Wetland Biological Conditions EA Report

Project Name	H-600 Pipeline Spread E	**AFE**	124300134	**Spread**	H-600 Pipeline Spread E
Contractor	Price Gregory			**Report #**	73
Environmental Auditor	Charles Haden			**Date/Time**	10/2/2023 9:47 AM

Wetland ID	W-M20	**Crossing Start Date**	10/4/2023	**Crossing Completion Date**	10/18/2023
Milepost	137.05	**Pre-Con Assessment Date**	10/2/2023	**Post-Con Assessment Date**	10/18/2023
Station	7236+15	**Cowardin Classification**	PEM	**Wetland Impact Area(acres)**	
State	WV				
County	Greenbrier				

	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?	N/A
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?	N/A
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?	N/A
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?	No
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	No
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.)	1	3

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Additional Notes

Pre-Construction Notes
Pre-Construction Meeting - 9/18/2023
17. Surface water, soil saturation and groundwater recharge observed in soil test pit (Photo 1).

10/04/2023 - Contractor developed plans to minimize the impact to the permitted impact area of the wetland resource; however, due to its proximity to the centerline wetland topsoil was removed (Photo 2) Soil segregated and stored in upland area (Photo 3). Resource protected from on-going activities with the installation of P1 fencing (Photo 4).

10/05/2023-10/17/2023 - Minimization measures were successfully implemented and other than topsoil removal, wetland resource was not disturbed (Photos 5 and 6). Trenching, hammering, bedding installation, pipe installation, welding, x-ray, sandblasting, coating, the construction of trench breakers, and the backfilling of the trench were all ongoing outside of aquatic resource during this timeframe.

10/18/2023 - Wetland topsoil restoration (Photo 7). Survey of elevation and boundary was completed. Seed applied to resource (Photo 8). Silt sock installed around perimeter of the restored wetland resource.

Post Construction Notes
17. Water did not recharge in post construction test pit.
18. Crossing and riparian areas have been recently restored. These areas will be monitored until 80% vegetative coverage has been achieved and areas that do not have 80% vegetative cover within 30 days will be reseeded.
Trenching did not occur in resource so Condition Nos. 1, 4, 6, 9, and 10 do not apply.

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
Charles Haden		Potesta & Associates	10/18/2023

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Required Photos

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

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

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

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

GPS Location	See Photo
Description	Photo 1: Wetland test pit.

GPS Location	See photo
Description	Photo 2: Wetland topsoil removal.

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Optional Photos

GPS Location	See Photo
Description	Photo 3: Wetland topsoil segregated in upland area.

GPS Location	See Photo
Description	Photo 4: Wetland topsoil removed; P1 fencing in place.

GPS Location	See Photo
Description	Photo 5: Wetland resource undisturbed 10/9/2023.

GPS Location	See Photo
Description	Photo 6: Wetland resource undisturbed 10/14/2023.

GPS Location	See Photo
Description	Photo 7: Wetland topsoil restoration.

GPS Location	See Photo
Description	Photo 8: Seed applied to wetland resource.