



Public Notice

U.S. Army Corps
of Engineers

Baltimore District

In Reply to Application Number
CENAB-OPR-P-2015-00581-P12 (PENN EAST PIPELINE)

PN- 17-42 Comment Period: September 8, 2017 to October 8, 2017

THE PURPOSE OF THIS PUBLIC NOTICE IS TO SOLICIT COMMENTS FROM THE PUBLIC REGARDING THE WORK DESCRIBED BELOW. NO DECISION HAS BEEN MADE AS TO WHETHER OR NOT A PERMIT WILL BE ISSUED AT THIS TIME.

This District has received an application for a Department of the Army permit pursuant to **Section 10 of the Rivers and Harbors Act of 1899 and/or Section 404 of the Clean Water Act (33 U.S.C. 1344)** as described below:

APPLICANT: Penn East Pipeline Project, LLC
1 Meridian Boulevard, Suite 2C01
Wyomissing, Pennsylvania 19610

WATERWAY AND LOCATION OF THE PROPOSED WORK: The proposed 36-inch diameter Penn East Pipeline Project extends approximately 116.0 miles (78.3 miles in Pennsylvania and 37.7 miles in New Jersey) from just north of the city of Dallas, in Luzerne County, Pennsylvania to Mercer County, New Jersey. The project includes multiple stream and wetland crossings in the Susquehanna River and Delaware River watersheds. (See enclosed map Enclosure 1).

Approximately 14.5 miles of the pipeline is proposed within the Corps of Engineers Baltimore District area of responsibility in Luzerne County (Susquehanna River Drainage), Pennsylvania. Within the Baltimore District, the applicant proposes to install the pipeline across the Susquehanna River via open-cut installation. The Susquehanna River Crossing crosses the river in Wyoming Borough on the north side of the Susquehanna River and Jenkins Township, on the south side of the Susquehanna River. The Susquehanna River, located in the Corps of Engineers Baltimore District, is considered a navigable waters of the United States. In addition, the 2.1 mile Hellertown Lateral consisting of a 24-inch pipeline will be constructed in Northampton County, Pennsylvania.

The pipeline is also proposed within the Corps of Engineers Philadelphia District area of responsibility crossing through numerous municipalities in northern and eastern Pennsylvania in Luzerne (Delaware River Drainage), Carbon, Northampton, and Bucks Counties, as well as Hunterdon County, New Jersey.

PURPOSE AND PROPOSED WORK: The purpose of this notice is to solicit comments and recommendations from the public concerning issuance of Department of the Army permit for the work described below. This Public Notice concerns the work associated with one separate single and complete crossing of waters (Susquehanna River) associated with the Overall Project of constructing the proposed Penn East Pipeline. The Overall Project is under the jurisdiction of the Federal Energy Regulatory Commission (FERC) which issued a Final Environmental Impact Study (FEIS) on April 10, 2017 for the Overall Project. The Corps of Engineers is a cooperating agency on that document. The complete FEIS may viewed at <https://www.ferc.gov/industries/gas/enviro/eis/2017/04-07-17-FEIS.asp> At this time the Baltimore District will issue one separate Individual Permit under the Application Number referenced above

to authorize a portion of the Overall Project occurring within the Baltimore District area of operations. This one Single and Complete crossing (Susquehanna River Crossing) does not meet the eligibility criteria of the Pennsylvania State Programmatic

General Permit (PASPGP) – 5. If through the course of the continuing review of the Overall Project additional Single and Complete crossings are determined not to be eligible for the PASPGP-5 those crossings will be Public Noticed separately at that time.

This public notice is for those Single and Complete crossings associated with the Overall Project that occur within the U.S. Army Corps of Engineers (USACE), Baltimore District area of operation which is approximately Mile Post 0.0 to Mile Post 14.4 and do not meet the eligibility requirements of the PASPGP-5. A separate Public Notice has been issued by the USACE, Philadelphia District for those Single and Complete projects that have been determined ineligible for the PASPGP-5 in the Philadelphia District's area of operation, Mile Post 14.4 to Mile Post 77.8. The Philadelphia District's Public Notice can be found at

<http://www.nap.usace.army.mil/Missions/Regulatory/Public-Notices/> .

The New Jersey Department of Environmental Protection (NJDEP) has assumed responsibility for issuing permits authorizing the discharge of dredged and/or fill material under Section 404 of the Clean Water Act within all areas greater than 1,000 feet from a navigable water of the United States within the State of New Jersey. This includes all of the pipeline route in New Jersey except for the first 1,000 feet from the Ordinary High Water Line of the Delaware River. The NJDEP area of operation is from Mile Post 77.8 to its terminus.

Penn East natural gas, has stated the purpose of the Overall Project is to provide about 1.1 million dekatherms per day (MMDth/d) of year-round natural gas transportation service from northern Pennsylvania to markets in New Jersey, eastern and southeastern Pennsylvania, and surrounding states. Penn East's stated objectives are to:

- Provide low cost natural gas produced from the Marcellus Shale region in northern Pennsylvania to homes and businesses in New Jersey, Pennsylvania, and surrounding states;
- Serve markets in the region with firm, reliable access to Marcellus Shale natural gas supplies versus traditional, more costly Gulf Coast regional supplies and pipeline pathways;
- Provide enhanced competition among natural gas suppliers and pipeline transportation providers; and
- Satisfy the needs of shippers seeking: additional supply flexibility, diversity, and reliability; liquid points for trading in locally produced natural gas; direct access to premium markets in the northeast and mid-Atlantic regions; ability to capture pricing differentials between the various interconnected pipelines; enhanced natural gas transportation system reliability; and direct access to affordable long-lived dry gas reserves. Penn East has executed long-term, binding precedent agreements with 12 shippers to deliver new natural gas to markets in New Jersey, eastern and southeastern Pennsylvania, and surrounding states. The precedent

agreements with the Project shippers account for 90 percent of the Project capacity of 1.1 MMDth/d.

SUSQUEHANNA RIVER CROSSING METHOD AND JUSTIFICATION

Penn East proposes to use a dual cofferdam system to construct the Susquehanna River crossing (Enclosures 2 and 3). Preliminary engineering of this crossing would involve installing a Portadam® at the upstream tip of Monocanock Island, which is located in the river's center, to divert flow to one side of the river.

Secondary coffer dams would be installed adjacent to the pipeline trench for further dewatering. After the pipe is installed under half of the river, the flow diversion, dewatering, and pipeline installation would be completed on the other half of the river. Penn East anticipates that construction of the Susquehanna River crossing would be completed within 45 days, including cofferdam construction, dewatering, pipeline construction, and restoration. Of the 45 days anticipated for construction, Penn East anticipates that it will take 6 days for trenching, pipeline construction, and backfilling (3 days for each side of the river).

(The applicant provided the following justification written below for the need of an open-cut installation across the North Branch of the Susquehanna River, in lieu of directional drilling under the river.)

The Susquehanna River, as it flows through Wilkes-Barre in Luzerne County, presented a challenge to the Project with its existing geologic setting and historic coal workings that occurred throughout the area. Penn East has extensively investigated this regional geohazard, and implemented field investigations and project routing that support the design and planning for construction and long-term operation of the Project. Penn East has used the results of the investigations described below to refine the design of the proposed crossing. Additional design detail and supporting engineering analyses will be submitted to the USACE Baltimore District and the PADEP in the application update after all surveys are complete.

Penn East held discussions with the PADEP Bureau of Abandoned Mine Reclamation (BAMR) during March, April, May, June and July 2016. Project representatives visited the Department's office in Wilkes Barre on April 28th and July 6th, 2016. During these visits, discussions were held with Mike Walsh and Bernard Walko. Data were obtained from the Department including historical underground mine working maps and records and details of remedial projects carried out in the area post-closure. In addition to the printed maps obtained from the PADEP BAMR, an extensive catalog of maps maintained by the PADEP is available on the Pennsylvania Mine Map Atlas. Historic maps from this source were used to provide supplementary details. Along with mapping, Colliery inspection reports were consulted to provide additional details on mine shafts, working dates, and contextual information.

As a result of the desktop analysis, Penn East discovered that ten named coal seams are present beneath the proposed Susquehanna River crossing location or surrounding areas. Four mine entrances were identified near the proposed Susquehanna River crossing location. The historic mine shafts which exist in close proximity to the River are not intersected by the currently proposed Project alignment. At the specific crossing of the Susquehanna River, there is estimated to be significantly greater than 60 feet of clearance between the ground surface and previously worked coal seams which

exist closer toward the eastern bank of the Susquehanna River. This clearance between the top of seams and the bottom of the proposed trench depth is considered sufficient clearance to ensure that trenching operations will not intersect historic workings; however, the depth to former worked seams would be too shallow for trenchless installation such as horizontal direction drilling (HDD). Should an HDD have been proposed, the drill alignment and depth would need sufficient clearance above the drill to avoid hydrofracture upwards into the streambed and River, which would require the alignment to be as deep or deeper than the former worked seams. As sufficient clearance would not be available, and the potential for intersecting the worked seams exist, there is risk of inadvertent return of borehole fluid into the mine seams which, in turn, could surface into the River or purge acid mine drainage existing in the mine into the River.

In addition to desktop and historic review, Penn East conducted geotechnical investigations in two exploratory holes to determine the nature of the ground conditions beneath the Susquehanna River, and calibrate and confirm data presented in historic maps- specifically the rock head elevation and presence or absence of workable coal or former coal workings. One boring was conducted along the south bank to a depth of 150 feet, and the second boring was conducted along the north bank to a depth of 170 feet. The geotechnical conditions beneath the river were found to be of deep alluvial deposits underlain by sedimentary rock. The overburden conditions observed were primarily stiff silts; however, layers of soft clay and highly permeable gravels were also encountered during drilling. Controlling and managing the drilling fluid pressures is key to a successful HDD installation. When the soils encountered by an HDD installation provide sufficient strength to resist the required drilling fluid pressures, flow of drilling fluids occurs within the HDD bore created with the drilling tools. However, if the soils encountered by the HDD bore are not capable of providing sufficient strength to resist the required drilling fluid pressures, flow of drilling fluids within the HDD bore cannot be controlled or maintained, resulting in drilling fluid migration into the surrounding soils. These escaping fluids will continue to flow into the surrounding soil until the induced fluid pressure within the HDD bore is relieved. When these fluids reach the ground surface, the term "inadvertent return" is used to describe the ponding fluids. Gravel deposits, similar to the river deposits observed in the borings, present a pervious pathway for drill fluid and therefore increase the risk of an inadvertent return. The presence of gravels also present challenges associated with bore stability, raveling and inducing steering corrections to maintain a proposed design alignment. Therefore, based on the geotechnical conditions observed in the boreholes and knowledge of historic mine workings in the area, traditional open-cut method of installation is proposed at the Susquehanna River crossing.

The Susquehanna River Crossing will result in 12.97 acres of temporary impacts to the Susquehanna River.

MITIGATION STATEMENT (PROVIDED BY THE APPLICANT)

Penn East has routed the proposed pipeline and reduced workspace limits to avoid and minimize impacts to wetlands and waterbodies to the extent practicable. Given the linear nature of the Project, total avoidance of aquatic habitats is not feasible, resulting in temporary impacts to wetlands and waterbodies during construction. Best management practices will be implemented to further minimize impacts to wetlands and waterbodies. These include:

- Reducing construction workspace widths at wetland and waterbody crossings to 75 feet;

- Limiting earth disturbance along stream banks to what is necessary to excavate the trench line and install the equipment crossings;
- Minimizing wetland vegetation clearing where feasible and leaving stumps that do not interfere with travel or installation of the pipeline in place to allow for re-sprouting following construction and restoration;
- Crossing waterbodies with discernible flow at the time of construction with a dry-crossing technique such as pumped bypass, flumed, or cofferdam;
- Installing erosion control devices across and along the edge of the construction workspace to minimize the flow of sediment into wetlands and waterbodies;
- Constructing temporary equipment bridges over streams to minimize direct impacts from equipment travel;
- Using equipment mats in wetlands to minimize impacts to the soil profile and reduce compaction and rutting in the travel lane;
- Segregating and stockpiling native streambed material for reinstallation after backfill;
- Segregating topsoil from wetland areas disturbed by trenching, except in areas where standing water is present or soils are saturated;
- Limiting instream construction to 24 hours across minor waterbodies, or those less than 10 feet wide, and limiting instream construction to 48 hours across intermediate waterbodies (those streams between 10 feet and 100 feet wide), wherever feasible;
- Completing in-stream construction activities in accordance with the Pennsylvania Fish and Boat Commission allowable work windows for trout stocked streams and wild trout streams
- Installing temporary trench plugs at the edges of wetlands and waterbodies to prevent the flow of upland sediments or other potential pollutants into wetlands and waterbodies during construction;
- Discharging water from trench dewatering activities to a filtration device, such as geotextile filter bag or straw bale structure to prevent heavily silt-laden water from flowing into wetlands or waterbodies;
- Installing permanent trench plugs at the edges of wetlands and waterbodies before the trench is backfilled to restore the hydrology to preconstruction conditions;
- Installing erosion control fabric within 50 feet of each waterbody and 100 feet of high quality waterbodies to help stabilize the soil until permanent vegetative cover is achieved;

- Stabilizing disturbed workspace through the distribution of seed and mulch as a temporary stabilization measure and following backfilling of the trench and grading of surface locations to ensure proper permanent revegetation of the ROW;
- Maintaining a minimum 100-foot buffer from wetlands and waterbodies to refuel vehicles, store or transfer liquid hazardous materials and coat pipeline segments with concrete, unless otherwise approved by the Environmental Inspector and secondary containment is implemented;
- Denoting wetland and waterbody boundary locations during construction, including signs that indicate no refueling zones;
- Conducting annual post-construction monitoring of restored wetland and waterbody locations for a minimum of two years to ensure success of restoration efforts.

No net loss to wetlands or waterbodies will occur within the pipeline corridor; Penn East will return all wetlands within the pipeline ROW to preconstruction contours and will restore natural flow conditions to all affected waterbodies. Approximately 0.01 acre (604 square feet) of palustrine emergent wetlands will be filled to accommodate construction and operation of the Kidder Compressor Station in Carbon County (USACE Philadelphia District). Permanent wetland impacts within the pipeline corridor will be associated with the conversion of PFO and PSS wetlands to PEM wetlands and will be limited to a 30-foot wide maintenance corridor within the permanent ROW. Total permanent wetland impacts resulting from the Project, in Pennsylvania, include the permanent functional conversion of 5.70 acres of PSS wetlands and 0.80 acres of PSS wetlands to an emergent cover. Within the Baltimore District, approximately 0.14 acres of PFO wetlands and 0.38 acres of PSS wetlands will be converted to PEM wetlands within the 30-foot wide maintained ROW.

COMPENSATORY MITIGATION

To compensate for the functional loss of these wetlands, Penn East proposes to enhance degraded wetlands at three offsite mitigation areas, one within the Upper Central Susquehanna River Sub basin, and two within the Central Delaware River Sub basin. The Central Delaware and Upper Susquehanna River Sub basins have been influenced by erosion and agricultural runoff. The three (3) proposed wetland mitigation areas abut stream channels and will serve to create a functional wetland/riparian buffer ecosystem along those channels that will address the resource function needs of both the Central Delaware River Sub basin and Upper Central Susquehanna River. Penn East will monitor the success of the offsite compensatory mitigation sites for a period of at least five consecutive growing seasons. The inspections will take place at an interval of not less than twice per year for the first two years and not less than once per year during the following three years, or as directed by permit requirements.

The mitigation plan will meet the requirements of the 2008 Joint Environmental Protection Agency and Corps of Engineers Final Mitigation Rule.

COMPLIANCE WITH SECTION 7 OF THE ENDANGERED SPECIES ACT/SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT

Penn East, acting as the FERC's non-federal representative for the purpose of complying with section 7(a)(2) of the ESA, initiated informal consultation with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) through correspondence on August 12, 2014. On September 18, 2014, NMFS replied stating that no threatened or endangered species under its jurisdiction are known to occur in the Overall Project area, and no further consultation is necessary.

A preliminary review of this application indicates that the proposed work would not affect listed species or their critical habitat pursuant to Section 7 of the Endangered Species Act as amended. The following Threatened or Endangered Species are known to exist within the portion of the Overall Project being reviewed within the Baltimore District's Area of Operation; Northern Long Eared Bat and Indiana Bat. As a result, to ensure protection of the Indiana and Northern Long-eared Bat time of year work restrictions will be implemented. As the evaluation of this application continues, additional information may become available which could modify this preliminary determination.

FERC is the lead federal agency responsible for the Section 106 process. The permit areas are within the Area of Potential Effect for the Overall Project as reviewed by FERC, and the results of the cultural resources investigations will be coordinated with the SHPO and the Tribes. If any significant resources exist within the permit area, the USACE will work with the FERC, the SHPO and the Tribes to avoid, minimize or mitigate impacts.

All work will be completed in accordance with the enclosed plan(s) (Enclosures 2 and 3). If you have any questions concerning this matter, please contact Mr. Michael Dombroskie, of this office, at (814) 235-0571 or Email at mike.dombroskie@usace.army.mil.

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonable may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economic, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, and consideration of property ownership and in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments provided will become part of the public record for this action. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity. Written

comments concerning the work described above related to the factors listed above or other pertinent factors must be received by the District Engineer, U.S. Army Corps of Engineers, Baltimore District, State College Pennsylvania Field Office at 1631 South Atherton Street, Suite 101, State College, PA 16801 within the comment period specified above.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 04-267), requires all Federal agencies to consult with the National Marine Fisheries Service (NMFS) on all actions, or proposed actions, permitted, funded, or undertaken by the agency that may adversely affect Essential Fish Habitat (EFH). The Corps has determined this project will not affect any EFH.

WATER QUALITY CERTIFICATION: The applicant obtained a 401 Water Quality Certification on February 7, 2017, from the **Pennsylvania Department of Environmental Protection**, in accordance with Section 401 of the Clean Water Act.

COASTAL ZONE MANAGEMENT PROGRAMS: The Project is not located within a Coastal Zone Management Area in Pennsylvania or New Jersey.

The applicant must obtain any State or local government permits which may be required.

The evaluation of the impact of this project on the public interest will include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404 of the Clean Water Act.

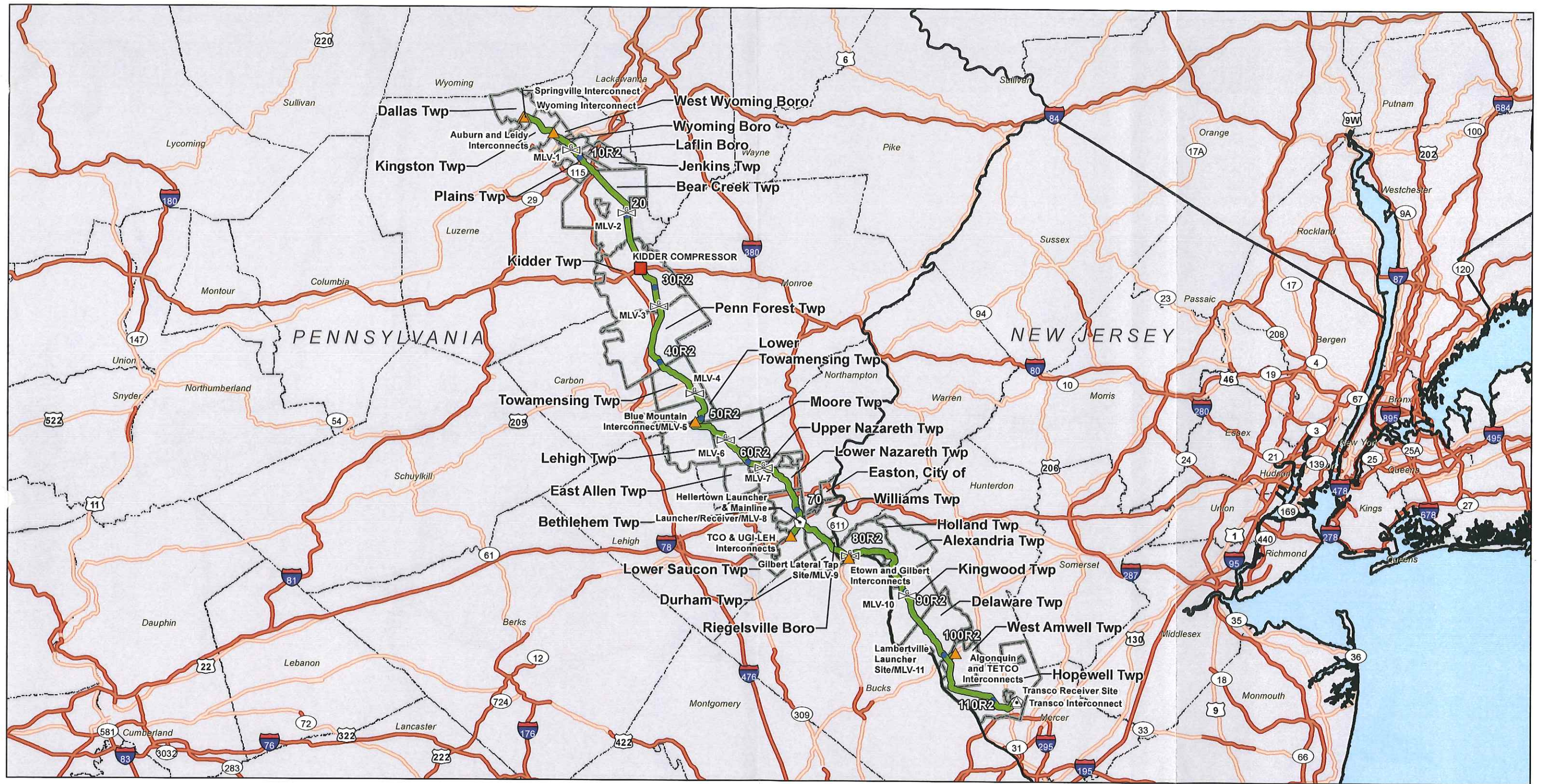
Any person who has an interest which may be adversely affected by the issuance of this permit may request a public hearing. The request, which must be in writing, must be received by the District Engineer, U.S. Army Corps of Engineers, Baltimore District, State College, PA Field Office at 1631 South Atherton Street, Suite 101, State College, PA 16801, within the comment period as specified above to receive consideration. Also it must clearly set forth the interest which may be adversely affected by this activity and the manner in which the interest may be adversely affected.

It is requested that you communicate this information concerning the proposed work to any persons know by you to be interested and not being known to this office, who did not receive a copy of this notice.

FOR THE DISTRICT ENGINEER

Patricia A. Strong

for Michael D. Danko
Acting Chief, Pennsylvania Section
Regulatory Branch



Legend

● Mile Post
 ⬢ Launcher/Receiver Site
 ▲ Interconnect
 ⚡ Mainline Block Valve
 ■ Compressor Station
 — Proposed Route
 ~ State Boundary
 Intersected Municipality Boundary
 County Boundary

Reference:
esri Streets



PennEast Pipeline Company, LLC



NAD 1983 UTM Zone 18N
Projection: Transverse Mercator
Linear Unit: Meter (1.0)

0 3 6 12 18 Miles

Key Map Not Drawn to Scale



TITLE:

Figure 1 PennEast Pipeline Project Project Overview Map

LOC: Luzerne County, Pennsylvania to Mercer County, New Jersey

REV.:

CKD. BY: BH

ENG.:

Date: 12/20/2016

W.O.:

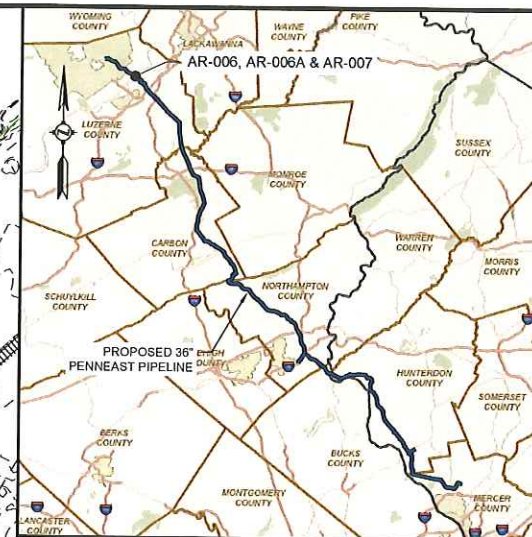
DRN. BY: CS

SCALE: See Graphic Scale

DWG. NO.:

SHEET: 1

LUZERNE COUNTY, PENNSYLVANIA



LOCATION MAP
SCALE: 1" = 15 MILES

LEGENDS

PROPOSED

- PROPOSED PIPELINE
- PROPOSED PERMANENT EASEMENT
- LIMITS OF DISTURBANCE AND ESCGP-2 BOUNDARY
- PROPOSED SAFETY FENCE
- ACCESS ROAD
- PERMANENT WATERBAR; SEE FIG. 15 (TYP.)
- TEMPORARY WATERBAR; SEE FIG. 19 (TYP.)
- SILT FENCE; SEE FIG. 5-8 (TYP.)
- COMPOST FILTER SOCK; SEE FIG. 4 & 9 (TYP.)
- EROSION CONTROL MATTING; SEE FIG. 23 (TYP.)
- ROCK CONSTRUCTION ENTRANCE; SEE FIG. 2 & 42 (TYP.)
- TIMBER MAT; SEE FIG. 32 (TYP.)
- PROPOSED PIPE YARD
- CHANNEL (ROAD DITCH)
- CHANNEL (DESIGNATION)
- TRENCH PLUG; SEE FIG. 20 (TYP.)
- BORE PIT

EXISTING

- PROPERTY LINE
- ROAD CENTERLINE
- RIPARIAN BUFFER
- STREAM (PUBLIC)
- STREAM (DELINEATED)
- WETLAND (PUBLIC)
- WETLAND (DELINEATED)
- WETLAND (AGRICULTURAL MODIFIED)
- WATERBODY (DELINEATED)
- WATERBODY (PUBLIC)
- EXISTING FOREIGN EASEMENT
- EXISTING PIPELINE
- EXISTING OVERHEAD LINE
- EXISTING CONTOURS
- EXISTING FENCE
- RAILROAD CENTERLINE
- LINE LIST NUMBER

- NOTES:
- THE CONTOURS AND IMAGERY SHOWN WERE PROVIDED BY PICTOMETRY, 2015. ADDITIONAL CONTOURS AND IMAGERY SUPPLEMENTED FROM PASDA AND USGS.
 - EXISTING FEATURES SHOWN WERE SURVEYED BY MOTT MACDONALD AND DIGITIZED FROM IMAGERY. ALL LOCATIONS ARE APPROXIMATE AND SHALL BE VERIFIED BY CONTRACTOR.
 - PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED ON GIS TAX MAP DATA AND RECTIFIED PROPERTY LINES AND ARE NOT THE RESULT OF A BOUNDARY SURVEY.

REFERENCE DRAWINGS		REVISIONS		PROJECT ENGINEER STAMP		APPROVALS	
DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR
000-03-01-014	ALIGNMENT SHEET	A	ISSUED FOR PERMIT	01/2016	HMM	HMM	HMM
000-03-01-015	ALIGNMENT SHEET	B	REVISED PER PADEP	06/2016	HMM	HMM	HMM
		C	REVISED FOR PADEP	01/2017	AJD (MM)	DOW (MM)	MJD (MM)

APPROVALS		APPROVALS	
DRAWN BY	DATE	CHECKED BY	DATE
AJD (MM)	12/2016	DOW (MM)	01/2017
ENG. APPROVAL	DATE	MJD (MM)	01/2017
P.U. APPROVAL	DATE	MAW (MM)	01/2017

PREPARED FOR

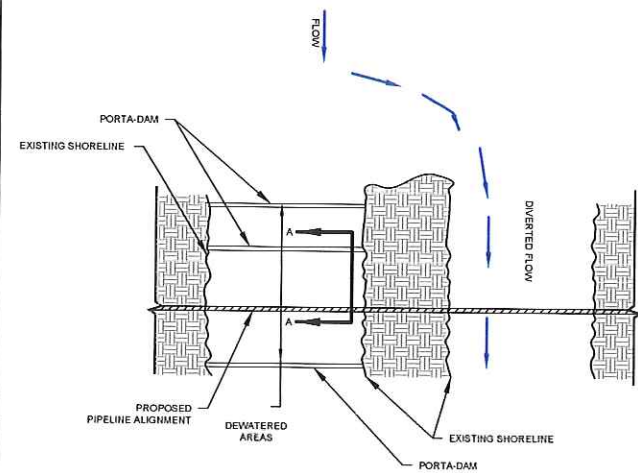
811
Know what's below. Call before you dig.

CLIENT APPROVAL

DATE

PennEast
PIPELINE

PENNEAST PIPELINE PROJECT		
EROSION AND SEDIMENTATION CONTROL PLANS		
ACCESS ROAD DETAIL		
AR-006, AR-006A & AR-007		
LUZERNE COUNTY, PENNSYLVANIA		
SCALE	DRAWING NO.	REVISION
AS NOTED	000-03-03-006	C



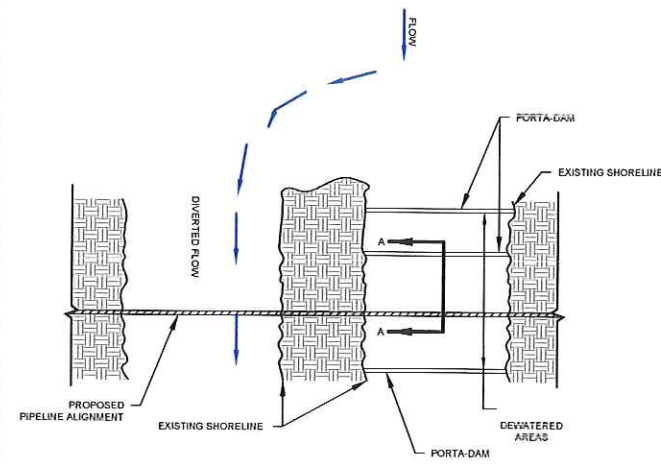
PORTA-DAM SYSTEM FOR STAGED RIVER CROSSING
PLAN VIEW (PHASE 1)
NOT TO SCALE

A	02/2016	ISSUED FOR PERMIT	HMM	HMM	HMM
B	06/2016	REVISED PER PADEP	HMM	HMM	HMM
C	01/2017	REVISED FOR PADEP	AJD (M/JON (M))	AJD (M)	AJD (M)



PENNEAST PIPELINE PROJECT
COFFERDAM
PLAN VIEW (PHASE 1)

REV	REV	REVISION DESCRIPTION	BY	CHKD	APP
-----	-----	----------------------	----	------	-----



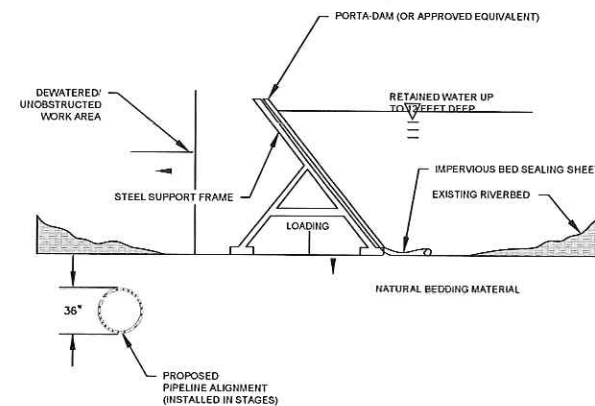
PORTA-DAM SYSTEM FOR STAGED RIVER CROSSING
PLAN VIEW (PHASE 2)
NOT TO SCALE

A	02/2016	ISSUED FOR PERMIT	HMM	HMM	HMM
B	06/2016	REVISED PER PADEP	HMM	HMM	HMM
C	01/2017	REVISED FOR PADEP	AJD (M/JON (M))	AJD (M)	AJD (M)



PENNEAST PIPELINE PROJECT
COFFERDAM
PLAN VIEW (PHASE 2)

REV	REV	REVISION DESCRIPTION	BY	CHKD	APP
-----	-----	----------------------	----	------	-----



PORTA-DAM SYSTEM FOR STAGED RIVER CROSSING
SECTION VIEW
NOT TO SCALE

A	02/2016	ISSUED FOR PERMIT	HMM	HMM	HMM
B	06/2016	REVISED PER PADEP	HMM	HMM	HMM
C	01/2017	REVISED FOR PADEP	AJD (M/JON (M))	AJD (M)	AJD (M)



PENNEAST PIPELINE PROJECT
COFFERDAM
SECTION A-A

REV	REV	REVISION DESCRIPTION	BY	CHKD	APP
-----	-----	----------------------	----	------	-----



Know what's below.
Call before you dig.

CLIENT APPROVAL

DATE

REVISIONS						APPROVALS	
NO.	DESCRIPTION	DATE	DRAWN	CK	APPR	DRAWN BY	DATE
A	ISSUED FOR PERMIT	02/2016	HMM	HMM	HMM	AJD (M)	12/2016
B	REVISED PER PADEP	06/2016	HMM	HMM	HMM	CHECKED BY	DATE
C	REVISED FOR PADEP	01/2017	AJD (M)	DOW (M)	MJD (M)	DOW (M)	01/2017
						ENG APPROVAL	DATE
						MJD (M)	01/2017
						P.M. APPROVAL	DATE
						MJD (M)	01/2017



PENNEAST PIPELINE PROJECT
EROSION AND SEDIMENTATION CONTROL PLAN
COFFERDAM DETAIL

SCALE	DRAWING NO.	REVISION
AS SHOWN	000-03-20-001	C