



Photo Location 52. View of Stream 26 (Sycamore Creek). Photograph taken facing downstream/west.



Photo Location 52. View of substrates of Stream 26 (Sycamore Creek).



Photo Location 53. View of Stream 27. Photograph taken facing upstream/south.



Photo Location 53. View of Stream 27. Photograph taken facing downstream/north.



Photo Location 53. View of substrates of Stream 27.



Photo Location 54. View of Wetland 19 at wetland determination sample point SP 44.
Photograph taken facing north.



Photo Location 54. View of Wetland 19 at wetland determination sample point SP 44.
Photograph taken facing east.



Photo Location 54. View of Wetland 19 at wetland determination sample point SP 44.
Photograph taken facing south.



Photo Location 54. View of Wetland 19 at wetland determination sample point SP 44.
Photograph taken facing west.



Photo Location 55. View of Stream 28 (Delano Run). Photograph taken facing upstream/west.



Photo Location 55. View of Stream 28 (Delano Run). Photograph taken facing downstream/east.



Photo Location 55. View of substrates of Stream 28 (Delano Run).



Photo Location 56. View of Wetland 20 at wetland determination sample point SP 46.
Photograph taken facing north.



Photo Location 56. View of Wetland 20 at wetland determination sample point SP 46.
Photograph taken facing east.



Photo Location 56. View of Wetland 20 at wetland determination sample point SP 46.
Photograph taken facing south.



Photo Location 56. View of Wetland 20 at wetland determination sample point SP 46.
Photograph taken facing west.



Photo Location 57. View of Wetland 21 at wetland determination sample point SP 48.
Photograph taken facing north.



Photo Location 57. View of Wetland 21 at wetland determination sample point SP 48.
Photograph taken facing east.



Photo Location 57. View of Wetland 21 at wetland determination sample point SP 48.
Photograph taken facing south.



Photo Location 57. View of Wetland 21 at wetland determination sample point SP 48.
Photograph taken facing west.



Photo Location 58. View of Stream 29. Photograph taken facing upstream/northwest.



Photo Location 58. View of Stream 29. Photograph taken facing downstream/southeast.



Photo Location 58. View of substrates of Stream 29.



Photo Location 59. View of Wetland 22 at wetland determination sample point SP 50.
Photograph taken facing north.



Photo Location 59. View of Wetland 22 at wetland determination sample point SP 50.
Photograph taken facing east.



Photo Location 59. View of Wetland 22 at wetland determination sample point SP 50.
Photograph taken facing south.



Photo Location 59. View of Wetland 22 at wetland determination sample point SP 50.
Photograph taken facing west.



Photo Location 60. View of Stream 30. Photograph taken facing upstream/west.



Photo Location 60. View of Stream 30. Photograph taken facing downstream/east.



Photo Location 60. View of substrates of Stream 30.



Photo Location 61. View of Stream 31. Photograph taken facing upstream/west.



Photo Location 61. View of Stream 31. Photograph taken facing downstream/east.



Photo Location 61. View of substrates of Stream 31.



Photo Location 62. View of Stream 32. Photograph taken facing upstream/west.



Photo Location 62. View of Stream 32. Photograph taken facing downstream/east.



Photo Location 62. View of substrates of Stream 32.



Photo Location 63. View of Stream 33. Photograph taken facing upstream/north.



Photo Location 63. View of Stream 33. Photograph taken facing downstream/south.



Photo Location 63. View of substrates of Stream 33.



Photo Location 64. View of Wetland 23 at wetland determination sample point SP 52.
Photograph taken facing north.



Photo Location 64. View of Wetland 23 at wetland determination sample point SP 52.
Photograph taken facing east.



Photo Location 64. View of Wetland 23 at wetland determination sample point SP 52.
Photograph taken facing south.



Photo Location 64. View of Wetland 23 at wetland determination sample point SP 52.
Photograph taken facing west.



Photo Location 64. View of soil test pit at wetland determination sample point SP 52 at
Wetland 23.



Photo Location 65. View of Stream 34. Photograph taken facing upstream/west.



Photo Location 65. View of Stream 34. Photograph taken facing downstream/east.



Photo Location 65. View of substrates of Stream 34.



Photo Location 66. View of Wetland 24 at wetland determination sample point SP 54.
Photograph taken facing north.



Photo Location 66. View of Wetland 24 at wetland determination sample point SP 54.
Photograph taken facing east.



Photo Location 66. View of Wetland 24 at wetland determination sample point SP 54.
Photograph taken facing south.



Photo Location 66. View of Wetland 24 at wetland determination sample point SP 54.
Photograph taken facing west.



Photo Location 66. View of soil test pit at wetland determination sample point SP 54 at
Wetland 24.



Photo Location 67. View of Open Water 3. Photograph taken facing southeast.



Photo Location 67. View of Open Water 3. Photograph taken facing south.



Photo Location 68. View of Wetland 25 at wetland determination sample point SP 56.
Photograph taken facing north.



Photo Location 68. View of Wetland 25 at wetland determination sample point SP 56.
Photograph taken facing east.



Photo Location 68. View of Wetland 25 at wetland determination sample point SP 56.
Photograph taken facing south.



Photo Location 68. View of Wetland 25 at wetland determination sample point SP 56.
Photograph taken facing west.



Photo Location 68. View of soil test pit at wetland determination sample point SP 56 at Wetland 25.



Photo Location 69. View of Stream 35. Photograph taken facing upstream/west.



Photo Location 69. View of Stream 35. Photograph taken facing downstream/east.



Photo Location 69. View of substrates of Stream 35.



Photo Location 70. View of Stream 36. Photograph taken facing upstream/southeast.



Photo Location 70. View of Stream 36. Photograph taken facing downstream/northwest.



Photo Location 70. View of substrates of Stream 36.



Photo Location 71. View of PSS wetland portion of Wetland 26 at wetland determination sample point SP 60. Photograph taken facing north.



Photo Location 71. View of PSS wetland portion of Wetland 26 at wetland determination sample point SP 60. Photograph taken facing east.



Photo Location 71. View of PSS wetland portion of Wetland 26 at wetland determination sample point SP 60. Photograph taken facing south.



Photo Location 71. View of PSS wetland portion of Wetland 26 at wetland determination sample point SP 60. Photograph taken facing west.



Photo Location 71. View of soil test pit at wetland determination sample point SP 60 at Wetland 26.



Photo Location 72. View of PEM wetland portion of Wetland 26 at wetland determination sample point SP 58. Photograph taken facing north.



Photo Location 72. View of PEM wetland portion of Wetland 26 at wetland determination sample point SP 58. Photograph taken facing east.



Photo Location 72. View of PEM wetland portion of Wetland 26 at wetland determination sample point SP 58. Photograph taken facing south.



Photo Location 72. View of PEM wetland portion of Wetland 26 at wetland determination sample point SP 58. Photograph taken facing west.



Photo Location 72. View of soil test pit at wetland determination sample point SP 58 and Wetland 26.



Photo Location 73. View of Stream 37. Photograph taken facing upstream/east.



Photo Location 73. View of Stream 37. Photograph taken facing downstream/west.



Photo Location 73. View of substrates of Stream 37.



Photo Location 74. View of Stream 38. Photograph taken facing upstream/west.



Photo Location 74. View of Stream 38. Photograph taken facing downstream/east.



Photo Location 74. View of substrates of Stream 38.



Photo Location 75. View of upland (old field habitat) at wetland determination sample point SP 61. Photograph taken facing east.



Photo Location 75. View of upland (old field habitat) at wetland determination sample point SP 61. Photograph taken facing north.



Photo Location 76. View of upland (hayfield habitat) at wetland determination sample point SP 62. Photograph taken facing east.



Photo Location 76. View of upland (hayfield habitat) at wetland determination sample point SP 62. Photograph taken facing south.



Photo Location 77. View of Stream 39. Photograph taken facing upstream/northwest.



Photo Location 77. View of Stream 39. Photograph taken facing downstream/southeast.



Photo Location 77. View of substrates of Stream 39.



Photo Location 78. View of Stream 40. Photograph taken facing upstream/south.



Photo Location 78. View of Stream 40. Photograph taken facing downstream/north.



Photo Location 78. View of substrates of Stream 40.



Photo Location 79. View of Stream 41. Photograph taken facing upstream/north.



Photo Location 79. View of Stream 41. Photograph taken facing downstream/south.



Photo Location 79. View of substrates of Stream 41.



Photo Location 80. View of Stream 4 from proposed access road. Photograph taken facing upstream/west.



Photo Location 80. View of Stream 4 from proposed access road. Photograph taken facing downstream/east.



Photo Location 81. View of Stream 28 (Delano Run). Photograph taken facing upstream/west.



Photo Location 81. View of Stream 28 (Delano Run). Photograph taken facing downstream/east.



Photo Location 81. View of substrates of Stream 28 (Delano Run).



Photo Location 82. View of Stream 23 (Chambers Creek) at proposed access road crossing.
Photograph taken facing upstream/north.



Photo Location 82. View of Stream 23 (Chambers Creek) at proposed access road crossing.
Photograph taken facing downstream/south.



Photo Location 82. View of substrates of Stream 23 (Chambers Creek) at proposed access road crossing.



Photo Location 83. View of upland drainage feature at proposed access road crossing.
Photograph taken facing north

**NORTH NEWARK–SHARP ROAD 138 KV TRANSMISSION LINE REBUILD PROJECT ECOLOGICAL
RESOURCES INVENTORY REPORT**

April 23, 2021

C.2 HABITAT PHOTOGRAPHS

AEP Ohio Transmission Company, Inc.
North Newark-Sharp Road 138 kV Transmission Line Rebuild Project
Knox and Licking Counties, Ohio



Photo Location 1. Representative view of maintained lawn and hayfield habitats. Photograph taken facing north.



Photo Location 2. Representative view of agricultural field. Photograph taken facing north.



Photo Location 3. Representative view of old field habitat. Photograph taken facing north.



Photo Location 3. Representative view of pasture habitat. Photograph taken facing northeast.

AEP Ohio Transmission Company, Inc.
North Newark-Sharp Road 138 kV Transmission Line Rebuild Project
Knox and Licking Counties, Ohio



Photo Location 4. Representative view of agricultural field. Photograph taken facing south.



Photo Location 5. Representative view of pasture habitat. Photograph taken facing northwest.



Photo Location 6. Representative view of maintained lawn habitat. Photograph taken facing east.



Photo Location 7. Representative view of early successional deciduous forest habitat. Photograph taken facing north.

AEP Ohio Transmission Company, Inc.
North Newark-Sharp Road 138 kV Transmission Line Rebuild Project
Knox and Licking Counties, Ohio



Photo Location 8. Representative view of early successional deciduous forest habitat.
Photograph taken facing northeast.



Photo Location 9. Representative view of industrial land at Sharp Road Station. Photograph taken facing north.



Photo Location 10. Representative view of potential bat roost tree at edge of agricultural field.



Photo Location 11. Representative view of old field habitat. Photograph taken facing south.

AEP Ohio Transmission Company, Inc.
North Newark-Sharp Road 138 kV Transmission Line Rebuild Project
Knox and Licking Counties, Ohio



Photo Location 12. Representative view of pasture habitat and mixed early successional/second growth deciduous forest habitat. Photograph taken facing northwest.



Photo Location 13. Representative view of proposed access road through industrial land. Photograph taken facing east.

AEP Ohio Transmission Company, Inc.
North Newark-Sharp Road 138 kV Transmission Line Rebuild Project
Knox and Licking Counties, Ohio



Photo Location 14. Representative view of hayfield habitat and proposed access road.
Photograph taken facing south.



Photo Location 15. Representative view of proposed access road and agricultural field habitat. Photograph taken facing south.



Photo Location 16. Representative view of upland drainage feature and agricultural field habitat at proposed access road. Photograph taken facing south.

**NORTH NEWARK–SHARP ROAD 138 KV TRANSMISSION LINE REBUILD PROJECT ECOLOGICAL
RESOURCES INVENTORY REPORT**

April 23, 2021

Appendix D DATA FORMS

D.1 WETLAND DETERMINATION DATA FORMS

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 12/12/19						
Applicant: American Electric Power (AEP)				County: Licking						
Investigator #1: Aaron Kwolek		Investigator #2: Kate Bomar		State: Ohio						
Soil Unit: Pits, gravel	NW1/WW1 Classification:			Wetland ID: Wetland 1						
Landform: Depression	Local Relief: Concave			Sample Point: SP 1						
Slope (%): 0	Latitude: 40.08975	Longitude: -82.416306	Datum: WGS 84	Community ID: PEM						
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No				Section: N/A						
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?		Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Township: N/A						
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?				Range: N/A Dir: N/A						
SUMMARY OF FINDINGS										
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Is This Sampling Point Within A Wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Remarks:										
HYDROLOGY										
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):										
<u>Primary:</u>		<u>Secondary:</u>								
<input type="checkbox"/> A1 - Surface Water	<input type="checkbox"/> B9 - Water-Stained Leaves	<input type="checkbox"/> B6 - Surface Soil Cracks								
<input type="checkbox"/> A2 - High Water Table	<input type="checkbox"/> B13 - Aquatic Fauna	<input type="checkbox"/> B10 - Drainage Patterns								
<input type="checkbox"/> A3 - Saturation	<input type="checkbox"/> B14 - True Aquatic Plants	<input type="checkbox"/> C2 - Dry-Season Water Table								
<input type="checkbox"/> B1 - Water Marks	<input type="checkbox"/> C1 - Hydrogen Sulfide Odor	<input type="checkbox"/> C8 - Crayfish Burrows								
<input type="checkbox"/> B2 - Sediment Deposits	<input type="checkbox"/> C3 - Oxidized Rhizospheres on Living Roots	<input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery								
<input type="checkbox"/> B3 - Drift Deposits	<input type="checkbox"/> C4 - Presence of Reduced Iron	<input type="checkbox"/> D1 - Stunted or Stressed Plants								
<input type="checkbox"/> B4 - Algal Mat or Crust	<input type="checkbox"/> C6 - Recent Iron Reduction in Tilled Soils	<input type="checkbox"/> D2 - Geomorphic Position								
<input type="checkbox"/> B5 - Iron Deposits	<input type="checkbox"/> C7 - Thin Muck Surface	<input type="checkbox"/> D5 - FAC-Neutral Test								
<input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery	<input type="checkbox"/> D9 - Gauge or Well Data									
<input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface	<input type="checkbox"/> Other (Explain in Remarks)									
Field Observations:										
Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	Depth: 2 (in.)	Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	Depth: (in.)									
Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	Depth: 2 (in.)									
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				N/A						
Remarks:										
SOILS										
Map Unit Name: Pits, gravel										
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)										
Top Depth	Bottom Depth	Horizon	Matrix		Redox Features				Texture (e.g. clay, sand, loam)	
			Color (Moist)	%	Color (Moist)	%	Type	Location		
0	2	1	10YR	2/1	100	--	--	--	--	muck
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NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>):					Indicators for Problematic Soils ¹					
<input type="checkbox"/> A1- Histosol	<input type="checkbox"/> S4 - Sandy Gleyed Matrix	<input type="checkbox"/> A16 - Coast Prairie Redox								
<input type="checkbox"/> A2 - Histic Epipedon	<input type="checkbox"/> S5 - Sandy Redox	<input type="checkbox"/> S7 - Dark Surface								
<input type="checkbox"/> A3 - Black Histic	<input type="checkbox"/> S6 - Stripped Matrix	<input type="checkbox"/> F12 - Iron-Manganese Masses								
<input type="checkbox"/> A4 - Hydrogen Sulfide	<input type="checkbox"/> F1 - Loamy Muck Mineral	<input type="checkbox"/> TF12 - Very Shallow Dark Surface								
<input type="checkbox"/> A5 - Stratified Layers	<input type="checkbox"/> F2 - Loamy Gleyed Matrix	<input type="checkbox"/> Other (Explain in Remarks)								
<input type="checkbox"/> A10 - 2 cm Muck	<input type="checkbox"/> F3 - Depleted Matrix									
<input type="checkbox"/> A11 - Depleted Below Dark Surface	<input type="checkbox"/> F6 - Redox Dark Surface									
<input type="checkbox"/> A12 - Thick Dark Surface	<input type="checkbox"/> F7 - Depleted Dark Surface									
<input type="checkbox"/> S1 - Sandy Muck Mineral	<input type="checkbox"/> F8 - Redox Depressions									
<input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat										
<small>¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</small>										
Restrictive Layer (If Observed)		Type: rock fill	Depth: 2"		Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No					
Remarks:										

Project/Site: **North Newark- Sharp Road 138 kV Line Rebuild Project**

Wetland ID: **Wetland 1**

Sample Point: **SP 1**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
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8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Herb Stratum (Plot size: 5 ft radius)

1.	<i>Typha angustifolia</i>	98	Y	OBL
2.	<i>Epilobium coloratum</i>	2	N	OBL
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5.	--	--	--	--
6.	--	--	--	--
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8.	--	--	--	--
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10.	--	--	--	--
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = **100**

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = **0**

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	100	x 1 =	100
FACW spp.	0	x 2 =	0
FAC spp.	0	x 3 =	0
FACU spp.	0	x 4 =	0
UPL spp.	0	x 5 =	0

Total **100** (A) **100** (B)

Prevalence Index = B/A = **1.000**

Hydrophytic Vegetation Indicators:

- | | | |
|------------------------------|-----------------------------|--|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Rapid Test for Hydrophytic Vegetation |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Dominance Test is > 50% |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Prevalence Index is ≤ 3.0 * |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Morphological Adaptations (Explain) * |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Problem Hydrophytic Vegetation (Explain) * |

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 12/12/19						
Applicant: American Electric Power (AEP)				County: Licking						
Investigator #1: Aaron Kwolek		Investigator #2: Kate Bomar		State: Ohio						
Soil Unit: Pits, gravel	NW1/WW1 Classification:			Wetland ID: Wetland 1						
Landform: Rise	Local Relief: Convex			Sample Point: SP 2						
Slope (%): 0	Latitude: 40.08984	Longitude: -82.41635	Datum: WGS 84	Community ID: UPL						
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No				Section: N/A						
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?		Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Township: N/A						
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?				Range: N/A Dir: N/A						
SUMMARY OF FINDINGS										
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Is This Sampling Point Within A Wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Remarks:										
HYDROLOGY										
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):										
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <u>Primary:</u> <ul style="list-style-type: none"> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface </div> <div style="width: 30%;"> <ul style="list-style-type: none"> <input type="checkbox"/> B9 - Water-Stained Leaves <input type="checkbox"/> B13 - Aquatic Fauna <input type="checkbox"/> B14 - True Aquatic Plants <input type="checkbox"/> C1 - Hydrogen Sulfide Odor <input type="checkbox"/> C3 - Oxidized Rhizospheres on Living Roots <input type="checkbox"/> C4 - Presence of Reduced Iron <input type="checkbox"/> C6 - Recent Iron Reduction in Tilled Soils <input type="checkbox"/> C7 - Thin Muck Surface <input type="checkbox"/> D9 - Gauge or Well Data <input type="checkbox"/> Other (Explain in Remarks) </div> <div style="width: 30%;"> <u>Secondary:</u> <ul style="list-style-type: none"> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C2 - Dry-Season Water Table <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D1 - Stunted or Stressed Plants <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test </div> </div>										
Field Observations:										
Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	Depth: (in.)	Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	Depth: (in.)									
Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	Depth: (in.)									
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				N/A						
Remarks:										
SOILS										
Map Unit Name: Pits, gravel										
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)										
Top Depth	Bottom Depth	Horizon	Matrix		Redox Features				Texture (e.g. clay, sand, loam)	
			Color (Moist)	%	Color (Moist)	%	Type	Location		
0	3	1	10YR	4/3	100	--	--	--	--	fill
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NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>):					Indicators for Problematic Soils ¹					
<ul style="list-style-type: none"> <input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers <input type="checkbox"/> A10 - 2 cm Muck <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Muck Mineral <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat 					<ul style="list-style-type: none"> <input type="checkbox"/> S4 - Sandy Gleyed Matrix <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Muck Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions 					
					<ul style="list-style-type: none"> <input type="checkbox"/> A16 - Coast Prairie Redox <input type="checkbox"/> S7 - Dark Surface <input type="checkbox"/> F12 - Iron-Manganese Masses <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input type="checkbox"/> Other (Explain in Remarks) 					
Restrictive Layer (If Observed) Type: rock fill Depth: 3"					Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No					
Remarks:										

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Project/Site: **North Newark- Sharp Road 138 kV Line Rebuild Project**

Wetland ID: **Wetland 1**

Sample Point: **SP 2**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Herb Stratum (Plot size: 5 ft radius)

1.	<i>Dipsacus fullonum</i>	2	N	FACU
2.	<i>Daucus carota</i>	5	N	UPL
3.	<i>Achillea millefolium</i>	5	N	FACU
4.	<i>Schedonorus arundinaceus</i>	40	Y	FACU
5.	<i>Dactylis glomerata</i>	15	Y	FACU
6.	<i>Trifolium pratense</i>	5	N	FACU
7.	<i>Plantago lanceolata</i>	3	N	FACU
8.	<i>Solidago canadensis</i>	5	N	FACU
9.	<i>Mellilotus officinalis</i>	5	N	FACU
10.	<i>Poa pratensis</i>	15	Y	FAC
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = **100**

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = **0**

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **3** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **33%** (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	0	x 1 =	0
FACW spp.	0	x 2 =	0
FAC spp.	15	x 3 =	45
FACU spp.	80	x 4 =	320
UPL spp.	5	x 5 =	25

Total **100** (A) **390** (B)

Prevalence Index = B/A = **3.900**

Hydrophytic Vegetation Indicators:

- ☐ Yes ☐ No Rapid Test for Hydrophytic Vegetation
☐ Yes ☐ No Dominance Test is > 50%
☐ Yes ☐ No Prevalence Index is ≤ 3.0 *
☐ Yes ☐ No Morphological Adaptations (Explain) *
☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) *

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 12/12/19						
Applicant: American Electric Power (AEP)				County: Licking						
Investigator #1: Aaron Kwolek		Investigator #2: Kate Bomar		State: Ohio						
Soil Unit: Pits, gravel	NW1/WW1 Classification:			Wetland ID: Wetland 2						
Landform: Depression	Local Relief: Concave			Sample Point: SP 3						
Slope (%): 0	Latitude: 40.09147	Longitude: -82.417003	Datum: WGS 84	Community ID: PEM						
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No				Section: N/A						
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?		Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Township: N/A						
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?				Range: N/A Dir: N/A						
SUMMARY OF FINDINGS										
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Is This Sampling Point Within A Wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Remarks:										
HYDROLOGY										
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):										
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <u>Primary:</u> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface </div> <div style="width: 30%;"> <input type="checkbox"/> B9 - Water-Stained Leaves <input type="checkbox"/> B13 - Aquatic Fauna <input type="checkbox"/> B14 - True Aquatic Plants <input type="checkbox"/> C1 - Hydrogen Sulfide Odor <input type="checkbox"/> C3 - Oxidized Rhizospheres on Living Roots <input type="checkbox"/> C4 - Presence of Reduced Iron <input type="checkbox"/> C6 - Recent Iron Reduction in Tilled Soils <input type="checkbox"/> C7 - Thin Muck Surface <input type="checkbox"/> D9 - Gauge or Well Data <input type="checkbox"/> Other (Explain in Remarks) </div> <div style="width: 30%;"> <u>Secondary:</u> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C2 - Dry-Season Water Table <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D1 - Stunted or Stressed Plants <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test </div> </div>										
Field Observations:										
Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	Depth: 3 (in.)	Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	Depth: 0 (in.)									
Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	Depth: 0 (in.)									
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				N/A						
Remarks:										
SOILS										
Map Unit Name: Pits, gravel										
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)										
Top Depth	Bottom Depth	Horizon	Matrix		Redox Features				Texture (e.g. clay, sand, loam)	
			Color (Moist)	%	Color (Moist)	%	Type	Location		
0	16	1	10YR	2/1	100	--	--	--	--	muck
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>):					Indicators for Problematic Soils ¹					
<input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers <input type="checkbox"/> A10 - 2 cm Muck <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Muck Mineral <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat					<input type="checkbox"/> S4 - Sandy Gleyed Matrix <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Muck Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions <input type="checkbox"/> A16 - Coast Prairie Redox <input type="checkbox"/> S7 - Dark Surface <input type="checkbox"/> F12 - Iron-Manganese Masses <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input type="checkbox"/> Other (Explain in Remarks)					
Restrictive Layer (If Observed) Type: rock fill Depth: 3"					Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No					
Remarks:										

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Project/Site: **North Newark- Sharp Road 138 kV Transmission Line Rebuild Project**

Wetland ID: **Wetland 2**

Sample Point: **SP 3**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Herb Stratum (Plot size: 5 ft radius)

1.	<i>Typha angustifolia</i>	100	Y	OBL
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = **100**

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = **0**

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	100	x 1 =	100
FACW spp.	0	x 2 =	0
FAC spp.	0	x 3 =	0
FACU spp.	0	x 4 =	0
UPL spp.	0	x 5 =	0

Total **100** (A) **100** (B)

Prevalence Index = B/A = **1.000**

Hydrophytic Vegetation Indicators:

- ☐ Yes ☐ No Rapid Test for Hydrophytic Vegetation
- ☐ Yes ☐ No Dominance Test is > 50%
- ☐ Yes ☐ No Prevalence Index is ≤ 3.0 *
- ☐ Yes ☐ No Morphological Adaptations (Explain) *
- ☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) *

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 12/12/19						
Applicant: American Electric Power (AEP)				County: Licking						
Investigator #1: Aaron Kwolek		Investigator #2: Kate Bomar		State: Ohio						
Soil Unit: Pits, gravel	NW1/WW1 Classification:			Wetland ID: Wetland 2						
Landform: Rise	Local Relief: Convex			Sample Point: SP 4						
Slope (%): 0	Latitude: 40.09172	Longitude: -82.41743	Datum: WGS 84	Community ID: UPL						
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No				Section: N/A						
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?		Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Township: N/A						
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?				Range: N/A Dir: N/A						
SUMMARY OF FINDINGS										
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Is This Sampling Point Within A Wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Remarks:										
HYDROLOGY										
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):										
<u>Primary:</u>		<u>Secondary:</u>								
<input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface		<input type="checkbox"/> B9 - Water-Stained Leaves <input type="checkbox"/> B13 - Aquatic Fauna <input type="checkbox"/> B14 - True Aquatic Plants <input type="checkbox"/> C1 - Hydrogen Sulfide Odor <input type="checkbox"/> C3 - Oxidized Rhizospheres on Living Roots <input type="checkbox"/> C4 - Presence of Reduced Iron <input type="checkbox"/> C6 - Recent Iron Reduction in Tilled Soils <input type="checkbox"/> C7 - Thin Muck Surface <input type="checkbox"/> D9 - Gauge or Well Data <input type="checkbox"/> Other (Explain in Remarks)								
<input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C2 - Dry-Season Water Table <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D1 - Stunted or Stressed Plants <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test										
Field Observations:										
Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	Depth: (in.)	Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	Depth: (in.)									
Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	Depth: (in.)									
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A										
Remarks:										
SOILS										
Map Unit Name: Pits, gravel										
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)										
Top Depth	Bottom Depth	Horizon	Matrix		Redox Features				Texture (e.g. clay, sand, loam)	
			Color (Moist)	%	Color (Moist)	%	Type	Location		
0	16	1	10YR	4/1	30	--	--	--	--	fill/clay
--	--	1	10YR	4/4	40	--	--	--	--	fill/clay
--	--	1	10YR	6/4	30	--	--	--	--	fill/clay
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>):					Indicators for Problematic Soils ¹					
<input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers <input type="checkbox"/> A10 - 2 cm Muck <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Muck Mineral <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat					<input type="checkbox"/> S4 - Sandy Gleyed Matrix <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Muck Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions					
					<input type="checkbox"/> A16 - Coast Prairie Redox <input type="checkbox"/> S7 - Dark Surface <input type="checkbox"/> F12 - Iron-Manganese Masses <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input type="checkbox"/> Other (Explain in Remarks)					
					¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.					
Restrictive Layer (If Observed)	Type:	Depth:	Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No							
Remarks:										

Project/Site: **North Newark- Sharp Road 138 kV Transmission Line Rebuild Project**

Wetland ID: **Wetland 2**

Sample Point: **SP 4**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Herb Stratum (Plot size: 5 ft radius)

1.	<i>Schedonorus arundinaceus</i>	60	Y	FACU
2.	<i>Sorghum halepense</i>	15	N	FACU
3.	<i>Solidago canadensis</i>	5	N	FACU
4.	<i>Plantago major</i>	5	N	FAC
5.	<i>Daucus carota</i>	5	N	UPL
6.	<i>Dipsacus fullonum</i>	5	N	FACU
7.	<i>Rosa multiflora</i>	2	N	FACU
8.	<i>Panicum sp.</i>	3	N	#N/A
9.	--	--	--	--
10.	--	--	--	--
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = **100**

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = **0**

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: **0** (A)

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **0%** (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	0	x 1 =	0
FACW spp.	0	x 2 =	0
FAC spp.	5	x 3 =	15
FACU spp.	87	x 4 =	348
UPL spp.	5	x 5 =	25

Total **97** (A) **388** (B)

Prevalence Index = B/A = **4.000**

Hydrophytic Vegetation Indicators:

- | | | |
|------------------------------|-----------------------------|--|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Rapid Test for Hydrophytic Vegetation |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Dominance Test is > 50% |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Prevalence Index is ≤ 3.0 * |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Morphological Adaptations (Explain) * |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Problem Hydrophytic Vegetation (Explain) * |

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 12/11/19													
Applicant: American Electric Power (AEP)				County: Licking													
Investigator #1: Aaron Kwolek		Investigator #2: Kate Bomar		State: Ohio													
Soil Unit: Sebring Silt Loam		NWII/WWI Classification:		Wetland ID: NA													
Landform: Depression		Local Relief: Concave		Sample Point: SP 5													
Slope (%): 0		Latitude: 40.0943		Longitude: -82.44373													
		Datum: WGS 84		Community ID: UPL													
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No																	
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?			Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No														
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?			Section: N/A														
			Township: N/A														
			Range: N/A Dir: N/A														
SUMMARY OF FINDINGS																	
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No			Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No														
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No			Is This Sampling Point Within A Wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No														
Remarks:																	
HYDROLOGY																	
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):																	
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <u>Primary:</u> <ul style="list-style-type: none"> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface </div> <div style="width: 30%;"> <ul style="list-style-type: none"> <input type="checkbox"/> B9 - Water-Stained Leaves <input type="checkbox"/> B13 - Aquatic Fauna <input type="checkbox"/> B14 - True Aquatic Plants <input type="checkbox"/> C1 - Hydrogen Sulfide Odor <input type="checkbox"/> C3 - Oxidized Rhizospheres on Living Roots <input type="checkbox"/> C4 - Presence of Reduced Iron <input type="checkbox"/> C6 - Recent Iron Reduction in Tilled Soils <input type="checkbox"/> C7 - Thin Muck Surface <input type="checkbox"/> D9 - Gauge or Well Data <input type="checkbox"/> Other (Explain in Remarks) </div> <div style="width: 30%;"> <u>Secondary:</u> <ul style="list-style-type: none"> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C2 - Dry-Season Water Table <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D1 - Stunted or Stressed Plants <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test </div> </div>																	
Field Observations:																	
Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)			Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No														
Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)																	
Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)																	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A																	
Remarks:																	
SOILS																	
Map Unit Name: Sebring Silt Loam																	
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)																	
Top Depth	Bottom Depth	Horizon	Matrix		Redox Features				Texture (e.g. clay, sand, loam)								
			Color (Moist)	%	Color (Moist)	%	Type	Location									
0	10	1	10YR	4/4	50	10YR	--	--	--	clay loam							
--	--	1	10YR	4/3	50	--	--	--	--	clay loam							
10	16	2	10YR	4/3	95	10YR	6/8	5	C	M	clay loam						
--	--	--	--	--	--	--	--	--	--	--	--						
--	--	--	--	--	--	--	--	--	--	--	--						
--	--	--	--	--	--	--	--	--	--	--	--						
--	--	--	--	--	--	--	--	--	--	--	--						
--	--	--	--	--	--	--	--	--	--	--	--						
NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>):						Indicators for Problematic Soils ¹											
<ul style="list-style-type: none"> <input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers <input type="checkbox"/> A10 - 2 cm Muck <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Muck Mineral <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat 						<ul style="list-style-type: none"> <input type="checkbox"/> S4 - Sandy Gleyed Matrix <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Muck Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions 						<ul style="list-style-type: none"> <input type="checkbox"/> A16 - Coast Prairie Redox <input type="checkbox"/> S7 - Dark Surface <input type="checkbox"/> F12 - Iron-Manganese Masses <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input type="checkbox"/> Other (Explain in Remarks) 					
Restrictive Layer (If Observed) Type: Depth:						Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No											
Remarks:																	

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Project/Site: **North Newark- Sharp Road 138 kV Transmission Line Rebuild Project**

Wetland ID: **NA**

Sample Point: **SP 5**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	<i>Fraxinus pennsylvanica</i>	2	N	FACW
2.	<i>Ulmus rubra</i>	15	Y	FAC
3.	<i>Rosa palustris</i>	5	N	OBL
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **22**

Herb Stratum (Plot size: 5 ft radius)

1.	<i>Phalaris arundinacea</i>	40	Y	FACW
2.	<i>Persicaria pensylvanica</i>	40	Y	FACW
3.	<i>Verbesina alternifolia</i>	10	N	FACW
4.	<i>Carex lurida</i>	5	N	OBL
5.	<i>Symphotrichum novae-angliae</i>	5	N	FACW
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = **100**

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = **0**

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: **3** (A)

Total Number of Dominant Species Across All Strata: **3** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	<u>10</u>	x 1 =	<u>10</u>
FACW spp.	<u>97</u>	x 2 =	<u>194</u>
FAC spp.	<u>15</u>	x 3 =	<u>45</u>
FACU spp.	<u>0</u>	x 4 =	<u>0</u>
UPL spp.	<u>0</u>	x 5 =	<u>0</u>

Total **122** (A) **249** (B)

Prevalence Index = B/A = **2.041**

Hydrophytic Vegetation Indicators:

- ☐ Yes ☐ No Rapid Test for Hydrophytic Vegetation
☐ Yes ☐ No Dominance Test is > 50%
☐ Yes ☐ No Prevalence Index is ≤ 3.0 *
☐ Yes ☐ No Morphological Adaptations (Explain) *
☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) *

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 12/12/19							
Applicant: American Electric Power (AEP)				County: Licking							
Investigator #1: Aaron Kwolek		Investigator #2: Kate Bomar		State: Ohio							
Soil Unit: Sebring Silt Loam		NW1/WW1 Classification: PUBF		Wetland ID: Wetland 3							
Landform: Depression		Local Relief: Concave		Sample Point: SP 6							
Slope (%): 0		Latitude: 40.1044 Longitude: -82.442888		Community ID: PEM							
		Datum: WGS 84		Section: N/A							
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No											
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?			Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?			Township: N/A								
			Range: N/A Dir: N/A								
SUMMARY OF FINDINGS											
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No			Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No			Is This Sampling Point Within A Wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Remarks:											
HYDROLOGY											
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):											
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <u>Primary:</u> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface </div> <div style="width: 30%;"> <input type="checkbox"/> B9 - Water-Stained Leaves <input type="checkbox"/> B13 - Aquatic Fauna <input type="checkbox"/> B14 - True Aquatic Plants <input type="checkbox"/> C1 - Hydrogen Sulfide Odor <input type="checkbox"/> C3 - Oxidized Rhizospheres on Living Roots <input type="checkbox"/> C4 - Presence of Reduced Iron <input type="checkbox"/> C6 - Recent Iron Reduction in Tilled Soils <input type="checkbox"/> C7 - Thin Muck Surface <input type="checkbox"/> D9 - Gauge or Well Data <input type="checkbox"/> Other (Explain in Remarks) </div> <div style="width: 30%;"> <u>Secondary:</u> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C2 - Dry-Season Water Table <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D1 - Stunted or Stressed Plants <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test </div> </div>											
Field Observations:											
Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: 4 (in.)			Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)											
Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: 10 (in.)											
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A											
Remarks:											
SOILS											
Map Unit Name: Sebring Silt Loam											
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)											
Top Depth	Bottom Depth	Horizon	Matrix			Redox Features				Texture (e.g. clay, sand, loam)	
			Color (Moist)	%		Color (Moist)	%	Type	Location		
0	2	1	10YR	2/1	100	--	--	--	--	muck	
2	10	2	10YR	4/1	92	10YR	4/6	8	C	M	
10	16	3	10YR	4/1	88	10YR	4/6	12	C	M	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>):						Indicators for Problematic Soils ¹					
<input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers <input type="checkbox"/> A10 - 2 cm Muck <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Muck Mineral <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat						<input type="checkbox"/> S4 - Sandy Gleyed Matrix <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Muck Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions					
						<input type="checkbox"/> A16 - Coast Prairie Redox <input type="checkbox"/> S7 - Dark Surface <input type="checkbox"/> F12 - Iron-Manganese Masses <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input type="checkbox"/> Other (Explain in Remarks)					
Restrictive Layer (If Observed) Type: Depth:						Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No					
Remarks:											

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Project/Site: **North Newark- Sharp Road 138 kV Transmission Line Rebuild Project**

Wetland ID: **Wetland 3**

Sample Point: **SP 6**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	<i>Cephalanthus occidentalis</i>	5	Y	OBL
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **5**

Herb Stratum (Plot size: 5 ft radius)

1.	<i>Sparganium americanum</i>	95	Y	OBL
2.	<i>Persicaria pensylvanica</i>	5	N	FACW
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = **100**

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = **0**

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	100	x 1 =	100
FACW spp.	5	x 2 =	10
FAC spp.	0	x 3 =	0
FACU spp.	0	x 4 =	0
UPL spp.	0	x 5 =	0

Total **105** (A) **110** (B)

Prevalence Index = B/A = **1.048**

Hydrophytic Vegetation Indicators:

- ☐ Yes ☐ No Rapid Test for Hydrophytic Vegetation
☐ Yes ☐ No Dominance Test is > 50%
☐ Yes ☐ No Prevalence Index is ≤ 3.0 *
☐ Yes ☐ No Morphological Adaptations (Explain) *
☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) *

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 12/12/19							
Applicant: American Electric Power (AEP)				County: Licking							
Investigator #1: Aaron Kwolek		Investigator #2: Kate Bomar		State: Ohio							
Soil Unit: Sebring silt loam		NW1/WW1 Classification: PFO1C		Wetland ID: Wetland 3							
Landform: Depression		Local Relief: Concave		Sample Point: SP 7							
Slope (%): 0		Latitude: 40.1046		Longitude: -82.442894							
		Datum: WGS 84		Community ID: PSS							
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No											
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?			Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?			Section: N/A								
			Township: N/A								
			Range: N/A Dir: N/A								
SUMMARY OF FINDINGS											
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No			Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No			Is This Sampling Point Within A Wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Remarks:											
HYDROLOGY											
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):											
<div style="display: flex; justify-content: space-between;"> <div style="width: 65%;"> <p><u>Primary:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface </div> <div style="width: 30%;"> <p><u>Secondary:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C2 - Dry-Season Water Table <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D1 - Stunted or Stressed Plants <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test </div> </div>											
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Field Observations:</p> <p>Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)</p> <p>Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)</p> <p>Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)</p> </div> <div style="width: 50%; background-color: #f0f0f0; padding: 5px;"> <p align="center">Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> </div> </div>											
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A											
Remarks:											
SOILS											
Map Unit Name: Sebring silt loam											
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)											
Top Depth	Bottom Depth	Horizon	Matrix			Redox Features				Texture (e.g. clay, sand, loam)	
			Color (Moist)		%	Color (Moist)		%	Type		Location
0	1	1	10YR	2/1	100	--	--	--	--	--	muck
1	6	2	10YR	4/1	95	10YR	6/4	5	C	PL	silty clay
6	16	3	10YR	4/1	85	10YR	6/4	15	C	M	silty clay
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>): <div style="display: flex; justify-content: space-between;"> <div style="width: 65%;"> <ul style="list-style-type: none"> <input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers <input type="checkbox"/> A10 - 2 cm Muck <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Muck Mineral <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat </div> <div style="width: 30%;"> <ul style="list-style-type: none"> <input type="checkbox"/> S4 - Sandy Gleyed Matrix <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Muck Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions </div> </div>											
Indicators for Problematic Soils ¹ <ul style="list-style-type: none"> <input type="checkbox"/> A16 - Coast Prairie Redox <input type="checkbox"/> S7 - Dark Surface <input type="checkbox"/> F12 - Iron-Manganese Masses <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input type="checkbox"/> Other (Explain in Remarks) 											
¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.											
Restrictive Layer (If Observed)		Type:	Depth:	Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No							
Remarks:											

Project/Site: **North Newark- Sharp Road 138 kV Transmission Line Rebuild Project**

Wetland ID: **Wetland 3**

Sample Point: **SP 7**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	<i>Acer negundo</i>	10	Y	FAC
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = 10

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	<i>Fraxinus pennsylvanica</i>	5	N	FACW
2.	<i>Cephalanthus occidentalis</i>	25	Y	OBL
3.	<i>Acer rubrum</i>	5	N	FAC
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = 35

Herb Stratum (Plot size: 5 ft radius)

1.	<i>Phalaris arundinacea</i>	40	Y	FACW
2.	<i>Persicaria pensylvanica</i>	40	Y	FACW
3.	<i>Scirpus cyperinus</i>	5	N	OBL
4.	<i>Carex grayi</i>	5	N	FACW
5.	<i>Sparganium americanum</i>	10	N	OBL
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = 100

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = 0

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	<u>40</u>	x 1 =	<u>40</u>
FACW spp.	<u>90</u>	x 2 =	<u>180</u>
FAC spp.	<u>15</u>	x 3 =	<u>45</u>
FACU spp.	<u>0</u>	x 4 =	<u>0</u>
UPL spp.	<u>0</u>	x 5 =	<u>0</u>

Total 145 (A) 265 (B)

Prevalence Index = B/A = 1.828

Hydrophytic Vegetation Indicators:

- ☐ Yes ☐ No Rapid Test for Hydrophytic Vegetation
☐ Yes ☐ No Dominance Test is > 50%
☐ Yes ☐ No Prevalence Index is ≤ 3.0 *
☐ Yes ☐ No Morphological Adaptations (Explain) *
☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) *

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 12/12/19						
Applicant: American Electric Power (AEP)				County: Licking						
Investigator #1: Aaron Kwolek		Investigator #2: Kate Bomar		State: Ohio						
Soil Unit: Sebring silt loam		NW1/WW1 Classification:		Wetland ID: Wetland 3						
Landform: Rise		Local Relief: Convex		Sample Point: SP 8						
Slope (%): 0		Latitude: 40.1047	Longitude: -82.442771	Community ID: UPL						
		Datum: WGS 84		Section: N/A						
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No				Township: N/A						
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?		Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Range: N/A Dir: N/A						
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?										
SUMMARY OF FINDINGS										
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Is This Sampling Point Within A Wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Remarks:										
HYDROLOGY										
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):										
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <u>Primary:</u> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface </div> <div style="width: 30%;"> <input type="checkbox"/> B9 - Water-Stained Leaves <input type="checkbox"/> B13 - Aquatic Fauna <input type="checkbox"/> B14 - True Aquatic Plants <input type="checkbox"/> C1 - Hydrogen Sulfide Odor <input type="checkbox"/> C3 - Oxidized Rhizospheres on Living Roots <input type="checkbox"/> C4 - Presence of Reduced Iron <input type="checkbox"/> C6 - Recent Iron Reduction in Tilled Soils <input type="checkbox"/> C7 - Thin Muck Surface <input type="checkbox"/> D9 - Gauge or Well Data <input type="checkbox"/> Other (Explain in Remarks) </div> <div style="width: 30%;"> <u>Secondary:</u> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C2 - Dry-Season Water Table <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D1 - Stunted or Stressed Plants <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test </div> </div>										
Field Observations:										
Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)		Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)										
Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)										
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				N/A						
Remarks:										
SOILS										
Map Unit Name: Sebring silt loam										
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)										
Top Depth	Bottom Depth	Horizon	Matrix		Redox Features				Texture (e.g. clay, sand, loam)	
			Color (Moist)	%	Color (Moist)	%	Type	Location		
0	16	1	10YR	4/3	100	--	--	--	--	silty clay
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>):					Indicators for Problematic Soils ¹					
<input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers <input type="checkbox"/> A10 - 2 cm Muck <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Muck Mineral <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat					<input type="checkbox"/> S4 - Sandy Gleyed Matrix <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Muck Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions					
					<input type="checkbox"/> A16 - Coast Prairie Redox <input type="checkbox"/> S7 - Dark Surface <input type="checkbox"/> F12 - Iron-Manganese Masses <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input type="checkbox"/> Other (Explain in Remarks)					
Restrictive Layer (If Observed) Type: Depth:					Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No					
Remarks:										

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Project/Site: **North Newark- Sharp Road 138 kV Transmission Line Rebuild Project**

Wetland ID: **Wetland 3**

Sample Point: **SP 8**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	<i>Acer negundo</i>	60	Y	FAC
2.	<i>Acer rubrum</i>	40	Y	FAC
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **100**

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	<i>Acer negundo</i>	10	Y	FAC
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **10**

Herb Stratum (Plot size: 5 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = **0**

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = **0**

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: **3** (A)

Total Number of Dominant Species Across All Strata: **3** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	0	x 1 =	0
FACW spp.	0	x 2 =	0
FAC spp.	110	x 3 =	330
FACU spp.	0	x 4 =	0
UPL spp.	0	x 5 =	0

Total **110** (A) **330** (B)

Prevalence Index = B/A = **3.000**

Hydrophytic Vegetation Indicators:

- | | | |
|------------------------------|-----------------------------|--|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Rapid Test for Hydrophytic Vegetation |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Dominance Test is > 50% |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Prevalence Index is ≤ 3.0 * |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Morphological Adaptations (Explain) * |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Problem Hydrophytic Vegetation (Explain) * |

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 12/12/19						
Applicant: American Electric Power (AEP)				County: Licking						
Investigator #1: Aaron Kwolek		Investigator #2: Kate Bomar		State: Ohio						
Soil Unit: Stonelick loam, occasionally flooded		NW1/WW1 Classification: R3USA		Wetland ID: NA						
Landform: Depression		Local Relief: Concave		Sample Point: SP 9						
Slope (%): 0		Latitude: 40.11168		Longitude: -82.44262						
		Datum: WGS 84		Community ID: UPL						
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No										
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?			Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No							
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?			Section: N/A							
			Township: N/A							
			Range: N/A Dir: N/A							
SUMMARY OF FINDINGS										
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No			Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No							
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No			Is This Sampling Point Within A Wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No							
Remarks:										
HYDROLOGY										
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):										
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <u>Primary:</u> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface </div> <div style="width: 30%;"> <input type="checkbox"/> B9 - Water-Stained Leaves <input type="checkbox"/> B13 - Aquatic Fauna <input type="checkbox"/> B14 - True Aquatic Plants <input type="checkbox"/> C1 - Hydrogen Sulfide Odor <input type="checkbox"/> C3 - Oxidized Rhizospheres on Living Roots <input type="checkbox"/> C4 - Presence of Reduced Iron <input type="checkbox"/> C6 - Recent Iron Reduction in Tilled Soils <input type="checkbox"/> C7 - Thin Muck Surface <input type="checkbox"/> D9 - Gauge or Well Data <input type="checkbox"/> Other (Explain in Remarks) </div> <div style="width: 30%;"> <u>Secondary:</u> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C2 - Dry-Season Water Table <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D1 - Stunted or Stressed Plants <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test </div> </div>										
Field Observations: Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.) Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.) Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)			Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A										
Remarks:										
SOILS										
Map Unit Name: Stonelick loam, occasionally flooded										
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)										
Top Depth	Bottom Depth	Horizon	Matrix		Redox Features				Texture (e.g. clay, sand, loam)	
			Color (Moist)	%	Color (Moist)	%	Type	Location		
0	16	1	10YR	4/3	100	--	--	--	--	fine sandy loam
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>): <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 30%;"> <input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers <input type="checkbox"/> A10 - 2 cm Muck <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Muck Mineral <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat </div> <div style="width: 30%;"> <input type="checkbox"/> S4 - Sandy Gleyed Matrix <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Muck Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions </div> <div style="width: 30%;"> Indicators for Problematic Soils ¹ <input type="checkbox"/> A16 - Coast Prairie Redox <input type="checkbox"/> S7 - Dark Surface <input type="checkbox"/> F12 - Iron-Manganese Masses <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input type="checkbox"/> Other (Explain in Remarks) </div> </div>										
¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.										
Restrictive Layer (If Observed) Type: Depth:			Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No							
Remarks:										

Project/Site: **North Newark- Sharp Road 138 kV Line Rebuild Project**

Wetland ID: **NA**

Sample Point: **SP 9**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	<i>Rosa multiflora</i>	5	Y	FACU
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **5**

Herb Stratum (Plot size: 5 ft radius)

1.	<i>Phalaris arundinacea</i>	97	Y	FACW
2.	<i>Verbesina alternifolia</i>	3	N	FACW
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = **100**

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = **0**

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **50%** (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	0	x 1 =	0
FACW spp.	100	x 2 =	200
FAC spp.	0	x 3 =	0
FACU spp.	5	x 4 =	20
UPL spp.	0	x 5 =	0

Total **105** (A) **220** (B)

Prevalence Index = B/A = **2.095**

Hydrophytic Vegetation Indicators:

- | | | |
|------------------------------|-----------------------------|--|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Rapid Test for Hydrophytic Vegetation |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Dominance Test is > 50% |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Prevalence Index is ≤ 3.0 * |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Morphological Adaptations (Explain) * |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Problem Hydrophytic Vegetation (Explain) * |

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 01/08/20							
Applicant: American Electric Power (AEP)				County: Licking							
Investigator #1: Aaron Kwolek		Investigator #2: Kate Bomar		State: Ohio							
Soil Unit: Shoals silt loam		NWII/WWI Classification:		Wetland ID: Wetland 4							
Landform: Basin		Local Relief: Concave		Sample Point: SP 10							
Slope (%): 0		Latitude: 40.15426		Longitude: -82.47805							
		Datum: WGS 84		Community ID: PEM							
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No				Section: N/A							
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?		Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Township: N/A							
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?				Range: N/A Dir: N/A							
SUMMARY OF FINDINGS											
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No									
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Is This Sampling Point Within A Wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No									
Remarks:											
HYDROLOGY											
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):											
<u>Primary:</u>			<u>Secondary:</u>								
<input type="checkbox"/> A1 - Surface Water	<input type="checkbox"/> B9 - Water-Stained Leaves	<input type="checkbox"/> B6 - Surface Soil Cracks									
<input type="checkbox"/> A2 - High Water Table	<input type="checkbox"/> B13 - Aquatic Fauna	<input type="checkbox"/> B10 - Drainage Patterns									
<input type="checkbox"/> A3 - Saturation	<input type="checkbox"/> B14 - True Aquatic Plants	<input type="checkbox"/> C2 - Dry-Season Water Table									
<input type="checkbox"/> B1 - Water Marks	<input type="checkbox"/> C1 - Hydrogen Sulfide Odor	<input type="checkbox"/> C8 - Crayfish Burrows									
<input type="checkbox"/> B2 - Sediment Deposits	<input type="checkbox"/> C3 - Oxidized Rhizospheres on Living Roots	<input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery									
<input type="checkbox"/> B3 - Drift Deposits	<input type="checkbox"/> C4 - Presence of Reduced Iron	<input type="checkbox"/> D1 - Stunted or Stressed Plants									
<input type="checkbox"/> B4 - Algal Mat or Crust	<input type="checkbox"/> C6 - Recent Iron Reduction in Tilled Soils	<input type="checkbox"/> D2 - Geomorphic Position									
<input type="checkbox"/> B5 - Iron Deposits	<input type="checkbox"/> C7 - Thin Muck Surface	<input type="checkbox"/> D5 - FAC-Neutral Test									
<input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery	<input type="checkbox"/> D9 - Gauge or Well Data										
<input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface	<input type="checkbox"/> Other (Explain in Remarks)										
Field Observations:											
Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	Depth: 1 (in.)	Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No									
Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	Depth: Surface (in.)										
Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	Depth: Surface (in.)										
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				N/A							
Remarks:											
SOILS											
Map Unit Name: Shoals silt loam											
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)											
Top Depth	Bottom Depth	Horizon	Matrix		Redox Features				Texture (e.g. clay, sand, loam)		
			Color (Moist)	%	Color (Moist)	%	Type	Location			
0	4	1	10YR	2/1	100	--	--	--	--	silt loam	
4	16	2	10YR	3/1	90	10YR	4/6	10	C	M	silt loam
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
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--	--	--	--	--	--	--	--	--	--	--	
NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>):						Indicators for Problematic Soils ¹					
<input type="checkbox"/> A1- Histosol	<input type="checkbox"/> S4 - Sandy Gleyed Matrix	<input type="checkbox"/> A16 - Coast Prairie Redox									
<input type="checkbox"/> A2 - Histic Epipedon	<input type="checkbox"/> S5 - Sandy Redox	<input type="checkbox"/> S7 - Dark Surface									
<input type="checkbox"/> A3 - Black Histic	<input type="checkbox"/> S6 - Stripped Matrix	<input type="checkbox"/> F12 - Iron-Manganese Masses									
<input type="checkbox"/> A4 - Hydrogen Sulfide	<input type="checkbox"/> F1 - Loamy Muck Mineral	<input type="checkbox"/> TF12 - Very Shallow Dark Surface									
<input type="checkbox"/> A5 - Stratified Layers	<input type="checkbox"/> F2 - Loamy Gleyed Matrix	<input type="checkbox"/> Other (Explain in Remarks)									
<input type="checkbox"/> A10 - 2 cm Muck	<input type="checkbox"/> F3 - Depleted Matrix										
<input type="checkbox"/> A11 - Depleted Below Dark Surface	<input type="checkbox"/> F6 - Redox Dark Surface										
<input type="checkbox"/> A12 - Thick Dark Surface	<input type="checkbox"/> F7 - Depleted Dark Surface										
<input type="checkbox"/> S1 - Sandy Muck Mineral	<input type="checkbox"/> F8 - Redox Depressions										
<input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat											
<small>¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</small>											
Restrictive Layer (If Observed)	Type:	Depth:	Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Remarks:											

Project/Site: **North Newark- Sharp Road 138 kV Transmission Line Rebuild Project**

Wetland ID: **Wetland 4**

Sample Point: **SP 10**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Herb Stratum (Plot size: 5 ft radius)

1.	<i>Typha latifolia</i>	70	Y	OBL
2.	<i>Vernonia gigantea</i>	10	N	FAC
3.	<i>Polygonum sagittatum</i>	10	N	OBL
4.	<i>Symphyotrichum novae-angliae</i>	10	N	FACW
5.	<i>Carex frankii</i>	2	N	OBL
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = **102**

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = **0**

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	82	x 1 =	82
FACW spp.	10	x 2 =	20
FAC spp.	10	x 3 =	30
FACU spp.	0	x 4 =	0
UPL spp.	0	x 5 =	0

Total **102** (A) **132** (B)

Prevalence Index = B/A = **1.294**

Hydrophytic Vegetation Indicators:

- | | | |
|------------------------------|-----------------------------|--|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Rapid Test for Hydrophytic Vegetation |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Dominance Test is > 50% |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Prevalence Index is ≤ 3.0 * |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Morphological Adaptations (Explain) * |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Problem Hydrophytic Vegetation (Explain) * |

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 01/08/20						
Applicant: American Electric Power (AEP)				County: Licking						
Investigator #1: Aaron Kwolek		Investigator #2: Kate Bomar		State: Ohio						
Soil Unit: Amanda silt loam		NW1/WW1 Classification:		Wetland ID: Wetland 4						
Landform: Side slope		Local Relief: Linear		Sample Point: SP 11						
Slope (%): 0		Latitude: 40.15401	Longitude: -82.477816	Community ID: UPL						
		Datum: WGS 84		Section: N/A						
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No				Township: N/A						
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?		Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Range: N/A Dir: N/A						
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?										
SUMMARY OF FINDINGS										
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Is This Sampling Point Within A Wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Remarks:										
HYDROLOGY										
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):										
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <u>Primary:</u> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface </div> <div style="width: 30%;"> <input type="checkbox"/> B9 - Water-Stained Leaves <input type="checkbox"/> B13 - Aquatic Fauna <input type="checkbox"/> B14 - True Aquatic Plants <input type="checkbox"/> C1 - Hydrogen Sulfide Odor <input type="checkbox"/> C3 - Oxidized Rhizospheres on Living Roots <input type="checkbox"/> C4 - Presence of Reduced Iron <input type="checkbox"/> C6 - Recent Iron Reduction in Tilled Soils <input type="checkbox"/> C7 - Thin Muck Surface <input type="checkbox"/> D9 - Gauge or Well Data <input type="checkbox"/> Other (Explain in Remarks) </div> <div style="width: 30%;"> <u>Secondary:</u> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C2 - Dry-Season Water Table <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D1 - Stunted or Stressed Plants <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test </div> </div>										
Field Observations:										
Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)		Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)										
Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)										
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				N/A						
Remarks:										
SOILS										
Map Unit Name: Amanda silt loam										
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)										
Top Depth	Bottom Depth	Horizon	Matrix		Redox Features				Texture (e.g. clay, sand, loam)	
			Color (Moist)	%	Color (Moist)	%	Type	Location		
0	16	1	10YR	3/3	100	--	--	--	--	silt loam
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
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NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>): <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers <input type="checkbox"/> A10 - 2 cm Muck <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Muck Mineral <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat </div> <div style="width: 30%;"> <input type="checkbox"/> S4 - Sandy Gleyed Matrix <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Muck Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions </div> <div style="width: 30%;"> Indicators for Problematic Soils ¹ <input type="checkbox"/> A16 - Coast Prairie Redox <input type="checkbox"/> S7 - Dark Surface <input type="checkbox"/> F12 - Iron-Manganese Masses <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input type="checkbox"/> Other (Explain in Remarks) </div> </div>										
¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.										
Restrictive Layer (If Observed)		Type:	Depth:	Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No						
Remarks:										

Project/Site: **North Newark- Sharp Road 138 kV Transmission Line Rebuild Project**

Wetland ID: **Wetland 4**

Sample Point: **SP 11**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Herb Stratum (Plot size: 5 ft radius)

1.	<i>Schedonorus arundinaceus</i>	45	Y	UPL
2.	<i>Solidago canadensis</i>	20	Y	FACU
3.	<i>Trifolium repens</i>	10	N	FACU
4.	<i>Plantago major</i>	10	N	FAC
5.	<i>Setaria faberi</i>	15	N	FACU
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = **100**

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = **0**

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: **0** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **0%** (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	0	x 1 =	0
FACW spp.	0	x 2 =	0
FAC spp.	10	x 3 =	30
FACU spp.	45	x 4 =	180
UPL spp.	45	x 5 =	225

Total **100** (A) **435** (B)

Prevalence Index = B/A = **4.350**

Hydrophytic Vegetation Indicators:

- | | | |
|------------------------------|-----------------------------|--|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Rapid Test for Hydrophytic Vegetation |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Dominance Test is > 50% |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Prevalence Index is ≤ 3.0 * |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Morphological Adaptations (Explain) * |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Problem Hydrophytic Vegetation (Explain) * |

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 12/13/19							
Applicant: American Electric Power (AEP)				County: Licking							
Investigator #1: Aaron Kwolek		Investigator #2: Kate Bomar		State: Ohio							
Soil Unit: Amanda silt loam, 12-18% slopes, eroded		NW1/WW1 Classification:		Wetland ID: Wetland 5							
Landform: Slope		Local Relief: Concave		Sample Point: SP 12							
Slope (%): 0		Latitude: 40.17194	Longitude: -82.48919	Community ID: PEM							
		Datum: WGS 84		Section: N/A							
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No				Township: N/A							
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?		Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Range: N/A Dir: N/A							
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?											
SUMMARY OF FINDINGS											
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No									
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Is This Sampling Point Within A Wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No									
Remarks:											
HYDROLOGY											
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):											
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <u>Primary:</u> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface </div> <div style="width: 48%;"> <u>Secondary:</u> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C2 - Dry-Season Water Table <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D1 - Stunted or Stressed Plants <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test </div> </div>											
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> Field Observations: Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: 2 (in.) Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.) Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: 0 (in.) </div> <div style="width: 48%; background-color: #f0f0f0; padding: 5px;"> Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No </div> </div>											
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A											
Remarks:											
SOILS											
Map Unit Name: Amanda silt loam, 12-18% slopes, eroded											
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)											
Top Depth	Bottom Depth	Horizon	Matrix		Redox Features				Texture (e.g. clay, sand, loam)		
			Color (Moist)	%	Color (Moist)	%	Type	Location			
0	1	1	10YR	2/1	100	--	--	--	--	muck	
1	4	2	10YR	3/1	90	10YR	4/6	10	C	M	silt loam
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
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NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>): <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers <input type="checkbox"/> A10 - 2 cm Muck <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Muck Mineral <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat </div> <div style="width: 48%;"> <input type="checkbox"/> S4 - Sandy Gleyed Matrix <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Muck Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions </div> </div>											
Indicators for Problematic Soils ¹ <input type="checkbox"/> A16 - Coast Prairie Redox <input type="checkbox"/> S7 - Dark Surface <input type="checkbox"/> F12 - Iron-Manganese Masses <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input type="checkbox"/> Other (Explain in Remarks)											
¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.											
Restrictive Layer (If Observed) Type: Rock		Depth: 4"		Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No							
Remarks:											

Project/Site: **North Newark- Sharp Road 138 kV Transmission Line Rebuild Project**

Wetland ID: **Wetland 5**

Sample Point: **SP 12**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Herb Stratum (Plot size: 5 ft radius)

1.	<i>Agrimonia parviflora</i>	5	N	FACW
2.	<i>Arctium minus</i>	2	N	FACU
3.	<i>Epilobium coloratum</i>	5	N	OBL
4.	<i>Carex lurida</i>	3	N	OBL
5.	<i>Phalaris arundinacea</i>	75	Y	FACW
6.	<i>Solidago gigantea</i>	10	N	FACW
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = **100**

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = **0**

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	8	x 1 =	8
FACW spp.	90	x 2 =	180
FAC spp.	0	x 3 =	0
FACU spp.	2	x 4 =	8
UPL spp.	0	x 5 =	0

Total **100** (A) **196** (B)

Prevalence Index = B/A = **1.960**

Hydrophytic Vegetation Indicators:

- ☐ Yes ☐ No Rapid Test for Hydrophytic Vegetation
- ☐ Yes ☐ No Dominance Test is > 50%
- ☐ Yes ☐ No Prevalence Index is ≤ 3.0 *
- ☐ Yes ☐ No Morphological Adaptations (Explain) *
- ☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) *

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 12/13/19						
Applicant: American Electric Power (AEP)				County: Licking						
Investigator #1: Aaron Kwolek		Investigator #2: Kate Bomar		State: Ohio						
Soil Unit: Shoals silt loam, 0-2% slopes, occasionally flooded	NW1/WW1 Classification:			Wetland ID: Wetland 5						
Landform: Slope	Local Relief: Linear			Sample Point: SP 13						
Slope (%): 3	Latitude: 40.172125	Longitude: -82.489135	Datum: WGS 84	Community ID: UPL						
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No				Section: N/A						
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?		Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Township: N/A						
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?				Range: N/A Dir: N/A						
SUMMARY OF FINDINGS										
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Is This Sampling Point Within A Wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Remarks:										
HYDROLOGY										
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):										
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <u>Primary:</u> <ul style="list-style-type: none"> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface </div> <div style="width: 48%;"> <u>Secondary:</u> <ul style="list-style-type: none"> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C2 - Dry-Season Water Table <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D1 - Stunted or Stressed Plants <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test </div> </div>										
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> Field Observations: Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.) Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.) Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.) </div> <div style="width: 48%; background-color: #f0f0f0; padding: 5px; text-align: center;"> Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No </div> </div>										
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A										
Remarks:										
SOILS										
Map Unit Name: Shoals silt loam, 0-2% slopes, occasionally flooded										
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)										
Top Depth	Bottom Depth	Horizon	Matrix		Redox Features				Texture (e.g. clay, sand, loam)	
			Color (Moist)	%	Color (Moist)	%	Type	Location		
0	1	1	10YR	2/1	100	--	--	--	--	silt loam
1	16	2	10YR	4/3	100	--	--	--	--	silt loam
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>):										
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <ul style="list-style-type: none"> <input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers <input type="checkbox"/> A10 - 2 cm Muck <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Muck Mineral <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat </div> <div style="width: 48%;"> <ul style="list-style-type: none"> <input type="checkbox"/> S4 - Sandy Gleyed Matrix <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Muck Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions </div> </div>										
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> Restrictive Layer (If Observed) Type: Depth: </div> <div style="width: 48%; background-color: #f0f0f0; padding: 5px; text-align: center;"> Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No </div> </div>										
Remarks:										

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Project/Site: **North Newark- Sharp Road 138 kV Line Rebuild Project**

Wetland ID: **Wetland 5**

Sample Point: **SP 13**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	<i>Robinia pseudoacacia</i>	5	Y	FACU
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = 5

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	<i>Rubus allegheniensis</i>	30	Y	FACU
2.	<i>Rosa multiflora</i>	30	Y	FACU
3.	<i>Robinia pseudoacacia</i>	5	N	FACU
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = 65

Herb Stratum (Plot size: 5 ft radius)

1.	<i>Lonicera japonica</i>	10	Y	FACU
2.	<i>Alliaria petiolata</i>	10	Y	FAC
3.	<i>Solidago canadensis</i>	15	Y	FACU
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = 35

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = 0

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 17% (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	<u>0</u>	x 1 =	<u>0</u>
FACW spp.	<u>0</u>	x 2 =	<u>0</u>
FAC spp.	<u>10</u>	x 3 =	<u>30</u>
FACU spp.	<u>95</u>	x 4 =	<u>380</u>
UPL spp.	<u>0</u>	x 5 =	<u>0</u>

Total 105 (A) 410 (B)

Prevalence Index = B/A = 3.905

Hydrophytic Vegetation Indicators:

- ☐ Yes ☐ No Rapid Test for Hydrophytic Vegetation
☐ Yes ☐ No Dominance Test is > 50%
☐ Yes ☐ No Prevalence Index is ≤ 3.0 *
☐ Yes ☐ No Morphological Adaptations (Explain) *
☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) *

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 12/30/19							
Applicant: American Electric Power (AEP)				County: Licking							
Investigator #1: Kate Bomar		Investigator #2: Matt Denzler		State: Ohio							
Soil Unit: Centerburg silt loam, 6-12% slopes, eroded		NW1/WW1 Classification:		Wetland ID: Wetland 6							
Landform: Toeslope		Local Relief: Concave		Sample Point: SP 14							
Slope (%): 2		Latitude: 40.20286	Longitude: -82.497642	Community ID: PEM							
		Datum: WGS 84		Section: N/A							
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No				Township: N/A							
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?		Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Range: N/A Dir: N/A							
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?											
SUMMARY OF FINDINGS											
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No									
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Is This Sampling Point Within A Wetland? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									
Remarks:											
HYDROLOGY											
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):											
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <u>Primary:</u> <ul style="list-style-type: none"> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface </div> <div style="width: 48%;"> <u>Secondary:</u> <ul style="list-style-type: none"> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C2 - Dry-Season Water Table <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D1 - Stunted or Stressed Plants <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test </div> </div>											
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> Field Observations: Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.) Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: 6 (in.) Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: 10 (in.) </div> <div style="width: 48%; background-color: #f0f0f0; padding: 5px;"> Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No </div> </div>											
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A											
Remarks:											
SOILS											
Map Unit Name: Centerburg silt loam, 6-12% slopes, eroded											
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)											
Top Depth	Bottom Depth	Horizon	Matrix			Redox Features				Texture (e.g. clay, sand, loam)	
			Color (Moist)		%	Color (Moist)		%	Type		Location
0	16	1	10YR	4/1	45	10YR	4/6	10	C	M	silty clay loam
--	--	1	10YR	5/1	45	--	--	--	--	--	silty clay loam
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>): <ul style="list-style-type: none"> <input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers <input type="checkbox"/> A10 - 2 cm Muck <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Muck Mineral <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat </div> <div style="width: 48%;"> <ul style="list-style-type: none"> <input type="checkbox"/> S4 - Sandy Gleyed Matrix <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Muck Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions </div> </div>											
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> Restrictive Layer (If Observed) Type: Depth: </div> <div style="width: 48%; background-color: #f0f0f0; padding: 5px;"> Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No </div> </div>											
Remarks:											

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Project/Site: **North Newark- Sharp Road 138 kV Transmission Line Rebuild Project**

Wetland ID: **Wetland 6**

Sample Point: **SP 14**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	<i>Rubus allegheniensis</i>	5	Y	FACU
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **5**

Herb Stratum (Plot size: 5 ft radius)

1.	<i>Dichanthelium clandestinum</i>	60	Y	FACW
2.	<i>Verbena hastata</i>	10	N	FACW
3.	<i>Apocynum cannabinum</i>	10	N	FAC
4.	<i>Prunella vulgaris</i>	5	N	FAC
5.	<i>Solidago gigantea</i>	10	N	FACW
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = **95**

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = **0**

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **50%** (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	0	x 1 =	0
FACW spp.	80	x 2 =	160
FAC spp.	15	x 3 =	45
FACU spp.	5	x 4 =	20
UPL spp.	0	x 5 =	0

Total **100** (A) **225** (B)

Prevalence Index = B/A = **2.250**

Hydrophytic Vegetation Indicators:

- | | | |
|------------------------------|-----------------------------|--|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Rapid Test for Hydrophytic Vegetation |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Dominance Test is > 50% |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Prevalence Index is ≤ 3.0 * |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Morphological Adaptations (Explain) * |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Problem Hydrophytic Vegetation (Explain) * |

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 12/30/19					
Applicant: American Electric Power (AEP)				County: Licking					
Investigator #1: Kate Bomar		Investigator #2: Matt Denzler		State: Ohio					
Soil Unit: Centerburg silt loam, 6-12% slopes, eroded		NW1/WW1 Classification: none		Wetland ID: Wetland 6					
Landform: Side slope		Local Relief: Concave		Sample Point: SP 15					
Slope (%): 2		Latitude: 40.20256	Longitude: -82.497587	Community ID: UPL					
		Datum: WGS 84		Section: N/A					
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No				Township: N/A					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?		Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Range: N/A Dir: N/A					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?									
SUMMARY OF FINDINGS									
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No							
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Is This Sampling Point Within A Wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No							
Remarks:									
HYDROLOGY									
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):									
<div style="display: flex; justify-content: space-between;"> <div style="width: 65%;"> <u>Primary:</u> <ul style="list-style-type: none"> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface </div> <div style="width: 30%;"> <u>Secondary:</u> <ul style="list-style-type: none"> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C2 - Dry-Season Water Table <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D1 - Stunted or Stressed Plants <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test </div> </div>									
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Field Observations: Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.) Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.) Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.) </div> <div style="width: 50%; background-color: #f0f0f0; padding: 5px; text-align: center;"> Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No </div> </div>									
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A									
Remarks:									
SOILS									
Map Unit Name: Centerburg silt loam, 6-12% slopes, eroded									
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)									
Top Depth	Bottom Depth	Horizon	Matrix		Redox Features				Texture (e.g. clay, sand, loam)
			Color (Moist)	%	Color (Moist)	%	Type	Location	
0	3	1	10YR	4/1	100	--	--	--	--
3	6	2	10YR	6/3	100	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
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--	--	--	--	--	--	--	--	--	--
NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>): <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 45%;"> <ul style="list-style-type: none"> <input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers <input type="checkbox"/> A10 - 2 cm Muck <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Muck Mineral <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat </div> <div style="width: 45%;"> <ul style="list-style-type: none"> <input type="checkbox"/> S4 - Sandy Gleyed Matrix <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Muck Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions </div> </div>									
Indicators for Problematic Soils ¹ <ul style="list-style-type: none"> <input type="checkbox"/> A16 - Coast Prairie Redox <input type="checkbox"/> S7 - Dark Surface <input type="checkbox"/> F12 - Iron-Manganese Masses <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input type="checkbox"/> Other (Explain in Remarks) 									
¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.									
Restrictive Layer (If Observed)		Type: rock	Depth: 6"	Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No					
Remarks:									

Project/Site: **North Newark- Sharp Road 138 kV Transmission Line Rebuild Project**

Wetland ID: **Wetland 6**

Sample Point: **SP 15**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	<i>Rubus allegheniensis</i>	30	Y	FACU
2.	<i>Rosa multiflora</i>	10	Y	FACU
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **40**

Herb Stratum (Plot size: 5 ft radius)

1.	<i>Dichanthelium clandestinum</i>	20	Y	FACW
2.	<i>Fragaria vesca</i>	5	N	UPL
3.	<i>Agrimonia parviflora</i>	15	Y	FACW
4.	<i>Polystichum acrostichoides</i>	10	Y	UPL
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = **50**

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = **0**

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **5** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **40%** (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	0	x 1 =	0
FACW spp.	35	x 2 =	70
FAC spp.	0	x 3 =	0
FACU spp.	40	x 4 =	160
UPL spp.	15	x 5 =	75

Total **90** (A) **305** (B)

Prevalence Index = B/A = **3.389**

Hydrophytic Vegetation Indicators:

- ☐ Yes ☐ No Rapid Test for Hydrophytic Vegetation
☐ Yes ☐ No Dominance Test is > 50%
☐ Yes ☐ No Prevalence Index is ≤ 3.0 *
☐ Yes ☐ No Morphological Adaptations (Explain) *
☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) *

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 12/31/19					
Applicant: American Electric Power (AEP)				County: Licking					
Investigator #1: Kate Bomar		Investigator #2: Matt Denzler		State: Ohio					
Soil Unit: Luray silty clay loam		NWII/WWI Classification: PEM1C		Wetland ID: Wetland 7					
Landform: Basin		Local Relief: Concave		Sample Point: SP 16					
Slope (%): 0		Latitude: 40.21326	Longitude: -82.500924	Community ID: PEM					
		Datum: WGS 84		Section: N/A					
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No				Township: N/A					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?		Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Range: N/A Dir: N/A					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?									
SUMMARY OF FINDINGS									
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No							
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Is This Sampling Point Within A Wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No							
Remarks:									
HYDROLOGY									
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):									
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <u>Primary:</u> <ul style="list-style-type: none"> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface </div> <div style="width: 48%;"> <u>Secondary:</u> <ul style="list-style-type: none"> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C2 - Dry-Season Water Table <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D1 - Stunted or Stressed Plants <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test </div> </div>									
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> Field Observations: Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: 2 (in.) Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: surface (in.) Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: 4 (in.) </div> <div style="width: 48%; background-color: #f0f0f0; padding: 5px; text-align: center;"> Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No </div> </div>									
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A									
Remarks:									
SOILS									
Map Unit Name: Luray silty clay loam									
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)									
Top Depth	Bottom Depth	Horizon	Matrix		Redox Features				Texture (e.g. clay, sand, loam)
			Color (Moist)	%	Color (Moist)	%	Type	Location	
0	4	1	10YR	2/1	100	--	--	--	muck
4	6	2	10YR	2/1	95	7.5YR	5/6	5	silt loam
6	16	3	10YR	4/1	85	7.5YR	5/6	15	clay loam
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
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--	--	--	--	--	--	--	--	--	--
NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>): <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 48%;"> <ul style="list-style-type: none"> <input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers <input type="checkbox"/> A10 - 2 cm Muck <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Muck Mineral <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat </div> <div style="width: 48%;"> <ul style="list-style-type: none"> <input type="checkbox"/> S4 - Sandy Gleyed Matrix <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Muck Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions </div> </div>									
Indicators for Problematic Soils ¹ <ul style="list-style-type: none"> <input type="checkbox"/> A16 - Coast Prairie Redox <input type="checkbox"/> S7 - Dark Surface <input type="checkbox"/> F12 - Iron-Manganese Masses <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input type="checkbox"/> Other (Explain in Remarks) 									
¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.									
Restrictive Layer (If Observed)		Type:	Depth:	Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No					
Remarks:									

Project/Site: **North Newark- Sharp Road 138 kV Transmission Line Rebuild Project**

Wetland ID: **Wetland 7**

Sample Point: **SP 16**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Herb Stratum (Plot size: 5 ft radius)

1.	<i>Typha latifolia</i>	85	Y	OBL
2.	<i>Scirpus atrovirens</i>	15	N	OBL
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = **100**

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = **0**

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	100	x 1 =	100
FACW spp.	0	x 2 =	0
FAC spp.	0	x 3 =	0
FACU spp.	0	x 4 =	0
UPL spp.	0	x 5 =	0

Total **100** (A) **100** (B)

Prevalence Index = B/A = **1.000**

Hydrophytic Vegetation Indicators:

- ☐ Yes ☐ No Rapid Test for Hydrophytic Vegetation
- ☐ Yes ☐ No Dominance Test is > 50%
- ☐ Yes ☐ No Prevalence Index is ≤ 3.0 *
- ☐ Yes ☐ No Morphological Adaptations (Explain) *
- ☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) *

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 12/31/19							
Applicant: American Electric Power (AEP)				County: Licking							
Investigator #1: Kate Bomar		Investigator #2: Matt Denzler		State: Ohio							
Soil Unit: Luray silty clay loam		NWII/WWI Classification: PEM1C		Wetland ID: Wetland 7							
Landform: Basin		Local Relief: Concave		Sample Point: SP 17							
Slope (%): 0		Latitude: 40.21292	Longitude: -82.500954	Community ID: PSS							
Datum: WGS 84											
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks)				<input type="checkbox"/> Yes <input type="checkbox"/> No							
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?		Are normal circumstances present?		Section: N/A							
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Township: N/A							
				Range: N/A Dir: N/A							
SUMMARY OF FINDINGS											
Hydrophytic Vegetation Present?		<input type="checkbox"/> Yes <input type="checkbox"/> No		Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No							
Wetland Hydrology Present?		<input type="checkbox"/> Yes <input type="checkbox"/> No		Is This Sampling Point Within A Wetland? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
Remarks:											
HYDROLOGY											
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):											
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <u>Primary:</u> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface </div> <div style="width: 48%;"> <u>Secondary:</u> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C2 - Dry-Season Water Table <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D1 - Stunted or Stressed Plants <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test </div> </div>											
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> Field Observations: Surface Water Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Depth: 2 (in.) Water Table Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Depth: (in.) Saturation Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Depth: (in.) </div> <div style="width: 48%; background-color: #f0f0f0; padding: 5px;"> Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No </div> </div>											
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A											
Remarks:											
SOILS											
Map Unit Name: Luray silty clay loam											
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)											
Top Depth	Bottom Depth	Horizon	Matrix		Redox Features				Texture (e.g. clay, sand, loam)		
			Color (Moist)	%	Color (Moist)	%	Type	Location			
0	16	1	2.5Y	2.5/1	90	7.5YR	5/6	10	C	M	silt loam
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>): <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 48%;"> <input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers <input type="checkbox"/> A10 - 2 cm Muck <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Muck Mineral <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat </div> <div style="width: 48%;"> <input type="checkbox"/> S4 - Sandy Gleyed Matrix <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Muck Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions </div> </div>					Indicators for Problematic Soils ¹ <input type="checkbox"/> A16 - Coast Prairie Redox <input type="checkbox"/> S7 - Dark Surface <input type="checkbox"/> F12 - Iron-Manganese Masses <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input type="checkbox"/> Other (Explain in Remarks)						
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> Restrictive Layer (If Observed) Type: Depth: </div> <div style="width: 48%; background-color: #f0f0f0; padding: 5px;"> Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No </div> </div>											
Remarks:											

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Project/Site: **North Newark- Sharp Road 138 kV Transmission Line Rebuild Project**

Wetland ID: **Wetland 7**

Sample Point: **SP 17**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	<i>Cornus amomum</i>	60	Y	FACW
2.	<i>Salix nigra</i>	10	N	OBL
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **70**

Herb Stratum (Plot size: 5 ft radius)

1.	<i>Phalaris arundinacea</i>	40	Y	FACW
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = **40**

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = **0**

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	10	x 1 =	10
FACW spp.	100	x 2 =	200
FAC spp.	0	x 3 =	0
FACU spp.	0	x 4 =	0
UPL spp.	0	x 5 =	0

Total **110** (A) **210** (B)

Prevalence Index = B/A = **1.909**

Hydrophytic Vegetation Indicators:

- ☐ Yes ☐ No Rapid Test for Hydrophytic Vegetation
☐ Yes ☐ No Dominance Test is > 50%
☐ Yes ☐ No Prevalence Index is ≤ 3.0 *
☐ Yes ☐ No Morphological Adaptations (Explain) *
☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) *

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 12/31/19							
Applicant: American Electric Power (AEP)				County: Licking							
Investigator #1: Kate Bomar		Investigator #2: Matt Denzler		State: Ohio							
Soil Unit: Luray silty clay loam		NW1/WW1 Classification: none		Wetland ID: Wetland 7							
Landform: Terrace		Local Relief: Linear		Sample Point: SP 18							
Slope (%): 2		Latitude: 40.21287	Longitude: -82.500991	Community ID: UPL							
		Datum: WGS 84		Section: N/A							
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No				Township: N/A							
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?		Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Range: N/A Dir: N/A							
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?											
SUMMARY OF FINDINGS											
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No									
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Is This Sampling Point Within A Wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No									
Remarks:											
HYDROLOGY											
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):											
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <u>Primary:</u> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface </div> <div style="width: 30%;"> <input type="checkbox"/> B9 - Water-Stained Leaves <input type="checkbox"/> B13 - Aquatic Fauna <input type="checkbox"/> B14 - True Aquatic Plants <input type="checkbox"/> C1 - Hydrogen Sulfide Odor <input type="checkbox"/> C3 - Oxidized Rhizospheres on Living Roots <input type="checkbox"/> C4 - Presence of Reduced Iron <input type="checkbox"/> C6 - Recent Iron Reduction in Tilled Soils <input type="checkbox"/> C7 - Thin Muck Surface <input type="checkbox"/> D9 - Gauge or Well Data <input type="checkbox"/> Other (Explain in Remarks) </div> <div style="width: 30%;"> <u>Secondary:</u> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C2 - Dry-Season Water Table <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D1 - Stunted or Stressed Plants <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test </div> </div>											
Field Observations:											
Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)		Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No									
Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)											
Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)											
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				N/A							
Remarks:											
SOILS											
Map Unit Name: Luray silty clay loam											
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)											
Top Depth	Bottom Depth	Horizon	Matrix		Redox Features				Texture (e.g. clay, sand, loam)		
			Color (Moist)	%	Color (Moist)	%	Type	Location			
0	8	1	10YR	3/2	100	--	--	--	--	silty clay loam	
8	16	2	10YR	4/3	98	10YR	4/6	2	C	M	silty clay loam
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>):					Indicators for Problematic Soils ¹						
<input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers <input type="checkbox"/> A10 - 2 cm Muck <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Muck Mineral <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat					<input type="checkbox"/> S4 - Sandy Gleyed Matrix <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Muck Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions <input type="checkbox"/> A16 - Coast Prairie Redox <input type="checkbox"/> S7 - Dark Surface <input type="checkbox"/> F12 - Iron-Manganese Masses <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input type="checkbox"/> Other (Explain in Remarks)						
Restrictive Layer (If Observed) Type: Depth:					Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No						
Remarks:											

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Project/Site: **North Newark- Sharp Road 138 kV Transmission Line Rebuild Project**

Wetland ID: **Wetland 7**

Sample Point: **SP 18**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	<u>Ind. Status</u>
1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **0**

Sapling/Shrub Stratum (Plot size: 15 ft radius)

1.	Rubus allegheniensis	10	Y	FACU
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--

Total Cover = **10**

Herb Stratum (Plot size: 5 ft radius)

1.	Zea mays	60	Y	UPL
2.	Schedonorus arundinaceus	10	N	FACU
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--
6.	--	--	--	--
7.	--	--	--	--
8.	--	--	--	--
9.	--	--	--	--
10.	--	--	--	--
11.	--	--	--	--
12.	--	--	--	--
13.	--	--	--	--
14.	--	--	--	--
15.	--	--	--	--

Total Cover = **70**

Woody Vine Stratum (Plot size: 30 ft radius)

1.	--	--	--	--
2.	--	--	--	--
3.	--	--	--	--
4.	--	--	--	--
5.	--	--	--	--

Total Cover = **0**

Remarks:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: **0** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **0%** (A/B)

Prevalence Index Worksheet

Total % Cover of:

Multiply by:

OBL spp.	0	x 1 =	0
FACW spp.	0	x 2 =	0
FAC spp.	0	x 3 =	0
FACU spp.	20	x 4 =	80
UPL spp.	60	x 5 =	300

Total **80** (A) **380** (B)

Prevalence Index = B/A = **4.750**

Hydrophytic Vegetation Indicators:

- | | | |
|------------------------------|-----------------------------|--|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Rapid Test for Hydrophytic Vegetation |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Dominance Test is > 50% |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Prevalence Index is ≤ 3.0 * |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Morphological Adaptations (Explain) * |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Problem Hydrophytic Vegetation (Explain) * |

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.

Woody Vines - All woody vines greater than 3.28 ft. in height.

Hydrophytic Vegetation Present ☐ Yes ☐ No

Additional Remarks:

Project/Site: North Newark- Sharp Road 138 kV Transmission Line Rebuild Project		Stantec Project #: 193707328		Date: 12/31/19							
Applicant: American Electric Power (AEP)				County: Licking							
Investigator #1: Kate Bomar		Investigator #2: Matt Denzler		State: Ohio							
Soil Unit: Algiers silt loam, frequently flooded		NW1/WW1 Classification: none		Wetland ID: Wetland 8							
Landform: Toeslope		Local Relief: Linear		Sample Point: SP 19							
Slope (%): 2		Latitude: 40.21124	Longitude: -82.500302	Community ID: PEM							
		Datum: WGS 84		Section: N/A							
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks) <input type="checkbox"/> Yes <input type="checkbox"/> No				Township: N/A							
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?		Are normal circumstances present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Range: N/A Dir: N/A							
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?											
SUMMARY OF FINDINGS											
Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Hydric Soils Present? <input type="checkbox"/> Yes <input type="checkbox"/> No									
Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No		Is This Sampling Point Within A Wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No									
Remarks:											
HYDROLOGY											
Wetland Hydrology Indicators (Check here if indicators are not present <input type="checkbox"/>):											
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <u>Primary:</u> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface </div> <div style="width: 30%;"> <input type="checkbox"/> B9 - Water-Stained Leaves <input type="checkbox"/> B13 - Aquatic Fauna <input type="checkbox"/> B14 - True Aquatic Plants <input type="checkbox"/> C1 - Hydrogen Sulfide Odor <input type="checkbox"/> C3 - Oxidized Rhizospheres on Living Roots <input type="checkbox"/> C4 - Presence of Reduced Iron <input type="checkbox"/> C6 - Recent Iron Reduction in Tilled Soils <input type="checkbox"/> C7 - Thin Muck Surface <input type="checkbox"/> D9 - Gauge or Well Data <input type="checkbox"/> Other (Explain in Remarks) </div> <div style="width: 30%;"> <u>Secondary:</u> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C2 - Dry-Season Water Table <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D1 - Stunted or Stressed Plants <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test </div> </div>											
Field Observations:											
Surface Water Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)		Wetland Hydrology Present? <input type="checkbox"/> Yes <input type="checkbox"/> No									
Water Table Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: (in.)											
Saturation Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Depth: surface (in.)											
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A											
Remarks:											
SOILS											
Map Unit Name: Algiers silt loam, frequently flooded											
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)											
Top Depth	Bottom Depth	Horizon	Matrix		Redox Features				Texture (e.g. clay, sand, loam)		
			Color (Moist)	%	Color (Moist)	%	Type	Location			
0	4	1	10YR	4/1	100	--	--	--	--	silt loam	
4	16	2	10YR	4/1	90	10YR	4/6	10	C	M	silty clay loam
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
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--	--	--	--	--	--	--	--	--	--	--	
NRCS Hydric Soil Field Indicators (check here if indicators are not present <input type="checkbox"/>): <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers <input type="checkbox"/> A10 - 2 cm Muck <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Muck Mineral <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat </div> <div style="width: 30%;"> <input type="checkbox"/> S4 - Sandy Gleyed Matrix <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Muck Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions </div> <div style="width: 30%;"> Indicators for Problematic Soils ¹ <input type="checkbox"/> A16 - Coast Prairie Redox <input type="checkbox"/> S7 - Dark Surface <input type="checkbox"/> F12 - Iron-Manganese Masses <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input type="checkbox"/> Other (Explain in Remarks) </div> </div>											
¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.											
Restrictive Layer (If Observed)		Type:	Depth:	Hydric Soil Present? <input type="checkbox"/> Yes <input type="checkbox"/> No							
Remarks:											

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

5/14/2021 4:17:37 PM

in

Case No(s). 21-0525-EL-BLN

Summary: Notice Letter of Notification Application for the North Newark-Sharp Road 138 kV Transmission Line Rebuild Project 301-400 electronically filed by Tanner Wolffram on behalf of AEP Ohio Transmission Company, Inc.