



Wetland Biological Conditions EA Report

Project Name	H-600 Pipeline Spread F	A/E	124300135	Spread	H-600 Pipeline Spread F
Contractor	Price Gregory	Report #	93		
Environmental Auditor	Alyssa Jones			Date/Time	10/20/2023 11:12 AM
Wetland ID	W-OP1-PEM	Crossing Start Date	10/23/2023	Crossing Completion Date	11/13/2023
Milepost	179.10	Pre-Con Assessment Date	10/20/2023	Post-Con Assessment Date	11/13/2023
Station	9456+48	Cowardin Classification	PEM	Wetland Impact Area(acres)	0.1359
State	WV				
County	Monroe				

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?	Yes
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)	2		3
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.)	2		3

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Additional Notes

Pre-Construction Note

Pre-Construction Meeting - 10/20/2023

- 17. Wetland test pit recharged. Saturated soils present (Photo1).
- 18. Timber mats in place prior to assessment. Wetland topsoil removed and excavation occurred at this site in 2018.
- 19. Wetland topsoil was not restored during 2018 construction; however, vegetative growth has occurred.

10/21/2023 - Initiated wetland topsoil removal. Excavated topsoil segregated and stored in work area (Photo 2). Began to excavate trench late in day; however, backfilled due to safety concerns.

10/23/2023 - Began excavating to expose pipe. Began pumping water from trench in aquatic resource. Additional wetland topsoil excavated, segregated and stored in work area. Once pipe exposed excavating continued around pipe including hammering (Photo 3 and 4).

10/24/2023 - Pumping water from trench in aquatic resource. Additional excavation in pit. Trench box installed and backfilling.

10/25/2023 - Pumping water from trench in aquatic resource. Mats placed along trench wall above trench box and other side of trench sloped for safety prior to anyone entering the trench. Initial pipe inspection.

10/26/2023 - Pumping water from trench in aquatic resource. Survey marked pipe trajectory. Final pipe inspection (Photo 5), five inches to cut from end of pipe. 811 paperwork obtained. Began to excavate trench out of aquatic resource on opposite side of road.

10/27/2023 - Pumping water from trench in aquatic resource. Continue to dig trench outside of aquatic resource on opposite side of road. Excavating trench from aquatic resource to road crossing.

10/28/2023 - No work in aquatic resource area.

10/30/2023 - Pumping water from trench in aquatic resource. Welding, sandblasting, and coating outside of resource area, across road. Continue excavation between road and aquatic resource. Began cutting road.

10/31/2023 - Pumping water from trench in aquatic resource. Welding, sandblasting, and coating outside of resource area, across road. Cutting road. No work in aquatic resource.

11/1/2023 - Pumping water from trench in aquatic resource. Installing rock shield. Sandbags for padding added to trench. Pipe placed in trench (Photo 6) and welding began.

11/2/2023 - Pumping water from trench in aquatic resource. Excavation of trench for additional room to construct trench breaker. Add sandbags to trench for padding. Additional segments of pipe placed in trench in upland area. Welding ongoing.

11/3/2022 - Pumping water from trench in aquatic resource. Welding and x-ray ongoing. Continuing to install additional sections of pipe in upland area.

11/4/2023 - Welding and x-ray ongoing. Weld at edge of resource did not pass inspection. Repairing weld.

11/6/2023 - Pumping water from trench in aquatic resource. Lining up pipe to cut and weld last section (outside of aquatic resource area).

11/7/2023 - Welding, sandblasting, and coating of pipe in trench outside of aquatic resource area. Last section of pipe cut.

11/8/2023 - Welding, sandblasting, and coating completed on pipe in trench. Padding added to trench.

11/9/2023 - Sandblasting and coating of pipe and adding padding to trench ongoing. Began stacking quikcrete trench breakers on both sides of the road (upgradient of aquatic resource). Backfilling trench.

11/10/2023 - Sandblasting, coating, and coating of pipe and adding padding and backfill to trench ongoing. Constructing trench breaker adjacent to aquatic resource (Photo 7). Concrete poured into trench between two quikcrete trench breakers.


11/11/2023 - Sandblasting and coating of pipe and adding padding to trench ongoing. Continued to add padding and backfill in trench. Survey onsite. Jeeping and rock shield added at tie-in at aquatic resource. Removed timber mats from trench in aquatic resource. Removed trench box. Subsoil restored.



















11/13/2023 - Survey onsite. Topsoil restored. Topsoil from 2018 construction also restored as per FERC (Photo 8). Aquatic resource seeded. Survey signed off on boundaries. Restoration complete.

Post Construction Notes

- 17. Post construction test pit contained saturated soils.
- 18. Does not include timber mats that remain in place for travel lane.
- 19. 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% cover within 30 days will be reseeded.

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
Alyssa Jones		Potesta	11/13/2023

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Required Photos							
					<p>View of permitted resource impact area during pre-construction assessment.</p>		<p>At edge of LOD, view of unimpacted resource area conditions during pre-construction assessment.</p>
					<p>View of permitted resource impact area during post-construction assessment.</p>		<p>At edge of LOD, view of unimpacted resource area conditions during post-construction assessment.</p>
					<p>Photo 1: Test pit and soil horizon</p>		<p>Photo 2: Segregated wetland topsoil in work area.</p>

Optional Photos		
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GPS Location See Photo	GPS Location See Photo
Description Photo 3: Exposed pipe in aquatic resource.	Description Photo 4: Hammering in aquatic resource.



GPS Location See Photo	GPS Location See Photo
Description Photo 5: Pipe inspection.	Description Photo 6: Installing pipe in trench in aquatic resource area.



GPS Location See Photo	GPS Location See Photo
Description Photo 7: Backfilling and constructing trench breaker outside of aquatic resource.	Description Photo 8: Restoring wetland topsoil removed during 2018 construction as per FERC instruction.