



pennsylvania
FISH AND BOAT COMMISSION

January 22, 2024

JACOBS

Two Commerce Square
2001 Market Street
9th Floor, Suite 900
Philadelphia, PA 19103

Jack Harper:

I have reviewed your REVISED Aids to Navigation Plan for the Schuylkill River HDD Project for Texas Eastern Transmission, LP over the Schuylkill River in Chester and Montgomery County. The new plan shows 3 Danger Keep Out being placed and keeping half of the river open for safe boat passage. The plan is acceptable as submitted and has been approved. All signage/buoys must be installed prior to construction and inspected frequently to ensure they are always visible to boaters. Any changes to this plan must be submitted directly to this office for further review. If buoys are to be utilized, a [PFBC-277 Application to Install Floating Structures/Private Aids to Navigation](#) (received 9/6/2023) must be submitted and approved prior to installation.

I will share the approved ATON plan with the PA Fish and Boat Commission's Division of Environmental Services and the Regional Law Enforcement Office to ensure they are aware of the project. Please advise the contractor that the project site may be inspected at any time by Bureau of Law Enforcement personnel for compliance with this plan. A copy of the approved plan along with this letter must be available for inspection, if requested.

Please feel free to contact me if you have any questions concerning this project or the Commission's Aids to Navigation program, in general. My office number is 717-836-3294.

Sincerely,

A handwritten signature in cursive script that reads "Richard D Morder".

Richard Morder
Aids to Navigation Manager

(Insert Addressee Name or Subject of Letter Here)

January 22, 2024

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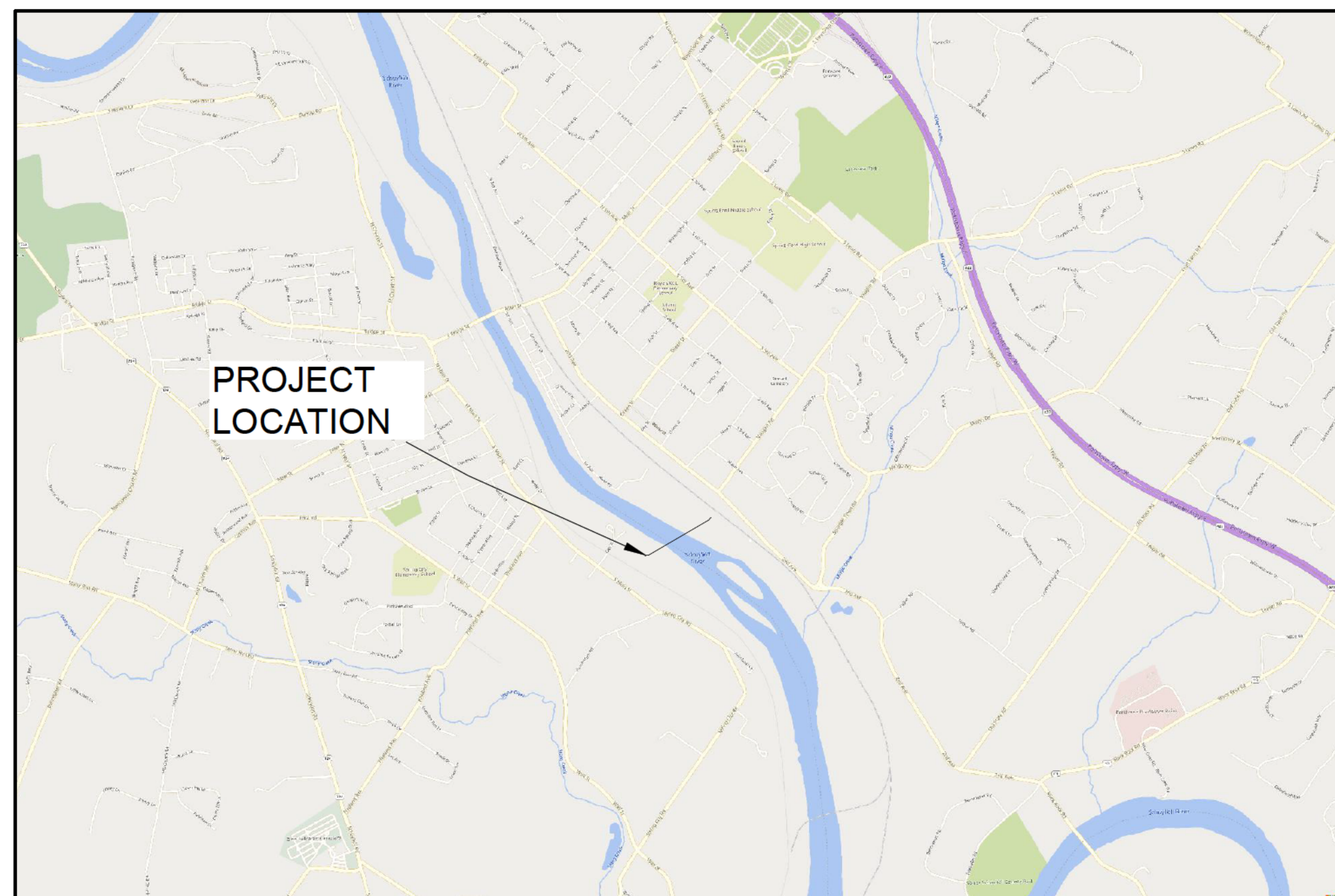
AID TO NAVIGATION (ATON) PROJECT PLANS

SCHUYLKILL RIVER HDD PROJECT

CHESTER AND MONTGOMERY COUNTY, PENNSYLVANIA

TEXAS EASTERN TRANSMISSION, LP

JANUARY 2024



VICINITY MAP
 2,000 0 2,000 4,000
 1"=2,000'

DRAWING INDEX		
SHEET NO.	SHEET NAME	DESCRIPTION
1	G0-001	TITLE SHEET
2	C0-001	ATON PROJECT PLAN
3	C0-002	ATON PLAN-NOTES
4	C0-003	ATON PLAN-DETAILS

JACOBS:
2301 CHESTNUT STREET
SUITE 4400
PHILADELPHIA, PA 19103
P. 215-845-6877

NO.	REVISION	DATE



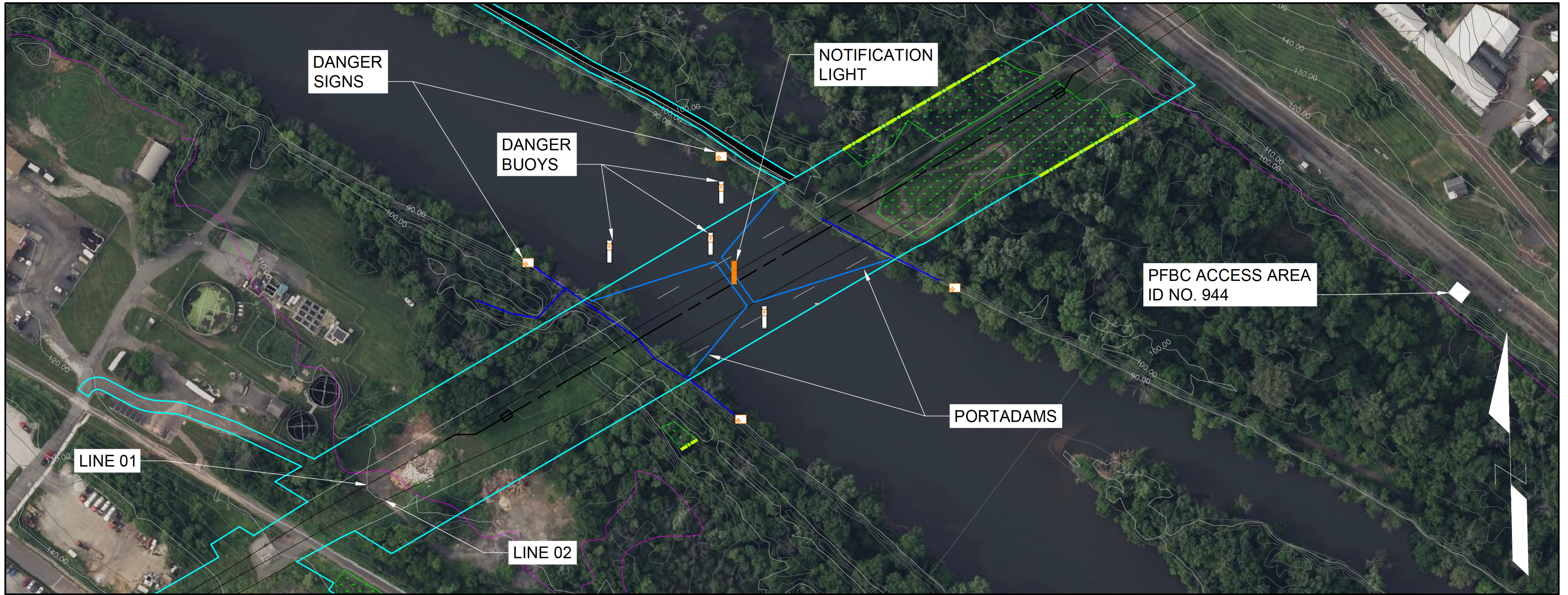
DATE	1/19/2024
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AID TO NAVIGATION MAPPING
 CHESTER AND MONTGOMERY COUNTY,
 PENNSYLVANIA







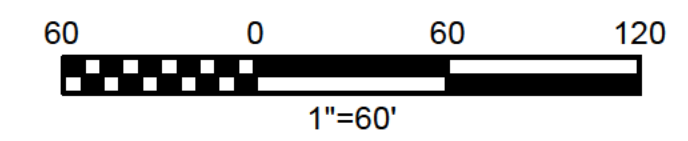
TITLE SHEET

PROJECT IDENTIFIER	D3739300
SHEET NAME	G0-001
VOLUME NUMBER	
SHEET NUMBER	1 OF 4



LEGEND:

- PERMIT BOUNDARY
- EXISTING STREAM
- FEMA FLOODPLAIN
- ⋯ WETLAND
- - - OPEN ENDED FEATURE
- - - EXISTING EASEMENT
- - - NEW LINE 1
- 100.00 EXISTING CONTOUR
-  DANGER SIGN
-  DANGER BUOY
-  PORTADAM
-  NOTIFICATION LIGHT



NOTES:

1. Runoff from this site drains to the Schuylkill River, which is designated as a warm water fishes, migratory fishes by PA Code 93.9.
2. Access will be via existing public or private roads. Addition of gravel will be the only improvements.

NO.	REVISION	DATE



DATE 1/19/2024
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 ACCEPTED

AID TO NAVIGATION MAPPING
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 PENNSYLVANIA



ATON PROJECT PLAN

PROJECT IDENTIFIER
D3739300
 SHEET NAME
CO-001
 VOLUME NUMBER
 SHEET NUMBER
2 OF 4

GENERAL NOTES:

1. ALL AID TO NAVIGATION (ATON) ACTIVITIES SHALL BE COMPLETED IN ACCORDANCE WITH THE APPROVED ATON PLANS. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
2. THE SCHUYLKILL RIVER IS A LARGER WATERWAY WHERE POWER BOATS MAY BE USED AS A POTENTIAL ACTIVITY. THEREFORE, WATER-BASED ATON (BUOYS) DURING BOATING SEASON AND SHORE-BASED SIGNS DURING NON-BOATING SEASON ARE REQUIRED.
3. APPROPRIATE SIGNAGE WILL BE PLACED AT LEAST 100 FEET UPSTREAM AND DOWNSTREAM OF THE CONSTRUCTION AREA ON ADJACENT BANKS. IN THE EVENT THERE ARE NO EXPOSED BANKS ON EITHER SIDE OF THE WATERWAY, SIGNS WILL BE PLACED ON OTHER STRUCTURES SUCH AS TREES, TO ENSURE NOTIFICATION IS MADE TO BOATERS.
4. APPROPRIATE MATERIAL, COLOR, AND REFLECTIVENESS OF SIGNAGE WILL BE FOLLOWED PER PFBC GUIDELINES FOR ATON.
5. STANDARD INLAND BUOYS WILL BE PLACED UPSTREAM AND DOWNSTREAM OF THE CONSTRUCTION AREA AND WILL BE MARKED WITH HAZARD MARKINGS CONGRUENT WITH THE ASSOCIATED SIGNAGE.
6. BUOYS WILL BE PERMITTED THROUGH THE USED APPLICATION TO INSTALL FLOATING STRUCTURES OR PRIVATE AIDS TO NAVIGATION PFBC-277 (SUBMITTED TO PFBC). BUOYS WILL PROPERLY DISPLAY ASSOCIATED PERMIT NUMBER.

ATON SEQUENCE

1. INSTALLATION OF ATON PER THE ATON DRAWINGS PRIOR TO STARTING ANY DISTURBANCE WITHIN SCHUYLKILL RIVER AND INSTALLATION OF PORTADAMS. ACCESS TO THE SITE WILL BE VIA EXISTING ROADS AND PFBC BOAT RAMP APPROXIMATELY 50 FEET AWAY FROM THE RIVERBANKS. SIGNAGE WILL BE INSTALLED VIA ACCESS ROADS FROM BOTH RIVERBANKS. BUOYS WILL BE INSTALLED VIA WATERCRAFT.
2. PIPELINE REMOVAL ACTIVITIES INCLUDING CLEANING/PURGING OF EXISTING PIPELINE, INSTALLATION OF PORTADAMS ON EITHER SIDE OF THE RIVER, EXCAVATION OF PIPELINE WITHIN THE RIVER AND REMOVAL OF PIPE FROM PORTADAM WORKSPACE, CLEAN FILL WILL BE BROUGHT IN TO BRING TRENCH UP TO GRADE.
3. REMOVAL OF ATON UPON COMPLETION OF PIPELINE REMOVAL ACTIVITIES.

PROJECT DESCRIPTION

TEXAS EASTERN TRANSMISSION, LP (TEXAS EASTERN) IS PROPOSING THE SCHUYLKILL RIVER HDD PROJECT (PROJECT) TO MAINTAIN THEIR EXISTING NATURAL GAS PIPELINE SYSTEM. THE PROJECT IS LOCATED IN SPRING CITY AND UPPER PROVIDENCE TOWNSHIPS, CHESTER AND MONTGOMERY COUNTIES, PENNSYLVANIA, AND IS WITHIN THE PHOENIXVILLE USGS 7.5 QUADRANGLE.

AT THIS LOCATION, TEXAS EASTERN HAS TWO PARALLEL EXISTING PIPELINE SYSTEMS WHICH CROSS UNDER THE SCHUYLKILL RIVER: LINE 1, A 20-INCH DIAMETER PIPELINE, AND LINE 2, A 36-INCH DIAMETER PIPELINE. THE EXISTING EASEMENT RANGES FROM APPROXIMATELY 75 FEET TO 110 FEET IN WIDTH. TEXAS EASTERN DURING ROUTINE MONITORING OF LINE 1, IDENTIFIED AN APPROXIMATELY 18-FOOT EXPOSURE OF THE LINE 1 PIPELINE IN THE SCHUYLKILL RIVER.

THE PROJECT PROPOSES TO INSTALL A NEW 20-INCH DIAMETER PIPE WITH A HORIZONTAL DIRECTIONAL DRILL (HDD) OF APPROXIMATELY 1,111 LINEAR FEET. THE NEW PIPELINE WILL BE PARALLEL AND OFFSET APPROXIMATELY 20 FEET FROM THE EXISTING LINE 1 WITHIN THE EXISTING EASEMENT. ADDITIONALLY, THE EXISTING 20-INCH DIAMETER LINE 1 PIPELINE WILL BE REMOVED. REMOVAL OF LINE 1 WITHIN THE SCHUYLKILL RIVER WILL BE COMPLETED USING PORTADAMS TO CREATE A DRY DITCH WITHIN THE RIVER. THE WORK WILL OCCUR IN TWO SEGMENTS COVERING HALF OF THE RIVER, EXECUTED ONE AT A TIME. THE PORTADAM WILL BE INSTALLED WITH DIVERS AND EQUIPMENT SUPPORT, AN EXCAVATOR. ONCE THE SECTION IS ISOLATED FROM THE RIVER, THE WATER WILL BE PUMPED OUT AND EXCAVATION OF THE PIPE WILL COMMENCE. THE EXCAVATED TRENCH WILL BE BACKFILLED AND CLEAN FILL ADDED AS NEEDED TO REACH EXISTING GRADE. EACH SIDE IS ANTICIPATED TO TAKE APPROXIMATELY 1 WEEK TO INSTALL THE PORTADAM AND 2-3 DAYS FOR PIPE REMOVAL. FOLLOWING COMPLETION OF THE WORK, THE PORTADAM WILL BE ROTATED TO THE SECOND SEGMENT AND THE SEQUENCE REPEATED.

WORK WILL OCCUR WITHIN THE EXISTING, MAINTAINED PIPELINE EASEMENT AND ADDITIONAL TEMPORARY WORKSPACE PARALLEL TO THE EASEMENT. FOLLOWING CONSTRUCTION, THE IMPACTED AREA WILL BE RESTORED TO PRE-CONSTRUCTION CONTOURS, SEEDED AND MULCHED. ACCESS TO THE SITE WILL BE ALONG EXISTING ROADS. ONE WETLAND (EMERGENT AND FORESTED) WILL BE TEMPORARILY IMPACTED FOR THE WORK. THE LIMITS OF DISTURBANCE (LOD) ASSOCIATED WITH THIS PROJECT ENCOMPASS 8 ACRES.

THE PAST AND PRESENT LAND USES FOR THE PROJECT AREA ARE EXISTING, MAINTAINED PIPELINE EASEMENT, GRAVEL ROAD, FORESTED AREA, AND COMMERCIAL/INDUSTRIAL AREAS. THE PROJECT DRAINS TO THE SCHUYLKILL RIVER WHICH IS CLASSIFIED AS WARM WATER FISHES (WWF), MIGRATORY FISHES (MF) BY PA CODE §93.9. EROSION AND SEDIMENT CONTROLS / BEST MANAGEMENT PRACTICES (BMPS) WILL BE USED DURING CONSTRUCTION TO MINIMIZE THE POTENTIAL FOR SEDIMENT LADEN RUNOFF TO EXIT THE SITE.

NO.	REVISION	DATE



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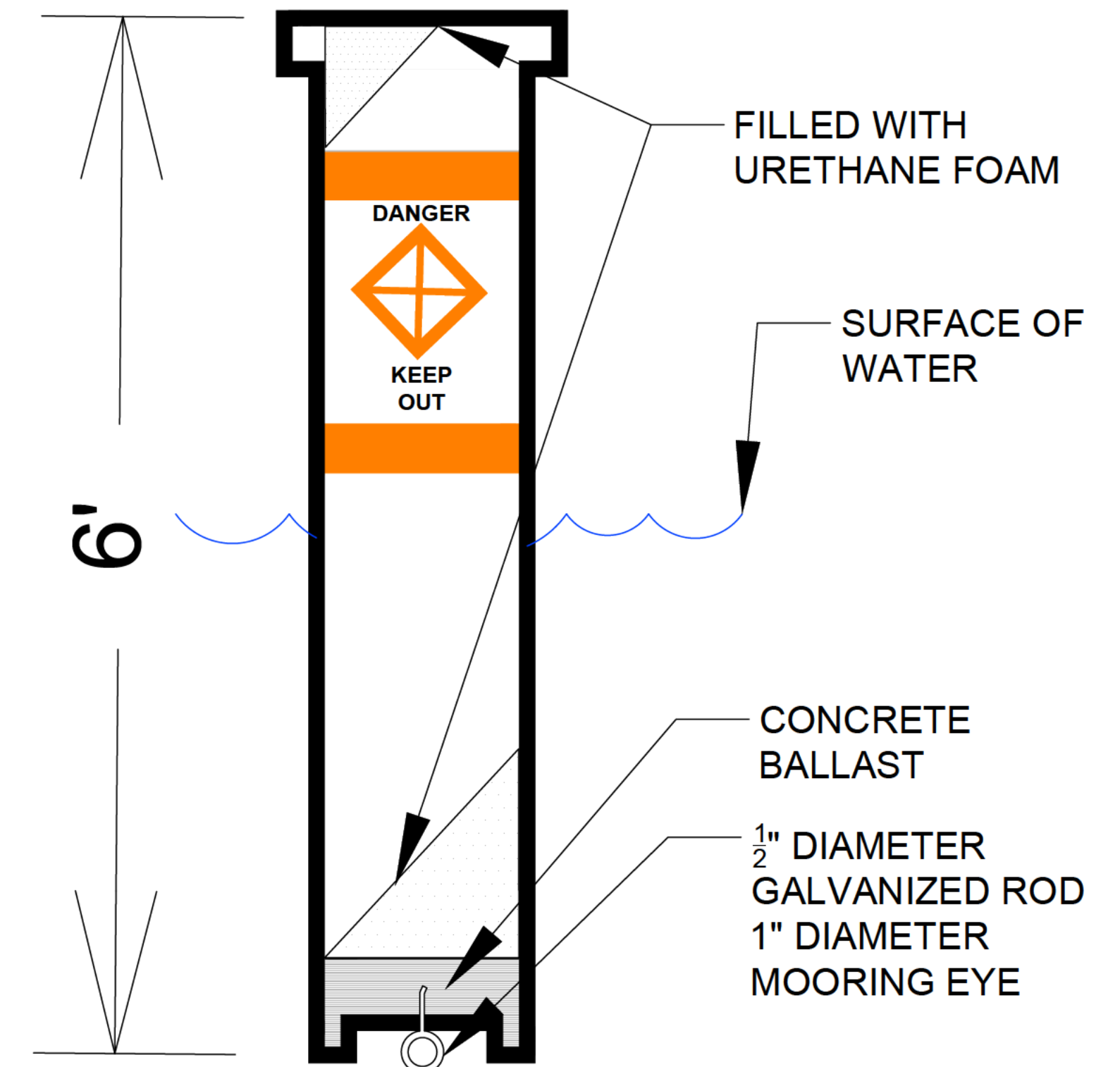
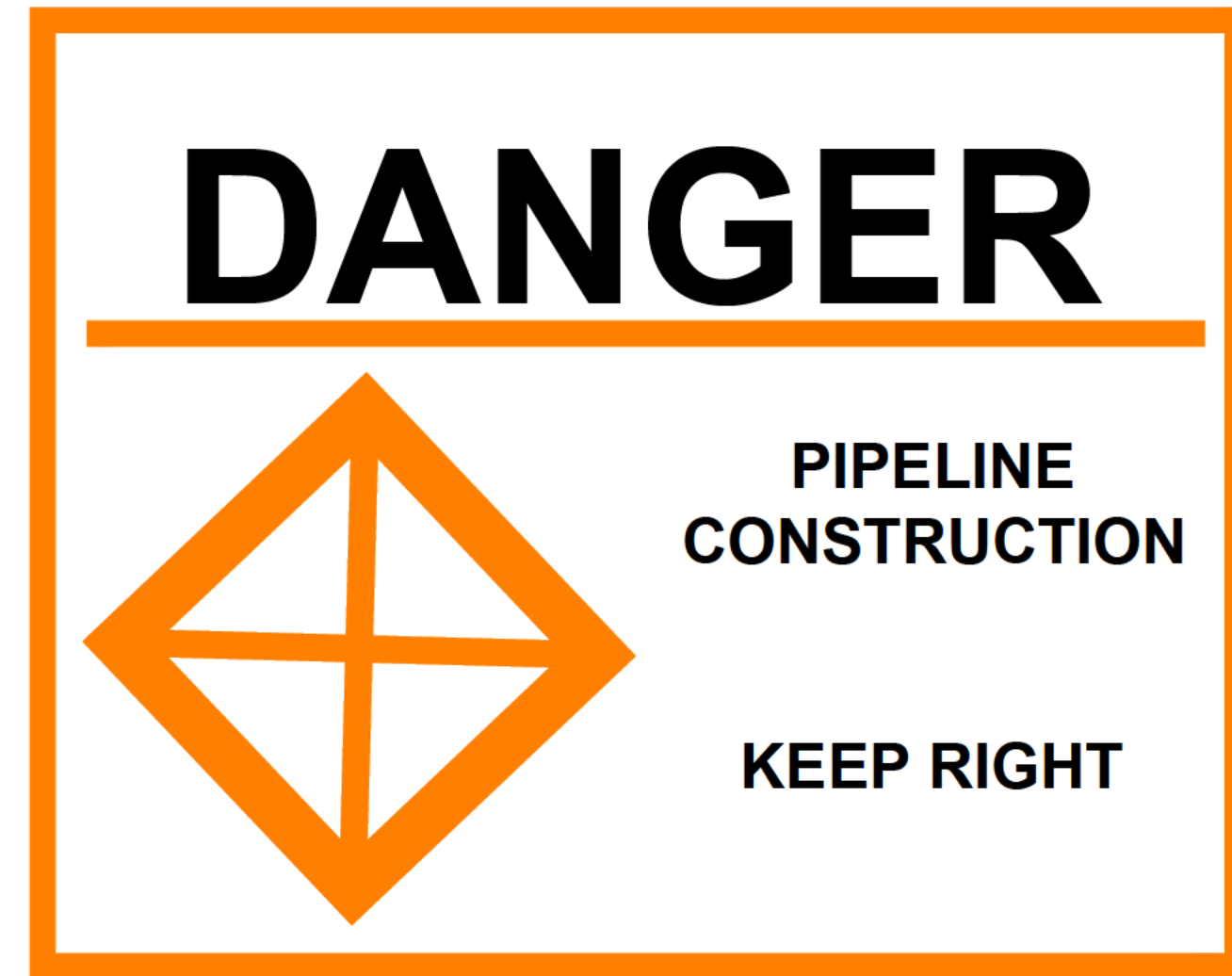
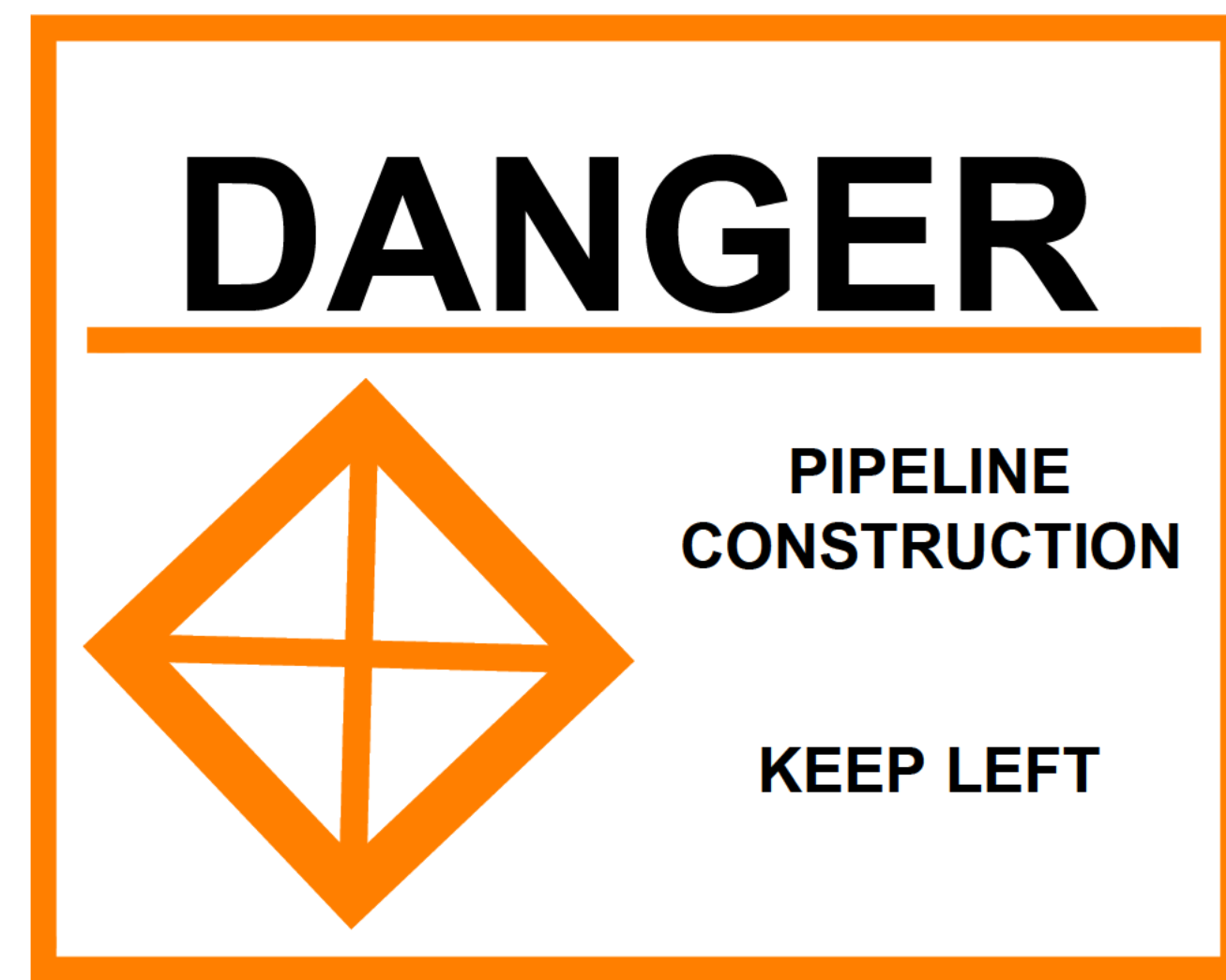


AID TO NAVIGATION MAPPING
CHESTER AND MONTGOMERY COUNTY,
PENNSYLVANIA



ATON NOTES

PROJECT IDENTIFIER	D3739300
SHEET NAME	C0-002
VOLUME NUMBER	
SHEET NUMBER	3 OF 4



DANGER SIGN

1. DANGER SIGNS WILL BE PLACED UPSTREAM AND DOWNSTREAM ALONG BOTH RIVERBANKS TO DIRECT BOATERS TO THE OPPOSITE HALF OF THE RIVER, AWAY FROM THE PORTADAM WORKSPACE DURING PIPELINE REMOVAL ACTIVITIES.
2. THESE SIGNS WILL BE INSTALLED APPROXIMATELY 100 FEET UPSTREAM AND DOWNSTREAM FROM THE LINE PIPELINE CROSSING, EACH SIGN FACING AWAY FROM THE PIPELINE CROSSING.
3. THERE WILL BE FOUR (4) TOTAL SIGNS; TWO (2) ON BOTH BANKS UPSTREAM AND TWO (2) ON BOTH BANKS DOWNSTREAM. THE SIGNS WILL BE FOUR (4) FEET WIDE BY FOUR (4) FEET TALL.

NOTIFICATION LIGHT

1. A NOTIFICATION LIGHT WILL BE PLACED AT THE WATER-BASED END OF THE PORTADAM WORKSPACE TO ALERT BOATERS OF THE CONSTRUCTION AREA DURING THE NIGHT AND LOW-LIGHT CONDITIONS.

DANGER BUOY

1. DANGER BUOYS WILL BE PLACED UPSTREAM AND DOWNSTREAM AT THE EDGE OF THE PROJECT PORTADAM WORKSPACE TO DIRECT BOATERS TO THE OPPOSITE HALF OF THE RIVER AND AWAY FROM THE PORTADAM WORKSPACE.
2. THERE WILL BE THREE (3) TOTAL BUOYS PER PORTADAM CONSTRUCTION ACTIVITIES; ALL BUOYS WILL BE ASSOCIATED WITH A DANGER SIGN.
3. EACH BUOY WILL BE A STANDARD 6-FOOT INLAND REGULATORY BUOY. DANGER SYMBOLS WILL BE IN ORANGE COLOR AND MESSAGES WILL BE IN BLACK COLOR. THE MESSAGE AND SYMBOLS WILL BE POSTED ON BOTH SIDES OF THE BUOY.
4. FOR UPSTREAM EXTENT OF THE WORKSPACE, TWO (2) BUOYS WILL BE PLACED DIAGONALLY FROM THE DANGER SIGN NEAR THE BANK TO THE END OF THE PORTADAM WORKSPACE (IN THE CENTER OF THE RIVER). FOR DOWNSTREAM EXTENT OF THE WORKSPACE, ONE (1) BUOY WILL BE PLACED IN THE CENTER OF THE RIVER/END OF THE PORTADAM WORKSPACE. FOLLOWING COMPLETION OF PORTADAM ACTIVITIES ON ONE SIDE OF THE RIVER, THE BUOYS WILL BE ROTATED TO THE SECOND SEGMENT AND THE BUOY PLACEMENT SEQUENCE WILL BE REPEATED.

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ATON DETAILS

PROJECT IDENTIFIER	D3739300
SHEET NAME	CO-003
VOLUME NUMBER	
SHEET NUMBER	4 OF 4