF THE WATER BY THE EXISTING VEGETATION.

#### HYDRIC SOILS

ACCORDING TO THE NATIONAL TECHNICAL COMMITTEE FOR HYDRIC SOILS (NTCHS). SOIL IS CLASSIFIED AS BEING HYDRIC IF IT FORMED UNDER CONDITIONS OF SATURATION, FLOODING, OR PONDING LONG ENOUGH DURING THE GROWING SEASON TO DEVELOP ANAEROBIC CONDITIONS IN THE UPPER PART. UNDER NATURAL CONDITIONS, THESE SOILS ARE EITHER SATURATED OR INUNDATED LONG ENOUGH DURING THE GROWING SEASON TO SUPPORT THE GROWTH AND REPRODUCTION OF HYDROPHYTIC VEGETATION.

THE HATBORO COMPONENT OF THE HATBORO SILT LOAM (HAA) IS CONSIDERED TO BE HYDRIC.

AEDES DELINEATED WETLANDS IN THE VICINITY OF THE PROJECT AREA IN FEBRUARY

#### DEFINITION OF STABILIZATION

A PROJECT SITE WILL BE CONSIDERED TO BE PERMANENTLY STABILIZED WHEN TEMPORARY CONTROL MEASURES HAVE BEEN REMOVED, ALL PERMANENT CONTROL MEASURES HAVE BEEN COMPLETED AND ARE FUNCTIONAL, AND UNIFORM EROSION-RESISTANT PERENNIAL VEGETATION IS ESTABLISHED TO THE POINT WHERE THE SURFACE SOIL IS CAPABLE OF RESISTING EROSION DURING RUNOFF EVENTS. THE STANDARD FOR THIS VEGETATIVE COVER WILL BE A UNIFORM COVERAGE OR DENSITY OF 70 PERCENT (GERMINATED GRASS COVER) ACROSS THE DISTURBED AREA (PER PA CODE CHAPTER 102.22(2)(1)).

	EDOCIONA AND OFFINESTED	EIGH CONTROL MEACHES MANUTENAN	105 00U5DU 5 (DD005DUD50
	EROSION AND SEDIMENTA	TION CONTROL MEASURES MAINTENAN	T SCHEDULE/PROCEDURES
CONTROL MEASURE	INSPECTION SCHEDULE	POTENTIAL ISSUES	TYPICAL REMEDIES
		UNDERCUTTING OF BARRIER	INCREASE NUMBER OF STAKES IN AFFECTED AREA
COMPOST FILTER SOCK	WEEKLY AND AFTER EACH 0.25 INCH RAINFALL EVENT	SEDIMENT AT 1/2 HEIGHT OF BARRIER	REMOVE SEDIMENT, PLACE ACROSS SITE AS FILL
		DAMAGED FABRIC	REPAIR/REPLACE ACCORDING TO MANUFACTURERS SPECIFICATIONS
		TORN FABRIC	REPLACE FILTER BAG
PUMPED WATER FILTER BAG	BEFORE AND AFTER EACH USE	SEDIMENT ESCAPING BAG	REPLACE FILTER BAG
		BAG FILLED 1/2 WITH SEDIMENT	REPLACE FILTER BAG
ROCK CONSTRUCTION	WEEKLY AND AFTER EACH	MISSING STONE, RUTTING	ADD ROCK TO SPECIFIED DIMENSIONS
ENTRANCE	MEASURABLE RAINFALL EVENT	SEDIMENT ON ROADWAY	SWEEP DRIED MATERIAL BACK TO PROJECT SITE. DO NOT WASH WITH WATER.
		SEDIMENT AT TOE OF SLOPE	APPLY EROSION CONTROL BLANKET AS NECESSARY
TEMPORARY/PERMANENT VEGETATION	WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	RILLS AND GULLIES FORMING	FILL RILLS AND GULLIES. APPLY EROSION CONTROL BLANKET AS NECESSARY
		BARE PATCHES	RE-SEED PER SEEDING SPECIFICATIONS
TIMBER MATTING	BEFORE AND AFTER EACH USE	BROKEN TIMBERS	REMOVE MAT AND REPLACE WITH NEW MAT
CONSTRUCTION FENCING	WEEKLY	FALLEN FABRIC	REPLACE STAKES AS NECESSARY TO ENSURE STURDY BARRIER

Know what's below. Call before you dig.

♠ PROFESSIONAL SAMUEL PHILIP GILBERT ENGINEER No. 079930

NOTES/REFERENCE DRAWINGS

**Energy Services** Powered by ARG THE LOCATION OF THE PIPELINE FACILITIES AS SHOWN HEREON MUST BE CONSIDERED AS APPROXIMATE ONLY. BEFORE DIGGING OR FOR AN EXACT LOCATION PLEASE CONTACT YOUR STATES UNDERGROUND UTILITY LOCATION SERVICE. AED ES PROJECT No.: 44-44116

ACCOUNT NO: ONSTRUCTION YEAR: DATE 02/2025 DRAWN CNN CHECK SPG 02/2025 PPROVED WKS 02/2025 REV DESCRIPTION DATE CHK'D APP' SCALE: AS NOTED

SUNOCO PIPELINE An ENERGY TRANSFER Partnership

ENERGY TRANSFER 11010 - 14-INCH TWIN OAKS TO NEWARK TWIN-NWRK INVESTIGATIONS DIG 4 PIPFLINE REPAIR EROSION AND SEDIMENTATION CONTROL NOTES

MIDDLETOWN TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA

OLD DRAWING NO.

AFE NO.

DRAWING NO. 44-44116-D4-106

#### WASTE RECYCLING AND DISPOSAL

THE OPERATOR/PERMITTEE SHALL ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, SANITARY WASTES, PACKAGING MATERIALS, COATING AND ASSOCIATED PACKAGING, WELDING MATERIALS, WASTE PIPE, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHOULD BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL. WHEREVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL. OFF-SITE TRANSPORT OF MATERIALS REQUIRES THAT THE RECEIVING FACILITY HAVE ITS OWN APPROVED, ACTIVE PERMIT TO RECEIVE SUCH MATERIALS.

HAZARDOUS OR POLLUTANT MATERIALS, INCLUDING BUT NOT LIMITED TO CHEMICALS, FUELS, AND LUBRICATING OILS SHALL NOT BE STORED WITHIN 100 FEET OF A WETLAND OR WATERBODY. SUITABLE ACCUMULATED SEDIMENT SHALL BE USED ON SITE. UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER ACCORDING TO THE PADEP'S SOLID WASTE MANAGEMENT'S REGULATIONS (PA CODE TITLE 25, CHAPTER 260.1 ET SEQ. AND 287.1 ET SEQ). THE WASTE DISPOSAL SITE MUST HAVE A SEPARATE APPROVED EROSION CONTROL PLAN.

#### STANDARD E&S PLAN NOTES

- 1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
- 2. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- 3. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS.
- 4. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
- 5. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
- 6. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
- 7. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAPS(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
- 8. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION.
- 9. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE
- 10. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
- 12. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN. OVER UNDISTURBED VEGETATED AREAS. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A PUMPED WATER FILTER BAG, OR EQUIVALENT SEDIMENT REMOVAL FACILITY, OVER NON-DISTURBED VEGETATED AREAS. DISCHARGE POINTS SHOULD BE ESTABLISHED TO PROVIDE FOR MAXIMUM DISTANCE TO ACTIVE WATERWAYS.
- 13. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY/DAILY BASIS AS INDICATED ON THE EROSION AND SEDIMENTATION CONTROL MEASURES MAINTENANCE SCHEDULE/PROCEDURES. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- 14. A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
- 15. SEDIMENT TRACKED OR CONVEYED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE REMOVED AND REDEPOSITED ONTO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY. REMOVAL CAN BE COMPLETED THROUGH USE OF MECHANICAL OR HAND TOOLS. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- 16. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
- 17. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES -- 6 TO 12 INCHES ON COMPACTED SOILS -- PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
- 18. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.

REGISTERED

/ PROFESSIONAL

SAMUEL PHILIP GILBERT

No. 079930

ENGINEER

NOTES/REFERENCE DRAWINGS

- 19. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN
- 20. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- 21. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- 22. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- 23. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- 24. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- 25. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
- 26. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
- 27. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
- 28. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
- 29. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
- 30. ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIALS/WASTES.
- 31. UNDERGROUND UTILITIES CUTTING THROUGH ANY ACTIVE CHANNEL SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL RESTORED TO ITS ORIGINAL CROSS-SECTION AND PROTECTIVE LINING. ANY BASE FLOW WITHIN THE CHANNEL SHALL BE CONVEYED PAST THE WORK AREA IN THE MANNER DESCRIBED IN THIS PLAN UNTIL SUCH RESTORATION IS COMPLETE.
- 32. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER. WITHIN 50 FEET OF A SURFACE WATER, AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.
- 33. AT NO TIME SHALL WORK CAUSE SEDIMENT TO ENTER A SURFACE WATER BODY OR ALLOW
- 34. WORK TO BE CONDUCTED IN DRY CONDITIONS TO THE EXTENT POSSIBLE.
- 35. SEDIMENT TRACKED OR CONVEYED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE REMOVED AND REDEPOSITED INTO THE LIMIT OF DISTURBANCE BY THE END OF EACH WORKING DAY. REMOVAL CAN BE COMPLETED THROUGH USE OF MECHANICAL OR HAND TOOLS. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELLED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER. IF REMOVAL AT THE END OF EACH WORKING DAY IS NOT EFFECTIVE, STREET SWEEPING SHALL BE USED

S/REFERENCE DRAWINGS								FACILITY CODE OR ACCOUNT		
À ED								CONSTRUCTION	I YEAR:	
	Energy Services  Powered by ARG  THE LOCATION OF THE PIPELINE FACILITIES AS SHOWN HEREON MUST BE CONSIDERED AS APPROXIMATE ONLY. BEFORE DIGGING OR FOR AN EXACT LOCATION PLEASE								BY	DATE
								DRAWN	CNN	02/2025
								CHECK	SPG	02/2025
	CONTACT YOUR STATES UNDERGROUND UTILITY LOCATION SERVICE.							APPROVED	WKS	02/2025
	AED ES PROJECT No.: 44-44116	REV	DESCRIPTION	BY	DATE	CHK'D	APP'D	SCALE: AS	NOTED	

SUNOCO PIPELINE An ENERGY TRANSFER Partnership

ENERGY TRANSFER 11010 - 14-INCH TWIN OAKS TO NEWARK TWIN-NWRK INVESTIGATIONS DIG 4 PIPELINE REPAIR EROSION AND SEDIMENTATION CONTROL NOTES

MIDDLETOWN TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA

OLD DRAWING NO. DRAWING NO. 44-44116-D4-107

AFE NO.

Know what's below. Call before you dig.