

STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



Stream ID: S-A41	Crossing Start Date: 10/17/2023	Crossing Completion Date: 10/20/2023
Milepost: 272.4	Pre-Con Assessment Date: 10/09/2023	Post-Con Assessment Date: 10/20/2023
Station: 14391+65	Stream Classification: Perennial (Perennial, Intermittent, Ephemeral)	Bankfull Width (ft.): 12
County: Franklin	303(d) Impairment Listing: 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)? <u>N/A</u> Fish Relocation? <u>Yes</u> Mussel Relocation? <u>N/A</u>		X	
2.	Is this resource designated a wild or stockable trout stream?			X
3.	Which crossing methods were utilized during the stream crossing? (<i>Select one or more</i>) 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?		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): <i>Bedrock, Boulder (>10"), Cobble (2-10"), Gravel (0.1-2"), Sand (<0.1"), Mud/Silt/Clay</i>	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)	2 - Suboptimal	2 - Suboptimal
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)	2 - Minor	2 - Minor

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Comments/Remarks

10-2-2023: Pre-con meeting. This tie-in crew will be installing the pipe across three resources during these crossing activities, S-A41, W-A12-PEM, and W-DD1. MVP EI anticipates that the triple crossing will begin at the end of this week or possibly next week depending on the completion of S-A36. -A. Thorpe

10-3 to 10-15-2023: No crossing activity or work near the resource crossing areas.

10-16-2023: Tie-in crew is completing another site. Currently digging a bell hole near GAS of triple crossing, stripping upland topsoil and segregating soil adjacent to resource area. Jeep tested pipe sections for the triple crossing. 3-inch pumps will be utilized during the dam and pump system. The fish relocation has been confirmed and is anticipated for tomorrow, 10/17/2023. -T. Snideman

10-17-2023: Fish relocation personnel safely removed the fish from stream before construction commenced. Excavated 12" of topsoil in the 10- and 50-foot buffer on both sides of the stream. Separated topsoil and segregated the soil by placing it on geotextile fabric. Installed sandbags to create a dam. Installed an energy diffuser. The Edge crew remained on site to remove any potential fish that remained within workspace. Excavated stream bank subsoil was stockpiled with the upland subsoil. A secondary dam was constructed near the energy diffuser due to unstable banks under the stream. The force of the discharge water has resulted in minor scour of the stream bed cobble. The installed super sack diffuser was modified to a filter bag and a rip rap diffuser.

-T. Snideman

10-18-2023: Trenching completed, and trench water was dewatered. Installed sandbag padding in the trench. Lowered a section of pipe into the trench, cut and welded the pipe. A 6-inch pump was utilized to actively remove water from the trench. The water was then conveyed to the installed dewatering structure. One weld was x-ray tested. -T. Snideman

10-19-2023: The first weld was coated. The second weld was x-rayed and coated. Trench breakers were installed on the CIS. Contractor stated that a second breaker was not required according to the E&S plan. Began backfilling the trench with subsoil. -T. Snideman

10-20-2023: Completed backfill of the subsoil, active restoration of the stream channel. The surveyors were onsite. Restored the topsoil in the 10-foot buffer up to the wetland area. Applied temporary and permanent seed and straw-matting. Removed the dam and pump and restored flow to the stream. Post-con auditor assessment completed. -T. Snideman


10-27-2023: New post-con pictures taken to confirm removal of the in-stream rock check dams.

Item #8: Vertical banks were sloped 3:1 for bank stabilization.

Item #9: Trench breaker was installed approximately 50 feet from the top of bank due to site safety concerns.

No impacts to biological conditions or unauthorized discharges 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	Traci Snideman <i>Print Name</i>	 <i>Signature</i>	10/20/2023 <i>Date</i>
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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.

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Optional Additional Photos



Photo Description: An overview of the pre-construction stream conditions. Bell hole excavation outside resource area.

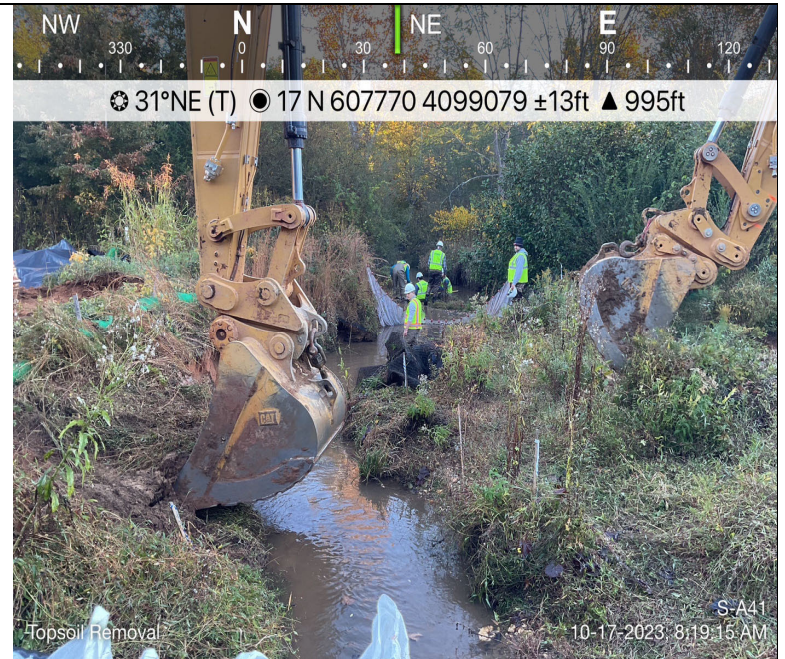


Photo Description: Removal of the topsoil from the stream bank.



Photo Description: Restoration of the stream banks.



Photo Description: Flow restored to stream after the conclusion of restoration activities. Rock check dams remain installed across channel in attempt to control turbidity.