STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Wetland

Studies and Solutions, Inc.

a DAVEY € company

Version 2.3

Stream ID: S-OO2	Crossing Start Date: 10/23/2023	Crossing Completion Date: 10/28/2023	
Milepost: 302.6	Pre-Con Assessment Date: 10/18/2023	Post-Con Assessment Date: 10/28/2023	
Station: 15987+31	Stream Classification: Intermittent (Perennial, Intermittent, Ephemeral)	Bankfull Width (ft.): 5	
County: Pittsylvania	303(d) Impairment Listing: Not Impaired	Riffle:Pool Complexes Present? No	

Item #	Resource Crossing Conditions		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?	Х		
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?		Dam & Pump, Flume	
4.	Was the top 1-foot (12-inches) of streambed substrate segregated and stockpiled separate from trench spoils?		Х	
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	
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		
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

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	Cobble (2-10")	Cobble (2-10")
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.)	1 - Optimal	1 - Optimal
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

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Comments/Remarks

10-18-2023: Pre-construction meeting. The MVP EI is Joseph Thomas, the Precision foreman is Dillion Gentry, and the EA is Kwame Bryant. The topsoil was removed and stockpiled next to the other topsoil piles. -K. Bryant 10-23-2023: The dam was constructed using sandbags. The stream bed was excavated, stockpiled on geotextile fabric, and covered. The trench was excavated and dewatered into dewatering structure. -K. Bryant 10-24-2023: The pipe was lowered into the trench and the pipe was welded onto the existing pipe on the left bank. -K. Bryant 10-25-2023: The tie in pipe was lowered into the trench and welded. The main pipe was lowered in and lined up to the existing pipe. -K. Bryant 10-26-2023: The tie in pipe on the right bank was welded. Sandblasting and welding occurred on the left bank. The weld on the right bank did not pass x-ray QC, so it was cut and rewelded. -K. Bryant 10-27-2023: The stream banks were regraded, trench breakers were installed, and the trench was backfilled, and the soil was padded. -K. Bryant 10-28-2023: The banks were seeded with temporary and permanent mix and covered with curalex. The dams were removed, and the stream flow was restored. Post-construction auditor assessment was completed. -K. Bryant No impact to biological conditions or unauthorized discharge, were observed during the crossing activities.

This report was written by Kwame Bryant
Print Name

Kwame Bryant
Signature

10/29/2023
Date

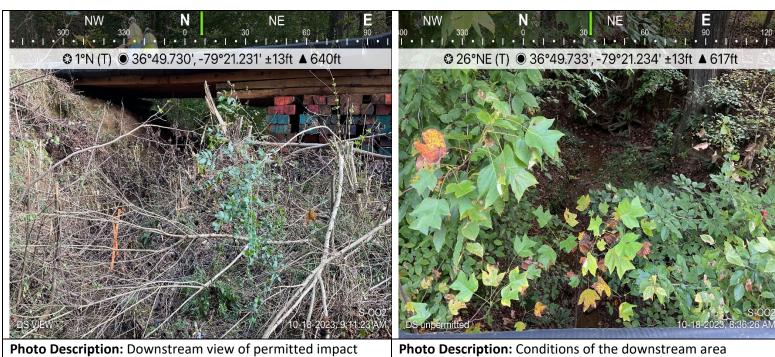
In accordance with the Mountain Valley Pipeline Consent Decree, Case No. CL18006874-00, (Issued October 11, 2019) this independent report was completed to document the on-site monitoring of instream invertebrate and fisheries resources during all construction activity

related to waterbody and wetland crossings, and document instream conditions and any impacts to the resources.

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Required Photos



area during pre-construction assessment.

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.

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Optional Additional Photos

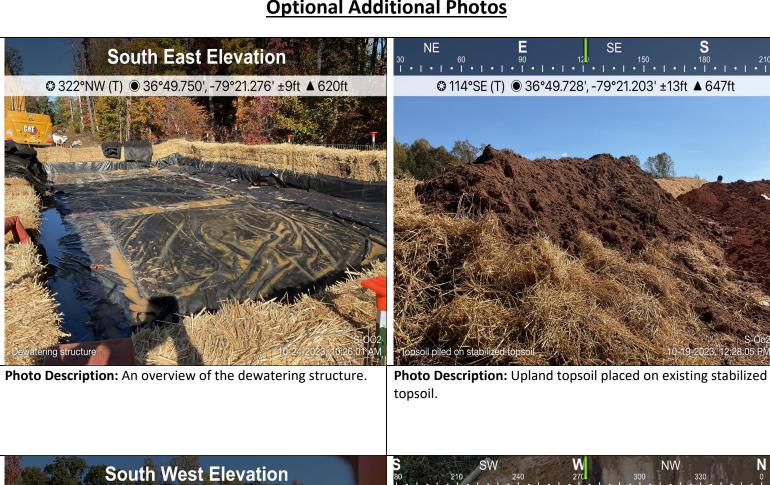




Photo Description: The flume pipe was installed and Photo Description: Stream bed and substrate separated and covered after excavation. maintained throughout restoration.