

STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



Stream ID: S-H17	Crossing Start Date: 11/03/2023	Crossing Completion Date: 11/13/2023
Milepost: 281.1	Pre-Con Assessment Date: 10/23/2023	Post-Con Assessment Date: 11/13/2023
Station: 14853+39	Stream Classification: Intermittent (Perennial, Intermittent, Ephemeral)	Bankfull Width (ft.): 8
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)? <u>N/A</u> Fish Relocation? <u>N/A</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>	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.)	3 - Marginal	3 - Marginal
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)	1 - Optimal	1 - Optimal
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

10-23-23: Pre-construction meeting. The MVP EI is Charlie Jackson, and the Precision foreman is Darren Groinden. During the meeting the placement of the dewatering structure was discussed in addition to water and soil management, and open cutting of the stream. -D. Fraise

10-25-23: The crew removed the top 12-inches of topsoil from the 50-foot buffer. -T. Snideman

11-02-23: Removed sediment from the timber mat bridge. The energy dissipater and the dam and pump were installed. The dewatering structure was functioning properly. The subsoil was excavated from the 50-foot buffer on the GAS and CIS of the stream. -T. Snideman

11-03-23: The crew continued excavating subsoil from the 50-foot buffers. The top 12-inches of topsoil was excavated from the 10-foot buffers, separated, and stockpiled. The streambed substrate was excavated, separated, and stockpiled. Excavation of the trench began. During trenching activities, the banks of trench began collapsing. The crew relocated the topsoil piles to ensure they do not fall into the ditch. -T. Snideman

11-04-23: The crew regrouped to consult about the streambank instability. It was determined that the course of action going forward would be to backfill and re-excavate the trench. -T. Snideman

11-06-23: Installed trench boxes for the unstable banks and continued excavating the trench. -T. Snideman

11-07-23: A portion of the bank caved in, and the crew is working to stabilize the banks. Pipe was installed and one weld was completed and x-rayed. A connecting section was lowered into the trench and welded. -T. Snideman

11-08-23: A team of engineers came to reassess the pipe section that was welded yesterday. It was decided that the weld should be cut, and the pipe should be rotated and welded again. -T. Snideman

11-09-23: Pipe was lowered into the trench and one weld was completed. The pipe was cut to fit, and welding began. -T. Snideman

11-10-23: Welding was completed, and the pipe was x-rayed. Backfilling has begun. Both trench breakers were installed 25-feet from the top of bank. -T. Snideman


11-11-23: A new crew will be finishing the stream restoration. The new Precision foreman is Billy Schluter. -T. Snideman

11-12-23: The crew is padding and backfilling the trench. The trench boxes were removed. The stream banks were restored using the survey data provided. Stream substrate was placed back into the stream and topsoil was restored. Seed and straw matting was installed, and the 10-foot buffer was restored. Flow was restored. -T. Snideman

11-13-23: The 50-foot buffers were restored, and the rock check dam was removed. The resource crossing has been completed. -T. Snideman

No unauthorized discharges or impacts to biological conditions were observed during the crossing.

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.

<i>This report was written by</i>	Traci Snideman <i>Print Name</i>	 <i>Signature</i>	11/13/2023 <i>Date</i>
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Required Photos

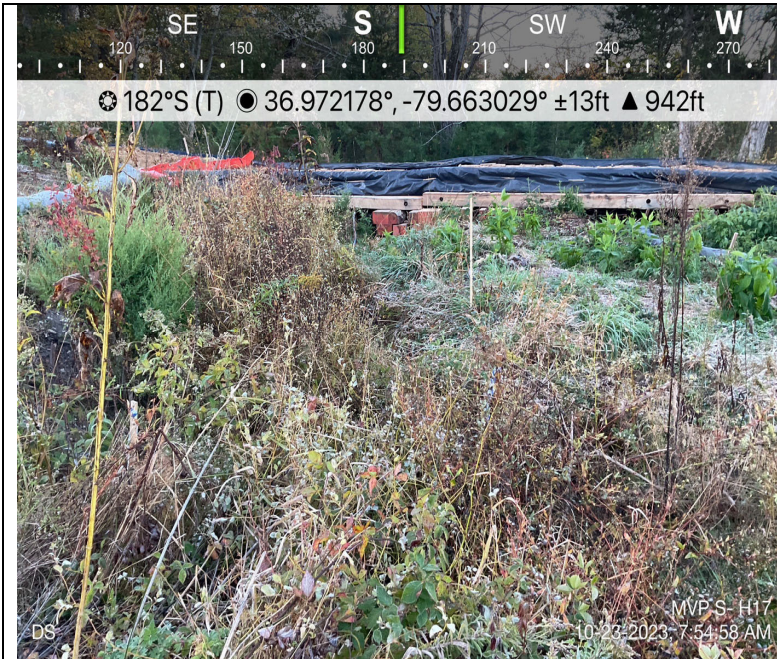


Photo Description: Downstream view of permitted impact area during pre-construction assessment.



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 dewatering structure.



Photo Description: Excavation of the streambed.

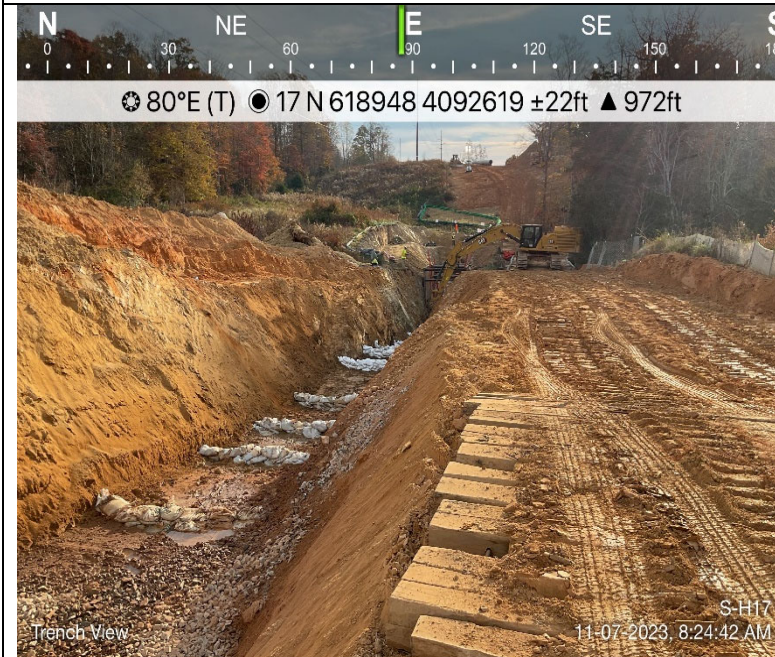


Photo Description: Rock check dams installed in the trench.



Photo Description: Site restoration and installation of the filter sock.