STREAM BIOLOGICAL CONDITIONS
ENVIRONMENTAL AUDITOR REPORT

Version 2.3

Stream ID: S-G16	**Crossing Start Date:** 10/21/2023	**Crossing Completion Date:** 11/20/2023
Milepost: 282.3	**Pre-Con Assessment Date:** 10/05/2023	**Post-Con Assessment Date:** 11/22/2023
Station: 14915+84	**Stream Classification:** Perennial **(Perennial, Intermittent, Ephemeral)**	**Bankfull Width (ft.):** 30
County: Franklin	**303(d) Impairment Listing:** Not Impaired	**Riffle:Pool Complexes Present?** No

Item #	Resource Crossing Conditions	N/A	YES	NO
1.	Were all applicable resource specific crossing conditions satisfied? Time of Year Restrictions (TOYR)? N/A Fish Relocation? N/A Mussel Relocation? N/A		X	
2.	Is this resource designated a wild or stockable trout stream?			X
3.	Which crossing methods were utilized during the stream crossing? *(Select one or more)* Dam & Pump, Flume, Cofferdam, Conventional Bore, Horizontal Directional Drill (HDD) Bore?	Conventional Bore		
4.	Was the top 1-foot (12-inches) of streambed substrate segregated and stockpiled separate from trench spoils?	X		
5.	Was excess material not needed for backfill removed and disposed of in an upland area?		X	
6.	Was the top 12-inches of backfill made with clean native stream substrate?	X		
7.	Was the pre-construction survey data provided and utilized during restoration in attempt to re-establish pre-construction contours?		X	
8.	Were any field modifications to the stream implemented by project or regulatory personnel to address potential drainage or bank restoration limitations?			X
9.	Were impervious trench breakers/plugs properly installed within 25-feet of top-of-bank to prevent subsurface erosion to or from the resource area?		X	
10.	Was permanent seed and stabilization material (straw or matting) applied to riparian areas and stream banks prior to re-establishing flow to the impact area of the channel?		X	
11.	Was the time of disturbance minimized by conducting resource work continuously to completion?		X	
12.	Have civil surveys been scheduled to verify as-built conditions meet pre-construction conditions in accordance with the project Mitigation Framework and federal/state permit requirements?	X		
13.	Are bareroot saplings required and/or scheduled to be planted for the dormant season (10/1 – 4/30)?		X	
14.	Did any unauthorized discharges to unpermitted resources occur during the crossing? If so, explain the corrective actions implemented in the Comments section and include additional photos.		X	

Item #	Biological Conditions	Pre-Con	Post-Con
15.	**Predominant Substrate Type (select one):** *Bedrock, Boulder (>10"), Cobble (2-10"), Gravel (0.1-2"), Sand (<0.1"), Mud/Silt/Clay*	Bedrock	Bedrock
16.	**Channel Conditions:** **Rating:** *1-Optimal (80-100% stable banks), 2-Suboptimal (60-80% stable banks), 3-Marginal (40-60% stable banks), 4-Poor (20-40% stable banks), 5-Severe (0-20% stable banks, highly eroded or unvegetated banks)*	3 - Marginal	3 - Marginal
17.	**Riparian Buffer Zone within ROW and ≤50 ft. from Stream Top-of-Bank:** **Rating:** *1-Optimal (60-100% heavy vegetative cover), 2-Suboptimal (30-60% mixed vegetated coverage), 3-Marginal (<30% vegetative coverage), 4-Poor (Mowed/maintained area or farmland, impervious area, sparsely vegetated coverage, etc.)*	2 - Suboptimal	2 - Suboptimal
18.	**Instream Habitat Conditions:** **Examples:** *Varied substrate sizes, varied combination of water velocities/depths, presence of woody/leafy debris, stable substrate with low amount of mobile particles, low embeddedness, shade protection, undercut banks, root mats, submerged aquatic vegetation.* **Rating:** *1-Optimal (Habitat conditions present in >50% of resource), 2-Suboptimal (Habitat conditions in 30-50% of resource), 3-Marginal (Habitat conditions in 10-30% of resource), 4-Poor (Habitat conditions in 0-10% of resource)*	2 - Suboptimal	2 - Suboptimal
19.	**Channel Alterations:** **Examples:** *Straightened channel, non-MVP stream crossings, non-native riprap/rock along banks, concrete/gabions/concrete block, manmade embankments, constrictions w/in channel, livestock or agricultural impacts.* **Rating:** *1-Negligible (unaltered/natural stream), 2-Minor (20-40% of resource disrupted by channel alterations), 3-Moderate (40-80% of resource disrupted), 4-Severe (>80% of resource disrupted)*	1 - Negligible	1 - Negligible

Comments/Remarks

10-5-23: Pre-construction meeting. The MVP EI is J. Anthony Mascorro, and the Precision Pipeline foreman is Logan Ball. The anticipated start date is Monday, 10-9-23. -A. Thorpe

10-13-23: Construction has begun. The top 12-inches of topsoil were excavated, separated, and stockpiled. Construction has stalled until the blast crew can determine if there is any rock to blast. -G. Aceves

10-14-23: No construction due to rain. -G. Aceves

10-16-23: The crew set up and blasted the GAS. -G. Aceves

ITEM #14 10-17-23: Excavating the GAS for bore pit. Set up the CIS for blasting. Blasting caused *tire mats* to shift into the stream. All other work stopped for mitigation. The total disturbed area is 25'x12.5' from the middle of stream to the buffer zone. Mats and rock were removed from the stream and the streambed by the environmental crew. The streambed was restored to the correct slope, temporary seed was applied, and the area was blanketed with erosion control sediment blankets. Filter socks were also installed. -G. Aceves

* ITEM #14* 10-18-23: The environmental crew returned to remove the rock dam and apply permanent riparian seed to the disturbed resource area. The stream and streambank are now restored. The GAS was excavated, and trench boxes were installed at 15-feet from ground level. -G. Aceves

10-19-23: Continued excavating the GAS entry pit. Installed and stabilized a second trench box. A metal wall was created for the second CIS blasting to obstruct material from falling into the stream. The blasting crew dug holes in preparation.
-G. Aceves

10-20-23: Successful second blast on the CIS. Grading was set for the borer tracks and the tracks were lowered. -G. Aceves

10-21-23: The borer and bore pipe were set inside of the trench and boring has commenced. -G. Aceves

10-23-23: Continued boring. Bored approximately 40-feet. -G. Aceves

10-24-23: Continued boring. Bored approximately 15-feet. The bore malfunctioned. The maintenance crew arrived and were able to repair the bore. -G. Aceves

10-25-23: Continued boring. Bored approximately 20-feet. -G. Aceves

10-26-23: Continued boring. The bore daylighted. The crew excavated the exit pit and placed two trench boxes in the pit. The trench boxes were installed one on top of the other to ensure any falling debris from the slope did not enter the pit. -G. Aceves

10-27-23: The crew began pushing the first ARO pipe through the bore machine. -D. Fraise

10-28-23: Continued to push line pipe through the bore. -A.Rauls

10-30-23: Continued pushing the line pipe through the bore and welding the pipe. Progress is slow due to the heavy presence of rock onsite. -B. Fennell

10-31-23: Continued pushing ARO through the bore. Three out of five pipes have been completed. -G. Aceves

11-1-23: Continued pushing the line pipe through the bore and welding the pipe. -B. Fennell

11-2-23: Continued pushing ARO pipe through the pipe. The fifth pipe has been welded. -G. Aceves

11-3-23: The final pipe has been pushed through the bore. The crew was cleaning up and is waiting on the tie-in crew. -G. Aceves

11-4-23: No current activity at crossing. -G. Aceves

11-6-23: No current activity at crossing. -G. Aceves

11-7-23: No current activity at crossing. -G. Aceves

11-8-23: No current activity at crossing. -G. Aceves

11-9-23: No current activity at crossing. -G. Aceves

11-10-23: No current activity at crossing. -G. Aceves

11-11-23: No current activity at crossing. -G. Aceves

11-13-23: No current activity at crossing. -G. Aceves

11-14-23: No current activity at crossing. -G. Aceves

11-15-23: No current activity at crossing. -G. Aceves

11-16-23: No current activity at crossing. -G. Aceves

11-17-23: No current activity at crossing. -G. Aceves

11-18-23: The pipe was connected to the GAS and the CIS of the ARO pipe. The CIS was QA/QCed, blasted, coated, and the weld was jeep tested. The GAS weld was QA/QCed. -G. Aceves

11-20-23: The CIS trench breakers were installed within 25-feet from the top of bank to prevent erosion to or from the resource area. The GAS weld was QA/QCed, blasted, coated and jeeped. The GAS trench breakers were installed within 25-feet from the top of bank to prevent erosion to or from the resource area. The trench breakers were padded for stabilization. -G. Aceves

11-21-23: No construction due to rain. No discharges were noted in the stream. -G. Aceves

11-22-23: Restoration is complete and the post-construction auditor assessment was conducted. -G. Aceves

No impacts to biological conditions were observed during the crossing activities.

In accordance with the Mountain Valley Pipeline Consent Decree, Case No. CL18006874-00, (Issued October 11, 2019) this independent report was completed to document the on-site monitoring of instream invertebrate and fisheries resources during all construction activity related to waterbody and wetland crossings, and document instream conditions and any impacts to the resources.

This report was written by	George Aceves *Print Name*	 *Signature*	11/22/2023 *Date*

Required Photos

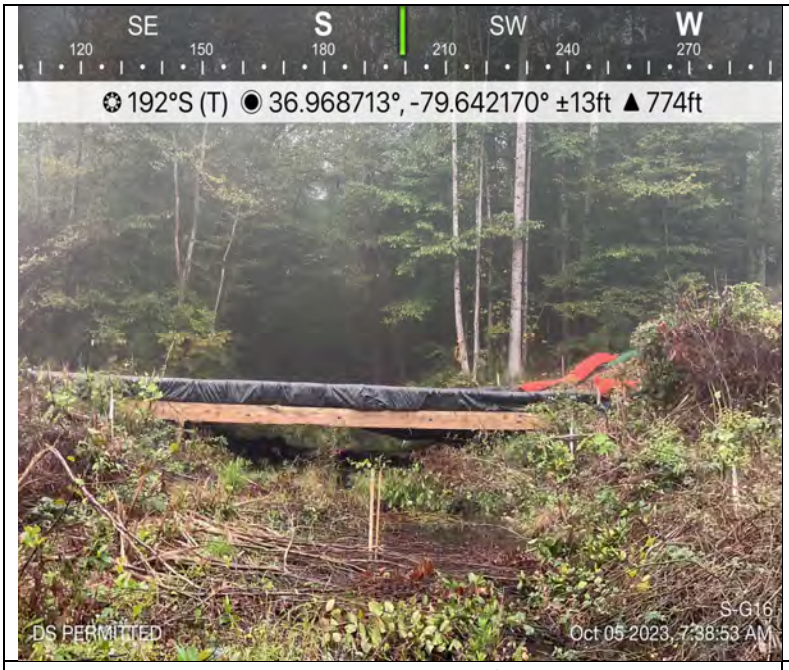

Photo Description: Downstream view of permitted impact area during pre-construction assessment.

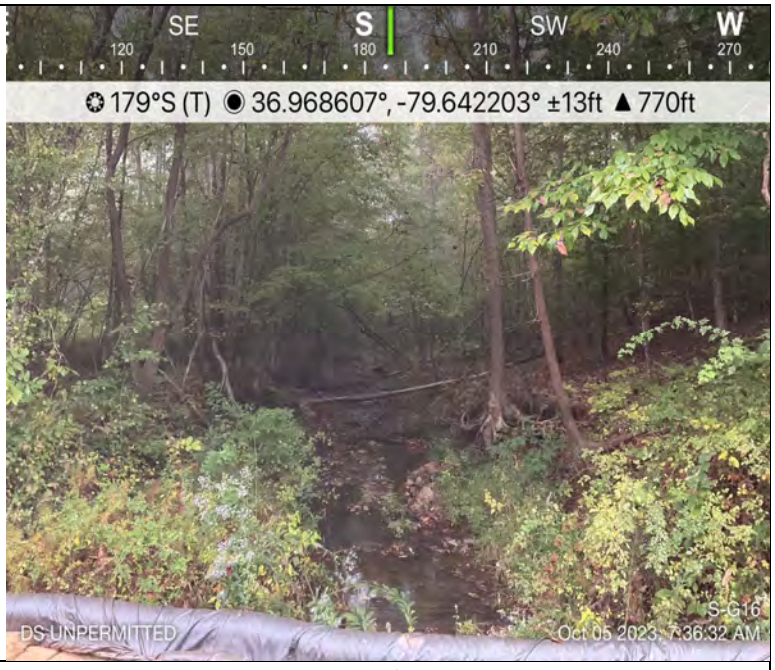

Photo Description: Conditions of the downstream area outside the ROW during pre-construction assessment.

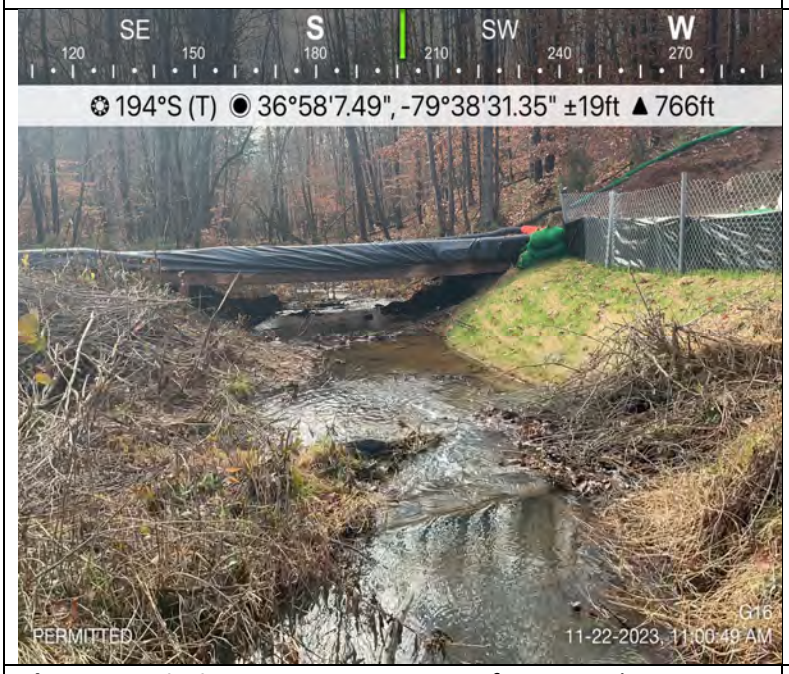

Photo Description: Downstream view of permitted impact area during post-construction assessment.

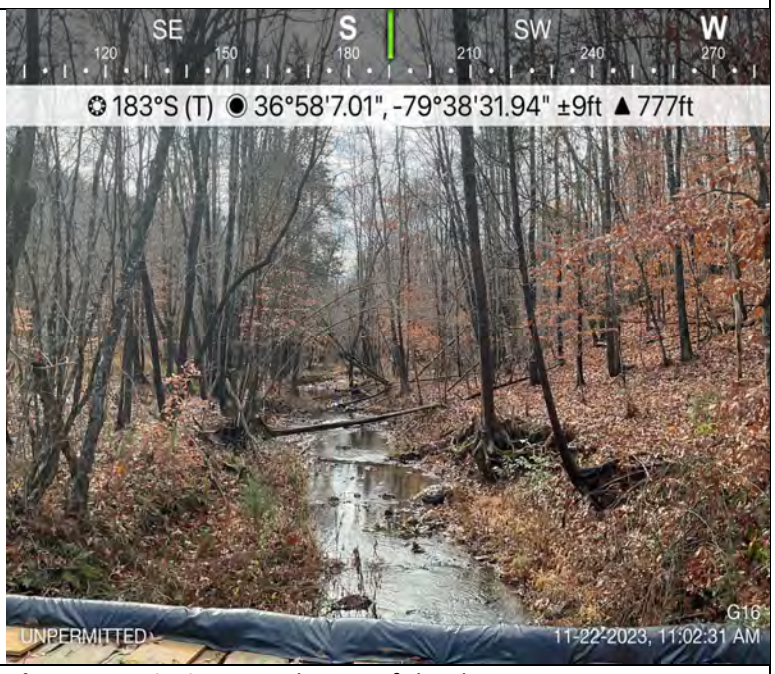

Photo Description: Conditions of the downstream area outside the ROW during post-construction assessment.

Optional Additional Photos

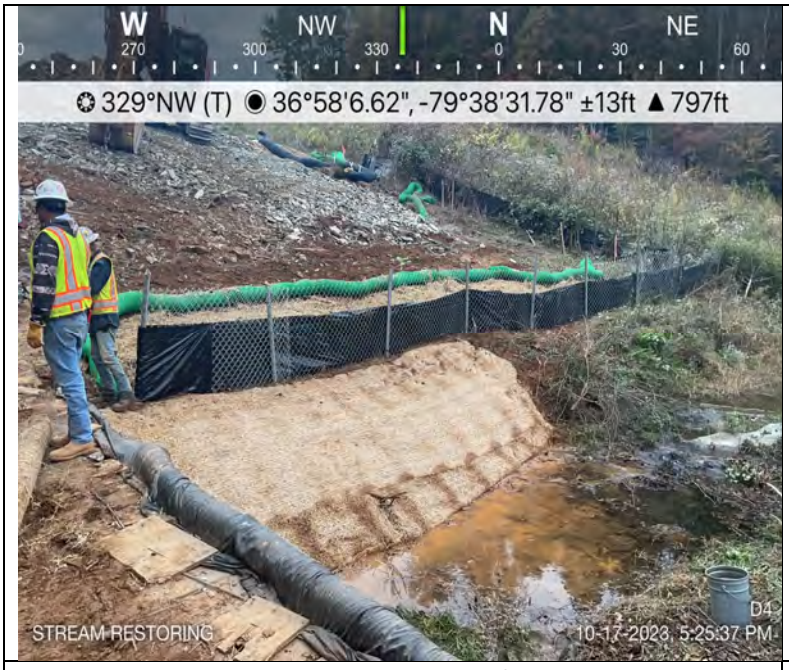

Photo Description: Stream restoration after the unauthorized discharge.

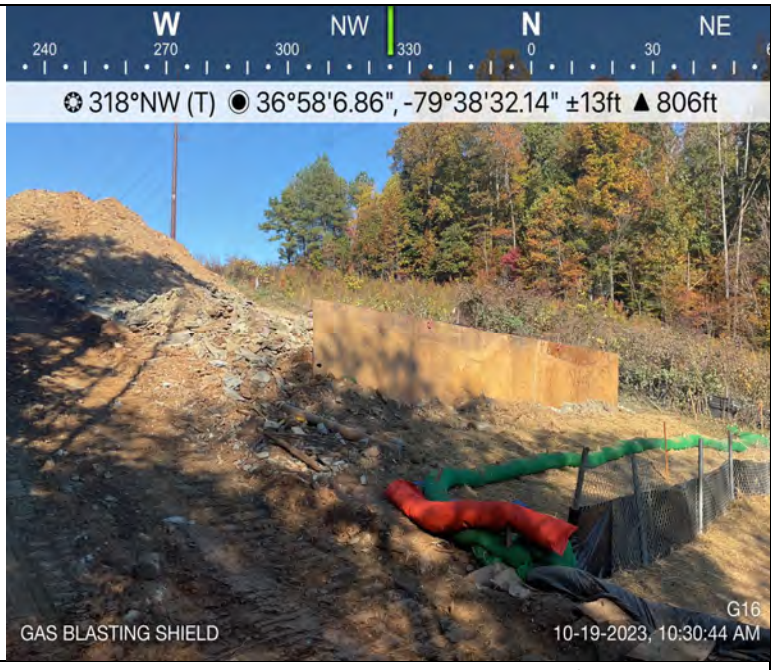

Photo Description: Stream protection installed for blasting activities.

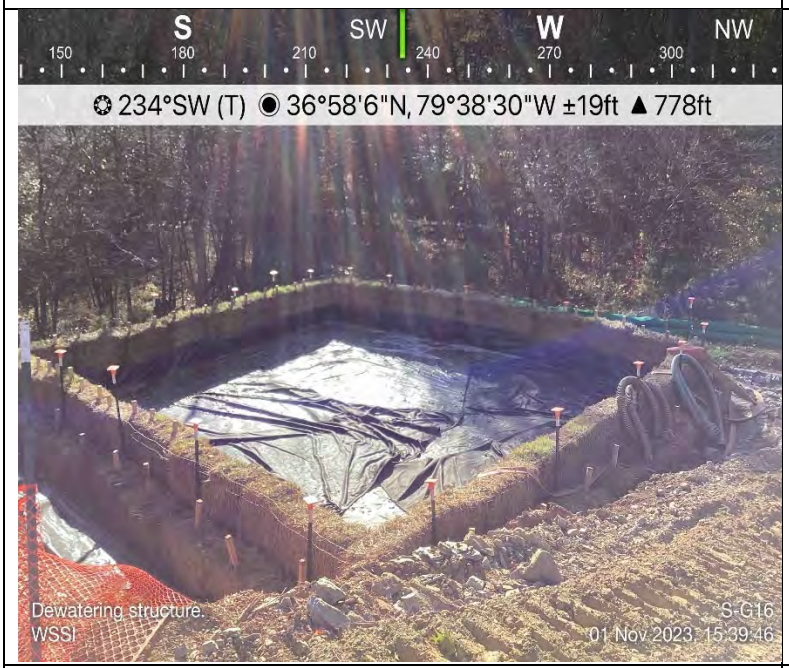

Photo Description: An overview of the dewatering structure.

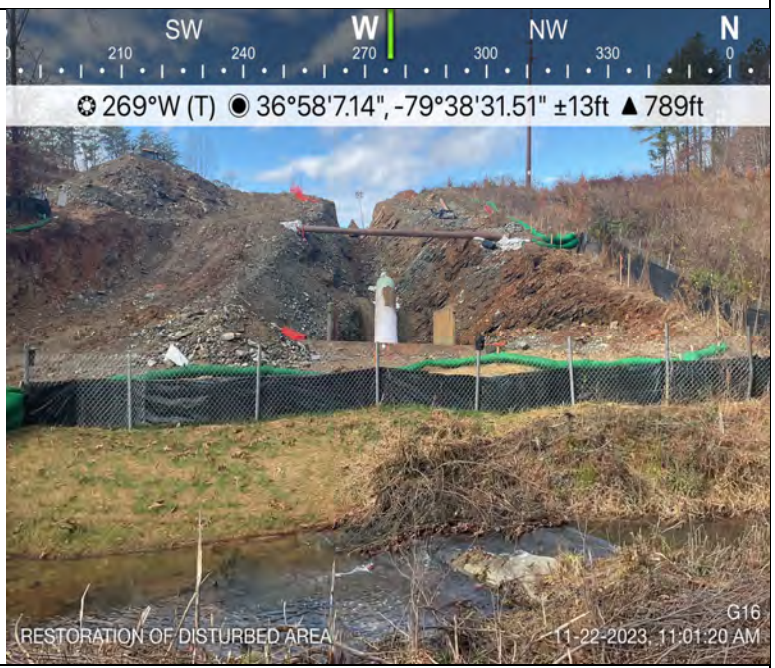

Photo Description: Stream restoration approximately one month after the unauthorized discharge.