Wetland Biological Conditions EA Report

Project Name	H-600 Pipeline Spread A	**AFE**	124300129	**Spread**	H-600 Pipeline Spread A
Contractor	Precision			**Report #**	39
Environmental Auditor	Samantha Felix			**Date/Time**	9/2/2023 6:51 PM

Wetland ID	W-A1a	**Crossing Start Date**	8/22/2023	**Crossing Completion Date**	9/2/2023
Milepost	0.65	**Pre-Con Assessment Date**	8/26/2023	**Post-Con Assessment Date**	9/5/2023
Station	34+32	**Cowardin Classification**	PEM	**Wetland Impact Area(acres)**	0.0038
State	WV				
County	Wetzel				

	Resource Post-Crossing Conditions	
1	Were equipment mats or other suitable methods utilized under heavy equipment to minimize soil compaction and disturbance in wetlands?	Yes
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?	No
9	Was equipment/timber matting removed from the wetland area properly by vertically lifting, and not pulling through the impact area?	Yes
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

8/22/23 - Pre-construction meeting and took pre-construction pictures of site. -S.Felix

8/26/23 - Dam and pump was installed. Two dams were created to catch water. Aquatic organisms were caught and released downstream from construction. -S.Felix

8/27/23 - Commenced sheet pile installation after checking again for aquatic organisms. Before each section of sheet pile was installed, 12” of waterbody substrate was segregated and stockpiled in a designated upland area separate from the other spoil. S.Felix

8/28/23 - Continued sheet pile installation. The top 12” of wetland substrate was segregated and stockpiled in a designated upland area separate from the other spoil before each section of sheet pile was installed. -S.Felix

8/29/23 - Finished sheet pile installation. Commenced the extraction of subsoil. -S.Felix

8/30/23 - Installed pipe and started welding. -S.Felix

8/31/23 - Finished welding and started filling the trench with subsoil. -S.Felix

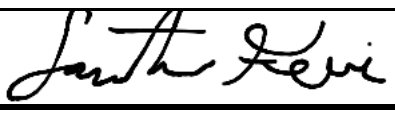
9/1/23 - Continued filling the trench with subsoil. -S.Felix

9/2/23 - After the subsoil was properly compacted, the sheet piling was removed. The 12” of segregated wetland topsoil and waterbody substrate were placed back onto the wetland and the stream respectively to match pre-construction contours using survey data and pre-construction pictures. -S.Felix

9/5/23 - Post-construction pictures taken.

Conditions 18 and 19 were given a rating of 4 during post-construction assessment due to lack of vegetation in the disturbed permitted impact area following the completion of the crossing and restoration efforts. The adjacent S-A1a stream bank and stream bed substrates 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
Samantha Felix		ERM	9/5/2023

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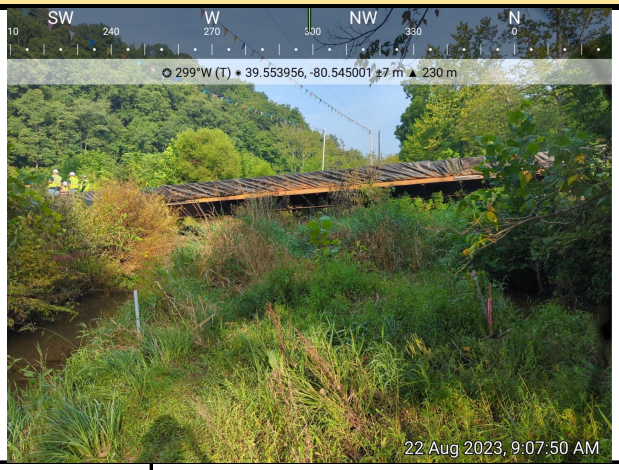
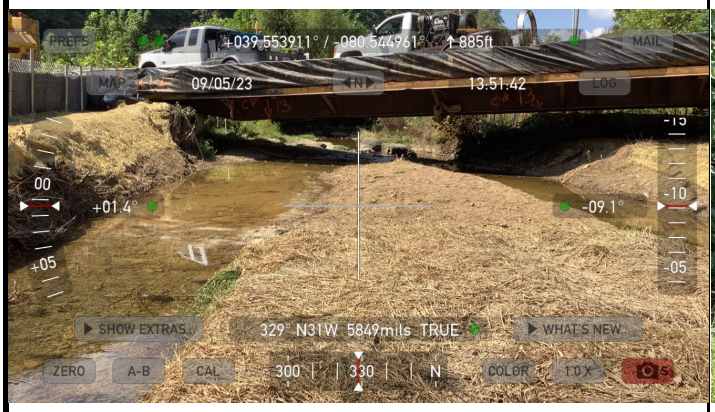
Required Photos



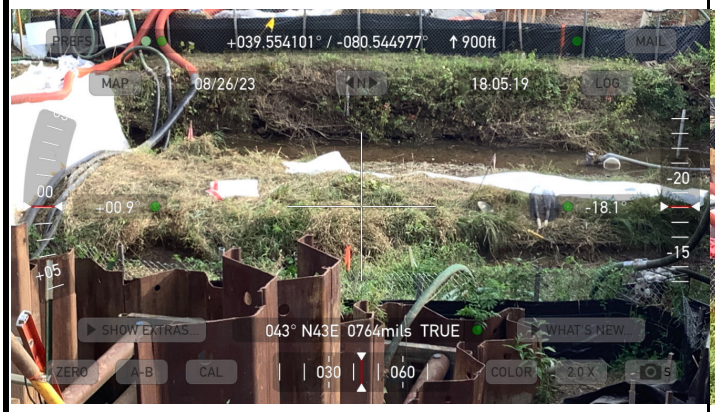
GPS Location	See above.
Description	View of permitted resource impact area during pre-construction assessment.

GPS Location	See above.
Description	At edge of LOD, view of unimpacted resource area conditions during pre-construction assessment.



GPS Location	See above.
Description	View of permitted resource impact area during post-construction assessment.

GPS Location	See above.
Description	At edge of LOD, view of unimpacted resource area conditions during post-construction assessment.



GPS Location	See above.
Description	This photo shows the dam and pump installed for the wetland and stream crossing

GPS Location	See above.
Description	This photo shows the contractor working on installing sheet piling.

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Optional Photos

GPS Location	See above.
Description	This photo shows the contractor continuing work on the sheet pile installation.

GPS Location	See above.
Description	This photo shows the contractor continuing work on the sheet pile installation.

GPS Location	See above.
Description	This photo shows the contractor working on excavating the trench

GPS Location	See above.
Description	This photo shows the contractor working on installation of pipeline.

GPS Location	See above.
Description	This photo shows the contractor working on backfilling the trench with soil.

GPS Location	See above.
Description	This photo shows the completed crossing.