These are records DRN received from the New Jersey Water Supply Authority from our OPRA request on September 27, 2022 regarding the Jacobs Creek Pipeline Relocation Project.
**NEW JERSEY WATER SUPPLY AUTHORITY**

**OPEN PUBLIC RECORDS ACT REQUEST FORM**

770 Bear Tavern Road, Ewing, NJ 08628
Tel: (609) 530-3999  
info@njwsa.org

**OCT 3, 2022 at 10:47**

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**Important Notice**

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

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### Requestor Information – Please Print

<table>
<thead>
<tr>
<th>First Name</th>
<th>Anneke</th>
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<tbody>
<tr>
<td>MI</td>
<td>LW</td>
</tr>
<tr>
<td>Last Name</td>
<td>van Rossum</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E-mail Address</th>
<th><a href="mailto:anneke@delawarengverksperger.org">anneke@delawarengverksperger.org</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mailing Address</td>
<td>925 Canal St, Suite 3701</td>
</tr>
<tr>
<td>City</td>
<td>Bristol</td>
</tr>
<tr>
<td>State</td>
<td>PA</td>
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<tr>
<td>Zip</td>
<td>19007</td>
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<tr>
<td>Telephone</td>
<td>215-369-1188</td>
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<td>ext 106</td>
<td>FAX</td>
</tr>
<tr>
<td>Preferred Delivery</td>
<td>Pick Up US Mail On-Site Fax X</td>
</tr>
</tbody>
</table>

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 Jersey, any other state, or the United States.

Signature: Anneke van Rossum  
Date: 9/29/2022

### Payment Information

- Maximum Authorization Cost: $0

- Select Payment Method
  - Cash
  - Check
  - Money Order

- Fees:
  - Letter size pages - $0.05 per page
  - Legal size pages - $0.07 per page
  - Other materials (CD, DVD, etc) – actual cost of material

- Delivery: Delivery / postage fees additional depending upon delivery type.

- Extras: Special service charge dependent upon request.

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**Record Request Information:** Please be as specific as possible in describing the records being requested. Also, please note that your preferred method of delivery will only be accommodated if the custodian has the technological means and the integrity of the records will not be jeopardized by such method of delivery.

The Delaware Riverkeeper Network requests electronic PDF copies of all documents submitted to the New Jersey Water Supply Authority by Sunoco regarding the Jacobs Creek Pipeline Relocation project including meeting minutes, correspondences, emails, reports, construction dates, permits, applications, approvals, and construction schedule, or other documents related to this project received by the New Jersey Water Supply Authority between August 1 and present.

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<td>Deposit Date</td>
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</tbody>
</table>

**Disposition Notes**

Custodian: If any part of request cannot be delivered in seven business days, detail reasons here.

- In Progress - Open
- Denied - Closed
- Filled - Closed 10/11/22
- Partial - Closed

**Tracking Information**

- Tracking #: 10/1/22 10/11/22
- Total Pages: 104
- Records Provided: see attached

**Final Cost**

- Total
- Deposit
- Balance Due
- Balance Paid

- Custodian Signature: Julie Selesky
- Date: 10/11/22
- Due: 10/13/22
DEPOSITS

The custodian may require a deposit against costs for reproducing documents sought through an anonymous request whenever the custodian anticipates that the documents requested will cost in excess of $5 to reproduce.

Where a special service charge is warranted under OPRA, that amount will be communicated to you as required under the statute. You have the opportunity to review and object to the charge prior to it being incurred. If, however, you approve of the fact and amount of the special service charge, you may be required to pay a deposit or pay in full prior to reproduction of the documents.

YOUR REQUEST FOR RECORDS IS DENIED FOR THE FOLLOWING REASON(S):
(To be completed by the Custodian of Records – check the box of the numbered exemption(s) as they apply to the records requested. If multiple records are requested, be specific as to which exemption(s) apply to each record. Response is due to requestor as soon as possible, but no later than seven business days.)

☐ Inter-agency or intra-agency advisory, consultative or deliberative material
☐ Legislative records
☐ Law enforcement records:
   ☐ Medical examiner photos
   ☐ Criminal investigatory records (however, N.J.S.A. 47:1A-3.b. lists specific criminal investigatory information which must be disclosed)
   ☐ Victims’ records
☐ Trade secrets and proprietary commercial or financial information
☐ Any record within the attorney-client privilege
☐ Administrative or technical information regarding computer hardware, software and networks which, if disclosed would jeopardize computer security
☐ Emergency or security information or procedures for any buildings or facility which, if disclosed, would jeopardize security of the building or facility or persons therein
☐ Security measures and surveillance techniques which, if disclosed, would create a risk to the safety or persons, property, electronic data or software
☐ Information which, if disclosed, would give an advantage to competitors or bidders
☐ Information generated by or on behalf of public employers or public employees in connection with:
   ☐ Any sexual harassment complaint filed with a public employer
   ☐ Any grievance filed by or against an employee
   ☐ Collective negotiations documents and statements of strategy or negotiating
☐ Information that is a communication between a public agency and its insurance carrier, administrative service organization or risk management office
☐ Information that is to be kept confidential pursuant to court order
☐ Certificate of honorable discharge issued by the United States government (Form DD-214) filed with a public agency
☐ Social security numbers
☐ Credit card numbers
☐ Unlisted telephone numbers
☐ Drivers’ license numbers
☐ Certain records of higher education institutions:
   ☐ Research records
   ☐ Questions or scores for exam for employment or academics
   ☐ Charitable contribution information
   ☐ Rare book collections gifted for limited access
   ☐ Admission applications
   ☐ Student records, grievances or disciplinary proceedings revealing a students’ identification
☐ Biotechnology trade secrets N.J.S.A. 47:1A-1.2
☐ Convicts requesting their victims’ records N.J.S.A. 47:1A-2.2
☐ Ongoing investigations of non-law enforcement agencies (must prove disclosure is inimical to the public interest) N.J.S.A. 47:1A-3.a.
☐ Public defender records N.J.S.A. 47:1A-5.k.
☐ Upholds exemptions contained in other State or federal statutes and regulations, Executive Orders, Rules of Court, and privileges created by State Constitution, statute, court rule or judicial case law N.J.S.A. 47:1A-9
☐ Personnel and pension records (however, the following information must be disclosed):
   - An individual's name, title, position, salary, payroll record, length of service, cæse of separation and the reason for such separation, and the amount and type of any pension received
   - When required to be disclosed by another law, when disclosure is essential to the performance of official duties of a person duly authorized by this State or the US, or when authorized by an individual in interest
   - Data contained in information which disclose conformity with specific experiential, educational or medical qualifications required for government employment or for receipt of a public pension, but not including any detailed medical or psychological information N.J.S.A. 47:1A-10

N.J.S.A. 47:1A-1
☐ "a public agency has a responsibility and an obligation to safeguard from public access a citizen's personal information with which it has been entrusted when disclosure thereof would violate the citizen's reasonable expectation of privacy.”
Burnett v. County of Bergen, 198 N.J. 408 (2009). Without ambiguity, the court held that the privacy provision "is neither a preface nor a preamble." Rather, "the very language expressed in the privacy clause reveals its substantive nature; it does not offer reasons why OPRA was adopted, as preambles typically do; instead, it focuses on the law's implementation." "Specifically, it imposes an obligation on public agencies to protect against disclosure of personal information which would run contrary to reasonable privacy interests."

Executive Order No. 21 (McGreevey 2002)
- Records where inspection, examination or copying would substantially interfere with the State's ability to protect and defend the State and its citizens against acts of sabotage or terrorism, or which, if disclosed, would materially increase the risk or consequences of potential acts of sabotage or terrorism.
- Records exempted from disclosure by State agencies' proposed rules.

Executive Order No. 26 (McGreevey 2002)
- Certain records maintained by the Office of the Governor
- Resumes, applications for employment or other information concerning job applicants while a recruitment search is ongoing
- Records of complaints and investigations undertaken pursuant to the Model Procedures for Internal Complaints Alleging Discrimination, Harassment or Hostile Environments
- Information relating to medical, psychiatric or psychological history, diagnosis, treatment or evaluation
- Information in a personal income or other tax return
- Information describing a natural person's finances, income, assets, liabilities, net worth, bank balances, financial history or activities, or creditworthiness, except as otherwise required by law to be disclosed
- Test questions, scoring keys and other examination data pertaining to the administration of an examination for public employment or licensing
- Records in the possession of another department (including NJ Office of Information Technology or State Archives) when those records are made confidential by regulation or EO 9.

Other Exemption(s) contained in a State statute, resolution of either or both House of the Legislature, regulation, Executive Order, Rules of Court, any federal law, federal regulation or federal order pursuant to N.J.S.A. 47:1A-9.a.

(Please provide detailed information regarding the exemption from disclosure for which you are relying to deny access to government records.
If multiple records are requested, be specific as to which exemption(s) apply to each record.)

REQUEST FOR RECORDS UNDER THE COMMON LAW
If, in addition to requesting records under OPRA, you are also requesting the government records under the common law, please check the box below.

A public record under the common law is one required by law to be kept, or necessary to be kept in the discharge of a duty imposed by law, or directed by law to serve as a memorial and evidence of something written, said, or done, or a written memorial made by a public officer authorized to perform that function, or a writing filed in a public office. The elements essential to constitute a public record are that it be a written memorial, that it be made by a public officer, and that the officer be authorized by law to make it.

☐ Yes, I am also requesting the documents under common law.

If the information requested is a "public record" under common law and the requester has a legally recognized interest in the subject matter contained in the material, then the material must be disclosed if the individual's right of access outweighs the State's interest in preventing disclosure.

Please set forth your interest in the subject matter contained in the requested material:

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Note that any challenge to a denial of a request for records under the common law cannot be made to the Government Records Council, as the Government Records Council only has jurisdiction to adjudicate challenges to denials of OPRA requests. A challenge to the denial of access under the common law can be made by filing an action in Superior Court.
1. All government records are subject to public access under the Open Public Records Act ("OPRA"), unless specifically exempt.

2. A request for access to a government record under OPRA must be in writing, hand-delivered, mailed, transmitted electronically, or otherwise conveyed to the appropriate custodian. N.J.S.A. 47:1A-5.g. The seven (7) business day response time does not commence until the records custodian receives the request form. If you submit the request form to any other officer or employee of the Name of Agency, that officer or employee must either forward the request to the appropriate custodian, or direct you to the appropriate custodian. N.J.S.A. 47:1A-5.h

3. Requestors may submit requests anonymously. If you elect not to provide a name, address, or telephone number, or other means of contact, the custodian is not required to respond until you reappear before the custodian seeking a response to the original request.

4. The fees for duplication of a government record in printed form are listed on the front of this form. We will notify you of any special service charges or other additional charges authorized by State law or regulation before processing your request. Payment shall be made by cash, check or money order payable to the Name of Agency.

5. **You may be charged a 50% or other deposit when a request for copies exceeds $25.** The Name of Agency custodian will contact you and advise you of any deposit requirements. You agree to pay the balance due upon delivery of the records. Anonymous requests in excess of $5.00 require a deposit of 100% of estimated fees.

6. Under OPRA, a custodian may deny access to a person who has been convicted of an indictable offense in New Jersey, any other state, or the United States, and who is seeking government records containing personal information pertaining to the person’s victim or the victim’s family. This includes anonymous requests for said information.

7. **By law, the Name of Agency must notify you that it grants or denies a request for access to government records within seven (7) business days after the agency custodian of records receives the request.** If the record requested is not currently available or is in storage, the custodian will advise you within seven (7) business days after receipt of the request when the record can be made available and the estimated cost for reproduction.

8. You may be denied access to a government record if your request would substantially disrupt agency operations and the custodian is unable to reach a reasonable solution with you.

9. If the Name of Agency is unable to comply with your request for access to a government record, the custodian will indicate the reasons for denial on the request form or other written correspondence and send you a signed and dated copy.

10. Except as otherwise provided by law or by agreement with the requester, if the agency custodian of records fails to respond to you within seven (7) business days of receiving a request, the failure to respond is a deemed denial of your request.

11. If your request for access to a government record has been denied or unfilled within the seven (7) business days required by law, you have a right to challenge the decision by the Name of Agency to deny access. At your option, you may either institute a proceeding in the Superior Court of New Jersey or file a complaint with the Government Records Council ("GRC") by completing the Denial of Access Complaint Form. You may contact the GRC by toll-free telephone at 866-850-0511, by mail at PO Box 819, Trenton, NJ, 08625, by e-mail at grc@dca.state.nj.us, or at their website at www.state.nj.us/grc. The Council can also answer other questions about the law. All questions regarding complaints filed in Superior Court should be directed to the Court Clerk in your County.

12. Information provided on this form may be subject to disclosure under the Open Public Records Act.
Please submit this to Treasury for Ch 51 approval.

Thanks,
Julie

From: Franciscus, James E <JAMES.FRANCISCUS>[redacted]
Sent: Wednesday, August 24, 2022 5:57 PM
To: Julie Shelley <jshelley@njwsa.org>
Cc: Weirsky, Edward J. <Edward.Weirsky>[redacted]; Wentzel, Adria <adria.wentzel@dep.nj.gov>; Paul Harenberg <PHarenberg@njwsa.org>; Kershner, Daniel A <DANIEL.KERSHNER>[redacted]
Subject: RE: Update on lease for Sunoco

Julie,

Attached is the signed form. Please confirm you have everything you need from us for the September board meeting. 

Thank you.

James

---

From: Franciscus, James E <JAMES.FRANCISCUS>[redacted]
Sent: Friday, August 19, 2022 3:15 PM
To: Julie Shelley <jshelley@njwsa.org>; Taliaferro, Kevin <Kevin.Taliaferro>[redacted]
Cc: Weirsky, Edward J. <Edward.Weirsky>[redacted]; Wentzel, Adria <adria.wentzel@dep.nj.gov>; Paul Harenberg <PHarenberg@njwsa.org>; Kershner, Daniel A <DANIEL.KERSHNER>[redacted]
Subject: Re: Update on lease for Sunoco

Julie,

Please email to Kevin Taliaferro via DocuSign. I have copied him on this email.

Thank you

James

---

From: Julie Shelley <jshelley@njwsa.org>
Sent: Friday, August 19, 2022 2:37:16 PM
To: Franciscus, James E <JAMES.FRANCISCUS>[redacted]
Cc: Weirsky, Edward J. <Edward.Weirsky>[redacted]; Wentzel, Adria <adria.wentzel@dep.nj.gov>; Paul Harenberg <PHarenberg@njwsa.org>; Kershner, Daniel A <DANIEL.KERSHNER>[redacted]
Subject: RE: Update on lease for Sunoco
Thank you. Today’s version (attached) will constitute the final, signature version. Please send me the email address for the signatory and I’ll send it to him via Docusign.

I will also send it to the appropriate signatories at DRCC and DEP. We and our attorney cannot execute the document until the conclusion of the Governor’s veto period following Board approval of the lease. We expect that to be the last week of September, but the exact date cannot be predetermined.

---

From: Franciscus, James E <JAMES.FRANCISCU>  
Sent: Friday, August 19, 2022 2:27 PM  
To: Julie Shelley <jshelley@njwsa.org>  
Cc: Weirsky, Edward J. <Edward.Weirsky>; Wentzel, Adria <adria.wentzel@dep.nj.gov>; Paul Harenberg <PHarenberg@njwsa.org>; Kershner, Daniel A <DANIEL.KERSHNER>  
Subject: Re: Update on lease for Sunoco

Yes, we will get you an updated certificate. Those don’t come out until 9/1 or so.

Please send out the agreement for signature.

Thank you

James

---

From: Julie Shelley <jshelley@njwsa.org>  
Sent: Friday, August 19, 2022 2:08:40 PM  
To: Franciscus, James E <JAMES.FRANCISCU>  
Cc: Weirsky, Edward J. <Edward.Weirsky>; Wentzel, Adria <adria.wentzel@dep.nj.gov>; Paul Harenberg <PHarenberg@njwsa.org>; Kershner, Daniel A <DANIEL.KERSHNER>  
Subject: RE: Update on lease for Sunoco

Hi James,

Thank you for these documents. I accepted most of your changes, with an exception to the (paragraph 3). See the attached and let me know if you have further concern.

We will need an updated insurance certificate, as your current policy terms end on September 15. No rush on that, we just need it by the time you sign the contract.

I’ll look for your email next week with the Pay to Play documents.

Have a good weekend!

Julie
Julie,

Attached are our minor changes to the agreement. Please review and let me know if you have any questions. I have also attached the Authority and COI for the exhibits. I should have the Pay to Play forms completed for you next week.

Thank you.

James

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No. We will execute this agreement as soon as our Board approves it and we clear the Governor’s veto period. We will use Docusign to circulate and execute it efficiently. It will take effect upon full execution and permit you to begin work as of the date of full execution.

The correction, if/when approved by the SHC, will result in an amendment to the lease to correct the rent.

---

Julie,

I received the draft agreement. It mentions that you need to go back to the State House to correct an error in the lease amount. Will that delay us from getting this agreement in place in September?
LE20-014 Exhibit A. Map of the Access Area
Sunoco Pipeline Replacement Project
D&R Canal State Park
From: Franciscus, James E <JAMES.FRANCISCUS@njwsa.org>
Sent: Thursday, August 25, 2022 9:22 AM
To: Julie Shelley
Subject: RE: Update on lease for Sunoco
Attachments:

Julie,
See attached.

From: Julie Shelley <jshelley@njwsa.org>
Sent: Thursday, August 25, 2022 8:47 AM
To: Franciscus, James E <JAMES.FRANCISCUS@njwsa.org>
Subject: RE: Update on lease for Sunoco

James,

Please check one of the boxes in Part 3 and send the form back to me.

Thanks,
Julie

From: Franciscus, James E <JAMES.FRANCISCUS@njwsa.org>
Sent: Wednesday, August 24, 2022 5:57 PM
To: Julie Shelley <jshelley@njwsa.org>
Cc: Weirsky, Edward J. <Edward.Weirsky@njwsa.org>; Wentzel, Adria <adria.wentzel@dep.nj.gov>; Paul Harenberg <PHarenberg@njwsa.org>; Kershner, Daniel A <DANIEL.KERSHNER@njwsa.org>
Subject: RE: Update on lease for Sunoco

Julie,
Attached is the signed form. Please confirm you have everything you need from us for the September board meeting.

Thank you.
James
Out of curiosity, did Bob sign electronically?

Good morning!

I’m going to circulate this lease via Docusign for signature. I presume I’m to send it directly to John Cecil, as I did before. I also need Robert Shaughnessy’s signature – can you give me his email address so I can send it directly to him as well?

Thanks!
Julie
Adria,

I will review and adopt and sign electronically.

Thanks,

Bob

Hi John and Bob,

You are going to be receiving an email from Julia Shelley at the NJ Water Supply Authority with a link that will allow you to sign a lease approved by SHC at its last meeting. The lease is an agreement NJDEP and NJWSA (Grantors) and Sunoco (Grantee) to allow Sunoco to remove an existing line that is currently exposed and install a new line. NJWSA will administer this lease and NJDEP is the underlying land owner. I wanted to give you a heads up this email from Julie would be forthcoming as we previously didn’t present WSA administered leased to SHC and WSA has a different signature process.

Thanks,

Adria

Good morning!

I’m going to circulate this lease via Docusign for signature. I presume I’m to send it directly to John Cecil, as I did before. I also need Robert Shaughnessy’s signature – can you give me his email address so I can send it directly to him as well?

Thanks!

Julie
From: Franciscus, James E <JAMES.FRANCISCUS>
Sent: Wednesday, August 3, 2022 10:45 AM
To: Julie Shelley; Marshall, Amy R
Subject: Re: NJWSA Lease

Julie, Ed is going to give you a call if he hasn’t already.

Thank you.

From: Julie Shelley <jshelley@njwsa.org>
Sent: Wednesday, August 3, 2022 10:36:35 AM
To: Marshall, Amy R <Amy.Marshall>
Cc: Franciscus, James E <JAMES.FRANCISCUS>
Subject: FW: NJWSA Lease

Amy,

I sent the message below and received James’ out of office reply. Would you please call me at [redacted] if you have any information about my request? Attached are the maps we intend to reference in the lease to be given for the use of State property (“attachment Maps SunocoPipeline….pdf”) as well as the previous maps that were made, which are inclusive of a temporary workspace area on State property (“Exhibit A Map….pdf”). I’m trying to establish whether the temporary workspace is still needed.

Thank you,
Julie

Julie Shelley
Manager, Contracts & Risk Management
New Jersey Water Supply Authority
1851 Route 31/PO Box 5196
Clinton, NJ 08809
908-638-6121 x260
www.njwsa.org

From: Julie Shelley
Sent: Wednesday, August 3, 2022 10:17 AM
To: 'Franciscus, James E' <JAMES.FRANCISCUS>
Cc: 'Kershner, Daniel A' <DANIEL.KERSHNER>; 'McGinn, Joseph F' <Joseph.McGinn>; Paul Harenberg <PHarenberg@njwsa.org>; 'Edward.Weirsky' <Edward.Weirsky@dep.nj.gov>; 'Wentzel, Adria' <Adria.Wentzel@dep.nj.gov>
Subject: RE: NJWSA Lease

James,
Please confirm whether Sunoco is still seeking temporary workspace on State property for the project, or strictly access under State property. An older submission for the project identified temporary workspace, and I’d like to confirm if that is still necessary.

I will be doing a site visit today to the property, so if you get this message after 11, please give me a call on my cell - [redacted].

Thanks,
Julie
Paul

I have attached the bore hole abandonment plan from Otis for your review. Let me know if you have any questions. I am still waiting on the names of the water source for the hydrotest water and the disposal facility the water will be taken to. As soon as I get them I will forward them to you.

Thanks
Edward J Weirsky Jr (Ed)
STV Inc
Sr. Project Manager
Work  609-530-0020
Mobl  [redacted]

The NJWSA has denied and redacted from the records the portion of the responsive records that reveal personal identifying information (i.e., cell phone numbers, email addresses) pursuant to N.J.S.A. 47:1A-1.1.
HDD INADVERTENT RETURN ASSESSMENT
SUPPLEMENTAL INFORMATION

14-INCH TWIN OAKS TO NEWARK JACOBS CREEK PIPELINE RELOCATION

Located In:

UPPER MAKEFIELD TOWNSHIP, BUCKS COUNTY, PA EWING & HOPEWELL TOWNSHIPS, MERCER COUNTY, NJ

HDD BORE HOLE AND ANNULAR ABANDONEMENT

PURPOSE:

In horizontal directional drilling there is the possibility that unforeseen circumstances prevent the directional drilling operation from progressing forward and a new profile, alignment and entry point will have to be established.

The original annular would have to be abandoned in place.

METHOD:

- The directional drilling equipment will have to trip out the drill stem, guidance assembly, mud motor and cutting head assembly.

- The directional drilling equipment will be moved from this drill pad and proper grout injection equipment will be brought in as certain grout mixtures will damage drilling equipment.

- A low strength grout mixture will be used and injected as far into the bore hole as feasible displacing the drilling fluid back to the entry point.

- The injection will continue until the estimated annular volume is filled with grout.

- The grout will be filled to where the annular meets the face of the entry pit.

- The entry pit will be backfilled and compacted with suitable soil.
From: Weirsky, Edward J. <Edward.Weirsky>
Sent: Thursday, August 11, 2022 11:40 AM
To: Paul Harenberg
Subject: FW:
Attachments: Exhibit A SOW - Jacob's Creek Relocation Project (Bid).pdf; Exhibit B Plans, Specifications and Project Documents Rev1.xlsx

From: Weirsky, Edward J.
Sent: Wednesday, July 13, 2022 4:12 PM
To: Paul Harenberg <PHarenberg@njwsa.org>
Subject: FW:

Paul

Here is the construction scope of work and the list of specifications. If you need to review any of the specification please let me know and I will get them to you.

Thank you
Edward J Weirsky Jr (Ed)
STV Inc
Sr. Project Manager
Work 609-530-0020
Mobile

From: Struss, Mark W. <MARK.STRUSS>
Sent: Wednesday, July 13, 2022 4:02 PM
To: Weirsky, Edward J. <Edward.Weirsky>
Subject:

Ed:

Attached is the scope of work and Exhibit B.

Thanks

Mark Struss
STV Energy Services, Inc.
205 West Welsh Drive
Douglassville, PA. 19518
Bus: (610) 385-8346
Mobile:
Bus Fax: (610) 385-8510
E-mail:
Please consider the environment before printing this e-mail.

Redesigned and rebuilt: visit our new website at www.stvinc.com

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EXHIBIT A
SCOPE OF WORK

JACOB’S CREEK PIPELINE RELOCATION PROJECT

1. GENERAL

The Jacob’s Creek Pipeline Relocation Project Work to be performed consists of all activities necessary to complete the installation of a 14-inch high-pressure petroleum products pipeline to replace a section of Company’s 14” Twin Oaks to Newark Pipeline. Work is located in Hopewell and Ewing Townships, Mercer County, New Jersey and Upper Makefield Township, Bucks County, Pennsylvania. The Work includes all items set forth in this section and as detailed in the complete Scope of Work (“Exhibit A”), Plans, Specifications, and Project Documents (“Exhibit B”), and Company Furnished Materials (“Exhibit C”).

The Work shall be constructed and is more fully described herein below, and includes the complete satisfactory performance of Contractor’s construction services, including all things described herein as well as any other Work not explicitly described below but reasonably inferred as being Contractor’s responsibility, including, without limitation, construction, fabrication and installation of the following Work:

(a) 14” Pipeline Open Cut Installation. Construction and installation of approximately 516 feet of a 14-inch diameter high-pressure petroleum products pipeline, which includes tie-ins. The 14-inch diameter high-pressure petroleum products pipeline will include appurtenances as set forth in Exhibit C.

(b) 14” Pipeline Horizontal Directional Drill (“HDD”) Crossing. Total of one (1) HDD crossing, approximately 2,515 linear feet, of 14-inch diameter high-pressure petroleum products pipeline. Work further includes the installation of a temporary 36-inch casing, approximately 167-foot long, to the rock layer, at the HDD entry point located in Pennsylvania. The HDD shall be drilled commencing in Pennsylvania, and the pipe shall be pulled back from the New Jersey side. Contractor shall be responsible for stringing and welding the pipeline at the HDD location in Pennsylvania. The 14-inch diameter high-pressure petroleum products pipeline will include appurtenances as set forth in Exhibit C.

(c) REMOVAL, DISPOSAL AND ABANDONMENT OF EXISTING PIPELINE. Upon the replacement and installation of the new 14-inch high-pressure petroleum products pipeline, Contractor shall complete the Work set forth below and in accordance with Section 16.

i. Grout and abandon in-place approximately 2,854 linear feet of the existing pipeline located under Jacobs Creek and the Delaware River.

ii. Removal of approximately 316 feet of 14-inch pipeline and 199-feet of 18” steel casing pipe, located in Jacobs Creek, where it goes through an existing NJDOT culvert. Contractor shall be responsible for pumping Jacobs Creek water around the pipeline removal area. The Contractor shall also be responsible for removal of the short sections of existing pipeline at the proposed tie-in locations.

2. PROJECT TIMING

2.1 COMMENCEMENT OF WORK

Contractor agrees to commence Work upon receipt of Notice to Proceed (NTP) from Company.
2.2 PROSECUTION AND COMPLETION OF WORK

The Contractor shall, after commencement of the Work, prosecute the Work with due diligence, and shall not neglect or discontinue the Work at any time. The Contractor shall perform all Work in a thorough workmanlike and substantial manner in accordance with the terms of the Agreement, accepted industry and Company standards, and with the utmost regard for safety of life and property. The Work shall be conducted in such a manner and with such machinery, equipment, tools, labor, and supervision as is deemed necessary and sufficient to ensure satisfactory completion of the Work and achievement of the In-Service and Final Completion Dates referenced in Section 2.3.2.

2.3 CONSTRUCTION SCHEDULE

2.3.1 Contractor shall develop a construction schedule for the Work that provides the most efficient and cost-effective installation. Contractor shall begin planning and other preparatory work upon execution by both parties of the Agreement. Contractor agrees it has examined and is familiar with the project scope of Work, Alignment Drawings, Construction Drawings, Company line list and restoration requirements, environmental permit requirements, and the terms and conditions of the Agreement and as a result, hereby certifies that it has sufficient information to prepare an accurate schedule of the timing and events required for performing the Work in an efficient and cost effective manner.

2.3.2 Work milestone dates are as follows:

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commencement Date</td>
<td>Upon receipt of Notice to Proceed (NTP) from Company</td>
</tr>
<tr>
<td>*In-Service Date</td>
<td>September 30, 2022, with time being of the essence at all times.</td>
</tr>
<tr>
<td>Final Completion Date</td>
<td>October 31, 2022 with time being of the essence at all times.</td>
</tr>
</tbody>
</table>

*The removal of the abandoned pipeline located at the Jacob’s creek cannot be performed from May 1 through July 31, 2022. Contractor shall be responsible for the removal of the abandoned pipeline on or before May 1 or after July 31, 2022.

2.3.3 Contractor shall provide a construction schedule to complete all Work and shall include at a minimum its Work commencement date and all Work milestone dates referenced in Section 2.3.2, as well as the duration of all major tasks to perform the Work as follows:

2.3.3.1 Preparation of Work plans and pre-mobilization planning. Contractor must provide acceptable drill plan to Company 30 days prior to mobilization of HDD equipment.

2.3.3.2 Company welding procedure and welder qualification testing.

2.3.3.3 Mobilization of equipment spreads, including dedicated manpower.

2.3.3.4 Clearing, removal of all debris, grading, and leveling of the Site locations as shown on each appropriate Site Drawing.

2.3.3.5 Hydrostatic Pipeline testing of all pipe. Contractor’s hydrostatic test plan shall be prepared and approved by the Company and a 3rd Party PE that is registered in the state or states the test is being conducted.

2.3.3.6 Project documentation, final HDD as-builts. The profile submitted must be in the latest AutoCAD version.
2.3.4 Contractor shall report progress on a weekly basis to Company. Contractor’s submission of any Work schedule that deviates from the Work milestone dates referenced in Section 2.3.2 is hereby rejected by Company unless accepted in writing by Company after Contractor has provided an acceptable recovery Work Plan.

2.3.5 Within fifteen (15) days of award of the Agreement, the Contractor shall develop and coordinate with Company and submit to the Company for approval, a detailed network and schedule of activities for the term of the Agreement that conform to the Agreement Completion Dates.

3. MATERIALS FURNISHED BY COMPANY

Company will supply all piping and any materials that become a permanent part of the completed pipeline unless otherwise indicated in the Specifications and Drawings. Company furnished material is generally listed in “EXHIBIT C” MATERIALS TO BE FURNISHED BY COMPANY.

The following requirements apply to Company furnished materials:

3.1 Prior to starting Work, Contractor shall discuss material and supply necessities at least 48 hours prior to mobilizing to the Site. It is the Contractor’s sole responsibility to make sure all materials and equipment are on the Site to execute the Work.

3.2 All materials shall be accompanied with a completed Company’s B9 Form (Material Receiving / Transfer Report).

3.3 The appropriate AFE number and PO number shall be clearly written on each piece of material and shall be easily visible from the shipping position.

3.4 The correct heat and serial number shall be clearly written on each piece of material and shall be easily visible from the shipping position. Likewise, all materials shall be unloaded and stored or arranged in a manner with the heat and serial numbers and AFE numbers easily visible.

3.5 MTR’s and certificates associated to each heat and serial number shall accompany the corresponding materials shipment and shall be organized in a manner that can easily be identified to each piece of material.

3.6 All materials shall be segregated, bundled, palletized, or otherwise assembled and shall be shipped by appropriate AFE number and PO. In no instance shall any returned materials be shipped, received, stored, or mixed with other materials with different AFE numbers.

3.7 Materials shall be quantified and assessed as surplus or as scrap and reported accordingly by the appropriate materials person on location.

3.8 Any pipe or materials returned that do not have MTR’s or certification shall be considered scrap. Contractor shall be responsible for returning of all “scrap” materials and shall be clearly and boldly marked as “scrap” and returned to the Company’s construction storage yard to be sold from field yard. Contractor shall be responsible for acquiring invoice receipt from Company for such material.

3.9 All Company supplied equipment and materials shall be available for pick-up at Company’s yards as listed in Exhibit C and Contractor shall be responsible for pre-loading inspection, loading, transporting to the Site, unloading, stringing, and storing/securing of all Company supplied materials at the Site. Contractor shall be responsible for any cost associated with the load out of materials from the Company’s yards.

3.10 All surplus pipes greater than 25 feet long shall be beveled on both ends and all coating shall be repaired prior to returning to the Company’s yards as listed in Exhibit C.
3.11 Any 14” pipe less than 25 feet and greater than 10 feet shall be required to be carried forward and installed into the line as nonconsecutive pups. Any pipe less than 25 feet and greater than 10 feet that is not installed into the line shall be purchased by the Contractor.

3.12 Any Company supplied materials after Contractor’s acceptance that is not utilized for the completion of the Work and not listed on As-built reports/Drawings that are not returned to Company’s yards as surplus or scrap materials will be reimbursed to Company by Contractor at its sole expense.

3.13 Contractor shall be responsible for providing all materials not listed in Exhibit C.

4. CUSTODY OF MATERIAL

The Contractor shall insure that all Company provided materials as listed in Exhibit C are properly stored and protected from damage. Any damage to materials after Contractor’s acceptance shall be the Contractor’s responsibility in accordance with the terms of the Agreement. Any damage to materials shall be reported to the Company as soon as it is detected. All handling storage and shipping shall be in accordance with Company standards which can be found in Exhibit B.

5. CONTRACTOR SUPPLIED ITEMS

Contractor shall furnish all machinery, tools, transportation, labor, and supervision necessary to complete the Work and all incidental and/or expendable material necessary to complete the Work. Cost of Contractor supplied items shall be included in Contractor’s lump sum price in Part IV Firm Offer. Major items to be furnished and performed by the Contractor shall include, but may not be limited to:

5.1 All welding electrodes and welding consumable materials.

5.2 Contractor shall supply and use heat applied FBE powder coating and finalized by coating with ARO (SPC 2888) with the approved drying time for coating on directional drill sections, approved coating will be used for coating on fabrication and tie-ins where heat applied epoxy powder is not appropriate. Contractor will provide coatings as specified in Company Coating Manual.

5.3 Sandblasting equipment, abrasive blast media, paint, painting supplies, and all necessary equipment for painting pipe and equipment per Company Specifications, including right-of-way fences and gate posts.

5.4 All necessary materials needed and required by Company, including but are not limited to, pipeline caps, valves, flanges, gaskets, gauges, and purge and packing of 100-pound nitrogen blanket.

5.5 All traffic control signs, barricades, flagmen, equipment, and trained or state certified personnel.

5.6 Materials needed for pressure testing, including water, pigs, materials for fabricating all test heads including temporary valves and weld fittings (except for pipe which will be furnished by Company); pumps, compressors, deadweights, pressure and temperature chart recorders and certified gauges, all temporary piping, hoses, frac tanks, sock filters, hay bales, connectors to fill and dewater the pipeline, fuel for all equipment.

5.7 Hydro-vac for the removal and disposal of residual product remaining in existing pipeline.

5.8 Hydro-vac to identify existing pipelines within the project area.

5.9 Fire Retardant Clothing (F.R.C) outer wear apparel, which shall be made of Nomex III, Kevlar, or Fire Retardant Cotton and shall be either one-piece coveralls or pants and shirt, and must be worn as the outer layer of clothing. The F.R.C shall be worn by all Contractor personnel when necessary within the project area. Contractor personnel shall wear hard hats, safety glasses with side shields, steel toe shoes, and any approved PPE that is required. FRC is required when cutting or welding on the existing pipeline (example, when making tie-ins to new pipe).
5.10 All other material necessary to complete the Work as may be called for elsewhere in this Agreement, the attached specifications, and Drawings, other than and except material to be furnished by Company as expressly stated herein in Exhibit C.

6. GENERAL REQUIREMENTS

Contractor shall furnish all machinery, tools, transportation, labor, supervision and all incidental and/or expendable material necessary to complete the Work listed below and shall be included in Contractor’s lump sum price in Part IV Firm Offer. Major items to be furnished and performed by the Contractor shall include, but may not be limited to:

6.1 Coordinating with Company Right-of-Way agents ONLY and complying with all terms and conditions stated in the Jacobs Creek HDD Line List (See Exhibit B). Contractor shall have no direct contact with landowners.

6.2 Coordinating with permitting agencies and compliance with all permits, foreign pipeline, and utility companies during the course of the Agreement.

6.3 Coordination with other contractors working within and near the right-of-way. Contractor agrees to cooperate with all other contractors.

6.4 Signage required by safety and permits as well as signage required to mark permissible roads and non-permissible roads to right of way.

6.5 Testing of all welders per Company Procedures and Specifications (See Exhibit B).

6.6 Clearing, grubbing, grading, and maintaining the construction right-of-way and temporary workspace.

6.7 All material, preparation and restoration of the right-of-way and temporary workspace as shown on drawings.

6.8 Installation and removal of all temporary and permanent fences, gates sound wall barriers, including materials.

6.9 Disposal of all timber, stumps, brush, and debris from pipeline easement, Sites, and temporary workspace. All materials removed from the right-of-way easement, temporary workspace and facility locations shall be chipped, or hauled off and properly disposed. Contractor shall not allow for debris to remain on pipeline easement, temporary workspace, and facilities and material shall be handled according to the terms and conditions stated in the Jacobs Creek HDD Line List (See Exhibit B).

6.10 Contractor shall be responsible for all pre-loading inspection, loading, transporting to the Site, unloading, stringing, and storing/securing of all Company supplied materials as listed in Exhibit C. Contractor shall be responsible for any cost associated with the load out of materials from Company’s yard.

6.11 All surplus pipes greater than 25 feet long shall be beveled on both ends and all coating shall be repaired prior to returning to the Company’s yards as listed in Exhibit C.

6.12 Cutting, beveling, transitioning, line-up and welding of pipe and fittings.

6.13 Field joint coating.

6.14 Construction mats, engineered excavation boxes, shoring, well points, etc. required for installation of pipeline and/or HDDs.

6.15 Directional drilling and installation of drilled crossings.
River, stream, canal, pond, and wetland crossings per permit and license requirements or as required on Company’s alignment Drawings.

Foreign pipeline and utility crossings with clearances in accordance with permits or Specifications. Contractor to locate and verify depth and location and stake all Company owned and foreign line crossings prior to excavation. Contractor will provide all construction matting materials required to cross foreign pipeline and easements.

Trench dewatering, well points, stream pump around, trench shoring, sheet piling and construction matting required for the pipeline construction and installation of all associated piping assemblies including transportation and disposal of materials.

Clearing, grading, and final Site restoration.

Performing sizing plate and caliper pig runs.

Hydrostatic testing of the HDD section per Company requirements and certification by a third-party PE registered in the appropriate State, then reviewed and approved by Company approved PE.

Cleanup and restoration as per the Company Specifications or landowner agreements.

All equipment furnished by Contractor shall be in sound and good working order. Any Work required to complete installation of the new pipeline but not listed as a pay item is no less included in the Scope of Work for installation of the new pipeline and is included in Contractor’s price.

Where joints of pipe are cut, it shall be the Contractor’s responsibility to ensure that the pipe and heat numbers of the parent joint are transferred to the cut end or ends of the parent joint as well as to both ends of all pups resulting from the cutting;

Repairs resulting from the striking, cutting, damage, modification, destruction, or crushing of drain or irrigation tiles, or any Company or foreign utility, whether or not such drain or irrigation tiles or utilities were known or unknown (mapped or not) at the time of execution of this Agreement;

CONTRACTOR SHALL FIELD VERIFY ALL MEASUREMENTS; and

Any item of Work that is required for completion of the installation but not specifically identified is to be included in Contractor’s pricing.

7. SPECIFIC REQUIREMENTS

7.1 Contractor shall abide by all Federal, State, County, and Township/Local permits and regulations.

7.2 SURVEY

7.2.1 COMPANY PROVIDED SURVEY

7.2.1.1 The pipeline route and the location of valves and other appurtenances are shown on the Company’s construction Drawings furnished by Company and shall be surveyed by Company and marked by stakes and color coded. Stakes will be set at intervals of approximately 200 feet to mark the centerline of the proposed pipeline, survey control monuments, the location of HDD, the right-of-way limits, and temporary workspace limits. Contractor is to verify the location of all foreign pipelines and verify the depth and location of any such pipelines and make Contractor’s employees aware of the location and depth of any such pipelines prior to excavation.

7.2.1.2 Company survey crews and/or survey consultants and survey equipment will require
access to the right-of-way and established survey monuments during the pipeline construction to determine the “as-built” location of the pipeline within the right-of-way and to record the longitudinal location of each component of the pipeline.

7.2.1.3 Company shall have the right to make minor deviations in the pipeline route and such changes shall in no manner alter the terms of compensation payable under the Agreement.

7.2.2 CONTRACTOR RESPONSIBILITY FOR SURVEY

7.2.2.1 The Contractor shall construct the Work in accordance with the stakes set by Company and shall be charged with full responsibility for conformity and agreement of the Work with stakes.

7.2.2.2 Contractor shall be held responsible for the preservation of all stakes and marks and survey monuments. If any of the stakes or marks or legal bars are carelessly or willfully destroyed or disturbed by the Contractor, its’ employees or Sub-contractors, the cost of replacing them shall be borne by the Contractor. Where stakes are removed for clearing, grading, cutting, topsoil removal, to permit equipment to move along the route, or for any other reason, the Contractor shall be responsible for re-establishing the staked line.

7.2.2.3 The Contractor shall perform necessary field surveys for the proper grading of the trench and the bending of pipe, for locating and staking existing underground facilities, and for other pipeline installations except for such field survey Work as is specified to be performed by Company.

8. REQUIRED NOTIFICATIONS

8.1 The Contractor is required to notify Company’s Representative prior to commencing any phase of the Work as detailed in these Specifications and to keep Company’s Representative informed regarding the location of all work crews, on a daily basis, as well as immediately notifying Company’s Representative regarding Work stoppages or shutdowns. Contractor shall provide Company scatter sheets of Contractor personnel daily and submitted no later than 6:00 AM. Company shall provide Contractor scatter sheet sample forms. See Exhibit B for additional Company Specifications and Requirements.

8.2 The Contractor shall keep Company’s on-site staff informed of the location and extent of Work it proposes to attempt daily in order that Company may make arrangements to have sufficient personnel at the Work location to keep pace with the pipe installation operation. Company will not be responsible; however, for any reduction in progress due to the Contractor’s failure to keep Company’s Representative informed.

8.3 The Contractor shall notify, in writing, both Company’s Representative and the authority having jurisdiction over any road, railway, canal, drainage ditch, river, foreign pipeline, or other utility, at least 72 hours (excluding Saturdays, Sundays, and Statutory Holidays), or as specified on the applicable permit(s), prior to commencement of pipeline construction, in order that the said authority may appoint an Inspector to ensure that the crossing is constructed in a satisfactory manner. Federal or State Departments of Transportation and Township/County road departments may also require a certificate of insurance from the Contractor specifying certain minimum insurance coverage for Work at road crossing Sites.

8.4 Prior to starting any Work in accordance with required notification, the Contractor shall notify all utilities within the area using the respective state’s One Call System and by calling direct all producers, utilities, utility districts and municipalities not a member of the One Call System.

8.5 Contractor shall immediately notify Company’s Representative of any spill of a potentially hazardous
8.6 Contractor shall immediately notify Company’s Representative if potentially contaminated soils are encountered.

8.7 Contractor shall immediately notify Company’s Representative of the discovery of a previously unreported historic property, other significant cultural materials, or suspected human remains uncovered during pipeline construction activities. Contractor shall cease Work at the Site until the Company’s archaeological consultant has inspected the Site and the Company has determined if the pipeline must be rerouted to avoid disturbance to the Site.

8.8 Contractor will be responsible for acquiring and disposal of all water required for construction.

8.9 Contractor shall provide written notification to Company’s Representative 48 hours prior to scheduling pickup of material from Company’s Yard as listed in Exhibit C.

9. USE OF DESIGNATED PUBLIC AND PRIVATE ROADS

9.1 All approved access roads and routes, both public and private, and ancillary sites shall be prepared and maintained by the Contractor. The Contractor, at his sole expense, shall restore State, County, Township, private and access roads, bridges and ancillary sites to their original condition. This Work shall meet with the approval of the Company and applicable landowner(s) and/or agencies.

9.2 Company is providing all permits listed in the Project Permit Matrix in Exhibit B. All other required permits are the responsibility of the Contractor.

9.3 Prior to commencement of any transportation activities, Contractor shall perform all transportation analyses and design activities required to ensure safe transport of all project materials.

9.4 The Contractor shall ensure that it is aware of all state, county, park and township weight restriction by-laws in force and that these by-laws are strictly adhered to and shall procure all hauling permits required for its operation and make arrangements for the movement of pipe, other materials and all equipment on Township/County/State/Park roads with the appropriate Township/County/State/Park officials before hauling commences.

9.5 The Contractor shall adhere to all Department of Transportation requirements.

9.6 The Contractor shall repair and pay for restoration of any damage done to any road.

9.7 The Contractor shall provide vehicle escorts for equipment haul trucks and flag persons where required and shall supply, install and maintain all temporary signs and other devices as required for warning public and private road users of construction activities. Such signs and devices and placement thereof shall conform to the specifications and requirements of the agency having jurisdiction over the crossing. In addition, the Contractor shall comply with all Township, County, and State regulations respecting such devices for the particular Township, County, and State in which the Work is being performed.

9.8 Where necessary, the Contractor will be responsible to provide and install all traffic controls. The Contractor shall use signage which is in accordance with NJDOT and PADOT specifications. Traffic control will be necessary at the PA tie-in area within Oakdale Avenue and at the NJ Grist Mill property entrance. The existing access to the Grist Mill property is limited access and it is located along a sharp turn on NJ029 and the property owner currently uses an installed mirror to allow traffic line of site.

9.9 The Contractor shall employ proper signaling, flagging, signage, etc. as may be necessary and required by NJDOT and PADOT. Since large vehicles (e.g., tank trucks) currently use such entrances for both properties, the motoring public may be aware and knowledgeable of such usage. However, the
Contractor shall take extra precautions to ensure the safety of the motoring public. The Contractor shall only use the provided site access points shown on the drawings during construction.

9.10 The traveled surfaces of roads, streets, highways, (and railways when applicable) shall be cleaned free of mud, dirt, or any debris immediately after such material has been deposited by equipment traversing these said roads or exiting from the right-of-way.

9.11 Parking of vehicles along public roads shall not be allowed.

9.12 Company has obtained permission for Contractor to access the pipeline right of way and Work Sites on some private roads. Contractor must grade and repair with like road base materials all roads damaged as a result of Contractor’s use so that such roads are left in a condition as good as or better than the condition to that in which the roads were initially found. Gate security may be required in accordance with the landowner stipulation. See Jacobs Creek HDD Line List in Exhibit B for specific landowner requirements.

9.13 Contractor should be aware of existing fences and gates and Contractor is responsible for repair or replacement of such items if damaged by Contractor’s operations.

10. RIGHT-OF-WAY ACTIVITIES

10.1 Company will provide a permanent right-of-way and temporary workspace for Contractor’s construction operations. Generally, the right-of-way (ROW) width for permanent and temporary workspace is shown in the Company’s Construction Drawings and/or in the Jacobs Creek HDD Line List and/or Alignment Sheets in Exhibit B.

10.2 Company will provide additional temporary workspace at road crossings, water body crossings, railroad crossings, wetland crossings, and foreign pipeline crossings as indicated on the alignment drawings. The workspace that has been arranged by Company is shown on the Company’s construction Drawings and/or in the Jacobs Creek HDD Line List and/or Alignment Sheets in Exhibit B. Contractor must limit the additional temporary workspace to only the extent that it is needed and may not exceed the limits identified on Company Drawings.

10.3 The Contractor shall also note that work space may be limited wherever physical barriers exist (i.e. trees, buildings, ponds, aboveground structures) or in sensitive areas such as wetlands as described in the Contract Documents, or as shown on the Company’s construction Drawings and/or in the Jacobs Creek HDD Line List and/or Alignment Sheets in Exhibit B. The Contractor shall allow for such partial restrictions and plan its operations accordingly. Any additional cost Contractor anticipates it may incur because of reduced workspace in these areas shall be included in Contractor’s pricing.

10.4 The Jacobs Creek HDD Line List provided to Contractor in Exhibit B provides “Special Conditions” or agreements that control, or at least impact, construction activities including access, ROW, clearing and restoration on a certain tract or group of tracts. Adherence to the “Special Conditions” is a part of Contractor’s Work Scope and is included in the total in Subpart A of the Part IV bid document. The Contractor shall be controlled and bound by all provisions or instructions contained in the Construction Drawings and/or in the Jacobs Creek HDD Line List and/or Alignment Sheets in Exhibit B. Contractor is reminded and advised to review same.

10.5 Compliance with the Company’s Pipeline Construction Specifications is a part of Contractor’s Scope of Work and cost for completing the specified Work is to be included in Contractor’s price. Compliance with Company’s Construction Specifications is required by all tracts on the Jacobs Creek HDD Line List in Exhibit B.

10.5.1 The Contractor shall be responsible for preparing the permanent right-of-way, the temporary workspace, and any Site access for construction. This Work preparation includes but is not limited to clearing & removal of timber, brush, and stumps, grading where required, erecting
temporary fences and sound walls, gaps and barricades and installing ramps and culverts.

10.5.2. The Contractor shall maintain the right-of-way in a clean, neat condition at all times. At no time shall litter be allowed to accumulate for more than one day at any location on the right-of-way. The Contractor shall provide a daily garbage detail with each major construction crew to keep the right-of-way clear of trash, waste from coating products, skids, defective materials and all construction and other debris immediately behind his operations to the satisfaction of Company, landowners, and tenants. Paper from wrapping or coating products or lightweight items such as tobacco products shall not be permitted to be scattered around by the wind.

10.5.3. The Contractor shall provide required portable restroom facilities for all personnel working on the location.

10.5.4. Ingress and Egress for construction is limited to pipeline ROW, public roads and approved private roads specifically provided by Company and shown on alignment sheets. Contractor shall not use property-owners private roads without WRITTEN permission from landowner and approved by Company ROW agent or Company Representative, verbal approvals are not acceptable to Company.

10.5.5. Contractor shall provide chains and locks for each “construction access gate”. Cost of chains and combination locks (limited to one lock per gate) will be included in Contractor’s pricing. Contractor may remove and keep the locks for future use at the conclusion of final clean-up.

10.5.6. Rock construction entrance pads are required, as detailed in Standard Construction Drawings where equipment exits the construction area onto any roads. Tracking of sediment onto any roads is to be prevented. Geotextile fabric will be used beneath these pads to separate the rock from the underlying soils. Unless otherwise directed by Company, all rock and geotextile materials will be removed and disposed of in an approved off-site location after completion of construction activities.

10.5.7. Contractor transport and service vehicles parked along the right-of-way shall be located within the boundaries of ROW, so as not to impede progress of the Work, or in any way prevent ready access of Company’s Representative, surveyors, and third-party inspection crews.

10.5.8. No clearing, grading or other construction activities shall occur outside approved, surveyed and flagged or staked right-of-way and temporary extra workspace limits (as shown on the Company’s construction Drawings and/or in the Jacobs Creek HDD Line List and/or Alignment Sheets in Exhibit B) without prior written approval from Company. If the Contractor exceeds authorized workspace limits, Contractor is responsible for all costs resulting from this action. All costs for damages of any kind or character whatsoever resulting from the use of unauthorized workspace shall be borne by Contractor.

10.5.9. Any activities conducted outside the approved construction right-of-way may result in immediate TERMINATION of the parties involved.

10.5.10. Contractor shall be responsible for carefully dismantling and restoring all fencing at any existing fence line, foreign pipeline, or utility facilities.

10.5.11. All fences are to be “H-Braced” prior to cutting and all temporary fencing and gates must be comparable to existing fencing. Temporary construction fences will be maintained to a condition that insures containment of livestock and exotic game for the duration of construction. Permanent fences and gates shall be constructed in accordance with Company’s standard construction Drawings. Gate security is always required at all game fences and may be required at all gates as referenced in the Jacobs Creek HDD Line List in Exhibit B.

10.5.12. The Contractor shall minimize the use of the full temporary workspace width to the extent
practicable. Where wetlands are encountered, every effort shall be made to minimize the extent of workspace utilization through the wetlands with a view to minimizing the disruption of natural habitat. Temporary workspace may be cleared and prepared to the extent that it is needed to complete the Work.

10.5.13. The Contractor shall ensure that construction through livestock grazing and agricultural areas is completed in a manner that minimizes interference or inconvenience to landowners/tenants and their livestock and agricultural operations. Landowner/tenant access to their property shall always be maintained including providing openings in the topsoil and spoil piles and leaving ditch plugs across the trench at various locations as necessary for access to water & feed.

10.5.14. Certain trees along the right of way are not to be removed or damaged in accordance with the Jacobs Creek HDD Line List in Exhibit B. Contractor will mark these trees in a manner that his own personnel will know to avoid removal or damage to these trees. Cost incurred by Company because of the erroneous damage or removal of an identified tree will be reimbursed by Contractor, including any punitive damages that may be assessed.

10.5.15. Trees cut or trimmed along the right of way to provide clearance for construction equipment will be trimmed with the proper tree cutting equipment and not broken off with excavation or construction equipment. Contractor will be charged for the cost of trees needlessly damaged during construction.

10.5.16. All trees cut or pushed down and any brush or timber removed during construction of the pipeline by Contractor will be handled in a manner as specified and approved by the landowner(s) and as dictated in the Construction Drawings and/or in the Jacobs Creek HDD Line List and/or Alignment Sheets in Exhibit B. Brush or timber may be removed from the pipeline ROW by hauling off for disposal by Contractor at a location and in a manner determined by Contractor and approved by Company. Chipping may be performed, but all debris must be removed from entire ROW line. Burying of stumps and brush on Company’s temporary workspace or permanent easement is prohibited. All debris shall be removed from ROW.

10.5.17. Contractor will leave ditch plugs or other means for livestock to travel across ditched areas for access to food and water.

10.5.18. No fishing in privately owned ponds; no firearms; no hunting; no pets allowed on Company’s Right of Way and Work locations.

10.5.19. No alcoholic beverages and/or ‘energy drinks’; and no illegal and/or un-prescribed drugs, allowed on Company’s Right of Way and Work locations.

10.5.20. There shall be no smoking within the Project Workspace and Pipeline Right of Way limits.

10.5.21. There shall be no removal of artifacts.

10.5.22. All vehicles are subject to search.

10.5.23. There shall be no non-employee individuals allowed on Company’s ROW and Work locations.

10.6. All landowners require a minimum of 48 hours’ notice before Contractor entry, or as required in Jacobs Creek HDD Line List. Landowner notification will be made by a Company ROW agent. Contractor shall provide notification requirements to Company agent a minimum of 96-hours prior to entry or as specified in the Jacobs Creek HDD Line List in Exhibit B.
11. ENVIRONMENTAL PERMITS, PLANS AND PROCEDURES

11.1 Company will provide a copy all permits listed in the Project Permit Matrix. Copies can be found in Exhibit B. Contractor shall perform the Work hereunder in strict conformance with the Company’s environmental permits and Company’s environmental compliance plans.

11.2 The Contractor shall employ its best efforts in accordance with common industry practices to return all areas disturbed during the Work to pre-construction contours, revegetated, and stabilized per ROW “Special Conditions” and all applicable permits.

11.3 The Contractor shall install, maintain, and remove temporary erosion and sediment controls as required, and shall include compliance with required erosion and sediment control in Contractor’s mainline installation pricing.

11.4 The Company Environmental Inspector, in compliance with the documents enclosed within these Bid Documents, will provide guidance to Contractor on required erosion and sediment control structures and the Contractor will be responsible for compliance with the environmental permits.

12. SAFETY

12.1 Contractor shall comply strictly with the requirements of the Company’s Contractor Safety Manual in Exhibit I and all applicable OSHA Standards and Regulations.

12.2 Contractor shall be responsible for ensuring its personnel and those of its subcontractors have successfully completed safety training required by Company. No Contractor or subcontractor personnel will be allowed on Company’s right-of-way without proper safety credentials as required by Company.

12.3 Contractor shall comply with all current applicable Company, federal, state, county, and local precautionary COVID-19 restrictions and requirements.

12.4 Contractor shall implement and administer Company’s COVID-19 screening requirements applicable to all personnel entering the Sites, including safe and efficient control and monitoring of traffic entering the Sites to accomplish such screening. Such screening process shall include, without limitation, daily completion by all personnel of the COVID-19 screening form attached hereto as Attachment I as well as the following:

12.4.1 Conducting daily temperature checks of all personnel, subcontractors, inspectors, and visitors entering the Sites Contractor provided non-contact laser digital thermometer on all Work personnel entering the Sites;

12.4.2 Ensuring required Company COVID-19 daily screening forms are filled out and submitted by all personnel, subcontractors, inspectors, and visitors entering the Sites;

12.4.3 Obtain and maintain all submitted COVID-19 daily screening forms, attached hereto as Attachment I, for all personnel, subcontractors, inspectors, and visitors entering the Work Sites, which shall be available for inspection by Company upon request. Contractor shall notify Company Representative immediately if any personnel or subcontractors answers any questions with a “yes” on the screening forms for Company’s evaluation;

12.4.4 Distributing Contractor provided protective masks and/or gloves as required to personnel, subcontractors, inspectors, and visitors entering the Sites; and

12.4.5 Contractor acknowledges that Company may change, amend, or modify, at no cost to the Company, the COVID-19 screening requirements at any time, based on changes in state, federal, or local regulations or guidance.
13. WELDING AND NDT

13.1 See Exhibit B for Company Welding Specifications and Requirements.

13.2 Contractor shall utilize Company welding procedures or prepare documented welding procedure(s) for Company review and approval. The final approved welding procedure shall govern the performance of all welds that become a permanent part of the Work. Welding procedure test shall meet the requirements outlined in API Standard 1104, latest edition and approved by DOT Part 195. Use of Company procedures shall not relieve Contractor of any liabilities to perform quality welds in accordance with Company’s specifications nor will Company be liable for any delays and/or extra work attributed by Contractor from the use of Company procedures.

13.3 Contractor shall perform welder qualification tests in accordance with API Standard 1104, latest edition and referenced by DOT Part 195.

13.4 Unless otherwise approved by Company, all procedure and welder qualification tests shall be performed employing the same Company provided material for pipelay Work. Contractor shall be responsible for the preparation of pup pieces for testing.

13.5 If Contractor does not use Company’s Welding Procedures, Contractor shall perform welding procedure test at a work center approved by Company. All preparation, sampling, destructive testing, metallurgical determination, hardness testing, etc. required to qualify procedure(s) must be provided by Contractor and be locally available to the work center so that expeditious results shall be achieved.

13.6 If Contractor does not use Company’s Welding Procedures, Contractor shall provide a schedule outlining the period required for procedure qualification testing for Company’s review and approval. If Contractor exceeds the time outlined in the approved schedule, Contractor, at Company’s option, shall be responsible for Company’s further inspection and administrative costs.

13.7 Contractor shall make available sufficient number of proposed welders/welding operators at the time of qualification testing to allow achieving the required number of Company approved welders within seven (7) working days. Otherwise, Contractor shall be responsible for Company’s further inspection and administration cost.

13.8 A Company qualified representative must be present during all procedure and welder qualification testing.

13.9 All welds and all welding operations shall be completed at the end of each day’s production, unless otherwise approved by Company’s Representative.

13.10 Contractor will provide NDE contractor for 100% inspection of welds and shall provide the necessary transportation along the ROW for NDE Contractor. All welds shall be subjected to 100 percent NDE inspection in accordance with API Standard 1104, latest edition and approved by DOT Part 195 and subject to 100 percent ongoing audit. Contractor is responsible for storage of all records until project is complete and shall maintain a record of each weld.

13.11 CONTRACTOR SHALL FIELD VERIFY ALL MEASUREMENTS.

13.12 A qualified welding inspector shall witness all welding activities including temporary welds.

14. BURIAL AND SPECIFIC CROSSING REQUIREMENTS

14.1 The minimum cover in the ROW of most public roads from the lowest point of barrow ditches to the top of pipe in all public and private road crossings is 60-inches unless otherwise shown on Road Crossing Permits. All lease, private, public, township, county, state, and federal roads are included.
14.2 The minimum cover below road surface at all public road crossings shall be not less than 60-inches or as shown on the Company’s construction Drawings and/or in the Jacobs Creek HDD Line List and/or Alignment Sheets and/or any Permit Drawings in Exhibit B.

14.3 The minimum clearance between Company’s pipeline and foreign pipelines at foreign pipeline crossings shall be 24-inches if open cut, 36-inches if bored, 10-feet if HDD, or the minimum distance required by the foreign pipeline Company/operator, whichever is greater, unless otherwise approved by Company. Contractor will have no recourse against Company for the greater clearance distance required by the foreign pipeline company/operators.

14.4 The Contractor shall, at its own expense, confirm or determine in advance of actual construction the precise location and actual depth of all utilities and subsurface structures and pipelines that either cross or are near the proposed pipeline. Contractor shall report to Company the discovery of any existing pipelines and other facilities not identified by Company furnished alignment sheets, maps, and Drawings.

14.5 The striking, cutting, damage, modification, destruction, or crushing of drain or irrigation tiles and required repairs associated with such damage in accordance with landowner requirements, and the terms of the Agreement, whether or not such drain or irrigation tiles were known or unknown (mapped or not) at the time of execution of this Agreement, are the responsibility of the Contractor.

15. HORIZONTAL DIRECTIONAL DRILLS

15.1 See Exhibit B for Company Horizontal Directional Drilling (HDD) Specifications and Requirements.

15.2 Company shall review and approve Contractor’s HDD plan and any subcontractor, vendor or supplier utilized to perform horizontal directional drills.

15.3 Company has determined certain water bodies and other crossings will be installed utilizing Horizontal Directional Drilling (HDD). The crossings shall be installed by HDD and shall be included in the Contractor’s price.

15.4 Company will provide 14-inch pipe coated with FBE coating and an abrasion resistant overlay (ARO) for the specified HDD.

15.5 Contractor shall perform a 4-hour pre-installation test at a minimum test pressure as designated on the HDD drawing or as designated by a Company Representative. Hauling, transporting, pumping, and metering of Contractor supplied water for HDD operations and pretest of the HDD crossings is the responsibility of Contractor and shall be included in Contractor’s pricing. All Directional Drill crossing water and drilling mud will be properly disposed of in accordance with regulatory and Company rules and regulations and is the responsibility of Contractor and shall be included in Contractor’s pricing.

15.6 Contractor is to floc all girth welds for the HDD pipe with FBE and ARO coating per Company’s Coating Manual.

16. REMOVAL, DISPOSAL AND ABANDONMENT OF EXISTING PIPELINE

The existing pipeline abandonment, removal, handling, and disposal shall comply with all Company procedures and federal, state and local permit requirements. The existing pipeline shall be removed, disposed, and abandoned as described below and as shown on the Drawings.

16.1. REMOVAL OF EXISTING PIPE ON LAND

16.1.1. The Contractor shall remove the Company’s existing 14-inch pipeline at tie-in locations indicated on the Drawings.

16.1.2. The existing 14-inch pipeline has coal tar coating that may contain asbestos fibers and shall be
handled accordingly per Company requirements. The Contractor should be prepared to remove pipe appropriately with asbestos abatement trained personnel and shall provide Company with the personnel current training credentials. The Contractor shall cut all removed portions of existing steel pipeline into 18’ lengths and place into Company-provided containers. The Company will provide roll-offs on site and arrange for disposal at an approved disposal facility.

16.1.3. Certain residual product may be present inside the abandoned pipeline, Contractor shall be responsible for providing a vac-truck(s) during pipe removal activities at all times for the removal and disposal of all residual products. The cost associated with the vac-truck shall be included in the Contractor’s lump sum price.

16.2. REMOVAL OF PIPE IN JACOBS CREEK

16.2.1. The Company’s existing 14-inch pipeline and 18-inch casing shall be removed in the creek at locations indicated on the Drawings. The Contractor shall not remove the existing pipeline from May 1 through July 31, 2022. Contractor shall be responsible for the removal of the abandoned pipeline on or before May 1 or after July 31, 2022.

16.2.2. The Contractor shall divert or pump around the creek prior to and during the pipeline removal.

16.2.3. The existing 14-inch pipeline has coal tar coating that may contain asbestos fibers and shall be handled accordingly per Company requirements. The Contractor should be prepared to remove pipe appropriately with asbestos abatement trained personnel and shall provide Company with the personnel current training credentials. The Contractor shall cut all removed portions of existing pipeline into 18’ lengths and place into Company-provided containers. The Company will provide roll-offs on site and arrange for disposal at an approved disposal facility.

16.2.4. Certain residual product may be present inside the abandoned pipeline, Contractor shall be responsible for providing a vac-truck(s) during pipe removal activities at all times for the removal and disposal of all residual products. The cost associated with the vac-truck shall be included in the Contractor’s lump sum price.

16.3. GROUTING OF EXISTING PIPELINE

16.3.1. Upon completion of pipeline integrity testing and tie-in of the newly installed pipeline, the Contractor shall grout the abandoned section of 14-inch pipeline as indicated on the Drawings.

16.3.2. The Contractor is responsible for grouting approximately 2,854 linear feet of 14-inch pipeline and abandoning in place.

16.3.3. The Contractor shall provide all labor, materials, and equipment to install end caps then grout the abandoned lines as specified. Grouting shall be performed using a method that avoids leaving any air voids after placement. Prior to initiating the grouting, the Contractor shall submit a grout mix design and filling procedure to the Company’s Representative for approval.

16.3.4. The grout mix design shall specify the following parameters:

- Cement Type and Quantity
- Admixtures Type and Quantity
- Water Content
- Yield
- Percent Free Water
- Settlement
- Compressive Strength
- Pumping Time

16.3.5. Certain residual product may be present inside the abandoned pipeline, Contractor shall be responsible for providing a vac-truck(s) at all times for the removal and disposal of all residual products. The cost associated with the vac-truck shall be included in the Contractor’s lump sum price.
17. PUBLIC ROAD AND RAILROAD CROSSINGS

There are no public road or railroad crossings on this project. There is one road being partially trenched on the PA side to allow the tie-in to the existing Company pipeline.

18. SIZING PLATE INSPECTION

18.1. The Contractor shall provide the labor, material, and equipment, to conduct a sizing plate inspection, prior to hydrotesting the new pipeline. The Contractor shall provide the sizing plates mounted on a poly pig for the HDD aboveground string portion of the 14-inch pipeline.

18.2. Sizing plate diameter tolerance shall be 2-1/2% of nominal pipe internal diameter.

18.3. One sizing plate inspection shall be performed prior to pull back.

18.4. The poly pig with sizing plate shall be run through the newly constructed pipeline by means of air. A continuous and even flow of air into the carrier pipe section shall be maintained until it is filled. If a pig/scraper sticks in the line it shall be the responsibility of the Contractor to locate and remove the stuck pig/scraper. The Contractor, at his own expense, shall remove the obstruction which caused the pig/scraper to stick and then rerun the pig/scraper, with the sizing plate, in the line after the obstruction is removed. The Contractor may elect to back pressure the pipeline to remove a pig/scraper that gets stuck.

19. CALIPER PIG INSPECTION

19.1. The Contractor shall provide the labor, material, and equipment, to conduct a caliper pig run on the entire installed length of pipe upon completion of the installation to verify that no anomalies have been created during the installation of the pipeline. Pipe anomalies that are larger than 2.0% of the pipe will not be accepted by the Company. The Contractor shall provide the Company with the caliper pig data prior to the Drilling Contractor demobilizing from the site.

19.2. The following is a list of Company approved Caliper Pig vendors: (Alternatives will not be permitted)

- Ricky Ramon
  - TDW Services, Inc
  - 4220 World Houston Parkway, Suite 100
  - Houston, TX 77032
  - 832-731-8131
- John Winzenberg
  - Enduro Pipeline Services, Inc
  - P.O. Box 3489
  - Tulsa, OK 74101
  - 918-446-1934
- Curtis Rogers
  - GeoCorr
  - 5200 Mitchelldale St, Suite D8
  - Houston, TX 77092
  - 832-977-5161

19.3. The caliper pig shall be run through the newly constructed pipeline by means of air. A continuous and even flow of air into the carrier pipe section shall be maintained until it is filled. If a caliper pig sticks in the line it shall be the responsibility of the Contractor to locate and remove the caliper pig. The Contractor, at his own expense, shall remove the obstruction which caused the caliper pig to stick and then rerun the caliper pig in the line after the obstruction is removed. The Contractor may elect to back pressure the pipeline to remove a caliper pig that gets stuck.

20. HYDROSTATIC TESTING

See Exhibit B for Company Hydrostatic Testing Specifications and Requirements. The following must be done
before any test water is introduced into the system or any dewatering take place.

20.1. The test area will be clearly marked with barricade tape at a safe distance prior to any testing. A project wide meeting will be conducted with all affected parties working on the project to discuss the areas affected by the testing. Only personnel directly involved with the testing will be allowed within the test boundary.

20.2. The test crew will then conduct a tailgate safety meeting to verify with absolute certainty that the test is ready to be started.

20.3. Contractor is responsible for furnishing, hauling, transporting, pumping and metering of Contractor supplied water for hydrostatic testing and shall be included in Contractor’s pricing. All hydrostatic testing water will be properly disposed of in accordance with regulatory and Company rules and regulations and is the responsibility of Contractor and shall be included in Contractor’s pricing.

20.4. Contractor is responsible for furnishing, hauling, transporting, pumping and metering of Contractor supplied water for hydrostatic testing and shall be included in Contractor’s pricing. All hydrostatic testing water will be properly disposed of in accordance with regulatory and Company rules and regulations and is the responsibility of Contractor and shall be included in Contractor’s pricing.

20.5. Contractor to provide all materials required for fabricating temporary pig launchers and receivers and shall fabricate and install temporary pig launchers and receivers, test headers, and supply all other materials and equipment, which includes, but may not be limited to fittings, valves, pigs, calibrated recorders and dead weights, hoses and enclosures with 3rd party certification of all test documentation necessary to complete all required testing of the completed pipeline. On all temporary test headers and/or temporary traps the MTR’s must be supplied and on Site as well as all welds shall be x-rayed and MT on Site.

20.6. Contractor’s hydrostatic test plan shall be prepared and approved by the Company and a 3rd Party PE that is registered in the state or states the test is being conducted. Contractor must submit the hydrotest plan to the Company for review and approval at least one week prior to proposed start of test activities.

20.7. Contractor is responsible for obtaining and disposal of all hydrotest water required for this project.

20.8. Contractor’s PE shall sign off on the completed HDD hydrotest and all related documents to verify the completed HDD is in accordance with the submitted test plan.

21. PIPELINE TIE-INS

21.1. Contractor shall provide the necessary labor, equipment, and materials for the complete tie-in operation. Reference Company Drawings for tie-in connections and locations.

21.2. The tie-ins should be adequately lined up as to not induce excessive bending that may cause additional stress loading on the pipe.

21.3. It is the Contractor’s responsibility to properly prepare each tie-in location in advance of the Work.

21.4. Contractor is required to notify and have a Company Representative on Site at all times during crossings and tie-in Work activities.

22. RECORDS

22.1. See Exhibit B for Company Records Specifications and Requirements.

22.2. Pipeline Safety Regulations and Regulatory Agency’s regulations require that Company preserve certain records. Contractor shall cooperate with development and documentation of records as requested by Company’s Representative.
22.3. Contractor shall keep and furnish complete records of all phases of the testing program.

22.4. Contractor shall record and maintain a log on a daily and monthly basis of water used for horizontal directional drills (if utilized).

22.5. HDD documentation, profiles, charts, etc. shall be submitted in AutoCAD in compliance with the Company’s Design and Drafting Standard. Documentation is to be provided within fourteen (14) days of completion of successful drill and pull back.

22.6. Contractor shall record and provide Company’s Representative, the date, time, location, total volume, maximum rate, and methods of all water discharged to the ground or surface water in association with trench dewatering.

22.7. Contractor shall provide Company’s Representative with copies of Material Safety Data Sheets (MSDS) for all chemicals used during construction of the pipeline.

22.8. Hazardous waste manifests will be provided to Company’s Representative on a weekly basis or as appropriate.

22.9. Contractor shall provide an electronic as-built report for each horizontal directional drill.

22.10. Contractor shall provide Company with a copy of all records and inspection reports required by the environmental permits in Exhibit B.

22.11. Contractor shall remove seed labels, as each bag is emptied, and submit the labels to Company’s Representative at the time of seeding.

22.12. Contractor shall complete a Caliper Survey Report detailing the time and activities for completing the caliper surveys. The report shall include a summary review/analysis of all findings and/or actions resulting from the caliper pig survey.

22.13. Contractor shall provide written acknowledgement from appropriate Township/County/State road and bridge authorities acknowledging their satisfaction with conditions of roads and bridges after movement of equipment by Contractor.
ATTACHMENT I
COVID-19 SCREENING INSTRUCTIONS
# Exhibit B

## Plans, Specifications, and Project Documents

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<tr>
<td>HDD Inadvertent Return Assessment, Preparedness, Prevention &amp; Contingency Plan</td>
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</table>
From: Edward J. Weirsky <Edward.Weirsky@stvinc.com>  
Sent: Thursday, August 18, 2022 3:22 PM  
To: Paul Harenberg  
Cc: Julie Shelley; daniel.kershner  
Subject: RE: FW:  
Attachments: Jacobs Creek HDD Analysis - January 2021.pdf

Paul

I have attached STV’s Horizontal Direction Drill Analysis Report which has the drill calculation attached as appendices. Please let me know if this helps with your questions relating to drilling calculations.

Thank you
Edward J Weirsky Jr (Ed)  
STV Inc  
Sr. Project Manager  
Work 609-530-0020  
Mobile 609-439-7603  
Edward.weirsky@stvinc.com

From: Paul Harenberg <PHarenberg@njwsa.org>  
Sent: Thursday, August 18, 2022 2:11 PM  
To: Edward J. Weirsky <Edward.Weirsky@stvinc.com>  
Cc: Julie Shelley <jshelley@njwsa.org>; daniel.kershner <daniel.kershner@energytransfer.com>  
Subject: RE: FW:

**This e-mail is from outside STV**

Ed,

In reviewing the specs, why wasn’t “C2.0520 - HDD Engineering Design Guideline” included in the package sent to the contractor? It was not on the spreadsheet you provided, but it is referenced in some of the specs you provided.

Thanks.

Regards,

Paul Harenberg, PE  
Project Engineer  
New Jersey Water Supply Authority

From: Edward J. Weirsky <Edward.Weirsky@stvinc.com>  
Sent: Tuesday, August 16, 2022 2:09 PM  
To: Paul Harenberg <PHarenberg@njwsa.org>
CC: Julie Shelley <jshelley@njwsa.org>; Daniel A. Kershner <DANIEL.KERSHNER@energytransfer.com>

Subject: RE: FW:

I'm using Mimecast to share large files with you. Please see the attached instructions.

Paul

Since these files are large I am sending you a link so you can download them. Let me know if you have any problems. Also let me know if you need anything else from us.

Thank you
Edward J Weirsky Jr (Ed)
STV Inc
Sr. Project Manager
Work  609-530-0020
Mobile 609-439-7603
Edward.weirsky@stvinc.com

---

From: Paul Harenberg <PHarenberg@njwsa.org>
Sent: Thursday, August 11, 2022 11:56 AM
To: Weirsky, Edward J. <Edward.Weirsky@stvinc.com>
Subject: RE: FW:

**This e-mail is from outside STV**

Ed,

Please send me the following specifications:

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<tr>
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<tr>
<td>HL4.0106</td>
<td>2/1/2018</td>
<td>Construction As-Built Survey</td>
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</tbody>
</table>

Regards,

Paul Harenberg, PE
Paul

Here is the construction scope of work and the list of specifications. If you need to review any of the specification please let me know and I will get them to you.

Thank you
Edward J Weirsky Jr (Ed)
STV Inc
Sr. Project Manager
Work  609-530-0020
Mobile 609-439-7603
Edward.weirsky@stvinc.com

Ed:

Attached is the scope of work and Exhibit B.

Thanks

Mark Struss
STV Energy Services, Inc.
205 West Welsh Drive
Douglassville, PA. 19518
Bus: (610) 385-8346
Mobile: (610) 698-8552
Bus Fax: (610) 385-8510
E-mail: mark.struss@stvinc.com
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Julie,

Attached is the renewal certificate.

From: Julie Shelley <jshelley@njwsa.org>
Sent: Friday, September 16, 2022 8:57 AM
To: Franciscus, James E <JAMES.FRANCISCUS\_<redacted>>
Cc: Paul Harenberg <PHarenberg@njwsa.org>; Wentzel, Adria <adria.wentzel@dep.nj.gov>; Weirsky, Edward J. <Edward.Weirsky\_<redacted>>; Kershner, Daniel A <DANIEL.KERSHNER\_<redacted>>
Subject: RE: Sunoco Lease

James,

There are a couple of minor outstanding items. I need an updated insurance certificate and Paul Harenberg, our engineer who is coordinating the review, is awaiting something from Ed (see attached).

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Julie

From: Franciscus, James E <JAMES.FRANCISCUS\_<redacted>>
Sent: Wednesday, September 14, 2022 11:58 AM
To: Julie Shelley <jshelley@njwsa.org>
Cc: Paul Harenberg <PHarenberg@njwsa.org>; Wentzel, Adria <adria.wentzel@dep.nj.gov>; Weirsky, Edward J. <Edward.Weirsky\_<redacted>>; Kershner, Daniel A <DANIEL.KERSHNER\_<redacted>>
Subject: RE: Sunoco Lease

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To: Franciscus, James E <JAMES.FRANCISCUS@njw.png>
Cc: Paul Harenberg <PHarenberg@njwsa.png>; Wentzel, Adria <adria.wentzel@dep.png.nj.gov>; Weirsky, Edward J. <Edward.Weirsky@dep.png.nj.gov>
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Best,

Julie

Private and confidential as detailed here. If you cannot access hyperlink, please e-mail sender.
Private and confidential as detailed here. If you cannot access hyperlink, please e-mail sender.
I'm waiting on a means and methods submittal for removal of the existing pipe within Jacobs Creek. I am ok with proceeding with construction if this is submitted prior to construction beginning. I have been informed I will get it “soon”. That is the one item I am waiting for.

Regards,

Paul Harenberg, PE
Project Engineer
New Jersey Water Supply Authority

Before I reply, just wanted to confirm you are ready for them to proceed?

That is great news. Once we have that agreement is there any other items that need to be addressed before commencement of construction?

As you may be aware, our Board approved the new lease for Sunoco on Sept 12. The Governor’s veto period ends at COB on Sept 27. I'll circulate the lease for our final signatures on the 28th and I'll distribute fully executed copies as soon as I have the two remaining signatures.
Best,
Julie
Private and confidential as detailed here. If you cannot access hyperlink, please e-mail sender.
SECRETARY’S CERTIFICATE

The undersigned, in his capacity as the Associate General Counsel and Secretary of Energy Transfer Operations GP LLC, a Delaware limited liability company (the “General Partner”), which is the general partner of Sunoco Pipeline L.P., a Texas limited partnership (the “Partnership”), hereby certifies that:

1. Kevin Taliaferro is the duly qualified and acting Senior Director – Right-of-Way of the General Partner, and he continues to occupy such office as of the date hereof and the signature set forth below is the true and genuine signature of said person.

   ____________________________
   Kevin Taliaferro – Senior Director – Right-of-Way

2. Kevin Taliaferro, as the Senior Director – Right-of-Way, is duly authorized and empowered on behalf of the General Partner, in its capacity as the general partner of the Partnership, on behalf of the Partnership, to execute, deliver and bind the General Partner and the Partnership with respect to real property and right-of-way instruments and that authority has not been repealed or rescinded and is in full force and effect as of the date hereof.

   IN WITNESS WHEREOF, I have hereunto set my hand this 18th day of August, 2022.

   ____________________________
   William J. Healy
   Associate General Counsel and Secretary
CERTIFICATE OF LIABILITY INSURANCE

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY END, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

**PRODUCER**
LOCKTON COMPANIES
3657 BRIARPARK DRIVE, SUITE 700
HOUSTON TX 77042
866-260-3538

**INSURED**
1513455 Sunoco Pipeline L.P.
1300 Main Street
Houston TX 77002

**INSURER(S) AFFORDING COVERAGE**

INSCRIBER A: Old Republic Insurance Company
24147

**CERTIFICATE NUMBER:** 18804928

**REVISI ON NUMBER:** XXXXXXXX

**DATE (MM/DD/YYYY):** 8/24/2022

**INSURER A:**

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**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES** (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

EXCESS WORKERS COMPENSATION - * POLICY APPLIES TO OHIO. Products/Completed Operations Aggregate Limit Subject to the General Aggregate Limit. All policies (except Workers’ Compensation/EL) contain a special endorsement with "Primary and Noncontributory" wording. Certificate holder continued: THE DELAWARE & RARITAN CANAL COMMISSION, Hillsville Mills, PO Box 539, Stockton, New Jersey 08559; THE NEW JERSEY WATER SUPPLY AUTHORITY, 1851 Highway 31, PO Box 5196, Clinton, New Jersey 08809. Re: LEASE AGREEMENT FOR LANDS WITHIN THE D&R CANAL TRANSMISSION COMPLEX, Additional insured in favor of The State of New Jersey (including the "New Jersey Water Supply Authority" and the "Department of Environmental Protection, State Park Service") and its agencies, employees and officers on all policies (except Workers’ Compensation/EL) where and to the extent required by written contract.

**CERTIFICATE HOLDER**

18804928

THE STATE OF NEW JERSEY,
DEPARTMENT OF ENVIRONMENTAL PROTECTION,
STATE PARKS, FORESTS AND HISTORIC SITES
CERTIFICATE HOLDER CONTINUED IN DESCRIPTION
P.O. Box 420, Mail Code 501-04
Trenton NJ 08625

**CANCELLATION**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

**AUTHORIZED REPRESENTATIVE:**

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Layer 2 Excess Liability
Policy# ME2223923; Insurer: White Bear
Policy# ME2217472; Insurer: Lloyd's of London Syndicates
*Policy# NAMCA2201239; Insurer: Ascot Bermuda Limited
Effective Dates: 9/15/2022-9/15/2023
Limits: $5,000,000

Pollution Legal Liability
Policy No: MWZZ 301298-22
Insurer: Old Republic Insurance Company
Policy Term: 9/15/22 - 9/15/23
Limits: $10,000,000 Each Pollution Incident
        $10,000,000 General Aggregate

*This Bermuda placement was made by the wholesaler and Lockton U.S. has only acted in the role of the consultant to the client with respect to this placement.
All policies (except Workers' Compensation/EL) include a blanket automatic additional insured endorsement [provision] that confers additional insured status to the certificate holder only if there is a written contract between the named insured and the certificate holder that requires the named insured to name the certificate holder as an additional insured. In the absence of such a contractual obligation on the part of the named insured, the certificate holder is not an additional insured under the policy.

All policies include a blanket automatic waiver of subrogation endorsement [provision] that provides this feature only when there is a written contract between the named insured and the certificate holder that requires it. In the absence of such a contractual obligation on the part of the named insured, the waiver of subrogation feature does not apply.
Thanks Julie. Will we need COIs for our contractors performing the work as well?

James,

There are a couple of minor outstanding items. I need an updated insurance certificate and Paul Harenberg, our engineer who is coordinating the review, is awaiting something from Ed (see attached).

Attached elsewhere in this response package

Best,
Julie

That is great news. Once we have that agreement is there any other items that need to be addressed before commencement of construction?

James,
As you may be aware, our Board approved the new lease for Sunoco on Sept 12. The Governor's veto period ends at COB on Sept 27. I'll circulate the lease for our final signatures on the 28th and I'll distribute fully executed copies as soon as I have the two remaining signatures.

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From: Edward J. Weirsky <Edward.Weirsky@stvinc.com>
Sent: Thursday, September 29, 2022 8:13 AM
To: Paul Harenberg; Julie Shelley
Cc: Wentzel, Adria; Kershner, Daniel A; John Hutchison; James E Franciscus, James E
Subject: RE: Sunoco Lease

Paul

Please find Sunoco’s updated Bore Hole Abandonment Plan. Please review and let me know if you have any other additional comments. Again thank you for your help in reviewing our documents.

Thank you
Edward J Weirsky Jr (Ed)
STV Inc
Sr. Project Manager
Work 609-530-0020
Mobile

From: Paul Harenberg <PHarenberg@njwsa.org>
Sent: Tuesday, September 27, 2022 4:06 PM
To: Franciscus, James E <JAMES.FRANCISCUS@njwsa.org>; Julie Shelley <jshelley@njwsa.org>
Cc: Wentzel, Adria <adria.wentzel@dep.nj.gov>; Weirsky, Edward J. <Edward.Weirsky@stvinc.com>; Kershner, Daniel A <daniel.kershner@nj.gov>; John Hutchison <john.hutchison@dep.nj.gov>
Subject: Re: Sunoco Lease

**This e-mail is from outside STV**

James/Ed,

We recently received the two attached submittals as requested. We do not have any comments on the Abandoned Pipeline Removal Plan. We do have comments on the Bore Hole Abandonment Plan. As not to hold up the project, we can give a conditional approval on the engineering end as these comments can be addressed between now and when the drilling begins. These comments must be addressed in one complete submittal package prior to drilling commencing. The comments are below:

**Bore Hole Abandonment Plan**

1. There are very little details provided in the document, therefore we recommend this be revised and resubmitted. Below are some more specific comments.
2. Provide a contingency HDD Bore alignment (vertical and horizontal) for review and approval by NJWSA. This could be done now, or could wait to submit for review when

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and if it is actually needed; however, there will be review/approvals required by NJWSA that could delay resuming the new HDD bore if a new alignment is needed.

3. Provide further details on grouting methods and grout mix, including:
   a. A method of injecting grout at the lowest point of the bore and forcing the drilling fluid out by tremie. End-dumping grout into the hole is not acceptable because it does not confirm the grout penetrated the entire bore length.
   b. The volume of grout injected needs to be tracked and compared against the theoretical volume to be filled, including accounting for potential grout loss in the ground.
   c. A frac-out plan needs to be implemented during grouting just as with drilling.
   d. The plan should address what will be done when the grout level sags after a few hours or days.

4. Note that the volume to be filled is not an annular space if the drill stem and tools have been removed.

5. Address methods of capture and disposal of the expelled drilling fluid.

6. There should be a site restoration description.

Should you have any questions please do not hesitate to contact me.

Regards,

Paul Harenberg, PE
Project Engineer
New Jersey Water Supply Authority

From: Franciscus, James E <JAMES.FRANCISCUS>
Sent: Tuesday, September 27, 2022 2:35 PM
To: Julie Shelley <jshelley@njwsa.org>
Cc: Paul Harenberg <PHarenberg@njwsa.org>; Wentzel, Adria <adria.wentzel@dep.nj.gov>; Weirsky, Edward J. <Edward.Weirsky1>; Kershner, Daniel A <DANIEL.KERSHNER>; John Hutchison <john.hutchison@dep.nj.gov>
Subject: RE: Sunoco Lease

Thanks Julie. I’ll check in on these two items and let you know.

From: Julie Shelley <jshelley@njwsa.org>
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To: Franciscus, James E <JAMES.FRANCISCUS>
Cc: Paul Harenberg <PHarenberg@njwsa.org>; Wentzel, Adria <adria.wentzel@dep.nj.gov>; Weirsky, Edward J. <Edward.Weirsky1>; Kershner, Daniel A
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From: Weirsky, Edward J. <Edward.Weirsky>
Sent: Thursday, September 29, 2022 8:59 AM
To: Paul Harenberg; Julie Shelley
Cc: Wentzel, Adria; Kershner, Daniel A; John Hutchison; Franciscus, James E
Subject: RE: Sunoco Lease
Attachments: RE: Sunoco Lease

Follow Up Flag: Follow up
Flag Status: Flagged

Paul
I am sorry for that. Here it is...

Thank you
Edward J Weirsky Jr (Ed)
STV Inc
Sr. Project Manager
Work 609-530-0020
Mobile

---

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Redesigned and rebuilt: visit our new website at www.stvinc.com
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HDD INADVERTENT RETURN ASSESSMENT
SUPPLEMENTAL INFORMATION

14-INCH TWIN OAKS TO NEWARK
JACOBS CREEK PIPELINE
RELOCATION

Located In:

UPPER MAKEFIELD TOWNSHIP, BUCKS COUNTY, PA
EWING & HOPEWELL TOWNSHIPS, MERCER COUNTY, NJ

HDD BORE HOLE AND ANNULAR ABANDONEMENT

PURPOSE:

In horizontal directional drilling there is the possibility that unforeseen circumstances prevent the
directional drilling operation from progressing forward and a new profile, alignment and entry point will
have to be established.

The original annular would have to be abandoned in place.

In the unlikely even the directional drill cannot be installed to the permitted design plan and
profile a new design will have to be submitted and approved through the appropriate agencies. This will
occur at the time it is decided to abandon the current bore hole. The new design will take into account all
data and information obtained from the previous drill location.
METHOD:

- The directional drilling equipment will have to trip out the drill stem, guidance assembly, mud motor and cutting head assembly.
- The directional drilling equipment will be moved from this drill pad and proper grout injection equipment will be brought in as certain grout mixtures will damage drilling equipment.
- A low strength grout mixture will be used and injected via tremie pipe or alternative into the lowest point in the bore hole displacing the drilling fluid back to the entry point.
- The MSDS/grout mix design will be submitted to the agencies for approval prior to injection.
- The injection will continue until the estimated annular volume is filled with grout.
- The estimated volume of the abandoned empty annular will be determined using a theoretical volume calculation considering the bit diameter and length into the profile.
- The quantity of grout will include a percentage over to account for bore hole irregularity and settlement.
- In the event the annular is not completely filled with the estimated quantity injected more will be injected until grout is visible at annular face.
- The HDD IR plan will be adhered to during grouting operations.
- The grout will be filled to where the annular meets the face of the entry pit.
- The drilling fluid that is displaced by the injection of the grout will be pumped out of the entry and/or exit pits and hauled off to proper disposal site.
- The entry pit will be cleaned of residual drilling fluid, backfilled and compacted with suitable soil.
- All site restoration will adhere to applicable PADEP/NJDEP permits as well as appropriate conservation district permits.
From: Weirsky, Edward J. <Edward.Weirsky@STV.com>
Sent: Thursday, August 11, 2022 12:26 PM
To: Paul Harenberg
Subject: RE: Update to Aaron’s IR Plan

Paul

You should now have the revised IRP. I will work on getting you the requested specifications. Let me know if you need anything else.

Thanks
Edward J Weirsky Jr (Ed)
STV Inc
Sr. Project Manager
Work  609-530-0020
Mobil  

The NJWSA has denied and redacted from the records the portion of the responsive records that reveal personal identifying information (i.e., cell phone numbers, email addresses) pursuant to N.J.S.A. 47:1A-1.1. This applies to the same information redacted in the following three pages.

From: Paul Harenberg <PHarenberg@njwsa.org>
Sent: Thursday, August 11, 2022 12:14 PM
To: Weirsky, Edward J. <Edward.Weirsky@STV.com>
Subject: RE: Update to Aaron’s IR Plan

**This e-mail is from outside STV**

Ed,

This was previously received and this was what was reviewed that generated the comments provided.

There is a revised IR plan that we never received (see attached email). This attachment follows the email thread.

Regards,

Paul Harenberg, PE
Project Engineer
New Jersey Water Supply Authority

From: Weirsky, Edward J. <Edward.Weirsky@STV.com>
Sent: Thursday, August 11, 2022 12:06 PM
To: Paul Harenberg <PHarenberg@njwsa.org>
Subject: RE: Update to Aaron’s IR Plan

Paul

I have attached the Aaron’s drill plan for your review.

This attachment follows the email thread.
Ed,

Note – There was no file attached to the previously email you sent me.

Sorry for the delay in getting back to you on this. I was away, and simultaneously received the review from the consultant on the work plan.

In order to avoid duplicating comments previously provided from myself or the consultant, I am taking some of their comments and paraphrasing below in red.

1. Conditions of the October 20, 2021 letter vs. what was provided.
   a. We suggest that the submittal specifically describes the existence of the existing public water supply of the NJWSA Delaware and Raritan Canal and the conditions imposed by NJWSA in the October 20, 2021 letter.
   b. Conditions 1 and 2 have not been addressed since an HDD specification has not been provided.
      i. Condition 1 requires the construction specification should require the applicant to provide NJWSA with guidance data, trajectory, and records of the HDD installation.
      ii. Condition 2 requires the construction specification should indicate that the submittals should be provided to NJWSA for review and approval prior to construction.
   c. Condition 2 has not been satisfied since a specification for pipe/casing removal and a submittal for means/methods of pipe/casing removal has not been provided. The condition requires the following:
      i. 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 within Jacobs Creek adjacent to the D&R Canal.
ii. Contract documents should also require the contractor to submit means/methods of pipe removal for review and approval by NJWSA prior to construction.

d. Condition 11 requires visual inspections to be performed. Section 16, Inadvertent Return Plan, Subsection 4.2 requires inspections, but does not provide a frequency for these inspections. Please revise the plan to show visual inspections frequency throughout the day for when the bore is crossing within the vicinity of the Delaware and Raritan Canal.

2. Section 16, Inadvertent Return (IR) Plan, Subsection 6 provides a list of materials to control IR. We recommend these materials, equipment, and crews be available in the vicinity of the Canal when the bore passes within NJWSA jurisdiction.

3. Section 19, Sample of Daily Report – We recommend all daily (or shift) reports be provided to NJWSA for review.

4. Section 20 Pressure Analysis – this indicates a pressure analysis has not been completed. Although not specifically required by NJWSA as it relates to the D&R Canal, it is standard practice to provide this.

5. Section 22 Pull force and pipe stress calculations – this indicates these calculations have not been completed. Although not specifically required by NJWSA as it related to the D&R Canal, it is standard practice to provide this.

6. The Contractor’s submittal includes no discussion of a contingency plan in the event the HDD bore cannot be completed, or the pipeline successfully installed. We recommend NJWSA request a plan for abandoning and securing the borehole in the event the crossing is not successfully completed.

Some of these items may be satisfied in the project specifications (4-6), but we did not receive the specifications. Let me know if further discussion is needed.

Regards,

Paul Harenberg, PE
Project Engineer
New Jersey Water Supply Authority
T 908-638-6121 x254
F 908-638-5241
pharenberg@njwsa.org

From: Weirsky, Edward J. <Edward.Weirsky@njwsa.org>
Sent: Monday, July 18, 2022 1:00 PM
To: Paul Harenberg <PHarenberg@njwsa.org>
Cc: Julie Shelley <jshelley@njwsa.org>; daniel.kershner <daniel.kershner@njwsa.org>
Subject: Update to Aaron’s IR Plan

Paul
Here is the updated IR plan with the two items you wanted listed in their plan. They listed them in section 7.3. Let me know if you need anything else adjusted in the plan.

Thank you
Edward J Weirsky Jr (Ed)
STV Inc
Sr. Project Manager
Work 609-530-0020
Mobil

Please consider the environment before printing this e-mail.

Redesigned and rebuilt: visit our new website at www.stvinc.com

The information contained in this electronic message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are informed that any dissemination, copying or disclosure of the material contained herein, in whole or in part, is strictly prohibited. If you have received this transmission in error, please notify STV and purge this message.
HDD INADVERTENT RETURN ASSESSMENT, PREPAREDNESS, PREVENTION AND CONTINGENCY PLAN

14-INCH TWIN OAKS TO NEWARK JACOBS CREEK PIPELINE RELOCATION

Located In:

UPPER MAKEFIELD TOWNSHIP, BUCKS COUNTY, PA EWING & HOPEWELL TOWNSHIPS, MERCER COUNTY, NJ

Prepared For:

SUNOCO PIPELINE LP (SPLP)
100 GREEN STREET
MARCUS HOOK, PA 19061-4800

June 2022
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APPENDICES

Appendix A – Initial Inadvertent Returns Plan
PURPOSE OF THE PLAN

Horizontal directional drilling (HDD) is a trenchless construction methodology for installing pipelines, conduits or cable utilizing drilling fluid, often pressurized, and consisting of a directionally controlled (e.g., steerable) pilot hole drilled along a predetermined path extending from grade at one end of a drilled segment to grade at the opposite end; enlarging the pilot hole to a size which will accommodate a pipeline; and pulling a pipeline/conduit into the enlarged hole without disturbing the surface area under which the pipeline is needed. HDDs are often used to cross sensitive areas or difficult to construct areas that involve, for example, roads, wetlands, and waterbodies. However, HDD’s can present a potential risk to ground water, surface waters and sensitive ecological resources. During completion of HDDs, inadvertent returns (IR) can occur which result in the release of fugitive drilling fluids to the surface of the ground or surface waters. A study (Skonberg, et al., 2008) of HDD’s has shown that IRs occur on approximately half of HDD installations and most frequently within 200 ft of the entry or exit points where there was less than 40 ft of overburden.

In Pennsylvania, pursuant to the Chapter 102 regulations (§102.5(I)) and Chapter 78a regulations (§78a.68a - for Horizontal directional drilling for oil and gas pipelines), a PPC Plan is required prior to beginning any Trenchless Technology activity and must include a site-specific contingency plan that describes the measures to be taken to control, contain and collect any discharge of drilling fluids and minimize impacts to waters of the Commonwealth” New Jersey has no regulatory requirements pertaining to oversight of HDDs, however it is recommended proper planning and installation procedures to mitigation and minimize potential impacts.

As such, this Inadvertent Return Contingency Plan (Plan) serves as the site-specific contingency plan and describes the procedures that Sunoco Pipeline, L.P. (SPLP) and its contractor will implement to avoid, minimize, and remediate potential environmental impacts that could result from an inadvertent return of drilling fluids during horizontal directional drilling (HDD) operations associated with the project.
1. PROJECT DESCRIPTION

SPLP owns and operates a 14-inch welded steel high-pressure petroleum products pipeline that transports product from SPLP’s Twin Oaks 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 from Pennsylvania and 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. At this location, the pipeline is exposed within the stream bed of Jacobs 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 for a total length of 301 feet within Jacobs Creek: 169-foot within the culvert, 3-feet upstream of the culvert and 129-feet downstream of the culvert. The creek bed is located approximately 30-35 feet below the highway and canal surface.

Horizontal directional drill (HDD) installation techniques will be used to install the proposed pipeline across the Delaware River and up Jacob’s Creek. The proposed HDD installation will be a 14-inch pipeline approximately 2,515-feet in length and approximately 85-feet deep under the Delaware and Jacob’s Creek stream beds, the concrete arch culvert and approximately 110-120 feet under the Delaware Raritan Canal and SR029.

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.

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 and the (3) 855-foot HDD pipeline strings will be assembled and tested within the same private residential property and an additional residential/farm property. On the NJ side, the HDD exit point will be within an existing Gristmill private property. Once the HDD drill and reaming process has been completed from the PA side, the HDD drill rig will move to the NJ side, or an additional smaller HDD rig will be installed on the NJ side to pull-back the 14-inch pipeline string that has been assembled on the PA side.

Access on the NJ side to the Gristmill property will be through a residential property off Creek Rim Drive and from an existing Gristmill property driveway off of NJ SR029. 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 the other access location through an existing private residence property located off Creek Rim Drive.
Access on the PA side to the PA residential and residential farm properties will be off of Oakdale Avenue.

The proposed HDD will be tied into the existing pipeline using open trench installation techniques located landside and outside of Jacob’s Creek and the Delaware River. On the NJ side approximately 394 feet of trenched pipe will be needed to tie-in the HDD installation Grist Mill property and on the PA side approximately 121 feet of trenched pipe will be needed to tie in the HDD installation within Oakdale Avenue.

Approximately 316 feet of the exposed pipe and 199-feet of exposed casing will be removed from Jacob’s Creek and the remaining existing pipeline will be abandoned in place and filled with grout. Access to the eastern end of the exposed pipe will be from the Gristmill property into the middle of Jacob’s creek. Jacob’s Creek will be dammed off using sandbags 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 be along an existing Delaware Raritan Canal macadam path/road and down an existing cleared embankment into the middle of Jacob’s creek. Jacob’s Creek will be dammed off using sandbags 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. 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 properly disposed of. All exposed pipeline removal activities will occur on the NJ side of the river. The remaining existing/abandoned pipeline will be grouted from the HDD land-side tie-in locations to the capped ends of the removed pipeline.

2. INADVERTANT DRILLING FLUID RETURN

For the purpose of this document and the 14-Inch Twin Oaks to Newark Jacobs Creek Pipeline Relocation Project (Jacobs Creek), an inadvertent drilling fluid release will be defined as the unintentional or inadvertent loss of drilling fluids from the HDD bore hole to the surface water/onshore, other than the area of the bore entry and exit points. Drilling fluids may be lost to subsurface geological formations as part of normal operations and may result in a reduction of drilling return fluids and materials. This is not considered an inadvertent release and will be evaluated if it occurs.

2.1 DRILLING FLUID

Drilling fluids consist of a mixture of water, bentonite, and additives. This mixture has a unit weight slightly higher than that of fresh water. Bentonite is a naturally occurring, non-toxic, inert substance. Drilling fluids allow for the transportation of soil and rock cuttings, cleaning, and cooling of the cutters, reduces friction, provides bore hole stabilization, and the transmission of hydraulic power. Any drilling fluid additives besides bentonite and water should be approved by the Pennsylvania Department of Environmental Protection (PA DEP). All pre-approved drilling fluid additives are listed on the PA DEP’s website. In addition, the use of
drilling fluid additives certified for conformance with American National Standards Institute / National Science Foundation International (ANSI/NSF) Standard 60 Drinking Water Treatment Chemicals-Health Effects with a product function of drilling fluid are also deemed acceptable.

3. INADVERTANT RETURN PREVENTION

The objective to prevent inadvertent returns shall be managed through reasonable construction practices, including:

3.1 CONTROLLED TOOL ADVANCE

During pilot hole activities, the rate of advancement of the tool head will be conservative to allow for the clearing of cuttings from the annular space, this will prevent blockages of the annular space that could result in a build-up of pressure that could increase the risk of an IR. If the rate of returns is decreased or if the downhole pressure is increased, the rate of advancement will be further slowed or stopped and appropriate measures will be taken to try to clean the hole through reversing direction to try to clear the annular space.

3.2 DOWN HOLE PRESSURE

Pumping pressure while the directional drill is in operation will be kept at a reasonable level to maintain positive circulation of drilling fluid to facilitate clearing of cuttings. Reductions of circulation events may require the adjustment of drilling fluid properties (e.g. viscosity, density) and drilling tool advancement changes.

During drilling, pressure will be continually monitored utilizing a downhole pressure probe located at the head of the drill. The measured pressure will be compared against the predicted pressures and the maximum allowable pressures. These differences should give indications of the circular flow rate and the specific geology being encountered by the tool head. The drill rig operator, or driller, is responsible for monitoring the pressures.

4. INADVERTANT RELEASE MONITORING

Ultimate responsibility for monitoring the site and HDD alignment for inadvertent drilling fluid release lies with the HDD superintendent.

4.1 CIRCULATION RATE

The drilling fluid circulation rate and the quantity of returns to the HDD entry return pit will be continuously monitored and quantified. Any substantial differences between the rate of drilling fluid returns and drilling fluid pumping rates may indicate an inadvertent drilling fluid release. The drill rig operator, or driller, is responsible for visually monitoring the return pit for Loss of Circulation (LOC) indications.
4.2  INSPECTION

The surface of the ground will be inspected visually along the HDD alignment for signs of Inadvertent Returns. Visual inspections while the HDD is operating under waterways/resources is required. Due to the width and depth of the watercourses, the use of a drone with thermal imaging capabilities will be employed to quickly detect potential releases. If pressure and advancement indications of an inadvertent return are noticed, then a drone and visual inspection of the HDD alignment shall be continuous until the source of the indications is identified. Reasonable efforts must be made to search for any location where drilling fluid may have reached the surface.

4.3  VIBRATORY MONITORING

Preconstruction vibratory monitoring of the subsurface has been conducted and will be used to compare to vibratory monitoring during construction. Differences in these values along with other indications of LOC could be used to detect possible Inadvertent Returns. Vibratory Monitoring was and will continue to be conducted by E2PM during construction.

5.  TEMPORARY CASING

At the entry point of the HDD on the Pennsylvania side, a temporary casing will be installed to facilitate the smooth flow of drilling fluid returns to the entry bore pit. The temporary casing will be installed from the surface to the rock interface and will provide additional protection to prevent an inadvertent return at this location. The casing will also provide additional protection due to the increase in flow rate and pressure at the tool head during rock drilling operations. The casing will be removed when the HDD has been completed.

6.  INADVERTANT RETURN RESPONSE

If an IR is observed, the flow of drilling fluid shall immediately cease, and the designated general contractor representative shall be notified immediately. The HDD Superintendent and general contractor representative shall determine the appropriate action to take depending on the volume and location of the inadvertent return.

1. If the inadvertent return is minor, easily contained and is not threatening sensitive resources, a leak-stopping compound shall be used to block the release. Any material contaminated with drilling fluid shall be removed to a depth of 2 feet from the surface and properly disposed of offsite as required. If the inadvertent return occurs within the limit of disturbance and is containable, the drilling operations may be restarted with environmental inspector and SPLP approval.

2. If an inadvertent return reaches the surface and becomes widespread, the HDD Superintendent shall authorize a readily accessible vacuum truck to assist in the removal of materials impacted by bentonite.
3. If an inadvertent return releases in Hough’s Creek tributary, Jacobs Creek, or the Delaware River, the HDD Contractor will make every attempt to reduce, and contain and eliminate further release.

4. The HDD Contractor will deploy a turbidity curtain around the location of the inadvertent return. The purpose is to contain and confine the suspended solids until observable settling can occur. The turbidity curtain will remain in place until the inadvertent return has stopped and cleanup has been completed. The Environmental Inspectors will characterize the environmental impacts from the release of drilling fluids, including the extent of the plume, the area affected by recovery efforts, and whether the impacts are permanent or temporary. A report of the assessment will be provided to the PADEP representative and/or NJDEP representative as required for determination of any further action.

Every reasonable effort to reduce, contain and eliminate the inadvertent return will be made. Until the release is contained, drilling operations to advance the directional drill shall not be resumed, however the operator may take steps to preserve the integrity of the bore hole. These actions may include but are not limited to: adding pre-approved loss circulation materials to the drilling fluid, circulating the bore hole with drilling fluid and removing the drill string from the bore hole.

Appropriate materials to control inadvertent returns must be kept on site. These materials may include but are not limited to:

- Pre-approved LCMs
- Wood stakes
- Plastic sheeting
- Sandbags
- Silt fence
- Silt sock
- Plastic tarp(s)
- Orange safety fence
- Metal posts
- Hand tools (e.g. shovels, buckets, rakes, push brooms)
- Storage Tanks (if needed)
- Pumps, vacuum trucks
7. GENERAL CONDITIONS

- This Inadvertent Return plan must be present on-site during drilling operations and be made available to all agencies involved in the project.

- All required permits and material Safety Data Sheets must be onsite and made available to all agencies involved in the project.

7.1 PADEP CONDITIONS

- The permittee shall notify DEP, in writing, of the proposed time for commencement of work at least 15 days prior to the commencement of construction.

- The project site shall be available for inspection by authorized officers and employees of the Pennsylvania Fish and Boat Commission. Prior to commencement and upon completion of the work authorized by this permit, the permittee shall notify the Pennsylvania Fish and Boat Commission’s Southeast Regional Office, Box 8, Elm, PA 17521; telephone 717.626.0228.

7.2 NJDEP CONDITIONS

- The permittee (SPLP) shall immediately inform NJDEP (Department) of any unanticipated adverse effects on the environment that are not described in the application or in the conditions of the NJDEP permit. The Department may, upon discovery of such unanticipated adverse effects, and upon the failure of the permittee to submit a report thereon, notify the permittee of its intent to suspend the permit.

The permittee (SPLP) shall immediately inform the Department by telephone at (877-927-6337 (WARN DEP hotline) of any noncompliance that may endanger public health, and welfare, or the environment. The permittee (SPLP) shall inform the Division of Land Resource Protection by telephone at (609)-777-0454 of any other noncompliance within two working days of the time the permittee became aware of the noncompliance, and in writing within five working days of the time the permittee becomes aware of the noncompliance. Such notice shall not, however, serve as a defense to enforcement action if the project is found to be in violation of this chapter (105). The written notice shall include:

a. A description of the noncompliance and its cause;

b. The period of noncompliance, including exact dates and times;
c. If the noncompliance has not been corrected, the anticipated length of time it is expected to continue; and

d. The steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

- The permittee (SPLP) shall submit written notification to the Bureau of Coastal and Land Use Compliance and Enforcement, 401 East State Street, 4th Floor, PO Box 420, Mail Code 401-04C, Trenton, NJ 08625, at least three working days prior to the commencement of regulate activities.

7.3 NJWSA CONDITIONS

- 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.

- 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.

7.4 UNITED STATES ARMY CORPS OF ENGINEERS CONDITIONS

- The permittee (SPLP) shall immediately inform the United States Army Corps of Engineers (USACE) of any unanticipated adverse effects on the environment that are not described in the application or in the conditions of the USACE permit. The USACE may, upon discovery of such unanticipated adverse effects, and upon the failure of the permittee to submit a report thereon, notify the permittee of its intent to suspend the permit.

8. TRAINING OF PERSONNEL

All HDD contractor personnel onsite will receive training in preventing, monitoring and response to inadvertent returns. This training will include:

- The details of this plan
- Specific permitting conditions and requirements
- Communication organization
- Order of authority and responsibility
- Contact names and phone numbers of appropriate individuals
- Reportable events
HDD INADVERTENT RETURN ASSESSMENT, PREPAREDNESS, PREVENTION AND CONTINGENCY PLAN

14-INCH TWIN OAKS TO NEWARK JACOBS CREEK PIPELINE RELOCATION

Located In:

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Prepared For:

SUNCOCO PIPELINE LP (SPLP)
100 GREEN STREET
MARCUS HOOK, PA 19061-4800

June 2022
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## APPENDICES

- Appendix A – Initial Inadvertent Returns Plan
PURPOSE OF THE PLAN

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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.

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 and the (3) 855-foot HDD pipeline strings will be assembled and tested within the same private residential property and an additional residential/farm property. On the NJ side, the HDD exit point will be within an existing Gristmill private property. Once the HDD drill and reaming process has been completed from the PA side, the HDD drill rig will move to the NJ side, or an additional smaller HDD rig will be installed on the NJ side to pull-back the 14-inch pipeline string that has been assembled on the PA side.

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Access on the PA side to the PA residential and residential farm properties will be off of Oakdale Avenue.

The proposed HDD will be tied into the existing pipeline using open trench installation techniques located landside and outside of Jacob’s Creek and the Delaware River. On the NJ side approximately 394 feet of trenched pipe will be needed to tie-in the HDD installation Grist Mill property and on the PA side approximately 121 feet of trenched pipe will be needed to tie in the HDD installation within Oakdale Avenue.

Approximately 316 feet of the exposed pipe and 199-feet of exposed casing will be removed from Jacob’s Creek and the remaining existing pipeline will be abandoned in place and filled with grout. Access to the eastern end of the exposed pipe will be from the Gristmill property into the middle of Jacob’s creek. Jacob’s Creek will be dammed off using sandbags 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 be along an existing Delaware Raritan Canal macadam path/road and down an existing cleared embankment into the middle of Jacob’s creek. Jacob’s Creek will be dammed off using sandbags 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. 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 properly disposed of. All exposed pipeline removal activities will occur on the NJ side of the river. The remaining existing/abandoned pipeline will be grouted from the HDD land-side tie-in locations to the capped ends of the removed pipeline.

2. INADVERTANT DRILLING FLUID RETURN

For the purpose of this document and the 14-Inch Twin Oaks to Newark Jacobs Creek Pipeline Relocation Project (Jacobs Creek), an inadvertent drilling fluid release will be defined as the unintentional or inadvertent loss of drilling fluids from the HDD bore hole to the surface water/onshore, other than the area of the bore entry and exit points. Drilling fluids may be lost to subsurface geological formations as part of normal operations and may result in a reduction of drilling return fluids and materials. This is not considered an inadvertent release and will be evaluated if it occurs.

2.1 DRILLING FLUID

Drilling fluids consist of a mixture of water, bentonite, and additives. This mixture has a unit weight slightly higher than that of fresh water. Bentonite is a naturally occurring, non-toxic, inert substance. Drilling fluids allow for the transportation of soil and rock cuttings, cleaning, and cooling of the cutters, reduces friction, provides bore hole stabilization, and the transmission of hydraulic power. Any drilling fluid additives besides bentonite and water should be approved by the Pennsylvania Department of Environmental Protection (PA DEP). All pre-approved drilling fluid additives are listed on the PA DEP’s website. In addition, the use of
drilling fluid additives certified for conformance with American National Standards Institute / National Science Foundation International (ANSI/NSF) Standard 60 Drinking Water Treatment Chemicals-Health Effects with a product function of drilling fluid are also deemed acceptable.

3. INADVERTANT RETURN PREVENTION

The objective to prevent inadvertent returns shall be managed through reasonable construction practices, including:

3.1 CONTROLLED TOOL ADVANCE

During pilot hole activities, the rate of advancement of the tool head will be conservative to allow for the clearing of cuttings from the annular space, this will prevent blockages of the annular space that could result in a build-up of pressure that could increase the risk of an IR. If the rate of returns is decreased or if the downhole pressure is increased, the rate of advancement will be further slowed or stopped and appropriate measures will be taken to try to clean the hole through reversing direction to try to clear the annular space.

3.2 DOWN HOLE PRESSURE

Pumping pressure while the directional drill is in operation will be kept at a reasonable level to maintain positive circulation of drilling fluid to facilitate clearing of cuttings. Reductions of circulation events may require the adjustment of drilling fluid properties (e.g. viscosity, density) and drilling tool advancement changes.

During drilling, pressure will be continually monitored utilizing a downhole pressure probe located at the head of the drill. The measured pressure will be compared against the predicted pressures and the maximum allowable pressures. These differences should give indications of the circular flow rate and the specific geology being encountered by the tool head. The drill rig operator, or driller, is responsible for monitoring the pressures.

4. INADVERTANT RELEASE MONITORING

Ultimate responsibility for monitoring the site and HDD alignment for inadvertent drilling fluid release lies with the HDD superintendent.

4.1 CIRCULATION RATE

The drilling fluid circulation rate and the quantity of returns to the HDD entry return pit will be continuously monitored and quantified. Any substantial differences between the rate of drilling fluid returns and drilling fluid pumping rates may indicate an inadvertent drilling fluid release. The drill rig operator, or driller, is responsible for visually monitoring the return pit for Loss of Circulation (LOC) indications.
4.2  INSPECTION

The surface of the ground will be inspected visually along the HDD alignment for signs of Inadvertent Returns. Visual inspections while the HDD is operating under waterways/resources is required. Due to the width and depth of the watercourses, the use of a drone with thermal imaging capabilities will be employed to quickly detect potential releases. If pressure and advancement indications of an inadvertent return are noticed, then a drone and visual inspection of the HDD alignment shall be continuous until the source of the indications is identified. Reasonable efforts must be made to search for any location where drilling fluid may have reached the surface.

4.3  VIBRATORY MONITORING

Preconstruction vibratory monitoring of the subsurface has been conducted and will be used to compare to vibratory monitoring during construction. Differences in these values along with other indications of LOC could be used to detect possible Inadvertent Returns. Vibratory Monitoring was and will continue to be conducted by E2PM during construction.

5.  TEMPORARY CASING

At the entry point of the HDD on the Pennsylvania side, a temporary casing will be installed to facilitate the smooth flow of drilling fluid returns to the entry bore pit. The temporary casing will be installed from the surface to the rock interface and will provide additional protection to prevent an inadvertent return at this location. The casing will also provide additional protection due to the increase in flow rate and pressure at the tool head during rock drilling operations. The casing will be removed when the HDD has been completed.

6.  INADVERTENT RETURN RESPONSE

If an IR is observed, the flow of drilling fluid shall immediately cease, and the designated general contractor representative shall be notified immediately. The HDD Superintendent and general contractor representative shall determine the appropriate action to take depending on the volume and location of the inadvertent return.

1. If the inadvertent return is minor, easily contained and is not threatening sensitive resources, a leak-stopping compound shall be used to block the release. Any material contaminated with drilling fluid shall be removed to a depth of 2 feet from the surface and properly disposed of offsite as required. If the inadvertent return occurs within the limit of disturbance and is containable, the drilling operations may be restarted with environmental inspector and SPLP approval.

2. If an inadvertent return reaches the surface and becomes widespread, the HDD Superintendent shall authorize a readily accessible vacuum truck to assist in the removal of materials impacted by bentonite.
3. If an inadvertent return releases in Hough’s Creek tributary, Jacobs Creek, or the Delaware River, the HDD Contractor will make every attempt to reduce, and contain and eliminate further release.

4. The HDD Contractor will deploy a turbidity curtain around the location of the inadvertent return. The purpose is to contain and confine the suspended solids until observable settling can occur. The turbidity curtain will remain in place until the inadvertent return has stopped and cleanup has been completed. The Environmental Inspectors will characterize the environmental impacts from the release of drilling fluids, including the extent of the plume, the area affected by recovery efforts, and whether the impacts are permanent or temporary. A report of the assessment will be provided to the PADEP representative and/or NJDEP representative as required for determination of any further action.

Every reasonable effort to reduce, contain and eliminate the inadvertent return will be made. Until the release is contained, drilling operations to advance the directional drill shall not be resumed, however the operator may take steps to preserve the integrity of the bore hole. These actions may include but are not limited to: adding pre-approved loss circulation materials to the drilling fluid, circulating the bore hole with drilling fluid and removing the drill string from the bore hole.

Appropriate materials to control inadvertent returns must be kept on site. These materials may include but are not limited to:

- Pre-approved LCMs
- Wood stakes
- Plastic sheeting
- Sandbags
- Silt fence
- Silt sock
- Plastic tarp(s)
- Orange safety fence
- Metal posts
- Hand tools (e.g. shovels, buckets, rakes, push brooms)
- Storage Tanks (If needed)
- Pumps, vacuum trucks
7. GENERAL CONDITIONS

- This Inadvertent Return plan must be present on-site during drilling operations and be made available to all agencies involved in the project.

- All required permits and material Safety Data Sheets must be onsite and made available to all agencies involved in the project.

7.1 PADEP CONDITIONS

- The permittee shall notify DEP, in writing, of the proposed time for commencement of work at least 15 days prior to the commencement of construction.

- The project site shall be available for inspection by authorized officers and employees of the Pennsylvania Fish and Boat Commission. Prior to commencement and upon completion of the work authorized by this permit, the permittee shall notify the Pennsylvania Fish and Boat Commission’s Southeast Regional Office, Box 8, Elm, PA 17521; telephone 717.626.0228.

7.2 NJDEP CONDITIONS

- The permittee (SPLP) shall immediately inform NJDEP (Department) of any unanticipated adverse effects on the environment that are not described in the application or in the conditions of the NJDEP permit. The Department may, upon discovery of such unanticipated adverse effects, and upon the failure of the permittee to submit a report thereon, notify the permittee of its intent to suspend the permit.

The permittee (SPLP) shall immediately inform the Department by telephone at (877-927-6337 (WARN DEP hotline) of any noncompliance that may endanger public health, and welfare, or the environment. The permittee (SPLP) shall inform the Division of Land Resource Protection by telephone at (609)-777-0454 of any other noncompliance within two working days of the time the permittee became aware of the noncompliance, and in writing within five working days of the time the permittee becomes aware of the noncompliance. Such notice shall not, however, serve as a defense to enforcement action if the project is found to be in violation of this chapter (105). The written notice shall include:

a. A description of the noncompliance and its cause;

b. The period of noncompliance, including exact dates and times;
c. If the noncompliance has not been corrected, the anticipated length of time it is expected to continue; and

d. The steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

- The permittee (SPLP) shall submit written notification to the Bureau of Coastal and Land Use Compliance and Enforcement, 401 East State Street, 4th Floor, PO Box 420, Mail Code 401-04C, Trenton, NJ 08625, at least three working days prior to the commencement of regulate activities.

7.3 UNITED STATES ARMY CORPS OF ENGINEERS CONDITIONS

- The permittee (SPLP) shall immediately inform the United States Army Corps of Engineers (USACE) of any unanticipated adverse effects on the environment that are not described in the application or in the conditions of the USACE permit. The USACE may, upon discovery of such unanticipated adverse effects, and upon the failure of the permittee to submit a report thereon, notify the permittee of its intent to suspend the permit.

8. TRAINING OF PERSONNEL

All HDD contractor personnel onsite will receive training in preventing, monitoring and response to inadvertent returns. This training will include:

- The details of this plan
- Specific permitting conditions and requirements
- Communication organization
- Order of authority and responsibility
- Contact names and phone numbers of appropriate individuals
- Reportable events
Paul

Here is the updated IR plan with the two items you wanted listed in their plan. They listed them in section 7.3. Let me know if you need anything else adjusted in the plan.

Thank you
Edward J Weirsky Jr (Ed)
STV Inc
Sr. Project Manager
Work  609-530-0020
Mobile 609-439-7603
Edward.weirsky@stvinc.com

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