



Stream Biological Conditions EA Report


Project Name	H-600 Pipeline Spread F	AFE	124300135	Spread	H-600 Pipeline Spread F
Contractor	Price Gregory	Report #	351		
Environmental Auditor	Allyson Kincaid	Date/Time	11/10/2023 9:04 AM		
Stream ID	S-I20	Crossing Start Date	11/20/2023	Crossing Completion Date	12/7/2023
Milepost	163.20	Pre-Con Assessment Date	11/10/2023	Post-Con Assessment Date	12/7/2023
Station	8616+96	Bankfull Width (ft.)	11.5	Riffle:Pool Complexes Present?	No
State	WV	Stream Classification	Perennial		
County	Summers	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	Bedrock, Boulder (>10")	Cobble (2-10")
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	2
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	2

AFE	124300135	Date/Time	11/10/2023 9:04 AM	Report #	351	
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)			4	4	
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	1	
Additional Notes						
<p>Pre-Construction Notes Pre-Construction Meeting - 10/30/2023</p> <p>11/20/2023 - No water in resource. No changes in resource since assessment (11/10/2023). Built US and DS dams. First 12 inches of substrate (Photo 1). Drilled holes for blasting. Mats placed over pumps and materials. Blasted. Made adjustments to dams as needed for placement of flume.</p> <p>11/21/2023 - Heavy rain event. No work in aquatic resource.</p> <p>11/22/2023 - No work being conducted in aquatic resource due to unsafe conditions on slope leading to resource. Welding ongoing.</p> <p>11/24/2023 - No flow in channel. No changes since 11/20/2023. X-ray, sand blasting and coating occurred outside resource area. No a.m. work in resource - still drying out. Pumped water from bell hole. Began excavating trench in aquatic resource area (Photo 2). Encountered groundwater. Began pumping water from trench.</p> <p>11/25/2023 - Water pumped from trench (almost continuously). Sandbag padding added to trench (Photo 3). Transported pipe and placed in trench then removed to increase depth of cover. Additional excavation completed. Pipe lowered into trench. Welding initiated. DS dam rebuilt.</p> <p>11/26/2023 - Water pumped from trench throughout day (and night). Weld and x-ray completed.</p> <p>11/27/2023 - Pumped water from trench. No water or flow in stream. Blasting and coating ongoing. No work in the aquatic resource area. Additional excavation in upland area. Trench completed.</p> <p>11/28/2023 - Work delayed due to unsafe/slick conditions from snow. Sandbag padding adding added to trench. Water pumped from trench. Test leads installed. Placed connecting pipe in trench. Began adding dirt padding to trench. Filled toe-slope area of trench. Pulled trench box.</p> <p>11/29/2023 - Picked pipe up to line up for cut. Worked remainder of day trying to cut and align pipe. Flume remained in place.</p> <p>11/30/2023-12/1/2023 - Water pumped from trench. Welding ongoing. Flume remained in place.</p> <p>12/2/2023 - Weld and x-ray completed. Trench breaker constructed (RDB). River weights added (Photo 4). Continued backfilling. Flume remained in place.</p> <p>12/4/2023 - Precipitation 0.6". Pumped water from trench. Flume remained in place.</p> <p>12/5/2023 - Pumped water from trench continuously. Sandblasted and coated. Installed trench breaker (LDB) and completed opposite trench breaker. Removed flume for backfilling. Backfilled trench in and adjacent to aquatic resource area. Flume restored (Photo 5).</p> <p>12/6/2023 - No activities in aquatic resource area due to weather causing unsafe conditions.</p> <p>12/7/2023 - Observed crossing, no flow. Survey team arrived and completed stream survey shooting elevations (Photo 6). Restored rocks and substrate instream (Photo 7). Final survey completed. Seeded buffer (Photo 8). Curlex applied.</p> <p>Post Construction Notes 16., 17. Crossing and riparian areas have been recently restored. These areas will be monitored until 80% vegetative cover has been achieved and areas that do not have 80% vegetative cover within 30 days will be reseeded. 19. Does not include timber mats that remain in place for travel lane.</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		
Allyson Kincaid				POTESTA		
				Date		
				12/7/2023		

AFE 124300135	Date/Time 11/10/2023 9:04 AM	Report # 351
----------------------	-------------------------------------	---------------------

Required Photos

	
<p>GPS Location See Photo</p>	<p>GPS Location See Photo</p>
<p>Description Downstream view of permitted impact area during pre-construction assessment.</p>	<p>Description Downstream view of unimpacted area during pre-construction assessment.</p>
	
<p>GPS Location See Photo</p>	<p>GPS Location See Photo</p>
<p>Description Downstream view of permitted impact area during post-construction assessment.</p>	<p>Description Downstream view of unimpacted area during post-construction assessment.</p>
	
<p>GPS Location See Photo</p>	<p>GPS Location See Photo</p>
<p>Description Photo 1: Removing top 12 inches of substrate.</p>	<p>Description Photo 2: Excavating trench in aquatic resource.</p>

Optional Photos		
------------------------	--	--



GPS Location See Photo	GPS Location See Photo
-------------------------------	-------------------------------

Description Photo 3: Sandbag pillows placed in trench.	Description Photo 4: Trench breaker on RDB. River weights.
---	---



GPS Location See Photo	GPS Location See Photo
-------------------------------	-------------------------------

Description Photo 5: Backfilled subsoil and flumed replaced.	Description Photo 6: Survey present onsite.
---	--



GPS Location See Photo	GPS Location See Photo
-------------------------------	-------------------------------

Description Photo 7: Restoring substrate.	Description Photo 8: Seeding buffer.
--	---