

Photograph 21: View of Stream 2 (near Britton Parkway) facing downstream, looking east.



Photograph 22: View of Stream 2 (near Davidson Road AEP Facility) facing upstream, looking west.





Photograph 23: View of Stream 2 (near Davidson Road AEP Facility) facing downstream, looking east.



Photograph 24: View of maintained lawn and edge of riparian corridor north of Davidson Road AEP Facility, looking west.





Photograph 25: View of SP-3 within upland area, looking north.



Photograph 26: View of SP-4 within upland area near Wetland A, looking south.



Civil & Environmental Consultants, Inc. Worthington, Ohio 43085 Phone: 614-540-6633 | Toll Free: 888-598-6808



Photograph 27: View from Britton Parkway, just south of Stream 2, looking east.



Photograph 28: View of maintained lawn south of Stream 2, looking east.



Photograph 29: View of playground, located south of Stream 2, looking south.



Photograph 30: View of ball field, located south of Stream 2, looking south.





Photograph 31: View of Dry Detention Basin 1, looking north.



Photograph 32: View of SP-5 within upland area, looking north.



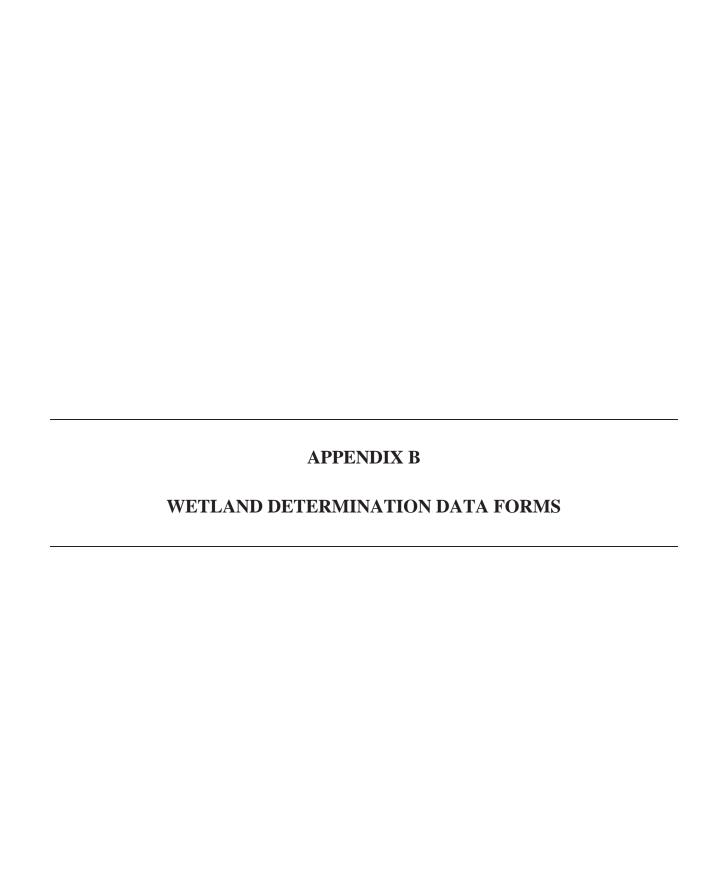


Photograph 33: View of maintained lawn area west of Davidson Road AEP Facility, looking south.



Photograph 34: View of Davidson Road AEP Facility in the southern portion of the Site, looking south.





Project/Site: Britton-Davidson Tap Line		City/County: Hillia	ard/Franklin	Sampling Date:	July 12, 2016
Applicant/Owner: American Electric Power			State: C	OH Sampling Point:	SP-1
Investigator(s): M. Hall and J. Demarest		Sect	tion, Township, Range: N/A		
· · · · · · · · · · · · · · · · · · ·			ief (concave, convex, none): No	ne	
Slope (%): 0% Lat: 40.05743			13237	Datum: N	ΔD83
	to 2 norooni			assification:	
· · · · · · · · · · · · · · · · · · ·	•	· ·			
Are climatic/hydrologic conditions on the site typical for the Are Vegetation No, Soil No, or Hydro  Are Vegetation No, Soil No, or Hydro	logy No	significantly distu	Yes	X No	.)
SUMMARY OF FINDINGS - Attach site map si				,	
Hydrophytic Vegetation Present?					
Hydric Soil Present?	Yes Yes		s the Sampled Area within a Wetland? Yes	No X	
Wetland Hydrology Present?	Yes		within a Wetland?		
Remarks: Upland area					
<b>VEGETATION</b> - Use scientific names of plants					
Tara Otratura (Dietoiae) 20 ft	Absolute	Dominant Indicato			
Tree Stratum (Plot size: 30 ft. )  1. Acer saccharum	% <u>Cov</u> er 50	Species? Status Y FACU			.)
2. Tilia americana	20	Y FACU		O. <u>2</u> (/	Ŋ
3. Quercus rubra	15	N FACU			
4. Juglans nigra	5	N FACU		5 (E	3)
5.					
Sapling/Shrub Stratum: Size: 15 ft. )  1. Acer saccharum	90	= Total Cover	Percent of Dominant Speci That Are OBL, FACW, or FA		√B)
2. Lindera benzoin	2	Y FACW		et:	
3.		<u> </u>	Total % Cover of:	Multiply by:	
4.	-		OBL species 0 x		
5.			FACW species 2 x	2 = 4	
	5	= Total Cover	FAC species 80 x	3 = 240	
Herb Stratum: (Plot size: 5 ft. )			FACU species 118 x	4 = 472	
1. Geum canadense	80	<u>Y</u> <u>FAC</u>	UPL species 0 x		
2. Elymus hystrix	15	N FACU		716(E	3)
3. Parthenocissus quinquefolia	_10_	N FACU		2.0	
4. 5.			Prevalence Index = B/A =	3.6	
6		_ =	Hydrophytic Vegetation Inc 1 - Rapid Test for Hy		
8.			2 - Dominance Test	is >50%	
9.			3 - Prevalence Index		
10	105	= Total Cover		aptations¹ (Provide sup or on a separate sheet)	
Woody Vine Stratum: (Plot size 30 ft. )  1. N/A			Problematic Hydrop	hytic Vegetation¹ (Explai	in)
2	_	= Total Cover	<sup>1</sup> Indicators of hydric soil ar be present, unless disturbe		ust
			Hydrophytic Vegetation Present?	Yes	No X
Remarks: (Include photo numbers here or on a separat	e sheet.)				

Depth (inches)	Matrix			Redox Featu			the absence of inc	,
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	- Texture	Remarks
0-16	10YR 2/2	100	00101 (1110131)		Турс		silt loam	Remarks
Type: C=Cor	ncentration, D=Deplet	ion RM=Re	duced Matrix MS=Ma	sked Sand (	Grains		<sup>2</sup> I ocation: PI = Po	ore Lining, M=Matrix.
Hydric Soil Inc		,			2.4			blematic Hydric Soils <sup>3</sup> :
Histosol (A	(1)		Sandy Gleyed Ma	trix (S4)			Coast Prairie Ro	edox (A16)
Histic Epipe			Sandy Redox (S5				Dark Surface (\$	, ,
Black Histic			Stripped Matrix (S				Iron-Manganes	•
	Sulfide (A4)		Loamy Mucky Min					Park Surface (TF12)
	ayers (A5)		Loamy Gleyed Ma				Other (Explain i	
2 cm Muck			Depleted Matrix (F				Other (Explain)	irromano)
	Below Dark Surface (A11	1)	Redox Dark Surfa					
	Surface (A12)	' /	Depleted Dark Sur					
	ndy Mucky Mineral (S1) Redox Depressions (F8)						ophytic vegetation and wetlar	
	andy Mucky Mineral (S1) Redox Depressions (F8)  cm Mucky Peat or Peat (S3)						e present, unless disturbed of problematic.	
	ayer (if observed):							problematic.
Type:	.jo. ( oo							
Depth (in	ches):						Hydric Soil Prese	nt? Yes No _2
HYDROL O	GY							
	rology Indicators:	quired; check	all that apply)			Secondary	Indicators (minimum of t	wo required)
<b>Wetland Hydr</b> Primary Indicato	rology Indicators: ors (minimum of one is re	quired; check		aves (B9)		Secondary	Indicators (minimum of t Surface Soil Cracks (l	
Wetland Hydr Primary Indicato Surface W	rology Indicators: ors (minimum of one is red vater (A1)	quired; check	Water-Stained Le			Secondary	Surface Soil Cracks (I	36)
Vetland Hydr Primary Indicate Surface W High Water	rology Indicators: ors (minimum of one is re /ater (A1) r Table (A2)	quired; check	Water-Stained Le	13)		Secondary	Surface Soil Cracks (I Drainage Patterns (B1	36) 0)
Vetland Hydr Primary Indicate Surface W High Water Saturation	rology Indicators: ors (minimum of one is re later (A1) r Table (A2) (A3)	quired; check	Water-Stained Le. Aquatic Fauna (B True Aquatic Plan	13) ts (B14)		Secondary	Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta	36) 0) ble (C2)
Vetland Hydr Primary Indicato Surface W High Water Saturation Water Marl	rology Indicators: ors (minimum of one is re later (A1) r Table (A2) (A3) ks (B1)	quired; check	Water-Stained Lea Aquatic Fauna (B True Aquatic Plan Hydrogen Sulfide	13) ts (B14) Odor (C1)	g Roots (C3)	Secondary	Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8	36) 0) ble (C2)
Vetland Hydr Primary Indicate Surface W High Water Saturation Water Mari Sediment E	rology Indicators: ors (minimum of one is re /ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2)	quired; check	Water-Stained Le Aquatic Fauna (B True Aquatic Plan Hydrogen Sulfide Oxidized Rhizospl	13) ts (B14) Odor (C1) neres on Livin	g Roots (C3)	Secondary	Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A	36) 0) ble (C2) 3) Aerial Imagery (C9)
Primary Indicate Surface W High Water Saturation Water Marl Sediment E Drift Depos	rology Indicators: ors (minimum of one is revalue (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3)	quired; check	Water-Stained Lea Aquatic Fauna (B True Aquatic Plan Hydrogen Sulfide	13) ts (B14) Odor (C1) neres on Living aced Iron (C4)		Secondary	Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed F	36) 0) ble (C2) 3) Aerial Imagery (C9)
Primary Indicate Surface W High Water Saturation Water Marl Sediment E Drift Depos	rology Indicators: ors (minimum of one is re /ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4)	quired; check	Water-Stained Le Aquatic Fauna (B True Aquatic Plan Hydrogen Sulfide Oxidized Rhizospl Presence of Redu Recent Iron Redu	ts (B14) Odor (C1) neres on Living uced Iron (C4) otion in Tilled S		Secondary	Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed F Geomorphic Position (	36) 0) ble (C2) 8) Aerial Imagery (C9) Plants (D1)
Wetland Hydr Primary Indicato Surface W High Water Saturation Water Marl Sediment E Drift Depos Algal Mat o	rology Indicators: ors (minimum of one is re /ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4)		Water-Stained Le Aquatic Fauna (B True Aquatic Plan Hydrogen Sulfide Oxidized Rhizospl Presence of Redu Recent Iron Redu Thin Muck Surface	ts (B14) Odor (C1) neres on Living uced Iron (C4) ction in Tilled S e (C7)		Secondary	Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed F	36) 0) ble (C2) 8) Aerial Imagery (C9) Plants (D1)
Primary Indicate Surface W High Water Saturation Water Marl Sediment E Drift Depos Algal Mat c Iron Depos Inundation	rology Indicators: ors (minimum of one is re /ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5)	y (B7)	Water-Stained Le Aquatic Fauna (B True Aquatic Plan Hydrogen Sulfide Oxidized Rhizospl Presence of Redu Recent Iron Redu	ts (B14) Odor (C1) neres on Living uced Iron (C4) ction in Tilled S e (C7) ta (D9)		Secondary	Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed F Geomorphic Position (	36) 0) ble (C2) 8) Aerial Imagery (C9) Plants (D1)
Wetland Hydr Primary Indicate Surface W High Water Saturation Water Mari Sediment D Drift Depos Algal Mat of Iron Depos Inundation Sparsely V	rology Indicators: ors (minimum of one is re /ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imager //egetated Concave Surf.	y (B7)	Water-Stained Le Aquatic Fauna (B True Aquatic Plan Hydrogen Sulfide Oxidized Rhizospl Presence of Redu Recent Iron Redu Thin Muck Surface Gauge or Well Da	ts (B14) Odor (C1) neres on Living uced Iron (C4) ction in Tilled S e (C7) ta (D9)		Secondary	Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed F Geomorphic Position (	36) 0) ble (C2) 8) Aerial Imagery (C9) Plants (D1)
Primary Indicate Surface W High Water Saturation Water Mark Sediment D Drift Depos Algal Mat of Iron Depos Inundation Sparsely W	rology Indicators: ors (minimum of one is re /ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imager /egetated Concave Surf.	y (B7) ace (B8)	Water-Stained Le. Aquatic Fauna (B True Aquatic Plan Hydrogen Sulfide Oxidized Rhizospl Presence of Redu Recent Iron Reduc Thin Muck Surface Gauge or Well Da Other (Explain in F	ts (B14) Odor (C1) neres on Living uced Iron (C4) ction in Tilled S e (C7) ta (D9)			Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed F Geomorphic Position ( FAC-Neutral Test (D5	B6) 0) ble (C2) 8) Aerial Imagery (C9) Plants (D1) D2)
Primary Indicate Surface W High Water Saturation Water Mark Sediment D Drift Depos Algal Mat of Iron Depos Inundation Sparsely W Field Observa	rology Indicators: ors (minimum of one is re /ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imager /egetated Concave Surf	y (B7) ace (B8)	Water-Stained Le. Aquatic Fauna (B True Aquatic Plan Hydrogen Sulfide Oxidized Rhizospl Presence of Redu Recent Iron Reduc Thin Muck Surface Gauge or Well Da Other (Explain in F	ts (B14) Odor (C1) neres on Living uced Iron (C4) ction in Tilled S e (C7) ta (D9)			Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed F Geomorphic Position (	36) 0) ble (C2) 8) Aerial Imagery (C9) Plants (D1)
Primary Indicate Surface W High Water Saturation Water Mark Sediment D Drift Depos Algal Mat o Iron Depos Inundation Sparsely W Field Observa Water Table Pre	rology Indicators: ors (minimum of one is re /ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imager /egetated Concave Surf. ations: Present? Yes esent? Yes	y (B7) ace (B8)	Water-Stained Le. Aquatic Fauna (B True Aquatic Plan Hydrogen Sulfide Oxidized Rhizospl Presence of Redu Recent Iron Redu Thin Muck Surface Gauge or Well Da Other (Explain in F	ts (B14) Odor (C1) neres on Living uced Iron (C4) ction in Tilled S e (C7) ta (D9)			Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed F Geomorphic Position ( FAC-Neutral Test (D5	B6) 0) ble (C2) 8) Aerial Imagery (C9) Plants (D1) D2)
Wetland Hydr Primary Indicato Surface W High Water Saturation Water Marl Sediment D Drift Depos Algal Mat o Iron Depos Inundation Sparsely V Field Observa Surface Water I Water Table Presentation Presentation	rology Indicators: ors (minimum of one is re /ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imager /egetated Concave Surf.  attions: Present? Yes esent? Yes ent? Yes	y (B7) ace (B8) No No	Water-Stained Le Aquatic Fauna (B True Aquatic Plan Hydrogen Sulfide Oxidized Rhizospl Presence of Redu Recent Iron Redu Thin Muck Surface Gauge or Well Da Other (Explain in F	ts (B14) Odor (C1) neres on Living uced Iron (C4) ction in Tilled S e (C7) ta (D9)			Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed F Geomorphic Position ( FAC-Neutral Test (D5	B6) 0) ble (C2) 8) Aerial Imagery (C9) Plants (D1) D2)
Wetland Hydr Primary Indicato Surface W High Water Saturation Water Marl Sediment D Drift Depos Algal Mat o Iron Depos Inundation Sparsely V Field Observa Surface Water I Water Table Presented Saturation Presented Service Service Service Water I Includes capilla	rology Indicators: ors (minimum of one is re /ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imager /egetated Concave Surf.  attions: Present? Yes esent? Yes ent? Yes ary fringe)	y (B7) ace (B8) No No No	Water-Stained Le. Aquatic Fauna (B True Aquatic Plan Hydrogen Sulfide Oxidized Rhizospl Presence of Redu Recent Iron Reduc Thin Muck Surface Gauge or Well Da Other (Explain in F  X Depth (inches): X Depth (inches):	ts (B14) Odor (C1) neres on Livin, uced Iron (C4) tition in Tilled S e (C7) ta (D9) Remarks)	Soils (C6)	Wetland H	Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed F Geomorphic Position (FAC-Neutral Test (D5)	B6) 0) ble (C2) 8) Aerial Imagery (C9) Plants (D1) D2)
Wetland Hydr Primary Indicato Surface W High Water Saturation Water Marl Sediment D Drift Depos Algal Mat o Iron Depos Inundation Sparsely V Field Observa Surface Water I Water Table Presented Saturation Presented Service Service Service Water I Includes capilla	rology Indicators: ors (minimum of one is re /ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imager /egetated Concave Surf.  attions: Present? Yes esent? Yes ent? Yes	y (B7) ace (B8) No No No	Water-Stained Le. Aquatic Fauna (B True Aquatic Plan Hydrogen Sulfide Oxidized Rhizospl Presence of Redu Recent Iron Reduc Thin Muck Surface Gauge or Well Da Other (Explain in F  X Depth (inches): X Depth (inches):	ts (B14) Odor (C1) neres on Livin, uced Iron (C4) tition in Tilled S e (C7) ta (D9) Remarks)	Soils (C6)	Wetland H	Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed F Geomorphic Position (FAC-Neutral Test (D5)	B6) 0) ble (C2) 8) Aerial Imagery (C9) Plants (D1) D2)
Wetland Hydr Primary Indicato Surface W High Water Saturation Water Marl Sediment D Drift Depos Algal Mat o Iron Depos Inundation Sparsely V Field Observa Surface Water I Water Table Presented Saturation Presented Service Service Service Water I Includes capilla	rology Indicators: ors (minimum of one is re /ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imager /egetated Concave Surf.  attions: Present? Yes esent? Yes ent? Yes ary fringe)	y (B7) ace (B8) No No No	Water-Stained Le. Aquatic Fauna (B True Aquatic Plan Hydrogen Sulfide Oxidized Rhizospl Presence of Redu Recent Iron Reduc Thin Muck Surface Gauge or Well Da Other (Explain in F  X Depth (inches): X Depth (inches):	ts (B14) Odor (C1) neres on Livin, uced Iron (C4) tition in Tilled S e (C7) ta (D9) Remarks)	Soils (C6)	Wetland H	Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed F Geomorphic Position (FAC-Neutral Test (D5)	B6) 0) ble (C2) 8) Aerial Imagery (C9) Plants (D1) D2)
Wetland Hydr Primary Indicato Surface W High Water Saturation Water Marl Sediment D Drift Depos Algal Mat o Iron Depos Inundation Sparsely V Field Observa Surface Water I Water Table Presented Saturation Presented Services Saturation Surface Capilla	rology Indicators: ors (minimum of one is re /ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imager /egetated Concave Surf.  attions: Present? Yes esent? Yes ent? Yes ary fringe)	y (B7) ace (B8) No No No	Water-Stained Le. Aquatic Fauna (B True Aquatic Plan Hydrogen Sulfide Oxidized Rhizospl Presence of Redu Recent Iron Reduc Thin Muck Surface Gauge or Well Da Other (Explain in F  X Depth (inches): X Depth (inches):	ts (B14) Odor (C1) neres on Livin, uced Iron (C4) tition in Tilled S e (C7) ta (D9) Remarks)	Boils (C6)	Wetland H	Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed F Geomorphic Position (FAC-Neutral Test (D5)	B6) 0) ble (C2) 8) Aerial Imagery (C9) Plants (D1) D2)

Project/Site: Britton-Davidson Tap Line	City/County: Hilliard	/Franklin Sampling Date: July 12, 2016
Applicant/Owner: American Electric Power		State: OH Sampling Point: SP-2
Investigator(s): M. Hall and J. Demarest	Section	
Landform (hillslope, terrace, etc.): Depression	Local Relief	(concave, convex, none): Concave
Slope (%): <u>0-1%</u> Lat: <u>40.05718</u>	Long: -83.133	352Datum: NAD83
	0 to 2 percent slopes	
Are climatic/hydrologic conditions on the site typical for Are Vegetation No, Soil No, or Hydronia.	this time of year? Yes ology No significantly disturbe	s NoX (If no, explain in Remarks.)  d? Are "Normal Circumstances" present?  YesX No
Are Vegetation No , Soil No , or Hydr		
SUMMARY OF FINDINGS - Attach site map		
Hydrophytic Vegetation Present? Hydric Soil Present?		he Sampled Area thin a Wetland? Yes X No
Wetland Hydrology Present?	Yes X No WI	thin a Wetland? Yes X NO NO
Remarks: Wetland A  VEGETATION - Use scientific names of plan		
Ose scientific flames of plan	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft. )	% Cover Species? Status	Number of Dominant Species
1. <u>N/A</u>		That Are OBL, FACW, or FAC:1 (A)
2		
3.	<del></del>	Total Number of Dominant
5.		Species Across All Strata: 1 (B)
Sapling/Shrub Stratum: Size: 15 ft. )	0 = Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
1. <u>N/A</u> 2.		Prevalence Index worksheet:
3.	<del></del>	Total % Cover of: Multiply by:
4.		OBL species x 1 =
5		FACW species x 2 =
	= Total Cover	FAC species x 3 =
Herb Stratum: (Plot size: 5 ft. )  1. Typha angustifolia	95 Y OBL	FACU species x 4 = UPL species x 5 =
Euthamia graminifolia	3 N FACW	Column Totals: (A) (B)
3. Asclepias incarnata		
4		Prevalence Index = B/A =
5	<u> </u>	
6 7.		Hydrophytic Vegetation Indicators:  X 1 - Rapid Test for Hydrophytic Vegetation
8.		X 2 - Dominance Test is >50%
9.		3 - Prevalence Index is ≤3.01
10.		4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
Manda Vina Ohnkum	100 = Total Cover	· · · · · ·
Woody Vine Stratum: (Plot size 30 ft. )  1. N/A		Problematic Hydrophytic Vegetation¹ (Explain)
2.		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	= Total Cover	be present, unless disturbed or problematic.
		Hydrophytic Vegetation         YesX
Remarks: (Include photo numbers here or on a separa	ate sheet.)	

	scription: (Describe	to the dep				or confirm	the absence of inc	dicators.)
Depth	Matrix			Redox Fea			_	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-4	10YR 2/1	100					silt loam	
4-16	10YR 4/1	75	10YR 5/6	25	C	M	silt loam	
	oncentration, D=Depleti	on, RM=Re	duced Matrix, MS=Ma	sked Sand	Grains.			ore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators for Pro	oblematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy Gleyed Ma	trix (S4)			Coast Prairie Re	edox (A16)
Histic Ep	ipedon (A2)		Sandy Redox (S5	)			Dark Surface (S	37)
Black His	stic (A3)		Stripped Matrix (S	6)			Iron-Manganese	e Masses (F12)
Hydrogei	n Sulfide (A4)		Loamy Mucky Min	eral (F1)			Very Shallow D	Dark Surface (TF12)
Stratified	Layers (A5)		Loamy Gleyed Ma	trix (F2)			Other (Explain i	n Remarks)
2 cm Mu	ck (A10)		X Depleted Matrix (F	-3)				
_	Below Dark Surface (A11	)	Redox Dark Surfa					
_ '	rk Surface (A12)	,	Depleted Dark Sur				21 11 1 61 1	
_	lucky Mineral (S1)		Redox Depression				•	rophytic vegetation and wetland e present, unless disturbed or
_	cky Peat or Peat (S3)			()			nydrology must b	problematic.
	Layer (if observed):							p. os. o
Type:								
	inches):						Hydric Soil Prese	nt? Yes X No
200(.							,	
HYDDOL	OCV							
HYDROL Wetland Hy	drology Indicators:							
-	ators (minimum of one is re	guired: check	all that apply)			Secondary	Indicators (minimum of t	wo required)
	Water (A1)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Water-Stained Le	aves (B9)			Surface Soil Cracks (I	
_	ter Table (A2)		Aquatic Fauna (B				Drainage Patterns (B1	
Saturatio	, ,		True Aquatic Plan				Dry-Season Water Ta	
Water Ma	` '						-	
	` '		Hydrogen Sulfide		ina Dooto (C2)		_ Crayfish Burrows (C8	
	t Deposits (B2)		Oxidized Rhizosph		-		_ Saturation Visible on A	
	osits (B3)		Presence of Redu	,	,		_ Stunted or Stressed F	, ,
	t or Crust (B4)		Recent Iron Reduc		Soils (C6)	X	_ Geomorphic Position (	
	osits (B5)		Thin Muck Surface			X	_ FAC-Neutral Test (D5)	)
	on Visible on Aerial Imagery		Gauge or Well Da	, ,				
Sparsely	Vegetated Concave Surfa	ace (B8) 	Other (Explain in F	Remarks)				
Field Observ	vations:							
Surface Wate	er Present? Yes	No	X Depth (inches):			Wetland F	lydrology Present?	YesX No
Water Table F	Present? Yes	No	X Depth (inches):					
Saturation Pre	esent? Yes	No	X Depth (inches):					
(includes capi	illary fringe)							
Describe Re	ecorded Data (stream g	auge, moni	oring well, aerial pho	tos, previo	ous inspectio	ns), if availa	ble:	
Remarks								

Project/Site: Britte	on-Davidson Tap Line		City/County	: Hilliard/	Franklin		Sampling Date:	July 12, 2016
Applicant/Owner: Ame	erican Electric Power				State:	ОН	Sampling Point:	SP-3
Investigator(s): M. H	all and J. Demarest			Section.		N/A	_	
Landform (hillslope, terr					concave, convex, none):			
	Lat: 40.05168				12			NAD83
Soil Map Unit Name:	Crosby silt loam, Southern	n Ohio Till Di					fication:	
·	conditions on the site typical for t							
Are Vegetation	No , Soil <u>No</u> , or Hydrol	ogy No	significantly	y disturbed	Yes	umstan X	No	s.)
	No , Soil <u>No</u> , or Hydrol					•	,	
SUMMARY OF FIN	IDINGS - Attach site map sh				ons, transects, impo	ortant	features, etc.	
Hydrophytic Vegetation	n Present?	Yes X			e Sampled Area			
Hydric Soil Present?		Yes		_ wit	hin a Wetland? Yes		NoX	
Wetland Hydrology Pre	esent?	Yes	No _X					
Remarks: Upland area								
VEGETATION - U	se scientific names of plants							
		Absolute	Dominant Ir		Dominance Test works			
	(Plot size: 30 ft. )	% Cover		Status	Number of Dominant S			(4)
<ol> <li>Populus deltoide</li> <li>2.</li> </ol>	<u>s</u>	_20_	<u> </u>	<u>FAC</u>	That Are OBL, FACW, or	r FAC:	(	(A)
				_	Total Number of Domin	ant		
4				_	Species Across All Stra		5 (	(B)
5.				_	'			,
Sapling/Shrub Stratum	n: Size: 15 ft. )	20	= Total Cov		Percent of Dominant Sp That Are OBL, FACW, or		80.00 (	(A/B)
1. Lonicera maacki		20	<u>Y</u>	UPL				
2. Populus deltoide		10	<u>Y</u>	FAC	Prevalence Index work	sheet:	A 4 10 1 1	
<ol> <li>Rubus alleghenie</li> <li>Pyrus calleryana</li> </ol>		10 5 2	N	F <u>AC</u> U UPL	Total % Cover of: OBL species	v —	Multiply by:	
5.				OFL	FACW species			
·		37	= Total Cov	er	FAC species			
Herb Stratum: (Plot	t size: 5 ft. )				FACU species	x 4=		
Agrostis gigantea		30	Y	FACW	UPL species	x 5=		
2. Poa pratensis		20	Y	FAC	Column Totals:	(A)		(B)
3. Schedonorus pra		15	<u>N</u>	F <u>AC</u> U				
4. Carex vulpinoide		10		FACW	Prevalence Index = B/A	=		
<ol> <li>Solidago canade</li> <li>Toxicodendron ra</li> </ol>		<u>10</u> <u>5</u>	<u>N</u> N	F <u>AC</u> U FAC	Hydrophytic Vegetation	Indica	tore:	
7. Rumex crispus	adicans	5	N	FAC FAC	1 - Rapid Test fo			
8. Apocynum canna	abinum	2	N	FAC	2 - Dominance T		-	
9.				_	3 - Prevalence In			
10.				_			ations¹ (Provide su	
		97	= Total Cov	er			n a separate sheet	•
Woody Vine Stratum:	(Plot size <u>30 ft.</u> )				Problematic Hyd	drophytic	C Vegetation <sup>1</sup> (Expla	ain)
1. <u>N/A</u>		-						
2.			= Total Cov	er	<sup>1</sup> Indicators of hydric so	urbed o		nust
					Hydrophytic Vegetation Present?	n 	Yes X	No
Remarks: (Include pho	oto numbers here or on a separat	e sheet.)						

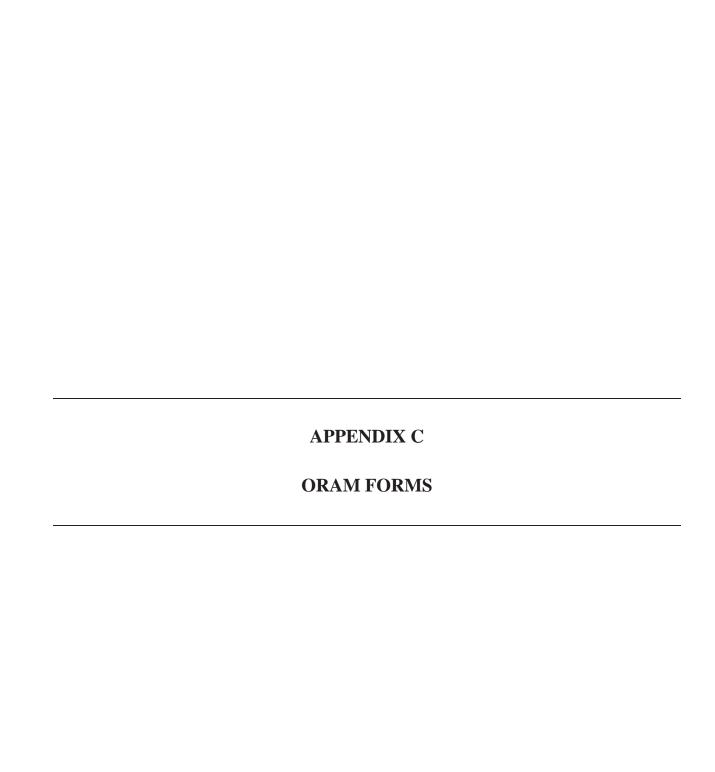
Depth		e to tne dep				or confirm	the absence of ind	icators.)	
•	Matrix Color (moist)	%		Redox Featu %		Loc <sup>2</sup>	– Texture	Domonic	6
(inches) 0-10	Color (moist) 10YR 4/3	100	Color (moist)		Type <sup>1</sup>	LOC	silt loam	Remark	S
0-10	10114/3						Silt IOaiii		
Type: C=Ce	ncentration, D=Deple	tion DM-Do	duced Matrix MS=Ma		Croins		2l coation: DI = Do	re Lining, M=Matrix.	
Hydric Soil Ir	<u>-</u>	tion, Rivi-Re	uuceu Mailix, M5-Ma	iskeu Saliu	Giailis.	-		blematic Hydric Soi	le <sup>3</sup> ·
•			Cond. Claved Ma	hi: (C4)				-	
Histosol (			Sandy Gleyed Ma	. ,			Coast Prairie Re		
	pedon (A2)		Sandy Redox (S5				Dark Surface (S	,	
Black Hist			Stripped Matrix (S				Iron-Manganese		
	Sulfide (A4)		Loamy Mucky Min					ark Surface (TF12)	
	Layers (A5)		Loamy Gleyed Ma				Other (Explain in	i Remarks)	
2 cm Muc		445	Depleted Matrix (F						
	Below Dark Surface (A1	11)	Redox Dark Surfa	` '					
	k Surface (A12)		Depleted Dark Sur Redox Depression	. ,				ophytic vegetation a	
	<u> </u>			1S (F8)				e present, unless di	sturbed or
	ky Peat or Peat (S3)							problematic.	
	.ayer (if observed):	atad aail							
Type:	roots and compac						Ukudaia Cail Dasasa	V	Na V
Depth (ir	iciles)i	0					Hydric Soil Presen	it? Yes	_ No _X_
HYDROLO	OGY								
Wetland Hyd	Irology Indicators:								
Primary Indicat	ors (minimum of one is r	equired; check	all that apply)			Secondary	Indicators (minimum of to	wo required)	_
Surface V	Vater (A1)		Water-Stained Le	aves (B9)			_ Surface Soil Cracks (B	36)	
High Wate	er Table (A2)		Aquatic Fauna (B	13)			_ Drainage Patterns (B10	0)	
Saturation	n (A3)		True Aquatic Plan	ts (B14)			_ Dry-Season Water Tab	ole (C2)	
Water Ma	rks (B1)		Hydrogen Sulfide	Odor (C1)		-	_ Crayfish Burrows (C8	)	
Sediment	Deposits (B2)		Oxidized Rhizospl	neres on Livir	ng Roots (C3)		_ Saturation Visible on A	erial Imagery (C9)	
Drift Depo	osits (B3)		Presence of Redu	iced Iron (C4)	)		_ Stunted or Stressed Pl	lants (D1)	
Algal Mat	or Crust (B4)		Recent Iron Redu	ction in Tilled	Soils (C6)		_ Geomorphic Position ([	02)	
Iron Depo	sits (B5)		Thin Muck Surface	e (C7)			_ FAC-Neutral Test (D5)		
Inundation	n Visible on Aerial Image	ery (B7)	Gauge or Well Da	ta (D9)					
Sparsely	Vegetated Concave Sur	rface (B8)	Other (Explain in F	Remarks)					
Field Observ	ations:								
Surface Water	Present? Yes	No	X Depth (inches):			Wetland F	lydrology Present?	Yes	NoX
Vater Table Pr	resent? Yes	No	X Depth (inches):						
Saturation Pres	sent? Yes	No	X Depth (inches):						
includes capil	lary fringe)								
Describe Re	corded Data (stream	gauge, monit	oring well, aerial pho	tos, previou	ıs inspectio	ns), if availa	ble:		
Remarks									

Project/Site:	Britton-Davidson Tap Line		City/County: Hill	liard/Franklin	Sampling Date:	July 12, 2016
Applicant/Owner	: American Electric Power			State:	OH Sampling Point:	SP-4
Investigator(s):	M. Hall and J. Demarest		Se	ction, Township, Range:	N/A	
Landform (hillslo				•	None	
Slope (%):	0% Lat: 40.05726		Long: -83		Datum: N	VD83
		0.10				
Soil Map Unit Na					/I classification:	N/A
-	rologic conditions on the site typical fo			Yes NoX		.)
Are Vegetation	No, Soil No, or Hyd	rology No	significantly dist		umstances" present?	
Are Vegetation	No, Soil No, or Hyd				X Noany answers in Remarks.)	
SUMMARY O	F FINDINGS - Attach site map	showing sa	impling point lo	cations, transects, impo	rtant features, etc.	
, , , ,	etation Present?	Yes	No <u>X</u> _	Is the Sampled Area		
Hydric Soil Pres	ent?	Yes _ >		within a Wetland?	NoX	
Wetland Hydrolo	ogy Present?	Yes	No <u>X</u> _			
Remarks: Upland area nea	ar Wetland A  N - Use scientific names of plar	nts				
TEGETATIO	Te dec solentino names of plan	Absolute	Dominant Indicat	tor Dominance Test works	hoot:	
Tree Stratum	(Plot size: 30 ft. )	% Cover	Species? Statu			
1. Tilia americ		25	Y FAC	'		4)
2. Carya ovat		10	Y FAC			•/
3. Juglans nig		5	N FAC	·	ant	
4. Maclura po		5 5 3	N FAC	· •		3)
5. Celtis occid	dentalis	3	N FAC			
		48	= Total Cover	Percent of Dominant Sp	ecies	
Sapling/Shrub S	Stratum: Size: 15 ft. )			That Are OBL, FACW, or	FAC: <u>28.57</u> (A	VB)
1. Lonicera m	naackii	30	Y UPL			
2. <u>Euonymus</u>		_10_	Y UPL	·		
3. Ulmus ame	ericana	5	N FAC		Multiply by:	
4	·			OBL species 0		
5		45	= Total Cover	FACW species5		
Herb Stratum:	(Plot size: 5 ft. )	<u>45</u>	= Total Cover	FAC species 25 FACU species 87		
Erigeron ai		15	Y FAC	· · · —	x 5 = 275	
	rus pratensis	15	Y FAC	· · · —		3)
3. Carex sp.		15	Y FAC	·   ——	(-)	• 7
4. Lonicera m	naackii	10	N UPL	' i	= 4.1	
5. Phleum pra	atense	10	N FAC	' i		
6. Geum cana	adense	5	N FAC	Hydrophytic Vegetation	Indicators:	
7. Daucus car		5 5 2	N UPL	1 - Rapid Test for	r Hydrophytic Vegetation	
	artemisiifolia	_2_	N FAC			
9.				3 - Prevalence Inc		
10					Adaptations <sup>1</sup> (Provide sup	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	(Dist size 20 ft )	_77_	= Total Cover		. ,	
Woody Vine Stra  1. Vitis vulpina	·	2	N EAC		Irophytic Vegetation¹ (Explai	in)
<ol> <li>Vitis vulpina</li> <li>2.</li> </ol>	d	_2_	N FAC	'		
		2	= Total Cover	be present, unless distu	· · · · · · · · · · · · · · · · · · ·	
				Hydrophytic Vegetation Present?	ı Yes	No X
Domarka: (laste	de photo numbers here or on a separ	rato choot \		1		
Tishiao. (mold						

Profile Des	Matrice		-	Dodoy Fact	iroo				
Depth	Matrix (maint)	0/		Redox Featu		1 2	- 	D	
(inches)	Color (moist)		Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-4	10YR 4/2	95	10YR 5/4	5	C	M	silt loam		
4-16	10YR 3/2						silt loam		
1Tymo: C=Co	neantration D=Dania	tion DM=Do	duced Matrix MC=Ma	- —— -	Croins		21 continue DI = Do	ro Lining M-Motrix	
Hydric Soil I	oncentration, D=Deple	tion, Rivi=Re	duced Matrix, MS=Ma	sked Sand (	Grains.			re Lining, M=Matrix. blematic Hydric Soils³:	
-								-	
Histosol (			Sandy Gleyed Mat				Coast Prairie Re		
	pedon (A2)		Sandy Redox (S5)				Dark Surface (S	•	
Black His			Stripped Matrix (St				Iron-Manganese		
	Sulfide (A4)		Loamy Mucky Mine					Park Surface (TF12)	
	Layers (A5)		Loamy Gleyed Ma				Other (Explain in	n Remarks)	
2 cm Muc			X Depleted Matrix (F						
	Below Dark Surface (A1	1)	Redox Dark Surface						
	k Surface (A12)		Depleted Dark Sur				<sup>3</sup> Indicators of hydr	ophytic vegetation and we	etland
	ucky Mineral (S1)		Redox Depression	ıs (F8)				e present, unless disturb	ed or
	cky Peat or Peat (S3)							problematic.	
	_ayer (if observed):								
Type:									
Depth (i									
Remarks	ncnes):						Hydric Soil Presei	nt? Yes <u>X</u> N	
Remarks							Hydric Soli Presel	itr fes A N	
HYDROLO							Hydric Soli Presel	itr fes A N	
HYDROLO	DGY	equired; check	all that apply)			Secondary	Indicators (minimum of t		
HYDROLO Wetland Hyo Primary Indica	DGY drology Indicators:	equired; check	all that apply)  Water-Stained Lea	aves (B9)		Secondary		wo required)	
HYDROL( Wetland Hyo Primary IndicaSurface N	DGY drology Indicators: tors (minimum of one is re	equired; check				Secondary	Indicators (minimum of t	wo required)	
HYDROL( Wetland Hyo Primary IndicaSurface N	DGY drology Indicators: tors (minimum of one is re Water (A1) er Table (A2)	equired; check	Water-Stained Lea	13)		Secondary	Indicators (minimum of t Surface Soil Cracks (t	wo required) 36)	
HYDROL ( Wetland Hyo Primary Indica Surface \ High Wat	DGY drology Indicators: tors (minimum of one is re Water (A1) er Table (A2) n (A3)	equired; check	Water-Stained Lea	13) ts (B14)		Secondary	Indicators (minimum of t Surface Soil Cracks (B Drainage Patterns (B1	wo required) 36) 0) ble (C2)	
HYDROLO Wetland Hyo Primary Indica Surface V High Wat Saturatio Water Ma	DGY drology Indicators: tors (minimum of one is re Water (A1) er Table (A2) n (A3)	equired; check	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant	13) ts (B14) Odor (C1)	ng Roots (C3)	Secondary	Indicators (minimum of t Surface Soil Cracks (B Drainage Patterns (B1 Dry-Season Water Ta	wo required) 36) 0) ble (C2)	
HYDROLO Wetland Hyo Primary Indica Surface V High Wat Saturatio Water Ma	DGY drology Indicators: tors (minimum of one is re Water (A1) er Table (A2) n (A3) arks (B1) Deposits (B2)	equired; check	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant Hydrogen Sulfide (	13) ts (B14) Odor (C1) neres on Livin	-	Secondary	Indicators (minimum of t Surface Soil Cracks (B Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8	wo required) 36) 0) ble (C2) s) Aerial Imagery (C9)	
HYDROL( Wetland Hyd Primary Indica Surface V High Wat Saturatio Water Ma Sediment Drift Depo	DGY drology Indicators: tors (minimum of one is re Water (A1) er Table (A2) n (A3) arks (B1) Deposits (B2)	equired; check	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant Hydrogen Sulfide ( Oxidized Rhizosph	l3) ts (B14) Odor (C1) neres on Livin ced Iron (C4)	)	Secondary	Indicators (minimum of t Surface Soil Cracks (B Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A	wo required) 36) 0) ble (C2) s) Aerial Imagery (C9)	
HYDROL( Wetland Hyd Primary Indica Surface V High Wat Saturatio Water Ma Sediment Drift Depo	DGY drology Indicators: tors (minimum of one is reward (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) or Crust (B4)	equired; check	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant Hydrogen Sulfide ( Oxidized Rhizosph Presence of Redu	ts (B14) Odor (C1) heres on Livin ced Iron (C4) stion in Tilled S	)	Secondary	Indicators (minimum of t Surface Soil Cracks (B Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed P	wo required) 36) 0) ble (C2) 4) Aerial Imagery (C9) Plants (D1)	
HYDROLO Wetland Hyd Primary Indica Surface \ High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo	DGY drology Indicators: tors (minimum of one is reward (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) or Crust (B4)		Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant Hydrogen Sulfide ( Oxidized Rhizosph Presence of Redu Recent Iron Reduc	ts (B14) Odor (C1) heres on Livin ced Iron (C4) stion in Tilled Se (C7)	)	Secondary	Indicators (minimum of t Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed P Geomorphic Position (	wo required) 36) 0) ble (C2) 4) Aerial Imagery (C9) Plants (D1)	
HYDROLO Wetland Hyo Primary Indica Surface \( \) High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio	DGY drology Indicators: tors (minimum of one is re Water (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5)	ry (B7)	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant Hydrogen Sulfide ( Oxidized Rhizosph Presence of Redu Recent Iron Reduc	ts (B14) Odor (C1) heres on Livin ced Iron (C4) tion in Tilled S c (C7) a (D9)	)	Secondary	Indicators (minimum of t Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed P Geomorphic Position (	wo required) 36) 0) ble (C2) 4) Aerial Imagery (C9) Plants (D1)	
HYDROLO Wetland Hyo Primary Indica Surface \( \) High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio	OGY  drology Indicators: tors (minimum of one is re Water (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Image Vegetated Concave Sur	ry (B7)	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant Hydrogen Sulfide ( Oxidized Rhizosph Presence of Redu Recent Iron Reduc Thin Muck Surface Gauge or Well Dat	ts (B14) Odor (C1) heres on Livin ced Iron (C4) tion in Tilled S c (C7) a (D9)	)	Secondary	Indicators (minimum of t Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed P Geomorphic Position (	wo required) 36) 0) ble (C2) 4) Aerial Imagery (C9) Plants (D1)	<u> </u>
HYDROL( Wetland Hyd Primary Indica Surface N High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely	DGY  drology Indicators: tors (minimum of one is re Water (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Image Vegetated Concave Sur vations:	ry (B7) face (B8)	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant Hydrogen Sulfide ( Oxidized Rhizosph Presence of Redu Recent Iron Reduc Thin Muck Surface Gauge or Well Dat	ts (B14) Odor (C1) heres on Livin ced Iron (C4) tion in Tilled S c (C7) a (D9)	)		Indicators (minimum of t Surface Soil Cracks (I Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed P Geomorphic Position (	wo required) 36) 0) ble (C2) 4) Aerial Imagery (C9) Plants (D1)	o
HYDROLO Wetland Hyo Primary Indica Surface N High Wate Saturation Water Ma Sediment Drift Dep Algal Mat Iron Depo Inundatio Sparsely	DGY  drology Indicators: tors (minimum of one is re Water (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Image Vegetated Concave Sur vations: r Present? Yes	ry (B7) face (B8)	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant Hydrogen Sulfide ( Oxidized Rhizosph Presence of Redu Recent Iron Reduc Thin Muck Surface Gauge or Well Dat Other (Explain in R	ts (B14) Odor (C1) heres on Livin ced Iron (C4) tion in Tilled S c (C7) a (D9)	)		Indicators (minimum of to Surface Soil Cracks (Banage Patterns (Banage Patterns (Banage Patterns (Captish Burrows (Captish Bu	wo required) 36) 0) ble (C2) 4) Aerial Imagery (C9) Plants (D1)	
HYDROLO Wetland Hyo Primary Indica Surface N High Wat Saturation Water Ma Sediment Drift Dep Algal Mat Iron Depot Inundation Sparsely Field Observ Surface Wate	DGY  drology Indicators: tors (minimum of one is re Water (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Image Vegetated Concave Sur rations: r Present? Yes resent? Yes	ry (B7) face (B8) No No	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant Hydrogen Sulfide ( Oxidized Rhizosph Presence of Redu Recent Iron Reduc Thin Muck Surface Gauge or Well Dat Other (Explain in R	ts (B14) Odor (C1) heres on Livin ced Iron (C4) tion in Tilled S c (C7) a (D9)	)		Indicators (minimum of to Surface Soil Cracks (Banage Patterns (Banage Patterns (Banage Patterns (Captish Burrows (Captish Bu	wo required) 36) 0) ble (C2) 4) Aerial Imagery (C9) Plants (D1)	
HYDROLO Wetland Hyo Primary Indica Surface N High Wate Saturation Water Ma Sediment Drift Dep Algal Mat Iron Depot Inundation Sparsely Field Observ Surface Water Water Table P	DGY drology Indicators: tors (minimum of one is re Water (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) For Crust (B4) osits (B5) n Visible on Aerial Image Vegetated Concave Sur vations: r Present? Yes resent? Yes	ry (B7) face (B8) No No	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant Hydrogen Sulfide ( Oxidized Rhizosph Presence of Redu Recent Iron Reduc Thin Muck Surface Gauge or Well Dat Other (Explain in R	ts (B14) Odor (C1) heres on Livin ced Iron (C4) tion in Tilled S c (C7) a (D9)	)		Indicators (minimum of to Surface Soil Cracks (Banage Patterns (Banage Patterns (Banage Patterns (Captish Burrows (Captish Bu	wo required) 36) 0) ble (C2) 4) Aerial Imagery (C9) Plants (D1)	
HYDROLO Wetland Hyc Primary Indica Surface N High Wat Saturation Water Ma Sediment Drift Dep Algal Mat Iron Depc Inundatio Sparsely Field Observ Surface Water Water Table P Saturation Pre (includes capi	DGY drology Indicators: tors (minimum of one is re Water (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) For Crust (B4) osits (B5) n Visible on Aerial Image Vegetated Concave Sur vations: r Present? Yes resent? Yes	ry (B7) face (B8) No No No	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant Hydrogen Sulfide ( Oxidized Rhizosph Presence of Redu Recent Iron Reduc Thin Muck Surface Gauge or Well Dat Other (Explain in R  X Depth (inches): X Depth (inches):	ts (B14) Odor (C1) Iteres on Livin ced Iron (C4) Station in Tilled S (C7) a (D9) Remarks)	Soils (C6)	Wetland H	Indicators (minimum of t Surface Soil Cracks (B Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed P Geomorphic Position (I FAC-Neutral Test (D5)	wo required) 36) 0) ble (C2) 4) Aerial Imagery (C9) Plants (D1)	
HYDROLO Wetland Hyc Primary Indica Surface N High Wat Saturation Water Ma Sediment Drift Dep Algal Mat Iron Depc Inundatio Sparsely Field Observ Surface Water Water Table P Saturation Pre (includes capi	DGY  drology Indicators: tors (minimum of one is reward (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) For Crust (B4) osits (B5) n Visible on Aerial Image Vegetated Concave Survations: r Present? Yes resent? Yes llary fringe)	ry (B7) face (B8) No No No	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant Hydrogen Sulfide ( Oxidized Rhizosph Presence of Redu Recent Iron Reduc Thin Muck Surface Gauge or Well Dat Other (Explain in R  X Depth (inches): X Depth (inches):	ts (B14) Odor (C1) Iteres on Livin ced Iron (C4) Station in Tilled S (C7) a (D9) Remarks)	Soils (C6)	Wetland H	Indicators (minimum of t Surface Soil Cracks (B Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed P Geomorphic Position (I FAC-Neutral Test (D5)	wo required) 36) 0) ble (C2) 4) Aerial Imagery (C9) Plants (D1)	
HYDROLO  Wetland Hyo  Primary Indica  Surface V  High Wate Ma  Sediment  Drift Depo  Algal Mat  Iron Depo  Inundatio  Sparsely  Field Observ  Surface Wate  Water Table P  Saturation Pre  (includes capil  Describe Re	DGY  drology Indicators: tors (minimum of one is reward (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) For Crust (B4) osits (B5) n Visible on Aerial Image Vegetated Concave Survations: r Present? Yes resent? Yes llary fringe)	ry (B7) face (B8) No No No	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant Hydrogen Sulfide ( Oxidized Rhizosph Presence of Redu Recent Iron Reduc Thin Muck Surface Gauge or Well Dat Other (Explain in R  X Depth (inches): X Depth (inches):	ts (B14) Odor (C1) Iteres on Livin ced Iron (C4) Station in Tilled S (C7) a (D9) Remarks)	Soils (C6)	Wetland H	Indicators (minimum of t Surface Soil Cracks (B Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed P Geomorphic Position (I FAC-Neutral Test (D5)	wo required) 36) 0) ble (C2) 4) Aerial Imagery (C9) Plants (D1)	
HYDROLO Wetland Hyc Primary Indica Surface N High Wat Saturation Water Ma Sediment Drift Dep Algal Mat Iron Depc Inundatio Sparsely Field Observ Surface Water Water Table P Saturation Pre (includes capi	DGY  drology Indicators: tors (minimum of one is reward (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) For Crust (B4) osits (B5) n Visible on Aerial Image Vegetated Concave Survations: r Present? Yes resent? Yes llary fringe)	ry (B7) face (B8) No No No	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant Hydrogen Sulfide ( Oxidized Rhizosph Presence of Redu Recent Iron Reduc Thin Muck Surface Gauge or Well Dat Other (Explain in R  X Depth (inches): X Depth (inches):	ts (B14) Odor (C1) Iteres on Livin ced Iron (C4) Station in Tilled S (C7) a (D9) Remarks)	Soils (C6)	Wetland H	Indicators (minimum of t Surface Soil Cracks (B Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed P Geomorphic Position (I FAC-Neutral Test (D5)	wo required) 36) 0) ble (C2) 4) Aerial Imagery (C9) Plants (D1)	
HYDROLO  Wetland Hyo  Primary Indica  Surface V  High Wate Ma  Sediment  Drift Depo  Algal Mat  Iron Depo  Inundatio  Sparsely  Field Observ  Surface Wate  Water Table P  Saturation Pre  (includes capil  Describe Re	DGY  drology Indicators: tors (minimum of one is reward (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) For Crust (B4) osits (B5) n Visible on Aerial Image Vegetated Concave Survations: r Present? Yes resent? Yes llary fringe)	ry (B7) face (B8) No No No	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant Hydrogen Sulfide ( Oxidized Rhizosph Presence of Redu Recent Iron Reduc Thin Muck Surface Gauge or Well Dat Other (Explain in R  X Depth (inches): X Depth (inches):	ts (B14) Odor (C1) Iteres on Livin ced Iron (C4) Station in Tilled S (C7) a (D9) Remarks)	Soils (C6)	Wetland H	Indicators (minimum of t Surface Soil Cracks (B Drainage Patterns (B1 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on A Stunted or Stressed P Geomorphic Position (I FAC-Neutral Test (D5)	wo required) 36) 0) ble (C2) 4) Aerial Imagery (C9) Plants (D1)	

Project/Site:	Britton-Davi	dson Tap Line		City/Cour	nty: Hillian	rd/Franklin		Sampling Date:	July 18, 2016
Applicant/Owner:	: American El	ectric Power				S	tate: OH	Sampling Point:	SP-5
Investigator(s):	J. Demarest	,			Section	on, Township, Range:	N/A		
Landform (hillslop	oe, terrace, etc.	): Flat				f (concave, convex, none	e): None		
Slope (%):	0%					3139		Datum: N	NAD83
Soil Map Unit Na	ime:	Celina silt loam	2 to 6 percent slopes					sification:	N/A
Are climatic/hydro	ologic conditi	ons on the site t	ypical for this time of y	ear?	Y	res No	X (If	f no, explain in Remark	s.)
Are Vegetation	No	, Soil No	, or Hydrology No	significan	tly disturb			inces" present?	,
							es X	No	
Are Vegetation	No	, Soil No	, or Hydrology No	naturally	problema	tic? (If needed, ex	plain any an	swers in Remarks.)	
SUMMARY OF	F FINDINGS	S - Attach site	map showing sa	mpling po	int loca	ations, transects, i	mportant	features, etc.	
Hydrophytic Vege	etation Prese	nt?	Yes X		ls	the Sampled Area			
Hydric Soil Prese			Yes		<u>х</u>   ,	within a Wetland?	Yes	NoX	
Wetland Hydrolog	gy Present?		Yes	No	<u>×</u>				
Remarks: Upland area									
VEGETATION	<b>N</b> - Use scie	entific names	of plants						
			Absolute	Dominant	Indicator	Dominance Test v	vorksheet:		
Tree Stratum	(Plot size	e: 30 ft.		Species?	Status	Number of Domina			
1. Populus de	Itoides		20	Y	FAC	That Are OBL, FAC	W, or FAC:	(	(A)
2. Pinus strob	us			<u>Y</u>	F <u>AC</u> U				
3. 4.		,				Total Number of Description Species Across All		5 (	(B)
5.						Species Across Air	oliala.	(	ы
			30	= Total Co	over	Percent of Domina	nt Species		
Sapling/Shrub St	tratum:	Size: 15 ft.				That Are OBL, FAC	W, or FAC:	60.00 (	(A/B)
1. Populus de				Y	FAC	B			
<ol> <li>Prunus virg</li> <li>3.</li> </ol>	iiniana			Y	F <u>AC</u> U	Prevalence Index Total % Cover of		: Multiply by:	
4.								=	
5.						FACW species			
			_15_	= Total Co	over			=	
Herb Stratum:  1. Poa pratens		5 ft.			— FAC	FACU species UPL species	x 4	=	
<ol> <li>Poa pratens</li> <li>Solidago ca</li> </ol>				N	FACU	Column Totals:			В)
3. Dipsacus fu			10	N	FACU	_	`		,
4. Asclepias s	yriaca		5	N	F <u>AC</u> U	Prevalence Index =	B/A =		
l						11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		-1	
l <del>-</del>						Hydrophytic Veget		ators: ophytic Vegetation	
						X 2 - Dominar	-	. ,	
١,						3 - Prevalen	ce Index is	≤3.0 <sup>1</sup>	
10								otations1 (Provide sup on a separate sheet	
Moody Vino Strai	t	(Diet size	<u>55</u>	= Total Co	over			·	•
Woody Vine Strat		(Plot size				Problemati	с пушорну	tic Vegetation¹ (Expl	aiii)
2.						1 Indicators of hydr	ic soil and v	wetland hydrology m	nust
				= Total Co	over	be present, unless			
						Hydrophytic Veget Present?	tation	Yes X	No
Remarks: (Include	de photo num	bers here or on	a separate sheet.)			<u> </u>			
I									

(inches) 0-4	Matrix		R	Redox Featur			the absence of ind	,
0-4	Color (moist)	<del></del> -	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	10YR 3/3	100					silt loam	
4-16	10YR 3/2	100					silt loam	
Type: C=Con	centration, D=Depletion, F		uced Matrix MS=Mas	ked Sand G	rains		<sup>2</sup> Location: PL= Por	e Lining M=Matrix
ydric Soil Ind		tivi itou	dood Maanx, Mo Mac	onou ounu o	ranio.			plematic Hydric Soils <sup>3</sup> :
Histosol (A			Sandy Gleyed Mate	riv (S4)			Coast Prairie Red	•
	*	-		` '				
Histic Epipe		-	Sandy Redox (S5)				Dark Surface (S	
Black Histic		-	Stripped Matrix (S6				Iron-Manganese	
Hydrogen S		-	Loamy Mucky Mine					ark Surface (TF12)
Stratified La		-	Loamy Gleyed Mat				Other (Explain in	Remarks)
2 cm Muck	, ,	_	Depleted Matrix (F3					
	elow Dark Surface (A11)	_	Redox Dark Surfac	e (F6)				
Thick Dark	Surface (A12)	_	Depleted Dark Surf	ace (F7)			3Indicators of hydro	phytic vegetation and wetland
Sandy Muc	cky Mineral (S1)	_	Redox Depression	s (F8)				present, unless disturbed or
5 cm Mucky	y Peat or Peat (S3)						ŗ	problematic.
Restrictive La	yer (if observed):							
Type:								
Depth (inc	ches):						Hydric Soil Presen	t? Yes No _X
HYDROLO	GY							
Vetland Hydro	ology Indicators:							
Salara a la diserta								
rimary indicato	ors (minimum of one is required	d; check a	all that apply)			Secondary	Indicators (minimum of tw	/o required)
Surface Wa		d; check a	all that apply)Water-Stained Lea	ves (B9)		Secondary	Indicators (minimum of tw Surface Soil Cracks (B	
	ater (A1)	d; check a				Secondary		6)
Surface Wa	ater (A1) Table (A2)	d; check a - -	Water-Stained Lea	3)		Secondary	Surface Soil Cracks (B	6)
Surface Wa	ater (A1) Table (A2) (A3)	d; check a - - -	Water-Stained Lea Aquatic Fauna (B1	3) s (B14)		Secondary	Surface Soil Cracks (B Drainage Patterns (B10	6) )) le (C2)
Surface Wa High Water Saturation ( Water Mark	ater (A1) Table (A2) (A3)	d; check a - - - -	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant	3) s (B14) Odor (C1)	Roots (C3)	Secondary	Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tab	6) )) le (C2)
Surface Wa High Water Saturation ( Water Mark Sediment D	ater (A1) Table (A2) (A3) ks (B1) Deposits (B2)	d; check a - - - -	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant: Hydrogen Sulfide ( Oxidized Rhizosph	3) s (B14) Odor (C1) eres on Living	Roots (C3)	Secondary	Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tab Crayfish Burrows (C8) Saturation Visible on Ad	6) )) le (C2) erial Imagery (C9)
Surface Wa High Water Saturation ( Water Mark Sediment D Drift Depos	ater (A1) Table (A2) (A3) ks (B1) Deposits (B2) sits (B3)	d; check a - - - - - -	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant: Hydrogen Sulfide ( Oxidized Rhizosph-	3) s (B14) Odor (C1) eres on Living ced Iron (C4)	, ,	Secondary	Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tab Crayfish Burrows (C8) Saturation Visible on Ad Stunted or Stressed Pla	6) )) le (C2) erial Imagery (C9) ants (D1)
Surface Water High Water Saturation ( Water Mark Sediment D Drift Depos Algal Mat or	ater (A1) Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4)	d; check a - - - - - -	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant: Hydrogen Sulfide C Oxidized Rhizosphi Presence of Reduct Recent Iron Reduct	3) s (B14) Odor (C1) eres on Living ced Iron (C4) tion in Tilled So	, ,	Secondary	Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tab Crayfish Burrows (C8) Saturation Visible on Ar Stunted or Stressed Pla Geomorphic Position (D	6) )) le (C2) erial Imagery (C9) ants (D1)
Surface Water High Water Saturation ( Water Mark Sediment D Drift Depos Algal Mat or Iron Deposi	ater (A1) Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5)	- - - - - -	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant: Hydrogen Sulfide C Oxidized Rhizosph: Presence of Reduc Recent Iron Reduct Thin Muck Surface	3) s (B14) Odor (C1) eres on Living ced Iron (C4) tion in Tilled Sc (C7)	, ,	Secondary	Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tab Crayfish Burrows (C8) Saturation Visible on Ad Stunted or Stressed Pla	6) )) le (C2) erial Imagery (C9) ants (D1)
Surface Water High Water Saturation (Water Mark Sediment D Drift Depos Algal Mat or Iron Deposi Inundation \	ater (A1) Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) Visible on Aerial Imagery (B7	- - - - - -	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant: Hydrogen Sulfide C Oxidized Rhizosphi Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data	3) s (B14) Odor (C1) eres on Living ced Iron (C4) tion in Tilled Sc (C7) a (D9)	, ,	Secondary	Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tab Crayfish Burrows (C8) Saturation Visible on Ar Stunted or Stressed Pla Geomorphic Position (D	6) )) le (C2) erial Imagery (C9) ants (D1)
Surface Waler High Water Saturation ( Water Mark Sediment D Drift Depos Algal Mat or Iron Deposi Inundation V Sparsely V	ater (A1) Table (A2) (A3) ks (B1) Deposits (B2) Sitis (B3) or Crust (B4) its (B5) Visible on Aerial Imagery (B7 degetated Concave Surface (I	- - - - - -	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant: Hydrogen Sulfide C Oxidized Rhizosph: Presence of Reduc Recent Iron Reduct Thin Muck Surface	3) s (B14) Odor (C1) eres on Living ced Iron (C4) tion in Tilled Sc (C7) a (D9)	, ,	Secondary	Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tab Crayfish Burrows (C8) Saturation Visible on Ar Stunted or Stressed Pla Geomorphic Position (D	6) )) le (C2) erial Imagery (C9) ants (D1)
Surface Waler High Water Saturation ( Water Mark Sediment D Drift Depos Algal Mat on Iron Deposi Inundation V Sparsely Volice Tield Observat	ater (A1) Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) V(sible on Aerial Imagery (B7 degetated Concave Surface (I	- - - - - - - - - - - - - -	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant: Hydrogen Sulfide ( Oxidized Rhizosphi Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in R	3) s (B14) Odor (C1) eres on Living ced Iron (C4) tion in Tilled Sc (C7) a (D9)	, ,		Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tab Crayfish Burrows (C8) Saturation Visible on Ad Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	6)  Ile (C2)  Ile (C2)  Ile (C1)  Ile (C2)  Il
Surface Water Saturation ( Water Mark Sediment D Drift Depos Algal Mat or Iron Deposi Inundation N Sparsely Vo Field Observat Gurface Water F	ater (A1) Table (A2) (A3) Ks (B1) Deposits (B2) Sits (B3) or Crust (B4) its (B5) Visible on Aerial Imagery (B7 degetated Concave Surface (I	- - - - - - - - - - - - - - - - - - -	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant: Hydrogen Sulfide C Oxidized Rhizosph: Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in R	3) s (B14) Odor (C1) eres on Living ced Iron (C4) tion in Tilled Sc (C7) a (D9)	, ,		Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tab Crayfish Burrows (C8) Saturation Visible on Ar Stunted or Stressed Pla Geomorphic Position (D	6)  Ile (C2)  Ile (C2)  Ile (C1)  Ile (C2)  Il
Surface Water Saturation ( Water Mark Sediment D Drift Depos Algal Mat or Iron Deposi Inundation N Sparsely Vo Field Observat Surface Water F	ater (A1) Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) Visible on Aerial Imagery (B7 degetated Concave Surface (Interest) tions: Present? Yes esent? Yes	- - - - - - - - - - - - - - - - - - -	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant: Hydrogen Sulfide ( Oxidized Rhizosphi Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in R	3) s (B14) Odor (C1) eres on Living ced Iron (C4) tion in Tilled Sc (C7) a (D9)	, ,		Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tab Crayfish Burrows (C8) Saturation Visible on Ad Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	6)  Ile (C2)  Ile (C2)  Ile (C1)  Ile (C2)  Il
Surface Water High Water Saturation ( Water Mark Sediment D Drift Depose Algal Mat or Iron Deposi Inundation N Sparsely Votage Saturation Presessaturation (Page 1997) Proposed Presessaturation (Page 1997) Presessaturation (Page 1	ater (A1) Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) Visible on Aerial Imagery (B7 degetated Concave Surface (Interest) Present? Yes ent? Yes	- - - - - - - - - - - - - - - - - - -	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant: Hydrogen Sulfide C Oxidized Rhizosph: Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in R	3) s (B14) Odor (C1) eres on Living ced Iron (C4) tion in Tilled Sc (C7) a (D9)	, ,		Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tab Crayfish Burrows (C8) Saturation Visible on Ad Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	6)  Ile (C2)  Ile (C2)  Ile (C1)  Ile (C2)  Il
Surface Water Saturation ( Water Mark Sediment D Drift Depos Algal Mat on Iron Deposi Inundation N Sparsely Vo Field Observat Surface Water F Water Table Prese includes capilla	ater (A1) Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) Visible on Aerial Imagery (B7 degetated Concave Surface (Interest) tions: Present? Yes ent? Yes ory fringe)	) B88) No 2 No 2	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant: Hydrogen Sulfide ( Oxidized Rhizosphi Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in R  X Depth (inches): X Depth (inches):	3) s (B14) Ddor (C1) eres on Living sed Iron (C4) tion in Tilled Sc (C7) a (D9) emarks)	pils (C6)	Wetland H	Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tab Crayfish Burrows (C8) Saturation Visible on Ad Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	6)  I)  le (C2)  erial Imagery (C9)  ants (D1)  12)
Surface Water Saturation ( Water Mark Sediment D Drift Depos Algal Mat on Iron Deposi Inundation N Sparsely Vo Field Observat Surface Water F Water Table Prese includes capilla	ater (A1) Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) Visible on Aerial Imagery (B7 degetated Concave Surface (Interest) Present? Yes ent? Yes	) B88) No 2 No 2	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant: Hydrogen Sulfide ( Oxidized Rhizosphi Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in R  X Depth (inches): X Depth (inches):	3) s (B14) Ddor (C1) eres on Living sed Iron (C4) tion in Tilled Sc (C7) a (D9) emarks)	pils (C6)	Wetland H	Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tab Crayfish Burrows (C8) Saturation Visible on Ad Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	6)  Ile (C2)  Ile (C2)  Ile (C1)  Ile (C2)  Il
Surface Water Saturation ( Water Mark Sediment D Drift Depos Algal Mat on Iron Deposi Inundation N Sparsely Vo Field Observat Surface Water F Water Table Prese includes capilla	ater (A1) Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) Visible on Aerial Imagery (B7 degetated Concave Surface (Interest) tions: Present? Yes ent? Yes ory fringe)	) B88) No 2 No 2	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant: Hydrogen Sulfide ( Oxidized Rhizosphi Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in R  X Depth (inches): X Depth (inches):	3) s (B14) Ddor (C1) eres on Living sed Iron (C4) tion in Tilled Sc (C7) a (D9) emarks)	pils (C6)	Wetland H	Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tab Crayfish Burrows (C8) Saturation Visible on Ad Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	6)  i) le (C2)  erial Imagery (C9)  ants (D1)  i2)
Surface Water Saturation ( Water Mark Sediment D Drift Depos Algal Mat on Iron Deposi Inundation N Sparsely Vo Field Observat Surface Water F Water Table Prese includes capilla	ater (A1) Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) Visible on Aerial Imagery (B7 degetated Concave Surface (Interest) tions: Present? Yes ent? Yes ory fringe)	) B88) No 2 No 2	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant: Hydrogen Sulfide ( Oxidized Rhizosphi Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in R  X Depth (inches): X Depth (inches):	3) s (B14) Ddor (C1) eres on Living sed Iron (C4) tion in Tilled Sc (C7) a (D9) emarks)	pils (C6)	Wetland H	Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tab Crayfish Burrows (C8) Saturation Visible on Ad Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	6)  i) le (C2)  erial Imagery (C9)  ants (D1)  i2)
Surface Water Saturation ( Water Mark Sediment D Drift Depos Algal Mat on Iron Deposi Inundation N Sparsely Vo Field Observat Surface Water F Water Table Prese includes capilla	ater (A1) Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) Visible on Aerial Imagery (B7 degetated Concave Surface (Interest) tions: Present? Yes ent? Yes ory fringe)	) B88) No 2 No 2	Water-Stained Lea Aquatic Fauna (B1 True Aquatic Plant: Hydrogen Sulfide ( Oxidized Rhizosphi Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in R  X Depth (inches): X Depth (inches):	3) s (B14) Ddor (C1) eres on Living sed Iron (C4) tion in Tilled Sc (C7) a (D9) emarks)	pils (C6)	Wetland H	Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tab Crayfish Burrows (C8) Saturation Visible on Ad Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	6)  I)  le (C2)  erial Imagery (C9)  ants (D1)  12)



# Background Information

Name: Mia Hall
Date: July 13, 2016
Affiliation: Civil & Environmental Consultants, Inc
250 Old Wilson Bridge Road, Suite 250, Worthington, Ohio 43085
Phone Number: 614-540-6633
e-mail address: mhall@cecinc.com
Name of Wetland: Wetland A
Vegetation Communit(ies): Herbaceous
HGM Class(es): Depression, Riverine
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.

Please See Ecological Survey Map

Lat/Long or UTM Coordinate 40, 05117, -83.13358
USGS Quad Name Hilliard, Ohio
County Franklin
Township Norwich
Section and Subsection N/A
Hydrologic Unit Code 05060001
Site Visit July 12, 2016
National Wetland Inventory Map Yes - not a mapped wetland
Ohio Wetland Inventory Map
Soil Survey Yes - Kokomo silty clay loam, 0 to 2 % slopes
Delineation report/map Ecological Survey Report Britton-Davidson Tap Line

CEC# 162-707

Name of Wetland: Wetland A	
Wetland Size (acres, hectares): 0.04 acre	
Sketch: Include north arrow, relationship with other surface waters, vegetation	n zones, etc.
1	
N D and Tax line	
N Proposed Tap Line	
Y	
	- / V
	L Forested Area -
	E Foresto
Welland A	V
	1
y/ W/ V/ V/	
-,7	
Stream 1	1
STIELL	1
	Maintained
	Lawn Area
1	
Approximate Site Boundary	
Approximation	
omments, Narrative Discussion, Justification of Category Changes:	
with the an apparagnal metho	nd located
Wetland A is an emergent wetla	-and 1) at
along an ephemeral stream (Str	earn a /
to rected (D) IIU	JI. DITE
the edge of a forested corridor South of the Wetland is main	lained lauin
eouth of the Wetland is main	ICVITIES INVANCE
The wetland is dominated by	INVASIVE
The Wetland 13	
Typha angustifolia	
14	
Final score: 17	Category:

Wetland A CEC#162-707

## **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	/	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	/	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	/	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		/
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.		/

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

## **Narrative Rating**

Wetland A CEC#162-707

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <a href="http://www.dnr.state.oh.us/dnap">http://www.dnr.state.oh.us/dnap</a>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES  Wetland should be evaluated for possible Category 3 status  Go to Question 2	Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES  Wetland is a Category 3 wetland.  Go to Question 3	Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	Go to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	Go to Question 6
6	<b>Bogs.</b> Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	Go to Question 8a
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES  Wetland is a Category 3 wetland  Go to Question 8b	Go to Question 8b

		CEC+ 162-70
Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES  Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		100
an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES  Wetland should be evaluated for possible Category 3 status	NO Go to Question 90
	Go to Question 10	
Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES Go to Question 9d	NO Go to Question 1
Does the wetland have a predominance of native species within its	YES	NO
vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9
	Go to Question 10	
Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES  Wetland should be evaluated for possible Category 3 status	NO Go to Question 1
	Go to Question 10	
Lake Plain Sand Prairies (Oak Openings) Is the wetland located in	YES	(NO)
Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland	Go to Question 1
gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this	Go to Question 11	
Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties),	YES  Wetland should be evaluated for possible Category 3 status	NO Complete Quantitative Rating
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?  Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?  Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?  Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.  Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?  Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?  Lake Plain Sand Prairies (Oak Openings) Is the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.  Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties)	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?  Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?  Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?  Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.  Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species or an also be present?  Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.  Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Myandot, Crawford, and Marion).  Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wo

Table 1. Characteristic plant	species.
-------------------------------	----------

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
invasivelexotic spp Lythrum salicaria Myriophyllum spicatum Najas minor Phalaris arundinacea Phragmites australis Potamogeton crispus Ranunculus ficaria Rhamnus frangula Typha angustifolia Typha xglanca		bog species  Calla palustris Carex atlantica var capillacea Carex echinata Carex oligosperma Carex trisperma Chamaedaphne calyculata Decodon verticillatus Eriophorum virginicum Larix laricina Nemopanthus mucronatus Schechzeria palustris	Oak Opening species  Carex cryptolepis Carex lasiocarpa Carex stricta Cladium mariscoides Calamagrostis stricta Calamagrostis canadensis Quercus palustris	wet prairie species  Calamagrostis canadensis  Calamogrostis stricta  Carex atherodes  Carex buxbaumii  Carex pellita  Carex sartwellii  Gentiana andrewsii  Helianthus grosseserratus  Liatris spicata  Lysimachia quadriflora  Lythrum alatum
	Parnassia giauca Potentilla fruticosa Rhamnus alnifolia Rhynchospora capillacea Salix candida Salix myricoides Salix serissima Solidago ohioensis Tofieldia glutinosa Triglochin maritimum Triglochin palustre	Scheenzerta patustris Sphagnum spp. Vaccinium macrocarpon Vaccinium corymbosum Vaccinium oxycoccos Woodwardia virginica Xyris difformis		Pycnanthemum virginianum Silphium terebinthinaceum Sorghastrum nutans Spartina pectinata Solidago riddellii

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: Britton T	Davidson Tap Line	Rater(s): M. Hall	Date: 7/13/2016
0 0	Metric 1. Wetland	Area (size).	Wetland A CEC#162-707
max 6 pts subtotal S	>50 acres (>20.2ha) (6) 25 to <50 acres (10.1 to 10 to <25 acres (4 to <1 3 to <10 acres (1.2 to <4 0.3 to <3 acres (0.12 to 0.1 to <0.3 acres (0.04 t <0.1 acres (0.04ha) (0 p	ots) <20.2ha) (5 pts) 0.1ha) (4 pts) Ha) (3 pts) <1.2ha) (2pts) o <0.12ha) (1 pt)	
4 4 1	Metric 2. Upland b	ouffers and surround	ing land use.
0 2 4	WIDE. Buffers average MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers average VERY LOW. 2nd growth LOW. Old field (>10 year MODERATELY HIGH. HIGH. Urban, industrial	n. Select only one and assign score. If 50m (164ft) or more around wetland page 25m to <50m (82 to <164ft) around rage 10m to <25m (32ft to <82ft) around research services. Select one or double check and and or older forest, prairie, savannah, wild ars), shrub land, young second growth Residential, fenced pasture, park, consequences.	erimeter (7) I wetland perimeter (4) Ind wetland perimeter (1) Ind perimeter (0) Ind
9 13	Metric 3. Hydrolog	gy.	
3	a. Sources of Water. Score all the High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent sure Perennial surface water c. Maximum water depth. Selection (27.6 (27.6 (1).7 to 27.6 (20.4 to 0.7 (15.7 to 27.6 (20.4 to 0.4 to 0.7 (20.4 to 0.4 to	orface water (3) (lake or stream) (5) 3d. t only one and assign score. Sin) (2)	
5	Recovered (7) Recovering (3) Recent or no recovery (1)	ditch tile	point source (nonstormwater) filling/grading road bed/RR track dredging other
8 21	Metric 4. Habitat	Alteration and Develo	opment.
2.5	None or none apparent Recovered (3) Recovering (2) Recent or no recovery (7) B. Habital development. Select (6) Excellent (7) Very good (6) Good (5)	1)	
4	Moderately good (4) Fair (3) Poor to fair (2) X Poor (1) C Habitat alteration. Score one	or double check and average.	
4.5	None or none apparent	(9) Check all disturbances observed mowing grazing clearcutting	shrub/sapling removal herbaceous/aquatic bed removal sedimentation
Subtotal this page		selective cutting woody debris removal toxic pollutants	dredging farming nutrient enrichment

Site: 🗑	Britton-	-Davidson Tap Line Rate	r(s): M.	Hall Date: 7/13/2016
	al			3.41.11.
n	ubtotal first pay			Wetland A
	ловован повера			CEC#162-707
D	21	Metric 5. Special Wetlar	nas.	
nax 10 pts	subtotal	Check all that apply and score as indicated		
		Bog (10)		
		Fen (10)		
		Old growth forest (10)  Mature forested wetland (5)		
	0	Lake Erie coastal/tributary wetland-	unrestricted by	drology (10)
		Lake Erie coastal/tributary wetland-		
		Lake Plain Sand Prairies (Oak Ope	nings) (10)	
		Relict Wet Prairies (10)		
		Known occurrence state/federal three Significant migratory songbird/water	eatened or end	angered species (10)
		Category 1 Wetland. See Question		
	-			terspersion, microtopography.
-4	17	metric o. Trant commun	ities, iiii	erspersion, inicrotopography.
ax 20 pts.	subtotal	6a. Wetland Vegetation Communities	Vegetation	Community Cover Scale
		Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
		O Aquatic bed	1	Present and either comprises small part of wetland's
	1	Emergent		vegetation and is of moderate quality, or comprises a
	1	O Shrub Forest	2	significant part but is of low quality
		Mudflats	2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small
		Open water		part and is of high quality
		6 Other	3	Present and comprises significant part, or more, of wetland's
		6b. horizontal (plan view) Interspersion		vegetation and is of high quality
		Select only one High (5)	Norrative D	topovieties of Water-Antique Over184
		Moderately high(4)	low	Low spp diversity and/or predominance of nonnative or
		Moderate (3)	1017	disturbance tolerant native species
	0	Moderately low (2)	mod	Native spp are dominant component of the vegetation,
		Low (1)		although nonnative and/or disturbance tolerant native spp
		X None (0)  6c Coverage of invasive plants Refer		can also be present, and species diversity moderate to
		to Table 1 ORAM long form for list. Add		moderately high, but generally w/o presence of rare threatened or endangered spp
		or deduct points for coverage	high	A predominance of native species, with nonnative spp
		X Extensive >75% cover (-5)		and/or disturbance tolerant native spp absent or virtually
	-5	Moderate 25-75% cover (-3)		absent, and high spp diversity and often, but not always,
		Sparse 5-25% cover (-1) Nearly absent <5% cover (0)	_	the presence of rare, threatened, or endangered spp
		Absent (1)	Mudflat and	Open Water Class Quality
	(	6d. Microtopography	0	Absent <0.1ha (0.247 acres)
	:	Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 acres)
		Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88 acres)
	D	Coarse woody debris >15cm (6in)  Standing dead >25cm (10in) dbh	3	High 4ha (9.88 acres) or more
		O Standing dead >25cm (10in) dbh Amphibian breeding pools	Microtopes	raphy Cover Scale
		The state of the s	0	Absent
			1	Present very small amounts or if more common of marginal quality
			2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
			3	Present in moderate or greater amounts
100				and of highest quality

End of Quantitative Rating. Complete Categorization Worksheets.

# **ORAM Summary Worksheet**

Wetland A CEC#162-707

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1,
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
9	Metric 2. Buffers and surrounding land use	4	
	Metric 3. Hydrology	q	
	Metric 4. Habitat	R	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-4	
	TOTAL SCORE	17	Category based on score breakpoints

**Complete Wetland Categorization Worksheet.** 

# **Wetland Categorization Worksheet**



Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions:  Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score less than the Category 2 scoring threshold (excluding gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions:  Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES  Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES  Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	(NO)	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES  Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, loca or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Final Category	
Choose one Category 1 Category 2 Category 2	egory 3

**End of Ohio Rapid Assessment Method for Wetlands.** 



# Chief Primary Headwater Habitat Evaluation Form

26

HHEI Score (sum of metrics 1, 2, 3):

	ION Britton-Davidso			Hilliard, Franklin (			
	SITE NUMBER	Stream 1	RIVER	BASIN 05060001	DR/	AINAGE AREA (mi²)	0.08
ENGTH OF STREA	AM REACH (ft) 200	LAT 40.	05728 LC	NG -83.13303 RI	VER CODE	RIVER MILE	
ATE 07/12/16	SCORER MRH	CC	OMMENTS (	culvert placement	and straight	ened	
	e All Items On This Fo						ruction
OTE. Complete							
TREAM CHANN MODIFICATIONS		ATURAL CH	ANNEL	RECOVERED RE	COVERING	RECENT OR NO REC	COVER
SUBSTRAT	TE (Estimate percent of e	very type of	substrate pr	esent. Check ONLY two	predominant su	bstrate TYPE boxes	
	. Add total number of signi						HI
TYPE		PERCENT	TYPE	011 7 10 11		PERCENT	Me
	SLABS [16 pts] ER (>256 mm) [16 pts]	0%	~	SILT [3 pt] LEAF PACK/WOOD	V DEBRIS 13 nts	85%	. •
==	OCK [16 pt]	0%	FIF	FINE DETRITUS [3		0%	Sub
	E (65-256 mm) [12 pts]	0%		CLAY or HARDPAN	-	10%	Max
	L (2-64 mm) [9 pts]	0%		MUCK [0 pts]		0%	1
SAND (	<2 mm) [6 pts]	0%		ARTIFICIAL [3 pts]		0%	
Total	of Percentages of	0.000/	(A)			(B)	
	Boulder, Cobble, Bedrock	0.00%					Α-
CORE OF TWO M	OST PREDOMINATE SUE	BSTRATE TY	PES: 3	TOTAL NUMBE	ER OF SUBSTRA	ATE TYPES: 3	1
Maximum I	Pool Depth (Measure the	maximum p	ool depth wi	thin the 61 meter (200	ft) evaluation rea	ach at the time of	Pool
	Avoid plunge pools from re			pipes) (Check ONL)	one box);		Max
> 30 centime			4	> 5 cm - 10 cm [15	pts]		-
> 22.5 - 30 0				< 5 cm [5 pts] NO WATER OR M	OIST CHANNEL	[0 pts]	1
	1						
COMMENT	S			MAXIMUM F	OOL DEPTH (c	entimeters): 8	-
BANK FUL	L WIDTH (Measured as ti	he average o	f 3-4 measur	ements) (Che	ck ONLY one bo	);	Bai
				> 1.0 m - 1.5 m (> 3		s]	W
> 4.0 meters					mtol		l Ma
> 3.0 m - 4.0	) m (> 9' 7" - 13') [25 pts]		1.	≤ 1.0 m (<=3' 3") [5	ptsj		1
> 3.0 m - 4.0			1.	」 ≤ 1.0 m (<=3' 3") [5	pisj		
> 3.0 m - 4.0	0 m (> 9' 7" - 13') [25 pts] 0 m (> 9' 7" - 4' 8") [20 pts]		14		BANKFULL WID	TH (meters): 0.76	5
> 3.0 m - 4.0 > 1.5 m - 3.0	0 m (> 9' 7" - 13') [25 pts] 0 m (> 9' 7" - 4' 8") [20 pts]		12			TH (meters): 0.76	
> 3.0 m - 4.0 > 1.5 m - 3.0 COMMENT	0 m (> 9' 7" - 13') [25 pts] 0 m (> 9' 7" - 4' 8") [20 pts] S			AVERAGE E	BANKFULL WID	,	
> 3.0 m - 4.0 > 1.5 m - 3.0 COMMENT	0 m (> 9' 7" - 13') [25 pts] 0 m (> 9' 7" - 4' 8") [20 pts] S  ARIAN ZONE AND FLOOI	DPLAIN QUA	LITY 分	AVERAGE E on must also be comp	BANKFULL WID	,	
> 3.0 m - 4.0 > 1.5 m - 3.0 COMMENT	O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts]  ARIAN ZONE AND FLOOI PARIAN WIDTH	DPLAIN QUA FLOOD	LITY 分的 PLAIN QUAL	AVERAGE E on must also be comp NOTE: River Left (L) and	BANKFULL WID	,	
> 3.0 m - 4.0 > 1.5 m - 3.0 COMMENT	O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts]  ARIAN ZONE AND FLOOI PARIAN WIDTH Per Bank)	DPLAIN QUA	LITY 分的 PLAIN QUAL (Most Pred	AVERAGE E on must also be comp	BANKFULL WID  Dieted d Right (R) as loc	oking downstream☆	
> 3.0 m - 4.0 > 1.5 m - 3.0 COMMENT	O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts]  ARIAN ZONE AND FLOOI PARIAN WIDTH Per Bank) Vide >10m	PLAIN QUA	NLITY 分的 PLAIN QUAL (Most Pred Mature For Immature I	AVERAGE E  on must also be completed to the complete state of the	BANKFULL WID	oking downstream &	
> 3.0 m - 4.0 > 1.5 m - 3.0 COMMENT	O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts]  ARIAN ZONE AND FLOOI PARIAN WIDTH Per Bank)	DPLAIN QUA FLOOD	LITY : ☆ PLAIN QUAL (Most Pred Mature Fol	AVERAGE E  on must also be completed to the complete state of the	BANKFULL WID	oking downstream☆  Conservation Tillage  Urban or Industrial	
> 3.0 m - 4.0 > 1.5 m - 3.0 COMMENT	O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts]  ARIAN ZONE AND FLOOI PARIAN WIDTH Per Bank) Vide >10m	PLAIN QUA	PLAIN QUAL (Most Pred Mature For Immature I	AVERAGE E  on must also be completed to the complete state of the	BANKFULL WID	oking downstream &	
> 3.0 m - 4.0 > 1.5 m - 3.0 COMMENT	O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts]  ARIAN ZONE AND FLOOI PARIAN WIDTH Per Bank) Vide >10m  Moderate 5-10m	PLAIN QUA	PLAIN QUAL (Most Pred Mature For Immature I	AVERAGE E  on must also be composite of the composite of	BANKFULL WID	oking downstream☆  Conservation Tillage  Urban or Industrial	rop
> 3.0 m - 4.0 > 1.5 m - 3.0 COMMENT  RIPA RIF L R (F	O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [25 pts] O m (> 9' 7" - 4' 8") [25 pts] O m (> 9' 7" - 4' 8") [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8"	FLOOD L R L R L C	PLAIN QUAL (Most Prec Mature For Immature I Field Residentia Fenced Pa	AVERAGE E  On must also be comp NOTE: River Left (L) and ITY Iominant per Bank) est, Wetland Forest, Shrub or Old I, Park, New Field sture	BANKFULL WID	oking downstream☆  Conservation Tillage  Urban or Industrial  Open Pasture, Row Co	rop
> 3.0 m - 4.0 > 1.5 m - 3.0 COMMENT  RIPA RIF L R (I	O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [25 pts] O m (> 9' 7" - 4' 8") [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 4' 8") [20	FLOOD L R L R L C	PLAIN QUAL (Most Prec Mature For Immature I Field Residentia Fenced Pa	AVERAGE E  on must also be composite to the composite test of the	BANKFULL WID	oking downstream☆  Conservation Tillage  Urban or Industrial  Open Pasture, Row Co	rop
> 3.0 m - 4.0 > 1.5 m - 3.0  COMMENT  RIP  RIP  RIP  N  COM  Streat Subs	O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O MARIAN ZONE AND FLOOI PARIAN WIDTH Per Bank) Vide > 10 m Moderate 5-10 m  None Moderate 5-10 m  None MMENTS OW REGIME (At Time of E am Flowing Surface flow with isolated p	FLOOD  R  R  R  R  R  R  R  R  R  R  R  R  R	PLAIN QUAL (Most Prec Mature For Immature I Field Residentia Fenced Pa	AVERAGE E  On must also be composite of the composite of	BANKFULL WID	cking downstream A  Conservation Tillage  Urban or Industrial  Open Pasture, Row Community  Mining or Construction  Is, no flow (Intermitten	rop
> 3.0 m - 4.0 > 1.5 m - 3.0  COMMENT  RIP  RIP  RIP  N  COM  Streat Subs	O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O MARIAN ZONE AND FLOOI PARIAN WIDTH Per Bank) Vide > 10 m Moderate 5-10 m  None Moderate 5-10 m  None MMENTS OW REGIME (At Time of Earn Flowing	FLOOD  R  R  R  R  R  R  R  R  R  R  R  R  R	PLAIN QUAL (Most Prec Mature For Immature I Field Residentia Fenced Pa	AVERAGE E  On must also be composite of the composite of	BANKFULL WID	cking downstream A  Conservation Tillage  Urban or Industrial  Open Pasture, Row Community  Mining or Construction  Is, no flow (Intermitten	rop
> 3.0 m - 4.0 > 1.5 m - 3.0  COMMENT  RIP  RIP  RIP  N  COM  Streat Subs  COM	O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O MARIAN ZONE AND FLOOI PARIAN WIDTH Per Bank) Vide > 10 m Moderate 5-10 m  None Moderate 5-10 m  None MMENTS OW REGIME (At Time of E am Flowing Surface flow with isolated p	TVAluation) (Coools (Interstiti	ILITY IN PLAIN QUAL (Most Prec Mature For Immature I Field Residentia Fenced Pa Check ONLY ( al)	AVERAGE E  on must also be completed for the complete of the c	BANKFULL WID  Dieted  d Right (R) as locally	cking downstream A  Conservation Tillage  Urban or Industrial  Open Pasture, Row Co  Mining or Construction  Is, no flow (Intermitten emeral)	rop
> 3.0 m - 4.0 > 1.5 m - 3.0  COMMENT  RIP  RIP  RIP  N  COM  Streat Subs COM  SINI None	O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O MARIAN ZONE AND FLOOI PARIAN WIDTH Per Bank) Vide >10m Moderate 5-10m Moderate 5-10m Marrow <5m Mone MMENTS OW REGIME (At Time of Earn Flowing Surface flow with isolated p MMENTS UOSITY (Number of bender	ivaluation) (Coools (Interstiti	ILITY IN PLAIN QUAL (Most Prec Mature For Immature I Field Residentia Fenced Pa Check ONLY ( al)	AVERAGE E  On must also be completed by the complete of the co	BANKFULL WID  Dieted  d Right (R) as locally	Conservation Tillage Urban or Industrial Open Pasture, Row Co Mining or Construction Is, no flow (Intermitten emeral)	rop
> 3.0 m - 4.0 > 1.5 m - 3.0  COMMENT  RIP  RIP  RIP  N  COM  Streat Subs  COM  SINI	O m (> 9' 7" - 13') [25 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O m (> 9' 7" - 4' 8") [20 pts] O MARIAN ZONE AND FLOOI PARIAN WIDTH Per Bank) Vide >10m Moderate 5-10m Moderate 5-10m Marrow <5m Mone MMENTS OW REGIME (At Time of Earn Flowing Surface flow with isolated p MMENTS UOSITY (Number of bender	Evaluation) (Coools (Interstiti	ILITY IN PLAIN QUAL (Most Prec Mature For Immature I Field Residentia Fenced Pa Check ONLY ( al)	AVERAGE E  On must also be completed on the complete of the complete of the complete one box of the co	BANKFULL WID  Dieted  d Right (R) as locally	cking downstream A  Conservation Tillage  Urban or Industrial  Open Pasture, Row Co  Mining or Construction  Is, no flow (Intermitten emeral)	rop

WWH Name: Scientific CWH Name:	ORMED? - Yes V No QHEI			
WWH Name: Science:		Score (If Yes, Att	ach Completed QHEI Form)	
_EWH Name:	EAM DESIGNATED USE(S) oto River		Distance from Evaluated S Distance from Evaluated S Distance from Evaluated S	tream
MAPPING:	ATTACH COPIES OF MAPS, INCLUD	ING THE <u>ENTIRE</u> WATERSHE	D AREA. CLEARLY MARK TH	E SITE LOCATION
SGS Quadrangle Na	me: Hilliard, Ohio	NRCS Soil Map	Page: NRCS Soil Ma	p Stream Order
ounty: Franklin			ich/ Hilliard	
MISCELLAN	MEOUS			
ase Flow Conditions		07/06/16	Quantity: 0.06	in.
notograph Informatio	n: j			
levated Turbidity? (Y	/N) Canopy (% oper	5%		
	ed for water chemistry? (Y/N):		and attach results) Lab Numb	er:
	emp (°C) Dissolved Oxygen		Conductivity (µmhos	
			Conductivity (µminos	(Citi)
the sampling reach	representative of the stream (Y/N)	If not, please explain:		
dditional comments/o	description of pollution impacts:			
rogs or Tadpoles Obsomments Regarding	(If Yes, Record all observation in the property of the propert	[ <sup>2</sup> -,-	rimary Headwater Habitat Asses  Voucher? (Y/N)	
oream was mostly				
oueam was mostly		BIDTION OF STREAM	REACH /This must be	
	NG AND NARRATIVE DESC			completed):
DRAWI	NG AND NARRATIVE DESC			
DRAWI	nt landmarks and other features of	interest for site evaluation a	nd a narrative description of	
DRAWI Include importa		interest for site evaluation a		
DRAWI Include importa	nt landmarks and other features of	interest for site evaluation a	nd a narrative description of	
DRAWI Include importa	nt landmarks and other features of	Area W	nd a narrative description of	
DRAWI Include importa	nt landmarks and other features of	Area W	nd a narrative description of	

# Chief Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3):

C	E	
n	-	

	on Tap Line/ City of Hilliard, Franklin County, Ohio	
SITE NUMBER	0	
ENGTH OF STREAM REACH (ft) 200	LAT. 40.05121 LONG83.13377 RIVER CODE RIVER MILE	
ATE 07/12/16   SCORER   MRH	COMMENTS culvert placement and straightened - UPSTREA	M
	orm - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Inst	
4.3		
TREAM CHANNEL NONE / N MODIFICATIONS:	NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RE	COVER
	every type of substrate present. Check ONLY two predominant substrate TYPE boxes	i HE
(Max of 32). Add total number of signi	ificant substrate types found (Max of 8). Final metric score is sum of boxes A & B.  PERCENT TYPE PERCENT	Me
BLDR SLABS [16 pts]	0% SILT [3 pt] 10%	Poi
BOULDER (>256 mm) [16 pts]	0% LEAF PACK/WOODY DEBRIS [3 pts] 0%	
BEDROCK [16 pt]	0% FINE DETRITUS [3 pts] 0%	Subs
OBBLE (65-256 mm) [12 pts]	8% CLAY or HARDPAN [0 pt] 10%	IWIGX
GRAVEL (2-64 mm) [9 pts]	60% MUCK [0 pts] 0%	20
SAND (<2 mm) [6 pts]	12% ARTIFICIAL [3 pts] 0%	2
Total of Percentages of	8.00% (A)	A +
Bldr Slabs, Boulder, Cobble, Bedrock CORE OF TWO MOST PREDOMINATE SUI		
ORE OF TWO MOST PREDOMINATE SUI	BSTRATE TYPES: 13 TOTAL NUMBER OF SUBSTRATE TYPES: 3	-
	e maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of	Pool
	road culverts or storm water pipes) (Check ONLY one box):  > 5 cm - 10 cm [15 pts]	Max
> 30 centimeters [20 pts] > 22.5 - 30 cm [30 pts]	< 5 cm [5 pts]	
> 10 - 22.5 cm [25 pts]	NO WATER OR MOIST CHANNEL [0 pts]	2
a a line with the line with th	MANUAL POOL PERTUGAL IN A NOTATION AND A NOTATION A	
COMMENTS	MAXIMUM POOL DEPTH (centimeters): 10	-
		100
		Ban
> 4.0 meters (> 13') [30 pts]	> 1 0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]	Wi
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]		Wi
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] < 1.0 m (<=3' 3") [5 pts]	Max
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	> 1 0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]	Wie Max
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] < 1.0 m (<=3' 3") [5 pts]	Max
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]  COMMENTS	AVERAGE BANKFULL WIDTH (meters):  This information must also be completed	Wi Max
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	AVERAGE BANKFULL WIDTH (meters):  This information must also be completed	Wi Max
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]  COMMENTS  RIPARIAN ZONE AND FLOO	> 1 0 m · 1.5 m (> 3' 3" - 4' 8") [15 pts]  AVERAGE BANKFULL WIDTH (meters):  1.52  This information must also be completed  DPLAIN QUALITY  ♣ NOTE: River Left (L) and Right (R) as looking downstream ♣  FLOODPLAIN QUALITY  L R (Most Predominant per Bank)  L R	Wi Max
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]  COMMENTS  RIPARIAN ZONE AND FLOO RIPARIAN WIDTH	This information must also be completed  OPLAIN QUALITY  L R (Most Predominant per Bank)  Mature Forest, Wetland  Note: 1.5 m (> 3' 3" - 4' 8") [15 pts]  AVERAGE BANKFULL WIDTH (meters):  1.52  1.52  L R (Most Predominant per Bank)  Mature Forest, Wetland  Conservation Tillage	Max
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]  COMMENTS  RIPARIAN ZONE AND FLOO RIPARIAN WIDTH L R (Per Bank)	This information must also be completed  OPPLAIN QUALITY  L R (Most Predominant per Bank)  Mature Forest, Wetland  I Description  L R (Most Predominant per Bank)  Mature Forest, Wetland  I I Description  Conservation Tillage  Immature Forest, Shrub or Old  I I I I I I I I I I I I I I I I I I I	Max
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]  COMMENTS  RIPARIAN ZONE AND FLOO  RIPARIAN WIDTH  L R (Per Bank) Wide >10m  Moderate 5-10m	This information must also be completed  OPPLAIN QUALITY  L R (Most Predominant per Bank)  Mature Forest, Wetland  Immature Forest, Shrub or Old  Field  Open Pasture Bow Completed  Urban or Industrial  Open Pasture Bow Completed  Urban or Industrial	Wil Max
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]  COMMENTS  RIPARIAN ZONE AND FLOO RIPARIAN WIDTH  (Per Bank) Wide >10m Moderate 5-10m  Narrow <5m	This information must also be completed  OPLAIN QUALITY    R (Most Predominant per Bank)  Mature Forest, Wetland  Immature Forest, Shrub or Old Field  Residential, Park, New Field  AVERAGE BANKFULL WIDTH (meters):  1.52  1.52  AVERAGE BANKFULL WIDTH (meters):  1.52  L R (Most Predominant per Bank)  L R (Most Predominant per Bank)  L R (Most Predominant per Bank)  Mature Forest, Wetland  Open Pasture, Row C	Wi Max
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]  COMMENTS  RIPARIAN ZONE AND FLOO RIPARIAN WIDTH  L R (Per Bank) Wide >10m Moderate 5-10m  Narrow <5m None	This information must also be completed  OPPLAIN QUALITY  L R (Most Predominant per Bank)  Mature Forest, Wetland  Immature Forest, Shrub or Old  Field  Open Pasture Bow Completed  Urban or Industrial  Open Pasture Bow Completed  Urban or Industrial	Wi Max
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]  COMMENTS  RIPARIAN ZONE AND FLOO RIPARIAN WIDTH  L R (Per Bank) Wide >10m Moderate 5-10m  Narrow <5m	This information must also be completed  OPLAIN QUALITY    R (Most Predominant per Bank)  Mature Forest, Wetland  Immature Forest, Shrub or Old Field  Residential, Park, New Field  AVERAGE BANKFULL WIDTH (meters):  1.52  1.52  AVERAGE BANKFULL WIDTH (meters):  1.52  L R (Most Predominant per Bank)  L R (Most Predominant per Bank)  L R (Most Predominant per Bank)  Mature Forest, Wetland  Open Pasture, Row C	Wi Max
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]  COMMENTS  RIPARIAN ZONE AND FLOO RIPARIAN WIDTH  L R (Per Bank) Wide > 10m  Moderate 5-10m  Narrow < 5m  None COMMENTS  FLOW REGIME (At Time of E	This information must also be completed  OPLAIN QUALITY  ROODPLAIN QUALITY  Residential, Park, New Field  Residential, Park, New Field  Fenced Pasture  AVERAGE BANKFULL WIDTH (meters):  1.52  AVERAGE BANKFULL WIDTH (meters):  1.52  1.52  AVERAGE BANKFULL WIDTH (meters):  1.52  L R (Most Predominant per Bank)	Wi Max
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]  COMMENTS  RIPARIAN ZONE AND FLOO RIPARIAN WIDTH  L R (Per Bank) Wide >10m Wide >10m Narrow <5m None COMMENTS  FLOW REGIME (At Time of E) Stream Flowing	This information must also be completed  OPPLAIN QUALITY  ANOTE: River Left (L) and Right (R) as looking downstream from Mature Forest, Wetland  Mature Forest, Wetland  Immature Forest, Shrub or Old  Field  Residential, Park, New Field  Fenced Pasture  Moist Channel, isolated pools, no flow (Intermitten)  Moist Channel, isolated pools, no flow (Intermitten)  AVERAGE BANKFULL WIDTH (Re' 8") [15 pts]  AVERAGE BANKFULL WIDTH (meters):  1.52  1.52  AVERAGE BANKFULL WIDTH (meters):  1.52  This information must also be completed  OPPLAIN QUALITY  L R (Most Predominant per Bank)  L R  Conservation Tillage  Urban or Industrial  Open Pasture, Row C  Mining or Construction  Evaluation) (Check ONLY one box):  Moist Channel, isolated pools, no flow (Intermitten)	Wi Max
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]  COMMENTS  RIPARIAN ZONE AND FLOO RIPARIAN WIDTH  L R (Per Bank) Wide > 10m  Moderate 5-10m  Narrow < 5m  None COMMENTS  FLOW REGIME (At Time of E	This information must also be completed  OPPLAIN QUALITY  ANOTE: River Left (L) and Right (R) as looking downstream from Mature Forest, Wetland  Mature Forest, Wetland  Immature Forest, Shrub or Old  Field  Residential, Park, New Field  Fenced Pasture  Moist Channel, isolated pools, no flow (Intermitten)  Moist Channel, isolated pools, no flow (Intermitten)  AVERAGE BANKFULL WIDTH (Re' 8") [15 pts]  AVERAGE BANKFULL WIDTH (meters):  1.52  1.52  AVERAGE BANKFULL WIDTH (meters):  1.52  This information must also be completed  OPPLAIN QUALITY  L R (Most Predominant per Bank)  L R  Conservation Tillage  Urban or Industrial  Open Pasture, Row C  Mining or Construction  Evaluation) (Check ONLY one box):  Moist Channel, isolated pools, no flow (Intermitten)	Wil Max 20
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]  COMMENTS  RIPARIAN ZONE AND FLOO RIPARIAN WIDTH  L R (Per Bank) Wide >10m Wide >10m Narrow <5m None COMMENTS  FLOW REGIME (At Time of Extream Flowing Subsurface flow with isolated p	This information must also be completed  DPLAIN QUALITY  Residential, Park, New Field  Residential, Park, New Field  Fenced Pasture  Moist Channel, isolated pools, no flow (Intermitten Dry channel, no water (Ephemeral)	Wil Max 20
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]  COMMENTS  RIPARIAN ZONE AND FLOO RIPARIAN WIDTH  L R (Per Bank) Wide >10m Moderate 5-10m  Narrow <5m None COMMENTS  FLOW REGIME (At Time of Extream Flowing Subsurface flow with isolated productions of the comments of th	This information must also be completed  **DPLAIN QUALITY**  **NOTE: River Left (L) and Right (R) as looking downstream*  **FLOODPLAIN QUALITY*  L. R. (Most Predominant per Bank)  Mature Forest, Wetland  Immature Forest, Shrub or Old  Field  Residential, Park, New Field  Residential, Park, New Field  Fenced Pasture  **Work of Conservation Tillage Open Pasture, Row Co	Wil Max 20
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]  COMMENTS  RIPARIAN ZONE AND FLOO RIPARIAN WIDTH  L R (Per Bank) Wide >10m Wide >10m Narrow <5m None COMMENTS  FLOW REGIME (At Time of Extream Flowing Subsurface flow with isolated promise of the comments	This information must also be completed  OPPLAIN QUALITY  NOTE: River Left (L) and Right (R) as looking downstream from the forest, Wetland  Immature Forest, Wetland  Immature Forest, Shrub or Old  Field  Residential, Park, New Field  Fenced Pasture  Woots Channel, isolated pools, no flow (Intermittent Dry channel, no water (Ephemeral)  Sper 61 m (200 ft) of channel)  (Check ONLY one box):  1.0  1.5 m (> 3' 3" - 4' 8") [15 pts]  AVERAGE BANKFULL WIDTH (meters):  1.52	Wil Max 20
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]  COMMENTS  RIPARIAN ZONE AND FLOO RIPARIAN WIDTH  L R (Per Bank) Wide >10m Wide >10m Narrow <5m None COMMENTS  FLOW REGIME (At Time of E) Stream Flowing Subsurface flow with isolated p COMMENTS  SINUOSITY (Number of benderman	This information must also be completed  OPPLAIN QUALITY  NOTE: River Left (L) and Right (R) as looking downstream from the forest, Wetland  Immature Forest, Wetland  Immature Forest, Shrub or Old  Field  Residential, Park, New Field  Fenced Pasture  Woots Channel, isolated pools, no flow (Intermittent Dry channel, no water (Ephemeral)  Sper 61 m (200 ft) of channel)  (Check ONLY one box):  1.0  1.5 m (> 3' 3" - 4' 8") [15 pts]  AVERAGE BANKFULL WIDTH (meters):  1.52	Wi Max

The state of the s	so be Completed):		
QHEI PERFORMED? - Yes V No QHEI Score	(If Yes, Attach Complete	d QHEI Form)	
DOWNSTREAM DESIGNATED USE(S)  WWH Name: Scioto River  CWH Name: SEWH Name: SE	Distance for	rom Evaluated Stream rom Evaluated Stream rom Evaluated Stream	1.90
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE E	ENTIRE WATERSHED AREA. CLE	ARLY MARK THE SITE I	OCATION
USGS Quadrangle Name: Hilliard, Ohio	NRCS Soil Map Page:	NRCS Soil Map Stream	
	nship / City: Norwich/ Hilliard		
MISCELLANEOUS	iomp / oxy		
Base Flow Conditions? (Y/N): Y Date of last precipitation:	07/06/16 Quantit	y: 0.06 I'M	
Photograph Information:			
Elevated Turbidity? (Y/N): N Canopy (% open): 90	0%		
Were samples collected for water chemistry? (Y/N): N (Note Is	ab sample no. or id. and attach re	sults) Lab Number:	
	pH (S.U.) Con	ductivity (µmhos/cm)	
Is the sampling reach representative of the stream (Y/N) If no	ot, please explain:		
Additional comments/description of pollution impacts:			
Performed? (Y/N): Y (If Yes, Record all observations. Vouch ID number. Include appropriate field date in the second all observations. Vouch ID number. Include appropriate field date in the second in		ter Habitat Assessment M ? (Y/N) N	anual)
DRAWING AND NARRATIVE DESCRIPTION	N OF STREAM REACH (TI	nis <u>must</u> be comple	eted):

Reset Form

# Primary Headwater Habitat Evaluation Form

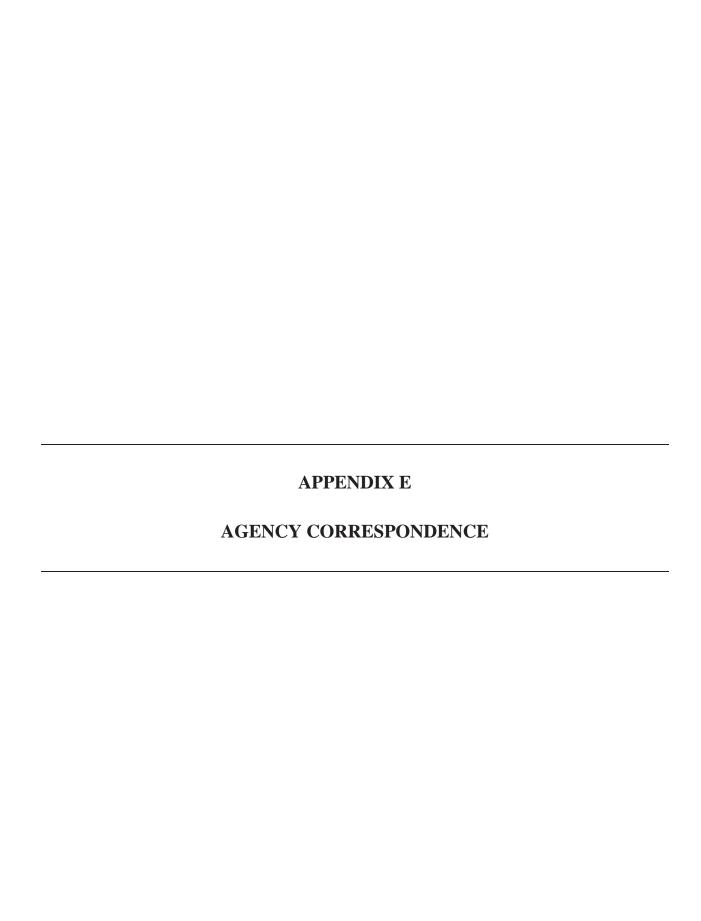
HHEI Score (sum of metrics 1, 2, 3):

5	7	
9	#	

SITE NAME/LOCATION Britton-Davidson Tap Line SITE NUMBER Stream 2  LENGTH OF STREAM REACH (ft) 200 LAT, 40.0	e/ City of Hilliard, Franklin County, Ohio  RIVER BASIN 05060001 DRAINAGE AREA (mi²) 0.  05144 LONG83.13106 RIVER CODE RIVER MILE	74
DATE 07/12/16 SCORER MRH CO	DMMENTS culvert placement and straightened - DOWNSTR	EAM
NOTE: Complete All Items On This Form - Refer to	to "Field Evaluation Manual for Ohio's PHWH Streams" for Instru	uctions
STREAM CHANNEL NONE / NATURAL CHA	ANNEL RECOVERED RECOVERING RECENT OR NO RECO	OVERY
· · · · · · · · · · · · · · · · · · ·	substrate present. Check ONLY two predominant substrate TYPE boxes te types found (Max of 8). Final metric score is sum of boxes A & B.  TYPE SILT [3 pt] LEAF PACK/WOODY DEBRIS [3 pts] FINE DETRITUS [3 pts] CLAY or HARDPAN [0 pt] MUCK [0 pts] ARTIFICIAL [3 pts]	HHE Metri Point Substra Max = 4
Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock  SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPE	(A) (B) PES: 9 TOTAL NUMBER OF SUBSTRATE TYPES: 3	A + B
2. Maximum Pool Depth (Measure the maximum poevaluation. Avoid plunge pools from road culverts or > 30 centimeters [20 pts] > 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts]	ool depth within the 61 meter (200 ft) evaluation reach at the time of r storm water pipes) (Check ONLY one box):  > 5 cm - 10 cm [15 pts]  < 5 cm [5 pts]  NO WATER OR MOIST CHANNEL [0 pts]	Pool Dep Max = 3
COMMENTS	MAXIMUM POOL DEPTH (centimeters): 15	1
3. BANK FULL WIDTH (Measured as the average of > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	f 3-4 measurements) (Check ONL Y one box):  > 1.0 m - 1.5 m (> 3° 3" - 4° 8") [15 pts]  < 1.0 m (<=3° 3") [5 pts]	Bankfu Width Max=30
COMMENTS	AVERAGE BANKFULL WIDTH (meters): 1.82	20
RIPARIAN ZONE AND FLOODPLAIN QUAL	his information must also be completed  LITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆  PLAIN QUALITY  (Most Predominant per Bank)  Mature Forest, Wetland  Immature Forest, Shrub or Old Field  Residential, Park, New Field  Fenced Pasture  Mining or Construction	р
FLOW REGIME (At Time of Evaluation) (Clastream Flowing Subsurface flow with isolated pools (Interstitian COMMENTS)	Moist Channel, isolated pools, no flow (Intermittent)  al)  Dry channel, no water (Ephemeral)	
SINUOSITY (Number of bends per 61 m (20 None 1.0 1.5	2.0 2.5 3.0 >3	
STREAM GRADIENT ESTIMATE  Flat (0 5 II/100 ft)  Flat to Moderate  Mode	lerate (2 II/100 II) Moderate to Severe Severe Severe (10 II/10	(11 00

DUITIONAL STR	EAM INFORMATION (This In	formation Must Als	o be Completed):			
QHEI PE	ERFORMED? - Yes V	o QHEI Score	(If Yes, Att	ach Completed QHEI For	rm)	
WWH Name: S		5)		Distance from Evalual	ted Stream_	0
JEWH Name: ]				Distance from Evaluat		
	IG: ATTACH COPIES OF MAPS	S, INCLUDING THE E	1			1
	Name: Hilliard, Ohio		NRCS Soil Map		il Map Stream Order	
ounty: Franklin		_ Town	ship / City: Norwi	ich/ Hilliard		
MISCELI ase Flow Condition	LANEOUS  ons? (Y/N): Y _ Date of I	ast precipitation:	07/06/16	Quantity: 0.06	5 //n.	
notograph Inform	nation:					
evated Turbidity?	20.0	y (% open): 90	%			
	lected for water chemistry? (Y/	1	ıb sample no. or id.	and attach results) Lab N	lumber:	1
ield Measures:	Temp (°C)Dissolve	d Oxygen (mg/l)	pH (S.U.)	Conductivity (µr	nhos/cm)	
the sampling rea	ach representative of the strea	m (Y/N) If not	, please explain:			
dditional commer	nts/description of pollution imp	acts				
erformed? (Y/N): ish Observed? (Y. rogs or Tadpoles omments Regard	ID number Includ  Y/N)  Y  Voucher? (Y/N)  Observed? (Y/N)  N  Vouch	e appropriate field dat Salamanders (	ta sheets from the Pobserved? (Y/N)	al. NOTE: all voucher sam rimary Headwater Habitat A  Voucher? (Y/N)  ates Observed? (Y/N)  N		vith the site
DRA	WING AND NARRATIV	E DESCRIPTION	OF STREAM	REACH (This must	be completed):	
Include impo	ortant landmarks and other for		1	nd a narrative descriptio	downstream's loc	Strec

Reset Form





September 26, 2016

Via email: environmentalreviewrequest@dnr.state.oh.us

Mr. John Kessler Ohio Department of Natural Resources Office of Real Estate 2045 Morse Road, Building E-2 Columbus, OH 43229

Dear Mr. Kessler:

Subject: ODNR Environmental Review Request

Britton-Davidson Tap Line

City of Hilliard, Franklin County, Ohio

CEC Project 162-707

On behalf of American Electric Power, Civil & Environmental Consultants, Inc. (CEC) is inquiring whether there are any known occurrences of federally listed endangered, threatened, or candidate species relative to the above referenced site.

## 1.0 SITE DESCRIPTION

The approximately 27.8-acre Site is located in the northeastern quadrant of the intersection of Davidson Road and Britton Parkway and extending north to a business facility in the City of Hilliard, Franklin County, Ohio (the Site). The location of the Site is indicated on the attached topographic map (Figure 1). Coordinates to a point in the central portion of the Site are: 40.053664, -83.134786.

The majority of the Site consists of maintained lawn areas and forested areas. The forested areas within the Site are dominated by the following tree species: shag-bark hickory (*Carya ovata*), American basswood (*Tilia americana*), black walnut (*Juglans nigra*), Northern red oak (*Quercus rubra*), sugar maple (*Acer saccharum*) and eastern cottonwood (*Populus deltoides*). Surrounding land uses include I-71, residential properties, commercial/retail properties, and agricultural land. CEC identified one wetland, two streams, two ditches, one retention basin and one dry detention basin within the Site during an ecological survey. A Site Location Map (Figure 1), a Background Environmental Data Map (Figure 2), an Ecological Survey Map (Figure 3) and site photographs are attached for your use.

Mr. John Kessler-ODNR CEC Project 162-707 Page 2 September 26, 2016

## 2.0 CLOSING

If you have any questions or need other information, please contact Ms. Jamie VanDusen at 614-310-0175 or e-mail at <u>jvandusen@cecinc.com</u>. Thank you for your time and I look forward to hearing from you soon.

Sincerely,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

Jamie VanDusen

Bill Acton

Project Manager

Vice President

Enclosures (4):

Figure 1 – Site Location Map (USGS)

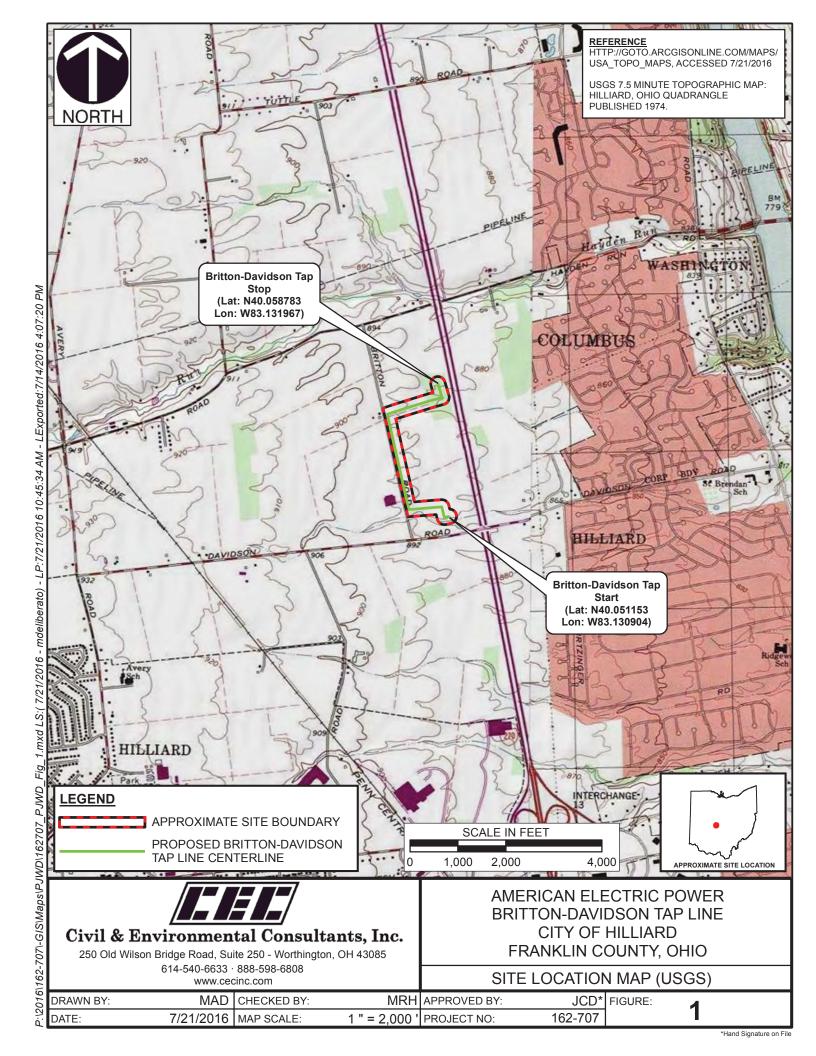
Figure 2 – Background Environmental Data Map

Figure 3 – Ecological Survey Map

Site Photographs

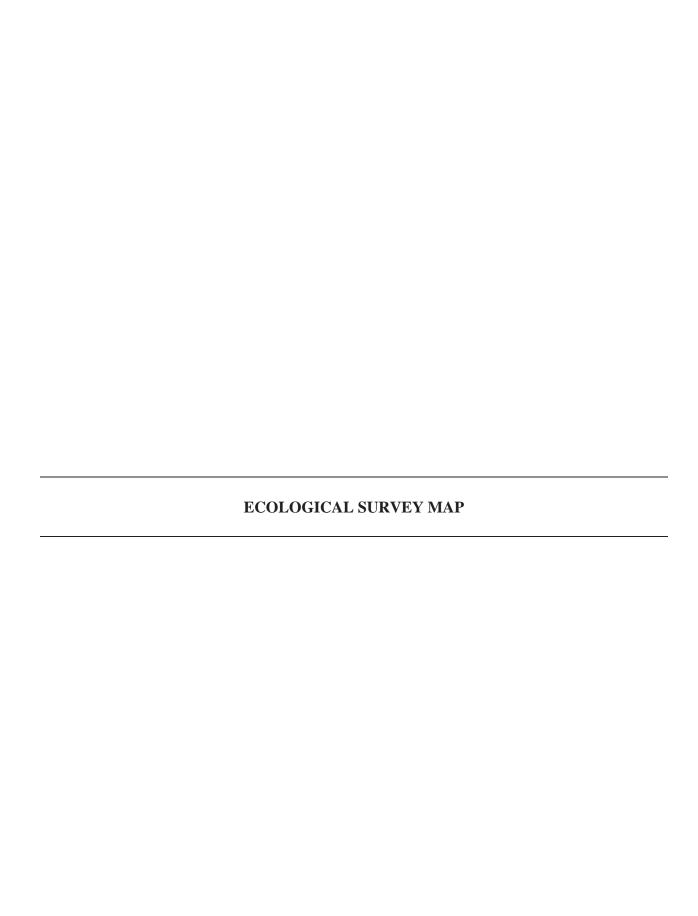
cc: Mr. Ron Howard – American Electric Power (email)



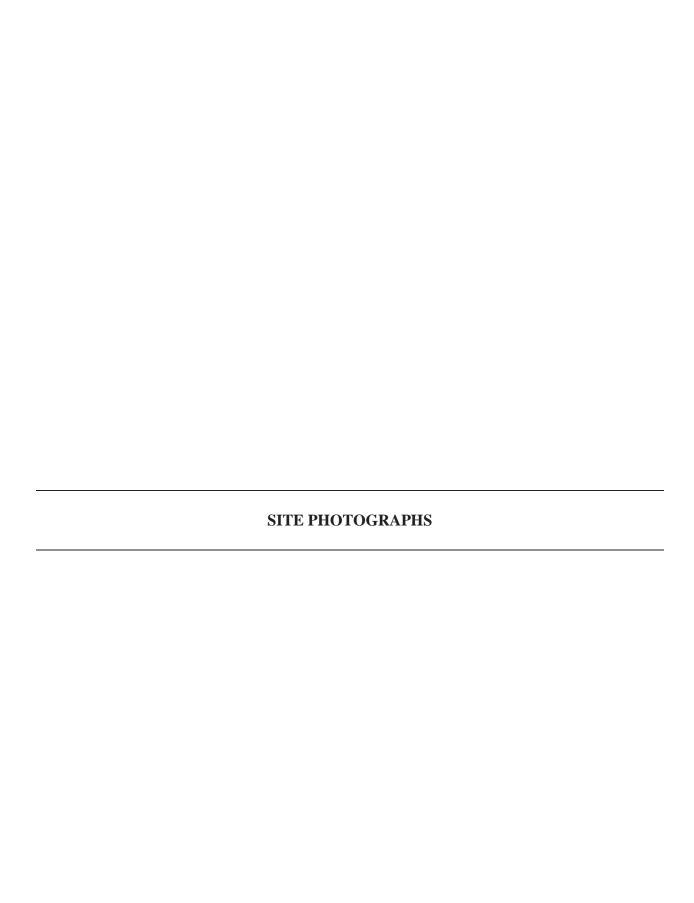














Photograph 1: View of Britton Parkway AEP Facility in the northern portion of the Site, looking east.



Photograph 2: View of typical ditch.





Photograph 3: View of typical wooded area, looking southeast.



Photograph 4: View of old access road, looking west.





Photograph 5: View of emergent wetland, looking north.



Photograph 6: View of ephemeral stream, looking west.





Photograph 7: View of maintained lawn, looking south.



Photograph 8: View of perennial stream, looking west.



AMERICAN ELECTRIC POWER BRITTON-DAVIDSON TAP LINE CITY OF HILLIARD, FRANKLIN COUNTY, OHIO CEC Project: 162-707

Photographs Taken On: July 12 and 18, 2016



Photograph 9: View of retention basin, looking northeast



Photograph 10: View of baseball field, looking south.



AMERICAN ELECTRIC POWER BRITTON-DAVIDSON TAP LINE CITY OF HILLIARD, FRANKLIN COUNTY, OHIO

CEC Project: 162-707 Photographs Taken On: July 12 and 18, 2016

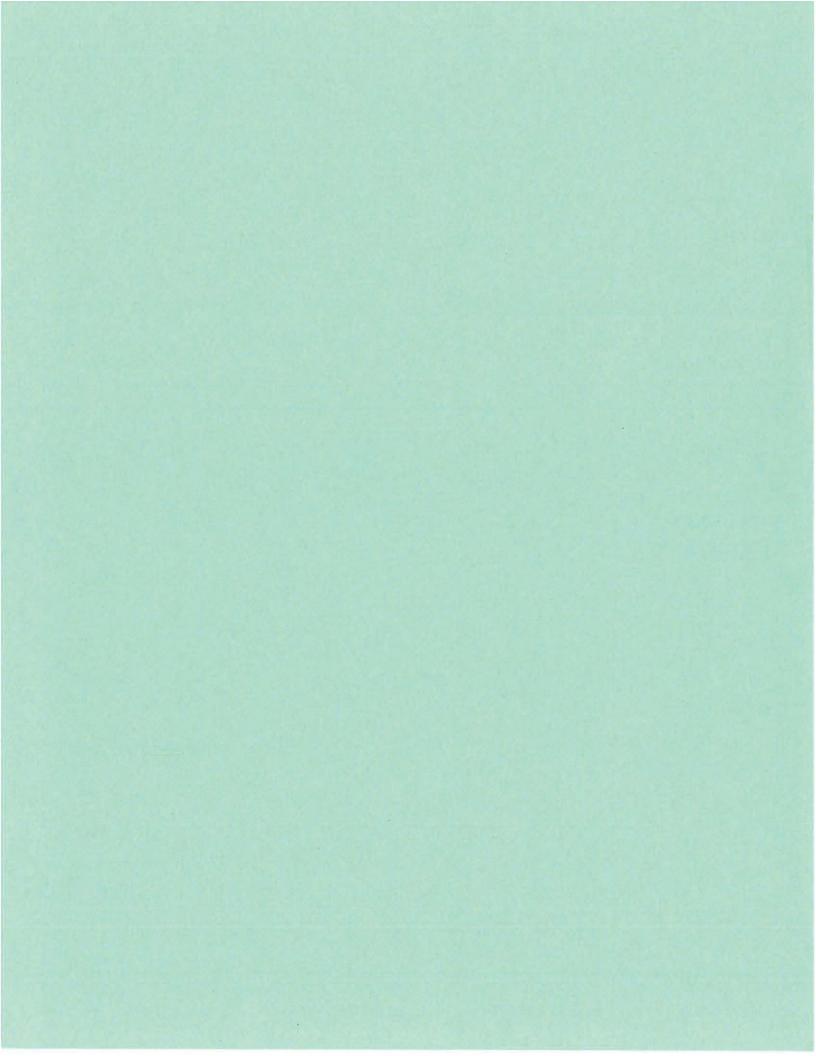


Photograph 11: View of dry detention basin, looking north.



Photograph 12: View of maintained lawn area west of Davidson Road AEP Facility, looking south.





September 26, 2016

Mr. Dan Everson U.S. Fish and Wildlife Service 4625 Morse Road, Suite 401 Columbus, OH 43230

Dear Mr. Everson:

Subject: Request for Information

Britton-Davidson Tap Line

City of Hilliard, Franklin County, Ohio

CEC Project 162-707

On behalf of American Electric Power, Civil & Environmental Consultants, Inc. (CEC) is inquiring whether there are any known occurrences of federally listed endangered, threatened, or candidate species relative to the above referenced site.

## 1.0 SITE DESCRIPTION

The approximately 27.8-acre Site is located in the northeastern quadrant of the intersection of Davidson Road and Britton Parkway and extending north to a business facility in the City of Hilliard, Franklin County, Ohio (the Site). The location of the Site is indicated on the attached topographic map (Figure 1). Coordinates to a point in the central portion of the Site are: 40.053664, -83.134786.

The majority of the Site consists of maintained lawn areas and forested areas. The forested areas within the Site are dominated by the following tree species: shag-bark hickory (*Carya ovata*), American basswood (*Tilia americana*), black walnut (*Juglans nigra*), Northern red oak (*Quercus rubra*), sugar maple (*Acer saccharum*) and eastern cottonwood (*Populus deltoides*). Surrounding land uses include I-71, residential properties, commercial/retail properties, and agricultural land. CEC identified one wetland, two streams, two ditches, one retention basin and one dry detention basin within the Site during an ecological survey. A Site Location Map (Figure 1), a Background Environmental Data Map (Figure 2), an Ecological Survey Map (Figure 3) and site photographs are attached for your use.

Mr. Mr. Dan Everson-USFWS CEC Project 162-707 Page 2 September 26, 2016

## 2.0 CLOSING

If you have any questions or need other information, please contact Ms. Jamie VanDusen at 614-310-0175 or e-mail at <u>jvandusen@cecinc.com</u>. Thank you for your time and I look forward to hearing from you soon.

Sincerely,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

Jamie VanDusen Project Manager Bill Acton

Vice President

Enclosures (4):

Figure 1 – Site Location Map (USGS)

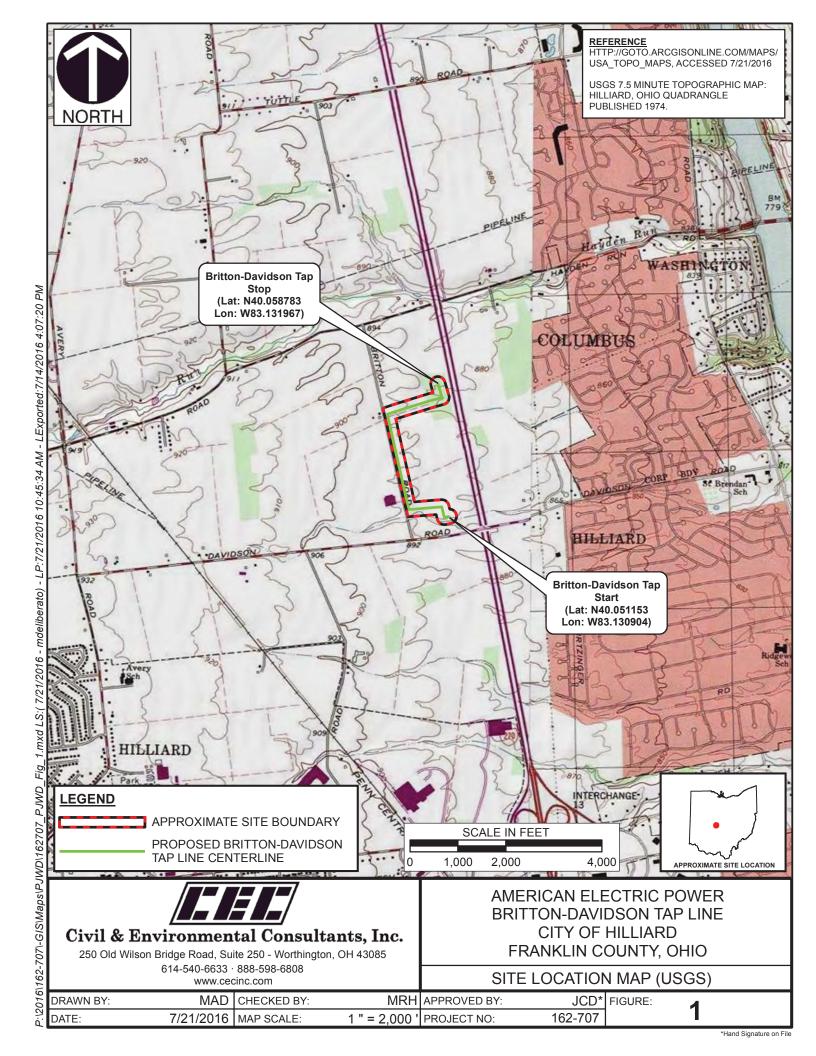
Figure 2 – Background Environmental Data Map

Figure 3 – Ecological Survey Map

Site Photographs

cc: Mr. Ron Howard – American Electric Power (email)



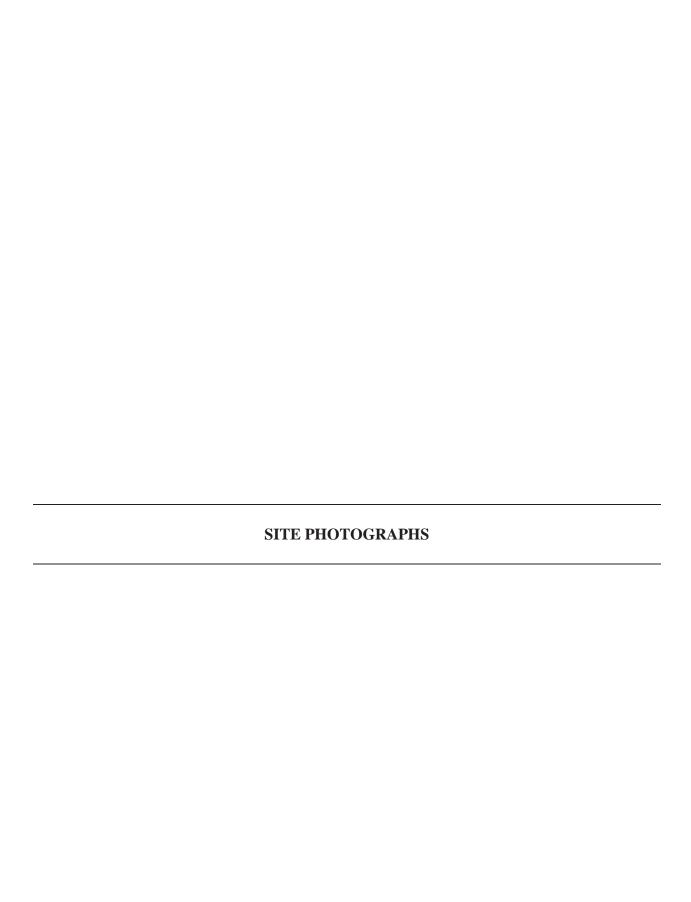














Photograph 1: View of Britton Parkway AEP Facility in the northern portion of the Site, looking east.



Photograph 2: View of typical ditch.





Photograph 3: View of typical wooded area, looking southeast.



Photograph 4: View of old access road, looking west.



AMERICAN ELECTRIC POWER BRITTON-DAVIDSON TAP LINE CITY OF HILLIARD, FRANKLIN COUNTY, OHIO CEC Project: 162-707

Photographs Taken On: July 12 and 18, 2016



Photograph 5: View of emergent wetland, looking north.



Photograph 6: View of ephemeral stream, looking west.





Photograph 7: View of maintained lawn, looking south.



Photograph 8: View of perennial stream, looking west.



AMERICAN ELECTRIC POWER BRITTON-DAVIDSON TAP LINE CITY OF HILLIARD, FRANKLIN COUNTY, OHIO CEC Project: 162-707

Photographs Taken On: July 12 and 18, 2016



Photograph 9: View of retention basin, looking northeast



Photograph 10: View of baseball field, looking south.



AMERICAN ELECTRIC POWER BRITTON-DAVIDSON TAP LINE CITY OF HILLIARD, FRANKLIN COUNTY, OHIO

CEC Project: 162-707 Photographs Taken On: July 12 and 18, 2016



Photograph 11: View of dry detention basin, looking north.



Photograph 12: View of maintained lawn area west of Davidson Road AEP Facility, looking south.



This foregoing document was electronically filed with the Public Utilities

**Commission of Ohio Docketing Information System on** 

11/4/2016 4:01:06 PM

in

Case No(s). 16-2122-EL-BNR

Summary: Notice (2) electronically filed by Mr. Hector Garcia on behalf of AEP Ohio Transmission Company