# STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Wetland

Studies and Solutions, Inc.

a DAVEY € company

Version 2.3

Stream ID: S-H27	Crossing Start Date: 10/23/2023	<b>Crossing Completion Date:</b> 10/25/2023
Milepost: 279.2	Pre-Con Assessment Date: 10/13/2023	Post-Con Assessment Date: 10/26/2023
<b>Station:</b> 14749+85	Stream Classification: Ephemeral (Perennial, Intermittent, Ephemeral)	Bankfull Width (ft.): 10
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		Х	
2.	Is this resource designated a wild or stockable trout stream?			Χ
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?		am & Pun	пр
4.	Was the top 1-foot (12-inches) of streambed substrate segregated and stockpiled separate from trench spoils?		Χ	
5.	Was excess material not needed for backfill removed and disposed of in an upland area?		Х	
6.	Was the top 12-inches of backfill made with clean native stream substrate?		Х	
7.	Was the pre-construction survey data provided and utilized during restoration in attempt to re-establish pre-construction contours?		Х	
8.	Were any field modifications to the stream implemented by project or regulatory personnel to address potential drainage or bank restoration limitations?			Х
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?		Х	
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?		Х	
11.	Was the time of disturbance minimized by conducting resource work continuously to completion?		Х	ļ
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?		Х	
13.	Are bareroot saplings required and/or scheduled to be planted for the dormant season $(10/1 - 4/30)$ ?	Х		ļ
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.			Х

	corrective actions implemented in the comments section and include additional photos.		
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	Mud/Silt/Clay	Mud/Silt/Clay
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)	2 - Suboptimal	1 - Optimal
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)	4 - Poor	4 - Poor
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)	2 - Minor	3 - Moderate

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## **Comments/Remarks**

10-13-2023: Pre-construction meeting. The MVP EI is Keith Davis, the Precision Foreman is Kevin Greene. This stream crossing will be an open cut and with a dam and pump. During the meeting soil management and the dewatering operation were discussed. -D. Fraise

10-14 to 10-22-2023: No work activity in the resource area.

10-23-2023: Construction activities commenced. Topsoil was removed and stockpiled inside the 50-foot buffer area. The top 12-inches of stream substrate was removed and stored in a Super Sak so that it remained separate

10-23-2023: Construction activities commenced. Topsoil was removed and stockpiled inside the 50-foot buffer area. The top 12-inches of stream substrate was removed and stored in a Super Sak so that it remained separated. Trenching was completed. The Subsoil was stockpiled in the appropriate upland area. Pipe was installed and the crew began the first weld. The first weld was completed. The next section of pipe was installed and was welded. -D. Fraise

10-24-2023: Welded the tie in pipe from the coming in side of the pipe. The pipe was x-rayed, coated, and sand blasted. -D. Fraise

10-25-2023: A bad weld was discovered during QC and had to be replaced. The replaced weld was x-rayed, sandblasted, and coated. The trench breaker was installed, then backfilling began. The survey crew was on site and conducting survey activities during the site's restoration. The crew backfilled both 10-foot and 50-foot buffer zones, installed filter sock, and applied seed and straw mulch to the buffer zones. -D. Fraise

No impact to biological conditions or unauthorized discharge, 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	Darrell Fraise  Print Name	Davill J.	10/26/2023 Date
		Signature	

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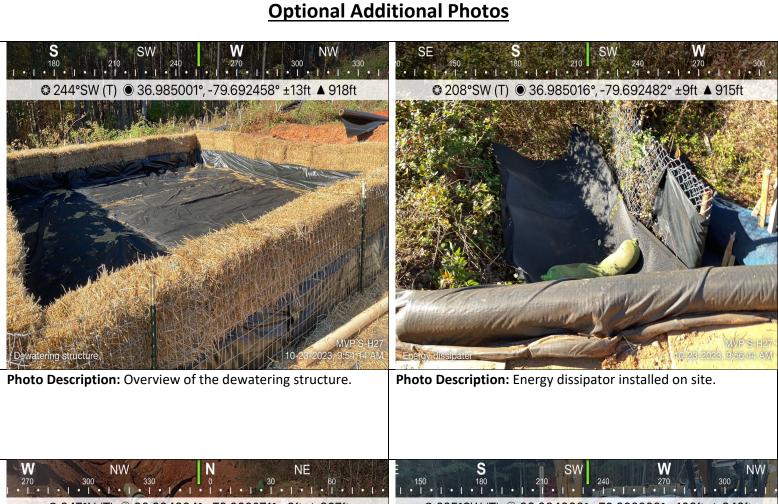


### **Required Photos**



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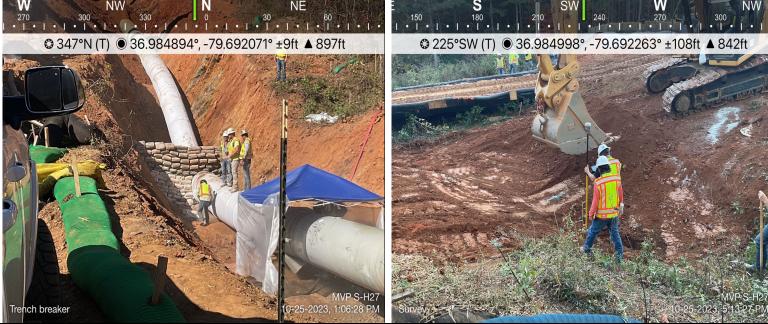


Photo Description: Installation of a trench breaker.

Photo Description: Survey conducted during site restoration in attempt to restore pre-construction contours of resource.