Appendix B DATA FORMS

B.1 WETLAND DETERMINATION FORMS





Applicant: Columbia Gas of Ohio County: Delaware	9	
Investigator #1: Angela Sjollema Investigator #2: Charlie Allen State: OH		
Soil Unit: Pewamo silt clay loam, 0-1% slopes NWI/WWI Classification: N/A Wetland ID: Wetland	1	
Landform: Terrace Local Relief: Concave Sample Point: SP01		
Slope (%): 0 Latitude:40.232698 Longitude: -83.113125 Datum: Community ID: PEM		
Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) - Yes - No Section: N/A		
Are Vegetation , Soil , or Hydrology significantly disturbed? Are normal circumstances present? Township: N/A		
Are Vegetation , Soil , or Hydrology naturally problematic? • Yes No Range: N/A	Dir:	N/A
SUMMARY OF FINDINGS		

Hydrophytic Vegetation Present? Hydric Soils Present? Yes □ No ■ Yes □ No Wetland Hydrology Present? Yes • No Is This Sampling Point Within A Wetland?

Remarks: Wet point for Wetland 1

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present.):

Primary:

- A1 Surface Water A2 - High Water Table
- A3 Saturation B1 - Water Marks
- B2 Sediment Deposits B3 - Drift Deposits
- B4 Algal Mat or Crust B5 - Iron Deposits
- B7 Inundation Visible on Aerial Imagery
- B8 Sparsely Vegetated Concave Surface
- B9 Water-Stained Leaves
- B13 Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor
- C3 Oxidized Rhizospheres on Living Roots
- C4 Presence of Reduced Iron
- C6 Recent Iron Reduction in Tilled Soils
- C7 Thin Muck Surface
- D9 Gauge or Well Data Other (Explain in Remarks)

Secondary:

- B6 Surface Soil Cracks B10 - Drainage Patterns
- C2 Dry-Season Water Table
- C8 Crayfish Burrows
- C9 Saturation Visible on Aerial Imagery
- D1 Stunted or Stressed Plants
- D2 Geomorphic Position
- D5 FAC-Neutral Test

Field Observations:

Surface Water Present? Yes No Depth: 0.5 (in.) Water Table Present? ■ Yes □ No Depth: 0 (in.) 8 Saturation Present? ■ Yes ■ No Depth: (in.)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

N/A

Wetland Hydrology Present? • Yes • No

Remarks:

SOILS	
Map Unit Name:	Pewamo silt clay loam 0-1% slopes

Profile Descri	Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)													
Тор	Bottom		Matrix				Redo		Texture					
Depth	Depth	Horizon	Color	Color (Moist) %			Color (Moist)	%	Туре	Location	(e.g. clay, sand, loam)			
0	8		10YR	5/2	80	5YR	5/6	10	С	PL	silt loam			
0	8			-		5YR	5/6	10	С	M	silt loam			
8	16		10YR	5/2	85	5YR	5/6	5	С	PL	silty clay loam			
8	16	-				5YR	5/6	10	С	M	silty clay loam			
16	20		10YR	5/2	90	5YR	5/6	5	С	PL	silty clay loam			
16	20					5YR	5/6	5	С	M	silty clay loam			

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

- A1- Histosol
- A2 Histic Epipedon
- A3 Black Histic
- A4 Hydrogen Sulfide
- A5 Stratified Layers
- A10 2 cm Muck A11 - Depleted Below Dark Surface
- A12 Thick Dark Surface

- S1 Sandy Muck Mineral
- F2 Loamy Gleyed Matrix
- F3 Depleted Matrix

S5 - Sandy Redox

S6 - Stripped Matrix

F6 - Redox Dark Surface

S4 - Sandy Gleyed Matrix

F1 - Loamy Muck Mineral

- F7 Depleted Dark Surface
- F8 Redox Depressions
- S3 5 cm Mucky Peat or Peat

Indicators for Problematic Soils 1

- A16 Coast Prairie Redox
- S7 Dark Surface
- F12 Iron-Manganese Masses
- TF12 Very Shallow Dark Surface Other (Explain in Remarks)

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

" Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**

Remarks:

Restrictive Layer



5.

Remarks:

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: North Columbus Loop - Preferred Route Wetland ID: Wetland 1 Sample Point: SP01 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) Species Name **Dominance Test Worksheet** % Cover Dominant Ind.Status Number of Dominant Species that are OBL, FACW, or FAC: ____1 (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5 Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B) 6. 7. 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = x 2 = FACW spp. 1 FAC spp. 0 x 3 =Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = 10 Cornus florida 10 FACU UPL spp. x 5 = Fraxinus pennsylvanica 2. **FACW** 1 Ν 3. 111 __(A) 142 Total 4. 5. Prevalence Index = B/A = 1.279 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation __ --Yes No 10. ■ No Yes Dominance Test is > 50% --Total Cover = Yes No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) No Problem Hydrophytic Vegetation (Explain) * Yes 1. Leersia oryzoides 90 Υ OBL * Indicators of hydric soil and wetland hydrology must be 10 OBL 2 Scirpus cyperinus Ν present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 30 ft radius) 1 Hydrophytic Vegetation Present • Yes • No 3. 4.

Additional Remarks:		

Total Cover =

0

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

Hydric Soil Present?

" Yes " No



S3 - 5 cm Mucky Peat or Peat

Type: N/A

Depth: N/A

Restrictive Layer (If Observed)

Remarks:

						M	idwest Region				
Project/Site:	Northern C	columbus Loop - Pre	ferred I	oon			Stantec Project #:	193707055		Date:	02/25/20
Applicant:		Gas of Ohio	nonou E	оор			Otanioo i rojoot ii.	100707000		County:	Delaware
nvestigator #1:				Investi	gator #2:	Charlie	Allen			State:	OH
Soil Unit:	,	ilty clay loam, 0-1 %	clonec	IIIVCOL	gator #Z.		WI/WWI Classification	n: Ν/Δ		Wetland ID:	
andform:	Terrace	ity ciay loam, 0-1 70	siopes	Loc	al Relief:	-	NVVI/VV VVI Classification	I. IN/A			
		1 -4141	40 0007				400	5.4		Sample Point:	
Slope (%):	0	Latitude:			ongitude:			Datum:		Community ID	•
		ditions on the site ty	•			(If no, expla		■ Yes □	No	Section:	N/A
		or Hydrology sig					Are normal circumsta	ances present	?	Township:	N/A
		or Hydrology nat	turally pr	oblemat	ic?		Yes	Мө		Range:	N/A Dir: N/A
UMMARY OF	FINDINGS										
Hydrophytic Ve	getation Pre	sent?		Yes	■ No			Hydric Soils	Present?		□ Yes ■ No
Netland Hydrol	oav Presen	t?		Yes	No			Is This Sam	plina Point	Within A Wet	land? Yes No
Remarks:	Farm field,	upland point for We	etland 1						. 0		
IYDROLOGY											
	ology Indic	ators (Check here i	f indicat	ors are r	ot preser	nt•):					
Primary:		•			•	,			Secondary		
	A1 - Surface	Water			B9 - Wate	er-Stained	Leaves		-	B6 - Surface So	oil Cracks
	A2 - High Wa	ater Table			B13 - Aqu	iatic Fauna	a			B10 - Drainage	Patterns
	A3 - Saturati					e Aquatic			•	C2 - Dry-Seaso	
•	B1 - Water N				C1 - Hydr				•	C8 - Crayfish B	
	B2 - Sedime						spheres on Living Roots		-		Visible on Aerial Imager
	B3 - Drift De			•			educed Iron				Stressed Plants
	B4 - Algal Ma						eduction in Tilled Soils		•	D2 - Geomorph	
	B5 - Iron Dep				C7 - Thin				•	D5 - FAC-Neut	ral Test
		on Visible on Aerial Ima			D9 - Gau						
	B8 - Sparsel	y Vegetated Concave S	Surface		Other (Ex	plain in Re	emarks)				
Field Observat											
Surface Water I		□ Yes ■ No	Depth:	-	(in.)			Wetland Hy	drology P	resent?	Yes No
Water Table Pr	esent?	■ Yes ■ No	Depth:	-	(in.)			vvctiana my	arology i	i Cociii i	103 110
Saturation Pres	ent?	□ Yes ■ No	Depth:	-	(in.)						
Doscribo Pocord	lod Data (etr	eam gauge, monitori	na woll a	orial pho	toc provi	oue inene	octions) if available:		N/A		
	ieu Data (Sti	eam gauge, monitori	ily well, a	aeriai pric	nos, previ	ous mspe	cuons), ii avaliable.		IN/A		
Remarks:											
OILS											
Map Unit Name	·.	Pewamo silty clay I	oam 0-1	1 % slope	es						
		, ,				ne: C=Concentra	ation, D=Depletion, RM=Reduced Matrix, CS	S=Covered/Coated Sand G	rains: Location: PL=	Pore Lining M=Matrix)	
Тор	Bottom			Matrix				lox Features			Texture
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Туре	Location	(e.g. clay, sand, loa
0	10		10YR	5/3	97	7.5YR	5/6	3	C	M	clay loam
10	20		10YR	5/3	93	7.5YR	5/6	7	С	M	clay loam
											
NRCS Hvdric	Soil Field I	ndicators (check he	ere if ind	icators a	re not pre	esent •):	Indicators	for Probler	natic Soils 1	
	A1- Histosol	(ly Gleyed	,			Prairie Redox	
	A2 - Histic E	pipedon		-	S5 - Sand		· · · · · · · · · · · · · · · · · · ·		S7 - Dark S		
	A3 - Black H					ped Matrix	(Manganese Mass	ses
	A4 - Hydroge					ny Muck M				Shallow Dark S	
	A5 - Stratifie					ny Gleved			-	ain in Remarks)	
-	A10 - 2 cm N			-		eted Matrix			Julior (Expi	III i tolliains)	
		ed Below Dark Surface				x Dark Su					
		Dark Surface				eted Dark					
	S1 - Sandy N					x Depress					
	, .										



Project/Site: North Columbus Loop - Preferred Loop Wetland ID: Wetland 1 Sample Point: SP02 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) Species Name **Dominance Test Worksheet** % Cover Dominant Ind.Status Number of Dominant Species that are OBL, FACW, or FAC: ____0 (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5 Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B) 6. 7. 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = x 2 = FACW spp. 0 FAC spp. 0 x 3 =Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = 3 Cornus florida 3 **FACU** UPL spp. x 5 = 2. 3. 33 162 (B) Total (A) 4. 5. Prevalence Index = B/A = 4.909 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation ----Yes No 10. ■ No Yes Dominance Test is > 50% --Total Cover = Yes ■ No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) No Problem Hydrophytic Vegetation (Explain) * Yes 1. Triticum aestivum 30 Υ UPL * Indicators of hydric soil and wetland hydrology must be 2 present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10.

--

Total Cover = 30

Woody Vine Stratum (Plot size: 30 ft radius)

1. -- -- -- -2. -- -- -- -3. -- -- -- -4. -- -- -- -5. -- Total Cover = 0

Remarks: 70% bare ground

Hydrophytic Vegetation Present - Yes - No

Herb - All herbaceous (non-woody) plants, regardless of size,

and woody plants less than 3.28 ft. tall.

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

Additional Remarks:

11.

12.

13.

14.

15.



Project/Site:	Northern Co	olumbus Loop - Pre	eferred R	oute			Stantec Project #:	193707055		Date:	03/03/20	
Applicant:	Columbia G	as of Ohio					•			County:	Union	
nvestigator #1:	Michelle Ke	arns		Investi	igator #2:	Julie Sla	ater			State:	ОН	
Soil Unit:	Lodbell silt	loam, channery sul	bstratum				IWI/WWI Classification	n: PFO1Ah		Wetland ID:	Upland	
andform:	Floodplain			Loc	al Relief:	Concave	Э			Sample Point:	SP03	
Slope (%):	2		40.243		ongitude:			Datum:		Community ID		
Are climatic/hyd	drologic cond	litions on the site ty	pical for	this time	of year?	(If no, expla	ain in remarks)	■ Yes □	No	Section:	N/A	
Are Vegetation		or Hydrology sig					Are normal circumsta	ances present	?	Township:	N/A	
Are Vegetation	, Soil , o	or Hydrology na					■ Yes	No		Range:		Dir: N/A
UMMARY OF		10			N.				D 10			
Hydrophytic Ve				Yes				Hydric Soils				Yes • No
Netland Hydro Remarks:	logy Present Upland poir			Yes	- No			Is This Sam	pling Point	Within A Wet	land?	Yes No
Primary	A1 - Surface A2 - High Wa A3 - Saturatic B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundatic B8 - Sparsely	ter Table on arks t Deposits oosits t or Crust	agery	ors are r	B9 - Wate B13 - Aqu B14 - Tru C1 - Hydr C3 - Oxidi C4 - Pres C6 - Rece C7 - Thin D9 - Gaug	er-Stained latic Fauna e Aquatic I ogen Sulfic ized Rhizo ence of Re	a Plants de Odor spheres on Living Roots educed Iron duction in Tilled Soils ace Data		Secondary	B6 - Surface S B10 - Drainage C2 - Dry-Seas C8 - Crayfish C C9 - Saturation D1 - Stunted or D2 - Geomorph D5 - FAC-Neut	Patterns on Water Ta Burrows Visible on A Stressed P nic Position	Aerial Imager
urface Water /ater Table Pr aturation Pres escribe Record	Present? resent? sent?	Yes No Yes No Yes No No	Depth: Depth: Depth: ing well, a	0 0 0 aerial pho	(in.) (in.) (in.) otos, previ	ous inspe	ctions), if available:	Wetland Hy	rdrology P	resent? •	Yes •	No
Surface Water Vater Table Pr Saturation Pres Describe Record Remarks: OILS Map Unit Name	Present? resent? sent? ded Data (stre	" Yes " No " Yes " No eam gauge, monitori	Depth: Depth: ing well, a	0 0 aerial pho substrat	(in.) (in.) otos, previ	slopes,			N/A		Yes •	No
Remarks: OILS Map Unit Name Profile Descrip	Present? resent? sent? ded Data (stre	" Yes " No " Yes " No eam gauge, monitori	Depth: Depth: ing well, a	0 0 aerial pho substrat	(in.) (in.) otos, previoum, 0-2% of indicators.) (Type	slopes,	. tion, D=Depletion, RM=Reduced Matrix, CSS	S=Covered/Coated Sand Gr	N/A			
Surface Water Vater Table Pr Saturation Pres Describe Record Remarks: OILS Map Unit Name Profile Descrip Top	Present? resent? resent? resent? resent? resent? resent? resent? resent.	"Yes "No "Yes "No eam gauge, monitori	Depth: Depth: ing well, a	0 0 aerial pho substrat	(in.) (in.) otos, previoum, 0-2% of indicators.) (Type	slopes,	tion, D=Depletion, RM=Reduced Matrix, CS Red	S=Covered/Coated Sand Gr	N/A N/A rains; Location: PL=8	² cre Lining, M=Matrix)	T	exture
Surface Water Vater Table Pr Saturation Pres Sescribe Record Remarks: OILS Map Unit Name Profile Descrip Top Depth	Present? esent? sent? ded Data (stre	" Yes " No " Yes " No earn gauge, monitori	Depth: Depth: ing well, a hannery dicator or confine Color	0 0 neerial pho substrat m the absence of Matrix (Moist)	(in.) (in.) otos, previoum, 0-2% of indicators.) (Type	slopes,	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand Gr IOX Features %	N/A rains; Location: PL=F	Pore Lining, M=Matrix) Location	Ti (e.g. clay	exture v, sand, loa
urface Water Vater Table Pr aturation Pres escribe Record emarks: DILS lap Unit Name rofile Descrip Top Depth 0	Present? esent? sent? ded Data (street) esents ded Data (street) esents bition (Describe to the part) Depth 20	" Yes " No " Yes " No earn gauge, monitori Lodbell silt loam, c he depth needed to document the in	Depth: Depth: ing well, a hannery Color 10YR	0 0 substrat m the absence of Matrix (Moist) 3/3	(in.) (in.) otos, previoum, 0-2% of indicators.) (Tyl	slopes,	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand Gr	N/A N/A Type	Pore Lining, M=Matrix) Location	Ti (e.g. clay	exture r, sand, loa ny loam
urface Water /ater Table Pr aturation Pres escribe Record emarks: DILS lap Unit Name rofile Descrip Top Depth 0	Present? resent? resent. resen	" Yes " No " Yes " No earn gauge, monitori Lodbell silt loam, c he depth needed to document the in Horizon	Depth: Depth: ing well, a hannery clicator or confine Color 10YR	0 0 substrat in the absence or Matrix (Moist) 3/3	(in.) (in.) otos, previoum, 0-2% of Indicators.) (Type of Indicators) (Type of Indicators) (Type of Indicators) (Indicators) (Indicator	o slopes,	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand Gr	N/A N/A Type	Pore Lining, M=Matrix) Location	Ti (e.g. clay	exture , sand, loa ny loam
urface Water /ater Table Pr aturation Pres escribe Record emarks: DILS lap Unit Name rofile Descrip Top Depth 0	Present? esent? esent? ded Data (street) esents esents ded Data (street) esents	" Yes " No " Yes " No earn gauge, monitori Lodbell silt loam, c he depth needed to document the in Horizon	Depth: Depth: Ing well, a hannery clicator or confine Color 10YR	O O O O O O O O O O O O O O O O O O O	(in.) (in.) otos, previoum, 0-2% findicators) (Tyl % 100	o slopes,	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand Gr	N/A N/A Type	Pore Lining, M=Matrix) Location	Ti (e.g. clay	exture , sand, loa ny loam
urface Water /ater Table Pr aturation Pres escribe Record emarks: DILS lap Unit Name rofile Descrip Top Depth 0	Present? resent? resent. resen	" Yes " No " Yes " No earn gauge, monitori Lodbell silt loam, c he depth needed to document the in Horizon	Depth: Depth: ing well, a hannery clicator or confine Color 10YR	Substrat In the absence of Matrix (Moist) 3/3	(in.) (in.) otos, previoum, 0-2% of Indicators.) (Type of Indicators) (Type of Indicators) (Type of Indicators) (Indicators) (Indicator	o slopes,	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand Gr	N/A N/A Type	Pore Lining, M=Matrix) Location	Ti (e.g. clay	exture , sand, loa ny loam
urface Water Vater Table Pr aturation Pres escribe Record emarks: DILS lap Unit Name rofile Descrip Top Depth 0	Present? esent? esent? ded Data (street) esents esents ded Data (street) esents	" Yes " No " Yes " No earn gauge, monitori Lodbell silt loam, c he depth needed to document the in Horizon	Depth: Depth: Ing well, a hannery closer or confine Color 10YR	O O O O O O O O O O O O O O O O O O O	(in.) (in.) otos, previoum, 0-2% findicators) (Tyl % 100	o slopes,	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand Gr	N/A N/A Type	Pore Lining, M=Matrix) Location	Ti (e.g. clay	exture , sand, loa ny loam
Surface Water Vater Table Pr Saturation Pres Describe Record Remarks: OILS Map Unit Name Profile Descrip Top Depth 0	Present? esent? sent? ded Data (street) btion (Describe to to Depth 20	" Yes " No " Yes " No earn gauge, monitori Lodbell silt loam, c he depth needed to document the in Horizon	Depth: Depth: Depth: ing well, a hannery dicator or confirm Color 10YR	Substrat In the absence of Matrix (Moist) 3/3	(in.) (in.) otos, previoum, 0-2% of indicators.) (Tyl 00 00 00 00 00 00 00 00 00 00 00 00 00	slopes, pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand Gr IOX Features %	N/A N/A Type	Pore Lining, M=Matrix) Location	Ti (e.g. clay	exture , sand, loa ny loam
surface Water Vater Table Pr Saturation Pres Sescribe Record Semarks: OILS Map Unit Name Profile Descrip Top Depth 0	Present? esent? esent? ded Data (street) esents esent? ded Data (street) esents	" Yes " No " Yes " No earn gauge, monitori Lodbell silt loam, c he depth needed to document the in Horizon	Depth: Depth: Depth: ing well, a hannery dicator or confin Color 10YR	Substratent the absence of Matrix (Moist) 3/3	(in.) (in.) otos, previoum, 0-2% findicators.) (Tyl	o slopes,	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand Gri	N/A N/A Type	Pore Lining, M=Matrix) Location	Ti (e.g. clay	exture /, sand, loa ny loam
urface Water /ater Table Pr aturation Pres escribe Record emarks: DILS lap Unit Name rofile Descrip Top Depth 0	Present? esent? esent? sent? ded Data (street) btion (Describe to the path of	" Yes " No " Yes " No earn gauge, monitori Lodbell silt loam, c he depth needed to document the in Horizon	Depth: Depth: Depth: ing well, a hannery dicator or confin Color 10YR	Substratent the absence of Matrix (Moist) 3/3	(in.) (in.) otos, previoum, 0-2% findicators) (Tyl % 100	o slopes, pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand Gr	N/A N/A Type	Pore Lining, M=Matrix) Location	Ti (e.g. clay	exture , sand, loa ny loam
urface Water l'ater Table Preservible Record emarks: DILS ap Unit Name rofile Descrip Top Depth 0	Present? resent? resent. resen	" Yes " No " Yes " No earn gauge, monitori Lodbell silt loam, c he depth needed to document the in Horizon	Depth: Depth: Depth: ing well, a hannery color 10YR	substrat m the absence of Matrix (Moist) 3/3	(in.) (in.) otos, previoum, 0-2% % 100	slopes, pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand Gr IOX Features %	N/A Type	Pore Lining, M=Matrix) Location	Ti (e.g. clay	exture
urface Water /ater Table Pr aturation Pres escribe Record emarks: DILS lap Unit Name rofile Descrip Top Depth 0	Present? resent? resent. resen	" Yes " No " Yes " No earn gauge, monitori Lodbell silt loam, co he depth needed to document the in Horizon dicators (check he	Depth: Depth: Depth: ing well, a hannery color 10YR	substrat m the absence of Matrix (Moist) 3/3	(in.) (in.) (in.) otos, previoum, 0-2% for indicators.) (Ty % 100	slopes, pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand Gr IOX Features %	N/A Tains; Location: PL=8 Type 5 for Probler A16 - Coast	Location Location	Ti (e.g. clay	exture
urface Water /ater Table Pr aturation Pres escribe Record emarks: DILS lap Unit Name rofile Descrip Top Depth 0	Present? resent? resent.	" Yes " No " Yes " No cam gauge, monitori Lodbell silt loam, c he depth needed to document the in Horizon dicators (check he	Depth: Depth: Depth: ing well, a hannery color 10YR	Substrate methodological photo	(in.) (in.) (in.) otos, previoum, 0-2% of indicators.) (Tyl % 100	slopes, pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand Gr Iox Features % Indicators	N/A Type 5 for Probler A16 - Coast S7 - Dark S	Location Location	(e.g. clay	exture
urface Water /ater Table Pr aturation Pres escribe Record emarks: DILS lap Unit Name rofile Descrip Top Depth 0 IRCS Hydric	Present? resent?	" Yes " No " Yes " No Hooseam gauge, monitorial silt loam, company to the depth needed to document the interpretation the depth needed to docume	Depth: Depth: Depth: ing well, a hannery color 10YR	substratent the absence of Matrix (Moist) 3/3 icators a	(in.) (in.) otos, previoum, 0-2% of Indicators.) (Ty) % 100	slopes, pe: C=Concentral	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand Gr IOX Features % Indicators	N/A Type	Location Location	Ti (e.g. clay cla	exture
urface Water Vater Table Pr aturation Pres escribe Record emarks: DILS lap Unit Name rofile Descrip Top Depth 0 NRCS Hydric	Present? resent? resents resen	" Yes " No " Yes " No Hooseam gauge, monitorial Silt loam, company to the depth needed to document the interpretation of the depth needed to document the inter	Depth: Depth: Depth: ing well, a hannery color 10YR	substrate to the absence of Matrix (Moist) 3/3 icators a	(in.)	slopes, pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand Gr OX Features % Indicators	N/A Type	Location Location	Ti (e.g. clay cla	exture
Surface Water Vater Table Pr Saturation Pres Sescribe Record Remarks: OILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Present? resent?	" Yes " No " Yes " No earn gauge, monitori Lodbell silt loam, c he depth needed to document the in Horizon dicators (check he stic n Sulfide Layers	Depth: Depth: Depth: ing well, a hannery color 10YR	substrat m the absence of Matrix (Moist) 3/3 icators a	(in.) (in.) (in.) otos, previoum, 0-2% um, 0-2% frindicators.) (Ty) % 100	slopes, pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand Gr IOX Features % Indicators	N/A Type	Location Location	Ti (e.g. clay cla	exture
Surface Water Vater Table Pr Saturation Pres Sescribe Record Semarks: OILS Map Unit Name Profile Descrip Top Depth 0 VRCS Hydric	Present? resent?	" Yes " No " Yes " No earn gauge, monitori Lodbell silt loam, content the interpretation of the depth needed to document the interpretation of the depth neede	Depth: Depth: Depth: ing well, a hannery Color 10YR ere if ind	substrat m the absence or Matrix (Moist) icators a	(in.) (in.) (in.) otos, previoum, 0-2% um, 0-2% findicators.) (Ty % 100 re not pre \$4 - Sand \$5 - Sand \$6 - Strip F1 - Loam F2 - Loam F3 - Deple	slopes, pe: C=Concentra	fion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand Gr OX Features % Indicators	N/A Type	Location Location	Ti (e.g. clay cla	exture
Surface Water Vater Table Pr Saturation Pres Sescribe Record Remarks: OILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Present? esent? esent? sent? ded Data (street) btion (Describe to the part of	" Yes " No " Yes " No earn gauge, monitori Lodbell silt loam, c he depth needed to document the in Horizon dicators (check he ipedon stic n Sulfide Layers uck de Below Dark Surface	Depth: Depth: Depth: ing well, a hannery Color 10YR ere if ind	substrat m the absence of Matrix (Moist) icators a	(in.) (in.) (in.) otos, previoum, 0-2% of Indicators.) (Tyl % 100 rer not pre \$4 - Sand \$5 - Sand \$6 - Strip F1 - Loam F2 - Loam F3 - Depile F6 - Redo	o slopes, pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)): Matrix inneral Matrix crface	S=Covered/Coated Sand Gr OX Features % Indicators	N/A Type	Location Location	Ti (e.g. clay cla	exture
Surface Water Vater Table Pr Saturation Pres Describe Record Remarks: OILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Present? resent?	" Yes " No " Yes " No " Yes " No Pam gauge, monitori Lodbell silt loam, c Horizon dicators (check horizodo stic n Sulfide Layers uck d Below Dark Surface eark Surface	Depth: Depth: Depth: ing well, a hannery Color 10YR ere if ind	substratent the absence of Matrix (Moist) 3/3 icators a	(in.)	slopes, pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)): Matrix inneral Matrix (rface Surface	S=Covered/Coated Sand Gr IOX Features % Indicators	N/A Type	Location Location	Ti (e.g. clay cla	exture
Surface Water Vater Table Pr Saturation Pres Sescribe Record Remarks: OILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Present? resent? resent. resen	" Yes " No " Yes " No earn gauge, monitori Lodbell silt loam, c he depth needed to document the in Horizon dicators (check he ipedon stic n Sulfide Layers uck did Below Dark Surface ark Surface uck Mineral	Depth: Depth: Depth: ing well, a hannery Color 10YR ere if ind	substrat m the absence of Matrix (Moist) icators a	(in.)	o slopes, pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)): Matrix inneral Matrix (rface Surface	S=Covered/Coated Sand Gr IOX Features % Indicators	N/A Tajns: Location: PL=F Type	Location Location	(e.g. clay	exture y, sand, loa y loam
Surface Water Vater Table Pr Saturation Pres Describe Record Remarks: OILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Present? resent? resent. resen	" Yes " No " Yes " No " Yes " No Pam gauge, monitori Lodbell silt loam, c Horizon	Depth: Depth: Depth: ing well, a hannery Color 10YR ere if ind	substrat m the absence of Matrix (Moist) 3/3 icators a	(in.)	slopes, pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)): Matrix inneral Matrix (rface Surface	S=Covered/Coated Sand Gr IOX Features % Indicators	N/A Type s for Probler A16 - Coast S7 - Dark S F12 - Iron-M TF12 - Very Other (Explain	Location Location	(e.g. clay	exture /, sand, loa y loam disturbed or proble



Project/Site: North Columbus Loop - Preferred Route Wetland ID: Upland Sample Point: SP03 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Gleditsia triacanthos 10 **FACU** 30 Υ FAC Number of Dominant Species that are OBL, FACW, or FAC: ____4 ___(A) 2. Acer negundo 3. Celtis occidentalis 5 Ν FAC 4. Ulmus americana 5 Ν **FACW** Total Number of Dominant Species Across All Strata: 6 (B) 5. Populus deltoides 10 FAC Ν Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B) 6. 7. 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = FACW spp. x 2 = x 3= Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = Cornus alba 10 **FACW** UPL spp. x 5= Fraxinus pennsylvanica 2. **FACW** 3 Υ 3. Total (A) 4. Prevalence Index = B/A = 5. 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation --Yes No 10. Yes No Dominance Test is > 50% --Total Cover = Yes No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) No Problem Hydrophytic Vegetation (Explain) * Yes 1. Elymus virginicus 30 Υ **FACW** * Indicators of hydric soil and wetland hydrology must be Packera glabella **FACW** 2 5 Ν present, unless disturbed or problematic. 3. Lysimachia nummularia **FACW** 5 **Definitions of Vegetation Strata:** 4 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 40 Woody Vine Stratum (Plot size: 30 ft radius) Rubus idaeus FACU 1 15 Rosa multiflora 15 **FACU** 3. Hydrophytic Vegetation Present . Yes . No 4. 5.

Additional Remarks:

Total Cover =

Remarks:

30



Remarks:

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: Northern Columbus Loop - Preferred Route Stantec Project #: 193707055 Date: 03/03/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Michelle Kearns State: Investigator #2: Julie Slater OH NWI/WWI Classification: PFO1Ah Lobdell silt loam, channery substratum, 0-2% slopes Wetland ID: Wetland 2 Soil Unit: Landform: Local Relief: Convex Sample Point: SP04 Depression Latitude: 40.242833 Longitude: -83.148068 Slope (%): Datum: --Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? Yes
 No Yes • No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Upland point for Wetland 2 HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present.): Primary: Secondary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table . B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows **B2 - Sediment Deposits** C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? □ Yes ■ No Depth: 0 (in.) Wetland Hydrology Present? • Yes • No Water Table Present? □ Yes ■ Depth: 0 (in.) No 0 Saturation Present? □ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Lobdell silt loam, channery substratum, 0-2% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Тор Bottom Texture Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 20 100 clay loam **10YR** 3/4 0 __ __ --------------------------NRCS Hydric Soil Field Indicators (check here if indicators are not present Indicators for Problematic Soils 1 S4 - Sandy Gleyed Matrix A16 - Coast Prairie Redox A2 - Histic Epipedon S5 - Sandy Redox S7 - Dark Surface A3 - Black Histic S6 - Stripped Matrix F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral A5 - Stratified Layers F2 - Loamy Gleyed Matrix Other (Explain in Remarks) A10 - 2 cm Muck F3 - Depleted Matrix A11 - Depleted Below Dark Surface F6 - Redox Dark Surface A12 - Thick Dark Surface F7 - Depleted Dark Surface S1 - Sandy Muck Mineral F8 - Redox Depressions 1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic S3 - 5 cm Mucky Peat or Peat Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**



Project/Site: North Columbus Loop - Preferred Route Wetland ID: Wetland 2 Sample Point: SP04 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Gleditsia triacanthos 25 **FACU** FAC Number of Dominant Species that are OBL, FACW, or FAC: ____2 (A) 2. 20 Υ Quercus macrocarpa 3. Ulmus americana 15 Ν **FACW** 4. Aesculus flava 15 Ν FACU Total Number of Dominant Species Across All Strata: 7 (B) 5 Carya cordiformis 5 **FACU** Ν Percent of Dominant Species That Are OBL, FACW, or FAC: 29% (A/B) 6. 7. 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 80 FACW spp. 15 x 2 = 30 FAC spp. 25 x 3 =75 Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = 105 420 Aesculus flava 15 **FACU** UPL spp. x 5= 2. FACU Lonicera morrowii 25 Υ 3. 145 525 Total (A) (B) 4. 5. Prevalence Index = B/A = 3.621 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation ----Yes No 10. ■ No Yes Dominance Test is > 50% --Total Cover = 40 Yes ■ No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) No Problem Hydrophytic Vegetation (Explain) * Yes 1. * Indicators of hydric soil and wetland hydrology must be 2 present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12.

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Woody Vine Stratum (Plot size: 30 ft radius) Toxicodendron radicans 1 5 FAC Rubus idaeus 15 **FACU** Rosa multiflora 3. Υ 5 **FACU** 4. 5. Total Cover = 25

Total Cover =

0

Hydrophytic Vegetation Present - Yes - No

and woody plants less than 3.28 ft. tall.

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

Additional Remarks:

Remarks:

13.

14.

15.



Restrictive Layer (If Observed)

Remarks:

Type: N/A

Depth: N/A

WETLAND DETERMINATION DATA FORM Midwest Region

						IVI	idwest Region						
											T = .		
Project/Site:		Columbus Loop - Pre	eferred R	oute			Stantec Proje	ect #:	193707055		Date:	03/03/20	
Applicant:		Gas of Ohio									County:	Delaware	
Investigator #1:				Investi	gator #2:						State:	ОН	
Soil Unit:		loam, channery sub	stratum,				IWI/WWI Classific	cation: P	PEM1Ch		Wetland ID:		2
Landform:	Depression				al Relief:						Sample Point:		
Slope (%):	1	Latitude: 4			.ongitude				Datum:		Community ID:	PFO	
Are climatic/hyd		ditions on the site ty				(If no, expl	ain in remarks)		Yes •	No	Section:	N/A	
Are Vegetation		or Hydrology sig					Are normal circu	umstand	ces present?	?	Township:	N/A	
Are Vegetation	, Soil ▫ ,	or Hydrology nat	turally pr	oblemati	c?		Yes	s I	No		Range:	N/A	Dir: N/A
SUMMARY OF	FINDINGS												
Hydrophytic Ve	getation Pre	esent?		Yes	- No			H	Hydric Soils	Present?		. \	∕es □ No
Wetland Hydrol	ogy Presen	t?		Yes	□ No			ls	s This Sam	oling Point	Within A Wetl	and? • ١	res · No
Remarks:													
HYDROLOGY													
Wetland Hydr	ology Indic	ators (Check here i	if indicate	ors are n	ot preser	nta)•							
Primary:		CHOOK HOLO	ii iiidiodi	oro are ri	ot prosor	,.				Secondary:			
<u>1 1111121 y</u> .	A1 - Surface	Water			B9 - Wate	er-Stained	Leaves			occondary.	B6 - Surface So	oil Cracks	
	A2 - High W				B13 - Aqu						B10 - Drainage		
•	A3 - Saturati				B14 - Tru					•	C2 - Dry-Seaso		le
	B1 - Water N	Marks			C1 - Hydr					•	C8 - Crayfish B		
	B2 - Sedime						spheres on Living Ro	oots			C9 - Saturation		
	B3 - Drift De						educed Iron			•	D1 - Stunted or		ants
-	B4 - Algal M						eduction in Tilled Soils	S			D2 - Geomorph		
	B5 - Iron De	posits ion Visible on Aerial Ima	ogon/		C7 - Thin D9 - Gaug						D5 - FAC-Neuti	rai i est	
		y Vegetated Concave S		-	Other (Ex								
	Во орагоо	y vogotatou conouve c	Juliuoo		Outor (Ex	piaii ii i i i	markoj						
Field Observat	tions:												
Surface Water		- Vaa - Na	Donth	2-3	(in)								
		■ Yes □ No	Depth:		(in.)			٧	Vetland Hy	drology Pi	resent? •	Yes • 1	No
Water Table Pr		Yes No	Depth:	0	(in.)				_				
Saturation Pres	ent?	■ Yes □ No	Depth:	0	(in.)								
Describe Record	led Data (str	ream gauge, monitori	ng well, a	erial pho	tos, previ	ous inspe	ections), if available	:		N/A			
Remarks:													
SOILS													
Map Unit Name	· lobdell s	ilt loam, channery s	ubstratur	n 0-2%	slopes								
		the depth needed to document the in-				no: C=Concentr	tion DeDonlotion BM=Reduced I	Matrix CS=Cox	used/Costad Sand Cr	nino: Location: DL=C	Poro Lining Matteriy		
Top	Bottom	o trie depart needed to document trie in	dicator or comm	Matrix	i iliuicators.) (Ty	pe. C=Concentra	ation, D-Depletion, Kivi-Reduced i		Features	dills, Location. FL-F	ore Lining, in-Matrix)	To	exture
I =		U - d	0-1		0/		0-1 (14-:-4)	Redux		T	Location		sand, loam
Depth	Depth	Horizon	1	(Moist)	%	5\10	Color (Moist)		<u>%</u>	Туре	Location	<u> </u>	
0	18		10YR	3/2	95	5YR	4/6		5	С	M	clay	y loam
NRCS Hydric	Soil Field I	ndicators (check he	ere if ind	icators a	re not pre	esent •):	<u> </u>	Indicators	for Problen	natic Soils 1		
	A1- Histosol	`			S4 - Sano		Matrix				Prairie Redox		
	A2 - Histic E	pipedon			S5 - Sano	y Redox				S7 - Dark S	urface		
	A3 - Black H				S6 - Strip						langanese Mass		
	A4 - Hydroge	en Sulfide			F1 - Loan					TF12 - Very	Shallow Dark S	urface	
	A5 - Stratifie				F2 - Loan				•		ain in Remarks)		
	A10 - 2 cm M				F3 - Deple								
•		ed Below Dark Surface	:	•	F6 - Redo								
•		Dark Surface		•	F7 - Deple								
-	,	Muck Mineral			F8 - Redo	x Depress	sions	1.	adioators of burden	dio vocatation '	entland budget	o proposit ::=!==: "	oturbod or '
п	აპ - 5 cm M	ucky Peat or Peat						· In	uscators of hydrophy	ruc vegetation and v	vetland hydrology must be	e present, unless di	sturbed or problemation

Hydric Soil Present?

Yes No



Remarks:

10% open water

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: North Columbus Loop - Preferred Route Wetland ID: Wetland 2 Sample Point: SP05 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Acer negundo FAC 40 **FACW** Number of Dominant Species that are OBL, FACW, or FAC: ____4 ___(A) 2. Ulmus americana Υ 3. Populus deltoides 20 FAC 4. Total Number of Dominant Species Across All Strata: 4 (B) 5. --Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 6. 7. 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = x 2 = FACW spp. FAC spp. x 3= Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = UPL spp. x 5= 2. 3. ____(A) Total 4. Prevalence Index = B/A = 5. 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation ----Yes No 10. Yes No Dominance Test is > 50% --Total Cover = Yes No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) No Problem Hydrophytic Vegetation (Explain) * Yes 1. Carex lurida 90 Υ OBL * Indicators of hydric soil and wetland hydrology must be 2 -present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 90 Woody Vine Stratum (Plot size: 30 ft radius) 1 Hydrophytic Vegetation Present • Yes • No 3. 4. 5. Total Cover = 0

Additional Remarks:		



WETLAND DETERMINATION DATA FORM Page 1 of 2 **Midwest Region** Project/Site: Northern Columbus Loop - Preferred Route Stantec Project #: 193707055 Date: 03/17/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen OH NWI/WWI Classification: PEM1Fh Lobdell silt loam, channery substratum, 0-2% slopes Wetland ID: Wetland 2 Soil Unit: Landform: Riverine Local Relief: Concave Sample Point: SP06 Longitude: -83.148895 Latitude: 40.243111 Slope (%): n Datum: --Community ID: PFO Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? ■ Yes □ No Yes • No Wetland Hydrology Present? ■ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Forested Wetland with large open water component. North of US 42 Wet point for Wetland 2 Wetland Hydrology Indicators (Check here if indicators are not present.): Secondary: Primary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows **B2 - Sediment Deposits** C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? □ Yes ■ Depth: (in.) No Wetland Hydrology Present? • Yes • No Water Table Present? ■ Yes □ Depth: 3 (in.) No 1 Saturation Present? ■ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Large open water area, but sample point taken outside surface water area SOILS Map Unit Name: Lobdell silt loam, channery substratum, 0-2% slopes

Profile Descri	Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)														
Тор	Bottom			Matrix			Red		Texture						
Depth	Depth	Horizon	Color	Color (Moist) %		Color (Moist) %		Color (Moist) %			Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	5		10YR	3/3	100						silty clay loam				
5	9		10YR	3/3	98	5YR	4/6	2	С	M	silty clay loam				
9	12		10YR	3/2	87	10YR	5/6	8	С	M					
9	12					10YR	6/6	5	С	M					
12	20		10YR	3/2	20	10YR	5/8	5	С	M					
12	20		10YR	4/2	40	10YR	5/4	35	С	M					

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

- A1- Histosol
- A2 Histic Epipedon
- A3 Black Histic A4 - Hydrogen Sulfide
- A5 Stratified Layers
- A10 2 cm Muck
- A11 Depleted Below Dark Surface
- A12 Thick Dark Surface
- S1 Sandy Muck Mineral
- S3 5 cm Mucky Peat or Peat

- S4 Sandy Gleyed Matrix
- S5 Sandy Redox S6 - Stripped Matrix
- F1 Loamy Muck Mineral
- F2 Loamy Gleyed Matrix
- F3 Depleted Matrix
- F6 Redox Dark Surface
- F7 Depleted Dark Surface
- F8 Redox Depressions

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

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**

Remarks:



Project/Site: North Columbus Loop - Preferred Route Wetland ID: Wetland 2 Sample Point: SP06

1. 2. 3. 4. 5. 6. 7. 8. 9.	Species Name Platanus occidentalis Populus deltoides Ulmus americana Acer negundo Aesculus glabra	5 60 10 3	N Y	Ind.Status FACW	Dominance Test Worksheet
2. 3. 4. 5. 6. 7. 8. 9.	Populus deltoides Ulmus americana Acer negundo Aesculus glabra	60 10			
3. 4. 5. 6. 7. 8. 9.	Ulmus americana Acer negundo Aesculus glabra	10		FAC	Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)
4. 5. 6. 7. 8. 9.	Acer negundo Aesculus glabra		N	FACW	(· · ·
5. 6. 7. 8. 9.	Aesculus glabra		N	FAC	Total Number of Dominant Species Across All Strata: 3 (B)
6. 7. 8. 9.	_	25	Y	FAC	(B)
7. 8. 9.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
8. 9.					(AB)
9.					Prevalence Index Worksheet
					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	103			FACW spp. 0 x 2 = 0
	10.01 00001	100			FAC spp. 0 x 3 = 0
pling/Shrub Stra	atum (Plot size: 15 ft radius)				FACU spp. 0 x 4 = 0
1.	Lonicera morrowii	3	N	FACW	UPL spp. 0 x 5 = 0
2.	Fraxinus pennsylvanica	7	Y	FACW	· · · · · · · · · · · · · · · · · · ·
3.	Ulmus americana	2	N	FACW	Total <mark>0</mark> (A) <mark>0</mark> (B)
4.					
5.				-	Prevalence Index = B/A = NA
6.				-	·
7.				-	
8.					Hydrophytic Vegetation Indicators:
9.				-	■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.					■ Yes □ No Dominance Test is > 50%
	Total Cover =	12			Yes □ No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
erh Stratum (Plo	t size: 5 ft radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.					2 163 140 1 Tobletti Tiyatopriyato Vegetation (Explain)
2.					* Indicators of hydric soil and wetland hydrology must be
3.					present, unless disturbed or problematic.
4.					Definitions of Vegetation Strata:
5.					Definitions of Vogetation offata.
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
9. 10.					ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
13.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
10.	Total Cover =				VVOOLY VIIIES WOODY VIIIOS GIODAGI MINITO. 20 TA INTIREGIIL
	Total Cover =	0			
andy Vina Strati	um (Plot size: 30 ft radius)				
1.	ım (Plot size: 30 ft radius)				
2.					
3.					Hydrophytic Vegetation Present = Yes = No
4.	 				nyurophytic vegetation Present # Yes # No
<u>4.</u> 5.					
<u>J.</u>	Total Cover =	0			

Additional Remarks:

Large open water area, but sample point taken outside surface water area



A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface

S1 - Sandy Muck Mineral

Type: Roots

Restrictive Layer

Remarks:

S3 - 5 cm Mucky Peat or Peat

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: Northern Columbus Loop - Preferred Route Stantec Project #: 193707055 Date: 03/17/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen ОН NWI/WWI Classification: PEM1Fh Wetland ID: Wetland 2 Soil Unit: Lobdell silt loam, channery substratum, 0-2% slopes Landform: Hillslope Local Relief: None Sample Point: SP07 Latitude: 40.243239 Longitude: -83.149435 Slope (%): Datum: --Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? □ Yes ■ No Yes • No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: North of US 42 Upland point for Wetland 2 Wetland Hydrology Indicators (Check here if indicators are not present.): Primary: Secondary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table . B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows **B2 - Sediment Deposits** C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? □ Yes ■ No Depth: (in.) Wetland Hydrology Present? • Yes • No Water Table Present? □ Yes ■ Depth: (in.) No Saturation Present? □ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: SOILS Map Unit Name: Lobdell silt loam, channery substratum, 0-2% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Тор Bottom Texture Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 7 5YR 100 14 5/3 silty clay 0 __ __ --------------------------NRCS Hydric Soil Field Indicators (check here if indicators are not present Indicators for Problematic Soils 1 S4 - Sandy Gleyed Matrix A16 - Coast Prairie Redox A2 - Histic Epipedon S5 - Sandy Redox S7 - Dark Surface A3 - Black Histic S6 - Stripped Matrix F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral A5 - Stratified Layers F2 - Loamy Gleyed Matrix Other (Explain in Remarks) A10 - 2 cm Muck F3 - Depleted Matrix

F6 - Redox Dark Surface

F8 - Redox Depressions

Depth:

14"

F7 - Depleted Dark Surface

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

Hydric Soil Present?

" Yes " No



Project/Site: North Columbus Loop - Preferred Route Wetland ID: Wetland 2 Sample Point: SP07 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Celtis occidentalis 45 FAC FAC Number of Dominant Species that are OBL, FACW, or FAC: ____2 (A) 2. 5 Prunus serotina Ν 3. Aesculus glabra 25 FAC 4. Acer saccharum 5 Ν FACU Total Number of Dominant Species Across All Strata: 4 (B) 7 5 Ν **FACU** Quercus alba 5 **FACW** Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B) 6. Ulmus americana 7. 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 92 FACW spp. 5 x 2 = 10 FAC spp. 80 x 3 =240 Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = 87 348 Lonicera morrowii 70 **FACU** UPL spp. x 5 = 2. FAC Aesculus glabra 5 Ν 3. 172 598 Total (A) 4. 5. Prevalence Index = B/A = 3.477 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation ----Yes No 10. ■ No Yes Dominance Test is > 50% --Total Cover = Yes ■ No Prevalence Index is ≤ 3.0 * 0 No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) No Problem Hydrophytic Vegetation (Explain) * Yes 1. Lonicera morrowii 5 Υ **FACU** * Indicators of hydric soil and wetland hydrology must be Smilax sp. 2 1 Ν present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 6 Woody Vine Stratum (Plot size: 30 ft radius) 1 Hydrophytic Vegetation Present - Yes - No 3. 4. 5. Total Cover = 0 Remarks:

Additional Remarks:		



Project/Site: Northern Columbus Loop - Preferred Route Stantec Project #: 193707055 Date: 02/25/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen OH NWI/WWI Classification: N/A Wetland ID: Wetland 3 Soil Unit: Pewamo silty clay loam, 0-1% slopes Landform: Terrace Local Relief: Concave Sample Point: SP08 Latitude: 40.226445 Slope (%): Longitude: -83.165893 Datum: --Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? ■ Yes □ No YesNo Wetland Hydrology Present? ■ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Wetland partially in hayfield. Wet point for Wetland 3

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present.):

Primary:

- A1 Surface Water B9 - Water-Stained Leaves
- A2 High Water Table A3 - Saturation . B1 - Water Marks
- **B2 Sediment Deposits** B3 - Drift Deposits
- B4 Algal Mat or Crust B5 - Iron Deposits
- B7 Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface
- C7 Thin Muck Surface D9 - Gauge or Well Data Other (Explain in Remarks)

B13 - Aquatic Fauna

B14 - True Aquatic Plants

C1 - Hydrogen Sulfide Odor

C4 - Presence of Reduced Iron

C3 - Oxidized Rhizospheres on Living Roots

C6 - Recent Iron Reduction in Tilled Soils

- Secondary:
 - B6 Surface Soil Cracks B10 - Drainage Patterns
 - C2 Dry-Season Water Table
 - C8 Crayfish Burrows
 - C9 Saturation Visible on Aerial Imagery
 - D1 Stunted or Stressed Plants
 - D2 Geomorphic Position
 - D5 FAC-Neutral Test

Field Observations:

Surface Water Present? Yes No Depth: (in.) Water Table Present? ■ Yes □ Depth: 0 (in.) No 3 Saturation Present? ■ Yes ■ No Depth: (in.)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

N/A

Wetland Hydrology Present? • Yes • No

Remarks:

SOILS

Man Unit Name	Pewamo silty clay loam	0-1% slones

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Redox Features Texture Top Matrix (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) % Color (Moist) Type Location 10YR 90 silty clay loam **10YR** 10 M 0 9 4/2 5/8 9 18 10YR 92 7.5YR 5/8 С clay loam 4/2 8 M --------------------------

NRCS Hydric Soil Field Indicators (check here if indicators are not present -

- A1- Histosol A2 - Histic Epipedon
- A3 Black Histic
- A4 Hydrogen Sulfide
- A5 Stratified Layers
- A10 2 cm Muck
- A11 Depleted Below Dark Surface
- A12 Thick Dark Surface
- S1 Sandy Muck Mineral
- S3 5 cm Mucky Peat or Peat

- S4 Sandy Gleyed Matrix
- S5 Sandy Redox S6 - Stripped Matrix
- F1 Loamy Muck Mineral
- F2 Loamy Gleyed Matrix
- F3 Depleted Matrix
- F6 Redox Dark Surface F7 - Depleted Dark Surface
- F8 Redox Depressions
- 1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: clay Depth: 18" **Hydric Soil Present?**

Remarks:



Project/Site: North Columbus Loop - Preferred Route Wetland ID: Wetland 3 Sample Point: SP08

VEGETATIO	(Species identified in all uppercase are non-na	ative spe	cies.)		
	(Plot size: 30 ft radius)				
	<u>Species Name</u>	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata: 2 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					B. I. I. I. W. I. I.
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.	 Total Cover =	0			OBL spp x 1 =
	Total Cover –	U			FACW spp.
Sanling/Shrub	Stratum (Plot size: 15 ft radius)				FAC spp.
1.					UPI spp
2.					
3.					Total(A)(B)
4.					
5.					Prevalence Index = B/A =
6.					
7.					
8.				-	Hydrophytic Vegetation Indicators:
9.				-	 Yes No Rapid Test for Hydrophytic Vegetation
10.					Yes • No Dominance Test is > 50%
	Total Cover =	0			Yes ■ No Prevalence Index is ≤ 3.0 *
					 Yes No Morphological Adaptations (Explain) *
	(Plot size: 5 ft radius)				 Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Echinochloa crus-galli	50	Y	FACW	* Indicators of hydric soil and wetland hydrology must be
2.	Carex frankii	15	N	OBL	present, unless disturbed or problematic.
3.	Symphyotrichum lateriflorum	20	Y	FACW	
4.	Eleocharis obtusa	15	N	OBL	Definitions of Vegetation Strata:
5.					Tuna
6 7.					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
8.					biodast noight (BBH), rogardioss of hoight.
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
_	Total Cover =	100			·
Woody Vine S	tratum (Plot size: 30 ft radius)				
1.					
2.				-	
3.					Hydrophytic Vegetation Present = Yes = No
4.					
5.					
	Total Cover =	0			
Remarks:					
ĺ					

Additional Remarks:			

" Yes " No

Hydric Soil Present?



Restrictive Layer

Remarks:

Type: Rock

7"

N/A

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: Northern Columbus Loop - Preferred Route Stantec Project #: 193707055 Date: 02/25/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen OH NWI/WWI Classification: N/A Wetland ID: Wetland 3 Soil Unit: Pewamo silty clay loam, 0-1% slopes Landform: Terrace Local Relief: Linear Sample Point: SP09 Latitude: 40.226398 Slope (%): Longitude: -83.165815 Datum: --Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? ■ Yes □ No Yes • No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Hay field, disturbed vegetation. Upland point for Wetland 3 Wetland Hydrology Indicators (Check here if indicators are not present.): Primary: Secondary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table . B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows **B2 - Sediment Deposits** C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? □ Yes ■ No Depth: (in.) Wetland Hydrology Present? • Yes • No Water Table Present? □ Yes ■ Depth: (in.) No Saturation Present? □ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Pewamo silty clay loam, 0-1% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Тор Bottom Texture Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) % Type Location 100 **10YR** 6/2 loamy sand 0 7 --__ --------------------------NRCS Hydric Soil Field Indicators (check here if indicators are not present Indicators for Problematic Soils 1 A1- Histosol S4 - Sandy Gleyed Matrix A16 - Coast Prairie Redox A2 - Histic Epipedon S5 - Sandy Redox S7 - Dark Surface A3 - Black Histic S6 - Stripped Matrix F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral A5 - Stratified Layers F2 - Loamy Gleyed Matrix Other (Explain in Remarks) A10 - 2 cm Muck F3 - Depleted Matrix A11 - Depleted Below Dark Surface F6 - Redox Dark Surface A12 - Thick Dark Surface F7 - Depleted Dark Surface S1 - Sandy Muck Mineral F8 - Redox Depressions 1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic S3 - 5 cm Mucky Peat or Peat



Project/Site: North Columbus Loop - Preferred Route Wetland ID: Wetland 3 Sample Point: SP09 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) Species Name **Dominance Test Worksheet** % Cover Dominant Ind.Status Number of Dominant Species that are OBL, FACW, or FAC: ____1 (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 6. 7. 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = x 2 = FACW spp. x 3 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. ___ x 4 = UPL spp. x 5= 2. 3. ____(A) Total 4. Prevalence Index = B/A = 5. 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation --Yes No 10. Yes No Dominance Test is > 50% --Total Cover = Yes No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) No Problem Hydrophytic Vegetation (Explain) * Yes 1. Plantago lanceolata 15 Ν **FACU** * Indicators of hydric soil and wetland hydrology must be Trifolium repens 10 **FACU** 2 N present, unless disturbed or problematic. 3. Echinochloa crus-galli 60 **FACW Definitions of Vegetation Strata:** 4 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11.

--

Hydrophytic Vegetation Present • Yes • No

Herb - All herbaceous (non-woody) plants, regardless of size,

and woody plants less than 3.28 ft. tall.

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

Additional Remarks:

12.

13.

14.



Project/Site:	Northern C	olumbus Loop - Pre	eferred R	oute			Stantec Project #:	193707055		Date:	06/17/20
Applicant:	Columbia (Gas of Ohio					·			County:	Union
Investigator #1:	Charlie Alle	en		Investi	gator #2:	Julie Sla	ater			State:	Ohio
Soil Unit:	Pk - Pewar	no silty clay loam, 0)-1% slop				I/WWI Classification:	N/A		Wetland ID:	Wetland 3a
Landform:	Terrace			Loc	al Relief:	None				Sample Point:	SP9a
Slope (%):	0%	Latitude	: 40.21	2592 Lo	ongitude:	-83.177	59	Datum:	N/A	Community ID:	Upland
Are climatic/hyd	Irologic cond	ditions on the site ty	pical for	this time	of year?	(If no, expla	ain in remarks)	X Yes	No	Section:	N/A
Are Vegetation			nificantly				Are normal circumsta			Township:	N/A
Are Vegetation		, 0, _ 0	turally pr				X Yes	No '		Range:	N/A
SUMMARY OF		or riyarology ha	tarany pr	obiomati	·.		IX.			rtungo.	1477
Hydrophytic Veg		cont?		V Voc	No			Hydric Soils	Drocont?		Yes X No
				X Yes						\A/:41=:	
Wetland Hydrol Remarks:	0,	nt for Wetland 3a		Yes	X No			is This Sam	pling Point	Within A Wetlar	nd? Yes X No
HYDROLOGY Wetland Hydro		ators (Check here	if indicate	ors are n	ot preser	nt 🗶):					
Primary:						,			Secondary:		
	A1 - Surface A2 - High Wa A3 - Saturation	ater Table			B13 - Aqu	er-Stained latic Fauna e Aquatic I	1			B6 - Surface Soil B10 - Drainage Pa B16 - Moss Trim I	atterns
	B1 - Water M					ogen Sulfi				C2 - Dry-Season	
	B2 - Sedime	•					spheres on Living Roots			C8 - Crayfish Burr	
	B3 - Drift De B4 - Algal Ma			-			educed Iron duction in Tilled Soils			D1 - Stunted or St	sible on Aerial Imagery
	B5 - Iron Dep					Muck Surf				D2 - Geomorphic	
		on Visible on Aerial Ima	agery			ge or Well				D5 - FAC-Neutral	
	B8 - Sparsely	y Vegetated Concave S	Surface		Other (Ex	plain in Re	marks)				
Field Observat	ions:										
Surface Water I	Present?	Yes X No	Depth:		(in.)			\A/-4			V
Water Table Pro	esent?	Yes X No	Depth:		(in.)			Wetland Hy	arology Pr	resent?	Yes X No
Saturation Pres	ent?	Yes X No	Depth:		(in.)						
Doscribo Pocord	od Data (etr	eam gauge, monitori	ing woll s	orial pho	toc provi	oue inend	ctions) if available:	N/A			
Describe Record	eu Dala (Sil	eam gauge, monitori	ilig well, c	iciiai piio	ios, pievi	ous mape	clions), ii avallable.	11/7			
Domorko											
Remarks:											
Remarks:											
						·					
SOILS		Dia Danama dika		- 0.40/			orion Decimano Olama	Var Davida	do sino a d		
SOILS Map Unit Name:		Pk - Pewamo silty	clay loam	ո, 0-1% s	slopes	S	eries Drainage Class:	Very Poorly	drained		
SOILS Map Unit Name: Taxonomy (Subo	group):										
SOILS Map Unit Name: Taxonomy (Subo	group): tion (Describe to			firm the absend			centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	oated Sand Grains;	Location: PL=Pore Lining, M	
SOILS Map Unit Name: Taxonomy (Subprofile Descript	group): tion (Describe to Bottom	the depth needed to document the	indicator or con	firm the absence	ce of indicators.)		centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	oated Sand Grains;	T -	Texture
SOILS Map Unit Name: Taxonomy (Subsection Top Depth	group): tion (Describe to Bottom Depth		indicator or con	firm the absence Matrix (Moist)	ee of indicators.)		centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	oated Sand Grains;	Location: PL=Pore Lining, N	
SOILS Map Unit Name: Taxonomy (Subprofile Descript	group): tion (Describe to Bottom	the depth needed to document the	Color 10YR	Matrix (Moist) 4/3	% 100	(Type: C=Con	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cr dox Features %	oated Sand Grains; Type	T -	Texture
SOILS Map Unit Name: Taxonomy (Subsection Top Depth	group): tion (Describe to Bottom Depth	the depth needed to document the	indicator or con	firm the absence Matrix (Moist)	ee of indicators.)	(Type: C=Con	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Codox Features	oated Sand Grains; Type	Location	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name: Taxonomy (Subpersile Description Top Depth 0	group): tion (Describe to Bottom Depth	the depth needed to document the Horizon	Color 10YR	Matrix (Moist) 4/3	% 100	(Type: C=Con	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cr dox Features %	oated Sand Grains; Type	Location 	Texture (e.g. clay, sand, loam) clay loam
SOILS Map Unit Name: Taxonomy (Subpersite Description Top Depth 0	group): tion (Describe to Bottom Depth 10	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 2/2	% 100 97	(Type: C=Con	Centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6	Matrix, CS=Covered/Codox Features % 3	Type C	Location M	Texture (e.g. clay, sand, loam) clay loam clay loam
SOILS Map Unit Name: Taxonomy (Subpersite Description Top Depth 0	group): tion (Describe to Bottom Depth 10	the depth needed to document the Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90	 10YR 10YR	Centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6 5/6	Matrix, CS=Covered/Ci dox Features % 3 10	Type C	Location M M	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Substance) Top Depth 0	group): tion (Describe to Bottom Depth 10	the depth needed to document the Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90	 10YR 10YR	Centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6 5/6	Matrix, CS=Covered/C dox Features % 3 10	Type C C	Location M M	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Substance) Top Depth 0	group): tion (Describe to Bottom Depth 10	the depth needed to document the Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90	 10YR 10YR 	Color (Moist) 5/6 5/6	Matrix, CS=Covered/Cidox Features % 3 10	Type C C	Location M M	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Subg Profile Descript Top Depth 0	group): tion (Describe to Bottom Depth 10	the depth needed to document the Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90	10YR 10YR	Color (Moist) 5/6 5/6	Matrix, CS=Covered/Cr dox Features % 3 10 	Type C C	Location M M	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Subg Profile Descript Top Depth 0	group): tion (Describe to Bottom Depth 10	the depth needed to document the Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90		centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6 5/6	Matrix, CS=Covered/Cr dox Features % 3 10 	oated Sand Grains; Type C C	Location M M	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Subg Profile Descript Top Depth 0	group): tion (Describe to Bottom Depth 10 Soil Field In	the depth needed to document the Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90 re not pre		Color (Moist) 5/6 5/6):	Matrix, CS=Covered/Cr dox Features % 3 10 	Type C C	Location M M matic Soils ¹	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Subg Profile Descript Top Depth 0	group): tion (Describe to Bottom Depth 10 Soil Field Ir	Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90 re not pre	10YR 10YR esent X peed Matrix	Color (Moist) 5/6 5/6):	Matrix, CS=Covered/Cr dox Features % 3 10 	Type C C	Location M M matic Soils ¹ Prairie Redox	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Subg Profile Descript Top Depth 0	group): tion (Describe to Bottom Depth 10 Soil Field In	Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90 re not pre	10YR 10YR	Color (Moist)	Matrix, CS=Covered/Cr dox Features % 3 10 	Type C C s for Proble A16 - Coast S7 - Dark Si	Location M M matic Soils ¹ Prairie Redox	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Subg Profile Descript Top Depth 0	group): tion (Describe to Depth 10 Soil Field Ir A1- Histosol A2 - Histo E A3 - Black H A4 - Hydroge	the depth needed to document the Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90 re not pre \$6 - Strip F1 - Loam F3 - Deple	10YR 10YR 10YR	Color (Moist) 5/6 5/6): ineral Matrix	Matrix, CS=Covered/Cr dox Features % 3 10 	Type C C s for Proble A16 - Coast S F12 - Iron-M TF12 - Very	Location M M matic Soils 1 Prairie Redox urface langanese Masses Shallow Dark Surf	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Subg Profile Descript Top Depth 0	group): tion (Describe to Depth 10 Soil Field Ir A1- Histosol A2 - Histic EI A4 - Hydroge A5 - Stratified	Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90 re not pre S6 - Stripi F1 - Loam F3 - Deple F6 - Redo	10YR 10YR 10YR	Color (Moist) 5/6 5/6): ineral Matrix contration, D=Depletion, RM=Reduced Re	Matrix, CS=Covered/Cr dox Features % 3 10 	Type C C s for Proble A16 - Coast S F12 - Iron-M TF12 - Very	Location M M matic Soils Prairie Redox urface langanese Masses	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Subg Profile Descript Top Depth 0	group): tion (Describe to Depth 10	Horizon	Color 10YR 10YR 10YR ere if indi	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90 re not pre S6 - Stripi F1 - Loam F2 - Loam F3 - Deple F6 - Red F7 - Deple	10YR 10YR 10YR sesent X ped Matrix y Muck M y Gleyed beted Matrix x y Mr Substant Su	Color (Moist) 5/6 5/6): iineral Matrix (rface Surface	Matrix, CS=Covered/Cr dox Features % 3 10 	Type C C s for Proble A16 - Coast S F12 - Iron-M TF12 - Very	Location M M matic Soils 1 Prairie Redox urface langanese Masses Shallow Dark Surf	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Subg Profile Descript Top Depth 0	group): tion (Describe to Bottom Depth 10 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete	the depth needed to document the Horizon	Color 10YR 10YR 10YR ere if indi	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90 re not pre S6 - Stripi F1 - Loam F3 - Deple F6 - Redo	10YR 10YR 10YR sesent X ped Matrix y Muck M y Gleyed beted Matrix x y Mr Substant Su	Color (Moist) 5/6 5/6): iineral Matrix (rface Surface	Matrix, CS=Covered/Cr dox Features % 3 10 	Type C C s for Proble A16 - Coast S F12 - Iron-M TF12 - Very	Location M M matic Soils 1 Prairie Redox urface langanese Masses Shallow Dark Surf	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Subg Profile Descript Top Depth 0	group): tion (Describe to Bottom Depth 10 Soil Field Ir A1 - Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplets A12 - Thick L	the depth needed to document the Horizon	Color 10YR 10YR 10YR ere if indi	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90 re not pre S6 - Stripi F1 - Loam F2 - Loam F3 - Deple F6 - Red F7 - Deple	10YR 10YR 10YR sesent X ped Matrix y Muck M y Gleyed beted Matrix x y Mr Substant Su	Color (Moist) 5/6 5/6): iineral Matrix (rface Surface	Matrix, CS=Covered/Cr dox Features % 3 10 	Type C C s for Proble A16 - Coast S F12 - Iron-M TF12 - Very	Location M M matic Soils 1 Prairie Redox urface langanese Masses Shallow Dark Surf	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Subg Profile Descript Top Depth 0	group): tion (Describe to Depth 10	the depth needed to document the Horizon	Color 10YR 10YR 10YR ere if indi	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90 re not pre S6 - Stripi F1 - Loam F2 - Loam F3 - Deple F6 - Red F7 - Deple	10YR 10YR 10YR sesent X ped Matrix y Muck M y Gleyed beted Matrix x y Mr Substant Su	Color (Moist) 5/6 5/6): iineral Matrix (rface Surface	Matrix, CS=Covered/Cr dox Features % 3 10 	Type C C s for Proble A16 - Coast S F12 - Iron-M TF12 - Very	Location M M matic Soils 1 Prairie Redox urface langanese Masses Shallow Dark Surf	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Subg Profile Descript Top Depth 0	group): tion (Describe to Depth 10	Horizon	Color 10YR 10YR 10YR ere if indi	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90 re not pre S6 - Stripi F1 - Loam F2 - Loam F3 - Deple F6 - Red F7 - Deple	10YR 10YR 10YR sesent X ped Matrix y Muck M y Gleyed beted Matrix x y Mr Substant Su	Color (Moist) 5/6 5/6): iineral Matrix (rface Surface	Matrix, CS=Covered/Cr dox Features % 3 10 	Type C C s for Proble A16 - Coast S F12 - Iron-M TF12 - Very	Location M M matic Soils 1 Prairie Redox urface langanese Masses Shallow Dark Surf	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Subg Profile Descript Top Depth 0	group): tion (Describe to Depth 10	the depth needed to document the Horizon	Color 10YR 10YR 10YR ere if indi	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90 re not pre S6 - Stripi F1 - Loam F2 - Loam F3 - Deple F6 - Red F7 - Deple	10YR 10YR 10YR sesent X ped Matrix y Muck M y Gleyed beted Matrix x y Mr Substant Su	Color (Moist) 5/6 5/6): iineral Matrix (rface Surface	Matrix, CS=Covered/Codox Features % 3 10 Indicator	Type	Location M M matic Soils ¹ Prairie Redox urface langanese Masses Shallow Dark Surfain in Remarks)	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Subg Profile Descript Top Depth 0	group): tion (Describe to Bottom Depth 10 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplet A12 - Thick I S1 - Sandy M S4 - Sandy G	the depth needed to document the Horizon	Color 10YR 10YR 10YR ere if indi	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90 re not pre S6 - Stripi F1 - Loam F2 - Loam F3 - Deple F6 - Red F7 - Deple	10YR 10YR 10YR sesent X ped Matrix y Muck M y Gleyed beted Matrix x y Mr Substant Su	Color (Moist) 5/6 5/6): iineral Matrix (rface Surface	Matrix, CS=Covered/Codox Features % 3 10 Indicator	Type C C s for Proble A16 - Coast S7 - Dark Si F12 - Iron-M TF12 - Very Other (Expla	Location M M matic Soils Prairie Redox urface langanese Masses Shallow Dark Surfain in Remarks)	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Subg Profile Descript Top Depth 0 NRCS Hydric:	group): tion (Describe to Bottom Depth 10 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black Hi A4 - Hydroge A5 - Stratifier A12 - Thick I S1 - Sandy N S3 - 5 cm Mt S4 - Sandy R	the depth needed to document the Horizon	Color 10YR 10YR 10YR ere if indi	Matrix (Moist) 4/3 2/2 2/2 cators a	% 100 97 90 re not pre S6 - Strip F1 - Loam F2 - Loam F3 - Deple F6 - Redc F7 - Deple F8 - Redc	10YR 10YR 10YR sesent X ped Matrix y Muck M y Gleyed beted Matrix x y Mr Substant Su	Color (Moist) 5/6 5/6): iineral Matrix (rface Surface	Matrix, CS=Covered/Codox Features % 3 10 Indicator 1 Indicators of hyddisturt.	Type C C s for Proble A16 - Coast \$7 - Dark \$0 F12 - Iron-N TF12 - Very Other (Explain	Location M M matic Soils Prairie Redox urface langanese Masses Shallow Dark Surfain in Remarks)	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Subg Profile Descript Top Depth 0	group): tion (Describe to Bottom Depth 10 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black Hi A4 - Hydroge A5 - Stratifier A12 - Thick I S1 - Sandy N S3 - 5 cm Mt S4 - Sandy R	the depth needed to document the Horizon	Color 10YR 10YR 10YR ere if indi	Matrix (Moist) 4/3 2/2 2/2	% 100 97 90 re not pre S6 - Strip F1 - Loam F2 - Loam F3 - Deple F6 - Redc F7 - Deple F8 - Redc	10YR 10YR 10YR sesent X ped Matrix y Muck M y Gleyed beted Matrix x y Mr Substant Su	Color (Moist) 5/6 5/6): iineral Matrix (rface Surface	Matrix, CS=Covered/Codox Features % 3 10 Indicator	Type C C s for Proble A16 - Coast \$7 - Dark \$0 F12 - Iron-N TF12 - Very Other (Explain	Location M M matic Soils Prairie Redox urface langanese Masses Shallow Dark Surfain in Remarks)	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam
SOILS Map Unit Name: Taxonomy (Suby Profile Descript Top Depth 0 NRCS Hydric	group): tion (Describe to Bottom Depth 10 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black Hi A4 - Hydroge A5 - Stratifier A12 - Thick I S1 - Sandy N S3 - 5 cm Mt S4 - Sandy R	the depth needed to document the Horizon	Color 10YR 10YR 10YR ere if indi	Matrix (Moist) 4/3 2/2 2/2 cators a	% 100 97 90 re not pre S6 - Strip F1 - Loam F2 - Loam F3 - Deple F6 - Redc F7 - Deple F8 - Redc	10YR 10YR 10YR sesent X ped Matrix y Muck M y Gleyed beted Matrix x y Mr Substant Su	Color (Moist) 5/6 5/6): iineral Matrix (rface Surface	Matrix, CS=Covered/Codox Features % 3 10 Indicator 1 Indicators of hyddisturt.	Type C C s for Proble A16 - Coast \$7 - Dark \$0 F12 - Iron-N TF12 - Very Other (Explain	Location M M matic Soils Prairie Redox urface langanese Masses Shallow Dark Surfain in Remarks)	Texture (e.g. clay, sand, loam) clay loam clay loam clay loam



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 3a Sample Point: SP9a

	(Species identified in all uppercase are non-na	ative spec	cies.)		
Tree Stratum (F	Plot size: 10 meter radius)	0/ 0	Dit	le d Oteter	Dominance Test Worksheet
4	<u>Species Name</u>	% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksneet
1.					Number of Descinate Consider that are ODI. FACIAL or FACIAL (A)
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					T. (1) (D. (1) (D. (1) (1) (1) (1) (1)
4.					Total Number of Dominant Species Across All Strata: 1 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.	<u></u>				OBL spp. 0 x 1 = 0
	Total Cover =	0			FACW spp. 0 x 2 = 0
					FAC spp. 0 x 3 = 0
	tratum (Plot size: 5 meter radius)				FACU spp. 0 x 4 = 0
1.					UPL spp. 0 x 5 = 0
2.					
3.					Total <u> </u>
4.			-		
5.					Prevalence Index = B/A = N/A
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes X No Rapid Test for Hydrophytic Vegetation
10.					x Yes ☐ No Dominance Test is > 50%
	Total Cover =	0			Yes No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
Herb Stratum (F	Plot size: 2 meter radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	GLYCINE MAX	10	N	UPL	* Indicators of hydric coil and watland hydrology must be
2.	POA PRATENSIS	80	Υ	FAC	* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.	HORDEUM JUBATUM	5	N	FAC	procent, unloss distarted of presidentatio.
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter
7.					at breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater
10.					than 3.28 ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of
13.					size, and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	95			
Woody Vine Stra	atum (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present X Yes No
4.					, , , , , , , , , , , , , , , , , , ,
5.					
	Total Cover =	0			
Remarks:	5% open ground				
	2.1. 2F 21. 3. 2 2				
A 1 11/4					
Additional R	emarks:				
1					· ·



Project/Site:	Northern C	olumbus Loop - Pr	eferred R	Route			Stantec Project #:	193707055		Date:	06/17/20	
Applicant:	Columbia C	Gas of Ohio					•			County:	Union	
Investigator #1:	Charlie Alle	en		Investi	gator #2:	Julie Sla	ater			State:	Ohio	
Soil Unit:	Pk - Pewar	no silty clay loam				NW	I/WWI Classification:	N/A		Wetland ID:	Wetland 3a	
Landform:	Terrace			Loc	al Relief:	Concav	е			Sample Point:	SP9b	
Slope (%):	1				ongitude:			Datum:	N/A	Community ID:	PEM	
Are climatic/hyd	drologic cond	ditions on the site t	ypical for	this time	of year?	(If no, expl	ain in remarks)	X Yes	No	Section:	N/A	
Are Vegetation	, Soil ,	or Hydrology sig	gnificantly	y disturbe	ed?		Are normal circumsta	ances presen	t?	Township:	N/A	
Are Vegetation	, Soil ,	or Hydrology na	aturally pr	oblemati	ic?		χ Yes	No		Range:	N/A	
SUMMARY OF	FINDINGS											
Hydrophytic Ve	getation Pre	sent?		X Yes	No			Hydric Soils	Present?		X Yes	No
Wetland Hydrol				X Yes	No			Is This Sam	oling Point	Within A Wetla	nd? X Yes	No
Remarks:		dge of agriculture t	field. Wet						<u> </u>			
Primary	A1 - Surface A2 - High Wa A3 - Saturati B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundation	ater Table on Marks nt Deposits posits at or Crust	nagery		B9 - Wate B13 - Aqu B14 - Tru C1 - Hydr C3 - Oxid C4 - Pres	er-Stained latic Fauna e Aquatic ogen Sulfi ized Rhizo ence of Re ent Iron Re Muck Suri ge or Well	Plants de Odor spheres on Living Roots educed Iron duction in Tilled Soils face Data		Secondary:	B6 - Surface Soil B10 - Drainage P B16 - Moss Trim C2 - Dry-Season C8 - Crayfish Bur C9 - Saturation V D1 - Stunted or S D2 - Geomorphic D5 - FAC-Neutra	eatterns Lines Water Table trows Sible on Aerial Imageressed Plants Position	agery
Field Observat Surface Water Water Table Pr Saturation Pres	Present? [esent? [Yes X No Yes X No X Yes No	Depth: Depth:	2	(in.) (in.) (in.)		ations) if available	Wetland Hy	drology P	resent? X	Yes No	
	ied Data (str	eam gauge, monitor	ing weii, a	aeriai pno	itos, previ	ous inspe	ctions), if available:	N/A				
Remarks:												
SOILS								V 5				
SOILS Map Unit Name		Pk - Pewamo silty	clay loan	n		S	eries Drainage Class:	Very Poorly	drained			
SOILS Map Unit Name Taxonomy (Sub	group):											
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to			nfirm the absen	ce of indicators.		centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;	Location: PL=Pore Lining,		
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to	the depth needed to document the	e indicator or cor	nfirm the absend			centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;		Texture	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to Bottom Depth		e indicator or cor	Matrix (Moist)	%	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Coedox Features	pated Sand Grains;	Location		
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to: Bottom Depth 4	the depth needed to document the	color 10YR	Matrix (Moist) 4/1	% 97	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6	Matrix, CS=Covered/Cedox Features	oated Sand Grains; Type C	Location PL	Texture	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	group): tion (Describe to Bottom Depth 4 12	the depth needed to document the	color 10YR 10YR	Matrix (Moist) 4/1 4/1	% 97 97	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6 5/6	Matrix, CS=Covered/Cocococococococococococococococococococ	Type C C	Location PL M	Texture (e.g. clay, san	d, loam) <mark>m</mark>
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to: Bottom Depth 4	the depth needed to document the Horizon	color 10YR	Matrix (Moist) 4/1	% 97	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6	Matrix, CS=Covered/Cedox Features	oated Sand Grains; Type C	Location PL	Texture (e.g. clay, san clay loa	d, Ioam) <mark>m</mark> m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	group): tion (Describe to Bottom Depth 4 12	the depth needed to document the Horizon	color 10YR 10YR	Matrix (Moist) 4/1 4/1	% 97 97	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6 5/6	Matrix, CS=Covered/Cocococococococococococococococococococ	Type C C	Location PL M	Texture (e.g. clay, san clay loa clay loa	d, Ioam) <mark>m</mark> m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 12	group): tion (Describe to Bottom Depth 4 12 20	the depth needed to document the Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/1 4/1 4/1	% 97 97 90	10YR 10YR 10YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6 5/6 5/6	Matrix, CS=Covered/Ci dox Features % 3 3	Type C C C	Location PL M M	Texture (e.g. clay, san clay loa clay loa	d, Ioam) <mark>m</mark> m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 12	group): tion (Describe to Bottom Depth 4 12 20	the depth needed to document the Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/1 4/1 4/1	% 97 97 90 	10YR 10YR 10YR 10YR	Centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6 5/6 5/6	Matrix, CS=Covered/Codox Features % 3 3 10	Type C C C	Location PL M	Texture (e.g. clay, san clay loa clay loa clay loa	d, Ioam) <mark>m</mark> m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 12	group): tion (Describe to Bottom Depth 4 12 20	the depth needed to document the Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/1 4/1 4/1 	% 97 97 90 	10YR 10YR 10YR 10YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6 5/6 5/6	Matrix, CS=Covered/Codox Features % 3 3 10	Type C C C	Location PL M	Texture (e.g. clay, san clay loa clay loa clay loa	d, Ioam) <mark>m</mark> m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 12	group): tion (Describe to Bottom Depth 4 12 20	Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/1 4/1	% 97 97 90 	10YR 10YR 10YR 10YR 	Color (Moist) 5/6 5/6 5/6	Matrix, CS=Covered/Codox Features % 3 3 10	Type C C C	Location PL M M	Texture (e.g. clay, san clay loa clay loa clay loa	d, Ioam) <mark>m</mark> m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 12	group): tion (Describe to Depth 4 12 20	Horizon	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/1 4/1 4/1 icators a	% 97 97 90 re not pre s6 - Strip F1 - Loan F2 - Loan F2 - Loan	10YR 10YR 10YR 10YR esent ped Matrix y Muck M y Gleyed eted Matrix to the desired Matrix to the desir	Centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6 5/6 5/6): ineral Matrix (rface Surface	Matrix, CS=Covered/Codox Features % 3 3 10 Indicator	Type C C C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location PL M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, san clay loa clay loa clay loa s	d, loam) m m m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 12 NRCS Hydric	group): tion (Describe to Describe to Depth 4 12 20	Horizon	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/1 4/1 4/1 icators a	% 97 97 90	10YR 10YR 10YR 10YR esent ped Matrix y Muck M y Gleyed eted Matrix to the desired Matrix to the desir	Centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6 5/6 5/6): ineral Matrix (rface Surface	Matrix, CS=Covered/Codox Features 9% 3 3 10 Indicator 1 Indicators of hyddisturts	Type C C C C s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Explain	Location PL M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, san clay loa clay loa clay loa sface	d, loam) m m m m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 12	group): tion (Describe to Describe to Depth 4 12 20	Horizon	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/1 4/1 4/1 icators a	% 97 97 90	10YR 10YR 10YR 10YR esent ped Matrix y Muck M y Gleyed eted Matrix to the desired Matrix to the desir	Centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6 5/6 5/6): ineral Matrix (rface Surface	Matrix, CS=Covered/Codox Features % 3 3 10 Indicator	Type C C C C s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Explain	Location PL M M	Texture (e.g. clay, san clay loa clay loa clay loa sface	d, loam) m m m m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 12 NRCS Hydric	group): tion (Describe to Describe to Depth 4 12 20	Horizon	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/1 4/1 4/1 icators a	% 97 97 90	10YR 10YR 10YR 10YR esent ped Matrix y Muck M y Gleyed eted Matrix to the desired Matrix to the desir	Centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6 5/6 5/6): ineral Matrix (rface Surface	Matrix, CS=Covered/Codox Features 9% 3 3 10 Indicator 1 Indicators of hyddisturts	Type C C C C s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Explain	Location PL M M	Texture (e.g. clay, san	d, loam) m m m m



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 3a Sample Point: SP9b

VEGETATION	(Species identified in all uppercase are non-na lot size: 10 meter radius)	tive spec	ies.)		
Tree Stratum (P	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.	<u></u>	76 COVEL	Dominant	IIIU.Status	Dominance rest Worksheet
2.					Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
3.					Number of Bornmant openies that are OBE, 1 Nove, of 1 No(A)
4.					Total Number of Dominant Species Across All Strata: 2 (B)
5.					(b)
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					(AB)
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 $\times 1 = 0$
_	Total Cover =	0			FACW spp. 0 x 2 = 0
					FAC spp. 0 x 3 = 0
Sapling/Shrub St	ratum (Plot size: 5 meter radius)				FACU spp. 0 x 4 = 0
1.					UPL spp. 0 x 5 = 0
2.				-	
3.				-	Total <u> </u>
4.					
5.				-	Prevalence Index = B/A = N/A
6.				-	
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes X No Rapid Test for Hydrophytic Vegetation
10.	 				X Yes No Dominance Test is > 50%
	Total Cover =	0			Yes No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
	ot size: 2 meter radius)			0.01	Yes No Problem Hydrophytic Vegetation (Explain) *
1.	TYPHA ANGUSTIFOLIA	70	Y	OBL	* Indicators of hydric soil and wetland hydrology must be
2.	PHALARIS ARUNDINACEA	20	Y	FACW	present, unless disturbed or problematic.
3.	HORDEUM JUBATUM	2	N	FAC	Deficial and of Venezation Observe
<u>4.</u> 5.	 				Definitions of Vegetation Strata:
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter
7.	_ 				at breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater
10.					than 3.28 ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of
13.					size, and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	92			, , ,
	. 3 30701				
Woody Vine Stra	tum (Plot size: 10 meter radius)				
1.					
2.			-	-	
3.					Hydrophytic Vegetation Present X Yes No
4.					
5.					
	Total Cover =	0			
Remarks:	8% open ground				
Additional Re	emarks:				



Applicant:	Northern C	olumbus Loop - Pro	eferred F	Route			Stantec Project #:	193707055		Date:	06/17/20
Аррисані.	Columbia C	Gas of Ohio					·			County:	Union
Investigator #1:	Charlie Alle	en		Investi	gator #2:	Julie Sla	ater			State:	Ohio
Soil Unit:	Blg1A1 - Bl	ount silt loam, grou	ınd mora	ine, 0-2%	6 Slopes	NW	I/WWI Classification:	N/A		Wetland ID:	Wetland 3b
Landform:	Terrace			Loc	al Relief:	None				Sample Point:	SP9c
Slope (%):	1%	Latitude						Datum:	N/A	Community ID:	PEM
Are climatic/hyd	drologic cond	ditions on the site ty	pical for	this time	of year?	(If no, expl		X Yes	No	Section:	N/A
Are Vegetation			gnificantly				Are normal circumsta	_ '	t?	Township:	N/A
Are Vegetation	, Soil ,	or Hydrology na	turally pr	oblemati	ic?		χ Yes	No		Range:	N/A
SUMMARY OF	FINDINGS										
Hydrophytic Ve	getation Pre	sent?		X Yes	No			Hydric Soils	Present?		X Yes No
Wetland Hydro	logy Present	?		X Yes	No			Is This Sam	oling Point	Within A Wetlaı	nd? X Yes No
Remarks:	Wet point f	or Wetland 3b									
Primary	A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water N B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundatio B8 - Sparsely	ater Table on larks nt Deposits posits at or Crust	agery		B9 - Wate B13 - Aqu B14 - Tru C1 - Hydr C3 - Oxid C4 - Pres	er-Stained latic Faund e Aquatic ogen Sulfi ized Rhizo ence of Re ent Iron Re Muck Sur ge or Well	Plants de Odor spheres on Living Roots educed Iron duction in Tilled Soils face Data		Secondary:	B6 - Surface Soil B10 - Drainage P B16 - Moss Trim C2 - Dry-Season C8 - Crayfish Bur C9 - Saturation V D1 - Stunted or S D2 - Geomorphic D5 - FAC-Neutral	atterns Lines Water Table rows isible on Aerial Imagery tressed Plants Position
Field Observat Surface Water Water Table Pr Saturation Pres	Present? [resent? [sent? [Yes X No Yes X No Yes X No	Depth: Depth: Depth:	 	(in.) (in.) (in.)			Wetland Hy	drology Pı	resent? X	Yes No
Describe Record	ded Data (str	eam gauge, monitor	ing well, a	aerial pho	tos, previ	ous inspe	ctions), if available:	N/A			
Remarks:											
Map Unit Name	: Bla1A	.1 - Blount silt loam	. around	moraine	. 0-2% sl	opes S	eries Drainage Class:	Somewhat P	oorly drain	ed	
Taxonomy (Sub	group).										
Taxonomy (Sub Profile Descrip		the depth needed to document the	indicator or cor	nfirm the absen	ce of indicators.	(Type: C=Cor	centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;	Location: PL=Pore Lining, I	M=Matrix)
Profile Descrip		the depth needed to document the	indicator or cor	nfirm the absen	ce of indicators.	(Type: C=Cor	centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co		Location: PL=Pore Lining, I	M=Matrix) Texture
Profile Descrip Top	Bottom	the depth needed to document the			ce of indicators.	(Type: C=Cor	Re		1	Location: PL=Pore Lining, I	
Profile Descrip	Bottom Depth			Matrix (Moist)			Re Color (Moist)	edox Features %	Туре	Location	Texture (e.g. clay, sand, loam
Profile Descrip Top Depth	Bottom Depth	Horizon	Color 10YR	Matrix (Moist) 3/2	%	(Type: C=Cor	Re	dox Features	1		Texture (e.g. clay, sand, loan clay
Profile Descrip Top Depth 0	Bottom Depth	Horizon 	Color	Matrix (Moist)	% 97	10YR	Re Color (Moist) 5/6	dox Features % 3	Type C	Location PL	Texture (e.g. clay, sand, loam
Profile Descrip Top Depth 0	Bottom Depth 10 20	Horizon 	Color 10YR Gley 1	Matrix (Moist) 3/2 5/10Y	% 97 100	10YR	Re Color (Moist) 5/6	dox Features % 3 	Type C 	Location PL	Texture (e.g. clay, sand, loam clay clay
Profile Descrip Top Depth 0 10	Bottom Depth 10 20	Horizon 	Color 10YR Gley 1	Matrix (Moist) 3/2 5/10Y	% 97 100	10YR 	Re Color (Moist) 5/6 	dox Features % 3	Type C 	Location PL	Texture (e.g. clay, sand, loan clay clay
Profile Descrip Top Depth 0 10	Bottom Depth 10 20	Horizon 	Color 10YR Gley 1	Matrix (Moist) 3/2 5/10Y 	% 97 100 	10YR	Re Color (Moist) 5/6 	dox Features % 3	Type C 	Location PL	Texture (e.g. clay, sand, loan clay clay
Profile Descrip Top Depth 0 10	Bottom Depth 10 20	Horizon 	Color 10YR Gley 1 	Matrix (Moist) 3/2 5/10Y 	% 97 100 	10YR	Re Color (Moist) 5/6 	dox Features	Type C	Location PL	Texture (e.g. clay, sand, loan clay clay
Profile Descrip Top Depth 0 10	tion (Describe to Bottom Depth 10 20	Horizon	Color 10YR Gley 1	Matrix (Moist) 3/2 5/10Y 	% 97 100 	10YR	Re Color (Moist) 5/6 	dox Features	Type C	Location PL	Texture (e.g. clay, sand, loan clay clay
Profile Descrip Top Depth 0 10	tion (Describe to Bottom Depth 10 20	Horizon	Color 10YR Gley 1	Matrix (Moist) 3/2 5/10Y 	% 97 100 	10YR	Re Color (Moist) 5/6 	dox Features	Type C	Location PL	Texture (e.g. clay, sand, loan clay clay
Profile Descrip Top Depth 0 10	tion (Describe to Bottom Depth 10 20	Horizon	Color 10YR Gley 1 ere if ind	Matrix (Moist) 3/2 5/10Y icators a	% 97 100 	10YR	Re Color (Moist) 5/6): ineral Matrix (rface Surface	dox Features % 3 Indicator 1 Indicators of hyd	Type C s for Proble A16 - Coast S7 - Dark S F12 - Iron-M TF12 - Very Other (Expla	Location PL matic Soils Prairie Redox urface langanese Masses Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, sand, loan clay clay
Profile Descrip Top Depth 0 10 NRCS Hydric	tion (Describe to Bottom Depth 10 20	Horizon	Color 10YR Gley 1 ere if ind	Matrix (Moist) 3/2 5/10Y icators a	% 97 100 re not prv 86 - Strip F1 - Loan F3 - Depli F6 - Redc F7 - Depli F8 - Redc	10YR	Re Color (Moist) 5/6): ineral Matrix (rface Surface	dox Features % 3 Indicator 1 Indicators of hyddisturb	Type C s for Proble A16 - Coast S7 - Dark S F12 - Iron-M TF12 - Very Other (Expla	Location PL matic Soils ¹ Prairie Redox urface langanese Masses Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, sand, loan clay clay sface
Profile Descrip Top Depth 0 10	tion (Describe to Bottom Depth 10 20	Horizon	Color 10YR Gley 1 ere if ind	Matrix (Moist) 3/2 5/10Y icators a	% 97 100 re not prv 86 - Strip F1 - Loan F3 - Depli F6 - Redc F7 - Depli F8 - Redc	10YR	Re Color (Moist) 5/6): ineral Matrix (rface Surface	dox Features % 3 Indicator 1 Indicators of hyd	Type C s for Proble A16 - Coast S7 - Dark S F12 - Iron-M TF12 - Very Other (Expla	Location PL matic Soils ¹ Prairie Redox urface langanese Masses Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, sand, loam clay clay sface
Profile Descrip Top Depth 0 10 NRCS Hydric	tion (Describe to Bottom Depth 10 20	Horizon	Color 10YR Gley 1 ere if ind	Matrix (Moist) 3/2 5/10Y icators a	% 97 100 re not prv 86 - Strip F1 - Loan F3 - Depli F6 - Redc F7 - Depli F8 - Redc	10YR	Re Color (Moist) 5/6): ineral Matrix (rface Surface	dox Features % 3 Indicator 1 Indicators of hyddisturb	Type C s for Proble A16 - Coast S7 - Dark S F12 - Iron-M TF12 - Very Other (Expla	Location PL matic Soils ¹ Prairie Redox urface langanese Masses Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, sand, loan clay clay sface



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 3b Sample Point: SP9c

VEGETATIO		ative spec	cies.)		
Tree Stratum ((Plot size: 10 meter radius)	0/ 0	Danisant	l- 1 0t-t	Dominance Test Worksheet
1.	<u>Species Name</u> 	% Cover	Dominant	Ind.Status	Dominance rest worksneet
2.					Number of Dominant Species that are OBL, FACW, or FAC:1(A)
3.					()
4.					Total Number of Dominant Species Across All Strata: 1 (B)
5.					·
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.	 T + 1 0				OBL spp. 0 x 1 = 0
	Total Cover =	0			FACW spp. 0 x 2 = 0
Conling/Chruh	Stratum (Plot size: 5 meter radius)				FAC spp. 0 x 3 = 0 FACU spp. 0 x 4 = 0
1.	Stratum (Flot size. 5 meter radius)				UPL spp. 0 x 5 = 0
2.					Δ1 Ε 3ρφ
3.					Total <mark>0</mark> (A) 0 (B)
4.					· · · · · · · · · · · · · · · · · · ·
5.					Prevalence Index = B/A = N/A
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					X Yes No Rapid Test for Hydrophytic Vegetation
10.					X Yes No Dominance Test is > 50%
	Total Cover =	0			Yes No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
,	Plot size: 2 meter radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	TYPHA ANGUSTIFOLIA	90	Υ	OBL	* Indicators of hydric soil and wetland hydrology must b
2.					present, unless disturbed or problematic.
3.					Definitions of Venetation Office
4. 5.					Definitions of Vegetation Strata:
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter
7.					at breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater
10.					than 3.28 ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of
13.					size, and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	90			
	ratum (Plot size: 10 meter radius)				
1.			-		
2.					Illudium budio Vonetati u Burranta i V
3.					Hydrophytic Vegetation Present X Yes No
4. 5.					
J.	Total Cover =	0			
Remarks:	10% open ground	- 0			
rtomarks.	10 % open ground				
Additional F	Pomarke:				
Auditional F	Vernan v.5.				



Project/Site: Applicant:	NOTHER	olumbus Loop - Pre	eferred R	Route			Stantec Project #:	193707055		Date:	06/17/20
	Columbia (Gas of Ohio					•			County:	Union
Investigator #1:	: Charlie Alle	en		Investi	igator #2:	Julie Sla	ater			State:	Ohio
Soil Unit:	Blg1A1 - E	Blount silt loam, gro	und moai	ine, 0-2%	6 slopes	NW	I/WWI Classification:	: N/A		Wetland ID:	Wetland 3b
Landform:	Terrace			Loc	al Relief:	None				Sample Point:	SP9d
Slope (%):	0	Latitude	40.204	378 L	ongitude:	-83.188	973	Datum:	N/A	Community ID:	Upland
Are climatic/hyd	drologic cond	ditions on the site ty	pical for	this time	of year?	(If no, expl	ain in remarks)	X Yes	No	Section:	N/A
Are Vegetation	, Soil ,	or Hydrology sig	gnificantly	v disturb	ed?		Are normal circumsta	ances presen	t?	Township:	N/A
Are Vegetation			turally pr				X Yes	No		Range:	N/A
SUMMARY OF		, 0,	, ,							Ü	
Hydrophytic Ve		sent?		Yes	X No	ı		Hydric Soils	Present?		Yes X No
Wetland Hydro				Yes						Within A Wetlaı	
Remarks:	0,	nt for Wetland 3b		100				io mio cam	omig i omic	· · · · · · · · · · · · · · · · · · ·	id. No X
Field Observat Surface Water Water Table Pr	A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundati B8 - Sparsely tions: Present?	ater Table on darks nt Deposits oosits at or Crust oosits on Visible on Aerial Im y Vegetated Concave: Yes Yes X No Yes	agery Surface Depth: Depth:		B9 - Wate B13 - Aqt B14 - Tru C1 - Hydr C3 - Oxid C4 - Pres C6 - Recc C7 - Thin D9 - Guaq Other (Ex	er-Stained uatic Faun e Aquatic ogen Sulfi ized Rhizo ence of R	Plants de Odor spheres on Living Roots educed Iron duction in Tilled Soils face Data	Wetland Hy	Secondary:	D1 - Stunted or S D2 - Geomorphic D5 - FAC-Neutral	atterns Lines Water Table rows isible on Aerial Imagery tressed Plants Position
Saturation Pres	Į.	Yes X No	Depth:		(in.)						
Describe Record	ded Data (str	eam gauge, monitor	ing well, a	aerial pho	otos, previ	ous inspe	ctions), if available:	N/A			
Remarks:											
	· Dla1A1	DI (30.1									
Map Unit Name	DIG IA I	 Blount silt loam, g 	irouna ma	oraine, 0	-2% slop	es S	eries Drainage Class:	Somewhat F	oorly Drair	ied	
Map Unit Name Taxonomy (Sub		- Blount silt loam, g	rouna m	oraine, 0	-2% slop	es S	eries Drainage Class:	Somewhat F	oorly Drair	ied	
Taxonomy (Sub	group):				·				•		M=Matrix)
Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to			nfirm the absen	ce of indicators.		centration, D=Depletion, RM=Reduced	I Matrix, CS=Covered/Co	pated Sand Grains;		M=Matrix) Texture
Taxonomy (Sub Profile Descrip Top	ogroup): otion (Describe to	the depth needed to document the	e indicator or cor	nfirm the absen	ce of indicators.		centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;	Location: PL=Pore Lining, I	Texture
Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	the depth needed to document the	e indicator or cor	Matrix (Moist)	ce of indicators.) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Coedox Features	pated Sand Grains; Type	Location: PL=Pore Lining, I	Texture (e.g. clay, sand, loam)
Taxonomy (Sub Profile Descrip Top Depth	pgroup): otion (Describe to Bottom Depth 8	the depth needed to document the Horizon	color 10YR	Matrix (Moist) 4/3	ce of indicators.) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	d Matrix, CS=Covered/Cedox Features	pated Sand Grains; Type	Location: PL=Pore Lining, I	Texture (e.g. clay, sand, loam) clay loam
Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to Bottom Depth 8 20	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 4/3	% 100 97) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6	Matrix, CS=Covered/Cocoox Features % 3	Type C	Location: PL=Pore Lining, I Location M	Texture (e.g. clay, sand, loam) clay loam clay loam
Taxonomy (Sub Profile Descrip Top Depth 0 8	ogroup): otion (Describe to Bottom Depth 8 20	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 4/3	% 100 97) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6	Matrix, CS=Covered/Ci dox Features % 3	Type C	Location: PL=Pore Lining, I Location M	Texture (e.g. clay, sand, loam) clay loam clay loam
Taxonomy (Sub Profile Descrip Top Depth 0 8	ogroup): otion (Describe to Bottom Depth 8 20	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 4/3	% 100 97	(Type: C=Cor	Centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6	Matrix, CS=Covered/Codox Features % 3	Type C	Location: PL=Pore Lining, I Location M	Texture (e.g. clay, sand, loam) clay loam clay loam
Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 20	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 4/3	% 100 97	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6	Matrix, CS=Covered/Codox Features % 3	Type C	Location: PL=Pore Lining, I Location M	Texture (e.g. clay, sand, loam) clay loam clay loam
Taxonomy (Sub Profile Descrip Top Depth 0 8	ogroup): otion (Describe to Bottom Depth 8 20	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 4/3	9% 100 97	10YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6	Matrix, CS=Covered/Codox Features % 3	Type C	Location: PL=Pore Lining, I Location M	Texture (e.g. clay, sand, loam) clay loam clay loam
Taxonomy (Sub Profile Descrip Top Depth 0 8	group): otion (Describe to Bottom Depth 8 20	Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 4/3	% 100 97	10YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6	Matrix, CS=Covered/Cc edox Features % 3 	Type C	Location: PL=Pore Lining, I	Texture (e.g. clay, sand, loam) clay loam clay loam
Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 20	Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 4/3	% 100 97	10YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6	Matrix, CS=Covered/Co edox Features % 3 	Type C	Location: PL=Pore Lining, I	Texture (e.g. clay, sand, loam) clay loam clay loam
Taxonomy (Sub Profile Descrip Top Depth 0 8	group): ation (Describe to Bottom Depth 8 20	Horizon	Color 10YR 10YR ere if indicator or cor	Matrix (Moist) 4/3 4/3	% 100 97 re not pre \$6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Red F7 - Deple	10YR	Centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6): ineral Matrix (rface Surface	Matrix, CS=Covered/Cocox Features 9% 3 Indicator 1 Indicators of hyde	Type C s for Proble S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, I Location M	Texture (e.g. clay, sand, loam) clay loam clay loam
Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	group): ation (Describe to Bottom Depth 8 20	Horizon	Color 10YR 10YR ere if indicator or cor	Matrix (Moist) 4/3 4/3 icators a	% 100 97 re not prv S6 - Strip F1 - Loan F2 - Loan F3 - Depli F6 - Redc	10YR 10YR esent X ped Matrix ny Muck M ny Gleyed eted Matrix ox Dark S eted Dark	Centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6): ineral Matrix (rface Surface	Matrix, CS=Covered/Cocox Features % 3 Indicator 1 Indicators of hyddisturts	Type C s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, I Location M	Texture (e.g. clay, sand, loam) clay loam clay loam sface
Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	group): ation (Describe to Bottom Depth 8 20	Horizon	Color 10YR 10YR ere if indicator or cor	Matrix (Moist) 4/3 4/3	% 100 97 re not prv S6 - Strip F1 - Loan F2 - Loan F3 - Depli F6 - Redc	10YR 10YR esent X ped Matrix ny Muck M ny Gleyed eted Matrix ox Dark S eted Dark	Centration, D=Depletion, RM=Reduced Re Color (Moist) 5/6): ineral Matrix (rface Surface	Matrix, CS=Covered/Cocox Features 9% 3 Indicator 1 Indicators of hyde	Type C s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, I Location M	Texture (e.g. clay, sand, loam) clay loam clay loam sface



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 3b Sample Point: SP9d

VEGETATION	(Species identified in all uppercase are non-na	itive spec	ies.)		
Tree Stratum (F	Plot size: 10 meter radius)				
	<u>Species Name</u>	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:0(A)
3.					`` ′
4.					Total Number of Dominant Species Across All Strata: 1 (B)
5.					· · · · · · · · · · · · · · · · · · ·
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
7.					(**2)
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
10.	Total Cover =	0			FACW spp. 0 x 2 = 0
	. 514. 5575.	ŭ			FAC spp. 0 x 3 = 0
Sapling/Shrub St	tratum (Plot size: 5 meter radius)				FACU spp. 0 x 4 = 0
1.					UPL spp. 20 x 5 = 100
2.					
3.					Total <u>20</u> (A) <u>100</u> (B)
4.					(r) 100 (b)
5.					Prevalence Index = B/A = 5.000
6.					Trovalence fildex = D/A = 0.000
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes X No Rapid Test for Hydrophytic Vegetation
10.					Yes X No Dominance Test is > 50%
10.	Total Cover =	0			Yes $\overline{\mathbf{X}}$ No Prevalence Index is $\leq 3.0 ^{*}$
	Total Gover –	U			Yes No Morphological Adaptations (Explain) *
Llank Charles (D	I-4 -i 04 di\				
1.	lot size: 2 meter radius)	20	Υ	LIDI	Yes No Problem Hydrophytic Vegetation (Explain) *
2.	ZEA MAYS	20		UPL	* Indicators of hydric soil and wetland hydrology must be
					present, unless disturbed or problematic.
3.					D. C. W
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.					at breast neight (DD11), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					than 3.20 it. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of
13.					size, and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	20		· <u> </u>	
Woody Vine Stra	atum (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present Yes X No
4.					
5.					
	Total Cover =	0			
Remarks:	80% open ground				
	-				
Additional Re	omarke:				
Auditional Re	miai A5.				
I					



Project/Site:	Northern C	olumbus Loop - Pr	eferred R	loute			Stantec Project #:	193707055		Date:	06/17/20	
Applicant:	Columbia C	Gas of Ohio					•			County:	Union	
Investigator #1:	Charlie Alle	en		Investi	gator #2:	Julie Sla	ater			State:	Ohio	
Soil Unit:	Pk - Pewar	no silty clay loam, (0-1% slop	oes		NW	/I/WWI Classification:	N/A		Wetland ID:	Wetland 3c	
Landform:	Toeslope				al Relief:					Sample Point:	SP9e	
Slope (%):	10		: 40.2029		ongitude			Datum:		Community ID:	PEM	
		ditions on the site ty				(If no, expl		X Yes	No	Section:	N/A	
Are Vegetation		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	gnificantly				Are normal circumsta	_ '	t?	Township:	N/A	
Are Vegetation		or Hydrology na	turally pr	oblemat	ic?		χ Yes	No		Range:	N/A	
SUMMARY OF				_								_
Hydrophytic Ve	~			X Yes		l .		Hydric Soils			X Yes	No
Wetland Hydrol				X Yes				Is This Sam	pling Point	Within A Wetla	nd? X Yes	No
_	ology Indica	vels through center							Carandana			
X	A1 - Surface A2 - High Wa	ater Table				er-Stained uatic Faun			Secondary:	B6 - Surface Soil B10 - Drainage P		
X	A3 - Saturation					e Aquatic				B16 - Moss Trim		
	B1 - Water M B2 - Sedimer			<u> </u>		ogen Sulfi	de Odor espheres on Living Roots		_	C2 - Dry-Season C8 - Crayfish Bur		
-	B3 - Drift Dep						educed Iron				iows isible on Aerial Ima	aerv
	B4 - Algal Ma						eduction in Tilled Soils			D1 - Stunted or S		.3,
	B5 - Iron Dep					Muck Sur				D2 - Geomorphic		
<u> </u>		on Visible on Aerial Im v Vegetated Concave		<u> </u>		ge or Well plain in Re				D5 - FAC-Neutra	l Test	
1	Do - Oparsely	y vegetated Concave	Surface	1	Other (LX	piaiii iii ixe	anarks)					
Field Observat	ions:											
Surface Water		X Yes No	Depth:	0.5	(in.)					_	_	
Water Table Pr		X Yes No		surface	` '			Wetland Hy	drology P	resent? X	Yes No	
Saturation Pres		X Yes No	Depth:	0	(in.)							
		eam gauge, monitor	•	orial pha	. ,	oue inen	actions) if available:	N/A				
	leu Dala (Sili	eam gauge, monitor	ilig well, a	aeriai pric	nos, pievi	ous mape	clions), ii avallable.	IN/A				
Remarks:												
Remarks.												
SOILS		Pk - Pewamo siltv	clav loam	ո. 0-1% ։	slopes	S	eries Drainage Class:	Very Poorly	drained			
SOILS Map Unit Name		Pk - Pewamo silty	clay loan	າ, 0-1% ເ	slopes	S	eries Drainage Class:	Very Poorly	drained			
SOILS Map Unit Name Taxonomy (Sub	group):	<u> </u>								Location: PL=Pore Lining,	M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group):	<u> </u>			ce of indicators.		ncentration, D=Depletion, RM=Reduced		oated Sand Grains;	Location: PL=Pore Lining,	M=Matrix) Texture)
SOILS Map Unit Name Taxonomy (Sub	group): tion (Describe to	<u> </u>	e indicator or cor	firm the absen	ce of indicators.		ncentration, D=Depletion, RM=Reduced	Matrix, CS=Covered/C	oated Sand Grains;	Location: PL=Pore Lining, I		
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to	the depth needed to document the	e indicator or cor	nfirm the absen	ce of indicators.		ncentration, D=Depletion, RM=Reduced	Matrix, CS=Covered/C	oated Sand Grains;		Texture	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to Bottom Depth	the depth needed to document the	e indicator or cor	Matrix	ce of indicators.) (Type: C=Cor	ncentration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cedox Features	oated Sand Grains; Type	Location	Texture (e.g. clay, sand	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to: Bottom Depth 2	the depth needed to document the Horizon	color 2.5Y	Matrix (Moist)	ce of indicators.) (Type: C=Cor	ncentration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cedox Features	oated Sand Grains; Type	Location 	Texture (e.g. clay, sand organic	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to Bottom Depth 2 20	the depth needed to document the Horizon	Color 2.5Y 10YR	Matrix (Moist) 3/1 5/1	% 100 70) (Type: C=Cor	Color (Moist) 5/6	Matrix, CS=Covered/Codox Features % 30	Type C	Location M	Texture (e.g. clay, sand organic clay	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to Depth 2 20	the depth needed to document the Horizon	Color 2.5Y 10YR	Matrix (Moist) 3/1 5/1	% 100 70) (Type: C=Cor	Color (Moist) 5/6	Matrix, CS=Covered/C dox Features % 30	Type C	Location M	Texture (e.g. clay, sand organic clay	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to Bottom Depth 2 20	the depth needed to document the Horizon	Color 2.5Y 10YR	Matrix (Moist) 3/1 5/1	% 100 70	(Type: C=Cor	Color (Moist) 5/6	Matrix, CS=Covered/C dox Features % 30	Type C	Location M	Texture (e.g. clay, sand organic clay	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to Bottom Depth 2 20	the depth needed to document the Horizon	Color 2.5Y 10YR	Matrix (Moist) 3/1 5/1 	% 100 70	(Type: C=Cor	Color (Moist) 5/6	Matrix, CS=Covered/C dox Features % 30	Type C	Location M	Texture (e.g. clay, sand organic clay	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to Bottom Depth 2 20	the depth needed to document the Horizon	Color 2.5Y 10YR	Matrix (Moist) 3/1 5/1 	% 100 70	10YR	Color (Moist) 5/6	Matrix, CS=Covered/C dox Features % 30	Type C	Location M	Texture (e.g. clay, sand organic clay	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to Depth 2 20	the depth needed to document the Horizon	Color 2.5Y 10YR	Matrix (Moist) 3/1 5/1	% 100 70		Color (Moist) 5/6	Matrix, CS=Covered/C dox Features % 30	Type C	Location M	Texture (e.g. clay, sand clay	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to Depth 2 20 Soil Field Ir A1- Histosol	Horizon	Color 2.5Y 10YR	Matrix (Moist) 3/1 5/1	% 100 70 re not pre	10YR esent ped Matrix	Color (Moist) 5/6):	Matrix, CS=Covered/C dox Features % 30	Type C s for Proble A16 - Coast	Location M matic Soils ¹ Prairie Redox	Texture (e.g. clay, sand clay	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to Depth 2 2 20 Soil Field Ir A1- Histosol A2 - Histic Ep	Horizon	Color 2.5Y 10YR	Matrix (Moist) 3/1 5/1	% 100 70 re not pre S6 - Strip F1 - Loan	10YR esent ped Matrix	Color (Moist) 5/6): (Inieral	Matrix, CS=Covered/C dox Features % 30	Type C s for Proble A16 - Coast S7 - Dark S	Location M matic Soils ¹ Prairie Redox urface	Texture (e.g. clay, sand clay	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to Depth 2 2 20	Horizon	Color 2.5Y 10YR	Matrix (Moist) 3/1 5/1 icators a	% 100 70 re not pre F1 - Loan F2 - Loan	10YR	Color (Moist) 5/6): (ineral Matrix	Matrix, CS=Covered/C dox Features % 30	Type C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N	Location M matic Soils ¹ Prairie Redox urface	Texture (e.g. clay, sand clay s	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to Depth 2 2 20 Soil Field Ir A1- Histosol A2 - Histic Ep	Horizon	Color 2.5Y 10YR	Matrix (Moist) 3/1 5/1	% 100 70	10YR	Color (Moist) 5/6	Matrix, CS=Covered/C dox Features % 30	Type C s for Proble A16 - Coast F12 - Iron-N TF12 - Very	Location M matic Soils ¹ Prairie Redox urface	Texture (e.g. clay, sand clay s	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to Depth 2 20	Horizon	Color 2.5Y 10YR ere if ind	Matrix (Moist) 3/1 5/1 icators a	% 100 70 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Red6 F7 - Deple	10YR 10YR esent ped Matrix ny Muck M ny Gleyed eted Matrix ox Dark Sc eted Dark	Color (Moist) 5/6): dineral Matrix x xurface Surface	Matrix, CS=Covered/C dox Features % 30	Type C s for Proble A16 - Coast F12 - Iron-N TF12 - Very	Location M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur	Texture (e.g. clay, sand clay s	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to Depth 2 2 20	Horizon	Color 2.5Y 10YR ere if ind	Matrix (Moist) 3/1 5/1 icators a	% 100 70 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Red6 F7 - Deple	10YR 10YR	Color (Moist) 5/6): dineral Matrix x xurface Surface	Matrix, CS=Covered/C dox Features % 30	Type C s for Proble A16 - Coast F12 - Iron-N TF12 - Very	Location M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur	Texture (e.g. clay, sand clay s	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to Depth 2 2 20	Horizon	Color 2.5Y 10YR ere if ind	Matrix (Moist) 3/1 5/1 icators a	% 100 70 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Red6 F7 - Deple	10YR 10YR esent ped Matrix ny Muck M ny Gleyed eted Matrix ox Dark Sc eted Dark	Color (Moist) 5/6): dineral Matrix x xurface Surface	Matrix, CS=Covered/C dox Features % 30	Type C s for Proble A16 - Coast F12 - Iron-N TF12 - Very	Location M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur	Texture (e.g. clay, sand clay s	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to Describe to Depth 2 20	Horizon	Color 2.5Y 10YR ere if ind	Matrix (Moist) 3/1 5/1 icators a	% 100 70 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Red6 F7 - Deple	10YR 10YR esent ped Matrix ny Muck M ny Gleyed eted Matrix ox Dark Sc eted Dark	Color (Moist) 5/6): dineral Matrix x xurface Surface	Matrix, CS=Covered/C dox Features % 30	Type C s for Proble A16 - Coast F12 - Iron-N TF12 - Very	Location M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur	Texture (e.g. clay, sand clay s	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to Describe to Depth 2 2 20	Horizon	Color 2.5Y 10YR ere if ind	Matrix (Moist) 3/1 5/1 icators a	% 100 70 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Red6 F7 - Deple	10YR 10YR esent ped Matrix ny Muck M ny Gleyed eted Matrix ox Dark Sc eted Dark	Color (Moist) 5/6): dineral Matrix x xurface Surface	Matrix, CS=Covered/C dox Features % 30	Type C s for Proble A16 - Coast F12 - Iron-N TF12 - Very	Location M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur	Texture (e.g. clay, sand clay s	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to Describe to Depth 2 2 20	Horizon	Color 2.5Y 10YR ere if ind	Matrix (Moist) 3/1 5/1 icators a	% 100 70 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Red6 F7 - Deple	10YR 10YR esent ped Matrix ny Muck M ny Gleyed eted Matrix ox Dark Sc eted Dark	Color (Moist) 5/6): dineral Matrix x xurface Surface	Matrix, CS=Covered/C dox Features % 30 Indicator	Type C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location M matic Soils ¹ Prairie Redox urface langanese Masse: Shallow Dark Sur	Texture (e.g. clay, sand clay sface	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	group): tion (Describe to Describe to Depth 2 2 20	Horizon	Color 2.5Y 10YR ere if ind	Matrix (Moist) 3/1 5/1 icators a	% 100 70 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Red6 F7 - Deple	10YR 10YR esent ped Matrix ny Muck M ny Gleyed eted Matrix ox Dark Sc eted Dark	Color (Moist) 5/6): dineral Matrix x xurface Surface	Matrix, CS=Covered/C dox Features % 30 Indicatos 1 Indicators of hyd	Type C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur	Texture (e.g. clay, sand clay s	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	group): tion (Describe to Describe to Depth 2 2 20	Horizon	Color 2.5Y 10YR ere if ind	Matrix (Moist) 3/1 5/1 icators a	% 100 70	10YR 10YR esent ped Matrix ny Muck M ny Gleyed eted Matrix ox Dark Sc eted Dark	Color (Moist) 5/6): dineral Matrix x xurface Surface	Matrix, CS=Covered/C dox Features % 30 Indicator 1 Indicators of hycodisturts	Type C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location M matic Soils strain in Remarks) tion and wetland hydr	Texture (e.g. clay, sand clay sface	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric Restrictive Laye (If Observed)	group): tion (Describe to Describe to Depth 2 2 20	Horizon	Color 2.5Y 10YR ere if ind	Matrix (Moist) 3/1 5/1 icators a	% 100 70	10YR 10YR esent ped Matrix ny Muck M ny Gleyed eted Matrix ox Dark Sc eted Dark	Color (Moist) 5/6): dineral Matrix x xurface Surface	Matrix, CS=Covered/C dox Features % 30 Indicatos 1 Indicators of hyd	Type C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location M matic Soils strain in Remarks) tion and wetland hydr	Texture (e.g. clay, sand clay sface	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	group): tion (Describe to Describe to Depth 2 2 20	Horizon	Color 2.5Y 10YR ere if ind	Matrix (Moist) 3/1 5/1 icators a	% 100 70	10YR 10YR esent ped Matrix ny Muck M ny Gleyed eted Matrix ox Dark Sc eted Dark	Color (Moist) 5/6): dineral Matrix x xurface Surface	Matrix, CS=Covered/C dox Features % 30 Indicator 1 Indicators of hycodisturts	Type C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location M matic Soils strain in Remarks) tion and wetland hydr	Texture (e.g. clay, sand clay sface	d, loam)



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 3c Sample Point: SP9e

VEGETATION		ative spec	cies.)		
Tree Stratum (Pl	ot size: 10 meter radius)				
	<u>Species Name</u>	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata: 1 (B)
5.					··
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					`` '
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
-	Total Cover =	0			FACW spp. 0 x 2 = 0
					FAC spp. 0 x 3 = 0
Sapling/Shrub Str	atum (Plot size: 5 meter radius)				FACU spp. 0 x 4 = 0
1.					UPL spp. 0 x 5 = 0
2.					3. 2 spp
3.					Total <u>0</u> (A) <u>0</u> (B)
4.					(0)
5.	- 				Prevalence Index = B/A = N/A
6.	_ 				1 TOYAIGHOO HINGA - D/A - IN/A
7.					
8.	 				Hydrophytic Vegetation Indicators:
9.					X Yes No Rapid Test for Hydrophytic Vegetation
10.					X Yes No Dominance Test is > 50%
10.	Total Cover =				
	Total Cover –	U			
					Yes No Morphological Adaptations (Explain) *
	ot size: 2 meter radius)	100		= 1 011/	Yes No Problem Hydrophytic Vegetation (Explain) *
1.	PHALARIS ARUNDINACEA	100	Υ	FACW	* Indicators of hydric soil and wetland hydrology must be
2.					present, unless disturbed or problematic.
3.					,
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter
7.					at breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater
10.					than 3.28 ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of
13.					size, and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
1.2.	Total Cover =				, , , , , , , , , , , , , , , , , , ,
	10101 00001 -	.00			
Woody Vine Strat	um (Plot size: 10 meter radius)				
1.					
2.					
3.	- 				Hydrophytic Vegetation Present X Yes No
3. 4.					ilyulophytic vegetation riesent X 1es No
5.					
J.	Total Cover =				
Domorlisi	Total Cover =	0			
Remarks:					
Additional Re	marks:				



Project/Site:	Northern C	olumbus Loop - Pro	eferred R	Route			Stantec Project #:	193707055		Date:	06/17/20
Applicant:	Columbia 0	Gas of Ohio					•			County:	Union
Investigator #1:	Charlie Alle	en		Investi	gator #2:	Julie Sla	ater			State:	Ohio
Soil Unit:	Pk - Pewai	mo silty clay loam, ()-1% slop				/I/WWI Classification:	N/A		Wetland ID:	Wetland 3c
Landform:	Terrace			Loc	al Relief:	none				Sample Point:	SP9f
Slope (%):	0	Latitude	40.2029	992 L	ongitude:	-83.190	043	Datum:	N/A	Community ID:	Upland
Are climatic/hyd	drologic cond	ditions on the site ty	pical for	this time	of year?	(If no, expl	ain in remarks)	X Yes	No	Section:	N/A
Are Vegetation			nificantly				Are normal circumsta	ances presen	t?	Township:	N/A
Are Vegetation	_ ' = '		turally pr				X Yes	No .		Range:	N/A
SUMMARY OF										·g	
Hydrophytic Ve		sent?		Yes	X No			Hydric Soils	Present?		Yes X No
Wetland Hydro				Yes						Within A Wetlar	
Remarks:		olanted Ag field. Up	land pair					is This Carri	olling i ollic	vviuiiii A vveuai	Id: No
HYDROLOGY Wetland Hydro Primary Field Observat Surface Water	A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water N B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundatio B8 - Sparsel	ater Table on Marks nt Deposits posits at or Crust posits on Visible on Aerial Im y Vegetated Concave s	agery		B9 - Wate B13 - Aqu B14 - Tru C1 - Hydr C3 - Oxid C4 - Pres	er-Stained latic Faund e Aquatic ogen Sulfi ized Rhizo ence of Re ent Iron Re Muck Sur ge or Well	a Plants de Odor spheres on Living Roots educed Iron sduction in Tilled Soils face Data	Wattand III	Secondary:	D1 - Stunted or S D2 - Geomorphic D5 - FAC-Neutral	atterns Lines Water Table rows isible on Aerial Imagery tressed Plants Position Test
Water Table Pr Saturation Pres	esent?	Yes X No Yes X No	Depth: Depth:		(in.) (in.)			Wetland Hy	drology Pi	resent?	Yes X No
Describe Record	led Data (str	eam gauge, monitor	ng well, a	aerial pho	tos, previ	ous inspe	ections), if available:	N/A			
Remarks: SOILS Map Unit Name Taxonomy (Sub		Pk - Pewamo silty	clay loam	າ, 0-1% ເ	slopes	S	eries Drainage Class:	Very Poorly	drained		
SOILS Map Unit Name Taxonomy (Sub	group):			•				<u> </u>		Location: PL=Pore Linino. N	u=Matrix)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to			nfirm the absen			centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;	Location: PL=Pore Lining, N	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to Bottom	the depth needed to document the	indicator or cor	nfirm the absen	ce of indicators.		centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;		Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to Bottom Depth	the depth needed to document the	indicator or cor	Matrix (Moist)	ce of indicators.	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Co	pated Sand Grains; Type	Location	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 8	the depth needed to document the Horizon	indicator or cor	Matrix (Moist) 4/3	% 100	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Codox Features	oated Sand Grains; Type	Location 	Texture (e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 20	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 5/1	% 100 100	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cr dox Features %	Type	Location 	Texture (e.g. clay, sand, loam) clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 20	the depth needed to document the Horizon	indicator or cor Color 10YR 10YR	Matrix (Moist) 4/3 5/1	% 100 100	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Ci dox Features % 	Type	Location 	Texture (e.g. clay, sand, loam) clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 20	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 5/1	% 100 100	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/C dox Features %	Type	Location	Texture (e.g. clay, sand, loam) clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 20	the depth needed to document the Horizon	indicator or cor Color 10YR 10YR	Matrix (Moist) 4/3 5/1 	% 100 100	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cidox Features %	Type		Texture (e.g. clay, sand, loam) clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 20	the depth needed to document the Horizon	indicator or cor Color 10YR 10YR	Matrix (Moist) 4/3 5/1	% 100 100	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cr dox Features %	Type		Texture (e.g. clay, sand, loam) clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 20	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 5/1	% 100 100	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cr dox Features %	Type		Texture (e.g. clay, sand, loam) clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 20	Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 5/1	% 100 100		centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cr dox Features % 	Type		Texture (e.g. clay, sand, loam) clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	group): tion (Describe to Describe to Depth 8 20	Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 4/3 5/1	% 100 100		centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Codox Features % Indicator 1 Indicators of hyd	Type s for Proble S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location	Texture (e.g. clay, sand, loam) clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	group): tion (Describe to Describe to Depth 8 20	Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 4/3 5/1	% 100 100		centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Codox Features % Indicator 1 Indicators of hyd	Type s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location	Texture (e.g. clay, sand, loam) clay loam clay loam sface
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	group): tion (Describe to Describe to Depth 8 20	Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 4/3 5/1 icators a	% 100 100		centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Codox Features 9% Indicator 1 Indicators of hyddisturt.	Type s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location	Texture (e.g. clay, sand, loam) clay loam



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 3c Sample Point: SP9f **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Number of Dominant Species that are OBL, FACW, or FAC: _____ (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B) 7. 8 Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = n Total Cover = FACW spp. 0 x 2 = 0 FAC spp. 0 x 3 = 0 Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. 0 x 4 = 0 UPL spp. 30 x 5 = 150 2 3. 30 150 (B) Total 4. 5. Prevalence Index = B/A = 5.000 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation --Yes X No X No 10. Yes Dominance Test is > 50% Total Cover = Yes X No Prevalence Index is ≤ 3.0 * Yes Morphological Adaptations (Explain) * No Herb Stratum (Plot size: 2 meter radius) Yes ☐ No Problem Hydrophytic Vegetation (Explain) * ZEA MAYS 30 Υ **UPL** * Indicators of hydric soil and wetland hydrology must be 2. present, unless disturbed or problematic. 3. --4. **Definitions of Vegetation Strata:** 5. 6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater 9. than 3.28 ft. tall. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of 12. size, and woody plants less than 3.28 ft. tall. 13. 14. ----15. Woody Vines - All woody vines greater than 3.28 ft. in height. Total Cover = 30 Woody Vine Stratum (Plot size: 10 meter radius) Hydrophytic Vegetation Present Yes X No 3. 4. 5. Total Cover =

Remarks:	70% open ground	
Additional R	emarks:	



Project/Site:	Northern C	olumbus Loop - Pr	eferred F	loute			Stantec Project #:	193707055		Date:	07/09/20	
Applicant:	Columbia C	Gas of Ohio					·			County:	Union	
Investigator #1:	Angela Sjo	llema		Investi	gator #2:	Julie Sla	ater			State:	Ohio	
Soil Unit:	Blg1A1 - Bl	lount silt loam, gro	und mora	ine, 0-2%	X	NW	/I/WWI Classification:	N/A		Wetland ID:	Wetland 3d	
Landform:	Floodplain			Loc	al Relief:	Concav	e			Sample Point:	SP9g	
Slope (%):	0		: 40.21					Datum:	N/A	Community ID:	PEM	
Are climatic/hyd	drologic cond	ditions on the site t	ypical for	this time	of year?	(If no, expl		X Yes	No	Section:	N/A	
Are Vegetation		or Hydrology si	gnificantly	/ disturbe	ed?		Are normal circumsta		ıt?	Township:	N/A	
Are Vegetation		or Hydrology na	aturally pr	oblemati	ic?		χ Yes	No		Range:	N/A	
SUMMARY OF	FINDINGS											
Hydrophytic Ve	getation Pre	sent?		X Yes	No			Hydric Soils	Present?		X Yes	No
Wetland Hydro	logy Present	?		X Yes	No			Is This Sam	pling Point	Within A Wetla	nd? X Yes	No
Remarks:	Ditch Wetla	and created by farr	ner.									
Primary X	A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundatio B8 - Sparsely tions: Present?	ater Table on Marks nt Deposits posits at or Crust	nagery	2	B9 - Wate B13 - Aqu B14 - Tru C1 - Hydr C3 - Oxid C4 - Pres	er-Stained latic Faund e Aquatic ogen Sulfi ized Rhizo ence of Re ent Iron Re Muck Sur ge or Well	a Plants de Odor sspheres on Living Roots educed Iron sduction in Tilled Soils face Data	Wetland Hy	Secondary:	D1 - Stunted or S D2 - Geomorphic D5 - FAC-Neutra	eatterns Lines Water Table rrows fisible on Aerial Imager estressed Plants Prosition	agery
Saturation Pres	sent?	Yes X No	Deptn:		(ın.)							
Describe Record	led Data (str	eam gauge, monitor	ring well, a	erial pho	tos, previ	ous inspe	ections), if available:	N/A				
Damandan	-											
i Remarks:												
Remarks:												
SOILS								0				
SOILS Map Unit Name		lount silt loam, gro	und mora	ine, 0-2%	<mark>% sloβeri</mark>	es Drain	age Class:	Somewhat p	poorly drain	ed		
SOILS Map Unit Name Taxonomy (Sub	group):											
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to			firm the absen			centration, D=Depletion, RM=Reduced	d Matrix, CS=Covered/C	oated Sand Grains;			
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to Bottom	the depth needed to document the	e indicator or cor	nfirm the absence	ce of indicators.)		ncentration, D=Depletion, RM=Reduced	Matrix, CS=Covered/C	coated Sand Grains;	Location: PL=Pore Lining, I	Texture	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to Bottom Depth	the depth needed to document the	e indicator or cor	Matrix (Moist)	ce of indicators.)	(Type: C=Cor	ncentration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cedox Features	coated Sand Grains; Type	Location: PL=Pore Lining, I	Texture (e.g. clay, san	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to Bottom	the depth needed to document the	e indicator or cor	nfirm the absence	% 87	(Type: C=Cor	ncentration, D=Depletion, RM=Reduced Re Color (Moist) 4/4	d Matrix, CS=Covered/Cedox Features	Coated Sand Grains; Type C	Location: PL=Pore Lining, I Location M	Texture (e.g. clay, san silty cla	d, loam) y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 4	the depth needed to document the	color 10YR	Matrix (Moist) 4/3	% 87	(Type: C=Cor	contration, D=Depletion, RM=Reduced Re Color (Moist) 4/4 4/6	d Matrix, CS=Covered/Cedox Features % 8 5	Type C C	Location: PL=Pore Lining, I Location M M	Texture (e.g. clay, san silty cla	d, loam) y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 4 15	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 4/2	% 87 85	(Type: C=Cor 10YR 10YR 10YR	contration, D=Depletion, RM=Reduced Re Color (Moist) 4/4 4/6 5/8	d Matrix, CS=Covered/C edox Features % 8 5 15	Type C C C	Location: PL=Pore Lining, Location M M M	Texture (e.g. clay, san silty cla	d, loam) y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 4	the depth needed to document th Horizon	color 10YR	Matrix (Moist) 4/3	% 87	(Type: C=Cor	contration, D=Depletion, RM=Reduced Re Color (Moist) 4/4 4/6	d Matrix, CS=Covered/Cedox Features % 8 5	Type C C	Location: PL=Pore Lining, I Location M M	Texture (e.g. clay, san silty cla	d, loam) y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 4 15	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 4/2	% 87 85	(Type: C=Cor 10YR 10YR 10YR	contration, D=Depletion, RM=Reduced Re Color (Moist) 4/4 4/6 5/8	d Matrix, CS=Covered/C edox Features % 8 5 15	Type C C C	Location: PL=Pore Lining, Location M M M	Texture (e.g. clay, san silty cla silty cla silty cla	d, loam) y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 15	group): tion (Describe to Bottom Depth 4 15 20	Horizon	color 10YR 10YR 10YR	Matrix (Moist) 4/3 4/2 4/2	% 87 85 80	10YR 10YR 10YR 10YR 10YR	Color (Moist) 4/4 4/6 5/8 5/8	B Matrix, CS=Covered/Cedox Features % 8 5 15 20	coated Sand Grains;	Location: PL=Pore Lining, I Location M M M	Texture (e.g. clay, san silty cla silty cla silty cla silty cla	d, loam) y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 15	group): tion (Describe to Bottom Depth 4 15 20	Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/3 4/2 4/2	% 87 85 80	10YR 10YR 10YR 10YR 10YR 	Color (Moist) 4/4 4/6 5/8	Matrix, CS=Covered/Cedox Features % 8 5 15 20	oated Sand Grains; S Type C C C	Location: PL=Pore Lining, I Location M M M	Texture (e.g. clay, san silty cla silty cla silty cla silty cla silty cla	d, loam) y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 15	group): tion (Describe to Bottom Depth 4 15 20	Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/3 4/2 4/2	% 87 85 80	10YR 10YR 10YR 10YR 10YR 	Color (Moist) 4/4 4/6 5/8	Matrix, CS=Covered/Cedox Features % 8 5 15 20	oated Sand Grains; S Type C C C C	Location: PL=Pore Lining, I	Texture (e.g. clay, san silty cla silty cla silty cla silty cla silty cla	d, loam) y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 15	group): tion (Describe to Depth 4 4 15 20 15 Soil Field Ir A1 - Histosol A2 - Histic Eq A5 - Stratified A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick E S1 - Sandy M	Horizon	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/3 4/2 4/2 icators a	% 87 85 80 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - R5 - R	10YR 10YR 10YR 10YR 10YR esent	Color (Moist) 4/4 4/6 5/8 5/8): cilineral Matrix x x riface Surface	Matrix, CS=Covered/Cedox Features % 8 5 15 20 Indicator	oated Sand Grains; Type C C C C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, I Location M M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, san silty cla silty cla silty cla silty cla silty cla sface	d, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 15	group): tion (Describe to Describe to Depth 4 15 20 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1 - Deplete A12 - Thick I S1 - Sandy M S4 - Sandy G S4 - Sandy	Horizon	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/3 4/2 4/2 icators a	9% 87 85 80 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Redc	10YR 10YR 10YR 10YR 10YR esent	Color (Moist) 4/4 4/6 5/8 5/8): cilineral Matrix x x riface Surface	d Matrix, CS=Covered/C edox Features % 8 5 15 20 Indicator	oated Sand Grains; Type C C C C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, I Location M M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur	Texture (e.g. clay, san silty cla silty cla silty cla silty cla silty cla	d, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 15	group): tion (Describe to Describe to Depth 4 15 20 Soil Field Ir A1- Histosol A2- Histic Ep A3- Black Hi A4- Hydroge A5- Stratifier A10- Deplete A12- Thick I S1- Sandy M S3- 5 cm Mt S4- Sandy R S5- Sandy R	Horizon	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/3 4/2 4/2 icators a	% 87	10YR 10YR 10YR 10YR 10YR esent	Color (Moist) 4/4 4/6 5/8 5/8): cilineral Matrix x x riface Surface	d Matrix, CS=Covered/C edox Features % 8 5 15 20 Indicator Indicators of hydisturd	Type C C C C C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, I Location M M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, san silty cla silty cla silty cla silty cla silty cla sface	d, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 15 NRCS Hydric	group): tion (Describe to Describe to Depth 4 15 20 Soil Field Ir A1- Histosol A2- Histic Ep A3- Black Hi A4- Hydroge A5- Stratifier A10- Deplete A12- Thick I S1- Sandy M S3- 5 cm Mt S4- Sandy R S5- Sandy R	Horizon	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/3 4/2 4/2 icators a	% 87	10YR 10YR 10YR 10YR 10YR esent	Color (Moist) 4/4 4/6 5/8 5/8): cilineral Matrix x x riface Surface	d Matrix, CS=Covered/C edox Features % 8 5 15 20 Indicator	Type C C C C C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, I Location M M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, san silty cla silty cla silty cla silty cla silty cla sface	d, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 15 NRCS Hydric	group): tion (Describe to Describe to Depth 4 15 20 Soil Field Ir A1- Histosol A2- Histic Ep A3- Black Hi A4- Hydroge A5- Stratifier A10- Deplete A12- Thick I S1- Sandy M S3- 5 cm Mt S4- Sandy R S5- Sandy R	Horizon	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/3 4/2 4/2 icators a	% 87	10YR 10YR 10YR 10YR 10YR esent	Color (Moist) 4/4 4/6 5/8 5/8): cilineral Matrix x x riface Surface	d Matrix, CS=Covered/C edox Features % 8 5 15 20 Indicator Indicators of hydisturd	Type C C C C C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, I Location M M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, san silty cla silty cla silty cla silty cla silty cla sface	d, loam) y y y y y y



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 3d Sample Point: SP9g

VEGETATION		ative spec	cies.)		
Tree Stratum (PI	ot size: 10 meter radius)				
	<u>Species Name</u>	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.			-		Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.					
4.					Total Number of Dominant Species Across All Strata:1 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	0			FACW spp. 0 x 2 = 0
					FAC spp. 0 x 3 = 0
Sapling/Shrub Str	ratum (Plot size: 5 meter radius)				FACU spp. 0 x 4 = 0
1.					UPL spp. 0 x 5 = 0
2.					
3.					Total 0 (A) 0 (B)
4.					
5.					Prevalence Index = B/A = N/A
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					🕱 Yes 🔲 No Rapid Test for Hydrophytic Vegetation
10.					X Yes No Dominance Test is > 50%
	Total Cover =	0			Yes No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
Herb Stratum (Plo	ot size: 2 meter radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Typha latifolia	100	Υ	OBL	
2.					* Indicators of hydric soil and wetland hydrology must be
3.					present, unless disturbed or problematic.
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter
7.					at breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater
10.					than 3.28 ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of
13.					size, and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
13.	Total Cover =				Troody Tines 7 in Hoody Vines greater than 0.20 it. in helyfit.
	Total Cover =	100			
Mandy Vizz Ct	(Upp (Diet eiger 10 meter dire)				
	tum (Plot size: 10 meter radius)				
1. 2.	_ 				
3.	 				Hydrophytic Vegetation Present X Yes No
					Hydrophytic Vegetation Present X Yes No
4. 5.					
J.	Total Cover -	0			
Remarks:	Total Cover =	U			
Remarks:					
				_	
Additional Re	marks:				



Project/Site:	Northern C	columbus Loop - Pro	eferred F	Route			Stantec Project #:	193707055		Date:	07/09/20
Applicant:	Columbia 0	Gas of Ohio					•			County:	Union
Investigator #1:	Angela Sjo	llema		Investi	igator #2:	Julie Sla	ater			State:	Ohio
Soil Unit:		mo silty clay loam, (0-1% slo				/I/WWI Classification:	N/A		Wetland ID:	Wetland 3d
Landform:	Terrace				al Relief:	Linear				Sample Point:	SP9h
Slope (%):	0	Latitude	40.21	3202 L	ongitude:	-83.174	439	Datum:	N/A	Community ID:	Upland
Are climatic/hyd	drologic cond	ditions on the site ty	pical for	this time	of year?	(If no, expl	ain in remarks)	X Yes	No	Section:	N/A
Are Vegetation			nificantly				Are normal circumsta	ances presen	t?	Township:	N/A
Are Vegetation	_ ' = '		turally pr				X Yes	No .		Range:	N/A
SUMMARY OF			,				125.			·g=-	
Hydrophytic Ve		sent?		Yes	X No			Hydric Soils	Present?		Yes X No
Wetland Hydro				Yes						Within A Wetlar	
Remarks:	logy i resem	· ·		100	_ X 10			is This Carri	pility i olite	vviaiiii 71 vvetai	id: 103 X NO
Field Observat Surface Water Water Table Pr	A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundati B8 - Sparsely tions: Present?	ater Table on Marks nt Deposits posits at or Crust posits on Visible on Aerial Im y Vegetated Concave s Yes Yes X No Yes	agery Surface Depth: Depth:		B9 - Wate B13 - Aqt B14 - Tru C1 - Hydr C3 - Oxid C4 - Pres C6 - Recc C7 - Thin D9 - Guaq Other (Ex	er-Stained latic Faunt e Aquatic ogen Sulfi ized Rhizo ence of Re ent Iron Re Muck Sur ge or Well	a Plants de Odor sspheres on Living Roots educed Iron sduction in Tilled Soils face Data	Wetland Hy	Secondary:	D1 - Stunted or S D2 - Geomorphic D5 - FAC-Neutral	atterns Lines Water Table rows isible on Aerial Imagery tressed Plants Position
Saturation Pres	ent?	Yes X No	Depth:		(in.)						
Describe Record	led Data (str	eam gauge, monitor	ing well, a	aerial pho	otos, previ	ous inspe	ections), if available:	N/A			
Remarks:											
SOILS											
SOILS Map Unit Name		PK - Pewamo silty	clay loar	n, 0-1%	slopes	S	eries Drainage Class:	Very Poorly	drained		
SOILS Map Unit Name Taxonomy (Sub	group):				•						
SOILS Map Unit Name Taxonomy (Sub	group):				•		eries Drainage Class:			Location: PL=Pore Lining, N	√=Matrix)
SOILS Map Unit Name Taxonomy (Sub	group):				ce of indicators.		ncentration, D=Depletion, RM=Reduced		oated Sand Grains;	Location: PL=Pore Lining, N	и=Matrix) Техture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to		indicator or cor	nfirm the absen	ce of indicators.		ncentration, D=Depletion, RM=Reduced	Matrix, CS=Covered/C	oated Sand Grains;	Location: PL=Pore Lining, N	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to Bottom	the depth needed to document the	indicator or cor	nfirm the absen	ce of indicators.		ncentration, D=Depletion, RM=Reduced	Matrix, CS=Covered/C	oated Sand Grains;		Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to Bottom Depth	the depth needed to document the	c indicator or cor	Matrix	ce of indicators.	(Type: C=Cor	ncentration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cedox Features	oated Sand Grains; Type	Location	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to Bottom Depth 18	the depth needed to document the Horizon	Color 10YR	Matrix (Moist)	ce of indicators.	(Type: C=Cor	ncentration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cedox Features	oated Sand Grains; Type	Location 	Texture (e.g. clay, sand, loam) silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to Bottom Depth 18	the depth needed to document the Horizon	Color 10YR	Matrix (Moist) 3/2	ce of indicators.	(Type: C=Cor	contration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cedox Features %	oated Sand Grains; Type	Location 	Texture (e.g. clay, sand, loam) silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to Bottom Depth 18	the depth needed to document the Horizon	Color 10YR	Matrix (Moist) 3/2	% 100	(Type: C=Cor	Color (Moist)	Matrix, CS=Covered/C dox Features %	Type	Location 	Texture (e.g. clay, sand, loam) silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 18	the depth needed to document the Horizon	Color 10YR	Matrix (Moist) 3/2 	% 100	(Type: C=Cor	Color (Moist)	Matrix, CS=Covered/C dox Features %	Type	Location	Texture (e.g. clay, sand, loam) silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 18	the depth needed to document the Horizon	Color 10YR	Matrix (Moist) 3/2	% 100	(Type: C=Cor	Color (Moist)	Matrix, CS=Covered/Codox Features %	Type		Texture (e.g. clay, sand, loam) silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 18	the depth needed to document the Horizon	Color 10YR	Matrix (Moist) 3/2	% 100		Color (Moist)	Matrix, CS=Covered/C cdox Features %	Type		Texture (e.g. clay, sand, loam) silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Describe to Depth 18 Soil Field In A1- Histosol A2 - Histic E1 A3 - Black H A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplete A12 - Thick E S1 - Sandy M S3 - 5 cm Mc	Horizon	Color 10YR ere if indicator or cor	Matrix (Moist) 3/2	% 100		Color (Moist)	Matrix, CS=Covered/C dox Features % Indicator 1 Indicators of hyd	Type	Location	Texture (e.g. clay, sand, loam) silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Describe to Depth 18 Soil Field Ir A1 - Histosol A2 - Histic E A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplet A12 - Thick I S1 - Sandy M S3 - 5 cm M S4 - Sandy G S5 - Sandy F	the depth needed to document the Horizon	Color 10YR ere if indicator or cor	Matrix (Moist) 3/2 icators a	% 100		Color (Moist)	Matrix, CS=Covered/C dox Features % Indicator 1 Indicators of hycodisturts	Type s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location	Texture (e.g. clay, sand, loam) silty clay sface
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to Describe to Depth 18 Soil Field Ir A1 - Histosol A2 - Histic E A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplet A12 - Thick I S1 - Sandy M S3 - 5 cm M S4 - Sandy G S5 - Sandy F	Horizon	Color 10YR ere if indicator or cor	Matrix (Moist) 3/2	% 100		Color (Moist)	Matrix, CS=Covered/C dox Features % Indicator 1 Indicators of hyd	Type s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location	Texture (e.g. clay, sand, loam) silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to Describe to Depth 18 Soil Field Ir A1 - Histosol A2 - Histic E A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplet A12 - Thick I S1 - Sandy M S3 - 5 cm M S4 - Sandy G S5 - Sandy F	the depth needed to document the Horizon	Color 10YR ere if indicator or cor	Matrix (Moist) 3/2 icators a	% 100		Color (Moist)	Matrix, CS=Covered/C dox Features % Indicator 1 Indicators of hycodisturts	Type s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location	Texture (e.g. clay, sand, loam) silty clay sface



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 3d Sample Point: SP9h **VEGETATION** (Species identified in all uppercase are non-native species.) Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Number of Dominant Species that are OBL, FACW, or FAC: _____(A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 4 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B) 7. 8 Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = n Total Cover = FACW spp. 15 x 2 = 30 FAC spp. 5 x 3 = 15 Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. 20 x 4 = 80 LONICERA MORROWII 20 **FACU** UPL spp. 15 x 5= 75 2 3. 55 200 (B) Total 4. 5. Prevalence Index = B/A = 3,636 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation --Yes X No X No 10. Yes Dominance Test is > 50% Total Cover = Yes X No Prevalence Index is ≤ 3.0 * Yes No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) No ☐ Yes Problem Hydrophytic Vegetation (Explain) * **GLYCINE MAX** 15 Υ **UPL** * Indicators of hydric soil and wetland hydrology must be 2. Toxicodendron radicans 5 FAC present, unless disturbed or problematic. 3. --4. **Definitions of Vegetation Strata:** 5. 6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater 9. than 3.28 ft. tall. 10. 11 Herb - All herbaceous (non-woody) plants, regardless of 12. size, and woody plants less than 3.28 ft. tall. 13. 14. --15. Woody Vines - All woody vines greater than 3.28 ft. in height. Total Cover = 20 Woody Vine Stratum (Plot size: 10 meter radius) **FACW** Vitis riparia 15 Hydrophytic Vegetation Present Yes X No 3. 4. 5. Total Cover = 15 Remarks: **Additional Remarks:**



Project/Site:	Northern C	olumbus Loop - Pr	eferred R	loute			Stantec Project #:	193707055		Date:	07/09/20	
Applicant:	Columbia C	Gas of Ohio					•			County:	Union	
Investigator #1:					gator #2:	Julie Sla	ater			State:	Ohio	
Soil Unit:	Gwg1B1 - G	lynwood silt loam, gro	ound morai	ne 2-6% s	lopes	NW	/I/WWI Classification:	N/A		Wetland ID:	Wetland 4	
Landform:	Floodplain				al Relief:					Sample Point:	SP9i	
Slope (%):	0		40.20					Datum:	-	Community ID:	PFO	
		ditions on the site t				(If no, expla		X Yes	No	Section:	N/A	
Are Vegetation			gnificantly				Are normal circumsta		t?	Township:	N/A	
Are Vegetation		or Hydrology na	aturally pr	oblemati	ic?		X Yes	No		Range:	N/A	
SUMMARY OF												
Hydrophytic Ve				X Yes				Hydric Soils			X Yes	No
Wetland Hydrol Remarks:	logy Present	1?		X Yes	No			Is This Sam	oling Point	Within A Wetla	nd? X Yes	No
HYDROLOGY Wetland Hydr	A1 - Surface A2 - High Wa A3 - Saturatio	ater Table on	if indicate	ors are n	ot preser B9 - Wate B13 - Aqu B14 - Tru C1 - Hydr	er-Stained latic Fauna e Aquatic	a Plants		Secondary:	B6 - Surface Soil B10 - Drainage P B16 - Moss Trim	atterns Lines	
	-	nt Deposits posits at or Crust		X	C3 - Oxid C4 - Pres	ized Rhizo ence of Re ent Iron Re Muck Surf ge or Well	spheres on Living Roots educed Iron eduction in Tilled Soils face Data		X	C2 - Dry-Season C8 - Crayfish Bur C9 - Saturation V D1 - Stunted or S D2 - Geomorphic D5 - FAC-Neutra	rrows fisible on Aerial Ima stressed Plants : Position	gery
Field Observat Surface Water Water Table Pr Saturation Pres	Present? [esent? [Yes X No Yes X No Yes X No	Depth: Depth: Depth:	 	(in.) (in.) (in.)			Wetland Hy	drology Pı	resent? X	Yes No	
Describe Record	led Data (str	eam gauge, monitor	ring well, a	aerial pho	tos, previ	ous inspe	ections), if available:	N/A				
Remarks:												
SOILS Map Unit Name	: Gwg1B1	l - Glynwood silt lo	am, grour	nd morai	ne 2-6%	s	eries Drainage Class:	Moderately v	vell drained	1		
SOILS		l - Glynwood silt lo	am, grour	nd morai	ne 2-6%	S	eries Drainage Class:	Moderately v	vell drained	i		
SOILS Map Unit Name Taxonomy (Sub	group):						Y				M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub	group):						centration, D=Depletion, RM=Reduced		pated Sand Grains;		M=Matrix) Texture	;
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to		e indicator or cor	firm the absen			centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;			
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to	the depth needed to document the	e indicator or cor	nfirm the absend	ce of indicators.)		centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;	Location: PL=Pore Lining, I	Texture	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to Depth	the depth needed to document the	e indicator or cor	Matrix (Moist)	ce of indicators.)	(Type: C=Con	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Co	pated Sand Grains;	Location: PL=Pore Lining, I	Texture (e.g. clay, sand	d, loam) oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3	group): tion (Describe to Depth 3 12	the depth needed to document th Horizon	e indicator or cor Color 10YR 10YR	Matrix (Moist) 3/2 3/2	% 100 95	(Type: C=Con	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Codox Features	Type	Location: PL=Pore Lining, I	(e.g. clay, sand silty clay lo silty clay lo silty clay lo	d, Ioam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 3 12	the depth needed to document the Horizon	e indicator or cor Color 10YR 10YR	Matrix (Moist) 3/2 3/2	% 100 95	(Type: C=Con	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6	Matrix, CS=Covered/Cocdox Features % 2	Type C	Location: PL=Pore Lining, I Location PL	Texture (e.g. clay, sand silty clay lo	d, Ioam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3	group): tion (Describe to Bottom Depth 3 12 20	Horizon	color 10YR 10YR 10YR 10YR	Matrix (Moist) 3/2 3/2 3/2 	% 100 95 100	(Type: C=Con 5YR 5YR	Contration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6	Matrix, CS=Covered/Cr dox Features % 2 3	Type C C	Location: PL=Pore Lining, I Location PL M	Texture (e.g. clay, sand silty clay lo silty clay lo silty clay lo silty clay lo	d, Ioam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 12	group): tion (Describe to Bottom Depth 3 12 20	Horizon	color Color 10YR 10YR 10YR	Matrix (Moist) 3/2 3/2 3/2 	% 100 95 100	5YR 5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6	Matrix, CS=Covered/Co dox Features % 2 3	Type C C	Location: PL=Pore Lining, I Location PL M	Texture (e.g. clay, sand silty clay lo silty clay lo silty clay lo silty clay lo	d, Ioam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 12	group): tion (Describe to Bottom Depth 3 12 20	Horizon	e indicator or cor Color 10YR 10YR 10YR	Matrix (Moist) 3/2 3/2 3/2	% 100 95 100	5YR 5YR	Color (Moist) 4/6 4/6	Matrix, CS=Covered/Cr dox Features % 2 3	Type C C	Location: PL=Pore Lining, I Location PL M	Texture (e.g. clay, sand silty clay lo silty clay lo silty clay lo silty clay lo	d, Ioam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 12	group): tion (Describe to Bottom Depth 3 12 20	Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 3/2 3/2	96 100 95 100		Color (Moist) 4/6 4/6	Matrix, CS=Covered/Cr dox Features % 2 3	Type C C	Location: PL=Pore Lining, I	Texture (e.g. clay, sand silty clay lo silty clay lo silty clay lo silty clay lo	d, Ioam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 12	group): tion (Describe to Depth 3 3 12 20 Soil Field Ir A1 - Histosol A2 - Histic Ep A5 - Stratified A10 - 2 cm M A11 - Deplet A12 - Thick E S1 - Sandy M	Horizon Hor	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 3/2 3/2 3/2 icators a	% 100 95 100 1	SYR SYR SYR seent — bed Matrix by Muck M by Gleyed deted Matrix bx Dark Su beted Dark	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6): :: ineral Matrix (criface Surface	Matrix, CS=Covered/Co dox Features % 2 3 Indicator	Type C C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, I Location PL M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, sand silty clay lo silty clay lo silty clay lo silty clay lo	d, loam) pam pam pam pam pam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 12	group): tion (Describe to Depth 3 3 12 20 3 3 12 3 3 12 3 3 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	Horizon	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 3/2 3/2 3/2 3/2 X X	% 100 95 100 re not pre \$6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple F8 - Redc	SYR SYR SYR seent — bed Matrix by Muck M by Gleyed deted Matrix bx Dark Su beted Dark	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6): :: ineral Matrix (criface Surface	Matrix, CS=Covered/Co dox Features % 2 3 Indicator 1 Indicators of hyddisturb	Type C C s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Explain	Location: PL=Pore Lining, I Location PL M Matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, sand silty clay lo	d, loam) pam pam pam pam pam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 12 NRCS Hydric Restrictive Laye (If Observed)	group): tion (Describe to Depth 3 3 12 20 3 3 12 3 3 12 3 3 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	Horizon Hor	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 3/2 3/2 3/2 icators a	% 100 95 100 re not pre \$6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple F8 - Redc	SYR SYR SYR seent — bed Matrix by Muck M by Gleyed deted Matrix bx Dark Su beted Dark	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6): :: ineral Matrix (criface Surface	Matrix, CS=Covered/Co dox Features % 2 3 Indicator	Type C C s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Explain	Location: PL=Pore Lining, I Location PL M Matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, sand silty clay ld sface	d, loam) pam pam pam pam pam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 12 NRCS Hydric	group): tion (Describe to Depth 3 3 12 20 3 3 12 3 3 12 3 3 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	Horizon	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 3/2 3/2 3/2 3/2 X X	% 100 95 100 re not pre \$6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple F8 - Redc	SYR SYR SYR seent — bed Matrix by Muck M by Gleyed deted Matrix bx Dark Su beted Dark	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6): :: ineral Matrix (criface Surface	Matrix, CS=Covered/Co dox Features % 2 3 Indicator 1 Indicators of hyddisturb	Type C C s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Explain	Location: PL=Pore Lining, I Location PL M Matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, sand silty clay lo	d, loam) pam pam pam pam pam

size, and woody plants less than 3.28 ft. tall.

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



13. 14.

15.

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 4 Sample Point: SP9i **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Ulmus americana 30 **FACW** 10 Number of Dominant Species that are OBL, FACW, or FAC: ____3 ___(A) 2. FAC Acer negundo 3. 4. Total Number of Dominant Species Across All Strata: 4 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B) 7. 8 Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = n Total Cover = FACW spp. 0 x 2 = 0 FAC spp. 0 x 3 = 0 Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. 0 x 4 = 0 LONICERA MORROWII 15 **FACU** UPL spp. x 5= 2 3. 0 0 Total 4. 5. Prevalence Index = B/A = 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation --Yes X No X Yes 10. No Dominance Test is > 50% Total Cover = Yes No Prevalence Index is ≤ 3.0 * Yes Morphological Adaptations (Explain) * No Herb Stratum (Plot size: 2 meter radius) Yes No Problem Hydrophytic Vegetation (Explain) * PHALARIS ARUNDINACEA 100 Υ **FACW** * Indicators of hydric soil and wetland hydrology must be 2. present, unless disturbed or problematic. 3. 4. **Definitions of Vegetation Strata:** 5. 6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater 9. than 3.28 ft. tall. 10. 11 Herb - All herbaceous (non-woody) plants, regardless of 12.

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Additional Remarks:			



Project/Site:	Northern C	olumbus Loop - Pre	eferred R	loute			Stantec Project #:	193707055		Date:	07/09/20
Applicant:	Columbia (Gas of Ohio					•			County:	Union
Investigator #1	: Angela Sjo	llema		Investi	igator #2:	Julie Sl	ater			State:	Ohio
Soil Unit:	Gwg1B1 - G	lynwood silt loam, gro	und morai	ne 2-6% s	slopes	NV	/I/WWI Classification:	N/A		Wetland ID:	Wetland 4
Landform:	Backslope			Loc	al Relief:	Linear				Sample Point:	SP9j
Slope (%):	3	Latitude:			ongitude:			Datum:	N/A	Community ID:	Upland
Are climatic/hyd	drologic cond	ditions on the site ty	pical for	this time	of year?	(If no, expl	ain in remarks)	X Yes	No	Section:	N/A
Are Vegetation	, Soil ,	or Hydrology sig	nificantly	/ disturb	ed?		Are normal circumsta	ances presen	t?	Township:	N/A
Are Vegetation			turally pr				X Yes	No		Range:	N/A
SUMMARY OF		, 0,	, ,							Ü	
Hydrophytic Ve		sent?		X Yes	No)		Hydric Soils	Present?		Yes X No
Wetland Hydro				Yes						Within A Wetlaı	
Remarks:	logy i rocom	••		100				io inio cam	omig i omic	vviami / v voda	id. 100 X ito
Field Observa Surface Water Water Table Pr	A1 - Surface A2 - High Wa A3 - Saturation B1 - Water Mater	ater Table on Marks nt Deposits posits at or Crust posits on Visible on Aerial Im y Vegetated Concave S Yes Yes X No Yes	agery Surface Depth: Depth:		B9 - Wate B13 - Aqt B14 - Tru C1 - Hydr C3 - Oxid C4 - Pres C6 - Rec C7 - Thin D9 - Guaq Other (Ex	er-Stained uatic Faun e Aquatic rogen Sulf lized Rhizo sence of R	a Plants de Odor sspheres on Living Roots educed Iron eduction in Tilled Soils face Data	Wetland Hy	Secondary:	D1 - Stunted or S D2 - Geomorphic D5 - FAC-Neutral	atterns Lines Water Table rows isible on Aerial Imagery tressed Plants Position
Saturation Pres	sent?	Yes X No	Depth:		(in.)						
Describe Record	ded Data (str	eam gauge, monitori	ing well, a	erial pho	otos, previ	ious inspe	ections), if available:	N/A			
Remarks:											
SOILS		0 404 61				0.00/0					
SOILS Map Unit Name		Gwg1B1 - Glynwoo	od silt loa	ım, groui	nd morair	ne 2-6%	eries Drainage Class:	Moderately v	well drained	1	
SOILS Map Unit Name Taxonomy (Sub	group):							•			
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): otion (Describe to			firm the absen	ce of indicators.		ncentration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;		
SOILS Map Unit Name Taxonomy (Sub	group):		indicator or cor	nfirm the absen	ce of indicators.		ncentration, D=Depletion, RM=Reduced	•	pated Sand Grains;	Location: PL=Pore Lining, I	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): otion (Describe to		indicator or cor	firm the absen	ce of indicators.		ncentration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;		Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): otion (Describe to Bottom	the depth needed to document the	indicator or cor	nfirm the absen	ce of indicators.		ncentration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;	Location: PL=Pore Lining, I	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): otion (Describe to Bottom Depth	the depth needed to document the	indicator or cor	Matrix (Moist)	ce of indicators.) (Type: C=Col	ncentration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Coedox Features	pated Sand Grains; Type	Location: PL=Pore Lining, I	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	egroup): otion (Describe to Bottom Depth 14	the depth needed to document the Horizon	indicator or cor	Matrix (Moist) 4/2	ce of indicators.) (Type: C=Coi	ncentration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Co	oated Sand Grains; Type	Location: PL=Pore Lining, I	Texture (e.g. clay, sand, loam) silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 14 20	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/2 4/3	% 100 100) (Type: C=Con	contration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cdox Features %	Type	Location: PL=Pore Lining, I Location	Texture (e.g. clay, sand, loam) silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): Ition (Describe to Bottom Depth 14 20	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/2 4/3	% 100 100) (Type: C=Coo	Color (Moist)	Matrix, CS=Covered/Cc	Type	Location: PL=Pore Lining, I	Texture (e.g. clay, sand, loam) silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	group): tion (Describe to Bottom Depth 14 20	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/2 4/3	% 100 100) (Type: C=Col	Color (Moist)	Matrix, CS=Covered/Cudox Features %	Type	Location: PL=Pore Lining, I	Texture (e.g. clay, sand, loam) silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	group): tion (Describe to Bottom Depth 14 20	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/2 4/3	% 100 100) (Type: C=Cor	Color (Moist)	Matrix, CS=Covered/Cr edox Features % 	Type	Location: PL=Pore Lining, I	Texture (e.g. clay, sand, loam) silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	group): tion (Describe to Bottom Depth 14 20	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/2 4/3	% 100 100) (Type: C=Col	Color (Moist)	Matrix, CS=Covered/Cr edox Features % 	Type	Location: PL=Pore Lining, I	Texture (e.g. clay, sand, loam) silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	group): tion (Describe to Bottom Depth 14 20	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/2 4/3	% 100 100		Color (Moist)	Matrix, CS=Covered/Cr. cdox Features %	Type	Location: PL=Pore Lining, I	Texture (e.g. clay, sand, loam) silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	group): tion (Describe to Depth 14 20	Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/3	% 100 100 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Red6 F7 - Deple		Color (Moist)	Matrix, CS=Covered/Cr. cdox Features % Indicator	Type s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, I Location	Texture (e.g. clay, sand, loam) silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	group): tion (Describe to Describe to Depth 14 20	the depth needed to document the Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/3 icators a	% 100 100	or (Type: C=Cod	Color (Moist)	Matrix, CS=Covered/Cr edox Features % Indicator 1 Indicators of hyddisturb	Type s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, I Location	Texture (e.g. clay, sand, loam) silt loam silt loam sface
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 NRCS Hydric	group): tion (Describe to Describe to Depth 14 20	Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/3	% 100 100	or (Type: C=Cod	Color (Moist)	Matrix, CS=Covered/Cr. cdox Features % Indicator	Type s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, I Location	Texture (e.g. clay, sand, loam) silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 NRCS Hydric	group): tion (Describe to Describe to Depth 14 20	the depth needed to document the Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/3 icators a	% 100 100	or (Type: C=Cod	Color (Moist)	Matrix, CS=Covered/Cr edox Features % Indicator 1 Indicators of hyddisturb	Type s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, I Location	Texture (e.g. clay, sand, loam) silt loam silt loam sface



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 4 Sample Point: SP9j

	(Species identified in all uppercase are non-na lot size: 10 meter radius)	ative spec	cies.)		
Tree Ottatum (I	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.	Ulmus americana	15	Y	FACW	Definition of the Heritage
		10	Y		Number of Deminant Species that are ORL FACW or FAC.
2.	Acer negundo			FAC	Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata: (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 57% (A/B)
7.				-	
8.					Prevalence Index Worksheet
9.				-	Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
10.	Total Cover =				FACW spp. 0 x 2 = 0
	Total Cover =	20			FACV Spp. 0
0 11 /01 1 01	(0)				
	ratum (Plot size: 5 meter radius)	45		E4011	FACU spp. 0 x 4 = 0
1.	LONICERA MORROWII	15	Y	FACU	UPL spp. 0 x 5 = 0
2.	Acer negundo	40	Υ	FAC	
3.					Total (A) (B)
4.				-	
5.				-	Prevalence Index = B/A = N/A
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes X No Rapid Test for Hydrophytic Vegetation
10.					X Yes No Dominance Test is > 50%
10.	Total Cover =				
	rotal Cover =	55			Yes No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
Herb Stratum (Pl	ot size: 2 meter radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	LONICERA MORROWII	5	Υ	FACU	*1 " 4
2.	Parthenocissus quinquefolia	5	Υ	FACU	* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.	Cyperus esculentus	5	Υ	FACW	present, unless disturbed or problematic.
4.					Definitions of Vegetation Strata:
5.					20
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter
7.					at breast height (DBH), regardless of height.
					at broadt holght (BB11), rogal alood of holght.
8.				-	
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater
10.					than 3.28 ft. tall.
11.					
12.				-	Herb - All herbaceous (non-woody) plants, regardless of
13.				-	size, and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
10.	Total Cover =				7 thoo 7 th moody vinos greater than 0.20 it. in neight.
	i otal Cover =	15			
	tum (Plot size: 10 meter radius)				
1.					
2.				-	
3.					Hydrophytic Vegetation Present X Yes No
4.					
5.					
<u> </u>	Total Cover =	0			
Remarks:	100100101				
itterriarits.					
Additional Re	marks:				
1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2					



Project/Site:	Northern C	columbus Loop - Pro	eferred R	Route			Stantec Project #:	193707055		Date:	07/09/20	
Applicant:	Columbia (Gas of Ohio					•			County:	Union	
Investigator #1:	Angela Sjo	llema		Investi	gator #2:	Julie Sla	ater			State:	Ohio	
Soil Unit:	Gwg1B1 - G	lynwood silt loam, gro	und morai	ne 2-6% s	slopes	NW	/I/WWI Classification:	N/A		Wetland ID:	Wetland 4	
Landform:	Floodplain			Loc	al Relief:	Linear				Sample Point:	SP9k	
Slope (%):	0	Latitude			ongitude:			Datum:	N/A	Community ID:	PEM	
Are climatic/hyd	drologic cond	ditions on the site ty	pical for	this time	of year?	(If no, expl		X Yes	No	Section:	N/A	
Are Vegetation		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	gnificantly	•			Are normal circumsta		t?	Township:	N/A	
Are Vegetation	, Soil ,	or Hydrology na	turally pr	oblemat	ic?		X Yes	No		Range:	N/A	
SUMMARY OF	FINDINGS											
Hydrophytic Ve	getation Pre	sent?		X Yes	No			Hydric Soils	Present?		X Yes	No
Wetland Hydrol	logy Present	t?		X Yes	No			Is This Sam	pling Point	Within A Wetla	nd? X Yes	No
Remarks:												
HYDROLOGY												
Wetland Hydr	oloav Indic	ators (Check here	if indicate	ors are r	ot preser	nt□):						
Primary					. от р. ооо.				Secondary:			
	A1 - Surface	Water			B9 - Wate	er-Stained	Leaves			B6 - Surface Soil	Cracks	
X	A2 - High Wa				B13 - Aqu					B10 - Drainage P		
	A3 - Saturation				B14 - Tru					B16 - Moss Trim		
	B1 - Water M B2 - Sedime			V	C1 - Hydr		spheres on Living Roots		H	C2 - Dry-Season C8 - Crayfish Bur		
	B3 - Drift De			^			educed Iron		<u> </u>	,	isible on Aerial Ima	agery
	B4 - Algal Ma				C6 - Rece	ent Iron Re	eduction in Tilled Soils		X	D1 - Stunted or S	Stressed Plants	0 ,
	B5 - Iron Dep				C7 - Thin					D2 - Geomorphic		
	=	on Visible on Aerial Im	0 ,	<u> </u>	D9 - Gua	-				D5 - FAC-Neutra	I Test	
	Bo - Sparsei	y Vegetated Concave :	Surrace		Other (Ex	piain in Ke	emarks)					
Field Observat												
			D 41		(: \							
Surface Water		Yes X No	Depth:		(in.)			Wetland Hy	drology Pi	resent? X	Yes No	
Water Table Pr Saturation Pres		Yes No	Depth: Depth:		(in.) (in.)							
	Į.	* *			` ,							
	led Data (str	eam gauge, monitor	ing well, a	aerial pho	tos, previ	ous inspe	ections), if available:	N/A				
Remarks:												
Remarks:												
SOILS												
SOILS Map Unit Name		Gwg1B1 - Glynwoo	od silt loa	ım, groui	nd morair	ne 2-6%S	eries Drainage Class:	Moderately v	well drained	i		
SOILS Map Unit Name Taxonomy (Sub	group):							,				
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to			nfirm the absen			centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	oated Sand Grains;			
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to Bottom	the depth needed to document the	indicator or cor	nfirm the absen	ce of indicators.)		centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	oated Sand Grains;	Location: PL=Pore Lining,	Texture	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to Bottom Depth	the depth needed to document the	indicator or cor	Matrix (Moist)	ce of indicators.)	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Coco	oated Sand Grains; Type	Location: PL=Pore Lining,	Texture (e.g. clay, san	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 3	the depth needed to document the	Color 10YR	Matrix (Moist) 4/2	ce of indicators.]	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6	Matrix, CS=Covered/Cr dox Features % 2	oated Sand Grains; Type	Location: PL=Pore Lining, Location PL	(e.g. clay, san	d, loam) oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3	group): tion (Describe to Bottom Depth 3 8	the depth needed to document the	Color 10YR 10YR	Matrix (Moist) 4/2 4/2	% 98 95	7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6	Matrix, CS=Covered/Codox Features % 2 5	Type C C	Location: PL=Pore Lining, Location PL M	Texture (e.g. clay, sand silty clay lo	d, Ioam) oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8	group): tion (Describe to Bottom Depth 3 8 14	the depth needed to document the Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/2 4/2 4/2	% 98 95 93	7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/6 4/4	Matrix, CS=Covered/Cd dox Features % 2 5 7	Type C C C	Location: PL=Pore Lining, Location PL M M	(e.g. clay, san	d, Ioam) oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3	group): tion (Describe to Bottom Depth 3 8	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/2 4/2	% 98 95	7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6	Matrix, CS=Covered/Codox Features % 2 5	Type C C	Location: PL=Pore Lining, Location PL M	Texture (e.g. clay, sand silty clay lo	d, loam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8	group): tion (Describe to Bottom Depth 3 8 14	the depth needed to document the Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/2 4/2 4/2	% 98 95 93	7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/6 4/4	Matrix, CS=Covered/Cd dox Features % 2 5 7	Type C C C	Location: PL=Pore Lining, Location PL M M	(e.g. clay, sand silty clay look silty silty silty clay look silty sil	d, loam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14	group): tion (Describe to Bottom Depth 3 8 14 20	the depth needed to document the Horizon	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 4/2 4/2 4/2 4/2 4/2	9% 98 95 93 97	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/6 4/4 4/4	Matrix, CS=Covered/C dox Features % 2 5 7	oated Sand Grains; Type C C C C	Location: PL=Pore Lining. Location PL M M	Texture (e.g. clay, san silty clay le silty clay le silty clay le	d, loam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14	group): tion (Describe to Bottom Depth 3 8 14 20	the depth needed to document the Horizon	Color 10YR 10YR 10YR 10YR 10YR	Matrix (Moist) 4/2 4/2 4/2 4/2 4/2	9% 98 95 93 97	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/6 4/4 4/4	Matrix, CS=Covered/Cridox Features % 2 5 7 3	Type C C C C	Location: PL=Pore Lining. Location PL M M M	Texture (e.g. clay, san silty clay le silty clay le silty clay le	d, loam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14	group): tion (Describe to Bottom Depth 3 8 14 20	the depth needed to document the Horizon	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 4/2 4/2 4/2 4/2	96 98 95 93 97 	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/6 4/4 4/4	Matrix, CS=Covered/Cr dox Features % 2 5 7 3	Type C C C C	Location: PL=Pore Lining. Location PL M M	Texture (e.g. clay, san silty clay le silty clay le silty clay le silty clay le	d, loam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14	group): tion (Describe to Bottom Depth 3 8 14 20	Horizon	Color 10YR 10YR 10YR 10YR	mfirm the absen Matrix (Moist) 4/2 4/2 4/2	% 98 95 93 97	7.5YR 7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/4 4/4	Matrix, CS=Covered/Cr. dox Features % 2 5 7 3	oated Sand Grains; Type C C C C	Location: PL=Pore Lining. Location PL M M	Texture (e.g. clay, san silty clay le silty clay le silty clay le silty clay le	d, loam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14	group): tion (Describe to Depth 3 8 14 20 Soil Field Ir	the depth needed to document the Horizon	Color 10YR 10YR 10YR 10YR	mfirm the absen Matrix (Moist) 4/2 4/2 4/2	% 98 95 93 97 re not pre S6 - Strip	7.5YR	Color (Moist) 4/6 4/6 4/4):	Matrix, CS=Covered/Cr. dox Features % 2 5 7 3	Type C C C C s for Proble A16 - Coast	Location: PL=Pore Lining. Location PL M M matic Soils Prairie Redox	Texture (e.g. clay, san silty clay le silty clay le silty clay le silty clay le	d, loam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14	group): tion (Describe to Depth 3 8 14 20 Soil Field Ir A1- Histosol A2 - Histic El	Horizon	Color 10YR 10YR 10YR 10YR	mfirm the absen Matrix (Moist) 4/2 4/2 4/2	% 98 95 93 97 re not pre S6 - Strip F1 - Loan	7.5YR 7.5YR 7.5YR 7.5YR esent ped Matrix	Contration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/4 4/4): :: ineral	Matrix, CS=Covered/Cr. dox Features % 2 5 7 3	Type C C C C s for Proble A16 - Coast S7 - Dark S	Location: PL=Pore Lining. Location PL M M matic Soils ¹ Prairie Redox urface	Texture (e.g. clay, san silty clay le silty clay le silty clay le silty clay le	d, loam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14	group): tion (Describe to Depth 3 8 14 20 Soil Field Ir A1 Histosol A3 - Black History)	Horizon	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 4/2 4/2 4/2 4/2 icators a	98 95 93 97 re not pre S6 - Strip F1 - Loan F2 -	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR	Contration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/6 4/4 4/4): :: ineral Matrix	Matrix, CS=Covered/Cr. dox Features % 2 5 7 3	Type C C C C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N	Location: PL=Pore Lining. Location PL M M matic Soils Prairie Redox urface langanese Masse	Texture (e.g. clay, san silty clay le silty clay le silty clay le silty clay le	d, loam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14	group): tion (Describe to Depth 3 8 14 20 Soil Field Ir A1 - Histosol A2 - Histic E A4 - Hydroge	Horizon	Color 10YR 10YR 10YR 10YR	mfirm the absen Matrix (Moist) 4/2 4/2 4/2	98 95 93 97 re not pre S6 - Strip F1 - Loan F3 - Deple	7.5YR	Color (Moist) 4/6 4/6 4/4 4/4	Matrix, CS=Covered/Cr. dox Features % 2 5 7 3	Type C C C C s for Proble A16 - Coast S F12 - Iron-N TF12 - Very	Location: PL=Pore Lining. Location PL M M matic Soils Prairie Redox urface langanese Masse Shallow Dark Sur	Texture (e.g. clay, san silty clay le silty clay le silty clay le silty clay le	d, loam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14	group): tion (Describe to Depth 3 8 14 20 Soil Field Ir A1 Histosol A3 - Black History)	Horizon	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 4/2 4/2 4/2 4/2 icators a	98 98 95 93 97 re not pre 86 - Strip F1 - Loan F3 - Deple	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 9	Color (Moist) 4/6 4/6 4/4 4/4	Matrix, CS=Covered/Cr. dox Features % 2 5 7 3	Type C C C C s for Proble A16 - Coast S F12 - Iron-N TF12 - Very	Location: PL=Pore Lining. Location PL M M matic Soils Prairie Redox urface langanese Masse	Texture (e.g. clay, san silty clay le silty clay le silty clay le silty clay le	d, loam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14	group): tion (Describe to Depth 3 8 14 20 Soil Field Ir A1 - Histosol A2 - Histic E, A3 - Black Hi A4 - Hydroge A5 - Stratifiee A10 - 2 cm M A11 - Deplete	Horizon	Color 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/2 4/2 icators a	98 95 93 97 re not pre S6 - Strip F1 - Loan F3 - Deple	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/4 4/4): ::ineral Matrix c rfface Surface	Matrix, CS=Covered/Cr. dox Features % 2 5 7 3	Type C C C C s for Proble A16 - Coast S F12 - Iron-N TF12 - Very	Location: PL=Pore Lining. Location PL M M matic Soils Prairie Redox urface langanese Masse Shallow Dark Sur	Texture (e.g. clay, san silty clay le silty clay le silty clay le silty clay le	d, loam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14	group): tion (Describe to Depth 3 8 14 20	Horizon	Color 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/2 4/2 icators a	98 98 95 93 97 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Red F7 - Deple	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/4 4/4): ::ineral Matrix c rfface Surface	Matrix, CS=Covered/Cr. dox Features % 2 5 7 3	Type C C C C s for Proble A16 - Coast S F12 - Iron-N TF12 - Very	Location: PL=Pore Lining. Location PL M M matic Soils Prairie Redox urface langanese Masse Shallow Dark Sur	Texture (e.g. clay, san silty clay le silty clay le silty clay le silty clay le	d, loam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14	group): tion (Describe to Describe to Depth 3 8 14 20 Soil Field Ir A1- Histosol A2 - Histic E A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplet A12 - Thick If S1 - Sandy M	Horizon	Color 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/2 4/2 icators a	98 98 95 93 97 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Red F7 - Deple	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/4 4/4): ::ineral Matrix c rfface Surface	Matrix, CS=Covered/Cr. dox Features % 2 5 7 3	Type C C C C s for Proble A16 - Coast S F12 - Iron-N TF12 - Very	Location: PL=Pore Lining. Location PL M M matic Soils Prairie Redox urface langanese Masse Shallow Dark Sur	Texture (e.g. clay, san silty clay le silty clay le silty clay le silty clay le	d, loam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14	group): tion (Describe to Describe to Depth 3 8 14 20 Soil Field Ir A1- Histosol A2 - Histic E1 A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplete A12 - Thick E S1 - Sandy M S3 - 5 cm Mc	Horizon Horizon	Color 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/2 4/2 icators a	98 98 95 93 97 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Red F7 - Deple	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/4 4/4): ::ineral Matrix c rfface Surface	Matrix, CS=Covered/Cr. dox Features % 2 5 7 3	Type C C C C s for Proble A16 - Coast S F12 - Iron-N TF12 - Very	Location: PL=Pore Lining. Location PL M M matic Soils Prairie Redox urface langanese Masse Shallow Dark Sur	Texture (e.g. clay, san silty clay le silty clay le silty clay le silty clay le	d, loam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14	group): tion (Describe to Describe to Depth 3 8 14 20 Soil Field Ir A1- Histosol A2 - Histic E1 A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplete A12 - Thick E S1 - Sandy M S3 - 5 cm Mc	Horizon	Color 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/2 4/2 icators a	98 98 95 93 97 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Red F7 - Deple	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/4 4/4): ::ineral Matrix c rfface Surface	Matrix, CS=Covered/Cr. dox Features % 2 5 7 3	Type C C C C s for Proble A16 - Coast S F12 - Iron-N TF12 - Very	Location: PL=Pore Lining. Location PL M M matic Soils Prairie Redox urface langanese Masse Shallow Dark Sur	Texture (e.g. clay, san silty clay le silty clay le silty clay le silty clay le	d, loam) oam oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14	group): tion (Describe to Describe to Depth 3 8 14 20	Horizon	Color 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/2 4/2 icators a	98 98 95 93 97 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Red F7 - Deple	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/4 4/4): ::ineral Matrix c rfface Surface	Matrix, CS=Covered/Cr. dox Features % 2 5 7 3 Indicator	Type C C C C C s for Proble A16 - Coast S 7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining. Location PL M M M matic Soils Prairie Redox urface langanese Masse Shallow Dark Sur	Texture (e.g. clay, san silty clay le silty clay le silty clay le silty clay le	d, loam) Dam Dam Dam Dam Dam Dam Dam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14 NRCS Hydric	group): tion (Describe to Describe to Depth 3 8 14 20 Soil Field Ir A1- Histosol A2 - Histic E A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplet A10 - 2 cm M S3 - 5 cm M S3 - 5 cm M S4 - Sandy G S5 - Sandy F	Horizon	Color 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/2 4/2 icators a	98 95 93 97 re not pre S6 - Strip F1 - Loan F3 - Deple F6 - Redc F7 - Deple F8 - Redc	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/4 4/4): ::ineral Matrix c rfface Surface	Matrix, CS=Covered/Codox Features % 2 5 7 3 Indicator 1 Indicators of hyddisturt.	Type C C C C C s for Proble A16 - Coast \$7 - Dark \$ \$7 - Dark \$ \$12 - Iron-N TF12 - Very Other (Explain the coast) Company of the coast of th	Location: PL=Pore Lining. Location PL M M M matic Soils Prairie Redox urface langanese Masse Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, san silty clay le	d, loam) Dam Dam Dam Dam Dam Dam Dam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14	group): tion (Describe to Describe to Depth 3 8 14 20 Soil Field Ir A1- Histosol A2 - Histic E A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplet A10 - 2 cm M S3 - 5 cm M S3 - 5 cm M S4 - Sandy G S5 - Sandy F	Horizon	Color 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/2 4/2 icators a	98 95 93 97 re not pre S6 - Strip F1 - Loan F3 - Deple F6 - Redc F7 - Deple F8 - Redc	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/4 4/4): ::ineral Matrix c rfface Surface	Matrix, CS=Covered/Cr. dox Features % 2 5 7 3 Indicator	Type C C C C C s for Proble A16 - Coast \$7 - Dark \$ \$7 - Dark \$ \$12 - Iron-N TF12 - Very Other (Explain the coast) Company of the coast of th	Location: PL=Pore Lining. Location PL M M M matic Soils Prairie Redox urface langanese Masse Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, san silty clay le silty clay le silty clay le silty clay le	d, loam) Dam Dam Dam Dam Dam Dam Dam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 8 14 NRCS Hydric	group): tion (Describe to Describe to Depth 3 8 14 20 Soil Field Ir A1- Histosol A2 - Histic E A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplet A10 - 2 cm M S3 - 5 cm M S3 - 5 cm M S4 - Sandy G S5 - Sandy F	Horizon	Color 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/2 4/2 icators a	98 95 93 97 re not pre S6 - Strip F1 - Loan F3 - Deple F6 - Redc F7 - Deple F8 - Redc	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/4 4/4): ::ineral Matrix c rfface Surface	Matrix, CS=Covered/Codox Features % 2 5 7 3 Indicator 1 Indicators of hyddisturt.	Type C C C C C s for Proble A16 - Coast \$7 - Dark \$ \$7 - Dark \$ \$12 - Iron-N TF12 - Very Other (Explain the coast) Company of the coast of th	Location: PL=Pore Lining. Location PL M M M matic Soils Prairie Redox urface langanese Masse Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, san silty clay le	d, loam) Dam Dam Dam Dam Dam Dam Dam



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 4 Sample Point: SP9k

VEGETATION	(Species identified in all uppercase are non-na	itive spec	ies.)		
Tree Stratum (P	ot size: 10 meter radius)				
,	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.	Acer negundo	15	Υ	FAC	
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					Trainibor of Borninari Operico trial are OBE, 171011, 011710.
4.					Total Number of Deminent Species Agrees All Strate: 2 (B)
					Total Number of Dominant Species Across All Strata:(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	15			FACW spp. 0 x 2 = 0
					FAC spp. 0 x 3 = 0
Sapling/Shrub St	ratum (Plot size: 5 meter radius)				FACU spp. 0 x 4 = 0
1.					UPL spp. 0 x 5 = 0
2.					
3.					Total <mark>0</mark> (A) <mark>0</mark> (B)
3. 4.					10tai <u> </u>
4. 5.					Dravolones Index = D/A - Al/A
_					Prevalence Index = B/A = N/A
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes 🛛 No Rapid Test for Hydrophytic Vegetation
10.					X Yes No Dominance Test is > 50%
	Total Cover =	0			Yes No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
Herb Stratum (Pl	ot size: 2 meter radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	PHALARIS ARUNDINACEA	90	Υ	FACW	
2.	Impatiens capensis	10	N	FACW	* Indicators of hydric soil and wetland hydrology must be
					present, unless disturbed or problematic.
3.					
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter
7.					at breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater
10.					than 3.28 ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of
13.					size, and woody plants less than 3.28 ft. tall.
14.	 				· · · · · · · · · · · · · · · · · · ·
					Woody Vince All woody vince greater than 2 20 ft in height
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
Woody Vine Stra	tum (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present X Yes No
4.					, , , , , , , , , , , , , , , , , , , ,
5.					
<u> </u>	Total Cover =	0			
Remarks:	Total Gover =	<u> </u>			
Remarks.					
Additional Re	marks:				



,	Northcom	olumbus Loop - Pro	eferred R	Route			Stantec Project #:	193707055		Date:	07/09/20
Applicant:	Columbia C	Gas of Ohio					,			County:	Union
Investigator #1	Angela Sjo	llema		Investi	igator #2:	Julie Sla	ater			State:	Ohio
Soil Unit:	Gwg1B1 - G	lynwood silt loam, gro	und morai	ne 2-6% s	slopes	NW	I/WWI Classification:	N/A		Wetland ID:	Wetland 4
Landform:	Shoulder			Loc	al Relief:	Linear				Sample Point:	SP9I
Slope (%):	3	Latitude	40.2025	5 L	ongitude:	-83.173	133	Datum:	N/A	Community ID:	Upland
Are climatic/hyd	drologic cond	ditions on the site ty	pical for	this time	of year?	(If no, expl	ain in remarks)	X Yes	No	Section:	N/A
Are Vegetation	, Soil ,	or Hydrology sig	nificantly	v disturb	ed?		Are normal circumsta	ances presen	t?	Township:	N/A
Are Vegetation			turally pr				X Yes	No		Range:	N/A
SUMMARY OF		, 6,	, ,							Ü	
Hydrophytic Ve		sent?		Yes	X No			Hydric Soils	Present?		Yes X No
Wetland Hydro				Yes						Within A Wetlar	
Remarks:	logy i rocom	•		100				io mio cam	omig i omic	· · · · · · · · · · · · · · · · · · ·	id. 100 X ito
Field Observa Surface Water Water Table Pr	A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundatio B8 - Sparsely tions: Present?	ater Table on larks at Deposits posits at or Crust posits on Visible on Aerial Im y Vegetated Concave s Yes Yes X No Yes	agery Surface Depth: Depth:		B9 - Wate B13 - Aqt B14 - Tru C1 - Hydr C3 - Oxid C4 - Pres C6 - Rec C7 - Thin D9 - Gua Other (Ex	er-Stained uatic Faun e Aquatic rogen Sulfi lized Rhizo sence of R	Plants de Odor spheres on Living Roots educed Iron duction in Tilled Soils face Data	Wetland Hy	Secondary:	D1 - Stunted or S D2 - Geomorphic D5 - FAC-Neutral	atterns Lines Water Table rows isible on Aerial Imagery tressed Plants Position
Saturation Pres	Į.	Yes X No	Depth:		(in.)						
Describe Record	led Data (str	eam gauge, monitor	ing well, a	aerial pho	otos, previ	ious inspe	ctions), if available:	N/A			
Remarks:											
SOILS											
Map Unit Name		Gwg1B1 - Glynwoo	od silt loa	ım, groui	nd moraiı	ne 2-6%	eries Drainage Class:	Moderately v	vell drained	I	
Map Unit Name Taxonomy (Sub	group):							•			
Map Unit Name Taxonomy (Sub	group):						eries Drainage Class:	•			
Map Unit Name Taxonomy (Sub	group):				ce of indicators.		centration, D=Depletion, RM=Reduced	•	pated Sand Grains;		u=Matrix) Texture
Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to		indicator or cor	nfirm the absen	ce of indicators.		centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;		
Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to Bottom	the depth needed to document the	indicator or cor	nfirm the absen	ce of indicators.		centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;	Location: PL=Pore Lining, M	Texture
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to Bottom Depth	the depth needed to document the	c indicator or cor	Matrix (Moist)	ce of indicators.) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Co	pated Sand Grains; Type	Location: PL=Pore Lining, N	Texture (e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to 1) Bottom Depth 8	the depth needed to document the Horizon	Color 10YR	Matrix (Moist) 7/3	ce of indicators. % 100) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Codox Features	oated Sand Grains; Type	Location: PL=Pore Lining, N	Texture (e.g. clay, sand, loam) silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to) Bottom Depth 8 16	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 7/3 5/3	% 100 100) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cdox Features %	Type	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 8 16	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 7/3 5/3	% 100 100) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cc dox Features %	Type	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 16	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 7/3 5/3	% 100 100) (Type: C=Cor	Centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cc dox Features %	Type	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 16	Horizon	Color 10YR 10YR	Matrix (Moist) 7/3 5/3	% 100 100) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cr dox Features % 	Type	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 16	Horizon	Color 10YR 10YR	Matrix (Moist) 7/3 5/3	% 100 100) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cr dox Features %	Type	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 16	Horizon	Color 10YR 10YR	matrix (Moist) 7/3 5/3	% 100 100	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cr. dox Features %	Type	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Describe to Depth 8 16	Horizon	Color 10YR 10YR ere if ind	matrix (Moist) 7/3 5/3	% 100 100 re not pri S6 - Strip F1 - Loan F2 - Loan F3 - Depl F6 - Red F7 - Depl	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cr dox Features % Indicator 1 Indicators of hyd	Type s for Proble S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Describe to Depth 8 16	Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 7/3 5/3 icators a	% 100 100 re not pr 56 - Strip F1 - Loan F2 - Loan F3 - Depl F6 - Redd F7 - Depl F8 - Redd	or (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cr dox Features % Indicator 1 Indicators of hyddisturb	Type s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay silty clay sface
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Describe to Depth 8 16	Horizon	Color 10YR 10YR ere if ind	matrix (Moist) 7/3 5/3	% 100 100 re not pr 56 - Strip F1 - Loan F2 - Loan F3 - Depl F6 - Redd F7 - Depl F8 - Redd	or (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cr dox Features % Indicator 1 Indicators of hyd	Type s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay silty clay sface



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 4 Sample Point: SP9I **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Acer saccharum 20 **FACU** FACU Number of Dominant Species that are OBL, FACW, or FAC: _____(A) 2. 5 Juglans nigra 3. 4. Total Number of Dominant Species Across All Strata: 7 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 29% (A/B) 7. 8 Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = n Total Cover = 25 25 FACW spp. x 2 = 50 FAC spp. 20 x 3 = 60 Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. 110 x 4 = 440 LONICERA MORROWII 60 **FACU** UPL spp. 0 x 5= 0 2 3. 155 550 (B) Total 4. 5. Prevalence Index = B/A = 3.548 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 --Yes X No Rapid Test for Hydrophytic Vegetation X No 10. Yes Dominance Test is > 50% Total Cover = Yes X No Prevalence Index is ≤ 3.0 * Yes No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) No ☐ Yes Problem Hydrophytic Vegetation (Explain) * Toxicodendron radicans 15 Υ FAC * Indicators of hydric soil and wetland hydrology must be RUBUS IDAEUS 2. 15 **FACU** present, unless disturbed or problematic. 3. LONICERA MORROWII 10 **FACU** 4. Juncus tenuis 5 Ν FAC **Definitions of Vegetation Strata:** 5 **FACW** Ν 5. Cyperus esculentus 6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater 9. than 3.28 ft. tall. 10. 11 Herb - All herbaceous (non-woody) plants, regardless of 12. size, and woody plants less than 3.28 ft. tall. 13. 14. --15. Woody Vines - All woody vines greater than 3.28 ft. in height. Total Cover = 50 Woody Vine Stratum (Plot size: 10 meter radius) 20 **FACW** Vitis riparia Hydrophytic Vegetation Present Yes X No 3. 4. 5. Total Cover = Remarks: **Additional Remarks:**



Project/Site:	Northern C	olumbus Loop - Pr	eferred R	Route			Stantec Project #:	193707055		Date:	07/09/20	
Applicant:	Columbia (Gas of Ohio					•			County:	Union	
Investigator #1:	Angela Sjo	llema		Investi	igator #2:	Julie Sla	ater			State:	Ohio	
Soil Unit:		ount silt loam, groun	d moraine	e, 0-2% s	lopes	NW	I/WWI Classification:	: N/A		Wetland ID:	Wetland 4a	
Landform:	Depression	า		Loc	al Relief:	Concav	е			Sample Point:	SP9M	
Slope (%):	0		:40.2019		ongitude:			Datum:	N/A	Community ID:	PEM	
Are climatic/hyd	drologic cond	ditions on the site t	ypical for	this time	of year?	(If no, expl	ain in remarks)	X Yes	No	Section:	N/A	
Are Vegetation	, Soil ,	or Hydrology sig	gnificantly	v disturb	ed?		Are normal circumsta	ances presen	t?	Township:	N/A	
Are Vegetation			turally pr	•			X Yes	No		Range:	N/A	
SUMMARY OF		, 0,	, ,							Ü		
Hydrophytic Ve		sent?		X Yes	No			Hydric Soils	Present?		X Yes	No
Wetland Hydro	~			X Yes						Within A Wetla		No
Remarks:		road with small em	hankmei		110			io mio cam	piirig r oiric	William 7 Woda	. A 100	110
Primary	A1 - Surface A2 - High Wa A3 - Saturation B4 - Water Mater	ater Table on Marks nt Deposits posits at or Crust	nagery		B9 - Wate B13 - Aqu B14 - Tru C1 - Hydr C3 - Oxid C4 - Pres	er-Stained latic Fauna e Aquatic ogen Sulfi ized Rhizo ence of Re ent Iron Re Muck Suri ge or Well	Plants de Odor spheres on Living Roots educed Iron duction in Tilled Soils face Data	Wetland Hy	X	D1 - Stunted or S D2 - Geomorphic D5 - FAC-Neutra	eatterns Lines Water Table trows Sible on Aerial Imageressed Plants Position	agery
	Į.	•	•		. ,							
Describe Record	led Data (str	eam gauge, monitor	ing well, a	aerial pho	otos, previ	ous inspe	ctions), if available:	N/A				
		0 0 ,	,	aomai pine	, р		,,					
Remarks:		<u> </u>	<u> </u>		, , , , , , ,	<u>'</u>						
Remarks:		5 5 7	<u> </u>		, , , , , , ,	· ·	·					
			<u> </u>		, , ,	·						
SOILS					·							
SOILS Map Unit Name					·		eries Drainage Class:	: Very Poorly	drained			
SOILS Map Unit Name Taxonomy (Sub	group):	Blg1A1 - Blount sil	t loam, g	round m	oraine, 0	-2% slo §	eries Drainage Class:					
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group):	Blg1A1 - Blount sil	t loam, g	round m	oraine, 0	-2% slo §				Location: PL=Pore Lining,		
SOILS Map Unit Name Taxonomy (Sub	group):	Blg1A1 - Blount sil	t loam, g	round m	oraine, 0-	-2% slo §	eries Drainage Class:		oated Sand Grains;	Location: PL=Pore Lining,	Texture	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to	Blg1A1 - Blount sil	It loam, g	round m	oraine, 0-	-2% slo §	eries Drainage Class:	I Matrix, CS=Covered/Co	oated Sand Grains;	Location: PL=Pore Lining,		
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to Bottom	Blg1A1 - Blount sil	It loam, g	round m	oraine, 0-	-2% slo §	eries Drainage Class: centration, D=Depletion, RM=Reduced Re	Matrix, CS=Covered/Co	oated Sand Grains;		Texture	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to Bottom Depth	Blg1A1 - Blount sil the depth needed to document the Horizon	it loam, g	round m	oraine, 0-	2% slo \$ (Type: C=Cor	eries Drainage Class: centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Coedox Features	oated Sand Grains; Type	Location	Texture (e.g. clay, san	d, loam) oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 8	Blg1A1 - Blount sil the depth needed to document the Horizon	e indicator or cor Color 10YR	round m firm the absen Matrix (Moist) 4/2	oraine, 0- ce of indicators. % 95	2% slo \$ (Type: C=Cor	eries Drainage Class: centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6	Matrix, CS=Covered/Cedox Features % 5	oated Sand Grains; Type	Location M	Texture (e.g. clay, san silty clay le	d, Ioam) oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 8 20	Blg1A1 - Blount sil the depth needed to document the Horizon	color 10YR 10YR	round m firm the absen Matrix (Moist) 4/2 5/2	oraine, 0- ce of indicators. % 95 68	2% slo \$ (Type: C=Cor 7.5YR 7.5YR	eries Drainage Class: centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 5/8	Matrix, CS=Covered/Cedox Features % 5 30	Type C C	Location M M	Texture (e.g. clay, sand silty clay lo	d, Ioam) oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 8 20	Blg1A1 - Blount sil the depth needed to document the Horizon	t loam, g indicator or cor Color 10YR 10YR	round m firm the absen Matrix (Moist) 4/2 5/2	oraine, 0- ce of indicators. % 95 68	2% slo \$ (Type: C=Cor 7.5YR 7.5YR 7.5YR	eries Drainage Class: centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 5/8 3/4	Matrix, CS=Covered/Ci dox Features % 5 30 2	Type C C C	Location M M M	Texture (e.g. clay, sand silty clay lo	d, Ioam) oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 20	Blg1A1 - Blount sil the depth needed to document the Horizon	t loam, g color Color 10YR 10YR	round m Infirm the absent Matrix (Moist) 4/2 5/2	oraine, 0- ce of indicators. % 95 68	2% slo\$ (Type: C=Cor	eries Drainage Class: centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 5/8 3/4	Matrix, CS=Covered/Codox Features % 5 30 2	Type C C C	Location M M M	Texture (e.g. clay, san- silty clay lo silty clay lo	d, Ioam) oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 20	Blg1A1 - Blount sil the depth needed to document the Horizon	t loam, g indicator or cor Color 10YR 10YR	round m Matrix (Moist) 4/2 5/2	oraine, 0-	2% slo\$ (Type: C=Cor) 7.5YR 7.5YR 7.5YR	eries Drainage Class: centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 5/8 3/4	Matrix, CS=Covered/Codox Features % 5 30 2	Type C C C	Location M M M	Texture (e.g. clay, san- silty clay lo silty clay lo	d, Ioam) oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 20	Blg1A1 - Blount sil the depth needed to document the Horizon	t loam, g indicator or cor Color 10YR 10YR	round m Matrix (Moist) 4/2 5/2	oraine, 0- ce of indicators. % 95 68	2% slo (Type: C=Cor 7.5YR 7.5YR 7.5YR	eries Drainage Class: centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 5/8 3/4	Matrix, CS=Covered/Codox Features % 5 30 2	Type C C C	Location M M M	Texture (e.g. clay, san silty clay le silty clay le	d, Ioam) oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 20	Blg1A1 - Blount sil the depth needed to document the Horizon	color 10YR 10YR	round m Matrix (Moist) 4/2 5/2	oraine, 0- ce of indicators: % 95 68	2% slo\$ (Type: C=Cor 7.5YR 7.5YR 7.5YR	eries Drainage Class: centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 5/8 3/4	Matrix, CS=Covered/Cocox Features % 5 30 2	oated Sand Grains; Type C C C	Location M M M	Texture (e.g. clay, san silty clay le silty clay le	d, Ioam) oam oam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 20	Big1A1 - Blount sil the depth needed to document the Horizon	t loam, g Color 10YR 10YR ere if ind	round m Matrix (Moist) 4/2 5/2	oraine, 0- ce of indicators:	2% slo\$ (Type: C=Cor 7.5YR 7.5YR 7.5YR esent ped Matrix by Muck M by Gleyed eted Matrix by Dark St box bark St beted Dark	eries Drainage Class: centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 5/8 3/4): ineral Matrix (criface Surface	Matrix, CS=Covered/Cocox Features % 5 30 2 Indicator	Type C C C s for Proble A16 - Coast S7 - Dark S7 - Dark S712 - Very Other (Explain	Location M M M matic Soils Prairie Redox urface langanese Masse Shallow Dark Sur	Texture (e.g. clay, san silty clay le silty clay le silty clay le	d, loam) Dam Dam Dam Dam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 20	Blg1A1 - Blount sil Horizon	t loam, g Color 10YR 10YR ere if ind	round m Matrix (Moist) 4/2 5/2 icators a	95 68 re not pre 86 - Strip F1 - Loan F2 - Loan F3 - Depli F6 - Redo	2% slo\$ (Type: C=Cor 7.5YR 7.5YR 7.5YR esent ped Matrix by Muck M by Gleyed eted Matrix by Dark St box bark St beted Dark	eries Drainage Class: centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 5/8 3/4): ineral Matrix (criface Surface	Matrix, CS=Covered/Cocox Features % 5 30 2 Indicator 1 Indicators of hyddisturts	Type C C C C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location M M M matic Soils Prairie Redox urface langanese Masse Shallow Dark Surain in Remarks)	Texture (e.g. clay, san silty clay le silty clay le silty clay le	d, loam) Dam Dam Dam Dam Dam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 20	Big1A1 - Blount sil the depth needed to document the Horizon	t loam, g Color 10YR 10YR ere if ind	round m Matrix (Moist) 4/2 5/2 icators a	95 68 re not pre 86 - Strip F1 - Loan F2 - Loan F3 - Depli F6 - Redo	2% slo\$ (Type: C=Cor 7.5YR 7.5YR 7.5YR esent ped Matrix by Muck M by Gleyed eted Matrix by Dark St box bark St beted Dark	eries Drainage Class: centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 5/8 3/4): ineral Matrix (criface Surface	Matrix, CS=Covered/Cocox Features % 5 30 2 Indicator	Type C C C C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location M M M matic Soils Prairie Redox urface langanese Masse Shallow Dark Surain in Remarks)	Texture (e.g. clay, san silty clay le silty clay le silty clay le	d, loam) Dam Dam Dam Dam Dam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	group): tion (Describe to Bottom Depth 8 20	Blg1A1 - Blount sil Horizon	t loam, g Color 10YR 10YR ere if ind	round m Matrix (Moist) 4/2 5/2 icators a	95 68 re not pre 86 - Strip F1 - Loan F2 - Loan F3 - Depli F6 - Redo	2% slo\$ (Type: C=Cor 7.5YR 7.5YR 7.5YR esent ped Matrix by Muck M by Gleyed eted Matrix by Dark St box bark St beted Dark	eries Drainage Class: centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 5/8 3/4): ineral Matrix (criface Surface	Matrix, CS=Covered/Cocox Features % 5 30 2 Indicator 1 Indicators of hyddisturts	Type C C C C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location M M M matic Soils Prairie Redox urface langanese Masse Shallow Dark Surain in Remarks)	Texture (e.g. clay, san silty clay le silty clay le silty clay le	d, loam) Dam Dam Dam Dam Dam



15.

3. 4. 5.

Remarks:

Woody Vine Stratum (Plot size: 10 meter radius)

35% Bare ground

Total Cover =

Total Cover =

65

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 4a Sample Point: SP9M **VEGETATION** (Species identified in all uppercase are non-native species.) Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Number of Dominant Species that are OBL, FACW, or FAC: _____ (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 6. 7. 8 Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = n Total Cover = FACW spp. 0 x 2 = 0 FAC spp. 0 x 3 = 0 Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. 0 x 4 = 0 UPL spp. x 5 = 2 3. 0 0 Total 4. 5. Prevalence Index = B/A = 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation --**X** Yes ☐ No X Yes 10. No Dominance Test is > 50% No No Total Cover = Yes Prevalence Index is ≤ 3.0 * Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) Yes ☐ No Problem Hydrophytic Vegetation (Explain) * TYPHA ANGUSTIFOLIA 20 Υ **OBL** * Indicators of hydric soil and wetland hydrology must be 2. Eleocharis obtusa 45 Υ OBL present, unless disturbed or problematic. 3. --4. **Definitions of Vegetation Strata:** 5. 6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater 9. than 3.28 ft. tall. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of 12. size, and woody plants less than 3.28 ft. tall. 13. 14. --

Additional Remarks:

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

Hydrophytic Vegetation Present X Yes No



Project/Site: Applicant:	Northern C	olumbus Loop - Pre	eferred F	Route			Stantec Project #:	193707055		Date:	07/09/20
	Columbia (Gas of Ohio					•			County:	Union
Investigator #1	: Angela Sjo	llema		Invest	igator #2:	Julie Sla	iter			State:	Ohio
Soil Unit:		ount silt loam, groun	d moraine	e, 0-2% s	lopes	NW	I/WWI Classification:	: N/A		Wetland ID:	Wetland 4a
Landform:	Terrace			Loc	al Relief:	Linear				Sample Point:	SP9n
Slope (%):	0	Latitude	:40.2018	62 L	ongitude:	-83.173)59	Datum:	N/A	Community ID:	Upland
Are climatic/hyd	drologic cond	ditions on the site ty	ypical for	this time	e of year?	(If no, expl	nin in remarks)	X Yes	No	Section:	N/A
Are Vegetation	, Soil ,	or Hydrology sig	gnificantly	v disturb	ed?		Are normal circumsta	ances presen	t?	Township:	N/A
Are Vegetation		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	turally pr	•			X Yes	No		Range:	N/A
SUMMARY OF		, 6,	7 1							Ü	
Hydrophytic Ve		sent?		X Yes	No			Hydric Soils	Present?		Yes X No
Wetland Hydro				Yes						Within A Wetlaı	
Remarks:		road with small em	hankmei	_	<u> </u>			io inio camp	Jillig i Olitic	· · · · · · · · · · · · · · · · · · ·	Too X Ito
Field Observa Surface Water Water Table Pr	A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Iron Dep B8 - Sparsely ttions: Present?	ater Table on Marks nt Deposits posits at or Crust posits on Visible on Aerial Im y Vegetated Concave Yes Yes X No Yes	agery Surface Depth: Depth:		B9 - Wate B13 - Aqt B14 - Tru C1 - Hydr C3 - Oxid C4 - Pres C6 - Recc C7 - Thin D9 - Guaq Other (Ex	er-Stained latic Fauna e Aquatic ogen Sulfi ized Rhizo ence of Re ent Iron Re Muck Suri ge or Well	Plants Je Odor spheres on Living Roots duced Iron duction in Tilled Soils ace Data	Wetland Hy	Secondary:	D1 - Stunted or S D2 - Geomorphic D5 - FAC-Neutral	atterns Lines Water Table rrows 'isible on Aerial Imagery tressed Plants
Saturation Pres	sent?	Yes X No	Depth:		(in.)						
Describe Record	ded Data (str	eam gauge, monitor	ing well, a	aerial pho	otos, previ	ous inspe	ctions), if available:	N/A			
Remarks:											
SOILS		DI-114 DI-1-1	4 la ausa au			00/ -1-6		Maria Danada	da a la a d		
Map Unit Name		Blg1A1 - Blount sil	t loam, g	round m	oraine, 0-	-2% slo β	eries Drainage Class:	Very Poorly	drained		
Map Unit Name Taxonomy (Sub	ogroup):										
Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to			nfirm the abser	ice of indicators.		centration, D=Depletion, RM=Reduced	I Matrix, CS=Covered/Co	pated Sand Grains;	Location: PL=Pore Lining, f	
Map Unit Name Taxonomy (Sub Profile Descrip Top	ogroup): otion (Describe to	the depth needed to document the	e indicator or cor	nfirm the abser	ice of indicators.		centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;		Texture
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	the depth needed to document the	e indicator or cor	Matrix	oce of indicators.	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Coedox Features	ated Sand Grains;	Location	Texture (e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	Degroup): Degroup): Bottom Depth Depth	the depth needed to document the Horizon	color 10YR	Matrix (Moist) 4/3	% 98	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist) 3/4	d Matrix, CS=Covered/Co edox Features % 2	Type	Location M	Texture (e.g. clay, sand, loam) silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth 10 18	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 4/1	% 98 75	7.5YR 7.5YR	Centration, D=Depletion, RM=Reduced Re Color (Moist) 3/4 5/8	Matrix, CS=Covered/Coedox Features % 2 20	Type C C	Location M M	Texture (e.g. clay, sand, loam) silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	Degroup): Degroup): Bottom Depth Depth	the depth needed to document the Horizon	color 10YR	Matrix (Moist) 4/3 4/1	% 98 75	7.5YR 7.5YR 7.5YR	Color (Moist) 3/4 5/8 4/4	Matrix, CS=Covered/Cc dox Features % 2 20 5	Type C C C	Location M	Texture (e.g. clay, sand, loam) silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to Bottom Depth 10 18	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 4/1	% 98 75	7.5YR 7.5YR	Centration, D=Depletion, RM=Reduced Re Color (Moist) 3/4 5/8	Matrix, CS=Covered/Coedox Features % 2 20	Type C C	Location M M	Texture (e.g. clay, sand, loam) silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to Bottom Depth 10 18	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 4/1	% 98 75	7.5YR 7.5YR 7.5YR 7.5YR	Color (Moist) 3/4 5/8 4/4	Matrix, CS=Covered/Co edox Features % 2 20 5	Type C C C	Location M M M	Texture (e.g. clay, sand, loam) silty clay silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): otion (Describe to Bottom Depth 10 18	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 4/1	98 75	7.5YR 7.5YR 7.5YR	Color (Moist) 3/4 5/8 4/4	Matrix, CS=Covered/Co edox Features % 2 20 5	Type C C C	Location M M M	Texture (e.g. clay, sand, loam) silty clay silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): tion (Describe to Bottom Depth 10 18	Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 4/1	% 98 75	7.5YR 7.5YR 7.5YR	Color (Moist) 3/4 5/8 4/4	Matrix, CS=Covered/Cc cdox Features % 2 20 5 	Type C C C	Location M M M	Texture (e.g. clay, sand, loam) silty clay silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): otion (Describe to Bottom Depth 10 18	Horizon	Color 10YR 10YR	Matrix (Moist) 4/3 4/1	% 98 75	7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 3/4 5/8 4/4	Matrix, CS=Covered/Cc dox Features % 2 20 5	Type C C C	Location M M M	Texture (e.g. clay, sand, loam) silty clay silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	Degroup): Stion (Describe to Depth 10 18 18 1- 14 15 15 15 15 16 15 16 15 16 16 16 16 16 16 16 16 16 16 16 16 16	Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 4/3 4/1	96 98 75 re not pre	7.5YR	Color (Moist) 3/4 5/8 4/4	Matrix, CS=Covered/Cocococococococococococococococococococ	Type C C C s for Proble S7 - Dark S7 F12 - Iron-N TF12 - Very Other (Expla	Location M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur	Texture (e.g. clay, sand, loam) silty clay silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	Degroup): Stion (Describe to Describe to Depth 10 18 18 1- 19 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 4/3 4/1 icators a	% 98 75 re not profession F1 - Loan F2 - Loan F3 - Depli F6 - Redd F7 - Depli F8 - Redd	7.5YR	Color (Moist) 3/4 5/8 4/4	Matrix, CS=Covered/Co edox Features % 2 20 5 Indicator 1 Indicators of hyddisturb	Type C C C C s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Expla	Location M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur	Texture (e.g. clay, sand, loam) silty clay silty clay silty clay sface
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	Degroup): Stion (Describe to Describe to Depth 10 18 18 1- 19 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 4/3 4/1	% 98 75 re not profession F1 - Loan F2 - Loan F3 - Depli F6 - Redd F7 - Depli F8 - Redd	7.5YR	Color (Moist) 3/4 5/8 4/4	Matrix, CS=Covered/Cocococococococococococococococococococ	Type C C C C s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Expla	Location M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur	Texture (e.g. clay, sand, loam) silty clay silty clay silty clay sface



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 4a Sample Point: SP9n

VEGETATION	(Species identified in all uppercase are non-na	itive spec	ies.)		
Tree Stratum (P	lot size: 10 meter radius)				
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
3.					· · · · · · · · · · · · · · · · · · ·
4.					Total Number of Dominant Species Across All Strata: 3 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 5 x 1 = 5
	Total Cover =	0			FACW spp. 15 x 2 = 30
					FAC spp. 35 x 3 = 105
Sapling/Shrub St	ratum (Plot size: 5 meter radius)				FACU spp. 10 x 4 = 40
1.	Carya ovalis	5	Υ	FACU	UPL spp. 0 x 5 = 0
2.					···
3.					Total 65 (A) 180 (B)
4.			-		, , ,
5.					Prevalence Index = B/A = 2.769
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes X No Rapid Test for Hydrophytic Vegetation
10.					Yes X No Dominance Test is > 50%
	Total Cover =	5			x Yes No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
Herb Stratum (Pl	ot size: 2 meter radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Juncus tenuis	20	Υ	FAC	
2.	PLANTAGO MAJOR	15	Y	FAC	* Indicators of hydric soil and wetland hydrology must be
3.	Carex frankii	5	N	OBL	present, unless disturbed or problematic.
4.	TARAXACUM OFFICINALE	5	N	FACU	Definitions of Vegetation Strata:
5.	PHALARIS ARUNDINACEA	5	N	FACW	
6	Hypericum mutilum	10	N	FACW	Tree - Woody plants 3 in. (7.6cm) or more in diameter
7.					at breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater
10.					than 3.28 ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of
13.					size, and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	60			, , , , , , , , , , , , , , , , , , ,
	10141 00001 -				
Woody Vine Stra	tum (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present X Yes No
4.					1.7 1.7
5.					
	Total Cover =	0			
Remarks:					
A al al (4) 1 - 5					
Additional Re	emarks:				



Project/Site:	Northern Columbus Loop -	- Preferred Route	Stantec	Project #:	193707055		Date:	01/31/2	0	
Applicant:	Columbia Gas of Ohio						County:	Union		
Investigator #1:	Angela Sjollema	Investigator #2:	Charlie Allen				State:	Ohio		
Soil Unit:	Blount silt loam, ground m	oraine, 0-2% slopes	NWI/WWI Cla	ssification:	PEM1C		Wetland ID:	Upland		
Landform:	Terrace	Local Relief:	Concave				Sample Point:	SP10		
Slope (%):	1 Latit	ude: 40.204316 Longitude:	-83.173597		Datum:		Community ID:	Upland		
Are climatic/hyd	Irologic conditions on the si	te typical for this time of year?	(If no, explain in remarks)		□ Yes ■	No	Section:	N/A		
Are Vegetation	, Soil , or Hydrology	significantly disturbed?	Are normal	l circumsta	nces present?)	Township:	N/A		
Are Vegetation	, Soil , or Hydrology	naturally problematic?		Yes	NΘ		Range:	N/A	Dir:	N/A
SUMMARY OF	FINDINGS						•			
Hydrophytic Veg	getation Present?	□ Yes ■ No			Hydric Soils	Present?			Yes	□ No

Wetland Hydrology Present? ■ Yes □ No Is This Sampling Point Within A Wetland? • Yes • No

Ag field disturbed vegetation. Planted winter wheat. Ag field signs of drainage tile changing hydrology. NWI pt, took data.

Wetland Hydrology Indicators (Check here if indicators are not present.):

Primary:

- A1 Surface Water A2 - High Water Table
- A3 Saturation . B1 - Water Marks
- B2 Sediment Deposits B3 - Drift Deposits
- B4 Algal Mat or Crust B5 - Iron Deposits
- B7 Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface
- B9 Water-Stained Leaves B13 - Aquatic Fauna
- B14 True Aquatic Plants C1 - Hydrogen Sulfide Odor
- C3 Oxidized Rhizospheres on Living Roots
- C4 Presence of Reduced Iron
- C6 Recent Iron Reduction in Tilled Soils
- C7 Thin Muck Surface D9 - Gauge or Well Data
- Other (Explain in Remarks)

Secondary:

- B6 Surface Soil Cracks
- B10 Drainage Patterns
- C2 Dry-Season Water Table
- C8 Crayfish Burrows
- C9 Saturation Visible on Aerial Imagery
- D1 Stunted or Stressed Plants
- D2 Geomorphic Position
- D5 FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

Field Observations:

Surface Water Present? □ Yes ■ No Depth: 0 (in.) Water Table Present? ■ Yes □ No Depth: 12 (in.) Saturation Present? ■ Yes ■ No Depth: 1 (in.)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Map Unit Name:

SOILS

Map Unit Name:	Blount silt loam, ground moraine, 0-2% slopes
Profile Description	(Describe to the depth peeded to document the indicator or confirm the absence of indicators.) (Tune: C=Concentration, D=Deplation, PM=Defused Matrix, CS=Courand/Costed Sand Grains: Location: PL=Para L

Тор	Bottom			Matrix			Redo	Texture			
Depth	Depth	Horizon	Color	(Moist)	%	Color (Moist)		%	Туре	Location	(e.g. clay, sand, loam)
0	2		2.5Y	5/2	100						silty clay loam
2	14		2.5Y	5/2	83	7.5YR	4/6	15	С	M	silty clay loam
2	14					7.5YR	6/8	2	С	M	silty clay loam
14	20		2.5Y	5/2	79	7.5YR	6/8	20	С	M	silty clay loam
14	20					7.5YR	4/6	1	С	M	silty clay loam
			-				1				
							-				

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

- A1- Histosol
- A2 Histic Epipedon
- A3 Black Histic
- A4 Hydrogen Sulfide A5 - Stratified Layers
- A10 2 cm Muck
- A11 Depleted Below Dark Surface A12 - Thick Dark Surface
- S3 5 cm Mucky Peat or Peat
- S1 Sandy Muck Mineral

- S4 Sandy Gleyed Matrix
- S5 Sandy Redox
- S6 Stripped Matrix
- F1 Loamy Muck Mineral F2 - Loamy Gleyed Matrix
- F3 Depleted Matrix
- F6 Redox Dark Surface
- F7 Depleted Dark Surface
- F8 Redox Depressions
- Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

TF12 - Very Shallow Dark Surface

Other (Explain in Remarks)

Indicators for Problematic Soils 1

A16 - Coast Prairie Redox

S7 - Dark Surface F12 - Iron-Manganese Masses

" Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**

Remarks:

Restrictive Layer



Project/Site: North Columbus Loop - Preferred Route Wetland ID: Upland Sample Point: SP10

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

Tree Stratum (Plot size: 30 ft radius)

	(Species identified in all uppercase are non-n	ative speci	es.)		
Tree Stratum (Pl	ot size: 30 ft radius)			-	
	Species Name	% Cover		Ind.Status	Dominance Test Worksheet
1.	Quercus palustris	3	Υ	FACW	
2.	Malus sylvestris	3	Υ	UPL	Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata:5(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	6			FACW spp 3
					FAC spp. $0 x 3 = 0$
Sapling/Shrub Str	atum (Plot size: 15 ft radius)				FACU spp. 10 $x 4 = 40$
1.	Lonicera morrowii	5	Υ	FACU	UPL spp. 73
2.	Robinia pseudoacacia	5	Υ	FACU	
3.				-	Total <u>86</u> (A) <u>411</u> (B)
4.				-	
5.				-	Prevalence Index = B/A = 4.779
6.				-	
7.					
8.					Hydrophytic Vegetation Indicators:
9.					■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.					■ Yes ■ No Dominance Test is > 50%
	Total Cover =	10			Yes No Prevalence Index is ≤ 3.0 *
					Yes • No Morphological Adaptations (Explain) *
Herb Stratum (Plo	ot size: 5 ft radius)				 Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Triticum aestivum	70	Υ	UPL	
2.					* Indicators of hydric soil and wetland hydrology must be
3.				-	present, unless disturbed or problematic.
4.				-	Definitions of Vegetation Strata:
5.				-	
6				-	Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.				-	Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
10.	Total Cover =				l
	Total Cover –	70			
Moody Vina Start	um (Plot size: 30 ft radius)				
	um (Plot size: 30 ft radius)				
1. 2.	_ 				
				-	Hudranhutia Vagatatian Brosant - Van Na
3.				-	Hydrophytic Vegetation Present Yes No
4.		-		-	
5.	Total Cover =				
Pomorko:	Total Cover =	0			
Remarks:	20% bare ground				

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

Hydric Soil Present?

" Yes " No



WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: Northern Columbus Loop - Preferred Route Stantec Project #: 193707055 Date: Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen Ohio NWI/WWI Classification: N/A Wetland ID: Glynwood silt loam, ground moraine, 2-6% slopes Wetland 4 Soil Unit: Landform: Terrace Local Relief: Concave Sample Point: SP11 Latitude:40.203898 Slope (%): Longitude: -83.175973 Datum: WGS 1984 Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? YesNo YesNo Wetland Hydrology Present? ■ Yes □ No Is This Sampling Point Within A Wetland? Remarks: Wet point for Wetland 4 HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present): Primary: Secondary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table . B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows **B2 - Sediment Deposits** C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth: (in.) Wetland Hydrology Present?
Yes
No Water Table Present? ■ Yes □ Depth: 6 (in.) No Saturation Present? □ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Glynwood silt loam, ground moraine, 2-6% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Тор Bottom Texture Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 100 silty clay loam **10YR** 4/2 0 3 3 15 10YR 4/2 90 5YR 4/6 10 С PL silty clay loam 5YR 15 20 10YR 4/2 4/6 silty clay loam 95 5 С М --------------------------NRCS Hydric Soil Field Indicators (check here if indicators are not present -Indicators for Problematic Soils 1 A1- Histosol S4 - Sandy Gleyed Matrix A16 - Coast Prairie Redox A2 - Histic Epipedon S5 - Sandy Redox S7 - Dark Surface A3 - Black Histic S6 - Stripped Matrix F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral A5 - Stratified Layers F2 - Loamy Gleyed Matrix Other (Explain in Remarks) A10 - 2 cm Muck F3 - Depleted Matrix A11 - Depleted Below Dark Surface F6 - Redox Dark Surface A12 - Thick Dark Surface F7 - Depleted Dark Surface S1 - Sandy Muck Mineral F8 - Redox Depressions

Remarks:

Restrictive Layer

S3 - 5 cm Mucky Peat or Peat

Depth:

N/A

Type: N/A



Project/Site: North Columbus Loop - Preferred Route Wetland ID: Wetland 4 Sample Point: SP11

VEGETATION	(Species identified in all uppercase are nor	-native spec	ies)		
	ot size: 30 ft radius)	rnauvo opoc	,,,,,		
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata:(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.	 		-		OBL spp.
	Total Cover	= 0			FACW spp. X 2 =
0 1: /01 1 0:	(D) (:- 45 6				FAC spp.
	ratum (Plot size: 15 ft radius)				FACU spp.
1. 2.					UPL spp
3.					Total (A) (B)
3. 4.	 				Total(A)(B)
5.					Prevalence Index = B/A =
6.	_ 				Frevalence index - B/A -
7.					
8.					Hydrophytic Vegetation Indicators:
9.					■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.					Yes No Dominance Test is > 50%
10.	Total Cover				 Yes No Prevalence Index is ≤ 3.0 *
	. 5 (4)	ŭ			□ Yes □ No Morphological Adaptations (Explain) *
Herb Stratum (Ple	ot size: 5 ft radius)				□ Yes □ No Problem Hydrophytic Vegetation (Explain) *
1.	Phalaris arundinacea	100	Υ	FACW	
2.					* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.					present, unless disturbed of problematic.
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.				-	Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.				-	it. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					and woody planto loss than 0.20 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover	= 100			
M 1 N 0:	(DL 4 : - 00 ft : :)				
•	tum (Plot size: 30 ft radius)				
1.				-	
2. 3.				-	Hydronhytia Vagatation Present - Van - N.
3. 4.					Hydrophytic Vegetation Present • Yes • No
4. 5.	 				
J.	Total Cover				
Remarks:	i otal Cover				

Additional Remarks:		



Project/Site: Northern Columbus Loop - Preferred Route Stantec Project #: 193707055 Date: Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen OH NWI/WWI Classification: N/A Glynwood silt loam, ground moraine, 2-6% slopes Wetland ID: Wetland 4 Soil Unit: Landform: Terrace Local Relief: Linear Sample Point: SP12 Latitude:40.203891 Slope (%): Longitude: -83.176057 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? □ Yes ■ No Yes • No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Took sample point in tilled corn field, no other upland areas. Upland sample point for Wetland 4. Wetland Hydrology Indicators (Check here if indicators are not present.): Secondary: Primary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table . B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows **B2 - Sediment Deposits** C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? □ Yes ■ No Depth: (in.) Wetland Hydrology Present? • Yes • No Water Table Present? □ Yes ■ Depth: (in.) No Saturation Present? □ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Glynwood silt loam, ground moraine, 2-6% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Texture Top Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location silty clay loam 14 **10YR** 4/2 100 0 14 20 10YR 5YR 4/6 3 С PL silty clay loam 4/2 95 14 20 5YR 4/6 silty clay loam 2 С М --------------------------NRCS Hydric Soil Field Indicators (check here if indicators are not present Indicators for Problematic Soils 1 A1- Histosol S4 - Sandy Gleyed Matrix A16 - Coast Prairie Redox A2 - Histic Epipedon S5 - Sandy Redox S7 - Dark Surface A3 - Black Histic S6 - Stripped Matrix F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral A5 - Stratified Layers F2 - Loamy Gleyed Matrix Other (Explain in Remarks) A10 - 2 cm Muck F3 - Depleted Matrix A11 - Depleted Below Dark Surface F6 - Redox Dark Surface A12 - Thick Dark Surface F7 - Depleted Dark Surface S1 - Sandy Muck Mineral F8 - Redox Depressions 1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic S3 - 5 cm Mucky Peat or Peat Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**

Remarks:



Project/Site: North Columbus Loop - Preferred Route Wetland ID: Wetland 4 Sample Point: SP12

VEGETATION	(Species identified in all up	percase are non-na	ative spec	cies.)		
	Plot size: 30 ft radius)			,		
,	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)
3.						
4.						Total Number of Dominant Species Across All Strata: 1 (B)
5.						
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
7.						
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. 0 x 1 = 0
		Total Cover =	0			FACW spp. 0 x 2 = 0
						FAC spp. 0 x 3 = 0
	Stratum (Plot size: 15 ft radius)					FACU spp. 0 x 4 = 0
1.						UPL spp. 70 x 5 = 350
2.						
3.						Total 70 (A) 350 (B)
4.						D
5. 6.						Prevalence Index = B/A = 5.000
7.						
8.	<u></u>					Hydrophytic Vegetation Indicators:
9.						Pydrophytic vegetation indicators. Pydrophytic Vegetation Rapid Test for Hydrophytic Vegetation
10.						■ Yes ■ No Dominance Test is > 50%
10.		Total Cover =				Pes No Prevalence Index is ≤ 3.0 *
		rotal Govel	Ü			PYes No Morphological Adaptations (Explain) *
Herh Stratum (F	Plot size: 5 ft radius)					Problem Hydrophytic Vegetation (Explain) *
1.	Triticum aestivum		70	Υ	UPL	- 105 NO Froblem Hydrophydd Vegetation (Explain)
2.						* Indicators of hydric soil and wetland hydrology must be
3.						present, unless disturbed or problematic.
4.						Definitions of Vegetation Strata:
5.						
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.						ft. tall.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size,
13.						and woody plants less than 3.28 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	70			
Woody Vine Str	atum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present Yes No
4.						
5.						
		Total Cover =	0			
Remarks:	30% bare ground.					

Additional Re	marks:
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Project/Site: Northern Columbus Loop - Preferred Route Stantec Project #: 193707055 Date: Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen OH NWI/WWI Classification: N/A Wetland ID: Blount silt loam, ground moraine, 2-4% slopes Wetland 4 Soil Unit: Landform: Floodplain Local Relief: Concave Sample Point: SP13 Latitude: 40.203348 Longitude: -83.180459 Slope (%): Datum: WGS 1984 Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Hydric Soils Present? YesNo Yes • No Wetland Hydrology Present? ■ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: 2nd wetland point for Wetland 4, tile surrounding

Wetland Hydrology Indicators (Check here if indicators are not present.):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks **B2 - Sediment Deposits** B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves B13 - Aquatic Fauna

B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants

D2 - Geomorphic Position

D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? ■ Yes ■ No Depth: 0 (in.) Water Table Present? Yes No Depth: 5 (in.) Saturation Present? 0 □ Yes ■ No Depth: (in.)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

N/A

Wetland Hydrology Present?
Yes
No

Remarks:

SOILS Map Unit Name: Blount silt loam, ground moraine, 2-4% slopes

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Top	Bottom		Matrix				Redo		Texture		
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	4	-	10YR	4/2	100						silty clay loam
4	15	-	10YR	4/2	97	5YR	5/4	3	C	M	silty clay loam
15	20	-	10YR	4/2	92	5YR	5/6	8	C	M	silty clay loam
		-		-							
		-		-							
	-	-		-	-				-		
		-									
		-									

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers

A10 - 2 cm Muck A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

Indicators for Problematic Soils 1

S7 - Dark Surface

A16 - Coast Prairie Redox

Other (Explain in Remarks)

F12 - Iron-Manganese Masses

TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**

Remarks:



Project/Site: North Columbus Loop - Preferred Route Wetland ID: Wetland 4 Sample Point: SP13

VEGETATION	(Species identified in all uppercase are nor	-native spec	ies)		
	ot size: 30 ft radius)	rnauvo opoc	,,,,,		
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata:(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.	 		-		OBL spp.
	Total Cover	= 0			FACW spp. X 2 =
0 1: /01 1 0:	(D) (:- 45 6				FAC spp.
	ratum (Plot size: 15 ft radius)				FACU spp.
1. 2.					UPL spp
3.					Total (A) (B)
3. 4.	 				Total(A)(B)
5.					Prevalence Index = B/A =
6.	_ 				Frevalence index - B/A -
7.					
8.					Hydrophytic Vegetation Indicators:
9.					■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.					Yes No Dominance Test is > 50%
10.	Total Cover				 Yes No Prevalence Index is ≤ 3.0 *
	. 5 (4)	ŭ			□ Yes □ No Morphological Adaptations (Explain) *
Herb Stratum (Ple	ot size: 5 ft radius)				□ Yes □ No Problem Hydrophytic Vegetation (Explain) *
1.	Phalaris arundinacea	100	Υ	FACW	
2.					* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.					present, unless disturbed of problematic.
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.				-	Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.				-	it. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					and woody planto loss than 0.20 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover	= 100			
M 1 N 0:	(DL 4 : - 00 ft : :)				
•	tum (Plot size: 30 ft radius)				
1.				-	
2. 3.				-	Hydronhytia Vagatation Present - Van - N.
3. 4.					Hydrophytic Vegetation Present • Yes • No
4. 5.	 				
J.	Total Cover				
Remarks:	i otal Cover				

Additional Remarks:		



Project/Site:	Northern Co	olumbus Loop - Pre	eferred R	oute			Stantec Project #:	193707055	j	Date: County:	01/31/20 Union
nvestigator #1:	1: Angela Sjollema Investigator #2: Charlie Allen									State:	OH
Soil Unit:	Blount silt loam, ground moraine, 0-2% slopes NWI/WWI Classification: N/A									Wetland ID:	Wetland 4
.andform:	Terrace Local Relief: Linear									Sample Point:	SP14
Slope (%):								Datum:		: Upland	
re climatic/hyd	· · · · · · · · · · · · · · · · · · ·							Yes	No	Section:	N/A
re Vegetation		or Hydrology sig					Are normal circumsta	ances present	?	Township:	N/A
Are Vegetation		or Hydrology na	turally pr	oblemat	ic?		Yes	No		Range:	N/A Dir: N
lydrophytic Ve		sent?		Yes	■ No			Hydric Soils	Present?		□ Yes ■
Vetland Hydro	0			• Yes						Within A Wet	land? Yes
Remarks:	0,	iled, tilled. 2nd upla	and point					io mio cam	piiiig i oiiit	***************************************	iana. 100
tomanto.	rtow orop, t	nou, unou. Ena api	and point	101 1101	idild i						
YDROLOGY											
		1 (0) 11	·c · · · ·								
•		ators (Check here	it indicate	ors are r	not preser	nt•):					
<u>Primary</u>		M-4			DO 141-4-	04-:	1		Secondary:	DC Cf C	-:1 01
	A1 - Surface					er-Stained				B6 - Surface S	
	A2 - High Wa A3 - Saturation					ıatic Fauna e Aquatic I				B10 - Drainage	on Water Table
_	B1 - Water M			-		ogen Sulfi			-	C8 - Crayfish E	
	B2 - Sedimen						spheres on Living Roots			•	n Visible on Aerial Imag
	B3 - Drift Dep						educed Iron				r Stressed Plants
	B4 - Algal Ma	t or Crust			C6 - Rece	ent Iron Re	duction in Tilled Soils			D2 - Geomorph	hic Position
	B5 - Iron Dep	osits				Muck Surf				D5 - FAC-Neut	tral Test
		on Visible on Aerial Im			,	ge or Well					
	B8 - Sparsely	Vegetated Concave	Surface	•	Other (Ex	plain in Re	marks)				
urface Water	Present?	□ Yes ■ No	Depth:	-	(in.)			Wotland Hy	drology P	rocont2 п	Vec . No
Surface Water Vater Table Pr Saturation Pres	resent? sent?	Yes No	Depth: Depth:	- - -	(in.) (in.)			Wetland Hy		resent? •	Yes • No
Vater Table Pr Saturation Pres	resent? sent?	Yes No	Depth: Depth:		(in.) (in.)	ous inspe	ctions), if available:	Wetland Hy	vdrology P	resent? •	Yes • No
Vater Table Pr Saturation Pres Describe Record Remarks: OILS Map Unit Name	resent? sent? ded Data (stre	" Yes " No " Yes " No earn gauge, monitor	Depth: Depth: ing well, a	aerial pho	(in.) (in.) otos, previ 2% slope	s			N/A		Yes • No
Vater Table Prosaturation Pressonescribe Record Remarks: OILS Map Unit Name Profile Descrip	resent? sent? ded Data (stre	" Yes " No " Yes " No earn gauge, monitor	Depth: Depth: ing well, a	aerial pho	(in.) (in.) otos, previ 2% slope	s	tion, D=Depletion, RM=Reduced Matrix, CSS		N/A		Yes • No
Vater Table Prosaturation Presseribe Record Remarks: OILS App Unit Name Profile Descrip	resent? sent? ded Data (stre	" Yes " No " Yes " No earn gauge, monitor Blount silt loam, gr	Depth: Depth: ing well, a	raine, 0- m the absence of	(in.) (in.) otos, previ	s	dion, D=Depletion, RM=Reduced Matrix, CS Red	=Covered/Coated Sand Gr	N/A	Pore Lining, M=Matrix)	Texture
Vater Table Presented in Presented P	resent? sent? ded Data (stre	" Yes " No " Yes " No earn gauge, monitor Blount silt loam, gr	Depth: Depth: ing well, a ound mo indicator or confirm Color	raine, 0- n the absence of Matrix (Moist)	(in.) (in.) otos, previ	S pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Cowered/Coated Sand G	N/A rains; Location: PL=i		Texture (e.g. clay, sand, lo
Vater Table Presenter Top Depth	resent? sent? ded Data (street) es: ption (Describe to t)	" Yes " No " Yes " No earn gauge, monitor Blount silt loam, gr he depth needed to document the in	Depth: Depth: ing well, a ound mo dicator or confin Color 10YR	raine, 0- m the absence of Matrix (Moist) 4/3	(in.) (in.) otos, previ	S pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Covered/Coated Sand G	N/A N/A Type	Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, k
/ater Table Praturation Presessible Recordemarks: DILS lap Unit Name rofile Descrip Top Depth 0	resent? sent? ded Data (street) be: ption (Describe to	" Yes " No " Yes " No earn gauge, monitor Blount silt loam, gr he depth needed to document the ir Horizon	Depth: Depth: Ing well, a Count mo Color 10YR	raine, 0- m the absence of Matrix (Moist) 4/3	(in.) (in.) otos, previous slope 2% slope 4 dicators.) (Ty % 100	S pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Covered/Coated Sand Gr	N/A N/A Type	Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, lo silty clay loan
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Vater Table Presented in Presented P	resent? sent? ded Data (street) better bette	Plount silt loam, gried depth needed to document the interest of the depth needed to document the interest of t	Depth: Depth: Depth: ing well, a ound mo dicator or confin Color 10YR	raine, 0- m the absence of Matrix (Moist) 4/3	(in.) (in.) otos, previ 2% slope findicators.) (Ty 100	S pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Cowered/Coated Sand G	N/A N/A Type	Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, losilty clay loan
Vater Table Presented in Presented P	resent? sent? ded Data (street) better bette	" Yes " No " Yes " No earn gauge, monitor Blount silt loam, gr he depth needed to document the in Horizon	Depth: Depth: Ing well, a Count mo Color 10YR	raine, 0- m the absence or Matrix (Moist) 4/3	(in.) (in.) otos, previ 2% slope 100	S pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Covered/Coated Sand G	N/A N/A Type	Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, losilty clay loan
Vater Table Presented in Presented P	resent? sent? ded Data (street) better bette	Plount silt loam, gried depth needed to document the interest of the depth needed to document the interest of t	Depth: Depth: Depth: ing well, a ound mo dicator or confin Color 10YR	raine, 0- m the absence of Matrix (Moist) 4/3	(in.) (in.) otos, previ 2% slope findicators.) (Ty 100	S pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Cowered/Coated Sand G	N/A N/A Type	Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, losilty clay loan
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/ater Table Praturation Preserving Record emarks: DILS lap Unit Namerofile Descriptop Depth O	resent? sent? ded Data (street) ded Data (street	" Yes " No " Yes " No Horizon Horizon dicators (check horizodon	Depth: Depth: Depth: ing well, a ound mo Color 10YR	raine, 0-m the absence or Matrix (Moist) 4/3	(in.)	S pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Covered/Coated Sand G OX Features % Indicators	N/A Type Type s for Probler A16 - Coast S7 - Dark S F12 - Iron-N	Location Location	Texture (e.g. clay, sand, losilty clay loan
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Vater Table Praturation Preservible Recording Preservible Recording Preservible Recording Preservible Recording Preservible Recording Preservible Pres	resent? sent? ded Data (street) Bottom Depth 20	" Yes " No " Yes " No " Yes " No earn gauge, monitor Blount silt loam, gr he depth needed to document the ir Horizon dicators (check h ipedon stic n Sulfide Layers	Depth: Depth: Depth: ing well, a ound mo Color 10YR	raine, 0- m the absence of Matrix (Moist) 4/3 icators a	(in.)	s	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Covered/Coated Sand G OX Features % Indicators	N/A Trains: Location: PL=1 Type s for Probler A16 - Coasis S7 - Dark S F12 - Iron-N TF12 - Very	Location Location	Texture (e.g. clay, sand, losilty clay loan
Vater Table Presenter Table Pr	resent? sent? ded Data (street) ded Data (street	" Yes " No " Yes " No earn gauge, monitor Blount silt loam, gr he depth needed to document the ir Horizon dicators (check holipedon stic n Sulfide Layers uck	Depth: Depth: Depth: ing well, a ound mo Color 10YR ere if ind	raine, 0- m the absence of Matrix (Moist) 4/3 icators a	(in.)	s	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)): Matrix ineral Matrix	=Cowered/Coated Sand G	N/A Trains: Location: PL=1 Type s for Probler A16 - Coasis S7 - Dark S F12 - Iron-N TF12 - Very	Location Location	Texture (e.g. clay, sand, losilty clay loan
Vater Table Presenter Table Presenter Table Presenter Pr	resent? sent? ded Data (street) ded Data (street	Pies No Pies N	Depth: Depth: Depth: ing well, a ound mo Color 10YR ere if ind	raine, 0- In the absence of Matrix (Moist) 4/3 icators a	(in.) (in.) (in.) 2% slope 2% slope findicators.) (Ty 4 100 -	s per C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)): Matrix inneral Matrix crface	=Cowered/Coated Sand G	N/A Trains: Location: PL=1 Type s for Probler A16 - Coasis S7 - Dark S F12 - Iron-N TF12 - Very	Location Location	Texture (e.g. clay, sand, losilty clay loan
Vater Table Prosaturation Pressure Record Remarks: OILS Map Unit Name Profile Descrip Top Depth O NRCS Hydric	resent? sent? ded Data (street) ded Data (street	" Yes " No " Yes " No sam gauge, monitor Blount silt loam, gr he depth needed to document the in Horizon dicators (check horizodo stic n Sulfide Layers uck dd Below Dark Surface eark Surface	Depth: Depth: Depth: ing well, a ound mo Color 10YR ere if ind	raine, 0-m the absence or Matrix (Moist) 4/3	(in.)	s pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Cowered/Coated Sand G	N/A Trains: Location: PL=1 Type s for Probler A16 - Coasis S7 - Dark S F12 - Iron-N TF12 - Very	Location Location	Texture (e.g. clay, sand, losilty clay loan
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Remarks:

20% bare ground.

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: North Columbus Loop - Preferred Route Wetland ID: Wetland 4 Sample Point: SP14 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) Species Name **Dominance Test Worksheet** % Cover Dominant Ind.Status Number of Dominant Species that are OBL, FACW, or FAC: ____0 (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5 Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B) 6. 7. 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = x 2 = FACW spp. 0 FAC spp. 0 x 3 =Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = 0 UPL spp. x 5 = 2. 3. 80 400 (B) Total (A) 4. 5. Prevalence Index = B/A = 5.000 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation ----Yes No 10. ■ No Yes Dominance Test is > 50% --Total Cover = Yes ■ No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) No Problem Hydrophytic Vegetation (Explain) * Yes 1. Triticum aestivum 75 Υ UPL * Indicators of hydric soil and wetland hydrology must be UPL 2 Lamium amplexicaule 5 Ν present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 80 Woody Vine Stratum (Plot size: 30 ft radius) 1 3. Hydrophytic Vegetation Present - Yes - No 4. 5. Total Cover = 0

Additional Remarks:			



WETLAND DETERMINATION DATA FORM Page 1 of 2 **Midwest Region** Project/Site: Northern Columbus Loop - Preferred Route Stantec Project #: 193707055 Date: Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen OH NWI/WWI Classification: N/A Wetland ID: Blount silt loam, ground moraine, 0-2% slopes Wetland 5 Soil Unit: Landform: Terrace Local Relief: Concave Sample Point: SP15 40.202395 Longitude: -83.184055 Slope (%): Latitude: Datum: --Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? Yes • No Yes • No Wetland Hydrology Present? ■ Yes □ No Is This Sampling Point Within A Wetland? Remarks: Wetland sample point for Wetland 5 HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present.): Secondary: Primary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows **B2 - Sediment Deposits** C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? □ Yes ■ No Depth: 0 (in.) Wetland Hydrology Present?
Yes
No Water Table Present? ■ Yes □ Depth: 4 (in.) No Saturation Present? 0 □ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Blount silt loam, ground moraine, 0-2% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Тор	Bottom		Matrix				Redo		Texture		
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	4	-	10YR	3/2	100		-				silty clay loam
4	15		10YR	4/1	90	5YR	4/6	10	С	PL	silty clay loam
15	21		10YR	5/1	87	5YR	4/6	3	С	PL	silty clay loam
15	21	-		-	-	10YR	6/6	10	С	M	silty clay loam
					-		-				
		-		-	1		1				
					-		-				

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

- A1- Histosol
- A2 Histic Epipedon
- A3 Black Histic A4 - Hydrogen Sulfide
- A5 Stratified Layers
- A10 2 cm Muck
- A11 Depleted Below Dark Surface
- A12 Thick Dark Surface
- S1 Sandy Muck Mineral
- S3 5 cm Mucky Peat or Peat

- S4 Sandy Gleyed Matrix
- S5 Sandy Redox
- S6 Stripped Matrix
- F1 Loamy Muck Mineral
- F2 Loamy Gleyed Matrix
- F3 Depleted Matrix
- F6 Redox Dark Surface
- F7 Depleted Dark Surface
- F8 Redox Depressions
- 1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Indicators for Problematic Soils 1

S7 - Dark Surface

A16 - Coast Prairie Redox

Other (Explain in Remarks)

F12 - Iron-Manganese Masses

TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**

Remarks:



Project/Site: North Columbus Loop - Preferred Route Wetland ID: Wetland 5 Sample Point: SP15

VEGETATION	(Species identified in all upp	ercase are non-na	ative spec	cies.)		
Tree Stratum (Pl	ot size: 30 ft radius)					
,	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.	<u></u>					
2.						Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.						·
4.						Total Number of Dominant Species Across All Strata: 1 (B)
5.						·
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.	<u></u>					(100 to 10
8.	<u></u>					Prevalence Index Worksheet
9.						
10.		T-4-1 O-1/-				OBL spp x 1 =
		Total Cover =	0			FACW spp. x 2 =
						FAC spp. $\times 3 =$
	ratum (Plot size: 15 ft radius)					FACU spp x 4 =
1.						UPL spp x 5 =
2.						
3.						Total(A)(B)
4.						
5.						Prevalence Index = B/A =
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.		-				■ Yes □ No Rapid Test for Hydrophytic Vegetation
10.						■ Yes □ No Dominance Test is > 50%
10.		Total Cover =	0			Yes □ No Prevalence Index is ≤ 3.0 *
		10101 00101				
Lizzh Stratum (Di						,
	ot size: 5 ft radius)		90		EACW.	□ Yes □ No Problem Hydrophytic Vegetation (Explain) *
1.	Phalaris arundinacea			Y	FACW	* Indicators of hydric soil and wetland hydrology must be
2.	Typha angustifolia		10	N	OBL	present, unless disturbed or problematic.
3.						· · · · · · · · · · · · · · · · · ·
4.						Definitions of Vegetation Strata:
5.						
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.						ft. tall.
11.						
12.		-				Herb - All herbaceous (non-woody) plants, regardless of size,
13.						and woody plants less than 3.28 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
10.		Total Cover =				**************************************
		Total Cover =	100			
	·-· · · · · · · · · · · · · · · · · · ·					
	tum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present • Yes • No
4.						
5.						
		Total Cover =	0			
Remarks:						

Additional Remarks:			



Remarks:

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: Northern Columbus Loop - Preferred Route Stantec Project #: 193707055 Date: Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen OH NWI/WWI Classification: N/A Blount silt loam, ground moraine, 0-2% slopes Wetland ID: Wetland 5 Soil Unit: Landform: Terrace Local Relief: Linear Sample Point: SP16 40.202418 Longitude: -83.184095 Slope (%): 0.5 Latitude: Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? YesNo Yes • No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Upland point for Wetland 5 HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present.): Primary: Secondary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows **B2 - Sediment Deposits** C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? □ Yes ■ No Depth: (in.) Wetland Hydrology Present? • Yes • No Water Table Present? □ Yes ■ Depth: (in.) No Saturation Present? □ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Blount silt loam, ground moraine, 0-2% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Тор Bottom Texture Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 100 clay loam **10YR** 3/2 0 6 12 10YR 100 6 4/3 clay loam __ --------------------------NRCS Hydric Soil Field Indicators (check here if indicators are not present Indicators for Problematic Soils 1 S4 - Sandy Gleyed Matrix A16 - Coast Prairie Redox A2 - Histic Epipedon S5 - Sandy Redox S7 - Dark Surface A3 - Black Histic S6 - Stripped Matrix F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral A5 - Stratified Layers F2 - Loamy Gleyed Matrix Other (Explain in Remarks) A10 - 2 cm Muck F3 - Depleted Matrix A11 - Depleted Below Dark Surface F6 - Redox Dark Surface A12 - Thick Dark Surface F7 - Depleted Dark Surface S1 - Sandy Muck Mineral F8 - Redox Depressions 1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic S3 - 5 cm Mucky Peat or Peat Restrictive Layer " Yes " No Type: Rock Depth: 12" **Hydric Soil Present?**



Project/Site: North Columbus Loop - Preferred Route Wetland ID: Wetland 5 Sample Point: SP16 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Morus alba FAC 10 **FACW** Number of Dominant Species that are OBL, FACW, or FAC: ____3 ___(A) 2. Υ Salix discolor 3. 4. Total Number of Dominant Species Across All Strata: 5 (B) 5. --Percent of Dominant Species That Are OBL, FACW, or FAC: 60% (A/B) 6. 7. 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = x 2 = FACW spp. FAC spp. x 3= Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. ___ x 4 = Pyrus calleryana 10 UPL UPL spp. x 5= 2. 3. Total (A) 4. Prevalence Index = B/A = 5. 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation ----Yes No 10. Yes No Dominance Test is > 50% --Total Cover = Yes No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) No Problem Hydrophytic Vegetation (Explain) * Yes 1. Phalaris arundinacea 80 Υ **FACW** * Indicators of hydric soil and wetland hydrology must be FACU 2 Solidago canadensis 25 Υ present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 105 Woody Vine Stratum (Plot size: 30 ft radius) 1 Hydrophytic Vegetation Present • Yes • No 3. 4. 5.

Additional Remarks:

Total Cover =

Remarks:

0



Project/Site:	Northern Columbus Loop	- Preferred route	Stantec Pro	niect #:	193707055		Date:	01/31/20)	
Applicant:	Columbia Gas of Ohio	Treferred route	Starteerie	η cot π .	1337 07 000		County:	Union	,	
1 ' '	Angela Sjollema	Investigator #2	P. Charlie Allen				State:	Ohio		
Soil Unit:	Pewamo silty clay loam, 0		NWI/WWI Classi	fication: N	/Δ		-		16	
Landform:	Floodplain/ditch	Local Relief		noation. I			Sample Point:		10	
Slope (%):	•		e: -83.169216		Datum:	WGS 1984	Community ID:			
. ,		te typical for this time of year			Yes •	No	Section:	N/A		
Are Vegetation		significantly disturbed?	Are normal cir	rcumstance	es present	?	Township:	N/A		
Are Vegetation		9			√ 0		Range:	N/A	Dir:	N/A
SUMMARY OF										
		V NI	_		Li Orila	D			1/	NI.

Hydrophytic Vegetation Present? Yes
No Hydric Soils Present? Yes • No Is This Sampling Point Within A Wetland? • Wetland Hydrology Present? Yes
No Yes •

Wet point for wetland 6 Remarks:

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present.):

Primary:

 B9 - Water-Stained Leaves A1 - Surface Water B13 - Aquatic Fauna A2 - High Water Table A3 - Saturation B14 - True Aquatic Plants B1 - Water Marks C1 - Hydrogen Sulfide Odor

 B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots B3 - Drift Deposits C4 - Presence of Reduced Iron B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils

B5 - Iron Deposits C7 - Thin Muck Surface B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks)

Secondary:

Wetland Hydrology Present?

 B6 - Surface Soil Cracks B10 - Drainage Patterns C2 - Dry-Season Water Table

C8 - Crayfish Burrows

 C9 - Saturation Visible on Aerial Imagery D1 - Stunted or Stressed Plants

Yes • No

 D2 - Geomorphic Position D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? Depth: 0.5 (in.) Yes • No Water Table Present? Depth: Surface (in.) Yes □ No Saturation Present? Yes □ No Depth: 6 (in.)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A

Remarks:

SOILS

Map Unit Name: Pewamo silty clay loam, 0-1% slopes

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Тор	Bottom		Matrix			Redox Features					Texture
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	6		10YR	3/2	100				-		silty clay loam
6	14		10YR	4/1	85	10YR	5/8	2	С	M	silty clay loam
					I	5YR	4/6	10	С	PL	silty clay loam
					1	5YR	4/6	3	С	M	silty clay loam
14	20		10YR	4/1	87	10YR	5/8	3	С	M	silty clay loam
					1	5YR	4/6	5	C	PL	silty clay loam
					-	10YR	4/6	5	С	PL	silty clay loam
					-				-		

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon

A3 - Black Histic

A4 - Hydrogen Sulfide

A5 - Stratified Layers A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix

S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix

F6 - Redox Dark Surface F7 - Depleted Dark Surface

F8 - Redox Depressions

Indicators for Problematic Soils ¹

A16 - Coast Prairie Redox

S7 - Dark Surface

F12 - Iron-Manganese Masses

TF12 - Very Shallow Dark Surface

Other (Explain in Remarks)

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

Restrictive Layer Depth: N/A Type: N/A **Hydric Soil Present?** Yes • No (If Observed)

Remarks:



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 6 Sample Point: SP17

ree Stratum (F	Plot size: 30 ft radius)				
	<u>Species Name</u>	% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:1 (A)
3.					
4.					Total Number of Dominant Species Across All Strata: (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC:100% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. $0 x 1 = 0$
	Total Cover =	0			FACW spp. $0 x 2 = 0$
					FAC spp. $0 X 3 = 0$
	tratum (Plot size: 15 ft radius)				FACU spp. $0 x 4 = 0$
1.					UPL spp. $\underline{\qquad}$ \times $5 = \underline{\qquad}$
2.					
3.					Total <u> </u>
4.					
5.					Prevalence Index = B/A = NA
6.					
7.					Hydronbytic Vocatation Indicators
8.					Hydrophytic Vegetation Indicators:
9.					■ Yes □ No Rapid Test for Hydrophytic Vegetation
10.	Total Cover =				■ Yes ■ No Dominance Test is > 50%
	Total Cover =	0			 Yes No Prevalence Index is ≤ 3.0 *
					□ Yes □ No Morphological Adaptations (Explain) *
-	Plot size: 5 ft radius)	100	V	E A C \ A /	 Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Phalaris arundinacea	100	Υ	FACW	* Indicators of hydric soil and wetland hydrology must be
2.					present, unless disturbed or problematic.
3.					Definitions of Venetation Strate.
<u>4.</u> 5.					Definitions of Vegetation Strata:
					Troo
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.					broast Holght (BBH), regardless of Holght.
8.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
9. 10.					ft. tall.
					
11.					Herb - All herbaceous (non-woody) plants, regardless of size,
12.					and woody plants less than 3.28 ft. tall.
13.					
14. 15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
10.	Total Cover –	100			VVOOdy Villes - All Woody Villes greater than 0.20 it. in height
	Total Cover =	100			
loody Vina Stra	otum (Plot cizo: 20 ft radius)				
1.	atum (Plot size: 30 ft radius)				
2.					
3.					Hydrophytic Vegetation Present • Yes • No
<u> </u>	 				nyurophytic vegetation Fresent • res • No
^					
5.	Total Cover -				
5. Remarks:	Total Cover =	0			

Additional	Remarks:
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Project/Site: Northern Columbus Loop - Preferred Route Stantec Project #: 193707055 Date: Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen Ohio Pewamo silty clay loam, 0-1% slopes NWI/WWI Classification: N/A Wetland ID: Wetland 6 Soil Unit: Landform: Terrace Local Relief: Convex Sample Point: SP18 Latitude: 40.196159 Slope (%): Longitude: -83.196192 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? □ Yes ■ No Yes No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Mowed vegetation. Upland point for Wetland 6

Wetland Hydrology Indicators (Check here if indicators are not present.):

Primary:

A1 - Surface Water

A2 - High Water Table A3 - Saturation B1 - Water Marks

B2 - Sediment Deposits B3 - Drift Deposits B4 - Algal Mat or Crust

B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery

B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves B13 - Aquatic Fauna

B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? □ Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ Depth: (in.) No Saturation Present? □ Yes ■ No Depth: (in.)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

N/A

Wetland Hydrology Present? • Yes • No

Remarks:

SOILS

Man Unit Name:	Pewamo silty clay loam	0-1% slopes

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Matrix Redox Features Texture Top (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 100 silty clay loam **10YR** 0 16 4/3 16 20 10YR 10YR 5/6 2 С М silty clay loam 4/3 98 --------------------------

NRCS Hydric Soil Field Indicators (check here if indicators are not present

- A2 Histic Epipedon
- A3 Black Histic
- A4 Hydrogen Sulfide
- A5 Stratified Layers
- A10 2 cm Muck A11 - Depleted Below Dark Surface
- A12 Thick Dark Surface
- S1 Sandy Muck Mineral
- S3 5 cm Mucky Peat or Peat
- S4 Sandy Gleyed Matrix
- S5 Sandy Redox S6 - Stripped Matrix
- F1 Loamy Muck Mineral
- F2 Loamy Gleyed Matrix
- F3 Depleted Matrix
- F6 Redox Dark Surface F7 - Depleted Dark Surface
- F8 Redox Depressions

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

Indicators for Problematic Soils 1

S7 - Dark Surface

A16 - Coast Prairie Redox

Other (Explain in Remarks)

F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**

Remarks:



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 6 Sample Point: SP18

VEGETATIO	(Species identified in all up	nercase are non-na	ative sner	cies)		
	(Plot size: 30 ft radius)	percuse are non n	auvo opot	3100.)		
	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.						
4.						Total Number of Dominant Species Across All Strata: 3 (B)
5.						(=/
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)
7.						(` ' /
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. 0 $\times 1 = 0$
		Total Cover =	0			FACW spp. 0 x 2 = 0
						FAC spp. 35 X 3 = 105
Sapling/Shrub	Stratum (Plot size: 15 ft radius)				FACU spp. 30 x 4 = 120
1.		,				UPL spp. 25 x 5 = 125
2.						··· ———
3.						Total 90 (A) 350 (B)
4.						
5.						Prevalence Index = B/A = 3.889
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.						■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.						■ Yes ■ No Dominance Test is > 50%
		Total Cover =	0			Yes No Prevalence Index is ≤ 3.0 *
						Yes No Morphological Adaptations (Explain) *
Herb Stratum	(Plot size: 5 ft radius)					□ Yes □ No Problem Hydrophytic Vegetation (Explain) *
1.	Setaria viridis		25	Υ	UPL	
2.	Setaria faberi		25	Υ	FACU	* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.	Poa pratensis		35	Υ	FAC	present, unless disturbed of problematic.
4.	Trifolium repens		5	N	FACU	Definitions of Vegetation Strata:
5.						•
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.						ft. tall.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size,
13.						and woody plants less than 3.28 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	90			•
Woody Vine S	tratum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present - Yes - No
4.	-					, , , ,
5.						
		Total Cover =	0			
Remarks:	10% open ground					
1	-					

Additional	Romarke:

" Yes " No

Hydric Soil Present?



Type: N/A

Remarks:

Depth:

N/A

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: Stantec Project #: 193707055 Northern Columbus Loop - Preferred Route Date: Applicant: Columbia Gas of Ohio County: Union Investigator #1: Michelle Kearns State: Investigator #2: Julie Slater OH NWI/WWI Classification: N/A Pewamo silty clay loam, 0-1% slopes Wetland ID: Wetland 7 Soil Unit: Landform: None Local Relief: Concave Sample Point: SP19 Latitude: 40.164293 Slope (%): Longitude: -83.215685 Datum: --Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? YesNo Yes • No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Upland point for Wetland 7 HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present.): Primary: Secondary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table . B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows **B2 - Sediment Deposits** C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? □ Yes ■ No Depth: (in.) Wetland Hydrology Present? • Yes • No Water Table Present? □ Yes ■ Depth: (in.) No Saturation Present? □ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: SOILS Map Unit Name: Glynwood clay loam, 6-12% slopes, eroded Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Тор Bottom Texture Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) % Color (Moist) Type Location 100 clay loam **10YR** 4/4 0 7 7 10YR 100 15 6/3 clay loam __ --------------------------NRCS Hydric Soil Field Indicators (check here if indicators are not present Indicators for Problematic Soils 1 S4 - Sandy Gleyed Matrix A16 - Coast Prairie Redox A2 - Histic Epipedon S5 - Sandy Redox S7 - Dark Surface A3 - Black Histic S6 - Stripped Matrix F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral A5 - Stratified Layers F2 - Loamy Gleyed Matrix Other (Explain in Remarks) A10 - 2 cm Muck F3 - Depleted Matrix A11 - Depleted Below Dark Surface F6 - Redox Dark Surface A12 - Thick Dark Surface F7 - Depleted Dark Surface S1 - Sandy Muck Mineral F8 - Redox Depressions 1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic S3 - 5 cm Mucky Peat or Peat Restrictive Layer



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 7 Sample Point: SP19 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Carya ovata 100 **FACU** Number of Dominant Species that are OBL, FACW, or FAC: ____0 (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 3 (B) 5 Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B) 6. 7. 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 100 x 2 = FACW spp. 0 FAC spp. 3 x 3 =Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = 147 UPL spp. x 5 = 2. 3. 150 597 Total (A) 4. 5. Prevalence Index = B/A = 3.980 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation ----Yes No 10. ■ No Yes Dominance Test is > 50% --Total Cover = Yes ■ No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) No Problem Hydrophytic Vegetation (Explain) * Yes 1. Carya ovata 15 Υ **FACU** * Indicators of hydric soil and wetland hydrology must be **FACU** 2 Fraxinus americana 2 N present, unless disturbed or problematic. 3. Poa pratensis 3 FAC **Definitions of Vegetation Strata:** 4 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 20 Woody Vine Stratum (Plot size: 30 ft radius) 1 Rosa multiflora 30 FACU Hydrophytic Vegetation Present • Yes • No 3. 4. 5. Total Cover = 30 Remarks:

Additional Remarks:		



Project/Site: Northern Columbus Loop - Preferred Route Stantec Project #: 193707055 Date: Applicant: Columbia Gas of Ohio County: Union Investigator #1: Michelle Kearns State: Investigator #2: Julie Slater OH NWI/WWI Classification: N/A Wetland ID: Wetland 7 Pewamo silty clay loam, 0-1% slopes Soil Unit: Landform: Depression Local Relief: Concave Sample Point: SP20 Latitude: 40.164409 Slope (%): Longitude: -83.21581 Datum: --Community ID: PFO Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? YesNo YesNo

Wetland Hydrology Present?

Remarks: Wet point for Wetland 7

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present.):

Primary:

- A1 Surface Water A2 - High Water Table
- A3 Saturation B1 - Water Marks
- **B2 Sediment Deposits** B3 - Drift Deposits
- B4 Algal Mat or Crust B5 - Iron Deposits
- B7 Inundation Visible on Aerial Imagery
- B8 Sparsely Vegetated Concave Surface
- B9 Water-Stained Leaves B13 - Aquatic Fauna

■ Yes ■ No

- B14 True Aquatic Plants C1 - Hydrogen Sulfide Odor
- C3 Oxidized Rhizospheres on Living Roots
- C4 Presence of Reduced Iron
- C6 Recent Iron Reduction in Tilled Soils
- C7 Thin Muck Surface D9 - Gauge or Well Data
- Other (Explain in Remarks)

Secondary:

Is This Sampling Point Within A Wetland?

- B6 Surface Soil Cracks
- B10 Drainage Patterns
- C2 Dry-Season Water Table
- C8 Crayfish Burrows
- C9 Saturation Visible on Aerial Imagery
- D1 Stunted or Stressed Plants
- D2 Geomorphic Position
- D5 FAC-Neutral Test

Wetland Hydrology Present?
Yes
No

Field Observations:

Surface Water Present? Yes No Depth: 0.5 (in.) Water Table Present? ■ Yes □ No Depth: surface (in.) Saturation Present? ■ Yes ■ No Depth: 0 (in.)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Glynwood clay loam, 6-12% slopes, eroded

Remarks:

Map Unit Name:

SOILS

Profile Description (De	scribe to the death needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains: Location: PL=Pore Lining, M=Matrix)

Common to the depart needed to determine the indicator of common and indicators, (1790. O determined in the indicators, (1790. O determ											
Тор	Bottom			Matrix			Redo	Texture			
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Туре	Location	(e.g. clay, sand, loam)
0	7		10YR	4/2	93	7.5YR	5/8	7	С	PL	clay loam
7	18	-	10YR	3/2	90	7.5YR	5/8	10	С	M	clay loam
		-					1		1		
		-					-		-		
							-				
		-					1		1		
		-					-		-		
									-		

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

- A1- Histosol
- A2 Histic Epipedon
- A3 Black Histic
- A4 Hydrogen Sulfide
- A5 Stratified Layers
- A10 2 cm Muck
- A11 Depleted Below Dark Surface A12 - Thick Dark Surface
- S3 5 cm Mucky Peat or Peat
- S1 Sandy Muck Mineral
- F3 Depleted Matrix
- S6 Stripped Matrix F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix

S5 - Sandy Redox

S4 - Sandy Gleyed Matrix

- F6 Redox Dark Surface
- F7 Depleted Dark Surface
- F8 Redox Depressions
- 1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

" Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**

Remarks:

Restrictive Layer



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 7 Sample Point: SP20 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Carya laciniosa 35 **FACW FACW** Number of Dominant Species that are OBL, FACW, or FAC: ____4 ___(A) 2. 20 Υ Ulmus americana 3. Quercus palustris 45 FACW 4. Total Number of Dominant Species Across All Strata: 4 (B) 5 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 6. --7. 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 100 0 FACW spp. x 2 = FAC spp. 0 x 3 = Sapling/Shrub Stratum (Plot size: 15 ft radius) x 4 = FACU spp. 0 Ulmus americana 20 **FACW** UPL spp. x 5= 2. 3. 0 __(A) Total 4. Prevalence Index = B/A = 5. 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation __ --Yes No 10. Yes No Dominance Test is > 50% --Total Cover = 20 Yes No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) No Problem Hydrophytic Vegetation (Explain) * Yes 1. * Indicators of hydric soil and wetland hydrology must be 2 present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 0 Woody Vine Stratum (Plot size: 30 ft radius) 1 Hydrophytic Vegetation Present • Yes • No 3. 4. 5. Total Cover = 0 Remarks: Lack of Herb layer

Additional Remarks:									



Project/Site:	Northern C	olumbus Loop - Pr	eferred R	Route			Stantec Project #:	193707055		Date:	07/09/20	
Applicant:	Columbia C	Gas of Ohio					•			County:	Union	
Investigator #1:	Angela Sjo	llema		Investi	gator #2:	Julie Sla	ater			State:	Ohio	
Soil Unit:	We - Wetze	el silty clay loam			-	NW	/I/WWI Classification:	N/A		Wetland ID:	Wetland 8a	
Landform:	Terrace			Loc	al Relief:	Linear				Sample Point:	SP20a	
Slope (%):	0	Latitude	:40.1602	96 Lo	ongitude:	-83.198	76	Datum:	N/A	Community ID:	PEM	
Are climatic/hyd	drologic cond	ditions on the site t	ypical for	this time	of year?	(If no, expl	ain in remarks)	X Yes	No	Section:	N/A	
Are Vegetation	, Soil ,	or Hydrology sig	gnificantly	v disturb	ed?		Are normal circumsta	ances presen	t?	Township:	N/A	
Are Vegetation		, o	aturally pr	•			X Yes	No		Range:	N/A	
SUMMARY OF		7 37	, ,				12.2			9		
Hydrophytic Ve		sent?		X Yes	No			Hydric Soils	Present?		X Yes	No
Wetland Hydrol				X Yes						Within A Wetla		No
Remarks:	logy i rocom	•		X 100	110			io mio camp	omig i omic	· · · · · · · · · · · · · · · · · · ·	. A 100	110
HYDROLOGY Wetland Hydr Primary	A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water M B2 - Sedimer	ater Table on larks nt Deposits	if indicate		B9 - Wate B13 - Aqu B14 - Tru C1 - Hydr C3 - Oxid	er-Stained latic Fauna e Aquatic ogen Sulfi ized Rhizo	a Plants		Secondary:	B6 - Surface Soil B10 - Drainage F B16 - Moss Trim C2 - Dry-Season C8 - Crayfish Bul	Patterns Lines Water Table rrows	adery.
	B8 - Sparsely	at or Crust				ent Iron Re Muck Sur ge or Well	eduction in Tilled Soils face Data			D1 - Saturation V D1 - Stunted or S D2 - Geomorphic D5 - FAC-Neutra	Position	agery
Field Observat Surface Water Water Table Pr Saturation Pres	Present? [esent? [ent? [Yes X No Yes X No Yes X No	Depth: Depth: Depth:	 	(in.) (in.) (in.)			Wetland Hy	drology P	resent? X	Yes No	
Describe Record	led Data (str	eam gauge, monitor	ing well, a	aerial pho	tos, previ	ous inspe	ections), if available:	N/A				
Remarks:												
SOILS												
SOILS Map Unit Name		We - Wetzel silty o	clay loam			S	eries Drainage Class:	Poorly draine	ed			
SOILS Map Unit Name Taxonomy (Sub	group):	<u> </u>										
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group):	<u> </u>			ce of indicators.		eries Drainage Class:			Location: PL=Pore Lining,		
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group):	<u> </u>	e indicator or cor	nfirm the absend			centration, D=Depletion, RM=Reduced		pated Sand Grains;		Texture	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to	<u> </u>	e indicator or cor	Matrix (Moist)	%	(Type: C=Cor	centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Coedox Features	pated Sand Grains;	Location: PL=Pore Lining,		
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to	the depth needed to document the	e indicator or cor	nfirm the absend		(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/4	Matrix, CS=Covered/Co edox Features % 4	oated Sand Grains; Type C	Location M	Texture	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 4	the depth needed to document the	color 10YR	Matrix (Moist) 4/2	% 93 	7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/4 4/4	Matrix, CS=Covered/Co edox Features % 4 3	Type C C	Location M PL	Texture (e.g. clay, san	d, loam) ⁄
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to: Bottom Depth 4	the depth needed to document the Horizon	color 10YR	Matrix (Moist) 4/2	% 93	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/4	Matrix, CS=Covered/Co edox Features % 4	oated Sand Grains; Type C	Location M	Texture (e.g. clay, san silty clay	d, loam) ⁄ ⁄
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 4	the depth needed to document the Horizon	color 10YR	Matrix (Moist) 4/2	% 93 	7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/4 4/4	Matrix, CS=Covered/Co edox Features % 4 3	Type C C	Location M PL	(e.g. clay, san silty clay silty clay	d, loam) ⁄ ⁄
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Depth 4 18	Horizon	Color 10YR 10YR	Matrix (Moist) 4/2 4/2	% 93 92	7.5YR 7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/4 4/4 4/4	Matrix, CS=Covered/Co edox Features % 4 3 8	Type C C C	Location M PL M	Texture (e.g. clay, san silty clay silty clay	d, loam) ⁄ ⁄
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	group): tion (Describe to Bottom Depth 4 18	Horizon	Color 10YR 10YR	Matrix (Moist) 4/2 4/2	% 93 92 	7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/4 4/4 4/4	Matrix, CS=Covered/Co edox Features % 4 3 8	Type C C C	Location M PL M	Texture (e.g. clay, san silty clay silty clay silty clay	d, loam) ⁄ ⁄
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	group): tion (Describe to Bottom Depth 4 18	Horizon	Color 10YR 10YR	Matrix (Moist) 4/2 4/2	% 93 92 	7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/4 4/4 4/4	Matrix, CS=Covered/Cc dox Features % 4 3 8	Type C C C	Location M PL M	Texture (e.g. clay, san silty clay silty clay silty clay	d, loam) ⁄ ⁄
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	group): tion (Describe to Depth 4 18	Horizon	Color 10YR 10YR	Matrix (Moist) 4/2 4/2	% 93 92	7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/4 4/4 4/4	Matrix, CS=Covered/Cc dox Features % 4 3 8	Type C C C	Location M PL M	Texture (e.g. clay, san silty clay silty clay silty clay	d, loam) ⁄ ⁄
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	group): tion (Describe to Depth 4 18	Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 icators a	% 93 92 re not pre F1 - Loan F2 - Loan F2 - Loan	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/4 4/4 4/4): ::ineral Matrix c rfface Surface	Matrix, CS=Covered/Cc dox Features % 4 3 8 Indicator	Type C C C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location M PL M	Texture (e.g. clay, san silty clay silty clay silty clay	d, loam) y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	group): tion (Describe to Describe to Depth 4 18 18 19	Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 icators a	% 93 92	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/4 4/4 4/4): ::ineral Matrix c rfface Surface	Matrix, CS=Covered/Co dox Features % 4 3 8 Indicator Indicators of hyd disturb	Type C C C C s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Explain	Location M PL M	Texture (e.g. clay, san silty clay silty clay silty clay silty clay sface	d, loam) y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	group): tion (Describe to Describe to Depth 4 18 18 19	Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 icators a	% 93 92	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/4 4/4 4/4): ::ineral Matrix c rfface Surface	Matrix, CS=Covered/Cc dox Features % 4 3 8 Indicator	Type C C C C s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Explain	Location M PL M	Texture (e.g. clay, san silty clay silty clay silty clay	d, loam) y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	group): tion (Describe to Describe to Depth 4 18 18 19	Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 icators a	% 93 92	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/4 4/4 4/4): ::ineral Matrix c rfface Surface	Matrix, CS=Covered/Co edox Features % 4 3 8 Indicator Indicators of hyd disturb	Type C C C C s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Explain	Location M PL M	Texture (e.g. clay, san silty clay silty clay silty clay silty clay sface	d, loam) y y y y



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 8a Sample Point: SP20a

VEGETATION	(Species identified in all uppercase are non-na lot size: 10 meter radius)	itive spec	ies.)		
Tiee Stratum (F	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.		70 COVEL			Dominiance 103t Worksheet
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					Number of Bornmant openies that are OBE, 1 NOW, of 1 No(A)
4.					Total Number of Dominant Species Across All Strata: 1 (B)
5.					Total Number of Berlinant epocles Notes All Strata.
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					(12)
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	0			FACW spp. 0 x 2 = 0
					FAC spp. 0 x 3 = 0
Sapling/Shrub St	ratum (Plot size: 5 meter radius)				FACU spp. 0 x 4 = 0
1.					UPL spp. 0 x 5 = 0
2.					
3.					Total <u> </u>
4.			-		
5.					Prevalence Index = B/A = N/A
6.					
7.					Hisduanh, die Verstetien Indicateur.
8. 9.					Hydrophytic Vegetation Indicators:
10.	 				X Yes No Rapid Test for Hydrophytic Vegetation X Yes No Dominance Test is > 50%
10.	Total Cover =	0			Yes No Prevalence Index is ≤ 3.0 *
	Total Gover –	U			Yes No Morphological Adaptations (Explain) *
Herb Stratum (D	ot size: 2 meter radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	PHALARIS ARUNDINACEA	100	Υ	FACW	Tes No Flobletti Hydrophytic Vegetation (Explain)
2.					* Indicators of hydric soil and wetland hydrology must be
3.					present, unless disturbed or problematic.
4.					Definitions of Vegetation Strata:
5.					Zommiono di regonnon on ana
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter
7.					at breast height (DBH), regardless of height.
8.					
9.				-	Sapling/Shrub - Woody plants less than 3 in. DBH and greater
10.					than 3.28 ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of
13.					size, and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
,	tum (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present X Yes No
4.				-	
5.	Total Cover =	0			
Remarks:	Total Cover -	U			
Nemarks.					
Additional D	mauka				
Additional Re	marks:				



Project/Site: Applicant:		olumbus Loop - Pre	eferred F	Route			Stantec Project #:	193707055		Date:	07/09/20
, τρριισατίτ.	Columbia C	Gas of Ohio					•			County:	Union
Investigator #1:	Angela Sjo	llema		Investi	igator #2:	Julie Sl	ater			State:	Ohio
Soil Unit:		el silty clay loam					/I/WWI Classification:	N/A		Wetland ID:	Wetland 8a
Landform:	Terrace			Loc	al Relief:	Linear				Sample Point:	SP20b
Slope (%):	0	Latitude	:40.1602	55 L	ongitude:	-83.198	751	Datum:	N/A	Community ID:	Upland
Are climatic/hyd	drologic cond	ditions on the site ty	pical for	this time	of year?	(If no, expl	ain in remarks)	X Yes	No	Section:	N/A
Are Vegetation			gnificantly				Are normal circumsta	ances presen	t?	Township:	N/A
Are Vegetation	= · = ·	, 0,	iturally pr	,			X Yes	No .		Range:	N/A
SUMMARY OF										·g - ·	
Hydrophytic Ve		sent?		Yes	X No	1		Hydric Soils	Present?		Yes X No
Wetland Hydrol				Yes						Within A Wetlar	
Remarks:	logy i resem	.:		103	_ X 110			is This Carri	Jillig i Ollic	vviuiiii A vvcuai	Id: No
Primary.	Wetland Hydrology Indicators (Check here if indicators are not present X): Primary:										
Surface Water Water Table Pr Saturation Pres	esent? sent?	Yes X No Yes X No Yes X No	Depth: Depth: Depth:		(in.) (in.) (in.)			Wetland Hy	drology Pı	resent?	Yes X No
	led Data (str	eam gauge, monitor	ing well, a	aerial pho	otos, previ	ious inspe	ections), if available:	N/A			
Remarks:											
SOILS Map Unit Name		We - Wetzel silty o	clay loam			S	eries Drainage Class:	Poorly draine	ed		
Map Unit Name Taxonomy (Sub	group):										
Map Unit Name Taxonomy (Sub	group):				ce of indicators.		eries Drainage Class:			Location: PL=Pore Lining, N	и=Matrix)
Map Unit Name Taxonomy (Sub	group):						ncentration, D=Depletion, RM=Reduced		pated Sand Grains;	Location: PL=Pore Lining, N	Texture
Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to		e indicator or cor	nfirm the absen			ncentration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;	Location: PL=Pore Lining, N	Texture
Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to Bottom	the depth needed to document the	e indicator or cor	nfirm the absen			ncentration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;		Texture
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to Bottom Depth	the depth needed to document the	e indicator or cor	Matrix (Moist)	%) (Type: C=Col	ncentration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Co	oated Sand Grains;	Location	Texture (e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to 1) Bottom Depth 6	the depth needed to document the Horizon	color 10YR	Matrix (Moist) 3/2	% 100) (Type: C=Coi	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Codox Features	Type	Location 	Texture (e.g. clay, sand, loam) silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to) Bottom Depth 6 14	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 3/2 4/2	% 100 100) (Type: C=Cor	Color (Moist)	Matrix, CS=Covered/Cdox Features %	Type	Location 	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to Depth 6 14 20	Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 4/2 4/3	% 100 100 100) (Type: C=Coo	Color (Moist)	Matrix, CS=Covered/Cc	Type	Location 	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 14	group): tion (Describe to Bottom Depth 6 14 20	Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 4/2 4/3	% 100 100 100) (Type: C=Col	Color (Moist)	Matrix, CS=Covered/Cc dox Features %	Type	Location	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 14	group): tion (Describe to Bottom Depth 6 14 20	Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 4/2 4/3	% 100 100 100) (Type: C=Cor	Color (Moist)	Matrix, CS=Covered/Cr dox Features %	Type		Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 14	group): tion (Describe to Bottom Depth 6 14 20	Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 4/2 4/3	% 100 100 100		Color (Moist)	Matrix, CS=Covered/Cr dox Features %	Type		Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 14	group): tion (Describe to Describe to Depth 6 14 20 Soil Field Ir A1- Histosol A2 - Histic Ep A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplet A12 - Thick E S1 - Sandy M	Horizon	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/2 4/2 4/3	% 100 100 100 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - Depli F6 - Redc		Color (Moist)	Matrix, CS=Covered/Cr dox Features % Indicator ¹ Indicators of hyd	Type s for Proble A16 - Coast S7 - Dark S F12 - Iron-M TF12 - Very Other (Expla	Location matic Soils ¹ Prairie Redox urface langanese Masses Shallow Dark Surlain in Remarks)	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 14 NRCS Hydric	group): tion (Describe to Describe to Depth 6 14 20 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick E S1 - Sandy M S3 - 5 cm Mt S4 - Sandy G S5 - Sandy R	Horizon	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/2 4/2 4/3 icators a	% 100 100 100	or (Type: C=Cod	Color (Moist)	Matrix, CS=Covered/Cr dox Features % Indicator 1 Indicators of hyddisturb	Type s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location matic Soils ¹ Prairie Redox urface langanese Masses Shallow Dark Surlain in Remarks)	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay loam sface
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 14 NRCS Hydric	group): tion (Describe to Describe to Depth 6 14 20 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick E S1 - Sandy M S3 - 5 cm Mt S4 - Sandy G S5 - Sandy R	Horizon	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/2 4/2 4/3	% 100 100 100 re not prv S6 - Strip F1 - Loan F2 - Loan F3 - Depli F6 - Redc	or (Type: C=Cod	Color (Moist)	Matrix, CS=Covered/Cr dox Features % Indicator ¹ Indicators of hyd	Type s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location matic Soils ¹ Prairie Redox urface langanese Masses Shallow Dark Surlain in Remarks)	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay loam



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 8a Sample Point: SP20b

	(Species identified in all uppercase are non-na	itive spec	cies.)		
ree Stratum (F	Plot size: 10 meter radius)	0/ 0-	Decerie 1	Ind Ot :	Dominance Test Workshoot
4	<u>Species Name</u>		<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1.					N 1 (D 1 (0) (1) (0) (1) (0)
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata:(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	0			FACW spp. 2 x 2 = 4
					FAC spp. 66 x 3 = 198
Sapling/Shrub S	tratum (Plot size: 5 meter radius)				FACU spp. 32 x 4 = 128
1.					UPL spp. 0 x 5 = 0
2.					
3.					Total 100 (A) 330 (B)
4.					 ··
5.					Prevalence Index = B/A = 3.300
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes X No Rapid Test for Hydrophytic Vegetation
10.					Yes X No Dominance Test is > 50%
	Total Cover =	0			Yes X No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
Herh Stratum (F	Plot size: 2 meter radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Solidago canadensis	30	Υ	FACU	Toblem Hydrophytic vegetation (Explain)
2.	CIRSIUM ARVENSE	2	N	FACU	* Indicators of hydric soil and wetland hydrology must be
3.		2			present, unless disturbed or problematic.
	Agrimonia parviflora		N Y	FACW	Definitions of Variation Strate:
4. 5.	POA PRATENSIS	66		FAC	Definitions of Vegetation Strata:
					T W. J. J. O. (70.)
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.					at breast fielght (DDH), regardless of fielght.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater
10.					than 3.28 ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of
13.					size, and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
Woody Vine Stra	atum (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present Yes X No
4.					, , , , , , , , , , , , , , , , , , ,
5.					
<u> </u>	Total Cover =	0			
Remarks:					
. tomanto.					
Additional R	emarks:				



	Northern C	olumbus Loop - Pr	eferred F	Route			Stantec Project #:	193707055		Date:	07/09/20	
Applicant:	Columbia C	Gas of Ohio					•			County:	Union	
Investigator #1:	Angela Sjo	llema		Investi	gator #2:	Julie Sla	ater			State:	Ohio	
Soil Unit:	Ble1B1 - Blo	ount silt loam, end n	noraine, 2	-4% slope	es	NW	I/WWI Classification:	N/A		Wetland ID:	Wetland 8b	
Landform:	Depression	1		Loc	al Relief:	Concav	Э			Sample Point:	SP20c	
Slope (%):	0		:40.1603		ongitude:			Datum:	N/A	Community ID:	PEM	
Are climatic/hyd	drologic cond	ditions on the site t	ypical for	this time	of year?	(If no, expl	ain in remarks)	X Yes	No	Section:	N/A	
Are Vegetation	, Soil ,	or Hydrology si	gnificantly	y disturbe	ed?		Are normal circumsta	ances presen	t?	Township:	N/A	
Are Vegetation	, Soil ,	or Hydrology na	aturally pr	oblemati	ic?		X Yes	No		Range:	N/A	
SUMMARY OF	FINDINGS											
Hydrophytic Ve	getation Pre	sent?		X Yes	No			Hydric Soils	Present?		X Yes	No
Wetland Hydro	~			X Yes	No			Is This Sam	oling Point	Within A Wetla	nd? X Yes	No
Remarks:	- 37								<u> </u>			
Field Observat Surface Water Water Table Pr Saturation Pres	A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water N B2 - Sedimer B3 - Drift Dep B5 - Iron Dep B7 - Inundatio B8 - Sparsely tions: Present? esent?	ater Table on larks on to Deposits cosits at or Crust cosits on Visible on Aerial In y Vegetated Concave Yes X No Yes X No Yes X No	nagery Surface Depth: Depth: Depth:	 	B9 - Wate B13 - Aqu B14 - Tru C1 - Hydr C3 - Oxid C4 - Pres C6 - Rece C7 - Thin D9 - Guaq Other (Ex	er-Stained latic Faunie e Aquatic ogen Sulfi ized Rhizc ence of Re ent Iron Re Muck Surr ge or Well plain in Re	Plants de Odor spheres on Living Roots aduced Iron duction in Tilled Soils face Data emarks)	Wetland Hy		D1 - Stunted or S D2 - Geomorphic D5 - FAC-Neutra	Patterns Lines Water Table Trows Visible on Aerial Ima Stressed Plants Position	agery
Describe Record	led Data (str	eam dauge monitor	ring well a	erial nho	tos previ	nus insne	ctions), if available:	N/A				
Remarks:	led Data (Sti	eam gauge, monitor	iling well, a	aciiai piio	itos, previ	ous mape	ctions), ii available.	IV/A				
ixciliaixs.												
SOILS												
SOILS		Diad Dd - Diagratic	lt la ava		in a 2 40/	alamad	ovice Dusinesse Classe	Companyhatin		a d		
Map Unit Name		Ble1B1 - Blount si	lt loam, e	nd morai	ine, 2-4%	slopesS	eries Drainage Class:	Somewhat p	oorly drain	ed		
Map Unit Name Taxonomy (Sub	group):				•			•				
Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to			nfirm the absen	•		centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;			
Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to Bottom	the depth needed to document th	e indicator or cor	nfirm the absenc	ce of indicators.)		centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;	Location: PL=Pore Lining,	Texture	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to 1) Bottom Depth		e indicator or cor	Matrix (Moist)	ce of indicators.	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Coedox Features	pated Sand Grains;	Location: PL=Pore Lining,		
Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to Bottom	the depth needed to document th	e indicator or cor	nfirm the absenc	ce of indicators.)	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6	Matrix, CS=Covered/Co edox Features % 3	oated Sand Grains; Type C	Location: PL=Pore Lining, Location M	Texture	d, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to 1) Bottom Depth	the depth needed to document th	e indicator or cor	Matrix (Moist)	ce of indicators.	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cocedox Features % 3 2	Type C C	Location: PL=Pore Lining,	Texture (e.g. clay, sand	d, loam) oam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to: Bottom Depth 8	the depth needed to document th Horizon	e indicator or cor Color 10YR	Matrix (Moist) 3/2	% 95	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6	Matrix, CS=Covered/Co edox Features % 3	oated Sand Grains; Type C	Location: PL=Pore Lining, Location M	(e.g. clay, sand	d, loam) oam oam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to) Bottom Depth 8	the depth needed to document th Horizon	e indicator or cor Color 10YR	Matrix (Moist) 3/2	% 95	7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6	Matrix, CS=Covered/Cocedox Features % 3 2	Type C C	Location: PL=Pore Lining, Location M PL	(e.g. clay, sand silty clay lo	d, loam) oam oam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 8 18	the depth needed to document th Horizon	Color 10YR 10YR	Matrix (Moist) 3/2 3/2	% 95 97	7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/6 4/6	Matrix, CS=Covered/Cc dox Features % 3 2 3	Type C C C	Location: PL=Pore Lining, Location M PL M	(e.g. clay, sand silty clay lo	d, loam) oam oam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 8 18	Horizon	Color 10YR 10YR	Matrix (Moist) 3/2 3/2	% 95 97	7.5YR 7.5YR 7.5YR 7.5YR	Centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/6	Matrix, CS=Covered/Cudox Features % 3 2 3	Type C C C	Location: PL=Pore Lining. Location M PL M	Texture (e.g. clay, sand silty clay lo silty clay lo	d, loam) oam oam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 8 18	Horizon	Color 10YR 10YR	Matrix (Moist) 3/2 3/2	% 95 97	7.5YR 7.5YR 7.5YR 7.5YR	Centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/6	Matrix, CS=Covered/Cr edox Features % 3 2 3	Type C C C	Location: PL=Pore Lining. Location M PL M	Texture (e.g. clay, sand silty clay lo silty clay lo silty clay lo	d, loam) oam oam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 18	the depth needed to document th Horizon	Color 10YR 10YR	Matrix (Moist) 3/2 3/2	9/6 95 97	7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/6	Matrix, CS=Covered/Cr edox Features % 3 2 3 	Type C C C	Location: PL=Pore Lining. Location M PL M	Texture (e.g. clay, sand silty clay lo silty clay lo silty clay lo	d, loam) oam oam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Bottom Depth 8 18	Horizon	Color 10YR 10YR	Matrix (Moist) 3/2 3/2	% 95 97 re not pre	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR	Color (Moist) 4/6 4/6 4/6	Matrix, CS=Covered/Cr. cdox Features % 3 2 3	Type C C C	Location: PL=Pore Lining, Location M PL M	Texture (e.g. clay, sand silty clay lo silty clay lo	d, loam) oam oam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): tion (Describe to Describe to Depth 8 18 18 19 18 19 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Horizon	Color 10YR 10YR	Matrix (Moist) 3/2 3/2 icators a	96 95 97 	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/6): ineral Matrix (rface Surface	Matrix, CS=Covered/Cr. cdox Features % 3 2 3 Indicator	Type C C C s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining. Location M PL M	Texture (e.g. clay, sand silty clay lo silty clay lo silty clay lo	d, loam) pam pam pam pam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	group): tion (Describe to Describe to Depth 8 18 18 19 18 19 18 19 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Horizon	Color 10YR 10YR	Matrix (Moist) 3/2 3/2 icators a	96 95 97 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Red F7 - Deple	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/6): ineral Matrix (rface Surface	Matrix, CS=Covered/Cr. cdox Features % 3 2 3 Indicator	Type C C C s for Proble S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining. Location M PL M	Texture (e.g. clay, sand silty clay lo silty clay lo silty clay lo	d, loam) pam pam pam pam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	group): tion (Describe to Describe to Depth 8 18 18 19 18 19 18 19 18 18 19 18 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Horizon	Color 10YR 10YR	Matrix (Moist) 3/2 3/2 icators a	% 95 97	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/6): ineral Matrix (rface Surface	Matrix, CS=Covered/Cr. cdox Features % 3 2 3 Indicator	Type C C C C s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Explain	Location: PL=Pore Lining. Location M PL M	Texture (e.g. clay, sand silty clay lo silty clay lo silty clay lo	d, loam) pam pam pam pam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	group): tion (Describe to Describe to Depth 8 18 18 19 18 19 18 19 18 18 19 18 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Horizon	Color 10YR 10YR	Matrix (Moist) 3/2 3/2 icators a	% 95 97	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/6): ineral Matrix (rface Surface	Matrix, CS=Covered/Cr. edox Features % 3 2 3 Indicator Indicators of hyddisturb	Type C C C C s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Explain	Location: PL=Pore Lining. Location M PL M	Texture (e.g. clay, sand silty clay lo silty clay lo silty clay lo silty clay lo	d, loam) pam pam pam pam



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 8b Sample Point: SP20c

VEGETATION		ative spec	ies.)		
Tree Stratum (Plot size: 10 meter radius)				Deminance Test Weylish est
4	<u>Species Name</u>	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1. 2.					Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.					Number of Dominant Species that are ODE, 1 ACW, of 1 AC(A)
4.					Total Number of Dominant Species Across All Strata: 1 (B)
5.					(-/
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					 · ·
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	0			FACW spp. 0 x 2 = 0
Cli/Chh (Charter (Dist size Forester and inc)				FAC spp. 0 x 3 = 0 FACU spp. 0 x 4 = 0
Sapiing/Shrub S	Stratum (Plot size: 5 meter radius)				FACU spp. 0 x 4 = 0 UPL spp. 0 x 5 = 0
2.					Δι Ε δρβ
3.					Total <mark>0</mark> (A) <mark>0</mark> (B)
4.					· <u>· · · · · · · · · · · · · · · · </u>
5.					Prevalence Index = B/A = N/A
6.					
7.			-		
8.					Hydrophytic Vegetation Indicators:
9.					🕱 Yes 🦳 No Rapid Test for Hydrophytic Vegetation
10.					X Yes No Dominance Test is > 50%
	Total Cover =	0			Yes No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
,	Plot size: 2 meter radius)	0.5		001	Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Juncus effusus	95	Y	OBL	* Indicators of hydric soil and wetland hydrology must be
2. 3.	Carex stipata	5	N	OBL 	present, unless disturbed or problematic.
3. 4.					Definitions of Vegetation Strata:
5.					Deminitions of Vegetation Strata.
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter
7.					at breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater
10.					than 3.28 ft. tall.
11.			-		
12.					Herb - All herbaceous (non-woody) plants, regardless of
13.					size, and woody plants less than 3.28 ft. tall.
14.					
15.	 				Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
\\/\.\\\'					
Woody Vine Str	ratum (Plot size: 10 meter radius)				
2.					
3.					Hydrophytic Vegetation Present X Yes No
4.					Туттријит годинани година
5.	_				
	Total Cover =	0			
Remarks:		·	·	·	·
Additional R	Remarks:				



	Northcom	olumbus Loop - Pre	eferred R	Route			Stantec Project #:	193707055		Date:	07/09/20
Applicant:	Columbia C	Gas of Ohio					•			County:	Union
Investigator #1:	Angela Sjo	llema		Investi	igator #2:	Julie Sla	ater			State:	Ohio
Soil Unit:		ount silt loam, end	moraine				/I/WWI Classification:	N/A		Wetland ID:	Wetland 8b
Landform:	Backslope			Loc	al Relief:	Linear				Sample Point:	SP20d
Slope (%):	2	Latitude	:40.1604	06 L	ongitude:	-83.193	8	Datum:	N/A	Community ID:	Upland
Are climatic/hyd	drologic cond	ditions on the site ty	pical for	this time	of year?	(If no, expl	ain in remarks)	X Yes	No	Section:	N/A
Are Vegetation			nificantly				Are normal circumsta			Township:	N/A
Are Vegetation		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	turally pr	•			X Yes	No '		Range:	N/A
SUMMARY OF		or riyarology na	itarany pr	obioinat	10:		<u>K</u>			rungo.	14// (
Hydrophytic Ve		cont2		Yes	X No			Hydric Soils	Drocont?		X Yes No
										\A(:41-: A \A(-41	
Wetland Hydro Remarks:	logy Present	.?		Yes	X No			is This Sam	oling Point	Within A Wetlaı	nd? Yes X No
HYDROLOGY Wetland Hydr Primary Field Observat Surface Water	A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water N B2 - Sedimer B3 - Drift Dep B5 - Iron Dep B7 - Inundatio B8 - Sparsely	ater Table on larks at Deposits ossits at or Crust ossits on Visible on Aerial Im y Vegetated Concave	agery Surface		B9 - Wate B13 - Aqu B14 - Tru C1 - Hydr C3 - Oxid C4 - Pres C6 - Rece C7 - Thin D9 - Guaç Other (Ex	er-Stained latic Fauna e Aquatic ogen Sulfi ized Rhizo ence of Re ent Iron Re Muck Suri ge or Well	a Plants de Odor spheres on Living Roots educed Iron sduction in Tilled Soils face Data		Secondary:	D1 - Stunted or S D2 - Geomorphic D5 - FAC-Neutral	atterns Lines Water Table rows isible on Aerial Imagery tressed Plants Position Test
Water Table Pr Saturation Pres	esent? sent?	Yes X No Yes X No Yes X No	Depth: Depth: Depth:		(in.) (in.) (in.)			Wetland Hy	drology P	resent?	Yes X No
	led Data (str	eam gauge, monitor	ing well, a	aerial pho	otos, previ	ous inspe	ections), if available:	N/A			
Remarks:											
SOILS											
Map Unit Name		Ble1B1 - Blount sil	t loam, e	nd mora	ine, 2-4%	slopesS	eries Drainage Class:	Somewhat p	oorly drain	ed	
		Ble1B1 - Blount sil	t loam, e	nd mora	ine, 2-4%	slopesS	eries Drainage Class:	Somewhat p	oorly drain	ed	
Map Unit Name Taxonomy (Sub	group):		•				eries Drainage Class:	•			M=Matrix)
Map Unit Name Taxonomy (Sub Profile Descrip	group):		•		ce of indicators.)		centration, D=Depletion, RM=Reduced	•	pated Sand Grains;		ν=Matrix) Texture
Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to Bottom		e indicator or cor	nfirm the absen	ce of indicators.)	•	centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;		
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to 1) Bottom Depth	the depth needed to document the	e indicator or cor	Matrix (Moist)	ce of indicators.)	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cocons	pated Sand Grains;	Location: PL=Pore Lining, I	Texture (e.g. clay, sand, loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to 1) Bottom Depth 5	the depth needed to document the Horizon	Color 10YR	Matrix (Moist) 4/2	ce of indicators.	(Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6	Matrix, CS=Covered/Co dox Features % 10	oated Sand Grains; Type C	Location: PL=Pore Lining, I	Texture (e.g. clay, sand, loam silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5	group): tion (Describe to) Bottom Depth 5 14	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/2 4/3	ce of indicators.) % 90 90	7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6	Matrix, CS=Covered/Codox Features % 10 10	Type C C	Location: PL=Pore Lining, I Location M PL	Texture (e.g. clay, sand, loam silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Depth 5 14 18	the depth needed to document the Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/2 4/3 5/3	% 90 90 65	7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 5/8	Matrix, CS=Covered/Cc dox Features % 10 10 20	Type C C C	Location: PL=Pore Lining, I Location M PL M	Texture (e.g. clay, sand, loam silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 14	group): tion (Describe to Bottom Depth 5 14 18	the depth needed to document the Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/2 4/3 5/3	% 90 90 65	7.5YR 7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 5/8	Matrix, CS=Covered/Cr dox Features % 10 10 20	Type C C C	Location: PL=Pore Lining, I Location M PL M	Texture (e.g. clay, sand, loam silty clay silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 14	group): tion (Describe to Bottom Depth 5 14 18	the depth needed to document the Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/2 4/3 5/3	% 90 90 65	7.5YR 7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 5/8	Matrix, CS=Covered/Cr dox Features % 10 10 20	Type C C C	Location: PL=Pore Lining, I Location M PL M	Texture (e.g. clay, sand, loam silty clay silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 14	group): tion (Describe to Bottom Depth 5 14 18	Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/2 4/3 5/3 	90 90 65	7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 5/8	Matrix, CS=Covered/Cr dox Features % 10 10 20 	Type C C C	Location: PL=Pore Lining, I Location M PL M	Texture (e.g. clay, sand, loam silty clay silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 14	group): tion (Describe to Bottom Depth 5 14 18	Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/2 4/3 5/3	% 90 90 65	7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 5/8	Matrix, CS=Covered/Cr. dox Features % 10 10 20	Type C C C	Location: PL=Pore Lining, I Location M PL M	Texture (e.g. clay, sand, loam silty clay silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 14	group): tion (Describe to Bottom Depth 5 14 18	Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/2 4/3 5/3	% 90 90 65	7.5YR 7.5YR 7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 5/8	Matrix, CS=Covered/Cr. dox Features % 10 10 20	Type C C C	Location: PL=Pore Lining, I Location M PL M	Texture (e.g. clay, sand, loam silty clay silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 14 NRCS Hydric	group): tion (Describe to Describe to Depth 5 14 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A1 - Deplete A12 - Thick E S1 - Sandy R S4 - Sandy R S5 - Sandy R	Horizon	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/3 5/3	% 90 90 65	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 5/8): ::ineral Matrix c rface Surface	Matrix, CS=Covered/Cr dox Features % 10 10 20 Indicator	Type C C C s for Proble S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, I Location M PL M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, sand, loam silty clay silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 14 NRCS Hydric	group): tion (Describe to Describe to Depth	Horizon	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/3 5/3 icators a	% 90 90 65 re not pre F1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple F8 - Redc	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 5/8): ::ineral Matrix c rface Surface	Matrix, CS=Covered/Cr dox Features % 10 10 20 Indicator	Type C C C C s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Explain	Location: PL=Pore Lining, I Location M PL M Matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, sand, loam silty clay silty clay silty clay silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 14 NRCS Hydric	group): tion (Describe to Describe to Depth	Horizon	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/3 5/3 icators a	% 90 90 65 re not pre F1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple F8 - Redc	7.5YR	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 5/8): ::ineral Matrix c rface Surface	Matrix, CS=Covered/Cr dox Features % 10 10 20 Indicator	Type C C C C s for Proble A16 - Coast F12 - Iron-N TF12 - Very Other (Explain	Location: PL=Pore Lining, I Location M PL M Matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur ain in Remarks)	Texture (e.g. clay, sand, loam silty clay silty clay silty clay silty clay



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 8b Sample Point: SP20d

VEGETATION	(Species identified in all uppercase are non-na	tive spec	ies.)		
Tree Stratum (PI	ot size: 10 meter radius)				
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.					· · · · · · · · · · · · · · · · · · ·
4.					Total Number of Dominant Species Across All Strata: 2 (B)
5.					·
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)
7.					(12)
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 3 x 1 = 3
10.	Total Cover =	0			FACW spp. 0 x 2 = 0
	. 5 (6)	ŭ			FAC spp. 65 x 3 = 195
Sapling/Shrub Str	ratum (Plot size: 5 meter radius)				FACU spp. 32 x 4 = 128
1.					UPL spp. 0 x 5 = 0
2.					. — — — — — — — — — — — — — — — — — — —
3.					Total 100 (A) 326 (B)
4.					10tal 100 (1) <u>020 (</u> D)
5.					Prevalence Index = B/A = 3.260
6.					1 TOYAIGHOC HINGS - D/A - 3.200
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes X No Rapid Test for Hydrophytic Vegetation
10.					Yes X No Dominance Test is > 50%
10.	Total Cover =	0			
	Total Covel –	U			
					Yes No Morphological Adaptations (Explain) *
	ot size: 2 meter radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	POA PRATENSIS	65	Y	FAC	* Indicators of hydric soil and wetland hydrology must be
2.	DIPSACUS FULLONUM	10	N	FACU	present, unless disturbed or problematic.
3.	Carex frankii	3	N	OBL	·
4.	LONICERA MORROWII	2	N	FACU	Definitions of Vegetation Strata:
5.	Solidago canadensis	20	Υ	FACU	
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter
7.					at breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater
10.					than 3.28 ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of
13.					size, and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
Woody Vine Strat	tum (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present X Yes No
4.					
5.					
<u> </u>	Total Cover =	0			
Remarks:	10.01.00001				
rtemants.					
Additional Re	marks:				



Project/Site:	Northern C	olumbus Loop - Pr	eferred R	Route			Stantec Project #:	193707055		Date:	07/09/20	
Applicant:	Columbia C	Gas of Ohio					•			County:	Union	
Investigator #1:	Angela Sjol	llema		Investi	gator #2:	Julie Sla	nter			State:	Ohio	
Soil Unit:	Ble1B1 - Blo	ount silt loam, end m	noraine, 2-	-4% slope	es	NW	I/WWI Classification:	N/A		Wetland ID:	Wetland 8c	
Landform:	Terrace			Loc	al Relief:	Concav	e			Sample Point:	SP20e	
Slope (%):	0		:40.1602		ongitude:			Datum:	_	Community ID:	PEM	
		ditions on the site t				(If no, expla	· · · · · · · · · · · · · · · · · · ·	X Yes	No	Section:	N/A	
Are Vegetation		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	gnificantly	•			Are normal circumsta		ť?	Township:	N/A	
Are Vegetation		or Hydrology na	turally pr	oblemati	c?		χ Yes	No		Range:	N/A	
SUMMARY OF												
Hydrophytic Ve				X Yes				Hydric Soils			X Yes	No
Wetland Hydrol	logy Present	?		X Yes	No			Is This Sam	pling Point	Within A Wetla	nd? X Yes	No
Remarks: HYDROLOGY Wetland Hydr	ology Indica	ators (Check here	if indicate	ors are n	ot preser	nt :						
<u>Primary</u> :	-			_					Secondary:			
_	A1 - Surface				B9 - Wate					B6 - Surface Soil		
	A2 - High Wa A3 - Saturation			<u> </u>	B13 - Aqu B14 - True					B10 - Drainage P B16 - Moss Trim		
	B1 - Water M				C1 - Hydr					C2 - Dry-Season		
	B2 - Sedimer	nt Deposits		X			spheres on Living Roots			C8 - Crayfish Bur	rows	
	B3 - Drift Dep						educed Iron				isible on Aerial Im	agery
	B4 - Algal Ma B5 - Iron Dep				Co - Rece		duction in Tilled Soils			D1 - Stunted or S D2 - Geomorphic		
		on Visible on Aerial Im	agery		D9 - Guag				X	D5 - FAC-Neutra		
	B8 - Sparsely	Vegetated Concave	Surface		Other (Ex	plain in Re	marks)					
Field Observat	tions:											
Surface Water	Present?	Yes X No	Depth:		(in.)			Wetland Hy	drology P	resent?	Yes No	
Water Table Pr		Yes X No	Depth:		(in.)			Wedana my	urology i	COCIIC: X	105 110	
Saturation Pres	ent?	Yes X No	Depth:		(in.)							
Describe Record	led Data (str	eam gauge, monitor	ing well, a	aerial pho	tos, previ	ous inspe	ctions), if available:	N/A				
Remarks:												
INCINAINS.												
ixemarks.												
SOILS												
SOILS Map Unit Name		Ble1B1 - Blount sil	t loam, e	nd morai	ne, 2-4%	slopesS	eries Drainage Class:	Somewhat p	oorly drain	ed		
SOILS Map Unit Name Taxonomy (Sub	group):		•		•							
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to t		•	nfirm the absen	•		centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	oated Sand Grains;			
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to the Bottom	the depth needed to document the	e indicator or cor	nfirm the absenc	ce of indicators.)		centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	oated Sand Grains;	Location: PL=Pore Lining, I	Textur	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to the Bottom Depth	the depth needed to document the	e indicator or cor	Matrix (Moist)	e of indicators.)	(Type: C=Con	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Coco	oated Sand Grains; Type	Location: PL=Pore Lining, I	Textur (e.g. clay, san	ıd, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to 1 Bottom Depth 6	the depth needed to document the Horizon	color 10YR	Matrix (Moist) 4/2	% 95	(Type: C=Con	centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6	Matrix, CS=Covered/Codox Features	oated Sand Grains; Type	Location: PL=Pore Lining, I	Textur (e.g. clay, san silty cla	ıd, loam) <mark>y</mark>
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to 1 Bottom Depth 6	the depth needed to document the Horizon	Color 10YR	Matrix (Moist) 4/2	% 95	(Type: C=Con	Centration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6	Matrix, CS=Covered/Codox Features % 3 2	oated Sand Grains; Type C C	Location: PL=Pore Lining, I Location PL M	Textur (e.g. clay, san silty cla	ıd, loam) <mark>y</mark> y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to 1 Bottom Depth 6 12	the depth needed to document the Horizon	Color 10YR 10YR	Matrix (Moist) 4/2 4/2	% 95 78	7.5YR 7.5YR 7.5YR	Color (Moist) 4/6 4/6 4/3	Matrix, CS=Covered/Cd dox Features % 3 2 20	Type C C C	Location: PL=Pore Lining, Location PL M M	Textur (e.g. clay, san silty cla silty cla silty cla	id, loam) y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to 1 Bottom Depth 6 12	Horizon	Color 10YR 10YR	Matrix (Moist) 4/2 4/2	% 95 78	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR	Color (Moist) 4/6 4/6 4/3 4/2	Matrix, CS=Covered/Cr dox Features % 3 2 20 2	oated Sand Grains; Type C C C C	Location: PL=Pore Lining, I Location PL M M	Textur (e.g. clay, san silty cla silty cla silty cla silty cla	id, loam) y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to the State of the	Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/2 4/2 4/6	% 95 78 77	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR	Color (Moist) 4/6 4/6 4/3 4/2 4/3	Matrix, CS=Covered/Cr dox Features % 3 2 20 20	Type C C C C	Location: PL=Pore Lining, I Location PL M M M	Textur (e.g. clay, san silty cla silty cla silty cla silty cla silty cla	nd, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to the following points) Bottom Depth 6 12 18	Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/2 4/2 4/6	% 95 78 77	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR 5YR	Color (Moist) 4/6 4/6 4/3 4/2 4/3 4/6	Matrix, CS=Covered/Cr dox Features % 3 2 20 20 20 3	Type C C C C C C	Location: PL=Pore Lining, I Location PL M M M M M	Textur (e.g. clay, san silty cla silty cla silty cla silty cla	nd, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12	group): tion (Describe to I Bottom Depth 6 12 18	Horizon	Color 10YR 10YR 10YR	Matrix (Moist) 4/2 4/2 4/6	% 95 78 77	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR 5YR	Color (Moist) 4/6 4/6 4/3 4/2 4/3 4/6	Matrix, CS=Covered/Cr dox Features % 3 2 20 2 20 3	oated Sand Grains; Type C C C C C C	Location: PL=Pore Lining, I Location PL M M M M M	Textur (e.g. clay, san silty cla	nd, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12	group): tion (Describe to I Bottom Depth 6 12 18	Horizon	Color 10YR -	Matrix (Moist) 4/2 4/2 4/6	% 95 78 77	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR 5YR	Color (Moist) 4/6 4/6 4/3 4/2 4/3 4/6	Matrix, CS=Covered/Cr. dox Features % 3 2 20 2 20 3	oated Sand Grains; Type C C C C C C	Location: PL=Pore Lining, I Location PL M M M M	Textur (e.g. clay, san silty cla silty cla silty cla silty cla silty cla	nd, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12	group): tion (Describe to I Bottom Depth 6 12 18 Soil Field Ir	Horizon	Color 10YR -	Matrix (Moist) 4/2 4/2 4/6	% 95 78 77 re not pre	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR 5YR	Color (Moist) 4/6 4/6 4/3 4/2 4/3 4/6):	Matrix, CS=Covered/Cr. dox Features % 3 2 20 2 20 3	oated Sand Grains: Type C C C C C cs for Proble	Location: PL=Pore Lining, I Location PL M M M M matic Soils ¹	Textur (e.g. clay, san silty cla	nd, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12	group): tion (Describe to I Bottom Depth 6 12 18	Horizon	Color 10YR -	Matrix (Moist) 4/2 4/2 4/6	% 95 78 77	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR 5YR esent cod Matrix	Color (Moist) 4/6 4/6 4/3 4/2 4/3 4/6):	Matrix, CS=Covered/Cr. dox Features % 3 2 20 2 20 3	oated Sand Grains: Type C C C C C cs for Proble	Location: PL=Pore Lining, I Location PL M M M M matic Soils Prairie Redox	Textur (e.g. clay, san silty cla	nd, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12	group): tion (Describe to I Bottom Depth 6 12 18 Soil Field Ir A1- Histosol A2 - Histo EA3 - Black Hi	Horizon	Color 10YR -	Matrix (Moist) 4/2 4/2 4/6 icators a	% 95 78 77 re not pre S6 - Stripl F1 - Loarn F2 - Loarn F2 - Loarn F2 - Loarn F2 - Loarn	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR 5YR esent oed Matrix by Muck My Gleyed	Contration, D=Depletion, RM=Reduced Re Color (Moist) 4/6 4/6 4/3 4/2 4/3 4/6): ineral Matrix	Matrix, CS=Covered/Cr. dox Features % 3 2 20 2 20 3	Type C C C C C C s for Proble A16 - Coast S 7 - Dark S F12 - Iron-N	Location: PL=Pore Lining, I Location PL M M M M matic Soils Prairie Redox urface langanese Masse:	Textur (e.g. clay, san silty cla	nd, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12	group): tion (Describe to I Bottom Depth 6 12 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge	Horizon	Color 10YR -	Matrix (Moist) 4/2 4/2 4/6 icators a	% 95 78 77 re not pre S6 - Stripp F1 - Loam F3 - Deple	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR 5YR esent — ped Matrix ny Muck M ny Gleyed eted Matrix	Color (Moist) 4/6 4/6 4/3 4/2 4/3 4/6): ineral Matrix	Matrix, CS=Covered/Cr. dox Features % 3 2 20 2 20 3	Type C C C C C C C C Tope C C C C Tope C C C Tope C C C Tope Tope	Location: PL=Pore Lining, I Location PL M M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur	Textur (e.g. clay, san silty cla	nd, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12	group): tion (Describe to I Bottom Depth 6 12 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified	Horizon	Color 10YR -	Matrix (Moist) 4/2 4/2 4/6 icators a	% 95 78 77 re not pre S6 - Stripl F1 - Loarn F3 - Deple F6 - Redo	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR 5YR esent ped Matrix y Muck M yy Gleyed teted Matrix x Dark Su	Color (Moist) 4/6 4/6 4/3 4/2 4/3 4/6): ineral Matrix	Matrix, CS=Covered/Cr. dox Features % 3 2 20 2 20 3	Type C C C C C C C C Tope C C C C Tope C C C Tope C C C Tope C Tope C C C Tope C Tope C Tope Tope	Location: PL=Pore Lining, I Location PL M M M M matic Soils Prairie Redox urface langanese Masse:	Textur (e.g. clay, san silty cla	nd, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12	group): tion (Describe to I Bottom Depth 6 12 18 Soil Field Ir A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A5 - Stratiffer A10 - 2 cm M	Horizon	Color 10YR 10YR 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/6 icators a	% 95 78 77 re not pre S6 - Stripp F1 - Loam F3 - Deple	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR 5YR 5YR esent ped Matrix by Muck M by Gleyed deted Matrix by Dark Su ceted Dark	Color (Moist) 4/6 4/6 4/6 4/3 4/2 4/3 4/6): ineral Matrix (frace Surface	Matrix, CS=Covered/Cr. dox Features % 3 2 20 2 20 3	Type C C C C C C C C Tope C C C C Tope C C C Tope C C C Tope C Tope C C C Tope C Tope C Tope Tope	Location: PL=Pore Lining, I Location PL M M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur	Textur (e.g. clay, san silty cla	nd, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12	group): tion (Describe to 1 Bottom Depth 6 12 18 Soil Field Ir A1 - Histosol A2 - Histo E4 A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplete A12 - Thick L	Horizon	Color 10YR 10YR 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/6 icators a	% 95 78 77 re not pre \$6 - Stripp F1 - Loan F2 - Loan F3 - Deple F6 - Red F7 - Deple	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR 5YR 5YR esent ped Matrix by Muck M by Gleyed deted Matrix by Dark Su ceted Dark	Color (Moist) 4/6 4/6 4/6 4/3 4/2 4/3 4/6): ineral Matrix (frace Surface	Matrix, CS=Covered/Cr. dox Features % 3 2 20 2 20 3	Type C C C C C C C C Tope C C C C Tope C C C Tope C C C Tope C Tope C C C Tope C Tope C Tope Tope	Location: PL=Pore Lining, I Location PL M M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur	Textur (e.g. clay, san silty cla	nd, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12	group): tion (Describe to I Bottom Depth 6 12 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick E S1 - Sandy M	Horizon	Color 10YR 10YR 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/6 icators a	% 95 78 77 re not pre \$6 - Stripp F1 - Loan F2 - Loan F3 - Deple F6 - Red F7 - Deple	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR 5YR 5YR esent ped Matrix by Muck M by Gleyed deted Matrix by Dark Su ceted Dark	Color (Moist) 4/6 4/6 4/6 4/3 4/2 4/3 4/6): ineral Matrix (frace Surface	Matrix, CS=Covered/Cr. dox Features % 3 2 20 2 20 3	Type C C C C C C C C Tope C C C C Tope C C C Tope C C C Tope C Tope C C C Tope C Tope C Tope Tope	Location: PL=Pore Lining, I Location PL M M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur	Textur (e.g. clay, san silty cla	nd, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12	group): tion (Describe to I Bottom Depth 6 12 18 Soil Field Ir A1- Histosol A2 - Histic Eq. A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick E A12 - Thick E S1 - Sandy M S3 - 5 cm ML	Horizon	Color 10YR 10YR 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/6 icators a	% 95 78 77 re not pre \$6 - Stripp F1 - Loan F2 - Loan F3 - Deple F6 - Red F7 - Deple	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR 5YR 5YR esent ped Matrix by Muck M by Gleyed deted Matrix by Dark Su ceted Dark	Color (Moist) 4/6 4/6 4/6 4/3 4/2 4/3 4/6): ineral Matrix (frace Surface	Matrix, CS=Covered/Cr. dox Features % 3 2 20 2 20 3	Type C C C C C C C C Tope C C C C Tope C C C Tope C C C Tope C Tope C C C Tope C Tope C Tope Tope	Location: PL=Pore Lining, I Location PL M M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur	Textur (e.g. clay, san silty cla	nd, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12	group): tion (Describe to the following land): Bottom Depth 6 12 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifica A10 - 2 cm M A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G	Horizon	Color 10YR 10YR 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/6 icators a	% 95 78 77 re not pre \$6 - Stripp F1 - Loan F2 - Loan F3 - Deple F6 - Red F7 - Deple	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR 5YR 5YR esent ped Matrix by Muck M by Gleyed deted Matrix by Dark Su ceted Dark	Color (Moist) 4/6 4/6 4/6 4/3 4/2 4/3 4/6): ineral Matrix (frace Surface	Matrix, CS=Covered/Cr. dox Features % 3 2 20 2 20 3	Type C C C C C C C C Tope C C C C Tope C C C Tope C C C Tope C Tope C C C Tope C Tope C Tope Tope	Location: PL=Pore Lining, I Location PL M M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur	Textur (e.g. clay, san silty cla	nd, loam) y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12	group): tion (Describe to I Bottom Depth 6 12 18 Soil Field Ir A1- Histosol A2 - Histic Eq. A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick E A12 - Thick E S1 - Sandy M S3 - 5 cm ML	Horizon	Color 10YR 10YR 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/6 icators a	% 95 78 77 re not pre \$6 - Stripp F1 - Loan F2 - Loan F3 - Deple F6 - Red F7 - Deple	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR 5YR 5YR esent ped Matrix by Muck M by Gleyed deted Matrix by Dark Su ceted Dark	Color (Moist) 4/6 4/6 4/6 4/3 4/2 4/3 4/6): ineral Matrix (frace Surface	Matrix, CS=Covered/Codox Features % 3 2 20 20 3 Indicator	Type C C C C C C C C T	Location: PL=Pore Lining, I Location PL M M M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur	Textur (e.g. clay, san silty cla	id, loam) y y y y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12 NRCS Hydric	group): tion (Describe to I Bottom Depth 6 12 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A10 - 2 cm M S3 - 5 cm Mt S4 - Sandy M S5 - Sandy R	Horizon	Color 10YR 10YR 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/6 icators a	% 95 78 77 re not pre \$6 - Strip F1 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR 5YR 5YR esent ped Matrix by Muck M by Gleyed deted Matrix by Dark Su ceted Dark	Color (Moist) 4/6 4/6 4/6 4/3 4/2 4/3 4/6): ineral Matrix (frace Surface	Matrix, CS=Covered/Codox Features % 3 2 20 20 2 Indicator 1 Indicators of hyddisturt.	Type C C C C C C C C S for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, I Location PL M M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur ain in Remarks)	Textur (e.g. clay, san silty cla solution	id, loam) y y y y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12	group): tion (Describe to I Bottom Depth 6 12 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A10 - 2 cm M S3 - 5 cm Mt S4 - Sandy M S5 - Sandy R	Horizon	Color 10YR 10YR 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/6 icators a	% 95 78 77 re not pre \$6 - Strip F1 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR 5YR 5YR esent ped Matrix by Muck M by Gleyed deted Matrix by Dark Su ceted Dark	Color (Moist) 4/6 4/6 4/6 4/3 4/2 4/3 4/6): ineral Matrix (frace Surface	Matrix, CS=Covered/Codox Features % 3 2 20 20 3 Indicator	Type C C C C C C C C S for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, I Location PL M M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur ain in Remarks)	Textur (e.g. clay, san silty cla	id, loam) y y y y y y y y y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12 NRCS Hydric	group): tion (Describe to I Bottom Depth 6 12 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A10 - 2 cm M S3 - 5 cm Mt S4 - Sandy M S5 - Sandy R	Horizon	Color 10YR 10YR 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 4/2 4/2 4/6 icators a	% 95 78 77 re not pre \$6 - Strip F1 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 10YR 5YR 5YR esent ped Matrix by Muck M by Gleyed deted Matrix by Dark Su ceted Dark	Color (Moist) 4/6 4/6 4/6 4/3 4/2 4/3 4/6): ineral Matrix (frace Surface	Matrix, CS=Covered/Codox Features % 3 2 20 20 2 Indicator 1 Indicators of hyddisturt.	Type C C C C C C C C S for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, I Location PL M M M M matic Soils Prairie Redox urface langanese Masse: Shallow Dark Sur ain in Remarks)	Textur (e.g. clay, san silty cla solution	id, loam) y y y y y y y y y



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 8c Sample Point: SP20e

	(Species identified in all uppercase are non-na lot size: 10 meter radius)	ative spec	cies.)		
Tree Stratum (P	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.	<u></u>	76 COVEL	DOMINIANI.	IIIU.Status	Dominance rest Worksheet
2.					Number of Dominant Species that are OBL, FACW, or FAC:1(A)
3.					Number of Bolimant openies that are OBE, 1 AOW, of 1 AO(A)
4.					Total Number of Dominant Species Across All Strata: 1 (B)
5.					(b)
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					(42)
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	0			FACW spp. $0 \times 2 = 0$
					FAC spp. 0 x 3 = 0
Sapling/Shrub St	ratum (Plot size: 5 meter radius)				FACU spp. 0 x 4 = 0
1.				-	UPL spp. 0 x 5 = 0
2.					
3.					Total <u> </u>
4.					
5.					Prevalence Index = B/A = N/A
6.					
7.					Healmanh Ata Wanadatan Indiadana
8. 9.					Hydrophytic Vegetation Indicators:
10.					Yes X No Rapid Test for Hydrophytic Vegetation X Yes No Dominance Test is > 50%
10.	 Total Cover =	0			X Yes No Dominance Test is > 50% Yes No Prevalence Index is ≤ 3.0 *
	Total Cover =	U			
Horb Stratum /D	lot size: 2 meter radius)				Yes No Morphological Adaptations (Explain) * Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Eleocharis obtusa	70	Y	OBL	Tes No Flobletti Hydrophytic Vegetation (Explain)
2.	Juncus tenuis	10	N	FAC	* Indicators of hydric soil and wetland hydrology must be
3.	TYPHA ANGUSTIFOLIA	10	N	OBL	present, unless disturbed or problematic.
4.	Apocynum cannabinum	5	N	FAC	Definitions of Vegetation Strata:
5.	Carex vulpinoidea	5	N	FACW	
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter
7.				-	at breast height (DBH), regardless of height.
8.				-	
9.				-	Sapling/Shrub - Woody plants less than 3 in. DBH and greater
10.				-	than 3.28 ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of
13.				-	size, and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
	tum (Plot size: 10 meter radius)				
1. 2.					
3.					Hydrophytic Vegetation Present X Yes No
4.					Hydrophytic Vegetation Present X Yes No
5.					
J	Total Cover =	0			
Remarks:					
Additional Re	emarks:				
1					
I					



Project/Site:	Northern C	olumbus Loop - Pro	eferred F	Route			Stantec Project #:	193707055		Date:	07/09/20
Applicant:	Columbia C	Gas of Ohio					•			County:	Union
Investigator #1:	Angela Sjo	llema		Investi	igator #2:	Julie Sla	ater			State:	Ohio
Soil Unit:	Ble1B1 - Bl	lount silt loam, end	moraine	, 2-4% s		NW	/I/WWI Classification:	N/A		Wetland ID:	Wetland 8c
Landform:	Terrace			Loc	al Relief:	Concav	е			Sample Point:	SP20f
Slope (%):	1	Latitude	40.1600	89 L	ongitude:	-83.190	77	Datum:	N/A	Community ID:	Upland
Are climatic/hyd	drologic cond	ditions on the site ty	pical for	this time	of year?	(If no, expl	ain in remarks)	X Yes	No	Section:	N/A
Are Vegetation	, Soil ,	or Hydrology sig	gnificantly	v disturb	ed?		Are normal circumsta	ances presen	t?	Township:	N/A
Are Vegetation			turally pr	•			X Yes	No		Range:	N/A
SUMMARY OF		, 6,	, , , , , , , , , , , , , , , , , , ,							Ü	
Hydrophytic Ve		sent?		X Yes	No			Hydric Soils	Present?		Yes X No
Wetland Hydro				Yes						Within A Wetlar	
Remarks:	logy i rocom	••		100				io i i iio Gaini	omig i omic	· · · · · · · · · · · · · · · · · · ·	id. 100 X ito
HYDROLOGY Wetland Hydr Primary Field Observat Surface Water Water Table Pr	A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water N B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundatio B8 - Sparsely	ater Table on darks nt Deposits oosits at or Crust oosits on Visible on Aerial Im y Vegetated Concave : Yes Yes X No Yes	agery		B9 - Wate B13 - Aqu B14 - Tru C1 - Hydr C3 - Oxid C4 - Pres C6 - Rece C7 - Thin D9 - Guae	er-Stained uatic Faunce e Aquatic rogen Sulfi lized Rhizo sence of R	a Plants de Odor sspheres on Living Roots educed Iron sduction in Tilled Soils face Data	Wetland Hy	Secondary:	D1 - Stunted or S D2 - Geomorphic D5 - FAC-Neutral	atterns Lines Water Table rows isible on Aerial Imagery tressed Plants Position
Saturation Pres		Yes X No	Depth:		(in.) (in.)			Ī			
Describe Record	led Data (str	eam gauge, monitor	ing well, a	aerial pho	otos, previ	ious inspe	ections), if available:	N/A			
Remarks:											
SOILS											
		Ble1B1 - Blount sil	t loam. e	nd mora	ine. 2-4%	slopes	eries Drainage Class:	Somewhat p	oorly drain	ed	
Map Unit Name		Ble1B1 - Blount sil	t loam, e	nd mora	ine, 2-4%	် slopesS	eries Drainage Class:	Somewhat p	oorly drain	ed	
Map Unit Name Taxonomy (Sub	group):		•								и=Matrix)
Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to		•	nfirm the absen	ce of indicators.		centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;		
Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to	the depth needed to document the	indicator or cor	nfirm the absen	ce of indicators.		centration, D=Depletion, RM=Reduced	Matrix, CS=Covered/Co	pated Sand Grains;	Location: PL=Pore Lining, M	Texture
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to 1) Bottom Depth	the depth needed to document the	c indicator or cor	Matrix (Moist)	ce of indicators.) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Coedox Features	pated Sand Grains; Type	Location: PL=Pore Lining, N	Texture (e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to: Bottom Depth 16	the depth needed to document the Horizon	Color 10YR	Matrix (Moist)	ce of indicators.) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cocococococococococococococococococococ	pated Sand Grains; Type	Location: PL=Pore Lining, N	Texture (e.g. clay, sand, loam) silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to Depth 16	the depth needed to document the Horizon	Color 10YR	Matrix (Moist) 5/2	% 100) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cocdox Features %	Type	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to Bottom Depth 16	the depth needed to document the Horizon	Color 10YR	Matrix (Moist) 5/2	% 100) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Ci	Type	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to Bottom Depth 16	the depth needed to document the Horizon	Color 10YR	Matrix (Moist) 5/2	% 100) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Cidox Features %	Type	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 16	the depth needed to document the Horizon	Color 10YR	Matrix (Moist) 5/2	% 100) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Codox Features %	Type	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 16	the depth needed to document the Horizon	Color 10YR	Matrix (Moist) 5/2	% 100) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Codox Features %	Type	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 16	Horizon	Color 10YR	Matrix (Moist) 5/2	% 100) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Ccdox Features %	Type	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 16	Horizon	Color 10YR	Matrix (Moist) 5/2	% 100) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Ccdox Features %	Type	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to Depth 16 -	Horizon	Color 10YR ere if indicator or cor	Matrix (Moist) 5/2	% 100 re not pre S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Red6 F7 - Deple) (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Codox Features 9% Indicator 1 Indicators of hyde	Type s for Proble S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to Describe to Depth 16	Horizon	Color 10YR ere if indicator or cor	Matrix (Moist) 5/2	% 100	or (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Codox Features 9% Indicator 1 Indicators of hyde	Type s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to Describe to Depth 16	Horizon	Color 10YR ere if indicator or cor	Matrix (Moist) 5/2 icators a	% 100	or (Type: C=Cor	centration, D=Depletion, RM=Reduced Re Color (Moist)	Matrix, CS=Covered/Codox Features 9/6 Indicator 1 Indicators of hyddisturt.	Type s for Proble A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location: PL=Pore Lining, N Location	Texture (e.g. clay, sand, loam) silty clay sface



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 8c Sample Point: SP20f

VEGETATION	(Species identified in all uppercase are non-na	itive spec	ies.)		
Tree Stratum (PI	ot size: 10 meter radius)				
,	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
3.					(1)
4.	<u></u>				Total Number of Dominant Species Across All Strata: 2 (B)
5.					Total Number of Dominant Species Across All Strata(b)
					D
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	0			FACW spp. 0 x 2 = 0
					FAC spp. $0 \times 3 = 0$
Sapling/Shrub Str	ratum (Plot size: 5 meter radius)				FACU spp. 0 x 4 = 0
1.	Fraxinus pennsylvanica	5	Υ	FACW	UPL spp. 0 x 5 = 0
2.					···
3.					Total 0 (A) 0 (B)
4.					· · · · · · · · · · · · · · · · · · ·
5.					Prevalence Index = B/A = N/A
6.			<u></u>		Trotaloliso Ilidox S/A - IVA
7.					
8.	 				Hydrophytic Vogotation Indicators:
8. 9.					Hydrophytic Vegetation Indicators:
-					Yes X No Rapid Test for Hydrophytic Vegetation
10.					x Yes ☐ No Dominance Test is > 50%
	Total Cover =	5			Yes No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
Herb Stratum (Ple	ot size: 2 meter radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	CIRSIUM ARVENSE	5	N	FACU	
2.	POA PRATENSIS	80	Υ	FAC	* Indicators of hydric soil and wetland hydrology must be
3.	Symphyotrichum novae-angliae	12	N	FACW	present, unless disturbed or problematic.
4.	Solidago canadensis	3	N	FACU	Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter
7.					at breast height (DBH), regardless of height.
8.					3 (// 3
					O. II. Woody planta less than 2 in DDH and greater
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					tilati 3.20 it. tali.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of
13.					size, and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
Woody Vine Strat	tum (Plot size: 10 meter radius)				
1.					
2.					
					Hydrophytic Vegetation Present V Ves
3.			-		Hydrophytic Vegetation Present X Yes No
4.					
5.	Total Course				
<u> </u>	Total Cover =	0			
Remarks:					
1					
Additional Da	marke				
Additional Re	IIIains:				



Stantec		TERMINATION DATA Midwest Region	FORM	Page 1 of 2
Are climatic/hydrologic conditions on the site Are Vegetation , Soil , or Hydrology , Are Vegetation , Soil , or Hydrology	Investigator #2: Charlie, 0-2% slopes Local Relief: Concade: 40.159796 Longitude: -83.20 typical for this time of year? (If no, esignificantly disturbed?	NWI/WWI Classification: ave 0144	Datum: • Yes • No	Date: 03/30/20 County: Union State: OH Wetland ID: Wetland 8 Sample Point: SP21 Community ID: PEM Section: N/A Township: N/A Range: N/A Dir: N/A
SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Wetland Hydrology Present? Remarks: Wet point for Wetland 8	■ Yes □ No ■ Yes □ No		Hydric Soils Present? Is This Sampling Point	w Yes w No Within A Wetland? Wes w No
HYDROLOGY Wetland Hydrology Indicators (Check here Primary: A1 - Surface Water A2 - High Water Table A3 - Saturation B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits B4 - Algal Mat or Crust B5 - Iron Deposits B7 - Inundation Visible on Aerial B8 - Sparsely Vegetated Concaver	B9 - Water-Stainn B13 - Aquatic Fai B14 - True Aquat C1 - Hydrogen Si C3 - Oxidized Rh C4 - Presence of C6 - Recent Iron C7 - Thin Muck S	ed Leaves una tic Plants ulfide Odor iizospheres on Living Roots Reduced Iron Reduction in Tilled Soils Surface (ell Data	Secondary	B6 - Surface Soil Cracks B10 - Drainage Patterns C2 - Dry-Season Water Table C8 - Crayfish Burrows C9 - Saturation Visible on Aerial Imagery D1 - Stunted or Stressed Plants D2 - Geomorphic Position D5 - FAC-Neutral Test
Field Observations: Surface Water Present? Water Table Present? Yes • No Saturation Present? Yes • No	Depth: 2 (in.) Depth: surface (in.) Depth: 1 (in.)		Wetland Hydrology P	resent? • Yes • No
Describe Recorded Data (stream gauge, monit Remarks:	oring well, aerial photos, previous ins	spections), if available:		

Map Unit Nam	ie:	Blount silt Ioam, e	nd morair	ne, 2-4%	slopes						
Profile Descr	iption (Describe to	the depth needed to document the	indicator or confirm	m the absence of	indicators.) (Ty	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS=	-Covered/Coated Sand Gr	ains; Location: PL=F	Pore Lining, M=Matrix)	
Тор	Bottom			Matrix				ox Features			Texture
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam
0	20		10YR	4/2	85	10YR	3/6	15	С	M	silty clay
					1		-				
					1		-				
					-		-				
					-		-				
					1		-				
					1		-				
NRCS Hydric	Soil Field In	idicators (check h	ere if ind	icators a	re not pr	esent •):	Indicators	for Problen	natic Soils 1	

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

- A1- Histosol A2 - Histic Epipedon A3 - Black Histic
- A4 Hydrogen Sulfide A5 - Stratified Layers
- A10 2 cm Muck
 A11 Depleted Below Dark Surface
- A12 Thick Dark Surface
- S1 Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat
- S4 Sandy Gleyed Matrix
- S5 Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral
- F2 Loamy Gleyed Matrix
 F3 Depleted Matrix
 F6 Redox Dark Surface
 - F7 Depleted Dark Surface F8 - Redox Depressions
- ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

A16 - Coast Prairie Redox

F12 - Iron-Manganese Masses

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

S7 - Dark Surface

Restrictive Layer (If Observed) Yes No **Hydric Soil Present?** Type: N/A Depth: N/A

Remarks:

SOILS



3. 4. 5.

Remarks:

WETLAND DETERMINATION DATA FORM Midwest Region

Northern Columbus Loop - Preferred Route Wetland ID: Wetland 8 Sample Point: SP21 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) Species Name **Dominance Test Worksheet** % Cover Dominant Ind.Status Number of Dominant Species that are OBL, FACW, or FAC: _____(A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 6. 7. 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 x 2 = FACW spp. FAC spp. 0 x 3 = x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 0 UPL spp. x 5 = 2. 3. Total 4. Prevalence Index = B/A = 5. 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation ----Yes No 10. Yes No Dominance Test is > 50% --Total Cover = Yes No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) No Problem Hydrophytic Vegetation (Explain) * Yes 1. Juncus effusus 60 Υ OBL * Indicators of hydric soil and wetland hydrology must be OBL 2 Scirpus atrovirens 25 Υ present, unless disturbed or problematic. 3. Trifolium repens 15 **FACU Definitions of Vegetation Strata:** 4 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 30 ft radius) 1

Additional Remarks:		

Total Cover =

0

Hydrophytic Vegetation Present • Yes • No



Project/Site:	Northern Columbus Loop -	Preferred Route	Stantec Pro	oject #:	193707055		Date:	03/30/20)	
Applicant:	Columbia Gas of Ohio						County:	Union		
Investigator #1:	Angela Sjollema	Investigator #2:	Charlie Allen				State:	OH		
Soil Unit:	Blount silt loam, end morai	ne, 0-2% slopes	NWI/WWI Class	ification:	N/A		Wetland ID:	Wetland	8	
Landform:	Terrace	Local Relief:	None				Sample Point:	SP22		
Slope (%):	0 Latitu	ude: 40.159762 Longitude:	-83.201436		Datum:		Community ID:	Upland		
Are climatic/hyd	Irologic conditions on the si	te typical for this time of year?	(If no, explain in remarks)		Yes	No	Section:	N/A		
Are Vegetation	, Soil , or Hydrology	significantly disturbed?	Are normal ci	ircumstan	ces present?)	Township:	N/A		
Are Vegetation	, Soil , or Hydrology	naturally problematic?	• Y	⁄es	Рo		Range:	N/A	Dir:	N/A
SUMMARY OF	FINDINGS									
Hydrophytic Veg	getation Present?	□ Yes ■ No			Hydric Soils	Present?			Yes	No
Wetland Hydrol	ogy Present?	□ Yes ■ No			ls This Samp	ling Point	Within A Wetla	and? •	Yes	• No

Remarks: Upland point for Wetland 8

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present.):

Primary:

A1 - Surface Water
A2 - High Water Table
A3 - Saturation

B1 - Water Marks
B2 - Sediment Deposits
B3 - Drift Deposits

B4 - Algal Mat or Crust
B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery
B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic FaunaB14 - True Aquatic PlantsC1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled SoilsC7 - Thin Muck Surface

D9 - Gauge or Well DataOther (Explain in Remarks)

Secondary:

B6 - Surface Soil CracksB10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed PlantsD2 - Geomorphic Position

D2 - Geomorphic Position
 D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

Field Observations:

Surface Water Present?

Yes
No Depth: -- (in.)
Water Table Present?
Yes
No Depth: -- (in.)
Saturation Present?
Yes
No Depth: -- (in.)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SOILS

Map Unit Name: Blount silt loam, end moraine, 2-4% slopes

Profile Descri	Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)													
Тор	Bottom			Matrix			Redo		Texture					
Depth	Depth	Horizon	Color	Color (Moist) %		t) % Color (Moist)		%	Type	Location	(e.g. clay, sand, loam)			
0	8		10YR	4/3	100						silty clay			
8	20		10YR	4/3	79	10YR	5/8	1	С	M	silty clay			
			10YR	5/1	20									

NRCS Hydric Soil Field Indicators (check here if indicators are not present.):

A1- Histosol

A2 - Histic EpipedonA3 - Black Histic

A4 - Hydrogen SulfideA5 - Stratified Layers

A10 - 2 cm Muck
 A11 - Depleted Below D

A11 - Depleted Below Dark Surface
A12 - Thick Dark Surface

S1 - Sandy Muck Mineral
S3 - 5 cm Mucky Peat or Peat

S4 - Sandy Gleyed Matrix

S5 - Sandy Redox
 S6 - Stripped Matrix
 F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

Indicators for Problematic Soils 1

A16 - Coast Prairie Redox

F12 - Iron-Manganese Masses

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

S7 - Dark Surface

Restrictive Layer (If Observed)

Type: N/A

Depth: N/A

Hydric Soil Present?

" Yes " No



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 8 Sample Point: SP22 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) Species Name **Dominance Test Worksheet** % Cover Dominant Ind.Status Number of Dominant Species that are OBL, FACW, or FAC: ____1 (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5 Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B) 6. 7. 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = x 2 = FACW spp. 0 0 FAC spp. 30 x 3 =90 Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = 70 280 UPL spp. x 5 = 2. 3. 100 370 (B) Total (A) 4. 5. Prevalence Index = B/A = 3.700 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation ----Yes No 10. ■ No Yes Dominance Test is > 50% --Total Cover = Yes ■ No Prevalence Index is ≤ 3.0 * 0 No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) No Problem Hydrophytic Vegetation (Explain) * Yes 1. Trifolium repens 70 Υ **FACU** * Indicators of hydric soil and wetland hydrology must be 2 Poa pratensis 30 Υ FAC present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 30 ft radius) 1 3. Hydrophytic Vegetation Present - Yes - No 4. 5.

Additional Remarks:

Total Cover =

Remarks:

0



Project/Site:	Northern Columbus Lo	op - Preferred Route		Star	ntec Project #:	193707055	5	Date:	03/30/20)	
Applicant:	Columbia Gas of Ohio							County:	Union		
Investigator #1:	Angela Sjollema	Inv	estigator #2	: Charlie Allen				State:	OH		
Soil Unit:	Blount silt loam, end m	oraine, 2-4% slopes		NWI/WW	I Classification	n: N/A		Wetland ID:	Wetland	9	
Landform:	Terrace		Local Relie	: Concave				Sample Point:	SP23		
Slope (%):	0 L	.atitude: 40.159511	Longitude	: -83.198185		Datum		Community ID:	PEM		
Are climatic/hyd	Irologic conditions on th	e site typical for this	time of year	? (If no, explain in remark	(s)	Yes	No	Section:	N/A		
Are Vegetation	, Soil , or Hydrolog	y significantly dist	turbed?	Are no	rmal circumsta	ances present	?	Township:	N/A		
Are Vegetation	, Soil , or Hydrolog	y naturally proble	matic?		Yes	Рo		Range:	N/A	Dir:	N/A
SUMMARY OF	FINDINGS										
Hydrophytic Veg	getation Present?		Yes - N	0		Hydric Soils	Present?			Yes	□ No
Wetland Hydrol	ogy Present?		Yes • N	0		Is This Sam	pling Point	Within A Wetl	and?	Yes	• No

Remarks: Wet point for Wetland 9

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface WaterA2 - High Water Table

A3 - SaturationB1 - Water MarksB2 - Sediment Deposits

B3 - Drift Deposits
B4 - Algal Mat or Crust
B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery
B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic Fauna
B14 - True Aquatic Plants
C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled SoilsC7 - Thin Muck Surface

D9 - Gauge or Well DataOther (Explain in Remarks)

Secondary:

B6 - Surface Soil CracksB10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed PlantsD2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

Field Observations:

Surface Water Present? • Yes • No Depth: 2 (in.)
Water Table Present? • Yes • No Depth: surface (in.)
Saturation Present? • Yes • No Depth: 4 (in.)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SOILS

Map Unit Name: Blount silt loam, end moraine, 2-4% slopes

Profile Description (Consolute to the death and any one the indicators of indicators). (The Consolute Description Blooding B

Tronie Descrip	TOTHE DESCRIPTION (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Deptetion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)													
Тор	Bottom		Matrix				Redo		Texture					
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)			
0	5		10YR	4/2	100						silt loam			
5	15		10YR	4/2	90	7.5YR	4/4	10	С	M	silty clay loam			
15	20		10YR	4/2	88	7.5YR	4/4	10	С	M	silty clay loam			
						7.5YR	5/6	2	С	M				
	-						-	-						
							-							

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic EpipedonA3 - Black Histic

A4 - Hydrogen SulfideA5 - Stratified Layers

A10 - 2 cm Muck
A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface
 S1 - Sandy Muck Mineral

S3 - 5 cm Mucky Peat or Peat

S4 - Sandy Gleyed Matrix

S5 - Sandy Redox
S6 - Stripped Matrix
F1 - Loamy Muck Mine

F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix F3 - Depleted Matrix

F6 - Redox Dark Surface
 F7 - Depleted Dark Surface

F8 - Redox Depressions

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

Indicators for Problematic Soils 1

A16 - Coast Prairie Redox

F12 - Iron-Manganese Masses

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

S7 - Dark Surface

Restrictive Layer (If Observed)

Type: N/A

Depth: N/A

Hydric Soil Present?

" Yes " No



Project/Site: North Columbus Loop - Preferred Route Wetland ID: Wetland 9 Sample Point: SP23

VEGETATION	(Species identified in all upp	ercase are non na	ative spec	ries)		
	Plot size: 30 ft radius)	ercase are non-na	ilive spec	Jies.)		
	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC: (A)
3.						
4.						Total Number of Dominant Species Across All Strata: 1 (B)
5.						
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.						(
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. 0 x 1 = 0
		Total Cover =	0			FACW spp. 0 x 2 = 0
						FAC spp. $0 \times 3 = 0$
Sapling/Shrub S	Stratum (Plot size: 15 ft radius)					FACU spp. 0 x 4 = 0
1.					-	UPL spp. 0 x 5 = 0
2.					-	······································
3.						Total <mark>0</mark> (A) <mark>0</mark> (B)
4.						, · ·, · ·
5.						Prevalence Index = B/A = NA
6.						
7.						
8.					-	Hydrophytic Vegetation Indicators:
9.					-	■ Yes □ No Rapid Test for Hydrophytic Vegetation
10.						■ Yes ■ No Dominance Test is > 50%
		Total Cover =	0			Yes □ No Prevalence Index is ≤ 3.0 *
						□ Yes □ No Morphological Adaptations (Explain) *
Herb Stratum (F	Plot size: 5 ft radius)					□ Yes □ No Problem Hydrophytic Vegetation (Explain) *
1.	Carex normalis		90	Υ	FACW	
2.	Rubus allegheniensis		2	N	FACU	* Indicators of hydric soil and wetland hydrology must be
3.	Solidago altissima		5	N	FACU	present, unless disturbed or problematic.
4.	Elymus hystrix		5	N	FACU	Definitions of Vegetation Strata:
5.					-	
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.						ft. tall.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size,
13.						and woody plants less than 3.28 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
10.		Total Cover =	102			
		. 5141 50761 -	102			
Woody Vine Str	ratum (Plot size: 30 ft radius)					
1.	atum (Flot size. 30 it radius)					
2.	-					
3.						Hydrophytic Vegetation Present • Yes • No
4.						injurophysio rogetation resent - 165 - 100
5.						
<u> </u>		Total Cover =	0			
Remarks:						

Additional Remarks:		

" Yes " No

Hydric Soil Present?



Type: N/A

Remarks:

Depth:

N/A

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: Stantec Project #: 193707055 Northern Columbus Loop - Preferred Route Date: Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen OH NWI/WWI Classification: N/A Blount silt loam, end moraine, 2-4% slopes Wetland ID: Wetland 9 Soil Unit: Landform: Terrace Local Relief: None Sample Point: SP24 Latitude: 40.159502 Slope (%): Longitude: -83.198131 Datum: --Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? YesNo Yes • No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Upland point for Wetland 9 HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present.): Primary: Secondary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table . B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows **B2 - Sediment Deposits** C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? □ Yes ■ No Depth: (in.) Wetland Hydrology Present? • Yes • No Water Table Present? □ Yes ■ Depth: (in.) No Saturation Present? □ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: SOILS Map Unit Name: Blount silt loam, end moraine, 2-4% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Тор Bottom Texture Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 100 silty clay 12 **10YR** 3/2 0 12 20 10YR 3/2 97 10YR 6/6 3 С М silty clay ----------------------------NRCS Hydric Soil Field Indicators (check here if indicators are not present Indicators for Problematic Soils 1 S4 - Sandy Gleyed Matrix A16 - Coast Prairie Redox A2 - Histic Epipedon S5 - Sandy Redox S7 - Dark Surface A3 - Black Histic S6 - Stripped Matrix F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral A5 - Stratified Layers F2 - Loamy Gleyed Matrix Other (Explain in Remarks) A10 - 2 cm Muck F3 - Depleted Matrix A11 - Depleted Below Dark Surface F6 - Redox Dark Surface A12 - Thick Dark Surface F7 - Depleted Dark Surface S1 - Sandy Muck Mineral F8 - Redox Depressions 1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic S3 - 5 cm Mucky Peat or Peat Restrictive Layer



Northern Columbus Loop - Preferred Route Wetland ID: Wetland 9 Sample Point: SP24 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) Species Name **Dominance Test Worksheet** % Cover Dominant Ind.Status 2. Number of Dominant Species that are OBL, FACW, or FAC: ____1 (A) 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 6. 7. 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 FACW spp. x 2 = FAC spp. 0 x 3 = x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 0 UPL spp. x 5 = 2. 3. Total 4. 5. Prevalence Index = B/A = NA 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation ----Yes No 10. Yes No Dominance Test is > 50% --Total Cover = Yes No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) No Problem Hydrophytic Vegetation (Explain) * Yes 1. Daucus carota 5 Ν UPL * Indicators of hydric soil and wetland hydrology must be Apocynum cannabinum FAC 2 5 Ν present, unless disturbed or problematic. 3. Dipsacus fullonum **FACU Definitions of Vegetation Strata:** 4 Rubus allegheniensis 3 Ν **FACU** Poa pratensis 5. 85 Υ FAC 6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 30 ft radius) 1 Hydrophytic Vegetation Present • Yes • No 3. 4. 5.

Additional Remarks:

Total Cover =

Remarks:

0



WETLAND DETERMINATION DATA FORM Page 1 of 2 **Midwest Region** Project/Site: Stantec Project #: 193707055 Northern Columbus Loop - Preferred Route Date: Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen OH NWI/WWI Classification: N/A Wetland ID: Blount silt loam, end moraine, 0-2% slopes Wetland 10 Soil Unit: Landform: Terrace Local Relief: Concave Sample Point: SP25 Latitude: 40.158472 Slope (%): Longitude: -83.195452 Datum: --Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? YesNo YesNo Wetland Hydrology Present? ■ Yes □ No Is This Sampling Point Within A Wetland? Remarks: Wetland point for Wetland 10 HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present.): Primary: Secondary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows **B2 - Sediment Deposits** C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth: 0.5 (in.) Wetland Hydrology Present?
Yes
No Water Table Present? ■ Yes □ Depth: surface (in.) No Saturation Present? ■ Yes ■ No Depth: 5 (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SOILS

Map Unit Name: Blount silt loam, end moraine, 0-2% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Тор Bottom Texture Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 7.5YR silty clay **10YR** 96 4 M 0 16 4/2 4/6 16 20 10YR 7.5YR 5/8 10 С 4/2 90 M silty clay --------------------------

NRCS Hydric Soil Field Indicators (check here if indicators are not present -

- A2 Histic Epipedon
- A3 Black Histic A4 - Hydrogen Sulfide A5 - Stratified Layers
- A10 2 cm Muck A11 - Depleted Below Dark Surface
- A12 Thick Dark Surface
- S1 Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat

Type: N/A

- S4 Sandy Gleyed Matrix
- S5 Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral
- F2 Loamy Gleyed Matrix F3 - Depleted Matrix
- F6 Redox Dark Surface F7 - Depleted Dark Surface F8 - Redox Depressions
- Depth: N/A

Indicators for Problematic Soils 1

- A16 Coast Prairie Redox
- S7 Dark Surface

Hydric Soil Present?

- F12 Iron-Manganese Masses
- TF12 Very Shallow Dark Surface Other (Explain in Remarks)

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

" Yes " No

Remarks:

Restrictive Layer



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 10 Sample Point: SP25

VEGETATION		ative spec	cies.)		
Tree Stratum (Pl	ot size: 30 ft radius)				D : T (W) (
	<u>Species Name</u>		<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:3(A)
3.					
4.					Total Number of Dominant Species Across All Strata:3(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.				-	
8.				-	Prevalence Index Worksheet
9.				-	Total % Cover of: Multiply by:
10.					OBL spp. $0 x 1 = 0$
	Total Cover =	0			FACW spp. 0 x 2 = 0
					FAC spp. $0 x 3 = 0$
Sapling/Shrub Str	atum (Plot size: 15 ft radius)				FACU spp. $0 x 4 = 0$
1.				-	UPL spp. $0 x 5 = 0$
2.					
3.					Total <mark>0</mark> (A) <mark>0</mark> (B)
4.					··
5.					Prevalence Index = B/A = NA
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.					■ Yes ■ No Dominance Test is > 50%
	Total Cover =	0			Yes ■ No Prevalence Index is ≤ 3.0 *
					□ Yes □ No Morphological Adaptations (Explain) *
Herh Stratum (Plo	ot size: 5 ft radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Juncus effusus	40	Υ	OBL	- 100 No 1100011111yarophytic vogotation (Explain)
2.	Dipsacus fullonum	5	N	FACU	* Indicators of hydric soil and wetland hydrology must be
3.	Juncus tenuis	20	Y	FAC	present, unless disturbed or problematic.
4.	Apocynum cannabinum	2	N .	FAC	Definitions of Vegetation Strata:
5.	Cyperus esculentus	3	N	FACW	Definitions of Vegetation official.
6	Poa pratensis	20	Y	FAC	Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.			<u>'</u>		breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
-					ft. tall.
10.					
11.					Harts All harbaccous (non weeds) plants regardless of size
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					•
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	90			
Woody Vine Strat	um (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present • Yes • No
4.					
5.					
	Total Cover =	0			
Remarks:					

Additional Re	marks:
---------------	--------



Remarks:

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: Applicant:		olumbus Loop - Pre Gas of Ohio	ferred R	oute			Stantec Project #:	193707055	5	Date: County:	03/30/20 Union
Investigator #1:				Invest	igator #2:	Charlie	Δllen			State:	OH
Soil Unit:		oam, end moraine,	0-2% slc		igator #2.		WI/WWI Classification	· N/A			Wetland 10
Landform:	Terrace	oam, ona moramo,	0 270 0.0	•	cal Relief:					Sample Point:	
Slope (%):	1	Latitude:	40.1586		ongitude:		613	Datum:		Community ID	
	drologic cond	ditions on the site ty						■ Yes □	No	Section:	N/A
Are Vegetation		or Hydrology sig					Are normal circumsta	nces present	?	Township:	N/A
Are Vegetation	, Soil ,	or Hydrology。 nat					Yes	No [']		Range:	N/A Dir: N/A
SUMMARY OF		m t O		Vac	NI.			Lludaia Caila	Dunnant		Vaa - Na
Hydrophytic Ve				• Yes				Hydric Soils		\A/:4b::	□ Yes □ No
Wetland Hydrol Remarks:	0,	rt for Wetland 10		• Yes	s • No			is this Sam	pling Point	within A wet	land? Yes No
Remarks.	Opiano poi	it for vvettarid to									
HYDROLOGY											
-		ators (Check here i	f indicate	ors are r	not preser	nt•):			0 1		
Primary:	: A1 - Surface	Motor			DO Wate	er-Stained	Logyon		Secondary:	B6 - Surface So	oil Crooks
	A2 - High Wa					uatic Fauna				B10 - Drainage	
	A3 - Saturation					e Aquatic I				C2 - Dry-Seaso	
	B1 - Water M	larks				ogen Sulfi				C8 - Crayfish B	
	B2 - Sedimer	nt Deposits		•			spheres on Living Roots				Visible on Aerial Imagery
	B3 - Drift Dep						educed Iron		•		Stressed Plants
-	B4 - Algal Ma			-			duction in Tilled Soils			D2 - Geomorph	
	B5 - Iron Dep	oosits on Visible on Aerial Ima	agon/			Muck Surf ge or Well				D5 - FAC-Neut	rai i est
_		/ Vegetated Concave S		-		plain in Re					
					`	•	,				
Field Observat	tions:										
Surface Water	Present?	□ Yes ■ No	Depth:		(in.)						
Water Table Pr		□ Yes ■ No	Depth:		(in.)			Wetland Hy	drology P	resent? •	Yes No
Saturation Pres		□ Yes ■ No	Depth:		(in.)						
					(111./						
			. المسيدة		, ,		ations) if available.				
	ded Data (str	eam gauge, monitori	ng well, a		, ,	ous inspe	ctions), if available:				
	ded Data (stre	eam gauge, monitori	ng well, a		, ,	ous inspe	ctions), if available:				
Remarks:	ded Data (str	eam gauge, monitori	ng well, a		, ,	ous inspe	ctions), if available:				
Remarks:	·		-	erial pho	otos, previ	ous inspe	ctions), if available:				
Remarks: SOILS Map Unit Name	9 :	Blount silt loam, en	d morair	nerial pho	otos, previ	·					
Remarks: SOILS Map Unit Name Profile Descrip	e:	Blount silt loam, en	d morair	nerial pho	otos, previ	·	. tion, D=Depletion, RM=Reduced Matrix, CS=		rains; Location: PL=1	² ore Lining, M=Matrix)	
Remarks: SOILS Map Unit Name	9 :	Blount silt loam, en	d morair	nerial pho ne, 0-2% In the absence	o slopes	·	tion, D=Depletion, RM=Reduced Matrix, CS=	ox Features			Texture
Remarks: SOILS Map Unit Name Profile Descrip	e:	Blount silt loam, en	d morair	nerial pho	otos, previ	·	. tion, D=Depletion, RM=Reduced Matrix, CS=		rains; Location: PL=4	Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam
Remarks: SOILS Map Unit Name Profile Descrip Top	e: otion (Describe to Bottom	Blount silt loam, en	d morair	nerial pho ne, 0-2% In the absence	o slopes	·	tion, D=Depletion, RM=Reduced Matrix, CS=	ox Features			<u> </u>
Remarks: SOILS Map Unit Name Profile Descrip Top Depth	e: otion (Describe to Bottom Depth	Blount silt loam, en the depth needed to document the in Horizon	d morair	ne, 0-2% Matrix (Moist)	otos, previ	pe: C=Concentra	tion, D=Depietion, RM=Reduced Matrix, CS= Redu Color (Moist)	ox Features %	Туре	Location	(e.g. clay, sand, loan
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0	e: ption (Describe to Bottom Depth 14	Blount silt loam, en the depth needed to document the in Horizon	d morain	ne, 0-2% In the absence Matrix (Moist) 5/4	otos, previ	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS-Reduced Matrix, CS-Color (Moist) 5/8	% 10	Type C	Location M	(e.g. clay, sand, loan
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 14	Bottom Depth 14 20	Blount silt loam, en the depth needed to document the in Horizon 	d morain	neerial phone in the absence Matrix (Moist) 5/4 5/4	otos, previ	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS= Redu Color (Moist) 5/8	% 10	Type C 	Location M	(e.g. clay, sand, loan silty clay silty clay
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 14	Bottom (Describe to Depth 14 20	Blount silt loam, en the depth needed to document the in Horizon	d morain dicator or confirm Color 10YR 10YR 10YR	me, 0-2% In the absence Matrix (Moist) 5/4 5/6	obslopes of indicators.) (Ty % 90 20 80	pe: C=Concentra	tion, D=Depietion, RM=Reduced Matrix, CS= Redu Color (Moist) 5/8	% 10	Type C 	Location M	(e.g. clay, sand, loam silty clay silty clay
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 14	Bottom Depth 14 20	Blount silt loam, en the depth needed to document the in Horizon	d morair Color 10YR 10YR 10YR	me, 0-2% the absence of Matrix (Moist) 5/4 5/6	o slopes of indicators.) (Ty % 90 20 80	10YR	tion, D=Depietion, RM=Reduced Matrix, CS- Redu Color (Moist) 5/8	% 10	Type C	Location M	(e.g. clay, sand, loam silty clay silty clay
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 14	Bottom Depth 14 20	Blount silt loam, en the depth needed to document the in Horizon	d morair dicator or confirm Color 10YR 10YR 10YR	Matrix (Moist) 5/4 5/6	slopes slopes 90 20 80	10YR	tion, D=Depletion, RM=Reduced Matrix, CS- Redde Color (Moist) 5/8	% 10	Type	Location M	(e.g. clay, sand, loam silty clay silty clay
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 14	Bottom Depth 14 20	Blount silt loam, en the depth needed to document the in Horizon	d morair dicator or confirm Color 10YR 10YR 10YR	ne, 0-2% In the absence of Matrix (Moist) 5/4 5/6	b slopes slopes slopes 9 90 20 80	10YR	tion, D=Depletion, RM=Reduced Matrix, CS- Redde Color (Moist) 5/8	% 10	Type C	Location M	(e.g. clay, sand, loam silty clay silty clay
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 14	Bottom Depth 14 20 Soil Field In	Blount silt loam, en the depth needed to document the in Horizon	d morair dicator or confirm Color 10YR 10YR 10YR	ne, 0-2% In the absence of Matrix (Moist) 5/4 5/6	o slopes o slopes of indicators.) (Ty ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	10YR	tion, D=Depletion, RM=Reduced Matrix, CS: Reduction (Moist) 5/8	% 10	Type	Location M	(e.g. clay, sand, loam silty clay silty clay
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 20	Blount silt loam, en the depth needed to document the in Horizon	d morair dicator or confirm Color 10YR 10YR 10YR	ner, 0-2% In the absence of Matrix (Moist) 5/4 5/6 cators a	o slopes o slopes o slopes o slopes of indicators.) (Ty o o o o o o o o o o o o o o o o o o o	10YR esent • dy Gleyed I	tion, D=Depletion, RM=Reduced Matrix, CS: Reduction (Moist) 5/8	x Features	Type	Location M matic Soils ¹ Prairie Redox	(e.g. clay, sand, loan silty clay silty clay
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 20 Soil Field Ir	Blount silt loam, en the depth needed to document the in Horizon	d morair dicator or confirm Color 10YR 10YR 10YR	Matrix (Moist) 5/4 5/6 cators a	s slopes of indicators.) (Ty % 90 20 80 stare not pro \$4 - Sanc \$5 - Sanc	10YR esent • dy Gleyed I	tion, D=Depletion, RM=Reduced Matrix, CS= Reduced Color (Moist) 5/8): Matrix	x Features	Type C s for Probler A16 - Coast S7 - Dark S	Location M matic Soils ¹ Prairie Redox	(e.g. clay, sand, loan silty clay silty clay
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 20 Soil Field Ir A1- Histosol A2 - Histic Ep	Blount silt loam, en the depth needed to document the in Horizon	d morair dicator or confirm Color 10YR 10YR 10YR	Mee, 0-2% The absence of the absence	5 slopes 5 slopes 6 slopes 7 % 90 20 80	10YR	tion, D=Depietion, RM=Reduced Matrix, CS- Reddiction (Moist) 5/8	x Features	Type C s for Probler A16 - Coasi S7 - Dark S F12 - Iron-N TF12 - Very	Location M	(e.g. clay, sand, loan silty clay silty clay
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 20 Soil Field Ir A1- Histosol A2 - Histo E4 A3 - Black Hi A4 - Hydroge A5 - Stratified	Blount silt loam, en the depth needed to document the in Horizon	d morair dicator or confirm Color 10YR 10YR 10YR	Matrix (Moist) 5/4 5/6 cators a	slopes sl	10YR sesent • dy Gleyed I dy Redox py Muck Mny Gleyed Martix hy Muck Mny Gleyed	tion, D=Depletion, RM=Reduced Matrix, CS: Reduction (Moist) 5/8): Matrix ineral Matrix	ox Features % 10 Indicators	Type C s for Probler A16 - Coasi S7 - Dark S F12 - Iron-N TF12 - Very	Location M	(e.g. clay, sand, loan silty clay silty clay
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 20 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratiflec A10 - 2 cm N	Blount silt loam, en the depth needed to document the in Horizon	d morain Color 10YR 10YR 10YR ere if indi	Merial phone of the absence of the a	s slopes of indicators.) (Ty selection of indicators.) (Ty s	10YR esent • dy Gleyed I dy Redox ped Matrix ny Muck M ny Gleyed eted Matrix	tion, D=Depletion, RM=Reduced Matrix, CS: Reduction (Moist) 5/8	x Features	Type C s for Probler A16 - Coasi S7 - Dark S F12 - Iron-N TF12 - Very	Location M	(e.g. clay, sand, loan silty clay silty clay
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 20 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A10 - 2 cm M A11 - Deplete	Blount silt loam, en the depth needed to document the in Horizon	d morain Color 10YR 10YR 10YR ere if indi	neerial phone neerial phone neerial phone neerial phone neerial phone make absence a Matrix (Moist) 5/4 5/6 cators a	s slopes of indicators.) (Ty s 90 20 80 are not pre S4 - Sanc S5 - Sanc S6 - Strip F1 - Loan F3 - Depli F6 - Redo	10YR esent • dy Gleyed I dy Redox ped Matrix ny Muck M ny Gleyed eted Matrix ox Dark Su	tion, D=Depietion, RM=Reduced Matrix, CS= Reduced Color (Moist) 5/8): Matrix inneral Matrix crface	x Features	Type C s for Probler A16 - Coasi S7 - Dark S F12 - Iron-N TF12 - Very	Location M	(e.g. clay, sand, loan silty clay silty clay
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 20 Soil Field Ir A1- Histosol A2 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick IC	Blount silt loam, en the depth needed to document the in Horizon	d morain Color 10YR 10YR 10YR ere if indi	neerial phone neerial phone neerial phone neerial phone neerial phone neerial phone make absence with a company solution of the solutio	Slopes Slopes	10YR	tion, D=Depletion, RM=Reduced Matrix, CS- Reduced Color (Moist) 5/8	x Features	Type C s for Probler A16 - Coasi S7 - Dark S F12 - Iron-N TF12 - Very	Location M	(e.g. clay, sand, loan silty clay silty clay
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 20 Soil Field Ir A1- Histosol A2 - Histic Eç A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm W A11 - Deplete A12 - Thick E S1 - Sandy M	Blount silt loam, en the depth needed to document the in Horizon	d morain Color 10YR 10YR 10YR ere if indi	neerial phone neerial phone neerial phone neerial phone neerial phone make absence a Matrix (Moist) 5/4 5/6 cators a	Slopes Slopes	10YR esent • dy Gleyed I dy Redox ped Matrix ny Muck M ny Gleyed eted Matrix ox Dark Su	tion, D=Depletion, RM=Reduced Matrix, CS- Reduced Color (Moist) 5/8	ox Features % 10 Indicators	Type C s for Probler A16 - Coasis S7 - Dark S F12 - Iron-N TF12 - Very Other (Expl	Location M	(e.g. clay, sand, loan silty clay silty clay
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 20 Soil Field Ir A1- Histosol A2 - Histic Eç A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm W A11 - Deplete A12 - Thick E S1 - Sandy M	Blount silt loam, en the depth needed to document the in Horizon	d morain Color 10YR 10YR 10YR ere if indi	neerial phone neerial phone neerial phone neerial phone neerial phone neerial phone make absence with a company solution of the solutio	Slopes Slopes	10YR	tion, D=Depletion, RM=Reduced Matrix, CS- Reduced Color (Moist) 5/8	ox Features % 10 Indicators	Type C s for Probler A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Expl.)	Location M	(e.g. clay, sand, loan silty clay silty clay ses



North Columbus Loop - Preferred Route Wetland ID: Wetland 10 Sample Point: SP26 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) Species Name **Dominance Test Worksheet** % Cover Dominant Ind.Status 2. Number of Dominant Species that are OBL, FACW, or FAC: ____1 (A) 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 6. 7. 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = FACW spp. 0 Total Cover = x 2 = x 3 = FAC spp. 0 Sapling/Shrub Stratum (Plot size: 15 ft radius) x 4 = FACU spp. ___ 0 UPL spp. x 5 = 2. 3. ____(A) Total 4. 5. Prevalence Index = B/A = NA 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation ----Yes No 10. Yes No Dominance Test is > 50% --Total Cover = Yes No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) No Problem Hydrophytic Vegetation (Explain) * Yes 1. Apocynum cannabinum 5 Ν FAC * Indicators of hydric soil and wetland hydrology must be **FACU** 2 Symphyotrichum ericoides 5 N present, unless disturbed or problematic. 3. Poa pratensis 90 FAC **Definitions of Vegetation Strata:** 4 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7.

--

15.					
			Total Cover =	100	
Woody Vine S	tratum (Plot size:	30 ft radius)			
1.					
2.					
3.					
4.					
5.					
			Total Cover =	0	
Remarks:			•		

Hydrophytic Vegetation Present • Yes • No

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

Herb - All herbaceous (non-woody) plants, regardless of size,

and woody plants less than 3.28 ft. tall.

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

Additional Remarks:

8.

9. 10. 11.

12.

13.

14.



Page 1 of 2 WETLAND DETERMINATION DATA FORM **Midwest Region** Project/Site: Northern Columbus Loop - Preferred Route Stantec Project #: 193707055 Date: Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen OH NWI/WWI Classification: N/A Blount silt loam, end moraine, 0-2% slopes Wetland ID: Wetland 11 Soil Unit: Landform: Terrace Local Relief: None Sample Point: SP27 Latitude: 40.157741 Slope (%): Longitude: -83.194282 Datum: --Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? YesNo YesNo Wetland Hydrology Present? ■ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Wetland point for Wetland 11 HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present.): Primary: Secondary: B6 - Surface Soil Cracks A1 - Surface Water B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows **B2 - Sediment Deposits** C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? YesNo Depth: (in.) Wetland Hydrology Present?
Yes
No Water Table Present? ■ Yes □ No Depth: surface (in.) Saturation Present? ■ Yes ■ No Depth: 10 (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: SOILS Map Unit Name: Blount silt loam, end moraine, 0-2% slopes

Profile Descrip	Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)												
Тор	Bottom			Matrix			Red		Texture				
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)		Type	Location	(e.g. clay, sand, loam)		
0	20		10YR	5/2	88	10YR	5/6	10	С	M	silty clay		
						7.5YR	4/6	2	С	M	silty clay		
							-						
							-						
	-						-						
							-						
							-						
NRCS Hydric	Soil Field I	ndicators (check he	ere if ind	icators a	re not pr	esent •):	Indicators	for Problen	natic Soils 1			

NRCS Hydric Soil Field Indicators (check here if indicators are not present •): A1- Histosol

A2 - Histic Epipedon

A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface

S1 - Sandy Muck Mineral

S3 - 5 cm Mucky Peat or Peat Type: N/A

S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix

F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix

Depth:

N/A

F6 - Redox Dark Surface

F7 - Depleted Dark Surface

F8 - Redox Depressions

1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic " Yes " No

Remarks:

Restrictive Layer

Hydric Soil Present?

A16 - Coast Prairie Redox

Other (Explain in Remarks)

F12 - Iron-Manganese Masses

TF12 - Very Shallow Dark Surface

S7 - Dark Surface



Northern Columbus Loop - Preferred Route Wetland ID: Wetland 11 Sample Point: SP27 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) Species Name **Dominance Test Worksheet** % Cover Dominant Ind.Status Number of Dominant Species that are OBL, FACW, or FAC: _____(A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 6. 7. 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 FACW spp. x 2 = FAC spp. 0 x 3 = x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 0 UPL spp. x 5 = 2. 3. 0 __(A) Total 4. Prevalence Index = B/A = 5. 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation ----Yes No 10. Yes No Dominance Test is > 50% --Total Cover = Yes No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) No Problem Hydrophytic Vegetation (Explain) * Yes 1. Juncus effusus 65 Υ OBL * Indicators of hydric soil and wetland hydrology must be FAC Apocynum cannabinum 2 5 N present, unless disturbed or problematic. 3. Juncus tenuis 20 FAC **Definitions of Vegetation Strata:** 4 Euthamia graminifolia 5 Ν **FACW** Dipsacus fullonum 5. 5 FACU Ν 6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at

--

Hydrophytic Vegetation Present = Yes - No

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

breast height (DBH), regardless of height.

Herb - All herbaceous (non-woody) plants, regardless of size,

and woody plants less than 3.28 ft. tall.

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

Additional Remarks:

7. 8.

9. 10. 11.

12.

13.

14.



WETLAND DETERMINATION DATA FORM

Project/Site:	Northern Columbus Loop	- Preferred Rout	е			Stanted	c Project #:	193707055	Date:	03/30/2	20	
Applicant:	Columbia Gas of Ohio						•		County:	Union		
Investigator #1:	Angela Sjollema	In	vestiga	ator#	2: C ł	narlie Allen			State:	OH		
Soil Unit:	Blount silt loam, end mor	aine, 0-2% slope:	3			NWI/WWI C	lassification:	: N/A	Wetland ID:	Wetlan	nd 11	
Landform:	Terrace		Local	Relie	ef: No	one			Sample Point:	SP28		
Slope (%):	1 Lat	itude: 40.157705	Lon	gitud	e: -8	3.194171		Datum:	Community ID	: Upland	t	
Are climatic/hyd	rologic conditions on the	site typical for this	time o	of yea	r? (If ı	no, explain in remarks)		Yes No	Section:	N/A		
Are Vegetation	, Soil , or Hydrology	significantly dis	sturbed	?		Are norma	al circumsta	ances present?	Township:	N/A		
Are Vegetation	, Soil , or Hydrology	naturally proble	ematic?	?			Yes	No	Range:	N/A	Dir:	N/A
SUMMARY OF I	FINDINGS											
Hydrophytic Veg	getation Present?		Yes	- N	lo			Hydric Soils Present?	?		Yes	■ No
Wetland Hydrolo	ogy Present?		Yes	• N	lo			Is This Sampling Poi	nt Within A Wet	land?	Yes	- No
Remarks:	Upland point for Wetland	11										

Primary:

 A1 - Surface Water A2 - High Water Table

A3 - Saturation B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves

 B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

 B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

 D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

Field Observations:

Surface Water Present? □ Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SOILS

Map Unit Name: Blount silt loam, end moraine, 0-2% slopes Profile Description

i Tollie Descrip	1 TOTHE DESCRIPTION (Describe to the depth needed to document the indicator or contirm the absence of indicators.) (Type: C=Concentration, D=Deptetion, RM=Reduced Matrix, CS=Covered Coated Sand Grains; Eccation: PL=Pore Lining, M=Matrix)											
Тор	Bottom			Matrix			Redo		Texture			
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Туре	Location	(e.g. clay, sand, loam)	
0	14		10YR	5/3	97	10YR	6/8	3	С	M	silty clay	
14	20		10YR	5/3	85	10YR	6/8	10	С	M	silty clay	
		-	10YR	6/2	5		1		1			
							-		1			
		-			-		-		1			
						-	-		-			
							-		1			
		-					-		1			

NRCS Hydric Soil Field Indicators (check here if indicators are not present.):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers

A10 - 2 cm Muck A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

Indicators for Problematic Soils 1

A16 - Coast Prairie Redox

F12 - Iron-Manganese Masses

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

S7 - Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A Hydric Soil Present?



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 11 Sample Point: SP28

VEGETATION	(Species identified in all uppercase are non-na	ative sne	cies)		
	lot size: 30 ft radius)	ative spec	5103.)		
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.					
4.					Total Number of Dominant Species Across All Strata: 1 (B)
5.					(8)
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					(VVB)
8.	<u></u>				Prevalence Index Worksheet
9.	<u></u>				Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
10.	Total Cover =				FACW spp. 0 x 2 = 0
	Total Cover =	U			FACV spp. 0
Capling/Chrub Ct	ratum (Plot size: 15 ft radius)				FACU spp. 0 x 4 = 0
1.	13 it faulus)				UPL spp. 0 x 5 = 0
2.					01 Е эрр
3.					Total 0 (A) 0 (B)
4.					Total <u> </u>
5.					Prevalence Index = B/A = NA
6.					Flevalence index - B/A - NA
7.					
8.					Hudronhutia Vagatation Indicators:
9.					Hydrophytic Vegetation Indicators: "Yes "No Rapid Test for Hydrophytic Vegetation"
10.					, , , ,
10.	Total Cover =	0			
	Total Cover –	U			■ Yes ■ No Prevalence Index is ≤ 3.0 *
					□ Yes □ No Morphological Adaptations (Explain) *
,	ot size: 5 ft radius)		N.	E40	Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Apocynum cannabinum	5	N	FAC	* Indicators of hydric soil and wetland hydrology must be
2.	Solidago canadensis	5	N	FACU	present, unless disturbed or problematic.
3.	Rubus allegheniensis	2	N	FACU	
4.	Poa pratensis	85	Y	FAC	Definitions of Vegetation Strata:
5.	Andropogon virginicus	3	N	FACU	
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					IC. WIII.
11.				-	
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					and woody plants less than 3.20 it. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
Woody Vine Stra	tum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present Yes No
4.					, , ,
5.			-		
	Total Cover =	0			
Remarks:					



Project/Site: Stantec Project #: 193707055 Northern Columbus Loop - Preferred Route Date: Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen OH NWI/WWI Classification: N/A Blount silt loam, end moraine, 2-4% slopes Wetland ID: Wetland 12 Soil Unit: Landform: Terrace Local Relief: Concave Sample Point: SP29 Latitude: 40.155304 Slope (%): Longitude: -83.190041 Datum: --Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? YesNo Yes • No Wetland Hydrology Present? ■ Yes □ No Is This Sampling Point Within A Wetland?

Remarks: Wetland point to Wetland 12

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

<u>nary:</u> ■ A1 - Surface Water

A2 - High Water Table
 A3 - Saturation
 B1 - Water Marks

B2 - Sediment DepositsB3 - Drift Deposits

B4 - Algal Mat or CrustB5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery
B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic FaunaB14 - True Aquatic PlantsC1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled SoilsC7 - Thin Muck Surface

D9 - Gauge or Well DataOther (Explain in Remarks)

Secondary:

B6 - Surface Soil CracksB10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants

D2 - Geomorphic PositionD5 - FAC-Neutral Test

- D3 - 1 AC-Neuliai Test

Wetland Hydrology Present? • Yes • No

Field Observations:

Surface Water Present? Yes No Depth: 0.5 (in.) Water Table Present? ■ Yes □ Depth: 4 (in.) No 2 Saturation Present? ■ Yes ■ No Depth: (in.)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SOILS

Map Unit Name: Blount silt loam, end moraine, 2-4% slopes

Profile Descrip	Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)											
Тор	Bottom			Matrix			Redo	Texture				
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)	
0	4		10YR	4/2	96	7.5YR	5/8	2	С	PL	silty clay loam	
		-				7.5YR	5/8	2	С	M	silty clay loam	
4	8		10YR	4/2	97	7.5YR	5/8	3	С	M	silty clay loam	
8	20	-	10YR	5/2	75	10YR	5/8	25	С	M	silty clay	
		-			-		-					
		-			-		1					
		-										

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon
A3 - Black Histic

A4 - Hydrogen SulfideA5 - Stratified Layers

A10 - 2 cm MuckA11 - Depleted Below Dark Surface

A11 - Depleted Below Dark Surface
 A12 - Thick Dark Surface

S1 - Sandy Muck MineralS3 - 5 cm Mucky Peat or Peat

S4 - Sandy Gleyed Matrix

S5 - Sandy RedoxS6 - Stripped MatrixF1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix
F3 - Depleted Matrix
F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

Restrictive Layer (If Observed)

Type: N/A

Depth: N/A

Hydric Soil Present?

" Yes " No



Project/Site: Northern Columbus Loop - Preferred Route Wetland ID: Wetland 12 Sample Point: SP29

VEGETATION	(Species identified in all uppercase are nor	n-native spe	cies.)		
	ot size: 30 ft radius)		/		
,	<u>Species Name</u>	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)
3.					, ,
4.					Total Number of Dominant Species Across All Strata: 3 (B)
5.					(-/
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					(*-)
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
10.	Total Cover				FACW spp. 0 x 2 = 0
	Total Cover	0			FAC spp. 0 x 3 = 0
Sanling/Shruh Str	atum (Plot size: 15 ft radius)				FACU spp. 0 x 4 = 0
1.	Salix nigra	10	Υ	OBL	UPL spp. 0 x 5 = 0
2.					от Е зрр
3.					Total <mark>0</mark> (A) <mark>0</mark> (B)
4.					10tai <u> </u>
5.					Prevalence Index = B/A = NA
6.					Trevalence much - D/A -
7.	_ 				
8.	_ 				Hydrophytic Vegetation Indicators:
9.					
10.					
10.	Tetal Causa	10			■ Yes ■ No Dominance Test is > 50%
	Total Cover	= 10			■ Yes ■ No Prevalence Index is ≤ 3.0 *
					 Yes No Morphological Adaptations (Explain) *
	ot size: 5 ft radius)			0.01	Yes • No Problem Hydrophytic Vegetation (Explain) *
1.	Typha angustifolia	25	Y	OBL	* Indicators of hydric soil and wetland hydrology must be
2.	Phalaris arundinacea	70	Y	FACW	present, unless disturbed or problematic.
3.	Juncus effusus	5	N	OBL	
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.				-	II. talli.
11.				-	
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover	= 100			
Woody Vine Strat	um (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present • Yes • No
4.					1130100113110 1030111111000111- 165 - 110
5.					
J.	Total Cover				
Remarks:	i otai Covel	- - U			
Remains.					

Additional Remarks:	



Project/Site:	North Columbus Loop - P	referred Route			Stantec Project #	f: 1'	93707055		Date:	03/30/20	O .	
Applicant:	Columbia Gas of Ohio								County:	Union		ļ
Investigator #1:	Angela Sjollema	Inv	estigato	r #2:	Charlie Allen				State:	OH		ļ
Soil Unit:	Blount silt loam, end mora	aine, 2-4% slopes			NWI/WWI Classification	n: N/	A		Wetland ID:	Wetland	l 12	ļ
Landform:	Terrace		Local Re	elief:	None				Sample Point:	SP30		ļ
Slope (%):	0 Lati	tude: 40.155316	Longit	ude:	-83.190077		Datum:		Community ID:	Upland		ļ
Are climatic/hyd	drologic conditions on the s	ite typical for this	time of y	ear?	(If no, explain in remarks)	-	Yes •	No	Section:	N/A		
Are Vegetation	, Soil , or Hydrology	significantly dist	urbed?		Are normal circums	tance	s present?	?	Township:	N/A		
Are Vegetation	, Soil , or Hydrology	naturally probler	matic?		Yes	Ν	Ð		Range:	N/A	Dir:	N/A
SUMMARY OF	FINDINGS											
Hydrophytic Veg	getation Present?	. `	Yes □	No		Ну	dric Soils	Present?			Yes	□ No
Wetland Hydrol	ogy Present?		Yes •	No		Is	This Sam	oling Point	Within A Wetl	and? •	Yes	• No

Wetland Hydrology Present? Remarks: Upland point for Wetland 12

Wetland Hydrology Indicators (Check here if indicators are not present.):

Primary:

A1 - Surface Water A2 - High Water Table

A3 - Saturation . B1 - Water Marks

B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves B13 - Aquatic Fauna

B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

Field Observations:

Surface Water Present? □ Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ No Depth: (in.) 1 Saturation Present? ■ Yes ■ No Depth: (in.)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Recent heavy rain

SOILS

Map Unit Name: Blount silt loam, end moraine, 2-4% slopes

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Тор Bottom Redox Features Texture Matrix (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 94 10YR ΡI silty clay loam **10YR** 1 0 4 5/2 5/8 10YR 5/8 5 С М silty clay loam __ 4 14 10YR 93 10YR 5/8 7 С М silty clay loam 5/2 14 20 10YR 5/2 90 10YR 5/8 10 С М silty clay ----------------------------

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface

S3 - 5 cm Mucky Peat or Peat

A12 - Thick Dark Surface S1 - Sandy Muck Mineral

S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix F6 - Redox Dark Surface F7 - Depleted Dark Surface

F8 - Redox Depressions

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

Indicators for Problematic Soils 1

S7 - Dark Surface

A16 - Coast Prairie Redox

Other (Explain in Remarks)

F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**



Project/Site: North Columbus Loop - Preferred Route Wetland ID: Wetland 12 Sample Point: SP30

VEGETATION	(Species identified in all uppercase are r	on-native spe	cies.)		
	Plot size: 30 ft radius)	<u> </u>			
	Species Name	% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:1(A)
3.					
4.					Total Number of Dominant Species Across All Strata: 3 (B)
5.					, , ,
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cov	er = 0			FACW spp. 0 x 2 = 0
					FAC spp. 20 x 3 = 60
Sapling/Shrub Si	tratum (Plot size: 15 ft radius)				FACU spp. 55 x 4 = 220
1.	Pyrus calleryana	5	Υ	UPL	UPL spp. 5 x 5 = 25
2.					
3.					Total 80 (A) 305 (B)
4.					(3)
5.					Prevalence Index = B/A = 3.813
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes No Rapid Test for Hydrophytic Vegetation
10.					■ Yes ■ No Dominance Test is > 50%
10.	Total Cov				Pes No Prevalence Index is ≤ 3.0 *
	Total Cov	Ci – J			PYes No Morphological Adaptations (Explain) *
Harb Stratum /D	let eize. Eft redius)				, , , , ,
1.	lot size: 5 ft radius) Apocynum cannabinum	20	Y	FAC	■ Yes ■ No Problem Hydrophytic Vegetation (Explain) *
2.		55	Y	FACU	* Indicators of hydric soil and wetland hydrology must be
3.	Solidago canadensis				present, unless disturbed or problematic.
4.					Definitions of Vegetation Strate:
5.	_ 	<u></u>			Definitions of Vegetation Strata:
					Troo
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.		-			broast holgh (bbr), regulates of holgh.
8.					Cauling (Chambe Woody plants loss than 2 in DPH and greater than 2.29
9.		-			Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					21
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cov	er = 75			
Woody Vine Stra	atum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present Pyes Pyo
4.					
5.					
	Total Cov	er = 0			
Remarks:	Moss 15%				
1					

Additional	Romarke:



Project/Site: Northern Columbus Loop - Preferred Stantec Project #: 193707055 Date: Applicant: Route Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen OH NWI/WWI Classification: N/A Wetland ID: Glynwood clay loam, 6-12% slopes, eroded Wetland 13 Soil Unit: Landform: Terrace Local Relief: Concave Sample Point: SP31 Latitude: 40.152707 Slope (%): Longitude: -83.186139 Datum: --Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? YesNo Yes • No ■ Yes □ Is This Sampling Point Within A Wetland?

Wetland Hydrology Present?

HYDROLOGY

Remarks:

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface Water

A2 - High Water Table A3 - Saturation B1 - Water Marks

Wetland point to Wetland 13

B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery

B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present?
Yes
No

Field Observations:

Surface Water Present? Yes No Depth: 0.5 (in.) Water Table Present? ■ Yes □ Depth: (in.) No 1 Saturation Present? ■ Yes ■ No Depth: 1 (in.)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SOILS

Map Unit Name: Glynwood clay loam, 6-12% slopes, eroded

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Texture Top Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 95 5YR 2 ΡI silt loam **10YR** 4/6 0 5 4/3 5YR 4/6 3 С М silt loam __ 5 14 10YR 5YR 4/6 PL silt loam 4/2 87 8 C 5YR 4/6 5 С М silt loam 14 20 2.5Y 4/2 96 5YR 4/6 4 С Μ silt loam ------------------------

NRCS Hydric Soil Field Indicators (check here if indicators are not present -

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral

S3 - 5 cm Mucky Peat or Peat

S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix F6 - Redox Dark Surface F7 - Depleted Dark Surface

F8 - Redox Depressions

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

Indicators for Problematic Soils 1

S7 - Dark Surface

A16 - Coast Prairie Redox

Other (Explain in Remarks)

F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**



Project/Site: North Columbus Loop - Preferred Route Wetland ID: Wetland 13 Sample Point: SP31

VEGETATION	(Species identified in all uppercase are nor	n-native spe	cies.)		
Tree Stratum (Pl	ot size: 30 ft radius)				
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.				-	Number of Dominant Species that are OBL, FACW, or FAC:1 (A)
3.				-	
4.					Total Number of Dominant Species Across All Strata: (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover	-= 0			FACW spp. 0 x 2 = 0
					FAC spp. $0 x 3 = 0$
Sapling/Shrub Str	ratum (Plot size: 15 ft radius)				FACU spp. $0 x 4 = 0$
1.				-	UPL spp. $0 x 5 = 0$
2.					···
3.					Total 0 (A) 0 (B)
4.					(//
5.					Prevalence Index = B/A = NA
6.				-	·
7.					
8.					Hydrophytic Vegetation Indicators:
9.					■ Yes □ No Rapid Test for Hydrophytic Vegetation
10.					■ Yes □ No Dominance Test is > 50%
	Total Cover				Yes □ No Prevalence Index is ≤ 3.0 *
	. 514. 5575.	ŭ			□ Yes □ No Morphological Adaptations (Explain) *
Herh Stratum (Pl	ot size: 5 ft radius)				Problem Hydrophytic Vegetation (Explain) *
1.	Typha latifolia	90	Υ	OBL	2 163 140 Frobient Hydrophytic Vegetation (Explain)
2.	Phalaris arundinacea	10	N N	FACW	* Indicators of hydric soil and wetland hydrology must be
3.					present, unless disturbed or problematic.
4.					Definitions of Vegetation Strata:
5.					Deminions of Vegetation Strata.
6					Tree
7.					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
8.		<u></u>			
					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
9.					ft. tall.
10.				-	
11.					Herb - All herbaceous (non-woody) plants, regardless of size,
12.					and woody plants less than 3.28 ft. tall.
13.					
14.					Million All Ward All wearbuilting weater than 2 20 ft in brinks
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover	= 100			
	tum (Plot size: 30 ft radius)				
1.		-	-		
2.					
3.					Hydrophytic Vegetation Present • Yes • No
4.					
5.					
_	Total Cover	-= 0			
Remarks:					

Additional Remarks:		



Project/Site: Northern Columbus Loop - Preferred Stantec Project #: 193707055 Date: Applicant: Route Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen OH NWI/WWI Classification: N/A Wetland ID: Glynwood clay loam, 6-12% slopes, eroded Wetland 13 Soil Unit: Landform: Hillslope Local Relief: None Sample Point: SP32 Longitude: -83.186398 Latitude: 40.152746 Slope (%): Datum: --Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? Yes
 No Yes • No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Upland point for Wetland 13 HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present.):

Primary:

A1 - Surface Water A2 - High Water Table

A3 - Saturation . B1 - Water Marks **B2 - Sediment Deposits** B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

Field Observations:

Surface Water Present? □ Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SOILS

Map Unit Name: Glynwood clay loam, 6-12% slopes, eroded Profile Description

I TOTHE DESCRIP	1 To The Description (Describe to the depth needed to document the indicator of confirm the absence of indicators.) (Type: C=Concentration, D=Deptetion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Eccation: PL=Pore Lining, M=Matrix)										
Тор	Bottom		Matrix			Redox Features				Texture	
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	2		10YR	5/3	97	7.5YR	4/6	3	С	PL	silt loam
2	20		10YR	5/3	96	10YR	5/8	4	С	M	silt loam
					-						
	-										
											-

NRCS Hydric Soil Field Indicators (check here if indicators are not present

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers A10 - 2 cm Muck

A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface S1 - Sandy Muck Mineral

S3 - 5 cm Mucky Peat or Peat

S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

Other (Explain in Remarks)

S7 - Dark Surface

Indicators for Problematic Soils 1

A16 - Coast Prairie Redox

F12 - Iron-Manganese Masses

TF12 - Very Shallow Dark Surface

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

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**



Project/Site: North Columbus Loop - Preferred Route Wetland ID: Wetland 13 Sample Point: SP32

VEGETATIO	(Species identified in all up	percase are non-na	ative spec	cies)		
	(Plot size: 30 ft radius)	porodoo dro non no	auvo opot	5100.)		
	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.						
4.						Total Number of Dominant Species Across All Strata: 3 (B)
5.						
6.						Percent of Dominant Species That Are OBL, FACW, or FAC:33% (A/B)
7.						
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. 0 x 1 = 0
		Total Cover =	0			FACW spp. 15 x 2 = 30
						FAC spp. 30 x 3 = 90
	Stratum (Plot size: 15 ft radius)					FACU spp. 25 x 4 = 100
1.						UPL spp. <u>25</u> x 5 = <u>125</u>
2.						
3.						Total 95 (A) 345 (B)
4. 5.						B
6.						Prevalence Index = B/A = 3.632
7.						
8.						Hydrophytic Vegetation Indicators:
9.						
10.						■ Yes ■ No Dominance Test is > 50%
10.		Total Cover =	0			Pes No Prevalence Index is ≤ 3.0 *
		rotal Govel	Ü			PYes No Morphological Adaptations (Explain) *
Herh Stratum	(Plot size: 5 ft radius)					Problem Hydrophytic Vegetation (Explain) *
1.	Dipsacus fullonum		20	Υ	FACU	- 105 NO 11001011111ydiophydd Vegetation (Explain)
2.	Festuca arundinacea		25	Y	UPL	* Indicators of hydric soil and wetland hydrology must be
3.	Poa pratensis		30	Y	FAC	present, unless disturbed or problematic.
4.	Phalaris arundinacea		15	N.	FACW	Definitions of Vegetation Strata:
5.	Solidago canadensis		5	N	FACU	
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.						ft. tall.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size,
13.						and woody plants less than 3.28 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	95			
Woody Vine St	tratum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present Pyes No
4.						
5.						
		Total Cover =	0			
Remarks:	Moss 5%	-				
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Additional Re	marks:
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