



State of New Jersey

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October 28, 2015

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Mr. Anthony Cox
Penn East Pipeline Company, LLC
One Meridian Boulevard
Suite 2C01
Wyomissing, Pa. 19610 77056

**RE: Proposed Penn East Pipeline Project
FERC Docket # CP15-558-000
Comments on Final Resource Reports and FERC Certificate Application
Hunterdon and Mercer Counties**

Dear Secretary Bose and Mr. Cox:

The New Jersey Department of Environmental Protection's (Department) Office of Permit Coordination and Environmental Review (PCER) distributed, for review and comment, the Final Resource Reports and Federal Energy Regulation Commission (FERC) Section 7(c) Certificate Application for the proposed PennEast Pipeline Project. These reports and the certificate application were prepared as part of the FERC National Environmental Policy Act (NEPA) requirements.

Of the total 110 mile long, 36 inch diameter proposed interstate natural gas pipeline, approximately 36 miles are located in New Jersey. As outlined in the attached maps, the proposed pipeline crosses the Delaware River at Durham Township, Pennsylvania to Holland Township, Hunterdon County and follows a route through Alexandria Township, Kingwood Township, Delaware Township, and West Amwell Township in Hunterdon County before terminating in Hopewell Township, Mercer County. The project also includes a 36 inch 1.3 mile lateral connection to an existing compressor station in West Amwell Township, Hunterdon County. In addition to the enclosed comments provided in response to the Draft Resource Reports on July 2, 2015, we offer the following comments for your consideration.

General Comment

To ensure the least amount of impact and maximum amount of mitigation and restoration feasibly possible, the Department strongly encourages co-location of any new linear utility lines in existing right of ways, directional drilling or similar methods under any water crossing, and a full alternatives analysis including temporary and permanent impacts for the route, as well as for the various available construction methods. At this time, less than 60% of the preferred route as proposed is to be co-located within an existing road or utility right of way.

As stated in the Department's July 2 response to the Draft Resource Reports, and in the absence of significant additional environmental survey data collected since June 2015, the Department's comments on the Final Resource Reports is limited because of the lack of specific, technical information for this project. At this time, PennEast possesses less than 35% of the total property access along the preferred route in New Jersey. The Department has not received any Land Use or Water Quality permit applications for any site preparation or construction. The Department has not been presented with information detailing site-specific impacts, mitigation and restoration plans.

The Department strongly encourages PennEast to complete all surveys prior to submitting applications to the Department for any permit or approval. The Department has provided permits and approvals to allow surveying and delineations on State lands. In addition, the Department strongly encourages PennEast to allow the Department to review the Draft Environmental Impact Statement (EIS) prior to PennEast submitting any permit application for site preparation or major construction to the Department for review. FERC will prepare an EIS for public comment, including the results of surveys completed at the time of submittal of the EIS for public review, which the Department will review and provide additional comments.

Based on the limited technical information presented in the Final Resource Reports, the Department is providing the following program-specific comments.

Land Use Permitting

The Division of Land Use Regulation – Bureau of Inland Regulation offers the following comments:

1. Before an applicant submits this type of large scale project application requiring a Freshwater Wetland Individual Permit and Flood Hazard Area Individual Permit, the applicant, as well as FERC, must establish the need for the project. If need is established, viable alternative routes must be explored prior to advancing the EIS and to minimize temporary and permanent disturbances;
2. Alternative analyses shall include local and county roads that either run parallel or are in the same general direction of the entire proposed route within New Jersey. The land use of this part of the State is primarily agricultural and light residential

use and an alternative analysis shall consider any conflicting utilities within the existing roadways that may impede the placement or maintenance of the pipeline;

3. In order to minimize the environmental impacts, and depending on site conditions, the applicant must be prepared to use a combination of drilling methods, including direct pipe method, horizontal directional drilling (HDD), expanded conventional jack & bore drilling, or open trenching in a dry condition. Further, areas along the proposed route are some of the most environmentally sensitive, where open trenching would result in significant permanent impacts to the local population of species living in these wetland or riverine ecosystems. If PennEast cannot successfully bore under these areas, then PennEast must first avoid the resources by exploring all viable alternatives. In addition, if avoidance is not possible and PennEast demonstrates a feasible alternative exists, then PennEast must support the preferred alternative and must minimize the disturbances to these areas;
4. A comparison chart should be presented outlining temporary and permanent impacts in acres to wetlands and riparian areas for the entire proposed route, considered alternatives, as well as a comparison of each drilling method alternative;
5. For a Department application to be administratively complete, Department rules require an applicant to provide owner consent and access to the project area. For these types of linear utility projects, the applicant must obtain easements or rights to the land along the proposed routes prior to submittal of a permit application for construction of this project;
6. Prior to any geotechnical or resource survey work in any regulated areas, the applicant must obtain all required Department permits and approvals;
7. The Department strongly encourages PennEast to submit an application to the Department for a Letter of Interpretation (LOI) at least one year prior to submittal of a Land Use permit application. An LOI is issued to establish the accurate wetland locations and resource classifications. The applicant is encouraged to also submit to the Department a request for a Flood Hazard Area (FHA) Verification to establish the location, and associated flood fringe and riparian zones for all State open waters along the routes;
8. The applicant must identify potential environmentally sensitive areas that may have State and/or Federally listed threatened and/or endangered species habitat and complete resource surveys. Input should be solicited by the appropriate agency and these areas should be avoided whenever practicable;
9. As currently proposed, the alignment traverses regions of the State that are governed by other Commissions and regions that may require additional environmental reviews and standards. The applicant shall consult with the

Delaware River Basin Commission (DRBC), the New Jersey Highlands Commission (NJHC), the Delaware and Raritan and the Morris Canal Commissions, and any other applicable State and Federal agencies to determine any approvals or exemptions as needed;

10. The applicant must identify any potential State Historic Preservation Area (SHPA) sites.

If you have any additional questions, please contact Christopher Squazzo at 609-292-1258.

Land Use Mitigation

1. Wetland mitigation is required to be conducted prior to or concurrent with a permitted activity. No regulated activities, especially construction, may occur until the Department has approved the mitigation proposals, including all temporary impact restorations. The Department strongly urges the applicant to identify potential mitigation sites concurrently with any parcel attainment process that is currently underway. Until such time that all mitigation proposals have been approved by the Department, the mitigation portion of the Department's regulations has the potential to prevent construction activities from occurring within regulated areas;
2. Based upon the potential wetland impacts presented in Resource Report 2, a significant amount of off-site wetland mitigation would be required if permits were to be issued.
3. If the applicant is applying for a Hardship Exception under a Flood Hazard Area Individual Permit for exceeding the disturbance limits under Table C at N.J.A.C 7:13-10.2, riparian compensation proposals, including all temporary impact restoration, are required to be approved prior to issuance of a permit. Again, the Department strongly urges the applicant to identify potential riparian compensation sites concurrently with any parcel attainment process that is currently underway. If a permit were to be issued, riparian compensation has the potential to prevent permit issuance until such time that all riparian compensation proposals have been approved by the Department.
4. The permanent conversion of forested and scrub-shrub wetlands to emergent wetlands is considered a permanent impact that requires off-site mitigation. The permanent conversion of palustrine forested and palustrine scrub-shrub wetlands to palustrine emergent wetlands requires restoration of the area temporarily disturbed to a non-forested wetland, and in addition, one acre of mitigation in accordance with the mitigation subchapter for each acre of disturbance.
5. Although no riparian impacts have been quantified at this time, the applicant should expect that significantly more riparian compensation would be required

than wetland mitigation, if permits were to be issued. The riparian impacts are always much greater than the wetland impacts for linear projects. Again, the Department cannot stress enough that the planning process for wetland mitigation and riparian compensation should already be well underway at this time.

6. Wetland mitigation must be in-kind. For example, if a wetland with a 150 foot transition area due to wood turtle is impacted, the mitigation must provide a direct ecological benefit to wood turtles and the enhanced or created wetlands would therefore also have a 150 foot transition area.
7. Riparian compensation requires that all replanting shall be located within the riparian zone of the same water as the cleared, cut or removed vegetation. It also requires that all replanting be located as close in proximity to the cleared, cut or removed vegetation as possible. Therefore, for example, it is inappropriate to propose compensation on a non-trout, 50 foot transition area stream for impacts to a trout production stream with a 150 transition area.
8. For the purposes of determining what constitutes in-kind mitigation for riparian and wetland impacts, greater details should be provided rather than the Cowardin classification system. Any ecological resources that afford a wetland or stream greater protection or a higher ecological classification should be identified for each wetland and riparian area along the length of the project. This information will be used to determine the appropriate mitigation and compensation that may be required if permits were to be issued.
9. Vernal habitat areas must be identified and mapped, including the 1,000 foot dispersal area. In-kind mitigation is required for any impacts to vernal habitat areas.
10. The potential for hazardous material contamination must be addressed in all mitigation proposals. A sampling plan must be approved by the Department prior to the commencement of sampling for all off-site mitigation proposals. Data shall be compared to the Ecological Screening Criteria. Any criteria will require a proposal outlining how the contamination will be addressed so that ecological receptors are not exposed to increased ecological risk.
11. Potential impacts to historic and archeological resources must also be addressed for all off-site mitigation proposals.

If you have any additional questions, please contact JoDale Legg at (609) 984-0618.

New Jersey Geological and Water Survey

General Comment:

Several different drilling methods are available for the installation of a pipeline depending on site conditions, geologic conditions, and an evaluation of total temporary and permanent impacts to natural resources. For the approximately seven HDD sites proposed by PennEast in the Final Resource Reports, little to no information is presented in the geotechnical reports. In exploring alternate routes and efforts to minimize temporary and permanent impacts to resources including wetlands, streams, fish and wildlife, the applicant and FERC must also consider geologic impediments to using various drilling methods including the HDD method. During the New Jersey Geological and Water Survey (NJGWS) review of the proposed pipeline alignment several geologic formations have been identified as areas that may not have the proper soil types and/or geology that are conducive for the use of the HDD pipeline installation method and require further investigation by the applicant. A full geotechnical assessment is required to fully evaluate the viability of each alternative drilling method and therefore the temporary and permanent impacts in acres of each drilling alternative.

Specific Final Resource Report Comments

I. Resource Report 1

Section 1.4.3.1 Geology and Soils, Page 1-56.

This report indicates that “[p]reliminary and completed studies undertaken during the project design phase include a seismic hazard analysis, quarry blasting study, arsenic risk assessment, karst hazard study and geotechnical horizontal directional feasibility study.” The report further indicates “[t]he details and results of these studies are contained in Resource Report 6 and appendices.” Examination of Resource Report 6 and appendices indicates that for most of the studies there is little to no data, or conclusions provided. The NJGWS notes that it is difficult to confirm the conclusions reached in the Resource Reports using incomplete data.

Section 1.4.3.2 Water Resources, Page 1-57

There is no mention of ground-water supply impacts. In New Jersey, most of the properties bounding the pipeline route are supplied by individual wells. There are numerous cases of wells drilled on adjacent properties impacting a neighbor’s well, especially in the rocks of the Newark Basin in Hunterdon County. Since over 90% of the pipeline in New Jersey is in these rocks, PennEast should have a plan in place covering at a minimum any damage, contamination and/or lowering the water levels in the wells before the Certificate is issued.

Section 1.5.2.4 Pre-Blasting in Streams, Page 1-84

The report indicates PennEast will submit a blasting plan to NJDEP prior to commencement of blasting activities. FERC and PennEast should be aware that all blasting in New Jersey is regulated by the Department of Labor & Workforce Development, Division of Safety and Health, Safety Compliance Unit. This Unit must be contacted prior to any blasting in the State and the regulations must be followed since they differ from, and in many cases, are more restrictive than what is presented in Appendix O – Section D, Blasting Plan. It is recommended that PennEast contact the Safety Compliance Unit and modify Appendix O – Section D, Blasting Plan to reflect New Jersey requirements prior to FERC's approval.

Table 1.7-2 Summary of Agency Consultation and Communications

This table lists the various Federal, State and local government entities that PennEast contacted. There is no record that PennEast or its consultants contacted either the NJGWS. In past pipeline projects, the NJGWS would receive a request for geologic information, such as bedrock and surficial geology, mines, karst and paleontology. The NJGWS would provide sources for the most recent information and current contacts. PennEast did not contact the NJGW&S and some of the cited references are outdated, such as a 5 mile to inch map of iron mines in New Jersey, dated 1890. The NJGWS website contains the mapping layer entitled "DGS03-2 Abandoned Mines of New Jersey (Scale 1:24,000) (6-21-2006), last updated in 2010.

II Resource Report 2

Section 2.2.1.1 Bedrock Aquifers, Page 2-2

The last paragraph indicates the project area includes five named aquifers or related confining units as shown on Table 2.1-1 and Figure 2.2-2. In the bedrock areas of New Jersey, there are no confining units in the same sense as seen in the Coastal Plain Province. In these rocks, nearby wells may encounter enough water to supply a home at totally different depths several hundred feet apart since the ground water flow is mainly through fractures, joints or partings, not intergranular as in a sand aquifer. Even the tightest formations in the state such as the Shawangunk and Martinsburg are aquifers where people successfully install wells. Generally these two formations yield less water than the thick confining clays of the Coastal Plain.

Section 2.2.1.2 Principal Aquifers, Pages 2-7 and 2-8 and Table 2.2-2

This section contains inaccurate information as it relates to New Jersey geology. For instance, the report inaccurately lists the Early Mesozoic Basin Aquifers as sandstone because the amount of sandstone is likely less than 40% of the total rock. Most of the Mesozoic rocks in the state are the fine shale, mudstone, siltstone and argillite with over a thousand feet of diabase, not sandstone, in the project area.

Section 2.2.3 Public and Private Water Supply Wells and Springs, Page 2-11

The second sentence, second paragraph, indicates that according to Department data from 2012 there are no private wells located within 150 feet of the right a way. The Data Miner used only shows wells that were issued a well permit. If a well was drilled before 1948, no permit was required and therefore these wells would not be identified by the Data Miner report. Also, over the years, thousands of wells have been drilled without a permit. A possible solution would be to locate any house, farm or business within 150 feet of the route that is outside an area served by a public water system and consider it to be on a private well, permitted or unpermitted. Although rare in New Jersey, springs may also be used as a domestic supply.

Section 2.2.5 Summary of Groundwater Effects and Mitigation, Pages 2-18 and 2-19

On these two pages, PennEast lists a number of scenarios and mitigation strategies. Based on NJGWS' examination of this section and the groundwater portion of this document, the NJGWS is concerned with mischaracterizations of the hydrogeology of the Newark Basin, which makes up nearly 90% of the New Jersey portion. For instance, the aquifer map used to indicate yields for the various aquifers is based on yields of high capacity wells geologically located to produce maximum yields, not the domestic wells. If domestic wells are added to the yield calculations, the estimated aquifer yields would likely be an order of magnitude lower for each aquifer.

There a number of published reports that PennEast did not review in determining the aquifer potential in New Jersey. These include the Geology and Ground Water Resources of Hunterdon County, N. J. (1966) and the Geology of the Ground Water Resources of Mercer County, New Jersey (1965). The former is available through the Rutgers Digital Library and the latter on the NJGWS website. In addition, there is a report on well failures in similar rocks in Somerset County (Houghton, 1988). Well failures and well interference are more common in the Newark Basin rocks than any other part of the state. In Hunterdon County, the median domestic well yield for the Brunswick is 15 gallons per minute (gpm), the Lockatong is 6 gpm, the Stockton is 18 gpm, baked Brunswick (hornfelds) is 6 gpm and the diabase is 5 gpm (Kasabach, 1966). With yields this low, interference can be common.

III. Resource Report 6

Section 6.1.1 Bedrock Geology, Page 6-1

The report states “[p]ublished information regarding geological conditions for the specific Project locations was obtained from the United States Geological Survey (USGS), Pennsylvania Department of Conservation and Natural Resources (PADCNR) and New Jersey Department of Environmental Protection (NJDEP).” Also, in the various geotechnical reports, the reports state that the “United States Geological Survey (USGS) mapping, included in Appendix D indicates....” However, there are no references of any USGS geologic maps in Appendix D. Please note that the USGS never mapped or

published any geologic mapping of many of the detailed areas shown. PennEast should cite the specific publication and properly reference any maps they use, not general statements of government agencies.

PennEast is using regional geologic mapping at 1:100,000 and 1:250,000 scales for site specific geology. Mapping at those scales is useful for an overview of the entire project, but not the individual meter stations or HDD sites. The regional geologic maps cannot show all the faults or other structures that may affect a specific site.

Section 6.1.3 Geologic investigation of Horizontal Directional Drill Crossings, Page 6-5

The report indicates that geologic investigations at 10 HDD crossings are complete or ongoing as of September 2015. Appendix O, Part A indicates that only 2 of 10 drill sites have geotechnical reports that are nearly complete while the remaining sites are either not started or awaiting site access for some or all of the borings. For the sites in New Jersey there is no specific information that can be reviewed.

Section 1.14 Geologic Investigation of Meter Station and Compressor Station Locations, Page 6-6

The report indicates that geologic investigations at 12 locations are complete or ongoing as of September 2015. Appendix O, Part C indicates that only 3 of the 12 facilities have complete geotechnical investigations, with those in New Jersey barely started.

Table 6.1-1 Geologic conditions Associated with the Project and Table 6.1-2 Surficial Geological Conditions Associated with the Project, Pages 6-7 to 6-25

The report mentions both bedrock and surficial geology, but does not identify where the pipeline will cross from one geologic unit to another or any potentially problematic geology.

6.2.1 Active and Abandoned Mines and Quarries, Page 6-26

In the last paragraph the report states “[t]here are no mines or quarries located within 0.25 miles of the Project in Hunterdon or Mercer Counties.” However, between MP 82 and MP 84, the pipeline route is near at least four (4) abandoned flagstone quarries, several of which are noted paleontology sites. The quarries range for as little as 500 feet to about 1,900 feet from the centerline of the route through this area.

Section 6.3.3 Faults, Page 6-32, 6-33

Near the top of the third paragraph the report states that the Ramapo fault system (RFS) in New Jersey is largely the Ramapo fault proper. This statement is not true since the Ramapo Fault proper extends from just southwest of Morristown, New Jersey to the northeast into southern New York. From Morristown to the southwest to Pennsylvania there are a series of parallel faults that step back to the northwest known collectively as

the Border Fault. These faults do not connect with the Ramapo proper, but the northeastern one is cut by the Ramapo Fault (see Drake and others, 1996).

Near the bottom of page 6-33, the report indicates “[t]he Monroe Boulder [sic] fault, located near the intersection of Route 611 and Lehenberg Road is greater than 4,000 feet from the Project location. Therefore, there will be no impact related to the Monroe Boulder [sic] Fault.” The Monroe Border Fault is the Border Fault in New Jersey and the pipeline does cross the fault between MP 75.6 and MP 75.7, therefore there is an impact on the fault. Also, between MP 74.9 and MP 80.9 there are epicenters of four earthquakes which were as close as 235 feet to 8,690 feet from the pipeline (Ghatge, 2004). The magnitudes ranged from 1.7 to 3.5.

Section 6.3.4 Surface Subsidence - Karst Terrain, Pages 6-33 to 6-35

There is no information pertaining to New Jersey in either this section or in Appendix O Section F. Karst Investigation Interim Report – Electrical Resistivity Imaging Survey.

Section 6.3.5 Surface Subsidence – Underground Mines

The last two sentences of the second paragraph references Table 6.2-1, Abandoned and Reclaimed Mines within 0.25 Miles of the Project Area and Figure 6.2-1, PennEast Pipeline Project Abandoned & Reclaim Mines. Table 6.2-1 lists no mines in New Jersey or in Northampton or Bucks Counties, Pennsylvania and Figure 6.2-1 shows no mines in those areas. According to the most recent published database for New Jersey there are no underground mines within 0.25 miles of the January 2015 GIS pipeline route supplied to the NJDEP, but there are abandoned quarries within that corridor as stated above. PennEast should consult with the NJG&WS and review information located on the data layer entitled “DGS03-2 Abandoned Mines of New Jersey (Scale 1:24,000), last updated June 21, 2006” and check that against the current route.

Section 6.3.1 Landslides, Page 6-35

The first sentence in the second paragraph states the USGS susceptibility map for the project location in New Jersey indicates that there is a low landslide incidence. New Jersey has a landslide database, entitled “DGS06-3 Landslides in New Jersey, last updated July 7, 2015, which Penn East should examine since there have been one or more landslides near the project route.

Section 6.3.8.1 Blasting, Page 6-38

The last sentence of this section indicates that “PennEast will apply and receive a State of New Jersey Explosives Application Blasters Use Permit for areas along the alignment in New Jersey where blasting will occur.” The act and regulations require more than a permit. The report should cite the New Jersey regulations as they do for the Federal and Pennsylvania blasting regulations. Also, in New Jersey there are more stringent monitoring requirements than in the Federal regulations. The additional requirements in

the New Jersey explosives regulations should be added to Appendix O, Section D, Blasting Plan prior to Penn East receiving FERC approval.

Section 6.3.8.2 Arsenic, Pages 6-38 and 6-39

This section contains numerous generalizations and concludes “[b]ased on available information, the likelihood of elevated levels of arsenic in the groundwater is de minimis due to the proposed construction methods. The study will be complete in late 2015.” Without having the study completed, it is impossible to say that the effect of construction of the pipeline will be de minimis. No information is provided on the concentration of arsenic bearing minerals in the rock along the pipeline route or any leachability tests of those minerals.

Section 6.4 Paleontology, Page 6-45

The report indicates a Dr. William Gallagher at Rider University was contacted who indicated there were only two significant potential fossil sites in Hunterdon County and none in Mercer County. The locations of the two sites, the Smith Clark Quarry in Milford and the Nishisakawick Creek in Frenchtown are 0.62 miles and 0.85 miles respectively from the project. Based on information at the NJG&WS and a conversation with Dr. Paul Olsen of Lamont Doherty, an expert on geology and fossils of the Newark Basin, the Smith Clark and the Messrs. Clark quarries are approximately 500 feet and 1,900 feet from the centerline of the right-a-way respectively. Both of these quarries are extremely important paleontological sites and one is close enough to be potentially affected. It should also be noted that NJG&WS staff have located another fossil site at the intersection of Jarves Road and Miller Park Road.

Figure 6.1-1

There are some colors on the map that do not match the Geologic Unit Age color in the legend, especially the Jurassic and the units in the lower extreme lower right corner. The map should be reconfirmed with sources and corrected as appropriate. Also, no references are given for the regional map Figure 6.1-1.

References:

Drake, A.A., Jr., Volkert, R.A., Monteverde, D.H., Herman, G.C., Houghton, H.F., Parker, R.A., and Dalton, R.F., 1996, Geologic Map of New Jersey: Northern Bedrock Sheet: U.S. Geological Survey Miscellaneous Investigation Series Map I-2540-A, scale 1:100,000.

Ghatge, Suhas, 2004, Earthquakes epicentered in New Jersey, New Jersey Geological Survey Digital Geodata Series, DGS04-1, updated 8-24-2015.

Houghton, Hugh F., 1988, Hydrogeologic study of water well failures in argillite bedrock of Sourland Mountain, Somerset County, New Jersey: New Jersey Geological Survey TM 88-2, 28p.

Kasabach, H.K., 1966, Geology and ground water resources of Hunterdon County, N. J.: NJ Division of Water Policy and Supply, SR no. 24, 128p.

Olsen, P.E., Smoot, J.P. and Whiteside, J.H., 2005, Stop 2 Upper Member L-M and Perkase Member of the Passaic Fm. Pebble Bluff, Milford, NJ., in Newark Basin- View from the 21st Century, edited by Gates, A.E., Geological Association of New Jersey XXII Annual Meeting, p. 125-133.

Widmer, K., 1965, Geology of the ground water resources of Mercer County: Geological Survey Report GSR 7, 115p.

If you have any additional questions, please contact Richard Dalton at the NJGWS at (609) 292-2576.

Natural and Historic Resources

In addition to comments provided in the Department enclosed response to the Draft Resource Reports of July 2, 2015, the Department's Division of Natural and Historic Resources (NHR), including Green Acres, Fish & Wildlife, and the Historic Preservation Office Group, has reviewed the Final Resource Reports and offers the following comments:

General Comment

NHR notes there is insufficient information provided in the Final Resource Reports to address potential impacts associated with the current proposed route across New Jersey State-owned lands and easements. This includes properties under the jurisdiction of the Department, as well as the New Jersey Natural Lands Trust's preserves that are adjacent to or to be crossed by the proposed pipeline. The Department was not provided with an alternative analysis for the proposed pipeline route assessing how PennEast plans to avoid or minimize potential impacts to State lands, including using existing utility or local roadway right of ways. The Final Resource Reports do not address other State land requirements if permission is granted for use of State lands, such as the requirements of the No Net Loss Act and State House Commission approval.

NHR has provided PennEast with survey guidelines for comprehensive data collection regarding threatened and endangered plants and animals and will provide PennEast with further guidelines on cultural resource surveys of State lands. Until NHR understands the alternatives and works with PennEast to establish which alignments are feasible, it is difficult to provide specific comments on these Resource Reports. PennEast's alternatives analysis must provide proof that there are no other reasonable and feasible routes before a diversion can occur on state/local/county park land.

NHR offers the following program comments. If you have any questions, please contact Robin Madden at (609) 292-5990.

Historic Preservation Office (HPO):

HPO-E2015-364

HPO Project # 14-4462-10

There is insufficient data or explanation in the archaeological survey report for the HPO to determine whether the survey was adequate to identify archaeological resources within the tested areas. The HPO will work with URS/AECOM to obtain this additional information so that we can evaluate the survey adequacy. If, after we receive the additional information and justification, the HPO will determine whether the survey conforms to the HPO's survey requirements.

Until we have a complete understanding of whether the survey work meets our standards, the HPO cannot evaluate any of the survey findings and recommendations. The enclosed specific comments were mailed to FERC on October 23, 2015. If you have any questions, please contact Jesse West-Rosenthal at (609)-984-6019.

New Jersey Natural Lands Trust

The New Jersey Legislature created the New Jersey Natural Lands Trust (NJNLT) in 1968 as an organization that could accept land donations and ensure their protection in perpetuity. The proposed PennEast pipeline route traverses five NJNLT-managed properties within its Gravel Hill Preserve in Holland Township, Hunterdon County, NJ. The 400-foot pipeline study corridor also includes a portion of the NJNLT's Thomas F. Breden Preserve at Milford Bluffs (also within Holland Township). PennEast has asserted to the NJNLT that PennEast has no intention of using any portion of that preserve for construction or staging. Property preserved in perpetuity should not be designated as the preferred route if viable, less environmentally damaging alternatives exist.

The NJNLT's Gravel Hill Preserve includes habitat for the state-endangered bobcat and a rare plant, wild comfrey. Portions of the NJNLT's Gravel Hill Preserve that are targeted in the application include a mature forest with a natural understory and a general absence of invasive plant species. If this preserve was subject to clearing for the installation of the pipeline, it would detrimentally impact rare species habitat and the understory species that thrive on a closed tree canopy and increase the likelihood for the introduction of invasive plant species, thereby permanently altering the integrity of the preserve's habitat.

State Forestry Services, Natural Heritage Program

PennEast must make every effort possible to minimize impacts to rare plant species and ecological communities within and adjacent to the proposed right-of-way. In order to evaluate the environmental impacts associated with PennEast’s proposed route, and using information contained in a Natural Heritage database report to PennEast, dated August 7, 2015, PennEast should be required to conduct rare plant surveys within the entire 400-foot Penn East pipeline study corridor and an additional 200 feet to each side of the study corridor (collectively referred to as the “survey area”) in accordance with protocols developed by the Office of Natural Lands Management and provided to PennEast. The surveys should target the rare plant species listed on the aforementioned Heritage database report, additional rare plant species occurrences not covered by the Flood Hazard Area Control Act rules but documented in the vicinity of the pipeline corridor, as well as all rare plant species documented in the two Natural Heritage Priority Sites crossed by the pipeline corridor. These categories include a total of 32 endangered or rare plant species.

Under State rules, PennEast will be required to address mitigation associated with the inevitable damage that will result from the pipeline construction. Damage includes invasive species, erosion, additional impact from deer, replanting with unsuitable plant species, and other issues and concerns. If damage occurs, PennEast will be required to compensate the State for these impacts.

NJ Endangered and Nongame Species Program (ENSP)

- 1) The wildlife survey effort to date does not meet ENSP standards/requirements and is lacking for the majority of the species for which surveys are required.
- 2) Certain species of concern, such as the northern copperheads require two (2) years of surveys including two spring, summer, and fall seasonal surveys. These surveys must be completed prior to commencement of any construction of this proposed pipeline.

If you have additional questions, please contact Kris Schantz at (908) 638-6639

Threatened and Endangered Species Unit

Species Documentation/Conditions along Penn East Right-of-way

Areas along the Penn East Pipeline right-of-way that are documented for New Jersey threatened and/or endangered species by Landscape Project Mapping Version 3.1 are listed below.

<u>Mile Number</u>	<u>Species Concerns</u>
74.9	Bald Eagle Foraging
75.2	Bobcat
75.6-76.1	Bobcat, Bald Eagle Nest
76.2-76.5	Bobcat

77.3	Bobcat
77.6	Bobcat, Wood Turtle
77.7	Bobcat, Bald Eagle Foraging
77.8-79.4	Bobcat
79.5	Bobcat, American Kestrel
79.7-79.9	American Kestrel, Bobolink
80.2-80.4	American Kestrel, Bobolink
80.5	Bald Eagle Foraging, Bobcat
81, 81.1	American Kestrel
82.3-82.5	Bobolink
82.6	Bobolink, Bald Eagle Foraging
82.7	Bobolink
82.9	Bald Eagle Foraging
83.2	Bald Eagle Foraging
84.1	Bald Eagle Foraging
85	Bald Eagle Foraging, Longtail Salamander
85.1, 85.2	Bald Eagle Foraging
85.3-85.6	American Kestrel, Bobolink, Grasshopper Sparrow
85.7	Bald Eagle Foraging, Red-shouldered Hawk,
86.1	Osprey
87.1-87.3	Bobolink, Grasshopper Sparrow, Bald Eagle Foraging
87.5-87.7	Bobolink, Grasshopper Sparrow
88.8-89.5	Bobolink, Grasshopper Sparrow, Bald Eagle Foraging
89.6	Bald Eagle Foraging
89.8	Bald Eagle Foraging
90.3-90.7	Red-shouldered Hawk, Red-headed Woodpecker
90.8	Red-shouldered Hawk, Red-headed Woodpecker, Bobolink
90.9-91.4	Bobolink, Grasshopper Sparrow, Red-shouldered Hawk, Red-headed Woodpecker
91.5	Bobolink, Grasshopper Sparrow
91.6-92	Grasshopper Sparrow
92.1	Grasshopper Sparrow, Longtail Salamander,
92.2	Longtail Salamander
92.3, 92.4	Bobolink, Grasshopper Sparrow, Savannah Sparrow
92.5-93.5	Bobolink, Grasshopper Sparrow, Savannah Sparrow, American Kestrel

93.6, 93.7	Bobolink, Grasshopper Sparrow, Savannah Sparrow
93.8	Bobolink, Grasshopper Sparrow, Savannah Sparrow, Bald Eagle Foraging, Longtail Salamander
93.9	Bald Eagle Foraging, Longtail Salamander
94.2	Longtail Salamander
94.3, 94.4	American Kestrel
95.5, 95.6	Barred Owl
95.7	Barred Owl, Wood Turtle
95.8	Barred Owl
95.9-96.4	Barred Owl, Wood Turtle
102.9-103.1	Wood Turtle
103.4-104.9	Wood Turtle
107.9-108.6	Grasshopper Sparrow
110.2, 110.3	Bald Eagle Foraging
110.4-110.9	Wood Turtle
110.905	Wood Turtle

PennEast must make every effort possible to minimize impacts to threatened and/or endangered species and their habitat within and adjacent to the proposed right-of-way. Conditions and survey requirements below should be utilized and all survey requirements must be completed prior to the issuance of permits from the Department (see "Species Surveys" condition). Avoidance of areas, minimization of impacts, directional drilling and co-location must be taken into consideration.

Timing Restrictions

In PennEast's September 2015 Final Resource Report, PennEast indicates that they will abide by a timing restriction of March 15th through September 10th to avoid impacting migratory songbirds during the breeding season. We recommend that FERC condition any authorization granted to PennEast with specific language requiring them to adhere to this restriction during construction. Adherence to this restriction will also avoid impacts to state listed grassland species such as the bobolink and grasshopper sparrow. The below chart summarizes the timing restrictions likely to be placed on this project.

Species	Condition/Survey Requirement
American Kestrel, Bobolink, Grasshopper Sparrow, Savannah Sparrow	Breeding season timing restriction: 4/1 through 8/15
Bald Eagle Foraging	No removal of trees 8" dbh or greater within 300' of top of bank
Longtail Salamander	Directional drilling recommended. Surveys required if trenching is proposed
Red-shouldered Hawk	Surveys will be required for Landscape mapped areas and habitat between mile posts 90.2 and 91.4.

Barred Owl	No removal of trees greater than 20" dbh
Wood Turtle	Directional drilling recommended. Timing restrictions may be required
Bobcat	Any suitable den habitat must be avoided
Osprey	Potential timing restrictions
Red-headed Woodpecker	Surveys and timing restrictions if suitable trees are proposed to be removed between mile posts 90.2 and 91.4. Possible avoidance of trees/areas.

Species Surveys

Prior to the issuance of any permits from the Department's Division of Land Use Regulation, habitat assessments of landscaped mapped habitats will need to be conducted and species-specific surveys of un-mapped suitable habitats must be completed for the following threatened and endangered species:

- Barred Owl
- Bobolink
- Grasshopper Sparrow
- Red-headed Woodpecker
- Red-shouldered Hawk
- Savannah Sparrow
- Bobcat
- Wood Turtle
- Longtail Salamander

In addition, PennEast must coordinate with the United States Fish and Wildlife Service to complete the necessary surveys including, but not limited to, bog turtle, Indiana bat and northern long-eared bat.

Stream Crossings

There are several potential stream crossings along the proposed Penn East right-of-way that are documented for wood turtle and longtail salamander. The following areas noted below are recommended to be directionally drilled if feasible (see comments below), to avoid adverse impacts to these species. Open trenching these areas would likely result in adverse impacts to habitat for wood turtle and longtail salamanders and potentially threaten local populations of the state threatened longtail salamander. Alternative locations may need to be investigated unless site specific analysis (including appropriate habitat analysis or surveys) and construction techniques can be demonstrated to result in regulatorily acceptable impacts.

<u>Stream Name</u>	<u>Crossing Location (associated mile markers)</u>	<u>Species Concern</u>
Delaware River Tributary	Mile points 77.5 through 77.6	Wood Turtle
Nishisakawick	Mile points 85 through 85.2	Long-tailed

Creek/Tributary			Salamander
Wickecheoke Tributary	Creek	Mile points 92.1 through 92.2	Long-tailed Salamander
Wickecheoke Tributary	Creek	Mile points 93.2 through 93.3	Long-tailed Salamander
Wickecheoke Tributary	Creek	Mile points 93.8 through 94	Long-tailed Salamander
Alexauken Creek Tributary		Mile points 96.3 through 96.5	Wood Turtle

As noted above, trenched crossings will likely result in adverse impacts to state listed species and subsequently result in potential permitting issues at the State level. We strongly encourage investigating directionally drilling, if feasible (see comments below) at mile points 85 through 85.2 (Nishisakawick Creek/Tributary) and mile points 93.8 through 94 (Wickecheoke Creek Tributary). Similar but lesser concerns would apply to the crossings at mile points 92.1 through 92.2 (Wickecheoke Creek Tributary) and 93.2 through 93.3 (Wickecheoke Creek Tributary).

Department geologists have suggested that directional drilling may be problematic at these and various other locations along the proposed ROW. We recommend that FERC require PennEast to address this concern and provide documentation that fully assesses whether directional drilling is a practical and feasible option to avoid directly impacting these various stream corridors subject to pipeline crossings.

Vernal Pools

The areas indicated below contain potential or certified vernal pools within 1,000' of the proposed PennEast right-of-way. Prior to the issuance of any permit from the Division of Land Use Regulation, surveys of these areas must be completed. Direct impacts to documented vernal pools should be avoided, especially those that are certified.

<u>Associated Mile Post</u>	<u>Vernal Pool ID</u>	<u>Approximate Distance to ROW</u>
86.5-86.6	1136ped	500'
87.7-87.8	1142ped	Within 150'
87.5	1141ped	900'
95.6	1087ped	500'
99.3-99.4	928ped	Within ROW
99.4-99.5	923ped	350'
99.5-99.6	922ped	680'
99.5-99.6	924ped	915'
99.9-100	2048ped	600'
99.9-100	905ped	Within ROW
100.4-100.5	904ped	330'
104.9	911ped	Within ROW

Summary

Directional drilling is strongly encouraged, if feasible, at mile points 85 through 85.2 (Nishisakawick Creek/Tributary) and mile points 93.8 through 94 (Wickecheoke Creek Tributary) so as to not adversely impact the State threatened species, longtail salamander.

In the September 2015 Final Resource Reports, PennEast has indicated they will abide by a timing restriction of March 15th through September 10th to avoid impacting migratory songbirds during the breeding season. We recommend that FERC condition any authorization granted Penn East with specific language requiring them to adhere to this restriction during construction. Adherence to this restriction will also avoid impacts to state listed grassland species.

All relevant State threatened and endangered species surveys must be completed prior to submission of any state permits.

We have significant concerns regarding proposed trenching of high quality C1 streams and/or trout associated waters. Alternatives and additional levels of protection of these crossings need to be detailed where directional drilling is not feasible.

Any forthcoming Division of Land Use Regulation permits required to commence construction are also contingent upon completed USFWS reviews.

Additional species may be discovered during the permitting process for this project. As a result, species documentation and habitat suitability is subject to change based on information available during the time the application is received. Penn East may be required to conduct additional surveys and/or to avoid certain areas of the proposed pipeline right-of-way depending on completed survey findings.

If you have additional questions, please contact Christina Albizati at (609) 292-1263.

Green Acres

In addition to comments presented in the July 2, 2015 response to the Draft Resource Reports, the Green Acres program offers the following additional comments.

Background

The Department's Green Acres Program is responsible for the stewardship of all State, county, municipal and non-profit owned land and easements that have been purchased with Green Acres bond funds or are otherwise encumbered under Green Acres Program regulations. Any disposal or diversion from a recreation or conservation use of Green Acres encumbered lands or the release of a conservation restriction subject to the New Jersey Conservation Restriction and Historic Preservation Restriction Act would require an application to the Green Acres Program.

The disposal/diversion application process includes a public need/public benefit analysis, alternatives analysis and compensation and mitigation requirements. The Green Acres rules require that every effort should be made to avoid the disposal or diversion of parkland. A complete alternatives analysis is expected for review in the Draft EIS including rerouting the pipeline around public lands. In order for a disposal or diversion to be approved, the Green Acres Program would have to find that there were no feasible alternatives for the proposed project, that there is a significant public need or benefit associated with the project, and that the project would not significantly interfere with the public's use of the parkland or adversely impact environmentally sensitive areas. These applications are scrutinized on a number of different levels within the Department, by environmental groups and the public (through the requirements for public hearings) and are evaluated thoroughly.

An application for a disposal/diversion can only be submitted by or with the approval of the land owner. Resolutions in support of the application are required to be adopted by the landowner in support of the application and compensation/mitigation package. If approved by the Commissioner, Green Acres disposal/diversion applications also require the approval of the State House Commission (a legislative commission that meets on a quarterly basis.) Conveyances of State land in an amount greater than one acre, or leases of more than 25 years, are subject to additional procedural requirements under the "Ogden Rooney" statute.

The conservation easement release process includes a similar review of alternatives, public need/public benefit analysis and compensation and mitigation requirements. Easements are released through the issuance of a certificate from the NJDEP Commissioner, which is recorded in the same manner as the easement.

Comments

The Final Resource Reports do not describe mitigation measures required to account for the potential diversion/disposal of Green Acres encumbered parkland. If alternate routes around encumbered parkland are considered to be not feasible or reasonable or are unavoidable, replacement land will be required as part of a diversion/disposal application at ratios pursuant to Table 1 of the Green Acres rules for county, municipal and non-profit owned parklands. In addition, the resource reports do not address restoration required to return Green Acres encumbered parkland back to the condition it was before the project or account for permanent impacts in developed right of ways. There is also no discussion regarding the specific Green Acres tree replacement requirements or discussion regarding the restoration of conservation lands back to pre-existing conditions. It is expected that there will be significant tree clearing on Green Acres encumbered parkland that will trigger a substantial tree replacement component to the project.

It should be noted that Resource Report 8 describes in detail, potential impacts and conditions at numerous Pennsylvania State Managed Lands, State Game Lands and State Forest Lands but does not provide similar consideration to New Jersey's State Managed

Lands including State Parkland, Fish and Wildlife Management Areas and Natural Heritage Program Lands.

The resource reports summarize impacted parkland parcels and provide approximate areas of disturbance but do not go into specifics regarding the conditions found within each parkland parcel. When analyzing impacted parkland in the resource reports and preparing an application for the disposal of diversion of parkland, the following issues must be addressed:

- Replacement land will be required at noted ratios for State Parkland and Conservation Easements and pursuant to Table 1 of the Green Acres rules for county, municipal and non-profit owned parklands.
- The potential for impacts to and fragmentation of habitat for known occurrences of endangered, threatened and species of special concern on parkland must be analyzed by the applicant and will be reviewed for all Green Acres encumbered parkland pursuant to *N.J.A.C.7:36-26.1(e)6*.
- Tree replacement will be required pursuant to *N.J.A.C. 7:36-26* and will be based on a square inch for square inch basis. Expected impacts to forested area on parkland parcels should be noted in the resource reports.
- Alternative construction techniques such as HDD should be utilized to the extent practicable to avoid/reduce parkland impacts.
- Temporary impacts to parkland will need to be restored to preexisting conditions and forest impacts will need to be mitigated for based on the same tree replacement requirements as disposals/diversions.

Specific Comments regarding the information contained in Final Resource Report #8.

1. A review of tables 8.4-1 and 8.4-2 revealed that the following parcels were not listed and may also be impacted.

County	Municipality	Block	Lot	Owner	Interest
Mercer	Hopewell	85	5	Hopewell Township	Fee
Mercer	Hopewell	85	8	Hopewell Township	Fee
Mercer	Hopewell	60	4	Hopewell Township	Fee
	West				
Hunterdon	Amwell	8	36	West Amwell Township	Fee
	West				
Hunterdon	Amwell	8	14	West Amwell Twp.	Funded Easement
Hunterdon	Kingwood	26	4	Unknown	Easement
Hunterdon	Alexandria	18	20.01	State of New Jersey	Fee

If you have any additional questions, please contact Kevin Appelget at (609) 777-4192.

Water Allocation

The Department's Bureau of Water Allocation has reviewed the Final Resource Report and Water Use and Quality and has the following comments.

It appears that there will be construction related dewatering, however no details were provided. Water use for pressure testing was also mentioned but no mention of use of water for dust control or re-vegetation was found (activities typically associated with large scale construction projects).

If construction related dewatering is required at rates exceeding 100,000 gallons per day of water (70 gallons per minute pumping capacity) then that activity would be regulated under a short term water use permit by rule if less than 31 days, or a dewatering permit if 31 days or longer. A dewatering permit by rule may be applicable if the dewatering occurs from within a coffer dam, or similar confined space. Discharges associated with this activity are for uncontaminated water associated with only short term water use. Any discharge of construction dewatering to any surface water body requires a surface water permit. Any discharge of contaminated water would require additional permit(s) and/or would not be a regulated discharge.

If you have any additional questions, please contact Jan Gheen at 609-984-3669.

Stormwater Management

A general permit for discharge of stormwater associated with construction activities, (5G3) is required from the Department. This general permit authorizes stormwater discharges from construction activities which disturb areas greater than 1 acre or smaller areas that are part of a large plan of common development greater than 1 acre. The applicant must have a certified Soil Erosion and Sediment Control Plan by each applicable County Soil Conservation District in order to have the necessary information for a complete permit application. The permit application process is available online at <http://www.state.nj.us/dep/dwq/5g3.htm>. If you have any additional questions, please contact Ron Bannister at (609) 633-7021.

Air Permitting

An air operating permit is required for any emergency generators over 1 MMBtu as well as non-emergency generators over 37 Kw. If you have any additional questions, please contact Robert Kettig at (609) 633-3858.

Air Quality Planning

If this project requires Federal funding, permit, approval or license, then a General Conformity Applicability Analysis and possibly a Conformity Determination will be required in accordance with the USEPA's Federal General Conformity regulation. (40 CFR Part 93, Subpart B, Determining Conformity of General Federal Actions to State or

Federal Implementation Plans). If you have any additional questions, please contact Angela Skowronek in the Bureau of Air Quality Planning (BAQP) at 609-984-0337.

Bureau of Mobile Sources

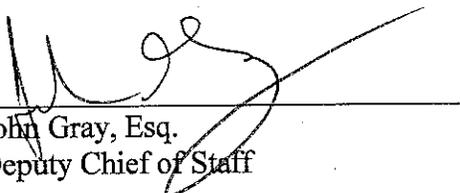
Diesel exhaust contributes the highest cancer risk of all air toxics in New Jersey and is a major source of NO_x within the state. Therefore, the Department recommends that construction projects involving non-road diesel construction equipment operating in a small geographic area over an extended period of time implement the following measures to minimize the impact of diesel exhaust:

1. All on-road vehicles and non-road construction equipment operating at, or visiting, the construction site shall comply with the three minute idling limit, pursuant to N.J.A.C. 7:27-14 and N.J.A.C. 7:27-15. Anti-idling signs to be posted at the site are available for purchase from the Bureau of Mobile Sources at 609-292-7953.
2. All non-road diesel construction equipment greater than 100 horsepower used on the project for more than ten days should have engines that meet the USEPA Tier 4 non-road emission standards, or the best available emission control technology that is technologically feasible for that application and is verified by the USEPA or the CARB as a diesel emission control strategy for reducing particulate matter and/or NO_x emissions.
3. All on-road diesel vehicles used to haul materials or traveling to and from the construction site should use designated truck routes that are designed to minimize impacts on residential areas and sensitive receptors such as hospitals, schools, daycare facilities, senior citizen housing, and convalescent facilities

If you have any additional questions, please contact Peg Hanna or Jeff Cantor in the Bureau of Mobile Sources at 609-292-2232.

Thank you for giving the New Jersey Department of Environmental Protection the opportunity to comment on the Final Resource Reports and FERC Certificate Application for the proposed Penn East Pipeline Project.

Sincerely,



John Gray, Esq.
Deputy Chief of Staff

Enclosures

cc: Medha Kochhar, FERC
Ruth Foster, NJDEP-PCER
Angela Skowronek, NJDEP-Air Quality Planning
Peg Hanna, NJDEP – Air Quality Mobile Sources
Jan Gheen, NJDEP-Water Allocation
Kelly Davis, NJDEP-Fish and Wildlife
Jesse West-Rosenthal, NJDEP- Historic Preservation
Chris Squazzo, NJDEP-Land Use
Dennis Contois, NJDEP - Land Use
Kevin Appelget, NJDEP - Green Acres
Diane Dow, NJDEP – Land Use
Ginger Kopkash, NJDEP - Land Use
JoDale Legg, NJDEP - Land Use Mitigation
Robin Madden, NJDEP – NHRG
Cari Wild, NJDEP-NHRG
Patrick Sheppard, NJDEP - Land Use
Michael Palmquist, NJDEP – Enforcement
Christina Albizati, NJDEP-Land Use T+E
Kelly Davis, NJDEP –NHRG T+E
Kris Schantz, NJDEP – NHRG ENSP
Richard Dalton, NJGS
Dan Kuti, NJDEP-Stormwater
Ronald Bannister, NJDEP – Stormwater
Kelly Perez, NJDEP – Surface Water
Jeff England, Penn East
Sean Sparks, Tetra Tech
Bernard Holcomb, AECOM
Marilyn Lennon, PS&S



State of New Jersey

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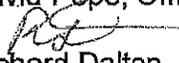
CHRIS CHRISTIE
Governor

BOB MARTIN
Commissioner

KIM GUADAGNO
Lt. Governor

MEMORANDUM

TO: David Pepe, Office of Permit Coordination and Env. Review

FROM:  Richard Dalton, New Jersey Geological and Water Survey

SUBJECT: PennEast Alternate Route

DATE: September 18, 2015

The PennEast proposed alternate pipeline route has been reviewed and areas of problematic geology have been identified as requested in your September 3, 2015 e-mail. On September 11, 2015 Ruth Foster asked Jeff Hoffman, Acting State Geologist, if we could provide a map of the alternate route identifying the diabase bedrock areas. In addition to areas where the pipeline crosses diabase or argillite bedrock several other geologic units that may prove difficult to horizontally drill are shown on the attached map. This map depicts only the areas of difficult rock types found along the route and is based on overlaying 1:100,000 scale GIS geology on the alternate pipeline route from the GIS data layer you provided. Since the 1:100,000 geology is not at a scale suitable for site specific work, the locations of contacts could be in error by as much as one hundred feet or more. Also some small units could have been missed during the regional 1:100,000 scale mapping. The MP distances below were estimated between the tenth of a mile MPs on the map.

Geologic units present along the alternate route that may be difficult to horizontally drill are:

A. Jurassic diabase and Lockatong Formation (argillite), the units you requested on September 3rd. It should be noted that the diabase intrusions have altered the rocks they intruded into hornfels which can be as hard as the original diabase. The alteration can extend as much as several hundred feet above or below the diabase intrusion. The width of the hornfels zones

are not shown on the map but can be as much as a mile wide, depending on the thickness and dip of the diabase intrusion. The 1:100,000 scale geologic maps do not show the hornfels and currently the only published 1:24,000 scale geologic map, along the pipeline route, that delineates hornfels is the Stockton geologic map by Monteverde and others (2015).

B. Passaic Formation- quartz-clast conglomerate and conglomerate and sandstone facies. These two facies of the Passaic Formation contain clasts, mainly quartzite, of pebble to small boulder size in a softer shale to mudstone matrix. During the drilling and reaming the hole clasts can be dislodged and remain in the hole after the drilling due to the difference in hardness between the clast and the matrix.

C. Leithsville Formation- a dolomitic limestone. This formation is one of the most solution prone (karstic) carbonate units in the state. Since this unit can have open or mud filled voids that interconnect there is a significant risk of sinkholes forming at the surface or for drilling fluid breakouts.

D. Hardyston Quartzite-varies from a quartzite to quartz pebble conglomerate to a quartz sandstone. The Hardyston can have extremely hard and softer interlayers as well as an upper calcareous sandstone at the contact with the overlying Leithsville Formation. It is fairly thin, less than 300 feet and occurs between a potentially cavernous rock and an extremely hard rock type.

E. Quartz-oligoclase gneiss and hornblend granite. These two units are similar in hardness to the diabase.

It should be noted that a horizontal drilling project at the Monksville Reservoir successfully drilled through crystalline rock units, including the quartz-oligoclase gneiss for a distance over 5,000 feet under the Monksville Reservoir. During the drilling several thousand feet of diorite gneiss, a metamorphic rock as hard and massive as the diabase, was drilled with no problems. The Monksville drilling showed that dense very hard rocks can be successfully drilled horizontally for long distances.

In addition to the geology, an applicant is required to identify the presence of potential paleontological resources, earthquake hazards, active or currently dormant faults, areas susceptible to landsliding, slumping, or subsidence due to karst or mining within 0.25 mile of the pipeline. I believe archaeological resources near the pipeline route are also required to be identified. The pipeline route crosses a major fault, the Border Fault, which although there has not been any documented recent movement on the fault, numerous earthquakes have occurred in the footwall block of the fault close to the alternate route.

Since under the FERC guidelines, the pipeline company is required to identify any archaeological or paleontological sites along the pipeline that may be affected. There are known dinosaur and other reptile trackways in the Milford and Frenchtown areas and one (between MP 80.4 and MP80.5) is described in a paper by Baird (1954). There is another trackway on Nishisawick Creek near MP 85. The website <http://www.njesta.org/fossilites.html> lists a number of fossil sites in the Milford area as well as several other sites which may be near the proposed route. The pipeline company should be required to investigate this further and contact Drs. Paul Olsen at Columbia University and David Parris at the New Jersey State Museum David.Parris@sos.nj.gov. In addition to the fossil sites, there are a number of archaeological sites on or near the pipeline route including camp sites, a village site and a burial ground (Schrabisch, 1917, map). The site locations on the map are at or near MP 75, 77.3, 84.2, 89.7, and 97.2. None of Schrabisch's reports published by the Geological Survey cover archaeological sites in Mercer County so it is important for the pipeline company to contact is Karen Flinn, Acting State Archaeologist, at the State Museum Karen.flinn@sos.nj.gov to obtain the most up to date information on sites in Hunterdon County and any known sites in Mercer County along the alternate route.

As stated above the pipeline route will cross some geologic units which may cause problems for horizontal drilling. Starting at the Delaware River crossing from the Pennsylvania side to the New Jersey side they will encounter the Leithsville Formation, a magnesium limestone, the geologic unit most susceptible to solution in New Jersey, and the Hardyston Quartzite at or near the New Jersey shoreline. From approximately MP 74.8 to just past MP 75.5 they will be crossing quartz-oligoclase gneiss and hornblend granite and again the Leithsville Formation to just past MP 75.6. The quartz-oligoclase gneiss and the hornblend granite are hard, dense, medium- to coarse-grained metamorphic and igneous rocks. The contact between the granite and the Leithsville is a major southeast dipping normal fault known as the Border Fault. Associated with the fault there may be a wide zone of highly fractured and broken bedrock which generally is deeply weathered to depths of tens to one hundred feet or more especially, in the Leithsville Formation.

From just past MP 75.6 to MP 76.5, the bedrock is the quartz-clast conglomerate facies of the Passaic Formation. From MP 76.5 to MP 77.2 the rock is the conglomerate and sandstone facies of the Passaic Formation. Then from MP 77.2 to just past MP 78.7 the bedrock is again the quartz clast conglomerate facies. From MP 78.7 to just before MP 79.3 the bedrock is again the conglomerate and sandstone facies of the Passaic Formation. The quartz-clast conglomerate facies contains pebble to cobble and small boulder size clasts of hard quartzite in a soft shale to mudstone matrix. The conglomerate and sandstone facies may have a coarser matrix between the clasts. Both of these facies of the Passaic Formation have pebble to cobble size clasts that can be dislodged during drilling and fall into the borehole.

From MP 79.3 to just before MP 89.9 the bedrock consists of shale, sandstone and mudstone of the Passaic Formation which should pose little to no problem, except they may have to blast at times. One major issue with the Passaic Formation, outside of the various conglomerate facies would be the potential of encountering dinosaur trackways in the rock.

Just past MP 89.8 the pipeline route crosses onto the Lockatong Formation which consists of mainly argillite. The Lockatong is a rock with a similar hardness to diabase. It is massive bedded with few fractures, so it can be difficult to drill and trenching would require blasting. The Lockatong extends to just past MP 92.9.

From just past MP 92.9 to MP 95.6 the bedrock is the Stockton Formation which mainly is an arkosic sandstone and should pose no significant problems. At MP 95.6 the route crosses onto the Jurassic diabase, a medium- to coarse-grained hard igneous rock. Generally the rock stratigraphically above and below the diabase intrusions can be baked into hornfels for a distance of several hundred feet above and below the contact. The hornfels can be as hard as the diabase. At MP 96.3 the route crosses onto the Lockatong Formation until MP 96.9. Within the Lockatong between MP 96.45 and MP 96.5 there is a thin diabase sill or dike. From MP 96.9 to just before MP 99.5 the pipeline route is underlain again by the Passaic Formation.

The diabase extends from just before MP 99.5 to MP 100.6. The hornfels zones will extend stratigraphically above and below the contact with the diabase. At MP 101.0 the pipeline route is again underlain by the Lockatong Formation until mid-way between MP 101.2 and MP 101.3, where the route is underlain by the Passaic Formation. The pipeline is again underlain by diabase from MP 103.4 until just past MP 104.9. From this point to the end at the Transco Interconnect (just past MP 110.8) the route is underlain by the Passaic Formation.

Slightly past MP 97.4 is the Lambertville Lateral which extends to just past MP 1.3, the Algonquin and TETCO Interconnects. This approximately 1.3 mile lateral is entirely underlain by the Passaic Formation.

References:

Baird, Donald, 1954, *Chirotherium lulli*, a pseudoschian reptile from New Jersey: Harvard College, Bulletin Museum of Comparative Zoology, Vol. 111, No. 4, 192 p.

Monteverde, Donald H., Herman, Gregory C., Stanford, Scott D., Spayd, Steven, 2015, Geologic Map of the Stockton Quadrangle, Hunterdon County, New Jersey: New Jersey Geological and Water Survey, GMS 15-1, scale 1:24,000.

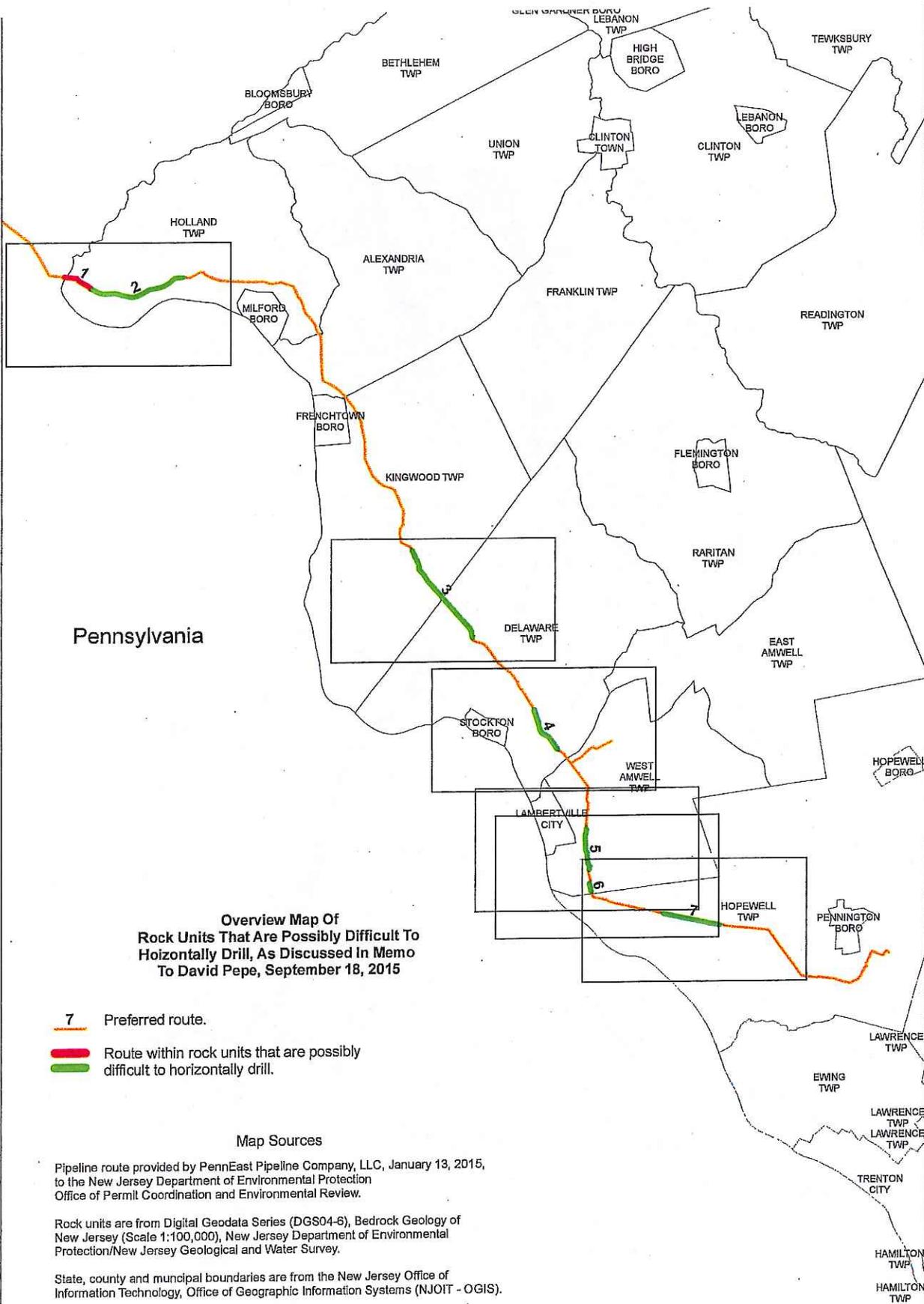
Schrabisch, Max, 1917, Archaeology of Warren and Hunterdon Counties,
Department of Conservation and Economic Development, Division of Geology,
Bulletin 18, 88 p. and map.

CC

Jeffery Hoffman, P.G., Acting State Geologist, New Jersey Geological and Water
Survey

Ruth W. Foster, PhD., P.G., Acting Director, Office of Permit Coordination &
Environmental Review

Attachment



Pennsylvania

**Overview Map Of
Rock Units That Are Possibly Difficult To
Horizontally Drill, As Discussed In Memo
To David Pepe, September 18, 2015**

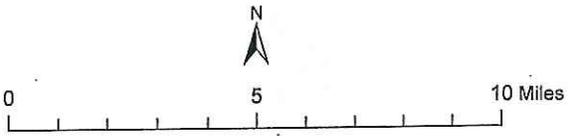
- 7 Preferred route.
- Route within rock units that are possibly difficult to horizontally drill.
- Route within rock units that are possibly difficult to horizontally drill.

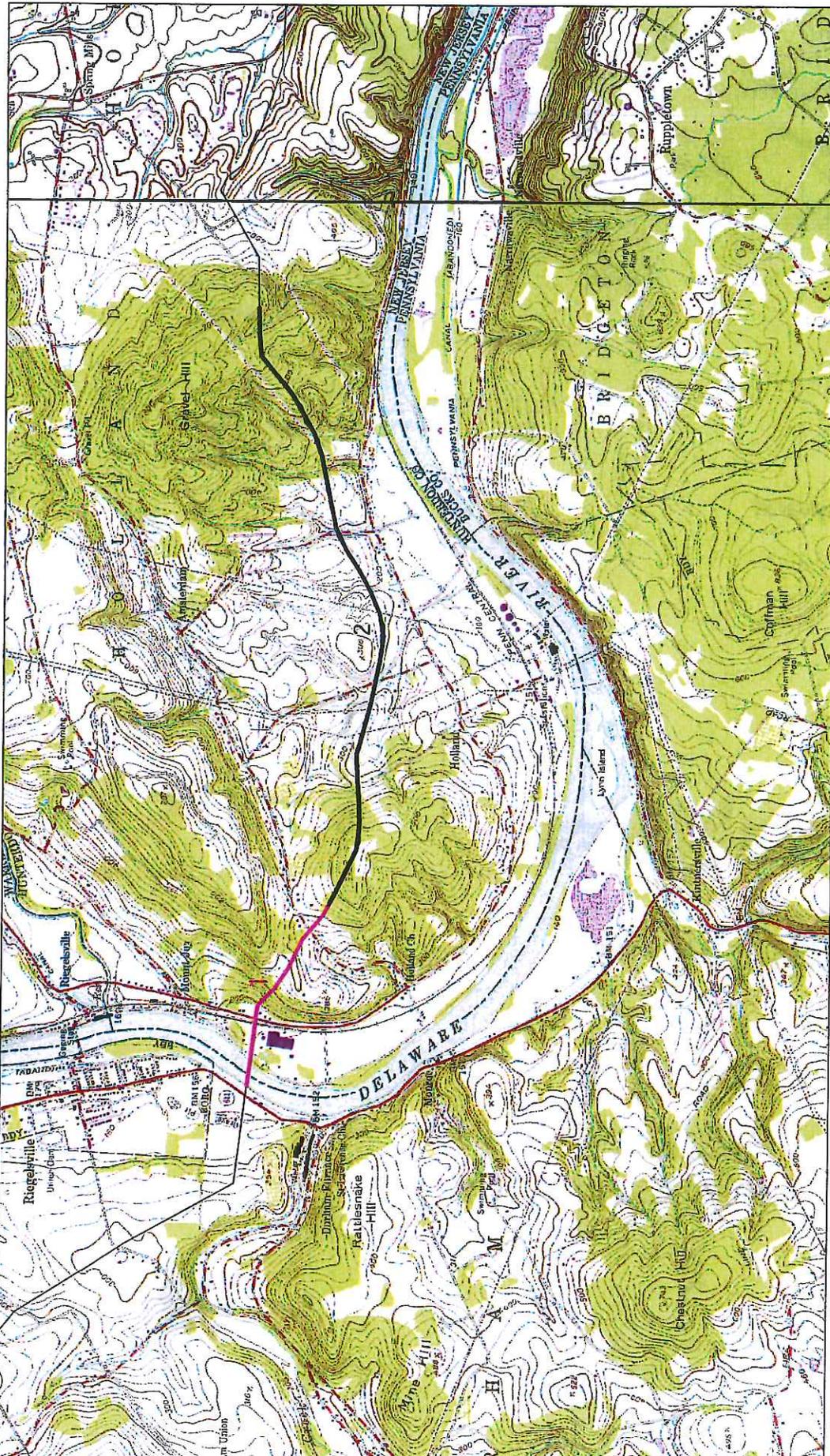
Map Sources

Pipeline route provided by PennEast Pipeline Company, LLC, January 13, 2015, to the New Jersey Department of Environmental Protection Office of Permit Coordination and Environmental Review.

Rock units are from Digital Geodata Series (DGS04-6), Bedrock Geology of New Jersey (Scale 1:100,000), New Jersey Department of Environmental Protection/New Jersey Geological and Water Survey.

State, county and municipal boundaries are from the New Jersey Office of Information Technology, Office of Geographic Information Systems (NJGIT - OGIS).





— Preferred route.



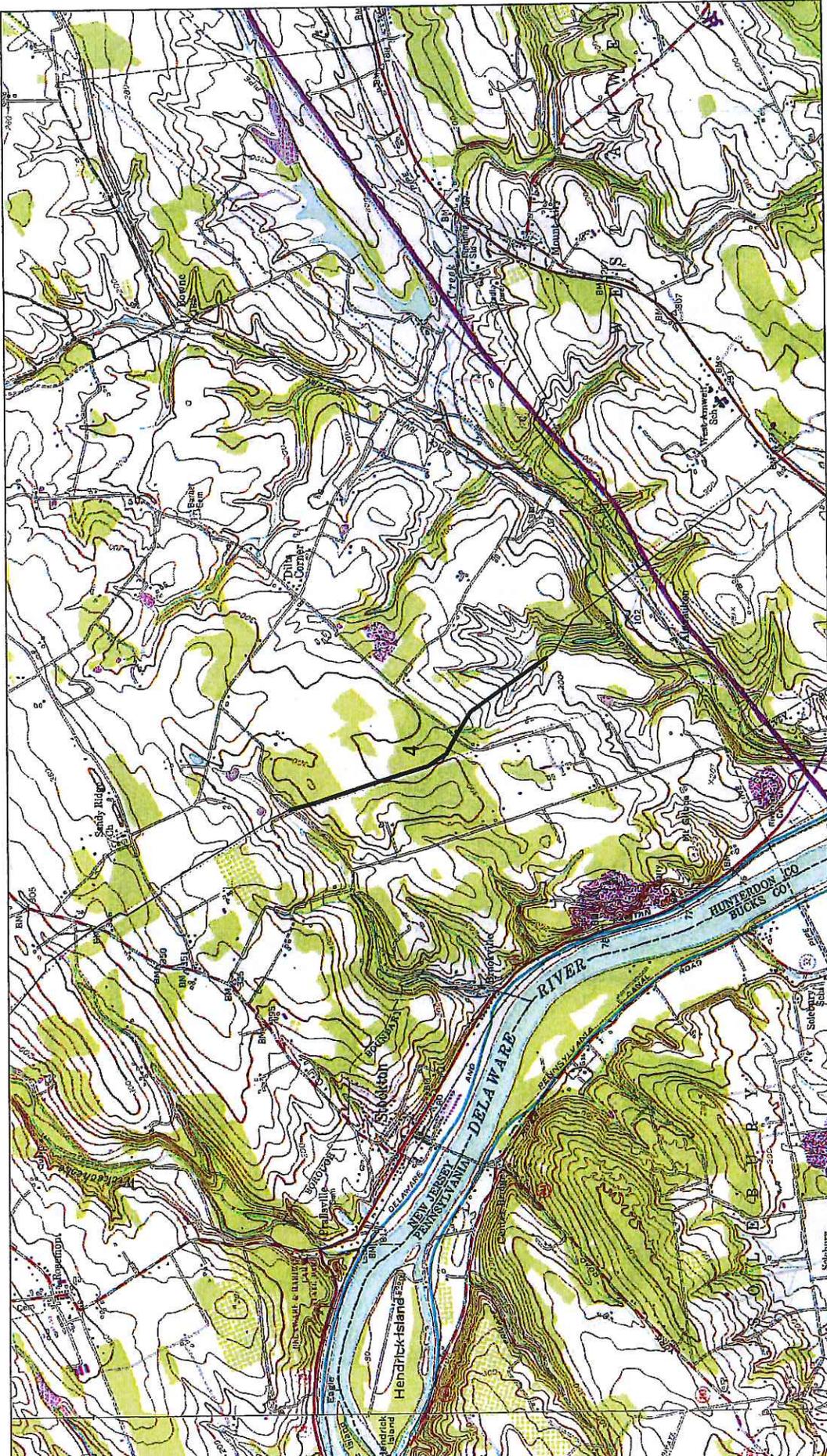
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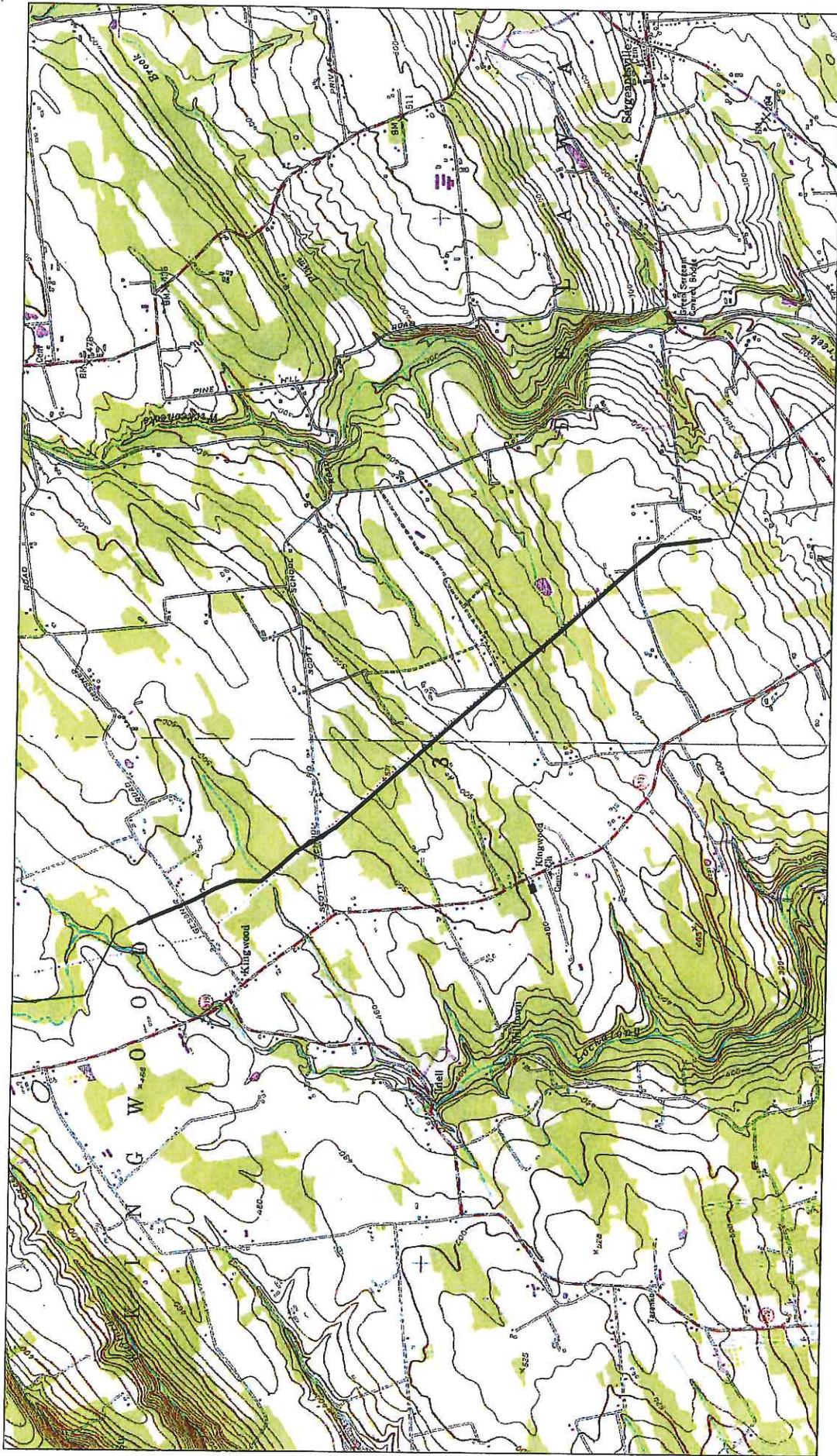
1 Mile post 74.8 to mile post 75.65. Leithsville, Harcyston Quartzite, quartz-oligoclase gneiss, possible Leithsville Formation, horblend granite and Leithsville Formation.

2 Mile post 75.65 to mile post 79.26. Passaic Formation quartz-clast conglomeration and conglomerate facies.



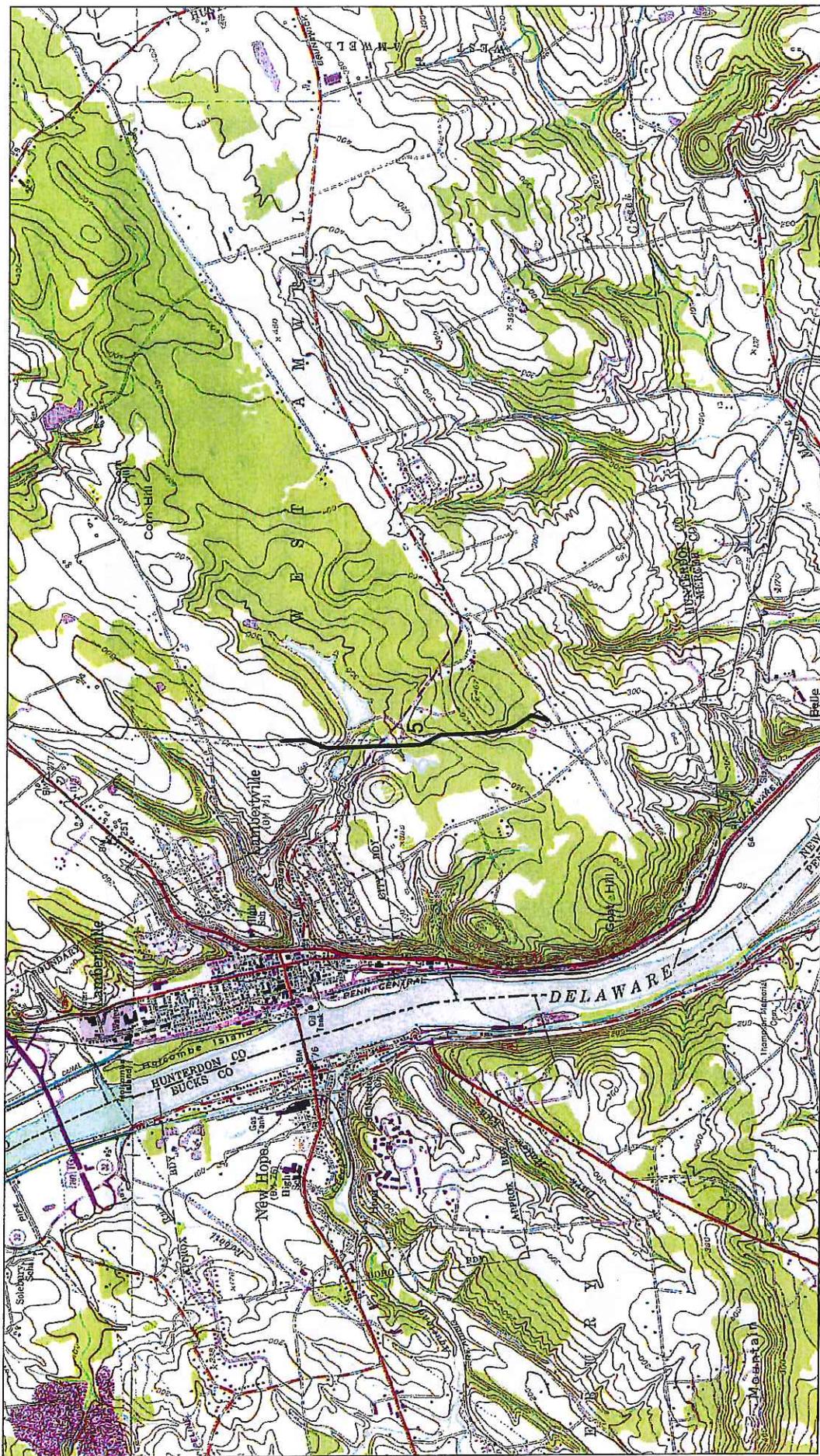
— Preferred route.

4 Mile post 89.95 to mile post 92.92. Diabase and Lockatong Formation.



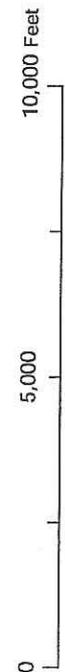
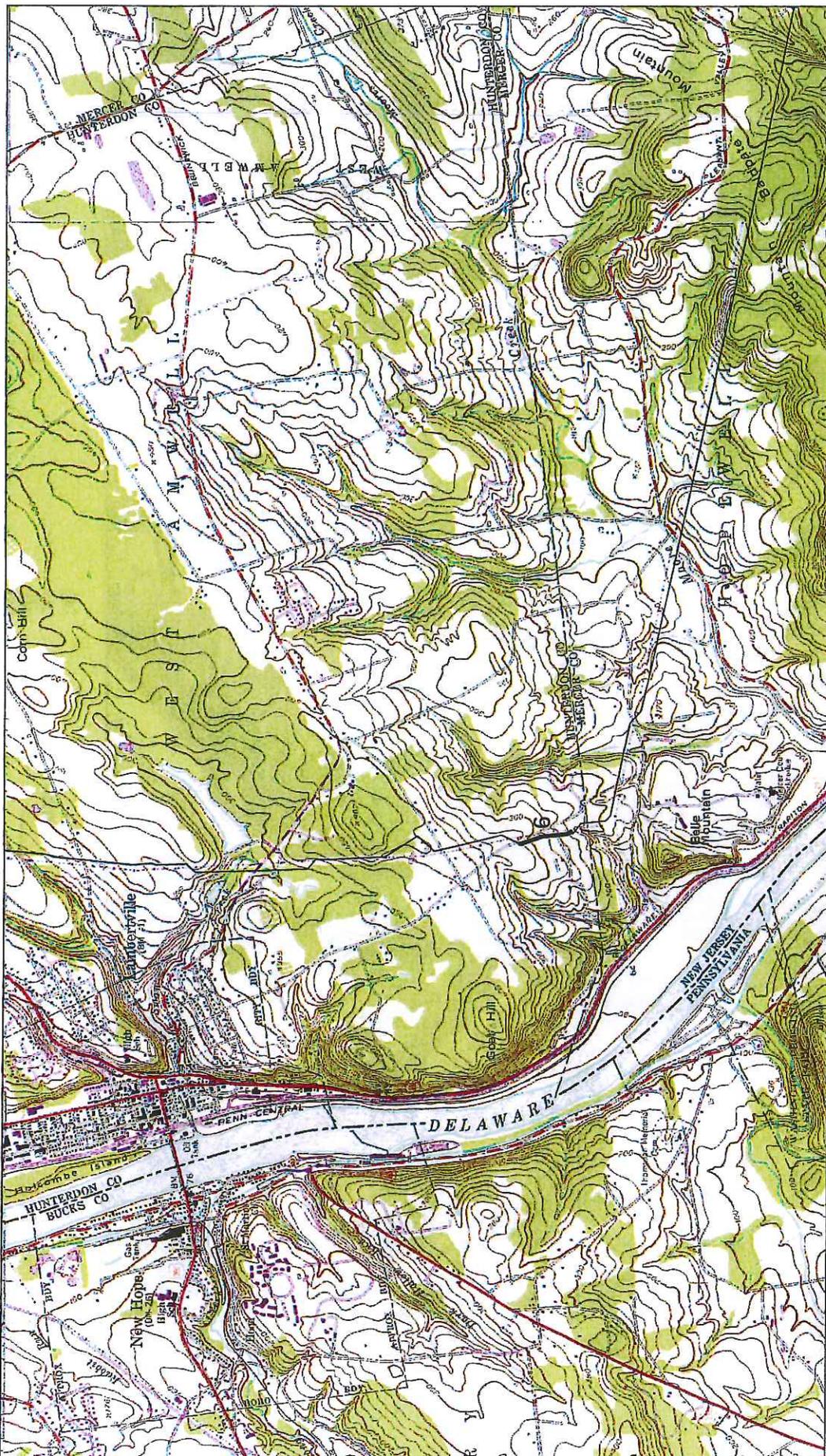
— Preferred route.

3 Mile post 75.65 to mile post 79.26. Lockatong Formation and Lockatong red beds.



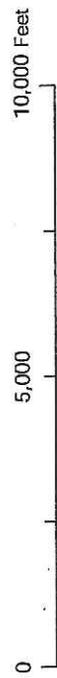
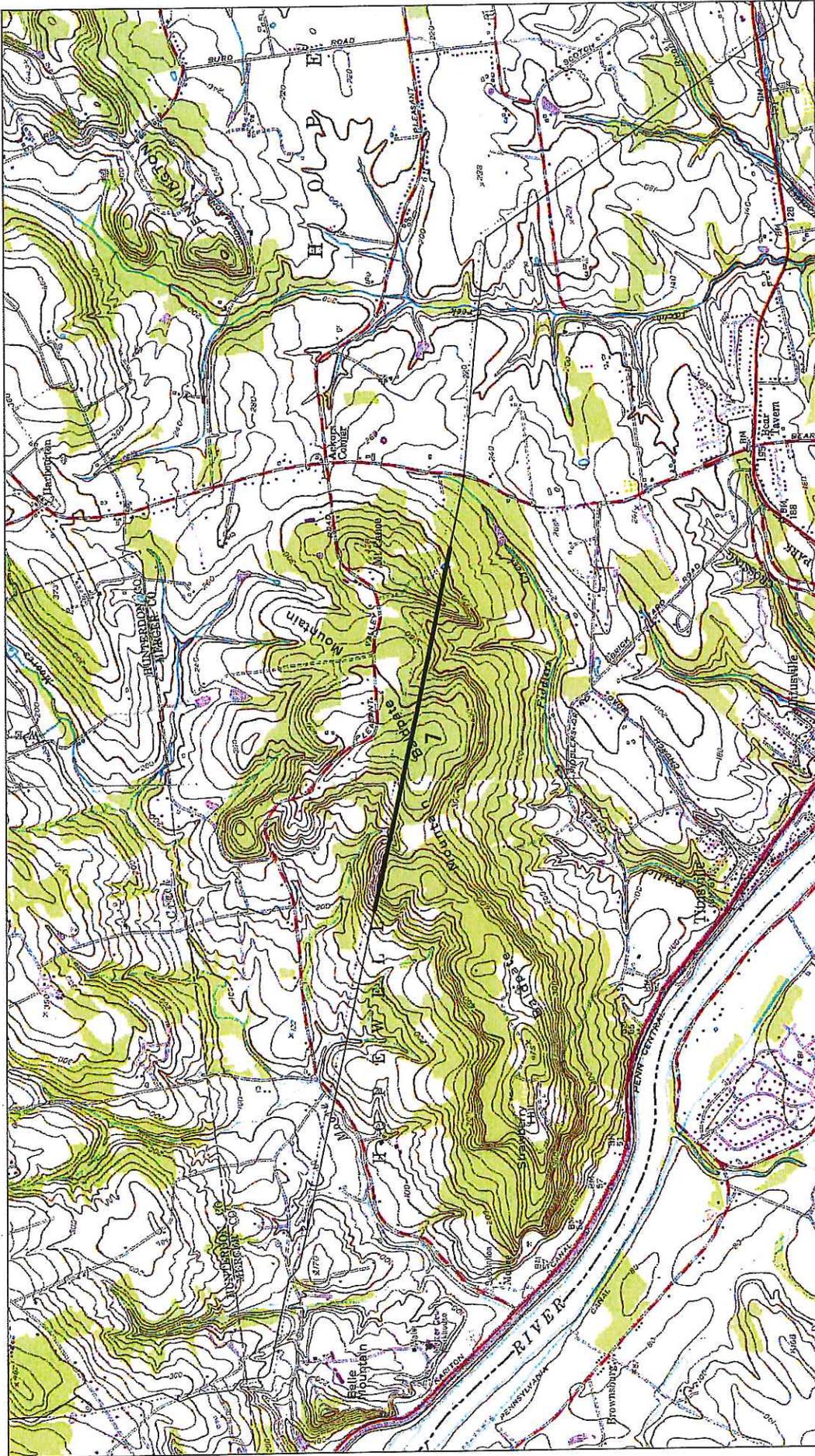
— Preferred route.

5 Mile post 95.6 to mile post 96.89. Diabase.



— Preferred route.

6 Mile post 101.0 to mile post 101.25. Lockatong Formation.



— Preferred route.

7 Mile post 103.4 to mile post 104.95. Diabase.



State of New Jersey

MAIL CODE 501-04B

DEPARTMENT OF ENVIRONMENTAL PROTECTION

NATURAL & HISTORIC RESOURCES

HISTORIC PRESERVATION OFFICE

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CHRIS CHRISTIE
Governor

BOB MARTIN
Commissioner

KIM GUADAGNO
Lt. Governor

October 23, 2015

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, D.C. 20426

Dear Ms. Bose:

As Deputy State Historic Preservation Officer for New Jersey, in accordance with 36 CFR Part 800: Protection of Historic Properties, as published in the *Federal Register* on December 12, 2000 (65 FR 77725-77739) and amended on July 6, 2004 (69 FR 40544-40555), I am providing Consultation Comments for the following proposed undertaking:

**Hunterdon and Mercer Counties
Reconnaissance-Level Historic Architectural Survey Report
PennEast Pipeline
Docket No. CP15-558-000
Federal Energy Regulatory Commission**

800.4 Identification of Historic Properties

The Historic Preservation Office (HPO) was recently provided with the opportunity to review and comment on the following reconnaissance-level historic architectural survey report, received at this office on October 19, 2015, for the above-referenced undertaking:

Zeoli, Vanessa and Eileen Hood.

September 2015 *Reconnaissance-Level Historic Architectural Survey Report, PennEast Pipeline Project, Hunterdon and Mercer Counties, New Jersey.* Prepared for PennEast Pipeline Company, LLC, Wyomissing, Pennsylvania.
Prepared by URS Corporation, Burlington, New Jersey.

According to the above-referenced report, this report documents a total of 21 previously undocumented historic architectural resources over 48 years of age within the study corridor (area of potential effects.) The 48 year cutoff was chosen, rather than 50, based on the

understanding that the intended project implementation will occur in 2017, at which time, those resources would be 50 years of age or older. The study corridor is 400 feet wide, chosen to account for minor changes that may occur in the pipeline alignment.

Of those 41 resources surveyed, 27 were recommended not eligible for listing on the National Register of Historic Places (NRHP), 7 were recommended eligible, and an additional 7 needed more research to determine potential eligibility. The 41 resources outlined in this report represent only the 41 to which URS was given access for documentation and survey. Properties to which the surveyors were not granted access include known locally designated historic properties, as well as ones that are listed on or eligible for listing on the New Jersey and National Registers of Historic Places. According to the report summary, there are an additional 102 properties (tax parcels) that still need survey, 5 of which URS currently has permission to access and are planned for survey in October 2015.

The HPO concurs that the following 22 newly identified resources over 48 years of age are ineligible for listing on the National Register of Historic Places:

- 646 Riegelsville Road, Holland Township, Hunterdon County (URS Field No. HU-0095)
- 626 Riegelsville Road, Holland Township, Hunterdon County (URS Field No. HU-0071)
- 111 Spring Garden Road, Holland Township, Hunterdon County (URS Field No. HU-0198)
- 100 Spring Garden Road (Block 24, Lot 6), Holland Township, Hunterdon County (URS Field No. HU-0196)
- 100 Spring Garden Road (Block 24, Lot 11), Holland Township, Hunterdon County (URS Field No. HU-0197)
- 284 Javes Road, Holland Township, Hunterdon County (URS Field No. HU-0072)
- 507 Milford-Mount Pleasant Road, Holland Township, Hunterdon County (URS Field No. HU-0073)
- 508 Milford-Mount Pleasant Road, Holland Township, Hunterdon County (URS Field No. HU-0074)
- 325 Stamets Road, Holland Township, Hunterdon County (URS Field No. HU-0185)
- 319 Stamets Road, Holland Township, Hunterdon County (URS Field No. HU-0186)
- 755 County Road 519, Kingwood Township, Hunterdon County (URS Field No. HU-0105)
- 189 Kingwood-Locktown Road, Kingwood Township, Hunterdon County (URS Field No. HU-0110)
- 32 Hewitt Road, Delaware Township, Hunterdon County (URS Field No. HU-0165)
- 45 Sanford Road, Delaware Township, Hunterdon County (URS Field No. HU-0216)
- 887 Sergeantsville Road, Delaware Township, Hunterdon County (URS Field No. HU-0193)
- 1454 Route 179, West Amwell Township, Hunterdon County (URS Field No. HU-0199)
- 32 Rocktown-Lamb Road, Delaware Township, Hunterdon County (URS Field No. HU-0171)

- 75 Valley Road, Hopewell Township, Mercer County (URS Field No. HU-0168)
- 1293 Bear Tavern Road, Hopewell Township, Mercer County (URS Field No. HU-0215)
- 324 Penn Harbourton Road, Hopewell Township, Mercer County (URS Field No. HU-0209)
- 1650 Reed Road, Hopewell Township, Mercer County (URS Field No. HU-0180)
- 1646 Reed Road, Hopewell Township, Mercer County (URS Field No. HU-0219)
- 24 Penn Lawrenceville Road, Hopewell Township, Mercer County (URS Field No. HU-0170)

No further survey work is necessary for the above-referenced properties.

The HPO furthermore concurs that the following resources may be eligible for listing on the NRHP and warrant intensive-level architectural survey:

- 83 Old River Road, Holland Township, Hunterdon County (URS Field No. HU-0070)
 - As noted in the survey forms, this property, the John Moore Farmhouse, was nominated to the NJ and NRHPs in 1979, but the nomination was tabled. Since that time, the exterior has been extensively altered. Intensive-level survey will help determine whether it still retains sufficient integrity for individual eligibility. In addition, this property lies within the original Barker Tract, which has recently been identified as a potentially eligible agricultural historic district or MPDF. The property's eligibility should also be assessed within this context, particularly if it no longer retains sufficient integrity for individual eligibility.
- 234 Riegelsville Road, Holland Township, Hunterdon County (URS Field No. HU-0148)
 - This property is also within the area known as the Barker Tract.
- 445 Miller Park Road, Holland Township, Hunterdon County (URS Field No. HU-0195)
 - Careful consideration should be taken when investigating the context for this property, which may be associated with the 20th century movement of artists, patrons, and other associated individuals, to this area from New York City and Philadelphia.
- 369 Stamets Road, Holland Township, Hunterdon County (URS Field No. HU-0075)
- 32 Kappus Road, Alexandria Township, Hunterdon County (URS Field No. HU-0094)
- 130 County Road 513, Alexandria Township, Hunterdon County (URS Field No. HU-0093)
- 97 Horseshoe Road, Kingwood Township, Hunterdon County (URS Field No. HU-0147)
- 155 Lower Creek Road, Delaware Township, Hunterdon County (URS Field No. HU-0210)
- Black River & Western Railroad, West Amwell Township, Hunterdon County (URS Field No. HU0191)
- Rock Road/Rocktown Road/The Road Along the Rocks, West Amwell Township, Hunterdon County (URS Field No. HU-0221)

- 87 Valley Road, Hopewell Township, Mercer County (URS Field No. ME-0172)
- 349 Penn Titusville Road, Hopewell Township, Mercer County (URS Field No. ME-0190)
- 1653 Reed Road, Hopewell Township, Mercer County (URS Field No. ME-0181)
 - The HPO is particularly interested in the builder of this house as it may relate to the property's significance.
- Joseph B. Blackwell Farm, 135 Blackwell Road, Hopewell Township, Mercer County (URS Field No. ME-0218)

The HPO respectfully disagrees with the report's assessment that the following resources do not merit further investigation, and requests intensive-level survey of these properties, in addition to the 14 above-referenced properties, identified by the consultant:

- 504 Milford-Mount Pleasant Road, Holland Township, Hunterdon County (URS Field No. HU-0194)
 - Although significantly altered, based upon the early date of construction given for the stone portion of the building, this property warrants additional investigation to determine both integrity and potential associations, which may render it significant under one or more of the NRHP Criteria.
- 173 Horsehoe Bend Road, Kingwood Township, Hunterdon County (URS Field No. HU-0184)
 - Analysis by HPO architectural historians indicates that this structure may have been built earlier than 1880, based upon the history of this building type in Hunterdon County, although additional details were difficult to discern based on the angle and distance of photos, along with vegetation.
- James Lambert House, 1465 Route 179, West Amwell Township, Hunterdon County (URS Field No. HU-0207)
 - Despite additions and some alterations, the reconnaissance-level survey forms for this property do not adequately justify its lack of inclusion on the intensive-level survey list.
- 108 Old Route 518 East, West Amwell Township, Hunterdon County (URS Field No. HU-0208)
 - Based upon the date of construction given for this dwelling, the HPO believes that this property may also be associated with the art community in Hunterdon County in the 20th century. Although the house does not appear to be significant architecturally, the property may be associated with significant person(s).

In addition to the newly identified historic resources (and the Joseph B. Blackwell, which was issued a SHPO Opinion of Eligibility on June 23, 1982) the report noted that there were 8 properties listed on or eligible for listing on the NRHP within the project's APE:

- Bunns Valley Agricultural Historic District (SHPO Opinion: 5/3/2004)

- Rosemont Rural Agricultural Historic District (NR: 6/18/2010; SR: 2/10/2010)
- Inch Lines Linear Multistate Historic District (SHPO Opinion: 8/31/1993)
- Pleasant Valley Historic District (NR: 6/14/1991; SR: 4/12/1991)
- Oldis (Smith-Mershon) Farm (SHPO Opinion: 5/17/2014)
- Delaware & Bound Brook Railroad Historic District (SHPO Opinion: 9/9/2005)
- NJ Route 31 Circle (Pennington Circle) (SHPO Opinion: 9/21/2010)

According to the report, survey of the above-referenced properties within the APE was incomplete as of September 2015 when the report was printed.

The report text states that one source of background research for surveyed properties was local historic preservation commissions. It was noted that when available online, a list of locally designated historic properties was obtained for survey. In order to identify all possible local sources, URS should consult with municipalities directly to obtain lists of local historic properties when that information is not readily available online. This will ensure that no locally significant properties, which may not be recognized at the state and federal level, are included in survey efforts.

As noted above, a potential new historic district has been brought to the HPO's attention in Holland Township, Hunterdon County. The Barker Tract, which was described in the 1979 John Moore House NRHP nomination form, is currently being evaluated, and its context is important to many of the properties in Holland Township.

Additional Comments

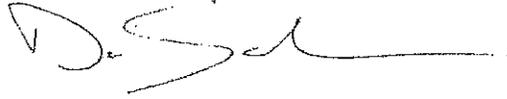
The submitted reconnaissance-level survey report meet's the HPO's *Guidelines for Architectural Survey*. The report is well laid out, and the HPO appreciates the clear and concise manner in which the survey data were reported for our review. We look forward to receiving the additional reconnaissance-level survey reports in this format. Please note that for properties that have been documented as part of Hunterdon County's Historic Sites Survey, individual files reside with the Hunterdon County Heritage and Cultural Commission in Flemington.

The HPO concurs that for those properties to which URS surveyors are unable to gain access permission, and are unlikely to be adversely affected by the PennEast Pipeline project, no further survey will be necessary, unless there are subsequent changes to project scope or alignment that may change the assessment of effects. Properties that fall into this category shall be noted in a future report for formal concurrence by the HPO prior to project implementation.

Thank you for providing the opportunity to review and comment on the potential for the above-referenced undertaking to affect historic properties. The HPO looks forward to receiving additional reconnaissance and intensive-level survey reports to complete identification of historic properties pursuant to 36 CFR § 800.4 from URS. If you have any questions regarding historic architecture, please contact Michelle Craren of my staff at (609) 292-0032) or michelle.craren@dep.nj.gov. Please reference the HPO Project Number 14-4462 in any future

calls, emails, or written correspondence in order to expedite our review and response. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Saunders', with a long horizontal flourish extending to the right.

Daniel D. Saunders
Deputy State Historic
Preservation Officer

CC: Chris Squazzo, DLUR
Vanessa Zeoli, URS/AECOM



State of New Jersey

MAIL CODE 501-04B

DEPARTMENT OF ENVIRONMENTAL PROTECTION

NATURAL & HISTORIC RESOURCES

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CHRIS CHRISTIE
Governor

BOB MARTIN
Commissioner

KIM GUADAGNO
Lt. Governor

October 22, 2015

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, D.C. 20426

Dear Ms. Bose:

As Deputy State Historic Preservation Officer for New Jersey, in accordance with 36 CFR Part 800: Protection of Historic Properties, as published in the *Federal Register* on December 12, 2000 (65 FR 77725-77739) and amended on July 6, 2004 (69 FR 40544-40555), I am providing Consultation Comments for the following proposed undertaking:

**Hunterdon and Mercer Counties
Phase I Archaeological Survey
PennEast Pipeline
Docket No. CP15-558-000
Federal Energy Regulatory Commission**

800.4 Identification of Historic Properties

The Historic Preservation Office (HPO) was recently provided with the opportunity to review and comment of the following Phase I archaeological survey report, received at this office on September 24, 2015, for the above-referenced undertaking:

Ziesing, Grace H. Joseph Kwiatek, Eileen Hood, Robert Kingsley, and Brian Albright
2015 *Phase I Archaeological Survey Report, PennEast Pipeline Project, Hunterdon and Mercer Counties, New Jersey, Volume I: Report Text*. Prepared for PennEast Pipeline Company, LLC Wyomissing, Pennsylvania. Prepared by URS, Burlington, New Jersey.

And

Ziesing, Grace H. Joseph Kwiatek, Eileen Hood, Robert Kingsley, and Brian Albright
2015 *Phase I Archaeological Survey Report, PennEast Pipeline Project, Hunterdon and Mercer Counties, New Jersey, Volume II: Appendixes*. Prepared for PennEast Pipeline Company, LLC Wyomissing, Pennsylvania. Prepared by URS, Burlington, New Jersey.

While this may assist the applicant with the management of the project internally, this system has no basis for reference to the HPO. The HPO requests that the documentation be revised to include the actual block and lot data for each parcel as employed in earlier documentation, such as the HPO-approved Scope of Work.

7. In several instances it is indicated that specific background deed research was conducted for parcels within the APE. However, details of the results of this research are not included within the report beyond summary reference within the text. Please revise the report to include the results of parcel-specific deed research in tabular form.
8. Several cultural landscape features, such as historic fieldstone walls, were identified during pedestrian survey of the APE. However, a review of the mapping detailing survey results does not include the location of these features. Please revise the mapping for the undertaking to include all cultural features identified during Phase I archaeological survey.

Thank you for providing the opportunity to review and comment on the potential for the above-referenced project to affect historic properties. The HPO looks forward to further consultation regarding the development of the proposed undertaking and receiving the requested documentation for review and comment. Once the HPO receives the info requested above, we will be able to continue reviewing the archaeological survey. If additional consultation with the HPO is needed for this undertaking, please reference the HPO project number 14-4462 in any future calls, emails, or written correspondence to help expedite your review and response. Please do not hesitate to contact Jesse West-Rosenthal (609-984-6019) of my staff with any questions regarding archaeology.

Sincerely,



Daniel D. Saunders
Deputy State Historic
Preservation Officer

Cc: Eric Howard, FERC
Grace Ziesing, URS

DDS/KJM/JWR



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF PERMIT COORDINATION AND ENVIRONMENTAL REVIEW
P.O. Box 420 Mail Code 401-07J Trenton, New Jersey 08625-0420
Telephone Number (609) 292-3600
FAX NUMBER (609) 633-2102

CHRIS CHRISTIE
Governor

BOB MARTIN
Commissioner

KIM GUADAGNO
Lt. Governor

July 02, 2015

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Mr. Anthony Cox
Penn East Pipeline Company, LLC
One Meridian Boulevard
Suite 2C01
Wyomissing, Pa. 19610 77056

**RE: Proposed Penn East Pipeline Project
FERC Docket # PF15-1-000
Comments on Draft Resource Reports
Hunterdon and Mercer Counties**

Dear Secretary Bose and Mr. Cox:

The New Jersey Department of Environmental Protection's (Department) Office of Permit Coordination and Environmental Review (PCER) distributed, for review and comment, the Draft Resource Reports for the proposed Penn East Pipeline Project. These reports were prepared as part of the federal Energy regulation Commission (FERC) National Environmental Policy Act (NEPA) requirements. Of the total 110 mile long, 36 inch diameter proposed interstate natural gas pipeline, 35 miles is located in New Jersey. As outlined in the attached maps, the proposed pipeline crosses the Delaware River at Durham Township, Pennsylvania to Holland Township, Hunterdon County and follows a route through Alexandria Township, Kingwood Township, Delaware Township, and West Amwell Township in Hunterdon County before terminating in Hopewell, Mercer County. The project also includes a 36 inch 1.3 mile lateral connection to an existing compressor station in West Amwell Township, Hunterdon County. We offer the following comments for your consideration.

General Comment

To ensure the least amount of impact and maximum amount of mitigation and restoration feasibly possible, the Department strongly encourages co-location of any new linear utility lines in existing right of ways, directional drilling or similar methods under any water crossing, and a full alternatives analysis including temporary and permanent impacts for the route as well as for the various available construction methods.

The Department comments on the Draft Resource Reports is limited because, at this time, less than 60 % of the preferred route as proposed is to be co-located within an existing road or utility right of way. Furthermore, while a significant portion of the environmental, cultural, historic and

ecological assessment has been completed in areas in which Penn East has obtained access at this time from private and public property owners, less than 35% of the total property access along the preferred route in New Jersey has been obtained at this time. Other than required Department permits for delineation and investigation, the Department cannot complete a review of Land Use or Water Quality permits for any site preparation or construction if the potential impact surveys and mitigation and restoration plans are not completed according to Department requirements.

The Department strongly encourages Penn East to complete the surveys prior to completing the pre-filing review period and before submitting an application to FERC for a Certificate of Public Convenience and Necessity. FERC will prepare a Draft Environmental Impact Statement (EIS) for public comment, including the results of completed surveys, following their receipt of the certificate application. In addition, the Department strongly encourages Penn East to allow the Department to review a Draft Environmental Impact Statement (EIS) prior to Penn East submitting any permit application for site preparation or major construction for Department review.

Land Use

The Division of Land Use Regulation – Bureau of Inland Regulation offers the following comments:

1. Before an applicant submits this type of large scale project/application requiring a Freshwater Wetland Individual Permit and Flood Hazard Area Individual Permit, the applicant must establish a need for the project, determine the preferred route and explore viable alternative routes and must be prepared to minimize disturbances;
2. For these types of linear utility projects, the applicant must obtain easements or rights to the land along the proposed routes prior to submittal. Furthermore, the applicant must utilize all/any established right-of-ways to the maximum extent possible;
3. The Department strongly encourages Penn East submit an application to the Department for a Letter of Interpretation (LOI) at least one year prior to submittal of a Land Use permit application. An LOI is issued to establish the accurate wetland locations and resource classifications and must submit to the Department for a Flood Hazard Area (FHA) Verifications to establish the location, and associated flood fringe and riparian zones for all State open waters along the routes;
4. The applicant must identify potential environmentally sensitive areas that may have State and/or Federally listed threatened and/or endangered species habitat and perform surveys. Input should be solicited by the appropriate agency and these areas should be avoided whenever practicable;
5. As currently proposed, the route goes through regions of the State that are governed by other Commissions and regions that have an additional layer of environmental protection. The applicant shall consult with the Delaware River Basin Commission (DRBC), the New Jersey Highlands Commission (NJHC), the Delaware/Raritan/Morris Canal Commissions, and any other applicable State and federal agencies to determine any approvals or exemptions as needed;

6. The applicant must identify any potential State Historic Preservation Area (SHPA) sites; and
7. In order to minimize the environmental impacts, the applicant must be prepared to utilize a combination of direct pipe method, horizontal directional drilling (HDD), expanded conventional jack & bore drilling or open trenching in a dry condition, depending on the site conditions.

If you have any additional questions, please contact Christopher Squazzo at 609-292-1258.

Land Use Mitigation

Penn East Pre-Filing Natural Resource Reports

NJDEP - Division of Land Use Regulation -- Mitigation Unit Comments

1. Wetland mitigation is required to be conducted prior to or concurrent with a permitted activity and no regulated activities, especially construction, may occur until the Department has approved the mitigation proposals and this includes all temporary impact restoration. The Department strongly urges the applicant to identify potential mitigation sites concurrently with the alignment parcel attainment process that is currently underway. Mitigation has the potential to prevent construction activities from occurring within regulated areas, if a permit were to be issued, until such time that all mitigation proposals have been approved by the Department.
2. If the applicant is applying for a Hardship Exception under a Flood Hazard Area Individual Permit for exceeding the disturbance limits under Table C, riparian compensation proposals are required to be approved prior to issuance of a permit and this includes all temporary impact restoration. Again, the Department strongly urges the applicant to identify potential riparian compensation sites concurrently with the alignment parcel attainment process that is currently underway. Riparian compensation has the potential to prevent permit issuance, if a permit were to be issued, until such time that all riparian compensation proposals have been approved by the Department.
3. The permanent conversion of forested and scrub-shrub wetlands to emergent is considered a permanent impact that requires off-site mitigation. The permanent conversion of palustrine forested and palustrine scrub-shrub wetlands to palustrine emergent wetlands requires restoration of the area temporarily disturbed to a non-forested wetland, and in addition, one acre of mitigation in accordance with the mitigation subchapter for each acre of disturbance.
4. Based upon the potential wetland impacts presented in the Resource Report 2, a significant amount of off-site wetland mitigation would be required if permits were to be issued. The riparian impacts are always much greater than the wetland impacts for linear projects. Although no riparian impacts have been quantified at this time, the applicant should expect that significantly more riparian compensation would be required than wetland mitigation, if permits were to be issued. Again, the Department cannot stress enough that the planning process for wetland mitigation and riparian compensation should already be well underway at this time.
5. Wetland mitigation must be in-kind. For example, if a wetland with a 150 foot transition area due to wood turtle is impacted, the mitigation must provide a direct ecological benefit to wood turtles and the enhanced or created wetlands would therefore also have a 150 foot transition area.
6. Riparian compensation requires that all replanting shall be located within the riparian zone of the same water as the cleared, cut or removed vegetation. It also requires that all replanting be located as close in proximity to the cleared, cut or removed vegetation as

- possible. Therefore, for example, it is inappropriate to propose compensation on a non-trout, 50 foot transition area stream for impacts to a trout production stream with a 150 transition area.
7. Riparian and wetland impacts should be broken down into greater detail than the Cowardin classification system for the purposes of determining what constitutes in-kind mitigation. Any ecological resources that afford a wetland or stream greater protection or a higher ecological classification should be identified for each wetland and riparian area along the length of the project. This information will be used to determine the appropriate mitigation and compensation that may be required if a permits were to be issued.
 8. Vernal habitat areas must be identified and mapped, including the 1000 foot dispersal area. In-kind mitigation is required for any impacts to vernal habitat areas.
 9. The potential for hazardous material contamination must be addressed in all mitigation proposals. A sampling plan must be approved by the Department prior to the commencement of sampling for all off-site mitigation proposals. Data shall be compared to the Ecological Screening Criteria and any exceedances identified with a proposal as to how the contamination will be addressed such that ecological receptors are not exposed to increased ecological risk.
 10. Potential impacts to historic and archeological resources must also be addressed for all off-site mitigation proposals.

If you have any additional questions, please contact JoDale Legg at (609) 984-0618.

Natural Resources

The Department's Division of Natural and Historic Resources (NHR), including Green Acres, Fish & Wildlife, and the Historic Preservation Office Group, has reviewed the Draft Resource Reports

NHRG General Comment

NHR is concerned that there is insufficient information provided in the pre-filing resource reports to address potential impacts associated with the current proposed route across NJ state-owned lands/easements including those under the jurisdiction of DEP and the NJ Natural Lands Trust preserves that are adjacent to or to be crossed by the proposed pipeline. In addition, the Department has not been provided with an alternative analysis for the proposed pipeline route assessing how Penn East plans to avoid or minimize potential impacts to DEP lands, including utilizing existing utility right of ways. Penn East has only recently contacted Natural & Historic Resources to seek access permission to survey certain lots and blocks. In addition, the draft resource reports do not address other state land requirements if permission is granted for use of our lands, such as the requirements of the No Net Loss Act.

NHR has provided Penn East with survey guidelines for comprehensive data collection regarding threatened and endangered plants and animals and will provide Penn East with further guidelines on cultural resource surveys of our lands. Until NHR is in agreement with Penn East on the lands Penn East need access to, the specific state lands that cannot be avoided and, that a comprehensive survey of all required natural resources has been completed and available for DEP review, it remains challenging for NHR to provide constructive comments to these resource reports. However, NHR offers the following specific program comments. If you have any questions, please contact Robin Madden at (609) 292-5990.

NJ Endangered and Nongame Species Program (ENSP) Review of PennEast Pipeline RESOURCE REPORT 3, Fisheries, Vegetation, and Wildlife; April 2015

Reviewed by ENSP staff (K. Schantz, MacKenzie Hall, Sharon Petzinger, Robert Somes, Jeanette Bowers-Altman, Brian Zarate)

3.4.1.1 Significant or Sensitive Habitats

There is no information regarding the Northern Copperhead presence within NJ's Baldpate Mountain and Goat Hill, the location of their critical habitats or the potential impacts to their critical habitats. As such, without such features being located, it is impossible to assess the impacts of the proposed work on this rare species or to assess the proposed timeline for site preparation (including the proposed period for tree removal) and construction activities.

3.4.2 Potential Impacts and Mitigation

- Pg. 3-30: Why is Penn East expanding the time period for tree removal/clearing to August 15 – April 15?
 - Proposed time periods for any activities must consider that no wildlife surveys have yet been conducted and as such, it is impossible for the State to thoroughly review and assess the potential impacts to wildlife inhabitants within and adjacent to the proposed pipeline project-related activities or to approve any proposed time periods for activities. The proposed time periods may not be appropriate depending on the species present. For example:
 - Depending on the location of Northern Copperhead critical habitat features (dens, gestation, birthing, and basking habitats), tree removal may not be appropriate during August – September when snakes are gestating and birthing or during the winter months in areas proximate to dens.
 - Different species of birds have different breeding periods and therefore, different “safe” periods for any activity proximate to their nest sites (as outlined in examples provided within ENSP’s comments dated March 12 and again, May 6, 2015). As such, the most restrictive time period for tree/vegetative clearing should be implemented to minimize harm to the various species present; i.e., a collective assessment of species must be addressed. In particular, if multiple state endangered and threatened species inhabit the area as migrants or residents and have different “safety” periods to minimize harm to breeding and/or congregating animals, the most restrictive of the combination of times must be implemented to minimize harm. For example, if the USFWS recommends tree clearing from Sept 1 through Mar 31 for migratory birds, then that should override broader recommendations of August 15- April 15. For locations with state endangered or threatened grassland bird species, such as grasshopper sparrow, vegetation clearing must be conducted September 11 through March 14. Areas with species that may have different “safety” periods such as red-shouldered hawk and red-headed woodpecker, the vegetation clearing must occur during the most [collective] restrictive period that also apply the USFWS migratory bird recommendations. In such a case, the vegetation clearing would be conducted September 1 through February 29, 2016 (February 28 in non-leap years).
 - According to ENSP’s data, the proposed route falls within the potential range of Indiana Bat and therefore, it’s likely the USFWS guidelines for tree clearing would apply (i.e., no clearing of trees >5” dbh from April 1- September 30).

3.5 Threatened and Endangered Species

- Table 3.5-1:

- Pg. 3-32, Northern Long-eared Bat: The Pennsylvania Game Commission may be requiring cutting November 1-March 31 because of the proximity of the project area to a hibernaculum in Bucks Co (Durham Mine), where Northern Long-eared Bats have been found. This mine is >10 miles from the New Jersey route and therefore, it's likely that ENSP would be slightly less restrictive (preferring vegetative clearing activities to occur October 1-March 31 *with regard to bat species only*). The report says a meeting was planned in April with the USFWS NJ Field Office to discuss these requirements but ENSP has not been provided the results of that meeting.
- Pg. 3-33: States (in regard to Northern Copperhead), "NJ Natural Heritage Program listed as species of concern. ENSP stated no surveys required as all occurrences are on private land."
 - This is an error and was based on the originally proposed route. NJ DEP has submitted revised comments dated May 6, 2015, stating, "Northern Copperheads inhabit county lands along the currently proposed route, therefore surveys conducted by qualified personnel are will likely be required." [sic]
 - The ENSP will need detailed information pertaining to the snakes' critical habitats (dens, gestation, birthing, and basking habitats) in order to assess the potential impacts of the proposed work in these areas.
- Pg. 3-34: Identifies timing restrictions for red-shouldered hawk and barred owl but does not state that surveys will be conducted to identify nests and cavity trees per ENSP's recommendations as is stated within the text (pg. 3-44); this is confusing.
- Pg. 3-34 to 3-35, birds: Breeding Red-headed Woodpeckers (state endangered species) have been documented along the proposed pipeline in Kingwood Township, Hunterdon County.
- Pg. 3-36 regarding Dwarf Wedgemussel: ENSP disagrees with the statement "USFWS (NJ) requiring if HDD used for in-water work may avoid need to survey for mussels." While no one anticipates impacts, accidents can happen. Therefore, although HDD is much preferred, ENSP still requires mussel surveys be conducted if suitable habitats are identified so that if something happens (e.g. inadvertent return), ENSP will have an understanding of the potential impacts to occur.

3.5.1.3 State Species - New Jersey

Most of the species within this section state that surveys will be conducted during the spring 2015. If such surveys have begun, it is important for Penn East Pipeline Company, LLC to understand that ENSP has not received any proposed surveys or surveyors (as recommended per our comments) for review and comment. As such, ENSP has not been able to provide additional information regarding whether or not the survey methods are sufficient. Allowing ENSP to provide such information prior to the commencement of surveys could benefit Penn East Pipeline by identifying potential problems with survey protocols or inadequacies in surveyors; all of which could be addressed and increase the likelihood that ENSP will accept the surveys' findings.

3.5.2 Potential Impacts and Mitigation

Pg. 3-47 to 3-48:

- States, "With the use of HDD and in-the-dry construction techniques for pipeline installation, no impacts are anticipated to occur to fish, mussel, or other aquatic species of concern."
 - Although this statement isn't wrong, it's not quite accurate. As previously stated above, while no one anticipates impacts, accidents can happen. Therefore, although HDD is much preferred, ENSP still requires mussel surveys be conducted if suitable habitats are identified so that if something happens (e.g. inadvertent return), ENSP will have an understanding of the potential impacts to occur.
- States, "Avoidance and minimization measures for timber rattlesnake and Allegheny woodrat may include pre-construction clearance surveys by qualified biologists."
 - This would also occur in NJ for Northern Copperheads and *may* require daily, state-approved, venomous snake monitors on site during project-related activities.

3.5.3 Cumulative Impacts

- Pg. 3-48: Report states, "Construction disturbance will likely cause the temporary displacement of wildlife from the construction workspace and adjacent areas. After construction, wildlife is expected to return to post construction habitats. No permanent or long-term impacts to wildlife resources are anticipated."
 - The permanent expansion of the right-of-way width will create both short- and long-term impacts to low mobile, terrestrial bound wildlife (small mammals, reptiles and amphibians). In the short-term, after construction, these animals will have a greater distance to cross making them susceptible to increased sun exposure and therefore, desiccation, and increased [visual] exposure and therefore, increased risk of predation from both avian and terrestrial predators. In the long-term, amphibians and reptiles that disperse across the right-of-way during spring will continue to have the risks related to increased exposure as grasses won't likely provide camouflage and humidity until May. In addition, adjacent forest habitats will have a decreased "core" area as light pollution (and temperature extremes) from the expanded right-of-way now reaches further into the forest and as such, decreases the amount of forest habitat available for interior forest (and area-sensitive) species. While nothing could be done regarding the latter, Penn East Pipeline Company, LLC could develop plans for revegetation (e.g., early season grasses, shrubs, ground cover) and natural structures (e.g., rocks) throughout their right-of-way that would minimize these animals' exposure throughout their active season.

NJDFW Bureau of Freshwater Fisheries :

The New Jersey Division of Fish & Wildlife (NJDFW) requests the Stony Brook & tributaries be crossed using the HDD method. During stream sampling, bridle shiner (*Notropis bifrenatus*) have been documented. Bridle shiner are a species of regional priority (NJ Wildlife Action Plan) and are candidate species for listing as State Threatened/Endangered. Listed freshwater mussel species have also been documented in the main stem and tributaries.

NJ DFW - Bureau of Freshwater Fisheries (BFF) would agree with the in-stream construction periods listed in Table 2A-2 **New Jersey Waters Crossed by the Project Workspace**. These

time periods (TP 6/1 to 9/30, TM & TS 6/15 to 9/30, NT 6/30 to 9/31) are outside the restricted time frames NJDFW – BFF would generally recommend.

In Section **3.2.2 Fisheries of Special Concern**, NJ would include Trout Production (TP) and trout stocked streams.

For this project, the BFF would agree with “*NMFS requires avoidance of in-water work between March 1 and June 30 to be protective of the following fish species: Striped bass (*Morone saxatilis*), Alewife herring (*Alosa pseudoharengus*), Blueback herring (*Alosa aestivalis*), American shad (*Alosa sapidissima*)*” in NJ waters which have unimpeded access to the Delaware River, to include Fiddlers Creek, Lockatong Creek, Alexauken Creek, and Jacobs Creek, where runs have been confirmed or reported.

The NJDFW – BFF disagrees with **Table 3.2-6 Summary of New Jersey-Water Quality Classifications and Trout Designation Waters Crossed by the Pipeline Facilities** as it does not list any Trout Production (TP) streams. Table 2A-2 lists 8 (eight) TP streams crossed by the pipeline and laterals.

Also all streams are TP, TM or NT, therefore, based on the title of the table all 72 streams should be summarized.

In Section **3.2.3 Potential Impacts and Mitigation** (p. 3-10), at bottom of page, “*In addition, in accordance with the Procedures, all in-stream work will be performed between June 1 and September 30 for cold water fisheries and between June 1 and November 30 for warm water fisheries*”. For warm water fisheries, and to match Table 2A-2, the timing should be between July 1 and November 30.

Green Acres

The NJDEP Green Acres Program is responsible for the stewardship of all State, county, municipal and non-profit owned land and easements that have been purchased with Green Acres bond funds or are otherwise encumbered under Green Acres Program regulations. Any disposal or diversion from a recreation or conservation use of Green Acres encumbered lands or the release of a conservation restriction subject to the New Jersey Conservation Restriction and Historic Preservation Restriction Act would require an application to the Green Acres Program.

The disposal/diversion application process includes a public need/public benefit analysis, alternatives analysis and compensation and mitigation requirements. The Green Acres rules require that every effort should be made to avoid the disposal or diversion of parkland. In order for a disposal or diversion to be approved, the Green Acres Program would have to find that there were no feasible alternatives for the proposed project, that there is a significant public need or benefit associated with the project, and that the project would not significantly interfere with the public's use of the parkland or adversely impact environmentally sensitive areas. These applications are scrutinized on a number of different levels within the NJDEP, by environmental groups and the public (through the requirements for public hearings) and are evaluated thoroughly.

If approved by the Commissioner, Green Acres disposal/diversion applications also require the approval of the State House Commission (a legislative commission that meets on a quarterly basis.) Conveyances of State land in an amount greater than one acre, or leases of more than 25 years, are subject to additional procedural requirements under the “Ogden Rooney” statute.

The conservation easement release process includes a similar review of alternatives, public need/public benefit analysis and compensation and mitigation requirements. Easements are released through the issuance of a certificate from the NJDEP Commissioner, which is recorded in the same manner as the easement.

Due to the brevity of the information presented in the Draft Resource Reports regarding the conditions found on potentially impacted parkland, we cannot yet evaluate if there will be adverse impacts to parkland. The Draft resource reports summarize impacted parkland parcels and provide approximate areas of disturbance but do not go into specifics regarding the conditions found within each parkland parcel.

When analyzing impacted parkland in the Resource Reports and preparing an application for the disposal of diversion of parkland, the following issues must be addressed:

- Replacement land will be required at a ratio to be determined for State parklands and Conservation Easements and pursuant to Table 1 of the Green Acres rules for county, municipal and non-profit owned parklands.
- Impacts and fragmentation of habitat to a documented occurrence of an endangered, threatened and species of special concern on parkland must be analyzed by the applicant and will be reviewed for all Green Acres encumbered parkland pursuant to *N.J.A.C. 7:36-26.1(e)6*. Known occurrences/habitat on parkland parcels should be noted in the Resource Reports.
- Tree replacement will be required pursuant to *N.J.A.C. 7:36-26* and will be based on a square inch for square inch basis. Expected impacts to forested area on parkland parcels should be noted in the Resource Reports.
- Alternative construction techniques such as HDD should be utilized to the extent practicable to avoid/reduce parkland impacts.
- Temporary impacts to parkland will need to be restored to preexisting conditions and forest impacts will need to be mitigated for based on same tree replacement requirements as disposals/diversions.

Specific Comments regarding the information contained in Draft Resource Report #8.

1. A review of tables 8.4-1 and 8.4-2 revealed that the following parcels were not listed and may also be impacted.

County	Municipality	Block	Lot	Owner	Interest
Mercer	Hopewell	72	35	Mercer County	funded Fee
Mercer	Hopewell	59	13.03	Mercer County	unfunded Fee
Mercer	Hopewell	59	13.02	Mercer County	unfunded Fee
Mercer	Hopewell	59	5	Delaware & Raritan Greenway Land Trust	funded Easement
Mercer	Hopewell	59	4	Delaware & Raritan Greenway Land Trust	funded Easement
Hunterdon	West Amwell	28	7	State of New Jersey	Fee
Hunterdon	West Amwell	17	5	State of New Jersey	Fee
Hunterdon	West Amwell	8	14	West Amwell Twp.	funded Easement
Hunterdon	Delaware	32	4	New Jersey Conservation Foundation	Fee
Hunterdon	Delaware	32	33	New Jersey Conservation Foundation	NP funded Easement
Hunterdon	Delaware	62	11	unkown	Easement
Hunterdon	Kingwood	5.01	2	State of New Jersey	Easement
Hunterdon	Holland	24	15	State of New Jersey - Natural Lands Trust	Fee
Hunterdon	Holland	24	7	State of New Jersey - Natural Lands Trust	Fee

2. Page 8-89 references the New Jersey Conservation Funds (NJCF). This acronym actually refers to the New Conservation Foundation which is a non-profit organization that protects threatened natural areas and farmland through land acquisition and stewardship in New Jersey.

If you have any additional questions, please contact Kevin Appelget at (609) 777-4192.

Cultural Resources

HPO-E2015-364
HPO Project # 14-4462-10

Consultation regarding the proposed pipeline through Hunterdon and Mercer Counties is currently ongoing between the HPO and the Federal Energy Regulatory Commission (FERC) pursuant to their obligations under Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR §800. The HPO consults with federal agencies in identifying historic properties and developing ways of either avoiding or minimizing any potential adverse effects from federally funded, licensed, or permitted projects in New Jersey.

The HPO has reviewed *Draft Resource Report 4 – Cultural Resources*, which was submitted by the applicant to FERC on April 17, 2015 in support of FERC's Pre-filing Review Process for the proposed Penn East pipeline. According to the report, at the time of filing, archaeological survey had been completed for 30.65% of the area of potential effects (APE) for the entire bi-state project corridor. With regard to architectural survey, the report states that survey of 78% of the APE has been completed. According to the report, technical reporting of the surveys and their results will be developed when survey has been completed on properties to which access has been granted.

Based on a review of the information provided, it appears that the applicant is conducting cultural resource survey consistent with the methodology previously approved by the HPO through prior consultation. However, since cultural resource survey is ongoing, the HPO has not been provided the opportunity to review and comment on a completed Phase I cultural resource survey report. Once initial cultural resource identification-level survey has been completed and submitted to the HPO for review, then the HPO will be able to comment on the potential for the above-referenced project to affect historic properties. As Section 106 consultation proceeds, the HPO will keep the Office of Permit Coordination and Environmental Review, the Division of Land Use Regulation, and the Natural and Historic Resources Group apprised of any developments and determinations made as part of the review process.

If you have any questions, please contact Jesse West-Rosenthal at (609)-984-6019.

Water Allocation

The Department's Bureau of Water Allocation has reviewed the Draft Resource Report and Water Use and Quality and has the following comments. It appears that there will be construction related dewatering, however no details were provided. Water use for pressure testing was also mentioned but no mention of use of water for dust control or re-vegetation was found (activities typically associated with large scale construction projects). Enclosed is information regarding construction related permitting mechanisms.

If construction related dewatering is required at rates exceeding 100,000 gallons per day of water (70 gallons per minute pumping capacity) then that activity would be regulated under a short term water use permit by rule if less than 31 days, or a dewatering permit if 31 days or longer. A dewatering permit by rule may be applicable if the dewatering occurs from within a coffer dam, or similar confined space. Discharge associated with this activity is for uncontaminated water associated with only short term water use. Any discharge of construction dewatering to any surface water body would require a surface water permit. Any discharge of contaminated water would require additional permit(s) and/or would not be a regulated discharge. If you have any additional questions, please contact Jan Gheen at 609-984-3669.

Stormwater Management

A general permit for discharge of stormwater associated with construction activities, (5G3) is required from the Department. This general permit authorizes stormwater discharges from construction activities which disturb areas greater than 1 acre or smaller areas that are part of a large plan of common development greater than 1 acre. The applicant must have a certified Soil Erosion and Sediment Control Plan by each applicable County Soil Conservation District in order to have the necessary information for a complete permit application. The permit application process is available online at <http://www.state.nj.us/dep/dwq/5g3.htm>. If you have any additional questions, please contact Ronald Bannister at (609) 633-7021.

Air Permitting

An air operating permit is required for any emergency generators over 1 MMBtu as well as non-emergency generators over 37 Kw. If you have any additional questions, please contact Robert Kettig at (609) 633-3858.

Air Quality Planning

If this project requires Federal funding, permit, approval or license, then a General Conformity Applicability Analysis and possibly a Conformity Determination will be required in accordance with the USEPA's Federal General Conformity regulation. (40 CFR Part 93, Subpart B, Determining Conformity of General Federal Actions to State or Federal Implementation Plans). If you have any additional questions, please contact Angela Skowronek in the Bureau of Air Quality Planning (BAQP) at 609-984-0337.

Bureau of Mobile Sources

Diesel exhaust contributes the highest cancer risk of all air toxics in New Jersey and is a major source of NOx within the state. Therefore, NJ DEP recommends that construction projects involving non-road diesel construction equipment operating in a small geographic area over an extended period of time implement the following measures to minimize the impact of diesel exhaust:

1. All on-road vehicles and non-road construction equipment operating at, or visiting, the construction site shall comply with the three minute idling limit, pursuant to N.J.A.C. 7:27-14 and N.J.A.C. 7:27-15. Anti-idling signs to be posted at the site are available for purchase from the Bureau of Mobile Sources at 609/292-7953.
2. All non-road diesel construction equipment greater than 100 horsepower used on the project for more than ten days should have engines that meet the USEPA Tier 4 non-road emission standards, or the best available emission control technology that is technologically feasible for that application

and is verified by the USEPA or the CARB as a diesel emission control strategy for reducing particulate matter and/or NOx emissions.

3. All on-road diesel vehicles used to haul materials or traveling to and from the construction site should use designated truck routes that are designed to minimize impacts on residential areas and sensitive receptors such as hospitals, schools, daycare facilities, senior citizen housing, and convalescent facilities

If you have any additional questions, please contact Peg Hanna or Jeff Cantor in the Bureau of Mobile Sources at 609-292-2232.

Thank you for giving the New Jersey Department of Environmental Protection the opportunity to comment on the Draft Resource Reports for the proposed Penn East Pipeline Project.

Sincerely,



John Gray, Deputy Chief of Staff

Enclosures

- C: Medha Kochhar, FERC
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Peg Hanna, NJDEP - Air Quality Mobile Sources
Jan Gheen, NJDEP-Water Allocation
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