STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Wetland

Studies and Solutions, Inc.

a DAVEY € company

Version 2.3

Stream ID: S-CD8	Crossing Start Date: 04/02/2024	Crossing Completion Date: 04/06/2024	
Milepost: 281.7	Pre-Con Assessment Date: 04/02/2024	Post-Con Assessment Date: 04/06/2024	
Station: 14881+45	Stream Classification: Intermittent (Perennial, Intermittent, Ephemeral)	Bankfull Width (ft.): 4.5	
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?			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	
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?		Χ	
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	Gravel (0.1-2")	Gravel (0.1-2")
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.)	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)	3 - Marginal	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

04-02-24: The pre-construction assessment was completed. The MVP Environmental Inspector is Keith Davis, and the Precision Pipeline foreman is William Martin. This in-stream work is to repair an anomaly detected in the pipe during QC activities. During the meeting plans were established for soil storage and segregation. The fencing, straw matting, and all other restorations practices from the first time this resource was crossed were removed. The crew installed the dam and pump as well as the energy dissipator. The topsoil was excavated from the 50-foot buffer on the Coming In Side (CIS) as well as the stream substrate. All topsoil and subsoil separated and stockpiled appropriately. The rock had to be hammered once the excavator couldn't dig any farther. The pipe was exposed, and the rock shield was removed. Underneath the pipe was hand dug. -T. Snideman

04-03-24: The dam and pump were operational and manned. The dewatering structure was functioning as designed. -D. Fraise

04-04-24: A section of pipe was removed to be replaced. Two new sections of pipe were welded together and prepared for pipe installation in the trench. The pump around was operational, and the dewatering structure was functioning as designed. -D. Fraise

04-05-24: The pipe was placed in the trench to be welded. The pump around was operational. The dewatering structure was functioning as designed. The pipe was welded to the tie in. More of the pipe had to be exposed to relieve pressure. During the pipe excavation, half of the existing trench breaker was removed and will need to be replaced. -D. Fraise

04-06-24: The trench breaker was re-constructed. The pipe was x-rayed, coated, and sandblasted. The dam and pump were operational, and the dewatering structure was functioning as designed. The trench box was removed, and the pipe trench was backfilled. Due to crew not having previous survey shots of the banks or the substrate elevations, both banks were returned to a 3:1 slope and tied into existing grades. The topsoil was returned to both banks. Super silt fence was installed along the 10-foot buffer zone, and filter sock was installed along the 50-foot buffer zone. The 50-foot buffer was seeded and Curlex was keyed in at 6 inches on both banks. The substrate was returned to the streambed. The dam and pump around were removed. Both banks and substrate were surveyed post-construction. The stream was released at approximately 1530 hours. Post-construction auditor assessment completed. -D. Fraise

Item #7: Pre-construction survey information was not utilized during restoration of resource banks to re-establish preexisting contours, but as-built survey of restored conditions was completed on 4/6/2024.

No impacts to biological conditions or unauthorized discharges were observed during the work 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	Daniell 5	04/05/2024	
	Print Name	Signature	Date	

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Required Photos

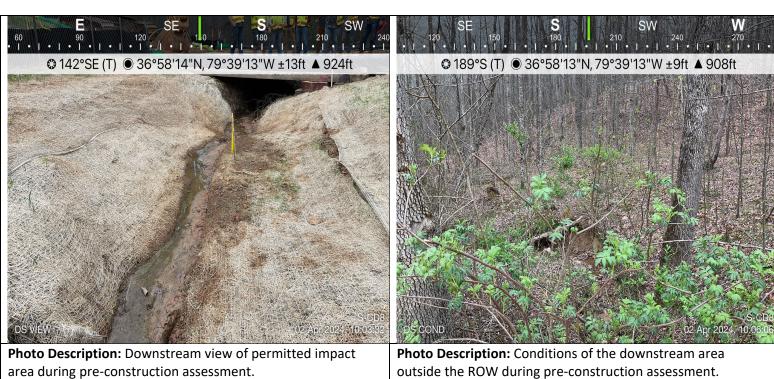




Photo Description: Downstream view of permitted impact area during post-construction assessment.



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

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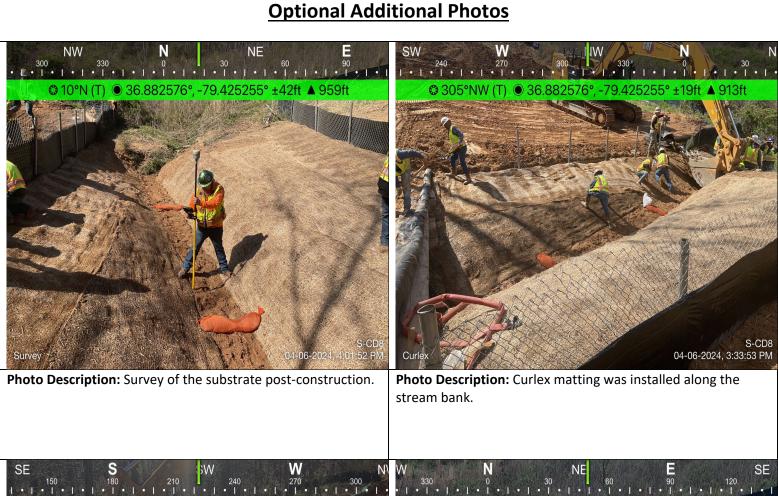




Photo Description: Topsoil was returned to the stream bank **Photo Description:** An overview of the dam and pump. and graded.