



Wetland Biological Conditions EA Report

Project Name	H-600 Pipeline Spread D	AFE	124300132	Spread	H-600 Pipeline Spread D
Contractor	Precision	Report #	40		
Environmental Auditor	Alex Miller			Date/Time	9/6/2023 7:47 AM
Wetland ID	W-IJ51	Crossing Start Date	8/15/2023	Crossing Completion Date	8/27/2023
Milepost	111.59	Pre-Con Assessment Date	8/8/2023	Post-Con Assessment Date	8/27/2023
Station	5891+95	Cowardin Classification	PEM	Wetland Impact Area(acres)	0.0410
State	WV				
County	Nicholas				

Resource Post-Crossing Conditions

1	Were equipment mats or other suitable methods utilized under heavy equipment to minimize soil compaction and disturbance in wetlands?	N/A
2	Was the existing vegetation removed prior to initiating land disturbance within the resource?	Yes
3	Was the top 1-foot (12-inches) of wetland soil segregated and stockpiled separate from trench spoils?	Yes
4	Was excess material not needed for backfill removed and disposed of in an upland area?	Yes
5	Was the top 12-inches of backfill made with clean native wetland topsoil?	Yes
6	Were standard decompaction practices (disking, plowing, cultivating, tilling, or incorporation of organic matter into the topsoil horizon) implemented prior to applying seed?	Yes
7	Was wetland topsoil replaced and temporarily seeded?	Yes
8	Was permanent seed applied to unsaturated wetlands?	Yes
9	Was equipment/timber matting removed from the wetland area properly by vertically lifting, and not pulling through the impact area?	N/A
10	Were impervious trench breakers/plugs properly installed within 25-feet of the resource to prevent subsurface erosion to or from the resource area?	Yes
11	Was the pre-construction survey data utilized during restoration in attempt to maintain the original surface hydrology, and were contours re-established to pre-construction conditions to maintain overland flow patterns?	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	Was the time of disturbance minimized by conducting resource work continuously to completion?	Yes
14	Does the post-construction square footage of wetland area appear to be restored to meet or exceed the pre-construction area square footage?	Yes
15	Are bareroot saplings required and/or scheduled to be planted for the dormant season (10/1 – 4/30) in PFO classified wetlands?	N/A
16	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
17	Wetland Saturation: Are surface waters, the water table, and/or overall soil saturation present? (Select Yes or No)	Yes	Yes
18	Resource Alterations: Are the wetland soil conditions visibly disturbed? Examples: Livestock presence, haul roads, farm traffic, drain tiles, recent mowing/clear cutting, recent excavating/disking of soils, etc. Rating: 1-Negligible (undisturbed/natural resource), 2-Minor (20-40% of resource disturbed by alterations), 3-Moderate (40-80% of resource disturbed), 4-Poor (>80% of resource disturbed)	1	4
19	Is vegetation present within the permitted impact area prior to disturbance? (Pre-Con)Are areas properly seeded and stabilized after restoration? (Post-Con) Rating: 1-Optimal (60-100% heavy vegetative cover), 2-Sub-optimal (30-60% mixed vegetative coverage), 3-Marginal (<30% vegetative coverage), 4-Poor (Mowed/maintained area or farmland, impervious area, sparsely vegetative coverage, etc.)	1	4

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Additional Notes

A 24" flume pipe was utilized for overnight flow throughout the crossing of S-IJ57 and dewatering of the trench was conducted as needed throughout the crossing.

08/15/2023 - Prior to construction entering the 10ft buffer of W-IJ51, stream-crossing S-IJ57 was dammed with sandbags and a 3-inch electric pump around was installed. The top 12" of the wetland substrate for W-IJ51 was excavated and stockpiled next to the super sacks of stream substrate. Excavation of the trench commenced.

08/16/2023 - A rain event delayed construction in the morning, and dewatering of the trench was required. The coming in-side CIS of the trench excavation was completed and a segment of pipe was lowered in later in the day. Welders started preparing the pipe to start welding the following day. The contractor started excavating the going away side (GAS) of the trench.

08/17/2023 - Welding commenced in the morning on the coming inside and continued throughout the afternoon. W-IJ51 and S-IJ57 underwent a DEP inspection in the early afternoon; all portions of W-IJ51 were up to code.

08/18/2023 - The contractor finished excavating of the trench on the GAS of the crossing and a segment of pipe was lowered in for welding to commence.

08/19/2023 - More excavation was needed on the GAS, which continued throughout the day. Welding operations continued throughout the day on the GAS.

08/21/2023 - Binding engineers were onsite to reconfigure a segmented pipe for the GAS. Three welds were completed on the GAS of the pipe by the end of the day.

08/22/2023 - Alex Miller took over crossing as EA. The welders had to perform a cutout and welding continued throughout the day.

08/23/2023 - Welding operations continued throughout the day.

08/24/2023 - Welding, X-ray, and coating of the pipe were completed today. Back filling of the trench started with padding the pipe using and sifting bucket on the excavator.


08/25/2023 -No work was done on the crossing due to a rain out event.

08/26/23 -The contractor continued to pad the pipe using a sifting bucket on an excavator. Trench breakers were installed within 25ft. of the wetland boundaries. Subsoil was replaced between the high marks to within 12" from surface.

08/27/23 - The contractor completed the backfill of the wetland subsoil, removed the 24" flume and re-established the pump-around prior to replacing the wetland (W-IJ51) and stream (S-IJ57) topsoil to the surveyor specifications. The wetland was seeded, and jute was placed on the steeper sloped areas. Super silt fence was placed at the wetland boundary and curlex was placed upslope of wetland boundary.

Conditions 18 and 19 were given a rating of 4 due to the lack of vegetation in the disturbed permitted impact area following completion of the crossing and restoration efforts. The W-IJ51 PEM topsoils have been properly stabilized and the disturbed area has been seeded with the appropriate permanent seed mix in accordance with Appendix B: Restoration Work Plan of the Mountain Valley Pipeline Comprehensive Stream and Wetland Monitoring, Restoration and Mitigation Framework.

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.

Name	Signature	Company	Date
Alex Miller		SWCA	8/27/2023

AFE 124300132		Date/Time 9/6/2023 7:47 AM		Report # 40	
Required Photos					
<p>8/15/23 7:58 AM +38.3524N -80.6364W 128° SE W-IJ51 (Pre_CC)</p> 		<p>8/15/23 8:02 AM 125° SE W-IJ51 (Pre_CC)</p> 			
GPS Location See Photo		GPS Location 38.3519, -80.6360			
Description View of permitted resource impact area during pre-construction assessment. View of wetland W-IJ51 prior to construction. Taken from bridge.		Description At edge of LOD, view of unimpacted resource area conditions during pre-construction assessment. View of unpermitted area of outside LOD. Taken from coming-in side of wetland.			
<p>8/27/23 5:16 PM +38.3524N -80.6363W 119° SE W-IJ51 (Post-AM)f</p> 		<p>8/29/23 12:58 PM +38.3523N -80.6362W 156° SE W-IJ51 (Post-AM)</p> 			
GPS Location See Photo		GPS Location See Photo			
Description View of permitted resource impact area during post-construction assessment. View of wetland W-IJ51 after construction was completed. Taken from bridge.		Description At edge of LOD, view of unimpacted resource area conditions during post-construction assessment. View of unpermitted area outside of LOD. Taken from going away side of wetland at edge of LOD.			
<p>8/26/23 3:06 PM +38.3523N -80.6364W 258° W W-IJ51 (Dur-AM)</p> 		<p>8/26/23 5:55 PM +38.3526N -80.6339W 231° SW W-IJ51 (Dur-AM)</p> 			
GPS Location See Photo		GPS Location See Photo			
Description Trench breaker installed on the going away side of the crossing inside the 25 ft buffer.		Description View of wetland crossing from coming-in side after backfilling has been finished and prior to replacement of wetland topsoil.			

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Optional Photos					
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