



Stream Biological Conditions EA Report


Project Name	H-600 Pipeline Spread D	AFE	124300132	Spread	H-600 Pipeline Spread D
Contractor	Precision	Report #	426		
Environmental Auditor	Kyle Gillow	Date/Time	12/5/2023 9:56 AM		
Stream ID	S-J23-EPH	Crossing Start Date	12/5/2023	Crossing Completion Date	12/15/2023
Milepost	122.42	Pre-Con Assessment Date	11/29/2023	Post-Con Assessment Date	12/15/2023
Station	6463+74	Bankfull Width (ft.)	1.5	Riffle:Pool Complexes Present?	No
State	WV	Stream Classification	Ephemeral		
County	Nicholas	303(d) Impairment Listing	No		

Resource Post-Crossing Conditions

1	Were all applicable resource specific crossing conditions satisfied?	N/A
	Time of Year Restrictions (TOYR)? <u> N/A </u> Mussel Relocation? <u> N/A </u>	
2	This question is not applicable in WV.	
3	Which crossing methods were utilized during the stream crossing? (If so select one or more) Dam & Pump <input checked="" type="checkbox"/> Flume <input checked="" type="checkbox"/> Cofferdam <input type="checkbox"/> Conventional Bore <input type="checkbox"/> Horizontal Directional Drill (HDD) Bore <input type="checkbox"/>	
4	Was the top 1-foot (12-inches) of streambed substrate segregated and stockpiled separate from trench spoils?	Yes
5	Was excess material not needed for backfill removed and disposed of in an upland area?	Yes
6	Was the top 12-inches of backfill made with clean native stream substrate?	Yes
7	Was the pre-construction survey data utilized during restoration in attempt to re-establish pre-construction contours?	Yes
8	Were any field modifications to the stream implemented by project or regulatory personnel to address potential drainage or bank restoration limitations?	No
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?	Yes
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?	Yes
11	Was the time of disturbance minimized by conducting resource work continuously to completion?	Yes
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?	Yes
13	Are bareroot saplings required and/or scheduled to be planted for the dormant season (10/1 - 4/30)?	N/A
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.	No

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-Sub-optimal (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)	1	1
17	Riparian Buffer Zone within ROW and ≤50 ft. from Stream Top-of-Bank: Rating: 1-Optimal (60-100% heavy vegetative cover), 2-Sub-optimal (30-60% mixed vegetated coverage), 3-Marginal (<30% vegetative coverage), 4-Poor (Mowed/maintained area or farmland, impervious area, sparsely vegetated coverage, etc.)	1	3

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Biological Conditions Continued					Pre-Con	Post-Con
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, Varied combination of water velocities, 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	3	
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	2	
Additional Notes						
<p>12/5/23 –With minimal flow present in S-J23-EPH a dam and pump around system was put into place prior to any ground disturbance. The top 12” of stream substrate was placed into super sacks and placed upstream for storage during construction. Blasting was required and once completed trenching through the feature commenced.</p> <p>12/6/23 to 12/8/23 – Excavation of the trench between the two loose ends continued for the next couple of days with the aid of a rock hammer.</p> <p>12/9/23 – The bottom of the trench was padded with sand bags once trenching was completed. A section of pipe extending from the coming in side (CIS) loose end through the feature was lowered in and welding operations commenced on the loose end.</p> <p>12/10/23 - No work was conducted on Sunday.</p> <p>12/11/23 – The next section of pipe from the going away side (GAS) of the feature to the GAS loose end was lowered in and welding operations commenced on the end of the pipe closest to the stream.</p> <p>12/12/23 – The final weld on the GAS loose end began while x-ray and coating operations were being conducted on the previous welds. By the end of the day all welds were x-rayed and coated.</p> <p>12/13/23 – Padding of the pipe and backfilling of the trench began while both bentonite trench breakers were installed within 25' of the feature on the CIS and GAS of the stream.</p> <p>12/14/23 – Once backfilling was complete, the top 12” of stream substrate was restored and verified by survey to pre-construction specifications. The environmental crew began installing the 10' buffers, but was not able to finish due to running out of daylight.</p> <p>12/15/23 – Restoration of the 10' buffers that was unable to be completed the previous day resumed. The proper seed mix was applied prior to the installation of curlex along the banks and silt fence at the 10' buffer zones on the coming in and going away sides of the feature. The dam and pump around were removed with feature still having minimal flow.</p>						
<p>In accordance with the Mountain Valley Pipeline Comprehensive Stream and Wetland Monitoring, Restoration and Mitigation Framework, 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.</p>						
Name		Signature		Company		
Kyle Gillow				SWCA		
				Date		
				12/15/2023		







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Required Photos

			
GPS Location	See caption in photo.	GPS Location	See caption in photo.
Description	Downstream view of permitted impact area during pre-construction assessment.	Description	Downstream view of unimpacted area during pre-construction assessment.
			
GPS Location	See caption in photo.	GPS Location	See caption in photo.
Description	Downstream view of permitted impact area during post-construction assessment.	Description	Downstream view of unimpacted area during post-construction assessment.
			
GPS Location	See caption in photo.	GPS Location	See caption in photo.
Description	Crew removing top 12" of stream substrate.	Description	Crew bagging stream substrate.

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Optional Photos

			
GPS Location	See caption in photo.	GPS Location	See caption in photo.
Description	Blasting crew drilling through feature.	Description	Start of trenching through feature.
			
GPS Location	See caption in photo.	GPS Location	See caption in photo.
Description	Making weld on the CIS of the stream.	Description	Breakers built on both the coming in and going away sides of feature.
			
GPS Location	See caption in photo.	GPS Location	See caption in photo.
Description	Re-establishing stream bed and banks.	Description	Placing stream substrate back into feature.