

These are documents that Delaware Riverkeeper Network received from our Open Public Records Act (OPRA) request on August 9, 2022 from Ewing Township, NJ.

STAFF REPORT





DRCC#: 20-5256B

DATE: September 28, 2020

PROJECT NAME: Sunoco Jacobs Creek Pipeline Relocation Project

Latest Submission Received: September 3, 2020

Applicant:

Sunoco Pipeline L.P. 100 Green Street Marcus Hook, AP 19061

Colleen.armstrong@energytransfer.com

Engineer:

Christopher Antoni STV Energy Services 205 West Welsh Drive Douglassville, PA 19518

Christopher.antoni@stvinc.com

Project Location:

Road	Municipality	County	Block(s)	Lot(s)
At Route 29 and Jacobs Creek Road	Hopewell Twp	Mercer	n/a	n/a
	Ewing Twp	Mercer	n/a	n/a

Jurisdictional Determination:

Zone A	Major	Nongovernmental

Subject to Review for:

Drainage	Visual	Traffic	Stream Corridors
X	X		X

THIS STAFF REPORT IS ISSUED AS A GUIDE TO APPLICANTS IN COMPLYING WITH DRCC REGULATIONS. IT IS NOT AN APPROVAL. NO CONSTRUCTION SHALL BEGIN UNTIL A CERTIFICATE OF APPROVAL HAS BEEN ISSUED.

Documents submitted: NJDEP Freshwater Wetlands General Permit 2 and Individual Flood Hazard Permit for Jacobs Creek Pipeline Relocation Project, dated April 2020.

PO BOX 539 STOCKTON, NJ 08559 609-397-2000 www.nj.gov/dep/drcc/

DATE: September 28, 2020

PROJECT NAME: Sunoco Jacobs Creek Pipeline Relocation Project

The application is incomplete. The following is a staff report and review of deficiencies:

Existing Conditions: Sunoco Pipeline L.P. (SXL) owns and operates a 14-inch welded steel high-pressure petroleum pipeline that transports product from SXL's Twin Oaks, Pennsylvania terminal to their Newark facility. Near the confluence of Jacobs Creek and the Delaware River in Ewing and Hopewell Townships, Mercer County, New Jersey, and Upper Makefield Township, Bucks County, Pennsylvania, the existing pipeline is located within the stream beds of the Delaware River and Jacobs Creek. The pipeline travels across the Delaware River then up the Jacobs Creek streambed, through a large concrete and stone arch culvert which supports the Delaware and Raritan Canal and State Route 29.

The project area is located near the confluence of the Delaware River and Jacobs Creek. At this location, the pipeline is within the stream bed of Jacobs Creek, running parallel to the creek. The Delaware and Raritan Canal parallels the Delaware River and New Jersey State Route 29 at this location, with Jacobs Creek bisecting them within a 24-foot wide rock and concrete arch culvert. The pipeline is exposed a total length of 301 feet within Jacobs Creek, 169-foot within the culvert, 3-feet upstream and 129-feet downstream of the culvert. The creek bed is located approximately 30-35 feet below the highway and canal surface.

The project area, described as a 4.42-acre site, is located within Commission Review Zone A and within the Delaware and Raritan Canal Historic District which extends 300 feet to either side of the mid-line of the canal.

On June 20, 2018, the applicant obtained a General Permit No. 1 which authorized emergency repair work at the site to repair a washed-out section of pipeline located in Jacobs Creek, Hopewell Township (DRCC# 18-5356). On September 20, 2019, the applicant obtained a General Permit No. 1 which modified the previous general permit in that the applicant required to drill a geotechnical boring for the purpose of obtaining soil samples (DRCC# 19-5256A).

Proposed Project: Horizontal directional drill (HDD) installation techniques will be used to install an approximately 2,500 foot of pipeline across the Delaware River and up Jacobs Creek, to replace the portion of exposed pipeline. The proposed HDD installation will be a 14-inch pipeline that will be approximately 35-40 feet deep under the Delaware and Jacobs Creek stream beds, the concrete arch culvert and approximately 75-85 feet under the Delaware Raritan Canal and Route 29.

Going from PA into NJ in a west to east direction, the proposed HDD will cross under PA SR 32/River Road, the Delaware River, Jacobs Creek and the concrete culvert that supports Route 29 and the Delaware/Raritan Canal.

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The proposed HDD will be installed from both the PA and NJ sides of the Delaware River. On the PA side, the HDD entry point will be within a private residential property. Two (2) 1250-foot HDD pipeline strings will be assembled and tested within the same private residential area and an additional residential/farm property. Access to the PA residential and residential farm property will be off Oakdale Avenue.

On the NJ side, the HDD exit point will be on what if referred to as the Gristmill property (see Figure 4). Access to the Gristmill property will be through a residential property off Creek Rim Drive and the existing Gristmill driveway off Route 29. The contractor will travel down the driveway and continue around the back of another private residence on the same property. Large construction equipment will use an additional access location through an existing private residence property located on Creek Rim Drive.

The proposed HDD will be tied into the existing pipeline using trench installation techniques located land-side and outside of Jacobs Creek and the Delaware River. On the NJ side the HDD installation will be tied in on the Grist Mill property and on the PA side it will be tied in within Oakdale Avenue.

The entire length of the abandoned pipeline from the location of the new tie ins will be grouted in place. Upon completion of the grouting, approximately 350 feet of the exposed abandoned/existing pipeline will be removed from Jacobs Creek and the remaining existing/abandoned pipeline will remain in place. Jacobs Creek will be dammed off using sand bags or a port-a dam to allow access into the stream and to the exposed pipe which will be cut and capped at this location. Access to the western end of the exposed pipe will along an existing Delaware Raritan Canal gravel tow path down an existing cleared embankment to the confluence of the Delaware River and Jacobs Creek. Once the exposed pipeline ends have been cut, the cut pipeline will be pulled through the culvert onto the Gristmill property where it will be cut into 20-foot joints and placed into roll-offs which will be hauled off-site and disposed of. All exposed pipeline removal activities will occur on the NJ side of the river.

As directed by NJDEP the scour hole under the existing pipe will not be filled. Upon removal of the existing pipeline, construction disturbance will be restored and no further impacts to Jacobs creek are proposed. As directed by DEP, a tree clearing moratorium from April 1 to August 31 will be enacted in order to protect nesting birds. Also as directed by NJDEP, in-stream work will not take place between March 1 and June 30 in order to protect anadromous fish.

Access to the site will include via the D&R Canal State Park from Bernard Drive in Ewing Township north along the towpath to Jacobs Creek, from Creek Rim Drive in Hopewell Township down to Jacobs Creek, and from Route 29 into the Gristmill property. The applicant states that the project will result in no new impervious surface and that the proposed disturbance is 4.42 acres.

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Stream Corridor: Pursuant to N.J.A.C. 7:45-9.1, "Each project within Zone A ... of the Review Zone shall be subject to review by the Commission for stream corridor impact if the project includes a portion of a stream corridor, as defined at N.J.A.C. 7:45-1.3." The pipeline replacement will take place within the stream bed of Jacobs Creek, a Commission regulated stream, which runs under the canal. Therefore, this project is subject to stream corridor impact review and the applicant is required to meet the compliance standards of N.J.A.C. 7:45-9.

Stormwater Impact: Pursuant to N.J.A.C. 7:45-8.1, the Commission shall review major projects within Review Zone A for stormwater runoff and water quality impact. The application states that the project will result in no new impervious surface. Staff requests that the applicant review the definition of "impervious surface" at N.J.A.C. 7:45-1.3, Definitions, which includes gravel surfaces, and confirm the amount of impervious surface resulting from the project, the amount of temporary impervious surface and the duration of time the temporary impervious surface will be in place.

Visual, Historic & Natural Quality Impact: The proposed project is within Commission Review Zone A. The Commission shall review all projects in Zone A to determine if the project is in accord with the goals for the park as defined by the park's Master Plan. The visual, historic and natural quality impact review is intended to assure that the development within Zone A is not harmful to the character of the environmental types identified in the Master Plan as comprising the Park. The proposed project is located within the Transportation environment, which is characterized at N.J.A.C. 7:45-10.2, as an area of "Park squeezed between road, railroads, and river and stream".

Major projects are discouraged from those portions of Zone A that comprise, in part, the Transportation environment, N.J.A.C. 7:45-10.3. This project is a major project in Review Zone A. Commission regulations state that the Commission shall not grant approval unless specific compensatory measures that mitigate the project's potential for harmful impact on the park are provided. Examples of such compensatory measures might include, but are not limited to: increased setback distances from the Park, making open space available at the site, extensive landscape development, development of traffic circulation patterns away from the park, noise abatement measures, improvements to adjoining areas of the park, and signage or other interpretive devices for historic structures or the district relating to the site. Please see N.J.A.C. 7:45-10.3(a).

Pursuant to N.J.A.C. 7:45-10.4(a), major and minor projects in a transportation environment shall be located 200 feet or more from the park. The proposed pipeline runs roughly perpendicularly east and west through the park and adjoining lands and ties into the existing pipeline to the east of the park. Commission staff notes that, at N.J.A.C 7:45-12.7(c), projects may be waived from the setback requirement if they are additions to a pre-existing nonconforming structure and the Commission determines that the proposed addition will not further impact on the character of the park. Staff withholds finding on the setback impact until further information is submitted by the applicant.

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Pursuant to N.J.A.C. 7:45-10.4(b), major and minor projects in Zone A shall maintain a reasonable height and scale relationship to nearby structures and vegetation. Within a transportation environment, projects shall be limited to a height of 40 feet above existing grade. The proposed pipeline relocation and replacement project is in compliance with this standard.

Pursuant to N.J.A.C. 7:45-10.4(c), major and minor projects within Zone A shall be in keeping with the character of the park's individual environments. Colors, building materials, and textures shall harmonize with surrounding man-made and natural materials. It is unclear what structures will be visible from the park at the conclusion of the project and therefore it is unclear if the proposed project is in compliance with this standard.

The compliance standards at N.J.A.C. 7:45-10.4(d)1 through 4, which address the impacts of project-related electric, telephone, and cable lines, ancillary areas and structures, and signage, do not apply to this project.

Pursuant to N.J.A.C. 7:45-10.4(d)5, for major and minor projects, wherever possible, natural terrains, soils, stones, and vegetation should be preserved. New vegetation, stones, and soils should be native to the environment in which they are placed. The applicant is required to demonstrate compliance with this standard. Staff notes that on Drawing 9 of 16 of the submitted site plan, it is noted that "existing trees within the temporary workspace will be cleared as necessary." It is unclear if the applicant is in compliance with N.J.A.C. 7:4510.4(d)5.

Pursuant to N.J.A.C. 7:45-10.4(d)6, major and minor projects located in any officially designated Federal, State, or local historic district or site shall be assessed for their impact upon the district or site. Recommendations to avoid, minimize, and/or mitigate the impacts of a project on a listed property shall be made in consultation with the NJDEP Historic Preservation Office.

Staff notes that a February 17, 2019 letter from the State Historic Preservation Office identifies the proposed project site as within the Delaware and Raritan Canal Historic District and within the boundaries of the Somerset Roller Mills (Jacobs Creek Grist Mill). Both sites are listed in the New Jersey and National Registers of Historic Places. In addition, the letter identifies the site as that consistent with the current archaeological models for locations containing Native American archeological deposits. The applicant will be required to complete review as required by the NJ Historic Preservation Office.

Additional Information Required:

- 1. Please provide a list, by block and lot with municipality, of the properties within the project site.
- 2. Please confirm the amount of total disturbance, including but not limited to excavation areas, vegetation removal areas, temporary workspaces, laydown areas, and access routes.

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3. Please provide the expected duration of the project within the park and Commission Review Zones.

- 4. Please provide the depth of the existing pipeline and that proposed within the project area.
- 5. The proposed project is subject to stream corridor impact review. Please submit materials which demonstrate compliance with the standards of N.J.A.C. 7:45-9.
- 6. The definition of impervious surface at N.J.A.C. 7:45-1.3 includes graveled surfaces. Please confirm the amount of new impervious surface proposed for the project. Please provide the amount of temporary impervious surface, including gravel, and an estimated duration of its placement within the project site.
- 7. Pursuant to N.J.A.C. 7:45-10.4(a), major and minor projects in a transportation environment shall be located 200 feet or more from the park. The proposed pipeline runs perpendicularly through the linear park and ties into the existing pipeline to the east of the park. Commission staff notes that, at N.J.A.C 7:45-12.7(c), projects may be waived from the setback requirement if they are additions to a pre-existing nonconforming structure and the Commission determines that the proposed addition will not further impact on the character of the park. Please submit justification for waiver of the setback requirement.
- 8. Pursuant to N.J.A.C. 7:45-10.4(c), major and minor projects within Zone A shall be in keeping with the character of the park's individual environments. Colors, building materials, and textures shall harmonize with surrounding man-made and natural materials. It is unclear what structures will be visible from the park as a result of the project. The applicant is required to submit materials illustrating compliance with the standards at N.J.A.C. 7:45-10.4(c).
- 9. Pursuant to N.J.A.C. 7:45-10.4(d)5, for major and minor projects, wherever possible, natural terrains, soils, stones, and vegetation should be preserved. New vegetation, stones, and soils should be native to the environment in which they are placed. The applicant is required to demonstrate compliance with this standard. Staff notes that on Drawing 9 of 16 of the submitted site plan, it is noted that "existing trees within the temporary workspace will be cleared as necessary." The applicant is requested to submit a vegetation removal and replacement plan, including number and species of trees to be removed. The planting plan shall use native species identified in the Commission's native species planting list. This list is available on the Commission website.
- 10. Upon the applicant's confirming the amount disturbance and new impervious surface resulting from the project, the applicant will be informed of the impact review fees required by the Commission at N.J.A.C. 7:45-13.

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11. The applicant shall obtain necessary approvals and permitting from the NJDEP Division of Parks and Forestry, NJDEP NHR Office of Concessions and Leases, NJDEP State Historic Preservation Office, and the New Jersey Water Supply Authority.

12. The applicant shall submit a hard copy of all application materials.

Staff Recommendation: Staff does not recommend approval at this time.

Sincerely,

John Hutchison Executive Director

c. Patricia Kallesser, Superintendent, D&R Canal State Park
Jesse West-Rosenthal, NJDEP Historic Preservation Office
Mike Sellar, NJWSA
Julie Shelly, NJWSA
Darin Shaffer, NJWSA
George Chidley, NJDEP NRH Office of Leases and Concessions
Hopewell Township Planning Board
Ewing Township Planning Board
Mercer County Planning Board

STAFF REPORT





DRCC#: 21-5256B

DATE: February 16, 2022

PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

Latest Submission Received: January 18, 2022

Applicant:

Sunoco Pipeline L.P. 100 Green Street Marcus Hook, PA 19061

Colleen.armstrong@energytransfer.com

Engineer:

STV Energy Services (STV) 205 West Welsh Drive Douglassville, PA 19518

<u>Christopher.antoni@stvinc.com</u> <u>Jim.mcginley@stvinc.com</u> Edward.weirsky@stvinc.com

Project Location:

Road	Municipality	County	Block(s)	Lot(s)
	Hopewell		99.01	6, 9, 10
	Township		427	1
N.J. State Highway Route No. 29/		Mercer	438	2
Jacobs Creek Road	Ewing		137	1, 1.01,
	Township			7
			437	3.01

Jurisdictional Determination:

Zone A	Major	Nongovernmental

Subject to Review for:

Drainage	Visual	Traffic	Stream Corridors
X	X	X	X

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PO BOX 539

STOCKTON, NJ 08559

609-397-2000

www.nj.gov/dep/drcc/

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CONSTRUCTION SHALL BEGIN UNTIL A CERTIFICATE OF APPROVAL HAS BEEN ISSUED.

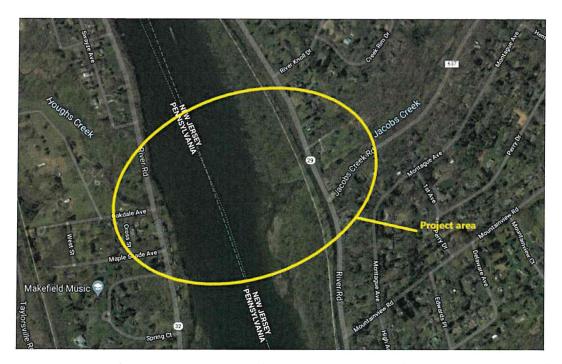
Documents Received: Permit Plans (24 sheets) dated April 17, 2020, revised April 12, 2021, prepared by STV; Sediment and Erosion Control Plan (1 sheet) dated April 17, 2020, prepared by STV; Lease Agreement between the N.J. Department of Conservation and Sun Pipeline Co. (8 pages), dated June 6, 1956; Summary of Project Review for NJDEP/SHPO (16 pages) dated December 16, 2021, prepared by E2 Project Management, LLC; NJDEP Freshwater Wetland General Permit 2 and Individual Flood Hazard Permit (240 pages), dated April 2020, submitted by STV.

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Staff comments continued below.

The application is incomplete. The following is a staff report and review of deficiencies:

Existing Conditions: The project area is the location where the Sunoco Pipeline L.P. (SXL) 14-inch welded steel high-pressure petroleum pipeline that transports product from SXL's Twin Oaks, Pennsylvania terminal to their Newark, New Jersey facility crosses the Delaware River. The pipeline crosses the Delaware River at Upper Makefield Township in Bucks County, Pennsylvania, and enters New Jersey near the confluence of Jacobs Creek and the Delaware River in Ewing and Hopewell Townships, Mercer County.



In the existing condition the existing pipeline is located within the stream beds of the Delaware River and Jacobs Creek. The pipeline travels across the Delaware River, then proceeds up the Jacobs Creek streambed, through a large concrete and stone arch culvert

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which supports the Delaware and Raritan Canal and N.J. State Highway Route No. 29 (Route 29).

The project area is located near the confluence of the Delaware River and Jacobs Creek. At this location, the pipeline is within the stream bed of Jacobs Creek and runs parallel to the creek. The Delaware and Raritan Canal parallels the Delaware River and Route 29 at this location, with Jacobs Creek bisecting them within a 24-foot-wide rock and concrete arch culvert. The pipeline is exposed for a total length of 301 feet within Jacobs Creek; 169 feet within the culvert, 3 feet upstream, and 129 feet downstream of the culvert. The creek bed is located approximately 30 to 35 feet below the Route 29 highway and canal surface.



The project area, which the applicant's submission indicates comprises a total area of 4.42 acres, is located within Commission Review Zone A and within the Delaware and Raritan Canal Historic District.

The Commission has reviewed applications relating to the SXL pipeline on two occasions. On June 20, 2018, the applicant obtained a General Permit No. 1 which authorized emergency repair work at the site to replace a washed-out section of pipeline located in Jacobs Creek, Hopewell Township (DRCC# 18-5356). On September 20, 2019, the applicant obtained a General Permit No. 1 which modified the previous general permit in that the applicant required to drill a geotechnical boring for the purpose of obtaining soil samples (DRCC# 19-5256A).

Proposed Project: The applicant proposes to install approximately 2,500 feet of pipeline across the Delaware River and then up Jacobs Creek in order to replace the portion of exposed pipeline using horizontal directional drill (HDD) installation

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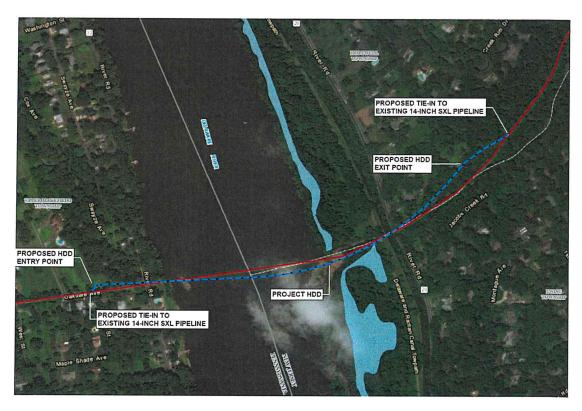
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techniques. The proposed HDD installation would consist of a 14-inch pipeline that will be located approximately 35 to 40 feet below the Delaware and Jacobs Creek stream beds, the concrete arch culvert which supports the Delaware and Raritan Canal and Route 29, and approximately 75 to 85 feet under the canal and Route 29.

Examining the proposed route from Pennsylvania to New Jersey in a west-to-east direction, the proposed HDD would cross under Pennsylvania Route 32/River Road, the Delaware River, Jacobs Creek and the concrete culvert that supports Route 29 and the Delaware/Raritan Canal.

The proposed HDD would be installed from both the Pennsylvania and New Jersey sides of the Delaware River. On the Pennsylvania side, the HDD entry point would be located on a private residential property. Two 1250-foot HDD pipeline strings will be assembled and tested within the above private residential area, and an additional residential/farm property. The Pennsylvania residential area and residential farm property would be accessed via Oakdale Avenue.

On the New Jersey side, the HDD exit point would be located on what is referred to by the applicant as the "Gristmill property" (i.e. Somerset Roller Mills site). Access to the Gristmill property would be through a residential property off Creek Rim Drive and the existing Gristmill driveway located off of Route 29. The contractor proposes to travel down the driveway and continue around the back of another private residence on the same property. Large construction equipment would use an additional access location at a private residence located on Creek Rim Drive.



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The proposed HDD would be tied into the existing pipeline using trench installation techniques located land-side and outside of Jacobs Creek and the Delaware River. On the New Jersey side of the Delaware River, the HDD installation would be tied in on the Grist Mill property, while on the Pennsylvania side it would be tied in at Oakdale Avenue.

The entire length of the abandoned pipeline from the location of the new tie in locations would then be grouted in place. Upon completion of the grouting, approximately 350 feet of the exposed abandoned/existing pipeline would be removed from Jacobs Creek and the remaining existing/abandoned pipeline would remain in place. Jacobs Creek would be dammed off using sandbags or a port-a-dam to allow access into the stream and to the exposed pipe, which would be cut and capped at this location. Access to the western end of the exposed pipe will be made along the existing Delaware Raritan Canal multiuse trail down an existing cleared embankment to the confluence of the Delaware River and Jacobs Creek. Once the exposed pipeline ends have been cut, the cut pipeline would be pulled through the culvert onto the Gristmill property where it would then be cut into 20-foot joints and placed into roll-offs, which would be hauled offsite for disposal. All exposed pipeline removal activities would occur on the New Jersey side of the Delaware River.

The applicant's submission indicates that as directed by NJDEP, the scour hole under the existing pipe would not be filled. Upon removal of the existing pipeline, construction disturbance would be restored and no further impacts to Jacobs Creek are proposed. The applicant's submission indicates that pursuant to direction from NJDEP, a tree clearing moratorium from April 1 to August 31 would be enacted in order to protect nesting birds. Also as directed by NJDEP, in-stream work would not take place between March 1 and June 30 in order to protect anadromous fish.

The applicant proposes to access the project site from the Delaware and Raritan Canal State Park from Bernard Drive in Ewing Township northward along the multiuse trail to Jacobs Creek, from Creek Rim Drive in Hopewell Township down to Jacobs Creek, and from Route 29 into the Gristmill property. The applicant's submission indicates that the project would result in the creation of no new impervious surface coverage, and that the project would result in the disturbance of 4.42 acres of land.

Stream Corridor: The Commission's regulations at N.J.A.C. 7:45-9.1 direct that "[E]ach project within Zone A... of the Review Zone shall be subject to review by the Commission for stream corridor impact if the project includes a portion of a stream corridor, as defined at N.J.A.C. 7:45-1.3." The pipeline replacement will take place within the stream bed of Jacobs Creek. Jacobs Creek is a Commission-regulated stream that runs under the Delaware and Raritan Canal. Therefore, the project is subject to stream corridor impact review and the applicant is required to meet the compliance standards set forth at N.J.A.C. 7:45-9.

Commission staff will require additional information in order to evaluate potential stream corridor impacts.

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Stormwater Impact: N.J.A.C. 7:45-8.1 directs that the Commission shall review major projects within Review Zone A for stormwater runoff and water quality impacts. The submitted application states that the project will not result in the creation of any new impervious surface coverage. Staff requests that the applicant review the definition of "impervious surface" at N.J.A.C. 7:45-1.3, which includes gravel surfaces, and confirm the amount of impervious surface coverage that would result from the project, the amount of temporary impervious surface and the duration of time the temporary impervious surface will be in place.

Visual, Historic & Natural Quality Impact: N.J.A.C. 7:45-10.2(a) directs that the Commission shall review all projects in Zone A to determine if the project is in accord with the goals for the Delaware and Raritan Canal State Park as defined in the park's Master Plan. The visual, historic and natural quality impact review is intended to assure that development within Zone A is not harmful to the character of the environmental types identified in the Master Plan as comprising the park.

The project is located in a Transportation canal environment as defined in Master Plan. The Transportation canal environment is characterized at N.J.A.C. 7:45-10.2(a) as an area in which the canal park squeezed between roads, railroads, and river or stream. The Master Plan at Page 14 notes that the canal is closely paralleled by the "railroad path" (now multiuse trail) to the west and Route 29 to the east for all of this section and that the Delaware River is very close to the path for nearly the entire length. The riverbank and the canal bank next to Route 29 are lined with trees and shrubs, sometimes quite densely. The plan also notes the presence of the historic communities of Titusville and Washington Crossing State Park to the north of the project site, and a large field south of the Mercer/Hunterdon County line which the plan anticipated in 1989 would serve as a venue for special events and the maintenance headquarters of the western section of the park. The plan also called for the creation of a staging area for a canal boat ride into Lambertville and recommended the creation of additional access areas to the park and additional paths throughout the section.

Commission staff observes that the SXL pipeline, which was constructed starting in 1956 preceded the creation of the Delaware and Raritan Canal State Park by 18 years, and that the applicant does not propose to expand the pipeline or create any new aboveground structures within the boundaries of the park. Staff also observes that the plan did not mention or call for the removal of the existing pipeline when it was adopted in 1989. Therefore, staff determines that the replacement of an existing pipeline is not inconsistent with the Master Plan.

N.J.A.C. 7:45-10.3(a) directs that major projects are discouraged in the Transportation canal environment of the Delaware and Raritan Canal State Park. Where major projects are proposed for the above-cited environments, the Commission shall not grant approval unless specific compensatory measures that mitigate the project's potential for harmful impact on the park are provided. Examples of such compensatory measures might include, but are not limited to:

1. Increased setback distances from the Park;

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PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

- 2. At least 40% of the total project site be made available for open space for recreation or conservation purposes, and location of that open space be as near the park as possible;
- 3. Extensive landscape development;
- 4. Development of circulation patterns that direct traffic away from the Park;
- 5. Noise abatement measures:
- 6. Improvements to adjoining portions of the Park;
- 7. Signs or other means of interpreting any historic structures or districts relating to the site.

The applicant has not indicated whether the project is in compliance with this requirement; nor has the applicant indicated whether they propose any of the seven specific compensatory measures cited hereinabove to mitigate the project's potential for harmful impact on the park. The applicant's email submission dated May 27, 2021 appears to indicate that the applicant seeks a waiver of strict adherence with this provision of the visual, historic and natural quality impact review standards pursuant to the criteria at N.J.A.C. 7:45-12.7(a), which states that "[P]rojects otherwise subject to the visual, historic and natural quality standards may be waived from strict adherence to such standards, if the applicant establishes to the satisfaction of the Commission that visual screening will continue to exist in the future, and;

- 1. Wherever possible, natural terrains, soils and vegetation are to be preserved, and new vegetation and soils are to be native to the environment in which they are placed; and
 - i. The topography of the land screens the entire project from the view of a person in the park;
 - ii. Existing structures screen the entire project from the view of a person in the park; or
 - iii. Vegetation located on preserved land screens the entire project from the view of a person in the park during the winter season."

Commission staff observes that the project is not eligible for the suggested waiver, since the applicant's submission clearly indicates that the proposed project does not preserve natural terrains, soils and <u>vegetation</u> [Emphasis added]. The applicant is directed to propose specific compensatory measures that mitigate the project's potential for harmful impact on the Delaware and Raritan Canal State Park. Given the foregoing, the project is not in compliance with this requirement.

The provisions of N.J.A.C. 7:45-10.4(b), which discourage minor projects proposed to be located in those portions of Zone A that comprise the Transportation canal environments of the park, and authorize the Commission to require as a condition of approval specific compensatory measures, are inapplicable to the proposed project, which as noted above, is a "major project."

N.J.A.C. 7:45-10.4(a) directs that projects in Review Zone A shall be set back from the Delaware and Raritan Canal State Park sufficiently far so that the winter visual and natural quality of the park is not adversely affected. In the Transportation canal

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environment, all structures shall be located 200 feet or more from the park. As the Commission staff noted in the September 28, 2020 staff report, N.J.A.C 7:45-12.7(c) states that projects may be waived from the setback requirement if they are additions to a pre-existing nonconforming structure and the Commission determines that the proposed addition will not further impact on the character of the park. The applicant has not submitted the requested justification for waiver of strict adherence with the setback requirement. Commission staff renews this request. Therefore, it is unclear whether the project is in compliance with this requirement.

N.J.A.C. 7:45-10.4(b) directs that projects in Review Zone A shall maintain a reasonable height and scale relationship to nearby structures or vegetation. In the Transportation canal environment, structures shall be limited to a height of 40 feet above existing grade where existing vegetation does not provide adequate winter screening. The applicant's submission indicates that that the project proposes no new aboveground structures; therefore, the project is in compliance with this requirement

N.J.A.C. 7:45-10.4(c) directs that for projects in Review Zone A, the exterior appearances of a project shall be in keeping with the character of the Delaware and Raritan Canal State Park's individual environments. Specifically, colors used shall harmonize with the manmade or natural surroundings of the project and shall be typical of colors found in the park environment. Building materials and texture shall harmonize with the surrounding manmade and natural materials. The applicant's submission indicates that since the project proposes no aboveground structures, the materials and colors proposed by the project would pose no visual impact. Accordingly, Commission staff determines that the project is in compliance with this requirement.

N.J.A.C. 7:45-10.4(d)1 directs that within Review Zone A any electric, telephone, cable television, and other such lines and equipment shall be underground or otherwise not visible from the Delaware and Raritan Canal State Park. Waivers may be requested from the Commission for aboveground terminals, transformers, and similar facilities, and for the extension of service in an existing development. The applicant's submission indicates that the project will be located below ground and would therefore not be visible from the Delaware and Raritan Canal State Park. Therefore, the project is in compliance with this requirement.

N.J.A.C. 7:45-10.4(d)2 directs that within Review Zone A any exposed storage areas, out-buildings, exposed machinery service areas, parking lots, loading areas, utility buildings, and similar ancillary areas and structures shall either be completely concealed from view from the park or designed to minimize their visual impact on the park. Commission staff understands that the project would be constructed below ground; however, the applicant is directed to confirm in writing that the project does not propose any ancillary areas or structures. Commission staff therefore cannot determine whether the project is in compliance with this requirement.

The provisions of N.J.A.C. 7:45-10.4(d)3 and 4, respectively which regulate the location and dimensions of commercial signs and outdoor advertising structures, are inapplicable to the proposed project.

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N.J.A.C. 7:45-10.4(d)5 directs that wherever possible, natural terrains, soils, stones, and vegetation should be preserved, and that new vegetation, stones, and soils should be native to the environment in which they are placed. The applicant's submission indicates that "[N]o tree removal will be required on commission property. All removal is limited to private properties east of the part across Route 29. The tree removal plan is ongoing as required by Hopewell township. A list of removed trees and the mitigation plan will be provided upon approval by Hopewell Township."

The applicant is advised that this response is insufficient for the purpose of compliance with N.J.A.C. 7:45-10.4(d)5 and misapprehends the Commission's regulations. First, Commission staff observes that there is no such thing as "commission property." The Delaware and Raritan Canal State Park is owned by the Department of Environmental Protection, while the water transmission complex of the canal is operated by the New Jersey Water Supply Authority (NJWSA). Secondly, the requirement to preserve natural terrains, soils, stones, and vegetation and to plant native species is enforceable in Review Zone A, and not the Delaware and to the Raritan Canal State Park property [Emphasis added]. Thus, the Commission has jurisdiction over -- and N.J.A.C. 7:45-10.4(d)5 applies to -- the removal and replanting of any vegetation withing Review Zone A related to the project. Staff also notes that compliance with any applicable tree planting requirements of Hopewell Township are separate from compliance with the Commission's regulations. Commission staff therefore cannot determine whether the project is in compliance with this requirement.

N.J.A.C. 7:45-10.4(d)6 directs that projects that are located in any officially designated Federal, State or local historic district or site shall be assessed for their impact upon that district or site. Recommendations to avoid, minimize, and/or mitigate the impacts of a project on a listed property shall be made in consultation with the New Jersey Historic Preservation Office (SHPO) and based upon the <u>United States Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings, as supplemented or amended, and incorporated herein by reference, in accordance with N.J.A.C. 7:4-8 of the New Jersey Register of Historic Places Rules. Commission staff will consult with the SHPO, as needed.</u>

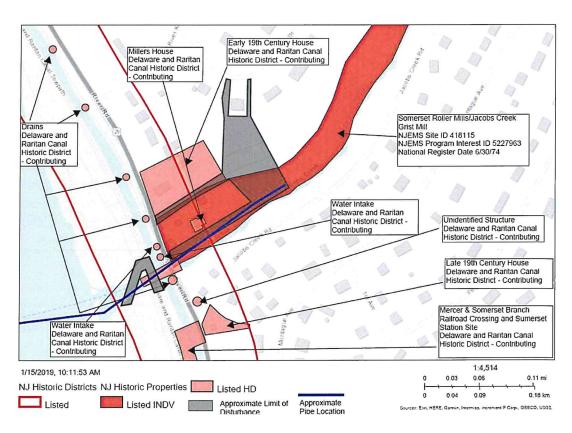
A review of the project area Block and Lots in the NJDEP SHPO "LUCY" online cultural resources inventory viewer indicates that the project will traverse the Delaware and Raritan Canal Historic District, which encompasses the canal bed and all structures within 300 feet of the centerline of the canal. Specifically, the proposed HDD would pass underneath the arch culvert which supports the Delaware and Raritan Canal. The culvert, which is comprised of a concrete arch and wall and partial stone interior, is an original element of the canal's design and the largest culvert on the canal.

In addition, the project would be located on what the applicant's submission refers to as the "Gristmill Property" (Block 99.01, Lot 6). This is an historic property; namely, the site of the Somerset Roller Mills (Jacobs Creek Grist Mill), a former gristmill complex originally built in the early 18th century that was placed on the National Register of

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Historic Places on November 19, 1974 for its significance in architecture, commerce, and industry. It is believed that Isaac Smith received a 1,000 acres land grant in 1726 from the English Crown, and shortly thereafter built the first house (Miller's House) and mill on the site, in order to ship processed grain down the Delaware River to Philadelphia. It is believed that that the mill provided flour to the Continental Army during the American Revolution. The opening of the Delaware and Raritan Canal next to the mill in 1834 greatly improved its business, leading to its expansion in the 1840s. The mill continued in operation until the Great Depression, by which point modern automated mill technology rendered it obsolete. The image below, taken from the applicant's submission, NJ-Geoweb and the "LUCY" online viewer shows the location of surrounding historic district boundaries and historic sites and structures in relation to the proposed project.



Finally, based upon its topographic setting, a well-drained landform adjacent to a tributary of Jacobs Creek, the project area is consistent with current archaeological models for locations containing Native American archaeological deposits.

The applicant's submission indicates that the applicant caused to be conducted a Phase IA archaeological assessment of the project site in September of 2020 and prior to the submission of the project application to the Commission. The report was submitted to the SHPO for review. The applicant's consultant defined areas of archaeological sensitivity and proposed the implementation of an archaeological monitoring and protection plan for the proposed project with limited subsurface testing only in areas of open cut excavation, such as the access/egress point for the HDD and an open trench

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connecting the access/egress point to the existing pipeline. The SHPO concurred with these recommendations and requested that vibration monitoring be conducted on the mill building and the Miller's House to ensure the HDD did not physically impact those structures.

The applicant also caused to be conducted a Phase IB subsurface investigation in October of 2021 in compliance with their NJDEP Freshwater Wetlands Permit special conditions. The survey report was submitted to the SHPO for review under that permit. The applicant's consultant states that on November 12, 2021 the SHPO indicated via email they concurred with the consultants findings but that this concurrence was not provided in any official capacity.

Therefore, in order to ensure compliance with N.J.A.C. 7:45-10.4(d)6 and implement any SHPO recommendations to avoid, minimize, and/or mitigate the impacts of the project on the historic resources cited hereinabove, Commission staff will recommend that any certificate of approval for the project be conditioned upon State Register review by the SHPO for compliance with the "New Jersey Register of Historic Places Act."

Traffic Impact: N.J.A.C. 7:45-11.1 directs that the Commission shall review <u>major projects</u> in Zone A of the Review Zone, or major projects in Zone B of the Review Zone that are within one mile of any portion of the Delaware and Raritan Canal State Park and have direct access to a road that enters Zone A, for their traffic impact on roads that enter the Park or any part of Zone A [Emphasis added].

Additional Conditions: Commission staff observes that the Delaware and Raritan Canal is a water transmission complex maintained by the New Jersey Water Supply Authority and used as a raw water source for several water companies downstream. As such, the applicant is advised that any certificate of approval for the project will include conditions from the NJWSA. The applicant is advised that NJWSA reviewed the project staff report for DRCC #20-5256B dated September 28, 2020. The NJWSA retained the consulting services of Schnabel Engineering to perform a review of the project's design and the contractor's means and methods as it related to potential impacts upon the water transmission complex of the Delaware and Raritan Canal.

An August 30, 2021 review completed by Schnabel Engineering of the design and construction documents concluded the following:

- Overall, the HDD bore path layout and design calculations utilize geometric characteristics that are compliant with industry guidelines for good practice. It is noted that the compounded curve created by the horizontal and vertical curvature of the steel pipe alignment, and the planned entry and exit angles are close to the limit of industry guidelines. The calculations show results within expected ranges for this type and scale of HDD installation.
- The depth of the proposed HDD bore path and its position deep within competent, high Rock Quality Designation (RQD) bedrock indicate a low likelihood the HDD installation would negatively impact the Canal and associated NJWSA operations.

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Removal of the existing pipe will result in a trench in the bedrock that may gradually fill with sediment transported by the stream during higher flow periods. It is estimated that this proposed condition will have no impact on the stability of the bridge/culvert founded on the bedrock; however, the contractor should not be permitted to cause fracturing of the foundation bedrock during pipe removal.

- NJWSA should review the contractor's Frac Out Contingency Plan submittal (aka Inadvertent Release Plan, Drill Fluid Management and Contingency Plan, etc.) with regard to proposed mitigation, monitoring, notification, containment, cleanup, and remediation measures where they could potentially impact NJWSA infrastructure.
- The construction specifications should require the HDD contractor to provide the NJWSA representative with guidance data on the position and trajectory of the HDD bore, as well as records of the HDD installation, prior to drilling under the Canal to confirm the planned path is being followed and the HDD operation is performing as expected.

Therefore, based upon the recommendation of Schnabel Engineering and the NJWSA's review, the applicant is advised that any Commission certificate of approval shall be conditioned upon the following:

- The construction specifications should require the HDD contractor to provide the NJWSA representative with guidance data on the position and trajectory of the HDD bore, as well as records of the HDD installation prior, to drilling under the Delaware and Raritan Canal to confirm the planned path is being followed and the HDD operation is performing as expected;
- 2. Construction specifications for the HDD operation, which should include minimum requirements for construction submittals and required content in the Inadvertent Release Plan, should be provided to the NJWSA for review and approval. The specifications should indicate that the submittals should be provided to NWJSA for review and approval prior to construction:
- 3. The existing pipeline within Jacobs Creek is proposed to be removed within the extent of the Jacobs Creek bridge/culvert carrying the Delaware and Raritan Canal. The bridge/culvert's foundations are bearing on rock. The contract documents should include requirements that the contractor is not permitted to use rock breaker (i.e. demo hammer) equipment to chip out the rock adjacent to the pipe, which may cause additional fracturing of the bridge/culvert foundation rock. The contract documents should also require the contractor to submit means/methods of pipe removal for review and approval by NJWSA prior to construction;
- 4. The applicant shall obtain the approval of the NJWSA regarding the means and methods for the HDD activities associated with the project. This is anticipated to be a contractor submittal at a time after contract award:

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5. The applicant shall notify the NJWSA of the start of construction to allow for ample time for scheduling a representative to be on site during pilot hole drilling;

- 6. The applicant shall provide the contractor's Drill Fluid Management and Contingency Plan (Inadvertent Release Plan, Frac Out Plan, etc.) to NJWSA for review and approval;
- 7. The applicant shall obtain any required Transmission Complex Utility Lease Agreement from the NJWSA;
- 8. In the event of any frac-out clean-up activities, access to State owned land shall be in accordance with the existing Lease;
- 9. Visual Inspections (frac-walks) for frac-outs shall be performed;
- 10. In the event of a "Loss of Returns" occurrence and in any event that drilling fluid reaches the surface at any point in the drilling operation, NJWSA shall be notified;
- 11. If frac-out occurs within NJWSA jurisdiction, drilling shall be stopped, all clean up procedures shall be followed, NJWSA shall be notified, and drilling operations shall only resume with NJWSA approval;
- 12. NJWSA shall be allowed to verify that the equipment listed in the means and methods are onsite as stated (or notify NJWSA of substitutions/changes); and
- 13. The NJWSA's consultant (Schnabel Engineering) will provide full-time onsite inspection.

Additional Information Required: Based upon a review of the submitted documentation, the following information should be provided prior to staff approval:

- 1. The applicant shall in future respond to the deficiencies set forth in this report through correspondence addressed to the Commission. References to documents submitted to other State agencies or other DEP regulatory programs are not sufficient to determine compliance with the Commission's regulations.
- 2. The applicant shall submit a Delaware and Raritan Canal Commission Stream Corridor delineation map that clearly identifies 100-foot buffers adjacent to the 100-year floodplain of any water course that will be impacted by the project including Jacobs Creek and its tributaries. The floodplain could be delineated using any one of the six methods that are provided in the NJ Flood Hazard Area Control Act Rules, N.J.A.C. 7:13.
- 2. The applicant shall provide specific details on any proposed disturbances within the defined Commission stream corridor areas. The applicant is reminded that any new intrusions under N.J.A.C. 7:45-9 within the stream corridor buffer area are strictly prohibited. The applicant must either remove the prohibited activities from within the

DATE: February 16, 2022

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stream corridor, or in the alternative provide an application with acceptable justification for a waiver of strict adherence to the Commission stream corridor impact review standards for any remaining disturbances with the corridor pursuant to the procedural and substantive requirements set forth N.J.A.C. 7:45-12. This justification shall include a detailed explanation and discussion of the square footage of proposed intrusions including, but not limited to, the amount of land disturbance, new impervious areas, landscaping and grading. The application should outline any mitigation efforts that are proposed. For any conditional uses sought in the stream corridor, the applicant must meet the standard set forth at N.J.A.C. 7:45-9.4(a).

- 3. The applicant is advised that the definition of "impervious surface" at N.J.A.C. 7:45-1.3 includes graveled surfaces [Emphasis added]. The applicant is directed to confirm the amount of new impervious surface proposed for the project. Please provide the amount of temporary impervious surface, including gravel, and an estimated duration of its placement within the project site.
- 4. In order to determine compliance with N.J.A.C. 7:45-10.3(a), the applicant is directed to propose specific compensatory measures that mitigate the project's potential for harmful impact on the Delaware and Raritan Canal State Park. The applicant is encouraged to contact the Commission staff to discuss any proposed special compensatory measures in detail
- 5. As noted in the September 28, 2020 staff report and in order to determine compliance with N.J.A.C. 7:45-10.4(a), the applicant is directed to either: explain in narrative format how the proposed project shall be set back from the Delaware and Raritan Canal State Park sufficiently far so that the winter visual and natural quality of the park is not adversely affected; or in the alternative, submitted a narrative justification for a waiver of strict adherence with the setback requirement based upon N.J.A.C 7:45-12.7(c), which states that projects may be waived from the setback requirement if they are additions to a pre-existing nonconforming structure and the Commission determines that the proposed addition will not further impact on the character of the park.
- 6. In order to determine compliance with N.J.A.C. 7:45-10.4(d)2, the applicant shall confirm in writing that any exposed storage areas, out-buildings, exposed machinery service areas, parking lots, loading areas, utility buildings, and similar ancillary areas and structures shall either be completely concealed from view from the park or designed to minimize their visual impact on the park.
- 7. In order to determine compliance with N.J.A.C. 7:45-10.4(d)5, the applicant shall submit a landscaping plan which indicates the number and species of all trees proposed to be removed by the project. The landscaping plan shall indicate the species, quantity and size of any proposed tree plantings, which shall be taken from the Commission lists of Native Trees and Shrubs, which may be accessed at: https://www.nj.gov/dep/drcc/pdf/Native%20Vegetation%20Lists/DRCC%20Current%20Tree%20List%207-1-21.pdf; and

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https://www.nj.gov/dep/drcc/pdf/Native%20Vegetation%20Lists/DRCC%20Current%20Shrub%20List%207-1-21.pdf

The applicant is advised that the Commission policy requires that any trees planted as part of an individual permit application shall have an 85% survivability rate over 3 years following planting.

- 8. In order to determine compliance with N.J.A.C. 7:45-10.4(d)6, the applicant is advised that any certificate of approval shall be conditioned upon State Register review by the State Historic Preservation Office for compliance with the "New Jersey Register of Historic Places Act."
- 9. The applicant shall obtain a Special Use Permit or Right-of-Entry Agreement, as the case may be, from the Department of Environmental Protection, Division of Parks and Forestry, State Park Service.
- 10. The applicant shall submit the traffic impact study required pursuant to N.J.A.C. 7:45-11.
- 11. The applicant is advised that any certificate of approval shall be conditioned upon compliance with the conditions contained in the recommendation prepared by Schnabel Engineering and the NJWSA set forth hereinabove related to the project design and the contractor's means and methods they relate to potential impacts upon the water transmission complex of the Delaware and Raritan Canal.
- 12. Pursuant to the schedule set forth at N.J.A.C. 7:45-13.2, the applicant shall remit application fee payment in the amount of \$9,900, made payable to "Treasurer, State of New Jersey."

Staff Recommendation: Staff does not recommend approval at this time.

Sincerely,

John Hutchison Executive Director

Joh State

c. Robin Madden, Chief of Operations, DEP Natural and Historic Resources Patricia Kallesser, Superintendent, Delaware and Raritan Canal State Park

DATE: February 16, 2022

PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

Jesse West-Rosenthal, Ph.D., Historic Preservation Specialist 2, DEP/SHPO Adria Wentzel, DEP Office of Leases and Concessions
Judeth Yeaney, DEP Legal Services & Stewardship
Darin Shaffer, Chief Engineer, NJWSA
Michael Sellar, Facility Manager, Delaware and Raritan Canal, NJWSA
Julie Shelley, Property and Permit Administrator, NJWSA
Mercer County Planning Board
Ewing Township Planning Board
Hopewell Township Planning Board

STAFF REPORT





DRCC #: 21-5256B **DATE**: June 7, 2022

PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

Latest Submission Received: May 10, 2022

Applicant:

Sunoco Pipeline L.P.
100 Green Street
Marcus Hook, PA 19061
Colleen.armstrong@energytransfer.com

Engineer:

STV Energy Services (STV) 205 West Welsh Drive Douglassville, PA 19518 Christopher.antoni@stvinc.com

<u>Jim.mcginley@stvinc.com</u> <u>Edward.weirsky@stvinc.com</u>

Project Location:

Road	Municipality	County	Block(s)	Lot(s)
	Hopewell		99.01	6, 9, 10
	Township		427	1
N.J. State Highway Route No. 29/		Mercer	438	2
Jacobs Creek Road	Ewing		137	1, 1.01,
	Township		9	7
			437	3.01

Jurisdictional Determination:

Zone A	Major	Nongovernmental

Subject to Review for:

Drainage	Visual	Traffic	Stream Corridors
X	X	X	X

THIS STAFF REPORT IS ISSUED AS A GUIDE TO APPLICANTS IN COMPLYING WITH DRCC REGULATIONS. IT IS NOT AN APPROVAL. NO

PO BOX 539

STOCKTON, NJ 08559 www.nj.gov/dep/drcc/

609-397-2000

PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

CONSTRUCTION SHALL BEGIN UNTIL A CERTIFICATE OF APPROVAL HAS BEEN ISSUED.

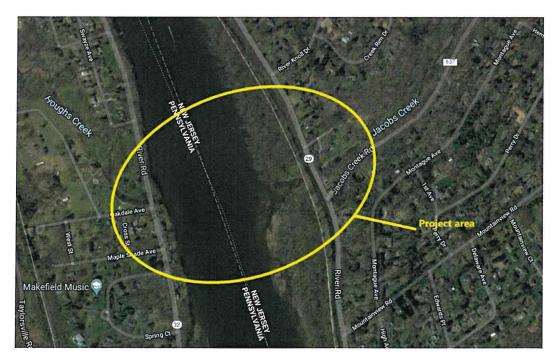
Documents Received: Permit Plans (24 sheets) dated April 17, 2020, revised April 12, 2021, prepared by STV; Sediment and Erosion Control Plan (1 sheet) dated April 17, 2020, prepared by STV; Lease Agreement between the N.J. Department of Conservation and Sun Pipeline Co. (8 pages), dated June 6, 1956; Summary of Project Review for NJDEP/SHPO (16 pages) dated December 16, 2021, prepared by E2 Project Management, LLC; NJDEP Freshwater Wetland General Permit 2 and Individual Flood Hazard Permit (240 pages), dated April 2020, Stream Corridor Exhibit (2 sheets) dated May 4, 2022; submitted by STV.

.....

Staff comments continued below.

The application is incomplete. The following is a staff report and review of deficiencies:

Existing Conditions: The project area is the location where the Sunoco Pipeline L.P. (SXL) 14-inch welded steel high-pressure petroleum pipeline that transports product from SXL's Twin Oaks, Pennsylvania terminal to their Newark, New Jersey facility crosses the Delaware River. The pipeline crosses the Delaware River at Upper Makefield Township in Bucks County, Pennsylvania, and enters New Jersey near the confluence of Jacobs Creek and the Delaware River in Ewing and Hopewell Townships, Mercer County.



In the existing condition, the existing pipeline is located within the stream beds of the Delaware River and Jacobs Creek. The pipeline travels across the Delaware River, then

PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

proceeds up the Jacobs Creek streambed, through a large concrete and stone arch culvert which supports the Delaware and Raritan Canal and N.J. State Highway Route No. 29 (Route 29).

The project area is located near the confluence of the Delaware River and Jacobs Creek. At this location, the pipeline is within the stream bed of Jacobs Creek and runs parallel to the creek. The Delaware and Raritan Canal parallels the Delaware River and Route 29 at this location, with Jacobs Creek bisecting them within a 24-foot-wide rock and concrete arch culvert. The pipeline is exposed for a total length of 301 feet within Jacobs Creek; 169 feet within the culvert, 3 feet upstream, and 129 feet downstream of the culvert. The creek bed is located approximately 30 to 35 feet below the Route 29 highway and canal surface.



The project area, which the applicant's submission indicates comprises a total area of 4.42 acres, is located within Commission Review Zone A and within the Delaware and Raritan Canal Historic District.

The Commission has reviewed applications relating to the SXL pipeline on two occasions. On June 20, 2018, the applicant obtained a General Permit No. 1 which authorized emergency repair work at the site to replace a washed-out section of pipeline located in Jacobs Creek, Hopewell Township (DRCC# 18-5356). On September 20, 2019, the applicant obtained a General Permit No. 1 which modified the previous general permit in that the applicant required to drill a geotechnical boring for the purpose of obtaining soil samples (DRCC# 19-5256A).

Proposed Project: The applicant proposes to install approximately 2,500 feet of pipeline across the Delaware River and then up Jacobs Creek in order to replace the

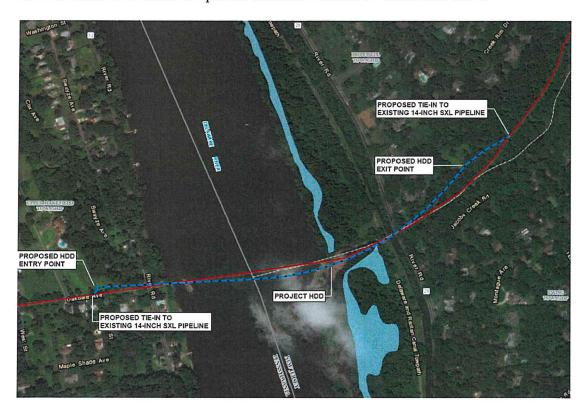
PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

portion of exposed pipeline using horizontal directional drill (HDD) installation techniques. The proposed HDD installation would consist of a 14-inch pipeline that will be located approximately 35 to 40 feet below the Delaware and Jacobs Creek stream beds, the concrete arch culvert which supports the Delaware and Raritan Canal and Route 29, and approximately 75 to 85 feet under the canal and Route 29.

Examining the proposed route from Pennsylvania to New Jersey in a west-to-east direction, the proposed HDD would cross under Pennsylvania Route 32/River Road, the Delaware River, Jacobs Creek and the concrete culvert that supports Route 29 and the Delaware and Raritan Canal.

The proposed HDD would be installed from both the Pennsylvania and New Jersey sides of the Delaware River. On the Pennsylvania side, the HDD entry point would be located on a private residential property. Two 1,250-foot HDD pipeline strings will be assembled and tested within the above private residential area, and an additional residential/farm property. The Pennsylvania residential area and residential farm property would be accessed via Oakdale Avenue.

On the New Jersey side of the Delaware River, the HDD exit point would be located on what is referred to by the applicant as the "Gristmill property" (i.e. Somerset Roller Mills site). Access to the Gristmill property would be through a residential property off Creek Rim Drive and the existing Gristmill driveway located off of Route 29. The contractor proposes to travel down the driveway and continue around the back of another private residence on the same property. Large construction equipment would use an additional access location at a private residence located on Creek Rim Drive.



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The proposed HDD would be tied into the existing pipeline using trench installation techniques located landside and outside of Jacobs Creek and the Delaware River. On the New Jersey side of the Delaware River, the HDD installation would be tied in on the Grist Mill property, while on the Pennsylvania side it would be tied in at Oakdale Avenue.

The entire length of the abandoned pipeline from the location of the new tie in locations would then be grouted in place. Upon completion of the grouting, approximately 350 feet of the exposed abandoned/existing pipeline would be removed from Jacobs Creek and the remaining existing/abandoned pipeline would remain in place. Jacobs Creek would be dammed off using sandbags or a port-a-dam to allow access into the stream and to the exposed pipe, which would be cut and capped at this location. Access to the western end of the exposed pipe will be made along the existing Delaware and Raritan Canal State Park multiuse trail down an existing cleared embankment to the confluence of the Delaware River and Jacobs Creek. Once the exposed pipeline ends have been cut, the cut pipeline would be pulled through the culvert onto the Gristmill property where it would then be cut into 20-foot joints and placed into roll-offs, which would be hauled offsite for disposal. All exposed pipeline removal activities would occur on the New Jersey side of the Delaware River.

The applicant's submission indicates that, as directed by NJDEP, the scour hole under the existing pipe would not be filled. Upon removal of the existing pipeline, construction disturbance would be restored and no further impacts to Jacobs Creek are proposed. The applicant's submission indicates that, pursuant to direction from NJDEP, a tree clearing moratorium from April 1 to August 31 would be enacted in order to protect nesting birds. Also, as directed by NJDEP, in-stream work would not take place between March 1 and June 30 in order to protect anadromous fish.

The applicant proposes to access the project site from the Delaware and Raritan Canal State Park from Bernard Drive in Ewing Township northward along the multiuse trail to Jacobs Creek, from Creek Rim Drive in Hopewell Township down to Jacobs Creek, and from Route 29 into the Gristmill property.

The applicant's submission indicates that the project would result in the creation of 29,426 square feet (0.67 acre) of impervious surface coverage in the form of temporary gravel construction entrances and laydown areas, which would be in place for the duration of construction, which is estimated to be four months. The project would also result in the disturbance of 4.42 acres of land.

Stream Corridor: Pursuant to N.J.A.C. 7:45-9.1, "Each project within Zone A of the Review Zone shall be subject to review by the Commission for stream corridor impact if the project includes a portion of a stream corridor, as defined at N.J.A.C. 7:45-1.3." The pipeline replacement will take place within the stream bed of Jacobs Creek, a Commission regulated stream, which runs under the canal. Therefore, this project is subject to stream corridor impact review and the applicant is required to meet the compliance standards of N.J.A.C. 7:45-9.

PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

As Jacobs Creek drains to the Delaware and Raritan Canal State Park, the Commission defines "stream corridor" to mean Jacobs Creek, the 100-year floodplain associated with Jacobs Creek, and all of the land within a 100-foot buffer adjacent to the 100-year flood line associated with Jacobs Creek. The applicant has provided a Delaware and Raritan Canal Commission exhibit; however, the 100-year floodplain delineation line has not been illustrated or labelled on the exhibit.

The existing stream corridor is currently made up of a mixture of upland vegetation primarily and undergrowth of multifloral rose and a variety of tree species. The applicant has also submitted a tree survey data for the proposed project.

The applicant is proposing intrusions within the Commission stream corridor area. Therefore, this project will be subjected to a stream corridor impact review as per N.J.A.C. 7:45-9.1(a). Impacts to the Commission stream corridor include land grading, which appears to be somewhat temporary in nature. Additional impacts will include the proposed installation and removal of existing pipeline across the Delaware River and up Jacobs Creek to replace the portion of exposed pipeline. A portion of this disturbance will be by using HDD installation techniques and a portion will be trenched. Construction of new structures, regrading and removal of vegetation are all considered to be prohibited uses in accordance with N.J.A.C. 7:45-9.3(a).

The applicant has suggested that portions of the proposed disturbances within the stream corridor could be considered to be a conditional use. Pursuant to N.J.A.C. 7:45-9.4(a)7, underground utility transmission lines may be permitted, as a conditional use, if the applicant demonstrates to the satisfaction of the Commission that the proposed use complies with the Master Plan. The 14-inch diameter pipeline will be installed within the stream corridor to provide transport of petroleum from SXLs Twin Oaks, Pennsylvania terminal to their Newark facility. A portion of the pipeline installation will be directionally drilled to minimize disturbance of sensitive land. The proposed work will take place during periods of low flow in accordance with soil erosion and sediment control practices approved by the United States Soil Conservation Service and the State Soil Conservation Committee and in a manner that will not impede flows or cause ponding of water. Additionally, the pipe removal work will take place in accordance with these same measures.

Commission staff will require additional information in order to evaluate potential stream corridor impacts.

Stormwater Impact: Pursuant to N.J.A.C. 7:45-8.1, the Commission shall review major projects within Review Zone A for stormwater runoff and water quality impact. The application states that the project will result in no new impervious surface. Staff requests that the applicant review the definition of "impervious surface" at N.J.A.C. 7:45-1.3, Definitions, which includes gravel surfaces, and confirm the amount of impervious surface resulting from the project, the amount of temporary impervious surface, and the duration of time the temporary impervious surface will be in place.

PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

Visual, Historic & Natural Quality Impact: N.J.A.C. 7:45-10.2(a) directs that the Commission shall review all projects in Zone A to determine if the project is in accord with the goals for the Delaware and Raritan Canal State Park as defined in the park's Master Plan. The visual, historic and natural quality impact review is intended to assure that development within Zone A is not harmful to the character of the environmental types identified in the Master Plan as comprising the park.

The project is located in a Transportation canal environment as defined in the Master Plan. The Transportation canal environment is characterized at N.J.A.C. 7:45-10.2(a) as an area in which the canal park squeezed between roads, railroads, and river or stream. The Master Plan at Page 14 notes that the canal is closely paralleled by the "railroad path" (now multiuse trail) to the west and Route 29 to the east for all of this section and that the Delaware River is very close to the path for nearly the entire length. The riverbank and the canal bank next to Route 29 are lined with trees and shrubs, sometimes quite densely. The plan also notes the presence of the historic community of Titusville and Washington Crossing State Park to the north of the project site, and a large field south of the Mercer/Hunterdon County line which the plan anticipated in 1989 would serve as a venue for special events and the maintenance headquarters of the western section of the park. The plan also called for the creation of a staging area for a canal boat ride into Lambertville and recommended the creation of additional access areas to the park and additional paths throughout the section.

Commission staff observes that the SXL pipeline, which was constructed starting in 1956 preceded the creation of the Delaware and Raritan Canal State Park by 18 years, and that the applicant does not propose to expand the pipeline or create any new aboveground structures within the boundaries of the park. Staff also observes that the plan did not mention or call for the removal of the existing pipeline when it was adopted in 1989. Therefore, staff determines that the replacement of an existing pipeline is not inconsistent with the Master Plan.

N.J.A.C. 7:45-10.3(a) directs that major projects are discouraged in the Transportation canal environment of the Delaware and Raritan Canal State Park. Where major projects are proposed for the above-cited environments, the Commission shall not grant approval unless specific compensatory measures that mitigate the project's potential for harmful impact on the park are provided. Examples of such compensatory measures might include, but are not limited to:

- 1. Increased setback distances from the Park;
- 2. At least 40% of the total project site be made available for open space for recreation or conservation purposes, and location of that open space be as near the park as possible;
- 3. Extensive landscape development;
- 4. Development of circulation patterns that direct traffic away from the Park;
- 5. Noise abatement measures:
- 6. Improvements to adjoining portions of the Park;
- 7. Signs or other means of interpreting any historic structures or districts relating to the site.

PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

The applicant seeks a waiver of strict adherence with this provision of the visual, historic and natural quality impact review standards pursuant to the criteria at N.J.A.C. 7:45-12.7(a), which states that "[P]rojects otherwise subject to the visual, historic and natural quality standards may be waived from strict adherence to such standards, if the applicant establishes to the satisfaction of the Commission that visual screening will continue to exist in the future, and;

- 1. Wherever possible, natural terrains, soils and vegetation are to be preserved, and new vegetation and soils are to be native to the environment in which they are placed; and
 - i. The topography of the land screens the entire project from the view of a person in the park;
 - ii. Existing structures screen the entire project from the view of a person in the park; or
 - iii. Vegetation located on preserved land screens the entire project from the view of a person in the park during the winter season."

The applicant states that the proposed project meets the criteria to be eligible for waiver because:

- All natural terrain and soils will be replaced in-kind, which would result in no impact to these resources;
- The applicant has, wherever possible, preserved native vegetation through the reduction of temporary workspace and the minimization of tree clearing. Any disturbed areas would be reseeded with a DEP-approved native seed mix in order to preserve the integrity of the area; and
- The area proposed to be cleared would not be visible from the Delaware and Raritan Canal State Park. Existing trees located along Route 29, existing structures, and relative elevation are such that visual impacts to the park are unlikely.

Commission staff determines that the applicant has met the criteria for a waiver of strict adherence with the provisions of N.J.A.C. 7:45-10.3(a).

The provisions of N.J.A.C. 7:45-10.4(b), which discourage minor projects proposed to be located in those portions of Zone A that comprise the Transportation canal environments of the park and authorize the Commission to require as a condition of approval specific compensatory measures, are inapplicable to the proposed project, which as noted above, is a "major project."

N.J.A.C. 7:45-10.4(a) directs that projects in Review Zone A shall be set back from the Delaware and Raritan Canal State Park sufficiently far so that the winter visual and natural quality of the park is not adversely affected. In the Transportation canal environment, all structures shall be located 200 feet or more from the park.

PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

The applicant has submitted a request for a waiver of strict adherence with the setback requirement pursuant to the criteria at N.J.A.C 7:45-12.7(c), which states that projects may be waived from the setback requirement if they are additions to a pre-existing nonconforming structure and the Commission determines that the proposed addition will not further impact on the character of the park.

The applicant notes that the pipeline is a pre-existing nonconforming structure, which pre-dates the creation of the Delaware and Raritan Canal State Park by 18 years. Second, the applicant notes that the location of any areas to be cleared within the 200-foot setback would not be visible from the park and would accordingly not further impact the character of the park. Finally, the applicant asserts that the proposed project would in the proposed condition improve the visual aesthetic of the park when compared with the existing condition. The applicant observes that in the existing condition, the current pipeline is exposed within the mouth of Jacobs Creek and is visible from the park. In the proposed condition, the pipeline would be removed.

Commission staff determines that the applicant has met the criteria for a waiver of strict adherence with the provisions of N.J.A.C. 7:45-10.4(a).

N.J.A.C. 7:45-10.4(b) directs that projects in Review Zone A shall maintain a reasonable height and scale relationship to nearby structures or vegetation. In the Transportation canal environment, structures shall be limited to a height of 40 feet above existing grade where existing vegetation does not provide adequate winter screening. The applicant's submission indicates that that the project proposes no new aboveground structures; therefore, the project is in compliance with this requirement

N.J.A.C. 7:45-10.4(c) directs that for projects in Review Zone A, the exterior appearances of a project shall be in keeping with the character of the Delaware and Raritan Canal State Park's individual environments. Specifically, colors used shall harmonize with the manmade or natural surroundings of the project and shall be typical of colors found in the park environment. Building materials and texture shall harmonize with the surrounding manmade and natural materials. The applicant's submission indicates that since the project proposes no aboveground structures, the materials and colors proposed by the project would pose no visual impact. Accordingly, Commission staff determines that the project is in compliance with this requirement.

N.J.A.C. 7:45-10.4(d)1 directs that within Review Zone A, any electric, telephone, cable television, and other such lines and equipment shall be underground or otherwise not visible from the Delaware and Raritan Canal State Park. Waivers may be requested from the Commission for aboveground terminals, transformers, and similar facilities, and for the extension of service in an existing development. The applicant's submission indicates that the project will be located below ground and would therefore not be visible from the Delaware and Raritan Canal State Park. The applicant's submission also notes that the majority of the limit of disturbance is located so that existing visual screening made up of trees within the park and along Route 29, as well as existing structures and topographical location of the proposed work, will shield any visual impacts of the

PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

proposed work and clearing from the park. Therefore, the project is in compliance with this requirement.

N.J.A.C. 7:45-10.4(d)2 directs that, within Review Zone A, any exposed storage areas, out-buildings, exposed machinery service areas, parking lots, loading areas, utility buildings, and similar ancillary areas and structures shall either be completely concealed from view from the park or designed to minimize their visual impact on the park. The project would be constructed below ground and does not propose any ancillary areas or structures. Therefore, the project is in compliance with this requirement.

The provisions of N.J.A.C. 7:45-10.4(d)3 and 4, respectively which regulate the location and dimensions of commercial signs and outdoor advertising structures, are inapplicable to the proposed project.

N.J.A.C. 7:45-10.4(d)5 directs that wherever possible, natural terrains, soils, stones, and vegetation should be preserved, and that new vegetation, stones, and soils should be native to the environment in which they are placed. The applicant's submission states that all natural terrains and soils will be replaced in-kind and that wherever possible native vegetation has been preserved. The applicant further notes that temporary workspace has been reduced to the greatest extent possible and tree clearing has been minimized wherever possible. Disturbed areas will be reseeded with a DEP-approved native seed mix in order to preserve the integrity of the area. Commission staff observes that this native seed mix was directed to be planted in lieu of woody vegetation. Therefore, the project is in compliance with this requirement.

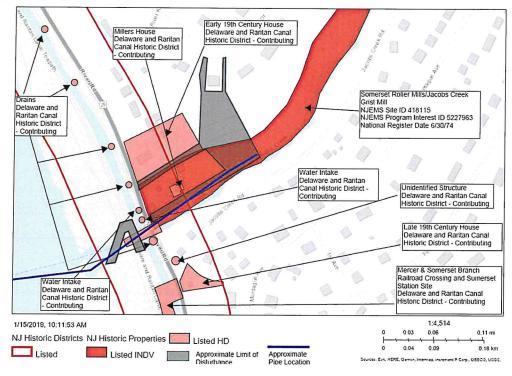
N.J.A.C. 7:45-10.4(d)6 directs that projects that are located in any officially designated Federal, State or local historic district or site shall be assessed for their impact upon that district or site. Recommendations to avoid, minimize, and/or mitigate the impacts of a project on a listed property shall be made in consultation with the New Jersey Historic Preservation Office (SHPO) and based upon the <u>United States Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings, as supplemented or amended, and incorporated herein by reference, in accordance with N.J.A.C. 7:4-8 of the New Jersey Register of Historic Places Rules. Commission staff will consult with the SHPO, as needed.</u>

A review of the project area Block and Lots in the NJDEP SHPO "LUCY" online cultural resources inventory viewer indicates that the project will traverse the Delaware and Raritan Canal Historic District, which encompasses the canal bed and all structures within 300 feet of the centerline of the canal. Specifically, the proposed HDD would pass underneath the arch culvert which supports the Delaware and Raritan Canal. The culvert, which is comprised of a concrete arch and wall and partial stone interior, is an original element of the canal's design and the largest culvert on the canal.

In addition, the project would be located on what the applicant's submission refers to as the "Gristmill Property" (Block 99.01, Lot 6). This is an historic property; namely, the site of the Somerset Roller Mills (Jacobs Creek Grist Mill), a former gristmill complex

PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

originally built in the early 18th century that was placed on the National Register of Historic Places on November 19, 1974, for its significance in architecture, commerce, and industry. It is believed that Isaac Smith received a 1,000-acres land grant in 1726 from the English Crown, and shortly thereafter built the first house (Miller's House) and mill on the site, in order to ship processed grain down the Delaware River to Philadelphia. It is believed that that the mill provided flour to the Continental Army during the American Revolution. The opening of the Delaware and Raritan Canal next to the mill in 1834 greatly improved its business, leading to its expansion in the 1840s. The mill continued in operation until the Great Depression, by which point modern automated mill technology rendered it obsolete. The image below, taken from the applicant's submission using NJ-Geoweb and the "LUCY" online viewer, shows the location of surrounding historic district boundaries and historic sites and structures in relation to the proposed project.



Finally, based upon its topographic setting as a well-drained landform adjacent to a tributary of Jacobs Creek, the project area is consistent with current archaeological models for locations containing Native American archaeological deposits.

The applicant's submission indicates that the applicant caused to be conducted a Phase IA archaeological assessment of the project site in September of 2020 and prior to the submission of the project application to the Commission. The report was submitted to the SHPO for review. The applicant's consultant defined areas of archaeological sensitivity and proposed the implementation of an archaeological monitoring and protection plan for the proposed project with limited subsurface testing only in areas of open cut excavation, such as the access/egress point for the HDD and an open trench connecting the access/egress point to the existing pipeline. The SHPO concurred with these recommendations and requested that vibration monitoring be conducted on the mill

PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

building and the Miller's House to ensure the HDD did not physically impact those structures.

The applicant also caused to be conducted a Phase IB subsurface investigation in October of 2021 in compliance with their NJDEP Freshwater Wetlands Permit special conditions. The survey report was submitted to the SHPO for review under that permit. The applicant's consultant states that on November 12, 2021, the SHPO indicated via email they concurred with the consultant's findings.

Additionally, the applicant has submitted an email, transmitted by the SHPO dated October 27, 2020, which states that "[T]his information is provided as informal notes to you and does not constitute identification level cultural resources survey under Section 106 of the National Historic Preservation Act or other law or regulation. These notes do not constitute project review under any state or federal law. The absence of previously identified cultural resources does not imply that there are no eligible historic properties in the requested area. Further identification of cultural resources may be required under one or more historic preservation review processes depending on project funding, licensing, or permitting."

Therefore, in order to ensure compliance with N.J.A.C. 7:45-10.4(d)6 and implement any SHPO recommendations to avoid, minimize, and/or mitigate the impacts of the project on the historic resources cited hereinabove, Commission staff recommends that any certificate of approval for the project be conditioned upon State Register review by the SHPO for compliance with the "New Jersey Register of Historic Places Act."

Traffic Impact: N.J.A.C. 7:45-11.1 directs that the Commission shall review major projects in Zone A of the Review Zone, or major projects in Zone B of the Review Zone that are within one mile of any portion of the Delaware and Raritan Canal State Park and have direct access to a road that enters Zone A, for their traffic impact on roads that enter the Park or any part of Zone A.

The applicant has submitted a statement which notes that the project is a replacement of existing pipeline, and that the proposed project would not require additional inspections. Therefore, no additional traffic is anticipated within the Delaware and Raritan Canal State Park or surrounding area after the completion of the proposed project.

Commission staff agrees with the submitted traffic assessment; and therefore, the project is in compliance with this requirement.

Additional Conditions: Commission staff observes that the Delaware and Raritan Canal is a water transmission complex maintained by the New Jersey Water Supply Authority (NJWSA) and used as a raw water source for several water companies downstream. As such, the applicant is advised that any certificate of approval for the project will include conditions from the NJWSA. The applicant is advised that NJWSA reviewed the project staff report for DRCC #20-5256B dated September 28, 2020. The NJWSA retained the consulting services of Schnabel Engineering to perform a review of the project's design

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and the contractor's means and methods as it related to potential impacts upon the water transmission complex of the Delaware and Raritan Canal.

An August 30, 2021 review completed by Schnabel Engineering of the design and construction documents concluded the following:

- Overall, the HDD bore path layout and design calculations utilize geometric characteristics that are compliant with industry guidelines for good practice. It is noted that the compounded curve created by the horizontal and vertical curvature of the steel pipe alignment, and the planned entry and exit angles are close to the limit of industry guidelines. The calculations show results within expected ranges for this type and scale of HDD installation.
- The depth of the proposed HDD bore path and its position deep within competent, high Rock Quality Designation (RQD) bedrock indicate a low likelihood the HDD installation would negatively impact the Canal and associated NJWSA operations.
- Removal of the existing pipe will result in a trench in the bedrock that may gradually fill with sediment transported by the stream during higher flow periods. It is estimated that this proposed condition will have no impact on the stability of the bridge/culvert founded on the bedrock; however, the contractor should not be permitted to cause fracturing of the foundation bedrock during pipe removal.
- NJWSA should review the contractor's Frac Out Contingency Plan submittal (aka Inadvertent Release Plan, Drill Fluid Management and Contingency Plan, etc.) with regard to proposed mitigation, monitoring, notification, containment, cleanup, and remediation measures where they could potentially impact NJWSA infrastructure.
- The construction specifications should require the HDD contractor to provide the NJWSA representative with guidance data on the position and trajectory of the HDD bore, as well as records of the HDD installation, prior to drilling under the Canal to confirm the planned path is being followed and the HDD operation is performing as expected.

Based upon the recommendations of Schnabel Engineering and the NJWSA review, NJWSA will require the following conditions to be satisfied:

1. The construction specifications should require the HDD contractor to provide the NJWSA representative with guidance data on the position and trajectory of the HDD bore, as well as records of the HDD installation prior, to drilling under the Delaware and Raritan Canal to confirm the planned path is being followed and the HDD operation is performing as expected;

PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

 Construction specifications for the HDD operation, which should include minimum requirements for construction submittals and required content in the Inadvertent Release Plan, should be provided to the NJWSA for review and approval. The specifications should indicate that the submittals should be provided to NWJSA for review and approval prior to construction;

- 3. The existing pipeline within Jacobs Creek is proposed to be removed within the extent of the Jacobs Creek bridge/culvert carrying the Delaware and Raritan Canal. The bridge/culvert's foundations are bearing on rock. The contract documents should include requirements that the contractor is not permitted to use rock breaker (i.e. demo hammer) equipment to chip out the rock adjacent to the pipe, which may cause additional fracturing of the bridge/culvert foundation rock. The contract documents should also require the contractor to submit means/methods of pipe removal for review and approval by NJWSA prior to construction;
- 4. The applicant shall obtain the approval of the NJWSA regarding the means and methods for the HDD activities associated with the project. This is anticipated to be a contractor submittal at a time after contract award;
- 5. The applicant shall notify the NJWSA of the start of construction to allow for ample time for scheduling a representative to be on site during pilot hole drilling;
- 6. The applicant shall provide the contractor's Drill Fluid Management and Contingency Plan (Inadvertent Release Plan, Frac Out Plan, etc.) to NJWSA for review and approval;
- 7. The applicant shall obtain any required Transmission Complex Utility Lease Agreement from the NJWSA;
- 8. In the event of any frac-out clean-up activities, access to State owned land shall be in accordance with the existing lease;
- 9. Visual inspections (frac-walks) for frac-outs shall be performed;
- 10. In the event of a "Loss of Returns" occurrence and in any event that drilling fluid reaches the surface at any point in the drilling operation, NJWSA shall be notified;
- 11. If frac-out occurs within NJWSA jurisdiction, drilling shall be stopped, all clean up procedures shall be followed, NJWSA shall be notified, and drilling operations shall only resume with NJWSA approval;
- 12. NJWSA shall be allowed to verify that the equipment listed in the means and methods are onsite as stated (or notify NJWSA of substitutions/changes); and
- 13. The NJWSA's consultant (Schnabel Engineering) will provide full-time onsite inspection.

PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

Additional information required:

- 1. A Delaware and Raritan Canal Commission Stream Corridor delineation map exhibit has been submitted by the applicant. However, the 100-year floodplain delineation line has not been illustrated or labelled on the exhibit. Please provide a stream corridor exhibit that clearly identifies 100-foot buffers adjacent to the 100-year floodplain of any water course that will be impacted by the project including Jacobs Creek and its tributaries. The floodplain could be delineated using any one of the six methods that are provided in the NJ Flood Hazard Area Control Act Rules, N.J.A.C. 7:13. The method of delineation for the 100-year floodplain should also be identified on the exhibit.
- 2. Please provide specific details on any proposed permanent or temporary disturbances within the defined Commission stream corridor area. Please be reminded that any intrusions under N.J.A.C. 7:45-9 within the stream corridor buffer area, including temporary disturbances are strictly prohibited. The applicant must either remove the prohibited activities from within the stream corridor or provide an application with acceptable justification for a waiver of strict adherence to the Commission stream corridor buffer regulations for any remaining disturbances with the corridor pursuant to N.J.A.C. 7:45-12. This should include a detailed discussion and tables of the square footage of the existing conditions and the proposed permanent or temporary intrusions within the stream corridor including but not limited to the amount of land disturbance, new impervious areas, landscaping, and grading. The amount of linear-feet and square-footage disturbance for the portion of HDD installation and for the trenching should also be identified. The application should outline any mitigation efforts that are proposed, including details on the re-establishment of native vegetation and original land surface grades.
- 3. The definition of impervious surface at N.J.A.C. 7:45-1.3 includes graveled surfaces. Please confirm the amount of new impervious surface proposed for the project. Please provide the amount of temporary impervious surface, including gravel, and an estimated duration of its placement within the project site.

Staff Recommendation: Staff does not recommend approval at this time.

Sincerely,

John Hutchison Executive Director

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PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

c. Robin Madden, Chief of Operations, DEP State Parks, Forests and Historic Sites Patricia Kallesser, Superintendent, Delaware and Raritan Canal State Park Jesse West-Rosenthal, Ph.D., Historic Preservation Specialist 2, DEP/SHPO Adria Wentzel, DEP Office of Leases and Concessions Judeth Yeaney, DEP Legal Services & Stewardship Darin Shaffer, Chief Engineer, NJWSA Michael Sellar, Facility Manager, Delaware and Raritan Canal, NJWSA Julie Shelley, Property and Permit Administrator, NJWSA Mercer County Planning Board Ewing Township Planning Board Hopewell Township Planning Board

STAFF REPORT





DRCC #: 21-5256B **DATE:** July 12, 2022

PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

Latest Submission Received: July 6, 2022

Applicant:

Sunoco Pipeline L.P. 100 Green Street Marcus Hook, PA 19061

Colleen.armstrong@energytransfer.com

Engineer:

STV Energy Services (STV) 205 West Welsh Drive Douglassville, PA 19518

<u>Christopher.antoni@stvinc.com</u> <u>Jim.mcginley@stvinc.com</u> Edward.weirsky@stvinc.com

Project Location:

Road	Municipality	County	Block(s)	Lot(s)
N.J. State Highway Route No. 29/ Jacobs Creek Road	Hopewell		99.01	6, 9, 10
	Township		427	1
		Mercer	438	2
	Ewing		137	1, 1.01,
	Township			7
			437	3.01

Jurisdictional Determination:

Zone A	Major	Nongovernmental

Subject to Review for:

Drainage	Visual	Traffic	Stream Corridors
X	X	X	X

THIS STAFF REPORT IS ISSUED AS A GUIDE TO APPLICANTS IN COMPLYING WITH DRCC REGULATIONS. IT IS NOT AN APPROVAL. NO

PO BOX 539 S'

STOCKTON, NJ 08559 www.nj.gov/dep/drcc/

609-397-2000

PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

CONSTRUCTION SHALL BEGIN UNTIL A CERTIFICATE OF APPROVAL HAS BEEN ISSUED.

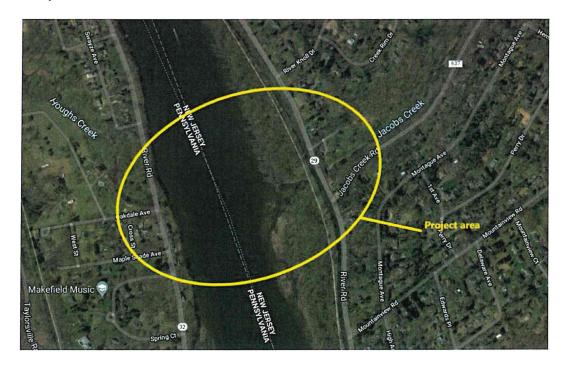
Documents Received: Permit Plans (24 sheets) dated April 17, 2020, revised April 12, 2021, prepared by STV; Sediment and Erosion Control Plan (1 sheet) dated April 17, 2020, prepared by STV; Lease Agreement between the N.J. Department of Conservation and Sun Pipeline Co. (8 pages), dated June 6, 1956; Summary of Project Review for NJDEP/SHPO (16 pages) dated December 16, 2021, prepared by E2 Project Management, LLC; NJDEP Freshwater Wetland General Permit 2 and Individual Flood Hazard Permit (240 pages), dated April 2020, Stream Corridor Exhibit (2 sheets) dated May 4, 2022; submitted by STV.

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Staff comments continued below.

The application is complete and shall be presented to the Commission for their action with a staff recommendation of approval at the July 20, 2020, meeting, based upon the following analysis:

Existing Conditions: The project area is the location where the Sunoco Pipeline L.P. (SXL) 14-inch welded steel high-pressure petroleum pipeline that transports product from SXL's Twin Oaks, Pennsylvania terminal to their Newark, New Jersey, facility crosses the Delaware River. The pipeline crosses the Delaware River at Upper Makefield Township in Bucks County, Pennsylvania, and enters New Jersey near the confluence of Jacobs Creek and the Delaware River in Ewing and Hopewell Townships, Mercer County.



PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

In the existing condition, the existing pipeline is located within the stream beds of the Delaware River and Jacobs Creek. The pipeline travels across the Delaware River, then proceeds up the Jacobs Creek streambed, through a large concrete and stone arch culvert, which supports the Delaware and Raritan Canal and N.J. State Highway Route No. 29 (Route 29).

The project area is located near the confluence of the Delaware River and Jacobs Creek. At this location, the pipeline is within the stream bed of Jacobs Creek and runs parallel to the creek. The Delaware and Raritan Canal parallels the Delaware River and Route 29 at this location, with Jacobs Creek bisecting them within a 24-foot-wide rock and concrete arch culvert. The pipeline is exposed for a total length of 301 feet within Jacobs Creek; 169 feet within the culvert, 3 feet upstream, and 129 feet downstream of the culvert. The creek bed is located approximately 30 to 35 feet below the Route 29 highway and canal surface.



The project area, which the applicant's submission indicates comprises a total area of 4.42 acres, is located within Commission Review Zone A and within the Delaware and Raritan Canal Historic District.

The Commission has reviewed applications relating to the SXL pipeline on two occasions. On June 20, 2018, the applicant obtained a General Permit No. 1, which authorized emergency repair work at the site to replace a washed-out section of pipeline located in Jacobs Creek, Hopewell Township (DRCC# 18-5356). On September 20, 2019, the applicant obtained a General Permit No. 1, which modified the previous general permit in that the applicant was required to drill a geotechnical boring for the purpose of obtaining soil samples (DRCC# 19-5256A).

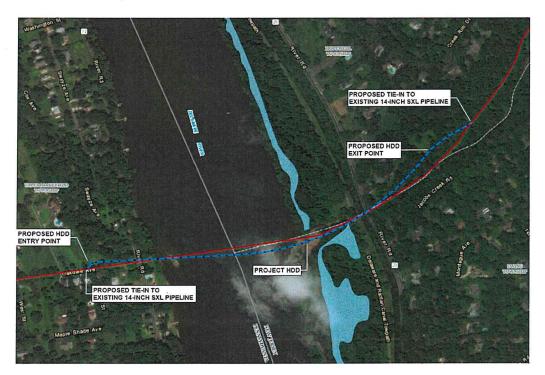
PROJECT NAME: Sunoco Jacobs Creek Pipeline Replacement

Proposed Project: The applicant proposes to install approximately 2,500 feet of pipeline across the Delaware River and then up Jacobs Creek to replace the portion of exposed pipeline using horizontal directional drill (HDD) installation techniques. The proposed HDD installation would consist of a 14-inch pipeline that will be located approximately 35 to 40 feet below the Delaware and Jacobs Creek stream beds, the concrete arch culvert, which supports the Delaware and Raritan Canal and Route 29, and approximately 75 to 85 feet under the canal and Route 29.

Examining the proposed route from Pennsylvania to New Jersey in a west-to-east direction, the proposed HDD would cross under Pennsylvania Route 32/River Road, the Delaware River, Jacobs Creek and the concrete culvert that supports Route 29 and the Delaware and Raritan Canal.

The proposed HDD would be installed from both the Pennsylvania and New Jersey sides of the Delaware River. On the Pennsylvania side, the HDD entry point would be located on a private residential property. Two 1,250-foot HDD pipeline strings will be assembled and tested within the above private residential area, and an additional residential/farm property. The Pennsylvania residential area and residential farm property would be accessed via Oakdale Avenue.

On the New Jersey side of the Delaware River, the HDD exit point would be located on what is referred to by the applicant as the "Gristmill property" (i.e. Somerset Roller Mills site). Access to the Gristmill property would be through a residential property off Creek Rim Drive and the existing Gristmill driveway located off Route 29. The contractor proposes to travel down the driveway and continue around the back of another private residence on the same property. Large construction equipment would use an additional access location at a private residence located on Creek Rim Drive.



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The proposed HDD would be tied into the existing pipeline using trench installation techniques located landside and outside of Jacobs Creek and the Delaware River. On the New Jersey side of the Delaware River, the HDD installation would be tied in on the Grist Mill property, while on the Pennsylvania side it would be tied in at Oakdale Avenue.

The entire length of the abandoned pipeline from the location of the new tie in locations would then be grouted in place. Upon completion of the grouting, approximately 350 feet of the exposed abandoned/existing pipeline would be removed from Jacobs Creek and the remaining existing/abandoned pipeline would remain in place. Jacobs Creek would be dammed off using sandbags or a port-a-dam to allow access into the stream and to the exposed pipe, which would be cut and capped at this location. Access to the western end of the exposed pipe will be made along the existing Delaware and Raritan Canal State Park multiuse trail down an existing cleared embankment to the confluence of the Delaware River and Jacobs Creek. Once the exposed pipeline ends have been cut, the cut pipeline would be pulled through the culvert onto the Gristmill property where it would then be cut into 20-foot joints and placed into roll-offs, which would be hauled offsite for disposal. All exposed pipeline removal activities would occur on the New Jersey side of the Delaware River.

The applicant's submission indicates that, as directed by NJDEP, the scour hole under the existing pipe would not be filled. Upon removal of the existing pipeline, construction disturbance would be restored and no further impacts to Jacobs Creek are proposed. The applicant's submission indicates that, pursuant to direction from NJDEP, a tree clearing moratorium from April 1 to August 31 would be enacted to protect nesting birds. Also, as directed by NJDEP, in-stream work would not take place between March 1 and June 30 to protect anadromous fish.

The applicant proposes to access the project site from the Delaware and Raritan Canal State Park from Bernard Drive in Ewing Township northward along the multiuse trail to Jacobs Creek, from Creek Rim Drive in Hopewell Township down to Jacobs Creek, and from Route 29 into the Gristmill property.

The applicant's submission indicates that the project would result in the creation of 29,426 square feet (0.67 acre) of impervious surface coverage in the form of temporary gravel construction entrances and laydown areas, which would be in place for the duration of construction, which is estimated to be four months. The project would also result in the disturbance of 4.42 acres of land.

Stream Corridor: Pursuant to N.J.A.C. 7:45-9.1, "Each project within Zone A of the Review Zone shall be subject to review by the Commission for stream corridor impact if the project includes a portion of a stream corridor, as defined at N.J.A.C. 7:45-1.3." The pipeline replacement will take place within the stream bed of Jacobs Creek, a Commission regulated stream, which runs under the canal. Therefore, this project is subject to stream corridor impact review and the applicant is required to meet the compliance standards of N.J.A.C. 7:45-9.

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As Jacobs Creek drains to the Delaware and Raritan Canal State Park, the Commission defines "stream corridor" to mean Jacobs Creek, the 100-year floodplain associated with Jacobs Creek, and all the land within a 100-foot buffer adjacent to the 100-year flood line associated with Jacobs Creek. The applicant has provided a Delaware and Raritan Canal Commission exhibit. The 100-year floodplain delineation line has been obtained from the FEMA Flood Insurance Rate Map (FIRM) Number 34021CO113F, last revised July 20, 2016. Commission staff has determined that an appropriate stream corridor delineation has been submitted.

The existing stream corridor is currently made up of a mixture of upland vegetation primarily and undergrowth of multifloral rose and a variety of tree species. The applicant has also submitted a tree survey data for the proposed project.

The applicant is proposing intrusions within the Commission stream corridor area. Therefore, this project will be subjected to a stream corridor impact review as per N.J.A.C. 7:45-9.1(a). Impacts to the Commission stream corridor include land grading, which appears to be somewhat temporary in nature. Additional impacts will include the proposed installation and removal of existing pipeline across the Delaware River and up Jacobs Creek, to replace the portion of exposed pipeline. A portion of this disturbance will be by using HDD installation techniques and a portion will be trenched. A total disturbance of 2.74 acres including existing easements (0.21 acre), proposed permanent easements (0.79 acre) and temporary workspace (1.74 acres) within the stream corridor. Construction of new structures, regrading and removal of vegetation are all considered to be prohibited uses in accordance with N.J.A.C. 7:45-9.3(a).

The applicant has suggested that portions of the proposed disturbances within the stream corridor could be considered a conditional use. Pursuant to the provisions of N.J.A.C. 7:45-9.4(a)7, underground utility transmission lines may be permitted, as a conditional use, if the applicant demonstrates to the satisfaction of the Commission that the proposed use complies with the Master Plan. The 14-inch diameter pipeline will be installed within the stream corridor to provide transport of petroleum from SXLs Twin Oaks, Pennsylvania terminal to their Newark facility. A portion of the pipeline installation will be directionally drilled to minimize disturbance of sensitive land.

Based on the submitted application, a 4-foot-wide trench excavation will be required for the installation of 14-inch pipe resulting in 1,580 square feet of land disturbance within the stream corridor. The proposed work will take place during periods of low flow in accordance with soil erosion and sediment control practices approved by the United States Soil Conservation Service and the State Soil Conservation Committee and in a manner that will not impede flows or cause ponding of water. Additionally, the pipe removal work will take place in accordance with these same measures.

If a use is prohibited and not a conditional use, the proposed prohibited use must be removed from the project, or a waiver must be submitted. The applicant is requesting a waiver of strict adherence from the stream corridor impact review standards pursuant to the criteria at N.J.A.C. 7:45-12(a)1 with justifications. Based on the nature of the

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proposed work, the applicant does not anticipate impacts to the stream corridor's ability to function as a buffer for the water course's ecological health and natural area. This determination is based on the following design criteria incorporated in the project design:

- The entirety of the proposed project area will be restored to original grade and restored utilizing native seed mixes upon completion of the pipeline installation;
- Tree removal within the Commission stream corridor has been reduced to the greatest extent possible limiting tree removal within the corridor to only areas needed along the proposed pipeline easement. Additional protections are being added (temporary fencing) around those trees along the stream corridor that are not being removed but in proximity to the work area; and
- Removal of 316 feet of currently exposed cased petroleum pipeline from Jacobs Creek will be done during periods of low flow, without excavation in the stream bed, will result in the removal of an existing impediment and allow for additional flow of water through the existing canal culvert. Pipeline removal will be accomplished by purging the existing line and grouting after tie-in of the new line to the existing. At which point, the exposed line will be cut into sections, pulled though the culvert and loaded onto trailers for offsite removal. As directed by NJDEP, no instream excavation is proposed.

Commission staff determines that the proposed underground utility transmission lines may be permitted, as a conditional use pursuant to N.J.A.C. 7:45-9.4(a)7. In addition, Commission staff believes that the applicant has justified and met the criteria for a waiver of strict adherence from the stream corridor impact review standards pursuant to N.J.A.C. 7:45-12(a)1.

Stormwater Impact: Pursuant to N.J.A.C. 7:45-8.1, the Commission shall review major projects within Review Zone A for stormwater runoff and water quality impact. The application states that the project will result in 29,426 square feet (0.68 acre) of new impervious surface. The Commission definition of "impervious surface" at N.J.A.C. 7:45-1.3, includes gravel surfaces. All the proposed impervious surface consists of temporary gravel construction entrances and laydown areas that will be in place for the duration of construction, which is estimated to be about four months. These areas are proposed to be revegetated upon completion of the project. As such, the stormwater management requirements of N.J.A.C. 7:45-8 will be met. However, Commission staff recommends that approval of the project should be conditioned upon the submission of an As-Built plan upon completion of the project to verify compliance with the revegetation requirement for the temporary graveled surfaces located in the construction entrances and laydown areas.

Visual, Historic & Natural Quality Impact: N.J.A.C. 7:45-10.2(a) directs that the Commission shall review all projects in Zone A to determine if the project is in accord with the goals for the Delaware and Raritan Canal State Park as defined in the park's Master Plan. The visual, historic and natural quality impact review is intended to ensure

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that development within Zone A is not harmful to the character of the environmental types identified in the Master Plan as comprising the park.

The project is located in a Transportation canal environment as defined in the Master Plan. The Transportation canal environment is characterized at N.J.A.C. 7:45-10.2(a) as an area in which the canal park is squeezed between roads, railroads, and river or stream. The Master Plan at Page 14 notes that the canal is closely paralleled by the "railroad path" (now multiuse trail) to the west and Route 29 to the east for all of this section and that the Delaware River is very close to the path for nearly the entire length. The riverbank and the canal bank next to Route 29 are lined with trees and shrubs, sometimes quite densely. The plan also notes the presence of the historic community of Titusville and Washington Crossing State Park to the north of the project site, and a large field south of the Mercer/Hunterdon County line, which the plan anticipated in 1989 would serve as a venue for special events and the maintenance headquarters of the western section of the park. The plan also called for the creation of a staging area for a canal boat ride into Lambertville and recommended the creation of additional access areas to the park and additional paths throughout the section.

Commission staff observes that the SXL pipeline, which was constructed starting in 1956, preceded the creation of the Delaware and Raritan Canal State Park by 18 years, and that the applicant does not propose to expand the pipeline or create any new aboveground structures within the boundaries of the park. Staff also observes that the plan did not mention or call for the removal of the existing pipeline when it was adopted in 1989. Therefore, staff determines that the replacement of an existing pipeline is not inconsistent with the Master Plan.

N.J.A.C. 7:45-10.3(a) directs that major projects are discouraged in the Transportation canal environment of the Delaware and Raritan Canal State Park. Where major projects are proposed for the above-cited environments, the Commission shall not grant approval unless specific compensatory measures that mitigate the project's potential for harmful impact on the park are provided. Examples of such compensatory measures might include, but are not limited to:

- 1. Increased setback distances from the park;
- 2. At least 40% of the total project site be made available for open space for recreation or conservation purposes, and location of that open space be as near the park as possible;
- 3. Extensive landscape development;
- 4. Development of circulation patterns that direct traffic away from the park;
- 5. Noise abatement measures;
- 6. Improvements to adjoining portions of the park;
- 7. Signs or other means of interpreting any historic structures or districts relating to the site.

The applicant seeks a waiver of strict adherence with this provision of the visual, historic and natural quality impact review standards pursuant to the criteria at N.J.A.C. 7:45-12.7(a), which states that "[P]rojects otherwise subject to the visual, historic and natural

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quality standards may be waived from strict adherence to such standards, if the applicant establishes to the satisfaction of the Commission that visual screening will continue to exist in the future, and;

- 1. Wherever possible, natural terrains, soils and vegetation are to be preserved, and new vegetation and soils are to be native to the environment in which they are placed; and
 - i. The topography of the land screens the entire project from the view of a person in the park;
 - ii. Existing structures screen the entire project from the view of a person in the park; or
 - iii. Vegetation located on preserved land screens the entire project from the view of a person in the park during the winter season."

The applicant states that the proposed project meets the criteria to be eligible for waiver because:

- All natural terrain and soils will be replaced in-kind, which would result in no impact to these resources;
- The applicant has, wherever possible, preserved native vegetation through the reduction of temporary workspace and the minimization of tree clearing. Any disturbed areas would be reseeded with a DEP-approved native seed mix to preserve the integrity of the area; and
- The area proposed to be cleared would not be visible from the Delaware and Raritan Canal State Park. Existing trees located along Route 29, existing structures, and relative elevation are such that visual impacts to the park are unlikely.

Commission staff determines that the applicant has met the criteria for a waiver of strict adherence with the provisions of N.J.A.C. 7:45-10.3(a).

The provisions of N.J.A.C. 7:45-10.4(b), which discourage minor projects proposed to be located in those portions of Zone A that comprise the Transportation canal environments of the park and authorize the Commission to require as a condition of approval specific compensatory measures, are inapplicable to the proposed project, which as noted above, is a "major project."

N.J.A.C. 7:45-10.4(a) directs that projects in Review Zone A shall be set back from the Delaware and Raritan Canal State Park sufficiently far so that the winter visual and natural quality of the park is not adversely affected. In the Transportation canal environment, all structures shall be located 200 feet or more from the park.

The applicant has submitted a request for a waiver of strict adherence with the setback requirement pursuant to the criteria at N.J.A.C 7:45-12.7(c), which states that projects may be waived from the setback requirement if they are additions to a pre-existing nonconforming structure and the Commission determines that the proposed addition will not further impact on the character of the park.

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The applicant notes that the pipeline is a pre-existing nonconforming structure, which pre-dates the creation of the Delaware and Raritan Canal State Park by 18 years. Second, the applicant notes that the location of any areas to be cleared within the 200-foot setback would not be visible from the park and would accordingly not further impact the character of the park. Finally, the applicant asserts that the proposed project would, in the proposed condition, improve the visual aesthetic of the park when compared with the existing condition. The applicant observes that in the existing condition, the current pipeline is exposed within the mouth of Jacobs Creek and is visible from the park. In the proposed condition, the pipeline would be removed.

Commission staff determines that the applicant has met the criteria for a waiver of strict adherence with the provisions of N.J.A.C. 7:45-10.4(a).

N.J.A.C. 7:45-10.4(b) directs that projects in Review Zone A shall maintain a reasonable height and scale relationship to nearby structures or vegetation. In the Transportation canal environment, structures shall be limited to a height of 40 feet above existing grade where existing vegetation does not provide adequate winter screening. The applicant's submission indicates that that the project proposes no new aboveground structures; therefore, the project is in compliance with this requirement

N.J.A.C. 7:45-10.4(c) directs that for projects in Review Zone A, the exterior appearances of a project shall be in keeping with the character of the Delaware and Raritan Canal State Park's individual environments. Specifically, colors used shall harmonize with the man-made or natural surroundings of the project and shall be typical of colors found in the park environment. Building materials and texture shall harmonize with the surrounding man-made and natural materials. The applicant's submission indicates that since the project proposes no aboveground structures, the materials and colors proposed by the project would pose no visual impact. Accordingly, Commission staff determines that the project is in compliance with this requirement.

N.J.A.C. 7:45-10.4(d)1 directs that within Review Zone A, any electric, telephone, cable television, and other such lines and equipment shall be underground or otherwise not visible from the Delaware and Raritan Canal State Park. Waivers may be requested from the Commission for aboveground terminals, transformers, and similar facilities, and for the extension of service in an existing development. The applicant's submission indicates that the project will be located below ground and would therefore not be visible from the Delaware and Raritan Canal State Park. The applicant's submission also notes that the majority of the limit of disturbance is located so that existing visual screening made up of trees within the park and along Route 29, as well as existing structures and topographical location of the proposed work, will shield any visual impacts of the proposed work and clearing from the park. Therefore, the project is in compliance with this requirement.

N.J.A.C. 7:45-10.4(d)2 directs that, within Review Zone A, any exposed storage areas, out-buildings, exposed machinery service areas, parking lots, loading areas, utility buildings, and similar ancillary areas and structures shall either be completely concealed

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from view from the park or designed to minimize their visual impact on the park. The project would be constructed below ground and does not propose any ancillary areas or structures. Therefore, the project is in compliance with this requirement.

The provisions of N.J.A.C. 7:45-10.4(d)3 and 4, respectively, which regulate the location and dimensions of commercial signs and outdoor advertising structures, are inapplicable to the proposed project.

N.J.A.C. 7:45-10.4(d)5 directs that wherever possible, natural terrains, soils, stones, and vegetation should be preserved, and that new vegetation, stones, and soils should be native to the environment in which they are placed. The applicant's submission states that all natural terrains and soils will be replaced in-kind and that wherever possible native vegetation has been preserved. The applicant further notes that temporary workspace has been reduced to the greatest extent possible and tree clearing has been minimized wherever possible. Disturbed areas will be reseeded with a DEP-approved native seed mix to preserve the integrity of the area. Commission staff observes that this native seed mix was directed to be planted in lieu of woody vegetation. Therefore, the project is in compliance with this requirement.

N.J.A.C. 7:45-10.4(d)6 directs that projects that are located in any officially designated Federal, State or local historic district or site shall be assessed for their impact upon that district or site. Recommendations to avoid, minimize, and/or mitigate the impacts of a project on a listed property shall be made in consultation with the New Jersey Historic Preservation Office (SHPO) and based upon the <u>United States Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings, as supplemented or amended, and incorporated herein by reference, in accordance with N.J.A.C. 7:4-8 of the New Jersey Register of Historic Places Rules. Commission staff will consult with the SHPO, as needed.</u>

A review of the project area Block and Lots in the NJDEP SHPO "LUCY" online cultural resources inventory viewer indicates that the project will traverse the Delaware and Raritan Canal Historic District, which encompasses the canal bed and all structures within 300 feet of the centerline of the canal. Specifically, the proposed HDD would pass underneath the arch culvert, which supports the Delaware and Raritan Canal. The culvert, comprising a concrete arch and wall and partial stone interior, is an original element of the canal's design and the largest culvert on the canal.

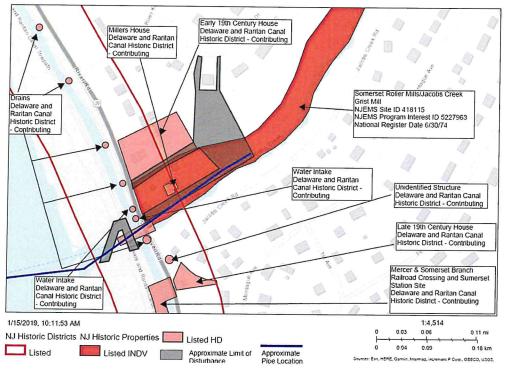
In addition, the project would be located on what the applicant's submission refers to as the "Gristmill Property" (Block 99.01, Lot 6). This is an historic property; namely, the site of the Somerset Roller Mills (Jacobs Creek Grist Mill), a former gristmill complex originally built in the early 18th century that was placed on the National Register of Historic Places on November 19, 1974, for its significance in architecture, commerce, and industry. It is believed that Isaac Smith received a 1,000-acres land grant in 1726 from the English Crown, and shortly thereafter built the first house (Miller's House) and mill on the site, to ship processed grain down the Delaware River to Philadelphia. It is believed that that the mill provided flour to the Continental Army during the American

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Revolution. The opening of the Delaware and Raritan Canal next to the mill in 1834 greatly improved its business, leading to its expansion in the 1840s. The mill continued in operation until the Great Depression, by which point modern automated mill technology rendered it obsolete. The image below, taken from the applicant's submission using NJ-Geoweb and the "LUCY" online viewer, shows the location of surrounding historic district boundaries and historic sites and structures in relation to the proposed project.



Finally, based upon its topographic setting as a well-drained landform adjacent to a tributary of Jacobs Creek, the project area is consistent with current archaeological models for locations containing Native American archaeological deposits.

The applicant's submission indicates that the applicant caused to be conducted a Phase IA archaeological assessment of the project site in September 2020 and prior to the submission of the project application to the Commission. The report was submitted to the SHPO for review. The applicant's consultant defined areas of archaeological sensitivity and proposed the implementation of an archaeological monitoring and protection plan for the proposed project with limited subsurface testing only in areas of open cut excavation, such as the access/egress point for the HDD and an open trench connecting the access/egress point to the existing pipeline. The SHPO concurred with these recommendations and requested that vibration monitoring be conducted on the mill building and the Miller's House to ensure the HDD did not physically impact those structures.

The applicant also caused to be conducted a Phase IB subsurface investigation in October 2021 in compliance with their NJDEP Freshwater Wetlands Permit special conditions. The survey report was submitted to the SHPO for review under that permit. The

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applicant's consultant states that on November 12, 2021, the SHPO indicated via email they concurred with the consultant's findings.

Additionally, the applicant has submitted an email, transmitted by the SHPO dated October 27, 2020, which states that "[T]his information is provided as informal notes to you and does not constitute identification level cultural resources survey under Section 106 of the National Historic Preservation Act or other law or regulation. These notes do not constitute project review under any state or federal law. The absence of previously identified cultural resources does not imply that there are no eligible historic properties in the requested area. Further identification of cultural resources may be required under one or more historic preservation review processes depending on project funding, licensing, or permitting."

Therefore, to ensure compliance with N.J.A.C. 7:45-10.4(d)6 and implement any SHPO recommendations to avoid, minimize, and/or mitigate the impacts of the project on the historic resources cited hereinabove, Commission staff recommends that any certificate of approval for the project be conditioned upon State Register review by the SHPO for compliance with the "New Jersey Register of Historic Places Act."

Traffic Impact: N.J.A.C. 7:45-11.1 directs that the Commission shall review major projects in Zone A of the Review Zone, or major projects in Zone B of the Review Zone that are within one mile of any portion of the Delaware and Raritan Canal State Park and have direct access to a road that enters Zone A, for their traffic impact on roads that enter the Park or any part of Zone A.

The applicant has submitted a statement which notes that the project is a replacement of existing pipeline, and that the proposed project would not require additional inspections. Therefore, no additional traffic is anticipated within the Delaware and Raritan Canal State Park or surrounding area after the completion of the proposed project.

Commission staff agrees with the submitted traffic assessment; and therefore, the project is in compliance with this requirement.

NJWSA Conditions: Commission staff observes that the Delaware and Raritan Canal is a water transmission complex maintained by the New Jersey Water Supply Authority (NJWSA) and used as a raw water source for several water companies downstream. As such, the applicant is advised that any certificate of approval for the project will include conditions from the NJWSA. The applicant is advised that NJWSA reviewed the project staff report for DRCC #20-5256B dated September 28, 2020. The NJWSA retained the consulting services of Schnabel Engineering to perform a review of the project's design and the contractor's means and methods as it related to potential impacts upon the water transmission complex of the Delaware and Raritan Canal.

An August 30, 2021, review completed by Schnabel Engineering of the design and construction documents concluded the following:

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Overall, the HDD bore path layout and design calculations utilize geometric
characteristics that are compliant with industry guidelines for good practice. It is
noted that the compounded curve created by the horizontal and vertical curvature of
the steel pipe alignment, and the planned entry and exit angles are close to the limit
of industry guidelines. The calculations show results within expected ranges for this
type and scale of HDD installation.

- The depth of the proposed HDD bore path and its position deep within competent, high Rock Quality Designation (RQD) bedrock indicate a low likelihood the HDD installation would negatively impact the Canal and associated NJWSA operations.
- Removal of the existing pipe will result in a trench in the bedrock that may gradually fill with sediment transported by the stream during higher flow periods. It is estimated that this proposed condition will have no impact on the stability of the bridge/culvert founded on the bedrock; however, the contractor should not be permitted to cause fracturing of the foundation bedrock during pipe removal.
- NJWSA should review the contractor's Frac Out Contingency Plan submittal (aka Inadvertent Release Plan, Drill Fluid Management and Contingency Plan, etc.) with regard to proposed mitigation, monitoring, notification, containment, cleanup, and remediation measures where they could potentially impact NJWSA infrastructure.
- The construction specifications should require the HDD contractor to provide the NJWSA representative with guidance data on the position and trajectory of the HDD bore, as well as records of the HDD installation, prior to drilling under the Canal to confirm the planned path is being followed and the HDD operation is performing as expected.

Based upon the recommendations of Schnabel Engineering and the NJWSA review, NJWSA will require the certain conditions to be satisfied, and Commission staff recommends that Commission approval of the project be conditioned upon compliance with those conditions, which are enumerated hereinbelow.

Staff Recommendation: Staff recommends approval, conditioned upon the following:

- The construction specifications shall require the HDD contractor to provide the NJWSA representative with guidance data on the position and trajectory of the HDD bore, as well as records of the HDD installation prior, to drilling under the Delaware and Raritan Canal to confirm the planned path is being followed and the HDD operation is performing as expected;
- 2. Construction specifications for the HDD operation, which should include minimum requirements for construction submittals and required content in the Inadvertent Release Plan, shall be provided to the NJWSA for review and approval. The specifications should indicate that the submittals should be provided to NWJSA for review and approval prior to construction;

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3. The existing pipeline within Jacobs Creek is proposed to be removed within the extent of the Jacobs Creek bridge/culvert carrying the Delaware and Raritan Canal. The bridge/culvert's foundations are bearing on rock. The contract documents shall include requirements that the contractor is not permitted to use rock breaker (i.e. demo hammer) equipment to chip out the rock adjacent to the pipe, which may cause additional fracturing of the bridge/culvert foundation rock. The contract documents should also require the contractor to submit means/methods of pipe removal for review and approval by NJWSA prior to construction;

- 4. The applicant shall obtain the approval of the NJWSA regarding the means and methods for the HDD activities associated with the project. This is anticipated to be a contractor submittal at a time after contract award:
- 5. The applicant shall notify the NJWSA of the start of construction to allow for ample time for scheduling a representative to be on site during pilot hole drilling;
- 6. The applicant shall provide the contractor's Drill Fluid Management and Contingency Plan (Inadvertent Release Plan, Frac Out Plan, etc.) to NJWSA for review and approval;
- 7. The applicant shall obtain any required Transmission Complex Utility Lease Agreement from the NJWSA;
- 8. In the event of any frac-out clean-up activities, access to State-owned land shall be in accordance with the existing lease;
- 9. Visual inspections (frac-walks) for frac-outs shall be performed:
- 10. In the event of a "Loss of Returns" occurrence and in any event that drilling fluid reaches the surface at any point in the drilling operation, NJWSA shall be notified;
- 11. If frac-out occurs within NJWSA jurisdiction, drilling shall be stopped, all cleanup procedures shall be followed, NJWSA shall be notified, and drilling operations shall only resume with NJWSA approval;
- 12. NJWSA shall be allowed to verify that the equipment listed in the means and methods are onsite as stated (or notify NJWSA of substitutions/changes);
- 13. The NJWSA's consultant (Schnabel Engineering) will provide full-time onsite inspection; and
- 14. The applicant shall submit to the Commission a complete set of As-Built plans upon completion of the project to verify compliance with the revegetation requirement for the temporary graveled surfaces located in the construction entrances and laydown areas related to the project.

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Sincerely,

John Hutchison Executive Director

Joh State

c. Robin Madden, Chief of Operations, DEP State Parks, Forests and Historic Sites Patricia Kallesser, Superintendent, Delaware and Raritan Canal State Park Jesse West-Rosenthal, Ph.D., Historic Preservation Specialist 2, DEP/SHPO Adria Wentzel, DEP Office of Leases and Concessions Judeth Yeaney, DEP Legal Services & Stewardship Darin Shaffer, Chief Engineer, NJWSA Michael Sellar, Facility Manager, Delaware and Raritan Canal, NJWSA Julie Shelley, Property and Permit Administrator, NJWSA Mercer County Planning Board Ewing Township Planning Board Hopewell Township Planning Board

EWING TOWNSHIP OPEN PUBLIC RECORDS ACT REQUEST FORM

OPEN Recall 4/18/2

2 Jake Garzio Drive, Ewing, NJ 08628 Phone: 609-538-7609/Fax: 609-771-0480 kmacellaro@ewingnj.org



Important Notice

The last page of this form contains important information related to your rights concerning government records. Please read it carefully.

First Name Anneke MI L.W. Last Name van Rossum E-mail Address anneke@delawareriverkeeper.org	Maximum Authorization Cost \$
anneke@delawareriyerkeeper org	_
TE-mail Address	Select Payment Method
025 Canal St. Suita 2704	Cash Check Money Order
Thailing / tear occ	Fees: Letter size page - \$.05 per
City Bristol State PA Zip 19007	page Legal size page - \$.10 per
Telephone 610-246-6165 FAX	page Other materials (CD, DVD,
Preferred Delivery: Up US Mail Inspect Fax E-mail	etc) – actual cost of material Delivery: Delivery / postage fees
If you are requesting records containing personal information, please circle one: Under penalty of N.J.S.A. 2C:28-3, I certify that I HAVE / HAVE NOT been convicted of any indictable offense under the laws of New	additional depending upon delivery type.
Jersey, any other state, or the United States.	Extras: Special service charge
Signature Annaka van Rossum Date 08/09/2022	dependent upon request.
Record Request Information: Please be as specific as possible in describing the records being requestive preferred method of delivery will only be accommodated if the custodian has the technological means a be jeopardized by such method of delivery.	
The Delaware Riverkeeper Network requests electronic PDF copies of the Jar Relocation Project application submitted to the township by Sunoco, as well a applications, approvals, maps, correspondences, emails, or other documents received by the township between January 1, 2020 and the present.	as any reports, supplementary related to this project