# REQUEST FOR A TYPE III VARIANCE FROM THE CITY OF COLUMBUS STORMWATER DRAINAGE MANUAL

#### SIMPSON STRONG-TIE EXPANSION SITE

**JANUARY 7, 2023** 

Prepared for:

**CITY OF COLUMBUS** ADMINISTRATOR, DOSD MR. GREG FEDNER 910 DUBLIN ROAD COLUMBUS, OHIO 43215



Prepared by:



Specialists in

**Ecological & Wetland Consulting** 

## TABLE OF CONTENTS

1.0	PRO	DJECT OVERVIEW	1
2.0	STR	EAM CORRIDOR PROTECTION ZONE	1
2.0		D. II. 7 CONTENT OF THE TEST OF THE STATE OF	
3.0	DEV	SON FOR VARIANCE REQUEST	
5.0	KLA	BOIT OR VARIANCE REQUEST	••••
4.0	ALTERNATIVES ANALYSIS2		
7.0	4.1	Offisite Considerations	2
		F. H. Consulting and Alexander	2
	4.2	Full Compliance Alternative	2
	4.3	Minimal Impact Alternative	
	4.3	Preferred Alternative	
	4.4 Alternatives Analysis Results		
2.0 3.0 4.0		4.4.1 Offsite v. Preferred	4
		4.4.2 Full Compliance v. Preferred	
		4.4.3 Minimal Impact v. Preferred	4
		1 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
5.0	PROPOSED MITIGATION		4
2.0	5.1	HUC12	e
	5.2	Mitigation Plan	
	J.∠	5.2.1 Wotland Creation Creating Dlan	٠ر
		5.2.1 Wetland Creation Grading Plan	ا
		5.2.2 Wetland Plant Community	٠٢

LITERATURE CITED9

#### **LIST OF FIGURES**

## **Figure**

- 1 Proposed Site Design
- 2a,b General Site Location and Site Aerial
- 3 Stream Corridor Protection Zone
- 4 Onsite Watershed Drainage
- 5 Mitigation Concept Design

#### LIST OF APPENDICES

# **Appendix**

- A Delineation Report and Preliminary Jurisdictional Determination
- B USACE 404 Individual Permit Application and Ohio EPA 404 WQC
- C Application Economic Analysis for Offsite Alternative
- D Full Compliance Alternative
- E Minimal Impact Alternative
- F Preferred Alternative
- G Historic Aerials

#### 1.0 PROJECT OVERVIEW

Simpson Strong Tie (SST) is a manufacturer of metal hangers used in various types of construction including but not limited to joist hangers and deck hangers. The company currently has approximately 284,000 SF of building under roof serving administration, manufacturing, and warehousing needs of their Hilliard Ohio plant. Due to the increase in demand for these products, additional warehouse space is needed in order to satisfy demand.

To accomplish this, SST is proposing to add warehouse capacity and an employee training center totaling 289,600SF +/-. (see Figure 1: Proposed Site Design). In order to accomplish this in the most effective way, the company purchased the parcel situated directly east of the current facility (Parcel 560-302754-00, hereafter referred to as the Site) to accommodate the proposed expansion. The Site is an old railyard, with several old rail lines and low-quality wetlands onsite. Roberts Milliken Ditch runs through the center of the Site from west to east. Seven (7) small tributaries of the ditch are also present onsite (See Figures 2a and 2b).

A wetland delineation was completed by Central Ohio Wetland Consulting, LLC in April 2021, and a supplemental delineation was completed by MAD Scientist Associates in September 2021. A total of seven (7) wetlands and eight (8) streams were delineated onsite. Based on field observations, wetlands and streams were determined to be potentially jurisdictional. A preliminary jurisdictional determination (PJD) from the USACE Huntington District confirmed the jurisdictional status of the wetlands and streams onsite.

A 404 Individual Permit application was submitted to the USACE Huntington District on November 1, 2022. A 401 Water Quality Certification (WQC) application was submitted to the Ohio EPA on November 29, 2022.

See Appendix A for delineation report and jurisdictional determination.

See Appendix B for USACE 404 Individual Permit Application and Ohio EPA 404 WQC Application.

#### 2.0 STREAM CORRIDOR PROTECTION ZONE

Roberts Milliken Ditch runs through the center of the property, connected to 7 small tributaries that feed into it. Based on the sewershed mapping provided by the City of Columbus (the City),

the drainage area of the Ditch is 0.277 square miles. According to Streamstats, the drainage area for Roberts Milliken Ditch is 0.57 square miles. In order to provide the most conservative Stream Corridor Protection Zone (SCPZ), the larger drainage area was used to calculate an SCPZ with a width of 118.73 feet. Four wetlands (Wetlands 3, 4, 5, and 6) from the delineation report are contiguous with the SCPZ and, therefore, are considered part of the SCPZ (See Figure 3). For ease of reference, the wetlands will be referred to by their numbers within this variance request.

#### 3.0 REASON FOR VARIANCE REQUEST

Based on capacity needs, a minimum of 230,000 square feet (sq. ft.) will be required for building construction. In addition, 115,975 sq. ft. of parking will need to be constructed to accommodate the increase in personnel employed at the facility. As per City regulations, the new building must be spaced 10 feet away from existing infrastructure, and stormwater detention with a capacity of 323,704 cubic feet (cf) is needed for the Site. Based on these requirements for proposed development, a total of 19.79 acres is needed for completing this project. Due to the configuration of wetlands onsite, there is not a section of contiguous acreage that could accommodate the proposed development without impacting onsite wetlands.

Based on building needs, Wetlands 4 and 6, which are part of the City of Columbus stream corridor protection zone (SCPZ), are expected to be impacted (Attachment A, Figure 2). Both wetlands were assessed using the ORAM (Ohio Rapid Assessment Method) and assigned scores of 25 and 26, respectively, which identifies them as Category 1 wetlands. These types of wetlands are defined as "limited quality waters" which have low functionality and limited potential for restoration (Ohio EPA, 2001) (Attachment A).

#### 4.0 ALTERNATIVES ANALYSIS

#### 4.1 Offsite Considerations

SST reviewed the possibility of purchasing a property that was not contiguous with the current manufacturing site, including an economic analysis of four (4) options. The economic analysis includes the proposed expansion into the Buckeye Yard property. This would have resulted in no impacts to the current Site.

Due to budgetary constraints and accessibility issues, however, this alternative was not considered economically feasible. Of the four alternatives reviewed, the expansion into the Buckeye Yard

Rail Site was the only one that would allow the current SST facility to continue operating, thus reducing costs by requiring an expansion rather than a completely new building. The remaining alternatives contained challenges and constraints to buildings based on Site configuration and Site location.

In regard to potential environmental impacts from the other alternatives, the other three alternatives required a construction footprint that met the current facility size in addition to the expansion size, therefore increasing the permeable surface within the county by closer to 622,000 sq. ft. instead of 300,000 sq. ft. Wetland and stream delineations were not conducted onsite for the alternative property options; however, based on a review of aerial imagery and other resources including the National Wetlands Inventory and web soil survey for alternative properties, it appears that wetlands and streams are present on the alternative sites as well. Therefore, it is probable that impacts to aquatic resources would have occurred in order to develop the alternative properties as well.

See Appendix C for Economic Analysis on the Non-Disturbance Alternative.

#### **4.2** Full Compliance Alternative

In the full compliance alternative, the proposed development of the Buckeye Yard site would be greatly reduced to avoid any impacts to the SCPZ. In order to accommodate both an expansion of operations, as well as parking for the additional personnel, there would only be room for an additional 81,600 SF building. This is significantly less than the 289,600 SF footprint needed to accommodate the added warehouse capacity and an employee training center.

A parking garage was not considered in the planning for this project due to land availability and significant additional costs that would pose an undue financial burden on the project. In the project approximately \$376,000 was allotted for asphalt paving for the surface parking lot currently shown on the variance documents. The probable cost to build a 2-story parking garage on the site is an order of magnitude of approximately \$9,376,000. Considering an additional cost to the project of approximately \$9,000,000 in an environment where costs had increased significantly over the last several years, this would put an undue burden on the owner and has the potential to stop the project from moving forward.

See Appendix D for Full Compliance Alternative.

#### **4.3** Minimal Impact Alternative

In the minimal impact alternative, the proposed development of the Buckeye Yard site is oriented to minimize disturbance to on-site aquatic resources. The required stormwater detention basin is situated within the SCPZ of Roberts Milliken Ditch, parallel to the stream. The construction of the stormwater detention pond would require 41.60 linear feet of impacts to a tributary of Roberts Milliken Ditch. To accommodate the ability for large trucks to be able to turn around in the northern portion of the proposed facility expansion, a total of 2.35 acres of the SCPZ (full wetland impact to Wetland 4 and partial wetland impact to Wetland 6) will be impacted. From a quantitative standpoint, this alternative would impact less of the SCPZ. That is why this option is considered the minimal impact alternative.

See Appendix E for the Minimal Impact Alternative Concept Plan.

#### 4.3 Preferred Alternative

In order to accommodate the proposed expansion of the manufacturing facility, SST will need to impact the southern portion of the SCPZ, particularly within Wetlands 4 and 6. A portion of Wetland 4 will be filled to accommodate building construction, and Wetland 6 will be converted into a detention basin for stormwater, therefore removing its ability to naturally regulate stormwater. Because of this, the impacts to Wetland 6 are being treated as impacts to the SCPZ. In this design, 2.75 acres of wetland will be impacted. The design does not impact Roberts Milliken Ditch or any of its tributaries onsite.

See Appendix F for Preferred Alternative Concept Design.

#### 4.4 Alternatives Analysis Results

Based on the alternatives analysis, SST is proposing moving forward with the preferred alternative. An analysis of each of the alternatives is provided below.

#### 4.4.1 Offsite v. Preferred

In comparison to an offsite option, the economic benefit to expanding Simpson Strong-Tie into the Buckeye Yard location is much greater as the expansion would be adjacent to the current building and allow a buildout instead of a brand-new facility on undisturbed land.

#### 4.4.2 Full Compliance v. Preferred

The full compliance alternative would only allow for the addition of an 81,600 SF building onsite, which would not accommodate the needs of the client. As described in the full compliance section above, reducing the parking footprint via a parking garage construction would not be economically feasible. In comparison, the preferred alternative would allow the client to successfully expand operations and provide parking to accommodate the additional personnel. With successful mitigation to the impacted SCPZ, the preferred alternative would increase the quality of the SCPZ, which would be preferred to the full compliance alternative.

#### 4.4.3 Minimal Impact v. Preferred

This alternative would quantitatively impact more SCPZ acreage in comparison to the minimal impact alternative; however, it would qualitatively be better for the streams onsite. Within the SCPZ impact, both Wetlands 4 and 6 are classified as Category 1 wetlands, and therefore, their contribution to wildlife habitat and ecosystem function is relatively low. In comparison, the stream impacted in the minimal impact alternative scored a 54 based on an HHEI analysis, which classifies it as Modified Class II Primary Headwater (PHW) Stream. While not directly comparable to the ORAM categories, the Ohio EPA HHEI manual describes Class II PHW streams as: "Streams found to have a moderately diverse community of warm-water adapted native fauna either present seasonally or on an annual basis." (Ohio EPA, 2018). In comparison to Category 1 wetlands, which are defined as those wetlands that "...support minimal wildlife habitat, or hydrological or recreational functions," and as wetlands which "...do not provide critical habitat for threatened or endangered species or contain rare, threatened or endangered species" (Ohio EPA, 2001), it is our recommendation that the increased impacts to the SCPZ would have less of an impact to the stream functions onsite than decreased SCPZ impact, but direct stream impact.

The preferred alternative is the most cost-effective and economically viable while also impacting the least water resources onsite. A mitigation plan has been created to address the 2.75 acres of proposed wetland impacts.

#### 5.0 PROPOSED MITIGATION

The USACE requires a total of 4.2 acres of wetland mitigation credits to account for the 2.75 acres of impact to these Category 1 jurisdictional wetlands (a 1.5:1 ratio). The City requires that wetlands within the SCPZ be mitigated onsite at a ratio of 1:1 (City of Columbus, 2021). In order to satisfy

all mitigation requirements, SST intends to create 2.75 acres of emergent wetland onsite and purchase the additional 1.5 acres through the Stream + Wetlands Foundation in-lieu fee (ILF) program.

#### 5.1 HUC12

Based on historic elevations, the Site is mapped into two separate HUC12 units (Hayden Run-Scioto River HUC12 050600011204) and Dry Run-Scioto River HUC12 050600011205), with the divide between the two running east to west. Nonetheless, based on historic aerials, it appears that the onsite drainage has been so heavily modified that this is no longer an accurate representation of the Site. Prior to the 1970s, the site was farmed, with no apparent wetland signatures appearing on historic aerials (See Appendix G). Roberts Milliken Ditch is visible, as well as Scioto Darby Creek to the north of the Site, into which the northern portion of the Site presumably drained originally. However, the construction of the railyard in the 1970s created artificial berms within the watershed, retaining most of the water onsite or conveying it to Roberts Milliken Ditch to the south. In particular, Wetland 3, which crosses the two HUCs, does not connect to Scioto Darby Creek because of the impediment of the surrounding railroad tracks. No culverts were observed that provide a hydrologic connection to Scioto Darby Creek. Instead, this wetland connects to Roberts Milliken Ditch (See Figure 4).

Other current-day observations that support the onsite drainage as a functionally single HUC are the presence of Scioto Darby Creek Road to the north that creates a large barrier from Scioto Darby Creek preventing onsite water from flowing north. Topographic overlays developed from recent LiDAR data indicate that most of the northern wetlands are depressions with no distinct outlet other than overland flow. A culvert was observed flowing into Wetland 2 beneath the railroad tracks from the north. The area that flows into the wetland is a small upland triangle between two raised tracks and supports the hypothesis that onsite drainage no longer flows to the north to Scioto Darby Creek (Attachment H, Photographs1-5).

#### **5.2** Mitigation Plan

In order to mitigate the impact to Wetlands 4 and 6 (part of the SCPZ requiring 1:1 mitigation in the immediate HUC12 watershed), SST intends to expand and connect Wetlands 2, 3, and 7 to create a more diverse wetland complex that would provide additional stormwater storage capacity and ultimately increase wetland quality within the Roberts Milliken Stream watershed. The

expanded wetland complex between Wetlands 2 and 7 will hydrologically connect to Wetland 5 through the partial removal of the railroad spur that separates the two areas. Wetland 5 is part of the SCPZ onsite, and thus, the newly created wetland complex will be part of the SCPZ and will contribute to overall stream health onsite.

The impacted wetlands are cattail monocultures and have been categorized as Category 1 wetlands through the ORAM. In contrast, Wetland 2 is more diverse and received a higher ORAM score of 32. Expanding this wetland area would not only account for the 2.75 acres of impact, but it would increase the quality of existing wetlands and the functional capacity of the SCPZ.

The SCPZ, with the new onsite addition from the mitigation wetlands, will be placed in a conservation easement to ensure that it will not be impacted by future changes to the site.

The additional wetland mitigation acreage required by the USACE and Ohio EPA due to the 1.5:1 mitigation ratio will be obtained through the Stream + Wetland Foundation ILF program.

#### 5.2.1 Wetland Creation Grading Plan

The wetlands identified on the Site vary in elevation and have formed (or persisted) in remnant land areas that are partitioned and defined by railroad infrastructure. Currently, Wetland 2 is situated at elevations below 886 feet AMSL (~883 – 886 ft AMSL), while the surrounding area exceeds these elevations (~887 - 890 ft AMSL). Wetland 7, located to the northwest of Wetland 2, is situated at 888 ft AMSL, directly downslope from the raised railroad bed. Wetland 5 spans elevations from 880 - 881 ft AMSL to the south but is separated from Wetland 2 by a raised railroad bed that is 12 to 13 feet higher (~893 ft AMSL).

To accomplish onsite wetland mitigation, it is proposed that excavation occur within certain areas that are currently not meeting wetland criteria. The proposed details are described below. It must be noted, however, that these plans are preliminary and have been developed for the purposes of obtaining concurrence/approval for the variance being sought in this application. A more thorough site analysis and detailed design will be completed to ensure that SST meets its mitigation requirements through successful onsite wetland creation should the variance be approved.

In order to achieve the appropriate hydrology for wetland creation, approximately 2 acres north of Wetland 2 will be excavated (presumably to elevations below 887 ft AMSL) to form a depression that is hydrologically connected – at least during peak flooding - with both Wetland 2 and Wetland

7. To the south of Wetland 2, an additional area of approximately 0.51 acres will also be excavated (to elevations of 884 ft AMSL or less).

Currently, Wetlands 7 and 2 are isolated from any stream connections due to the railroad beds that surround the area and contain a central depression. Historically, this area would have drained to the northeast, but it currently does not function as part of the watershed for the Scioto Darby Creek. The current culvert under the existing railroad track to the east allows excess water to flow into Wetland 2, but based on the culvert grade, further isolates these wetlands from the original watershed. Instead, as part of this variance, these wetlands (along with the newly constructed expansion) will connect to the Roberts Milliken Ditch watershed to the south. Based on onsite observations and topography review, there will be substantial hydrology to accommodate the additional wetland acreage to successfully create mitigation wetlands and connect them to the SCPZ.

A connection between the expanded Wetland 2 and Wetland 5 to the south will be created by removing a portion of the existing railroad spur and contouring the area to slope to the natural elevation of Wetland 5. In general, this subtle topography will accommodate the collection of stormwater within the northern basin without inundating Wetland 5. This wetland will also provide additional stream corridor protection zone area. The connectivity of the proposed wetland restoration to Wetland 5, which is contemporarily situated in the HUC12 watershed where the impacted wetlands are located, results in a 1:1 replacement of the impacted wetlands within the same watershed.

See Figure 5 for the Mitigation Concept Design.

#### 5.2.2 Wetland Plant Community

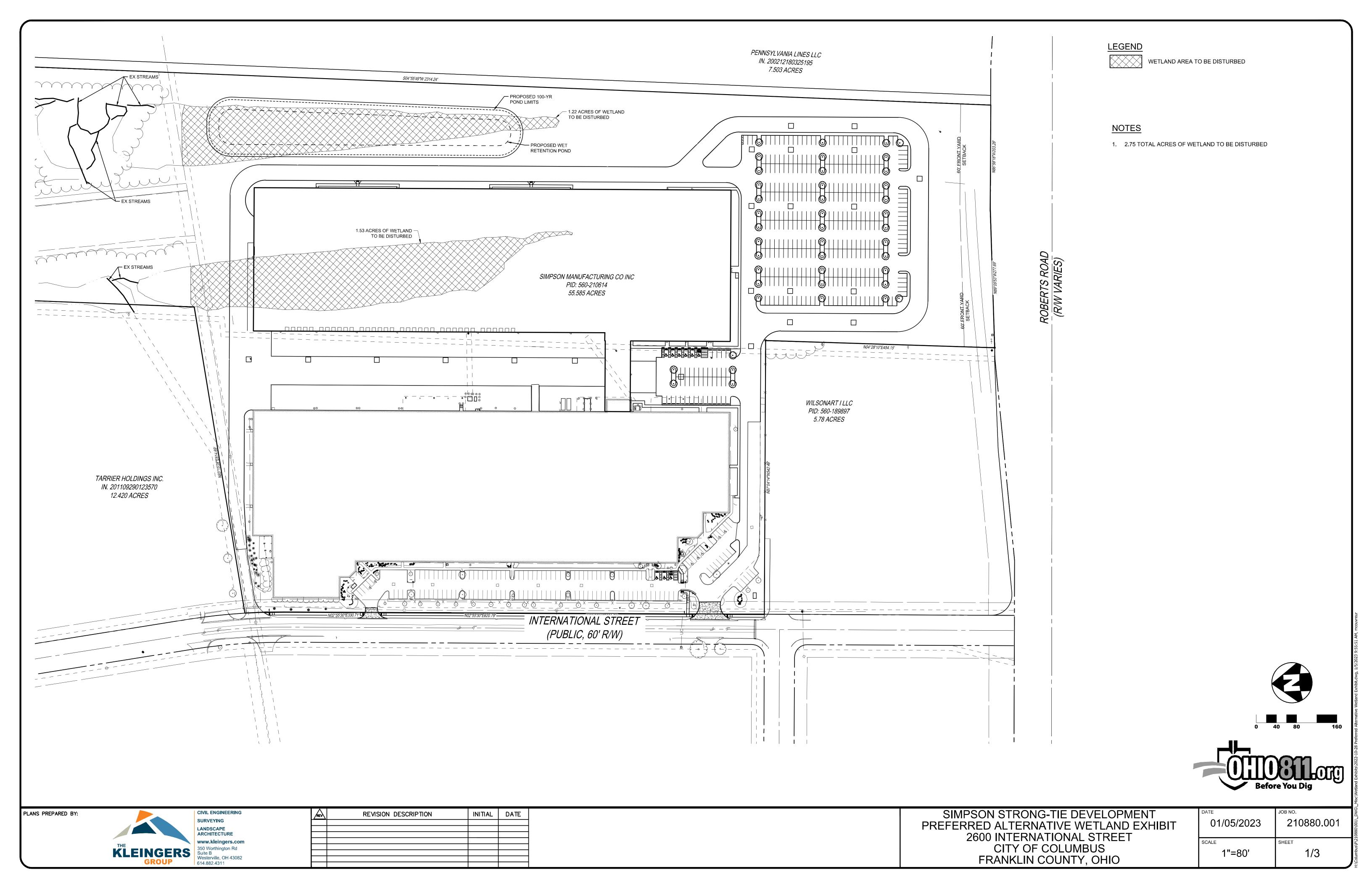
The wetlands to be impacted are cattail monocultures that score as Category 1 wetlands using the ORAM. While these areas provide some stream corridor protection, they contain minimal wildlife habitat and are considered to be of low quality. In contrast, Wetland 2 scores as a Category 2 wetland, which "...support[s] moderate wildlife habitat, or hydrological or recreational functions," and is "...dominated by native species but generally without the presence of, or habitat for, rare, threatened and endangered (T&E) species; and wetlands which are degraded but have a reasonable potential for reestablishing lost wetland functions" (ORAM; Ohio EPA, 2001). In order to preserve the functions of the current Category 2 wetland, the newly formed wetlands will incorporate the

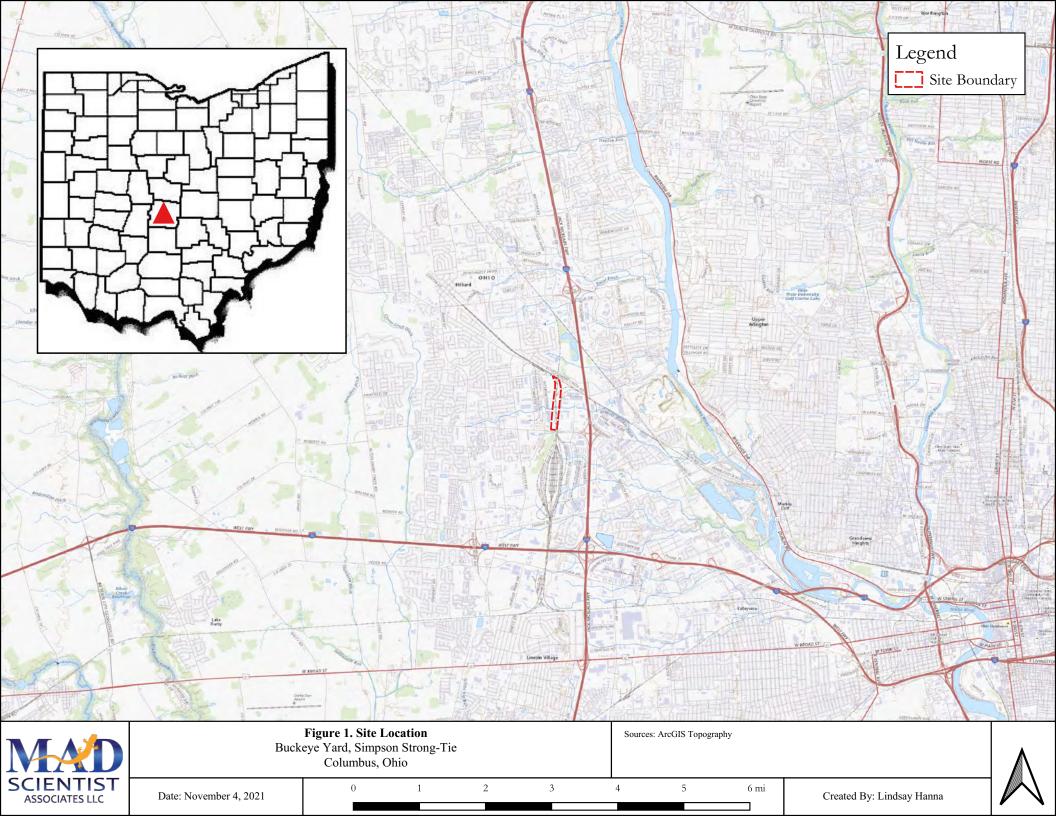
existing vegetation within Wetland 2, including the large cottonwood (*Populus deltoides*) trees located on the northern end. The majority of the area proposed for wetland expansion is currently dominated by Callery pear (*Pyrus calleryana*), which is considered an invasive upland species. Removal of the Callery pear and the establishment of additional emergent wetland plants will reduce invasive species coverage onsite and enhance the habitat value and ecosystem functions of these wetlands. The newly-created wetlands will be seeded with appropriate native shallow and deep emergent wetland plant species and monitored for invasives species encroachment. However, in general, it is expected that plant communities within the new wetlands will re-establish naturally due to the presence of higher quality vegetation found in Wetland 2, which may serve as a source area for wetland plant propagules.

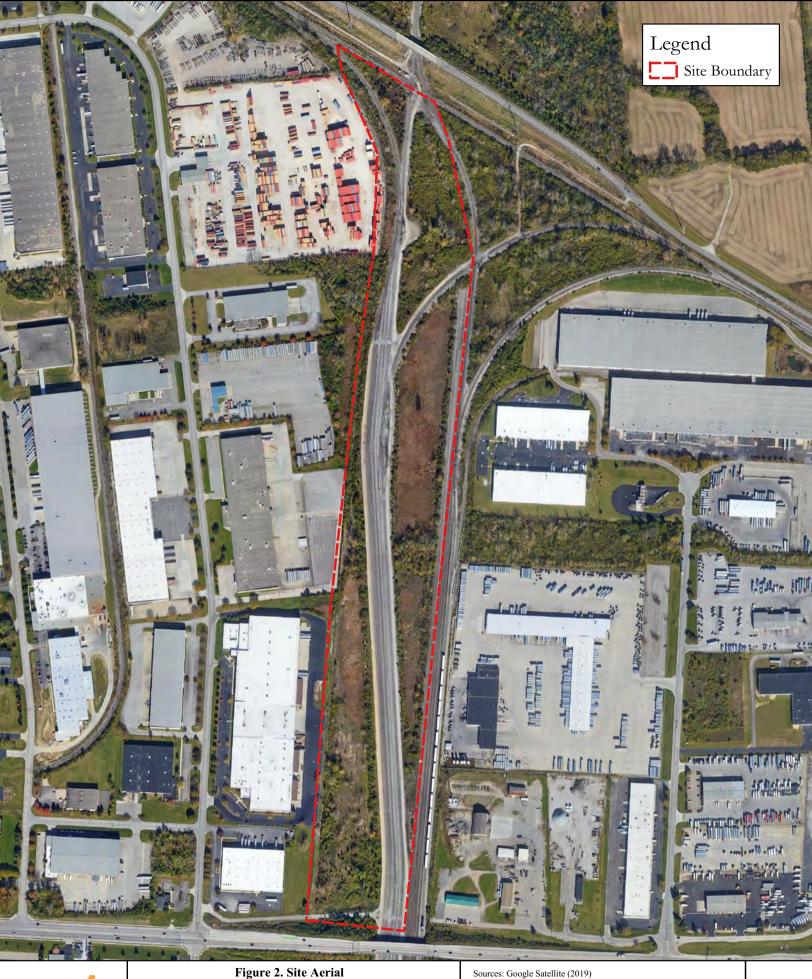
#### LITERATURE CITED

- The City of Columbus Department of Public Utilities. 2021. Division of Sewerage and Drainage Stormwater Drainage Manual.
- Ohio EPA. 2001. Ohio Rapid Assessment Method for Wetlands. Version 5.0 Final. Ohio Environmental Protection Agency. Columbus, Ohio.
- Ohio EPA. 2018. Field Methods for Evaluating Primary Headwater Streams in Ohio. Version 4.0. Ohio EPA Division of Surface Water, Columbus, Ohio. 129 pp.







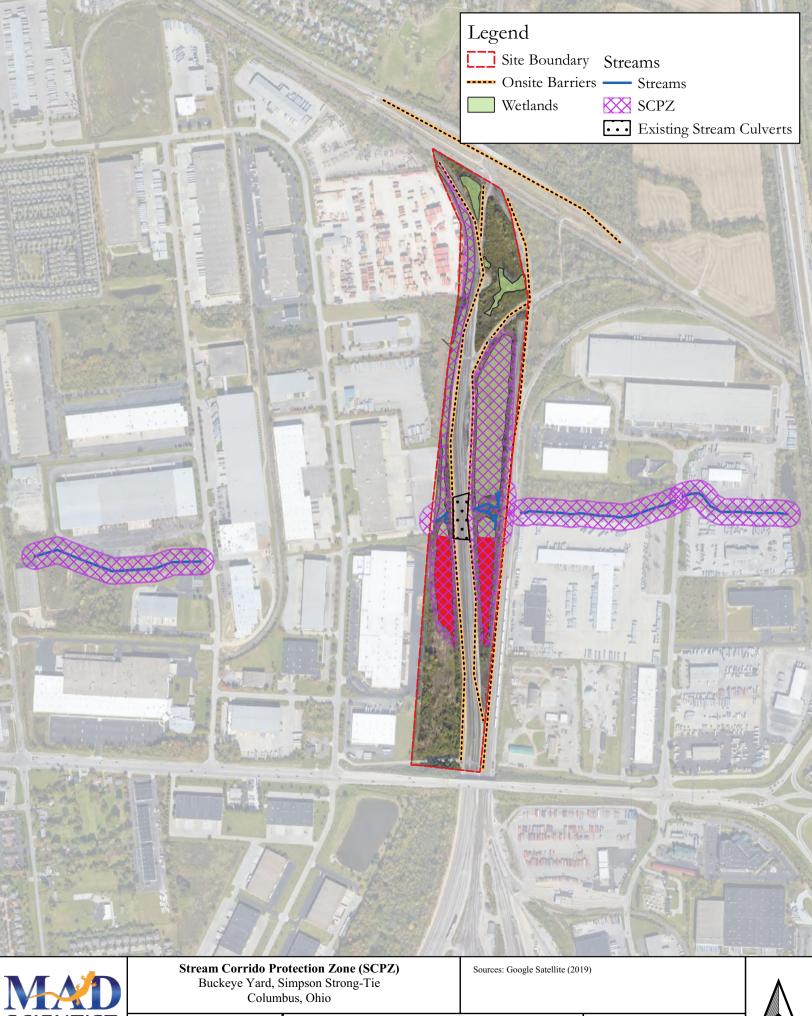




Buckeye Yard, Simpson Strong-Tie Columbus, Ohio

Date: November 4, 2021

200 400 1,000 ft

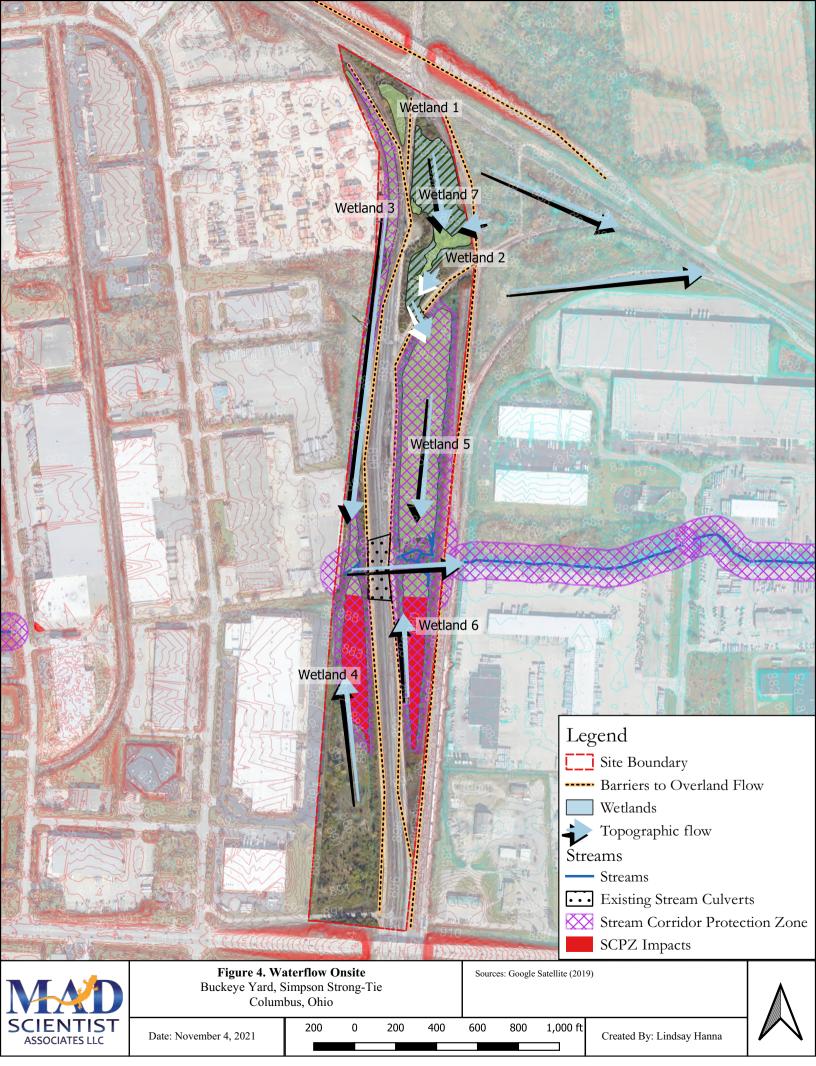


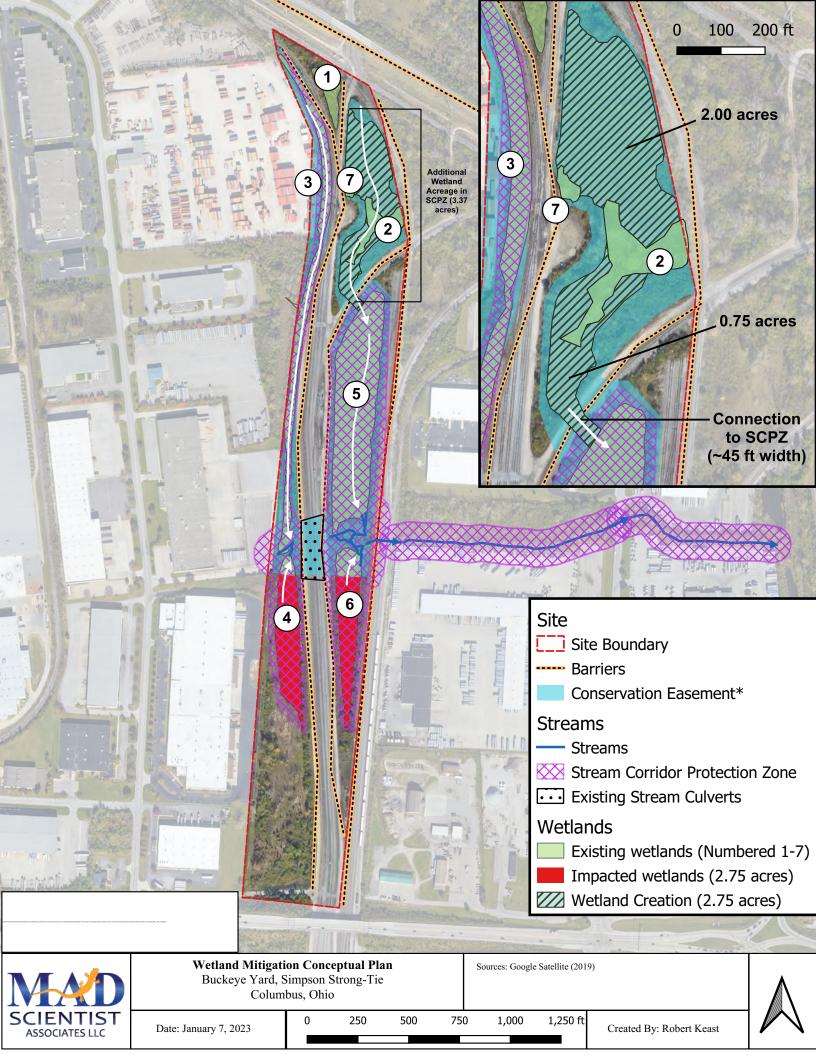
ASSOCIATES LLC

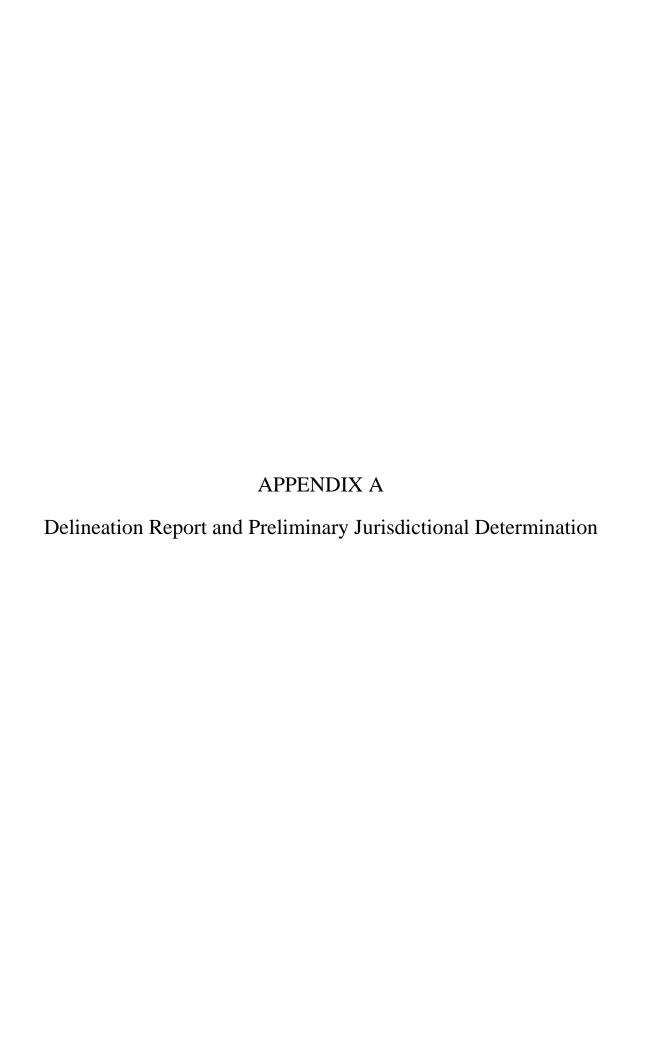
Date: January 7, 2023

1,200 1,500 ft 600











# **Memorandum: Buckeye Yard Wetland Assessment**

Date: May 3, 2022

**RE:** Assessment of water resources onsite at Buckeye Yard (north of Roberts Road) in

Franklin County, Ohio

#### Introduction

This is a supplemental memo to be included with the delineation report completed by Central Ohio Wetland Consulting, LLC on April 20, 2021.

Simpson Strong-Tie Co., Inc. (SST) hired MAD Scientist Associates, LLC (MAD) to provide wetland assessment services as part of the company's due diligence prior to purchasing a property within Buckeye Yard north on Roberts Road in Franklin County, OH (Figures 1 and 2). Field work was completed on October 18, 2021, by Certified Wetland Delineator (CWD) Lindsay Hanna and Environmental Technician Cody Wright. Observations were recorded regarding the delineated water resources onsite as well as any additional wetlands observed. In addition, connectivity of water resources to make a potential jurisdictional determination was reviewed. Delineation datasheets were completed using methods presented in the 1987 U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (Environmental Laboratory, 1987) and the Midwest Regional Supplement (Version 2.0; USACE, 2012).

#### Site Findings

MAD confirmed the presence of seven (7) wetlands and eight (8) streams onsite. MAD verified the wetland boundaries that were delineated by Central Ohio Wetland Consulting, LLC in a previous delineation report and completed datasheets at each wetland. In addition, MAD delineated an additional wetland and conducted an ORAM for this wetland. Based on field observations, these wetlands and streams are potentially jurisdictional, however a formal jurisdictional determination will have to be submitted to USACE before this can be verified.

Supplemental photos can be found in Appendix A of this addendum.

#### Wetlands 1-6

MAD confirmed the presence of Wetlands 1 through 6 that were previously delineated by Central Ohio Wetland Consulting, LLC in April 2021. The updated wetland boundaries are presented in Figure 3 of this addendum. Wetland datasheets are provided in Appendix B of this addendum.

#### Wetland 7

Wetland 7 is located in the northern portion in Buckeye Yard located along the edge of the railroad track. The wetland is estimated to be 0.057 acres. Dominant species include green ash (Fraxinus pennsylvanica-FACW), cottonwood (Populus deltoides-FAC), gray dogwood (Cornus racemose-FAC), common buckthorn (Rhamnus cathartica-FAC), narrow-leaf cattail (Typha angustifolia-OBL), barnyard glass (Echinochloa crus-galli-FACW), and yellow nutsedge

(*Cyperus esculentus-FACW*). Wetland hydrology indicators at the Site for Wetland 7 included saturation, geomorphic position, and passing the FAC-neutral test for plants. Hydric soil indicators included depleted matrix (F3) evidenced by a low chroma of 2, with prominent redoximorphic features present (4 to 12 percent) as concentration in the matrix.

Wetland 7 is small with a very narrow buffer of high intensity land uses. The hydrology has been impacted by the nearby railroad track and stormwater input; it appears to be recovering. Similarly, the habitat has been impacted by shrub removal and is of fair quality; it appears to be recovering. In general, there is little wildlife habitat and a sparse amount of invasive cattail. Based on these factors, Wetland 7 scored a 23 on the ORAM, categorizing it as a Category 1 wetland.

#### **Impacts**

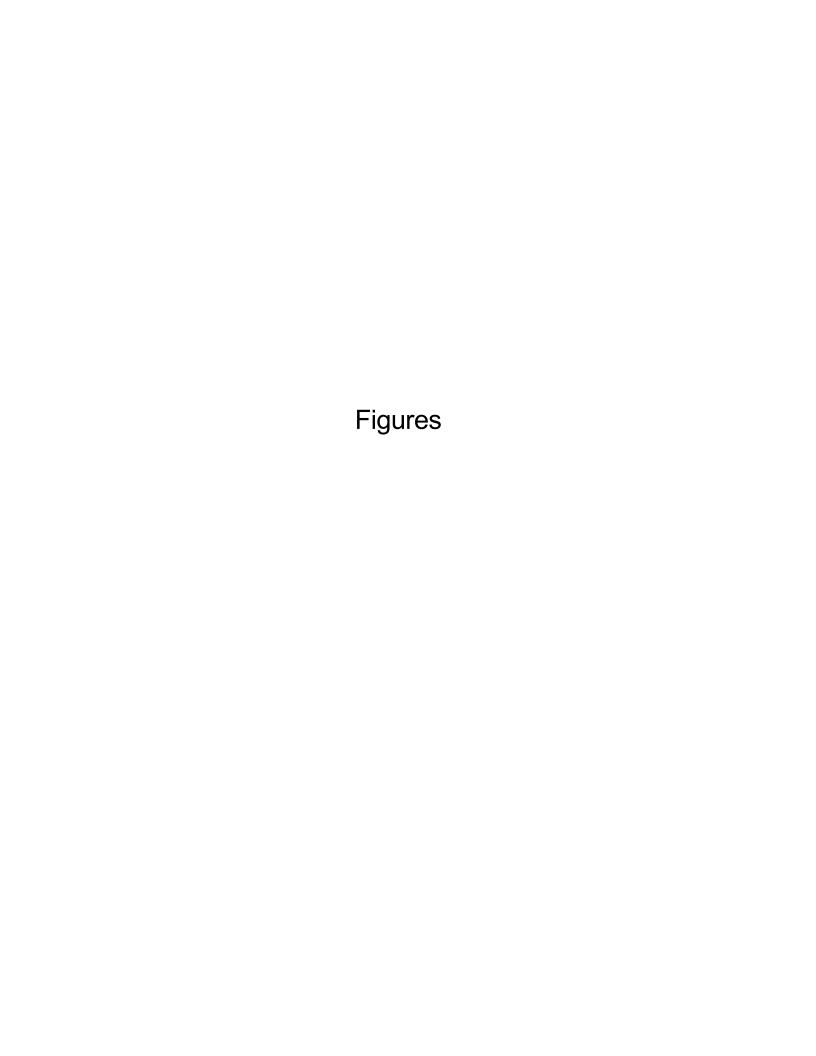
Wetlands 4 and 6 will be impacted. In total, 2.51 acres of wetland will be impacted (1.35 acres of Wetland 4 and 1.16 acres of Wetland 6).

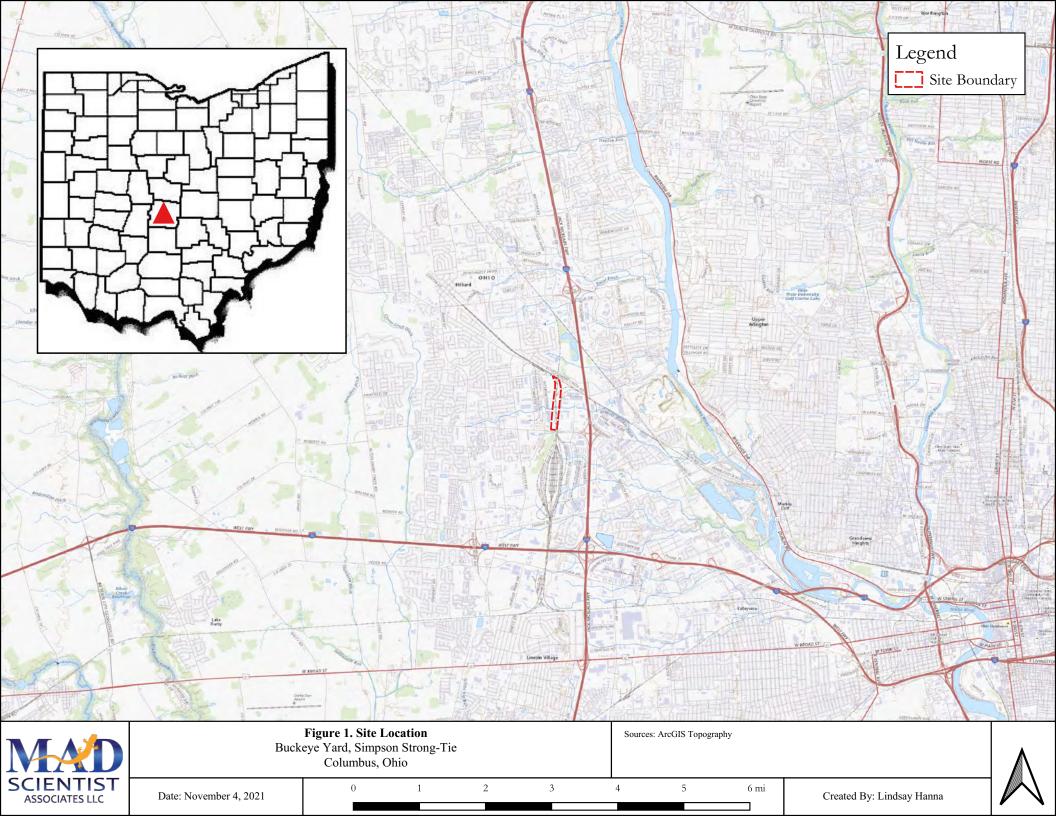
#### **Literature Cited:**

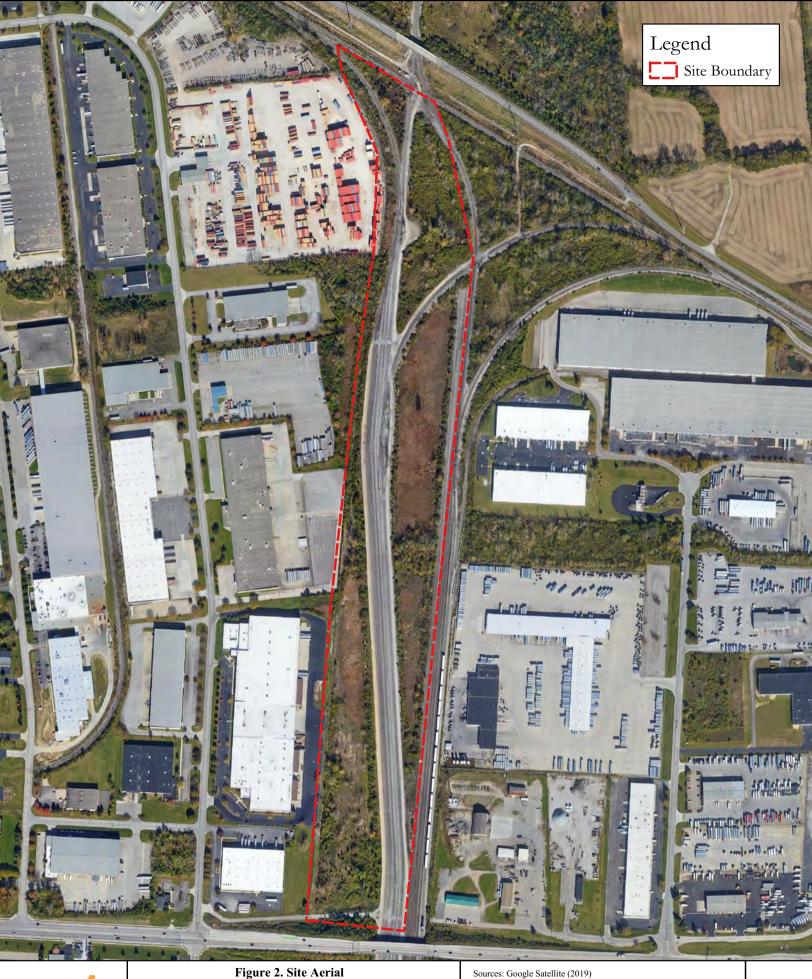
Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report. Y-87-1. U.S. Army Engineers Waterways Experiment Station. Vicksburg, MS.

Ohio EPA. 2001. Ohio Rapid Assessment Method for Wetlands. Version 5.0 Final. Ohio Environmental Protection Agency. Columbus, Ohio.

USACE. 2012. Regional supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0). J. S. Wakeley, R. W. Lichvar, C. V. Noble, and J.F. Berkowitz. ERDC/EL TR-10-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center.









Buckeye Yard, Simpson Strong-Tie Columbus, Ohio

Date: November 4, 2021

200 400 1,000 ft





Buckeye Yard, Simpson Strong-Tie Columbus, Ohio

Date: November 4, 2021

1,000 ft 200 400



# Attachment A Photolog



Photograph 1 – Soil in Wetland 1.



Photograph 2 –Wetland 1 facing northeast toward wetland interior.



Photograph 3 – Upland area between Wetland 1 and Wetland 3, facing south.



Photograph 4 – Soil in Wetland 2.



Photograph 5 – Wetland 2 interior, facing north.



Photograph 6 – Wetland 2 interior, facing east.



Photograph 7 – Soil at Upland 2.



Photograph 8 – Soil in Wetland 3.



Photograph 9 – Wetland 3 interior, facing north.



Photograph 10 – Wetland 4 connectivity with stream, facing south.



Photograph 11 – Upland facing Wetland 4, facing north.



Photograph 12 –Soil in Wetland 5.



Photograph 13 – Wetland 5, facing north.



Photograph 14 – Soil in Wetland 6.



Photograph 15 – Wetland 6 facing north, toward stream area.



Photograph 16 – Wetland 6 interior, facing south.



Photograph 17 – Soil in Wetland 7.



Photograph 18 – Wetland 7 interior, facing east.

Attachment B

Datasheets

Project/Site: Buckeye Yard		City/Cou	nty: Columb	ous/Franklin	Sampling Date	e: <u>11/3/21</u>
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Poin	t: W1-up
Investigator(s): Lindsay Hanna		Section, T	Γownship, Ra	ange:		
Landform (hillside, terrace, etc.): depression			Local relief (	concave, convex, none):	Concave	
Slope (%):2 Lat: _40.013685°		Long:	83.127905°		Datum: NAD '83	
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent s	lopes		NWI classif	ication: N/A	
Are climatic / hydrologic conditions on the site typical	for this time of	of year?	Yes X	No (If no, exp	lain in Remarks.	)
Are Vegetation Y , Soil Y , or Hydrology Y	significantly	disturbed? A	ا Are "Normal (	Circumstances" present?	Yes X	No
Are Vegetation N , Soil N , or Hydrology No	naturally pro	blematic? (	If needed, ex	xplain any answers in Rer	marks.)	
SUMMARY OF FINDINGS – Attach site m	=		ng point lo	ocations, transects	important fo	eatures, etc.
Hydrophytic Vegetation Present? Yes N	lo X	Is the	Sampled A	rea		
	lo X		n a Wetland		No X	
	lo X					
Remarks:						
Site appears mowed, potential soil modification. Wet	land A interio	or mix of FAC,	FACU and F	FACW species.		
VEGETATION – Use scientific names of pla		Decident	To disease	1		
<u>Tree Stratum</u> (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	ksheet:	
Populus deltoides	8	Yes	FAC	Number of Dominant S		
2.				Are OBL, FACW, or F	•	1 (A)
3.				Total Number of Domi	nant Species	
4.				Across All Strata:		4 (B)
5		T-t-L Cover		Percent of Dominant S	•	05 00/ /A/D)
Sapling/Shrub Stratum (Plot size:	8	=Total Cover		Are OBL, FACW, or F	AC:	25.0% (A/B)
	.)			Prevalence Index wo	rksheet:	
1. 2.				Total % Cover of:		oly by:
3.				OBL species	x 1 =	
4.				FACW species	x 2 =	
5.				FAC species	x 3 =	
		=Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size:)				UPL species	x 5 =	
Schizachyrium scoparium	10	Yes	FACU	Column Totals:	(A)	(B)
2. Euthamia graminifolia	5	No	FACW	Prevalence Index =	= B/A =	
3. Juniperus virginiana	12	Yes	FACU			
4. Spiraea japonica	10	Yes	UPL	Hydrophytic Vegetati		
5.				1 - Rapid Test for		getation
6. 7.				2 - Dominance Te 3 - Prevalence Inc		
8.				4 - Morphological		ovide supporting
					s or on a separa	
10.				Problematic Hydro		•
	37	=Total Cover		<sup>1</sup> Indicators of hydric so	. , .	` ' '
Woody Vine Stratum (Plot size:	)			be present, unless dis		
1.				Hydrophytic	-	
2.				Vegetation		
		=Total Cover		Present? Yes	No	<u>x</u>
Remarks: (Include photo numbers here or on a sepa	arate sheet.)			1		

SOIL Sampling Point: W1-up

Depth	Matrix		Red		_ 4	. 1					
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Text	ure		Remarks	
		. <del></del>		<del></del>				2			
	ncentration, D=Dep	letion, RM	=Reduced Matrix,	MS=Mas	ked San	d Grains				ning, M=Matr	
ydric Soil I										matic Hydric	Soils":
Histosol (	•			leyed Mat	rix (S4)				Prairie Redo		
	pedon (A2)			edox (S5)					_	lasses (F12)	
Black His	tic (A3)		Stripped	Matrix (S6	3)			Red P	arent Materi	al (F21)	
Hydrogen	Sulfide (A4)		Dark Sur	face (S7)				Very S	Shallow Dark	Surface (F22	2)
Stratified	Layers (A5)		Loamy M	lucky Mine	eral (F1)			Other	(Explain in F	Remarks)	
2 cm Mud	ck (A10)		Loamy G	leyed Mat	rix (F2)						
Depleted	Below Dark Surfac	e (A11)	Depleted	Matrix (F	3)						
Thick Dar	k Surface (A12)		Redox Da	ark Surfac	e (F6)			<sup>3</sup> Indicators	of hydrophy	tic vegetatior	and
Sandy Mu	ucky Mineral (S1)		Depleted	Dark Sur	face (F7	)		wetlar	d hydrology	must be pres	ent,
5 cm Muc	ky Peat or Peat (S	3)	Redox Do	epression	s (F8)			unless	disturbed o	r problematic	
estrictive I	ayer (if observed)			-							
	ayer (ii observed)										
I vno:	Pocks										
Type:	Rocks						Hydric Sc	il Procont	•	Vos	No
Depth (ind		1	and Wetland 3/				Hydric So	oil Present?	,	Yes	No_
Depth (indexemarks:	ches): ack, uphill between	1	and Wetland 3/				Hydric Sc	oil Present?	,	Yes	No_
Depth (indexemarks:	ches): ack, uphill between	1	and Wetland 3/				Hydric Sc	oil Present	,	Yes	No_
Depth (included in the control of th	ches): ack, uphill between	1 Wetland 1	and Wetland 3/				Hydric Sc	oil Present?	•	Yes	No_
Depth (included per	ches):  ack, uphill between	1 Wetland 1		t apply)			Hydric Sc			Yes	
Depth (included property of the property of th	ches):  ack, uphill between  GY  Irology Indicators:	1 Wetland 1	ired; check all tha	t apply) ained Lea	ves (B9)		Hydric Sc	Secondary		minimum of t	
Depth (independent of the property of the prop	GY  Irology Indicators: ators (minimum of comments)	1 Wetland 1	ired; check all tha Water-St		` ′		Hydric Sc	Secondary Surface	√Indicators (	minimum of t	
Depth (included in the control of th	GY  Irology Indicators: ators (minimum of other (A1) er Table (A2)	1 Wetland 1	ired; check all tha Water-St Aquatic F	ained Lea	3)		Hydric Sc	Secondary Surfac	<u>/ Indicators (</u> :ee Soil Crack	minimum of t (ss (B6) (B10)	
Depth (included property of the property of th	GY  Irology Indicators: ators (minimum of other (A1) er Table (A2) n (A3)	1 Wetland 1	ired; check all tha Water-St Aquatic F True Aqu	ained Lea auna (B1	3) s (B14)		Hydric Sc	Secondary Surface Draina	<u>/ Indicators (</u> ce Soil Crack age Patterns	minimum of took (B6) (B10) Table (C2)	
Depth (included primary Indicution Surface Valued Water Marks)	GY  Irology Indicators: ators (minimum of other (A1) er Table (A2) n (A3)	1 Wetland 1	ired; check all tha Water-St Aquatic F True Aqu Hydroger	ained Lea auna (B1 atic Plant	3) s (B14) Odor (C1	)		Secondary Surface Draina Dry-Sac	r Indicators ( ce Soil Crack age Patterns cason Water sh Burrows (	minimum of took (B6) (B10) Table (C2)	wo requi
Depth (included primary Indicution Surface Valued Water Marks)	GY  Irology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) E Deposits (B2)	1 Wetland 1	ired; check all thaWater-StAquatic FTrue AquHydrogerOxidized	ained Lea Fauna (B1 natic Plant n Sulfide (	3) s (B14) Odor (C1 eres on	) Living R		Secondary Surface Draina Dry-Se	r Indicators ( ce Soil Crack age Patterns cason Water sh Burrows ( ation Visible	minimum of took (B6) (B10) r Table (C2) (C8)	wo requi
Popth (included in the content of th	GY  Irology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) E Deposits (B2)	1 Wetland 1	ired; check all tha  Water-St  Aquatic F  True Aqu  Hydroger  Oxidized  Presence	ained Lea Fauna (B1 latic Plant n Sulfide ( Rhizosph	3) s (B14) Odor (C1 eres on ced Iron	) Living R (C4)	oots (C3)	Secondary Surface Draina Dry-Si Crayfi Satura	r Indicators ( ce Soil Crack age Patterns cason Water sh Burrows ( ation Visible	minimum of to the second of th	wo requi
Popth (incomplete property of the property of	GY Irology Indicators: ators (minimum of of Vater (A1) er Table (A2) in (A3) arks (B1) er Deposits (B2) osits (B3) or Crust (B4)	1 Wetland 1	ired; check all tha  Water-St  Aquatic F  True Aqu  Hydroger  Oxidized  Presence	ained Lea Fauna (B1 latic Plant n Sulfide ( Rhizosph e of Redud	3) s (B14) Odor (C1 eres on ced Iron tion in T	) Living R (C4)	oots (C3)	Secondary Surface Draina Dry-Si Crayfi Satura Stunte Geom	r Indicators ( ce Soil Crack age Patterns eason Water sh Burrows ( ation Visible and or Stresse	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
Primary Indic Saturation Water Ma Sediment Drift Depo	GY Irology Indicators: ators (minimum of of Vater (A1) er Table (A2) in (A3) arks (B1) er Deposits (B2) osits (B3) or Crust (B4)	1 Wetland 1	ired; check all tha  Water-St  Aquatic F  True Aqu  Hydroger  Oxidized  Presence  Recent Ir	ained Lea Fauna (B1 latic Plant n Sulfide ( Rhizosph e of Reduc ron Reduc	3) s (B14) Odor (C1 eres on ced Iron tion in T	) Living R (C4)	oots (C3)	Secondary Surface Draina Dry-Si Crayfi Satura Stunte Geom	r Indicators ( ce Soil Crack age Patterns eason Water sh Burrows ( ation Visible of d or Stresse orphic Positi	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
Popth (included in the content of th	GY  Irology Indicators: ators (minimum of or Vater (A1) er Table (A2) in (A3) arks (B1) c Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial I	1 Wetland 1 one is requi	ired; check all tha  Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or	ained Lea Fauna (B1 latic Plant n Sulfide ( Rhizosph e of Reduc on Reduc k Surface	3) s (B14) Odor (C1 eres on ced Iron tion in T (C7) a (D9)	) Living R (C4) illed Soil	oots (C3)	Secondary Surface Draina Dry-Si Crayfi Satura Stunte Geom	r Indicators ( ce Soil Crack age Patterns eason Water sh Burrows ( ation Visible of d or Stresse orphic Positi	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
Popth (incomplete in the complete in the compl	GY  Irology Indicators: ators (minimum of or vater (A1) er Table (A2) in (A3) arks (B1) c Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial II Vegetated Concave	1 Wetland 1 one is requi	ired; check all tha  Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or	ained Lea Fauna (B1 Iatic Plant In Sulfide ( Rhizosph Ie of Reduc Iron Reduc Iron Reduc Iron Well Dat	3) s (B14) Odor (C1 eres on ced Iron tion in T (C7) a (D9)	) Living R (C4) illed Soil	oots (C3)	Secondary Surface Draina Dry-Si Crayfi Satura Stunte Geom	r Indicators ( ce Soil Crack age Patterns eason Water sh Burrows ( ation Visible of d or Stresse orphic Positi	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
Popth (incomplete in the complete in the compl	GY  Irology Indicators: ators (minimum of	Wetland 1  one is requi	ired; check all tha  Water-St  Aquatic F  True Aqu  Hydroger  Oxidized  Presence  Recent Ir  Thin Muc  7)  Gauge of  B8)  Other (Ex	ained Lea Fauna (B1 latic Plant n Sulfide ( Rhizosph e of Reduc on Reduc ck Surface r Well Dat xplain in R	3) s (B14) Ddor (C1 eres on ced Iron tion in T (C7) a (D9)	) Living R (C4) illed Soil	oots (C3)	Secondary Surface Draina Dry-Si Crayfi Satura Stunte Geom	r Indicators ( ce Soil Crack age Patterns eason Water sh Burrows ( ation Visible of d or Stresse orphic Positi	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
Popth (incomplete in the control of	GY  Irology Indicators: ators (minimum of or	Wetland 1  one is requi	ired; check all tha  Water-St  Aquatic F  True Aqu  Hydroger  Oxidized  Presence  Recent Ir  Thin Muc  7)  Gauge of  B8)  Other (Ex	ained Lea Fauna (B1 Iatic Plant In Sulfide ( Rhizosph Ie of Reduc Ir on Reduc Ick Surface Ir Well Dat Ixplain in R	3) s (B14) Ddor (C1 eres on ced Iron tion in T (C7) a (D9) temarks)	) Living R (C4) illed Soil	oots (C3)	Secondary Surface Draina Dry-Si Crayfi Satura Stunte Geom	r Indicators ( ce Soil Crack age Patterns eason Water sh Burrows ( ation Visible of d or Stresse orphic Positi	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
Popth (increments)  Popth	GY  Irology Indicators: ators (minimum of or Vater (A1) er Table (A2) in (A3) arks (B1) is Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial I Vegetated Concave rations: er Present? Ye Present? Ye	Wetland 1  one is required as a series are series serie	ired; check all tha  Water-St  Aquatic F  True Aqu  Hydroger  Oxidized  Presence  Recent Ir  Thin Muc  7) Gauge of  B8) Other (Ex	ained Lea Fauna (B1 Iatic Plant In Sulfide ( Rhizosph Ie of Reduction Fon Reduction Ick Surface Ir Well Dat Ixplain in R	3) s (B14) Odor (C1 eres on ced Iron tion in T (C7) a (D9) temarks) nches):nches):	) Living R (C4) illed Soil	oots (C3)	Secondary Surface Draina Dry-Se Crayfi Satura Stunte Geom FAC-N	n Indicators ( ce Soil Crack age Patterns eason Water sh Burrows ( ation Visible ed or Stresse orphic Positi	minimum of the second s	wo requi
Popth (increments)  YDROLO  YDROLO  Vetland Hyd  Primary Indic  Surface V  High Water Ma  Sediment  Drift Depo  Algal Mat  Iron Depo  Inundatio  Sparsely  Field Observ  Surface Water  Vater Table I  Saturation Primary Indic	GY  Irology Indicators: ators (minimum of or Vater (A1) er Table (A2) in (A3) arks (B1) in Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial I Vegetated Concave rations: er Present? Present? Ye esent? Ye esent?	Wetland 1  one is required as a series are series serie	ired; check all tha  Water-St  Aquatic F  True Aqu  Hydroger  Oxidized  Presence  Recent Ir  Thin Muc  7)  Gauge of  B8)  Other (Ex	ained Lea Fauna (B1 Iatic Plant In Sulfide ( Rhizosph Ie of Reduc Ir on Reduc Ick Surface Ir Well Dat Ixplain in R	3) s (B14) Odor (C1 eres on ced Iron tion in T (C7) a (D9) temarks) nches):nches):	) Living R (C4) illed Soil	oots (C3)	Secondary Surface Draina Dry-Si Crayfi Satura Stunte Geom	n Indicators ( ce Soil Crack age Patterns eason Water sh Burrows ( ation Visible ed or Stresse orphic Positi	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
Popth (incomplete National Principle Principle National Principle Nati	GY  Irology Indicators: ators (minimum of of other (A1) er Table (A2) in (A3) arks (B1) in Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial I vegetated Concave rations: ar Present? Present? esent? yeesent? yeesent? yeesent?	magery (B)	ired; check all tha  Water-St  Aquatic F  True Aqu  Hydroger  Oxidized  Presence  Recent Ir  Thin Muc  7)  Gauge or  B8)  Other (Ex)  No  X  No  X	ained Lea Fauna (B1 latic Plant in Sulfide ( Rhizosph e of Reduc ron Reduc ck Surface ir Well Dat explain in R Depth (ii Depth (ii	3) s (B14) Ddor (C1 eres on ced Iron tion in T (C7) a (D9) demarks) nches): nches):	) Living R (C4) illed Soil	oots (C3) s (C6)	Secondary Surface Draina Dry-Si Crayfi Satura Stunte Geom FAC-N	n Indicators ( ce Soil Crack age Patterns eason Water sh Burrows ( ation Visible ed or Stresse orphic Positi	minimum of the second s	wo requi
Popth (incomposition of the composition of the comp	GY  Irology Indicators: ators (minimum of or Vater (A1) er Table (A2) in (A3) arks (B1) in Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial I Vegetated Concave rations: er Present? Present? Ye esent? Ye esent?	magery (B)	ired; check all tha  Water-St  Aquatic F  True Aqu  Hydroger  Oxidized  Presence  Recent Ir  Thin Muc  7)  Gauge or  B8)  Other (Ex)  No  X  No  X	ained Lea Fauna (B1 latic Plant in Sulfide ( Rhizosph e of Reduc ron Reduc ck Surface ir Well Dat explain in R Depth (ii Depth (ii	3) s (B14) Ddor (C1 eres on ced Iron tion in T (C7) a (D9) demarks) nches): nches):	) Living R (C4) illed Soil	oots (C3) s (C6)	Secondary Surface Draina Dry-Si Crayfi Satura Stunte Geom FAC-N	n Indicators ( ce Soil Crack age Patterns eason Water sh Burrows ( ation Visible ed or Stresse orphic Positi	minimum of the second s	wo requi
Depth (incomplete processing proc	GY  Irology Indicators: ators (minimum of of other (A1) er Table (A2) in (A3) arks (B1) in Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial I vegetated Concave rations: ar Present? Present? esent? yeesent? yeesent? yeesent?	magery (B)	ired; check all tha  Water-St  Aquatic F  True Aqu  Hydroger  Oxidized  Presence  Recent Ir  Thin Muc  7)  Gauge or  B8)  Other (Ex)  No  X  No  X	ained Lea Fauna (B1 latic Plant in Sulfide ( Rhizosph e of Reduc ron Reduc ck Surface ir Well Dat explain in R Depth (ii Depth (ii	3) s (B14) Ddor (C1 eres on ced Iron tion in T (C7) a (D9) demarks) nches): nches):	) Living R (C4) illed Soil	oots (C3) s (C6)	Secondary Surface Draina Dry-Si Crayfi Satura Stunte Geom FAC-N	n Indicators ( ce Soil Crack age Patterns eason Water sh Burrows ( ation Visible ed or Stresse orphic Positi	minimum of the second s	wo requi
Popth (incomposition of the composition of the comp	GY  Irology Indicators: ators (minimum of of other (A1) er Table (A2) in (A3) arks (B1) in Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial I vegetated Concave rations: ar Present? Present? esent? yeesent? yeesent? yeesent?	magery (B)	ired; check all tha  Water-St  Aquatic F  True Aqu  Hydroger  Oxidized  Presence  Recent Ir  Thin Muc  7)  Gauge or  B8)  Other (Ex)  No  X  No  X	ained Lea Fauna (B1 latic Plant in Sulfide ( Rhizosph e of Reduc ron Reduc ck Surface ir Well Dat explain in R Depth (ii Depth (ii	3) s (B14) Ddor (C1 eres on ced Iron tion in T (C7) a (D9) demarks) nches): nches):	) Living R (C4) illed Soil	oots (C3) s (C6)	Secondary Surface Draina Dry-Si Crayfi Satura Stunte Geom FAC-N	n Indicators ( ce Soil Crack age Patterns eason Water sh Burrows ( ation Visible ed or Stresse orphic Positi	minimum of the second s	wo requi

Project/Site: Buckeye Yard		City/Cour	nty: Columb	ous/Franklin	Sampling Date	11/3/21
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point	: W1-wet
Investigator(s): Lindsay Hanna		Section, T	Γownship, Ra	ange:		
Landform (hillside, terrace, etc.): depression		l	Local relief (	concave, convex, none):	Concave	
Slope (%):2 Lat: _40.013687°		Long:{	83.127801°		Datum: NAD '83	
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent s	slopes		NWI classifi	cation: N/A	
Are climatic / hydrologic conditions on the site typical for	or this time o	of year?	Yes X	No (If no, exp	lain in Remarks.)	)
Are Vegetation Y , Soil Y , or Hydrology Y s	significantly	disturbed? A	ا Are "Normal (	Circumstances" present?	Yes X	No
Are Vegetation N , Soil N , or Hydrology No r			If needed, ex	kplain any answers in Rer	narks.)	
SUMMARY OF FINDINGS – Attach site ma			ıg point lo	ocations, transects,	important fe	eatures, etc.
Hydrophytic Vegetation Present? Yes X No	 )	Is the	Sampled A	rea		
Hydric Soil Present? Yes X No			n a Wetland		No	
Wetland Hydrology Present? Yes X No	,					
Remarks:						
Site appears mowed, potential soil modification. Wetla	and A interio	or mix of FAC,	FACU and F	FACW species.		
VEGETATION – Use scientific names of pla		Dominant	Indicator	T		
<u>Tree Stratum</u> (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test work	ksheet:	
Populus deltoides	20	Yes	FAC	Number of Dominant S		
2. Salix nigra	18	Yes	OBL	Are OBL, FACW, or FA	•	5 (A)
3.				Total Number of Domi	nant Species	
4.				Across All Strata:		5 (B)
5		<del></del>		Percent of Dominant S	•	00/ /A/D)
Sapling/Shrub Stratum (Plot size: )	38	=Total Cover		Are OBL, FACW, or FA	AC:	(A/B)
				Prevalence Index wo	rkshoot:	
2.				Total % Cover of:		oly by:
3.	·			OBL species	x 1 =	
4.				FACW species	x 2 =	
5.				FAC species	x 3 =	
		=Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size:)				UPL species	x 5 =	
1. Salix nigra	5	Yes	OBL	Column Totals:	(A)	(B)
2. Cornus sericea	10	Yes	FACW	Prevalence Index =	: B/A =	
3. Rhamnus cathartica	8	Yes	FAC	Under white Vocateti	. I1!4e we i	
4 5.				Hydrophytic Vegetati 1 - Rapid Test for		station
6.				X 2 - Dominance Te		etation
7				3 - Prevalence Ind		
8.				4 - Morphological		ovide supporting
9.					s or on a separat	
10				Problematic Hydro	phytic Vegetatio	n¹ (Explain)
	23	=Total Cover		<sup>1</sup> Indicators of hydric so	il and wetland hy	drology must
Woody Vine Stratum (Plot size:)	1			be present, unless dist		
1				Hydrophytic		
2				Vegetation		
		=Total Cover		Present? Yes_	<u> </u>	
Remarks: (Include photo numbers here or on a separ	ate sheet.)					

SOIL Sampling Point: W1-wet

Profile Desc	cription: (Describe	to the dep	oth needed to doc	ument t	he indica	tor or o	confirm the absence	of indicators.)
Depth	Matrix		Redo	x Featur				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10YR 4/2	98	10YR 5/6	2	<u>C</u>	M	Loamy/Clayey	Prominent redox concentrations
3-13	2.5Y 4/2	98	10YR 5/4	2	С	М	Loamy/Clayey	Distinct redox concentrations
13-15	10YR 4/2	96	10YR 4/6	1	С	M	Loamy/Clayey	Prominent redox concentrations
			10YR 6/4	3	С	М		Distinct redox concentrations
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion RM:	=Reduced Matrix I	MS=Mas	ked Sand	Grains	<sup>2</sup> l ocation	: PL=Pore Lining, M=Matrix.
Hydric Soil								s for Problematic Hydric Soils <sup>3</sup> :
Histosol			Sandy Gle	eyed Mat	rix (S4)			t Prairie Redox (A16)
	pipedon (A2)		Sandy Re	-	` ,			Manganese Masses (F12)
Black His			Stripped N		3)			Parent Material (F21)
— Hydroge	n Sulfide (A4)		Dark Surfa	-	•		Very	Shallow Dark Surface (F22)
	Layers (A5)		Loamy Mu	ıcky Min	eral (F1)		Other	(Explain in Remarks)
2 cm Mu			Loamy Gl					,
Depleted	Below Dark Surface	e (A11)	X Depleted	Matrix (F	3)			
	ark Surface (A12)	. ,	Redox Da				<sup>3</sup> Indicator	s of hydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Depleted	Dark Sur	face (F7)		wetla	nd hydrology must be present,
5 cm Mu	icky Peat or Peat (S3	3)	Redox De	pression	s (F8)		unles	s disturbed or problematic.
Restrictive I	Layer (if observed):							
Type:								
Depth (ir	nches):						Hydric Soil Present	? Yes X No
Remarks:								
This data for	m is revised from Mi	dwest Reg	ional Supplement	Version 2	2.0 to incl	ude the	NRCS Field Indicators	s of Hydric Soils, Version 7.0, 2015
Errata. (http:	//www.nrcs.usda.gov	//Internet/F	SE_DOCUMENTS	S/nrcs142	2p2_0512	93.doc	<b>K</b> )	
HYDROLO	)GY							
Wetland Hy	drology Indicators:							
Primary India	cators (minimum of c	ne is requ	ired; check all that	apply)			<u>Secondar</u>	y Indicators (minimum of two required)
X Surface	Water (A1)		Water-Sta	ined Lea	ives (B9)		Surfa	ce Soil Cracks (B6)
	iter Table (A2)		Aquatic Fa	auna (B1	3)			age Patterns (B10)
Saturatio	on (A3)		True Aqua	atic Plant	s (B14)		Dry-S	Season Water Table (C2)
Water M	arks (B1)		Hydrogen	Sulfide (	Odor (C1)	)	Crayf	ish Burrows (C8)
Sedimen	nt Deposits (B2)		Oxidized F	•		-	oots (C3)Satur	ration Visible on Aerial Imagery (C9)
	oosits (B3)		Presence	of Redu	ced Iron (	C4)		ed or Stressed Plants (D1)
	it or Crust (B4)		Recent Iro			lled Soil	· · · —	norphic Position (D2)
	osits (B5)		Thin Muck		, ,		X FAC-	Neutral Test (D5)
	on Visible on Aerial I				. ,			
Sparsely	Vegetated Concave	Surface (I	B8)Other (Ex	olain in F	Remarks)			
Field Obser								
	er Present? Ye	s X	No		nches): _			
Surface Wat			No	Depth (i	nches):	5		
Water Table	Present? Ye		No		_			
Water Table Saturation P	Present? Ye resent? Ye		No	Depth (i	nches):	5	Wetland Hydrolog	gy Present? Yes X No
Water Table Saturation P (includes car	Present? Ye resent? Ye pillary fringe)	s X	No		_			gy Present? Yes X No
Water Table Saturation P (includes car	Present? Ye resent? Ye	s X	No		_			gy Present? Yes X No No
Water Table Saturation P (includes cap Describe Re	Present? Ye resent? Ye pillary fringe)	s X	No		_			gy Present? Yes X No
Water Table Saturation P (includes car	Present? Ye resent? Ye pillary fringe)	s X	No		_			gy Present? Yes <u>X</u> No

Project/Site: Buckeye Yard		City/Cour	nty: Columb	ous/Franklin	Sampling Date:	11/3/21
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point:	W2-up
Investigator(s): Lindsay Hanna		Section, T	ownship, Ra	ange:		
Landform (hillside, terrace, etc.): depression		I	Local relief (	concave, convex, none):	Concave	
Slope (%): 2 Lat: 40.012603°		Long:{	83.127084°		Datum: NAD '83	
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent s	lopes		NWI classif	ication: N/A	
Are climatic / hydrologic conditions on the site typical f	or this time o	of year?	Yes X	No (If no, exp	lain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y	significantly	disturbed? A	re "Normal (	Circumstances" present?	Yes X N	No
Are Vegetation N , Soil N , or Hydrology No	naturally pro	blematic? (f	If needed, ex	κρlain any answers in Rer	marks.)	
SUMMARY OF FINDINGS – Attach site m	ap showir	ng samplin	g point lo	ocations, transects	important fe	atures, etc.
Hydrophytic Vegetation Present? Yes X No	0	Is the	Sampled A	rea		
Hydric Soil Present? Yes X No	0		n a Wetland		No X	
Wetland Hydrology Present? Yes X No	o					
Remarks:						
<b>VEGETATION</b> – Use scientific names of pla						
Tree Stratum (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	ksheet:	
Populus deltoides	15	Yes	FAC	Number of Dominant S		
2.				Are OBL, FACW, or F	•	2 (A)
3.				Total Number of Domi	nant Species	
4				Across All Strata:	<u> </u>	4 (B)
5				Percent of Dominant S	•	(4/5)
Combination (District) 15	15	=Total Cover		Are OBL, FACW, or F	AC: <u>t</u>	50.0% (A/B)
Sapling/Shrub Stratum (Plot size: 15 1. Rhamnus cathartica	) 35	Yes	FAC	Prevalence Index wo	rkehoot:	
Knamnus camaruca     Lonicera maackii	15	Yes	UPL	Total % Cover of:		lv hv <sup>.</sup>
3.				OBL species 0		0
4.				FACW species 2	x 2 =	4
5.				FAC species 50	) x 3 =	150
	50	=Total Cover		FACU species 0	x 4 =	0
Herb Stratum (Plot size: 5				UPL species 24	x 5 =	120
Lonicera maackii	9	Yes	UPL	Column Totals: 76		274 (B)
2. Fraxinus pennsylvanica	2	No	FACW	Prevalence Index =	= B/A =3.6	<u>i1</u>
3. 4.				Hydrophytic Vegetati	ion Indicators:	
5				1 - Rapid Test for		etation
6.				2 - Dominance Te		Addion
7.				3 - Prevalence Inc	lex is ≤3.0 <sup>1</sup>	
8.				4 - Morphological		
9.				data in Remark	s or on a separate	e sheet)
10				Problematic Hydro	ophytic Vegetation	າ <sup>1</sup> (Explain)
	11	=Total Cover		<sup>1</sup> Indicators of hydric so		
Woody Vine Stratum (Plot size:	)			be present, unless dis	urbed or problem	atic.
1.				Hydrophytic		
2		=Total Cover		Vegetation Present? Yes	No X	,
Demonstrate (Include whate mounth one have an an an analysis		- Total Cover		riesent: ies_		
Remarks: (Include photo numbers here or on a sepa	rate sneet.)					

SOIL Sampling Point: W2-up

Depth	Matrix		Red	ox Featur							
inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Textu	ıre		Remarks	
0-8	10YR 3/2	100					Loamy/C	layey			
		<u> </u>									
							-				
								<del></del> -			
							-				
	ncentration, D=Dep	letion, RM	=Reduced Matrix,	MS=Mas	ked Sand	d Grains.				ning, M=Matr	•
lydric Soil Ir			0		-i (O.4)					matic Hydric	Soils":
Histosol (	·			eyed Mat			-		Prairie Redo		
	pedon (A2)			edox (S5)			-		_	Masses (F12)	
Black Hist				Matrix (S6	9)		-		arent Materi	,	»\
	Sulfide (A4)		Dark Sur	` '	oral (F1)		-			Surface (F22	<u>2)</u>
2 cm Muc	Layers (A5)			lucky Mine				Other	Explain in F	veillaiks)	
_	:k (A10) Below Dark Surface	(Δ11)		leyed Mat Matrix (F							
	k Surface (A12)	(411)		ark Surfac			;	<sup>3</sup> Indicators	of hydronby	tic vegetatior	and
	ucky Mineral (S1)			Dark Sur	` '	)				must be pres	
_	cky Peat or Peat (S3	3)		epression		,				r problematic	
	ayer (if observed):	-			(. 0)					. p. 02.0	-
	ayer (ii observeu).										
Type:	roots										
Type:	roots	8					Hydric Soi	l Present?		Yes	No
Type: Depth (inc		8	_				Hydric Soi	l Present?		Yes	No_
Depth (ind	ches):	8					Hydric Soi	I Present?		Yes	No_
Depth (inc	ches):	8					Hydric Soi	I Present?		Yes	No_
Depth (included) Remarks:  YDROLOG Vetland Hyd	GY rology Indicators:										
Depth (ind Remarks: YDROLOG Vetland Hyd	GY rology Indicators: ators (minimum of o				(00)			Secondary	Indicators (	minimum of t	
Depth (incomments)  YDROLOG  Vetland Hydrimary Indicators  Surface V	GY rology Indicators: ators (minimum of o		Water-St	ained Lea	` '			Secondary Surfac	Indicators ( e Soil Crack	minimum of t	
POPPOLOGICAL SURFACE VICTOR SURFACE VICTOR V	GY  rology Indicators: ators (minimum of o		Water-St Aquatic F	ained Lea auna (B1	3) ` ´			Secondary Surfac Draina	Indicators ( e Soil Crack ge Patterns	minimum of t (ss (B6) (B10)	
POROLOGICAL Surface VIX High Water Saturation	GY rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3)		Water-St Aquatic F True Aqu	ained Lea auna (B1 atic Plant	3) s (B14)			Secondary Surfac Draina Dry-Se	Indicators ( e Soil Crack ge Patterns ason Water	minimum of took (B6) (B10) Table (C2)	
Pepth (included in the control of th	GY rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1)		Water-St Aquatic F True Aqu Hydroger	ained Lea auna (B1 atic Plant Sulfide (	3) s (B14) Odor (C1	)		Secondary Surfac Draina Dry-Se Crayfis	Indicators ( e Soil Crack ge Patterns ason Water th Burrows (	minimum of took (B6) (B10) r Table (C2) (C8)	wo requi
Pepth (included per	GY rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2)		Water-St Aquatic F True Aqu Hydroger Oxidized	ained Lea auna (B1 atic Plant Sulfide ( Rhizosph	3) s (B14) Odor (C1 eres on I	) Living Ro		Secondary Surfac Draina Dry-Se Crayfis Satura	Indicators ( e Soil Crack ge Patterns ason Water th Burrows ( tion Visible	minimum of to the second secon	wo requi
Popth (incomplete project project)  Popth (incomplete project	GY  rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) osits (B3)		Water-St Aquatic F True Aqu Hydroger Oxidized Presence	ained Lea Fauna (B1 atic Plant n Sulfide ( Rhizosph e of Reduc	3) s (B14) Odor (C1) eres on l ced Iron (	) Living Ro (C4)	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte	Indicators ( e Soil Crack ge Patterns ason Water th Burrows ( tion Visible d or Stresse	minimum of to the second of th	wo requi
Primary Indica Surface V X High Water Ma Sediment Drift Depo	GY  rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) osits (B3) or Crust (B4)		Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir	ained Lea Fauna (B1 atic Plant n Sulfide ( Rhizosph e of Reduc on Reduc	3) s (B14) Odor (C1 eres on I ced Iron (	) Living Ro (C4)	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
YDROLOG  /etland Hyd rimary Indica Surface V  K High Wate K Saturation Water Ma Sediment Drift Depo	GY  rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) osits (B3) or Crust (B4)	ne is requ	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir	ained Lea Fauna (B1 atic Plant n Sulfide ( Rhizosph e of Reduc	3) s (B14) Odor (C1) eres on I ced Iron ( ction in Ti	) Living Ro (C4)	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns ason Water th Burrows ( tion Visible d or Stresse	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
POPPOLOGIA SURFACE WATER MAIN SEDIMENT DEPOLOGIA Algal Mat Iron Depologian Incondition Inc	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5)	ne is requ	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or	ained Lea Fauna (B1 atic Plant of Sulfide ( Rhizosph e of Reduction Reduction k Surface	3) s (B14) Odor (C1) eres on I ced Iron ( ction in Ti e (C7) a (D9)	) Living Ro (C4) Illed Soils	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
Popth (incomplete in the complete in the compl	GY  Irology Indicators: ators (minimum of or	ne is requ	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or	ained Lea Fauna (B1 atic Plant of Sulfide ( Rhizosph e of Reduction Reduction k Surface	3) s (B14) Odor (C1) eres on I ced Iron ( ction in Ti e (C7) a (D9)	) Living Ro (C4) Illed Soils	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
Popth (incomplete property)  Popth (incomplet	GY  Irology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial In Vegetated Concave rations:	ne is requ magery (B' Surface (l	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or	ained Lea Fauna (B1 atic Plant of Sulfide ( Rhizosph e of Reduction Reduction k Surface	3) s (B14) Ddor (C1 eres on I ced Iron ( tition in Ti c (C7) a (D9)	) Living Ro (C4) Illed Soils	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
Popth (incomplete property)  Popth (incomplet	GY  rology Indicators: ators (minimum of or	ne is requ magery (B' Surface (l	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or B8) Other (Ex	ained Lea Fauna (B1 atic Plant on Sulfide ( Rhizosph e of Reduc on Reduc k Surface Well Dat	3) s (B14) Ddor (C1 eres on I ced Iron ( tition in Ti e (C7) a (D9) Remarks)	) Living Ro (C4) Illed Soils	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
Primary Indication  X High Water X Saturation Water Mater Sediment Drift Depotential	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) in (A3) in (A3) in (B1) in Deposits (B2) in Visible on Aerial In Vegetated Concave rations: er Present? Ye Present? Ye	magery (B Surface (l s 	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or B8) Other (Ex	ained Leafauna (B1 atic Plant in Sulfide ( Rhizospher of Reduction on Reduction k Surface Well Date oplain in F	3) s (B14) Ddor (C1 eres on I ced Iron ( tition in Ti e (C7) a (D9) Remarks) nches):nches):	) Living Ro (C4) Illed Soil	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi eutral Test	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
Primary Indicates Surface Water Mater Mate	GY  rology Indicators: ators (minimum of or Vater (A1) er Table (A2) in (A3) arks (B1) Deposits (B2) besits (B3) or Crust (B4) besits (B5) in Visible on Aerial In Vegetated Concave rations: er Present? Ye esent? Ye esent? Ye	magery (B Surface (l s 	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or B8) Other (Ex	ained Lea Fauna (B1 atic Plant n Sulfide ( Rhizosph e of Reduc on Reduc on Reduc ok Surface Well Dat xplain in F	3) s (B14) Ddor (C1 eres on I ced Iron ( tition in Ti e (C7) a (D9) Remarks) nches):nches):	) Living Ro (C4) Illed Soil:	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geomo	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi eutral Test	minimum of the set (B6) (B10) Table (C2) (C8) On Aerial Imaged Plants (D1) ion (D2) (D5)	wo requ
Popth (incomplete of the control of	GY  rology Indicators: ators (minimum of or Vater (A1) er Table (A2) in (A3) arks (B1) Deposits (B2) besits (B3) or Crust (B4) besits (B5) in Visible on Aerial In Vegetated Concave rations: er Present? Ye esent? Ye esent? Ye	magery (B Surface (I s s X s X	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or B8) Other (Ex	ained Lea Fauna (B1 atic Plant in Sulfide ( Rhizosph e of Reduc on Reduc k Surface Well Dat k plain in R Depth (i Depth (i	3) s (B14) Ddor (C1 eres on I ced Iron ( tition in Ti c(C7) a (D9) Remarks) nches): nches): _ nches): _	) Living Ro (C4) Illed Soils	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome FAC-N	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi eutral Test	minimum of the set (B6) (B10) Table (C2) (C8) On Aerial Imaged Plants (D1) ion (D2) (D5)	wo requi
Depth (incomplete processing proc	GY  rology Indicators: ators (minimum of or	magery (B Surface (I s s X s X	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or B8) Other (Ex	ained Lea Fauna (B1 atic Plant in Sulfide ( Rhizosph e of Reduc on Reduc k Surface Well Dat k plain in R Depth (i Depth (i	3) s (B14) Ddor (C1 eres on I ced Iron ( tition in Ti c(C7) a (D9) Remarks) nches): nches): _ nches): _	) Living Ro (C4) Illed Soils	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome FAC-N	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi eutral Test	minimum of the set (B6) (B10) Table (C2) (C8) On Aerial Imaged Plants (D1) ion (D2) (D5)	wo requi
Popth (incomplete of the control of	GY  rology Indicators: ators (minimum of or	magery (B Surface (I s s X s X	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or B8) Other (Ex	ained Lea Fauna (B1 atic Plant in Sulfide ( Rhizosph e of Reduc on Reduc k Surface Well Dat k plain in R Depth (i Depth (i	3) s (B14) Ddor (C1 eres on I ced Iron ( tition in Ti c(C7) a (D9) Remarks) nches): nches): _ nches): _	) Living Ro (C4) Illed Soils	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome FAC-N	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi eutral Test	minimum of the set (B6) (B10) Table (C2) (C8) On Aerial Imaged Plants (D1) ion (D2) (D5)	wo requi

Project/Site: Buckeye Yard		City/Cou	inty: Columb	ous/Franklin	Sampling Date	e: <u>11/3/21</u>
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Poin	t: W2-wet
Investigator(s): Lindsay Hanna		Section, 7	Гownship, Ra	ange:		
Landform (hillside, terrace, etc.): depression			Local relief (d	concave, convex, none):	Concave	
Slope (%): 2 Lat: 40.012542°		Long: -	·83.127187°		Datum: <u>NAD '83</u>	
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent s	lopes		NWI classif	ication: N/A	
Are climatic / hydrologic conditions on the site typical f	for this time o	of year?	Yes X	No (If no, exp	lain in Remarks	.)
Are Vegetation Y , Soil Y , or Hydrology Y	significantly	disturbed? F	Are "Normal (	Circumstances" present?	Yes X	No
Are Vegetation N , Soil N , or Hydrology No	naturally pro	blematic? (	If needed, ex	xplain any answers in Rer	marks.)	
SUMMARY OF FINDINGS – Attach site m	ap showir	ng samplin	ng point lo	ocations, transects	important f	eatures, etc.
Hydrophytic Vegetation Present? Yes X N	0	Is the	Sampled A	rea		
Hydric Soil Present? Yes X N	o		n a Wetland'		No X	
Wetland Hydrology Present? Yes X N	0					
Remarks:						
VEGETATION – Use scientific names of pla						
Tree Stratum (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	kehoot:	
1. Populus deltoides	20	Yes	FAC	Number of Dominant 9		
Acer saccharinum	15	Yes	FACW	Are OBL, FACW, or F	•	6 (A)
3.				Total Number of Domi		, , ,
4.				Across All Strata:		7 (B)
5.				Percent of Dominant S	Species That	
	35	=Total Cover		Are OBL, FACW, or F	AC:	85.7% (A/B)
Sapling/Shrub Stratum (Plot size: 15	)	.,				
1. Rhamnus cathartica	8	Yes	FAC	Prevalence Index wo		T. L
2. <u>Lonicera japonica</u> 3.	5	Yes	FACU	Total % Cover of: OBL species	x 1 =	ply by:
4				FACW species	x 1 =	<del></del>
5.				FAC species	x3=	
	13	=Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size: 5 )				UPL species	x 5 =	
Agrimonia parviflora	18	Yes	FACW	Column Totals:	(A)	(B)
2. Euthamia graminifolia	25	Yes	FACW	Prevalence Index =	B/A =	
3. Fraxinus pennsylvanica	12	No	FACW			
4. Symphyotrichum lateriflorum	10	No	FACW	Hydrophytic Vegetati		
5. Carex frankii	18	Yes	OBL	1 - Rapid Test for		getation
6.				X 2 - Dominance Te		
7. 8.				3 - Prevalence Inc 4 - Morphological		rovide supporting
					s or on a separa	
10.				Problematic Hydro		· ·
	83	=Total Cover		<sup>1</sup> Indicators of hydric so	. ,	` ' '
Woody Vine Stratum (Plot size:	)			be present, unless dis		
1.				Hydrophytic		
2				Vegetation		
		=Total Cover		Present? Yes	X No	
Remarks: (Include photo numbers here or on a sepa	rate sheet.)					

SOIL Sampling Point: W2-wet

Profile Desc	cription: (Describe	to the dept	h needed to doc	ument t	he indica	ator or	confirm the absence	of indicators.)	
Depth	Matrix		Redo	x Featur	es				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Rem	arks
0-3	10YR 3/2	98	10YR 3/6	2	С	М	Loamy/Clayey	Prominent redox	concentrations
3-11	10YR 4/2	95	10YR 5/4	5	С	М	Loamy/Clayey	Distinct redox	concentrations
11-16	10YR 3/2	95	10YR 5/4	1	С	М	Loamy/Clayey	Distinct redox	concentrations
			10YR 5/6	4	С	M		Prominent redox	concentrations
			-						
			-						
			_						
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion RM=	Reduced Matrix N	MS=Mas	ked Sand		<sup>2</sup> l ocation	: PL=Pore Lining, M	=Matrix
Hydric Soil		iodon, ravi	toddood Matrix, 1	vio mao	Rod Gain	a Oranic		rs for Problematic H	
Histosol			Sandy Gle	yed Mat	rix (S4)			st Prairie Redox (A16	-
l ——	pipedon (A2)		Sandy Re					Manganese Masses	,
Black His			Stripped N					Parent Material (F21)	
Hydrogei	n Sulfide (A4)		Dark Surfa	ace (S7)	,		Very	Shallow Dark Surfac	e (F22)
	Layers (A5)		Loamy Mu	icky Min	eral (F1)			r (Explain in Remarks	
2 cm Mu			Loamy Gle					` '	,
	Below Dark Surface	e (A11)	X Depleted I	-					
Thick Da	rk Surface (A12)		Redox Da	rk Surfac	ce (F6)		<sup>3</sup> Indicato	rs of hydrophytic vege	etation and
Sandy M	lucky Mineral (S1)		Depleted I	Dark Sur	face (F7)	)	wetla	and hydrology must b	e present,
5 cm Mu	cky Peat or Peat (S3	3)	? Redox De	pression	s (F8)		unles	ss disturbed or proble	ematic.
Restrictive I	Layer (if observed):								
Type:									
Depth (in	nches):		<u></u>				Hydric Soil Presen	t? Yes	No
HYDROLO	GY								
Wetland Hyd	drology Indicators:								
Primary Indic	cators (minimum of o	ne is requir	ed; check all that	apply)			<u>Seconda</u>	ry Indicators (minimu	m of two required)
Surface	Water (A1)		Water-Sta	ined Lea	aves (B9)		Surfa	ace Soil Cracks (B6)	
	ter Table (A2)		Aquatic Fa	auna (B1	3)			nage Patterns (B10)	
X Saturation	` '		True Aqua					Season Water Table	(C2)
	arks (B1)		Hydrogen		•	•		fish Burrows (C8)	
	t Deposits (B2)		Oxidized F	•		-		ration Visible on Aeria	
	oosits (B3)		Presence					ted or Stressed Plant	
	t or Crust (B4)		Recent Iro			lled Soi		morphic Position (D2)	
	osits (B5)	(5.7)	Thin Muck		, ,		X FAC	-Neutral Test (D5)	
	on Visible on Aerial II								
	Vegetated Concave	• Ѕипасе (В	8) Other (Exp	Diain in F	kemarks)		T		
Field Obser		_	No. V	Donth (i	nahaa).				
Surface Water Table		s X	No X No	Depth (i	_	8			
Saturation P		s X		Depth (i Depth (i	_	1	Wetland Hydrolo	ay Drocont? Voc	Y No
(includes cap		<u> </u>	NO	Deptii (i	1101165).		vvetiana nyaroto	gy Present? Yes	X No
	corded Data (stream	gauge moi	nitoring well aeria	al photos	previou	s insper			
2 2 3 3 1 1 0 1 1 0 1	Data (otrodin	J==90, 11101		110100	, p. 01100	opo(	, aranabio.		
Remarks:									

Project/Site: Buckeye Yard		City/Cour	nty: Columb	us/Franklin	Sampling Date:	11/3/21
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point	W3-wet
Investigator(s): Lindsay Hanna		Section, T	ownship, Ra	nge:		
Landform (hillside, terrace, etc.): depression		L	_ocal relief (c	concave, convex, none):	Concave	
Slope (%): 2 Lat: 40.013665°	<u> </u>	Long:8	83.128058°	[	Datum: NAD '83	
Soil Map Unit Name: Urban land-Celina complex, 2 to 1	2 percent s	lopes		NWI classifi	cation: N/A	
Are climatic / hydrologic conditions on the site typical fo	r this time c	of year?	Yes X	No (If no, exp	lain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y s	ignificantly (	disturbed? A	re "Normal C	Circumstances" present?	Yes X	No
Are Vegetation N , Soil N , or Hydrology No n	aturally prol	blematic? (I	f needed, ex	plain any answers in Ren	narks.)	
SUMMARY OF FINDINGS – Attach site ma	p showir	ng samplin	g point lo	cations, transects,	important fe	atures, etc.
Hydrophytic Vegetation Present? Yes No	0	Is the	Sampled Ar	rea		
Hydric Soil Present? Yes No			n a Wetland?		No X	
Wetland Hydrology Present? Yes No	X	<u> </u>				
Remarks:					<u> </u>	
Site appears mowed, potential soil modification. Wetla	nd A interio	r mix of FAC,	FACU and F.	ACW species.		
VECETATION   Lies estatific names of plan	-4-					
VEGETATION – Use scientific names of plan	Absolute	Dominant	Indicator	Γ		1
<u>Tree Stratum</u> (Plot size:30)	% Cover	Species?	Status	Dominance Test work	ksheet:	
1. Salix nigra	25	Yes	OBL	Number of Dominant S	Species That	
2.				Are OBL, FACW, or FA	AC:	4 (A)
3.				Total Number of Domi	nant Species	5 (D)
4 5.				Across All Strata:		5 (B)
J	25	=Total Cover		Percent of Dominant S Are OBL, FACW, or FA	•	30.0% (A/B)
Sapling/Shrub Stratum (Plot size: 15 )						
Cornus sericea	10	Yes	FACW	Prevalence Index wo	rksheet:	
2. Lonicera maackii	5	Yes	UPL	Total % Cover of:	·	ly by:
3				OBL species	x 1 =	
4				FACW species	x 2 =	
5	15	=Total Cover		FAC species FACU species	x 3 = x 4 =	
Herb Stratum (Plot size: 5 )		-10101 0010.		UPL species	x5=	
1. Phalaris arundinacea	18	Yes	FACW	Column Totals:	(A)	(B)
2. Typha x glauca	5	Yes	OBL	Prevalence Index =	B/A =	
3. Symphyotrichum lateriflorum	2	No	FACW		•	
4				Hydrophytic Vegetati		
5.				1 - Rapid Test for		etation
6.				X 2 - Dominance Te		
7.				3 - Prevalence Ind 4 - Morphological		wide cupporting
8. 9.					s or on a separat	
10.				Problematic Hydro		•
	25	=Total Cover		<sup>1</sup> Indicators of hydric so		, , ,
Woody Vine Stratum (Plot size:)				be present, unless dist		
1				Hydrophytic		
2				Vegetation		
		=Total Cover		Present? Yes_	X No_	_
Remarks: (Include photo numbers here or on a separa	ate sheet.)					

SOIL Sampling Point: W3-wet

Depth	Matrix		Read	x Featur	00			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10YR 4/1	100					Loamy/Clayey	
3-11	10YR 4/2	97	7.5YR 5/6	3	С	М	Loamy/Clayey	Prominent redox concentrations
11-16	2.5Y 5/1	97	10YR 5/6	3	С	М	Loamy/Clayey	Prominent redox concentrations
					<u> </u>			
Type: C=C	concentration, D=Dep	letion, RM		MS=Mas	ked Sand	Grains		: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicato	rs for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy Gle	eyed Mat	rix (S4)		? Coas	st Prairie Redox (A16)
Histic E	pipedon (A2)		Sandy Re	dox (S5)			Iron-	Manganese Masses (F12)
Black H	istic (A3)		Stripped N	/latrix (S	6)		Red	Parent Material (F21)
Hydroge	en Sulfide (A4)		Dark Surfa	ace (S7)			Very	Shallow Dark Surface (F22)
Stratifie	d Layers (A5)		Loamy Mu	ıcky Min	eral (F1)		Othe	er (Explain in Remarks)
2 cm Mu	uck (A10)		Loamy Gle	eyed Ma	trix (F2)			
Deplete	d Below Dark Surface	e (A11)	X Depleted I	Matrix (F	3)			
Thick Da	ark Surface (A12)		Redox Da	rk Surfa	ce (F6)		<sup>3</sup> Indicato	rs of hydrophytic vegetation and
Sandy N	/lucky Mineral (S1)		Depleted I	Dark Sur	face (F7)		wetla	and hydrology must be present,
	ucky Peat or Peat (S	3)	Redox De					ss disturbed or problematic.
Restrictive Type: Depth (i	Layer (if observed): nches):		<u> </u>				Hydric Soil Presen	t?
Type: Depth (i							Hydric Soil Presen	t? Yes <u>X</u> No
Type: Depth (i Remarks:	nches):						Hydric Soil Presen	t? Yes <u>X</u> No
Type: Depth (i Remarks:  HYDROLO Wetland Hy	nches):  OGY rdrology Indicators:		uirad: abaak all that	annly)				
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi	DGY rdrology Indicators:		•		(RO)		Seconda	ry Indicators (minimum of two require
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface	DGY rdrology Indicators: cators (minimum of c		Water-Sta	ined Lea	` ,		Seconda Surf:	ry Indicators (minimum of two require ace Soil Cracks (B6)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa	DGY rdrology Indicators: cators (minimum of compared (A1) ater Table (A2)		Water-Sta	ined Lea auna (B1	3)		Seconda Surfa Drair	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturation	OGY  rdrology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3)		Water-Sta Aquatic Fa True Aqua	ined Lea auna (B1 atic Plant	(3) ts (B14)		Seconda Surf: Drain Dry-	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M	OGY  vdrology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) vdarks (B1)		Water-Sta Aquatic Fa True Aqua Hydrogen	ined Lea auna (B1 atic Plant Sulfide (	(3) ts (B14) Odor (C1)		SecondaSurfaDrainDryCray	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8)
Type: Depth (i Remarks:  IYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimer	odrology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph	l3) ts (B14) Odor (C1) neres on L	iving R	SecondaSurfaDrainDryCray poots (C3)Satu	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturatie Water M Sedimee Drift De	ordes):  OGY  Indrology Indicators: Index (A1) Index (A1) Index (A2) Index (A3) Index (B1) Index (B1) Index (B2) Index (B2) Index (B3)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Redu	ts (B14) Odor (C1) neres on l ced Iron (	iving Ro	Seconda   Surfa   Drain   Dry-   Cray   Satur   Sturn	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimel Drift Del Algal Ma	DGY rdrology Indicators: Cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc	ts (B14) Odor (C1) neres on L ced Iron (	iving Ro	Seconda   Surf:   Drain   Dry-   Cray   Satu   Stun   S (C6)   X Geo	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimel Drift Del Algal Ma Iron Dep	DGY rdrology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	one is requ	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduce on Reduce Surface	ts (B14) Odor (C1) neres on L ced Iron ( ction in Ti e (C7)	iving Ro	Seconda   Surf:   Drain   Dry-   Cray   Satu   Stun   S (C6)   X Geo	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1)
Type: Depth (i Remarks:  IYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimen Drift Dep Algal Ma Iron Dep Inundati	DGY  vdrology Indicators: cators (minimum of of the cators (minimum of of of the cators (minimum of	one is requ	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 37) Gauge or	ined Lea auna (B1 Sulfide ( Rhizosph of Redu on Reduc Surface Well Da	ts (B14) Odor (C1) neres on L ced Iron ( ction in Ti e (C7) ta (D9)	iving Ro	Seconda   Surf:   Drain   Dry-   Cray   Satu   Stun   S (C6)   X Geo	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimel Drift Del Algal Ma Iron Dep Inundati Sparsely	rdrology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial I by Vegetated Concave	one is requ	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 37) Gauge or	ined Lea auna (B1 Sulfide ( Rhizosph of Redu on Reduc Surface Well Da	ts (B14) Odor (C1) neres on L ced Iron ( ction in Ti e (C7) ta (D9)	iving Ro	Seconda   Surf:   Drain   Dry-   Cray   Satu   Stun   S (C6)   X Geo	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimen Drift Dep Algal Ma Iron Dep Inundati Sparsely	DGY rdrology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial I by Vegetated Concave	one is requ magery (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or (B8) Other (Exp	ined Lea auna (B1 autic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat blain in F	ts (B14) Odor (C1) heres on L ced Iron ( ction in Ti e (C7) ta (D9) Remarks)	iving Ro	Seconda   Surf:   Drain   Dry-   Cray   Satu   Stun   S (C6)   X Geo	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimel Drift Del Algal Ma Iron Dep Inundati Sparsely Field Obser Surface Wa	DGY rdrology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial I by Vegetated Concave rvations: ter Present?	magery (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or (B8) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc surface Well Dat blain in F	ts (B14) Odor (C1) neres on L ced Iron ( ction in Ti e (C7) ta (D9) Remarks)	Living Ro C4) Iled Soil	Seconda   Surf:   Drain   Dry-   Cray   Satu   Stun   S (C6)   X Geo	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Inundati Sparsely Field Obsel Surface Wa Water Table	DGY  rdrology Indicators: cators (minimum of of water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial I y Vegetated Concave rvations: ter Present? Ye	magery (Bes	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or (B8) No X No	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc s Surface Well Dat Depth (i Depth (i	ts (B14) Odor (C1) neres on L ced Iron ( ction in Ti e (C7) ta (D9) Remarks) Inches):	Living Ro C4) Illed Soil	Seconda	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimel Drift Dep Algal Ma Iron Dep Inundati Sparsely Field Obser Surface Wa Water Table Saturation F	nches):  OGY  Indrology Indicators: Incators (minimum of	magery (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or (B8) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc s Surface Well Dat Depth (i Depth (i	ts (B14) Odor (C1) neres on L ced Iron ( ction in Ti e (C7) ta (D9) Remarks)	Living Ro C4) Iled Soil	Seconda   Surf:   Drain   Dry-   Cray   Satu   Stun   S (C6)   X Geo	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimel Drift Dep Algal Ma Iron Dep Inundati Sparsely Field Obser Surface Wa Water Table Saturation F (includes ca	nches):  OGY  Indrology Indicators: Icators (minimum of	magery (Bes X	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or (B8) Other (Exp	ined Lea auna (B1 sulfide (Rhizosphof Reducent on Reducent Surfacent Well Darblain in Forthologies Depth (in Depth (	ts (B14) Odor (C1) neres on L ced Iron ( ction in Ti e (C7) ta (D9) Remarks) Inches): Inches):	Living Ro C4) Illed Soil	Seconda	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5)
Type: Depth (i Remarks:  HYDROLO  Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimel Drift Dep Algal Ma Iron Dep Inundati Sparsely Field Obser Surface Wa Water Table Saturation F (includes ca	nches):  OGY  Indrology Indicators: Incators (minimum of	magery (Bes X	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or (B8) Other (Exp	ined Lea auna (B1 sulfide (Rhizosphof Reducent on Reducent Surfacent Well Darblain in Forthologies Depth (in Depth (	ts (B14) Odor (C1) neres on L ced Iron ( ction in Ti e (C7) ta (D9) Remarks) Inches): Inches):	Living Ro C4) Illed Soil	Seconda	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5)

Project/Site: Buckeye Yard		City/Cour	nty: Columb	ous/Franklin	Sampling Date	e: <u>11/3/21</u>
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point	t: W4-up
Investigator(s):Lindsay Hanna		Section, T	Γownship, Ra	ange:		
Landform (hillside, terrace, etc.): depression		!	Local relief (	concave, convex, none):	Concave	
Slope (%): 2 Lat: 40.005752°		Long:	83.128613°		Datum: NAD '83	
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent s	slopes		NWI classif	ication: N/A	
Are climatic / hydrologic conditions on the site typical f	for this time o	of year?	Yes X	No (If no, exp	lain in Remarks.	)
Are Vegetation Y , Soil Y , or Hydrology Y	significantly	disturbed? A	——\re "Normal (	Circumstances" present?	Yes X	No
Are Vegetation N , Soil N , or Hydrology No	naturally pro	blematic? (	If needed, ex	xplain any answers in Rer	marks.)	
SUMMARY OF FINDINGS – Attach site m	ap showi	ng samplin	ıg point lo	ocations, transects	, important fe	eatures, etc.
Hydrophytic Vegetation Present? Yes X No	0	Is the	Sampled A	rea		
<del></del>	o X		n a Wetland		No X	
Wetland Hydrology Present? Yes No	o X					
Remarks:						
<b>VEGETATION</b> – Use scientific names of pla						
<u>Tree Stratum</u> (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	ksheet:	
1.	70 COVO.	ороско .	Otatas	Number of Dominant S		
2.				Are OBL, FACW, or F	•	4 (A)
3.				Total Number of Domi	nant Species	
4.				Across All Strata:		5 (B)
5		T-t-l Cover		Percent of Dominant S	•	00 00/ (A/D)
Sapling/Shrub Stratum (Plot size: 15	`	=Total Cover		Are OBL, FACW, or F	AC:	80.0% (A/B)
1. Rhamnus cathartica	2	Yes	FAC	Prevalence Index wo	rksheet:	
Juniperus virginiana	3	Yes	FACU	Total % Cover of:		oly by:
3. Pyrus calleryana	1	No	UPL	OBL species	x 1 =	
4. Populus deltoides	2	Yes	FAC	FACW species	x 2 =	
5				FAC species	x 3 =	
(5)	8	=Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size: 5 )	10	No	FACIL	UPL species	x 5 =	(D)
Schizachyrium scoparium     Juniperus virginiana	10	No No	FACU FACU	Column Totals:  Prevalence Index =	(A)	(B)
Suriperus viiginiaria     Euthamia graminifolia	18	Yes	FACW	Frevalence index -	- b/A -	
4. Epilobium coloratum	20	Yes	OBL	Hydrophytic Vegetati	ion Indicators:	
5.				1 - Rapid Test for		jetation
6.				X 2 - Dominance Te	st is >50%	
7.				3 - Prevalence Inc		
8				4 - Morphological		
9					s or on a separa	•
10		<del></del>		Problematic Hydro	. ,	` . ,
Waady Vina Stratum (Diat size)	58	=Total Cover		<sup>1</sup> Indicators of hydric so be present, unless dis		
Woody Vine Stratum (Plot size:1.	)			·	turbea or probler	natic.
2.				Hydrophytic Vegetation		
<del>-                                   </del>		=Total Cover		Present? Yes	X No	
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			-		
remaines (e.zze pe.e	,					

SOIL Sampling Point: W4-up

Depth	Matrix		Redo	x Featur						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-8	10YR 4/2	100					Loamy/Claye	<b>е</b> у		
8-13	10YR 4/3	100					Loamy/Claye	ey	friable	
					,					
,										
Type: C=Ce	ncentration, D=Dep	lotion DM	-Paduaad Matrix I		kod Son	d Croine	21.00	cation: PL=Pore	Lining M-Matrix	
lydric Soil I		ielion, ixivi-	-ineduced Matrix, i	vio-ivias	Neu Sain	u Granis.			ematic Hydric So	oils <sup>3</sup> :
Histosol (			Sandy Gle	eved Mat	rix (S4)			Coast Prairie Re	•	
	ipedon (A2)		Sandy Re	-	(= .)			Iron-Manganese		
— ' Black His			Stripped N		3)			Red Parent Mate		
	Sulfide (A4)		Dark Surfa		,			Very Shallow Da	, ,	
	Layers (A5)		Loamy Mu	, ,	eral (F1)			Other (Explain in	` ,	
2 cm Muc			Loamy Gl	•	, ,			` '	,	
	Below Dark Surface	e (A11)	Depleted	-						
 Thick Dar	rk Surface (A12)	, ,	Redox Da		•		<sup>3</sup> Ind	icators of hydrop	nytic vegetation ar	nd
Sandy Mı	ucky Mineral (S1)		Depleted	Dark Sur	face (F7	)			y must be presen	
	cky Peat or Peat (S3	3)	Redox De	pression	s (F8)			unless disturbed	-	
Restrictive L	.ayer (if observed):									
Type:										
Depth (in	ches):						Hydric Soil Pr	ocont?	Yes	No
							nyunc 3011 F1	esent:		_
Remarks: Gravel in laye	er at 3 inches						nyunc 30ii Fi	esent:		<u>_</u>
Gravel in laye							nyunc 30ii Fi	esent:		
Gravel in laye	GY		- -				nyunc 30ii Fi	esent:		
YDROLO Wetland Hyd	GY Irology Indicators:	ano is requi	irod: chack all that	apply)						
YDROLO Wetland Hyd	<b>GY</b> Irology Indicators: ators (minimum of c	one is requi			wes (R0)		Sec	ondary Indicators	: (minimum of two	
YDROLO Vetland Hyd Primary Indic Surface V	GY Irology Indicators: ators (minimum of control (A1)	one is requi	Water-Sta	ined Lea	` '		Sec	ondary Indicators Surface Soil Cra	: (minimum of two	
YDROLO Vetland Hyd Primary Indic Surface V High Wat	GY Irology Indicators: ators (minimum of control Vater (A1) er Table (A2)	one is requi	Water-Sta	ined Lea auna (B1	3) ` ´		Sec	ondary Indicators Surface Soil Cra Drainage Patterr	: (minimum of two cks (B6) is (B10)	
YDROLO Wetland Hyd Primary Indic Surface V High Wat Saturation	GY Irology Indicators: ators (minimum of control Vater (A1) ter Table (A2) n (A3)	one is requi	Water-Sta Aquatic Fa True Aqua	ined Lea auna (B1 atic Plant	3) s (B14)		Sec	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat	: (minimum of two cks (B6) is (B10) er Table (C2)	
YDROLO  Vetland Hyd  Primary Indic  Surface V  High Wat  Saturation  Water Ma	GY Irology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) arks (B1)	one is requi	Water-Sta Aquatic Fa True Aqua Hydrogen	ined Lea auna (B1 atic Plant Sulfide (	3) s (B14) Odor (C1	)	Sec	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows	: (minimum of two cks (B6) is (B10) er Table (C2) is (C8)	requir
YDROLO  Vetland Hyd  Primary Indic  Surface V  High Wat  Saturation  Water Ma  Sediment	GY Irology Indicators: ators (minimum of or Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2)	one is requi	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph	3) s (B14) Odor (C1 eres on	) Living Ro	Sec	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl	cks (B6) s (B10) er Table (C2) s (C8) e on Aerial Image	requir
YDROLO Vetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo	GY Irology Indicators: ators (minimum of control of con	one is requi	Water-Sta Aquatic Fa True Aqua Hydrogen	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc	3) s (B14) Odor (C1 eres on led	) Living Ro (C4)	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres	c (minimum of two cks (B6) is (B10) er Table (C2) c (C8) e on Aerial Imager sed Plants (D1)	requir
YDROLO Vetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo	GY Irology Indicators: ators (minimum of converted (A1) erer Table (A2) en (A3) arks (B1) t Deposits (B2) posits (B3) erer Crust (B4)	one is requi	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc	3) s (B14) Odor (C1 eres on led Iron etion in Ti	) Living Ro (C4)	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl	c (minimum of two cks (B6) is (B10) er Table (C2) is (C8) e on Aerial Imagel sed Plants (D1) ition (D2)	requir
YDROLO Vetland Hyd Surface V High Wat Saturation Water Ma Sediment Drift Depo	GY Irology Indicators: ators (minimum of converted (A1) erer Table (A2) en (A3) arks (B1) t Deposits (B2) posits (B3) erer Crust (B4)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface	3) s (B14) Odor (C1 eres on lead Iron etion in Ties (C7)	) Living Ro (C4)	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres Geomorphic Pos	c (minimum of two cks (B6) is (B10) er Table (C2) is (C8) e on Aerial Imagel sed Plants (D1) ition (D2)	requii
YDROLO Vetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio	GY Irology Indicators: ators (minimum of or	magery (B7	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 7) Gauge or	ined Lea auna (B1 Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat	3) s (B14) Odor (C1 eres on lead Iron et (C7) a (D9)	) Living Ro (C4) illed Soils	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres Geomorphic Pos	c (minimum of two cks (B6) is (B10) er Table (C2) is (C8) e on Aerial Imagel sed Plants (D1) ition (D2)	requi
YDROLO Wetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely	GY  Irology Indicators: ators (minimum of orwater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) is or Crust (B4) besits (B5) in Visible on Aerial II Vegetated Concave	magery (B7	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck T) Gauge or	ined Lea auna (B1 Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat	3) s (B14) Odor (C1 eres on lead Iron et (C7) a (D9)	) Living Ro (C4) illed Soils	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres Geomorphic Pos	c (minimum of two cks (B6) is (B10) er Table (C2) is (C8) e on Aerial Imagel sed Plants (D1) ition (D2)	requii
Wetland Hyden Surface Wetland Water Massed Sediment Drift Depote Algal Mater Iron Depote Inundation Sparsely	GY  Irology Indicators: ators (minimum of or Nater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) posits (B3) it or Crust (B4) posits (B5) in Visible on Aerial II Vegetated Concave vations:	magery (Bī	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck T) Gauge or	ined Lea auna (B1 Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat	3) s (B14) Ddor (C1 eres on led Iron tion in Ti (C7) a (D9)	) Living Ro (C4) illed Soils	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres Geomorphic Pos	c (minimum of two cks (B6) is (B10) er Table (C2) is (C8) e on Aerial Imagel sed Plants (D1) ition (D2)	requii
Wetland Hyde Primary Indic Surface W High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely Field Observ Gurface Water	GY  Irology Indicators: ators (minimum of or Nater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) is or Crust (B4) is or Crust (B4) is or Krust (B5) in Visible on Aerial II Vegetated Concave vations:	magery (Bī s Surface (B	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck T) Gauge or Other (Ex	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat Dlain in F	3) s (B14) Ddor (C1 eres on led Iron tition in Title (C7) a (D9) temarks)	) Living Ro (C4) illed Soils	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres Geomorphic Pos	c (minimum of two cks (B6) is (B10) er Table (C2) is (C8) e on Aerial Imagel sed Plants (D1) ition (D2)	requii
YDROLO Wetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely Field Observ Water Table	GY  Irology Indicators: ators (minimum of or	magery (Bī Surface (B	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 7) Gauge or 38) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc c Surface Well Dat blain in F	3) s (B14) Ddor (C1 eres on led Iron et (C7) a (D9) elemarks) nches):	) Living Ro (C4) illed Soils	Sec 	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres Geomorphic Pos	e (minimum of two cks (B6) is (B10) er Table (C2) s (C8) e on Aerial Imager sed Plants (D1) ition (D2) t (D5)	requi
Wetland Hyden Saturation Wetland Hyden Surface Water Massed Mater Massed Mater Massed Mater Mate	GY  Irology Indicators: ators (minimum of or Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) posits (B3) t or Crust (B4) posits (B5) in Visible on Aerial II Vegetated Concave vations: er Present? Ye esent? Ye esent? Ye esent? Ye	magery (Bi	Water-Star	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat Delain in F Depth (i Depth (i	3) s (B14) Ddor (C1 eres on led Iron et (C7) a (D9) demarks) nches): _ nches): _	) Living Ro (C4) illed Soils	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stres Geomorphic Pos FAC-Neutral Tes	e (minimum of two cks (B6) is (B10) er Table (C2) s (C8) e on Aerial Imager sed Plants (D1) ition (D2) t (D5)	requi
Wetland Hyden Saturation Wetland Hyden Surface Water Massed Mater Massed Mater Massed Mater Mate	GY  Irology Indicators: ators (minimum of or Nater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) posits (B3) it or Crust (B4) posits (B5) in Visible on Aerial II Vegetated Concave vations: er Present? Ye present? Ye esent? Ye	magery (Bi	Water-Star	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat Delain in F Depth (i Depth (i	3) s (B14) Ddor (C1 eres on led Iron et (C7) a (D9) demarks) nches): _ nches): _	) Living Ro (C4) illed Soils	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stres Geomorphic Pos FAC-Neutral Tes	e (minimum of two cks (B6) is (B10) er Table (C2) s (C8) e on Aerial Imager sed Plants (D1) ition (D2) t (D5)	requi
YDROLO Vetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely Field Observ Surface Water Vater Table I Saturation Princludes cap Describe Rec	GY  Irology Indicators: ators (minimum of or Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) posits (B3) t or Crust (B4) posits (B5) in Visible on Aerial II Vegetated Concave vations: er Present? Ye esent? Ye esent? Ye esent? Ye	magery (Bi	Water-Star Aquatic Farana Aquatic Fa	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat Delain in F Depth (i Depth (i	3) s (B14) Ddor (C1 eres on led Iron et (C7) a (D9) demarks) nches): _ nches): _	) Living Ro (C4) illed Soils	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stres Geomorphic Pos FAC-Neutral Tes	e (minimum of two cks (B6) is (B10) er Table (C2) s (C8) e on Aerial Imager sed Plants (D1) ition (D2) t (D5)	requi
YDROLO Vetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely Field Observ Surface Water Vater Table I Saturation Princludes cap	GY  Irology Indicators: ators (minimum of or Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) posits (B3) t or Crust (B4) posits (B5) in Visible on Aerial II Vegetated Concave vations: er Present? Ye esent? Ye esent? Ye esent? Ye	magery (Bi	Water-Star Aquatic Farana Aquatic Fa	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat Delain in F Depth (i Depth (i	3) s (B14) Ddor (C1 eres on led Iron et (C7) a (D9) demarks) nches): _ nches): _	) Living Ro (C4) illed Soils	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stres Geomorphic Pos FAC-Neutral Tes	e (minimum of two cks (B6) is (B10) er Table (C2) s (C8) e on Aerial Imager sed Plants (D1) ition (D2) t (D5)	requi

Project/Site: Buckeye Yard		City/County: Colum				
Applicant/Owner: Simpson Strong-Tie			State: OH	Sampling Point: W4-wet		
Investigator(s): Lindsay Hanna	,	Section, Township,	Range:			
Landform (hillside, terrace, etc.): depression		Local relie	f (concave, convex, none):	Concave		
Slope (%): 2 Lat: 40.005886°		Long: <u>-83.128574</u>	•	Datum: NAD '83		
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent slope	s	NWI classif	fication: N/A		
Are climatic / hydrologic conditions on the site typical for	or this time of yea	ar? Yes X	No (If no, exp	olain in Remarks.)		
Are Vegetation Y, Soil Y, or Hydrology Y s	significantly distu	rbed? Are "Norma	al Circumstances" present?	Yes X No		
Are Vegetation N, Soil N, or Hydrology No r	naturally problem	atic? (If needed,	explain any answers in Re	marks.)		
SUMMARY OF FINDINGS – Attach site ma	ap showing s	sampling point	locations, transects	, important features, etc.		
Hydrophytic Vegetation Present?         Yes         X         No           Hydric Soil Present?         Yes         X         No           Wetland Hydrology Present?         Yes         X         No	<u> </u>	Is the Sampled within a Wetlar		No_X_		
Remarks:  VEGETATION – Use scientific names of pla	inte					
VEGETATION - 030 3010Hillio Hallios S. Pia		ominant Indicator				
<u>Tree Stratum</u> (Plot size: 30 )	% Cover Sp	pecies? Status	_ Dominance Test wor	ksheet:		
1 2			Number of Dominant Are OBL, FACW, or F	•		
3. 4.			Total Number of Dom Across All Strata:	inant Species2 (B)		
5.	=Tot	tal Cover	Percent of Dominant S Are OBL, FACW, or F	•		
Sapling/Shrub Stratum (Plot size: 15 )	)			,		
1			Prevalence Index wo	orksheet:		
2.			Total % Cover of			
3.			OBL species	x1=		
5.			FACW species FAC species	x 2 = x 3 =		
5	=Tot	tal Cover	FAC species FACU species	x 3 =		
Herb Stratum (Plot size: 5 )		ai Covoi	UPL species	x 5 =		
1. Typha X glauca	35	Yes OBL	Column Totals:	(A) (B)		
2. Juncus effusus 3.	32	Yes OBL	Prevalence Index =	= B/A =		
4.			Hydrophytic Vegetat	ion Indicators:		
5.			1 - Rapid Test for	Hydrophytic Vegetation		
6			X 2 - Dominance Te	est is >50%		
7			3 - Prevalence Inc			
8.				Adaptations <sup>1</sup> (Provide supporting s or on a separate sheet)		
9.			-	·		
10	67 =Tot	tal Cover	-   <del></del>	ophytic Vegetation <sup>1</sup> (Explain)		
Woody Vine Stratum (Plot size: )		ai oovei		oil and wetland hydrology must sturbed or problematic.		
1			- Hydrophytic	·		
2.			_ Vegetation			
	=Tot	tal Cover	Present? Yes	X No		
Remarks: (Include photo numbers here or on a separ	rate sheet.)					

SOIL Sampling Point: W4-wet

Depth	Matrix			x Featur						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-3	2.5Y 5/2	100					Loamy/Clayey			
3-4	2.5Y 5/2	98	2.5Y 5/4	2	С	М	Loamy/Clayey	Distino	ct redox conce	ntrations
4-8	10YR 5/2	94	10YR 5/6	6	<u>C</u>	<u>M</u>	Loamy/Clayey	Promine	ent redox cond	entrations
Hydric Soil Histoso Histic E Black H Hydroge Stratifie 2 cm M Deplete Thick D Sandy M	Concentration, D=Dep Indicators: I (A1) pipedon (A2) iistic (A3) en Sulfide (A4) d Layers (A5) uck (A10) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) ucky Peat or Peat (S3	e (A11)	Sandy Gle Sandy Re Stripped M Dark Surfa Loamy Mu Loamy Gle X Depleted I Redox Da Depleted I ? Redox De	eyed Mat dox (S5) Matrix (Si Mace (S7) Icky Min eyed Ma Matrix (F rk Surfac Dark Sur	eral (F1) trix (F2) (3) ce (F6) face (F7)		Indica Co Iro Re Ot Ot	on: PL=Pore I tors for Proble past Prairie Rec n-Manganese ad Parent Mate ery Shallow Dai her (Explain in tors of hydroph etland hydrolog less disturbed	ematic Hydric dox (A16) Masses (F12) rial (F21) rk Surface (F2 Remarks) nytic vegetatio y must be pre	e: Soils <sup>3</sup> :  2)  In and sent,
lestrictive	Layer (if observed):									
Type: Depth (i Remarks:							Hydric Soil Preso	ent?	Yes	_ No
Type: Depth (i Remarks: Gravel in la	yer at 3 inches						Hydric Soil Prese	ent?	Yes	_ No
Type: Depth (i Remarks: Gravel in la	yer at 3 inches						Hydric Soil Preso	ent?	Yes	No
Type: Depth (i Remarks: Gravel in lay  IYDROLO Wetland Hy Primary Ind	yer at 3 inches  OGY  ydrology Indicators: icators (minimum of comments)						Secon	dary Indicators	: (minimum of	
Type: Depth (i Remarks: Gravel in lay  IYDROLO Wetland Hy Primary Ind Surface X High Water M Sedime Drift De Algal M Iron De Inundat	yer at 3 inches  OGY  ydrology Indicators: icators (minimum of control of the con	one is requ	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck T) Gauge or	ined Lea auna (B1 Sulfide ( Rhizosph of Redu on Reduc Surface Well Da	ts (B14) Odor (C1) neres on L ced Iron ( ction in Til e (C7) ta (D9)	iving Ro	Second Su Dr Dr Cr Cr soots (C3) Sa Str s (C6) Ge		e (minimum of cks (B6) is (B10) er Table (C2) s (C8) e on Aerial Ima sed Plants (D1	two require
Type: Depth (i Remarks: Gravel in lay  IYDROLO  Wetland Hy Primary Ind Surface X High Water M Sedime Drift De Algal M Iron De Inundat Sparsel  Field Obse Surface Water Table Saturation F	yer at 3 inches  OGY  /drology Indicators: icators (minimum of context) ic	magery (B	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck T) Gauge or	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc a Surface Well Dat Depth (i Depth (i	ts (B14) Odor (C1) neres on L ced Iron ( ction in Til e (C7) ta (D9)	iving Ro	Second Su Dr Dr Cr Cr soots (C3) Sa Str s (C6) Ge	dary Indicators  Irface Soil Crace  ainage Pattern  y-Season Wate  ayfish Burrows  turation Visible  unted or Stress  comorphic Pos  IC-Neutral Tes	is (minimum of cks (B6) as (B10) er Table (C2) is (C8) er on Aerial Imased Plants (D1 ition (D2) at (D5)	two require
Type: Depth (i Remarks: Gravel in lay  IYDROLO  Wetland Hy Primary Ind Surface X High W: X Saturati Water M Sedime Drift De Algal M: Iron De Inundat Sparsel Field Obse Surface Wa Water Table Saturation F (includes ca	yer at 3 inches	magery (B	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck Gauge or B8) Other (Exp No No No	ined Lea auna (B1 auna (B1 Sulfide ( Rhizosph of Reduc n Reduc Surface Well Da Delain in F Depth (i Depth (i	ts (B14) Odor (C1) neres on L ced Iron ( ction in Til e (C7) ta (D9) Remarks) Inches): Inches):	Living Rock C4) Illed Soil	Second	dary Indicators  Irface Soil Crace  ainage Pattern  y-Season Wate  ayfish Burrows  turation Visible  unted or Stress  comorphic Pos  IC-Neutral Tes	cks (B6) sis (B10) er Table (C2) sis (C8) e on Aerial Ima sed Plants (D1 ition (D2)	agery (C9)

Project/Site: Buckeye Yard		City/Cou	nty: Columb	ous/Franklin	Sampling Date:	10/18/21
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point	: W5&6-up
Investigator(s): Lindsay Hanna		Section, T	ownship, Ra	ange:		
Landform (hillside, terrace, etc.): depression		!	Local relief (	concave, convex, none):	Concave	
Slope (%): 2 Lat: 40.007998°		Long: -	83.127790°	•	Datum: NAD '83	
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent s	lopes		NWI classif	ication: N/A	
Are climatic / hydrologic conditions on the site typical for	or this time o	of year?	Yes X	No (If no, exp	olain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y s		-		Circumstances" present?	·	No
Are Vegetation N , Soil N , or Hydrology No r				ι γplain any answers in Rei		
SUMMARY OF FINDINGS – Attach site ma						atures, etc.
Hydrophytic Vegetation Present? Yes No	. X	Is the	Sampled A	rea		
	$\frac{x}{X}$		a Wetland		No X	
Wetland Hydrology Present? Yes X No						
Remarks:						
Site appears mowed, potential soil modification. Wetla	and A interio	r mix of FAC,	FACU and F	ACW species.		
VEGETATION – Use scientific names of pla						
Tree Stratum (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	rkshoot:	
1. Catalpa speciosa	20	Yes	FACU	Number of Dominant		
Acer saccharinum	20	Yes	FACW	Are OBL, FACW, or F	•	3 (A)
3. Fraxinus pennsylvanica	10	No	FACW	Total Number of Dom		``
4. Celtis occidentalis	18	Yes	FAC	Across All Strata:		7 (B)
5.				Percent of Dominant S	Species That	
	68	=Total Cover		Are OBL, FACW, or F	AC:	42.9% (A/B)
Sapling/Shrub Stratum (Plot size:)	)					
Lonicera maackii	50	Yes	UPL	Prevalence Index wo		
2. Ligustrum vulgare	15	Yes	FACU	Total % Cover of		ly by:
3. Rhamnus cathartica	10	<u>No</u>	FAC	OBL species	x 1 =	
4 5.				FACW species FAC species	x 2 = x 3 =	
J	75	=Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size: 5 )		- Total Gover		UPL species	x5=	
1. Rhamnus cathartica	10	Yes	FAC	Column Totals:	(A)	(B)
2. Lonicera maackii	8	Yes	UPL	Prevalence Index :	`	`
3.						
4.				Hydrophytic Vegetat	ion Indicators:	
5.				1 - Rapid Test for	Hydrophytic Vego	etation
6				2 - Dominance Te		
7				3 - Prevalence Inc		
8				4 - Morphological		
9.					s or on a separat	-
10		T-1-1 0		Problematic Hydro		` ' '
Woody Vine Stratum (Plot size: )	18	=Total Cover		<sup>1</sup> Indicators of hydric so be present, unless dis		
					turbed or problem	latic.
1				Hydrophytic		
		=Total Cover		Vegetation Present? Yes	No X	(
Remarks: (Include photo numbers here or on a separ				<u> </u>	<del></del>	
Transitio. (morado prioto numboro nere di dii a sepai	ato siloet.)					

SOIL Sampling Point: W5&6-up

Profile Desc Depth	cription: (Describe Matrix	to the dep		<b>ument t</b> x Featur		ator or o	confirm the ab	sence of	indicators.)		
-	Color (moist)	%		% %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture			Remarks	
(inches)			Color (moist)				-		Durant		
0-8	10YR 3/2	98	10YR 4/6	2	<u> </u>	PL_	Loamy/Cla		Prominent	redox conc	entrations
8-16	2.5Y 4/2	100					Loamy/Cla	iyey			
							_				
<sup>1</sup> Type: C=C	oncentration, D=Dep	letion RM=	:Reduced Matrix M		ked Sand		2	ocation:	PL=Pore Lini	na M=Matr	iv
Hydric Soil		iodon, raw	Troduced Waters, I	vic ivido	Roa Garie	Oranic			for Problema		
Histosol			Sandy Gle	ved Mat	rix (S4)				Prairie Redox	-	
	pipedon (A2)		Sandy Red						inganese Ma		
	stic (A3)		Stripped M	, ,			_		rent Material		
	n Sulfide (A4)		Dark Surfa	`	-,		_	_	nallow Dark S	` '	2)
	l Layers (A5)		Loamy Mu	` ,	eral (F1)		_	_ `	Explain in Re	•	-/
	ick (A10)		Loamy Gle	•	, ,		_			,	
	d Below Dark Surface	e (A11)	Depleted N	-							
	ark Surface (A12)	( /	Redox Dai				3lr	ndicators	of hydrophytic	c vegetation	n and
	lucky Mineral (S1)		Depleted [		` '	)			l hydrology m	_	
	icky Peat or Peat (S3	3)	Redox De						disturbed or p		
	Layer (if observed):	-			. ,				<u> </u>		
Type:	Rocks										
Depth (ir		1					Hydric Soil I	Present?		Yes	No X
Remarks:			<del></del>								
HYDROLC	GY										
Wetland Hy	drology Indicators:										
Primary India	cators (minimum of c	ne is requi	red; check all that	apply)			<u>S</u>	econdary	<u>Indicators (m</u>	inimum of t	wo required
	Water (A1)		Water-Sta		` '			_	Soil Cracks	` '	
	iter Table (A2)		Aquatic Fa				_		ge Patterns (E		
Saturation			True Aqua				_		ason Water T		
	arks (B1)		Hydrogen		` '	<i>'</i>	<u> </u>		n Burrows (C	-	
	nt Deposits (B2)		Oxidized F			-	loots (C3)		ion Visible on		
	posits (B3)		Presence			,			l or Stressed	-	)
	t or Crust (B4)		Recent Iro			lied Soil	IS (C6)		rphic Position	. ,	
	osits (B5)	magan, /D7	Thin Muck				_	FAC-N	eutral Test (D	(5)	
	on Visible on Aerial I Vegetated Concave										
		Surface (L	38) Other (Exp	naiii iii i	(emarks)		1				
Field Obser		_	Na V	Danth (							
Surface Wat Water Table		s X			nches): _	7					
Saturation P					nches): _		Watland H	vdrology	Drocont?	Voc V	No
(includes ca			NO	nehiii (i	nches): _		Wetland H	yarology	r rescill!	Yes X	No
	corded Data (stream	gauge mo	nitoring well aeria	l photos	. previou	s inspec	ctions), if availa	ble:			
		J			, <sub>F</sub> . 5.100		<i>)</i> , a rana				
Remarks:											

Project/Site: Buckeye Yard		City/Cou	nty: Columb	ous/Franklin	Sampling Date:	10/18/21
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point	: W5-wet
Investigator(s): Lindsay Hanna		Section, T	Township, Ra	ange:		
Landform (hillside, terrace, etc.): depression			Local relief (	concave, convex, none):	Concave	
Slope (%): 2 Lat: 40.008253°		Long: -	83.127799°	•	Datum: NAD '83	
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent s			NWI classit	ication: N/A	
Are climatic / hydrologic conditions on the site typical for	-		Yes X		olain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y s		-		Circumstances" present?		No
Are Vegetation N , Soil N , or Hydrology No r				plain any answers in Re		
SUMMARY OF FINDINGS – Attach site ma					•	atures, etc.
Hydrophytic Vegetation Present? Yes No	. X	Is the	Sampled A	rea		
	0		n a Wetland		No X	
Wetland Hydrology Present? Yes X						
Remarks:		I				
Site appears mowed, potential soil modification. Wetla	and A interio	r mix of FAC,	FACU and F	ACW species.		
<b>VEGETATION</b> – Use scientific names of pla	nts.					
T 01 1 (D) 1	Absolute	Dominant	Indicator			
Tree Stratum (Plot size: 30 )	% Cover	Species?	Status	Dominance Test wor		
Catalpa speciosa     Acer saccharinum	<u>35</u> 20	Yes Yes	FACU FACW	Number of Dominant Are OBL, FACW, or F	•	5 (A)
Fraxinus pennsylvanica	15	No	FACW			(A)
4. Ulmus americana	15	No	FACW	Total Number of Dom Across All Strata:	inant Species	8 (B)
5.				Percent of Dominant	Species That	(
	85	=Total Cover		Are OBL, FACW, or F	•	62.5% (A/B)
Sapling/Shrub Stratum (Plot size:						` ′
Cornus racemosa	10	Yes	FAC	Prevalence Index wo	orksheet:	
2. Fraxinus pennsylvanica	12	Yes	FACW	Total % Cover of	: Multip	ly by:
3. Lonicera maackii	8	Yes	UPL	OBL species	x 1 =	
4.				FACW species	x 2 =	
5				FAC species	x 3 =	
Harb Otratum (Districts 5	30	=Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size: 5 )	10	Vaa	EAC\A/	UPL species Column Totals:	x 5 =	(B)
Lysimachia nummularia     Symphyotrichum lanceolatum	<u>10</u> 8	Yes Yes	FACW FAC	Prevalence Index :	`	(D)
Viburnum trilobum		Yes	FAC	i revalence index		
4.				Hydrophytic Vegetat	ion Indicators:	
5.				1 - Rapid Test for		etation
6.				X 2 - Dominance Te	est is >50%	
7.				3 - Prevalence Inc	dex is ≤3.0 <sup>1</sup>	
8.				4 - Morphological		
9					s or on a separat	-
10				Problematic Hydr	ophytic Vegetatio	n <sup>1</sup> (Explain)
	23	=Total Cover		<sup>1</sup> Indicators of hydric s		
Woody Vine Stratum (Plot size:)	1			be present, unless dis	turbed or problem	natic.
1.				Hydrophytic		
2		=Total Cover		Vegetation Present? Yes	No >	,
Demonstra (Include abote accept				11656111: 165		<u>`</u>
Remarks: (Include photo numbers here or on a separ	ate sneet.)					

SOIL Sampling Point: W5-wet

Depth	Matrix		Redo	x Featur	<u> </u>				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Ren	narks
0-9	2.5Y 4/2	93	10YR 5/8	5	С	PL/M	Loamy/Clayey	Prominent redo	x concentration
			2.5Y 4/1	2	RM	M			
9-16	2.5Y 5/2	91	10YR 5/6	5	С	PL/M	Loamy/Clayey	Prominent redo	x concentration
			10YR 3/6	4	C	PL/M		Prominent redo	
			10111 0/0		<u> </u>			- Tommont rodo	X concontration
Type: C=C	Concentration, D=Dep	letion, RM	I=Reduced Matrix, I	MS=Mas	ked Sand	d Grains		: PL=Pore Lining, N	
Hydric Soil	Indicators:							rs for Problematic	-
Histosol	I (A1)		Sandy Gle	-				st Prairie Redox (A16	•
Histic E	pipedon (A2)		Sandy Re	dox (S5)			Iron-	Manganese Masses	(F12)
Black H	istic (A3)		Stripped N	∕latrix (S	3)		Red	Parent Material (F21	1)
Hydroge	en Sulfide (A4)		Dark Surfa	ace (S7)			Very	Shallow Dark Surface	ce (F22)
Stratifie	d Layers (A5)		Loamy Mu	icky Min	eral (F1)		Othe	r (Explain in Remark	ks)
2 cm Mi	uck (A10)		Loamy Gl	eyed Ma	trix (F2)		_ <del></del>		
Deplete	d Below Dark Surface	e (A11)	X Depleted	Matrix (F	3)				
Thick D	ark Surface (A12)		Redox Da	rk Surfac	ce (F6)		<sup>3</sup> Indicato	rs of hydrophytic veg	getation and
Sandy N	Mucky Mineral (S1)		Depleted	Dark Sur	face (F7)	)	wetla	and hydrology must b	be present,
5 cm Mi	ucky Peat or Peat (S	3)	? Redox De	pression	s (F8)		unle	ss disturbed or probl	ematic.
Restrictive	Layer (if observed):								
Restrictive Type:	Layer (if observed):								
Type: Depth (i							Hydric Soil Presen	t? Yes	No_
Type: Depth (i Remarks:	inches):						Hydric Soil Presen	t? Yes	No_
Type: Depth (i Remarks:	DGY						Hydric Soil Presen	t? Yes	No
Type: Depth (i Remarks:  HYDROLO Wetland Hy	OGY								
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Ind	DGY /drology Indicators:		•		(0.0)		Seconda	ry Indicators (minimi	um of two requi
Type: Depth (i Remarks:  IYDROLO Wetland Hy Primary Indi Surface	OGY /drology Indicators: icators (minimum of o		Water-Sta	ined Lea	, ,		Seconda Surf:	ry Indicators (minimi ace Soil Cracks (B6)	um of two requi
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Ind Surface X High Wa	OGY vdrology Indicators: icators (minimum of of Water (A1) ater Table (A2)		Water-Sta	ained Lea auna (B1	3) ` ´		Seconda Surf. _X_Draii	ry Indicators (minimi ace Soil Cracks (B6) nage Patterns (B10)	um of two requi
Type: Depth (i Remarks:  IYDROLO Wetland Hy Primary Indi Surface X High Wa X Saturati	OGY /drology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3)		Water-Sta Aquatic Fa True Aqua	ained Lea auna (B1 atic Plant	3) s (B14)		Seconda Surf: X Drain Dry-	ry Indicators (minimo ace Soil Cracks (B6) nage Patterns (B10) Season Water Table	um of two requi
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa X Saturati Water M	OGY /drology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1)		Water-Sta Aquatic Fa True Aqua Hydrogen	nined Lea auna (B1 atic Plant Sulfide (	3) s (B14) Odor (C1	)	Seconda Surfa X Drain Dry- Cray	ry Indicators (minimi ace Soil Cracks (B6) nage Patterns (B10) Season Water Table fish Burrows (C8)	um of two requi
Type: Depth (i Remarks:  IYDROLO Wetland Hy Primary Ind Surface X High Water M X Sedime	OGY  /drology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3) //arks (B1) nt Deposits (B2)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph	3) s (B14) Odor (C1 eres on l	) _iving Ro	SecondaSurfa X_DrainDryCray poots (C3)Satu	ry Indicators (minimi ace Soil Cracks (B6) nage Patterns (B10) Season Water Table fish Burrows (C8) ration Visible on Aer	um of two requi
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Ind Surface X High Water M X Saturati Water M X Sedime Drift De	onches):  OGY  Adrology Indicators: icators (minimum of of the control of the con		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Redu	3) s (B14) Odor (C1 teres on led	) _iving Ro (C4)	Seconda   Surfa   X Drain   Dry-   Cray   Dots (C3)	ry Indicators (minimo ace Soil Cracks (B6) nage Patterns (B10) Season Water Table fish Burrows (C8) ration Visible on Aer ted or Stressed Plan	um of two requi
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Ind Surface X High Water N X Sedime Drift De Algal Ma	OGY /drology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro	ained Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduo	3) s (B14) Odor (C1 eres on lead from the cation in Ti	) _iving Ro (C4)	Seconda           Surf.           X Drain           Dry-           Cray           Doots (C3)         Satur           Stun         Geo	ry Indicators (minimo ace Soil Cracks (B6) nage Patterns (B10) Season Water Table fish Burrows (C8) ration Visible on Aer ted or Stressed Plan morphic Position (D2	um of two requi
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Ind Surface X High Wat X Saturati Water M X Sedime Drift De Algal Ma	DGY /drology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3) //arks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	one is requ	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc c Surface	3) SS (B14) Odor (C1 Deres on lead Iron (ction in Ties (C7)	) _iving Ro (C4)	Seconda           Surf.           X Drain           Dry-           Cray           Doots (C3)         Satur           Stun         Geo	ry Indicators (minimi ace Soil Cracks (B6) nage Patterns (B10) Season Water Table fish Burrows (C8) ration Visible on Aer ted or Stressed Plar	um of two requi
Type: Depth (i Remarks:  IYDROLO Wetland Hy Primary Indi Surface X High Water M X Saturati Water M X Sedime Drift De Algal Mallron Del Inundati	OGY  /drology Indicators: icators (minimum of of water (A1) ater Table (A2) on (A3) /darks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I	one is requ	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 67) Gauge or	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat	3) s (B14) Odor (C1 eres on letton in Ties (C7) at (D9)	) _iving Ro (C4) Iled Soil	Seconda           Surf.           X Drain           Dry-           Cray           Doots (C3)         Satur           Stun         Geo	ry Indicators (minimo ace Soil Cracks (B6) nage Patterns (B10) Season Water Table fish Burrows (C8) ration Visible on Aer ted or Stressed Plan morphic Position (D2	um of two requi
Type: Depth (i Remarks:  IYDROLO Wetland Hy Primary Ind Surface X High Water M X Saturati Water M X Sedime Drift De Algal Maliron Dej Inundati Sparsel	onches):  OGY  Idrology Indicators: icators (minimum of	one is requ	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 67) Gauge or	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat	3) s (B14) Odor (C1 eres on letton in Ties (C7) at (D9)	) _iving Ro (C4) Iled Soil	Seconda           Surf.           X Drain           Dry-           Cray           Doots (C3)         Satur           Stun         Geo	ry Indicators (minimo ace Soil Cracks (B6) nage Patterns (B10) Season Water Table fish Burrows (C8) ration Visible on Aer ted or Stressed Plan morphic Position (D2	um of two requi
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Ind Surface X High Water M X Sedime Drift De Algal Malron Dep Inundati Sparsel	DGY /drology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3) /darks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I y Vegetated Concave rvations:	one is requ magery (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck Gauge or (B8) Other (Ex	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat plain in F	3) s (B14) Odor (C1 eres on led Iron (ction in Ties (C7) a (D9) Remarks)	) _iving Ro (C4) Iled Soil	Seconda           Surf.           X Drain           Dry-           Cray           Doots (C3)         Satur           Stun         Geo	ry Indicators (minimo ace Soil Cracks (B6) nage Patterns (B10) Season Water Table fish Burrows (C8) ration Visible on Aer ted or Stressed Plan morphic Position (D2	um of two requi
Type: Depth (i Remarks:  IYDROLO Wetland Hy Primary Indi Surface X High Wa X Saturati Water N X Sedime Drift De Algal Ma Iron Dej Inundati Sparsel Field Obse	DGY /drology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3) /darks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I y Vegetated Concave rvations: iter Present?	magery (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck (R8) Other (Ex	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc c Surface Well Dat plain in F	3) Is (B14) Ddor (C1 Interes on I	) _iving Ro (C4) Iled Soil	Seconda           Surf.           X Drain           Dry-           Cray           Doots (C3)         Satur           Stun         Geo	ry Indicators (minimo ace Soil Cracks (B6) nage Patterns (B10) Season Water Table fish Burrows (C8) ration Visible on Aer ted or Stressed Plan morphic Position (D2	um of two requi
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa X Saturati Water M X Sedime Drift De Algal Ma Iron Dej Inundati Sparsel Field Obse Surface Wa Water Table	DGY /drology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3) /darks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Ye	magery (Bes	Water-Sta  Aquatic Fa  True Aqua  Hydrogen  Oxidized Fa  Presence  Recent Iro  Thin Muck  67)  Gauge or  (B8)  No  X  No	ained Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc ( Surface Well Dat plain in F	3) Is (B14) Odor (C1 Ideres on It Cod Iron (C7) Ideres	) Living Re (C4) Illed Soil	Seconda	ry Indicators (minima ace Soil Cracks (B6) nage Patterns (B10) Season Water Table fish Burrows (C8) ration Visible on Aer ted or Stressed Plan morphic Position (D2 -Neutral Test (D5)	um of two requi
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Ind Surface X High Water N X Sedime Drift De Algal Mater N Iron Dep Inundati Sparsel Field Obse Surface Water Table Saturation F	OGY  /drology Indicators: icators (minimum of of water (A1) ater Table (A2) on (A3) /darks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Present? Yea	magery (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck (R8) Other (Ex	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc c Surface Well Dat plain in F	3) Is (B14) Odor (C1 Ideres on It Cod Iron (C7) Ideres	) _iving Ro (C4) Iled Soil	Seconda           Surf.           X Drain           Dry-           Cray           Doots (C3)         Satur           Stun         Geo	ry Indicators (minima ace Soil Cracks (B6) nage Patterns (B10) Season Water Table fish Burrows (C8) ration Visible on Aer ted or Stressed Plan morphic Position (D2 -Neutral Test (D5)	um of two requi
Type: Depth (i Remarks:  IYDROLO Wetland Hy Primary Ind Surface X High Water M X Sedime Drift De Algal Maliron Deplinundati Sparsel Field Obsel Surface Water Table Saturation F (includes ca	DGY  Inches):  I	magery (Bes X	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck Gauge or Other (Exp No No No No	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat plain in F Depth (i Depth (i	3) s (B14) Odor (C1 eres on led Iron (ction in Tie (C7) a (D9) Remarks) nches): _ nches): _ nches): _	) Living Ro (C4) Iled Soil	Seconda Surfa X Drain Dry- Cray pots (C3) Satu Stun s (C6) Geo X FAC	ry Indicators (minima ace Soil Cracks (B6) nage Patterns (B10) Season Water Table fish Burrows (C8) ration Visible on Aer ted or Stressed Plan morphic Position (D2 -Neutral Test (D5)	um of two requi
Type: Depth (i Remarks:  IYDROLO Wetland Hy Primary Ind Surface X High Water M X Sedime Drift De Algal Maliron Deplinundati Sparsel Field Obsel Surface Water Table Saturation F (includes ca	OGY  /drology Indicators: icators (minimum of of water (A1) ater Table (A2) on (A3) /darks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Present? Yea	magery (Bes X	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck Gauge or Other (Exp No No No No	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat plain in F Depth (i Depth (i	3) s (B14) Odor (C1 eres on led Iron (ction in Tie (C7) a (D9) Remarks) nches): _ nches): _ nches): _	) Living Ro (C4) Iled Soil	Seconda Surfa X Drain Dry- Cray pots (C3) Satu Stun s (C6) Geo X FAC	ry Indicators (minima ace Soil Cracks (B6) nage Patterns (B10) Season Water Table fish Burrows (C8) ration Visible on Aer ted or Stressed Plan morphic Position (D2 -Neutral Test (D5)	um of two requi

Project/Site: Buckeye Yard	City/Cou	nty: Columb				
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point	W6-wet
Investigator(s): Lindsay Hanna		Section, T	Гownship, Ra	ange:		
Landform (hillside, terrace, etc.): depression			Local relief (d	concave, convex, none):	Concave	
Slope (%): 2 Lat: 40.007824°		Long:	·83.127451°		Datum: NAD '83	
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent s	lopes		NWI classifi	cation: N/A	
Are climatic / hydrologic conditions on the site typical for	or this time of	of year?	Yes X	No (If no, exp	lain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y	significantly	disturbed? A	Are "Normal (	Circumstances" present?	Yes X	No
Are Vegetation N , Soil N , or Hydrology No	naturally pro	blematic? (	If needed, ex	xplain any answers in Rer	narks.)	
SUMMARY OF FINDINGS – Attach site ma	ap showi	ng samplin	ng point lo	ocations, transects,	important fe	atures, etc.
Hydrophytic Vegetation Present? Yes X No	 o	Is the	Sampled A	rea		
Hydric Soil Present? Yes X No	0		n a Wetland1		No X	
Wetland Hydrology Present? Yes X No	o <u> </u>				<u></u> -	
Remarks:						
<b>VEGETATION</b> – Use scientific names of pla	ınts.					
T 01 1 (D) 1	Absolute	Dominant	Indicator	- · - ·		
Tree Stratum (Plot size: 30 )	% Cover 10	Species?	Status	Dominance Test wor		
<ol> <li>Salix nigra</li> <li>Fraxinus pennsylvanica</li> </ol>	10	Yes Yes	OBL FACW	Number of Dominant S Are OBL, FACW, or Fa	•	5 (A)
3.		100	I AOV	Total Number of Domi		<u> </u>
4.				Across All Strata:	nani opecies	5 (B)
5.				Percent of Dominant S	Species That	, , .
	20	=Total Cover		Are OBL, FACW, or F	•	00.0% (A/B)
Sapling/Shrub Stratum (Plot size: 15	)					
1. Salix nigra	15	Yes	OBL	Prevalence Index wo		
2.				Total % Cover of:		ly by:
3.				OBL species	x 1 =	
5.				FACW species  FAC species	x 2 = x 3 =	
5	15	=Total Cover		FACU species	x	
Herb Stratum (Plot size: 5 )		- 10tai 00vc.		UPL species	^	
1. Typha X glauca	10	No	OBL	Column Totals:	(A)	(B)
Symphyotrichum lateriflorum	15	Yes	FACW	Prevalence Index =	`` /	` ` `
3. Phalaris arundinacea	35	Yes	FACW			
4. Acer saccharinum	5	No	FACW	Hydrophytic Vegetati	on Indicators:	
5. Impatiens capensis	10	No	FACW	1 - Rapid Test for		etation
6. Lysimachia nummularia	10	No	FACW	X 2 - Dominance Te		
7.				3 - Prevalence Ind		
8.				4 - Morphological	Adaptations ˈ (Pro s or on a separat	
9				Problematic Hydro		•
10	85	=Total Cover				, , ,
Woody Vine Stratum (Plot size:	1	- I Ulai Govei		<sup>1</sup> Indicators of hydric so be present, unless dis		
1.	,			·	urbou or prosition	iatio.
2.				Hydrophytic Vegetation		
		=Total Cover		Present? Yes_	X No_	
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			_	<u> </u>	

SOIL Sampling Point: W6-wet

Depth	Matrix		i veuc	x Featur	C3				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-5	10YR 3/1	100					Loamy/Clayey		
5-11	10YR 4/1	93	7.5YR 4/6	7	С	М	Loamy/Clayey	Prominent redox conce	ntrations
11-17	10YR 5/1	80	10YR 5/4	15	С	М	Loamy/Clayey	Distinct redox concen	trations
			10YR 4/4	5	С	М		Distinct redox concen	trations
								-	
Type: C=Co	oncentration, D=Dep	letion, RM	======================================	MS=Mas	ked Sand	I Grains	Location 2	n: PL=Pore Lining, M=Matrix	<b>(</b> .
Hydric Soil I								ors for Problematic Hydric S	Soils³:
Histosol	(A1)		Sandy Gle	-				st Prairie Redox (A16)	
Histic Ep	ipedon (A2)		Sandy Re	dox (S5)			Iron	-Manganese Masses (F12)	
Black His	` '		Stripped N	/latrix (S	3)		Red	Parent Material (F21)	
Hydroge	n Sulfide (A4)		Dark Surfa	ace (S7)			Ver	y Shallow Dark Surface (F22)	)
Stratified	Layers (A5)		Loamy Mu	icky Min	eral (F1)		Oth	er (Explain in Remarks)	
2 cm Mu	ck (A10)		Loamy Gl	eyed Ma	trix (F2)				
X Depleted	Below Dark Surface	e (A11)	X Depleted	Matrix (F	3)				
Thick Da	rk Surface (A12)		Redox Da	rk Surfac	e (F6)		<sup>3</sup> Indicate	ors of hydrophytic vegetation	and
Sandy M	ucky Mineral (S1)		Depleted	Dark Sur	face (F7)		wet	and hydrology must be prese	ent,
5 cm Mu	cky Peat or Peat (S	3)	Redox De	pression	s (F8)		unle	ess disturbed or problematic.	
Dankelakiya I	_ayer (if observed):								
Type: _ Depth (ir	nches):		<u> </u>				Hydric Soil Prese	nt? Yes	No
Type: _ Depth (ir	iches):						Hydric Soil Prese	nt? Yes	No
Type: _ Depth (ir Remarks:							Hydric Soil Prese	nt? Yes	No
Type: _ Depth (ir Remarks:	GY						Hydric Soil Prese	nt? Yes	No
Type:	GY drology Indicators:		uired: check all that	annly)					
Type:	GY drology Indicators: cators (minimum of c				oves (BQ)		<u>Second</u>	ary Indicators (minimum of tw	
Type:	drology Indicators: cators (minimum of c		Water-Sta	ined Lea	` '		<u>Second</u> Sur	ary Indicators (minimum of tw face Soil Cracks (B6)	
Type:	drology Indicators: cators (minimum of c Water (A1) ter Table (A2)		Water-Sta Aquatic Fa	ined Lea auna (B1	3)		Sur Sur Dra	ary Indicators (minimum of tw face Soil Cracks (B6) inage Patterns (B10)	
Type:	drology Indicators: eators (minimum of control of the control of t		Water-Sta Aquatic Fa True Aqua	ined Lea auna (B1 atic Plant	3) s (B14)		Second Sur Dra Dry	ary Indicators (minimum of tw face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2)	
Type:	drology Indicators: eators (minimum of co Water (A1) ter Table (A2) on (A3) arks (B1)		Water-Sta Aquatic Fa True Aqua Hydrogen	nined Lea auna (B1 atic Plant Sulfide (	3) s (B14) Odor (C1)		Second Sur Dra Dry Cra	ary Indicators (minimum of tw face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8)	vo require
Type:	drology Indicators: cators (minimum of co Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	iined Lea auna (B1 atic Plant Sulfide ( Rhizosph	3) s (B14) Odor (C1) eres on L	iving R	<u>Second</u> Sur Dra Dry Cra oots (C3) Sat	ary Indicators (minimum of twa face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imag	vo require
Type:	drology Indicators: cators (minimum of control of the control of t		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Redu	3) s (B14) Odor (C1) teres on l ced Iron (	iving R C4)	Second Sur Dra Dry Cra oots (C3) Sat Stu	ary Indicators (minimum of twa face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagented or Stressed Plants (D1)	vo require
Type:	drology Indicators: cators (minimum of control of contr		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc	3) s (B14) Odor (C1) neres on L ced Iron (	iving R C4)	Second Sur Dra Dry Cra oots (C3) Sat Stu s (C6) Second	ary Indicators (minimum of twater Soil Cracks (B6) inage Patterns (B10) reseason Water Table (C2) respectively fish Burrows (C8) reaction Visible on Aerial Imagented or Stressed Plants (D1) omorphic Position (D2)	vo require
Type:	drology Indicators: cators (minimum of control of contr	one is requ	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc s Surface	3) s (B14) Odor (C1) eres on L ced Iron ( ction in Ti e (C7)	iving R C4)	Second Sur Dra Dry Cra oots (C3) Sat Stu s (C6) Second	ary Indicators (minimum of twa face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagented or Stressed Plants (D1)	vo require
Type:	drology Indicators: eators (minimum of control of the control of t	one is requ magery (B	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck T) Gauge or	nined Lea auna (B1 Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat	3) s (B14) Odor (C1) eres on L ced Iron ( ction in Ti e (C7) a (D9)	iving R C4)	Second Sur Dra Dry Cra oots (C3) Sat Stu s (C6) Second	ary Indicators (minimum of twater Soil Cracks (B6) inage Patterns (B10) reseason Water Table (C2) respectively fish Burrows (C8) reaction Visible on Aerial Imagented or Stressed Plants (D1) omorphic Position (D2)	vo require
Type:	drology Indicators: cators (minimum of control of contr	one is requ magery (B	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck T) Gauge or	nined Lea auna (B1 Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat	3) s (B14) Odor (C1) eres on L ced Iron ( ction in Ti e (C7) a (D9)	iving R C4)	Second Sur Dra Dry Cra oots (C3) Sat Stu s (C6) Second	ary Indicators (minimum of twater Soil Cracks (B6) inage Patterns (B10) reseason Water Table (C2) respectively fish Burrows (C8) reaction Visible on Aerial Imagented or Stressed Plants (D1) omorphic Position (D2)	vo require
Type:	drology Indicators: cators (minimum of control of contr	magery (B Surface (	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck Fa Gauge or Other (Ex	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc s Surface Well Dat plain in F	3) ss (B14) Odor (C1) eres on Leced Iron (ction in Tie (C7) a (D9) Remarks)	iving R C4)	Second Sur Dra Dry Cra oots (C3) Sat Stu s (C6) Second	ary Indicators (minimum of twater Soil Cracks (B6) inage Patterns (B10) reseason Water Table (C2) respectively fish Burrows (C8) reaction Visible on Aerial Imagented or Stressed Plants (D1) omorphic Position (D2)	vo require
Type:	drology Indicators: cators (minimum of control of contr	magery (B e Surface (	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck (7) Gauge or (88) Other (Ex	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc surface Well Dat blain in F	3) ss (B14) Odor (C1) peres on Led Iron ( stion in Ti e (C7) a (D9) Remarks)	Living Ro	Second Sur Dra Dry Cra oots (C3) Sat Stu s (C6) Second	ary Indicators (minimum of twater Soil Cracks (B6) inage Patterns (B10) reseason Water Table (C2) respectively fish Burrows (C8) reaction Visible on Aerial Imagented or Stressed Plants (D1) omorphic Position (D2)	vo require
Type:	drology Indicators: cators (minimum of control of contr	magery (Besus X	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck (7) Gauge or (B8) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc ( Surface Well Dat Depth (i Depth (i	3) Ss (B14) Odor (C1) Deres on Leced Iron ( Stion in Ti E (C7) Sa (D9) Remarks) Inches): Inches):	Living Rock C4) Illed Soil	Second   Sur   Dra   Dry   Cra   Sat   Stu   Stu   Stu   Stu   Stu   St   According to the second of the second	ary Indicators (minimum of twa face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) offish Burrows (C8) curation Visible on Aerial Imagented or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)	vo require
Type:	drology Indicators: cators (minimum of o Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial II Vegetated Concave vations: er Present? Present? Ye resent?	magery (B e Surface (	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck (7) Gauge or (88) Other (Ex	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc ( Surface Well Dat Depth (i Depth (i	3) ss (B14) Odor (C1) peres on Led Iron ( stion in Ti e (C7) a (D9) Remarks)	Living Ro	Second Sur Dra Dry Cra oots (C3) Sat Stu s (C6)	ary Indicators (minimum of twa face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagented or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)	vo require
Type:	drology Indicators: cators (minimum of own of control (Mater (A1)) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial II Vegetated Concave vations: er Present? Present? Yesent? Yesent? Yesent? Yesent?	magery (Bes X	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck Gauge or B8) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat blain in F Depth (i Depth (i	3) Is (B14) Odor (C1) Ieres on Leced Iron (Interesting in Time (C7) Is a (D9) Remarks) Inches): Inches): Inches): Inches):	civing Rocal C4)  Iled Soil	Second   Sur   Dra   Dry   Cra   Sat   Stu   Stu   Stu   Stu   Sto   Cra   X   FAC	ary Indicators (minimum of twa face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) offish Burrows (C8) curation Visible on Aerial Imagented or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)	vo require
Type:	drology Indicators: cators (minimum of o Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial II Vegetated Concave vations: er Present? Present? Ye resent?	magery (Bes X	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck Gauge or B8) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat blain in F Depth (i Depth (i	3) Is (B14) Odor (C1) Ieres on Leced Iron (Interesting in Time (C7) Is a (D9) Remarks) Inches): Inches): Inches): Inches):	civing Rocal C4)  Iled Soil	Second   Sur   Dra   Dry   Cra   Sat   Stu   Stu   Stu   Stu   Sto   Cra   X   FAC	ary Indicators (minimum of twa face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) offish Burrows (C8) curation Visible on Aerial Imagented or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)	vo require

Project/Site: Buckeye Yard	City/Cour	nty: Columb	ımbus/Franklin Sampling Date: 10-18-21			
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point:	W7-UP
Investigator(s): Lindsay Hanna, Cody Wright		Section, T	ownship, Ra	ange: N/A		
Landform (hillside, terrace, etc.): base of hillslope		L	_ocal relief (d	concave, convex, none):	concave	
Slope (%):1 Lat: _40.012823°		Long: -8	83.127693°		Datum: NAD' 83	
Soil Map Unit Name: Urban Land-Celina complex				NWI classif	ication: N/A	
Are climatic / hydrologic conditions on the site typical fo	or this time c	of year?	Yes X	No (If no, exp	lain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y s	ignificantly (	disturbed? A	re "Normal (	Circumstances" present?	Yes X	lo
Are Vegetation N , Soil N , or Hydrology No n	aturally prol	blematic? (I	f needed, ex	κρlain any answers in Rer	marks.)	
SUMMARY OF FINDINGS – Attach site ma			g point lo	ocations, transects,	important fe	atures, etc.
Hydrophytic Vegetation Present? Yes No	Х	Is the	Sampled A	rea		
	X		n a Wetland		No_X_	
	X					
Remarks:		•				
Along rocky edge of railroad access road						
VEGETATION – Use scientific names of plan		5	1 114 - 11	1		
<u>Tree Stratum</u> (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	ksheet:	
1				Number of Dominant S		
2.				Are OBL, FACW, or F.	•	0 (A)
3.				Total Number of Domi	nant Species	
4.				Across All Strata:		1 (B)
5		T-tal Cover		Percent of Dominant S	•	0 00/ /A/D)
Sapling/Shrub Stratum (Plot size: 15 )	:	=Total Cover		Are OBL, FACW, or F.	AC:	0.0% (A/B)
1. (Flot size. 13 )				Prevalence Index wo	rksheet:	
2.				Total % Cover of:		ly by:
3.	·			OBL species	x 1 =	
4.				FACW species	x 2 =	
5				FAC species	x 3 =	
		=Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size: 5 )	22			UPL species	x 5 =	
1. Daucus carota	60	Yes	UPL	Column Totals:	(A)	(B)
Cornus racemosa     Setaria pumila	10	No No	FAC FAC	Prevalence Index =	= B/A =	
4. Setaria pumila	10	INU	FAC	Hydrophytic Vegetati	on Indicators:	
5				1 - Rapid Test for		etation
6.				2 - Dominance Te		Julion
7.				3 - Prevalence Inc		
8.				4 - Morphological		
9.					s or on a separate	·
10				Problematic Hydro	ophytic Vegetation	n¹ (Explain)
	80	=Total Cover		<sup>1</sup> Indicators of hydric so		
Woody Vine Stratum (Plot size:)				be present, unless dis	turbed or problem	atic.
1.				Hydrophytic		
2		=Total Cover		Vegetation Present? Yes	No X	,
Develope (Include whate numbers here or on a concre		- TOtal Ouvel		Flesent: 165_		<u> </u>
Remarks: (Include photo numbers here or on a separa	ate sneei.)					

SOIL Sampling Point: W7-UP

Depth	Matrix			ox Feature	_ 1	. 2				_	
inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Text	ure		Remarks	
		. —— -									
		· —— ·					-	<del></del>			
-											
<u> </u>		letien DM	Deduced Metric	MO Mari				21	DL D Li		
	ncentration, D=Dep	netion, Rivi	=Reduced Matrix,	IVIS=IVIASK	ed Sand	Grains.				ning, M=Matr	
lydric Soil II			0		(0.4)					matic Hydric	Solis :
Histosol (	•			leyed Matr	x (S4)				Prairie Redo		
	pedon (A2)			edox (S5)					_	lasses (F12)	
Black His				Matrix (S6	)				rent Materi	` ,	
	Sulfide (A4)		Dark Surf	` '						Surface (F2	2)
Stratified	Layers (A5)		Loamy M	lucky Mine	ral (F1)			Other (	Explain in F	Remarks)	
2 cm Muc	k (A10)		Loamy G	leyed Matı	ix (F2)						
Depleted	Below Dark Surfac	e (A11)	Depleted	Matrix (F3	5)						
Thick Dar	k Surface (A12)		Redox Da	ark Surfac	e (F6)			<sup>3</sup> Indicators	of hydrophy	tic vegetation	and
Sandy Mu	ucky Mineral (S1)		Depleted	Dark Surf	ace (F7)	)		wetland	hydrology	must be pres	ent,
5 cm Muc	ky Peat or Peat (S	3)	Redox De	epressions	(F8)			unless	disturbed o	r problematio	
estrictive L	ayer (if observed)										
	.,.										
I vpe:	Rock										
Type: Depth (inc	Rock ches):	0	<u> </u>				Hydric So	il Present?		Yes	No
Depth (ind Remarks: This data form		idwest Reg					NRCS Field	il Present?	of Hydric Sc	Yes	
Depth (ind Remarks: This data form Frrata. (http://	ches): n is revised from M /www.nrcs.usda.go	idwest Reg					NRCS Field		of Hydric Sc		
Depth (ind Remarks: This data form Frrata. (http://	ches): n is revised from M /www.nrcs.usda.go	idwest Reg					NRCS Field		of Hydric Sc		<b>No</b>
Depth (included per	ches): n is revised from M /www.nrcs.usda.go	idwest Reg					NRCS Field		of Hydric Sc		
Depth (incomplete property) Remarks: This data form Errata. (http://	ches):  n is revised from M /www.nrcs.usda.go	idwest Reg	SE_DOCUMENT	S/nrcs142			NRCS Field	I Indicators o			 .0, 2015
Depth (independent of the control of	n is revised from M /www.nrcs.usda.go	idwest Reg	SE_DOCUMENT	S/nrcs142	p2_0512	293.docx	NRCS Field	I Indicators of		oils, Version 7	 .0, 2015
Depth (independent of the control of	ches):  n is revised from M /www.nrcs.usda.go  GY  Irology Indicators: ators (minimum of	idwest Reg	SE_DOCUMENT: ired; check all thatWater-Sta	S/nrcs142	p2_0512	293.docx	NRCS Field	I Indicators of Secondary Surface	Indicators (	minimum of the set (B6)	 .0, 2015
Depth (independent of the control of	m is revised from M/www.nrcs.usda.go  GY  Irology Indicators: ators (minimum of volume of the column	idwest Reg	ired; check all that Water-Sta Aquatic F	S/nrcs142 t apply) ained Leav	ves (B9)	293.docx	NRCS Field	Secondary Surface Drainae	Indicators ( e Soil Crack ge Patterns	minimum of the set (B6)	 .0, 2015
Depth (indexembre) Remarks: This data form Frrata. (http:// PDROLOG  Portland Hyde Primary Indicate Surface V High Wat Saturation	ches):  n is revised from M /www.nrcs.usda.go  GY  lrology Indicators: ators (minimum of of the color) Vater (A1) er Table (A2) n (A3)	idwest Reg	ired; check all that Water-Sta Aquatic F True Aqu	S/nrcs142  t apply) ained Leav	ves (B9)	293.docx	NRCS Field	Secondary Surface Drainae	Indicators ( e Soil Crack ge Patterns	minimum of to (B10)  r Table (C2)	 .0, 2015
Depth (incomplete property)  Property (incomplete property)  P	m is revised from M/www.nrcs.usda.go  GY  Irology Indicators: ators (minimum of electric (A1) er Table (A2) n (A3) arks (B1)	idwest Reg	ired; check all that Water-Sta Aquatic F True Aqu Hydroger	S/nrcs142  t apply) ained Leav Fauna (B13 attic Plants	ves (B9) 3) 4 (B14) dor (C1	293.docx	NRCS Field	Secondary Surface Drainae Dry-Se Crayfis	Indicators ( e Soil Crack ge Patterns ason Water h Burrows (	minimum of to (B10) (B10) r Table (C2) (C8)	
Depth (incomplete property)  Permarks: This data form Frrata. (http://  Primary Indication Surface V High Wat Saturation Water Ma Sediment	GY  Irology Indicators: ators (minimum of electrical) er Table (A2) n (A3) arks (B1) E Deposits (B2)	idwest Reg	ired; check all that Water-Sta Aquatic F True Aqu Hydroger Oxidized	t apply) ained Leav Fauna (B13 atic Plants n Sulfide C Rhizosphe	ves (B9) 3) 4 (B14) dor (C1 eres on I	293.docx	NRCS Field	Secondary Surface Drainag Dry-Se Crayfis Saturat	Indicators ( e Soil Crack ge Patterns ason Water h Burrows ( ion Visible (	minimum of to (S (B6) (B10) (C8) on Aerial Image	wo requir
Depth (incomplete property)  Primary Indication  Surface V High Water Mater Ma	GY  Irology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) c Deposits (B2) posits (B3)	idwest Reg	ired; check all that Water-Sta Aquatic F True Aqu Hydroger Oxidized Presence	t apply) ained Leav Fauna (B13 attic Plants n Sulfide C Rhizosphe	ves (B9) 3) 6 (B14) dor (C1 eres on I	) Living Ro	NRCS Field	Secondary Surface Drainag Dry-Se Crayfis Saturat Stunted	Indicators ( e Soil Crack ge Patterns ason Water h Burrows ( ion Visible of	minimum of the set of	wo requir
Primary Indicates Saturation Water Mass Saturation Water Mass Sediment Drift Depo	GY  Irology Indicators: ators (minimum of or Vater (A1) er Table (A2) in (A3) arks (B1) er Deposits (B2) osits (B3) or Crust (B4)	idwest Reg	ired; check all that Water-Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent In	t apply) ained Leav Fauna (B13 atic Plants a Sulfide C Rhizosphe e of Reduc	ves (B9) 3) 4 (B14) 5 (B14) 6 (C1 6 eres on leed Iron (ion in Ti	) Living Ro	NRCS Field	Secondary Surface Drainae Dry-Se Crayfis Saturat Stunted Geomo	Indicators ( e Soil Crack ge Patterns ason Water h Burrows ( ion Visible of d or Stresse	minimum of the control of the contro	wo requir
Depth (incomplete property)  Permarks: This data form Trata. (http://www.incomplete property)  Primary Indicates  Surface V  High Wat  Saturation  Water Mater Mat	ches):  In is revised from M /www.nrcs.usda.go  GY  Irology Indicators: ators (minimum of or Vater (A1) er Table (A2) in (A3) arks (B1) is Deposits (B2) posits (B3) or Crust (B4) posits (B5)	idwest Reg	ired; check all that Water-Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc	t apply) ained Leav Fauna (B13 attic Plants a Sulfide C Rhizosphe e of Reduct con Reduct	ves (B9) 3) dor (C1 eres on I ed Iron (ion in Ti (C7)	) Living Ro	NRCS Field	Secondary Surface Drainae Dry-Se Crayfis Saturat Stunted Geomo	Indicators ( e Soil Crack ge Patterns ason Water h Burrows ( ion Visible of	minimum of the control of the contro	wo requir
Depth (included in the control of th	GY  GY  Irology Indicators: ators (minimum of exter (A1) er Table (A2) n (A3) arks (B1) E Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial	idwest Reg	ired; check all that  Water-St:  Aquatic F  True Aqu  Hydroger  Oxidized  Presence  Recent In  Thin Muc  7)  Gauge or	t apply) ained Leav Fauna (B13 attic Plants a Sulfide C Rhizosphe e of Reduct on Reduct on Reduct	ves (B9) 3) 4 (B14) 4 (C1 6 res on I 6 red Iron (ion in Ti 6 (C7) 6 (D9)	) Living Ro (C4) Illed Soils	NRCS Field	Secondary Surface Drainae Dry-Se Crayfis Saturat Stunted Geomo	Indicators ( e Soil Crack ge Patterns ason Water h Burrows ( ion Visible of d or Stresse	minimum of the control of the contro	wo requii
Depth (incomplete in the complete in the compl	GY  Irology Indicators: ators (minimum of ators (Marks (B1)) arks (B1) c Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial (Vegetated Concave	idwest Reg	ired; check all that  Water-St:  Aquatic F  True Aqu  Hydroger  Oxidized  Presence  Recent In  Thin Muc  7)  Gauge or	t apply) ained Leav Fauna (B13 attic Plants a Sulfide C Rhizosphe e of Reduct con Reduct	ves (B9) 3) 4 (B14) 4 (C1 6 res on I 6 red Iron (ion in Ti 6 (C7) 6 (D9)	) Living Ro (C4) Illed Soils	NRCS Field	Secondary Surface Drainae Dry-Se Crayfis Saturat Stunted Geomo	Indicators ( e Soil Crack ge Patterns ason Water h Burrows ( ion Visible of d or Stresse	minimum of to the control of the con	wo requir
Popth (incomplete in the complete in the compl	GY  Irology Indicators: ators (minimum of a) Arks (B1) Expensits (B2) Dosits (B3) Or Crust (B4) Dosits (B5) In Visible on Aerial Ivegetated Concaverations:	idwest Reg v/Internet/F one is requ magery (B'	ired; check all that  Water-Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc 7) Gauge or B8) Other (Ex	t apply) ained Leav Fauna (B13 attic Plants n Sulfide C Rhizosphe e of Reduct con Reduct ck Surface r Well Data	ves (B9) 3) dor (C1 eres on I ed Iron (ion in Ti (C7) i (D9) emarks)	) Living Ro (C4) Illed Soils	NRCS Field	Secondary Surface Drainae Dry-Se Crayfis Saturat Stunted Geomo	Indicators ( e Soil Crack ge Patterns ason Water h Burrows ( ion Visible of d or Stresse	minimum of to the control of the con	wo requir
Depth (incomplete in the control of	ches):  In is revised from M /www.nrcs.usda.go  GY  Irology Indicators: ators (minimum of a) Vater (A1) er Table (A2) in (A3) arks (B1) E Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial (Visible on	magery (B'	ired; check all that  Water-Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc 7) Gauge or B8) Other (Ex	t apply) ained Leav Fauna (B13 attic Plants n Sulfide C Rhizosphe of Reduct con Reduct ck Surface r Well Data xplain in Re	ves (B9) 3) 4 (B14) dor (C1 eres on I ed Iron (ion in Ti (C7) 1 (D9) emarks) ches): _	) Living Ro (C4) Illed Soils	NRCS Field	Secondary Surface Drainae Dry-Se Crayfis Saturat Stunted Geomo	Indicators ( e Soil Crack ge Patterns ason Water h Burrows ( ion Visible of d or Stresse	minimum of to the control of the con	wo requii
Depth (incomplete in the complete in the compl	ches):  m is revised from M /www.nrcs.usda.go  GY  Irology Indicators: ators (minimum of electric (Management) arks (B1) c Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial (Vegetated Concave artions: ar Present?  Ye Present?  Ye Present?	magery (B'es_eseseseseseses	ired; check all that  Water-St:  Aquatic F  True Aqu  Hydroger  Oxidized  Presence  Recent In  Thin Muc  7) Gauge or  B8) Other (Ex	t apply) ained Leav Fauna (B13 attic Plants a Sulfide C Rhizosphe of Reduct on Reduct	ves (B9) 3) (B14) dor (C1 eres on I ed Iron ( ion in Ti (C7) I (D9) emarks) ches): _ ches): _	) Living Ro (C4) Illed Soils	NRCS Field )  poots (C3) s (C6)	Secondary Surface Drainag Dry-Se Crayfis Saturat Stunted Geomo	Indicators ( e Soil Crack ge Patterns ason Water h Burrows ( ion Visible of d or Stresse rphic Positi eutral Test	minimum of the second of the s	wo requingery (C9
Depth (incomplete in the control of	ches):  m is revised from M /www.nrcs.usda.go  GY  Irology Indicators: ators (minimum of electric (Management)  Parks (B1) Expensits (B2) Desits (B3) For Crust (B4) Desits (B5) For Visible on Aerial (Management)  Vegetated Concave  For Present?  Present?  Yesesent?	magery (B'es_eseseseseseses	ired; check all that  Water-Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc 7) Gauge or B8) Other (Ex	t apply) ained Leav Fauna (B13 attic Plants n Sulfide C Rhizosphe of Reduct con Reduct ck Surface r Well Data xplain in Re	ves (B9) 3) (B14) dor (C1 eres on I ed Iron ( ion in Ti (C7) I (D9) emarks) ches): _ ches): _	) Living Ro (C4) Illed Soils	NRCS Field )  poots (C3) s (C6)	Secondary Surface Drainae Dry-Se Crayfis Saturat Stunted Geomo	Indicators ( e Soil Crack ge Patterns ason Water h Burrows ( ion Visible of d or Stresse rphic Positi eutral Test	minimum of to the control of the con	wo requi
Popth (incomplete incomplete inco	ches):  m is revised from M /www.nrcs.usda.go  GY  Irology Indicators: ators (minimum of all Vater (A1) er Table (A2) in (A3) arks (B1) in Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial II Vegetated Concave rations: ar Present? Present? esent? you	magery (B'	ired; check all that  Water-Sta  Aquatic F  True Aqu  Hydroger  Oxidized  Presence  Recent In  Thin Muc  7)  Gauge or  B8)  Other (Ex	t apply) ained Leav Fauna (B13 attic Plants a Sulfide C Rhizosphe of Reduct on Reduct on Reduct on Reduct ck Surface r Well Data cplain in Re  Depth (in Depth (in	ves (B9) 3) dor (C1 eres on I ed Iron (ion in Ti (C7) i (D9) emarks) ches): _ ches): _	) Living Ro (C4) Illed Soils	NRCS Field  oots (C3)  s (C6)	Secondary Surface Drainag Dry-Se Crayfis Saturat Stunted Geomo	Indicators ( e Soil Crack ge Patterns ason Water h Burrows ( ion Visible of d or Stresse rphic Positi eutral Test	minimum of the second of the s	wo requi
Depth (incomplete includes cap	ches):  m is revised from M /www.nrcs.usda.go  GY  Irology Indicators: ators (minimum of electric (Management)  Parks (B1) Expensits (B2) Desits (B3) For Crust (B4) Desits (B5) For Visible on Aerial (Management)  Vegetated Concave  For Present?  Present?  Yesesent?	magery (B'	ired; check all that  Water-Sta  Aquatic F  True Aqu  Hydroger  Oxidized  Presence  Recent In  Thin Muc  7)  Gauge or  B8)  Other (Ex	t apply) ained Leav Fauna (B13 attic Plants a Sulfide C Rhizosphe of Reduct on Reduct on Reduct on Reduct ck Surface r Well Data cplain in Re  Depth (in Depth (in	ves (B9) 3) dor (C1 eres on I ed Iron (ion in Ti (C7) i (D9) emarks) ches): _ ches): _	) Living Ro (C4) Illed Soils	NRCS Field  oots (C3)  s (C6)	Secondary Surface Drainag Dry-Se Crayfis Saturat Stunted Geomo	Indicators ( e Soil Crack ge Patterns ason Water h Burrows ( ion Visible of d or Stresse rphic Positi eutral Test	minimum of the second of the s	wo requi
Depth (incomplete property)  Property (incomplete property)  P	ches):  m is revised from M /www.nrcs.usda.go  GY  Irology Indicators: ators (minimum of all Vater (A1) er Table (A2) in (A3) arks (B1) in Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial II Vegetated Concave rations: ar Present? Present? esent? you	magery (B'	ired; check all that  Water-Sta  Aquatic F  True Aqu  Hydroger  Oxidized  Presence  Recent In  Thin Muc  7)  Gauge or  B8)  Other (Ex	t apply) ained Leav Fauna (B13 attic Plants a Sulfide C Rhizosphe of Reduct on Reduct on Reduct on Reduct ck Surface r Well Data cplain in Re  Depth (in Depth (in	ves (B9) 3) dor (C1 eres on I ed Iron (ion in Ti (C7) i (D9) emarks) ches): _ ches): _	) Living Ro (C4) Illed Soils	NRCS Field  oots (C3)  s (C6)	Secondary Surface Drainag Dry-Se Crayfis Saturat Stunted Geomo	Indicators ( e Soil Crack ge Patterns ason Water h Burrows ( ion Visible of d or Stresse rphic Positi eutral Test	minimum of the second of the s	wo requi
Depth (incomplete in the control of	ches):  m is revised from M /www.nrcs.usda.go  GY  Irology Indicators: ators (minimum of all Vater (A1) er Table (A2) in (A3) arks (B1) in Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial II Vegetated Concave rations: ar Present? Present? esent? you	magery (B'	ired; check all that  Water-Sta  Aquatic F  True Aqu  Hydroger  Oxidized  Presence  Recent In  Thin Muc  7)  Gauge or  B8)  Other (Ex	t apply) ained Leav Fauna (B13 attic Plants a Sulfide C Rhizosphe of Reduct on Reduct on Reduct on Reduct ck Surface r Well Data cplain in Re  Depth (in Depth (in	ves (B9) 3) dor (C1 eres on I ed Iron (ion in Ti (C7) i (D9) emarks) ches): _ ches): _	) Living Ro (C4) Illed Soils	NRCS Field  oots (C3)  s (C6)	Secondary Surface Drainag Dry-Se Crayfis Saturat Stunted Geomo	Indicators ( e Soil Crack ge Patterns ason Water h Burrows ( ion Visible of d or Stresse rphic Positi eutral Test	minimum of the second of the s	wo requi

Project/Site: Buckeye Yard	City/Cour	nty: Columb	us/Franklin	Sampling Date:	10-18-21	
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point:	W7-WET
Investigator(s): Lindsay Hanna, Cody Wright		Section, T	ownship, Ra	nge: N/A		
Landform (hillside, terrace, etc.): base of hillslope			Local relief (c	concave, convex, none):	oncave	
Slope (%): 1 Lat: 40.012821°		Long:{	83.127668°		Datum: NAD' 83	
Soil Map Unit Name: Urban Land-Celina complex				NWI classifi	cation: N/A	
Are climatic / hydrologic conditions on the site typical fo	r this time c	of year?	Yes X	No (If no, expl	ain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y s	ignificantly	disturbed? A	re "Normal C	Circumstances" present?	Yes X N	lo
Are Vegetation N , Soil N , or Hydrology No n	aturally pro	blematic? (I	If needed, ex	plain any answers in Ren	narks.)	<del></del>
SUMMARY OF FINDINGS – Attach site ma	ıp showir	ng samplin	g point lo	cations, transects,	important fe	atures, etc.
Hydrophytic Vegetation Present? Yes X No		Is the	Sampled Ar	rea		
Hydric Soil Present? Yes X No			n a Wetland?		No	
Wetland Hydrology Present? Yes X No					·	
Remarks:						
Area is at the base of the slope of old rail road access	road.					
VECETATION . Has according names of plan	-1-					
VEGETATION – Use scientific names of plan	Absolute	Dominant	Indicator	Γ		1
<u>Tree Stratum</u> (Plot size:30)	% Cover	Species?	Status	Dominance Test worl	sheet:	
Fraxinus pennsylvanica	3	Yes	FACW	Number of Dominant S	species That	
2. Populus deltoides	10	Yes	FAC	Are OBL, FACW, or FA	•	7 (A)
3.				Total Number of Domin	nant Species	:=.
4				Across All Strata:		7 (B)
5	13	=Total Cover		Percent of Dominant S	•	00 00/ (A/R)
Sapling/Shrub Stratum (Plot size: 15 )	13	= Fotal Cover		Are OBL, FACW, or FA	AC:	00.0% (A/B)
1. Cornus racemosa	12	Yes	FAC	Prevalence Index wo	rksheet:	
2. Rhamnus cathartica	5	Yes	FAC	Total % Cover of:		y by:
3.				OBL species	x 1 =	
4.				FACW species	x 2 =	
5.				FAC species	x 3 =	
	17	=Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size: 5 )				UPL species	x 5 =	
1. Typha angustifolia	20	Yes	OBL	Column Totals:	(A)	(B)
2. Epilobium coloratum	10	No	OBL	Prevalence Index =	B/A =	
3. Echinochloa crus-galli  A. Populin deltoides	<u>23</u> 8	Yes	FACW	Undrambatia Vagatati	Indicatora	
Populus deltoides     Symphyotrichum pilosum	12	No No	FACU	Hydrophytic Vegetation 1 - Rapid Test for		station
Cyperus esculentus	15	Yes	FACW	X 2 - Dominance Tes		lation
7				3 - Prevalence Ind		
8.				4 - Morphological		vide supporting
9.				data in Remarks	s or on a separate	e sheet)
10				Problematic Hydro	phytic Vegetation	<sup>1</sup> (Explain)
	88	=Total Cover		<sup>1</sup> Indicators of hydric so		
Woody Vine Stratum (Plot size:)				be present, unless dist	urbed or problem	atic.
1				Hydrophytic		
2		T-4-1 Cause		Vegetation	V No	
		=Total Cover		Present? Yes_	<u>X</u> No	_
Remarks: (Include photo numbers here or on a separa	ate sheet.)					

**SOIL** Sampling Point: W7-WET

Profile Desc	cription: (Describe	to the dept	h needed to doci	ument tl	ne indica	tor or	confirm the absence	of indicators.)
Depth	Matrix		Redo	x Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-9	10YR 5/2	96	10YR 6/4	4	С	М	Loamy/Clayey	Distinct redox concentrations
9-12	2.5y 5/2	91	10YR 5/6	6	С	M	Loamy/Clayey	Prominent redox concentrations
			10YR 5/1	3	D			
12-18	2.5y 5/2	83	10YR 5/6	12	С	M	Loamy/Clayey	Prominent redox concentrations
	2.0y 0/2		10YR 4/2	5			<u> Loanny, olayoy</u>	T TOTALISTIC TO GOOD CONTROLLED
			1011( 4/2					
	-							
1- 0.0				40.14			2,	BL B. J. L. M. M. J.
Hydric Soil	oncentration, D=Dep	letion, RIM=	Reduced Matrix, N	/IS=Mas	ked Sand	Grains		n: PL=Pore Lining, M=Matrix.  rs for Problematic Hydric Soils <sup>3</sup> :
Histosol			Sandy Gle	vod Mat	riv (S1)			st Prairie Redox (A16)
	oipedon (A2)		Sandy Gle		IIX (34)			Manganese Masses (F12)
	stic (A3)		Stripped M		3)			Parent Material (F21)
	n Sulfide (A4)		Dark Surfa	`	,			Shallow Dark Surface (F22)
	d Layers (A5)		Loamy Mu	` '	eral (F1)			er (Explain in Remarks)
	ick (A10)		Loamy Gle					(Explain in Nomano)
	d Below Dark Surface	e (A11)	X Depleted N	-				
	ark Surface (A12)	( )	Redox Dar		•		<sup>3</sup> Indicato	rs of hydrophytic vegetation and
	lucky Mineral (S1)		Depleted D		` '			and hydrology must be present,
5 cm Mu	ıcky Peat or Peat (S3	3)	Redox Dep		, ,			ss disturbed or problematic.
Restrictive	Layer (if observed):							
Type:	,							
Depth (ii	nches):		_				Hydric Soil Presen	t? Yes X No
Remarks:	-							
	m is revised from Mi	dwest Regio	onal Supplement \	ersion 2	2.0 to incl	ude the	NRCS Field Indicator	rs of Hydric Soils, Version 7.0, 2015
	://www.nrcs.usda.gov							•
HYDROLO	OGY							
Wetland Hy	drology Indicators:							
Primary Indi	cators (minimum of o	ne is requir	ed; check all that	apply)			Seconda	ry Indicators (minimum of two required)
Surface	Water (A1)		Water-Stai	ined Lea	ves (B9)		Surfa	ace Soil Cracks (B6)
High Wa	ater Table (A2)		Aquatic Fa	una (B1	3)		Drair	nage Patterns (B10)
X Saturation	` '		True Aqua	tic Plant	s (B14)		Dry-9	Season Water Table (C2)
Water M	larks (B1)		Hydrogen	Sulfide (	Odor (C1)	)		fish Burrows (C8)
	nt Deposits (B2)		Oxidized R			-	` ' —	ration Visible on Aerial Imagery (C9)
	posits (B3)		Presence of					ted or Stressed Plants (D1)
	at or Crust (B4)		Recent Iro			lled Soi	· · ·	morphic Position (D2)
	posits (B5)	(D.7)	Thin Muck		` '		X FAC	-Neutral Test (D5)
	on Visible on Aerial Ir							
	/ Vegetated Concave	Surface (B	8) Other (Exp	nain in R	emarks)		T	
Field Obser			N. V	D 41- /:-				
Surface Wat				Depth (i	· -	17		
Water Table Saturation P				Depth (i	_	17 0	Watland Hydrala	ay Present? Ves V No
	pillary fringe)	s <u>X</u>	No	Depth (i			Wetland Hydrolo	gy Present? Yes X No No
,	corded Data (stream	gauge mo	 nitoring well_aeria	antona l	. previous	s inspec	 ctions), if available <sup>.</sup>	
2555156110	Data (ottodili	J			, p. 51100		,, n arandolo.	
Remarks:								

Attachment C

Wetland 7 ORAM

### **Background Information**

Name:

Lindsay Hanna

Date:

4/15/2022

Affiliation:

**MAD Scientist Associates** 

Address

253 North State Street, Suite 101 Westerville, Ohio 43081

Phone Number:

(614) 818-9156

e-mail address:

Lindsay@madscientistassociates.net

Name of Wetland:

Wetland 7

Vegetation Communit(ies):

Emergent

HGM Class(es):

Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.



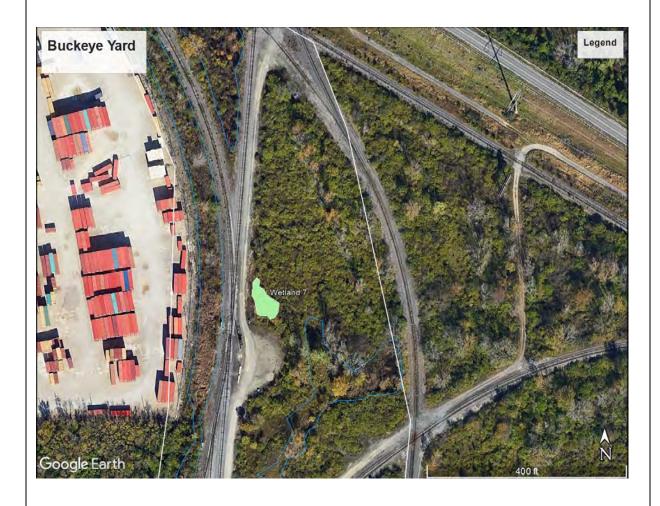
Lat/Long or UTM Coordinate WGS 84: 40.012762°	-83.127578°
USGS Quad Name	Dublin
County	Franklin
Township	
Section and Subsection	
Hydrologic Unit Code	050600011204
Site Visit	11/3/2022
National Wetland Inventory Map	
Ohio Wetland Inventory Map	
Soil Survey	Urban land-Celina complex
Delineation report/map	Yes

Wetland 7

Wetland Size (acres, hectares):

0.057 acres

Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.



Comments, Narrative Discussion, Justification of Category Changes:

Wetland 7 is located in the northern portion in Buckeye Yard located along the edge of the railroad track. The wetland is estimated to be 0.057 acres. Dominant species include green ash (Fraxinus pennsylvanica), cottonwood (Populus deltoides), gray dogwood (Cornus racemosa), common buckthorn (Rhamnus cathartica), narrow-leaf cattail (Typha angustifolia), barnyard glass (Echinochloa crus-galli), and yellow nutsedge (Cyperus esculentus). Wetland hydrology indicators at the Site for Wetland 7 included saturation, geomorphic position, and passing the FAC-neutral test for plants. Hydric soil indicators included depleted depleted matrix (F3) evidenced by a low chroma of 2, with prominent redoximorphic features present (4 to 12 percent) as concentration in the matrix.

Final score : 23 Category: 1

#### **Scoring Boundary Worksheet**

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

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

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

#### Wetland 7

### **Narrative Rating**

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

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

# Wetland 7

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
0-		Go to Question 9a	(10)
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this	YES	NO
	elevation, or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence,	YES	NO
	i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	Go to Question 9d	Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance	YES	NO
	tolerant native plant species within its vegetation communities?	Wetland should be evaluated for possible Category 3 status	Go to Question 10
10	Lake Diein Cond Dusinics (Oak Openings) to the westend leasted in	Go to Question 10	(NO)
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	YES	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES	(NO)
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion	Wetland should be evaluated for possible	Complete Quantitative
	Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Category 3 status	Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

Table 1. Characteristic plant species.

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

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

Site: W	etland A	Rater(s): LH Date: 4/15/2022
0	0	Metric 1. Wetland Area (size).
max 6 pts.	subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2ha) (5 pts)  10 to <25 acres (4 to <10.1ha) (4 pts)  3 to <10 acres (1.2 to <4ha) (3 pts)  0.3 to <3 acres (0.12 to <1.2ha) (2pts)  0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)  <
1	3	Metric 2. Upland buffers and surrounding land use.
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one and assign score. Do not double check.  WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)  MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)  NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)  VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)  2b. Intensity of surrounding land use. Select one or double check and average.  VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)  LOW. Old field (>10 years), shrub land, young second growth forest. (5)  MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)  HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)
7	10	Metric 3. Hydrology.
max 30 pts.	subtotal	3a. Sources of Water. Score all that apply.  High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5)  3c. Maximum water depth. Select only one and assign score.  >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) <ul> <li>3b. Connectivity. Score all that apply.</li> <li>Between stream/lake and other human use (1)</li> <li>Part of wetland/upland (e.g. forest), complex (1)</li> <li>Part of riparian or upland corridor (1)</li> <li>3d. Duration inundation/saturation. Score one or dbl check</li> <li>Semi- to permanently inundated/saturated (4)</li> <li>Regularly inundated/saturated (3)</li> <li>Seasonally inundated (2)</li> <li>Seasonally saturated in upper 30cm (12in) (1)</li> </ul>
		3e. Modifications to natural hydrologic regime. Score one or double check and average.  None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1) Recovery (1) Recovering (3) Recent or no recovery (1) Recovering (3) Recovering (4) Reco
11	21	Metric 4. Habitat Alteration and Development.
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or double check and average.  None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1)  4b. Habitat development. Select only one and assign score.  Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3)  Recent of in (9)
		Poor to fair (2) Poor (1)  4c. Habitat alteration. Score one or double check and average.
s	21	None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)
last revised	d 1 Februa	y 2001 jjm

7

Site: Wetland A	Rater	( <b>s):</b> LH		Date: 4/15/2022
21 subtotal first pa	nge			
0 21	Metric 5. Special Wetlan	ds.	Wetland 7	
max 10 pts. subtotal	Check all that apply and score as indicated.  Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-re Lake Erie coastal/tributary wetland-re Lake Plain Sand Prairies (Oak Open Relict Wet Prairies (10) Known occurrence state/federal three Significant migratory songbird/water Category 1 Wetland. See Question	estricted hydro ings) (10) atened or enda fowl habitat or 1 Qualitative F	angered species (10) susage (10) Rating (-10)	anography
2 23	Metric 6. Plant communi	·	•	pograpny.
max 20 pts. subtotal	6a. Wetland Vegetation Communities.		Community Cover Scale	<del></del>
	Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.24	
	Aquatic bed	1	Present and either comprises sm	
	1 Emergent		vegetation and is of moderate of	
	Shrub		significant part but is of low qua	-
	Forest	2	Present and either comprises sig	
	Mudflats		vegetation and is of moderate of	quality or comprises a small
	Open water		part and is of high quality	
	Other	3	Present and comprises significan	t part, or more, of wetland's
	6b. horizontal (plan view) Interspersion.		vegetation and is of high quality	/
	Select only one.		•	
	High (5)	Narrative D	escription of Vegetation Quality	
	Moderately high(4)	low	Low spp diversity and/or predomi	nance of nonnative or
	Moderate (3)		disturbance tolerant native spec	cies
	✓ Moderately low (2)	mod	Native spp are dominant compon	ent of the vegetation,
	Low (1)		although nonnative and/or distu	ırbance tolerant native spp
	None (0)		can also be present, and specie	es diversity moderate to
	6c. Coverage of invasive plants. Refer		moderately high, but generally	w/o presence of rare
	to Table 1 ORAM long form for list. Add		threatened or endangered spp	
	or deduct points for coverage	high	A predominance of native species	s, with nonnative spp
	Extensive >75% cover (-5)		and/or disturbance tolerant nati	ve spp absent or virtually
	Moderate 25-75% cover (-3)		absent, and high spp diversity a	and often, but not always,
	✓ Sparse 5-25% cover (-1)		the presence of rare, threatene	d, or endangered spp
	Nearly absent <5% cover (0)	1		
	Absent (1)	Mudflat and	d Open Water Class Quality	
	6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
	Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 ac	ores)
	Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88	
	Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more	
	o Standing dead >25cm (10in) dbh	-	,	
	Amphibian breeding pools	Microtopog	raphy Cover Scale	
		0	Absent	
		1	Present very small amounts or if of marginal quality	more common
		2	Present in moderate amounts, bu	•
		3	quality or in small amounts of h  Present in moderate or greater a	
			and of highest quality	
23			•	

End of Quantitative Rating. Complete Categorization Worksheets.

## **ORAM Summary Worksheet**

		circle answer or insert	Result
		score	Nesuit
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
J	Metric 2. Buffers and surrounding land use	1	
	Metric 3. Hydrology	7	
	Metric 4. Habitat	11	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	2	
	TOTAL SCORE	23	Category based on score breakpoints

**Complete Wetland Categorization Worksheet.** 

### Wetland 7

# **Wetland Categorization Worksheet**

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

Final Category				
Choose one	(Category 1)	Category 2	Category 3	

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

hio		-	
7 IIIU	d	92	hin
	Ν,	Œ	1110

# Headwater Habitat Evaluation Index Field Form HHEI Score (sum of metrics 1+2+3)

	-	. 1	
ı	-5	4	
	-7		

SITE NAME OCATION 5/2 55 T- BULKER	Yard Experies	-,4134-35
DITE AUMEDED STATE CO DIVED BASIN	RIVER CODE DRAINAGE AREA (mi²)  #O. 007826 LONG S3_127576 RIVER MILE	
LENGTH OF STREAM REACH (ft) 10 LAT	LONG KIVEK MILE	
DATE 10-11-21 SCORER LH C		hu sellens
	to "Headwater Habitat Evaluation Index Field Manual" for Inst	
(Max of 32). Add total number of significant sub  TYPE  BLDR SLABS [16 pts]  BOULDER (>256 mm) [16 pts]  BEDROCK [16 pts]  COBBLE (65-256 mm) [12 pts]  GRAVEL (2-64 mm) [9 pts]  SAND (<2 mm) [6 pts]	SILT [3 pt] LEAF PACK/WOODY DEBRIS [3 pts] FINE DETRITUS [3 pts]	HHEI Metric Points Substrat Max = 4
Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock SCORE OF TWO MOST PREDOMINATE SUBSTRATE	TYPES: TOTAL NUMBER OF SUBSTRATE TYPES:	A + B
2. Maximum Pool Depth (Measure the maximum time of evaluation, Avoid plunge pools from ros > 30 centimeters [20 pts]  > 22.5 - 30 cm [30 pts]  > 10 - 22.5 cm [25 pts]	m pool depth within the 61 meter (200 feet) evaluation reach at the ad culverts or storm water pipes) (Check ONLY one box):  5 cm - 10 cm [15 pts]  < 5 cm [5pts]  NO WATER OR MOIST CHANNEL [0pts]	Pool Dep Max = 3
COMMENTS	MAXIMUM POOL DEPTH (centimeters): 3 5	- Control
3. BANK FULL WIDTH (Measured as the average > 4.0 meters (> 13') [30 pts]   3.0 m - 4.0 m (> 9' 7"- 13') [25 pts]   > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]    COMMENTS	ge of 3 - 4 measurements) (Check <i>ONLY</i> one box):    X	Bankfu Width Max=30
	his information must also be completed	
	QUALITY * NOTE: River Left (L) and Right (R) as looking downstreams	*
RIPARIAN WIDTH	FLOODPLAIN QUALITY (Most Predominant per Bank)	
L P.       (Per Bank)       L R         □ □ Wide > 10 m       □ □         □ □ Moderate 5-10 m       □ □         □ □ Narrow < 5 m	Mature Forest, Wetland  Immature Forest, Shrub or Old Field  Residential, Park, New Field  Fenced Pasture  L R  Conservation Tillage  Urban or Industrial  Open Pasture, Row C  Mining or Constructio	
None LL		
FLOW REGIME (At Time of Evaluation	n) (Check ONLY one box):	
Stream Flowing Subsurface flow with isolated pools (inte	Moist Channel, isolated pools, no flow (intermitt	tent)
SINUOSITY (Number of bends per 61  None  0.5  Number of bends per 61  1.0  1.5	m (200 ft) of channel) (Check ONLY one box):  2.0 2.5 3.0 >3	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft)	Moderate (2 ft/100 ft) Moderate to Severe Severe Severe	ft/100 ft)

#### ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

DOWNOTDEAN DEGICALATED LIGE(O)	
DOWNSTREAM DESIGNATED USE(S)	Distance from Evaluated Stream
	Distance from Evaluated Stream
	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING	THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.
USGS Quadrangle Name:	NRCS Soil Map Page: NRCS Soil Map Stream Order:
County:	Township/City:
MISCELLANEOUS	
Base Flow Conditions? (Y/N): Date of last precipitation	tation: Quantity:
Photo-documentation Notes:	
Elevated Turbidity?(Y/N): Canopy (% open): _	
Were samples collected for water chemistry? (Y/N):	Lab Sample # or ID (attach results):
Field Measures:Temp (°C) Dissolved Oxygen (mg	g/l) pH (S.U.) Conductivity (umhos/cm)
Is the sampling reach representative of the stream (Y/N)	If not, explain:
Additional comments/description of pollution impacts:	
BIOLOGICA	AL OBSERVATIONS
	ill observations below)
Fish Observed? (Y/N) Species observed (if known	n):
Frogs or Tadpoles Observed? (Y/N) Species observed.	rved (if known):
Salamanders Observed? (Y/N) Species observed (if	if known):
Aquatic Macroinvertebrates Observed? (Y/N) Specie	ies observed (if known):
Comments Regarding Biology:	
	THE RESERVE OF THE PARTY OF THE
DRAWING AND NARRATIVE DESCR	RIPTION OF STREAM REACH (This must be completed
Include important landmarks and other features of it	interest for site evaluation and a narrative description of the stream's location
	trees //

May 2020 Revision Page 2

trees



# CENTRAL OHIO WETLAND CONSULTING, LLC

6260 Havens Rd. Blacklick, Ohio 43004 mkaminski434@gmail.com (614) 940-8771

# **JURISDICTIONAL WATERS DELINEATION REPORT**

# BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO

Prepared by:

CENTRAL OHIO WETLAND CONSULTING, LLC MATT KAMINSKI, OWNER 6260 HAVENS ROAD BLACKLICK, OHIO 43004

# Prepared for:

KIMLEY-HORN AND ASSOCIATES, INC. C/O MR. JUSTIN M. MULLER 7965 N. HIGH ST. SUITE 200 COLUMBUS, OHIO 43235

# **TABLE OF CONTENTS**

<u>1.0</u>	INTRODUCTION AND PURPOSE	<u>1</u>
	1.1 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT	1
	1.2 SPECIAL TERMS AND CONDITIONS	2
<u>2.0</u>	EVALUATION AREA AND SURROUNDING AREA CHARACTERISTICS	<u>2</u>
<u>3.0</u>	RESEARCH AND REVIEW OF PUBLISHED INFORMATION	<u>3</u>
	3.1 USGS TOPOGRAPHIC MAPS	3
	3.2 SOIL REVIEW	4
	3.3 NATIONAL WETLANDS INVENTORY (NWI) MAP	5
	3.4.1 PUBLISHED INFORMATION REVIEW CONCLUSIONS	<b>6</b> 7
<u>4.0</u>	FIELD RECONNAISSANCE/DELINEATION OF JURISDICTIONAL WATERS	<u>7</u>
	4.1 METHODOLOGY	
	4.1.1 HYDRIC SOIL CRITERIA	
	4.1.2 WETLAND HYDROLOGY CRITERIA4.1.3 HYDROPHYTIC VEGETATION CRITERIA	
	4.2 JURISDICTIONAL WATERS DELINEATION FINDINGS	10
	4.2.1 STREAMS	
	4.2.1 WETLANDS	14
<u>5.0</u>	FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS	<u>19</u>
6 N	SIGNATURE OF PROFESSIONAL PERSONNEL	21

#### **APPENDIX 1 – MAPS AND EVALUATION AREA INFORMATION**

General Location Map of Evaluation Area Location Maps of Evaluation Area Franklin County Auditor GIS Maps 1954/1955, 1966, 1973, 1980/1981, and 2019 USGS Topographic Maps USDA Web Soil Survey Maps National Wetlands Inventory (NWI) Maps

#### **APPENDIX 2 – AERIAL PHOTOGRAPHS**

1956 Aerial Photographs

1960 Aerial Photographs

1964 Aerial Photographs

1979 Aerial Photographs

1989 Aerial Photographs

1994 Aerial Photographs

2002 Aerial Photographs

2009 Aerial Photographs

2019 Aerial Photographs

#### **APPENDIX 3 – DELINEATION MAP**

Wetland and Stream Delineation Maps ORAM Scoresheets (24 pages)

#### <u>APPENDIX 4 – EVALUATION AREA PHOTOGRAPHS</u>

Photo Keys

Field Reconnaissance Photos (Photo 1 through Photo 61)

#### 1.0 INTRODUCTION AND PURPOSE

Central Ohio Wetland Consulting, LLC (COWC) has been contracted by Kimley-Horn and Associates, Inc. (Client) to perform a Jurisdictional Waters Delineation Report for the <u>Buckeye Yard</u> property located in the City of Columbus, Franklin County, Ohio. The "evaluation area" for this Jurisdictional Waters Delineation Report consists of former Norfolk-Southern railroad acreage, including former rail lines and ballast material, ancillary structures, open areas, waste land, and wooded land. For descriptive purposes, the evaluation area has been divided into three separate areas, all of which are part of Franklin County parcels 570-146296, 241-000038, and 560-154558:

- North Section: 41± acres located north of Roberts Road and south of Scioto Darby Creek Road,
- Central Section: 287± acres located north of Trabue Road and south of Roberts Road, and,
- South Section: 77± acres located north of the existing Norfolk Southern CJ Line and south of Trabue Road.

The purpose of COWC's services is to document the size/length, location, and quality of all potentially jurisdictional waters of the United States and/or isolated waters of the State of Ohio within the evaluation area. COWC performed this delineation for specific application to the evaluation area described herein, in accordance with the United States Army Corps of Engineers (USACE) Wetlands Delineation Manual (1987) and the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region. The conclusions made within this Jurisdictional Waters Delineation Report are to be considered "preliminary" until verified by the USACE Huntington, WV District Office. This delineation report can be submitted to the USACE as part of a preliminary jurisdictional determination (PJD), approved jurisdictional determination (AJD), or preconstruction notification (PCN). The Ohio Environmental Protection Agency (Ohio EPA) will require a copy of the delineation report and an AJD letter issued by the USACE for all isolated wetland impacts, and ephemeral stream impacts greater than 300 linear feet.

The delineation includes three principal components: 1) research and review of published information, 2) field reconnaissance and delineation of jurisdictional waters (i.e. wetlands, ponds, and streams), and 3) data compilation/report preparation.

#### 1.1 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT

This Jurisdictional Waters Delineation Report has been prepared based upon field observations and COWC's professional interpretation of the USACE Wetlands Delineation Manual (1987) and the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region at the time of our field reconnaissance. The conclusions presented in this report are professional opinions based on data collected between the commencement date and the

report date. The information in this report is true to the best of our knowledge. COWC obtained some of the information presented in this report from other agencies and sources. COWC assumes no responsibility for the accuracy or completeness of information provided by others. No warranty, expressed or implied, is made.

#### 1.2 SPECIAL TERMS AND CONDITIONS

This report has been prepared by COWC as a professional service for the exclusive use of Kimley-Horn and Associates, Inc. and other parties that may be jointly affiliated by Kimley-Horn and Associates, Inc. and COWC. Any other entity that wishes to use or rely upon this report, or that wishes to duplicate, reproduce, copy, extract, or quote from this report must request permission from COWC to do so. Any unauthorized use of, or reliance upon, this report shall release COWC from any liability resulting from such use or reliance. Any unauthorized duplication, reproduction, copying, excerption, or quotation of this report shall expose the violator to all legal remedies available to COWC.

#### 2.0 EVALUATION AREA AND SURROUNDING AREA CHARACTERISTICS

The evaluation area consists of former Norfolk-Southern railroad acreage, including former rail lines and ballast material, ancillary structures, open areas, waste land, and wooded land. The North Section of the evaluation area consists of 41± acres located north of Roberts Road and south of Scioto Darby Creek Road. The Central Section of the evaluation area consists of 287± acres located north of Trabue Road and south of Roberts Road. The South Section of the evaluation area consists of 77± acres located north of the existing Norfolk Southern CJ Line and south of Trabue Road. Areas surrounding the evaluation area are developed for railroad, industrial, and commercial purposes.

Approximate latitude / longitude coordinates for the central part of each section of the evaluation area are:

- North Section 40.008475 / -83.127839,
- Central Section 39.992969 / -83.129678, and
- South Section 39.974661 / -83.130694.

Appendix 1 includes location maps, Franklin County Auditor Geographic Information System (GIS) Maps, United States Geological Survey (USGS) topographic maps (Hilliard, Ohio and Galloway, Ohio), United States Department of Agriculture (USDA) soil survey maps, and United States Fish & Wildlife Service (USFWS) National Wetland Inventory (NWI) maps. Appendix 2 includes aerial photographs showing the evaluation area. Photographs depicting representative vegetation, property features, and views from several locations around the evaluation are provided in Appendix 4.

#### 3.0 RESEARCH AND REVIEW OF PUBLISHED INFORMATION

COWC's research and review of published information includes: USGS topographic maps, the USDA soil survey map, USFWS NWI map, and aerial photographs from various local governmental agencies. COWC uses this information to determine historical uses of the evaluation area, the geo-morphological setting at the evaluation area, soil types present, whether the evaluation area has been significantly disturbed within the past few years, and for visual evidence of ponds, streams, or saturation or inundation on land surfaces, and the potential for wetlands. Copies of the reviewed information is appended.

#### 3.1 USGS TOPOGRAPHIC MAPS

COWC reviewed 1954/1955, 1966, 1973, 1980/1981, and 2019 Hilliard, Ohio and Galloway, Ohio, USGS 7.5-minute series topographic maps for the evaluation area. COWC uses USGS topographic maps as an indicator of watershed characteristics in and around the evaluation area, and to identify small depressional areas, streams, and wetland mapping symbols. The appendix of this report includes portions of these USGS maps showing the evaluation area.

The maps reviewed indicate several drainages crossing the North, Central, and South Sections of the evaluation area.

#### North Section

Rail lines are shown within the North Section on the 1973 through 2019 maps. Prior to 1973, the North Section is depicted as vacant land. Roberts Millikin Ditch is shown crossing the central part of the North Section in a general west to east direction. An unnamed tributary to Roberts Millikin Ditch is shown on the southern part of the North Section. This unnamed tributary is shown in a general southwest/northeast orientation on the 1954 through 1980 maps. The 2019 map indicates this unnamed tributary has been reoriented in a general north/south direction, west of existing rail lines. No other potential streams, wetlands, or ponds are depicted on the North Section. Lower surface elevations are generally indicated between railroad lines on the central and northern parts of the North Section.

#### Central Section

The Central Section is predominately developed with rail lines on the 1973 through 2019 maps. Prior to 1973, the Central Section is depicted as vacant land. The topographic maps show green tint, indicating wooded areas, on the northwest part of the Central Section. One (1) wetland mapping symbol is also depicted within the green tint area on the northwest part of the Central Section. Four (4) unnamed tributary streams are shown crossing the Central Section in a general west to east direction on the 1954/1955 and 1966 maps. These tributary streams are not shown or have be redirected through or around rail lines on the 1973 through 2019 maps.

#### South Section

Rail lines are shown within the South Section on the 1973 through 2019 maps. Prior to 1973, the North Section is generally depicted as vacant land. Approximately five (5) unnamed tributaries are shown crossing the South Section of the evaluation area on the 1955 and 1966 maps. Only three (3) tributaries are shown crossing the South Section on the 2019 map. One (1) pond is also depicted on the southern part of the South Section on the 2019 map. No other potential streams, wetlands, or ponds are depicted on the South Section.

#### 3.2 SOIL REVIEW

COWC reviewed information from the USDA Natural Resources Conservation Service (NRCS), the USDA Web Soil Survey website<sup>1</sup>, and the list of <u>Hydric Soils of the United States</u> (published by NRCS in cooperation with the National Technical Committee for Hydric Soils). These sources indicate soils underlying the evaluation area consist of the following:

TABLE 1
EVALUATION AREA SOIL DESIGNATIONS

Map Unit ID	Map Unit Name	% Slope	Hydric Classification	% Hydric Component	Component Landform
СеВ	Celina silt loam	2-6	Non-hydric with hydric components	Kokomo 5%	Depressions
CrA	Crosby silt loam	0-2	Non-hydric with hydric components	Kokomo 8%	Depressions
CrB	Crosby silt loam	2-6	Non-hydric with hydric components	Kokomo 8%	Depressions
Ко	Kokomo silty clay loam	0-2	Hydric	Kokomo 90%	Depressions
Us	Udorthents, loamy, steep	18-25	Non-hydric	-	-
Uv	Urban land-Celina complex, occasionally flooded	2-12	Non-hydric with hydric components	Kokomo 5%	Depressions

Celina silt loam (CeB) is generally described as a gently sloping, moderately well-drained soil on uplands. These soils are typically found on convex ridgetops, on side slopes above steeper areas, and along well-defined waterways.

Crosby silt loam (CrA and CrB) is generally described as a nearly level to gently sloping, somewhat poorly drained soil on narrow and broad upland areas. This mapping unit also contains areas of Kokomo soils located in depressions and Celina soils on low knolls.

Kokomo silty clay loam (Ko) is described as a nearly level, very poorly drained soil located in depressions and at the heads of drainageways on uplands. Runoff from adjacent higher elevations can cause ponding in Kokomo soils. Kokomo silty clay loam is considered a hydric soil.

\_

<sup>&</sup>lt;sup>1</sup> http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

Udorthents, loamy, steep (Us) is generally described as soils in borrow areas that have been subject to surface mining, particularly for use as fill material used under highways and buildings.

Urban land-Celina complex (Uv) is generally described as areas of urban land covered by streets, parking lots, buildings, railroad yards, and other structures. Soils in these areas have been altered to the extent specific soil identification is not feasible. Undeveloped portions of this soil unit are dominated by Celina soil.

The evaluation area is predominately comprised of Urban land-Celina complex soils. Wooded areas adjacent to the west of the existing railroad lines on the Central Section are mapped with Crosby, Celina, and Kokomo soil units.

According to mapping available from the USDA NRCS, and the list of <u>Hydric Soils of the United States</u> published by the NRCS in cooperation with the National Technical Committee for Hydric Soils, the evaluation area contains hydric soil. Thin bands of mapped hydric Kokomo soils are located on the western portions of the Central Section of the evaluation area. The USGS topographic maps indicate these areas are likely drained by tributary streams.

#### 3.3 NATIONAL WETLANDS INVENTORY (NWI) MAP

COWC reviewed the USFWS NWI website<sup>2</sup> for wetland mapping symbols depicted within the evaluation area. The USFWS produced NWI maps in an attempt to document wetlands throughout the United States. The USFWS generated NWI maps using high-altitude infrared aerial photography to identify areas of saturation or inundation on land surfaces. Areas that are saturated or inundated typically have lower infrared heat signatures than dry areas. The USFWS mapped these cooler infrared heat signature areas as wetlands without field verification. NWI maps may not reflect actual field conditions due to meteorological or seasonal conditions that may have existed at the time of data collection. COWC typically uses NWI maps to plan field reconnaissance, and as an indicator of areas that may support wetlands.

The NWI map shows three (3) wetland mapping symbols within the evaluation area:

- One (1) PEM1C symbol located on the northern part of the North Section,
- One (1) PFO1A symbol located within the wooded northwest part of the Central Section, and
- One (1) PEM1A symbol located on the southern part of the South Section.

The PEM1C designation indicates an area that is palustrine (non-tidal wetlands dominated by trees, shrubs, persistent emergent vegetation), emergent

<sup>&</sup>lt;sup>2</sup> https://www.fws.gov/wetlands/Data/Mapper.html

(herbaceous, erect and rooted hydrophytes), persistent (dominated by species that normally remain standing through to the next growing season), and seasonally flooded (surface water is present for extended periods, especially early in the growing season, but absent by the end of the growing season in most years). This area was delineated as Wetland 5.

The PFO1A designation indicates an area that is palustrine, forested (containing woody vegetation 20 feet in height and taller), broad-leaved deciduous (trees and shrubs with relatively wide, flat leaves that are shed during the cold and seasonally dry conditions), and temporary flooded (areas were surface water is present for brief (days/weeks) periods during the growing season). This area was delineated as Wetland 7.

The PEM1A designation indicates an area that is palustrine, emergent, persistent, and temporary flooded. This area was delineated as Pond 2.

The NWI map shows streams/drainages in similar locations as depicted on the USGS maps. Drainage features within the evaluation area are depicted with R5UBH an R4SBC designations. The R5UBH designation indicates a permanently flooded (water covers the substrate throughout the year in all years), riverine habitat contained within a channel (open conduit either naturally or artificially created which may periodically or continuously contain moving water) that has an unconsolidated bottom (at least 25% cover of particles less than 6-7 centimeters and vegetative cover less than 30%). The unknow perennial modifier indicates the drainage cannot be distinguished from lower perennial and upper perennial. The R4SBC designation indicates a seasonally flooded, riverine habitat contained within a channel that has intermittent flow (water may flow only part of the year).

#### 3.4 AERIAL PHOTOGRAPHS

COWC reviewed aerial photographs of the evaluation area dated 1956, 1960, 1964, 1979, and 1989 available from the Ohio Department of Transportation Office of CADD & Mapping website<sup>3</sup>; and 1994, 2002, 2009, and 2019 from Google Earth Pro<sup>4</sup>. Copies of the aerial photographs showing the evaluation area are provided in Appendix 2.

The 1956 through 1964 aerial photographs generally depict the evaluation area as vacant land with numerous streams crossing from west to east.

The 1979 through 2019 aerial photographs generally depict the evaluation area as developed for use as a rail yard. Undeveloped wooded land is located on the western part of the Central Section. Streams previously apparent crossing the

 $<sup>^{3}\ \</sup>underline{\text{http://www.dot.state.oh.us/Divisions/Engineering/CaddMapping/Pages/default.aspx}}$ 

<sup>&</sup>lt;sup>4</sup> Earth Versions – Google Earth

evaluation from west to east have been manipulated, channelized, and relocated as part of development for rail use.

The 2019 aerial photograph indicates the evaluation area is similar in appearance to what was observed during our field reconnaissance on April 9, April 12, and April 13, 2021.

#### 3.4.1 PUBLISHED INFORMATION REVIEW CONCLUSIONS

Information obtained from USGS topographic maps, NWI maps, and aerial photographs indicate the potential for numerous streams, wetlands, and ponds within the evaluation area.

The potential for wetlands and streams within an area cannot be determined solely from review of published information; therefore, an onsite investigation is required to verify current property conditions.

#### 4.0 FIELD RECONNAISSANCE/DELINEATION OF JURISDICTIONAL WATERS

Matthew R. Kaminski, owner of Central Ohio Wetland Consulting, LLC, performed the field reconnaissance for the jurisdictional waters delineation during the morning and afternoon hours on Friday April 9, 2021, Monday April 12, 2021, and Tuesday April 13, 2021. Research and review of published information indicates physical property conditions were generally unchanged for several years prior to this delineation, such that the evaluation area was considered undisturbed for data collection. Therefore, the routine method was used in this assessment. Photographic documentation from the field reconnaissance and general landscape photographs are provided in Appendix 4.

COWC performs its field reconnaissance for jurisdictional waters delineations using criteria and guidance in the Corps of Engineers' Wetland Delineation Manual (USACE, 1987) and the 2010 Midwest Regional Supplement to the 1987 Wetland Delineation Manual. In this method, vegetation, hydrology, and soil criteria are used to identify jurisdictional/isolated wetlands. The delineation method and vegetation sampling methodology uses the procedures for Routine Determinations found in the 1987 and 2010 manuals.

To establish the presence of jurisdictional/isolated wetlands, three characteristics are required to be present. These wetland characteristics consist of hydric soils, a dominance of hydrophytic (i.e. wetland) vegetation, and wetland hydrology. All three criteria must be present for an area to be identified as wetland. These three criteria are defined and explained in detail in the Corps of Engineers' Wetland Delineation Manual (USACE, 1987) and the 2010 Midwest Regional Supplement to the 1987 Wetland Delineation Manual. The Wetlands Research Program of the USACE Waterways Experiment Station developed the manual in 1987. COWC followed the methods described in these manuals in performing the delineation.

Wetland and waterbody delineation of field-verified water features are made using COWC's professional judgment and interpretation of the USACE Jurisdictional Determination Form Instructional Guidebook (USACE, 2007). For the purposes of this report, "non-jurisdictional" or "excluded" is defined as aquatic features that are not regulated by the USACE under the provisions of Section 404 of the Clean Water Act (CWA). Isolated wetlands that do not have a surface water connection to waters of the U.S. and ephemeral streams are non-jurisdictional from the perspective of the USACE; however, are regulated by the Ohio EPA under the provisions of Section 401 of the CWA.

#### 4.1 METHODOLOGY

After collecting pertinent information through the review of published information, COWC uses the routine method to determine if wetland areas exist within the evaluation area. The approach used for the routine determination is the plant community assessment procedure. This approach requires initial identification of representative plant community types in the subject area followed by characterization of vegetation, soils, and hydrology for each community type.

The evaluation area is assessed in accordance with guidelines from the USACE pertaining to potential jurisdictional waters of the United States and/or isolated waters of the State of Ohio. All potential wetlands, streams, and drainage ditches are followed to determine the flow regime and whether such features have a surface water connection to waters of the U.S.

The field investigation is conducted by walking and visually surveying the evaluation area, and in the vicinity, to collect wetland and stream data, as necessary. Upon identification of hydrophytic (wetland) and non-wetland communities, the wetland boundary is surveyed with a Spectra SP20 handheld Global Navigation Satellite System (GNSS) receiver with sub-meter accuracy. Field notes are taken at points where the dominant vegetation species change from wetland to upland or hydrologic or soil indicators become transitional. Areas saturated or inundated by surface water at the time of our field reconnaissance are presumed to contain hydric soil characteristics. COWC records observations concerning hydrology and vegetation on the appropriate Wetland Determination Data Form.

#### 4.1.1 HYDRIC SOIL CRITERIA

COWC performs shovel test pits to characterize soil conditions and to evaluate the presence or absence of hydric soil features. A drain spade is used to collect soil samples from a maximum depth of approximately 20 inches below ground surface. COWC determines the presence or absence of hydric soils by comparing soil samples to a Munsell soil color chart, as soil colors often reveal whether a soil is hydric or non-hydric. The standardized Munsell soil colors consist of three components: hue, value, and chroma. Soil in hydric soil areas typically show yellow-red hues, varying gray color values,

and chromas of one or two. Chromas of two or less are considered low, and are often diagnostic of hydric soils. Hydric mineral soils saturated for long periods of the growing season, but unsaturated for some time, often develop mottles and/or a low chroma matrix. Soils are considered hydric if at least one primary indicator, or at least one problematic hydric soil indicator is present, as defined by the USACE.

Mineral based soils (as opposed to carbon- or organic-based soils) generally contain significant amounts of iron and manganese. As the iron component of the soil matrix comes into contact with the atmosphere, the iron tends to oxidize giving soils a high "chroma" or rust-like color. This characteristic is typically observed in upland (i.e., non-wetlands) areas where oxygen is abundant. On the contrary, mineral soils that are saturated for extended periods (e.g., hydric soils) tend to have oxygen ions stripped, chemically reducing iron and giving these soils bluish-grayish coloring or low chroma. This reduced condition in mineral soils is known as "gleying" and is typically observed in wetlands, where soil oxygen contents are generally lower relative to upland soils. Low oxygen levels in reduced soils also tend to slow decomposition, leading to increased organic content.

The evaluation area is predominately comprised of Urban land-Celina complex soils. Wooded areas adjacent to the west of the existing railroad lines on the Central Section are mapped with Crosby, Celina, and Kokomo soil units. Areas saturated or inundated by surface water at the time of our field reconnaissance were presumed to contain hydric soil characteristics. COWC observed hydric soil characteristics within the areas delineated as Wetland 1 through Wetland 12.

#### 4.1.2 WETLAND HYDROLOGY CRITERIA

Wetland hydrology is determined present in areas that are periodically inundated or have soils saturated to the surface sometime during the growing season. This is a dynamic characteristic and is usually not present during drier periods of the year. Primary wetland hydrology indicators include, but are not limited to, surface water, high water table, inundation, soil saturation in the upper 12 inches of the soil, water marks, sediment deposits, drift deposits, and water-stained leaves. Secondary wetland hydrology indicators include surface soil cracks, drainage patterns, dryseason water table, crayfish burrows, saturation visible on aerial imagery, stunted or stressed plants, geomorphic position, and FAC-Neutral Test of vegetation. One primary indicator or two or more secondary indicators are required to establish a positive indication of wetland hydrology.

COWC observed primary and secondary hydrology indicators for wetlands within the areas delineated as Wetland 1 through Wetland 12.

#### 4.1.3 HYDROPHYTIC VEGETATION CRITERIA

Hydrophytic vegetation is determined present if more than 50 percent of plant species within a plant community have an indicator status of obligate wetland (OBL), facultative wetland (FACW), and/or facultative (FAC). The indicator status of plant species found in wetlands is listed in the 2018 National Wetland Plant List - Midwest Region published by the USACE<sup>5</sup>.

COWC used this data and determined hydrophytic vegetation dominance was present within the areas delineated as Wetland 1 through Wetland 12.

#### 4.2 JURISDICTIONAL WATERS DELINEATION FINDINGS

COWC's field reconnaissance identified twelve (12) wetlands (Wetland 1 through Wetland 12) totaling 13.53± acres, thirteen (13) streams (Stream 1 through Stream 13) totaling 10,377± linear feet, and two (2) ponds (Pond 1 and Pond 2) totaling 1.18± acre within the evaluation area. The centerline of the streams and the boundary of the ponds and wetlands were surveyed with a Spectra SP20 handheld GNSS receiver with sub-meter accuracy. Appendix 3 provides maps showing the location of the delineated wetlands, ponds, and streams. Multi-directional photographs of each stream and wetland, and general landscape photographs are provided in Appendix 4.

Several streams delineated within the evaluation area are depicted on USGS maps as unnamed tributaries to the Scioto River, prior to development of the evaluation area as a railroad yard. Streams within the evaluation area have been placed in culverts, channelized, and relocated as part of development of the evaluation area for railroad use in the mid to late 1960s.

Wetlands within the evaluation area are generally located in low-lying areas between existing railroad lines, and appear to be attributed to poor surface water drainage. Manipulation of on-site drainage features by beavers (*Castor canadensis*) has resulted in the establishment of several of the delineated wetlands.

#### **4.2.1 STREAMS**

COWC identified thirteen (13) streams (Stream 1 through Stream 13) totaling  $10,377\pm$  linear feet within the evaluation area. These streams were delineated as Stream 1 ( $260\pm$  LF), Stream 2 ( $59\pm$  LF), Stream 3 ( $97\pm$  LF), Stream 4 ( $119\pm$  LF), Stream 5 ( $50\pm$  LF), Stream 6 ( $158\pm$  LF), Stream 7 ( $114\pm$  LF), Stream 8 ( $61\pm$  LF), Stream 9 ( $320\pm$  LF), Stream 10 ( $2,552\pm$  LF), Stream 11 ( $3,921\pm$  LF), Stream 12 ( $369\pm$  LF), and Stream 13 ( $2,297\pm$  LF). These streams are further described below.

-

<sup>&</sup>lt;sup>5</sup> NWPL Home v3.4-f9c (army.mil)

TABLE 2 STREAM INFORMATION

Stream ID	Length (On-Site)	Classification	Start Location	End Location
Stream 1	260± LF	Perennial	40.007903	40.008136
(Roberts Millikin Ditch)			-83.128758	-83.127289
Stream 2	59± LF	Ephemeral	40.00785	40.008003
			-83.128597	-83.128575
Stream 3	97± LF	Intermittent	40.008131	40.008025
			-83.127797	-83.127517
Stream 4	119± LF	Intermittent	40.008147	40.007983
			-83.127458	-83.127319
Stream 5	50± LF	Intermittent	40.007975	40.007878
			-83.127436	-83.127350
Stream 6	158± LF	Intermittent	40.007728	40.008128
			-83.127353	-83.127278
Stream 7	114± LF	Ephemeral	40.008425	40.008136
			-83.127272	-83.127278
Stream 8	61± LF	Ephemeral	40.008403	40.008244
			-83.127339	-83.127281
Stream 9	320± LF	Intermittent	40.002356	40.002489
			-83.129508	-83.128431
Stream 10	2,552± LF	Perennial	39.997258	40.002511
			-83.132658	-83.128356
Stream 11	3,921± LF	Perennial	39.993333	39.983883
			-83.134142	-83.130006
Stream 12	369± LF	Perennial	39.989911	39.990389
			-83.134697	-83.133558
Stream 13	2,297± LF	Perennial	39.969858	39.966231
			-83.138011	-83.132869
Total	10,377± LF			

Stream 1 – Roberts Millikin Ditch (260± linear feet North Section)

Stream 1 is an east/west oriented portion of Roberts Millikin Ditch crossing the central part of the North Section of the evaluation area. Roberts Millikin Ditch flows through residential and industrial areas to the west prior to entering the evaluation area. This stream is littered with trash and debris and has perennial flow characteristics. Surface water was flowing within Stream 1 during our field reconnaissance on April 9, 2021.

Stream 1 originates at a round concrete culvert near the western boundary of the North Section of the evaluation area. Stream 1 flows unobstructed for approximately 73 LF before entering double round culverts beneath elevated railroad lines. Upon exiting these culverts, Stream 1 flows for an additional 187 LF before entering a second set of double round culverts beneath elevated railroad lines and exiting the evaluation area to the east.

Stream 1 is located within a wooded corridor on the central part of the North Section. This area appears frequently flooded with numerous deposits of sand and gravel. Stream 1 is highly braided within this frequently flooded area, and overflow drainage from Stream 1 has created several other smaller order streams (Streams 3, 4, and 5). Substrate material within Stream 1 consists of cobble, silt, sand, and gravel.

#### Stream 2 (59± linear feet North Section)

Stream 2 is an ephemeral stream that drains Wetland 4 on the central part of the North Section of the evaluation area. Excess surface water retained within Wetland 4 follows a natural gradient to the north, where it has cut a channel. Substrate material within Stream 2 consists of silt and hardpan. Surface water was flowing within Stream 2 during our field reconnaissance on April 9, 2021. Stream 2 has a direct surface water connection with Stream 1 (Roberts Millikin Ditch).

#### Stream 3 (97± linear feet North Section)

Stream 3 appears to have intermittent flow characteristics, and is a braided sub-channel resulting from overflow drainage of Stream 1 (Roberts Millikin Ditch) within a frequently flooded wooded corridor on the central part of the North Section of the evaluation area. Surface water was flowing within Stream 3 during our field reconnaissance on April 9, 2021. Substrate material within Stream 3 consists of silt, sand, and gravel.

#### Stream 4 (119± linear feet North Section)

Stream 4 appears to have intermittent flow characteristics, and is a braided sub-channel resulting from overflow drainage of Stream 1 (Roberts Millikin Ditch) within a frequently flooded wooded corridor on the central part of the North Section of the evaluation area. Surface water was flowing within Stream 4 during our field reconnaissance on April 9, 2021. Substrate material within Stream 4 consists of silt, sand, and gravel.

#### Stream 5 (50± linear feet North Section)

Stream 5 appears to have intermittent flow characteristics, and is a braided sub-channel resulting from overflow drainage of Stream 1 (Roberts Millikin Ditch) within a frequently flooded wooded corridor on the central part of the North Section of the evaluation area. Surface water was flowing within Stream 5 during our field reconnaissance on April 9, 2021. Substrate material within Stream 5 consists of silt, sand, and gravel.

#### Stream 6 (158± linear feet North Section)

Stream 6 is an intermittent stream that drains Wetland 6 on the central part of the North Section of the evaluation area. Excess surface water retained within Wetland 6 follows a natural gradient to the north, where it has cut a

channel. This channel transitions to intermittent flow characteristics at the confluence with Streams 4 and 5. Substrate material within Stream 6 consists of silt, sand, and gravel. Surface water was flowing within Stream 6 during our field reconnaissance on April 9, 2021. Stream 6 has a direct surface water connection with Stream 1 (Roberts Millikin Ditch).

#### Stream 7 (114± linear feet North Section)

Stream 7 is an ephemeral stream that drains Wetland 5 on the central part of the North Section of the evaluation area. Excess surface water retained within Wetland 5 follows a natural gradient to the south, where it has cut a channel. Substrate material within Stream 7 consists of silt and hardpan. Surface water was flowing within Stream 7 during our field reconnaissance on April 9, 2021. Stream 7 has a direct surface water connection with Stream 1 (Roberts Millikin Ditch).

#### Stream 8 (61± linear feet North Section)

Stream 8 is an ephemeral stream that drains Wetland 5 on the central part of the North Section of the evaluation area. Excess surface water retained within Wetland 5 follows a natural gradient to the south, where it has cut a channel. Substrate material within Stream 8 consists of silt and hardpan. Surface water was flowing within Stream 8 during our field reconnaissance on April 9, 2021. Stream 8 has a direct surface water connection with Stream 1 (Roberts Millikin Ditch).

#### Stream 9 (320± linear feet Central Section)

Stream 9 is a west to east flowing intermittent stream on the north part of the Central Section of the evaluation area. Stream 9 originates at the outfall of a round concrete culvert pipe which discharges surface water from a west adjoining stormwater management pond. This stream is littered with trash and debris. Stream 9 has a direct surface water connection with Stream 10 on the northwest part of the Central Section of the evaluation area. Surface water was flowing within Stream 9 during our field reconnaissance on April 13, 2021. Substrate material within Stream 9 consists of silt, sand, and gravel.

#### Stream 10 (2,552± linear feet Central Section)

Stream 10 is a general southwest to northeast flowing perennial stream on the northwest part of the Central Section of the evaluation area. Stream 10 originates at the outfall of an oval-shaped concrete culvert pipe near the western boundary of the Central Section of the evaluation area. This culvert discharges surface water from the west. Surface water was flowing within Stream 10 during our field reconnaissance on April 13, 2021. Substrate material within Stream 10 consists of cobble, silt, sand, and gravel. Stream 10 is partially impounded by Pond 1.

#### Stream 11 (3,921± linear feet Central Section)

Stream 11 is a north to south flowing perennial stream contained within a ditch on the southwest part of the Central Section of the evaluation area. Surface water was flowing within Stream 11 during our field reconnaissance on April 13, 2021.

#### Stream 12 (369± linear feet Central Section)

Stream 12 is a west to east flowing perennial stream contained within a ditch on the southwest part of the Central Section of the evaluation area. Surface water was flowing within Stream 12 during our field reconnaissance on April 13, 2021. Stream 12 has a direct surface water connection to Stream 11.

#### Stream 13 (2,297± linear feet South Section)

Stream 13 is a west to southeast flowing perennial stream contained within a ditch on the South Section of the evaluation area. Stream 13 enters the South Section of the evaluation area from a culvert beneath Manor Park Drive. Portions of Stream 13 have been impounded by beavers in numerous locations, resulting in the creation of Wetland 11. Surface water was flowing within Stream 13 during our field reconnaissance on April 12, 2021.

#### 4.2.1 WETLANDS

COWC identified twelve (12) wetlands (Wetland 1 through Wetland 12) totaling  $13.53\pm$  acres within the evaluation area. These areas exhibit a dominance of hydrophytic species, primary and secondary wetland hydrology indicators, and hydric soil characteristics. These wetlands were delineated as Wetland 1 (0.40 $\pm$  acre), Wetland 2 (0.31 $\pm$  acre), Wetland 3 (1.53 $\pm$  acre), Wetland 4 (1.67 $\pm$  acre), Wetland 5 (4.72 $\pm$  acre), Wetland 6 (1.45 $\pm$  acre), Wetland 7 (0.49 $\pm$  acre), Wetland 8 (0.29 $\pm$  acre), Wetland 9 (1.10 $\pm$  acre), Wetland 10 (0.22 $\pm$  acre), Wetland 11 (0.92 $\pm$  acre), and Wetland 12 (0.43 $\pm$  acre). These wetlands are further described below.

TABLE 3
WETLAND INFORMATION

Wetland ID	Acreage (On-Site)	Cowardin Classification	ORAM Score	Status	Location
Wetland	0.40±	Palustrine	29	Jurisdictional	40.014106
1		Emergent (PEM)	(Cat. 1)		-83.127944
Wetland	0.31±	Palustrine	32	Jurisdictional	40.012344
2		Forested (PFO)	(Cat. 2)		-83.126881
Wetland	1.53±	Palustrine	42	Jurisdictional	40.011019
3		Emergent (PEM)	(Cat. 2)		-83.128378

Wetland	1.67±	Palustrine	25	Jurisdictional	40.006775
4		Emergent (PEM)	(Cat. 1)		-83.128611
Wetland	4.72±	Palustrine	27	Jurisdictional	40.009728
5		Emergent (PEM)	(Cat. 1)		-83.127467
Wetland	1.45±	Palustrine	26	Jurisdictional	40.006722
6		Emergent (PEM)	(Cat. 1)		-83.127569
Wetland	0.49±	Palustrine	49	Jurisdictional	39.998444
7		Forested (PFO)	(Cat. 2)		-83.130556
Wetland	0.29±	Palustrine	38	Jurisdictional	39.997300
8		Emergent (PEM)	(Cat. 2)		-83.131078
Wetland	1.10±	Palustrine	34	Jurisdictional	39.970158
9		Emergent (PEM)	(Cat. 2)		-83.133319
Wetland	0.22±	Palustrine	24	Jurisdictional	39.969094
10		Emergent (PEM)	(Cat. 1)		-83.133639
Wetland	0.92±	Palustrine	52	Jurisdictional	39.968056
11		Forested (PFO)	(Cat. 2)		-83.133531
Wetland	0.43±	Palustrine	35	Jurisdictional	39.963508
12		Emergent (PEM)	(Cat. 2)		-83.131206
Total	13.53±		•	_	_

COWC completed Ohio Rapid Assessment Method (ORAM) score sheets for the wetland areas delineated within the evaluation area. Wetland areas identified within the evaluation area scored within Category 1 and Category 2, according to Ohio EPA standards. The ORAM forms are appended.

Using the USACE OMBIL Regulatory Module (ORM) Project Upload Template, COWC determined the Cowardin classification of wetlands within the evaluation area as palustrine emergent (PEM) and palustrine forested (PFO).

#### Wetland 1 (0.40± acre North Section)

Wetland 1 is a flooded depression on the north part of the North Section of the evaluation area. Elevated railroad tracks surround the wetland. Establishment of Wetland 1 appears to be attributed to poor surface water drainage in low-lying areas between rail lines. Based on visual observation, Wetland 1 appears to be regularly inundated/saturated. The wetland receives hydrology from precipitation and overland flow from adjacent uplands. Wetland 1 is generally dominated by various Dogwood species (*Cornus species*), Green Ash (*Fraxinus pennsylvanica*), Black Willow (*Salix nigra*), Narrow-Leaf Cattail (T*ypha angustifolia*), and Marsh Primrose (*Ludwigia palustris*).

#### Wetland 2 (0.31± acre North Section)

Wetland 2 is a flooded, forested depression on the north part of the North Section of the evaluation area. Wetland 2 is located within a low-lying area surrounded by elevated railroad tracks. Establishment of Wetland 2

appears to be attributed to poor surface water drainage in low-lying areas between rail lines. Dense brushy areas dominated by European Privet (*Ligustrum vulgare*) and Morrow's Honeysuckle (*Lonicera morrowii*) provide a buffer between Wetland 2 and the surrounding railroad tracks. A culvert pipe is located along the eastern boundary of Wetland 2, partially draining this wetland with surface water flow to the east, beneath elevated railroad tracks. Based on visual observation, Wetland 2 appears to be semi to permanently inundated/saturated. The wetland receives hydrology from precipitation and overland flow from adjacent uplands. Wetland 2 is generally dominated by Eastern Cottonwood (*Populus deltoides*), Green Ash (*Fraxinus pennsylvanica*), Black Willow (*Salix nigra*), and Narrow-Leaf Cattail (Typha angustifolia).

#### Wetland 3 (1.53 ± acre North Section)

Wetland 3 is located along the western boundary of the North Section of the evaluation area. This wetland is part of a larger wetland complex that extends off-site to the west. Portions of Wetland 3 are located within a channelized ditch that has been impounded by beavers in numerous locations. These beaver impoundments of an apparently perennial ditch have also facilitated the establishment of additional wetlands to the west of the evaluation area. Wetland 3 appears to be permanently inundated by surface water, with flowing water observed at beaver dam locations. Wetland 3 appears to receive hydrology from precipitation and stormwater drainage from areas to the west of the evaluation area. Wetland 3 is generally dominated by Narrow-leaf Cattail (*Typha angustifolia*), Black Willow (*Salix nigra*), and various Dogwood species (*Cornus species*). Dense brushy areas dominated by European Privet (*Ligustrum vulgare*) and Morrow's Honeysuckle (*Lonicera morrowii*) generally surround Wetland 3.

#### Wetland 4 (1.67 ± acre North Section)

Wetland 4 is located within a low-lying area on the central part of the North Section of the evaluation area. Railroad tracks abut the wetland to the east with higher surface elevations to the west. Wetland 4 is dominated by Narrow-leaf Cattail (*Typha angustifolia*) and Common Reed (*Phragmites australis*). This wetland has a direct surface water connection to Stream 1 (Roberts Millikin Ditch) via Stream 2. Based on visual observation, Wetland 4 appears to be semi to permanently inundated/saturated. The wetland receives hydrology from precipitation and overland flow from adjacent uplands.

#### Wetland 5 (4.72± acre North Section)

Wetland 5 is located within a low-lying area on the central part of the North Section of the evaluation area. Elevated railroad tracks surround the wetland. Establishment of Wetland 5 appears to be attributed to poor surface water drainage in low-lying areas between rail lines. Wetland 5 is

dominated by Narrow-leaf Cattail (*Typha angustifolia*). This wetland has a direct surface water connection to Stream 1 (Roberts Millikin Ditch) via Stream 7 and 8. Based on visual observation, Wetland 5 appears to be semi to permanently inundated/saturated. The wetland receives hydrology from precipitation and overland flow from adjacent uplands. Wetland 5 is mapped with a PEM1C designation on the NWI map.

#### Wetland 6 (1.45± acre North Section)

Wetland 6 is located within a low-lying area on the central part of the North Section of the evaluation area. Elevated railroad tracks surround the wetland. Establishment of Wetland 6 appears to be attributed to poor surface water drainage in low-lying areas between rail lines. Wetland 6 is dominated by Narrow-leaf Cattail (*Typha angustifolia*). This wetland has a direct surface water connection to Stream 1 (Roberts Millikin Ditch) via Stream 6. Based on visual observation, Wetland 6 appears to be semi to permanently inundated/saturated. The wetland receives hydrology from precipitation and overland flow from adjacent uplands.

#### Wetland 7 (0.49± acre Central Section)

Wetland 7 is located within the wooded northwest part of the Central Section of the evaluation area. According to the USDA web soil survey map, this wetland is located within hydric Kokomo silty clay loam soils. Wetland 7 is mapped with a PFO1A designation on the NWI map. The wetland appears to receive hydrology from precipitation, overland flow from adjacent uplands, and flood waters from Stream 10. Stream 10 abuts the east side of the wetland and appears to provide surface water to Wetland 7 during prolonged precipitation events. Based on visual observation, Wetland 7 appears to be regularly inundated/saturated. Wetland 7 is generally dominated by American Elm (*Ulmus americana*), Swamp White Oak (*Quercus bicolor*), and Green Ash (*Fraxinus pennsylvanica*).

#### Wetland 8 (0.29± acre Central Section)

Wetland 8 is located within the wooded northwest part of the Central Section of the evaluation area. According to the USDA web soil survey map, this wetland is located within hydric Kokomo silty clay loam soils. The wetland appears to receive hydrology from precipitation, overland flow from adjacent uplands, and flood waters from Stream 10. Stream 10 abuts the north side of the wetland and appears to provide surface water to Wetland 8 during prolonged precipitation events. Based on visual observation, Wetland 8 appears to be seasonally saturated. Wetland 8 is generally dominated by Reed Canary Grass (*Phalaris arundinacea*) and Black Willow (*Salix nigra*).

#### Wetland 9 (1.10± acre South Section)

Wetland 9 is located within a channelized ditch along the western boundary of the South Section of the evaluation area. Based on visual observation, Wetland 9 appears to be semi to permanently inundated/saturated. Wetland 9 is generally dominated by Narrow-leaf Cattail (*Typha angustifolia*) and Black Willow (*Salix nigra*).

#### Wetland 10 (0.22± acre South Section)

Wetland 10 is a flooded depression on the western part of the South Section of the evaluation area. Railroad tracks abut the wetland to the south, east, and west with higher surface elevations to the north. Establishment of Wetland 10 appears to be attributed to poor surface water drainage in low-lying areas between rail lines. Based on visual observation, Wetland 10 appears to be semi to permanently inundated/saturated. The wetland receives hydrology from precipitation and overland flow from adjacent uplands. Wetland 10 is generally dominated by various Dogwood species (*Cornus species*), Black Willow (*Salix nigra*), and Narrow-Leaf Cattail (*Typha angustifolia*).

#### Wetland 11 (0.92± acre South Section)

Wetland 11 is located along the western part of the South Section of the evaluation area. This wetland is part of a wetland complex established due to numerous beaver impoundments within Stream 13. Several of these beaver dam structures are elaborate, flooding areas west of Stream 13. Wetland 11 appears to be permanently inundated by surface water, with flowing water observed at beaver dam locations. Wetland 11 appears to receive hydrology from precipitation and perennial surface water from Stream 13. Wetland 11 is generally dominated by Narrow-leaf Cattail (*Typha angustifolia*), Black Willow (*Salix nigra*), American Elm (*Ulmus americana*), Green Ash (*Fraxinus pennsylvanica*), Eastern Cottonwood (*Populus deltoides*), and various Dogwood (*Cornus species*) and Carex (*Carex species*) species. Dense brushy areas dominated by European Privet (*Ligustrum vulgare*) and Morrow's Honeysuckle (*Lonicera morrowii*) generally surround Wetland 11.

#### Wetland 12 (0.43± acre South Section)

Wetland 12 is located on the southern part of the South Section of the evaluation area. This wetland is located within a channelized ditch that has been impounded by beavers in numerous locations. These beaver impoundments of an apparently perennial ditch have facilitated the establishment of wetlands within the ditch limits. Wetland 12 appears to be permanently inundated by surface water, with flowing water observed at beaver dam locations. Wetland 12 appears to receive hydrology from precipitation and stormwater flow from areas to the west of the evaluation area. Wetland 12 is generally dominated by Narrow-leaf Cattail (*Typha* 

angustifolia), Black Willow (Salix nigra), and various Dogwood species (Cornus species). Dense brushy areas dominated by European Privet (Ligustrum vulgare) and Morrow's Honeysuckle (Lonicera morrowii) generally surround Wetland 12.

#### **4.2.2 PONDS**

COWC identified two (2) ponds (Pond 1 and Pond 2) totaling  $1.18\pm$  acre within the evaluation area. These ponds were delineated as Pond 1 ( $0.23\pm$  acre) and Pond 2 ( $0.95\pm$  acre), and further described below.

#### Pond 1 (0.23 ± acre)

Pond 1 is located on the western part of the Central Section of the evaluation area. Pond 1 appears to be a heavily silted excavation that partially impounds Stream 10, which flows through the central part of Pond 1. Pond 1 may provide a limited amount of stormwater retention from areas to the west of the evaluation area, and may help reduce the flow volume of Stream 10. This pond contains no rooted or emergent vegetation. Pond 1 is mapped with a PUBG designation on the NWI map.

#### Pond 2 (0.95± acre)

Pond 2 is located on the southern part of the South Section of the evaluation area. This pond appears to have been created by excavation, and does not impound a stream or apparent surface water feature. Two (2) round culvert outlet structures are located in the northeast part of the pond. Pond 2 is mapped with a PEM1A designation on the NWI map.

TABLE 4
POND INFORMATION

Pond ID	Acreage	Description	Location
Pond 1	0.23±	Impoundment	39.997153
			-83.131842
Pond 2	0.95±	Stormwater	39.964861
		Management	-83.131814
Total	1.18±		

#### 5.0 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

COWC identified twelve (12) wetlands (Wetland 1 through Wetland 12) totaling 13.53± acres, thirteen (13) streams (Stream 1 through Stream 13) totaling 10,377± linear feet, and two (2) ponds (Pond 1 and Pond 2) totaling 1.18± acre within the evaluation area.

COWC followed the Navigable Waters Protection Rule (effective June 22, 2020) to determine the potential regulatory status of surface water features identified with the evaluation area. Per Title 33 (Navigation and Navigable Waters) of the Code of Federal

Regulations (CFR), Chapter 2 (Corps of Engineers, Department of the Army, Department of Defense), Part 328 (Definition of Waters of the United States), Section 328.3 (Definitions), COWC has come to the following conclusions:

- Wetland 1 through Wetland 12 are likely considered waters of the U.S. per 33 CFR 328.3(a)(4), as they appear to meet the definition "adjacent wetlands" per 33 CFR 328.3(c)(1)(i)-(iv).
- Stream 1, Stream 3, Stream 4, Stream 5, Stream 6, Stream 9, Stream 10, Stream 11, Stream 12, and Stream 13 are likely considered waters of the U.S. per 33 CFR 328.3(a)(2), as they appear to meet the definition of ""tributaries" per 33 CFR 328.3(c)(12).
- Stream 2, Stream 7, and Stream 8 are likely considered "non-jurisdictional waters" or "excluded features" because they appear to be ephemeral. Ephemeral features are considered "non-jurisdictional waters" per 33 CFR 328.3(b)(3). "Ephemeral" is defined in 33 CFR 328.3(c)(3) as "surface water flowing or pooling only in direct response to precipitation (e.g. rain or snow fall).
- Pond 1 is likely considered waters of the U.S. per 33 CFR 328.3(a)(3), as Pond 1 appears to meet the definition of "lakes and ponds, and impoundments of jurisdictional waters" per 33 CFR 328.3(c)(6).
- Pond 2 may be considered "non-jurisdictional" or "excluded" per 33 CFR 328.3 (b)(10), as Pond 2 appears to meet the definition of a "stormwater control feature constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off".

Except for Stream 2, Stream 7, Stream 8, and Pond 2, surface water features identified within the evaluation area are likely to be regulated by the USACE. Section 404 of the CWA requires pre-construction notification (PCN) to the USACE and a Department of the Army (DA) permit prior to discharging dredged or fill material into waters of the U.S.

Stream 2, Stream 7, and Stream 8 appear to have ephemeral characteristics; therefore, may fall under the jurisdiction of the Ohio EPA. Ephemeral streams in the State of Ohio are regulated by the Ohio EPA. Certain situations may require a pre-activity notice (PAN) to the Ohio EPA for ephemeral stream impacts.

Pond 2 may be a non-regulated feature, as it appears to have been constructed for stormwater control use.

The USACE has authority to determine the jurisdictional status of surface water features identified within the evaluation area. Therefore, findings in this report are preliminary until verified by the USACE. COWC recommends obtaining an Approved Jurisdictional Determination (AJD) from the USACE Huntington, WV District Office for written verification of the findings documented within this report. With your authorization, COWC will supply the required information to process this request. With this reported

information and/or a site visit, the USACE will make the official determination on jurisdiction. The findings and conclusions of this delineation report are subject to change, pending USACE verification. This report will become public information upon submittal to the USACE.

#### 6.0 SIGNATURE OF PROFESSIONAL PERSONNEL

To the best of our professional knowledge and belief, COWC personnel responsible for this report declare we have the specific qualifications based on education, training, and experience to assess the evaluation area for waters of the U.S. and isolated waters of the State of Ohio. The jurisdictional waters delineation has been conducted in a manner consistent with the criteria contained in the USACE Wetlands Delineation Manual (1987) and the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, and with the level of care and skill ordinarily used by similar professionals performing similar services under similar conditions in the vicinity of the evaluation area.

COWC appreciates the opportunity to serve you on this project. Please contact COWC owner Matt Kaminski at <a href="mailto:mkaminski434@gmail.com">mkaminski434@gmail.com</a> with any questions or concerns regarding this report.

Respectfully submitted,

Central Ohio Wetland Consulting, LLC

Prepared by:

Matthew R. Kaminski, Owner

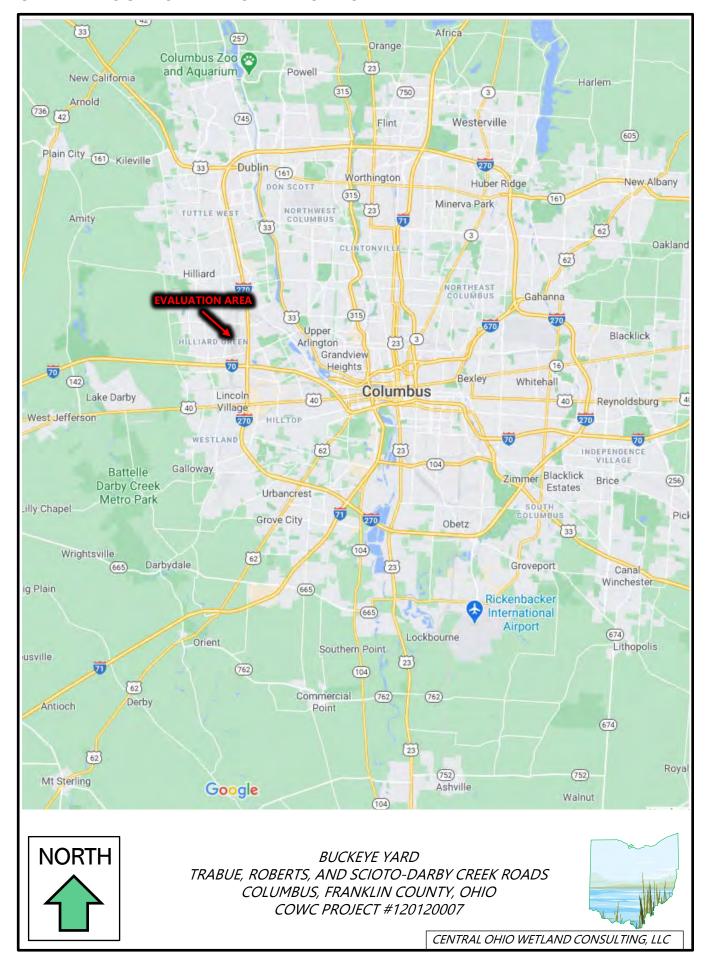
Mettle R. Karreli

Wetland Scientist, 401/404 Specialist

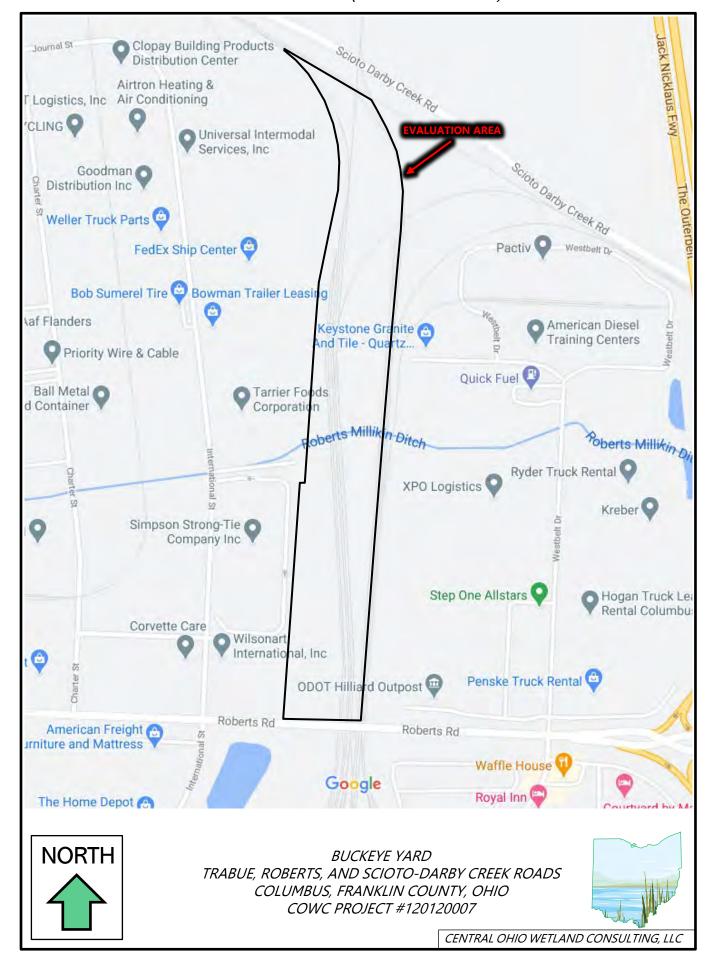
Matthew R. Kaminski holds a Bachelor of Science Degree in Environmental Geography from Ohio University with 16 years of experience as an environmental consultant. Mr. Kaminski has completed hundreds of jurisdictional waters delineations throughout the State of Ohio upon completion of the 38 Hour Army Corps of Engineers Wetland Delineation & Management Training Program in 2006. Mr. Kaminski's experience includes wetland/stream delineation, plant identification, stream evaluations, 404/401 permitting, Ohio Rapid Assessment Method v. 5.0, Clean Water Act (CWA) regulations, Sections 7 & 9 of the Endangered Species Act (ESA), and Ohio Historic Preservation Office (OHPO) Section 106. Throughout his career, Mr. Kaminski has successfully facilitated regulatory approval of numerous residential, commercial, and institutional projects. Since September 2020, Mr. Kaminski has been sole proprietor of Central Ohio Wetland Consulting, LLC, offering comprehensive wetland and stream consultation and guidance for commercial and residential developers, architects, civil design professionals, and private individuals. Professional wetland and stream consulting services include preliminary jurisdictional waters assessments, wetland/stream delineation, approved and preliminary jurisdictional determination requests, and 404/401 permitting services.

APPENDIX 1	

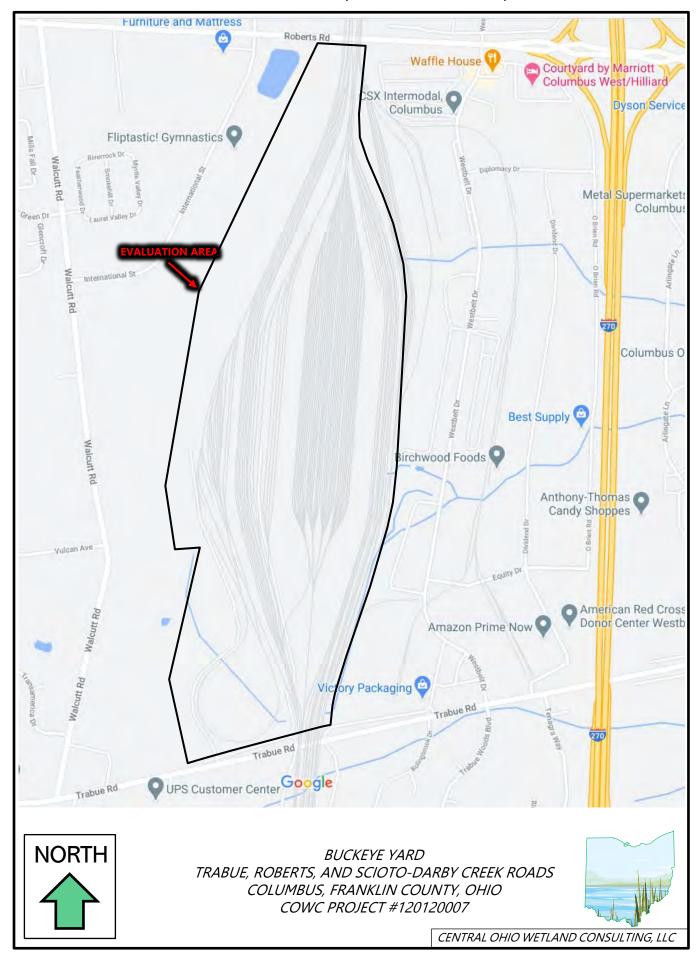
#### GENERAL LOCATION MAP OF EVALUATION AREA



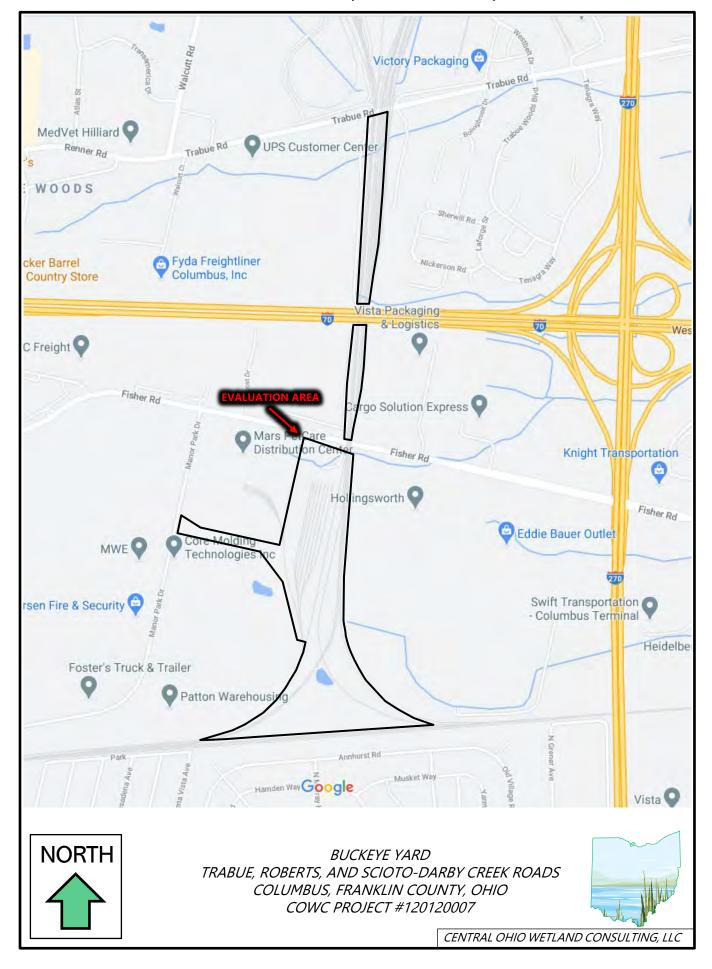
#### LOCATION MAP OF EVALUATION AREA (NORTH SECTION)



### LOCATION MAP OF EVALUATION AREA (CENTRAL SECTION)



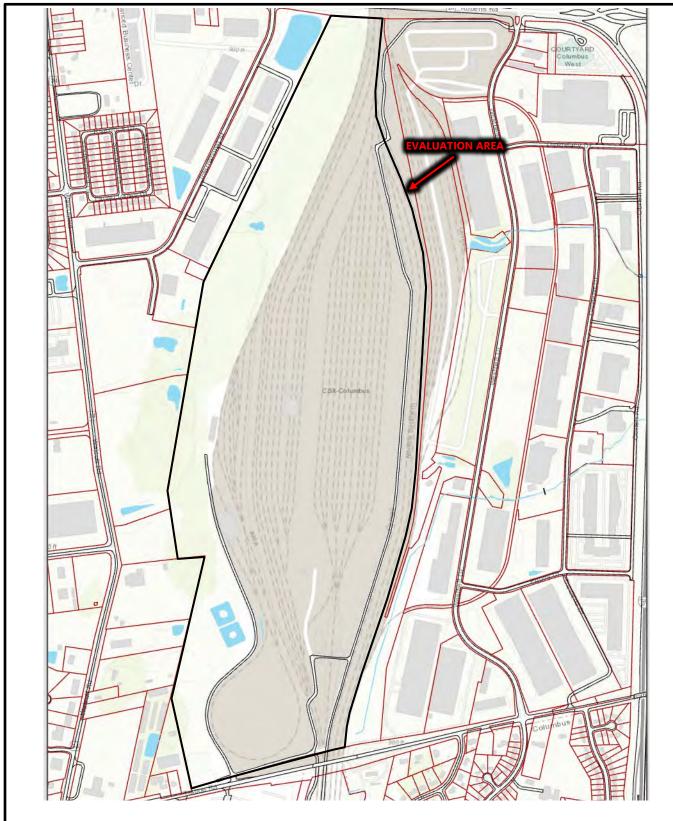
## LOCATION MAP OF EVALUATION AREA (SOUTH SECTION)



# FRANKLIN COUNTY AUDITOR GIS MAP (NORTH SECTION)



# FRANKLIN COUNTY AUDITOR GIS MAP (CENTRAL SECTION)



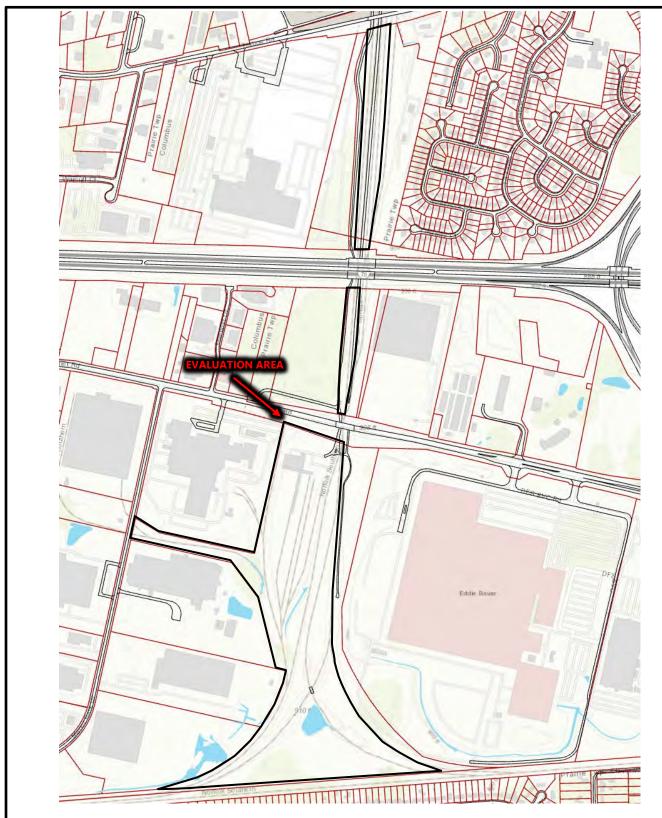


BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007



CENTRAL OHIO WETLAND CONSULTING, LLC

# FRANKLIN COUNTY AUDITOR GIS MAP (SOUTH SECTION)

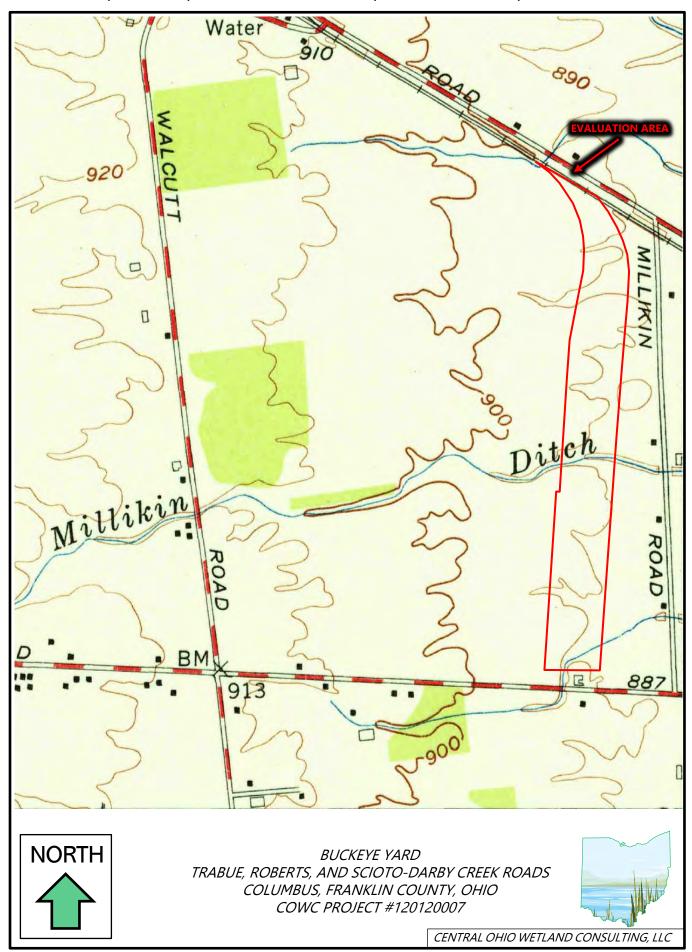




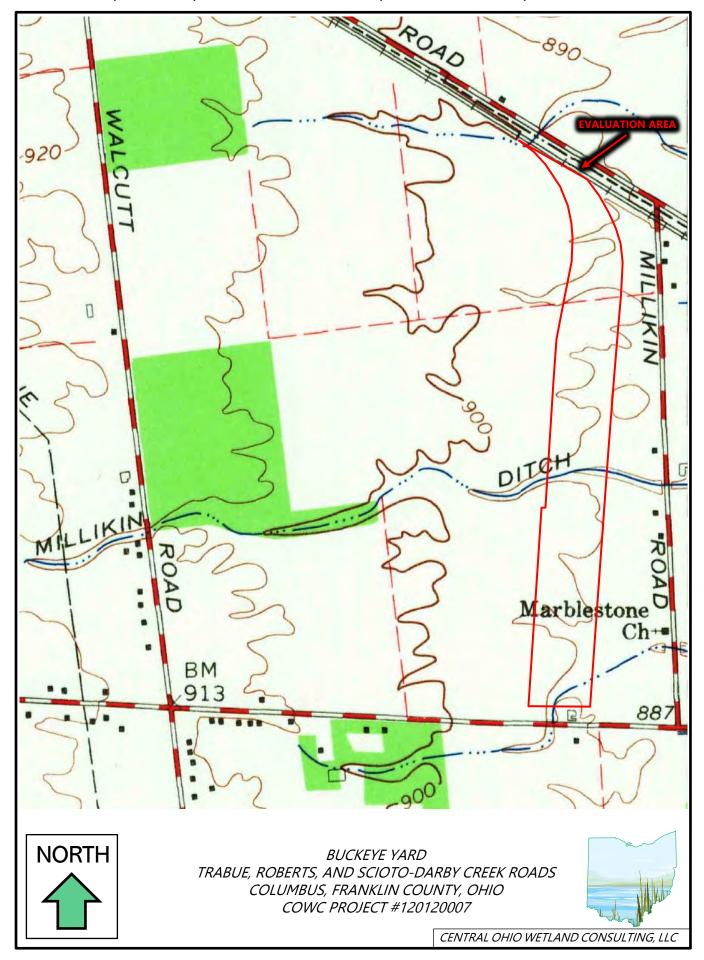
BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

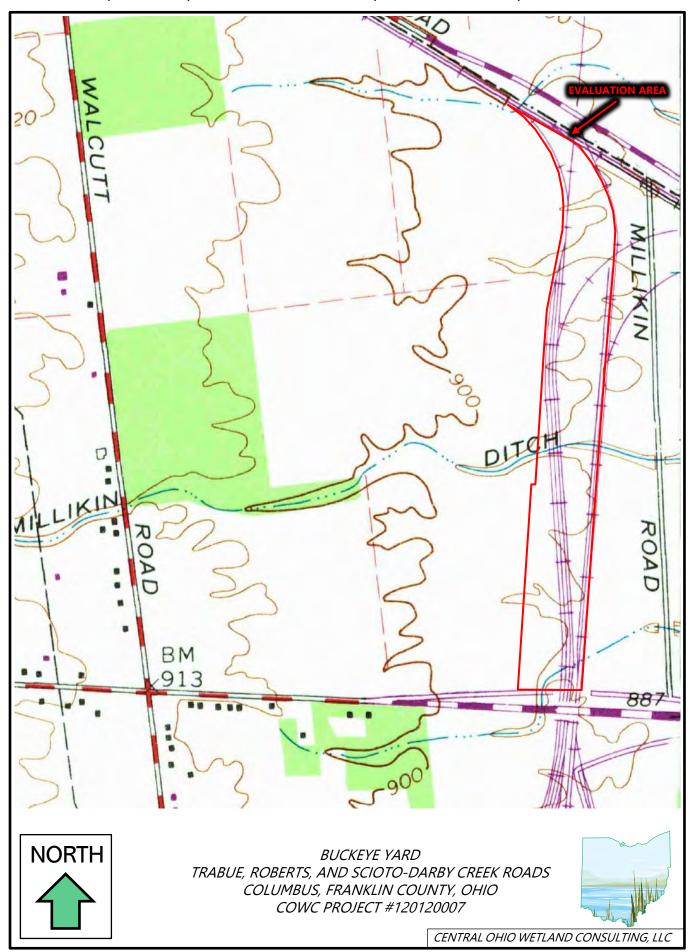


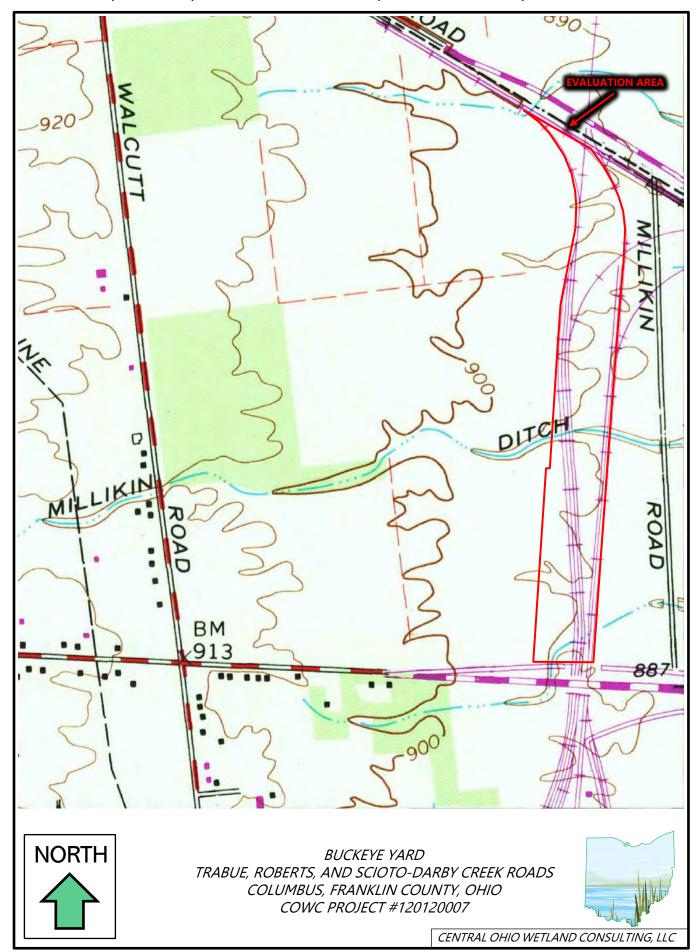
CENTRAL OHIO WETLAND CONSULTING, LLC

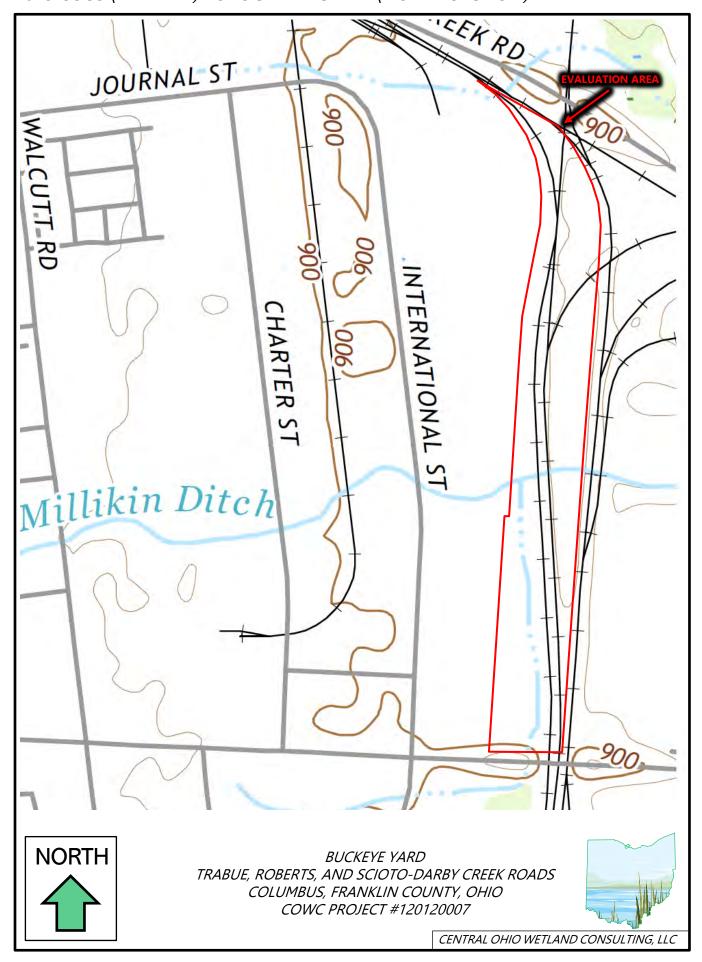


## 1966 USGS (HILLIARD) TOPOGRAPHIC MAP (NORTH SECTION)

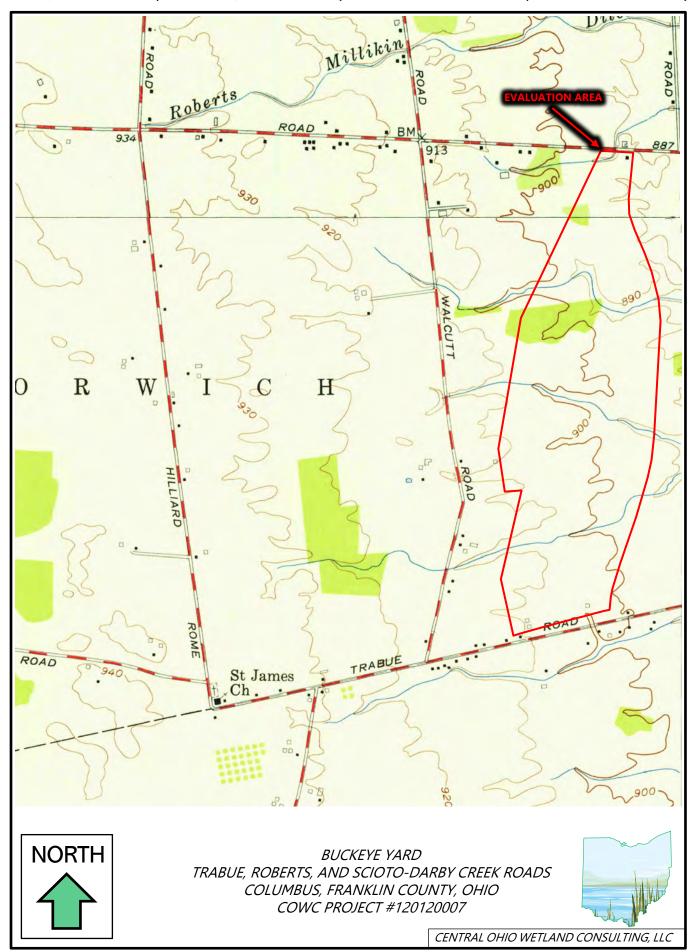




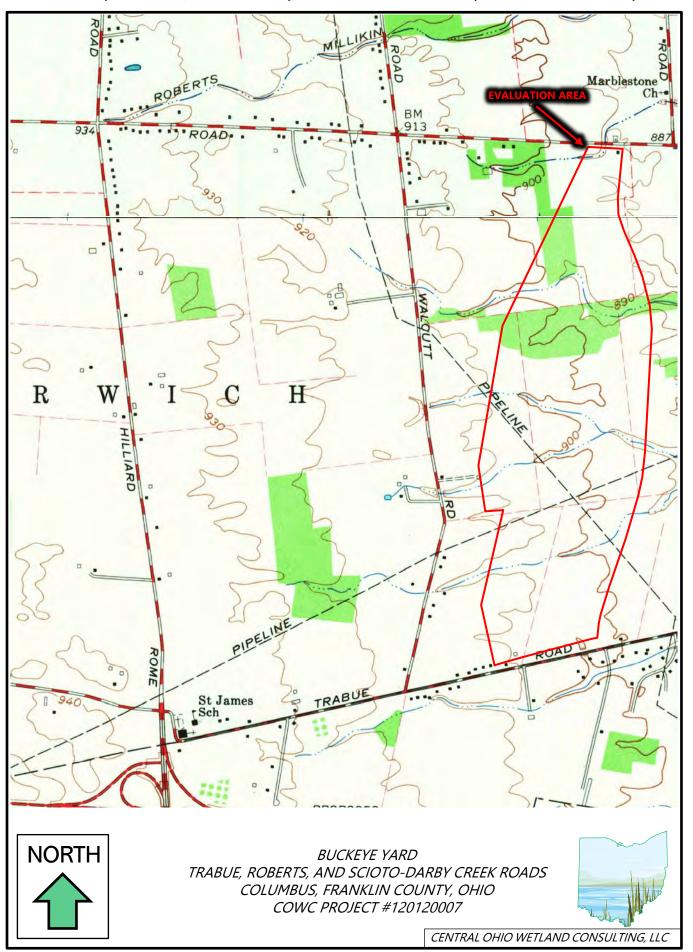




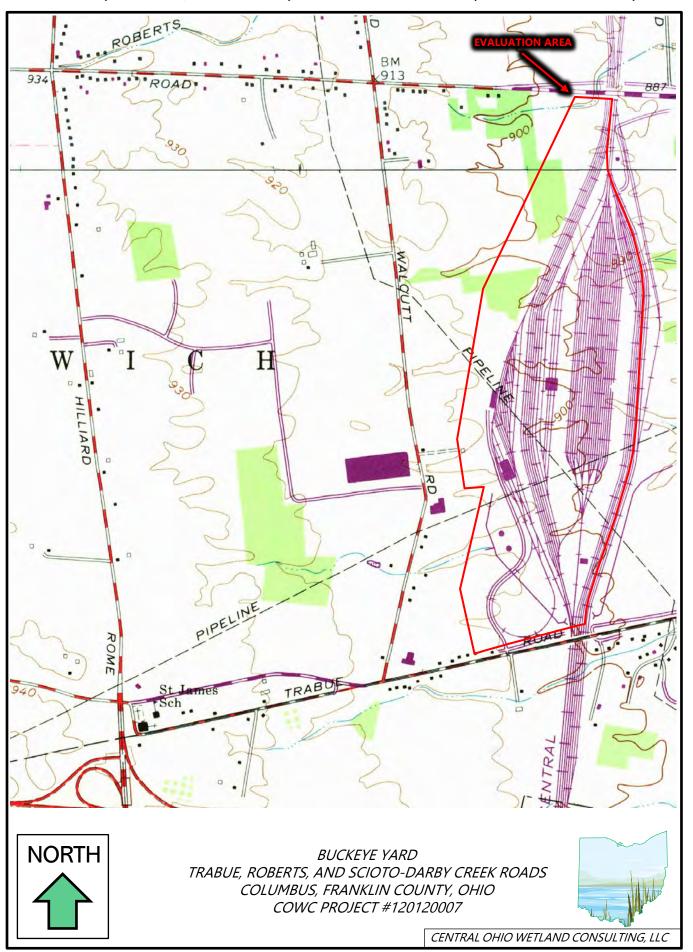
## 1954/1955 USGS (HILLIARD/GALLOWAY) TOPOGRAPHIC MAP (CENTRAL SECTION)



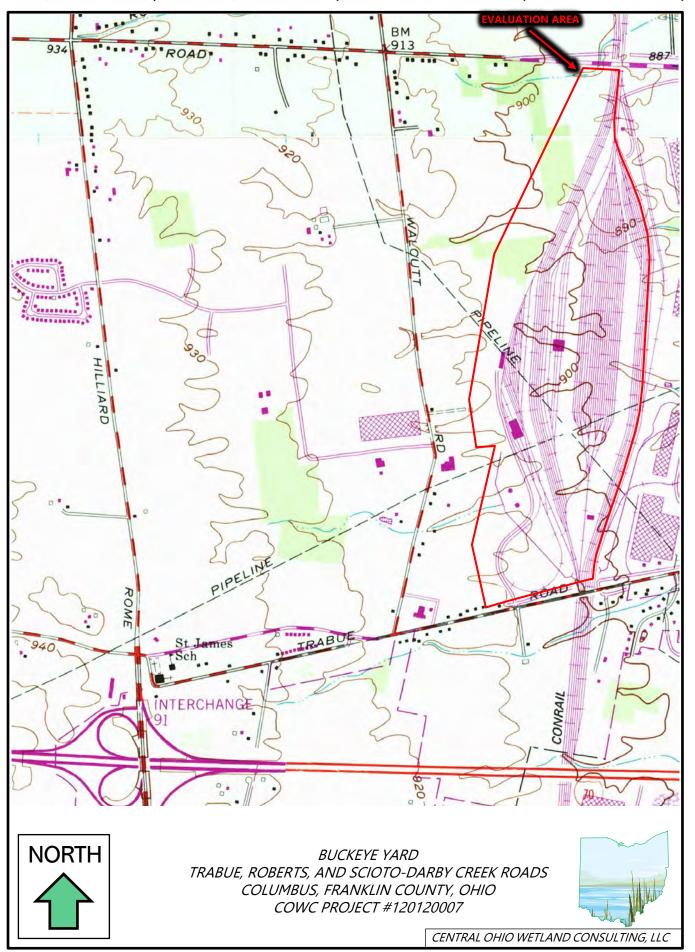
## 1966 USGS (HILLIARD/GALLOWAY) TOPOGRAPHIC MAP (CENTRAL SECTION)



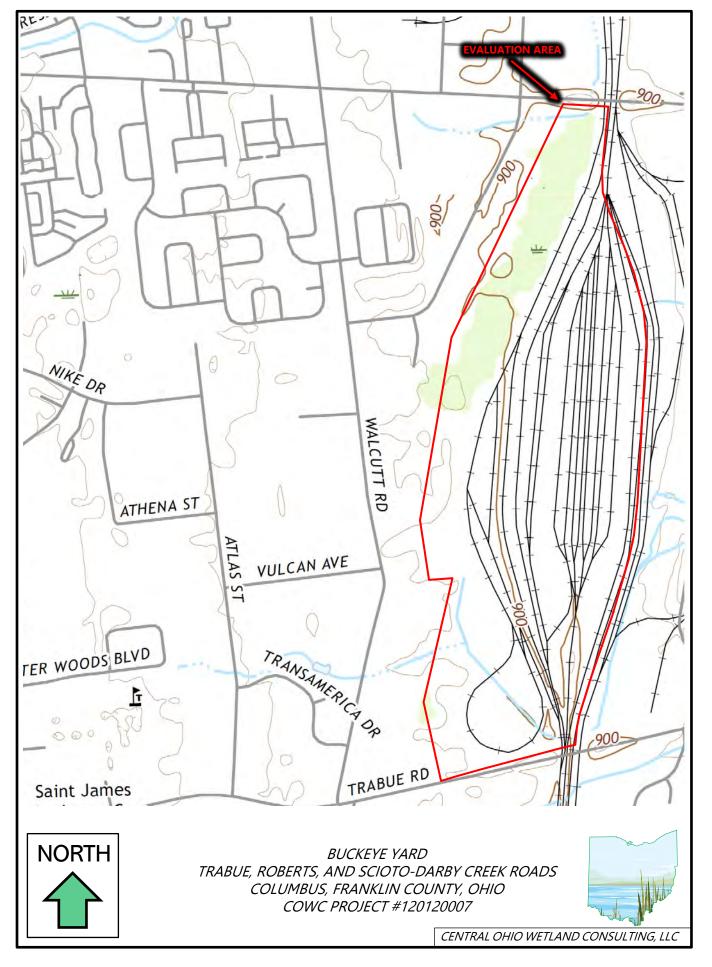
# 1973 USGS (HILLIARD/GALLOWAY) TOPOGRAPHIC MAP (CENTRAL SECTION)

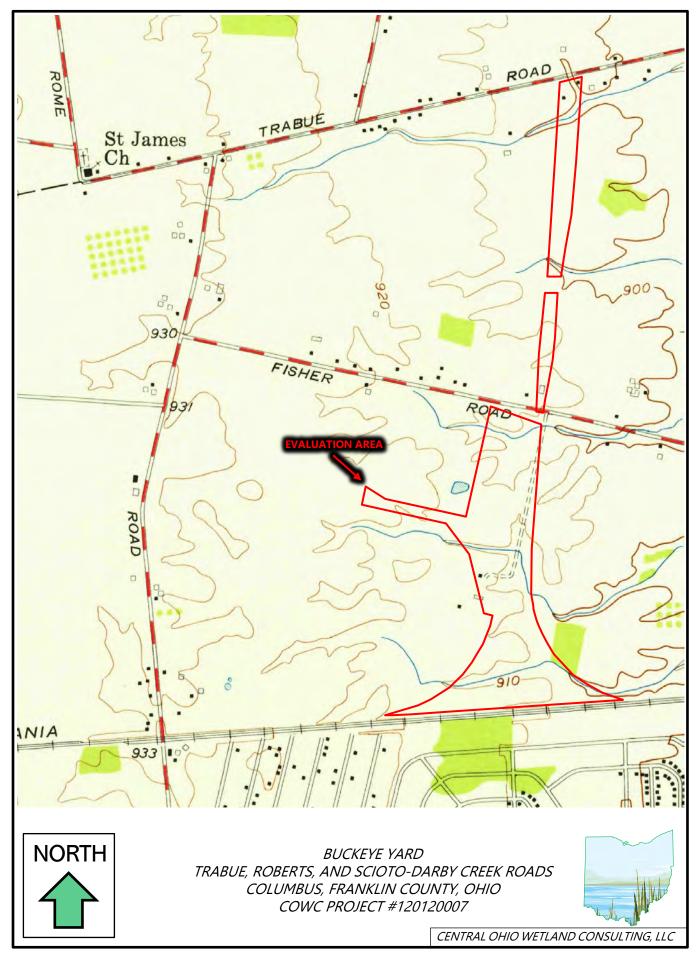


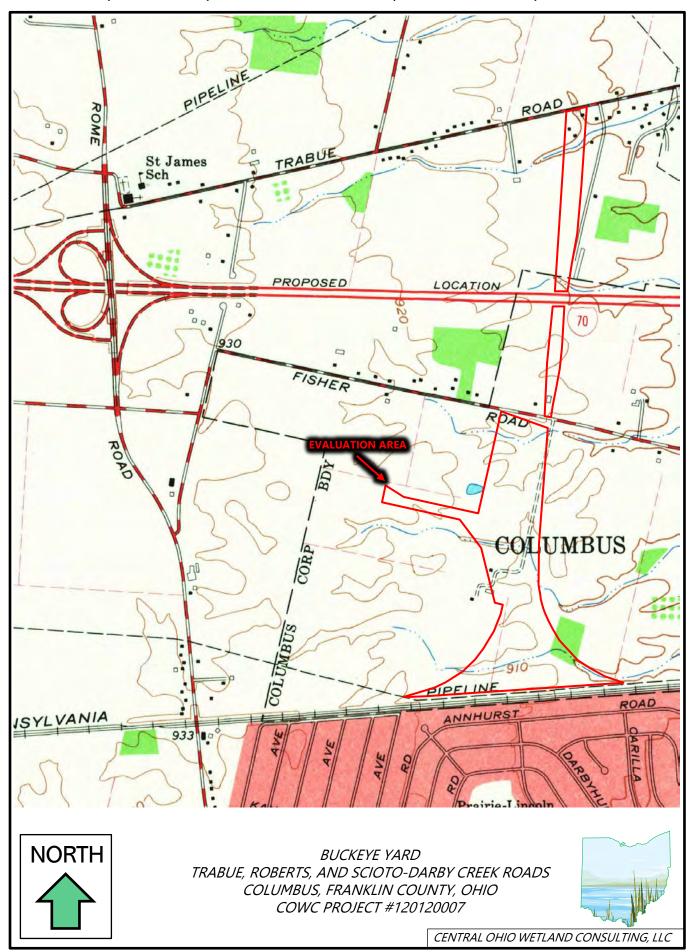
## 1980/1981 USGS (HILLIARD/GALLOWAY) TOPOGRAPHIC MAP (CENTRAL SECTION)

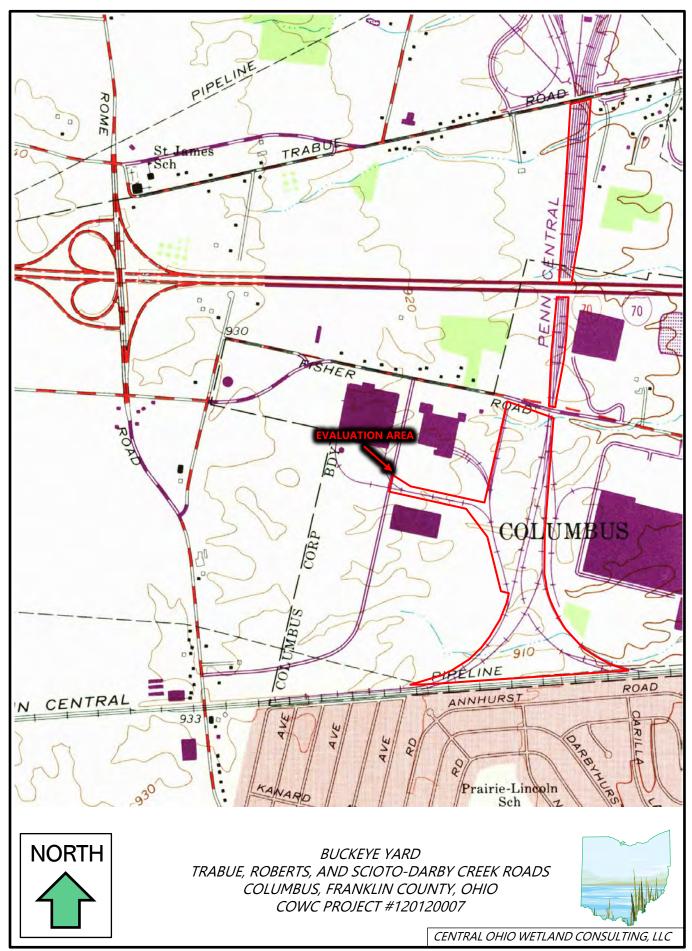


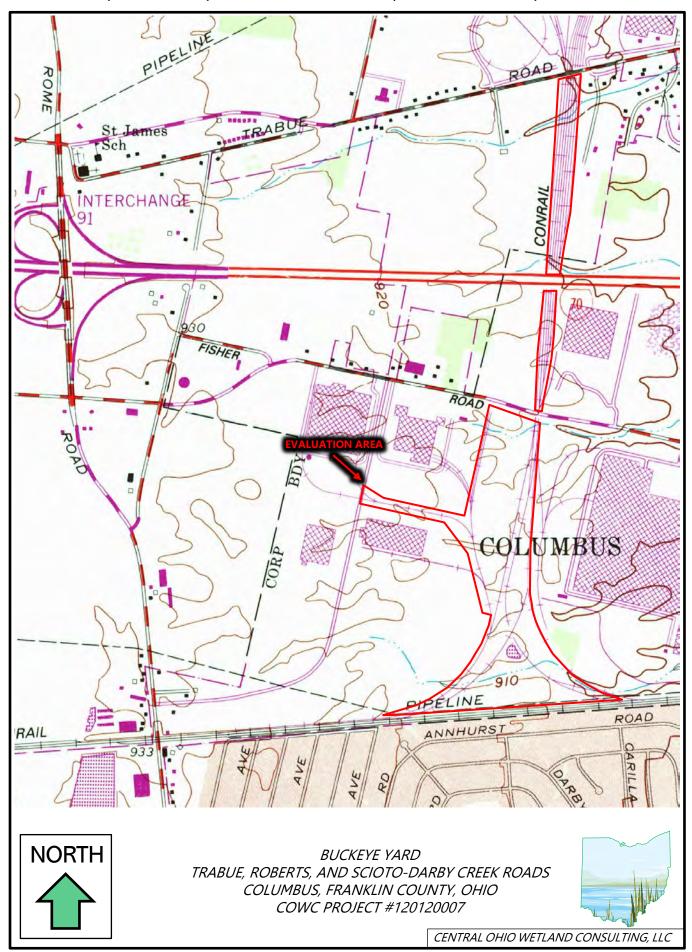
#### 2019 USGS (HILLIARD/GALLOWAY) TOPOGRAPHIC MAP (CENTRAL SECTION)

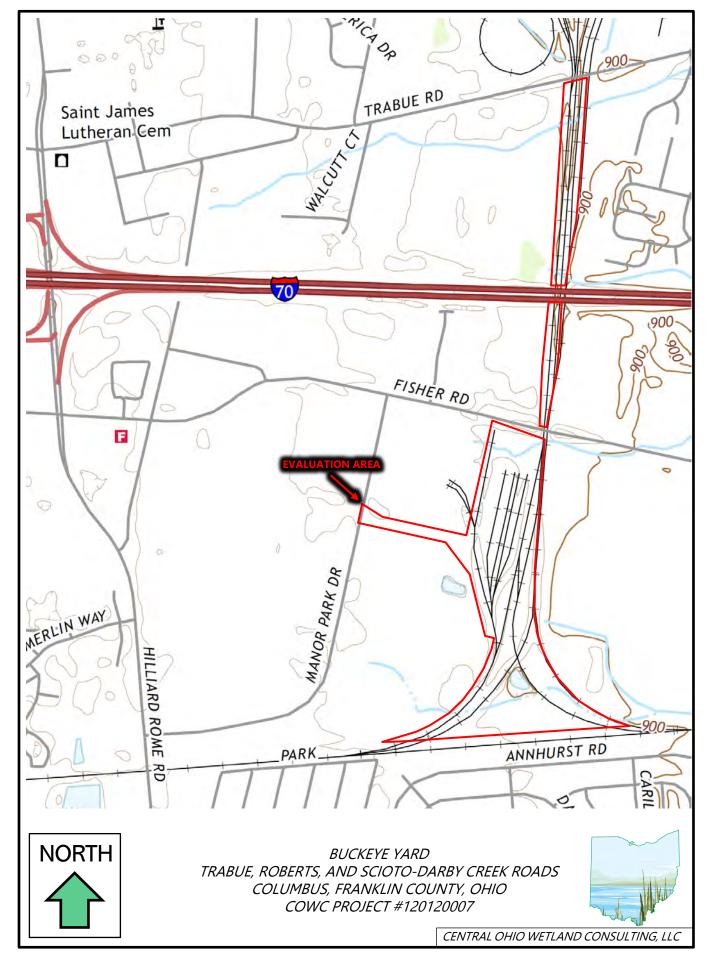




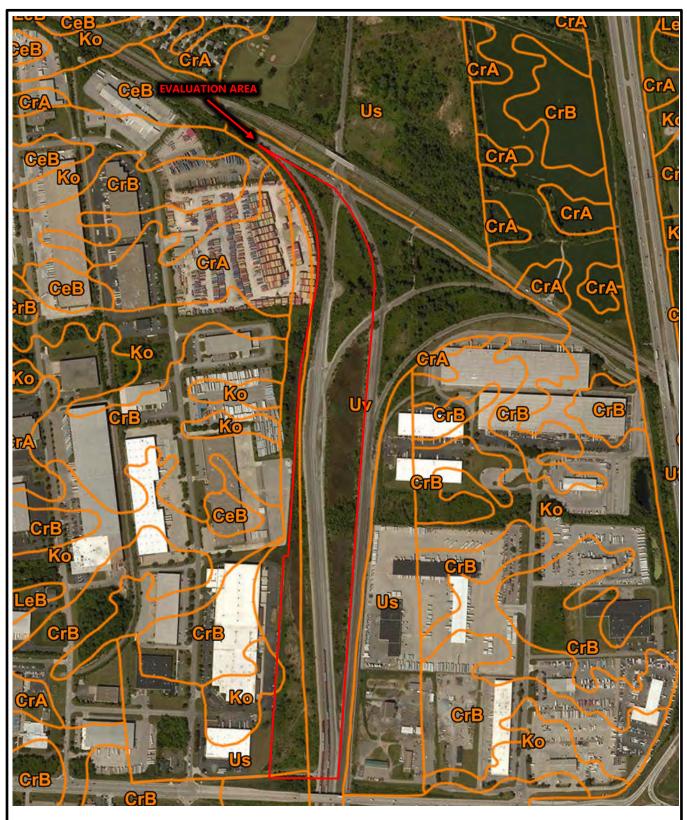








## USDA WEB SOIL SURVEY MAP (NORTH SECTION)

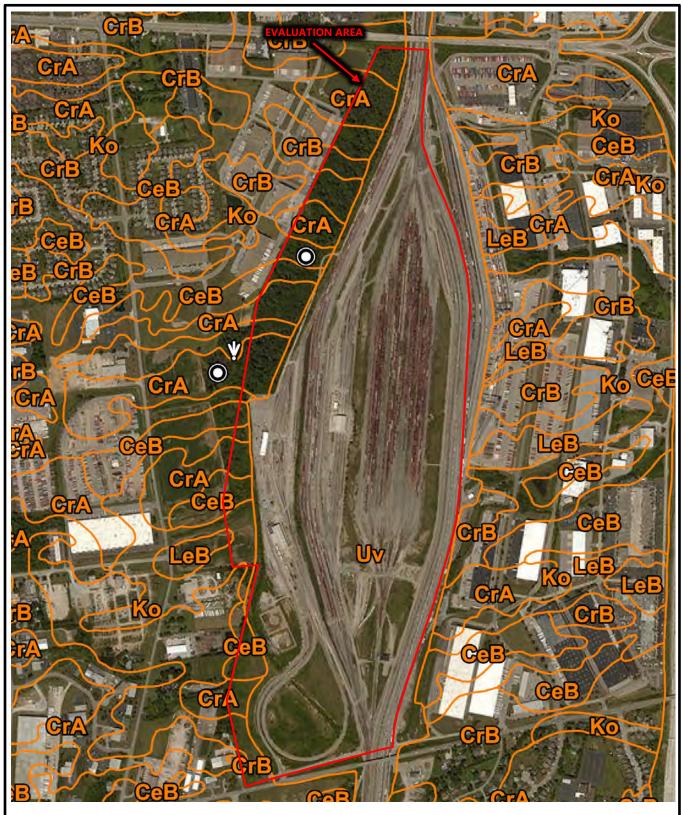




BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007



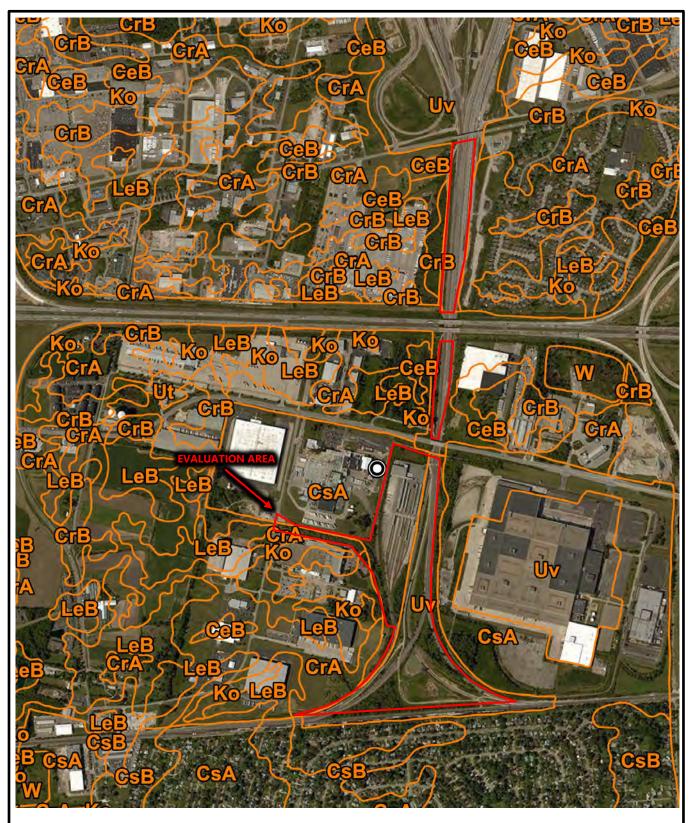
## USDA WEB SOIL SURVEY MAP (CENTRAL SECTION)





BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007

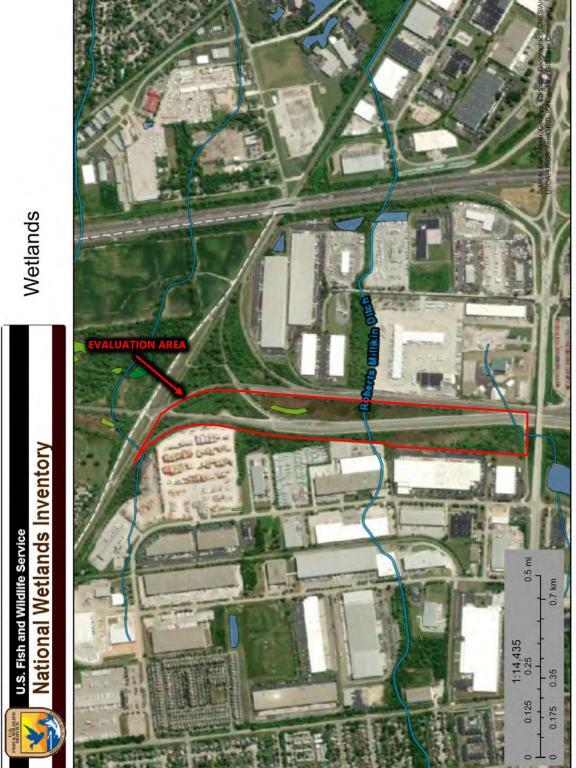






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007





This map is for general reference only. The US Fish a Service is not responsible for the accuracy or currentr base data shown on this map. All wetlands related dat be used in accordance with the layer metadata found Wetlands Mapper web site.

Riverine

November 20, 2020

Netlands

Estuarine and Marine Deepwater

Freshwater Forested/Shrub Wetland Freshwater Emergent Wetland

Freshwater Pond

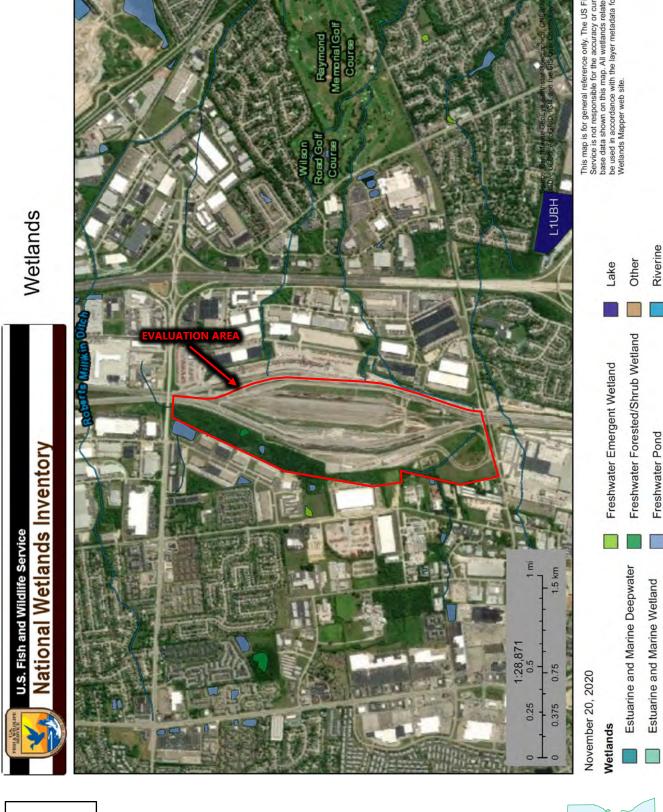
Estuarine and Marine Wetland

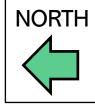
**BUCKEYE YARD** TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007





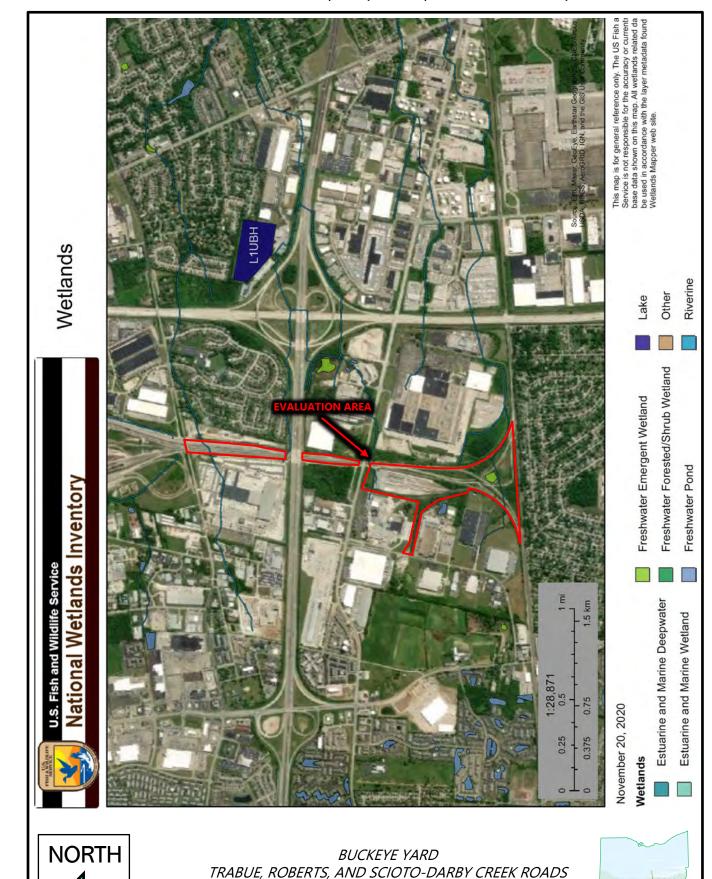
NORTH





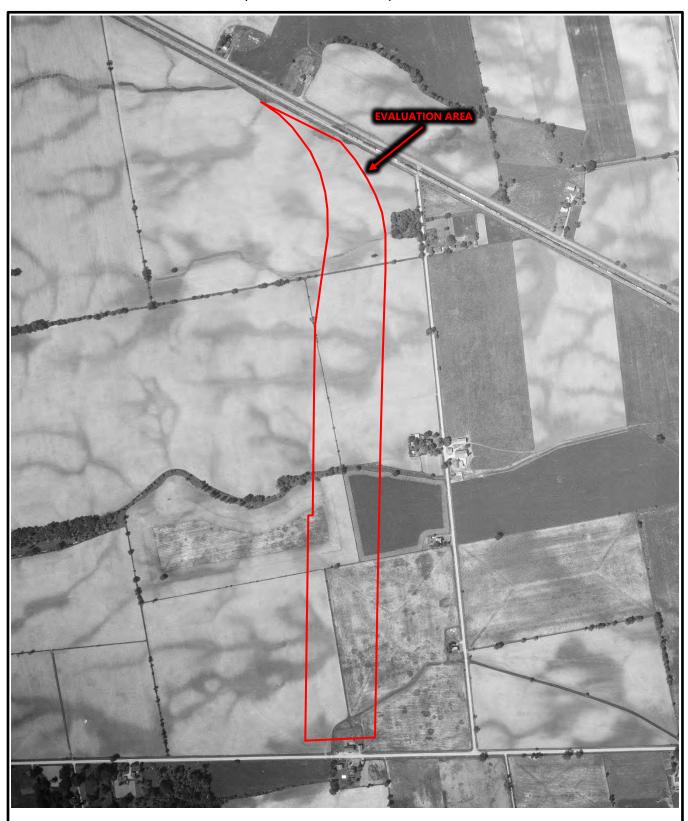
BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007





COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007

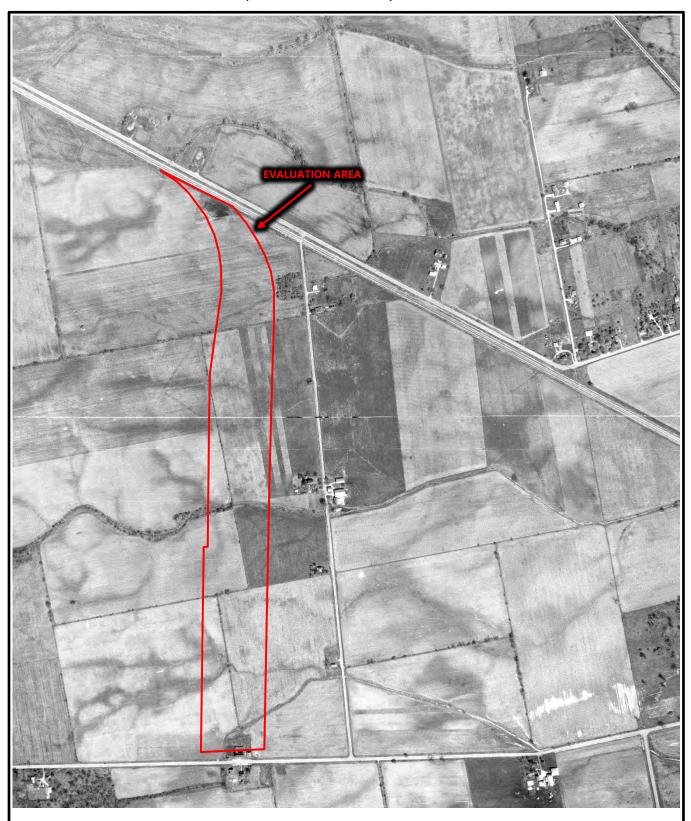
APPENDIX 2	





BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

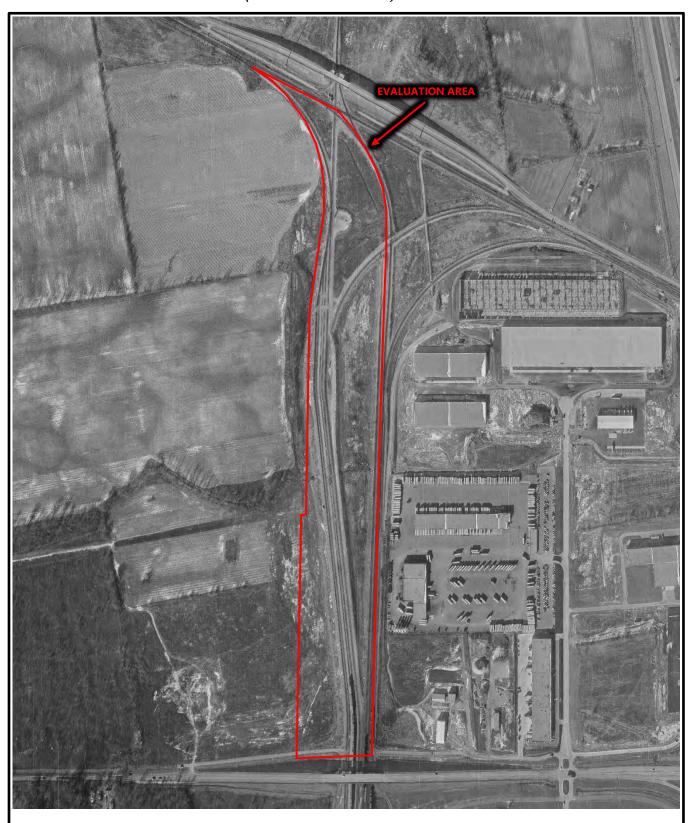






BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007

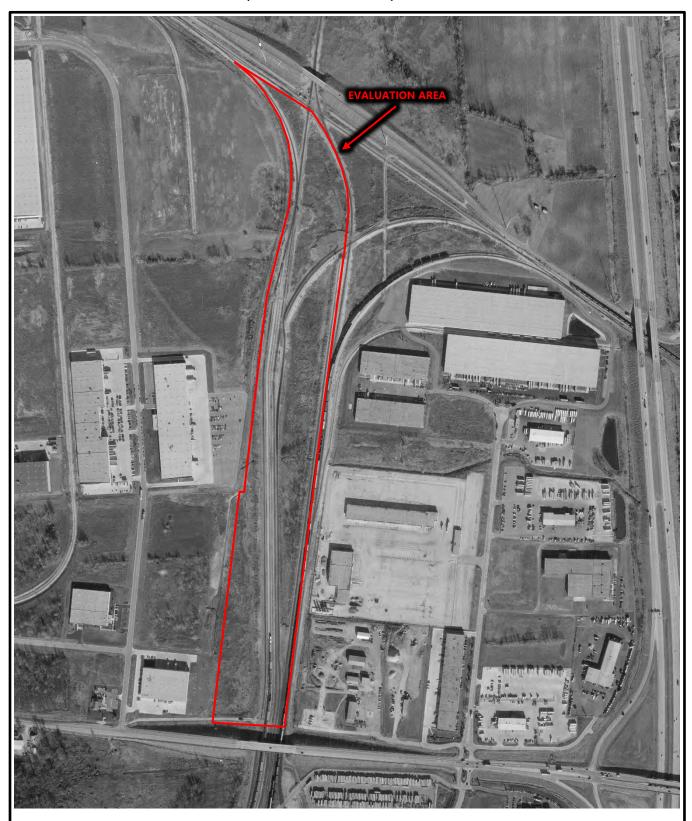






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

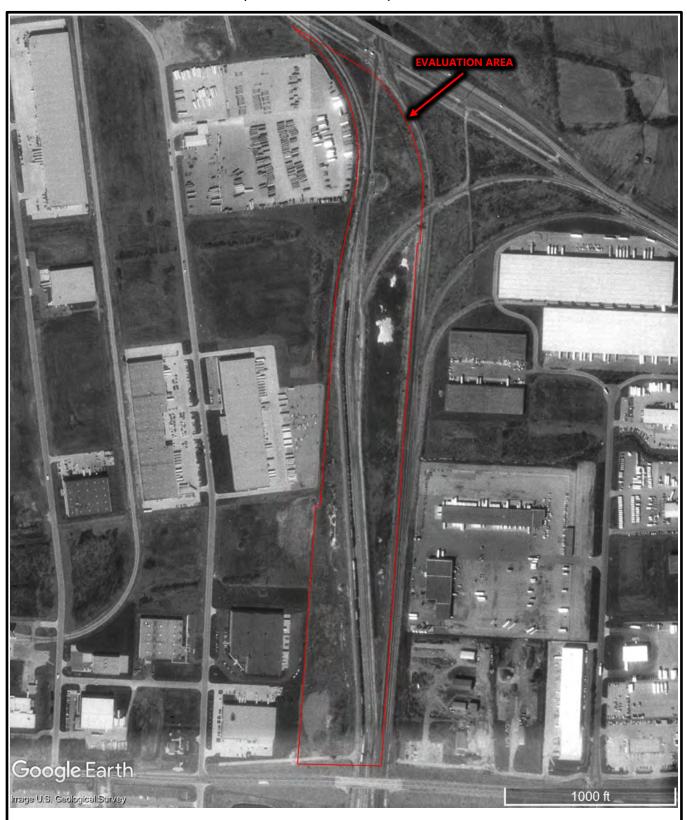






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

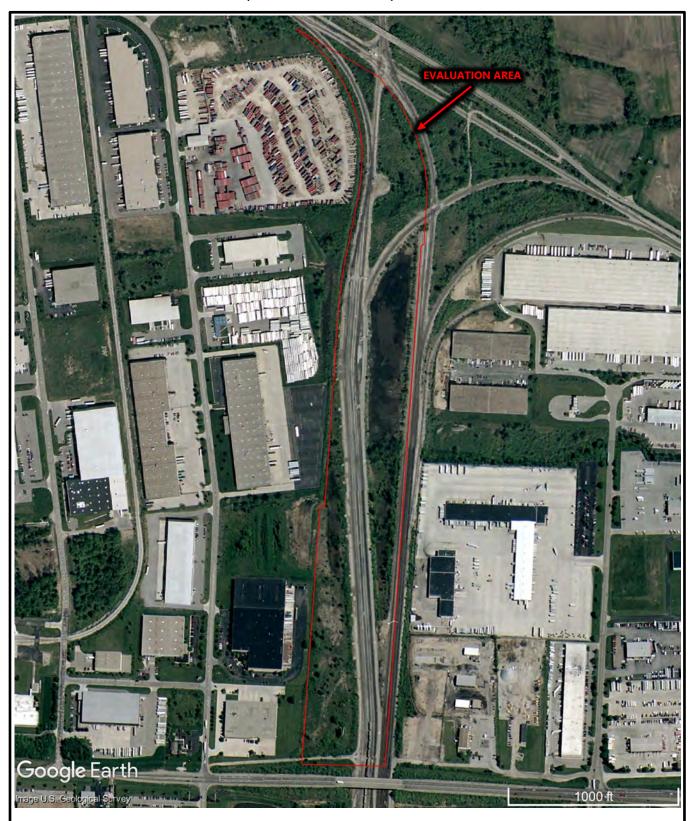






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

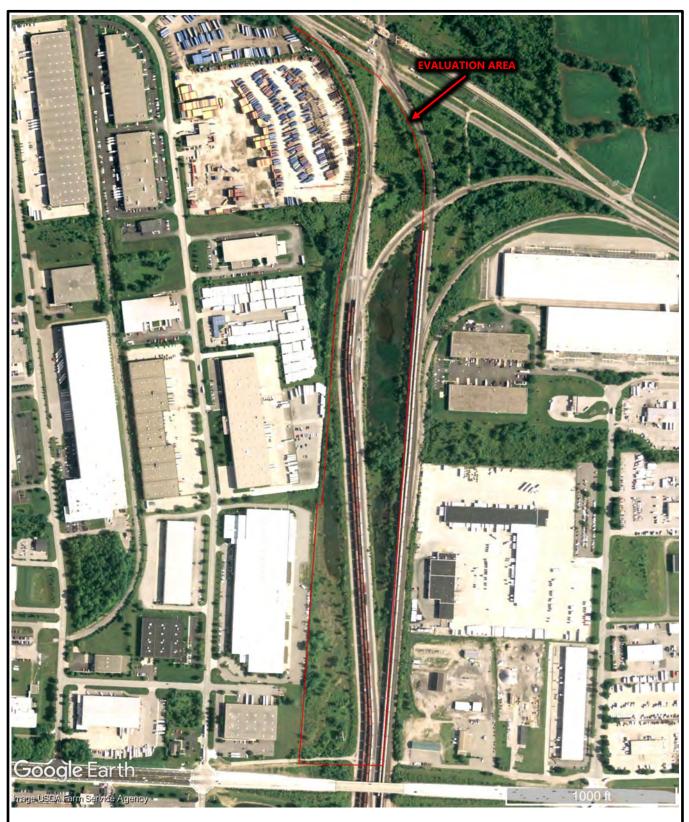






BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007

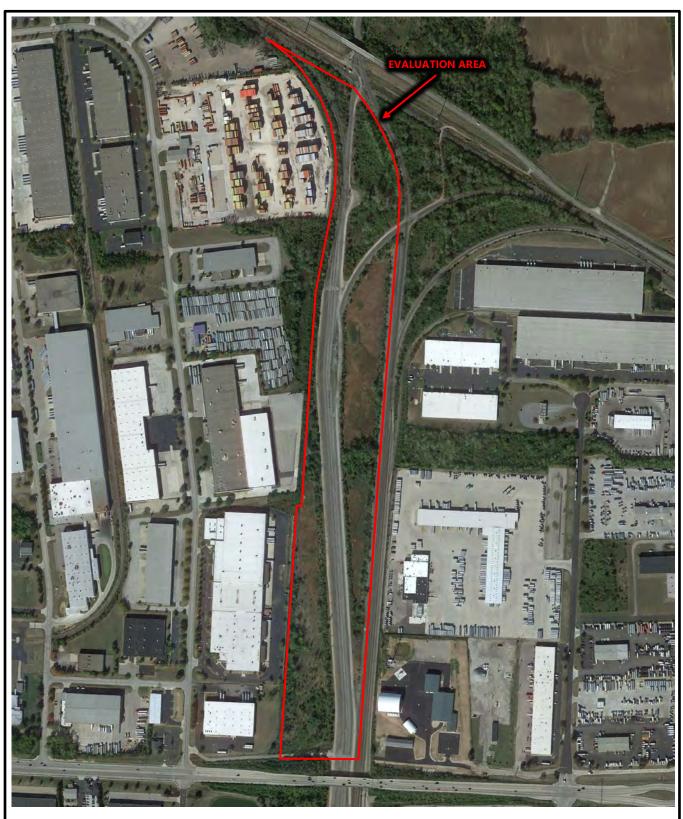






BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007

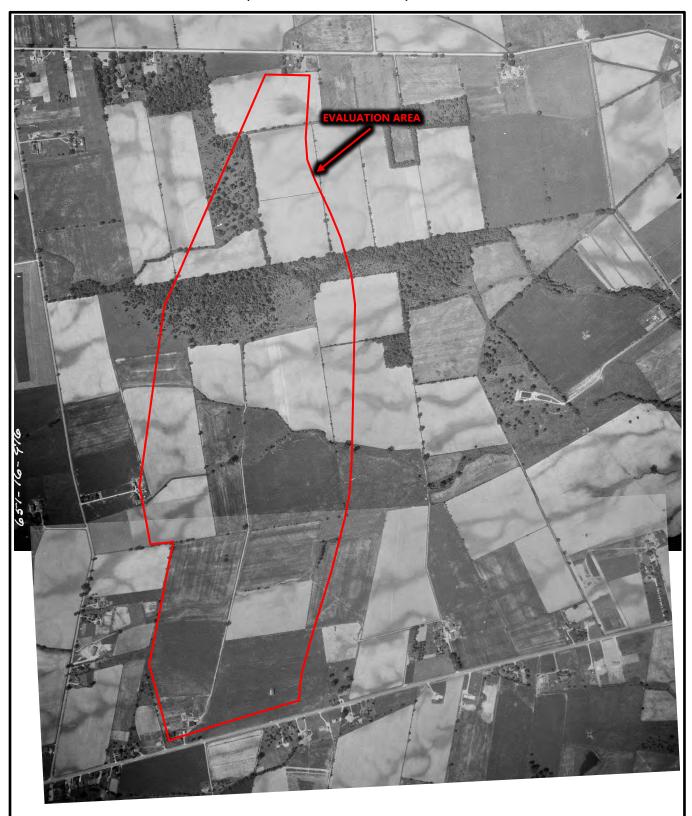






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

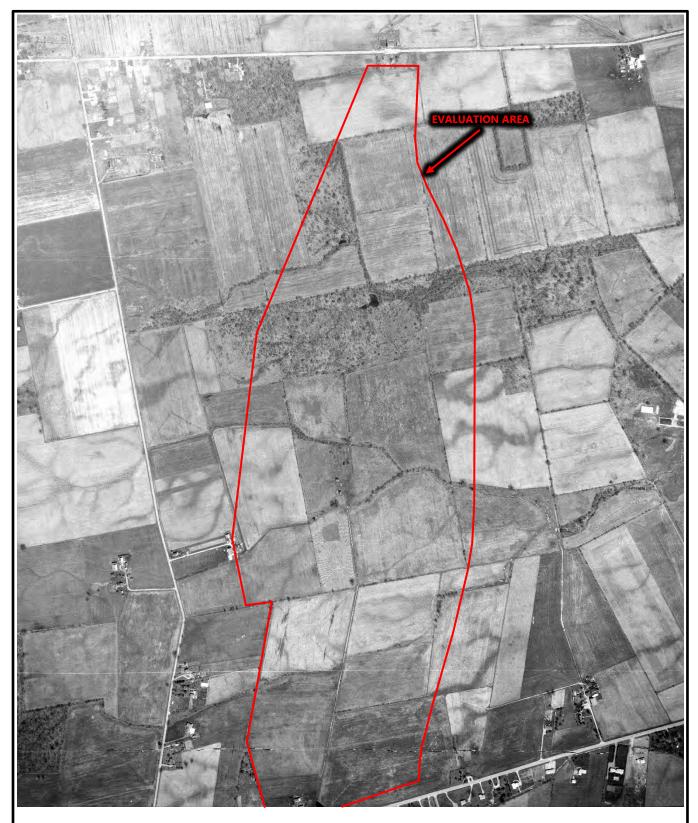






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

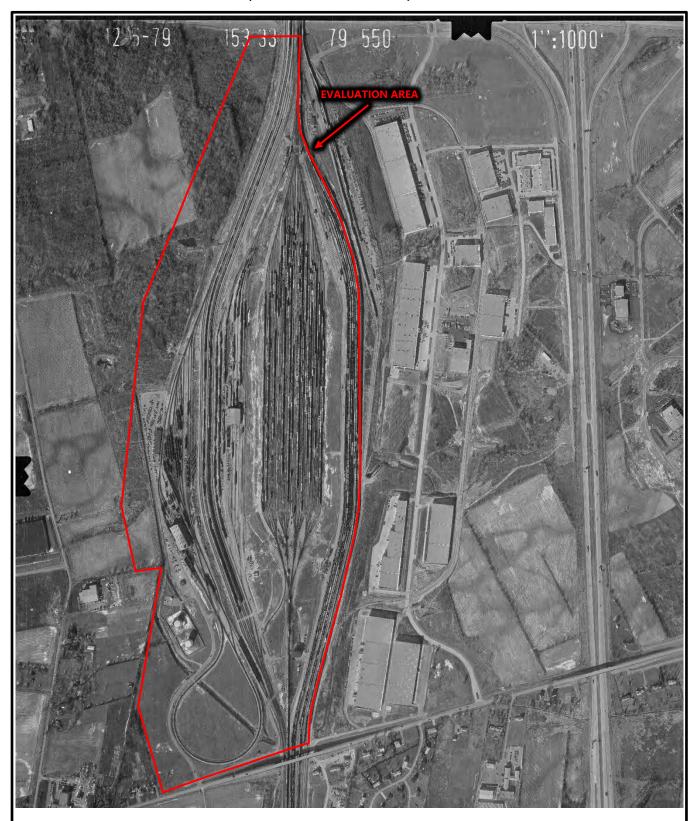






BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007

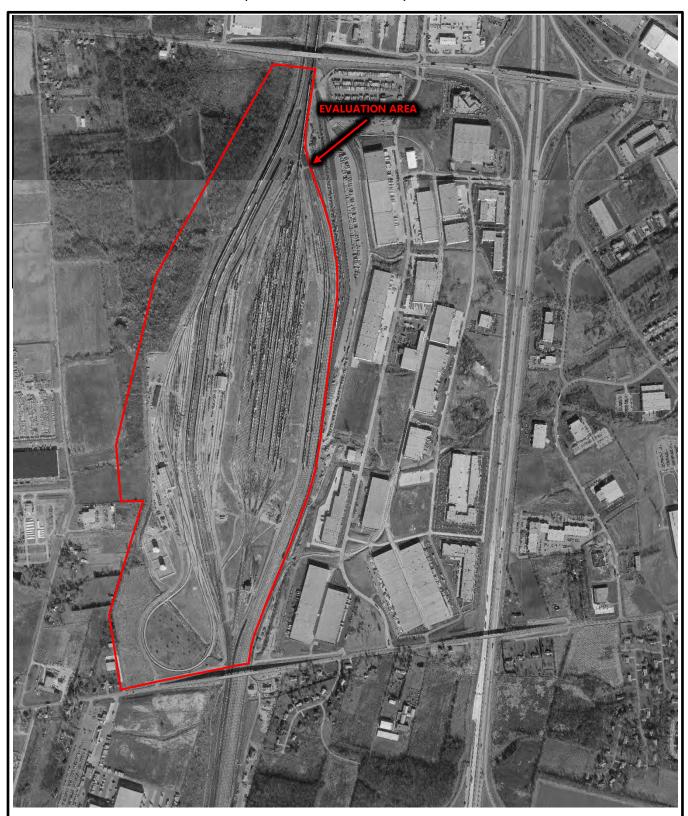






BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007

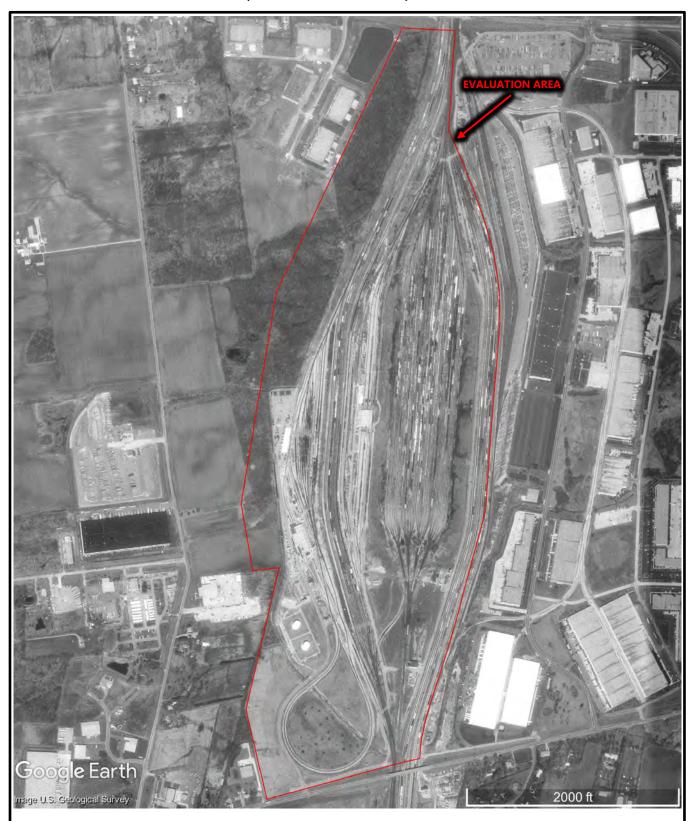






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007







BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007







BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007



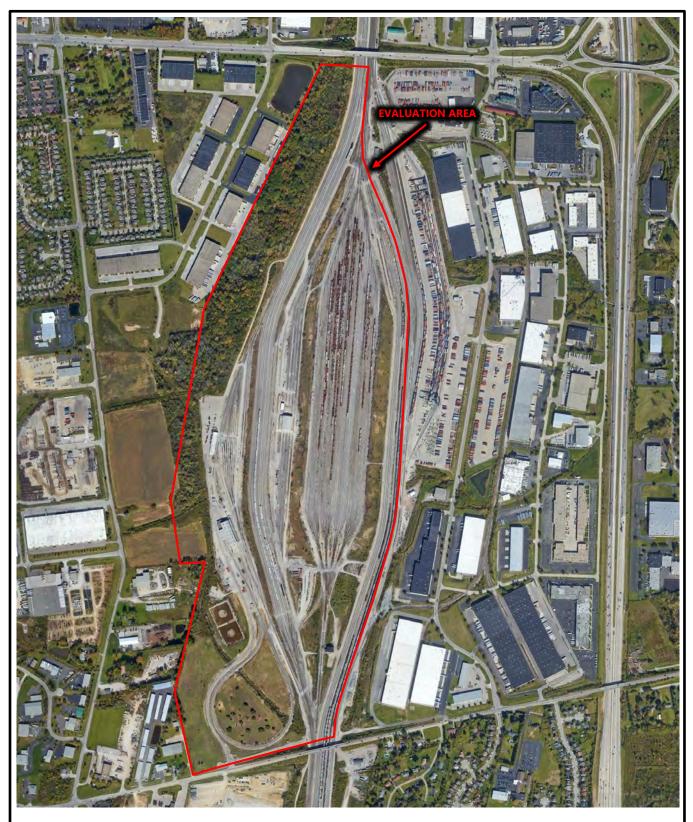




BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007



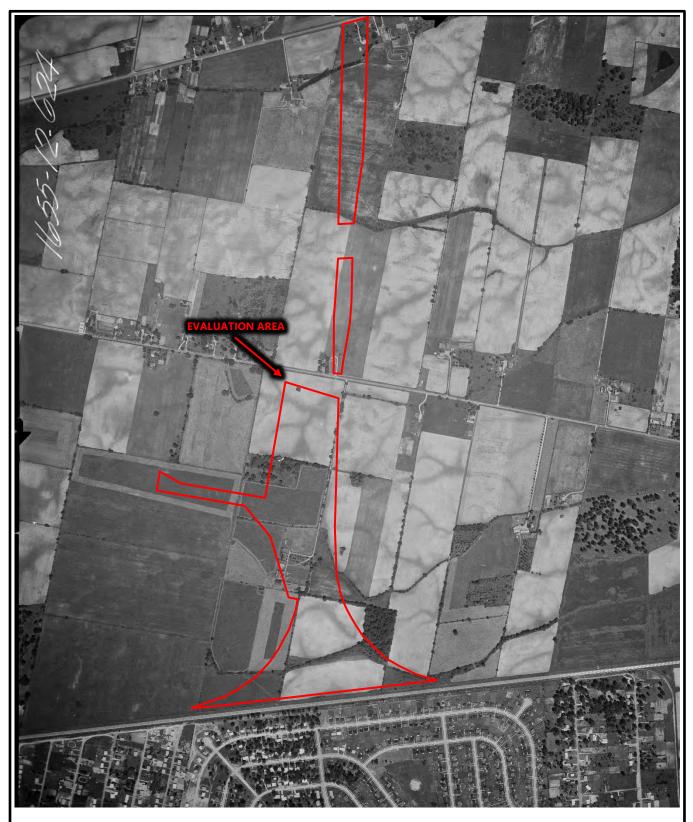
# 2019 AERIAL PHOTOGRAPH (CENTRAL SECTION)





BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

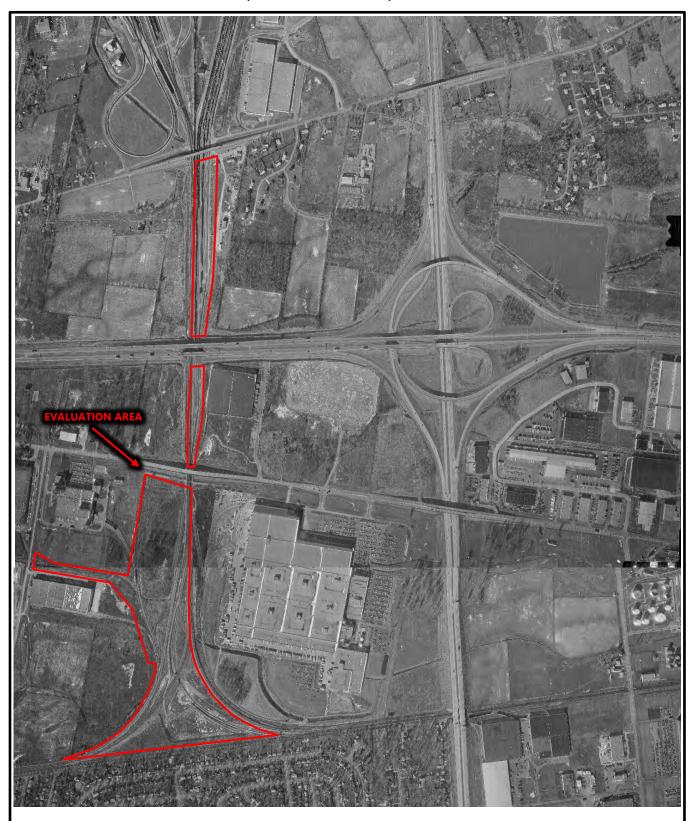






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

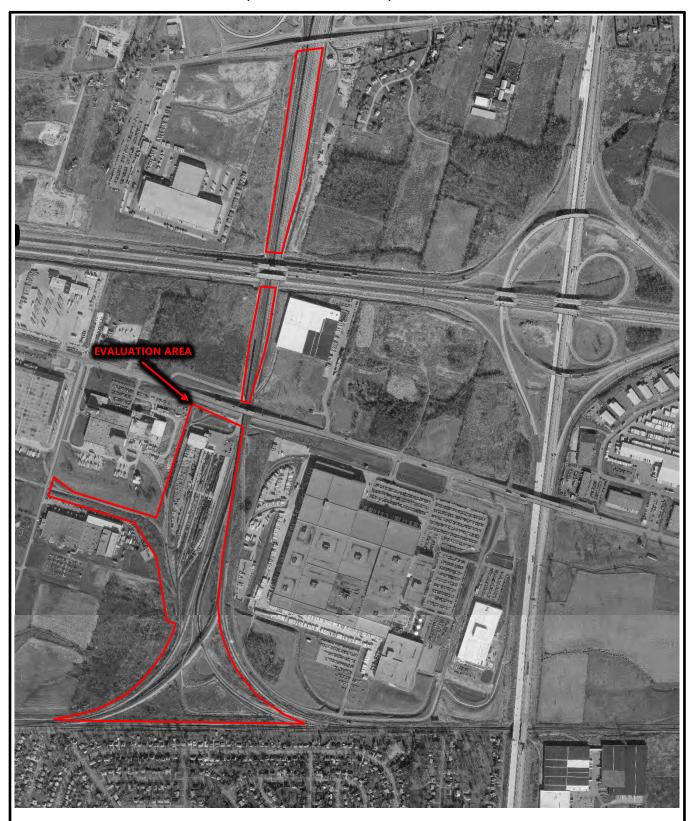






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

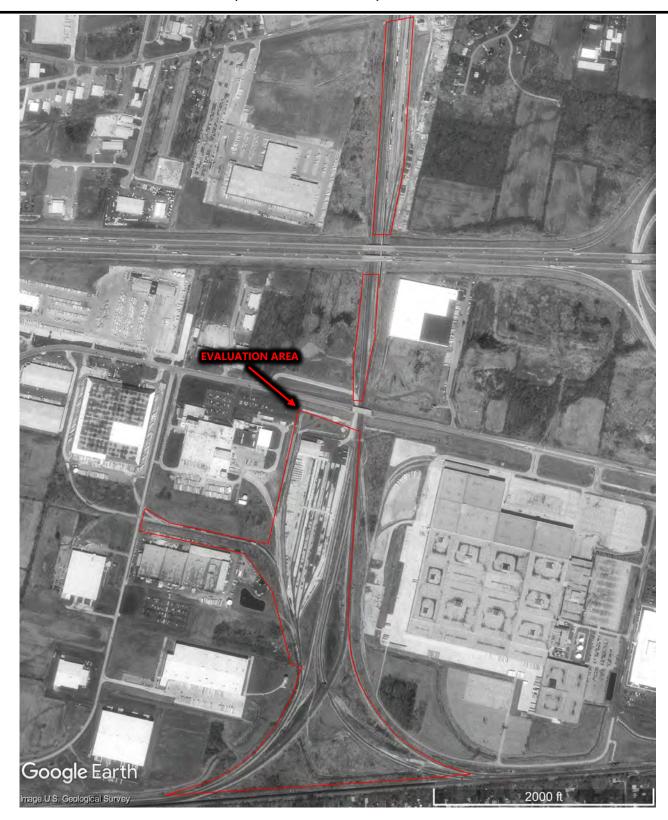






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007







BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007







BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007







BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007







BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007



# APPENDIX 3

# WETLAND DELINEATION MAP (NORTH SECTION)





BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007



# STREAM DELINEATION MAP (NORTH SECTION)

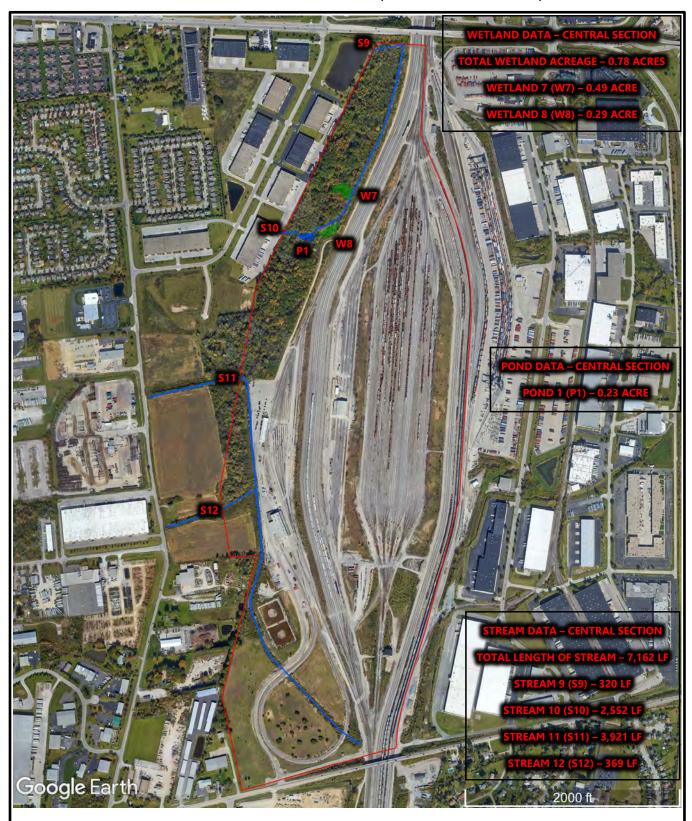




BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007



### WETLAND AND STREAM DELINEATION MAP (CENTRAL SECTION)





BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007



# WETLAND AND STREAM DELINEATION MAP (SOUTH SECTION)





BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007



Site: B	uckeye `	Yard Ra	nter(s): Matt Kaminski		<b>Date:</b> 4/9/2021
2	2	Metric 1. Wetland Area	a (size).		
max 6 pts.	subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2ha  10 to <25 acres (4 to <10.1ha) (6 pts)  3 to <10 acres (1.2 to <4ha) (3 pts)  0.3 to <3 acres (0.12 to <1.2ha)  0.1 to <0.3 acres (0.04 to <0.12ha)  <0.1 acres (0.04ha) (0 pts)	4 pts) ots) (2pts)		
1	3	Metric 2. Upland buffe	ers and surroundi	ng land use.	
max 14 pts.	subtotal	MEDIUM. Buffers average 25m NARROW. Buffers average 10r VERY NARROW. Buffers average 25m  2b. Intensity of surrounding land use. Se VERY LOW. 2nd growth or olde LOW. Old field (>10 years), shr MODERATELY HIGH. Residen	64ft) or more around wetland per to <50m (82 to <164ft) around w to <25m (32ft to <82ft) around age <10m (<32ft) around wetland	imeter (7) vetland perimeter (4) wetland perimeter (1) perimeter (0) erage. fe area, etc. (7) rest. (5) vation tillage, new fallo	w field. (3)
10	13	Metric 3. Hydrology.			
max 30 pts.	subtotal	Recovered (7)	ater (3) stream) (5) ne and assign score.  gime. Score one or double check heck all disturbances observed	Part of wetland/up Part of riparian or Puration inundation/satu Semi- to permane Regularly inundat Seasonally inundat Seasonally satura and average.	in (1) ake and other human use (1) bland (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl check. ently inundated/saturated (4) ed/saturated (3) ated (2) tted in upper 30cm (12in) (1)
,		Recovering (3) Recent or no recovery (1)	tile dike weir stormwater input	filling/grading road bed/RR track dredging other	<u> </u>
14	27	Metric 4. Habitat Alter	ration and Develop	oment.	
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or of None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1)	ü		
		4b. Habitat development. Select only one Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1)			
ſ		4c. Habitat alteration. Score one or double None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)	le check and average.  heck all disturbances observed mowing grazing clearcutting selective cutting	shrub/sapling rem herbaceous/aquat sedimentation	
su	27	age	woody debris removal toxic pollutants	dredging farming nutrient enrichme	nt
last revised	1 Februa	ry 2001 jjm			

## Address   State   S	0:4		- Jp-	11 - )		<b>D</b> - 1 - 4/0/0004
Metric 5. Special Wetlands.    Check all that apply and score as indicated.   Sog (10)	Site:	Buckeye	Yard Ra	ter(s): Matt	Kaminski	Date: 4/9/2021
Category 1 Wetland. See Question 1 Qualitative Rating (-10)   Metric 6. Plant communities, interspersion, microtopography.   Subboll   Ga. Wetland Vegetation Communities. Score all present using 0 to 3 scale.     Aquatic bed   1 Emergent   1 Shrub   2 Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality   2 Present and is of moderate quality, or comprises a significant part but is of moderate quality or comprises a significant part but is of moderate quality or comprises a small part and is of high quality   2 Present and comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality   3 Present and comprises significant part of wetland's vegetation and is of high quality   3 Present and comprises significant part of wetland's vegetation and is of high quality   3 Present and comprises significant part of wetland's vegetation and is of high quality   3 Present and comprises significant part of wetland's vegetation and is of high quality   3 Present and comprises significant part of wetland's vegetation and is of high quality   3 Present and comprises significant part of wetland's vegetation and is of high quality   3 Present and comprises significant part of wetland's vegetation and is of high quality   3 Present and comprises significant part of wetland's vegetation and is of high quality   3 Present and comprises significant part of wetland's vegetation and is of high quality   3 Present and comprises significant part of wetland's vegetation and is of high quality   3 Present and isomprises a small part of wetland's vegetation and is of high quality   3 Present and comprises significant part of wetland's vegetation and is of high quality   3 Present and comprises significant part of wetland's vegetation and is of high quality   4 Present and comprises significant part of wetland's vegetation and is of high quality   4 Present and comprises significant p	o .	27 Subtotal first pa	Check all that apply and score as indicate Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetlate Lake Plain Sand Prairies (Oak (10)) Relict Wet Prairies (10)	ands.  d.  and-unrestricted had-restricted hydropenings) (10)	nydrology (10) drology (5)	
Metric 6. Plant communities, interspersion, microtopography.			Significant migratory songbird/w	ater fowl habitat	or usage (10)	
Vegetation Community Cover Scale  Score all present using 0 to 3 scale.  Aquatic bed  Aquatic bed  Emergent  Shrub  Forest  Other  Oth			Category 1 Wetland. See Ques	tion 1 Qualitative	e Rating (-10)	
Score all present using 0 to 3 scale.  Aquatic bed Aquatic bed 1 Emergent 1 Shrub Forest Mudflats Open water Other Other High (5) Moderately high(4) Moderately low (2) Low (1) None (0) 6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage Extensive >75% cover (-5) Moderate 2 Sparse 5-25% cover (-5) Moderate 2 Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent 0 or Moderate (3) to 1 or 3 scale.  O Absent or comprises 9.0 tha (0.2471 acres) 1 Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality Present and comprises significant part, or more, of wetland's vegetation and is of high quality Present and so of high quality  Narrative Description of Vegetation Quality  low Low sp diversity and/or predominance of nonnative or disturbance tolerant native species mod Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp  Apredominance foliare species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp  Mudflat and Open Water Class Quality  Mudflat and Open Water Class Quality  Absent <0.1ha (0.2471 acres)  Mudflat and Open Water Class Quality  Microtopography Cover Scale  Microtopography Cover Scale  D Absent  Present in moderate or greater amounts  Present in moderate or greater amounts	2	29	Metric 6. Plant comm	unities, ir	nterspersion, mic	rotopography.
Aquatic bed Emergent 1 Shrub Forest Mudflats Open water Other Other High (5) Moderately high(4) Moderately low (2) Low (1) None (0)  6. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-5) Moderate 25-75% cover (-1) Nearly absent <5% cover (-1) Nearly absent (-1) Amphibian breeding pools  1 Present and either comprises significant part of wetland's vegetation and is of high quality or comprises a small part of high quality or comprises a small part and is of high quality or comprises a small part and is of high quality or expetation and is of high quality  Narrative Description of Vegetation and is of high quality  Narrative Description of Vegetation and is of high quality or comprises a small part of wetland's vegetation and is of high quality or expetation and is of high quality or expetation and is of high quality or expetation and is of high quality or presence of rample and is of high quality  Narrative Description of Vegetation and is of high quality or comprises a small part of wetland's vegetation and is of high quality or comprises as mall part of high quality or presence of rample and is of high quality  Narrative Description of Vegetation and is of high quality or presence of rample and is of high quality  Narrative Description of Vegetation and is of high quality or presence of rample and is of high quality or depetation and is of high quality  Narrative Description of Vegetation and is of high quality or presence of rample and is of high quality or depetation and is of high quality or presence of rample and is of high quality or presence of rample and is of high quality or presence of rample and is of high quality or presence of rample and is of high quality or presence of rample and is of high quality or presence of rample and is of high quality or presence of rample and is of hig	max 20 pts.	subtotal	6a. Wetland Vegetation Communities.	Vegetation	on Community Cover Scale	
Temergent   1 Shrub   1			Score all present using 0 to 3 scale.	0		
Shrub   Forest   Forest   Mudflats   Open water   Other   Ot				1		
Forest Mudflats Open water Other Other 6b. horizontal (plan view) Interspersion. Select only one. High (5) Moderately high(4) Moderately (3) Moderately (3) Moderately low (2) Low (1) Low (1) None (0) 6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage Extensive >75% cover (-5) Moderately 25-75% cover (-5) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) 6d. Microtopography. Score all present using 0 to 3 scale.  0 Vegetated hummucks/fussucks 0 Coarse woody debris >15cm (6in) 0 Standing dead >25cm (10in) dbh 1 Amphibian breeding pools  2 Present and either comprises significant part of wetland's vegetation and is of high quality 1 vegetation and is of high quality  3 Present and comprises significant part of wetland's vegetation and is of high quality 1 ow Low spp diversity and for high quality  1 low Low spp diversity and/or predominance of nonnative or disturbance tolerant native species although or disturbance tolerant native species although or endangered to moderately high, but generally wio presence of rare threatened tolerant native spp and/or disturbance					I -	
Mudflats Open water Other Othe			<del></del>			
Open water Other			<u> </u>	2		
6b. horizontal (plan view) Interspersion.  Select only one.  High (5)  Moderately high(4)  Low (1)  Low (1)  None (0)  6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage  Extensive >75% cover (-5)  Moderate 25-75% cover (-3)  Sparse 5-25% cover (-1)  Nearly absent (-5% cover (0)  Absent (1)  6d. Microtopography.  Score all present using 0 to 3 scale.  0 Vegetated hummucks/tussucks 0 Coarse woody debris >15cm (6in) 0 Standing dead >25cm (10in) dbh 1 Amphibian breeding pools  3 Present and comprises significant part, or more, of wetland's vegetation and is of high quality  1 Low (1)  Low (1)  Low (1)  Low (2)  Low (3)  Narrative Description of Vegetation Quality  Iow Low spp diversity and/or predominance of nonnative or distrubance tolerant native species  mod Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp  A predominance of nonnative or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp  A predominance of nonnative or disturbance tolerant native spp and/or					I -	
Select only one.   Select only one.   Select only one.   High (5)   Moderately high(4)   Moderatel (3)   Moderately low (2)   Low (1)   None (0)   Standing dead >2.55 m (10in) dbh 1   Amphibian breeding pools   Moderate (3)   Multiple   Moderately low (2)   Select only one.   None (0)   Standing dead >2.5cm (10in) dbh 1   Amphibian breeding pools   Moderately low (2)   Moderate (3)   Moderately low (2)   Low (1)   Select only one (3)   Moderately low (2)   Select only one (4)   None (0)   None (0)   Standing dead >2.5cm (10in) dbh 1   Amphibian breeding pools   Moderate 25-75% cover (-1)   Moderate 25-75% cover (-1)   Select only one (4)   None (1)   None (1)   None (1)   None (2)   None (3)   None (4)   None (4)   None (5)   None (6)   None (7)			<b>—</b>			•
Select only one.  High (5)  Moderately high(4)  Moderately (3)  None (0)  6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage  Extensive >75% cover (-5)  Moderate 25-75% cover (-1)  Nearly absent < 5% cover (0)  Absent (1)  6d. Microtopography.  Score all present using 0 to 3 scale.  0 Vegetated hummucks/tussucks  0 Coarse woody debris >15cm (6in)  0 Standing dead >25cm (10in) dbh  1 Amphibian breeding pools  Narrative Description of Vegetation Quality  low Low spp diversity and/or predominance of nonnative or disturbance tolerant native spp examines to monetately high, but generally w/o presence of rare threatened or endangered spp  A predominance of native species with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp  Mudflat and Open Water Class Quality  0 Absent <0.1ha (0.247 acres)  1 Low 0.1 to <1ha (0.247 to 2.47 acres)  2 Moderate 1 to <4ha (2.47 to 9.88 acres)  3 High 4ha (9.88 acres) or more  Microtopography Cover Scale  0 Absent  1 Present very small amounts or if more common of marginal quality  2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality				3		
High (5)  Moderately high(4)  Moderately low (2)  Low (1)  None (0)  6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage  Extensive >75% cover (-5)  Moderate 25-75% cover (-5)  Moderate 25-75% cover (-1)  Nearly absent <5% cover (0)  Absent (1)  6d. Microtopography.  Score all present using 0 to 3 scale.  0 Vegetated hummucks/tussucks 0 Coarse woody debris >15cm (6in) 0 Standing dead >25cm (10in) dbh 1 Amphibian breeding pools  Mistrative Description of Vegetation Quality  low Low spp diversity and/or predominance of nonnative or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp  Appendix Appendix Application (10 Vegetation Quality (10 vegetation Quality and/or predominance of nonnative or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp  Appendix Appendix Application (10 vegetation Quality (10 ve					vegetation and is of high	ı quality
Moderately high(4)   Moderately low (2)   Low (1)   None (0)						
Moderate (3)				Narrative		
Moderately low (2) Low (1) None (0) 6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) 6d. Microtopography. Score all present using 0 to 3 scale.  O Vegetated hummucks/tussucks C Coarse woody debris >15cm (6in) O Standing dead >25cm (10in) dbh T Amphibian breeding pools  Moderate 25-75% cover (10in) dbh T Present very small amounts or if more common of marginal quality Present in moderate amounts, but not of highest quality Rative spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp  high A predominance of native species, with nonnative spp and/or disturbance tolerant native spp and/or				low	1	
Low (1) None (0) 6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage  Extensive >75% cover (-5)  Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) 6d. Microtopography.  Score all present using 0 to 3 scale.  0 Vegetated hummucks/tussucks 0 Coarse woody debris >15cm (6in) 0 Standing dead >25cm (10in) dbh 1 Amphibian breeding pools  Microtopography Cover Scale  Migh A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp  Mudflat and Open Water Class Quality  0 Absent <0.1ha (0.247 acres) 1 Low 0.1 to <1ha (0.247 to 2.47 acres) 2 Moderate 1 to <4ha (2.47 to 9.88 acres) 3 High 4ha (9.88 acres) or more  Microtopography Cover Scale  0 Absent 1 Present very small amounts or if more common of marginal quality 2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality 3 Present in moderate or greater amounts			` '			· · · · · · · · · · · · · · · · · · ·
None (0)   6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage   Extensive >75% cover (-5)   ✓ Moderate 25-75% cover (-3)   Sparse 5-25% cover (-1)   Nearly absent <5% cover (0)   Absent (1)   Moderated hummucks/tussucks   O Coarse woody debris >15cm (6in)   O Standing dead >25cm (10in) dbh   1 Amphibian breeding pools   Microtopography Cover Scale			<u> </u>	mod		
6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage  Extensive >75% cover (-5)  Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1)  6d. Microtopography.  Score all present using 0 to 3 scale.  0 Vegetated hummucks/tussucks 0 Coarse woody debris >15cm (6in) 0 Standing dead >25cm (10in) dbh 1 Amphibian breeding pools  Microtopography Cover Scale  0 Absent 1 Present very small amounts or if more common of marginal quality 2 Present in moderate or greater amounts					_	
to Table 1 ORAM long form for list. Add or deduct points for coverage  Extensive >75% cover (-5)  Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1)  6d. Microtopography.  Score all present using 0 to 3 scale.  O Vegetated hummucks/tussucks O Coarse woody debris >15cm (6in) O Standing dead >25cm (10in) dbh Amphibian breeding pools  Microtopography Cover Scale  O Absent <0.1ha (0.247 to 2.47 acres)  Microtopography Cover Scale  Amphibian breeding pools  Microtopography Cover Scale  O Absent  Present very small amounts or if more common of marginal quality  Present in moderate amounts, but not of highest quality  Read threatened or endangered spp  high A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp  Mudflat and Open Water Class Quality  O Absent <0.1ha (0.247 acres)  I Low 0.1 to <1ha (0.247 to 9.88 acres)  Microtopography Cover Scale  O Absent  Present very small amounts or if more common of marginal quality  Present in moderate amounts, but not of highest quality or in small amounts of highest quality  Read or endangered spp  high A predominance of native species, with nonnative spp and/or disturbance tolerant native spp and/or disturbance tolerant na						
or deduct points for coverage  Extensive >75% cover (-5)  ✓ Moderate 25-75% cover (-3)  Sparse 5-25% cover (-1)  Nearly absent <5% cover (0)  Absent (1)  6d. Microtopography.  Score all present using 0 to 3 scale.  ○ Vegetated hummucks/tussucks ○ Coarse woody debris >15cm (6in) ○ Standing dead >25cm (10in) dbh 1 Amphibian breeding pools  Microtopography Cover Scale  ○ Absent ○ Absent ○ Present in moderate amounts, but not of highest quality  2 Present in moderate or greater amounts						•
Extensive >75% cover (-5)  Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1)  6d. Microtopography. Score all present using 0 to 3 scale.  0 Vegetated hummucks/tussucks 0 Coarse woody debris >15cm (6in) 0 Standing dead >25cm (10in) dbh 1 Amphibian breeding pools  Microtopography Cover Scale  Microtopography Cover Scale  0 Absent 1 Present very small amounts or if more common of marginal quality 2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality 3 Present in moderate or greater amounts						
Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1)  6d. Microtopography. Score all present using 0 to 3 scale.  0 Vegetated hummucks/tussucks Coarse woody debris >15cm (6in) D Standing dead >25cm (10in) dbh Amphibian breeding pools  Microtopography Cover Scale  Microtopography Cover Scale  0 Absent 1 Present very small amounts or if more common of marginal quality 2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality 3 Present in moderate or greater amounts				high		
Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1)  6d. Microtopography. Score all present using 0 to 3 scale.  0 Vegetated hummucks/tussucks Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh Amphibian breeding pools  Microtopography Cover Scale  Microtopography Cover Scale  Microtopography Cover Scale  Microtopography Cover Scale  Description:  Mudflat and Open Water Class Quality  Absent <0.1ha (0.247 acres)  Description:  Mudflat and Open Water Class Quality  Absent <0.247 to 2.47 acres)  Microtopography Cover Scale  Microtopography Cover Scale  Description:  Nearly absent <0.1ha (0.247 acres)  Microtopography Cover Scale  Absent  Present very small amounts or if more common of marginal quality  Present in moderate amounts, but not of highest quality or in small amounts of highest quality  Present in moderate or greater amounts			` ′		l l	
Nearly absent <5% cover (0) Absent (1)  6d. Microtopography. Score all present using 0 to 3 scale.  0 Vegetated hummucks/tussucks Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh Amphibian breeding pools  Microtopography Cover Scale  Microtopography Cover Scale  0 Absent  1 Present very small amounts or if more common of marginal quality  2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality  3 Present in moderate or greater amounts						•
Absent (1) 6d. Microtopography. Score all present using 0 to 3 scale.  O Vegetated hummucks/tussucks Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh Amphibian breeding pools  Mudflat and Open Water Class Quality  O Absent <0.1ha (0.247 acres)  1 Low 0.1 to <1ha (0.247 to 2.47 acres)  2 Moderate 1 to <4ha (2.47 to 9.88 acres)  3 High 4ha (9.88 acres) or more  Microtopography Cover Scale  O Absent  Present very small amounts or if more common of marginal quality  2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality  3 Present in moderate or greater amounts			Sparse 5-25% cover (-1)		the presence of rare, thr	eatened, or endangered spp
6d. Microtopography. Score all present using 0 to 3 scale.  0 Vegetated hummucks/tussucks 0 Coarse woody debris >15cm (6in) 0 Standing dead >25cm (10in) dbh 1 Amphibian breeding pools  Microtopography Cover Scale  0 Absent 1 Present very small amounts or if more common of marginal quality 2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality 3 Present in moderate or greater amounts						
Score all present using 0 to 3 scale.  O Vegetated hummucks/tussucks Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh Amphibian breeding pools  Microtopography Cover Scale  O Absent Present very small amounts or if more common of marginal quality Present in moderate amounts, but not of highest quality or in small amounts of highest quality  Present in moderate or greater amounts			. ,	Mudflat a	<del></del>	
O Vegetated hummucks/tussucks Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh Amphibian breeding pools  Microtopography Cover Scale  O Absent  Present very small amounts or if more common of marginal quality  Present in moderate amounts, but not of highest quality or in small amounts of highest quality  Present in moderate or greater amounts				0	,	,
Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh Amphibian breeding pools  Microtopography Cover Scale  O Absent  Present very small amounts or if more common of marginal quality  Present in moderate amounts, but not of highest quality or in small amounts of highest quality  3 Present in moderate or greater amounts					`	
O Standing dead >25cm (10in) dbh Amphibian breeding pools  Microtopography Cover Scale  O Absent  1 Present very small amounts or if more common of marginal quality  2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality  3 Present in moderate or greater amounts					\\	
Amphibian breeding pools    Microtopography Cover Scale			·	· —	High 4ha (9.88 acres) or n	nore
0 Absent 1 Present very small amounts or if more common of marginal quality 2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality 3 Present in moderate or greater amounts						
1 Present very small amounts or if more common of marginal quality 2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality 3 Present in moderate or greater amounts			1 Amphibian breeding pools		<u> </u>	
of marginal quality  Present in moderate amounts, but not of highest quality or in small amounts of highest quality  Present in moderate or greater amounts						
2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality  3 Present in moderate or greater amounts				1	•	ts or if more common
quality or in small amounts of highest quality  Present in moderate or greater amounts				2		unts, but not of highest
3 Present in moderate or greater amounts				_		•
· · · · · · · · · · · · · · · · · · ·				3		
		7			-	

Metric 1. Wetland Area (size).  Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2ha) (5 pts)  10 to <25 acres (4 to <10.1ha) (4 pts)
>50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts)
3 to <10 acres (1.2 to <4ha) (3 pts)  0.3 to <3 acres (0.12 to <1.2ha) (2pts)  0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)  <0.1 acres (0.04ha) (0 pts)
Metric 2. Upland buffers and surrounding land use.
max 14 pts. subtotal  2a. Calculate average buffer width. Select only one and assign score. Do not double check.  WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)  MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)  NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)  VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)  2b. Intensity of surrounding land use. Select one or double check and average.  VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)  LOW. Old field (>10 years), shrub land, young second growth forest. (5)  MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)  HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)
Metric 3. Hydrology.
max 30 pts. subtotal  3a. Sources of Water. Score all that apply.  High pH groundwater (5)  Other groundwater (3)  Precipitation (1)  Seasonal/Intermittent surface water (3)  Perennial surface water (lake or stream) (5)  3c. Maximum water depth. Select only one and assign score.  >0.7 (27.6in) (3)  0.4 to 0.7m (15.7 to 27.6in) (2)  <0.4m (<15.7in) (1)  3e. Modifications to natural hydrologic regime. Score one or double check and average.  3b. Connectivity. Score all that apply.  100 year floodplain (1)  Pert of wetland/upland (e.g. forest), complex (1)  Part of riparian or upland corridor (1)  3d. Duration inundation/saturation. Score one or dbl check  Semi- to permanently inundated/saturated (4)  Regularly inundated/saturated (3)  Seasonally saturated in upper 30cm (12in) (1)
None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1) Recovering (3) Recovering (4) Recovering (4) Recovering (4) Recovering (5) Recovering (5) Recovering (5) Recovering (6) Recovering (6) Recovering (7)
Metric 4. Habitat Alteration and Development.
max 20 pts. subtotal 4a. Substrate disturbance. Score one or double check and average.  None or none apparent (4)  Recovered (3)  Recovering (2)  Recent or no recovery (1)  4b. Habitat development. Select only one and assign score.
Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1)
4c. Habitat alteration. Score one or double check and average.    Value   None or none apparent (9)   Recovered (6)   Recovering (3)   Recent or no recovery (1)   Recent
subtotal this page last revised 1 February 2001 jjm

Sito: F	), , alcay a	Vand	(c): N-#1/-		<b>Date:</b> 4/9/2021
Site: E	вискеуе	Yard Rater	(S): Matt Ka	aminski	Date: 4/9/2021
su	28 btotal first pa	_	_		
0	28	Metric 5. Special Wetlan	ids.		
max 10 pts.	subtotal	Check all that apply and score as indicated.  Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-t Lake Erie coastal/tributary wetland-r Lake Plain Sand Prairies (Oak Open Relict Wet Prairies (10) Known occurrence state/federal thre Significant migratory songbird/water Category 1 Wetland. See Question	estricted hydrol nings) (10) eatened or enda fowl habitat or 1 Qualitative R	angered species (10) usage (10) ating (-10)	
4	32	Metric 6. Plant commun	ities, inte	erspersion, microto	pography.
max 20 pts.	subtotal	6a. Wetland Vegetation Communities.	Vegetation	Community Cover Scale	
		Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.24	71 acres) contiguous area
		Aquatic bed	1	Present and either comprises small	
		1 Emergent		vegetation and is of moderate q	
		Shrub		significant part but is of low qua	
		1 Forest	2	Present and either comprises sign	•
		Mudflats	_	vegetation and is of moderate q	
		Open water		part and is of high quality	
		Other	3	Present and comprises significant	nart or more of wetland's
		6b. horizontal (plan view) Interspersion.	Ü	vegetation and is of high quality	
		Select only one.		vegetation and is of high quality	
		High (5)	Narrative De	escription of Vegetation Quality	
		Moderately high(4)	low	Low spp diversity and/or predoming	nance of nonnative or
		Moderate (3)	IOW	disturbance tolerant native spec	
		Moderately low (2)	mod	Native spp are dominant compone	
		<b>——</b>	IIIOG		_
		Low (1)		although nonnative and/or distu	
		None (0)		can also be present, and specie	-
		6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add		moderately high, but generally w	wo presence or rare
			la i ada	threatened or endangered spp	
		or deduct points for coverage	high	A predominance of native species	
		Extensive >75% cover (-5)		and/or disturbance tolerant nativ	
		Moderate 25-75% cover (-3)		absent, and high spp diversity a	
		Sparse 5-25% cover (-1)		the presence of rare, threatened	d, or endangered spp
		Nearly absent <5% cover (0) Absent (1)	Mudflat and	Open Water Class Quality	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 ac	res)
		1 Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88	acres)
		0 Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more	
		0 Standing dead >25cm (10in) dbh			
		1 Amphibian breeding pools	Microtopog	raphy Cover Scale	
			0	Absent	
			1	Present very small amounts or if r	more common
				of marginal quality	
			2	Present in moderate amounts, bu	t not of highest
				quality or in small amounts of hi	
			3	Present in moderate or greater ar	nounts
	•			and of highest quality	
32				, , ,	

Site: B	uckeye `	/ard Rater(s): Matt Kaminski Date: 4/9/2021
2	2	Metric 1. Wetland Area (size).
max 6 pts.	subtotal	Select one size class and assign score.    >50 acres (>20.2ha) (6 pts)   25 to <50 acres (10.1 to <20.2ha) (5 pts)   10 to <25 acres (4 to <10.1ha) (4 pts)   3 to <10 acres (1.2 to <4ha) (3 pts)   0.3 to <3 acres (0.12 to <1.2ha) (2pts)   0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)   <0.1 acres (0.04ha) (0 pts)
1	3	Metric 2. Upland buffers and surrounding land use.
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one and assign score. Do not double check.  WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)  MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)  NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)  VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)  2b. Intensity of surrounding land use. Select one or double check and average.  VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)  LOW. Old field (>10 years), shrub land, young second growth forest. (5)  MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)  HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)
22	25	Metric 3. Hydrology.
max 30 pts.	subtotal	3a. Sources of Water. Score all that apply.  High pH groundwater (5)  Other groundwater (3)  Precipitation (1)  Seasonal/Intermittent surface water (3)  Perennial surface water (lake or stream) (5)  3c. Maximum water depth. Select only one and assign score.  >0.7 (27.6in) (3)  0.4 to 0.7m (15.7 to 27.6in) (2)  <0.4m (<15.7in) (1)  Seasonally inundated (2)  Seasonally saturated in upper 30cm (12in) (1)  Seasonally inundated in upper 30cm (12in) (1)  Seasonally saturated in upper 30cm (12in) (1)  Modifications to natural hydrologic regime. Score one or double check and average.
		None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1) Recovering (3) Recovering (4) Recovering (4) Recovering (5) Recovering (5) Recovering (6) Recovering (6) Recovering (7) Recoveri
15	40	Metric 4. Habitat Alteration and Development.
max 20 pts.	subtotal	<ul> <li>4a. Substrate disturbance. Score one or double check and average.  None or none apparent (4)  Recovered (3)  Recovering (2)  Recent or no recovery (1)</li> <li>4b. Habitat development. Select only one and assign score.  Excellent (7)  Very good (6)  Good (5)</li> </ul>
		Moderately good (4)  Fair (3)  Poor to fair (2)  Poor (1)  4c. Habitat alteration. Score one or double check and average.  ✓ None or none apparent (9)  Recovered (6)  Check all disturbances observed  Recovered (6)  shrub/sapling removal
ſ		Recovering (3) Recent or no recovery (1)
SII	40	woody debris removal farming toxic pollutants nutrient enrichment
last revised		

Cita		Dete	w/a\		Doto: 4/0/2021
Site: E	Buckeye	Yard Rate	r(s): Matt Ka	ıminski	<b>Date:</b> 4/9/2021
i		1			
	40				
su	btotal first pa	<u> </u>			
0	40	Metric 5. Special Wetlar	nds.		
max 10 pts.	subtotal	Check all that apply and score as indicated.			
		Bog (10)			
		Fen (10)			
		Old growth forest (10)			
		Mature forested wetland (5)		. (10)	
		Lake Erie coastal/tributary wetland-		=	
		Lake Erie coastal/tributary wetland- Lake Plain Sand Prairies (Oak Ope	-	ogy (5)	
		Relict Wet Prairies (10)	illings) (10)		
		Known occurrence state/federal thr	eatened or enda	ngered species (10)	
		Significant migratory songbird/wate			
		Category 1 Wetland. See Question			
		Metric 6. Plant commur			nogranhy
2	42	Wethic o. Thank commu	iities, iiite	erspersion, inicioto	pograpity.
may 20 nta	auhtatal	Co Moderna Monatation Communities	Vonetetien (	Samananita Carray Saala	
max 20 pts.	subtotal	6a. Wetland Vegetation Communities.		Community Cover Scale	[74)ti
		Score all present using 0 to 3 scale.  Aquatic bed	<u>0</u> 1	Absent or comprises <0.1ha (0.24) Present and either comprises small	
		1 Emergent		vegetation and is of moderate q	
		1 Shrub		significant part but is of low qua	
		Forest	2	Present and either comprises sign	•
		Mudflats		vegetation and is of moderate q	uality or comprises a small
		Open water		part and is of high quality	
		Other	3	Present and comprises significant	
		6b. horizontal (plan view) Interspersion.		vegetation and is of high quality	
		Select only one.	Norrativa Da	ecorintian of Vagatation Quality	
		High (5) Moderately high(4)	low	escription of Vegetation Quality  Low spp diversity and/or predomin	nance of nonnative or
		Moderate (3)	IOW	disturbance tolerant native spec	
		Moderately low (2)	mod	Native spp are dominant compone	
		Low (1)		although nonnative and/or distu	_
		None (0)		can also be present, and specie	s diversity moderate to
		6c. Coverage of invasive plants. Refer		moderately high, but generally w	v/o presence of rare
		to Table 1 ORAM long form for list. Add		threatened or endangered spp	
		or deduct points for coverage	high	A predominance of native species	
		Extensive >75% cover (-5)  Moderate 25-75% cover (-3)		and/or disturbance tolerant nativals absent, and high spp diversity a	
		Sparse 5-25% cover (-1)		the presence of rare, threatened	
		Nearly absent <5% cover (0)		and production of rare, amountained	a, or oridarigorou opp
		Absent (1)	Mudflat and	Open Water Class Quality	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 ac	res)
		0 Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88	acres)
		O Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more	
		<ul><li>0 Standing dead &gt;25cm (10in) dbh</li><li>1 Amphibian breeding pools</li></ul>	Microtopogi	raphy Cover Scale	
		<u> </u>	0	Absent	
			1	Present very small amounts or if r of marginal quality	more common
			2	Present in moderate amounts, bu quality or in small amounts of hi	
			3	Present in moderate or greater ar	
40				and of highest quality	

Site: B	uckeye `	Yard Ra	ater(s): Matt Kaminski		<b>Date:</b> 4/9/2021
2	2	Metric 1. Wetland Area	a (size).		
max 6 pts.	subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2h  10 to <25 acres (4 to <10.1ha) (3 in the control of t	(4 pts) pts) ) (2pts)		
1	3	Metric 2. Upland buffe	ers and surroundi	ng land use.	
max 14 pts.	subtotal	MEDIUM. Buffers average 25m NARROW. Buffers average 10m VERY NARROW. Buffers average 25m  2b. Intensity of surrounding land use. See VERY LOW. 2nd growth or old LOW. Old field (>10 years), shi MODERATELY HIGH. Resider	64ft) or more around wetland per n to <50m (82 to <164ft) around w m to <25m (32ft to <82ft) around age <10m (<32ft) around wetland	imeter (7) vetland perimeter (4) wetland perimeter (1) perimeter (0) erage. fe area, etc. (7) vest. (5) rvation tillage, new fallo	w field. (3)
11	14	Metric 3. Hydrology.			
max 30 pts.	subtotal	3a. Sources of Water. Score all that appl High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface w Perennial surface water (lake of some surface) 3c. Maximum water depth. Select only of solid sol	vater (3) r stream) (5) 3d. E ne and assign score.  gime. Score one or double check check all disturbances observed ditch tile dike	Part of wetland/up Part of riparian or Regularly inundat Seasonally inundat Seasonally saturat and average.  point source (none filling/grading road bed/RR track	in (1) ake and other human use (1) bland (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl check. ently inundated/saturated (4) ed/saturated (3) ated (2) tted in upper 30cm (12in) (1)
			weir stormwater input	dredging  other culvert	
13	27	Metric 4. Habitat Alter	ration and Develo	oment.	
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1)  4b. Habitat development. Select only one Excellent (7) Very good (6) Good (5) Moderately good (4)	·		
ſ		Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or doub	ole check and average.  Check all disturbances observed mowing grazing clearcutting selective cutting	shrub/sapling rem herbaceous/aquat sedimentation dredging	
su	27 btotal this pa	age	woody debris removal toxic pollutants	farming nutrient enrichme	nt
last revised	1 Februa	ry 2001 jjm			

Site:	Buckeye	Yard		Rater(s):	Matt Ka	ıminski	Date: 4/9/2021
		1					
	27						
\$	subtotal first pa	<b>J</b> ige					
0	27	Metric 5	5. Special W	etlands	•		
max 10 pts.	subtotal		apply and score as indic	cated.			
		Bog Fen					
			growth forest (10)				
			ire forested wetland (5)			. (40)	
			e Erie coastal/tributary w e Erie coastal/tributary w		-	•• , ,	
			Plain Sand Prairies (O		-	-97 (-7	
			ct Wet Prairies (10)	1 41 4			
			wn occurrence state/fed ificant migratory songbi				
			gory 1 Wetland. See C			- , ,	
0	25	Metric 6	. Plant com	munitie	s, inte	erspersion, microto	pography.
-2	25				•	• ,	
max 20 pts.	subtotal		egetation Communities	. <u>Ve</u>		Community Cover Scale	
			ent using 0 to 3 scale. atic bed		<u>0</u> 1	Absent or comprises <0.1ha (0.24) Present and either comprises small	
			rgent			vegetation and is of moderate of	
		Shru			-	significant part but is of low qua	•
		Fore Mud			2	Present and either comprises sign vegetation and is of moderate of	
		Оре	n water			part and is of high quality	
		Othe		-	3	Present and comprises significant	
		Select only one	(plan view) Interspersio e.	m. <u> </u>		vegetation and is of high quality	
		High		Na	rrative De	escription of Vegetation Quality	
			erately high(4) erate (3)		low	Low spp diversity and/or predomined disturbance tolerant native spec	
			erately low (2)		mod	Native spp are dominant component	
		Low				although nonnative and/or distu	
		6c Coverage	e (0) of invasive plants.  Refe	2r		can also be present, and species moderately high, but generally was	
			AM long form for list. A			threatened or endangered spp	•
		or deduct point	-		high	A predominance of native species	
			nsive >75% cover (-5) erate 25-75% cover (-3`	)		and/or disturbance tolerant nativals absent, and high spp diversity a	• • •
			se 5-25% cover (-1)	<u></u>		the presence of rare, threatened	
			rly absent <5% cover (0 ent (1)		ıdflat and	Open Water Class Quality	
		6d. Microtopo	` '	<u></u>	0	Absent <0.1ha (0.247 acres)	
			ent using 0 to 3 scale.	_	1	Low 0.1 to <1ha (0.247 to 2.47 ac	
			etated hummucks/tussu rse woody debris >15cn		3	Moderate 1 to <4ha (2.47 to 9.88 High 4ha (9.88 acres) or more	acres)
			ding dead >25cm (10in	· ·		Triigit 4tia (5.00 acres) or more	
		1 Amp	hibian breeding pools	<u>Мі</u>		raphy Cover Scale	
				_	<u>0</u> 1	Absent Present very small amounts or if r	more common
						of marginal quality	nore common
					2	Present in moderate amounts, bu	_
					3	quality or in small amounts of hi	
0.5						and of highest quality	
25							

Site: Buckeye	Yard R	Rater(s): Matt Kaminski		<b>Date:</b> 4/9/2021
3 3	Metric 1. Wetland Are	ea (size).		
max 6 pts. subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2  10 to <25 acres (4 to <10.1ha)  3 to <10 acres (1.2 to <4ha) (3  0.3 to <3 acres (0.12 to <1.2ha  0.1 to <0.3 acres (0.04 to <0.1  <0.1 acres (0.04ha) (0 pts)	) (4 pts) 3 pts) a) (2pts)		
1 4	Metric 2. Upland buff	ers and surroundi	ng land use.	
max 14 pts. subtotal	MEDIUM. Buffers average 25 NARROW. Buffers average 10 VERY NARROW. Buffers average 20 Low. Old field (>10 years), sl	(164ft) or more around wetland per im to <50m (82 to <164ft) around v 0m to <25m (32ft to <82ft) around erage <10m (<32ft) around wetland	rimeter (7) wetland perimeter (4) d wetland perimeter (1) d perimeter (0) rerage. ife area, etc. (7) prest. (5) ervation tillage, new fallo	w field. (3)
	Metric 3. Hydrology.	r pasture, row cropping, mining, co	mstruction. (1)	
12   16	metric o. Tryanology.			
max 30 pts. subtotal	3a. Sources of Water. Score all that apply High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface Perennial surface water (lake of some solution) 3c. Maximum water depth. Select only of solution (2) >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) <0.4m (<15.7in) (1)	water (3) or stream) (5) 3d. I one and assign score.	Part of wetland/up Part of riparian or Duration inundation/satu Semi- to permane Regularly inundat Seasonally inundat	in (1) ake and other human use (1) bland (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl check. ently inundated/saturated (4) ed/saturated (3)
	3e. Modifications to natural hydrologic re	egime. Score one or double checl		100 III upper 000III (12III) (1)
	None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)	Check all disturbances observed ditch tile dike weir stormwater input	point source (nons filling/grading road bed/RR track dredging other_culvert	
13 29	Metric 4. Habitat Alte	eration and Develo	pment.	
max 20 pts. subtotal	4a. Substrate disturbance. Score one of None or none apparent (4)  Recovered (3) Recovering (2) Recent or no recovery (1)  4b. Habitat development. Select only or Excellent (7)			
	Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or dou	ible check and average		
		Check all disturbances observed mowing grazing clearcutting	shrub/sapling rem herbaceous/aquat sedimentation	
29 subtotal this p.		selective cutting woody debris removal toxic pollutants	dredging farming nutrient enrichme	nt
last revised 1 Februa	· ·			

Site: E	) u alkayaa '	Yard Rater	(c): Ma# I	a main alci	<b>Date:</b> 4/9/2021
Site. B	вискеуе	rard   Nater	( <b>5).</b> Matt K	aminski	Date. 4/3/2021
		1			
	29				
	htatal finat ma				
su	btotal first pa	_			
0	29	Metric 5. Special Wetlan	ds.		
max 10 pts.	subtotal	Check all that apply and score as indicated.			
		Bog (10)			
		Fen (10)			
		Old growth forest (10)			
		Mature forested wetland (5)  Lake Erie coastal/tributary wetland-u	inrestricted by	drology (10)	
		Lake Erie coastal/tributary wetland-re	-		
		Lake Plain Sand Prairies (Oak Open	•		
		Relict Wet Prairies (10)	<b>3</b> / (		
		Known occurrence state/federal thre	atened or end	angered species (10)	
		Significant migratory songbird/water			
		Category 1 Wetland. See Question	1 Qualitative F	Rating (-10)	
	0.7	Metric 6. Plant communi	ities. int	erspersion, microto	pography.
-2	27			, , , , , , , , , , , , , , , , , , , ,	1 3 1 3
max 20 pts.	subtotal	6a. Wetland Vegetation Communities.	Vegetation	Community Cover Scale	
		Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.24	471 acres) contiguous area
		Aquatic bed	1	Present and either comprises small	
		1 Emergent		vegetation and is of moderate of	
		Shrub		significant part but is of low qua	-
		Forest Mudflats	2	Present and either comprises sign vegetation and is of moderate of	
		Open water		part and is of high quality	quality of comprises a small
		Other	3	Present and comprises significan	t part, or more, of wetland's
		6b. horizontal (plan view) Interspersion.		vegetation and is of high quality	
		Select only one.			
		High (5)		escription of Vegetation Quality	
		Moderately high(4) Moderate (3)	low	Low spp diversity and/or predomi	
		Moderately low (2)	mod	Native spp are dominant compon	
		Low (1)	mod	although nonnative and/or distu	_
		None (0)		can also be present, and specie	
		6c. Coverage of invasive plants. Refer		moderately high, but generally v	w/o presence of rare
		to Table 1 ORAM long form for list. Add		threatened or endangered spp	
		or deduct points for coverage	high	A predominance of native species	
		Extensive >75% cover (-5)		and/or disturbance tolerant nati absent, and high spp diversity a	
		Moderate 25-75% cover (-3) Sparse 5-25% cover (-1)		the presence of rare, threatened	· · · · · · · · · · · · · · · · · · ·
		Nearly absent <5% cover (0)		· ·	a, or oridangered opp
		Absent (1)		d Open Water Class Quality	
		6d. Microtopography.  Score all present using 0 to 3 scale.	<u>0</u>	Absent <0.1ha (0.247 acres) Low 0.1 to <1ha (0.247 to 2.47 acres)	eres)
		Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88	
		0 Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more	<u> </u>
		0 Standing dead >25cm (10in) dbh			
		1 Amphibian breeding pools	Microtopo	graphy Cover Scale	
			0	Absent	
			1	Present very small amounts or if i of marginal quality	
			2	Present in moderate amounts, bu quality or in small amounts of h	ighest quality
	•		3	Present in moderate or greater ar	nounts
27			-	and of highest quality	
<u>~ '</u>					

Site: B	uckeye `	Yard Rater(s): Matt Kaminski Date: 4/9/2021
2	2	Metric 1. Wetland Area (size).
max 6 pts.	subtotal	Select one size class and assign score.    >50 acres (>20.2ha) (6 pts)   25 to <50 acres (10.1 to <20.2ha) (5 pts)   10 to <25 acres (4 to <10.1ha) (4 pts)   3 to <10 acres (1.2 to <4ha) (3 pts)   0.3 to <3 acres (0.12 to <1.2ha) (2pts)   0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)   <0.1 acres (0.04ha) (0 pts)
1	3	Metric 2. Upland buffers and surrounding land use.
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one and assign score. Do not double check.    WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)   MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)   NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)   VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)  2b. Intensity of surrounding land use. Select one or double check and average.   VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)   LOW. Old field (>10 years), shrub land, young second growth forest. (5)   MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)   WIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)
12	15	Metric 3. Hydrology.
max 30 pts.	subtotal	3a. Sources of Water. Score all that apply.  High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5)  Maximum water depth. Select only one and assign score.  >0.7 (27.6in) (3)  0.4 to 0.7m (15.7 to 27.6in) (2)  <0.4m (<15.7in) (1)  3b. Connectivity. Score all that apply.  100 year floodplain (1) Part of wetland/upland (e.g. forest), complex (1) Part of riparian or upland corridor (1)  3d. Duration inundation/saturation. Score one or dbl check Regularly inundated/saturated (4) Regularly inundated/saturated (3) Seasonally inundated (2) Seasonally saturated in upper 30cm (12in) (1)  3e. Modifications to natural hydrologic regime. Score one or double check and average.
,		None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)  Check all disturbances observed ditch lile lile liling/grading road bed/RR track dredging other culvert
13	28	Metric 4. Habitat Alteration and Development.
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or double check and average.  None or none apparent (4)  Recovered (3)  Recovering (2)  Recent or no recovery (1)  4b. Habitat development. Select only one and assign score.  Excellent (7)  Very good (6)  Good (5)  Moderately good (4)  Fair (3)  Poor to fair (2)
		Poor (1) 4c. Habitat alteration. Score one or double check and average.
su last revised	28 btotal this pa	
iasi revised	ı reprua	ry z∪∪ r jjin

0:4		Datas	(-)-		D-4 4/0/2024
Site: E	Buckeye	Yard Rater	(S): Matt K	aminski	<b>Date:</b> 4/9/2021
su	28 btotal first pa	_	. da		
0	28	Metric 5. Special Wetlan	ius.		
max 10 pts.	subtotal	Check all that apply and score as indicated.  Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-r Lake Erie coastal/tributary wetland-r Lake Plain Sand Prairies (Oak Open Relict Wet Prairies (10) Known occurrence state/federal thre Significant migratory songbird/water Category 1 Wetland. See Question	estricted hydro nings) (10) eatened or enda fowl habitat or 1 Qualitative R	angered species (10) usage (10) ating (-10)	
-2	26	Metric 6. Plant commun	ities, int	erspersion, microto	ppography.
max 20 pts.	subtotal	J 6a. Wetland Vegetation Communities.	Vegetation	Community Cover Scale	
		Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.24	471 acres) contiguous area
		Aquatic bed	1	Present and either comprises small	
		1 Emergent		vegetation and is of moderate of	
		Shrub		significant part but is of low qua	
		Forest	2	Present and either comprises sign	•
		Mudflats	-	vegetation and is of moderate of	
		Open water		part and is of high quality	quality of comprisce a cinali
		Other	3	Present and comprises significan	t nart or more of wetland's
		6b. horizontal (plan view) Interspersion.	Ü	vegetation and is of high quality	
		Select only one.		vegetation and to or might quality	<u>'</u>
		High (5)	Narrative D	escription of Vegetation Quality	
		Moderately high(4)	low	Low spp diversity and/or predomi	nance of nonnative or
		Moderate (3)	IOW	disturbance tolerant native spec	
		Moderately low (2)	mod	Native spp are dominant compon	
		<b>—</b>	mou		_
		✓ Low (1)		although nonnative and/or distu	
		None (0)		can also be present, and specie	
		6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add		moderately high, but generally with reatened or endangered spo	w/o presence or rare
		or deduct points for coverage	high	threatened or endangered spp  A predominance of native species	s with poppative eng
		Extensive >75% cover (-5)	nign	and/or disturbance tolerant nati	
				•	
		Moderate 25-75% cover (-3) Sparse 5-25% cover (-1)		absent, and high spp diversity a the presence of rare, threatened	
		Nearly absent <5% cover (0)		the presence of fare, threatened	u, or endangered spp
		Absent (1)	Mudflat and	Open Water Class Quality	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 ac	cres)
		<ul><li>0 Vegetated hummucks/tussucks</li></ul>	2	Moderate 1 to <4ha (2.47 to 9.88	3 acres)
		O Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more	
		0 Standing dead >25cm (10in) dbh			
		1 Amphibian breeding pools	Microtopog	raphy Cover Scale	
			0	Absent	
			1	Present very small amounts or if of marginal quality	more common
			2	Present in moderate amounts, bu quality or in small amounts of h	
			3	Present in moderate or greater ar	
	ľ		3	_	nounto
26				and of highest quality	

Site: B	uckeye `	Yard Rat	<b>:er(s):</b> Matt Kaminski		<b>Date:</b> 4/13/2021
		·			
2	2	Metric 1. Wetland Area	(size).		
max 6 pts.	subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2ha)  10 to <25 acres (4 to <10.1ha) (4  3 to <10 acres (1.2 to <4ha) (3 pts)  0.3 to <3 acres (0.12 to <1.2ha) (3  0.1 to <0.3 acres (0.04 to <0.12ha)  <0.1 acres (0.04ha) (0 pts)	pts) s) 2pts)		
7	9	Metric 2. Upland buffer	rs and surroundir	ng land use.	
max 14 pts.	subtotal	2a. Calculate average buffer width. Select WIDE. Buffers average 50m (164 WIDE. Buffers average 25m t NARROW. Buffers average 10m VERY NARROW. Buffers average 2b. Intensity of surrounding land use. Sele VERY LOW. 2nd growth or older LOW. Old field (>10 years), shrul MODERATELY HIGH. Residentia HIGH. Urban, industrial, open pa	4ft) or more around wetland pering o <50m (82 to <164ft) around wetland co <25m (32ft to <82ft) around ge <10m (<32ft) around wetland ect one or double check and average forest, prairie, savannah, wildlift bland, young second growth for al, fenced pasture, park, conservations.	meter (7) etland perimeter (4) wetland perimeter (1) perimeter (0) erage. e area, etc. (7) est. (5) vation tillage, new fallo	w field. (3)
17	26	Metric 3. Hydrology.			
max 30 pts.	subtotal	3a. Sources of Water. Score all that apply.  High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface wat Perennial surface water (lake or s 3c. Maximum water depth. Select only one >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2)  <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regir None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)	ter (3) stream) (5) 3d. De and assign score.  me. Score one or double check eck all disturbances observed ditch tile dike	Part of wetland/up Part of riparian or uration inundation/satu Semi- to permane Regularly inundati Seasonally inundati Seasonally satura and average.  point source (none filling/grading road bed/RR track	n (1) ake and other human use (1) aland (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl check. ntly inundated/saturated (4) ed/saturated (3) ated (2) ted in upper 30cm (12in) (1)
		Motric 4 Habitat Altara	weir stormwater input	dredging other	
17	43	Metric 4. Habitat Altera	ation and Develop	ment.	
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or do None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1)  4b. Habitat development. Select only one a Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1)	and assign score.		
		4c. Habitat alteration. Score one or double			<del></del>
ļ	43	None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)	eck all disturbances observed mowing grazing clearcutting selective cutting woody debris removal	shrub/sapling rem herbaceous/aquat sedimentation dredging farming	
		」	toxic pollutants	nutrient enrichme	nt
last revised	btotal this pa	·			

Site: E	Buckeye	Yard Rater	(s): Matt Ka	aminski	Date: 4/13/2021
	· · · · ·		· /		
	43				
SL	ubtotal first pa	_	-1 -		
0	43	Metric 5. Special Wetlan	as.		
max 10 pts.	subtotal	Check all that apply and score as indicated.			
		Bog (10) Fen (10)			
		Old growth forest (10)			
		Mature forested wetland (5)			
		Lake Erie coastal/tributary wetland-u	-	=	
		Lake Erie coastal/tributary wetland-n	-	ogy (5)	
		Lake Plain Sand Prairies (Oak Open Relict Wet Prairies (10)	iiigs) (10)		
		Known occurrence state/federal thre	atened or enda	ngered species (10)	
		Significant migratory songbird/water		• , ,	
		Category 1 Wetland. See Question		- ,	
6	49	Metric 6. Plant communi	ities, inte	erspersion, microto	pography.
0					
max 20 pts.	subtotal	6a. Wetland Vegetation Communities.		Community Cover Scale	<b>1</b> -1
		Score all present using 0 to 3 scale.  Aquatic bed	<u>0</u>	Absent or comprises <0.1ha (0.24) Present and either comprises sm	
		Emergent	'	vegetation and is of moderate of	
		Shrub		significant part but is of low qua	
		1 Forest	2	Present and either comprises sign	
		Mudflats		vegetation and is of moderate of	quality or comprises a small
		Open water Other	3	part and is of high quality  Present and comprises significan	t part, or more, of wetland's
		6b. horizontal (plan view) Interspersion.		vegetation and is of high quality	
		Select only one.			
		High (5)		escription of Vegetation Quality	nance of nannative ar
		Moderately high(4)  Moderate (3)	low	Low spp diversity and/or predomi disturbance tolerant native spec	
		Moderately low (2)	mod	Native spp are dominant compon	
		Low (1)		although nonnative and/or distu	
		None (0)		can also be present, and specie	-
		6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add		moderately high, but generally threatened or endangered spp	w/o presence of rare
		or deduct points for coverage	high	A predominance of native species	s, with nonnative spp
		Extensive >75% cover (-5)	J	and/or disturbance tolerant nati	
		Moderate 25-75% cover (-3)		absent, and high spp diversity a	
		Sparse 5-25% cover (-1) Nearly absent <5% cover (0)		the presence of rare, threatene	d, or endangered spp
		Absent (1)	Mudflat and	Open Water Class Quality	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 ac	
		0 Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88	3 acres)
		1 Coarse woody debris >15cm (6in) 0 Standing dead >25cm (10in) dbh	3	High 4ha (9.88 acres) or more	
		0 Amphibian breeding pools	Microtopog	raphy Cover Scale	
			0	Absent	
			1	Present very small amounts or if of marginal quality	
			2	Present in moderate amounts, but quality or in small amounts of h	_
			3	Present in moderate or greater ar	mounts
40				and of highest quality	

Site: Buckeye	Yard Ra	ater(s): Matt Kaminski	<b>Date:</b> 4/13/2021	
1 1	Metric 1. Wetland Are	a (size).		
max 6 pts. subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2h  10 to <25 acres (4 to <10.1ha)  3 to <10 acres (1.2 to <4ha) (3  0.3 to <3 acres (0.12 to <1.2ha)  0.1 to <0.3 acres (0.04 to <0.12  <0.1 acres (0.04ha) (0 pts)	na) (5 pts) (4 pts) pts) ) (2pts)		
7 8	Metric 2. Upland buffe	ers and surroundi	ng land use.	
max 14 pts. subtotal	MEDIUM. Buffers average 25n NARROW. Buffers average 10 VERY NARROW. Buffers aver 2b. Intensity of surrounding land use. So VERY LOW. 2nd growth or old LOW. Old field (>10 years), sh MODERATELY HIGH. Resider	64ft) or more around wetland per n to <50m (82 to <164ft) around w m to <25m (32ft to <82ft) around age <10m (<32ft) around wetland	imeter (7) vetland perimeter (4) wetland perimeter (1) perimeter (0) erage. fe area, etc. (7) rest. (5) rvation tillage, new fallor	w field. (3)
15 23	Metric 3. Hydrology.	, , , , , , , , , , , , , , , , , , , ,	( )	
max 30 pts. subtotal	3a. Sources of Water. Score all that app High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface w Perennial surface water (lake o 3c. Maximum water depth. Select only o >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2)  <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic re None or none apparent (12) Recovered (7)	vater (3) r stream) (5) 3d. E ne and assign score.	Part of wetland/up Part of riparian or Duration inundation/satu Semi- to permane Regularly inundati Seasonally inundati Seasonally satura	n (1) ake and other human use (1) aland (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl check. ntly inundated/saturated (4) ed/saturated (3) ated (2) ted in upper 30cm (12in) (1)
	Recovering (3) Recent or no recovery (1)	tile dike weir stormwater input	filling/grading road bed/RR track dredging other	,
15 38	Metric 4. Habitat Alter	ration and Develo <sub>l</sub>	oment.	
max 20 pts. subtotal	4a. Substrate disturbance. Score one or None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1)  4b. Habitat development. Select only one Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1)	e and assign score.		
	4c. Habitat alteration. Score one or double None or none apparent (9)	ble check and average. Check all disturbances observed		
38	Recovered (6) Recovering (3) Recent or no recovery (1)	mowing grazing clearcutting selective cutting woody debris removal toxic pollutants	shrub/sapling rem herbaceous/aquat sedimentation dredging farming nutrient enrichmer	tic bed removal
subtotal this p	·			

Site: Buckeye Yard  Rater(s): Matt Kaminski    State	Sito: D	) u alkaya '	Vard Pator	(e): Ne# K	amain alsi	Date: 4/13/2021
## Metric 5. Special Wetlands.    Description of Special Wetlands   Description of Vegetation Quality	Site. B	вискеуе	rard	( <b>5).</b> Matt Ka	aminski	Date. 4/10/2021
## Metric 5. Special Wetlands.    Description of Vegetation Communities (10)   Motive forested wetland (5)   Lake Eric constalt/industry wetland-unrestricted hydrology (10)   Lake Eric constalt/industry wetland-restricted hydrology (10)   Lake Eric constalt/industry (10)   Lake Eric constalt/industry (10)   Lake Eric constalt/industry wetland-restricted hydrology (10)   Lake Eric constalt/industry (10)   La			1			
Metric 5. Special Wetlands.  Check all that apply and score as indicated.  Bog (10) Fen (10) Check all that apply and score as indicated.  Bog (10) Fen (10) Check all that apply and score as indicated.  Bog (10) Fen (10) Check all that apply and score as indicated.  Bog (10) Fen (10) Check all that apply and score as indicated.  Bog (10) Fen (10) Check all that apply and score as indicated.  Bog (10) Fen (10) Check all that apply and score as indicated.  Bog (10) Fen (10) Check efficiency apply and score as indicated.  Bog (10) Fen (10) Check efficiency apply and score as indicated.  Metric 6. Plant communities (OA Copanings) (10) Category 1 Wetland. See Question 1 Qualitative Rating (-10)  Metric 6. Plant communities, interspersion, microtopography.  Score all present using 0 to 3 scale.  Aqualic bed 1 Fenergent 1 Shrub Forest 1 Check all that apply and score as indicated.  Metric 6. Plant communities (OA Copanings) (10) Category 1 Wetland. See Question 1 Qualitative Rating (-10)  Metric 6. Plant communities, interspersion, microtopography.  Score all present using 0 to 3 scale.  Aqualic bed 2 Forest 1 Shrub Forest 2 Check all that apply and score as indicated.  Metric 6. Plant communities (OA Copanings) (10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Q		38				
Metric 5. Special Wetlands.  Check all that apply and score as indicated.  Bog (10) Fen (10) Check all that apply and score as indicated.  Bog (10) Fen (10) Check all that apply and score as indicated.  Bog (10) Fen (10) Check all that apply and score as indicated.  Bog (10) Fen (10) Check all that apply and score as indicated.  Bog (10) Fen (10) Check all that apply and score as indicated.  Bog (10) Fen (10) Check all that apply and score as indicated.  Bog (10) Fen (10) Check efficiency apply and score as indicated.  Bog (10) Fen (10) Check efficiency apply and score as indicated.  Metric 6. Plant communities (OA Copanings) (10) Category 1 Wetland. See Question 1 Qualitative Rating (-10)  Metric 6. Plant communities, interspersion, microtopography.  Score all present using 0 to 3 scale.  Aqualic bed 1 Fenergent 1 Shrub Forest 1 Check all that apply and score as indicated.  Metric 6. Plant communities (OA Copanings) (10) Category 1 Wetland. See Question 1 Qualitative Rating (-10)  Metric 6. Plant communities, interspersion, microtopography.  Score all present using 0 to 3 scale.  Aqualic bed 2 Forest 1 Shrub Forest 2 Check all that apply and score as indicated.  Metric 6. Plant communities (OA Copanings) (10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Category 1 Wetland. See Question 1 Q	eu	htotal firet na				
Check all that apply and score as indicated.  Sog (10) Fen (10) Old growth forest (10) Neture forested wetland (5) Lake Eric cossatal/inhulary wetland-unrestricted hydrology (10) Lake Eric acossatal/inhulary wetland-unrestricted hydrology (10) Lake Plain Sand Praintes (Oak Openings) (10) Relict Wet Praintes (10) Relict	- Su	btotal ilist pa	<u>-</u>	مام		
Bog (19)   College	0	38	wetric 5. Special wetian	as.		
Bog (19)   College						
Fen (10)   Old growth forest (10)   Old grow	max 10 pts.	subtotal				
Mature forested wetland (5)   Lake Eric coastal/tributary wetland-unrestricted hydrology (10)   Lake Eric coastal/tributary wetland-drestricted hydrology (5)   Lake Plain Sand Prairies (Oak Openings) (10)   Reliad Wet Prairies (10)   Known occurrence statelfederal threatened or endangered species (10)   Significant migratory songbirdwater fowl habitat or usage (10)   Category 1 Wetland. See Question 1 Qualitative Rating (-10)   Category 1 Wetland. See Question 1 Qualitative Rating (-10)   Category 1 Wetland. See Question 1 Qualitative Rating (-10)   Category 1 Wetland. See Question 1 Qualitative Rating (-10)   Category 1 Wetland. See Question 1 Qualitative Rating (-10)   Category 1 Wetland. See Question 1 Qualitative Rating (-10)   Category 1 Wetland. See Question 1 Qualitative Rating (-10)   Category 1 Wetland. Since 1   Plain (-10)   Category 1 Wetland. Since 2   Present and either comprises a small part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality one.   High (5)   Moderately high (4)   Moderately high (4)   Moderately high (4)   Moderately high (4)   Moderately high (-10)   None (0)   Reliable (-10)   None (0)   Reliable (-10)   None (0)   Reliable (-10)   Reliable (-						
Mature forested wetland (5) Lake Eric coastal/tributary wetland-unrestricted hydrology (10) Lake Eric coastal/tributary wetland-unrestricted hydrology (5) Lake Eric coastal/tributary wetland-unrestricted hydrology (5) Lake Eric coastal/tributary wetland-unrestricted hydrology (5) Lake Plain Sand Prairies (04 Openings) (10) Relict Wet Prairies (			· · ·			
Lake Eric coastal/tribulary wetland-crestricted hydrology (10) Lake Pilan Sand Prairies (Oak Openings) (10) Relict Wet Prairies (10) Significant migratory songbrid/water fow habitat or usage (10) Category 1 Wetland. See Question 1 Qualitative Retaing (-10)  Metric 6. Plant communities, interspersion, microtopography.  Wegetation Community Cover Scale Score all present using 0 to 3 scale. Aquatic bed Aquatic bed Remergent Shrub Forest John Mudflats Open water Oother Oother Oother Oother Forest Wedetaile (10) Noderate (3) Woderate (3) Rain Wetland Vegetation Community Cover Scale  8. horizontal (plan view) Interspersion.  Select only one.  Relict Vegetation Community Cover Scale  1 Present and either comprises small part of wetland's vegetation and is of moderate quality or comprises a significant part of wetland's vegetation and is of high quality Present and offither comprises significant part, or more, of wetland's vegetation and is of high quality Present and offither comprises significant part, or more, of wetland's vegetation and is of high quality Present and offither comprises significant part, or more, of wetland's vegetation and is of high quality Present and offither comprises significant part, or more, of wetland's vegetation and is of high quality Norrative Description of Vegetation Quality Iow Low spp diversity and offen, or more of vegetation, although nonative and of siturbance tolerant native species  Native spp are dominant component of the vegetation, although nonative and is of high quality or comprises a small part and is of high quality Appears of 25% cover (-1) Nearly absent <5% cover (-5) Whoderate 25.75% cover (-5) Whoderate 25.75% cover (-5) Whoderate 25.75% cover (-6) Absent (-1) Low 0.1 to <1474 acres) Appears of 25% cover (-1) Nearly absent <5% cover (-1) Nea						
Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Prairies (10) Known occurrence state/federal threatened or endangered species (10) Significant migratory songbird/water fowl habitat or usage (10) Category 1 Wetland. See Question 1 Qualitative Rating (-10)  Metric 6. Plant communities, interspersion, microtopography.  Narrative Description of Vegetation Counting and is in death of high duality or comprises a small part of wellands vegetation and is of high quality or comprises a small			` '	inrestricted hyd	rology (10)	
Relict Wet Prairies (10) Significant migratory songbird/water fowl habitat or usage (10) Significant migratory songbird/water fowl habitat or usage (10) Category 1 Wetland. See Question 1 Qualitative Rating (-10)  8a  Metric 6. Plant communities, interspersion, microtopography.  9a  Wetland Vegetation Communities, interspersion, microtopography.  9a  Wetland Vegetation Communities, interspersion, microtopography.  9a  Wegetation Community Cover Scale  Score all present using 0 to 3 scale.  Aquatic bed  1 Emergent Shrub Forest Mudflats Open water Other Other Select only one.  Pligh (5) Moderate (3)  Moderate (3) Moderate (3) Moderate (3)  Moderate (3)			Lake Erie coastal/tributary wetland-r	estricted hydrol	ogy (5)	
Known occurrence statefederal threatened or endangered species (10)  Significant migratory songbird/water fowl habitat or usage (10)  Reading the subtonal of the state of the				ings) (10)		
Significant migratory songbird/water fow habitat or usage (10)			` ′			
Category 1 Wetland. See Question 1 Qualitative Rating (-10)   Metric 6. Plant communities, interspersion, microtopography.   Socor all present using 0 to 3 scale.						
Metric 6. Plant communities, interspersion, microtopography.  6a. Wetland Vegetation Communities.  Score all present using 0 to 3 scale.  Aquatic bed  1 Emergent  Shrub  Forest  Other  Other  Other  High (5)  Moderately ligh(4)  Moderately ligh(4)  Moderately ligh(4)  None (0)  6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage  Extensive >75% cover (-5)  Moderate 25-75% cover (-5)  Moderate 25-75% cover (-1)  Nearly absent <5% cover (0)  Absent (1)  6d. Microtopography.  Score all present using 0 to 3 scale.  0 Absent or comprises small part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality.  2 Present and either comprises significant part of wetland's vegetation and is of high quality.  3 Present and comprises significant part, or more, of wetland's vegetation and is of high quality.  Narrative Description of Vegetation Quality.  Iow Low spp diversity and/or predominance of nonnative or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally who presence of rare threatened or endangered spp  high A predominance of native species, with nonnative spp and/or disturbance tolerant native spp and/or disturbance tolerant						
Aquatic bed			1 <u> </u>		= ' '	nography
Score all present using 0 to 3 scale.  Aquatic bed  1 Emergent Shrub Forest Mudflats Open water Other Other Select only one. High (5) None (0) Low (1) None (0) Extensive >75% cover (-5) Absent (1) Roderate (3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) Absent (1) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) Score all present using 0 to 3 scale.  O Vegetated hummucks/fussucks O Coarse woody debris >15cm (6in) O Standing dead >25cm (10in) dbh O Amphibian breeding pools  O Absent (1) Present and either comprises semil part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality Present and comprises significant part, or more, of wetland's vegetation and is of high quality  Narrative Description of Vegetation Quality Iow Low spp diversity and/or predominance of nonnative or disturbance tolerant native species mod Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp  Mudflat and Open Water Class Quality  Might Apredominance of nonnative or disturbance tolerant native spp absent or virtually absent, and high spd viersity and often, but not always, the presence of rare, threatened, or endangered spp  Mudflat and Open Water Class Quality  Mudflat and O	0	38	wiethic 6. Plant Commun	ities, iiit	erspersion, microto	pograpity.
Score all present using 0 to 3 scale.  Aquatic bed  1 Emergent Shrub Forest Mudflats Open water Other Other Select only one. High (5) None (0) Low (1) None (0) Extensive >75% cover (-5) Absent (1) Roderate (3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) Absent (1) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) Score all present using 0 to 3 scale.  O Vegetated hummucks/fussucks O Coarse woody debris >15cm (6in) O Standing dead >25cm (10in) dbh O Amphibian breeding pools  O Absent (1) Present and either comprises semil part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality Present and comprises significant part, or more, of wetland's vegetation and is of high quality  Narrative Description of Vegetation Quality Iow Low spp diversity and/or predominance of nonnative or disturbance tolerant native species mod Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp  Mudflat and Open Water Class Quality  Might Apredominance of nonnative or disturbance tolerant native spp absent or virtually absent, and high spd viersity and often, but not always, the presence of rare, threatened, or endangered spp  Mudflat and Open Water Class Quality  Mudflat and O	may 20 nto	auhtatal		Manatation (	Community Cover Cools	
Aquatic bed Emergent Shrub Forest Mudflats Open water Other Other Other High (5) Moderately high (4) Moderately low (2) Low (1) None (0) Cc. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-5) Absent (1) Nearly absent <5% cover (0) Absent (1) Other	111ax 20 pts.	Subtotal				171 acres) contiguous area
The mergent   Shrub						
Forest Mudiflats Open water Other Ot						
wegetation and is of moderate quality or comprises a small part and is of high quality  3 Present and comprises significant part, or more, of wetland's vegetation and is of high quality  1 Present and comprises significant part, or more, of wetland's vegetation and is of high quality  3 Present and comprises significant part, or more, of wetland's vegetation and is of high quality  Nome (a)  Worderately high (b)  Low (1)  None (0)  6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage  Extensive >75% cover (-5)  Moderate 25-75% cover (-5)  Moderate 25-75% cover (-1)  Nearly absent <5% cover (-1)  Nearly absent <5% cover (-1)  Nearly absent <5% cover (-1)  Score all present using 0 to 3 scale.  0 Vegetated hummucks/tussucks 0 Coarse woody debris >15cm (fin) 0 Standing dead >25cm (10in) dbh 0 Amphibian breeding pools  Microtopography  Microtopography  Microtopography Cover Scale  0 Absent 1  Present very small amounts or if more common of marginal quality  Present in moderate or greater amounts and highest quality  Present in moderate or greater amounts and of highest quality			Shrub			•
Open water Other O			<b>—</b>	2		
6b. horizontal (plan view) Interspersion.  Select only one.  High (5)  Moderately high(4)  Low (1)  Low (1)  None (0)  6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage  Extensive >75% cover (-5)  Moderate 25-75% cover (-1)  Nearly absent <5% cover (-1)  Nearly besent (1)  6d. Microtopography.  Score all present using 0 to 3 scale.  0 Vegetated hummucks/tussucks 0 Coarse woody debris >15cm (6in) 0 Standing dead >25cm (10in) dbh 0 Amphibian breeding pools  Microtopography Cover Scale  Microtopography Cover Scale  0 Absent 1 Present very small amounts or if more common of marginal quality  3 Present and comprises significant part, or more, of wetland's vegetation and is of high quality  wegetation and is of high quality  Narrative Description of Vegetation Quality  low Low spp diversity and/or predominance of nonnative or disturbance tolerant native spp ace dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp  high A predominance of native species, with nonnative spp and/or disturbance tolerant native spp assent or virtually absent, and high spp diversity and offen, but not always, the presence of rare, threatened, or endangered spp  Mudflat and Open Water Class Quality  0 Absent <0 Into <0 Absent Into moderate amounts, but not of highest quality or in small amounts of highest quality or in moderate or greater amounts and of highest quality			<b>—</b>		_	uality or comprises a small
Select only one.			·			t part, or more, of wetland's
Select only one.    High (5)				3	-	
High (5)  Moderately high(4)  Moderately high(4)  Moderately bw (2)  Low (1)  Soc Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage  Extensive >75% cover (-5)  Moderate 25-75% cover (-3)  Sparse 5-25% cover (-1)  Nearly absent <5% cover (0)  Absent (1)  6d. Microtopography.  Score all present using 0 to 3 scale.  ○ Vegetated hummucks/tussucks ○ Coarse woody debris >15cm (6in) ○ Standing dead >25cm (10in) dbh ○ Amphibian breeding pools  Marrative Description of Vegetation Quality  Low spp diversity and/or predominance of nonnative or disturbance tolerant native species  mod Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/p or presence of rare threatened or endangered spp  high A predominance of native species diversity moderate to moderately high, but generally w/p or presence of rare threatened or endangered spp  and/or disturbance tolerant native spp acan also be present, and species diversity moderate to moderately high, but generally w/p or presence of rare threatened or endangered spp  and/or disturbance tolerant native spp acan also be present, and species diversity moderate to moderate or although nonnative and/or disturbance tolerant native spp and/or					vegetation and is of riight quality	
Moderate (3)				Narrative De	escription of Vegetation Quality	
Moderately low (2)   Low (1)   Low (1)   Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp				low	Low spp diversity and/or predomin	nance of nonnative or
Low (1) None (0) None (0) Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage  Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent (-1) Absent (1)  6d. Microtopography.  Score all present using 0 to 3 scale.  O Vegetated hummucks/tussucks O Coarse woody debris >15cm (6in) O Standing dead >25cm (10in) dbh O Amphibian breeding pools  Microtopography Cover Scale  D Absent O Absent O Present in moderate amounts, but not of highest quality  Present in moderate or greater amounts and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp  high A predominance of native species, with nonnative spp and/or disturbance tolerant native spp and/or disturbance of native species, with nonnative spp and/or disturbance of native species, with nonnative spp and/or disturbance of native species, with nonnative and/or disturbance tolerant native spp and/or disturbance of native species, with nonnative spp and/or disturbance of native species, with nonnative and/or disturbance of native species, with nonnative spp and/or disturbance of native species, with nonnative and/or disturbance of native speci			` '		•	
None (0)   6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage   Extensive >75% cover (-5)   ✓ Moderate 25-75% cover (-3)   Sparse 5-25% cover (-1)   Nearly absent <5% cover (0)   Absent (1)     6d. Microtopography. Score all present using 0 to 3 scale.   O Vegetated hummucks/tussucks   O Coarse woody debris >15cm (6in)   O Standing dead >25cm (10in) dbh   O Amphibian breeding pools   O Absent     1 Present very small amounts or if more common of marginal quality   O Present in moderate amounts, but not of highest quality   O Present in moderate or greater amounts and of highest quality   O Present in moderate amounts of sand of highest quality   O Present in moderate amounts and of highest quality   O Present in moderate amounts and of highest quality   O Present in moderate amounts and of highest quality   O Present in moderate amounts and of highest quality   O Present in moderate amounts and of highest quality   O Present in moderate amounts and of highest quality   O Present in moderate amounts and of highest quality   O Present in moderate amounts and of highest quality   O Present in moderate quality   O Present in moderate amounts   O Present in moderate amounts   O Present in moderate amounts   O Present in moderate or greater   O Present in moderate or greater   O Present in moderate or greater   O Present in moderate   O Present			<u> </u>	mod		=
6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage  Extensive >75% cover (-5)  ✓ Moderate 25-75% cover (-3)  Sparse 5-25% cover (-1)  Nearly absent <5% cover (0)  Absent (1)  6d. Microtopography.  Score all present using 0 to 3 scale.  ○ Vegetated hummucks/tussucks  ○ Coarse woody debris >15cm (6in)  ○ Standing dead >25cm (10in) dbh  ○ Amphibian breeding pools  Microtopography Cover Scale  ○ Absent  1 Present very small amounts or if more common of marginal quality  2 Present in moderate amounts, but not of highest quality  3 Present in moderate or greater amounts and of highest quality  Present in moderate or greater amounts and of highest quality			<b>—</b>		-	
to Table 1 ORAM long form for list. Add or deduct points for coverage  Extensive >75% cover (-5)  Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1)  6d. Microtopography.  Score all present using 0 to 3 scale.  O Vegetated hummucks/tussucks O Coarse woody debris >15cm (6in) O Standing dead >25cm (10in) dbh O Amphibian breeding pools  Microtopography Cover Scale  Microtopography Cover Scale  Microtopography Cover Scale  Microtopography Cover Scale  O Absent  Present very small amounts or if more common of marginal quality  Present in moderate amounts, but not of highest quality  Rhigh A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp  Mudflat and Open Water Class Quality  O Absent <						•
or deduct points for coverage  Extensive >75% cover (-5)  Moderate 25-75% cover (-3)  Sparse 5-25% cover (-1)  Nearly absent <5% cover (0)  Absent (1)  6d. Microtopography.  Score all present using 0 to 3 scale.  0 Vegetated hummucks/tussucks 0 Coarse woody debris >15cm (6in) 0 Standing dead >25cm (10in) dbh 0 Amphibian breeding pools  Microtopography Cover Scale  Microtopography Cover Scale  0 Absent 1 Present very small amounts or if more common of marginal quality  Present in moderate amounts, but not of highest quality  3 Present in moderate or greater amounts and of highest quality  A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp  Mudflat and Open Water Class Quality  0 Absent <						
Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1)  6d. Microtopography. Score all present using 0 to 3 scale.  0 Vegetated hummucks/tussucks 0 Coarse woody debris >15cm (6in) 0 Standing dead >25cm (10in) dbh 0 Amphibian breeding pools  Microtopography Cover Scale  Microtopography Cover Scale  Microtopography Cover Scale  D Absent <0.1ha (0.247 acres) D Moderate 1 to <4ha (2.47 to 9.88 acres) Microtopography Cover Scale  Microtopography Cover Scale D Absent D Present very small amounts or if more common of marginal quality  Present in moderate amounts, but not of highest quality or in small amounts of highest quality  3 Present in moderate or greater amounts and of highest quality			or deduct points for coverage	high		s, with nonnative spp
Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1)  6d. Microtopography. Score all present using 0 to 3 scale.  0 Vegetated hummucks/tussucks 0 Coarse woody debris >15cm (6in) 0 Standing dead >25cm (10in) dbh Amphibian breeding pools  Microtopography Cover Scale  Description Absent  Mudflat and Open Water Class Quality  Absent <0.1ha (0.247 acres)  Moderate 1 to <4ha (2.47 to 9.88 acres)  Microtopography Cover Scale  Description Absent  Present very small amounts or if more common of marginal quality  Present in moderate amounts, but not of highest quality or in small amounts of highest quality  Present in moderate or greater amounts and of highest quality					I	• •
Nearly absent <5% cover (0) Absent (1)  6d. Microtopography. Score all present using 0 to 3 scale.  0 Vegetated hummucks/tussucks Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh Amphibian breeding pools  Microtopography Cover Scale  Microtopography Cover Scale  Microtopography Cover Scale  Negretated hummucks/tussucks Amphibian breeding pools  Microtopography Cover Scale  Negretated hummucks/tussucks Amphibian breeding pools  Microtopography Cover Scale  Negretated hummucks/tussucks Amphibian breeding pools  Microtopography Cover Scale  Present very small amounts or if more common of marginal quality  Present in moderate amounts, but not of highest quality or in small amounts of highest quality  Present in moderate or greater amounts and of highest quality						
Absent (1)  6d. Microtopography.  Score all present using 0 to 3 scale.  0 Vegetated hummucks/tussucks 0 Coarse woody debris >15cm (6in) 0 Standing dead >25cm (10in) dbh 0 Amphibian breeding pools  Microtopography Cover Scale  0 Absent 1 Present very small amounts or if more common of marginal quality 2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality 3 Present in moderate or greater amounts and of highest quality					the presence of rare, threatened	i, or endangered spp
6d. Microtopography. Score all present using 0 to 3 scale.  O Vegetated hummucks/tussucks Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh Amphibian breeding pools  Microtopography Cover Scale  O Absent  1 Present very small amounts or if more common of marginal quality  2 Present in moderate amounts, but not of highest quality  3 Present in moderate or greater amounts and of highest quality				Mudflat and	Open Water Class Quality	
Score all present using 0 to 3 scale.    O   Vegetated hummucks/tussucks   O   Coarse woody debris >15cm (6in)   Standing dead >25cm (10in) dbh   O   Amphibian breeding pools   Microtopography Cover Scale   O   Absent   Present very small amounts or if more common of marginal quality   O   Present in moderate amounts, but not of highest quality   O   Present in moderate or greater amounts and of highest quality   O   Present in moderate or greater amounts and of highest quality   O   O   O   O   O   O   O   O   O			` '			
Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh Amphibian breeding pools  Microtopography Cover Scale  Amphibian breeding pools  Microtopography Cover Scale  Absent Present very small amounts or if more common of marginal quality  Present in moderate amounts, but not of highest quality or in small amounts of highest quality  Present in moderate or greater amounts and of highest quality				1	Low 0.1 to <1ha (0.247 to 2.47 ac	res)
O Standing dead >25cm (10in) dbh Amphibian breeding pools  Microtopography Cover Scale  O Absent  1 Present very small amounts or if more common of marginal quality  2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality  3 Present in moderate or greater amounts and of highest quality						acres)
Amphibian breeding pools   Microtopography Cover Scale   0   Absent   1   Present very small amounts or if more common of marginal quality   2   Present in moderate amounts, but not of highest quality or in small amounts of highest quality   3   Present in moderate or greater amounts and of highest quality			<b>—</b>	3	High 4ha (9.88 acres) or more	
0 Absent 1 Present very small amounts or if more common of marginal quality 2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality 3 Present in moderate or greater amounts and of highest quality				Microtopog	ranhy Cover Scale	
1 Present very small amounts or if more common of marginal quality 2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality 3 Present in moderate or greater amounts and of highest quality			Amphibian breeding pools		<del>-,'                                    </del>	
of marginal quality  2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality  3 Present in moderate or greater amounts and of highest quality						nore common
quality or in small amounts of highest quality  3 Present in moderate or greater amounts and of highest quality					of marginal quality	
3 Present in moderate or greater amounts and of highest quality				2		
and of highest quality						
		ľ		3	_	nounts
	38				and or highest quality	

Site: B	uckeye`	/ard Rater(s): Matt Kaminski Date: 4/12/2021
2	2	Metric 1. Wetland Area (size).
max 6 pts.	subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2ha) (5 pts)  10 to <25 acres (4 to <10.1ha) (4 pts)  3 to <10 acres (1.2 to <4ha) (3 pts)  0.3 to <3 acres (0.12 to <1.2ha) (2pts)  0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)  <0.1 acres (0.04ha) (0 pts)
1	3	Metric 2. Upland buffers and surrounding land use.
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one and assign score. Do not double check.  WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)  MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)  NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)  VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)  2b. Intensity of surrounding land use. Select one or double check and average.  VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)  LOW. Old field (>10 years), shrub land, young second growth forest. (5)  MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)  HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)
22	25	Metric 3. Hydrology.
max 30 pts.	subtotal	3a. Sources of Water. Score all that apply.  High pH groundwater (5)  Other groundwater (3)  Precipitation (1)  Seasonal/Intermittent surface water (3)  Perennial surface water (lake or stream) (5)  3c. Maximum water depth. Select only one and assign score.  >0.7 (27.6in) (3)  0.4 to 0.7m (15.7 to 27.6in) (2)  <0.4m (<15.7in) (1)  3e. Modifications to natural hydrologic regime. Score one or double check and average.  3b. Connectivity. Score all that apply.  100 year floodplain (1)  Part of wetland/upland (e.g. forest), complex (1)  Part of riparian or upland corridor (1)  Semi- to permanently inundated/saturated (4)  Regularly inundated/saturated (3)  Seasonally saturated in upper 30cm (12in) (1)  Seasonally saturated in upper 30cm (12in) (1)
		None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)  Check all disturbances observed  ditch lile liling/grading road bed/RR track dredging other_culvert
8	33	Metric 4. Habitat Alteration and Development.
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or double check and average.  None or none apparent (4)  Recovered (3)  Recovering (2)  Recent or no recovery (1)  4b. Habitat development. Select only one and assign score.  Excellent (7)  Very good (6)  Good (5)  Moderately good (4)
		Fair (3) Poor to fair (2) Poor (1)
ı		4c. Habitat alteration. Score one or double check and average.  None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)  Check all disturbances observed mowing shrub/sapling removal herbaceous/aquatic bed removal sedimentation
CII	33	selective cutting dredging woody debris removal farming nutrient enrichment
last revised		

Cito	Buckeye	V- a-l	Rater(s):	NA - 11 1Z -		Date: 4/12/2021	
Site.	вискеуе	Yaro	Rater(S).	Matt Kar	minski	Date. 4/12/2021	
		1					
	33						
	subtotal first pa						
	Subtotal III'st pa	Ť					
0	33	Metric 5. Special W	vetianas.				
	. subtotal	]					
max 10 pts	. Subtotal	Check all that apply and score as inc Bog (10)	dicated.				
		Fen (10)					
		Old growth forest (10)					
		Mature forested wetland (	5)				
		Lake Erie coastal/tributary	,	ricted hydro	ology (10)		
		Lake Erie coastal/tributary	wetland-restrict	ed hydrolo	ogy (5)		
		Lake Plain Sand Prairies (	(Oak Openings)	(10)			
		Relict Wet Prairies (10)					
		Known occurrence state/fe			• , ,		
		Significant migratory song			• , ,		
	1	Category 1 Wetland. See			= : :		
1	34	Metric 6. Plant con	nmunitie	s, inte	erspersion, microto	pography.	
max 20 pts	. subtotal	6a. Wetland Vegetation Communitie	es. <u>Ve</u>	-	ommunity Cover Scale		
		Score all present using 0 to 3 scale.		0	Absent or comprises <0.1ha (0.24		a
		Aquatic bed		1	Present and either comprises small		
		1 Emergent 1 Shrub			vegetation and is of moderate of significant part but is of low qua	•	
		Forest		2	Present and either comprises sign	-	
		Mudflats		_	vegetation and is of moderate of		all
		Open water			part and is of high quality		
		Other		3	Present and comprises significan	t part, or more, of wetland	's
		6b. horizontal (plan view) Interspers	sion.		vegetation and is of high quality	1	
		Select only one.					
		High (5)	<u>Na</u>		scription of Vegetation Quality		
		Moderately high(4)  Moderate (3)		low	Low spp diversity and/or predomi disturbance tolerant native spec		
		Moderate (3)  Moderately low (2)		mod	Native spp are dominant compon		
		✓ Low (1)		mou	although nonnative and/or distu	-	o
		None (0)			can also be present, and specie		
		6c. Coverage of invasive plants. Re			moderately high, but generally w	w/o presence of rare	
		to Table 1 ORAM long form for list.	Add		threatened or endangered spp		
		or deduct points for coverage		high	A predominance of native species		
		Extensive >75% cover (-5	,		and/or disturbance tolerant nation	• • •	
		Moderate 25-75% cover (-1)	-3)		absent, and high spp diversity a the presence of rare, threatened	_	
		Nearly absent <5% cover	(0)		the presence of fare, threatened	a, or cridarigered app	
		Absent (1)		dflat and	Open Water Class Quality		
		6d. Microtopography.		0	Absent <0.1ha (0.247 acres)		
		Score all present using 0 to 3 scale.		1	Low 0.1 to <1ha (0.247 to 2.47 ac	cres)	
		0 Vegetated hummucks/tuss		2	Moderate 1 to <4ha (2.47 to 9.88	acres)	
		0 Coarse woody debris >15		3	High 4ha (9.88 acres) or more		
		0 Standing dead >25cm (10			amby Cayer Seal-		
		1 Amphibian breeding pools	Mic		aphy Cover Scale Absent		
				<u>0</u> 1	Present very small amounts or if	more common	
				į	of marginal quality	nore common	
				2	Present in moderate amounts, bu	t not of highest	
					quality or in small amounts of h	•	
	_			3	Present in moderate or greater ar	nounts	
3/1					and of highest quality		

Site: Bu	uckeye `	Yard   <b>Rater(s):</b> Matt Kaminski	<b>Date:</b> 4/12/2021
1	1	Metric 1. Wetland Area (size).	
max 6 pts.	subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2ha) (5 pts)  10 to <25 acres (4 to <10.1ha) (4 pts)  3 to <10 acres (1.2 to <4ha) (3 pts)  0.3 to <3 acres (0.12 to <1.2ha) (2pts)  0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)  <0.1 acres (0.04ha) (0 pts)	
2	3	Metric 2. Upland buffers and surrounding land use.	
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one and assign score. Do not double check.  WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)  MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)  NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)  VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)  2b. Intensity of surrounding land use. Select one or double check and average.  VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)  LOW. Old field (>10 years), shrub land, young second growth forest. (5)  MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)	ow field. (3)
12	15	Metric 3. Hydrology.	
max 30 pts.	subtotal	Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5)  3c. Maximum water depth. Select only one and assign score. >0.7 (27.6in) (3)  0.4 to 0.7m (15.7 to 27.6in) (2)  Part of wetland/u Part of vetland/u	nin (1)  lake and other human use (1)  pland (e.g. forest), complex (1)  r upland corridor (1)  uration. Score one or dbl check.  ently inundated/saturated (4)  ted/saturated (3)
		3e. Modifications to natural hydrologic regime. Score one or double check and average.  None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1) Recent or no recovery (1) Recovering (3) Recovering (4) Recovering (5) Recovering (6) Recovering (7) Recovering (7) Recovering (7) Recovering (8) Recovering (9) Recovering (9) Recovering (1)	
7	22	Metric 4. Habitat Alteration and Development.	
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or double check and average.  None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1)  4b. Habitat development. Select only one and assign score.	
		Excellent (7)  Very good (6)  Good (5)  Moderately good (4)  Fair (3)  Poor to fair (2)  Poor (1)	
		4c. Habitat alteration. Score one or double check and average.  None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)  None or none apparent (9) Recovering (3) Recent or no recovery (1)  Recovering (3) Recent or no recovery (1)	
	22	selective cutting dredging woody debris removal farming nutrient enrichme	ent
last revised	i rebrua	ıry 200 i jjili	

0:4					TB 4 4/40/0004
Site:	Buckeye	Yard Rate	er(s): Matt I	Kaminski	<b>Date:</b> 4/12/2021
0 max 10 pts.	22 subtotal first pa	Metric 5. Special Wetla  Check all that apply and score as indicated.  Bog (10) Fen (10)	nds.		
	1	Old growth forest (10)  Mature forested wetland (5)  Lake Erie coastal/tributary wetland  Lake Erie coastal/tributary wetland  Lake Plain Sand Prairies (Oak Op  Relict Wet Prairies (10)  Known occurrence state/federal th  Significant migratory songbird/wat  Category 1 Wetland. See Questic	d-restricted hydr lenings) (10) nreatened or end ler fowl habitat on on 1 Qualitative	dangered species (10) or usage (10) Rating (-10)	on o gran by
2	24	Metric 6. Plant commu 	•	•	opograpny.
max 20 pts.	subtotal	6a. Wetland Vegetation Communities.	Vegetatio	n Community Cover Scale	
		Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.2	
		Aquatic bed	1	Present and either comprises sr	
		1 Emergent		vegetation and is of moderate	
		1 Shrub	_	significant part but is of low qu	•
		Forest	2	Present and either comprises si	
		Mudflats		vegetation and is of moderate	quality or comprises a small
		Open water		part and is of high quality	
		Other	3	Present and comprises significa	nt part, or more, of wetland's
		6b. horizontal (plan view) Interspersion.		vegetation and is of high quali	ty
		Select only one.			
		High (5)	Narrative	Description of Vegetation Quality	
		Moderately high(4)	low	Low spp diversity and/or predon	ninance of nonnative or
		Moderate (3)		disturbance tolerant native spe	
		Moderately low (2)	mod	Native spp are dominant compo	
		Low (1)		although nonnative and/or dist	_
		None (0)		can also be present, and spec	
		6c. Coverage of invasive plants. Refer		moderately high, but generally	
		to Table 1 ORAM long form for list. Add		threatened or endangered spp	•
		or deduct points for coverage	high	A predominance of native specie	
		Extensive >75% cover (-5)	iligii	and/or disturbance tolerant na	
		✓ Moderate 25-75% cover (-3)		absent, and high spp diversity	
		Sparse 5-25% cover (-1)		the presence of rare, threaten	-
		<b>—</b> • • • • • • • • • • • • • • • • • • •	-	the presence of fare, threaten	ed, or endangered spp
		Nearly absent <5% cover (0)	Mudfleter	od Onen Water Class Ovality	
		Absent (1)		nd Open Water Class Quality	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 a	
		0 Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.8	38 acres)
		O Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more	
		O Standing dead >25cm (10in) dbh			
		1 Amphibian breeding pools		graphy Cover Scale	
			0	Absent	
			1	Present very small amounts or in of marginal quality	f more common
			2	Present in moderate amounts, b	out not of highest
			-	quality or in small amounts of	_
			3	Present in moderate or greater a	
	7		5	and of highest quality	
٠.,	1			and or mignost quality	

Site: Buckeye	Yard	Rater(s): Matt Kaminski		<b>Date:</b> 4/12/2021
	Metric 1 Wetland A	roa (sizo)		
2 2	Metric 1. Wetland A	iea (Size).		
max 6 pts. subtotal	Select one size class and assign score  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20  10 to <25 acres (4 to <10.1f  3 to <10 acres (1.2 to <4ha)  0.3 to <3 acres (0.12 to <1.2  0.1 to <0.3 acres (0.04 to <0.4)  <0.1 acres (0.04ha) (0 pts)	0.2ha) (5 pts) na) (4 pts) (3 pts) 2ha) (2pts)		
2 4	Metric 2. Upland but	ffers and surroundi	ng land use.	
max 14 pts. subtotal	MEDIUM. Buffers average and NARROW. Buffers average VERY NARROW. Buffers average VERY NARROW. Buffers average VERY LOW. 2nd growth or LOW. Old field (>10 years), MODERATELY HIGH. Res	n (164ft) or more around wetland per 25m to <50m (82 to <164ft) around v 10m to <25m (32ft to <82ft) around verage <10m (<32ft) around wetland	rimeter (7) wetland perimeter (4) d wetland perimeter (1) d perimeter (0) verage. ife area, etc. (7) perst. (5) ervation tillage, new fallo	ow field. (3)
22 26	Metric 3. Hydrology		mondonii (1)	
max 30 pts. subtotal	3a. Sources of Water. Score all that a High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surfactory Perennial surface water (lake) 3c. Maximum water depth. Select only >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologicy None or none apparent (12)	te water (3) e or stream) (5) 3d. If y one and assign score.  (2) c regime. Score one or double check   Check all disturbances observed	Part of wetland/up Part of riparian or Duration inundation/satu Semi- to permane Regularly inundat Seasonally inundat Seasonally satura k and average.	in (1) lake and other human use (1) pland (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl check. ently inundated/saturated (4) ted/saturated (3) ated (2) ated in upper 30cm (12in) (1)
	Recovered (7) Recovering (3) Recent or no recovery (1)	ditch tile dike weir stormwater input	point source (non- filling/grading road bed/RR track dredging other_beaver da	k
17 43	Metric 4. Habitat Alt	eration and Develo	pment.	
max 20 pts. subtotal	4a. Substrate disturbance. Score one None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1)  4b. Habitat development. Select only Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3)			
43 subtotal this p	Poor to fair (2) Poor (1)  4c. Habitat alteration. Score one or d  None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)	ouble check and average.  Check all disturbances observed mowing grazing clearcutting selective cutting woody debris removal toxic pollutants	shrub/sapling rem herbaceous/aqua sedimentation dredging farming nutrient enrichme	tic bed removal

Sito	Buckeye	Vard	Rater(s):	Mott Kon	nin alci	<b>Date:</b> 4/12/2021
Site.	Бискеуе	Talu	itatei(s).	Matt Kar	HIHSKI	Date. William
		1				
	43					
:	subtotal first pa	age				
	<del></del>	Metric 5. Special V	Votlande			
0	43	Netric 3. Special V	vetianus.	•		
max 10 pts.	subtotal	Check all that apply and score as inc	dicated			
		Bog (10)	dicated.			
		Fen (10)				
		Old growth forest (10)				
		Mature forested wetland (	,			
		Lake Erie coastal/tributary		-		
		Lake Erie coastal/tributary  Lake Plain Sand Prairies (		-	gy (5)	
		Relict Wet Prairies (10)	(Oak Openings)	(10)		
		Known occurrence state/fo	ederal threatene	ed or endan	gered species (10)	
		Significant migratory song	bird/water fowl l	habitat or u	sage (10)	
	_	Category 1 Wetland. See	Question 1 Qua	alitative Rat	ting (-10)	
9	52	Metric 6. Plant con	nmunitie	s, inte	rspersion, microto	pography.
9	52				•	
max 20 pts.	subtotal	6a. Wetland Vegetation Communitie			ommunity Cover Scale	
		Score all present using 0 to 3 scale.	_	<u>0</u> 1	Absent or comprises < 0.1ha (0.24	
		Aquatic bed 1 Emergent		'	Present and either comprises sma vegetation and is of moderate q	
		1 Shrub			significant part but is of low qua	•
		1 Forest		2	Present and either comprises sign	nificant part of wetland's
		Mudflats			vegetation and is of moderate q	uality or comprises a small
		1 Open water	_	3	part and is of high quality	nort or more of wetlends
		6b. horizontal (plan view) Interspers	— sion	3	Present and comprises significan vegetation and is of high quality	
		Select only one.			vogotation and io or mgm quanty	
		High (5)	Na	rrative Des	scription of Vegetation Quality	
		Moderately high(4)		low	Low spp diversity and/or predomi	
		Moderate (3)  Moderately low (2)		mod	disturbance tolerant native spec Native spp are dominant component	
		Low (1)		mou	although nonnative and/or distu	•
		None (0)			can also be present, and specie	
		6c. Coverage of invasive plants. Re			moderately high, but generally v	
		to Table 1 ORAM long form for list.	Add		threatened or endangered spp	
		or deduct points for coverage  Extensive >75% cover (-5	3	high	A predominance of native species and/or disturbance tolerant native	
		Moderate 25-75% cover (-	,		absent, and high spp diversity a	• • • • • • • • • • • • • • • • • • • •
		✓ Sparse 5-25% cover (-1)			the presence of rare, threatened	
		Nearly absent <5% cover				
		Absent (1)	Mu		Open Water Class Quality	
		6d. Microtopography.  Score all present using 0 to 3 scale.	_	<u>0</u> 1	Absent <0.1ha (0.247 acres) Low 0.1 to <1ha (0.247 to 2.47 ac	res)
		0 Vegetated hummucks/tus		2	Moderate 1 to <4ha (2.47 to 9.88	
		1 Coarse woody debris >15		3	High 4ha (9.88 acres) or more	
		1 Standing dead >25cm (10	•			
		1 Amphibian breeding pools	<u>Mi</u>		Absent	
				<u>0</u> 1	Present very small amounts or if	more common
				•	of marginal quality	
				2	Present in moderate amounts, bu	<u> </u>
					quality or in small amounts of hi	
	7			3	Present in moderate or greater ar and of highest quality	nounts
52	1				and of highest quality	

Site: B	uckeye `	'ard Rater(s): Matt Kaminski Date: 4/12/2021
2	2	Metric 1. Wetland Area (size).
max 6 pts.	subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2ha) (5 pts)  10 to <25 acres (4 to <10.1ha) (4 pts)  3 to <10 acres (1.2 to <4ha) (3 pts)  0.3 to <3 acres (0.12 to <1.2ha) (2pts)  0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)  <0.1 acres (0.04ha) (0 pts)
2	6	Metric 2. Upland buffers and surrounding land use.
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one and assign score. Do not double check.  WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)  WEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)  NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)  VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)  2b. Intensity of surrounding land use. Select one or double check and average.  VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)  LOW. Old field (>10 years), shrub land, young second growth forest. (5)  MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)  ✓ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)
18	24	Metric 3. Hydrology.
max 30 pts.	subtotal	3a. Sources of Water. Score all that apply.  High pH groundwater (5)  Other groundwater (3)  Precipitation (1)  Seasonal/Intermittent surface water (3)  Perennial surface water (lake or stream) (5)  3c. Maximum water depth. Select only one and assign score.  No.7 (27.6in) (3)  0.4 to 0.7m (15.7 to 27.6in) (2)
		None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)  Check all disturbances observed ditch lile liling/grading road bed/RR track dredging other beaver dams
9	33	Metric 4. Habitat Alteration and Development.
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or double check and average.  None or none apparent (4)  Recovered (3)  Recovering (2)  Recent or no recovery (1)
		4b. Habitat development. Select only one and assign score.  Excellent (7)  Very good (6)  Good (5)  Moderately good (4)  ✓ Fair (3)  Poor to fair (2)  Poor (1)
ſ		4c. Habitat alteration. Score one or double check and average.  None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)  Recent or no recovery (1)  Recovering (3) Recent or no recovery (1)
<u>l</u> su	33	woody debris removal farming toxic pollutants nutrient enrichment
last revised		

0:40.		. Det	/-\		Data : 4/12/2021	
Site:	Buckeye	Yard Rat	er(s): Matt	Kaminski	Date: 4/12/2021	
	33					
	subtotal first pa	ge				
0	33	Metric 5. Special Wetla	ands.			
max 10 pts.	subtotal	one on the tract apply and score as maistace.				
		Bog (10)				
		Fen (10)				
		Old growth forest (10)  Mature forested wetland (5)				
		Lake Erie coastal/tributary wetland-unrestricted hydrology (10)				
		Lake Erie coastal/tributary wetland-restricted hydrology (5)				
		Lake Plain Sand Prairies (Oak Openings) (10)				
		Relict Wet Prairies (10)  Known occurrence state/federal threatened or endangered species (10)				
		Significant migratory songbird/water fowl habitat or usage (10)				
		Category 1 Wetland. See Quest		• , ,		
		Metric 6. Plant commu	ınities, in	terspersion, micro	topography.	
2	35				topog.upy.	
max 20 pts.	. subtotal	6a. Wetland Vegetation Communities.	. Wetland Vegetation Communities. Vegetation Community Cover Scale			
		Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0		
		Aquatic bed	1	Present and either comprises		
		1 Emergent 1 Shrub		vegetation and is of moderal significant part but is of low		
		Forest	2	Present and either comprises		
		Mudflats			te quality or comprises a small	
		Open water		part and is of high quality		
		Other	3	_	cant part, or more, of wetland's	
		6b. horizontal (plan view) Interspersion. Select only one.	-	vegetation and is of high qua	ality	
		High (5) Narrative Description of Vegetation Quality				
		Moderately high(4)	low	Low spp diversity and/or predo		
		Moderate (3)	<del></del>	disturbance tolerant native s	•	
		Moderately low (2)	mod	Native spp are dominant comp	=	
		Low (1) None (0)		can also be present, and spe	isturbance tolerant native spp ecies diversity moderate to	
		6c. Coverage of invasive plants. Refer		moderately high, but genera	•	
		to Table 1 ORAM long form for list. Add		threatened or endangered s		
		or deduct points for coverage	high	A predominance of native spe		
		Extensive >75% cover (-5)  Moderate 25-75% cover (-3)		and/or disturbance tolerant r absent, and high spp diversi		
		Sparse 5-25% cover (-1)		the presence of rare, threate		
		Nearly absent <5% cover (0)				
	Absent (1) Mudflat and Open Water Class Quality					
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	7 \	
		Score all present using 0 to 3 scale.  O Vegetated hummucks/tussucks	1	Low 0.1 to <1ha (0.247 to 2.47 Moderate 1 to <4ha (2.47 to 9		
		0 Coarse woody debris >15cm (6ir		High 4ha (9.88 acres) or more		
		0 Standing dead >25cm (10in) dbh	· —	, ,	<del></del> ,	
		1 Amphibian breeding pools Microtopography Cover Scale				
			0	Absent	r if more commen	
			1	Present very small amounts of of marginal quality	i ii more common	
			2	Present in moderate amounts,	, but not of highest	
				quality or in small amounts o	of highest quality	
T	<del>-</del>		3	Present in moderate or greate	r amounts	
	1			and of highest quality		

**End of Quantitative Rating. Complete Categorization Worksheets.** 

# APPENDIX 4

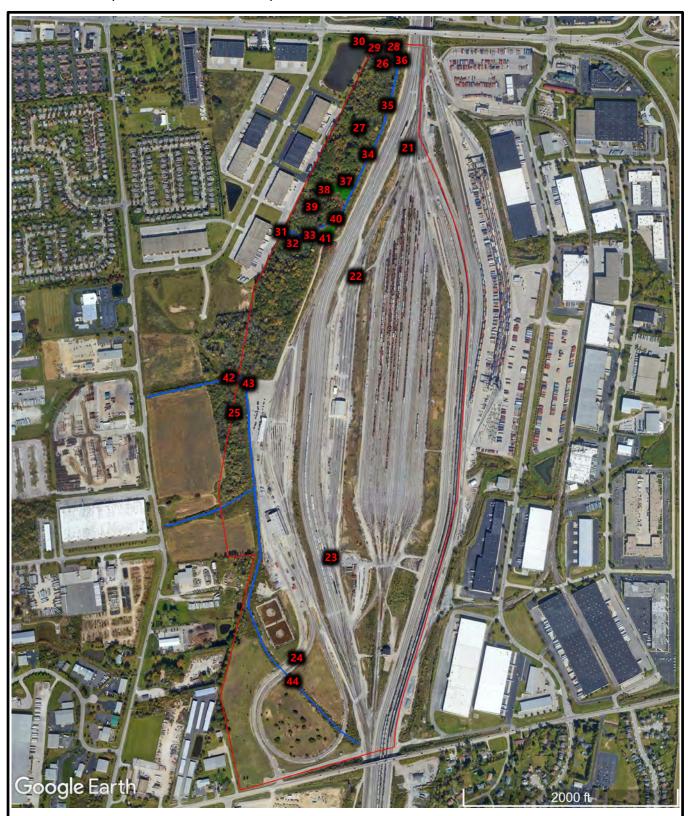




BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007



CENTRAL OHIO WETLAND CONSULTING, LLC





BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007



CENTRAL OHIO WETLAND CONSULTING, LLC





BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007



CENTRAL OHIO WETLAND CONSULTING, LLC



Photo 1 – Southerly view of former rail lines on the North Section of the evaluation area.



Photo 2 – Typical view of former rail lines and adjacent brushy areas on the North Section of the evaluation area.



Photo 3 – Southerly view across waste land areas on the southwest part of the North Section of the evaluation area.



Photo 4 – Northerly view of dense brushy areas on the northeast part of the North Section of the evaluation area.



Photo 5 – Southerly view of Wetland 1 on the North Section of the evaluation area.



Photo 6 – Southwesterly view of Wetland 2 on the North Section of the evaluation area.



Photo 7 – Northwesterly view across Wetland 3 on the North Section of the evaluation area. This wetland appears to have established due to beaver impoundments within a drainage ditch.



Photo 8 – Northerly view along Wetland 3 on the North Section of the evaluation area.



Photo 9 – Northerly view of Wetland 4 on the North Section of the evaluation area.



Photo 10 – Southerly view of Wetland 4 on the North Section of the evaluation area.



Photo 11 – Easterly view across Wetland 5 on the North Section of the evaluation area.



Photo 12 – Westerly view across the southern part of Wetland 5 on the North Section of the evaluation area.



Photo 13 – Northerly view of Stream 7 and Stream 8 on the North Section of the evaluation area. These ephemeral streams appear to partially drain Wetland 5.



Photo 14 – Southerly view across Wetland 5 on the North Section of the evaluation area.



Photo 15 – Northerly view across Wetland 6 on the North Section of the evaluation area.



Photo 16 – Easterly view along Stream 1 (Roberts Millikin Ditch) on the North Section of the evaluation area.



Photo 17 – Northeasterly view of two existing culvert pipes directing surface water from Stream 1 (Roberts Millikin Ditch) beneath elevated railroad lines.



Photo 18 – Westerly view at the continuation of Stream 1 (Roberts Millikin Ditch) upon exiting the culvert pipes depicted in Photo 17.



Photo 19 – Westerly view of Stream 1 (Roberts Millikin Ditch) on the North Section of the evaluation area.



Photo 20 – Westerly view of Stream 1 (Roberts Millikin Ditch) on the North Section of the evaluation area.



Photo 21 – Southerly view of former railroad lines on the Central Section of the evaluation area.



Photo 22 – Northeasterly view of former railroad lines and waste areas between tracks on the Central Section of the evaluation area.



Photo 23 – Northerly view of former railroad lines on the Central Section of the evaluation area.



Photo 24 – Southerly view of former railroad lines and brushy land on the southern part of the Central Section of the evaluation area.



Photo 25 – Southerly view along a cleared utility corridor on the west central part of the Central Section of the evaluation area.



Photo 26 – Typical view of dense vegetation comprising the wooded western portions of the Central Section of the evaluation area.



Photo 27 – Typical view of dense vegetation comprising the wooded western portions of the Central Section of the evaluation area.



Photo 28 – Westerly view along Stream 9 on the Central Section of the evaluation area.



Photo 29 – Westerly view at the origination of Stream 9. This culvert pipe discharges surface water from a west adjoining storm water management pond.



Photo 30 – Southwesterly view at the west adjoining storm water management pond directing surface water to Stream 9.

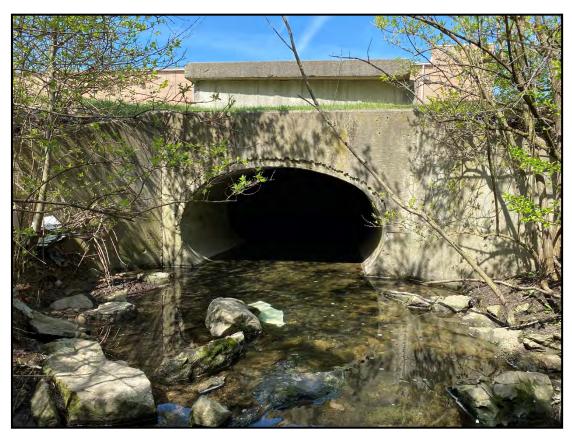


Photo 31 – Westerly view at the beginning of Stream 10 on the Central Section of the evaluation area.



Photo 32 – Northeasterly view across Pond 1 on Central Section of the evaluation area. This pond impounds Stream 10.



Photo 33 – Southwesterly view across Pond 1 on Central Section of the evaluation area. This pond impounds Stream 10.

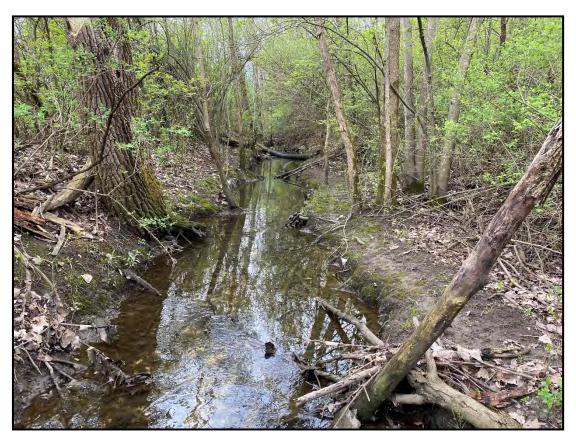


Photo 34 – Southerly (upstream) view along Stream 10 on Central Section of the evaluation area.



Photo 35 – Northerly (downstream) view along Stream 10 on Central Section of the evaluation area.



Photo 36 – Northeasterly view of the confluence of Stream 9 with Stream 10 on the northwest part of the Central Section of the evaluation area.



Photo 37 – Southerly view of Wetland 7 on the Central Section of the evaluation area.



Photo 38 – Easterly view of Wetland 7 on the Central Section of the evaluation area.



Photo 39 – Typical view of wooded areas to the north, south, and west of Wetland 7 on the Central Section of the evaluation area.



Photo 40 – Southwesterly view of Wetland 8 on the Central Section of the evaluation area.



Photo 41 – Northeasterly view of Wetland 8 on the Central Section of the evaluation area.



Photo 42 – Easterly view of Stream 11 as it enters the Central Section of the evaluation area from the west.



Photo 43 – Northwesterly view of Stream 11 on the Central Section of the evaluation area.



Photo 44 – Southeasterly view of Stream 11 as it crosses the southwest part of the Central Section of the evaluation area.



Photo 45 – Southerly view along former rail lines comprising the north part of the South Section of the evaluation area.



Photo 46 – Easterly view along Stream 13 as it enters the South Section of the evaluation from the west, beneath Manor Park Drive.



Photo 47 – Westerly view along Stream 13 on the South Section of the evaluation area.



Photo 48 – Southeasterly view along Stream 13 on the South Section of the evaluation area.



Photo 49 – Southwesterly view of Wetland 11 on the South Section of the evaluation area. This wetland appears to have established due to beaver impoundments within Stream 13.



Photo 50 – Northwesterly view of Wetland 11 on the South Section of the evaluation area.



Photo 51 – Westerly view of Wetland 11 on the South Section of the evaluation area.



Photo 52 – Northerly view of Wetland 10 on the South Section of the evaluation area.



Photo 53 - Northerly view of Wetland 9 on the South Section of the evaluation area



Photo 54 – Northerly view across vacant waste land on the southern part of the South Section of the evaluation area.



Photo 55 – Typical view of densely vegetated areas on the southwest part of the South Section of the evaluation area.



Photo 56 – Easterly view of Pond 2 on the South Section of the evaluation area.



Photo 57 – Northwesterly view of Wetland 12 on the South Section of the evaluation area. This wetland appears to have established due to beaver impoundments within a drainage ditch.



Photo 58 – Easterly view of Wetland 12 on the South Section of the evaluation area. This wetland appears to have established due to beaver impoundments within a drainage ditch.



Photo 59 – Westerly view of eastern part of Wetland 12 on the South Section of the evaluation area.



Photo 60 – Easterly view at the termination point of Wetland 12 on the South Section of the evaluation area.



Photo 61 – Northerly view of vacant waste land on the South Section of the evaluation area.

### APPENDIX B

USACE 404 Individual Permit Application and Ohio EPA 404 WQC Application

November 1, 2022

U.S. Army Corps of Engineers, Huntington District 502 Eighth Street Huntington, West Virginia 25701

Subject: Application for Individual 404 Permit for the Simpson Strong-Tie Expansion in Columbus, Franklin County, Ohio

To Whom It May Concern:

Enclosed as Attachment A, please find an Application for Department of the Army Permit Form 4345 for a 404 Individual Permit for the Simpson Strong-Tie Expansion Project in Columbus, Franklin County, Ohio (henceforth referred to as "the Site"). This application is submitted on behalf of Simpson Strong-Tie (Applicant).

Simpson Strong Tie (SST) is a manufacturer of metal hangers used in various types of construction including but not limited to joist hangers and deck hangers. The company currently has approximately 284,000 SF facility serving administration, manufacturing, and warehousing needs of their Hilliard, Ohio plant. Due to the increase in demand for these products, additional warehouse space is needed in order to satisfy demand.

To accomplish this, SST is proposing to add warehouse capacity and an employee training center totaling 289,600 SF. In order to accomplish this in the most effective way, the company purchased the parcel situated directly east of the current facility (Parcel 560-302754-00) to accommodate the proposed expansion. The Site is an old railyard, with several old rail lines and low-quality wetlands onsite. Roberts Milliken Ditch runs through the center of the Site from west to east.

### Wetland Delineation

A wetland and stream delineation was completed in April 2021 by Central Ohio Wetland Consulting, LLC. A subsequent delineation was completed by MAD Scientist Associates on October 19, 2021, to confirm findings and map wetlands and streams onsite. A total of seven (7) wetlands and eight (8) streams were delineated onsite. For the purposes of this request, A total of 2.75 acres of Wetland 4 and Wetland 6 will be impacted under the proposed development plan. Both of these wetlands are low quality, Category 1 emergent wetlands dominated by hybrid cattail (*Typha x glauca*). The delineation report is included in Attachment B.

### Preferred Alternative

An Alternatives Analysis was completed as part of this application and the preferred alternative would impact 2.75 acres of Category 1 emergent wetlands. Currently, the Applicant has reserved 4.2 acres of wetland credits with the Stream + Wetlands Foundation's in-lieu fee program to mitigate this impact at a 1.5:1 ratio. However, due to the requirement from the City of Columbus for a Type II Variance based on the impact to a stream corridor protection zone (SCPZ), the Applicant is submitting a request for variance to mitigate a portion of this onsite, as required by the City of Columbus regulations. Should the variance get approved, the Applicant will submit an amendment to this permit with a mitigation plan to create 2.75 acres of Category 2 emergent wetland onsite (1:1 ratio), with the remaining 1.5 acres of credit to be held within the in-lieu fee of Stream + Wetlands Foundation. A copy of the mitigation credits can be found in Attachment C.

Correspondence has been received from the Ohio Department of Natural Resources and U.S. Fish & Wildlife Service regarding Threatened & Endangered Species (Attachment D). No impacts are anticipated to any listed species or habitats.

Feel free to contact me with any questions. I can be reached at 614-818-9156 or via email at lindsay@madscientistassociates.net.

Best Regards,

Lindsay Hanna, CWD

**Project Scientist** 

**MAD Scientist Associates** 

cc: Spencer Brown, Lincoln Construction Burak Gursal, Simpson Strong-Tie

### ATTACHMENT A 404 PCN APPLICATION FORM

### U.S. Army Corps of Engineers (USACE)

#### APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

33 CFR 325. The proponent agency is CECW-CO-R.

Form Approved -OMB No. 0710-0003 Expires: 02-28-2022

The public reporting burden for this collection of information, OMB Control Number 0710-0003, is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at <a href="whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil">whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil</a>. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR APPLICATION TO THE ABOVE EMAIL.

#### PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: http://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx

and may be accessed at the following website.	nttp://dpcid.defense.gov/Privacy/	SORNSINGEX/D	OD-wide-SORN-Article-V	/lew/Article/570113	<u>5/a i 145b-ce.aspx</u>
	(ITEMS 1 THRU 4 TO BE	FILLED BY TH	IE CORPS)		
1. APPLICATION NO.	2. FIELD OFFICE CODE		3. DATE RECEIVED	4. DATE APPLIC	CATION COMPLETE
	(ITEMS BELOW TO BE	FILLED BY AP	PLICANT)		
5. APPLICANT'S NAME		8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required)			
First - Burak Middle -	Last - Gursel First - Lindsay Middle - Last - Hanna			Hanna	
Company - Simpson Strong-Tie	Company - MAD Scientist Associates				
E-mail Address - bgursel@strongtie.com	E-mail Address - Lindsay@madscientistassociates.net				
6. APPLICANT'S ADDRESS:		9. AGENT'S ADDRESS:			
Address- 5956 W. Las Positas Blvd	Address- 254 N. State St. Suite 101				
City - Pleasanton State - CA	Zip - 94588 Country - USA	City - Wester	rville State - O	H Zip - 4308	81 Country - USA
7. APPLICANT'S PHONE NOs. w/AREA CODE		10. AGENTS PHONE NOs. w/AREA CODE			
a. Residence b. Business 925-560-9000	c. Fax	a. Residence	b. Business 614-818-9		Fax
	STATEMENT OF	AUTHORIZATI	ON		
11. I hereby authorize, Lindsay Hanna to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.  November 8, 2022  SIGNATURE OF APPLICANT  DATE					
N	AME, LOCATION, AND DESCRI	PTION OF PRO	JECT OR ACTIVITY		
12. PROJECT NAME OR TITLE (see instructi Simpson Strong-Tie Buckeye Yard Expa	,				
13. NAME OF WATERBODY, IF KNOWN (if applicable)		14. PROJECT	STREET ADDRESS (if	applicable)	
	Address 2600 International St				
15. LOCATION OF PROJECT					
Latitude: ∘N 40.006278° Longi	tude: °W -83.128316°	City - Colum	lbus St	tate- OH	Zip- 43228
16. OTHER LOCATION DESCRIPTIONS, IF I	KNOWN (see instructions)				
State Tax Parcel ID	Municipality				
Section - Township -	,	Range	9 -		

17. DIRECTIONS TO THE SITE From 270-N/270-W, take exit 10 for Roberts R first driveway on the right to continue to the Bo		tely 0.8 miles and turn right onto International Street. Take the s 1 and 2).
need to be constructed to accommodate the inc spaced 10 feet away from existing infrastructure requirements for proposed development, a tota	00 square feet will be required trease in personnel employed a re, and stormwater retention who for 19.79 acres is needed for	If for building construction. In addition, 115,975 sf of parking will at the facility. As per City regulations, the new building must be with a capacity of 323,704 cf is needed for the Site. Based on these completing this project. For this, 2.75 acres of wetland (1.53 modate the construction needs. See attached design plan.
19. Project Purpose (Describe the reason or purpose See attached.	of the project, see instructions)	
USE BLOCKS 2	0-23 IF DREDGED AND/OR FILL	_ MATERIAL IS TO BE DISCHARGED
	U-23 IF DREDGED AND/OR I ILL	MATERIAL IS TO BE DISCHARGED
	bus for stormwater capture-th	1.22 acres of Wetland 6 will be modified to serve at a retention is design is based on the Ohio EPA Rainwater and Land
21. Type(s) of Material Being Discharged and the An	_	
Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards
Fill: 27,813.57 cubic yards		
22. Surface Area in Acres of Wetlands or Other Wate	ers Filled (see instructions)	
Acres 2.75 acre	·	
or Linear Feet		
Lineal Feet 23. Description of Avoidance, Minimization, and Con	energation (see instructions)	
See attached for Alternatives Analysis and Mit		

**ENG FORM 4345, FEB 2019** Page 2 of 3

24. Is Any Portion of the Work Already Complete? Yes No IF YES, DESCRIBE THE COMPLETED WORK					
25 Addresses of Adjoin	ing Property Owners, Lessee	s Etc. Whose Property A	digins the Waterbody (if mor	so than can be entered here. please attack	ach a cumplemental list)
a. Address- 2500 Inter		5, Etc., W11000 1 Topotty 71	ajomo mo vvatenbody (irmor	e triali can be chiefed here, please at	аст а заррістіста пэту.
		Chata (	NII.	Zip - 43228	
City - Columbus		State - (	State - OH		
b. Address- 2700 Inter	national St				
City - Columbus		State - OH		Zip - 43228	
c. Address- 2625 West	belt Dr				
City - Columbus		State - OH		Zip - 43228	
d. Address- 2559 Wes	tbelt Dr				
City - Columbus		State - (	ЭН	Zip - 43228	
e. Address-					
City -		State -		Zip -	
	ates or Approvals/Denials rec	eived from other Federal, S	_		
AGENCY	TYPE APPROVAL*	NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
City of Columbus	Stormwater		Pending Variance		
	_				
	_			-	
* Would include but is no	ot restricted to zoning, building	g, and flood plain permits			
27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.					
By By	iveral	2022-11-08	1 indan	u Hanna	2022-11-09
SIGNATUR	RE OF APPLICANT	DATE	SIGNATE	y Hanna RE OF AGENT	DATE
	be signed by the person we statement in block 11 ha			applicant) or it may be sig	ned by a duly

knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States

statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

### **BOX 19**

Simpson Strong Tie (SST) is a manufacturer of metal hangers used in various types of construction including but not limited to joist hangers and deck hangers. The company currently has approximately 284,000 SF of building under roof serving administration, manufacturing and warehousing needs of their Hilliard Ohio plant. Due to the increase in demand for these products, additional warehouse space is needed in order to satisfy demand.

Based on capacity needs, a minimum of 230,000 square feet (sq. ft.) will be required for building construction. In addition, 115,975 sq. ft. of parking will need to be constructed to accommodate the increase in personnel employed at the facility. As per City regulations, the new building must be spaced 10 feet away from existing infrastructure, and stormwater retention with a capacity of 323,704 cubic feet (cf) is needed for the Site. Based on these requirements for proposed development, a total of 19.79 acres is needed for completing this project. Due to the configuration of wetlands onsite, there is not a section of contiguous acreage that could accommodate the proposed development without impacting onsite wetlands.

Based on building needs, Wetlands 4 and 6 are expected to be impacted. Both wetlands were assessed using the ORAM (Ohio Rapid Assessment Method) and assigned scores of 25 and 26, respectively, which identifies them as Category 1 wetlands. These types of wetlands are defined as "limited quality waters" which have low functionality and limited potential for restoration (Ohio EPA, 2001) (See Delineation Report).

The expected construction timeline for this is mid-2023 to 2025.

### **BOX 23**

### 1.0 ALTERNATIVES ANALYSIS

### 1.1 Non-Disturbance Alternative

SST reviewed the possibility of purchasing a property that was not contiguous with the current manufacturing site, including an economic analysis of four (4) options. The economic analysis includes the proposed expansion into the Buckeye Yard property. This would have resulted in no impacts to the current Site.

However, due to budgetary constraints and accessibility issues, this alternative was not considered economically feasible. Of the four alternatives reviewed, the expansion into the Buckeye Yard Rail Site was the only one that would allow the current SST facility to continue operating, thus reducing costs by requiring an expansion rather than a completely new building. The remaining alternatives contained challenges and constraints to buildings based on Site configuration and Site location.

In regard to potential environmental impacts from the other alternatives, the other three alternatives required a construction footprint that met the current facility size in addition to the expansion size, therefore increasing the permeable surface within the county by closer to 622,000 sq. ft. instead of 300,000 sq. ft. Wetland and stream delineations were not conducted onsite for the alternative property options; however based on a review of aerial imagery and other resources including the National Wetlands Inventory and web soil survey for alternative properties, it appears that wetlands and streams are present on the alternative sites as well. Therefore, it is probable that impacts to aquatic resources would have occurred in order to develop the alternative properties as well.

See Attachment A for Economic Analysis on the Non-Disturbance Alternative.

### 1.2 Minimal Disturbance Alternative

In the minimal disturbance alternative, the proposed development of the Buckeye Yard site is oriented to minimize disturbance to on-site aquatic resources. The required stormwater retention basin is situated within the stream corridor of Roberts Milliken Ditch, parallel to the stream. The construction of the stormwater detention pond would require 41.60 linear feet of impacts to Roberts Milliken Ditch (?). To accommodate the ability for large trucks to be able to turn around

in the northern portion of the proposed facility expansion, a total of 2.35 acres between Wetlands 4 (full wetland area) and 6 (partial wetland area) will be impacted. While this alternative results in less potential impacts to aquatic resources, it requires impacts to both streams and wetlands.

See Attachment B for the Minimal Disturbance Alternative Concept Plan.

### 1.3 Preferred Alternative

In order to accommodate the proposed expansion of the manufacturing facility, SST will need to impact Wetlands 4 and 6. A portion of Wetland 4 will be filled to accommodate facility construction, and Wetland 6 will be converted into a stormwater retention basin. In this design, a total of 2.75 acres of wetland will be impacted. The design does not impact Robert Milliken Ditch or any of its tributaries onsite and includes stormwater bioswales associated with the southern parking lots to accommodate additional stormwater retention.

See Attachment C for Preferred Alternative Concept Plan.

### 1.4 Alternatives Analysis Results

Based on the alternatives analysis, SST is proposing moving forward with the preferred alternative. This alternative would impact more wetland acreage in comparison to the minimal impact alternative, however, it would eliminate any direct stream impacts. Both Wetlands 4 and 6 are classified as Category 1 wetlands, and therefore their contribution to wildlife habitat and ecosystem function is relatively low. In comparison to the non-disturbance alternative, the economic benefit is much greater as the expansion would be adjacent to the current building and allow a buildout instead of a brand new facility on undisturbed land. The preferred alternative is the most cost-effective and economically viable while also impacting the least water resources onsite. A mitigation plan has been created to address the 2.75 acres of proposed wetland impacts. The proposed mitigation plan is detailed in section 2.0.

### 2.0 PROPOSED MITIGATION

The USACE requires a total of 4.2 acres of wetland mitigation credits to account for the 2.75 acres of impact to these Category 1 jurisdictional wetlands (a 1.5:1 ratio). Currently Simpson Strong-Tie has purchased these credits through the in-lieu program from Stream + Wetlands Foundation.

Due to City of Columbus stormwater requirements, Simpson Strong-Tie is currently requesting a variance with the City to mitigate 2.75 acres onsite, as required by the City of Columbus Stormwater Drainage manual. Once this variance is approved, Simpson Strong-Tie intends to submit an amendment to this permit with a full mitigation plan describing the onsite mitigation plan and design. In addition, Simpson Strong-Tie will work with the Stream + Wetland Foundation for a reimbursement for 2.7 acres of credit, while maintaining 1.5 acres through the Stream + Wetlands Foundation in-lieu fee (ILF) program to satisfy the USACE requirement.

See Attachment D for current mitigation credit receipt from Stream + Wetland Foundation.

### ATTACHMENT A

Economic Analysis on the Non-Disturbance Alternative



# MARKET OPTIONS





# CBRE

#### RYAN DEANGELIS

Senior Vice President +1 916 492 6975 rvan.deanaelis@cbre.com

#### MATTHEW LEHMAN

Vice President +1 614 430 5051 matthew lehman@chre.com

### MICHAEL MULLADY

Executive Vice President +1 614 430 5030 michael.mullady@cbre.com

### **WESTON DEVORE**

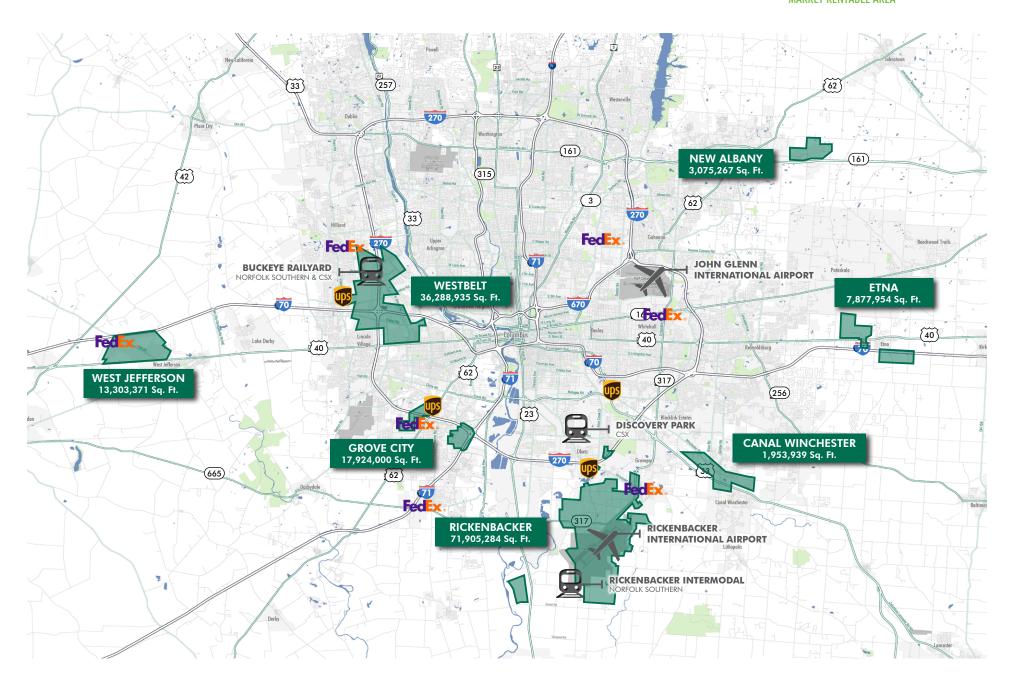
Vice President +1 614 430 5031 weston.devore@cbre.com

#### DISCLAIMER

CBRE © 2021 All Rights Reserved. All information included in this letter/proposal pertaining to CBRE, Inc.—including but not limited to its operations, employees, technology and clients—is proprietary and confidential and supplied with the understanding that such information will be held in confidence and not disclosed to any third party without CBRE's prior written consent. This letter/proposal is intended solely as a preliminary expression of general intentions, is for discussion purposes only, and does not create any agreement or obligation by CBRE to negotiate or continue negotiations. CBRE shall have no contractual obligation with respect to the matters referred to herein unless and until a definitive, fully-executed agreement has been delivered by the parties. Prior to delivery of a definitive executed agreement, and without any liability to the other party, either party may (1) propose different terms from those summarized herein, (2) enter into negotiations with other parties and/or (3) unilaterally terminate all negotiations with the other party hereto. Photos herein are the property of their respective owners. Use of these images without the express written consent of the owner is prohibited. CBRE and the CBRE logo are service marks of CBRE, Inc. All other marks displayed on this document are the property of their respective owners, and the use of such logos does not imply any affiliation with or endorsement of CBRE.

### INDUSTRIAL MARKET OVERVIEW

# 276,015,075 SQ. FT.



### COLUMBUS INDUSTRIAL LABOR CONCENTRATION

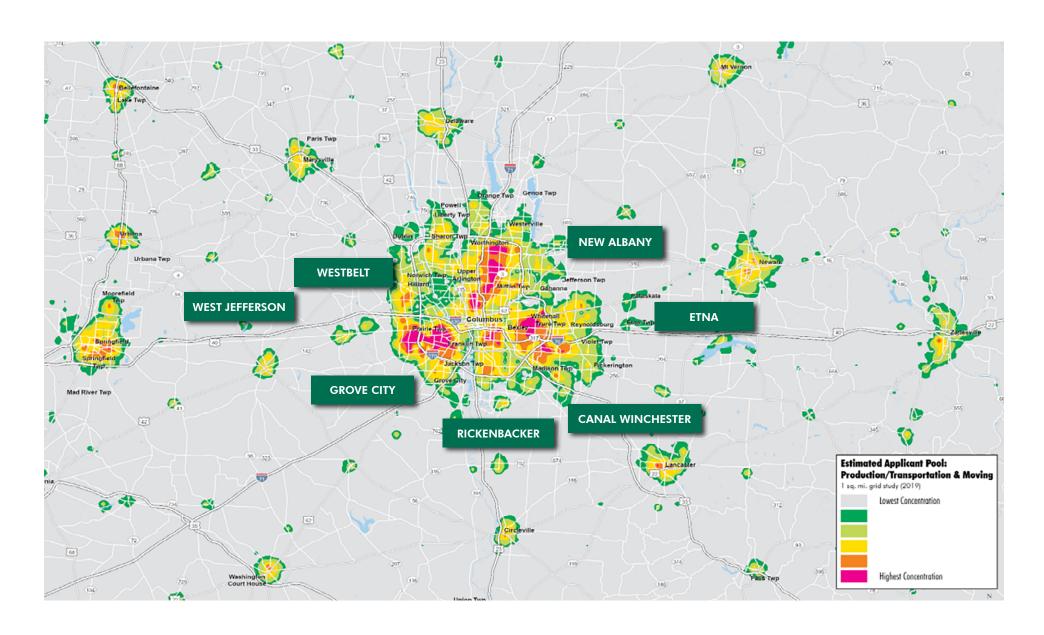
4.90%
COLUMBUS UNEMPLOYMENT RATE

~18.59%
EMPLOYMENT GROWTH SINCE 2010

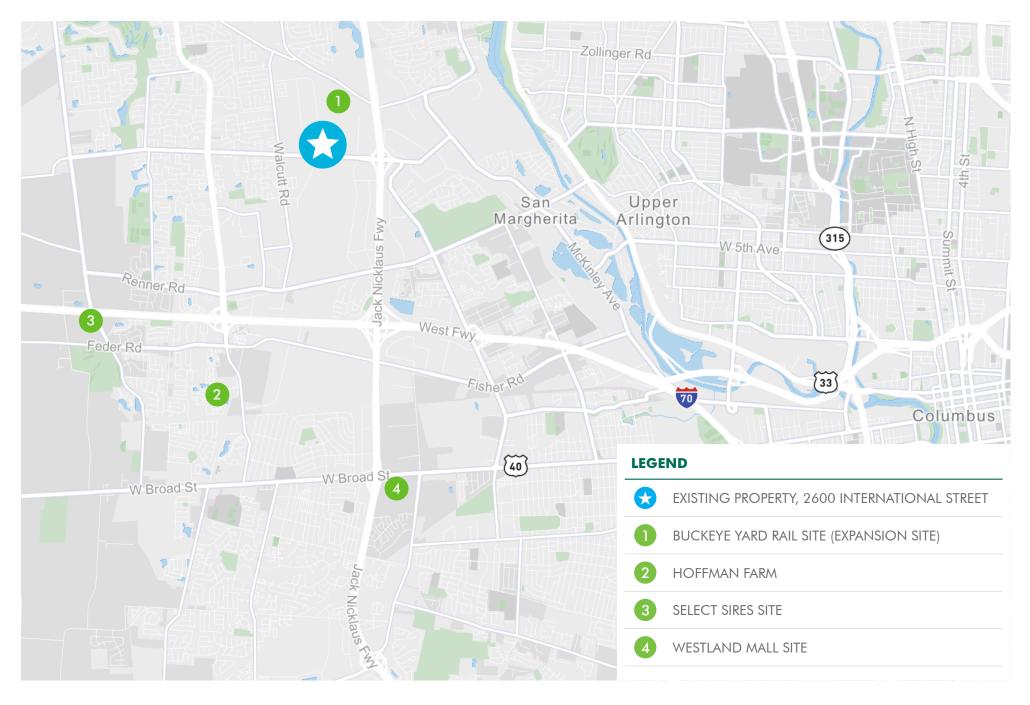
**51.00%**LABOR PARTICIPATION RATE

\$18.11/HR
AVERAGE MANUFACTURING WAGES

\$16.55/HR
AVERAGE LOGISTICS WAGES



### LAND AVAILABILITIES



### COMPARISON OF PROPOSED ECONOMIC TERMS

		1	2	3	4
		BUCKEYE YARD RAIL SITE (EXPANSION SITE)	HOFFMAN FARM COLUMBUS, OH	SELECT SIRES DEVELOPMENT	WESTLAND MALL
SITE INFORMATION	SUBMARKET	Westbelt (Current Facility)	WEST COLUMBUS	West Side	West Side
	DEVELOPER	Land Owned by Xebec	TPA Group	VanTrust	Trident Capital
	CURRENT SITE STATUS	Industrial use land Contiguous with the Existing Manufacturing facility Parcel	Greenfield development site. In the process of due diligence to purchase, annexation, zoning, incentives negotiations, and entitlement	This is a Greenfield Land Site currently listed for Sale and Development. We have engaged a development partner, Van Trust to investigate the development potential of this site on Simpson's behalf with the ultimate goal of receiving a formal proposal on the site for a new facility.	This is the former Westland Mall location which is now slated for redevelopment.  Trident is currently in contract to purchase this site from the current owners.
	PROPOSED BUILDING SIZE (SQ. FT.)	Simpson could construct a 200,000 Sq. Ft. addition	622,500 Sq. Ft.	570,000 Sq. Ft.	500,000 Sq. Ft.
	EXPANSION CAPABILITY	TBD. A 200,000 Sq. Ft. Expansion appears to be feasible subject to proper due diligence of the site.	This Building will not have expansion capabilities due to the site constraints	Expandable by 313,500 Sq. Ft.	Expandable by + 300,000 Sq. Ft.
	LARGEST SIZE ACHIEVABLE (SQ. FT.)	TBD	TBD 622,500 Sq. Ft. (we recommend maximizing the initial footprint)		+/- 800,000
	SITE SIZE WITHOUT EXPANSION (ACRES)	40 Acres	+/- 27 Acres	70 Acres	+/- 50 Acres
	SITE SIZE WITH EXPANSION (ACRES)	40 Acres	+/- 27 Acres	70 Acres	+/- 50 Acres
DEAL STRUCTURE	PROPOSED DEAL TYPE	The Land behind the Existing Factory is approximately 40 Acres and includes inactive rail lines. The strategy would be to Purchase the Land Site for expansion of the existing Building. This site will need to be fully vetted as to its suitability for future Industrial development during the Acquisition/Due Diligence phase of the purchase. Items to vet would be wetland impact and environmental contamination issues.  Simpson as owner of the Ground would be able to self perform an expansion of its existing facility. The additional ground could be suitable for vehicle/trailer parking, or could be potentially disposed through sale to other interested neighbors who have not yet been contacted.	The ownership is proposing a merchant build with Simpson purchasing the shell property upon completion	A proposal on this site has not yet been received. The developer Van Trust is currently investigating the Site for Suitability to Develop. Due to its location at the edge of Columbus, infrastructure may be challenging.	A proposal on this site has not yet been received. However, based on previous proposals from this developer, this site could be developed as a merchant building with a closing of the property upon the substantial completion of the base building shell.
	LEASE OF THE PROPERTY		Not Proposed	Still Researching this site - No Proposal Yet	A lease of the Property is likely not needed.
	PROPOSED LEASE PAYMENT START DATE	N/A - this would be a Simpson-owned land site for expansion of the existing manufacturing facility.			
	FIRST YEAR LEASE RATE (\$/SQ. FT. NNN)				
PURCHASE OF THE PROPERTY	PROPOSED CLOSING DATE TO PURCHASE THE PROPERTY	The Property is Currently in Contract with Xebec for purchase from Norfolk Southern Railroad. The closing is expected to occur in 2021. The property could be acquired in 60 to 90 Days from Contract Execution	Timing to purchase is To Be Determined, TPA is currently acquiring the property. Closing in 2021		The date of the Seller's closing is yet to be determined. Upon closing of the Trident Purchase,
	PROPOSED PURCHASE PRICE	,	\$76.00/Sq. Ft. or \$47,310,000	Still Researching this site - No Proposal Yet	
	PROPOSED PURCHASE PRICE WITH MAX EXPANSION CAPABILITY	The 40 Acre Site would be Acquired for \$275,000 to \$300,000 Per Acre = \$11M to \$12M	The 40 Acre Site would be Acquired for \$275,000 to \$300,000 Per Acre = \$11M to \$12M	Jilli Researching inis site - No Proposuriter	
	PROPOSED PURCHASE PRICE \$/SQ. FT.		\$76.00/Sq. Ft.		
TI INCLUDED IN THE PROPOSED	TI ALLOWANCE INCLUDED (\$/SQ. FT.)	Not Applicable	Scope of Shell Delivery to be Negotiated	Still Researching this site - No Proposal Yet	Still Researching this site - No Proposal Yet
PRICING  SIMPSON'S	TI ALLOWANCE INCLUDED (TOTAL)  PROPOSED SIMPSON CONSTRUCTION		Upon Closing, the building shell will be constructed by		
CONSTRUCTION	START DATE	Upon Simpson's Closing on the Land.	TPA to Simpson's specifications	Unknown	Unknown
SIMPSON'S EXISTING PROPERTY	NOTES REGARDING THE EXISTING PROPERTY: 2600 INTERNATIONAL STREET	This Scenario would allow the continued use of the Existing Facility on International Street	Not proposed		This Developer has expressed an interest in purchasing the Existing Simpson building as a component of this transaction
	NOTES:	We would anticipate that a 200,000 Sq. Ft. Addition could be accomplished at \$70.00 to \$80.00/Sq. Ft. \$14M to \$16M	Although no TI was Proposed, we would expect to have room to negotiate a greater scope within the offered pricing. This property is currently under contract to purchase by the national developer - TPA Group.	The Site presents challenges to development.	This is a newly available site on the market and the Developer is currently in contract to purchase the site

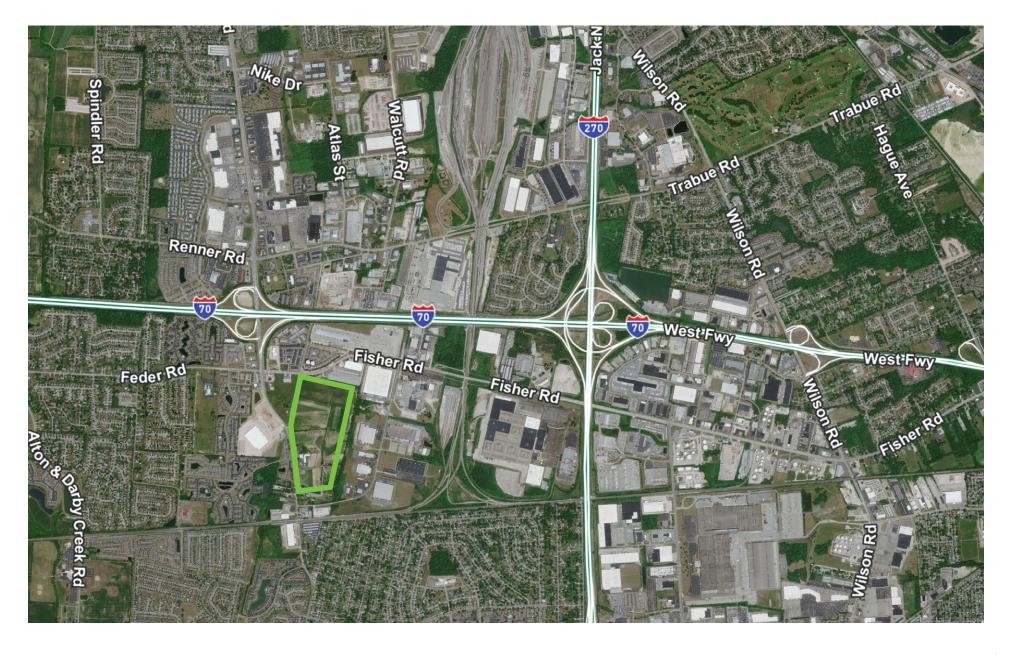
### BUCKEYE YARD RAIL SITE



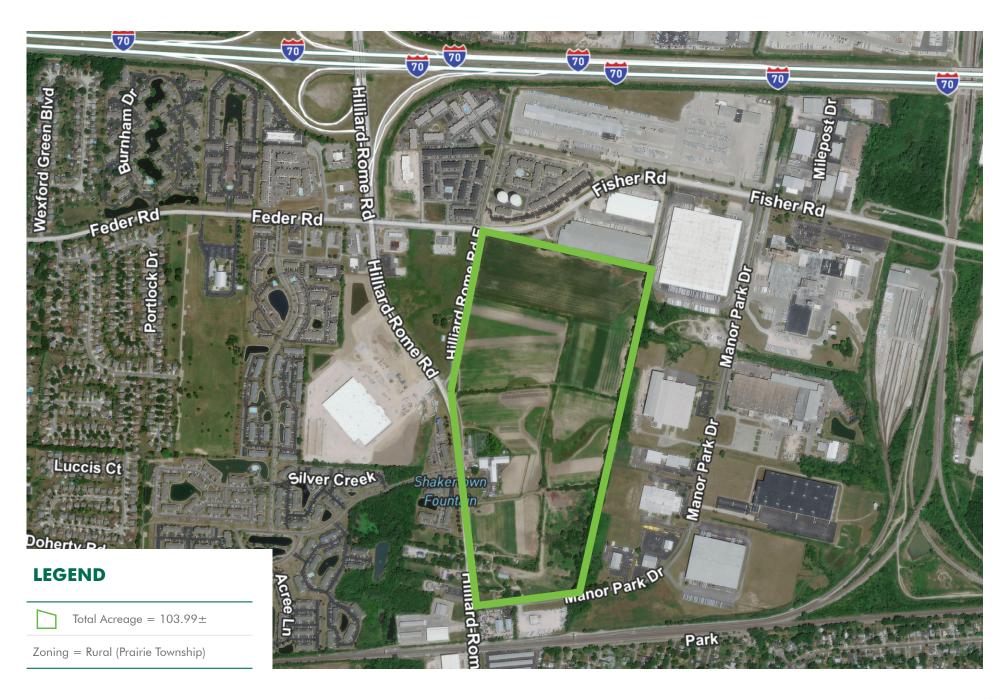
### BUCKEYE YARD RAIL SITE



### 10 HOFFMAN FARM, 800 HILLIARD ROME ROAD



### 10 HOFFMAN FARM, 800 HILLIARD ROME ROAD



### 1 HOFFMAN FARM, 800 HILLIARD ROME ROAD



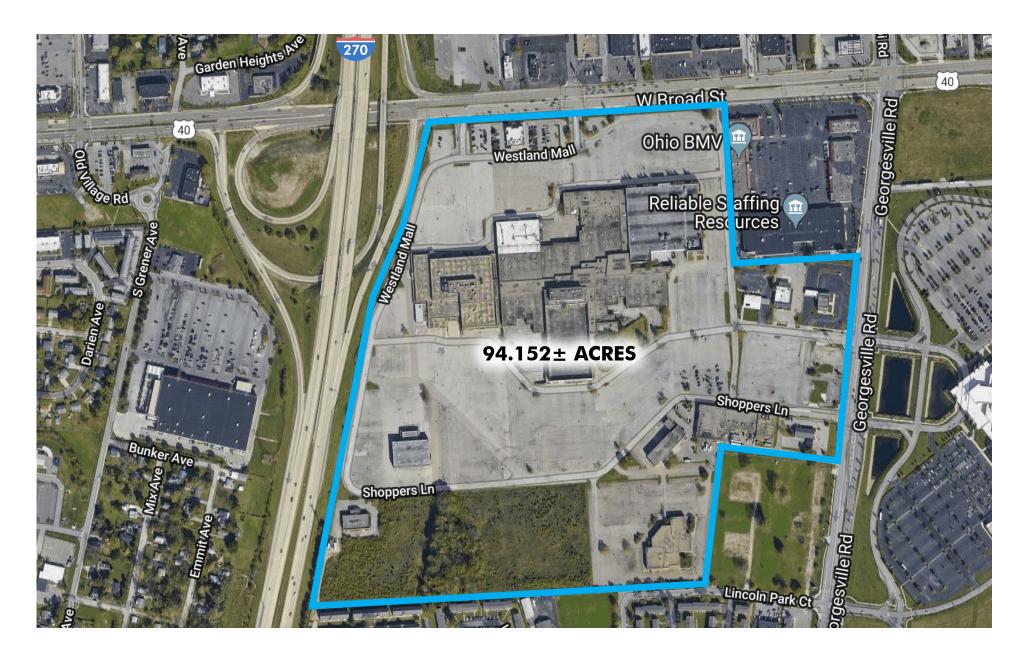
# 3 SELECT SIRES SITE



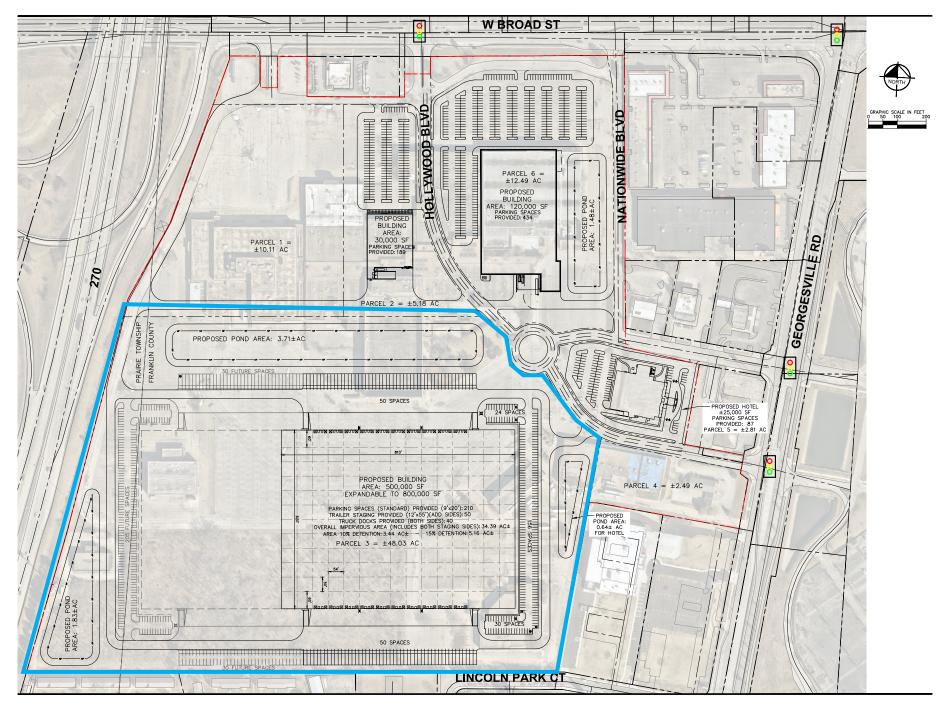
# 3 SELECT SIRES SITE

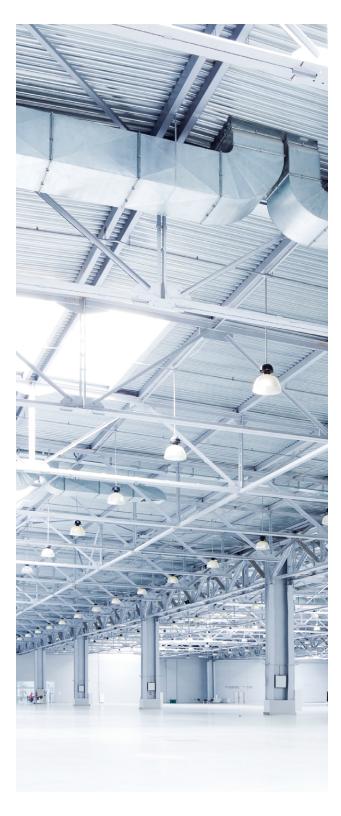


# 4 WESTLAND MALL SITE



### WESTLAND MALL SITE





### PREPARED BY

#### RYAN DEANGELIS

Senior Vice President +1 916 492 6975 ryan.deangelis@cbre.com

#### MATTHEW LEHMAN

Vice President +1 614 430 5051 matthew.lehman@cbre.com

#### MICHAEL MULLADY

Executive Vice President +1 614 430 5030 michael.mullady@cbre.com

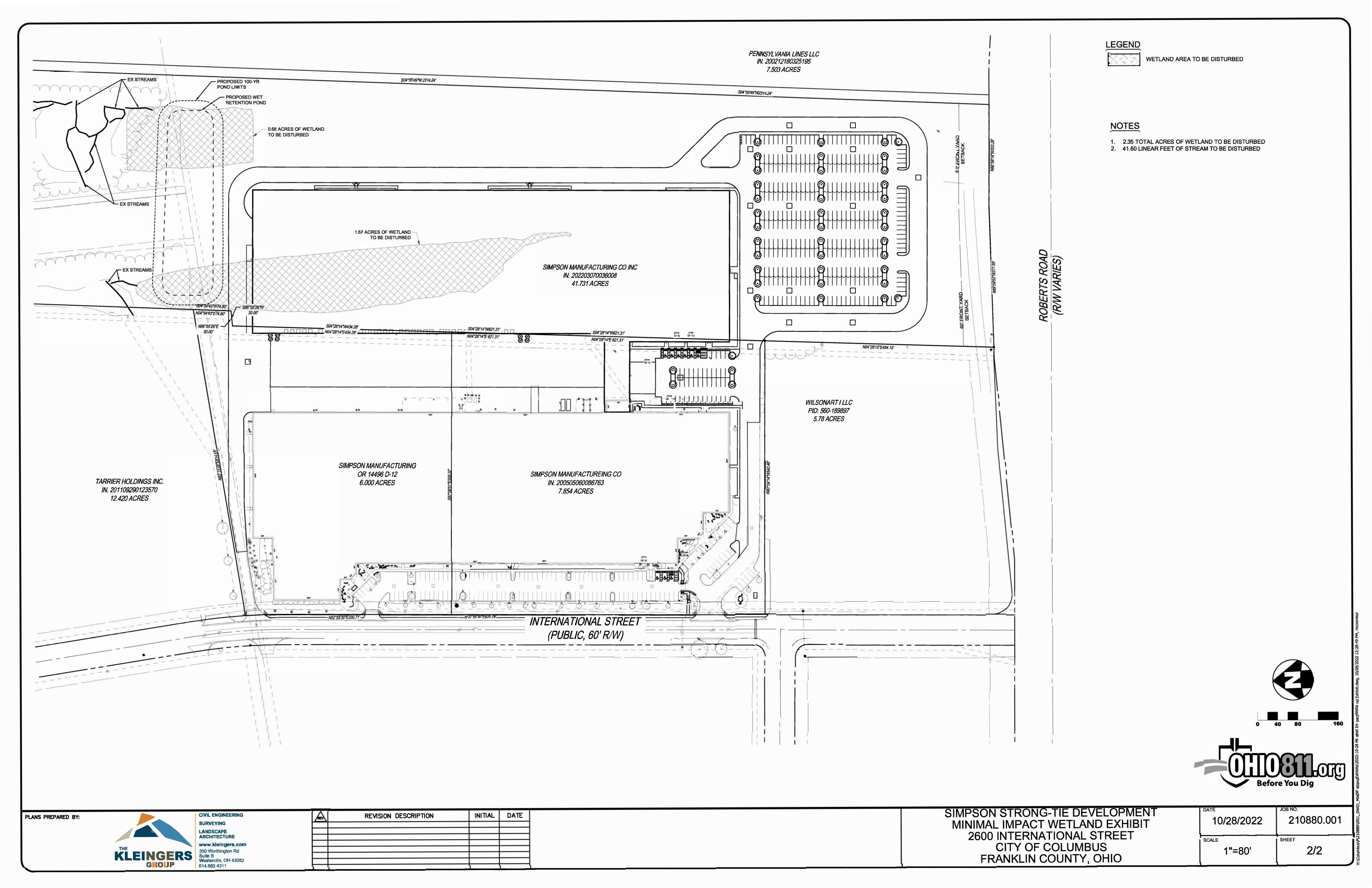
#### **WESTON DEVORE**

Vice President +1 614 430 5031 weston.devore@cbre.com

CBRE © 2021 All Rights Reserved. All information included in this letter/proposal pertaining to CBRE, Inc.—including but not limited to its operations, employees, technology and clients—is proprietary and confidential and supplied with the understanding that such information will be held in confidence and not disclosed to any third party without CBRE's prior written consent. This letter/proposal is intended solely as a preliminary expression of general intentions, is for discussion purposes only, and does not create any agreement or obligation by CBRE to negotiate or continue negotiations. CBRE shall have no contractual obligation with respect to the matters referred to herein unless and until a definitive, fully-executed agreement has been delivered by the parties. Prior to delivery of a definitive executed agreement, and without any liability to the other party, either party may (1) propose different terms from those summarized herein, (2) enter into negotiations with other parties and/or (3) unilaterally terminate all negotiations with the other party hereto. Photos herein are the property of their respective owners. Use of these images without the express written consent of the owner is prohibited. CBRE and the CBRE logo are service marks of CBRE, Inc. All other marks displayed on this document are the property of their respective owners, and the use of such logos does not imply any affiliation with or endorsement of CBRE.

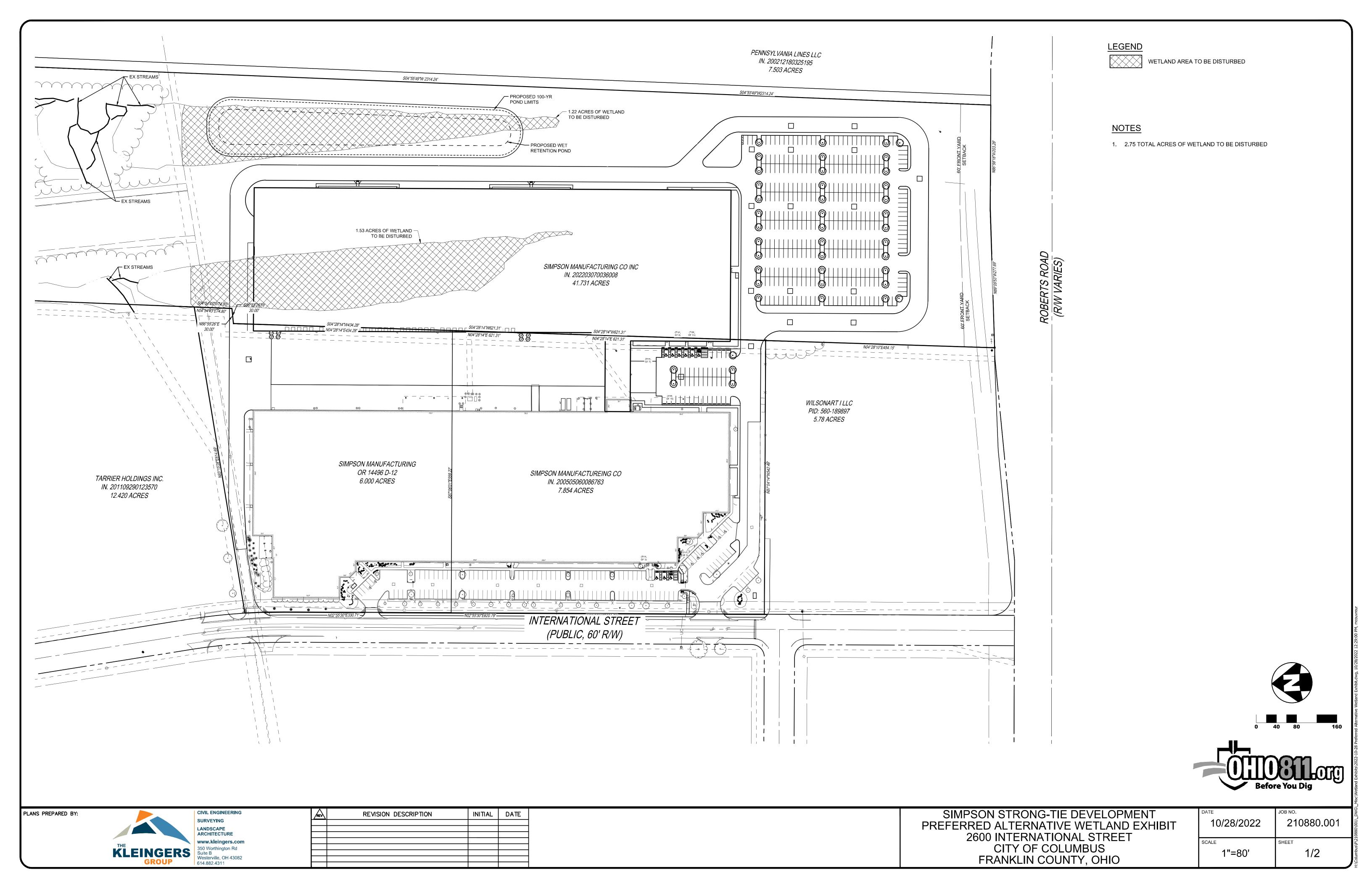
### ATTACHMENT B

Minimal Disturbance Alternative Concept Plan



### ATTACHMENT C

Preferred Alternative Concept Plan







123 South Broad Street, Suite 238 P.O. Box 369 Lancaster, Ohio 43130 T: (740) 654-4016 F: (740) 689-0890

November 4, 2022

Mr. Burak Gursel Simson Strong-Tie Co., Inc. 5956 W. Positas Blvd. Pleasanton, CA 94588

RE: Wetlands Mitigation for the Buckeye Yard Expansion site located at 2600 International Street, Columbus Ohio 43228

ACCT NO. SCIO-179

Dear Mr. Gursel:

The Stream + Wetlands Foundation received on November 4, 2022, an amended purchase agreement for the Buckeye Yard Expansion site. As per the terms of the updated purchase agreement, the previously paid deposit payment of \$32,175 (Check #749648) reserves 4.2 acres of non-forested wetland mitigation credits, from our Huntington In-Lieu Fee Program.

The remaining balance of \$198,825 is due within 30 days of the permit issuance date. If you do not receive your permit within the 6-month reservation period, an additional deposit payment will be required as per the terms of our agreement.

Thank you very much for allowing Stream + Wetlands Foundation to assist you with the wetlands mitigation needs of this project. Should you need further assistance, please feel free to call anytime.

Sincerely,

Vincent E. Messerly, P.E.

President

Cc: Lindsay Hanna, MAD Scientist & Associates, via email



### ATTACHMENT B WETLAND DELINEATION REPORT



### **Memorandum: Buckeye Yard Wetland Assessment**

**Date:** May 3, 2022

RE: Assessment of water resources onsite at Buckeye Yard (north of Roberts Road) in

Franklin County, Ohio

### Introduction

This is a supplemental memo to be included with the delineation report completed by Central Ohio Wetland Consulting, LLC on April 20, 2021.

Simpson Strong-Tie Co., Inc. (SST) hired MAD Scientist Associates, LLC (MAD) to provide wetland assessment services as part of the company's due diligence prior to purchasing a property within Buckeye Yard north on Roberts Road in Franklin County, OH (Figures 1 and 2). Field work was completed on October 18, 2021, by Certified Wetland Delineator (CWD) Lindsay Hanna and Environmental Technician Cody Wright. Observations were recorded regarding the delineated water resources onsite as well as any additional wetlands observed. In addition, connectivity of water resources to make a potential jurisdictional determination was reviewed. Delineation datasheets were completed using methods presented in the 1987 U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (Environmental Laboratory, 1987) and the Midwest Regional Supplement (Version 2.0; USACE, 2012).

### Site Findings

MAD confirmed the presence of seven (7) wetlands and eight (8) streams onsite. MAD verified the wetland boundaries that were delineated by Central Ohio Wetland Consulting, LLC in a previous delineation report and completed datasheets at each wetland. In addition, MAD delineated an additional wetland and conducted an ORAM for this wetland. Based on field observations, these wetlands and streams are potentially jurisdictional, however a formal jurisdictional determination will have to be submitted to USACE before this can be verified.

Supplemental photos can be found in Appendix A of this addendum.

### Wetlands 1-6

MAD confirmed the presence of Wetlands 1 through 6 that were previously delineated by Central Ohio Wetland Consulting, LLC in April 2021. The updated wetland boundaries are presented in Figure 3 of this addendum. Wetland datasheets are provided in Appendix B of this addendum.

### Wetland 7

Wetland 7 is located in the northern portion in Buckeye Yard located along the edge of the railroad track. The wetland is estimated to be 0.057 acres. Dominant species include green ash (Fraxinus pennsylvanica-FACW), cottonwood (Populus deltoides-FAC), gray dogwood (Cornus racemose-FAC), common buckthorn (Rhamnus cathartica-FAC), narrow-leaf cattail (Typha angustifolia-OBL), barnyard glass (Echinochloa crus-galli-FACW), and yellow nutsedge

(*Cyperus esculentus-FACW*). Wetland hydrology indicators at the Site for Wetland 7 included saturation, geomorphic position, and passing the FAC-neutral test for plants. Hydric soil indicators included depleted matrix (F3) evidenced by a low chroma of 2, with prominent redoximorphic features present (4 to 12 percent) as concentration in the matrix.

Wetland 7 is small with a very narrow buffer of high intensity land uses. The hydrology has been impacted by the nearby railroad track and stormwater input; it appears to be recovering. Similarly, the habitat has been impacted by shrub removal and is of fair quality; it appears to be recovering. In general, there is little wildlife habitat and a sparse amount of invasive cattail. Based on these factors, Wetland 7 scored a 23 on the ORAM, categorizing it as a Category 1 wetland.

### **Impacts**

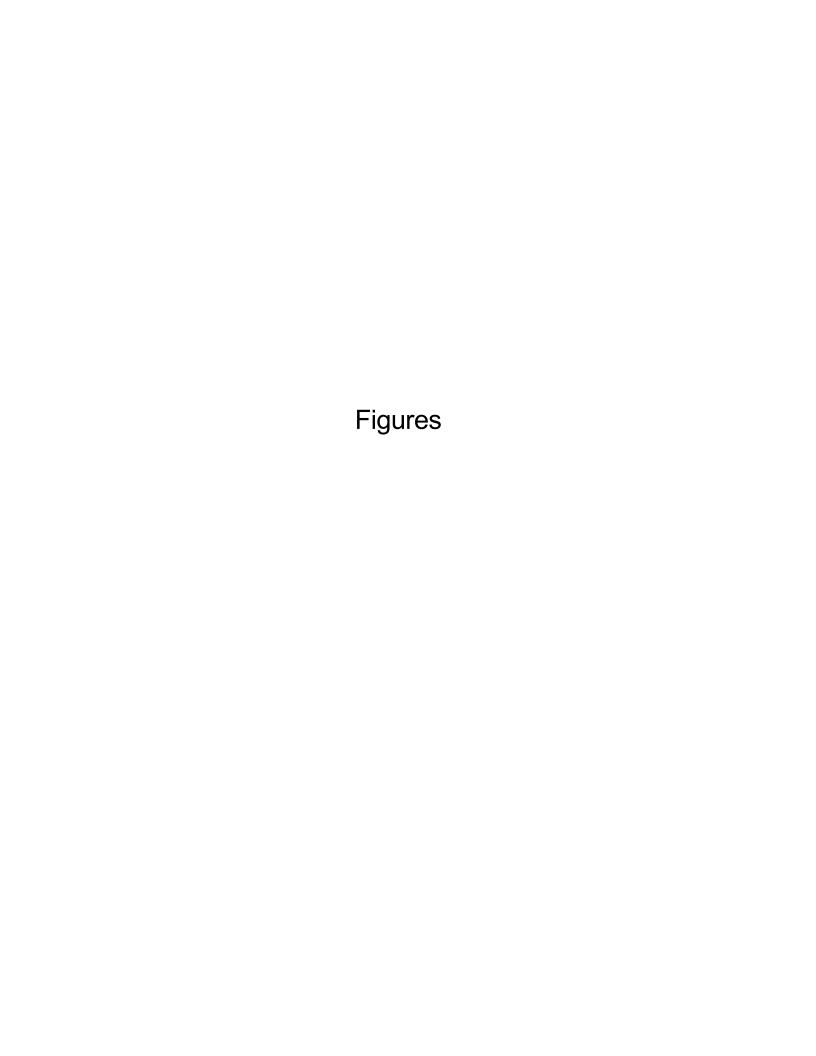
Wetlands 4 and 6 will be impacted. In total, 2.51 acres of wetland will be impacted (1.35 acres of Wetland 4 and 1.16 acres of Wetland 6).

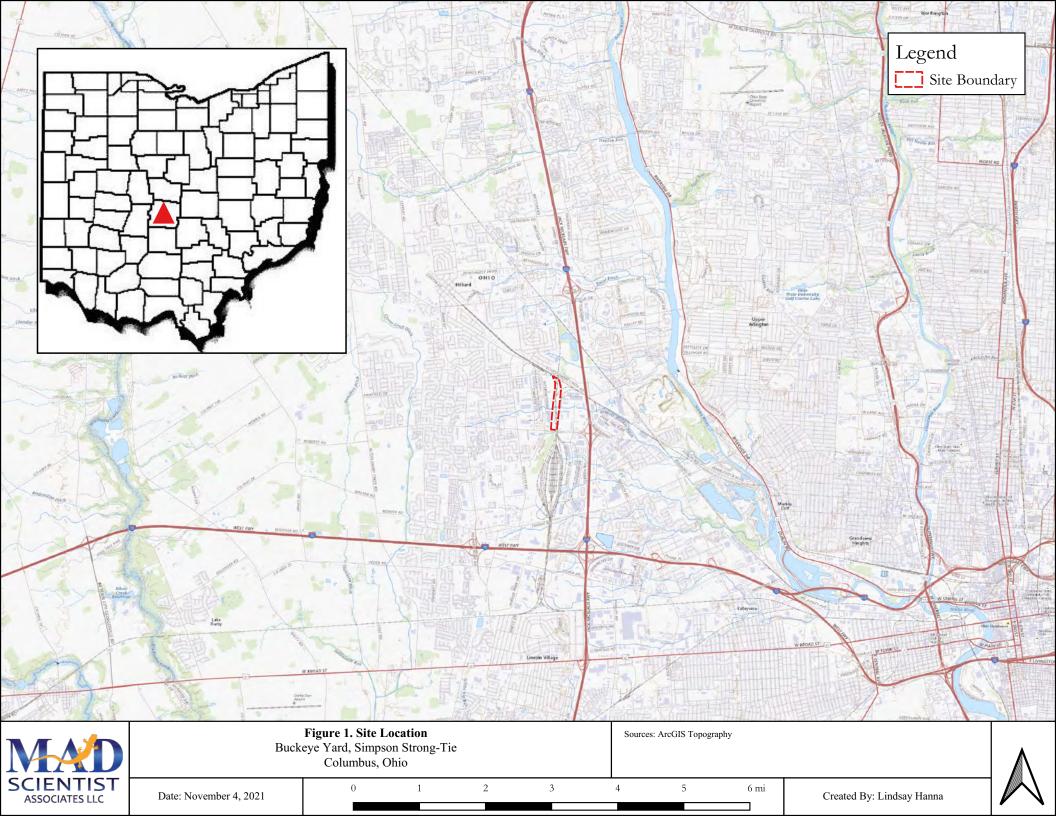
### **Literature Cited:**

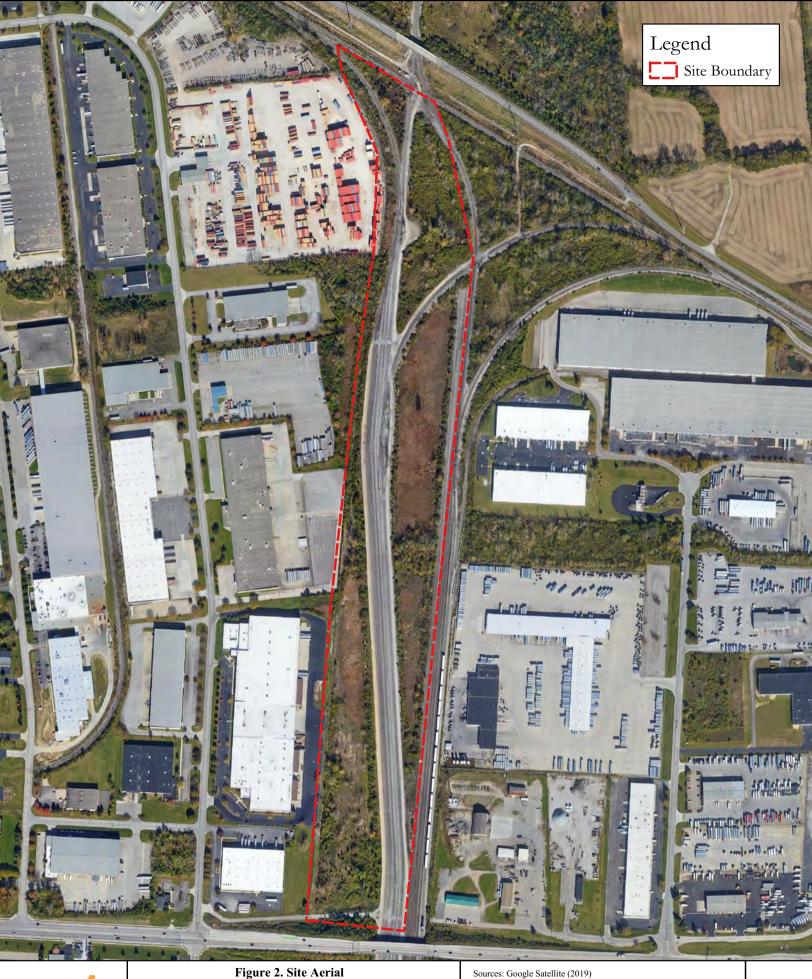
Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report. Y-87-1. U.S. Army Engineers Waterways Experiment Station. Vicksburg, MS.

Ohio EPA. 2001. Ohio Rapid Assessment Method for Wetlands. Version 5.0 Final. Ohio Environmental Protection Agency. Columbus, Ohio.

USACE. 2012. Regional supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0). J. S. Wakeley, R. W. Lichvar, C. V. Noble, and J.F. Berkowitz. ERDC/EL TR-10-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center.









Buckeye Yard, Simpson Strong-Tie Columbus, Ohio

200 400 1,000 ft





Buckeye Yard, Simpson Strong-Tie Columbus, Ohio

> 1,000 ft 200 400



Created By: Lindsay Hanna

# Attachment A Photolog



Photograph 1 – Soil in Wetland 1.



Photograph 2 –Wetland 1 facing northeast toward wetland interior.



Photograph 3 – Upland area between Wetland 1 and Wetland 3, facing south.



Photograph 4 – Soil in Wetland 2.



Photograph 5 – Wetland 2 interior, facing north.



Photograph 6 – Wetland 2 interior, facing east.



Photograph 7 – Soil at Upland 2.



Photograph 8 – Soil in Wetland 3.



Photograph 9 – Wetland 3 interior, facing north.



Photograph 10 – Wetland 4 connectivity with stream, facing south.



Photograph 11 – Upland facing Wetland 4, facing north.



Photograph 12 –Soil in Wetland 5.



Photograph 13 – Wetland 5, facing north.



Photograph 14 – Soil in Wetland 6.



Photograph 15 – Wetland 6 facing north, toward stream area.



Photograph 16 – Wetland 6 interior, facing south.



Photograph 17 – Soil in Wetland 7.



Photograph 18 – Wetland 7 interior, facing east.

Attachment B

Datasheets

Project/Site: Buckeye Yard		City/Cou	nty: Columb	ous/Franklin	Sampling Date	e: <u>11/3/21</u>
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Poin	t: W1-up
Investigator(s): Lindsay Hanna		Section, T	Γownship, Ra	ange:		
Landform (hillside, terrace, etc.): depression			Local relief (	concave, convex, none):	Concave	
Slope (%):2 Lat: _40.013685°		Long:	83.127905°		Datum: NAD '83	
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent s	lopes		NWI classif	ication: N/A	
Are climatic / hydrologic conditions on the site typical	for this time of	of year?	Yes X	No(If no, exp	lain in Remarks.	)
Are Vegetation Y , Soil Y , or Hydrology Y	significantly	disturbed? A	ا Are "Normal (	Circumstances" present?	Yes X	No
Are Vegetation N , Soil N , or Hydrology No	naturally pro	blematic? (	If needed, ex	xplain any answers in Rer	marks.)	
SUMMARY OF FINDINGS – Attach site m	=		ng point lo	ocations, transects	important fo	eatures, etc.
Hydrophytic Vegetation Present? Yes N	lo X	Is the	Sampled A	rea		
	lo X		n a Wetland		No X	
	lo X					
Remarks:						
Site appears mowed, potential soil modification. Wet	land A interio	or mix of FAC,	FACU and F	FACW species.		
VEGETATION – Use scientific names of pla		Decident	To disease	1		
<u>Tree Stratum</u> (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	ksheet:	
Populus deltoides	8	Yes	FAC	Number of Dominant S		
2.				Are OBL, FACW, or F	•	1 (A)
3.				Total Number of Domi	nant Species	
4.				Across All Strata:		4 (B)
5		T-t-L Cover		Percent of Dominant S	•	05 00/ /A/D)
Sapling/Shrub Stratum (Plot size:	8	=Total Cover		Are OBL, FACW, or F	AC:	25.0% (A/B)
	.)			Prevalence Index wo	rksheet:	
1. 2.				Total % Cover of:		oly by:
3.				OBL species	x 1 =	
4.				FACW species	x 2 =	
5.				FAC species	x 3 =	
		=Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size:)				UPL species	x 5 =	
Schizachyrium scoparium	10	Yes	FACU	Column Totals:	(A)	(B)
2. Euthamia graminifolia	5	No	FACW	Prevalence Index =	= B/A =	
3. Juniperus virginiana	12	Yes	FACU			
4. Spiraea japonica	10	Yes	UPL	Hydrophytic Vegetati		
5.				1 - Rapid Test for		getation
6. 7.				2 - Dominance Te 3 - Prevalence Inc		
8.				4 - Morphological		ovide supporting
					s or on a separa	
10.				Problematic Hydro		•
	37	=Total Cover		<sup>1</sup> Indicators of hydric so	. , .	` ' '
Woody Vine Stratum (Plot size:	)			be present, unless dis		
1.				Hydrophytic	-	
2.				Vegetation		
		=Total Cover		Present? Yes	No	<u>x</u>
Remarks: (Include photo numbers here or on a sepa	arate sheet.)			1		

SOIL Sampling Point: W1-up

Depth	cription: (Describe Matrix	to the depth		ument th x Feature		ator or C	confirm the at	sence of indic	alors.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Э	Remarks	
	,		, ,							
							-			
							-			
	-									
1										
	oncentration, D=Dep	letion, RM=R	Reduced Matrix, N	ИS=Mask	ed San	d Grains			ore Lining, M=Ma	
Hydric Soil							Ir		roblematic Hydri	c Soils <sup>3</sup> :
Histosol	` '		Sandy Gle	-	ix (S4)		_		Redox (A16)	
	pipedon (A2)		Sandy Red				_		ese Masses (F12	2)
Black His			Stripped M	/latrix (S6	)		_	Red Parent N	Material (F21)	
Hydroge	n Sulfide (A4)		Dark Surfa	ace (S7)				Very Shallow	Dark Surface (F	22)
Stratified	Layers (A5)		Loamy Mu	icky Mine	ral (F1)			Other (Explain	in in Remarks)	
2 cm Mu	ck (A10)		Loamy Gle	eyed Mati	rix (F2)					
Depleted	Below Dark Surface	e (A11)	Depleted I	Matrix (F3	3)					
Thick Da	rk Surface (A12)		Redox Da	rk Surfac	e (F6)		<sup>3</sup> l	ndicators of hyd	Irophytic vegetation	on and
Sandy M	ucky Mineral (S1)		Depleted [	Dark Surf	ace (F7	)		wetland hydr	ology must be pre	esent,
5 cm Mu	cky Peat or Peat (S	3)	Redox De	pressions	(F8)			unless distur	bed or problemati	ic.
Restrictive I	Layer (if observed):									
Type:	Rocks									
Depth (in	nches):	1	_				Hydric Soil	Present?	Yes	No X
Remarks:			_							
HYDROLO	GY									
Wetland Hvo	drology Indicators:									
_	cators (minimum of c	ne is require	d: check all that	apply)			s	econdary Indica	ators (minimum of	two required
-	Water (A1)	•	Water-Sta		ves (B9)			Surface Soil		•
	ter Table (A2)		Aquatic Fa		` '		_	— Drainage Pat	` ,	
Saturation	` '		True Aqua	,	,		_		Water Table (C2)	
	arks (B1)		Hydrogen			)	_	Crayfish Buri		
	t Deposits (B2)		Oxidized F				oots (C3)	-	sible on Aerial Im	agery (C9)
Drift Dep	osits (B3)		Presence	of Reduc	ed Iron	(C4)	_	Stunted or St	tressed Plants (D	1)
Algal Ma	t or Crust (B4)		Recent Iro	n Reduct	ion in Ti	illed Soil	ls (C6)	Geomorphic	Position (D2)	
	osits (B5)		Thin Muck	Surface	(C7)		_	FAC-Neutral		
	on Visible on Aerial I	magery (B7)	Gauge or '				_		, ,	
	Vegetated Concave					1				
Field Obser			<u> </u>							
Surface Water		ıs.	No X	Depth (ir	iches).					
Water Table			No X	Depth (ir	-					
Saturation P			No X	Depth (ir	_		Wetland H	lydrology Pres	ent? Yes	No X
(includes cap				_ op (	_			.,		- ··· <u>·</u>
	corded Data (stream	gauge, mon	itoring well, aeria	al photos.	previou	s inspec	ctions). if availa	ıble:		
	(554111	JJ.S,SII		F5155,	,		,,			
Remarks:										

Project/Site: Buckeye Yard		City/Cour	nty: Columb	ous/Franklin	Sampling Date	11/3/21
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point	: W1-wet
Investigator(s): Lindsay Hanna		Section, T	Γownship, Ra	ange:		
Landform (hillside, terrace, etc.): depression		l	Local relief (	concave, convex, none):	Concave	
Slope (%):2 Lat: _40.013687°		Long:{	83.127801°		Datum: NAD '83	
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent s	slopes		NWI classifi	cation: N/A	
Are climatic / hydrologic conditions on the site typical for	or this time o	of year?	Yes X	No (If no, exp	lain in Remarks.)	)
Are Vegetation Y , Soil Y , or Hydrology Y s	significantly	disturbed? A	ا Are "Normal (	Circumstances" present?	Yes X	No
Are Vegetation N , Soil N , or Hydrology No r			If needed, ex	xplain any answers in Rer	narks.)	
SUMMARY OF FINDINGS – Attach site ma			ıg point lo	ocations, transects,	important fe	eatures, etc.
Hydrophytic Vegetation Present? Yes X No	 )	Is the	Sampled A	rea		
Hydric Soil Present? Yes X No			n a Wetland		No	
Wetland Hydrology Present? Yes X No	,					
Remarks:						
Site appears mowed, potential soil modification. Wetla	and A interio	or mix of FAC,	FACU and F	FACW species.		
VEGETATION – Use scientific names of pla		Dominant	Indicator	T		
<u>Tree Stratum</u> (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test work	ksheet:	
Populus deltoides	20	Yes	FAC	Number of Dominant S		
2. Salix nigra	18	Yes	OBL	Are OBL, FACW, or FA	•	5 (A)
3.				Total Number of Domi	nant Species	
4.				Across All Strata:		5 (B)
5		<del></del>		Percent of Dominant S	•	00/ /A/D)
Sapling/Shrub Stratum (Plot size: )	38	=Total Cover		Are OBL, FACW, or FA	AC:	(A/B)
				Prevalence Index wo	rkshoot:	
2.				Total % Cover of:		oly by:
3.	·			OBL species	x 1 =	
4.				FACW species	x 2 =	
5.				FAC species	x 3 =	
		=Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size:)				UPL species	x 5 =	
1. Salix nigra	5	Yes	OBL	Column Totals:	(A)	(B)
2. Cornus sericea	10	Yes	FACW	Prevalence Index =	: B/A =	
3. Rhamnus cathartica	8	Yes	FAC	Under white Vocateti	. I1!4e we i	
4 5.				Hydrophytic Vegetati 1 - Rapid Test for		station
6.				X 2 - Dominance Te		etation
7				3 - Prevalence Ind		
8.				4 - Morphological		ovide supporting
9.					s or on a separat	
10				Problematic Hydro	phytic Vegetatio	n¹ (Explain)
	23	=Total Cover		<sup>1</sup> Indicators of hydric so	il and wetland hy	drology must
Woody Vine Stratum (Plot size:)	1			be present, unless dist		
1				Hydrophytic		
2				Vegetation		
		=Total Cover		Present? Yes	<u> </u>	
Remarks: (Include photo numbers here or on a separ	ate sheet.)					

SOIL Sampling Point: W1-wet

Profile Desc	ription: (Describe	to the dept	h needed to doc	ument th	ne indica	tor or	confirm the absenc	e of indicators.	.)	
Depth	Matrix		Redo	x Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-3	10YR 4/2	98	10YR 5/6	2	С	М	Loamy/Clayey	Prominen	it redox conce	entrations
3-13	2.5Y 4/2	98	10YR 5/4	2	С	М	Loamy/Clayey	Distinct	redox concen	ıtrations
13-15	10YR 4/2	96	10YR 4/6	1	С	М	Loamy/Clayey	Prominen	t redox conce	entrations
			10YR 6/4	3	С	М		Distinct	redox concen	ıtrations
			_							
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM=	Reduced Matrix, N	 ∕IS=Masl	ked Sand	Grains	s. <sup>2</sup> Locati	on: PL=Pore Lir	ning, M=Matrix	X.
Hydric Soil								tors for Probler		
Histosol	(A1)		Sandy Gle	yed Mat	rix (S4)		_?_Co	ast Prairie Redo	x (A16)	
Histic Ep	ipedon (A2)		Sandy Red	dox (S5)			Iro	n-Manganese M	asses (F12)	
Black His	stic (A3)		Stripped M	latrix (S6	6)		Re	d Parent Materia	al (F21)	
Hydroge	n Sulfide (A4)		Dark Surfa	ce (S7)			Ve	ry Shallow Dark	Surface (F22	)
Stratified	Layers (A5)		Loamy Mu	cky Mine	eral (F1)		Otl	her (Explain in R	temarks)	
2 cm Mu	ck (A10)		Loamy Gle	eyed Mat	rix (F2)					
Depleted	Below Dark Surface	e (A11)	X Depleted N	Matrix (F	3)					
Thick Da	rk Surface (A12)		Redox Dar	k Surfac	e (F6)		<sup>3</sup> Indica	tors of hydrophy	tic vegetation	and
Sandy M	ucky Mineral (S1)		Depleted [	Dark Sur	face (F7)		we	tland hydrology	must be prese	ent,
5 cm Mu	cky Peat or Peat (S3	3)	Redox Dep	oression	s (F8)		un	less disturbed or	· problematic.	
Restrictive I	_ayer (if observed):									
Type:										
Depth (in	nches):		<u>_</u>				Hydric Soil Prese	ent?	Yes X	No
Remarks:										
This data for	m is revised from Mi	dwest Regio	onal Supplement \	ersion 2	2.0 to incl	ude the	NRCS Field Indicat	ors of Hydric So	ils, Version 7.	.0, 2015
Errata. (http:/	//www.nrcs.usda.gov	//Internet/FS	SE_DOCUMENTS	/nrcs142	2p2_0512	93.doc	x)			
HYDROLO	GY									
Wetland Hyd	drology Indicators:									
Primary Indic	cators (minimum of o	ne is requir	ed; check all that	apply)			Second	dary Indicators (ı	minimum of tv	vo required)
X Surface	Water (A1)		Water-Sta	ined Lea	ves (B9)		Su	rface Soil Crack	s (B6)	
	ter Table (A2)		Aquatic Fa	una (B1	3)		Dra	ainage Patterns	(B10)	
Saturatio	on (A3)		True Aqua	tic Plant	s (B14)			y-Season Water		
Water M	arks (B1)		Hydrogen		, ,			ayfish Burrows (		
Sedimen	t Deposits (B2)		Oxidized F			-	` '	turation Visible o	-	
	osits (B3)		Presence					unted or Stresse	٠,	
	t or Crust (B4)		Recent Iro			lled Soi	` '	omorphic Position	. ,	
	osits (B5)		Thin Muck				<u>X</u> FA	.C-Neutral Test (	D5)	
Inundatio	on Visible on Aerial I	magery (B7)								
Sparsely	Vegetated Concave	Surface (B	8)Other (Exp	lain in R	emarks)					
Field Obser	vations:									
Surface Wat	er Present? Ye		No	Depth (ii	nches): _	5				
Water Table				Depth (ii	_	5	.			
Saturation P		s X	No	Depth (ii	nches): _	5	Wetland Hydro	logy Present?	Yes X	No
(includes cap										
Describe Re	corded Data (stream	gauge, mo	nitoring well, aeria	l photos	, previous	sinspe	ctions), if available:			
Remarks:										
i veilidiks.										

Project/Site: Buckeye Yard		City/Cour	nty: Columb	ous/Franklin	Sampling Date:	11/3/21
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point:	W2-up
Investigator(s): Lindsay Hanna		Section, T	ownship, Ra	ange:		
Landform (hillside, terrace, etc.): depression		I	Local relief (	concave, convex, none):	Concave	
Slope (%): 2 Lat: 40.012603°		Long:{	83.127084°		Datum: NAD '83	
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent s	lopes		NWI classif	ication: N/A	
Are climatic / hydrologic conditions on the site typical f	or this time o	of year?	Yes X	No (If no, exp	lain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y	significantly	disturbed? A	re "Normal (	Circumstances" present?	Yes X N	No
Are Vegetation N , Soil N , or Hydrology No	naturally pro	blematic? (f	If needed, ex	κρlain any answers in Rer	marks.)	
SUMMARY OF FINDINGS – Attach site m	ap showir	ng samplin	g point lo	ocations, transects	important fe	atures, etc.
Hydrophytic Vegetation Present? Yes X No	0	Is the	Sampled A	rea		
Hydric Soil Present? Yes X No	0		n a Wetland		No X	
Wetland Hydrology Present? Yes X No	o					
Remarks:						
<b>VEGETATION</b> – Use scientific names of pla						
Tree Stratum (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	ksheet:	
Populus deltoides	15	Yes	FAC	Number of Dominant S		
2.				Are OBL, FACW, or F	•	2 (A)
3.				Total Number of Domi	nant Species	
4				Across All Strata:	<u> </u>	4 (B)
5				Percent of Dominant S	•	(4/5)
Combination (District	15	=Total Cover		Are OBL, FACW, or F	AC: <u>t</u>	50.0% (A/B)
Sapling/Shrub Stratum (Plot size: 15 1. Rhamnus cathartica	) 35	Yes	FAC	Prevalence Index wo	rkehoot:	
Knamnus camaruca     Lonicera maackii	15	Yes	UPL	Total % Cover of:		lv hv <sup>.</sup>
3.				OBL species 0		0
4.				FACW species 2	x 2 =	4
5.				FAC species 50	) x 3 =	150
	50	=Total Cover		FACU species 0	x 4 =	0
Herb Stratum (Plot size: 5				UPL species 24	x 5 =	120
Lonicera maackii	9	Yes	UPL	Column Totals: 76		274 (B)
2. Fraxinus pennsylvanica	2	No	FACW	Prevalence Index =	= B/A =3.6	<u>i1</u>
3. 4.				Hydrophytic Vegetati	ion Indicators:	
5				1 - Rapid Test for		etation
6.				2 - Dominance Te		Addion
7.				3 - Prevalence Inc	lex is ≤3.0 <sup>1</sup>	
8.				4 - Morphological		
9.				data in Remark	s or on a separate	e sheet)
10				Problematic Hydro	ophytic Vegetation	າ <sup>1</sup> (Explain)
	11	=Total Cover		<sup>1</sup> Indicators of hydric so		
Woody Vine Stratum (Plot size:	)			be present, unless dis	turbed or problem	atic.
1.				Hydrophytic		
2		=Total Cover		Vegetation Present? Yes	No X	,
Demonstrate (Include whate mounth one have an an an analysis		- Total Cover		riesent: ies_		
Remarks: (Include photo numbers here or on a sepa	rate sneet.)					

SOIL Sampling Point: W2-up

Depth	Matrix		Red	ox Featur							
inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Textu	ıre		Remarks	
0-8	10YR 3/2	100					Loamy/C	layey			
		<u> </u>									
							-				
								<del></del> -			
							-				
	ncentration, D=Dep	letion, RM	=Reduced Matrix,	MS=Mas	ked Sand	d Grains.				ning, M=Matr	•
lydric Soil Ir			0		-i (O.4)					matic Hydric	Soils":
Histosol (	·			eyed Mat			-		Prairie Redo		
	pedon (A2)			edox (S5)			-		_	Masses (F12)	
Black Hist				Matrix (S6	9)		-		arent Materi	,	»\
	Sulfide (A4)		Dark Sur	` '	oral (F1)		-			Surface (F22	<u>2)</u>
2 cm Muc	Layers (A5)			lucky Mine				Other	Explain in F	veillaiks)	
_	:k (A10) Below Dark Surface	(Δ11)		leyed Mat Matrix (F							
	k Surface (A12)	(411)		ark Surfac			;	<sup>3</sup> Indicators	of hydronby	tic vegetatior	and
	ucky Mineral (S1)			Dark Sur	` '	)				must be pres	
_	cky Peat or Peat (S3	3)		epression		,				r problematic	
	ayer (if observed):	-			(. 0)					. p. 02.0	-
	ayer (ii observeu).										
Type:	roots										
Type:	roots	8					Hydric Soi	l Present?		Yes	No
Type: Depth (inc		8	_				Hydric Soi	l Present?		Yes	No_
Depth (ind	ches):	8					Hydric Soi	I Present?		Yes	No_
Depth (inc	ches):	8					Hydric Soi	I Present?		Yes	No_
Depth (included) Remarks:  YDROLOG Vetland Hyd	GY rology Indicators:										
Depth (ind Remarks: YDROLOG Vetland Hyd	GY rology Indicators: ators (minimum of o				(00)			Secondary	Indicators (	minimum of t	
Depth (incomments)  YDROLOG  Vetland Hydrimary Indicators  Surface V	GY rology Indicators: ators (minimum of o		Water-St	ained Lea	` '			Secondary Surfac	Indicators ( e Soil Crack	minimum of t	
POPPOLOGICAL SURFACE VICTOR SURFACE VICTOR V	GY  rology Indicators: ators (minimum of o Vater (A1) er Table (A2)		Water-St Aquatic F	ained Lea auna (B1	3) ` ´			Secondary Surfac Draina	Indicators ( e Soil Crack ge Patterns	minimum of t (ss (B6) (B10)	
POROLOGICAL Surface VIX High Water Saturation	GY rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3)		Water-St Aquatic F True Aqu	ained Lea auna (B1 atic Plant	3) s (B14)			Secondary Surfac Draina Dry-Se	Indicators ( e Soil Crack ge Patterns ason Water	minimum of took (B6) (B10) Table (C2)	
Pepth (included in the control of th	GY rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1)		Water-St Aquatic F True Aqu Hydroger	ained Lea auna (B1 atic Plant Sulfide (	3) s (B14) Odor (C1	)		Secondary Surfac Draina Dry-Se Crayfis	Indicators ( e Soil Crack ge Patterns ason Water th Burrows (	minimum of took (B6) (B10) r Table (C2) (C8)	wo requi
Pepth (included per	GY rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2)		Water-St Aquatic F True Aqu Hydroger Oxidized	ained Lea auna (B1 atic Plant Sulfide ( Rhizosph	3) s (B14) Odor (C1 eres on I	) Living Ro		Secondary Surfac Draina Dry-Se Crayfis Satura	Indicators ( e Soil Crack ge Patterns ason Water th Burrows ( tion Visible	minimum of to the second secon	wo requi
Popth (incomplete project project)  Popth (incomplete project	GY  rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) osits (B3)		Water-St Aquatic F True Aqu Hydroger Oxidized Presence	ained Lea Fauna (B1 atic Plant n Sulfide ( Rhizosph e of Reduc	3) s (B14) Odor (C1) eres on l ced Iron (	) Living Ro (C4)	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte	Indicators ( e Soil Crack ge Patterns ason Water th Burrows ( tion Visible d or Stresse	minimum of to the second of th	wo requi
Primary Indica Surface V X High Water Ma Sediment Drift Depo	GY  rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) osits (B3) or Crust (B4)		Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir	ained Lea Fauna (B1 atic Plant n Sulfide ( Rhizosph e of Reduc on Reduc	3) s (B14) Odor (C1 eres on I ced Iron (	) Living Ro (C4)	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
YDROLOG  /etland Hyd rimary Indica Surface V  K High Wate K Saturation Water Ma Sediment Drift Depo	GY  rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) osits (B3) or Crust (B4)	ne is requ	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir	ained Lea Fauna (B1 atic Plant n Sulfide ( Rhizosph e of Reduc	3) s (B14) Odor (C1) eres on I ced Iron ( ction in Ti	) Living Ro (C4)	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns ason Water th Burrows ( tion Visible d or Stresse	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
POPPOLOGIA SURFACE WATER MAIN SEDIMENT DEPOLOGIA Algal Mat Iron Depologian Incondition Inc	rology Indicators: ators (minimum of or	ne is requ	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or	ained Lea Fauna (B1 atic Plant of Sulfide ( Rhizosph of Reduction Reduction k Surface	3) s (B14) Odor (C1) eres on I ced Iron ( ction in Ti e (C7) a (D9)	) Living Ro (C4) Illed Soils	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
Popth (incomplete in the complete in the compl	GY  Irology Indicators: ators (minimum of or	ne is requ	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or	ained Lea Fauna (B1 atic Plant of Sulfide ( Rhizosph of Reduction Reduction k Surface	3) s (B14) Odor (C1) eres on I ced Iron ( ction in Ti e (C7) a (D9)	) Living Ro (C4) Illed Soils	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
Popth (incomplete property)  Popth (incomplet	GY  Irology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial In Vegetated Concave	ne is requ magery (B' Surface (l	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or	ained Lea Fauna (B1 atic Plant of Sulfide ( Rhizosph of Reduction Reduction k Surface	3) s (B14) Ddor (C1 eres on I ced Iron ( tition in Ti c (C7) a (D9)	) Living Ro (C4) Illed Soils	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
Popth (incomplete property)  Popth (incomplet	GY  rology Indicators: ators (minimum of or	ne is requ magery (B' Surface (l	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or B8) Other (Ex	ained Lea Fauna (B1 atic Plant on Sulfide ( Rhizosph e of Reduc on Reduc k Surface Well Dat	3) s (B14) Ddor (C1 eres on I ced Iron ( tition in Ti e (C7) a (D9) Remarks)	) Living Ro (C4) Illed Soils	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
Primary Indication  X High Water X Saturation Water Mater Sediment Drift Depotential	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) in (A3) in (A3) in (B1) in Deposits (B2) in Visible on Aerial In Vegetated Concave rations: er Present? Ye Present? Ye	magery (B Surface (l s 	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or B8) Other (Ex	ained Leafauna (B1 atic Plant in Sulfide ( Rhizospher of Reduction on Reduction k Surface Well Date oplain in F	3) s (B14) Ddor (C1 eres on I ced Iron ( tition in Ti e (C7) a (D9) Remarks) nches):nches):	) Living Ro (C4) Illed Soil	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi eutral Test	minimum of took (B6) (B10) r Table (C2) (C8) on Aerial Imaed Plants (D1) ion (D2)	wo requi
Primary Indicates Surface Water Mater Mate	GY  rology Indicators: ators (minimum of or Vater (A1) er Table (A2) in (A3) arks (B1) Deposits (B2) besits (B3) or Crust (B4) besits (B5) in Visible on Aerial In Vegetated Concave rations: er Present? Ye esent? Ye esent? Ye	magery (B Surface (l s 	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or B8) Other (Ex	ained Lea Fauna (B1 atic Plant n Sulfide ( Rhizosph e of Reduc on Reduc on Reduc ok Surface Well Dat xplain in F	3) s (B14) Ddor (C1 eres on I ced Iron ( tition in Ti e (C7) a (D9) Remarks) nches):nches):	) Living Ro (C4) Illed Soil:	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geomo	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi eutral Test	minimum of the set (B6) (B10) Table (C2) (C8) On Aerial Imaged Plants (D1) ion (D2) (D5)	wo requ
Popth (incomplete production of the production o	GY  rology Indicators: ators (minimum of or Vater (A1) er Table (A2) in (A3) arks (B1) Deposits (B2) besits (B3) or Crust (B4) besits (B5) in Visible on Aerial In Vegetated Concave rations: er Present? Ye esent? Ye esent? Ye	magery (B Surface (I s s X s X	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or B8) Other (Ex	ained Lea Fauna (B1 atic Plant in Sulfide ( Rhizosph e of Reduc on Reduc k Surface Well Dat k plain in F	3) s (B14) Ddor (C1 eres on I ced Iron ( tition in Ti c(C7) a (D9) Remarks) nches): nches): _ nches): _	) Living Ro (C4) Illed Soils	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome FAC-N	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi eutral Test	minimum of the set (B6) (B10) Table (C2) (C8) On Aerial Imaged Plants (D1) ion (D2) (D5)	wo requi
Depth (incomplete processing proc	GY  rology Indicators: ators (minimum of or	magery (B Surface (I s s X s X	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or B8) Other (Ex	ained Lea Fauna (B1 atic Plant in Sulfide ( Rhizosph e of Reduc on Reduc k Surface Well Dat k plain in F	3) s (B14) Ddor (C1 eres on I ced Iron ( tition in Ti c(C7) a (D9) Remarks) nches): nches): _ nches): _	) Living Ro (C4) Illed Soils	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome FAC-N	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi eutral Test	minimum of the set (B6) (B10) Table (C2) (C8) On Aerial Imaged Plants (D1) ion (D2) (D5)	wo requi
Popth (incomplete production of the production o	GY  rology Indicators: ators (minimum of or	magery (B Surface (I s s X s X	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or B8) Other (Ex	ained Lea Fauna (B1 atic Plant in Sulfide ( Rhizosph e of Reduc on Reduc k Surface Well Dat k plain in F	3) s (B14) Ddor (C1 eres on I ced Iron ( tition in Ti c(C7) a (D9) Remarks) nches): nches): _ nches): _	) Living Ro (C4) Illed Soils	oots (C3)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome FAC-N	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse orphic Positi eutral Test	minimum of the set (B6) (B10) Table (C2) (C8) On Aerial Imaged Plants (D1) ion (D2) (D5)	wo requi

Project/Site: Buckeye Yard		City/Cou	inty: Columb	ous/Franklin	Sampling Date	e: <u>11/3/21</u>
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Poin	t: W2-wet
Investigator(s): Lindsay Hanna		Section, 7	Гownship, Ra	ange:		
Landform (hillside, terrace, etc.): depression			Local relief (d	concave, convex, none):	Concave	
Slope (%): 2 Lat: 40.012542°		Long: -	·83.127187°		Datum: <u>NAD '83</u>	
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent s	lopes		NWI classif	ication: N/A	
Are climatic / hydrologic conditions on the site typical f	for this time o	of year?	Yes X	No (If no, exp	lain in Remarks	.)
Are Vegetation Y , Soil Y , or Hydrology Y	significantly	disturbed? F	Are "Normal (	Circumstances" present?	Yes X	No
Are Vegetation N , Soil N , or Hydrology No	naturally pro	blematic? (	If needed, ex	xplain any answers in Rer	marks.)	
SUMMARY OF FINDINGS – Attach site m	ap showir	ng samplin	ng point lo	ocations, transects	important f	eatures, etc.
Hydrophytic Vegetation Present? Yes X N	0	Is the	Sampled A	rea		
Hydric Soil Present? Yes X N	o		n a Wetland'		No X	
Wetland Hydrology Present? Yes X N	0					
Remarks:						
VEGETATION – Use scientific names of pla						
Tree Stratum (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	kehoot:	
1. Populus deltoides	20	Yes	FAC	Number of Dominant 9		
Acer saccharinum	15	Yes	FACW	Are OBL, FACW, or F	•	6 (A)
3.				Total Number of Domi		, , ,
4.				Across All Strata:		7 (B)
5.				Percent of Dominant S	Species That	
	35	=Total Cover		Are OBL, FACW, or F	AC:	85.7% (A/B)
Sapling/Shrub Stratum (Plot size: 15	)	.,				
1. Rhamnus cathartica	8	Yes	FAC	Prevalence Index wo		T. L
2. <u>Lonicera japonica</u> 3.	5	Yes	FACU	Total % Cover of: OBL species	x 1 =	ply by:
4				FACW species	x 1 =	<del></del>
5.				FAC species	x3=	
	13	=Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size: 5 )				UPL species	x 5 =	
Agrimonia parviflora	18	Yes	FACW	Column Totals:	(A)	(B)
2. Euthamia graminifolia	25	Yes	FACW	Prevalence Index =	B/A =	
3. Fraxinus pennsylvanica	12	No	FACW			
4. Symphyotrichum lateriflorum	10	No	FACW	Hydrophytic Vegetati		
5. Carex frankii	18	Yes	OBL	1 - Rapid Test for		getation
6.				X 2 - Dominance Te		
7. 8.				3 - Prevalence Inc 4 - Morphological		rovide supporting
					s or on a separa	
10.				Problematic Hydro		· ·
	83	=Total Cover		<sup>1</sup> Indicators of hydric so	. ,	` ' '
Woody Vine Stratum (Plot size:	)			be present, unless dis		
1.				Hydrophytic		
2				Vegetation		
		=Total Cover		Present? Yes	X No	
Remarks: (Include photo numbers here or on a sepa	rate sheet.)					

SOIL Sampling Point: W2-wet

Profile Desc	ription: (Describe	to the dep	th needed to doc	ument t	he indica	ator or	confirm the absenc	e of indicator	s.)	
Depth	Matrix		Redo	x Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-3	10YR 3/2	98	10YR 3/6	2	С	М	Loamy/Clayey	Promine	ent redox cond	centrations
3-11	10YR 4/2	95	10YR 5/4	5	С	М	Loamy/Clayey	Distino	ct redox conce	entrations
11-16	10YR 3/2	95	10YR 5/4	1	С	М	Loamy/Clayey	Distino	ct redox conce	entrations
			10YR 5/6	4	С	М		Promine	ent redox cond	centrations
								_		
1 <sub>Type: C=C</sub>	oncentration, D=Dep	lotion PM-	-Poducod Matrix N		kod Sand		<sup>2</sup> l ocati	on: PL=Pore I	ining M=Mat	riv
Hydric Soil		elion, ixivi-	-Neduced Matrix, IV	/IO-IVIAS	keu Sanc	Gianis		ors for Proble		
Histosol			Sandy Gle	ved Mat	rix (S4)			ast Prairie Re	-	
	pipedon (A2)		Sandy Red					n-Manganese		1
Black His			Stripped M					d Parent Mate		'
	n Sulfide (A4)		Dark Surfa	-				ry Shallow Dai	, ,	12)
	Layers (A5)		Loamy Mu	` '				ner (Explain in	•	)
2 cm Mu			Loamy Gle	-				iei (Expiaiii iii	(Nemarks)	
	ו Below Dark Surface	(Δ11)	X Depleted N							
	irk Surface (A12)	(Δ11)	Redox Dar		-		<sup>3</sup> Indica	tors of hydroph	ovtic vegetatic	n and
	lucky Mineral (S1)		Depleted D					tland hydrolog	-	
	cky Peat or Peat (S3	1)	? Redox Dep					ess disturbed	-	
			- Redex Be	510001011	(1 0)		un.	- COO GIOTGIDOG	— probleman	J.
	Layer (if observed):									
Type: Depth (ir	achoo):						Hudria Sail Brook	nt?	Voo	No
Depth (ii	<u></u>						Hydric Soil Prese	ent?	Yes	No
Remarks:										
HYDROLO	GY									
_	drology Indicators:									
-	cators (minimum of c	ne is requi	•					lary Indicators	•	two required)
	Water (A1)		Water-Sta		` '			rface Soil Crad	` '	
	ter Table (A2)		Aquatic Fa					ainage Pattern		
X Saturation	. ,		True Aqua					/-Season Wat	` '	
	arks (B1)		Hydrogen		` '	<b>'</b>		ayfish Burrows		
	t Deposits (B2)		Oxidized F			-		turation Visible		
	osits (B3)		Presence			,		inted or Stress		1)
	t or Crust (B4)		Recent Iro			lled Soi	` ' —	omorphic Pos	٠, ,	
	osits (B5)	(5.5	Thin Muck				<u>X</u> FA	C-Neutral Tes	t (D5)	
	on Visible on Aerial I		· —							
Sparsely	Vegetated Concave	Surface (E	38)Other (Exp	olain in F	Remarks)					
Field Obser										
Surface Wat					nches):					
Water Table		s X			nches):	8		_		
Saturation P		s <u>X</u>	No	Depth (i	nches):	1	Wetland Hydro	ogy Present?	Yes X	No
(includes cap							1			
Describe Re	corded Data (stream	gauge, mo	onitoring well, aeria	ı photos	, previou	s insped	ctions), if available:			
Damester										
Remarks:										
I										

Project/Site: Buckeye Yard		City/Cour	nty: Columb	us/Franklin	Sampling Date:	11/3/21
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point	W3-wet
Investigator(s): Lindsay Hanna		Section, T	ownship, Ra	nge:		
Landform (hillside, terrace, etc.): depression		L	_ocal relief (c	concave, convex, none):	Concave	
Slope (%): 2 Lat: 40.013665°	<u> </u>	Long:8	83.128058°	[	Datum: NAD '83	
Soil Map Unit Name: Urban land-Celina complex, 2 to 1	2 percent s	lopes		NWI classifi	cation: N/A	
Are climatic / hydrologic conditions on the site typical fo	r this time c	of year?	Yes X	No (If no, exp	lain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y s	ignificantly (	disturbed? A	re "Normal C	Circumstances" present?	Yes X	No
Are Vegetation N , Soil N , or Hydrology No n	aturally prol	blematic? (I	f needed, ex	plain any answers in Ren	narks.)	
SUMMARY OF FINDINGS – Attach site ma	p showir	ng samplin	g point lo	cations, transects,	important fe	atures, etc.
Hydrophytic Vegetation Present? Yes No	0	Is the	Sampled Ar	rea		
Hydric Soil Present? Yes No			n a Wetland?		No X	
Wetland Hydrology Present? Yes No	X	<u> </u>				
Remarks:					<u> </u>	
Site appears mowed, potential soil modification. Wetla	nd A interio	r mix of FAC,	FACU and F.	ACW species.		
VECETATION   Lies estatific names of plan	-4-					
VEGETATION – Use scientific names of plan	Absolute	Dominant	Indicator	Γ		1
<u>Tree Stratum</u> (Plot size:30)	% Cover	Species?	Status	Dominance Test work	ksheet:	
1. Salix nigra	25	Yes	OBL	Number of Dominant S	Species That	
2.				Are OBL, FACW, or FA	AC:	4 (A)
3.				Total Number of Domi	nant Species	5 (D)
4 5.				Across All Strata:		5 (B)
J	25	=Total Cover		Percent of Dominant S Are OBL, FACW, or FA	•	30.0% (A/B)
Sapling/Shrub Stratum (Plot size: 15 )						
Cornus sericea	10	Yes	FACW	Prevalence Index wo	rksheet:	
2. Lonicera maackii	5	Yes	UPL	Total % Cover of:	·	ly by:
3				OBL species	x 1 =	
4				FACW species	x 2 =	
5	15	=Total Cover		FAC species FACU species	x 3 = x 4 =	
Herb Stratum (Plot size: 5 )		-10101 0010.		UPL species	x5=	
1. Phalaris arundinacea	18	Yes	FACW	Column Totals:	(A)	(B)
2. Typha x glauca	5	Yes	OBL	Prevalence Index =	B/A =	
3. Symphyotrichum lateriflorum	2	No	FACW		•	
4				Hydrophytic Vegetati		
5.				1 - Rapid Test for		etation
6.				X 2 - Dominance Te		
7.				3 - Prevalence Ind 4 - Morphological		wide cupporting
8. 9.					s or on a separat	
10.				Problematic Hydro		•
	25	=Total Cover		<sup>1</sup> Indicators of hydric so		, , ,
Woody Vine Stratum (Plot size:)				be present, unless dist		
1				Hydrophytic		
2				Vegetation		
		=Total Cover		Present? Yes_	X No_	_
Remarks: (Include photo numbers here or on a separa	ate sheet.)					

SOIL Sampling Point: W3-wet

Depth	Matrix		Read	x Featur	00			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10YR 4/1	100					Loamy/Clayey	
3-11	10YR 4/2	97	7.5YR 5/6	3	С	М	Loamy/Clayey	Prominent redox concentrations
11-16	2.5Y 5/1	97	10YR 5/6	3	С	М	Loamy/Clayey	Prominent redox concentrations
					<u> </u>			
Type: C=C	concentration, D=Dep	letion, RM		MS=Mas	ked Sand	Grains		: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicato	rs for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy Gle	eyed Mat	rix (S4)		? Coas	st Prairie Redox (A16)
Histic E	pipedon (A2)		Sandy Re	dox (S5)			Iron-	Manganese Masses (F12)
Black H	istic (A3)		Stripped N	/latrix (S	6)		Red	Parent Material (F21)
Hydroge	en Sulfide (A4)		Dark Surfa	ace (S7)			Very	Shallow Dark Surface (F22)
Stratifie	d Layers (A5)		Loamy Mu	ıcky Min	eral (F1)		Othe	er (Explain in Remarks)
2 cm Mu	uck (A10)		Loamy Gle	eyed Ma	trix (F2)			
Deplete	d Below Dark Surface	e (A11)	X Depleted I	Matrix (F	3)			
Thick Da	ark Surface (A12)		Redox Da	rk Surfa	ce (F6)		<sup>3</sup> Indicato	rs of hydrophytic vegetation and
Sandy N	/lucky Mineral (S1)		Depleted I	Dark Sur	face (F7)		wetla	and hydrology must be present,
	ucky Peat or Peat (S	3)	Redox De					ss disturbed or problematic.
Restrictive Type: Depth (i	Layer (if observed): nches):		<u> </u>				Hydric Soil Presen	t?
Type: Depth (i							Hydric Soil Presen	t? Yes <u>X</u> No
Type: Depth (i Remarks:	nches):						Hydric Soil Presen	t? Yes <u>X</u> No
Type: Depth (i Remarks:  HYDROLO Wetland Hy	nches):  OGY rdrology Indicators:		uirad: abaak all that	anniki)				
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi	DGY rdrology Indicators:		•		(RO)		Seconda	ry Indicators (minimum of two require
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface	DGY rdrology Indicators: cators (minimum of c		Water-Sta	ined Lea	` ,		Seconda Surf:	ry Indicators (minimum of two require ace Soil Cracks (B6)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa	DGY rdrology Indicators: cators (minimum of compared (A1) ater Table (A2)		Water-Sta	ined Lea auna (B1	3)		Seconda Surfa Drair	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturation	OGY  rdrology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3)		Water-Sta Aquatic Fa True Aqua	ined Lea auna (B1 atic Plant	(3) ts (B14)		Seconda Surf: Drain Dry-	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2)
Type: Depth (i Remarks:  HYDROLO  Wetland Hy Primary Indi Surface X High Wa Saturati Water M	OGY  vdrology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) vdarks (B1)		Water-Sta Aquatic Fa True Aqua Hydrogen	ined Lea auna (B1 atic Plant Sulfide (	(3) ts (B14) Odor (C1)		SecondaSurfaDrainDryCray	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8)
Type: Depth (i Remarks:  IYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimer	odrology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph	l3) ts (B14) Odor (C1) neres on L	iving R	SecondaSurfaDrainDryCray poots (C3)Satu	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturatie Water M Sedimee Drift De	ordes):  OGY  Indrology Indicators: Index (A1) Index (A1) Index (A2) Index (A3) Index (B1) Index (B1) Index (B2) Index (B2) Index (B3)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Redu	ts (B14) Odor (C1) neres on l ced Iron (	iving Ro	Seconda   Surfa   Drain   Dry-   Cray   Satur   Sturn	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimel Drift Del Algal Ma	DGY rdrology Indicators: Cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc	ts (B14) Odor (C1) neres on L ced Iron (	iving Ro	Seconda   Surf:   Drain   Dry-   Cray   Satu   Stun   S (C6)   X Geo	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimel Drift Del Algal Ma Iron Dep	DGY rdrology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	one is requ	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduce on Reduce Surface	ts (B14) Odor (C1) neres on L ced Iron ( ction in Ti e (C7)	iving Ro	Seconda   Surf:   Drain   Dry-   Cray   Satu   Stun   S (C6)   X Geo	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1)
Type: Depth (i Remarks:  IYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimen Drift Dep Algal Ma Iron Dep Inundati	DGY  vdrology Indicators: cators (minimum of of the cators (minimum of of of the cators (minimum of	one is requ	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 37) Gauge or	ined Lea auna (B1 Sulfide ( Rhizosph of Redu on Reduc Surface Well Da	ts (B14) Odor (C1) neres on L ced Iron ( ction in Ti e (C7) ta (D9)	iving Ro	Seconda   Surf:   Drain   Dry-   Cray   Satu   Stun   S (C6)   X Geo	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimel Drift Del Algal Ma Iron Dep Inundati Sparsely	rdrology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial I by Vegetated Concave	one is requ	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 37) Gauge or	ined Lea auna (B1 Sulfide ( Rhizosph of Redu on Reduc Surface Well Da	ts (B14) Odor (C1) neres on L ced Iron ( ction in Ti e (C7) ta (D9)	iving Ro	Seconda   Surf:   Drain   Dry-   Cray   Satu   Stun   S (C6)   X Geo	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimen Drift Dep Algal Ma Iron Dep Inundati Sparsely	DGY rdrology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial I by Vegetated Concave	one is requ magery (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or (B8) Other (Exp	ined Lea auna (B1 autic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat blain in F	ts (B14) Odor (C1) heres on L ced Iron ( ction in Ti e (C7) ta (D9) Remarks)	iving Ro	Seconda   Surf:   Drain   Dry-   Cray   Satu   Stun   S (C6)   X Geo	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimel Drift Del Algal Ma Iron Dep Inundati Sparsely Field Obser Surface Wa	DGY rdrology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial I by Vegetated Concave rvations: ter Present?	magery (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or (B8) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc surface Well Dat blain in F	ts (B14) Odor (C1) neres on L ced Iron ( ction in Ti e (C7) ta (D9) Remarks)	Living Ro C4) Iled Soil	Seconda   Surf:   Drain   Dry-   Cray   Satu   Stun   S (C6)   X Geo	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Inundati Sparsely Field Obsel Surface Wa Water Table	DGY  rdrology Indicators: cators (minimum of of water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial I y Vegetated Concave rvations: ter Present? Ye	magery (Bes	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or (B8) No X No	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc s Surface Well Dat Depth (i Depth (i	ts (B14) Odor (C1) neres on L ced Iron ( ction in Ti e (C7) ta (D9) Remarks) Inches):	Living Ro C4) Illed Soil	Seconda	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimel Drift Dep Algal Ma Iron Dep Inundati Sparsely Field Obser Surface Wa Water Table Saturation F	nches):  OGY  Indrology Indicators: Incators (minimum of	magery (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or (B8) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc s Surface Well Dat Depth (i Depth (i	ts (B14) Odor (C1) neres on L ced Iron ( ction in Ti e (C7) ta (D9) Remarks)	Living Ro C4) Iled Soil	Seconda   Surf:   Drain   Dry-   Cray   Satu   Stun   S (C6)   X Geo	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimel Drift Dep Algal Ma Iron Dep Inundati Sparsely Field Obser Surface Wa Water Table Saturation F (includes ca	nches):  OGY  Indrology Indicators: Icators (minimum of	magery (Bes X	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or (B8) Other (Exp	ined Lea auna (B1 sulfide (Rhizosphof Reducent on Reducent Surfacent Well Darblain in Forthologies Depth (in Depth (	ts (B14) Odor (C1) neres on L ced Iron ( ction in Ti e (C7) ta (D9) Remarks) Inches): Inches):	Living Ro C4) Illed Soil	Seconda	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5)
Type: Depth (i Remarks:  HYDROLO  Wetland Hy Primary Indi Surface X High Wa Saturati Water M Sedimel Drift Dep Algal Ma Iron Dep Inundati Sparsely Field Obser Surface Wa Water Table Saturation F (includes ca	nches):  OGY  Indrology Indicators: Incators (minimum of	magery (Bes X	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or (B8) Other (Exp	ined Lea auna (B1 sulfide (Rhizosphof Reducent on Reducent Surfacent Well Darblain in Forthologies Depth (in Depth (	ts (B14) Odor (C1) neres on L ced Iron ( ction in Ti e (C7) ta (D9) Remarks) Inches): Inches):	Living Ro C4) Illed Soil	Seconda	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5)

Project/Site: Buckeye Yard		City/Cour	nty: Columb	ous/Franklin	Sampling Date	e: <u>11/3/21</u>
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point	t: W4-up
Investigator(s):Lindsay Hanna		Section, T	Γownship, Ra	ange:		
Landform (hillside, terrace, etc.): depression		!	Local relief (	concave, convex, none):	Concave	
Slope (%): 2 Lat: 40.005752°		Long:	83.128613°		Datum: NAD '83	
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent s	slopes		NWI classif	ication: N/A	
Are climatic / hydrologic conditions on the site typical f	for this time o	of year?	Yes X	No (If no, exp	lain in Remarks.	)
Are Vegetation Y , Soil Y , or Hydrology Y	significantly	disturbed? A	لــــــــــــــــــــــــــــــــــــ	Circumstances" present?	Yes X	No
Are Vegetation N , Soil N , or Hydrology No	naturally pro	blematic? (	If needed, ex	xplain any answers in Rer	marks.)	
SUMMARY OF FINDINGS – Attach site m	ap showi	ng samplin	ıg point lo	ocations, transects	, important fe	eatures, etc.
Hydrophytic Vegetation Present? Yes X No	0	Is the	Sampled A	rea		
<del></del>	o X		n a Wetland		No X	
Wetland Hydrology Present? Yes No	o X					
Remarks:						
<b>VEGETATION</b> – Use scientific names of pla						
<u>Tree Stratum</u> (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	ksheet:	
1.	70 COVO.	ороско .	Otatas	Number of Dominant S		
2.				Are OBL, FACW, or F	•	4 (A)
3.				Total Number of Domi	nant Species	
4.				Across All Strata:		5 (B)
5		T-t-l Cover		Percent of Dominant S	•	00 00/ (A/D)
Sapling/Shrub Stratum (Plot size: 15	`	=Total Cover		Are OBL, FACW, or F	AC:	80.0% (A/B)
1. Rhamnus cathartica	2	Yes	FAC	Prevalence Index wo	rksheet:	
Juniperus virginiana	3	Yes	FACU	Total % Cover of:		oly by:
3. Pyrus calleryana	1	No	UPL	OBL species	x 1 =	
4. Populus deltoides	2	Yes	FAC	FACW species	x 2 =	
5				FAC species	x 3 =	
(5)	8	=Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size: 5 )	10	No	FACIL	UPL species	x 5 =	(D)
Schizachyrium scoparium     Juniperus virginiana	10	No No	FACU FACU	Column Totals:  Prevalence Index =	(A)	(B)
Suriperus viiginiaria     Euthamia graminifolia	18	Yes	FACW	Frevalence index -	- b/A -	
4. Epilobium coloratum	20	Yes	OBL	Hydrophytic Vegetati	ion Indicators:	
5.				1 - Rapid Test for		jetation
6.				X 2 - Dominance Te	st is >50%	
7.				3 - Prevalence Inc		
8				4 - Morphological		
9					s or on a separa	•
10		<del></del>		Problematic Hydro	. ,	` . ,
Waady Vina Stratum (Diat size)	58	=Total Cover		<sup>1</sup> Indicators of hydric so be present, unless dis		
Woody Vine Stratum (Plot size:1.	)			·	turbea or probler	natic.
2.				Hydrophytic Vegetation		
<del>-                                   </del>		=Total Cover		Present? Yes	X No	
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			-		
remaines (e.zze pe.e	,					

SOIL Sampling Point: W4-up

Depth	Matrix		Redo	x Featur						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-8	10YR 4/2	100					Loamy/Claye	<b>е</b> у		
8-13	10YR 4/3	100					Loamy/Claye	ey	friable	
					,					
,										
Type: C=Ce	ncentration, D=Dep	lotion DM	-Paduaad Matrix I		kod Son	d Croine	21.00	cation: PL=Pore	Lining M-Matrix	
lydric Soil I		ielion, ixivi-	-ineduced Matrix, i	vio-ivias	Neu Sain	u Granis.			ematic Hydric Sc	oils <sup>3</sup> :
Histosol (			Sandy Gle	eved Mat	rix (S4)			Coast Prairie Re	•	
	ipedon (A2)		Sandy Re	-	(= .)			Iron-Manganese		
— ' Black His			Stripped N		3)			Red Parent Mate		
	Sulfide (A4)		Dark Surfa		,			Very Shallow Da	, ,	
	Layers (A5)		Loamy Mu	, ,	eral (F1)			Other (Explain in	` '	
2 cm Muc			Loamy Gl	•	, ,			` '	,	
	Below Dark Surface	e (A11)	Depleted	-						
 Thick Dar	rk Surface (A12)	, ,	Redox Da		•		<sup>3</sup> Ind	icators of hydrop	nytic vegetation ar	nd
Sandy Mı	ucky Mineral (S1)		Depleted	Dark Sur	face (F7	)			y must be presen	
	cky Peat or Peat (S3	3)	Redox De	pression	s (F8)			unless disturbed	-	
Restrictive L	.ayer (if observed):									
Type:										
Depth (in	ches):						Hydric Soil Pr	ocont?	Yes	No
							nyunc 3011 F1	esent:		_
Remarks: Gravel in laye	er at 3 inches						nyunc 30ii Fi	esent:		<u>_</u>
Gravel in laye							nyunc 30ii Fi	esent:		
Gravel in laye	GY		- -				nyunc 30ii Fi	esent:		
YDROLO Wetland Hyd	GY Irology Indicators:	ano is requi	irod: chack all that	apply)						
YDROLO Wetland Hyd	<b>GY</b> Irology Indicators: ators (minimum of c	one is requi			wes (R0)		Sec	ondary Indicators	: (minimum of two	
YDROLO Vetland Hyd Primary Indic Surface V	GY Irology Indicators: ators (minimum of control (A1)	one is requi	Water-Sta	ined Lea	` '		Sec	ondary Indicators Surface Soil Cra	: (minimum of two	
YDROLO Vetland Hyd Primary Indic Surface V High Wat	GY Irology Indicators: ators (minimum of control Vater (A1) er Table (A2)	one is requi	Water-Sta	ined Lea auna (B1	3) ` ´		Sec	ondary Indicators Surface Soil Cra Drainage Patterr	: (minimum of two cks (B6) is (B10)	
YDROLO Wetland Hyd Primary Indic Surface V High Wat Saturation	GY Irology Indicators: ators (minimum of control Vater (A1) ter Table (A2) n (A3)	one is requi	Water-Sta Aquatic Fa True Aqua	ined Lea auna (B1 atic Plant	3) s (B14)		Sec	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat	: (minimum of two cks (B6) is (B10) er Table (C2)	
YDROLO  Vetland Hyd  Primary Indic  Surface V  High Wat  Saturation  Water Ma	GY Irology Indicators: ators (minimum of o Vater (A1) ter Table (A2) n (A3) arks (B1)	one is requi	Water-Sta Aquatic Fa True Aqua Hydrogen	ined Lea auna (B1 atic Plant Sulfide (	3) s (B14) Odor (C1	)	Sec	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows	: (minimum of two cks (B6) is (B10) er Table (C2) is (C8)	requir
YDROLO  Vetland Hyd  Primary Indic  Surface V  High Wat  Saturation  Water Ma  Sediment	GY Irology Indicators: ators (minimum of or Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2)	one is requi	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph	3) s (B14) Odor (C1 eres on	) Living Ro	Sec	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl	cks (B6) s (B10) er Table (C2) s (C8) e on Aerial Image	requir
YDROLO Vetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo	GY Irology Indicators: ators (minimum of control of con	one is requi	Water-Sta Aquatic Fa True Aqua Hydrogen	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc	3) s (B14) Ddor (C1 eres on led	) Living Ro (C4)	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres	c (minimum of two cks (B6) is (B10) er Table (C2) c (C8) e on Aerial Imager sed Plants (D1)	requir
YDROLO Vetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo	GY Irology Indicators: ators (minimum of converted (A1) er Table (A2) en (A3) arks (B1) t Deposits (B2) posits (B3) er Crust (B4)	one is requi	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc	3) s (B14) Odor (C1 eres on led Iron etion in Ti	) Living Ro (C4)	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl	c (minimum of two cks (B6) is (B10) er Table (C2) is (C8) e on Aerial Imagel sed Plants (D1) ition (D2)	requir
YDROLO Vetland Hyd Surface V High Wat Saturation Water Ma Sediment Drift Depo	GY Irology Indicators: ators (minimum of converted (A1) er Table (A2) en (A3) arks (B1) t Deposits (B2) posits (B3) er Crust (B4)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface	3) s (B14) Odor (C1 eres on lead Iron etion in Ties (C7)	) Living Ro (C4)	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres Geomorphic Pos	c (minimum of two cks (B6) is (B10) er Table (C2) is (C8) e on Aerial Imagel sed Plants (D1) ition (D2)	requii
YDROLO Vetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio	GY Irology Indicators: ators (minimum of or	magery (B7	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 7) Gauge or	ined Lea auna (B1 Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat	3) s (B14) Odor (C1 eres on lead Iron et (C7) a (D9)	) Living Ro (C4) illed Soils	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres Geomorphic Pos	c (minimum of two cks (B6) is (B10) er Table (C2) is (C8) e on Aerial Imagel sed Plants (D1) ition (D2)	requi
YDROLO Wetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely	GY  Irology Indicators: ators (minimum of orwater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) is or Crust (B4) besits (B5) in Visible on Aerial II Vegetated Concave	magery (B7	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck T) Gauge or	ined Lea auna (B1 Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat	3) s (B14) Odor (C1 eres on lead Iron et (C7) a (D9)	) Living Ro (C4) illed Soils	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres Geomorphic Pos	c (minimum of two cks (B6) is (B10) er Table (C2) is (C8) e on Aerial Imagel sed Plants (D1) ition (D2)	requii
Wetland Hyden Surface Wetland Water Massed Sediment Drift Depotential Iron Depotential Sparsely  Field Observerse	GY  Irology Indicators: ators (minimum of or Nater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) posits (B3) it or Crust (B4) posits (B5) in Visible on Aerial II Vegetated Concave vations:	magery (Bī	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck T) Gauge or	ined Lea auna (B1 Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat	3) s (B14) Ddor (C1 eres on led Iron tion in Ti (C7) a (D9)	) Living Ro (C4) illed Soils	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres Geomorphic Pos	c (minimum of two cks (B6) is (B10) er Table (C2) is (C8) e on Aerial Imagel sed Plants (D1) ition (D2)	requii
Wetland Hyde Primary Indic Surface W High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely Field Observ Gurface Water	GY  Irology Indicators: ators (minimum of or	magery (Bī s Surface (B	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck T) Gauge or Other (Ex	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat Dlain in F	3) s (B14) Ddor (C1 eres on led Iron tition in Title (C7) a (D9) temarks)	) Living Ro (C4) illed Soils	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres Geomorphic Pos	c (minimum of two cks (B6) is (B10) er Table (C2) is (C8) e on Aerial Imagel sed Plants (D1) ition (D2)	requii
YDROLO Wetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely Field Observ Water Table	GY  Irology Indicators: ators (minimum of or	magery (Bī Surface (B	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 7) Gauge or 38) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc c Surface Well Dat blain in F	3) s (B14) Ddor (C1 eres on led Iron et (C7) a (D9) elemarks) nches):	) Living Ro (C4) illed Soils	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres Geomorphic Pos	e (minimum of two cks (B6) is (B10) er Table (C2) s (C8) e on Aerial Imager sed Plants (D1) ition (D2) t (D5)	requi
Wetland Hyden Saturation Wetland Hyden Surface Water Massed Mater Massed Mater Massed Mater Mate	GY  Irology Indicators: ators (minimum of orwater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) posits (B3) t or Crust (B4) posits (B5) in Visible on Aerial Invegetated Concave vations: er Present? Yee esent? Yee esent? Yee	magery (Bi	Water-Star	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat Delain in F Depth (i Depth (i	3) s (B14) Ddor (C1 eres on led Iron et (C7) a (D9) demarks) nches): _ nches): _	) Living Ro (C4) illed Soils	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres Geomorphic Pos FAC-Neutral Tes	e (minimum of two cks (B6) is (B10) er Table (C2) s (C8) e on Aerial Imager sed Plants (D1) ition (D2) t (D5)	requi
Wetland Hyden Saturation Wetland Hyden Surface Water Massed Sediment Iron Deponsion Sparsely Field Observer Water Table In Saturation Projection Sparsely Field Observer Water Table In Saturation Projection Sparsely Field Observer Water Table In Saturation Projection Sparsely	GY  Irology Indicators: ators (minimum of or Nater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) posits (B3) it or Crust (B4) posits (B5) in Visible on Aerial II Vegetated Concave vations: er Present? Ye present? Ye esent? Ye	magery (Bi	Water-Star	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat Delain in F Depth (i Depth (i	3) s (B14) Ddor (C1 eres on led Iron et (C7) a (D9) demarks) nches): _ nches): _	) Living Ro (C4) illed Soils	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres Geomorphic Pos FAC-Neutral Tes	e (minimum of two cks (B6) is (B10) er Table (C2) s (C8) e on Aerial Imager sed Plants (D1) ition (D2) t (D5)	requi
YDROLO Vetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely Field Observ Surface Water Vater Table I Saturation Princludes cap Describe Rec	GY  Irology Indicators: ators (minimum of orwater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) posits (B3) t or Crust (B4) posits (B5) in Visible on Aerial Invegetated Concave vations: er Present? Yee esent? Yee esent? Yee	magery (Bi	Water-Star	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat Delain in F Depth (i Depth (i	3) s (B14) Ddor (C1 eres on led Iron et (C7) a (D9) demarks) nches): _ nches): _	) Living Ro (C4) illed Soils	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres Geomorphic Pos FAC-Neutral Tes	e (minimum of two cks (B6) is (B10) er Table (C2) s (C8) e on Aerial Imager sed Plants (D1) ition (D2) t (D5)	requi
YDROLO Vetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely Field Observ Surface Water Vater Table I Saturation Princludes cap	GY  Irology Indicators: ators (minimum of orwater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) posits (B3) t or Crust (B4) posits (B5) in Visible on Aerial Invegetated Concave vations: er Present? Yee esent? Yee esent? Yee	magery (Bi	Water-Star	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat Delain in F Depth (i Depth (i	3) s (B14) Ddor (C1 eres on led Iron et (C7) a (D9) demarks) nches): _ nches): _	) Living Ro (C4) illed Soils	oots (C3)	ondary Indicators Surface Soil Cra Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visibl Stunted or Stres Geomorphic Pos FAC-Neutral Tes	e (minimum of two cks (B6) is (B10) er Table (C2) s (C8) e on Aerial Imager sed Plants (D1) ition (D2) t (D5)	requi

Project/Site: Buckeye Yard		City/Coun	ty: Columbu	us/Franklin	Sampling Date:	11/3/21
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point	W4-wet
Investigator(s):Lindsay Hanna		Section, To	ownship, Rar	nge:		
Landform (hillside, terrace, etc.): depression		L	ocal relief (c	oncave, convex, none):	Concave	
Slope (%): 2 Lat: 40.005886°		Long: <u>-</u> 8	3.128574°		Datum: NAD '83	
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent slo	pes		NWI classifi	cation: N/A	
Are climatic / hydrologic conditions on the site typical f	or this time of	year?	res X	No (If no, exp	ain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y	significantly dis	sturbed? Ar	re "Normal C	ircumstances" present?	Yes X	No
Are Vegetation N , Soil N , or Hydrology No	naturally proble	ematic? (If	needed, exp	olain any answers in Ren	narks.)	
SUMMARY OF FINDINGS - Attach site m	ap showinເ	g samplinç	g point lo	cations, transects,	important fe	atures, etc.
Hydrophytic Vegetation Present?         Yes         X         No           Hydric Soil Present?         Yes         X         No           Wetland Hydrology Present?         Yes         X         No	0		Sampled Ar a Wetland?		No_X_	
Remarks:  VEGETATION – Use scientific names of pla	onte					
VEGETATION - 036 3016Titillo Tiamos 31 pie	Absolute	Dominant	Indicator			
<u>Tree Stratum</u> (Plot size: 30 )	% Cover	Species?	Status	Dominance Test work	ksheet:	
1. 2.				Number of Dominant S Are OBL, FACW, or FA	•	2 (A)
3. 4.				Total Number of Domin	nant Species	2 (B)
5.		Total Cover		Percent of Dominant S Are OBL, FACW, or FA	•	00.0% (A/B)
Sapling/Shrub Stratum (Plot size: 15	)	-	l			
1				Prevalence Index wo		
2.			[	Total % Cover of:		ly by:
3		·	<del></del> [	OBL species FACW species	x 1 =	
5.			<del></del> [	FACVV species  FAC species	x 2 = x 3 =	
J		Total Cover	<del></del> [	FACU species	x 3 =	
Herb Stratum (Plot size: 5 )		10		UPL species	x 5 =	
1. Typha X glauca	35	Yes	OBL	Column Totals:	(A)	(B)
Juncus effusus    3.	32	Yes	OBL	Prevalence Index =	B/A =	
4.				Hydrophytic Vegetati	on Indicators:	
5.				1 - Rapid Test for	Hydrophytic Vege	etation
6				X 2 - Dominance Te	st is >50%	
7				3 - Prevalence Ind		
8.				4 - Morphological	Adaptations  ' (Pro s or on a separat	
9.						•
10	67 =	Total Cover	<del></del> [	Problematic Hydro		, , ,
Woody Vine Stratum (Plot size:		Total Gover		<sup>1</sup> Indicators of hydric so be present, unless dist		
1	, 		[	Hydrophytic	,	
2.				Vegetation		
	=	Total Cover		Present? Yes _	X No	_
Remarks: (Include photo numbers here or on a sepa	rate sheet.)					

SOIL Sampling Point: W4-wet

Depth	Matrix			x Featur						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-3	2.5Y 5/2	100					Loamy/Clayey			
3-4	2.5Y 5/2	98	2.5Y 5/4	2	С	М	Loamy/Clayey	Distin	ct redox conce	entrations
4-8	10YR 5/2	94	10YR 5/6	6	<u>C</u>	<u>M</u>	Loamy/Clayey	Promin	ent redox cond	centrations
Hydric Soil Histoso Histic E Black H Hydroge Stratifie 2 cm M Deplete Thick D Sandy M	Concentration, D=Dep Indicators: I (A1) pipedon (A2) listic (A3) en Sulfide (A4) d Layers (A5) uck (A10) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) ucky Peat or Peat (S3	e (A11)	Sandy Gle Sandy Rec Stripped M Dark Surfa Loamy Mu Loamy Gle X Depleted I Redox Da Pepleted I Redox De	eyed Mat dox (S5) Matrix (Si Mace (S7) Icky Min eyed Ma Matrix (F rk Surfac Dark Sur	eral (F1) trix (F2) (3) ce (F6) face (F7)		Indica CoIroReVeOt	tors for Problems to Prairie Reson-Manganese and Parent Materry Shallow Dather (Explain in the Company of the Problems of Prob	Masses (F12) erial (F21) ark Surface (F2	c Soils <sup>3</sup> :  2)  n and sent,
lestrictive	Layer (if observed):									
Type: Depth (i Remarks:			<u></u>				Hydric Soil Preso	ent?	Yes	_ No
Type: Depth (i Remarks: Gravel in la	yer at 3 inches						Hydric Soil Preso	ent?	Yes	No
Type: Depth (i Remarks: Gravel in la	yer at 3 inches						Hydric Soil Preso	ent?	Yes	_ No
Type: Depth (i Remarks: Gravel in lay  IYDROLO Wetland Hy Primary Ind	yer at 3 inches  OGY  ydrology Indicators: icators (minimum of c						Secon	dary Indicators	s (minimum of	
Type: Depth (i Remarks: Gravel in lay  IYDROLO Wetland Hy Primary Ind Surface X High Water M Sedime Drift De Algal M Iron De Inundat	yer at 3 inches  OGY  ydrology Indicators: icators (minimum of control of the con	one is requ	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 7) Gauge or	ined Lea auna (B1 Sulfide ( Rhizosph of Redu on Reduc Surface Well Da	ts (B14) Odor (C1) neres on L ced Iron ( ction in Til e (C7) ta (D9)	iving Ro	Secon  Su  Dr  Dr  Cr  cots (C3)  St  s (C6)  Geo	dary Indicators ırface Soil Cra ainage Patterr y-Season Wat ayfish Burrows aturation Visibl	s (minimum of cks (B6) ns (B10) ter Table (C2) s (C8) e on Aerial Ima sed Plants (D1	two require
Type: Depth (i Remarks: Gravel in lay  IYDROLO  Wetland Hy Primary Ind Surface X High Water M Sedime Drift De Algal M Iron De Inundat Sparsel  Field Obse Surface Water Table Saturation F	yer at 3 inches  OGY  /drology Indicators: icators (minimum of context) ic	magery (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 7) Gauge or B8) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc a Surface Well Dat Depth (i Depth (i	ts (B14) Odor (C1) neres on L ced Iron ( ction in Til e (C7) ta (D9)	iving Ro	Secon  Su  Dr  Dr  Cr  cots (C3)  St  s (C6)  Geo	dary Indicators urface Soil Cra ainage Patterr y-Season Wat ayfish Burrows aturation Visibl unted or Stres eomorphic Pos	s (minimum of cks (B6) ns (B10) ter Table (C2) s (C8) e on Aerial Ima sed Plants (D1 sition (D2) st (D5)	two require
Type: Depth (i Remarks: Gravel in lay  IYDROLO  Wetland Hy Primary Ind Surface X High W: X Saturati Water M Sedime Drift De Algal M: Iron De Inundat Sparsel Field Obse Surface Wa Water Table Saturation F (includes ca	yer at 3 inches	magery (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 7) Gauge or B8) Other (Exp No X No No	ined Lea auna (B1 auna (B1 Sulfide ( Rhizosph of Reduc n Reduc Surface Well Da Delain in F Depth (i Depth (i	ts (B14) Odor (C1) neres on L ced Iron ( ction in Til e (C7) ta (D9) Remarks) Inches): Inches):	Living Rock C4) Illed Soil	Secon	dary Indicators urface Soil Cra ainage Patterr y-Season Wat ayfish Burrows aturation Visibl unted or Stres eomorphic Pos	s (minimum of cks (B6) ns (B10) ter Table (C2) s (C8) e on Aerial Ima sed Plants (D1 sition (D2) st (D5)	agery (C9)

Project/Site: Buckeye Yard		City/Cou	nty: Columb	ous/Franklin	Sampling Date:	10/18/21
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point	: W5&6-up
Investigator(s): Lindsay Hanna		Section, T	Township, Ra	ange:		
Landform (hillside, terrace, etc.): depression		!	Local relief (	concave, convex, none):	Concave	
Slope (%): 2 Lat: 40.007998°		Long: -	83.127790°	•	Datum: NAD '83	
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent s	lopes		NWI classif	ication: N/A	
Are climatic / hydrologic conditions on the site typical for	or this time o	of year?	Yes X	No (If no, exp	olain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y s		-		Circumstances" present?	·	No
Are Vegetation N , Soil N , or Hydrology No r				ι γplain any answers in Rei		
SUMMARY OF FINDINGS – Attach site ma						atures, etc.
Hydrophytic Vegetation Present? Yes No	. X	Is the	Sampled A	rea		
	$\frac{x}{X}$		n a Wetland		No X	
Wetland Hydrology Present? Yes X No						
Remarks:		<u>'</u>				
Site appears mowed, potential soil modification. Wetla	and A interio	r mix of FAC,	FACU and F	ACW species.		
<b>VEGETATION</b> – Use scientific names of pla						
Tree Stratum (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	rkshoot:	
1. Catalpa speciosa	20	Yes	FACU	Number of Dominant		
Acer saccharinum	20	Yes	FACW	Are OBL, FACW, or F	•	3 (A)
3. Fraxinus pennsylvanica	10	No	FACW	Total Number of Dom		``
4. Celtis occidentalis	18	Yes	FAC	Across All Strata:		7 (B)
5.				Percent of Dominant S	Species That	
	68	=Total Cover		Are OBL, FACW, or F	AC:	42.9% (A/B)
Sapling/Shrub Stratum (Plot size:)	1					
Lonicera maackii	50	Yes	UPL	Prevalence Index wo		
2. Ligustrum vulgare	15	Yes	FACU	Total % Cover of		ly by:
3. Rhamnus cathartica	10	<u>No</u>	FAC	OBL species	x 1 =	
4 5.				FACW species FAC species	x 2 = x 3 =	
J	75	=Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size: 5 )		- rotal oover		UPL species	x5=	
1. Rhamnus cathartica	10	Yes	FAC	Column Totals:	(A)	(B)
2. Lonicera maackii	8	Yes	UPL	Prevalence Index :	`	`
3.						
4.				Hydrophytic Vegetat	ion Indicators:	
5.				1 - Rapid Test for	Hydrophytic Vego	etation
6				2 - Dominance Te		
7				3 - Prevalence Inc		
8				4 - Morphological		
9.					s or on a separat	-
10		T-1-1 0		Problematic Hydro		` ' '
Woody Vino Stratum (Diet size:	18	=Total Cover		<sup>1</sup> Indicators of hydric so be present, unless dis		
Woody Vine Stratum (Plot size:)					turbed or problem	latic.
1				Hydrophytic		
		=Total Cover		Vegetation Present? Yes	No X	(
Remarks: (Include photo numbers here or on a separ				<u> </u>	<del></del>	
Transitio. (morado prioto numboro nere di dii a sepai	ato 31106t.)					

SOIL Sampling Point: W5&6-up

Profile Desc Depth	cription: (Describe Matrix	to the dep		<b>ument t</b> x Featur		ator or o	confirm the abso	ence of indic	ators.)	
-	Color (moist)	%		% %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
(inches)			Color (moist)							
0-8	10YR 3/2	98	10YR 4/6	2	<u> </u>	PL_	Loamy/Claye		minent redox con	centrations
8-16	2.5Y 4/2	100					Loamy/Claye	<u></u>		
							<u> </u>			
<sup>1</sup> Type: C=C	oncentration, D=Dep	letion RM=	Reduced Matrix N		ked Sand		21.00	nation: PI =Pr	ore Lining, M=Mat	riv
Hydric Soil		iodon, raw	Troduced Waters, I	vic ivido	Roa Garie	Oranic			oblematic Hydri	
Histosol			Sandy Gle	ved Mat	rix (S4)			Coast Prairie	-	
	pipedon (A2)		Sandy Red				<del></del>	•	ese Masses (F12)	1
	stic (A3)		Stripped M	, ,			-	•	//aterial (F21)	
	n Sulfide (A4)		Dark Surfa	`	<i>5</i> ,				Dark Surface (F2	22)
	l Layers (A5)		Loamy Mu	` ,	eral (F1)		-	•	n in Remarks)	· <b>-</b> )
	ick (A10)		Loamy Gle	•	, ,			- (=,4,5.6.	,	
	d Below Dark Surface	e (A11)	Depleted N	-						
	ark Surface (A12)	( )	Redox Dai				<sup>3</sup> Ind	licators of hvd	rophytic vegetatio	n and
	lucky Mineral (S1)		Depleted [		` '	)		-	ology must be pre	
	icky Peat or Peat (S3	3)	Redox De					-	bed or problemation	
	Layer (if observed):	-	<u> </u>	'	,	I			<u> </u>	
Type:	Rocks									
Depth (ir		1					Hydric Soil Pr	esent?	Yes	No X
Remarks:		-								
HYDROLC	)GY									
Wetland Hy	drology Indicators:									
Primary Indi	cators (minimum of c	ne is requi	red; check all that	apply)			<u>Sec</u>	condary Indica	tors (minimum of	two required)
Surface	Water (A1)		Water-Sta	ined Lea	aves (B9)			Surface Soil	Cracks (B6)	
	iter Table (A2)		Aquatic Fa	auna (B1	3)			Drainage Pat		
Saturation			True Aqua					•	Water Table (C2)	
	arks (B1)		Hydrogen		` '	<i>'</i>		Crayfish Burr		
	nt Deposits (B2)		Oxidized F			-	oots (C3)	•	sible on Aerial Im	
	posits (B3)		Presence			,		•	ressed Plants (D	1)
	it or Crust (B4)		Recent Iro			lled Soi	ls (C6)	Geomorphic	` '	
	osits (B5)	/D7	Thin Muck					FAC-Neutral	Test (D5)	
	on Visible on Aerial I Vegetated Concave		· —							
		Surface (E	38)Other (Exp	nain in F	(emarks)		1			
Field Obser				D " "						
Surface Wat					nches): _					
Water Table		s_X_			nches): _		Wetland Use	dualant Duan	omt? Van V	No
Saturation P		s	NO A	Depth (i	nches):		welland nyo	drology Prese	ent? Yes X	_ No
(includes cap	corded Data (stream	dalide mo	nitoring well serie	ıl nhotos	nreviou	s insper	tions) if available	٥.		
Pescibe ive	Soraca Data (Sticalli	gaage, iiic	acilia woli, acilia	p.10103	, proviou	s maper	S. Grio <sub>j</sub> , ii avaliabi	<b>.</b>		
Remarks:										

Project/Site: Buckeye Yard		City/Cou	nty: Columb	ous/Franklin	Sampling Date:	10/18/21
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point	: W5-wet
Investigator(s): Lindsay Hanna		Section, T	Township, Ra	ange:		
Landform (hillside, terrace, etc.): depression			Local relief (	concave, convex, none):	Concave	
Slope (%): 2 Lat: 40.008253°		Long: -	83.127799°	•	Datum: NAD '83	
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent s			NWI classit	ication: N/A	
Are climatic / hydrologic conditions on the site typical for	-		Yes X	No (If no, exp	olain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y s		-		Circumstances" present?		No
Are Vegetation N , Soil N , or Hydrology No r				cplain any answers in Re		
SUMMARY OF FINDINGS – Attach site ma					•	atures, etc.
Hydrophytic Vegetation Present? Yes No	. X	Is the	Sampled A	rea		
	0		n a Wetland		No X	
Wetland Hydrology Present? Yes X						
Remarks:		I				
Site appears mowed, potential soil modification. Wetla	and A interio	r mix of FAC,	FACU and F	ACW species.		
<b>VEGETATION</b> – Use scientific names of pla						
Tree Stratum (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	·kehoot:	
1. Catalpa speciosa	35	Yes	FACU			
Acer saccharinum	20	Yes	FACW	Number of Dominant Are OBL, FACW, or F	•	5 (A)
3. Fraxinus pennsylvanica	15	No	FACW	Total Number of Dom		
4. Ulmus americana	15	No	FACW	Across All Strata:	пан орсосэ	8 (B)
5.				Percent of Dominant S	Species That	
	85	=Total Cover		Are OBL, FACW, or F	•	62.5% (A/B)
Sapling/Shrub Stratum (Plot size:)					•	
Cornus racemosa	10	Yes	FAC	Prevalence Index wo	orksheet:	
2. Fraxinus pennsylvanica	12	Yes	FACW	Total % Cover of	: Multip	ly by:
3. Lonicera maackii	8	Yes	UPL	OBL species	x 1 =	
4				FACW species	x 2 =	
5		T-1-1 0		FAC species	x 3 =	
Horb Stratum (Diet aize: F. )	30	=Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size: 5 )  1. Lysimachia nummularia	10	Yes	FACW	UPL species Column Totals:	x 5 =	(B)
Symphyotrichum lanceolatum	8	Yes	FAC	Prevalence Index	`	(B)
Viburnum trilobum		Yes	FAC	1 TOVAICHOO HIGGX		
4.				Hydrophytic Vegetat	ion Indicators:	
5.				1 - Rapid Test for		etation
6.				X 2 - Dominance Te	est is >50%	
7.				3 - Prevalence Inc	dex is ≤3.0 <sup>1</sup>	
8.				4 - Morphological		
9					s or on a separat	-
10				Problematic Hydr	ophytic Vegetatio	n <sup>1</sup> (Explain)
	23	=Total Cover		<sup>1</sup> Indicators of hydric s		
Woody Vine Stratum (Plot size:)				be present, unless dis	turbed or problem	natic.
1.				Hydrophytic		
2		=Total Cover		Vegetation Present? Yes	No >	,
Demontos (Includo altata assestante la companyo		TOTAL COVE		11636111: 165	NO_/	<u>`                                    </u>
Remarks: (Include photo numbers here or on a separ	ate sneet.)					

SOIL Sampling Point: W5-wet

Depth	Matrix		Read	x Featur	<u> </u>				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Rema	rks
0-9	2.5Y 4/2	93	10YR 5/8	5	С	PL/M	Loamy/Clayey	Prominent redox	concentrations
			2.5Y 4/1	2	RM	M			
9-16	2.5Y 5/2	91	10YR 5/6	5	С	PL/M	Loamy/Clayey	Prominent redox	concentrations
			10YR 3/6	4	C	PL/M		Prominent redox	
			10110 3/0	<u> </u>	<u> </u>	1 L/W		T TOTHINGTE TOGOX (	Sonochitations
				<u> </u>	<u> </u>				
Type: C=C	Concentration, D=Dep	letion, RM	1=Reduced Matrix, I	MS=Mas	ked Sand	d Grains	. <sup>2</sup> Location	n: PL=Pore Lining, M=	Matrix.
Hydric Soil	Indicators:						Indicato	rs for Problematic Hy	dric Soils <sup>3</sup> :
Histoso	I (A1)		Sandy Gle	eyed Mat	rix (S4)			st Prairie Redox (A16)	
Histic E	pipedon (A2)		Sandy Re	dox (S5)			Iron-	Manganese Masses (F	<sup>-</sup> 12)
Black H	istic (A3)		Stripped N	/latrix (S	3)		Red	Parent Material (F21)	
Hydroge	en Sulfide (A4)		Dark Surfa	ace (S7)			Very	Shallow Dark Surface	(F22)
Stratifie	d Layers (A5)		Loamy Mu	ıcky Min	eral (F1)		Othe	r (Explain in Remarks)	)
2 cm M	uck (A10)		Loamy Gle	eyed Ma	trix (F2)				
Deplete	d Below Dark Surface	e (A11)	X Depleted I	Matrix (F	3)				
Thick D	ark Surface (A12)		Redox Da	rk Surfac	e (F6)		<sup>3</sup> Indicato	rs of hydrophytic veget	ation and
Sandy N	Mucky Mineral (S1)		Depleted I	Dark Sur	face (F7)	)	wetla	and hydrology must be	present,
	ucky Peat or Peat (S3	3)	? Redox De					ss disturbed or problen	
Restrictive	Layer (if observed):								
	Layer (if observed):								
Type: Depth (i							Hydric Soil Presen	t? Yes_	No
Type: Depth (i Remarks:	inches):						Hydric Soil Presen	t? Yes_	No
Type: Depth (i Remarks:	DGY						Hydric Soil Presen	t? Yes_	No
Type: Depth (i Remarks:  HYDROLO Wetland Hy	OGY							-	
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Ind	DGY /drology Indicators:		•		(00)		Seconda	ry Indicators (minimum	
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface	OGY /drology Indicators: icators (minimum of c		Water-Sta	ined Lea	, ,		Seconda Surf:	ry Indicators (minimun ace Soil Cracks (B6)	
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Ind Surface X High Wa	OGY vdrology Indicators: icators (minimum of comparts) Water (A1) ater Table (A2)		Water-Sta	ined Lea auna (B1	3) ` ´		Seconda Surf. _X_Draii	ry Indicators (minimun ace Soil Cracks (B6) nage Patterns (B10)	n of two require
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa X Saturati	OGY /drology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3)		Water-Sta Aquatic Fa True Aqua	ined Lea auna (B1 atic Plant	3) s (B14)		Seconda Surf: X Drain Dry-	ry Indicators (minimun ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (G	n of two require
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa X Saturati Water M	OGY /drology Indicators: icators (minimum of compared (A1)) ater Table (A2) on (A3) Marks (B1)		Water-Sta Aquatic Fa True Aqua Hydrogen	nined Lea auna (B1 atic Plant Sulfide (	3) s (B14) Odor (C1	)	Seconda Surfa X Drain Dry- Cray	ry Indicators (minimun ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C fish Burrows (C8)	n of two require
Type: Depth (i Remarks:  HYDROLO  Wetland Hy Primary Ind Surface X High Water M X Sedime	OGY  /drology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3) //arks (B1) nt Deposits (B2)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph	3) s (B14) Odor (C1 eres on l	) Living Ro	SecondaSurfa X_DrainDryCray poots (C3)Satu	ry Indicators (minimum ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (0 fish Burrows (C8) ration Visible on Aerial	n of two require C2) Imagery (C9)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Ind Surface X High Water M X Sedime Drift De	onches):  OGY  Adrology Indicators: icators (minimum of of the control of the con		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Redu	3) s (B14) Odor (C1 teres on led	) Living Ro (C4)	Seconda   Surfa   X Drain   Dry-   Cray   Satur   Sturn	ry Indicators (minimum ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (0 fish Burrows (C8) ration Visible on Aerial ted or Stressed Plants	n of two require C2) Imagery (C9)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Ind Surface X High Water N X Sedime Drift De Algal Ma	OGY /drology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduo	3) s (B14) Odor (C1 eres on lead from the cettion in Ti	) Living Ro (C4)	Seconda           Surf.           X Drain           Dry-           Cray           pots (C3)         Satu           Stun           s (C6)         Geo	ry Indicators (minimunace Soil Cracks (B6) nage Patterns (B10) Season Water Table (Cfish Burrows (C8) ration Visible on Aerial ted or Stressed Plants morphic Position (D2)	n of two require C2) Imagery (C9)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Ind Surface X High Wat X Saturati Water M X Sedime Drift De Algal Ma	DGY /drology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3) //arks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	one is requ	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface	3) SS (B14) Odor (C1 Deres on lead Iron (ction in Ties (C7)	) Living Ro (C4)	Seconda           Surf.           X Drain           Dry-           Cray           pots (C3)         Satu           Stun           s (C6)         Geo	ry Indicators (minimum ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (0 fish Burrows (C8) ration Visible on Aerial ted or Stressed Plants	n of two require C2) Imagery (C9)
Type: Depth (i Remarks:  IYDROLO Wetland Hy Primary Indi Surface X High Water M X Saturati Water M X Sedime Drift De Algal Ma Iron Dej Inundati	OGY  /drology Indicators: icators (minimum of of the content of th	one is requ	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 37) Gauge or	uined Lea auna (B1 Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat	3) s (B14) Odor (C1 eres on letton in Ties (C7) at (D9)	) Living Ro (C4) Illed Soil	Seconda           Surf.           X Drain           Dry-           Cray           pots (C3)         Satu           Stun           s (C6)         Geo	ry Indicators (minimunace Soil Cracks (B6) nage Patterns (B10) Season Water Table (Cfish Burrows (C8) ration Visible on Aerial ted or Stressed Plants morphic Position (D2)	n of two require
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Ind Surface X High Water M X Sedime Drift De Algal Malron Dep Inundati Sparsel	onches):  OGY  Idrology Indicators: icators (minimum of	one is requ	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 37) Gauge or	uined Lea auna (B1 Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat	3) s (B14) Odor (C1 eres on letton in Ties (C7) at (D9)	) Living Ro (C4) Illed Soil	Seconda           Surf.           X Drain           Dry-           Cray           pots (C3)         Satu           Stun           s (C6)         Geo	ry Indicators (minimunace Soil Cracks (B6) nage Patterns (B10) Season Water Table (Cfish Burrows (C8) ration Visible on Aerial ted or Stressed Plants morphic Position (D2)	n of two require
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Ind Surface X High Water M X Sedime Drift De Algal Malron Dep Inundati Sparsel	DGY /drology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3) /darks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I y Vegetated Concave rvations:	one is requ magery (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or (B8) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat plain in F	3) s (B14) Odor (C1 eres on led Iron (ction in Ties (C7) a (D9) Remarks)	) Living Ro (C4) Illed Soil	Seconda           Surf.           X Drain           Dry-           Cray           pots (C3)         Satu           Stun           s (C6)         Geo	ry Indicators (minimunace Soil Cracks (B6) nage Patterns (B10) Season Water Table (Cfish Burrows (C8) ration Visible on Aerial ted or Stressed Plants morphic Position (D2)	n of two require
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa X Saturati Water N X Sedime Drift De Algal Ma Iron Dej Inundati Sparsel Field Obse	DGY /drology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3) /darks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I y Vegetated Concave rvations: iter Present?	magery (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or (B8) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc c Surface Well Dat plain in F	3) Is (B14) Ddor (C1 Interes on I	) Living Ro (C4) Illed Soil	Seconda           Surf.           X Drain           Dry-           Cray           pots (C3)         Satu           Stun           s (C6)         Geo	ry Indicators (minimunace Soil Cracks (B6) nage Patterns (B10) Season Water Table (Cfish Burrows (C8) ration Visible on Aerial ted or Stressed Plants morphic Position (D2)	n of two require C2) Imagery (C9)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Indi Surface X High Wa X Saturati Water M X Sedime Drift De Algal Ma Iron Dej Inundati Sparsel Field Obse Surface Wa Water Table	DGY /drology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3) /darks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Ye	magery (Bes	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or (B8) No X No	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc ( Surface Well Dat Depth (i Depth (i	3) Is (B14) Odor (C1 Ideres on It Cod Iron (C7) Ideres	) Living Re (C4) Illed Soil	Seconda	ry Indicators (minimum ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (0 fish Burrows (C8) ration Visible on Aerial ted or Stressed Plants morphic Position (D2) -Neutral Test (D5)	n of two require C2) Imagery (C9) (D1)
Type: Depth (i Remarks:  HYDROLO Wetland Hy Primary Ind Surface X High Water N X Sedime Drift De Algal Mater N Iron Dep Inundati Sparsel Field Obse Surface Water Table Saturation F	OGY  /drology Indicators: icators (minimum of of water (A1) ater Table (A2) on (A3) /darks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Present? Yea	magery (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or (B8) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc c Surface Well Dat plain in F	3) Is (B14) Odor (C1 Ideres on It Cod Iron (C7) Ideres	) Living Ro (C4) Illed Soil	Seconda           Surf.           X Drain           Dry-           Cray           pots (C3)         Satu           Stun           s (C6)         Geo	ry Indicators (minimum ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (0 fish Burrows (C8) ration Visible on Aerial ted or Stressed Plants morphic Position (D2) -Neutral Test (D5)	n of two require C2) Imagery (C9) (D1)
Type: Depth (i Remarks:  HYDROLO  Wetland Hy Primary Ind Surface X High W: X Saturati Water M X Sedime Drift De Algal M: Iron Dep Inundati Sparsel Field Obse Surface Wa Water Table Saturation F (includes ca	DGY  Idrology Indicators: icators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I y Vegetated Concave rvations: ater Present?  Present?  Ye Present?  Ye pipillary fringe)	magery (Bes X	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or (B8) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat blain in F Depth (i Depth (i	3) s (B14) Odor (C1 eres on led Iron (ction in Tie (C7) a (D9) Remarks) nches): _ nches): _ nches): _	) Living Ro (C4) Illed Soil	Seconda Surfa X Drain Dry- Cray soots (C3) Satu Stun s (C6) Geo X FAC	ry Indicators (minimum ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (0 fish Burrows (C8) ration Visible on Aerial ted or Stressed Plants morphic Position (D2) -Neutral Test (D5)	n of two require C2) Imagery (C9) (D1)
Type: Depth (i Remarks:  IYDROLO Wetland Hy Primary Ind Surface X High W: X Saturati Water M X Sedime Drift De Algal M: Iron De  Inundati Sparsel Field Obse Surface Wa Water Table Saturation F (includes ca	OGY  /drology Indicators: icators (minimum of of water (A1) ater Table (A2) on (A3) /darks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Present? Yea	magery (Bes X	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or (B8) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat blain in F Depth (i Depth (i	3) s (B14) Odor (C1 eres on led Iron (ction in Tie (C7) a (D9) Remarks) nches): _ nches): _ nches): _	) Living Ro (C4) Illed Soil	Seconda Surfa X Drain Dry- Cray soots (C3) Satu Stun s (C6) Geo X FAC	ry Indicators (minimum ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (0 fish Burrows (C8) ration Visible on Aerial ted or Stressed Plants morphic Position (D2) -Neutral Test (D5)	n of two require C2) Imagery (C9) (D1)

Project/Site: Buckeye Yard		City/Cour	nty: Columb	ous/Franklin	Sampling Date	11/3/21
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point	: W6-wet
Investigator(s): Lindsay Hanna		Section, T	Γownship, Ra	ange:		
Landform (hillside, terrace, etc.): depression		!	Local relief (d	concave, convex, none):	Concave	
Slope (%): 2 Lat: 40.007824°		Long: -	83.127451°		Datum: NAD '83	
Soil Map Unit Name: Urban land-Celina complex, 2 to	12 percent s	lopes		NWI classifi	cation: N/A	
Are climatic / hydrologic conditions on the site typical for	or this time of	of year?	Yes X	No (If no, exp	lain in Remarks.)	)
Are Vegetation Y , Soil Y , or Hydrology Y	significantly	disturbed? A	ا Are "Normal (	Circumstances" present?	Yes X	No
Are Vegetation N , Soil N , or Hydrology No	naturally pro	blematic? (	If needed, ex	κρlain any answers in Rer	marks.)	
SUMMARY OF FINDINGS – Attach site ma	ap showi	ng samplin	ng point lo	ocations, transects,	important fe	eatures, etc.
Hydrophytic Vegetation Present? Yes X No	o	Is the	Sampled A	rea		
Hydric Soil Present? Yes X No	0		n a Wetland1		No_X_	
Wetland Hydrology Present? Yes X No	o <u> </u>					
Remarks:						
<b>VEGETATION</b> – Use scientific names of pla	ınts.					
T 01 1 (D) 1	Absolute	Dominant	Indicator			
Tree Stratum (Plot size: 30 )	% Cover 10	Species?	Status	Dominance Test wor		
<ol> <li>Salix nigra</li> <li>Fraxinus pennsylvanica</li> </ol>	10	Yes Yes	OBL FACW	Number of Dominant S Are OBL, FACW, or Fa	•	5 (A)
3.	10	103	IACVV	Total Number of Domi		<u> </u>
4.				Across All Strata:	папт эрестез	5 (B)
5.				Percent of Dominant S	Snecies That	, ` .
	20	=Total Cover		Are OBL, FACW, or F	•	100.0% (A/B)
Sapling/Shrub Stratum (Plot size: 15	)					
1. Salix nigra	15	Yes	OBL	Prevalence Index wo		
2.				Total % Cover of:		oly by:
3.				OBL species	x1=	
5.				FACW species  FAC species	x 2 = x 3 =	
5	15	=Total Cover		FACU species	x	
Herb Stratum (Plot size: 5 )		- 10tai 00vc.		UPL species		
1. Typha X glauca	10	No	OBL	Column Totals:	(A)	(B)
Symphyotrichum lateriflorum	15	Yes	FACW	Prevalence Index =	`	
3. Phalaris arundinacea	35	Yes	FACW			
4. Acer saccharinum	5	No	FACW	Hydrophytic Vegetati	on Indicators:	
5. Impatiens capensis	10	No	FACW	1 - Rapid Test for		etation
6. Lysimachia nummularia	10	No	FACW	X 2 - Dominance Te		
7.				3 - Prevalence Ind		
8.				4 - Morphological	Adaptations ˈ (Pro s or on a separat	
9				Problematic Hydro		•
10	85	=Total Cover		l —		, , ,
Woody Vine Stratum (Plot size:	1	- I Ulai Govei		<sup>1</sup> Indicators of hydric so be present, unless dis		
1.	,				turbou or prob.c	iatio.
2.				Hydrophytic Vegetation		
		=Total Cover		Present? Yes_	X No_	
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			_		

SOIL Sampling Point: W6-wet

Depth	Matrix		Reuc	x Featur	es				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-5	10YR 3/1	100					Loamy/Clayey		
5-11	10YR 4/1	93	7.5YR 4/6	7	С	М	Loamy/Clayey	Prominent redox con-	centrations
11-17	10YR 5/1	80	10YR 5/4	15	С	М	Loamy/Clayey	Distinct redox conce	entrations
			10YR 4/4	5	С	М		Distinct redox conce	entrations
Type: C=C	oncentration, D=Dep	letion, RM	======================================	MS=Mas	ked Sand	Grains	Location 2	n: PL=Pore Lining, M=Mat	trix.
Hydric Soil								ors for Problematic Hydri	c Soils³:
Histosol	(A1)		Sandy Gle					st Prairie Redox (A16)	
Histic Ep	pipedon (A2)		Sandy Re				Iron	-Manganese Masses (F12)	)
Black Hi	` '		Stripped N	∕latrix (S	3)		Red	Parent Material (F21)	
Hydroge	n Sulfide (A4)		Dark Surfa	ace (S7)			Ver	y Shallow Dark Surface (F2	22)
Stratified	d Layers (A5)		Loamy Mu	ıcky Min	eral (F1)		Oth	er (Explain in Remarks)	
2 cm Mu	ıck (A10)		Loamy Gl	eyed Ma	trix (F2)				
X Depleted	d Below Dark Surface	e (A11)	X Depleted	Matrix (F	3)				
Thick Da	ark Surface (A12)		Redox Da	rk Surfa	e (F6)		<sup>3</sup> Indicate	ors of hydrophytic vegetation	n and
Sandy M	lucky Mineral (S1)		Depleted	Dark Sur	face (F7)		wet	and hydrology must be pre	esent,
5 cm Mu	icky Peat or Peat (S	3)	Redox De	pression	s (F8)		unle	ess disturbed or problemati	C.
Postrictivo I	Layer (if observed):								
	,								
Type:							Hydric Soil Prese	nt? Yes	No
			_				Hydric Soil Prese	nt? Yes	_ No
Type: _ Depth (ir Remarks:	nches):						Hydric Soil Prese	nt? Yes	No
Type:	nches):						Hydric Soil Prese	nt? Yes	No
Type:	OGY drology Indicators:	one is requ	uired: check all that	annly)					
Type:	OGY drology Indicators: cators (minimum of c	one is requ			oves (BQ)		<u>Second</u>	ary Indicators (minimum of	
Type:	OGY drology Indicators: cators (minimum of c	one is requ	Water-Sta	ined Lea	` '		<u>Second</u> Sur	ary Indicators (minimum of face Soil Cracks (B6)	
Type: Depth (in Remarks:  HYDROLO Wetland Hy Primary India Surface X High Wa	OGY drology Indicators: cators (minimum of compared (A1) atter Table (A2)	one is requ	Water-Sta Aquatic Fa	ined Lea auna (B1	3)		Sur Sur Dra	ary Indicators (minimum of face Soil Cracks (B6) inage Patterns (B10)	
Type:	drology Indicators: cators (minimum of o Water (A1) ter Table (A2) on (A3)	one is requ	Water-Sta Aquatic Fa True Aqua	ined Lea auna (B1 atic Plant	3) s (B14)		Second Sur Dra Dry	ary Indicators (minimum of face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2)	
Type: Depth (in Remarks:  HYDROLC  Wetland Hy Primary India Surface X High Wa X Saturatio Water M	drology Indicators: cators (minimum of of Water (A1) ster Table (A2) on (A3) larks (B1)	one is requ	Water-Sta Aquatic Fa True Aqua Hydrogen	nined Lea auna (B1 atic Plant Sulfide (	3) s (B14) Odor (C1)	)	Second Sur Dra Dry Cra	ary Indicators (minimum of face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8)	two require
Type:	drology Indicators: cators (minimum of company) Water (A1) Ater Table (A2) On (A3) Jarks (B1) At Deposits (B2)	one is requ	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph	3) s (B14) Odor (C1) eres on L	) ₋iving R	Second Sur Dra Dry Cra oots (C3) Sat	ary Indicators (minimum of face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Im	two require
Type:	OGY drology Indicators: cators (minimum of of the cators (Management o	one is requ	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Redu	3) s (B14) Odor (C1) teres on l ced Iron (	) Living R C4)	Second Sur Dra Dry Cra oots (C3) Sat Stu	ary Indicators (minimum of face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Im ted or Stressed Plants (D	two require
Type: Depth (in Remarks:  HYDROLO Wetland Hy Primary India Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma	drology Indicators: cators (minimum of of Water (A1) atter Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4)	one is requ	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc	3) s (B14) Odor (C1) neres on L ced Iron (	) Living R C4)	Second Sur Dra Dry Cra oots (C3) Sat Stu s (C6)	ary Indicators (minimum of face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Im nted or Stressed Plants (Domorphic Position (D2)	two require
Type: Depth (in Remarks:  HYDROLO Wetland Hy Primary India Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep	drology Indicators: cators (minimum of of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc s Surface	3) s (B14) Odor (C1) eres on L ced Iron ( ction in Ti e (C7)	) Living R C4)	Second Sur Dra Dry Cra oots (C3) Sat Stu s (C6)	ary Indicators (minimum of face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Im ted or Stressed Plants (D	two require
Type: Depth (in Remarks:  HYDROLO Wetland Hy Primary India Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundation	drology Indicators: cators (minimum of of the cators (minimum of of of the cators (minimum of	magery (B	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck T) Gauge or	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Redu on Reduc Surface Well Dat	3) s (B14) Odor (C1) eres on L ced Iron ( ction in Ti e (C7) a (D9)	) Living R C4)	Second Sur Dra Dry Cra oots (C3) Sat Stu s (C6)	ary Indicators (minimum of face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Im nted or Stressed Plants (Domorphic Position (D2)	two require
Type: Depth (in Pepth (in Remarks: Pepth (in	drology Indicators: cators (minimum of of the cators (minimum of of of the cators (minimum of	magery (B	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck T) Gauge or	nined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Redu on Reduc Surface Well Dat	3) s (B14) Odor (C1) eres on L ced Iron ( ction in Ti e (C7) a (D9)	) Living R C4)	Second Sur Dra Dry Cra oots (C3) Sat Stu s (C6)	ary Indicators (minimum of face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Im nted or Stressed Plants (Domorphic Position (D2)	two require
Type: Depth (in Remarks:	drology Indicators: cators (minimum of of the cators (minimum of of of the cators (minimum of	magery (B s Surface (	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck To Gauge or Bas Other (Ex	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dat plain in F	3) ss (B14) Odor (C1) eres on Leced Iron (ction in Tie (C7) a (D9) Remarks)	) Living R C4)	Second Sur Dra Dry Cra oots (C3) Sat Stu s (C6)	ary Indicators (minimum of face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Im nted or Stressed Plants (Domorphic Position (D2)	two require
Type: Depth (in Remarks:  HYDROLO Wetland Hy Primary India Surface X High Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatia Sparsely Field Obser Surface Water	drology Indicators: cators (minimum of of other Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial I of Vegetated Concave vations:	magery (B s Surface (	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck (7) Gauge or (88) Other (Ex	ained Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc surface Well Dat blain in F	3) ss (B14) Odor (C1) peres on Led Iron ( stion in Ti e (C7) a (D9) Remarks)	) Living R C4) Illed Soil	Second Sur Dra Dry Cra oots (C3) Sat Stu s (C6)	ary Indicators (minimum of face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Im nted or Stressed Plants (Domorphic Position (D2)	two require
Type: Depth (in Permarks:  TYDROLC  Wetland Hy Primary India Surface X High Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatia Sparsely  Field Obser Surface Water Water Table	drology Indicators: cators (minimum of of other Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial I of Vegetated Concave vations: er Present? Yes	magery (B s Surface ( es ss X	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck (7) Gauge or (B8) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc ( Surface Well Dat Depth (i Depth (i	3) Ss (B14) Odor (C1) Deres on Leced Iron ( Stion in Ti E (C7) Sa (D9) Remarks) Inches): Inches):	) Living R C4) Illed Soil	Second   Sur   Dra   Dry   Cra   Sat   Stu   Stu   Stu   Stu   Stu   St   According to the second of the second	ary Indicators (minimum of face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Im nted or Stressed Plants (Domorphic Position (D2) C-Neutral Test (D5)	two require
Type: Depth (in Remarks:  HYDROLC  Wetland Hy Primary India Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely  Field Obser Surface Water Table Saturation P	drology Indicators: cators (minimum of of other cators (minimum of othe	magery (B s Surface (	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck (7) Gauge or (88) Other (Ex	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc ( Surface Well Dat Depth (i Depth (i	3) ss (B14) Odor (C1) peres on Led Iron ( stion in Ti e (C7) a (D9) Remarks)	) Living R C4) Illed Soil	Second Sur Dra Dry Cra oots (C3) Sat Stu s (C6)	ary Indicators (minimum of face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Im nted or Stressed Plants (Domorphic Position (D2) C-Neutral Test (D5)	two require
Type: Depth (in Remarks:  HYDROLO  Wetland Hy Primary India Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely  Field Obser Surface Wat Water Table Saturation P (includes ca	drology Indicators: cators (minimum of company) water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial I of Vegetated Concave vations: are Present? Present? Ye present? Ye pillary fringe)	magery (B s Surface ( es X es X	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck Gauge or B8) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dar blain in F Depth (i Depth (i	3) Is (B14) Odor (C1) Ieres on Leced Iron (Interesting in Time (C7) Is (D9) Remarks) Inches): Inches): Inches): Inches):	) Living R C4) Illed Soil	Second   Sur   Dra   Dry   Cra   Sat   Stu   Stu   Stu   Stu   Sto   Cra   X   FAC	ary Indicators (minimum of face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Im nted or Stressed Plants (Domorphic Position (D2) C-Neutral Test (D5)	two require
Type: Depth (in Remarks:  HYDROLO  Wetland Hy Primary India Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely  Field Obser Surface Wat Water Table Saturation P (includes ca	drology Indicators: cators (minimum of of other cators (minimum of othe	magery (B s Surface ( es X es X	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck Gauge or B8) Other (Exp	ined Lea auna (B1 atic Plant Sulfide ( Rhizosph of Reduc on Reduc Surface Well Dar blain in F Depth (i Depth (i	3) Is (B14) Odor (C1) Ieres on Leced Iron (Interesting in Time (C7) Is (D9) Remarks) Inches): Inches): Inches): Inches):	) Living R C4) Illed Soil	Second   Sur   Dra   Dry   Cra   Sat   Stu   Stu   Stu   Stu   Sto   Cra   X   FAC	ary Indicators (minimum of face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Im nted or Stressed Plants (Domorphic Position (D2) C-Neutral Test (D5)	two require

# WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Buckeye Yard		City/Cour	nty: Columb	ous/Franklin	Sampling Date:	10-18-21
Applicant/Owner: Simpson Strong-Tie				State: OH	Sampling Point:	W7-UP
Investigator(s): Lindsay Hanna, Cody Wright		Section, T	ownship, Ra	ange: N/A		
Landform (hillside, terrace, etc.): base of hillslope		L	_ocal relief (d	concave, convex, none):	concave	
Slope (%):1 Lat: _40.012823°		Long: -8	83.127693°		Datum: NAD' 83	
Soil Map Unit Name: Urban Land-Celina complex				NWI classif	ication: N/A	
Are climatic / hydrologic conditions on the site typical fo	or this time c	of year?	Yes X	No (If no, exp	lain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y s	ignificantly (	disturbed? A	re "Normal (	Circumstances" present?	Yes X	lo
Are Vegetation N , Soil N , or Hydrology No n	aturally prol	blematic? (I	f needed, ex	κρlain any answers in Rer	marks.)	
SUMMARY OF FINDINGS – Attach site ma			g point lo	ocations, transects,	important fe	atures, etc.
Hydrophytic Vegetation Present? Yes No	Х	Is the	Sampled A	rea		
	X		n a Wetland		No_X_	
	X					
Remarks:		•				
Along rocky edge of railroad access road						
VEGETATION – Use scientific names of plan		5	1 114 - 11	1		
<u>Tree Stratum</u> (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	ksheet:	
1				Number of Dominant S		
2.				Are OBL, FACW, or F.	•	0 (A)
3.				Total Number of Domi	nant Species	
4.				Across All Strata:		1 (B)
5		T-tal Cover		Percent of Dominant S	•	0 00/ /A/D)
Sapling/Shrub Stratum (Plot size: 15 )	:	=Total Cover		Are OBL, FACW, or F.	AC:	0.0% (A/B)
1. (Flot size. 13 )				Prevalence Index wo	rksheet:	
2.				Total % Cover of:		ly by:
3.	·			OBL species	x 1 =	
4.				FACW species	x 2 =	
5				FAC species	x 3 =	
		=Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size: 5 )	22			UPL species	x 5 =	
1. Daucus carota	60	Yes	UPL	Column Totals:	(A)	(B)
Cornus racemosa     Setaria pumila	10	No No	FAC FAC	Prevalence Index =	= B/A =	
4. Setaria pumila	10	INU	FAC	Hydrophytic Vegetati	on Indicators:	
5				1 - Rapid Test for		etation
6.				2 - Dominance Te		Julion
7.				3 - Prevalence Inc		
8.				4 - Morphological		
9.					s or on a separate	·
10				Problematic Hydro	ophytic Vegetation	n¹ (Explain)
	80	=Total Cover		<sup>1</sup> Indicators of hydric so		
Woody Vine Stratum (Plot size:)				be present, unless dis	turbed or problem	atic.
1.				Hydrophytic		
2		=Total Cover		Vegetation Present? Yes	No X	,
Develope (Include whete numbers here or on a concre		- TOtal Ouvel		Flesent: 165_		<u> </u>
Remarks: (Include photo numbers here or on a separa	ate sneei.)					

US Army Corps of Engineers Midwest Region – Version 2.0

SOIL Sampling Point: W7-UP

inches)				dox Featur							
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Textu	ıre		Remarks	
	_										
vne: C=Conce	ntration, D=Depl	etion RM	=Reduced Matrix	MS=Mas	ked Sand	d Grains		<sup>2</sup> Location:	PI =Pore I i	ning, M=Mati	ix
ydric Soil Indic		Cuon, run	-reduced Matri	k, MO-Mas	ica Gari	oranis.				matic Hydric	
Histosol (A1)			Sandy (	Gleyed Mat	rix (S4)				Prairie Redo	-	
Histic Epiped				Redox (S5)			-			fasses (F12)	
Black Histic (	` '			d Matrix (S					ariganese iv arent Materi		
	•			ırface (S7)	)		-			Surface (F2	2)
Hydrogen Sul				` '	oral (F1)		-			`	۷)
Stratified Lay				Mucky Min			-	— Other (	Explain in F	(emarks)	
2 cm Muck (A	,	(444)		Gleyed Ma							
<del>_</del> ·	ow Dark Surface	(A11)		d Matrix (F				31	- <b>£</b> la	4:	
Thick Dark S	` ,			Dark Surfac	` '					tic vegetatio	
Sandy Mucky				d Dark Sur		1				must be pre	
	Peat or Peat (S3	)	Redox i	Depression	S (F8)			uniess	disturbed o	r problemation	·
estrictive Laye	r (if observed):										
Туре:	Rock										
Depth (inchested) Remarks: This data form is										Yes	
Depth (inchestemarks:	s): revised from Mid	lwest Reg					NRCS Field				No
Depth (inchest lemarks: his data form is rrata. (http://ww	s): revised from Mic w.nrcs.usda.gov	lwest Reg					NRCS Field				_
Depth (inches emarks: his data form is rrata. (http://ww	s): revised from Mic w.nrcs.usda.gov	lwest Reg					NRCS Field				_
Depth (inches emarks: his data form is rrata. (http://www.yDROLOGY	s): revised from Mic w.nrcs.usda.gov	dwest Reg	SE_DOCUMEN	TS/nrcs14			NRCS Field	Indicators	of Hydric Sc		7.0, 2015
Depth (inches emarks: his data form is rrata. (http://www.yDROLOGY	revised from Mic w.nrcs.usda.gov	dwest Reg	SE_DOCUMEN	TS/nrcs14	2p2_0512	293.docx)	NRCS Field	Indicators	of Hydric Sc	oils, Version	7.0, 2015
Depth (inches emarks: his data form is rrata. (http://www.yDROLOGY/etland Hydrologimary Indicator	revised from Mic w.nrcs.usda.gov  ogy Indicators: s (minimum of o	dwest Reg	ired; check all th	TS/nrcs14:	2p2_0512	293.docx)	NRCS Field	Indicators  Secondary Surface	of Hydric So	minimum of (S (B6)	7.0, 2015
Depth (inches emarks: his data form is rrata. (http://www  YDROLOGY  /etland Hydrolo rimary Indicator Surface Wate	revised from Micw.nrcs.usda.gov.	dwest Reg	ired; check all th  Water-S  Aquatic	TS/nrcs14: at apply) Stained Lea	2p2_0512 aves (B9) 3)	293.docx)	NRCS Field	Indicators  Secondary Surfac Draina	of Hydric So  Indicators ( e Soil Crack ge Patterns	minimum of (S (B6)	7.0, 2015
Depth (inches emarks: his data form is rrata. (http://www  YDROLOGY /etland Hydrologimary Indicator Surface Wate High Water T	revised from Micw.nrcs.usda.gov.	dwest Reg	ired; check all the	TS/nrcs14:  at apply) Stained Lea Fauna (B1	aves (B9) 3) s (B14)	293.docx)	NRCS Field	Secondary Surface Draina Dry-Se	of Hydric So  Indicators ( e Soil Crack ge Patterns	minimum of (SS (B6) (B10)	7.0, 2015
Depth (inchestemarks: his data form is rrata. (http://www.yDROLOGY)  YDROLOGY  Yetland Hydrology  Indicator Surface Wate High Water T Saturation (A	revised from Micw.nrcs.usda.gov.  ogy Indicators: s (minimum of oger (A1) fable (A2) 3) (B1)	dwest Reg	ired; check all th  Water-S  Aquatic  True Ac  Hydroge	at apply) Stained Lea Fauna (B1 puatic Plant	2p2_0512 aves (B9) 3) s (B14) Odor (C1	(293.docx)	NRCS Field	Secondary Surfac Draina Dry-Se Crayfis	Indicators ( e Soil Crack ge Patterns eason Water	minimum of (SS (B6) (B10)	7.0, 2015
Depth (inches emarks: his data form is rrata. (http://www  YDROLOGY  /etland Hydrologic rimary Indicator Surface Wate High Water T Saturation (A Water Marks	revised from Micw.nrcs.usda.gov.  ogy Indicators: s (minimum of oer (A1) Table (A2) 3) (B1) posits (B2)	dwest Reg	ired; check all the Water-S Aquatic True Ac Hydroge Oxidize	at apply) Stained Lea Fauna (B1 puatic Planten Sulfide (	aves (B9) 3) s (B14) Odor (C1 leres on l	) Living Ro	NRCS Field	Secondary Surface Draina Dry-Se Crayfis Satura	Indicators ( e Soil Crack ge Patterns ason Water th Burrows (	minimum of (B10) (B10) r Table (C2) (C8)	7.0, 2015
Depth (inchestemarks: his data form is rrata. (http://www.yDROLOGY)  YDROLOGY  Yetland Hydrology  Water Marks  Sediment De	revised from Mic w.nrcs.usda.gov. ogy Indicators: s (minimum of o er (A1) Table (A2) .3) (B1) posits (B2) s (B3)	dwest Reg	ired; check all the Water-S Aquatic True Ac Hydrogo Oxidize Presence	at apply) Stained Lea Fauna (B1 Juatic Plant en Sulfide ( d Rhizosph	aves (B9) 3) s (B14) Odor (C1 eres on loced Iron (ced Ir	) Living Ro	NRCS Field	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte	Indicators ( e Soil Crack ge Patterns ason Water th Burrows (	minimum of (S (B6) (B10) (C8) (C8) on Aerial Imaged Plants (D1	7.0, 2015
Depth (inches emarks: his data form is rrata. (http://ww  YDROLOGY  /etland Hydrolo rimary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits	revised from Mic w.nrcs.usda.gov. ogy Indicators: s (minimum of o er (A1) Table (A2) .3) (B1) posits (B2) s (B3) Crust (B4)	dwest Reg	ired; check all the Water-S Aquatic True Ac Hydroge Oxidize Presence Recent	at apply) Stained Lea Fauna (B1 Juatic Plant en Sulfide ( d Rhizosph	aves (B9) 3) s (B14) Odor (C1 eres on lection in Titologian	) Living Ro	NRCS Field	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse	minimum of (ss (B6) (B10) (C2) (C8) (D10) (D2)	7.0, 2015
Depth (inchest lemarks: his data form is rrata. (http://www.ypprocessed)  YDROLOGY  Yetland Hydrology  Yetland Hydrology  Indicator Surface Water High Water To Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (Iron Deposits)	revised from Mic w.nrcs.usda.gov. ogy Indicators: s (minimum of o er (A1) Table (A2) .3) (B1) posits (B2) s (B3) Crust (B4)	dwest Reg	ired; check all the Water-S Aquatic True Ac Hydrogo Oxidize Presence Recent Thin Mu 7) Gauge	at apply) Stained Lea Fauna (B1 puatic Plant en Sulfide ( d Rhizosph ce of Reduct lron Reduct lron Reduct lor Well Dat	aves (B9) 3) s (B14) Odor (C1 eres on led dron of the cettion in Tie	) Living Roc (C4)	NRCS Field	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse	minimum of (ss (B6) (B10) (C2) (C8) (D10) (D2)	7.0, 2015
Depth (inchest temarks: this data form is trrata. (http://www.communication)  YDROLOGY  Vetland Hydrology  Vetland Hydrology  Vetland Hydrology  Surface Water  High Water T  Saturation (A  Water Marks  Sediment Deposits  Algal Mat or (Inon Deposits)  Inundation Vi	revised from Micw.nrcs.usda.gov.  pgy Indicators: s (minimum of oper (A1) Table (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5)	dwest Reg /Internet/F	ired; check all the Water-S Aquatic True Ac Hydrogo Oxidize Presence Recent Thin Mu 7) Gauge	at apply) Stained Lea Fauna (B1 Juatic Planten Sulfide of Reduction Reductio	aves (B9) 3) s (B14) Odor (C1 eres on led dron of the cettion in Tie	) Living Roc (C4)	NRCS Field	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse	minimum of (ss (B6) (B10) (C2) (C8) (D10) (D2)	7.0, 2015
Depth (inchest clemarks: his data form is irrata. (http://www.com/www.	revised from Mic w.nrcs.usda.gov.  regy Indicators: s (minimum of o er (A1) Table (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5) sisble on Aerial In getated Concave	dwest Reg /Internet/F	ired; check all the Water-S Aquatic True Ac Hydrogo Oxidize Presence Recent Thin Mu 7) Gauge	at apply) Stained Lea Fauna (B1 puatic Plant en Sulfide ( d Rhizosph ce of Reduct lron Reduct lron Reduct lor Well Dat	aves (B9) 3) s (B14) Odor (C1 eres on led dron of the cettion in Tie	) Living Roc (C4)	NRCS Field	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse	minimum of (ss (B6) (B10) (C2) (C8) (D10) (D2)	7.0, 2015
Depth (inchest cemarks: his data form is irrata. (http://www.cemarka. (h	revised from Mic w.nrcs.usda.gov.  pgy Indicators: s (minimum of o er (A1) Table (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5) sible on Aerial In getated Concave	nagery (B	ired; check all the Water-S Aquatic True Ac Hydrogo Oxidize Presence Recent Thin Mu 7) Gauge	at apply) Stained Lea Fauna (B1 puatic Plant en Sulfide ( d Rhizosph ce of Reduct lron Reduct lron Reduct lor Well Dat	aves (B9) 3) s (B14) Odor (C1 eres on led tron of the cetton in Tie	) Living Roc (C4)	NRCS Field	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse	minimum of (ss (B6) (B10) (C2) (C8) (D10) (D2)	7.0, 2015
Depth (inches Remarks: This data form is Firrata. (http://www.  YDROLOGY  Vetland Hydrology  Vetland Hydrology  Vetland Hydrology  Frimary Indicator  Surface Water  High Water T  Saturation (A  Water Marks  Sediment Deposits  Algal Mat or (Inon Deposits  Inundation Vi  Sparsely Veg  Vetland Hydrology  Sield Observation  Surface Water Principles	revised from Micw.nrcs.usda.gov.  pgy Indicators: s (minimum of o er (A1) Table (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5) sisible on Aerial Ingetated Concave pons: resent? Yes	nagery (B	ired; check all the Water-Standard Aquatic True Action William Present Recent Thin Mu T) Gauge B8) Other (I	at apply) Stained Lea Fauna (B1 Juatic Plant en Sulfide ( d Rhizosph ce of Reduct lron Reduct lron Reduct lron Reduct lron Well Dat Explain in F	aves (B9) 3) s (B14) Odor (C1 eres on led to in Tie c (C7) a (D9) Remarks)	) Living Roc (C4)	NRCS Field	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators ( e Soil Crack ge Patterns eason Water th Burrows ( tion Visible d or Stresse	minimum of (ss (B6) (B10) (C2) (C8) (D10) (D2)	7.0, 2015
Depth (inches Remarks: This data form is Errata. (http://www  YDROLOGY  Vetland Hydrolo Primary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or ( Iron Deposits Inundation Vi Sparsely Veg  Field Observation Surface Water Provater Table Presidents	revised from Micw.nrcs.usda.gov.  regy Indicators: s (minimum of oper (A1) Table (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5) sible on Aerial Ingetated Concave resent? Yes	nagery (B	ired; check all the Water-S Aquatic True Ac Hydrogo Oxidize Present Recent Thin Mu 7) Gauge B8) Other (I	at apply) Stained Lea Fauna (B1 puatic Plant en Sulfide ( d Rhizosph ce of Reduct lron Reduct lron Reduct lron Well Dat Explain in F	aves (B9) 3) s (B14) Odor (C1 leres on led (C7) a (D9) Remarks) nches):nches):nches):	) Living Roc (C4)	NRCS Field	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geome	Indicators (ee Soil Crackge Patterns eason Water dition Visible dor Stresse orphic Positieutral Test	minimum of (ss (B6) (B10) (C2) (C8) (D10) (D2)	7.0, 2015
Depth (inches Remarks: This data form is Errata. (http://www  YDROLOGY  Vetland Hydrolo Primary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (I Iron Deposits Inundation Vi	revised from Mice w.nrcs.usda.gov.  regy Indicators: s (minimum of orer (A1) Table (A2) Table (A2) Table (B3) Crust (B4) Togetated Concave ons: Tresent? Tresent? The sent? The	nagery (B	ired; check all the Water-S Aquatic True Ac Hydrogo Oxidize Present Thin Mu 7) Gauge B8) Other (I	at apply) Stained Lea Fauna (B1 quatic Plant en Sulfide ( d Rhizosph ce of Reduct lron Reduct uck Surface or Well Dat Explain in F	aves (B9) 3) s (B14) Odor (C1 leres on led (C7) a (D9) Remarks) nches):nches):nches):	) Living Roc (C4)	NRCS Field	Secondary Surface Draina Dry-Se Crayfis Satura Stunte Geomo	Indicators (ee Soil Crackge Patterns eason Water drows (tion Visible d or Stresse orphic Positieutral Test	minimum of (SS (B6)) (B10) Table (C2) (C8) on Aerial Imaded Plants (D1) ion (D2) (D5)	two requi
Depth (inches Remarks: This data form is Errata. (http://www  YDROLOGY  Vetland Hydrolo Primary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (Iron Deposits Inundation Vi Sparsely Veg  Vetland Observation Surface Water Provider Table Presently Presen	revised from Mice w.nrcs.usda.gov.  regy Indicators: s (minimum of orer (A1) Table (A2) Table (A2) Table (B3) Crust (B4) Togetated Concave ons: Tresent? Tresent? The sent? The	nagery (B Surface (	ired; check all the Water-S Aquatic True Ac Hydroge Oxidize Present Thin Mu 7) Gauge B8) Other (I	at apply) Stained Lea Fauna (B1 Juatic Plant en Sulfide ( d Rhizosph ce of Reductlor Reductlor Reductlor Reductlor Well Date Explain in F Depth (i Depth (i	aves (B9) 3) s (B14) Odor (C1 eres on led Iron (ction in Tie (C7) a (D9) Remarks) nches): _ nches): _ nches): _	) Living Ro (C4) Iled Soils	ots (C3) (C6)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geomo FAC-N	Indicators (ee Soil Crackge Patterns eason Water drows (tion Visible d or Stresse orphic Positieutral Test	minimum of (SS (B6)) (B10) Table (C2) (C8) on Aerial Imaded Plants (D1) ion (D2) (D5)	two requi
Depth (inches Remarks: This data form is Errata. (http://www  YDROLOGY  Vetland Hydrolo Primary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (Iron Deposits Inundation Vi Sparsely Veg  Vetland Observation Surface Water Provider Table Presently Presen	revised from Mic w.nrcs.usda.gov.  regy Indicators: s (minimum of o er (A1) Table (A2) Table (A2) Table (B3) Crust (B4) To (B5) To (B5	nagery (B Surface (	ired; check all the Water-S Aquatic True Ac Hydroge Oxidize Present Thin Mu 7) Gauge B8) Other (I	at apply) Stained Lea Fauna (B1 Juatic Plant en Sulfide ( d Rhizosph ce of Reductlor Reductlor Reductlor Reductlor Well Date Explain in F Depth (i Depth (i	aves (B9) 3) s (B14) Odor (C1 eres on led Iron (ction in Tie (C7) a (D9) Remarks) nches): _ nches): _ nches): _	) Living Ro (C4) Iled Soils	ots (C3) (C6)	Secondary Surfac Draina Dry-Se Crayfis Satura Stunte Geomo FAC-N	Indicators (ee Soil Crackge Patterns eason Water drows (tion Visible d or Stresse orphic Positieutral Test	minimum of (SS (B6)) (B10) Table (C2) (C8) on Aerial Imaded Plants (D1) ion (D2) (D5)	two requi

US Army Corps of Engineers Midwest Region – Version 2.0

# WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Buckeye Yard		City/Cour	nty: Columb	us/Franklin	Sampling Date:	10-18-21
Applicant/Owner: Simpson Strong-Tie	cant/Owner: Simpson Strong-Tie				Sampling Point:	W7-WET
nvestigator(s): Lindsay Hanna, Cody Wright Section, Township, F				nge: N/A		
Landform (hillside, terrace, etc.): base of hillslope			Local relief (c	concave, convex, none):	oncave	
Slope (%): 1 Lat: 40.012821°		Long:{	83.127668°		Datum: NAD' 83	
Soil Map Unit Name: Urban Land-Celina complex				NWI classifi	cation: N/A	
Are climatic / hydrologic conditions on the site typical fo	r this time c	of year?	Yes X	No (If no, expl	ain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y s	ignificantly	disturbed? A	re "Normal C	Circumstances" present?	Yes X N	lo
Are Vegetation N , Soil N , or Hydrology No n	aturally pro	blematic? (I	If needed, ex	plain any answers in Ren	narks.)	<del></del>
SUMMARY OF FINDINGS – Attach site ma	ıp showir	ng samplin	g point lo	cations, transects,	important fe	atures, etc.
Hydrophytic Vegetation Present? Yes X No		Is the	Sampled Ar	rea		
Hydric Soil Present? Yes X No			n a Wetland?		No	
Wetland Hydrology Present? Yes X No					·	
Remarks:						
Area is at the base of the slope of old rail road access	road.					
VECETATION . Has according names of plan	-1-					
VEGETATION – Use scientific names of plan	Absolute	Dominant	Indicator	Γ		1
<u>Tree Stratum</u> (Plot size:30)	% Cover	Species?	Status	Dominance Test worl	sheet:	
Fraxinus pennsylvanica	3	Yes	FACW	Number of Dominant S	species That	
2. Populus deltoides	10	Yes	FAC	Are OBL, FACW, or FA	•	7 (A)
3.				Total Number of Domin	nant Species	:=.
4				Across All Strata:		7 (B)
5	13	=Total Cover		Percent of Dominant S	•	00 00/ (A/R)
Sapling/Shrub Stratum (Plot size: 15 )	13	= Fotal Cover		Are OBL, FACW, or FA	AC:	00.0% (A/B)
1. Cornus racemosa	12	Yes	FAC	Prevalence Index wo	rksheet:	
2. Rhamnus cathartica	5	Yes	FAC	Total % Cover of:		y by:
3.				OBL species	x 1 =	
4.				FACW species	x 2 =	
5.				FAC species	x 3 =	
	17	=Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size: 5 )				UPL species	x 5 =	
1. Typha angustifolia	20	Yes	OBL	Column Totals:	(A)	(B)
2. Epilobium coloratum	10	No	OBL	Prevalence Index =	B/A =	
3. Echinochloa crus-galli  A. Populin deltaidea	<u>23</u> 8	Yes	FACW	Undrambatia Vagatati	Indicatora	
Populus deltoides     Symphyotrichum pilosum	12	No No	FACU	Hydrophytic Vegetation 1 - Rapid Test for		station
Cyperus esculentus	15	Yes	FACW	X 2 - Dominance Tes		lation
7				3 - Prevalence Ind		
8.				4 - Morphological		vide supporting
9.				data in Remarks	s or on a separate	e sheet)
10				Problematic Hydro	phytic Vegetation	<sup>1</sup> (Explain)
	88	=Total Cover		<sup>1</sup> Indicators of hydric so		
Woody Vine Stratum (Plot size:)				be present, unless dist	urbed or problem	atic.
1				Hydrophytic		
2		T-4-1 Cause		Vegetation	V No	
		=Total Cover		Present? Yes_	<u>X</u> No	_
Remarks: (Include photo numbers here or on a separa	ate sheet.)					

US Army Corps of Engineers

**SOIL** Sampling Point: W7-WET

Profile Desc	cription: (Describe	to the dept	h needed to doci	ument tl	ne indica	tor or	confirm the absence	of indicators.)
Depth	Matrix		Redo	x Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-9	10YR 5/2	96	10YR 6/4	4	С	М	Loamy/Clayey	Distinct redox concentrations
9-12	2.5y 5/2	91	10YR 5/6	6	С	M	Loamy/Clayey	Prominent redox concentrations
			10YR 5/1	3	D			
12-18	2.5y 5/2	83	10YR 5/6	12	С	M	Loamy/Clayey	Prominent redox concentrations
	2.0y 0/2		10YR 4/2	5			<u> Loanny, olayoy</u>	T TOTALISTIC TO GOOD CONTROLLED
			1011( 4/2					
	-							
1- 0.0				40.14			2,	BL B. J. L. M. M. J.
Hydric Soil	oncentration, D=Dep	letion, RIM=	Reduced Matrix, N	/IS=Mas	ked Sand	Grains		n: PL=Pore Lining, M=Matrix.  rs for Problematic Hydric Soils <sup>3</sup> :
Histosol			Sandy Gle	vod Mat	riv (S1)			st Prairie Redox (A16)
	oipedon (A2)		Sandy Gle		IIX (34)			Manganese Masses (F12)
	stic (A3)		Stripped M		3)			Parent Material (F21)
	n Sulfide (A4)		Dark Surfa	`	,			Shallow Dark Surface (F22)
	d Layers (A5)		Loamy Mu	` '	eral (F1)			er (Explain in Remarks)
	ick (A10)		Loamy Gle					(Explain in Nomano)
	d Below Dark Surface	e (A11)	X Depleted N	-				
	ark Surface (A12)	( )	Redox Dar		•		<sup>3</sup> Indicato	rs of hydrophytic vegetation and
	lucky Mineral (S1)		Depleted D		` '			and hydrology must be present,
5 cm Mu	ıcky Peat or Peat (S3	3)	Redox Dep		, ,			ss disturbed or problematic.
Restrictive	Layer (if observed):							
Type:	,							
Depth (ii	nches):		_				Hydric Soil Presen	t? Yes X No
Remarks:	-							
	m is revised from Mi	dwest Regio	onal Supplement \	ersion 2	2.0 to incl	ude the	NRCS Field Indicator	rs of Hydric Soils, Version 7.0, 2015
	://www.nrcs.usda.gov							•
HYDROLO	OGY							
Wetland Hy	drology Indicators:							
Primary Indi	cators (minimum of o	ne is requir	ed; check all that	apply)			Seconda	ry Indicators (minimum of two required)
Surface	Water (A1)		Water-Stai	ined Lea	ves (B9)		Surfa	ace Soil Cracks (B6)
High Wa	ater Table (A2)		Aquatic Fa	una (B1	3)		Drair	nage Patterns (B10)
X Saturation	` '		True Aqua	tic Plant	s (B14)		Dry-9	Season Water Table (C2)
Water M	larks (B1)		Hydrogen	Sulfide (	Odor (C1)	)		fish Burrows (C8)
	nt Deposits (B2)		Oxidized R			-	` ' —	ration Visible on Aerial Imagery (C9)
	posits (B3)		Presence of					ted or Stressed Plants (D1)
	at or Crust (B4)		Recent Iro			lled Soi	· · ·	morphic Position (D2)
	posits (B5)	(D.7)	Thin Muck		` '		X FAC	-Neutral Test (D5)
	on Visible on Aerial Ir							
	/ Vegetated Concave	Surface (B	8) Other (Exp	nain in R	emarks)		T	
Field Obser			N. V	D 41- /:-				
Surface Wat				Depth (i	· -	17		
Water Table Saturation P				Depth (i	_	17 0	Watland Hydrola	av Present? Ves V No
		s <u>X</u>	No	Depth (i			Wetland Hydrolo	gy Present? Yes X No No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:								
2555156110	Data (ottodili	J			, p. 51100		,, n arandolo.	
Remarks:								

US Army Corps of Engineers Midwest Region – Version 2.0

Attachment C

Wetland 7 ORAM

# **Background Information**

Name:

Lindsay Hanna

Date:

4/15/2022

Affiliation:

**MAD Scientist Associates** 

Address

253 North State Street, Suite 101 Westerville, Ohio 43081

Phone Number:

(614) 818-9156

e-mail address:

Lindsay@madscientistassociates.net

Name of Wetland:

Wetland 7

Vegetation Communit(ies):

Emergent

HGM Class(es):

Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.



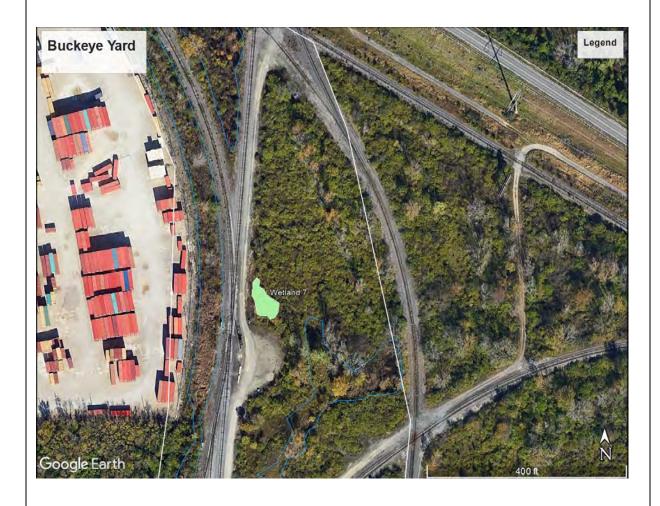
Lat/Long or UTM Coordinate WGS 84: 40.012762°	-83.127578°
USGS Quad Name	Dublin
County	Franklin
Township	
Section and Subsection	
Hydrologic Unit Code	050600011204
Site Visit	11/3/2022
National Wetland Inventory Map	
Ohio Wetland Inventory Map	
Soil Survey	Urban land-Celina complex
Delineation report/map	Yes

Wetland 7

Wetland Size (acres, hectares):

0.057 acres

Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.



Comments, Narrative Discussion, Justification of Category Changes:

Wetland 7 is located in the northern portion in Buckeye Yard located along the edge of the railroad track. The wetland is estimated to be 0.057 acres. Dominant species include green ash (Fraxinus pennsylvanica), cottonwood (Populus deltoides), gray dogwood (Cornus racemosa), common buckthorn (Rhamnus cathartica), narrow-leaf cattail (Typha angustifolia), barnyard glass (Echinochloa crus-galli), and yellow nutsedge (Cyperus esculentus). Wetland hydrology indicators at the Site for Wetland 7 included saturation, geomorphic position, and passing the FAC-neutral test for plants. Hydric soil indicators included depleted depleted matrix (F3) evidenced by a low chroma of 2, with prominent redoximorphic features present (4 to 12 percent) as concentration in the matrix.

Final score : 23 Category: 1

# **Scoring Boundary Worksheet**

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

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

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

# Wetland 7

# **Narrative Rating**

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

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

# Wetland 7

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	(VI)
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this	YES	NO
	elevation, or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence,	YES	NO
	i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	Go to Question 9d	Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance	YES	NO
	tolerant native plant species within its vegetation communities?	Wetland should be evaluated for possible Category 3 status	Go to Question 10
10	Lake Diein Cond Dusivice (Oak Openings) to the westend leasted in	Go to Question 10	(110)
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	YES	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES	(NO)
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion	Wetland should be evaluated for possible	Complete Quantitative
	Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Category 3 status	Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

Table 1. Characteristic plant species.

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

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

Site: W	etland A	Rater(s): LH Date: 4/15/2022
0	0	Metric 1. Wetland Area (size).
max 6 pts.	subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2ha) (5 pts)  10 to <25 acres (4 to <10.1ha) (4 pts)  3 to <10 acres (1.2 to <4ha) (3 pts)  0.3 to <3 acres (0.12 to <1.2ha) (2pts)  0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)  <
1	3	Metric 2. Upland buffers and surrounding land use.
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one and assign score. Do not double check.  WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)  MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)  NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)  VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)  2b. Intensity of surrounding land use. Select one or double check and average.  VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)  LOW. Old field (>10 years), shrub land, young second growth forest. (5)  MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)  V HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)
7	10	Metric 3. Hydrology.
max 30 pts.	subtotal	3a. Sources of Water. Score all that apply.  High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5)  3c. Maximum water depth. Select only one and assign score.  >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) <a href="#"></a>
		3e. Modifications to natural hydrologic regime. Score one or double check and average.  None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1) Recovery (1) Recovering (3) Recent or no recovery (1) Recovering (3) Recovering (4) Recovering (4) Recovering (4) Recovering (5) Recovering (6) Recovering (6) Recovering (7) Reco
11	21	Metric 4. Habitat Alteration and Development.
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or double check and average.  None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1)  4b. Habitat development. Select only one and assign score.  Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3)  Recent or no recovery (1)  Parameter foir (2)
		Poor to fair (2) Poor (1)  4c. Habitat alteration. Score one or double check and average.
s	21	None or none apparent (9)  Recovered (6) Recovering (3) Recent or no recovery (1)
last revised	d 1 Februa	ry 2001 jjm

7

Site: Wetland A	Rater(	s):LH		Date: 4/15/2022
21 subtotal first pag	ge			
0 21	Metric 5. Special Wetland	ds.	Wetland 7	
	Check all that apply and score as indicated.  Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-re Lake Plain Sand Prairies (Oak Openi Relict Wet Prairies (10) Known occurrence state/federal threa Significant migratory songbird/water is Category 1 Wetland. See Question 1	estricted hydro ings) (10) atened or enda fowl habitat or 1 Qualitative R	angered species (10) usage (10) atting (-10)	nography
2 23	Metric 6. Plant communi	·	•	ppograpny.
max 20 pts. subtotal	6a. Wetland Vegetation Communities.		Community Cover Scale	
	Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.24	
	Aquatic bed	1	Present and either comprises sm	
	1 Emergent		vegetation and is of moderate of	
	Shrub		significant part but is of low qua	•
	Forest	2	Present and either comprises sig	
	Mudflats		vegetation and is of moderate of	quality or comprises a small
	Open water		part and is of high quality	
	Other	3	Present and comprises significan	t part, or more, of wetland's
	6b. horizontal (plan view) Interspersion.		vegetation and is of high quality	1
	Select only one.			
	High (5)	Narrative D	escription of Vegetation Quality	
	Moderately high(4)	low	Low spp diversity and/or predomi	nance of nonnative or
	Moderate (3)		disturbance tolerant native spec	cies
	✓ Moderately low (2)	mod	Native spp are dominant compon	ent of the vegetation,
	Low (1)		although nonnative and/or distu	rbance tolerant native spp
	None (0)		can also be present, and specie	es diversity moderate to
	6c. Coverage of invasive plants. Refer		moderately high, but generally	w/o presence of rare
	to Table 1 ORAM long form for list. Add		threatened or endangered spp	
	or deduct points for coverage	high	A predominance of native species	s, with nonnative spp
	Extensive >75% cover (-5)		and/or disturbance tolerant nati	ve spp absent or virtually
	Moderate 25-75% cover (-3)		absent, and high spp diversity a	and often, but not always,
	✓ Sparse 5-25% cover (-1)		the presence of rare, threatene	d, or endangered spp
	Nearly absent <5% cover (0)			
	Absent (1)	Mudflat and	d Open Water Class Quality	
	6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
	Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 ac	cres)
	Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88	3 acres)
	Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more	<u>-</u>
	o Standing dead >25cm (10in) dbh			
	Amphibian breeding pools	Microtopog	raphy Cover Scale	
		0	Absent	
		1	Present very small amounts or if of marginal quality	more common
		2	Present in moderate amounts, but quality or in small amounts of h	_
		3	Present in moderate or greater a	
23			and of highest quality	

End of Quantitative Rating. Complete Categorization Worksheets.

# **ORAM Summary Worksheet**

		circle answer or insert	Result
		score	Nosuit
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
J	Metric 2. Buffers and surrounding land use	1	
	Metric 3. Hydrology	7	
	Metric 4. Habitat	11	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	2	
	TOTAL SCORE	23	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

# Wetland 7

# **Wetland Categorization Worksheet**

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

Final Category					
Choose one	(Category 1)	Category 2	Category 3		
	$\overline{}$				

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



# CENTRAL OHIO WETLAND CONSULTING, LLC

6260 Havens Rd. Blacklick, Ohio 43004 mkaminski434@gmail.com (614) 940-8771

# **JURISDICTIONAL WATERS DELINEATION REPORT**

# BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO

Prepared by:

CENTRAL OHIO WETLAND CONSULTING, LLC MATT KAMINSKI, OWNER 6260 HAVENS ROAD BLACKLICK, OHIO 43004

# Prepared for:

KIMLEY-HORN AND ASSOCIATES, INC. C/O MR. JUSTIN M. MULLER 7965 N. HIGH ST. SUITE 200 COLUMBUS, OHIO 43235

# **TABLE OF CONTENTS**

<u>1.0</u>	INTRODUCTION AND PURPOSE	<u>1</u>
	1.1 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT	1
	1.2 SPECIAL TERMS AND CONDITIONS	2
<u>2.0</u>	EVALUATION AREA AND SURROUNDING AREA CHARACTERISTICS	<u>2</u>
<u>3.0</u>	RESEARCH AND REVIEW OF PUBLISHED INFORMATION	<u>3</u>
	3.1 USGS TOPOGRAPHIC MAPS	3
	3.2 SOIL REVIEW	4
	3.3 NATIONAL WETLANDS INVENTORY (NWI) MAP	5
	3.4.1 PUBLISHED INFORMATION REVIEW CONCLUSIONS	<b>6</b> 7
<u>4.0</u>	FIELD RECONNAISSANCE/DELINEATION OF JURISDICTIONAL WATERS	<u>7</u>
	4.1 METHODOLOGY	
	4.1.1 HYDRIC SOIL CRITERIA	
	4.1.2 WETLAND HYDROLOGY CRITERIA4.1.3 HYDROPHYTIC VEGETATION CRITERIA	
	4.2 JURISDICTIONAL WATERS DELINEATION FINDINGS	10
	4.2.1 STREAMS	
	4.2.1 WETLANDS	14 19
<u>5.0</u>	FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS	<u>19</u>
6.0	SIGNATURE OF PROFESSIONAL PERSONNEL	21

#### **APPENDIX 1 – MAPS AND EVALUATION AREA INFORMATION**

General Location Map of Evaluation Area Location Maps of Evaluation Area Franklin County Auditor GIS Maps 1954/1955, 1966, 1973, 1980/1981, and 2019 USGS Topographic Maps USDA Web Soil Survey Maps National Wetlands Inventory (NWI) Maps

# **APPENDIX 2 – AERIAL PHOTOGRAPHS**

1956 Aerial Photographs

1960 Aerial Photographs

1964 Aerial Photographs

1979 Aerial Photographs

1989 Aerial Photographs

1994 Aerial Photographs

2002 Aerial Photographs

2009 Aerial Photographs

2019 Aerial Photographs

# **APPENDIX 3 – DELINEATION MAP**

Wetland and Stream Delineation Maps ORAM Scoresheets (24 pages)

# <u>APPENDIX 4 – EVALUATION AREA PHOTOGRAPHS</u>

Photo Keys

Field Reconnaissance Photos (Photo 1 through Photo 61)

#### 1.0 INTRODUCTION AND PURPOSE

Central Ohio Wetland Consulting, LLC (COWC) has been contracted by Kimley-Horn and Associates, Inc. (Client) to perform a Jurisdictional Waters Delineation Report for the <u>Buckeye Yard</u> property located in the City of Columbus, Franklin County, Ohio. The "evaluation area" for this Jurisdictional Waters Delineation Report consists of former Norfolk-Southern railroad acreage, including former rail lines and ballast material, ancillary structures, open areas, waste land, and wooded land. For descriptive purposes, the evaluation area has been divided into three separate areas, all of which are part of Franklin County parcels 570-146296, 241-000038, and 560-154558:

- North Section: 41± acres located north of Roberts Road and south of Scioto Darby Creek Road,
- Central Section: 287± acres located north of Trabue Road and south of Roberts Road, and,
- South Section: 77± acres located north of the existing Norfolk Southern CJ Line and south of Trabue Road.

The purpose of COWC's services is to document the size/length, location, and quality of all potentially jurisdictional waters of the United States and/or isolated waters of the State of Ohio within the evaluation area. COWC performed this delineation for specific application to the evaluation area described herein, in accordance with the United States Army Corps of Engineers (USACE) Wetlands Delineation Manual (1987) and the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region. The conclusions made within this Jurisdictional Waters Delineation Report are to be considered "preliminary" until verified by the USACE Huntington, WV District Office. This delineation report can be submitted to the USACE as part of a preliminary jurisdictional determination (PJD), approved jurisdictional determination (AJD), or preconstruction notification (PCN). The Ohio Environmental Protection Agency (Ohio EPA) will require a copy of the delineation report and an AJD letter issued by the USACE for all isolated wetland impacts, and ephemeral stream impacts greater than 300 linear feet.

The delineation includes three principal components: 1) research and review of published information, 2) field reconnaissance and delineation of jurisdictional waters (i.e. wetlands, ponds, and streams), and 3) data compilation/report preparation.

# 1.1 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT

This Jurisdictional Waters Delineation Report has been prepared based upon field observations and COWC's professional interpretation of the USACE Wetlands Delineation Manual (1987) and the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region at the time of our field reconnaissance. The conclusions presented in this report are professional opinions based on data collected between the commencement date and the

report date. The information in this report is true to the best of our knowledge. COWC obtained some of the information presented in this report from other agencies and sources. COWC assumes no responsibility for the accuracy or completeness of information provided by others. No warranty, expressed or implied, is made.

# 1.2 SPECIAL TERMS AND CONDITIONS

This report has been prepared by COWC as a professional service for the exclusive use of Kimley-Horn and Associates, Inc. and other parties that may be jointly affiliated by Kimley-Horn and Associates, Inc. and COWC. Any other entity that wishes to use or rely upon this report, or that wishes to duplicate, reproduce, copy, extract, or quote from this report must request permission from COWC to do so. Any unauthorized use of, or reliance upon, this report shall release COWC from any liability resulting from such use or reliance. Any unauthorized duplication, reproduction, copying, excerption, or quotation of this report shall expose the violator to all legal remedies available to COWC.

#### 2.0 EVALUATION AREA AND SURROUNDING AREA CHARACTERISTICS

The evaluation area consists of former Norfolk-Southern railroad acreage, including former rail lines and ballast material, ancillary structures, open areas, waste land, and wooded land. The North Section of the evaluation area consists of 41± acres located north of Roberts Road and south of Scioto Darby Creek Road. The Central Section of the evaluation area consists of 287± acres located north of Trabue Road and south of Roberts Road. The South Section of the evaluation area consists of 77± acres located north of the existing Norfolk Southern CJ Line and south of Trabue Road. Areas surrounding the evaluation area are developed for railroad, industrial, and commercial purposes.

Approximate latitude / longitude coordinates for the central part of each section of the evaluation area are:

- North Section 40.008475 / -83.127839,
- Central Section 39.992969 / -83.129678, and
- South Section 39.974661 / -83.130694.

Appendix 1 includes location maps, Franklin County Auditor Geographic Information System (GIS) Maps, United States Geological Survey (USGS) topographic maps (Hilliard, Ohio and Galloway, Ohio), United States Department of Agriculture (USDA) soil survey maps, and United States Fish & Wildlife Service (USFWS) National Wetland Inventory (NWI) maps. Appendix 2 includes aerial photographs showing the evaluation area. Photographs depicting representative vegetation, property features, and views from several locations around the evaluation are provided in Appendix 4.

#### 3.0 RESEARCH AND REVIEW OF PUBLISHED INFORMATION

COWC's research and review of published information includes: USGS topographic maps, the USDA soil survey map, USFWS NWI map, and aerial photographs from various local governmental agencies. COWC uses this information to determine historical uses of the evaluation area, the geo-morphological setting at the evaluation area, soil types present, whether the evaluation area has been significantly disturbed within the past few years, and for visual evidence of ponds, streams, or saturation or inundation on land surfaces, and the potential for wetlands. Copies of the reviewed information is appended.

#### 3.1 USGS TOPOGRAPHIC MAPS

COWC reviewed 1954/1955, 1966, 1973, 1980/1981, and 2019 Hilliard, Ohio and Galloway, Ohio, USGS 7.5-minute series topographic maps for the evaluation area. COWC uses USGS topographic maps as an indicator of watershed characteristics in and around the evaluation area, and to identify small depressional areas, streams, and wetland mapping symbols. The appendix of this report includes portions of these USGS maps showing the evaluation area.

The maps reviewed indicate several drainages crossing the North, Central, and South Sections of the evaluation area.

#### North Section

Rail lines are shown within the North Section on the 1973 through 2019 maps. Prior to 1973, the North Section is depicted as vacant land. Roberts Millikin Ditch is shown crossing the central part of the North Section in a general west to east direction. An unnamed tributary to Roberts Millikin Ditch is shown on the southern part of the North Section. This unnamed tributary is shown in a general southwest/northeast orientation on the 1954 through 1980 maps. The 2019 map indicates this unnamed tributary has been reoriented in a general north/south direction, west of existing rail lines. No other potential streams, wetlands, or ponds are depicted on the North Section. Lower surface elevations are generally indicated between railroad lines on the central and northern parts of the North Section.

#### Central Section

The Central Section is predominately developed with rail lines on the 1973 through 2019 maps. Prior to 1973, the Central Section is depicted as vacant land. The topographic maps show green tint, indicating wooded areas, on the northwest part of the Central Section. One (1) wetland mapping symbol is also depicted within the green tint area on the northwest part of the Central Section. Four (4) unnamed tributary streams are shown crossing the Central Section in a general west to east direction on the 1954/1955 and 1966 maps. These tributary streams are not shown or have be redirected through or around rail lines on the 1973 through 2019 maps.

#### South Section

Rail lines are shown within the South Section on the 1973 through 2019 maps. Prior to 1973, the North Section is generally depicted as vacant land. Approximately five (5) unnamed tributaries are shown crossing the South Section of the evaluation area on the 1955 and 1966 maps. Only three (3) tributaries are shown crossing the South Section on the 2019 map. One (1) pond is also depicted on the southern part of the South Section on the 2019 map. No other potential streams, wetlands, or ponds are depicted on the South Section.

#### 3.2 SOIL REVIEW

COWC reviewed information from the USDA Natural Resources Conservation Service (NRCS), the USDA Web Soil Survey website<sup>1</sup>, and the list of <u>Hydric Soils of the United States</u> (published by NRCS in cooperation with the National Technical Committee for Hydric Soils). These sources indicate soils underlying the evaluation area consist of the following:

TABLE 1
EVALUATION AREA SOIL DESIGNATIONS

Map Unit ID	Map Unit Name	% Slope	Hydric Classification	% Hydric Component	Component Landform
СеВ	Celina silt loam	2-6	Non-hydric with hydric components	Kokomo 5%	Depressions
CrA	Crosby silt loam	0-2	Non-hydric with hydric components	Kokomo 8%	Depressions
CrB	Crosby silt loam	2-6	Non-hydric with hydric components	Kokomo 8%	Depressions
Ко	Kokomo silty clay loam	0-2	Hydric	Kokomo 90%	Depressions
Us	Udorthents, loamy, steep	18-25	Non-hydric	-	-
Uv	Urban land-Celina complex, occasionally flooded	2-12	Non-hydric with hydric components	Kokomo 5%	Depressions

Celina silt loam (CeB) is generally described as a gently sloping, moderately well-drained soil on uplands. These soils are typically found on convex ridgetops, on side slopes above steeper areas, and along well-defined waterways.

Crosby silt loam (CrA and CrB) is generally described as a nearly level to gently sloping, somewhat poorly drained soil on narrow and broad upland areas. This mapping unit also contains areas of Kokomo soils located in depressions and Celina soils on low knolls.

Kokomo silty clay loam (Ko) is described as a nearly level, very poorly drained soil located in depressions and at the heads of drainageways on uplands. Runoff from adjacent higher elevations can cause ponding in Kokomo soils. Kokomo silty clay loam is considered a hydric soil.

\_

<sup>&</sup>lt;sup>1</sup> http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

Udorthents, loamy, steep (Us) is generally described as soils in borrow areas that have been subject to surface mining, particularly for use as fill material used under highways and buildings.

Urban land-Celina complex (Uv) is generally described as areas of urban land covered by streets, parking lots, buildings, railroad yards, and other structures. Soils in these areas have been altered to the extent specific soil identification is not feasible. Undeveloped portions of this soil unit are dominated by Celina soil.

The evaluation area is predominately comprised of Urban land-Celina complex soils. Wooded areas adjacent to the west of the existing railroad lines on the Central Section are mapped with Crosby, Celina, and Kokomo soil units.

According to mapping available from the USDA NRCS, and the list of <u>Hydric Soils of the United States</u> published by the NRCS in cooperation with the National Technical Committee for Hydric Soils, the evaluation area contains hydric soil. Thin bands of mapped hydric Kokomo soils are located on the western portions of the Central Section of the evaluation area. The USGS topographic maps indicate these areas are likely drained by tributary streams.

#### 3.3 NATIONAL WETLANDS INVENTORY (NWI) MAP

COWC reviewed the USFWS NWI website<sup>2</sup> for wetland mapping symbols depicted within the evaluation area. The USFWS produced NWI maps in an attempt to document wetlands throughout the United States. The USFWS generated NWI maps using high-altitude infrared aerial photography to identify areas of saturation or inundation on land surfaces. Areas that are saturated or inundated typically have lower infrared heat signatures than dry areas. The USFWS mapped these cooler infrared heat signature areas as wetlands without field verification. NWI maps may not reflect actual field conditions due to meteorological or seasonal conditions that may have existed at the time of data collection. COWC typically uses NWI maps to plan field reconnaissance, and as an indicator of areas that may support wetlands.

The NWI map shows three (3) wetland mapping symbols within the evaluation area:

- One (1) PEM1C symbol located on the northern part of the North Section,
- One (1) PFO1A symbol located within the wooded northwest part of the Central Section, and
- One (1) PEM1A symbol located on the southern part of the South Section.

The PEM1C designation indicates an area that is palustrine (non-tidal wetlands dominated by trees, shrubs, persistent emergent vegetation), emergent

<sup>&</sup>lt;sup>2</sup> https://www.fws.gov/wetlands/Data/Mapper.html

(herbaceous, erect and rooted hydrophytes), persistent (dominated by species that normally remain standing through to the next growing season), and seasonally flooded (surface water is present for extended periods, especially early in the growing season, but absent by the end of the growing season in most years). This area was delineated as Wetland 5.

The PFO1A designation indicates an area that is palustrine, forested (containing woody vegetation 20 feet in height and taller), broad-leaved deciduous (trees and shrubs with relatively wide, flat leaves that are shed during the cold and seasonally dry conditions), and temporary flooded (areas were surface water is present for brief (days/weeks) periods during the growing season). This area was delineated as Wetland 7.

The PEM1A designation indicates an area that is palustrine, emergent, persistent, and temporary flooded. This area was delineated as Pond 2.

The NWI map shows streams/drainages in similar locations as depicted on the USGS maps. Drainage features within the evaluation area are depicted with R5UBH an R4SBC designations. The R5UBH designation indicates a permanently flooded (water covers the substrate throughout the year in all years), riverine habitat contained within a channel (open conduit either naturally or artificially created which may periodically or continuously contain moving water) that has an unconsolidated bottom (at least 25% cover of particles less than 6-7 centimeters and vegetative cover less than 30%). The unknow perennial modifier indicates the drainage cannot be distinguished from lower perennial and upper perennial. The R4SBC designation indicates a seasonally flooded, riverine habitat contained within a channel that has intermittent flow (water may flow only part of the year).

#### 3.4 AERIAL PHOTOGRAPHS

COWC reviewed aerial photographs of the evaluation area dated 1956, 1960, 1964, 1979, and 1989 available from the Ohio Department of Transportation Office of CADD & Mapping website<sup>3</sup>; and 1994, 2002, 2009, and 2019 from Google Earth Pro<sup>4</sup>. Copies of the aerial photographs showing the evaluation area are provided in Appendix 2.

The 1956 through 1964 aerial photographs generally depict the evaluation area as vacant land with numerous streams crossing from west to east.

The 1979 through 2019 aerial photographs generally depict the evaluation area as developed for use as a rail yard. Undeveloped wooded land is located on the western part of the Central Section. Streams previously apparent crossing the

 $<sup>^{3}\ \</sup>underline{\text{http://www.dot.state.oh.us/Divisions/Engineering/CaddMapping/Pages/default.aspx}}$ 

<sup>&</sup>lt;sup>4</sup> Earth Versions – Google Earth

evaluation from west to east have been manipulated, channelized, and relocated as part of development for rail use.

The 2019 aerial photograph indicates the evaluation area is similar in appearance to what was observed during our field reconnaissance on April 9, April 12, and April 13, 2021.

#### 3.4.1 PUBLISHED INFORMATION REVIEW CONCLUSIONS

Information obtained from USGS topographic maps, NWI maps, and aerial photographs indicate the potential for numerous streams, wetlands, and ponds within the evaluation area.

The potential for wetlands and streams within an area cannot be determined solely from review of published information; therefore, an onsite investigation is required to verify current property conditions.

# 4.0 FIELD RECONNAISSANCE/DELINEATION OF JURISDICTIONAL WATERS

Matthew R. Kaminski, owner of Central Ohio Wetland Consulting, LLC, performed the field reconnaissance for the jurisdictional waters delineation during the morning and afternoon hours on Friday April 9, 2021, Monday April 12, 2021, and Tuesday April 13, 2021. Research and review of published information indicates physical property conditions were generally unchanged for several years prior to this delineation, such that the evaluation area was considered undisturbed for data collection. Therefore, the routine method was used in this assessment. Photographic documentation from the field reconnaissance and general landscape photographs are provided in Appendix 4.

COWC performs its field reconnaissance for jurisdictional waters delineations using criteria and guidance in the Corps of Engineers' Wetland Delineation Manual (USACE, 1987) and the 2010 Midwest Regional Supplement to the 1987 Wetland Delineation Manual. In this method, vegetation, hydrology, and soil criteria are used to identify jurisdictional/isolated wetlands. The delineation method and vegetation sampling methodology uses the procedures for Routine Determinations found in the 1987 and 2010 manuals.

To establish the presence of jurisdictional/isolated wetlands, three characteristics are required to be present. These wetland characteristics consist of hydric soils, a dominance of hydrophytic (i.e. wetland) vegetation, and wetland hydrology. All three criteria must be present for an area to be identified as wetland. These three criteria are defined and explained in detail in the Corps of Engineers' Wetland Delineation Manual (USACE, 1987) and the 2010 Midwest Regional Supplement to the 1987 Wetland Delineation Manual. The Wetlands Research Program of the USACE Waterways Experiment Station developed the manual in 1987. COWC followed the methods described in these manuals in performing the delineation.

Wetland and waterbody delineation of field-verified water features are made using COWC's professional judgment and interpretation of the USACE Jurisdictional Determination Form Instructional Guidebook (USACE, 2007). For the purposes of this report, "non-jurisdictional" or "excluded" is defined as aquatic features that are not regulated by the USACE under the provisions of Section 404 of the Clean Water Act (CWA). Isolated wetlands that do not have a surface water connection to waters of the U.S. and ephemeral streams are non-jurisdictional from the perspective of the USACE; however, are regulated by the Ohio EPA under the provisions of Section 401 of the CWA.

#### 4.1 METHODOLOGY

After collecting pertinent information through the review of published information, COWC uses the routine method to determine if wetland areas exist within the evaluation area. The approach used for the routine determination is the plant community assessment procedure. This approach requires initial identification of representative plant community types in the subject area followed by characterization of vegetation, soils, and hydrology for each community type.

The evaluation area is assessed in accordance with guidelines from the USACE pertaining to potential jurisdictional waters of the United States and/or isolated waters of the State of Ohio. All potential wetlands, streams, and drainage ditches are followed to determine the flow regime and whether such features have a surface water connection to waters of the U.S.

The field investigation is conducted by walking and visually surveying the evaluation area, and in the vicinity, to collect wetland and stream data, as necessary. Upon identification of hydrophytic (wetland) and non-wetland communities, the wetland boundary is surveyed with a Spectra SP20 handheld Global Navigation Satellite System (GNSS) receiver with sub-meter accuracy. Field notes are taken at points where the dominant vegetation species change from wetland to upland or hydrologic or soil indicators become transitional. Areas saturated or inundated by surface water at the time of our field reconnaissance are presumed to contain hydric soil characteristics. COWC records observations concerning hydrology and vegetation on the appropriate Wetland Determination Data Form.

#### 4.1.1 HYDRIC SOIL CRITERIA

COWC performs shovel test pits to characterize soil conditions and to evaluate the presence or absence of hydric soil features. A drain spade is used to collect soil samples from a maximum depth of approximately 20 inches below ground surface. COWC determines the presence or absence of hydric soils by comparing soil samples to a Munsell soil color chart, as soil colors often reveal whether a soil is hydric or non-hydric. The standardized Munsell soil colors consist of three components: hue, value, and chroma. Soil in hydric soil areas typically show yellow-red hues, varying gray color values,

and chromas of one or two. Chromas of two or less are considered low, and are often diagnostic of hydric soils. Hydric mineral soils saturated for long periods of the growing season, but unsaturated for some time, often develop mottles and/or a low chroma matrix. Soils are considered hydric if at least one primary indicator, or at least one problematic hydric soil indicator is present, as defined by the USACE.

Mineral based soils (as opposed to carbon- or organic-based soils) generally contain significant amounts of iron and manganese. As the iron component of the soil matrix comes into contact with the atmosphere, the iron tends to oxidize giving soils a high "chroma" or rust-like color. This characteristic is typically observed in upland (i.e., non-wetlands) areas where oxygen is abundant. On the contrary, mineral soils that are saturated for extended periods (e.g., hydric soils) tend to have oxygen ions stripped, chemically reducing iron and giving these soils bluish-grayish coloring or low chroma. This reduced condition in mineral soils is known as "gleying" and is typically observed in wetlands, where soil oxygen contents are generally lower relative to upland soils. Low oxygen levels in reduced soils also tend to slow decomposition, leading to increased organic content.

The evaluation area is predominately comprised of Urban land-Celina complex soils. Wooded areas adjacent to the west of the existing railroad lines on the Central Section are mapped with Crosby, Celina, and Kokomo soil units. Areas saturated or inundated by surface water at the time of our field reconnaissance were presumed to contain hydric soil characteristics. COWC observed hydric soil characteristics within the areas delineated as Wetland 1 through Wetland 12.

#### 4.1.2 WETLAND HYDROLOGY CRITERIA

Wetland hydrology is determined present in areas that are periodically inundated or have soils saturated to the surface sometime during the growing season. This is a dynamic characteristic and is usually not present during drier periods of the year. Primary wetland hydrology indicators include, but are not limited to, surface water, high water table, inundation, soil saturation in the upper 12 inches of the soil, water marks, sediment deposits, drift deposits, and water-stained leaves. Secondary wetland hydrology indicators include surface soil cracks, drainage patterns, dryseason water table, crayfish burrows, saturation visible on aerial imagery, stunted or stressed plants, geomorphic position, and FAC-Neutral Test of vegetation. One primary indicator or two or more secondary indicators are required to establish a positive indication of wetland hydrology.

COWC observed primary and secondary hydrology indicators for wetlands within the areas delineated as Wetland 1 through Wetland 12.

#### 4.1.3 HYDROPHYTIC VEGETATION CRITERIA

Hydrophytic vegetation is determined present if more than 50 percent of plant species within a plant community have an indicator status of obligate wetland (OBL), facultative wetland (FACW), and/or facultative (FAC). The indicator status of plant species found in wetlands is listed in the 2018 National Wetland Plant List - Midwest Region published by the USACE<sup>5</sup>.

COWC used this data and determined hydrophytic vegetation dominance was present within the areas delineated as Wetland 1 through Wetland 12.

#### 4.2 JURISDICTIONAL WATERS DELINEATION FINDINGS

COWC's field reconnaissance identified twelve (12) wetlands (Wetland 1 through Wetland 12) totaling 13.53± acres, thirteen (13) streams (Stream 1 through Stream 13) totaling 10,377± linear feet, and two (2) ponds (Pond 1 and Pond 2) totaling 1.18± acre within the evaluation area. The centerline of the streams and the boundary of the ponds and wetlands were surveyed with a Spectra SP20 handheld GNSS receiver with sub-meter accuracy. Appendix 3 provides maps showing the location of the delineated wetlands, ponds, and streams. Multi-directional photographs of each stream and wetland, and general landscape photographs are provided in Appendix 4.

Several streams delineated within the evaluation area are depicted on USGS maps as unnamed tributaries to the Scioto River, prior to development of the evaluation area as a railroad yard. Streams within the evaluation area have been placed in culverts, channelized, and relocated as part of development of the evaluation area for railroad use in the mid to late 1960s.

Wetlands within the evaluation area are generally located in low-lying areas between existing railroad lines, and appear to be attributed to poor surface water drainage. Manipulation of on-site drainage features by beavers (*Castor canadensis*) has resulted in the establishment of several of the delineated wetlands.

#### **4.2.1 STREAMS**

COWC identified thirteen (13) streams (Stream 1 through Stream 13) totaling  $10,377\pm$  linear feet within the evaluation area. These streams were delineated as Stream 1 ( $260\pm$  LF), Stream 2 ( $59\pm$  LF), Stream 3 ( $97\pm$  LF), Stream 4 ( $119\pm$  LF), Stream 5 ( $50\pm$  LF), Stream 6 ( $158\pm$  LF), Stream 7 ( $114\pm$  LF), Stream 8 ( $61\pm$  LF), Stream 9 ( $320\pm$  LF), Stream 10 ( $2,552\pm$  LF), Stream 11 ( $3,921\pm$  LF), Stream 12 ( $369\pm$  LF), and Stream 13 ( $2,297\pm$  LF). These streams are further described below.

-

<sup>&</sup>lt;sup>5</sup> NWPL Home v3.4-f9c (army.mil)

TABLE 2 STREAM INFORMATION

Stream ID	Length (On-Site)	Classification	Start Location	End Location
Stream 1	260± LF	Perennial	40.007903	40.008136
(Roberts Millikin Ditch)			-83.128758	-83.127289
Stream 2	59± LF	Ephemeral	40.00785	40.008003
			-83.128597	-83.128575
Stream 3	97± LF	Intermittent	40.008131	40.008025
			-83.127797	-83.127517
Stream 4	119± LF	Intermittent	40.008147	40.007983
			-83.127458	-83.127319
Stream 5	50± LF	Intermittent	40.007975	40.007878
			-83.127436	-83.127350
Stream 6	158± LF	Intermittent	40.007728	40.008128
			-83.127353	-83.127278
Stream 7	114± LF	Ephemeral	40.008425	40.008136
			-83.127272	-83.127278
Stream 8	61± LF	Ephemeral	40.008403	40.008244
			-83.127339	-83.127281
Stream 9	320± LF	Intermittent	40.002356	40.002489
			-83.129508	-83.128431
Stream 10	2,552± LF	Perennial	39.997258	40.002511
			-83.132658	-83.128356
Stream 11	3,921± LF	Perennial	39.993333	39.983883
			-83.134142	-83.130006
Stream 12	369± LF	Perennial	39.989911	39.990389
			-83.134697	-83.133558
Stream 13	2,297± LF	Perennial	39.969858	39.966231
			-83.138011	-83.132869
Total	10,377± LF			

Stream 1 – Roberts Millikin Ditch (260± linear feet North Section)

Stream 1 is an east/west oriented portion of Roberts Millikin Ditch crossing the central part of the North Section of the evaluation area. Roberts Millikin Ditch flows through residential and industrial areas to the west prior to entering the evaluation area. This stream is littered with trash and debris and has perennial flow characteristics. Surface water was flowing within Stream 1 during our field reconnaissance on April 9, 2021.

Stream 1 originates at a round concrete culvert near the western boundary of the North Section of the evaluation area. Stream 1 flows unobstructed for approximately 73 LF before entering double round culverts beneath elevated railroad lines. Upon exiting these culverts, Stream 1 flows for an additional 187 LF before entering a second set of double round culverts beneath elevated railroad lines and exiting the evaluation area to the east.

Stream 1 is located within a wooded corridor on the central part of the North Section. This area appears frequently flooded with numerous deposits of sand and gravel. Stream 1 is highly braided within this frequently flooded area, and overflow drainage from Stream 1 has created several other smaller order streams (Streams 3, 4, and 5). Substrate material within Stream 1 consists of cobble, silt, sand, and gravel.

## Stream 2 (59± linear feet North Section)

Stream 2 is an ephemeral stream that drains Wetland 4 on the central part of the North Section of the evaluation area. Excess surface water retained within Wetland 4 follows a natural gradient to the north, where it has cut a channel. Substrate material within Stream 2 consists of silt and hardpan. Surface water was flowing within Stream 2 during our field reconnaissance on April 9, 2021. Stream 2 has a direct surface water connection with Stream 1 (Roberts Millikin Ditch).

# Stream 3 (97± linear feet North Section)

Stream 3 appears to have intermittent flow characteristics, and is a braided sub-channel resulting from overflow drainage of Stream 1 (Roberts Millikin Ditch) within a frequently flooded wooded corridor on the central part of the North Section of the evaluation area. Surface water was flowing within Stream 3 during our field reconnaissance on April 9, 2021. Substrate material within Stream 3 consists of silt, sand, and gravel.

# Stream 4 (119± linear feet North Section)

Stream 4 appears to have intermittent flow characteristics, and is a braided sub-channel resulting from overflow drainage of Stream 1 (Roberts Millikin Ditch) within a frequently flooded wooded corridor on the central part of the North Section of the evaluation area. Surface water was flowing within Stream 4 during our field reconnaissance on April 9, 2021. Substrate material within Stream 4 consists of silt, sand, and gravel.

# Stream 5 (50± linear feet North Section)

Stream 5 appears to have intermittent flow characteristics, and is a braided sub-channel resulting from overflow drainage of Stream 1 (Roberts Millikin Ditch) within a frequently flooded wooded corridor on the central part of the North Section of the evaluation area. Surface water was flowing within Stream 5 during our field reconnaissance on April 9, 2021. Substrate material within Stream 5 consists of silt, sand, and gravel.

# Stream 6 (158± linear feet North Section)

Stream 6 is an intermittent stream that drains Wetland 6 on the central part of the North Section of the evaluation area. Excess surface water retained within Wetland 6 follows a natural gradient to the north, where it has cut a

channel. This channel transitions to intermittent flow characteristics at the confluence with Streams 4 and 5. Substrate material within Stream 6 consists of silt, sand, and gravel. Surface water was flowing within Stream 6 during our field reconnaissance on April 9, 2021. Stream 6 has a direct surface water connection with Stream 1 (Roberts Millikin Ditch).

## Stream 7 (114± linear feet North Section)

Stream 7 is an ephemeral stream that drains Wetland 5 on the central part of the North Section of the evaluation area. Excess surface water retained within Wetland 5 follows a natural gradient to the south, where it has cut a channel. Substrate material within Stream 7 consists of silt and hardpan. Surface water was flowing within Stream 7 during our field reconnaissance on April 9, 2021. Stream 7 has a direct surface water connection with Stream 1 (Roberts Millikin Ditch).

## Stream 8 (61± linear feet North Section)

Stream 8 is an ephemeral stream that drains Wetland 5 on the central part of the North Section of the evaluation area. Excess surface water retained within Wetland 5 follows a natural gradient to the south, where it has cut a channel. Substrate material within Stream 8 consists of silt and hardpan. Surface water was flowing within Stream 8 during our field reconnaissance on April 9, 2021. Stream 8 has a direct surface water connection with Stream 1 (Roberts Millikin Ditch).

#### Stream 9 (320± linear feet Central Section)

Stream 9 is a west to east flowing intermittent stream on the north part of the Central Section of the evaluation area. Stream 9 originates at the outfall of a round concrete culvert pipe which discharges surface water from a west adjoining stormwater management pond. This stream is littered with trash and debris. Stream 9 has a direct surface water connection with Stream 10 on the northwest part of the Central Section of the evaluation area. Surface water was flowing within Stream 9 during our field reconnaissance on April 13, 2021. Substrate material within Stream 9 consists of silt, sand, and gravel.

#### Stream 10 (2,552± linear feet Central Section)

Stream 10 is a general southwest to northeast flowing perennial stream on the northwest part of the Central Section of the evaluation area. Stream 10 originates at the outfall of an oval-shaped concrete culvert pipe near the western boundary of the Central Section of the evaluation area. This culvert discharges surface water from the west. Surface water was flowing within Stream 10 during our field reconnaissance on April 13, 2021. Substrate material within Stream 10 consists of cobble, silt, sand, and gravel. Stream 10 is partially impounded by Pond 1.

## Stream 11 (3,921± linear feet Central Section)

Stream 11 is a north to south flowing perennial stream contained within a ditch on the southwest part of the Central Section of the evaluation area. Surface water was flowing within Stream 11 during our field reconnaissance on April 13, 2021.

## Stream 12 (369± linear feet Central Section)

Stream 12 is a west to east flowing perennial stream contained within a ditch on the southwest part of the Central Section of the evaluation area. Surface water was flowing within Stream 12 during our field reconnaissance on April 13, 2021. Stream 12 has a direct surface water connection to Stream 11.

# Stream 13 (2,297± linear feet South Section)

Stream 13 is a west to southeast flowing perennial stream contained within a ditch on the South Section of the evaluation area. Stream 13 enters the South Section of the evaluation area from a culvert beneath Manor Park Drive. Portions of Stream 13 have been impounded by beavers in numerous locations, resulting in the creation of Wetland 11. Surface water was flowing within Stream 13 during our field reconnaissance on April 12, 2021.

#### 4.2.1 WETLANDS

COWC identified twelve (12) wetlands (Wetland 1 through Wetland 12) totaling  $13.53\pm$  acres within the evaluation area. These areas exhibit a dominance of hydrophytic species, primary and secondary wetland hydrology indicators, and hydric soil characteristics. These wetlands were delineated as Wetland 1 (0.40 $\pm$  acre), Wetland 2 (0.31 $\pm$  acre), Wetland 3 (1.53 $\pm$  acre), Wetland 4 (1.67 $\pm$  acre), Wetland 5 (4.72 $\pm$  acre), Wetland 6 (1.45 $\pm$  acre), Wetland 7 (0.49 $\pm$  acre), Wetland 8 (0.29 $\pm$  acre), Wetland 9 (1.10 $\pm$  acre), Wetland 10 (0.22 $\pm$  acre), Wetland 11 (0.92 $\pm$  acre), and Wetland 12 (0.43 $\pm$  acre). These wetlands are further described below.

TABLE 3
WETLAND INFORMATION

Wetland ID	Acreage (On-Site)	Cowardin Classification	ORAM Score	Status	Location
Wetland	0.40±	Palustrine	29	Jurisdictional	40.014106
1		Emergent (PEM)	(Cat. 1)		-83.127944
Wetland	0.31±	Palustrine	32	Jurisdictional	40.012344
2		Forested (PFO)	(Cat. 2)		-83.126881
Wetland	1.53±	Palustrine	42	Jurisdictional	40.011019
3		Emergent (PEM)	(Cat. 2)		-83.128378

Wetland	1.67±	Palustrine	25	Jurisdictional	40.006775
4		Emergent (PEM)	(Cat. 1)		-83.128611
Wetland	4.72±	Palustrine	27	Jurisdictional	40.009728
5		Emergent (PEM)	(Cat. 1)		-83.127467
Wetland	1.45±	Palustrine	26	Jurisdictional	40.006722
6		Emergent (PEM)	(Cat. 1)		-83.127569
Wetland	0.49±	Palustrine	49	Jurisdictional	39.998444
7		Forested (PFO)	(Cat. 2)		-83.130556
Wetland	0.29±	Palustrine	38	Jurisdictional	39.997300
8		Emergent (PEM)	(Cat. 2)		-83.131078
Wetland	1.10±	Palustrine	34	Jurisdictional	39.970158
9		Emergent (PEM)	(Cat. 2)		-83.133319
Wetland	0.22±	Palustrine	24	Jurisdictional	39.969094
10		Emergent (PEM)	(Cat. 1)		-83.133639
Wetland	0.92±	Palustrine	52	Jurisdictional	39.968056
11		Forested (PFO)	(Cat. 2)		-83.133531
Wetland	0.43±	Palustrine	35	Jurisdictional	39.963508
12		Emergent (PEM)	(Cat. 2)		-83.131206
Total	13.53±		•	_	_

COWC completed Ohio Rapid Assessment Method (ORAM) score sheets for the wetland areas delineated within the evaluation area. Wetland areas identified within the evaluation area scored within Category 1 and Category 2, according to Ohio EPA standards. The ORAM forms are appended.

Using the USACE OMBIL Regulatory Module (ORM) Project Upload Template, COWC determined the Cowardin classification of wetlands within the evaluation area as palustrine emergent (PEM) and palustrine forested (PFO).

#### Wetland 1 (0.40± acre North Section)

Wetland 1 is a flooded depression on the north part of the North Section of the evaluation area. Elevated railroad tracks surround the wetland. Establishment of Wetland 1 appears to be attributed to poor surface water drainage in low-lying areas between rail lines. Based on visual observation, Wetland 1 appears to be regularly inundated/saturated. The wetland receives hydrology from precipitation and overland flow from adjacent uplands. Wetland 1 is generally dominated by various Dogwood species (*Cornus species*), Green Ash (*Fraxinus pennsylvanica*), Black Willow (*Salix nigra*), Narrow-Leaf Cattail (T*ypha angustifolia*), and Marsh Primrose (*Ludwigia palustris*).

# Wetland 2 (0.31± acre North Section)

Wetland 2 is a flooded, forested depression on the north part of the North Section of the evaluation area. Wetland 2 is located within a low-lying area surrounded by elevated railroad tracks. Establishment of Wetland 2

appears to be attributed to poor surface water drainage in low-lying areas between rail lines. Dense brushy areas dominated by European Privet (*Ligustrum vulgare*) and Morrow's Honeysuckle (*Lonicera morrowii*) provide a buffer between Wetland 2 and the surrounding railroad tracks. A culvert pipe is located along the eastern boundary of Wetland 2, partially draining this wetland with surface water flow to the east, beneath elevated railroad tracks. Based on visual observation, Wetland 2 appears to be semi to permanently inundated/saturated. The wetland receives hydrology from precipitation and overland flow from adjacent uplands. Wetland 2 is generally dominated by Eastern Cottonwood (*Populus deltoides*), Green Ash (*Fraxinus pennsylvanica*), Black Willow (*Salix nigra*), and Narrow-Leaf Cattail (Typha angustifolia).

# Wetland 3 (1.53± acre North Section)

Wetland 3 is located along the western boundary of the North Section of the evaluation area. This wetland is part of a larger wetland complex that extends off-site to the west. Portions of Wetland 3 are located within a channelized ditch that has been impounded by beavers in numerous locations. These beaver impoundments of an apparently perennial ditch have also facilitated the establishment of additional wetlands to the west of the evaluation area. Wetland 3 appears to be permanently inundated by surface water, with flowing water observed at beaver dam locations. Wetland 3 appears to receive hydrology from precipitation and stormwater drainage from areas to the west of the evaluation area. Wetland 3 is generally dominated by Narrow-leaf Cattail (*Typha angustifolia*), Black Willow (*Salix nigra*), and various Dogwood species (*Cornus species*). Dense brushy areas dominated by European Privet (*Ligustrum vulgare*) and Morrow's Honeysuckle (*Lonicera morrowii*) generally surround Wetland 3.

#### Wetland 4 (1.67 ± acre North Section)

Wetland 4 is located within a low-lying area on the central part of the North Section of the evaluation area. Railroad tracks abut the wetland to the east with higher surface elevations to the west. Wetland 4 is dominated by Narrow-leaf Cattail (*Typha angustifolia*) and Common Reed (*Phragmites australis*). This wetland has a direct surface water connection to Stream 1 (Roberts Millikin Ditch) via Stream 2. Based on visual observation, Wetland 4 appears to be semi to permanently inundated/saturated. The wetland receives hydrology from precipitation and overland flow from adjacent uplands.

#### Wetland 5 (4.72± acre North Section)

Wetland 5 is located within a low-lying area on the central part of the North Section of the evaluation area. Elevated railroad tracks surround the wetland. Establishment of Wetland 5 appears to be attributed to poor surface water drainage in low-lying areas between rail lines. Wetland 5 is

dominated by Narrow-leaf Cattail (*Typha angustifolia*). This wetland has a direct surface water connection to Stream 1 (Roberts Millikin Ditch) via Stream 7 and 8. Based on visual observation, Wetland 5 appears to be semi to permanently inundated/saturated. The wetland receives hydrology from precipitation and overland flow from adjacent uplands. Wetland 5 is mapped with a PEM1C designation on the NWI map.

# Wetland 6 (1.45± acre North Section)

Wetland 6 is located within a low-lying area on the central part of the North Section of the evaluation area. Elevated railroad tracks surround the wetland. Establishment of Wetland 6 appears to be attributed to poor surface water drainage in low-lying areas between rail lines. Wetland 6 is dominated by Narrow-leaf Cattail (*Typha angustifolia*). This wetland has a direct surface water connection to Stream 1 (Roberts Millikin Ditch) via Stream 6. Based on visual observation, Wetland 6 appears to be semi to permanently inundated/saturated. The wetland receives hydrology from precipitation and overland flow from adjacent uplands.

# Wetland 7 (0.49± acre Central Section)

Wetland 7 is located within the wooded northwest part of the Central Section of the evaluation area. According to the USDA web soil survey map, this wetland is located within hydric Kokomo silty clay loam soils. Wetland 7 is mapped with a PFO1A designation on the NWI map. The wetland appears to receive hydrology from precipitation, overland flow from adjacent uplands, and flood waters from Stream 10. Stream 10 abuts the east side of the wetland and appears to provide surface water to Wetland 7 during prolonged precipitation events. Based on visual observation, Wetland 7 appears to be regularly inundated/saturated. Wetland 7 is generally dominated by American Elm (*Ulmus americana*), Swamp White Oak (*Quercus bicolor*), and Green Ash (*Fraxinus pennsylvanica*).

#### Wetland 8 (0.29± acre Central Section)

Wetland 8 is located within the wooded northwest part of the Central Section of the evaluation area. According to the USDA web soil survey map, this wetland is located within hydric Kokomo silty clay loam soils. The wetland appears to receive hydrology from precipitation, overland flow from adjacent uplands, and flood waters from Stream 10. Stream 10 abuts the north side of the wetland and appears to provide surface water to Wetland 8 during prolonged precipitation events. Based on visual observation, Wetland 8 appears to be seasonally saturated. Wetland 8 is generally dominated by Reed Canary Grass (*Phalaris arundinacea*) and Black Willow (*Salix nigra*).

## Wetland 9 (1.10± acre South Section)

Wetland 9 is located within a channelized ditch along the western boundary of the South Section of the evaluation area. Based on visual observation, Wetland 9 appears to be semi to permanently inundated/saturated. Wetland 9 is generally dominated by Narrow-leaf Cattail (*Typha angustifolia*) and Black Willow (*Salix nigra*).

#### Wetland 10 (0.22± acre South Section)

Wetland 10 is a flooded depression on the western part of the South Section of the evaluation area. Railroad tracks abut the wetland to the south, east, and west with higher surface elevations to the north. Establishment of Wetland 10 appears to be attributed to poor surface water drainage in low-lying areas between rail lines. Based on visual observation, Wetland 10 appears to be semi to permanently inundated/saturated. The wetland receives hydrology from precipitation and overland flow from adjacent uplands. Wetland 10 is generally dominated by various Dogwood species (*Cornus species*), Black Willow (*Salix nigra*), and Narrow-Leaf Cattail (*Typha angustifolia*).

# Wetland 11 (0.92± acre South Section)

Wetland 11 is located along the western part of the South Section of the evaluation area. This wetland is part of a wetland complex established due to numerous beaver impoundments within Stream 13. Several of these beaver dam structures are elaborate, flooding areas west of Stream 13. Wetland 11 appears to be permanently inundated by surface water, with flowing water observed at beaver dam locations. Wetland 11 appears to receive hydrology from precipitation and perennial surface water from Stream 13. Wetland 11 is generally dominated by Narrow-leaf Cattail (*Typha angustifolia*), Black Willow (*Salix nigra*), American Elm (*Ulmus americana*), Green Ash (*Fraxinus pennsylvanica*), Eastern Cottonwood (*Populus deltoides*), and various Dogwood (*Cornus species*) and Carex (*Carex species*) species. Dense brushy areas dominated by European Privet (*Ligustrum vulgare*) and Morrow's Honeysuckle (*Lonicera morrowii*) generally surround Wetland 11.

#### Wetland 12 (0.43± acre South Section)

Wetland 12 is located on the southern part of the South Section of the evaluation area. This wetland is located within a channelized ditch that has been impounded by beavers in numerous locations. These beaver impoundments of an apparently perennial ditch have facilitated the establishment of wetlands within the ditch limits. Wetland 12 appears to be permanently inundated by surface water, with flowing water observed at beaver dam locations. Wetland 12 appears to receive hydrology from precipitation and stormwater flow from areas to the west of the evaluation area. Wetland 12 is generally dominated by Narrow-leaf Cattail (*Typha* 

angustifolia), Black Willow (Salix nigra), and various Dogwood species (Cornus species). Dense brushy areas dominated by European Privet (Ligustrum vulgare) and Morrow's Honeysuckle (Lonicera morrowii) generally surround Wetland 12.

#### **4.2.2 PONDS**

COWC identified two (2) ponds (Pond 1 and Pond 2) totaling  $1.18\pm$  acre within the evaluation area. These ponds were delineated as Pond 1 ( $0.23\pm$  acre) and Pond 2 ( $0.95\pm$  acre), and further described below.

#### Pond 1 (0.23 ± acre)

Pond 1 is located on the western part of the Central Section of the evaluation area. Pond 1 appears to be a heavily silted excavation that partially impounds Stream 10, which flows through the central part of Pond 1. Pond 1 may provide a limited amount of stormwater retention from areas to the west of the evaluation area, and may help reduce the flow volume of Stream 10. This pond contains no rooted or emergent vegetation. Pond 1 is mapped with a PUBG designation on the NWI map.

#### Pond 2 (0.95± acre)

Pond 2 is located on the southern part of the South Section of the evaluation area. This pond appears to have been created by excavation, and does not impound a stream or apparent surface water feature. Two (2) round culvert outlet structures are located in the northeast part of the pond. Pond 2 is mapped with a PEM1A designation on the NWI map.

TABLE 4
POND INFORMATION

Pond ID	Acreage	Description	Location
Pond 1	0.23±	Impoundment	39.997153
			-83.131842
Pond 2	0.95±	Stormwater	39.964861
		Management	-83.131814
Total	1.18±		

#### 5.0 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

COWC identified twelve (12) wetlands (Wetland 1 through Wetland 12) totaling 13.53± acres, thirteen (13) streams (Stream 1 through Stream 13) totaling 10,377± linear feet, and two (2) ponds (Pond 1 and Pond 2) totaling 1.18± acre within the evaluation area.

COWC followed the Navigable Waters Protection Rule (effective June 22, 2020) to determine the potential regulatory status of surface water features identified with the evaluation area. Per Title 33 (Navigation and Navigable Waters) of the Code of Federal

Regulations (CFR), Chapter 2 (Corps of Engineers, Department of the Army, Department of Defense), Part 328 (Definition of Waters of the United States), Section 328.3 (Definitions), COWC has come to the following conclusions:

- Wetland 1 through Wetland 12 are likely considered waters of the U.S. per 33 CFR 328.3(a)(4), as they appear to meet the definition "adjacent wetlands" per 33 CFR 328.3(c)(1)(i)-(iv).
- Stream 1, Stream 3, Stream 4, Stream 5, Stream 6, Stream 9, Stream 10, Stream 11, Stream 12, and Stream 13 are likely considered waters of the U.S. per 33 CFR 328.3(a)(2), as they appear to meet the definition of ""tributaries" per 33 CFR 328.3(c)(12).
- Stream 2, Stream 7, and Stream 8 are likely considered "non-jurisdictional waters" or "excluded features" because they appear to be ephemeral. Ephemeral features are considered "non-jurisdictional waters" per 33 CFR 328.3(b)(3). "Ephemeral" is defined in 33 CFR 328.3(c)(3) as "surface water flowing or pooling only in direct response to precipitation (e.g. rain or snow fall).
- Pond 1 is likely considered waters of the U.S. per 33 CFR 328.3(a)(3), as Pond 1 appears to meet the definition of "lakes and ponds, and impoundments of jurisdictional waters" per 33 CFR 328.3(c)(6).
- Pond 2 may be considered "non-jurisdictional" or "excluded" per 33 CFR 328.3 (b)(10), as Pond 2 appears to meet the definition of a "stormwater control feature constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off".

Except for Stream 2, Stream 7, Stream 8, and Pond 2, surface water features identified within the evaluation area are likely to be regulated by the USACE. Section 404 of the CWA requires pre-construction notification (PCN) to the USACE and a Department of the Army (DA) permit prior to discharging dredged or fill material into waters of the U.S.

Stream 2, Stream 7, and Stream 8 appear to have ephemeral characteristics; therefore, may fall under the jurisdiction of the Ohio EPA. Ephemeral streams in the State of Ohio are regulated by the Ohio EPA. Certain situations may require a pre-activity notice (PAN) to the Ohio EPA for ephemeral stream impacts.

Pond 2 may be a non-regulated feature, as it appears to have been constructed for stormwater control use.

The USACE has authority to determine the jurisdictional status of surface water features identified within the evaluation area. Therefore, findings in this report are preliminary until verified by the USACE. COWC recommends obtaining an Approved Jurisdictional Determination (AJD) from the USACE Huntington, WV District Office for written verification of the findings documented within this report. With your authorization, COWC will supply the required information to process this request. With this reported

information and/or a site visit, the USACE will make the official determination on jurisdiction. The findings and conclusions of this delineation report are subject to change, pending USACE verification. This report will become public information upon submittal to the USACE.

#### 6.0 SIGNATURE OF PROFESSIONAL PERSONNEL

To the best of our professional knowledge and belief, COWC personnel responsible for this report declare we have the specific qualifications based on education, training, and experience to assess the evaluation area for waters of the U.S. and isolated waters of the State of Ohio. The jurisdictional waters delineation has been conducted in a manner consistent with the criteria contained in the USACE Wetlands Delineation Manual (1987) and the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, and with the level of care and skill ordinarily used by similar professionals performing similar services under similar conditions in the vicinity of the evaluation area.

COWC appreciates the opportunity to serve you on this project. Please contact COWC owner Matt Kaminski at <a href="mailto:mkaminski434@gmail.com">mkaminski434@gmail.com</a> with any questions or concerns regarding this report.

Respectfully submitted,

Central Ohio Wetland Consulting, LLC

Prepared by:

Matthew R. Kaminski, Owner

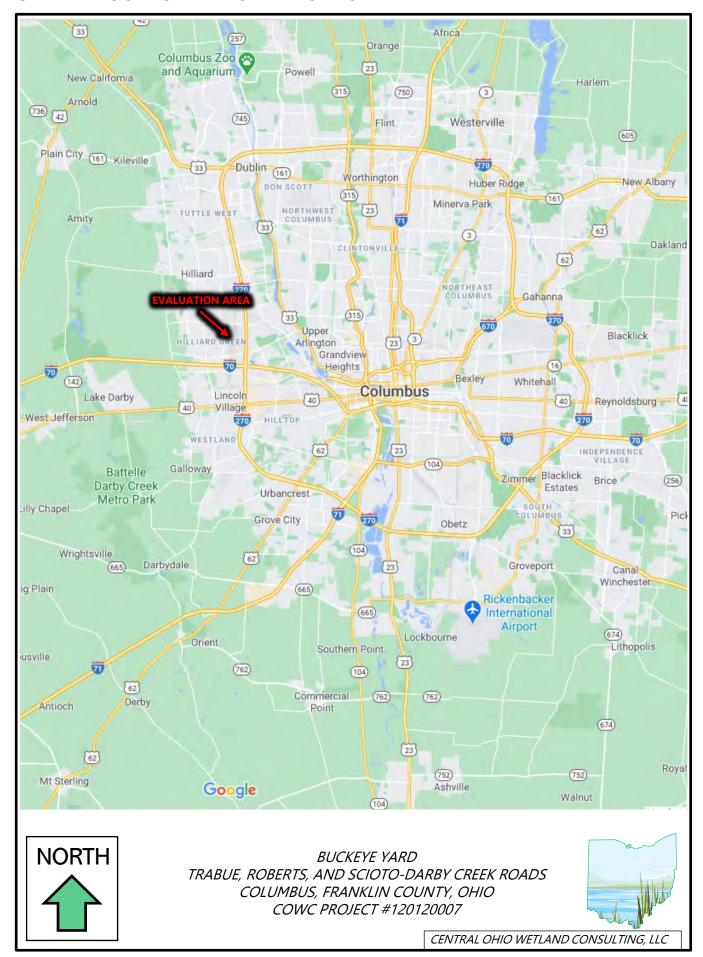
Mettle R. Karreli

Wetland Scientist, 401/404 Specialist

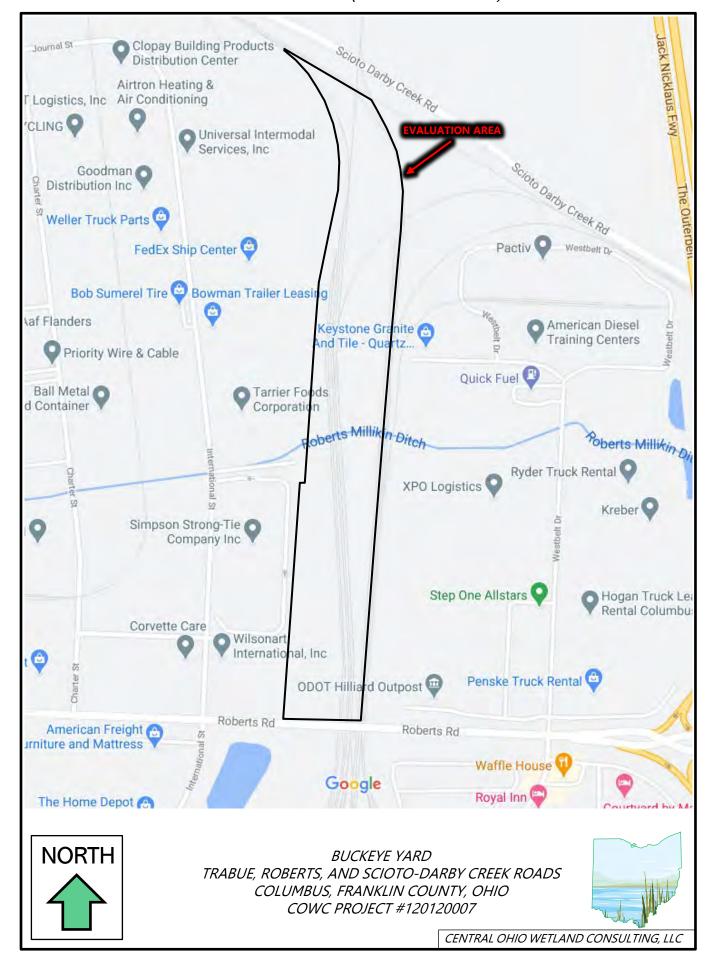
Matthew R. Kaminski holds a Bachelor of Science Degree in Environmental Geography from Ohio University with 16 years of experience as an environmental consultant. Mr. Kaminski has completed hundreds of jurisdictional waters delineations throughout the State of Ohio upon completion of the 38 Hour Army Corps of Engineers Wetland Delineation & Management Training Program in 2006. Mr. Kaminski's experience includes wetland/stream delineation, plant identification, stream evaluations, 404/401 permitting, Ohio Rapid Assessment Method v. 5.0, Clean Water Act (CWA) regulations, Sections 7 & 9 of the Endangered Species Act (ESA), and Ohio Historic Preservation Office (OHPO) Section 106. Throughout his career, Mr. Kaminski has successfully facilitated regulatory approval of numerous residential, commercial, and institutional projects. Since September 2020, Mr. Kaminski has been sole proprietor of Central Ohio Wetland Consulting, LLC, offering comprehensive wetland and stream consultation and guidance for commercial and residential developers, architects, civil design professionals, and private individuals. Professional wetland and stream consulting services include preliminary jurisdictional waters assessments, wetland/stream delineation, approved and preliminary jurisdictional determination requests, and 404/401 permitting services.

APPENDIX 1	

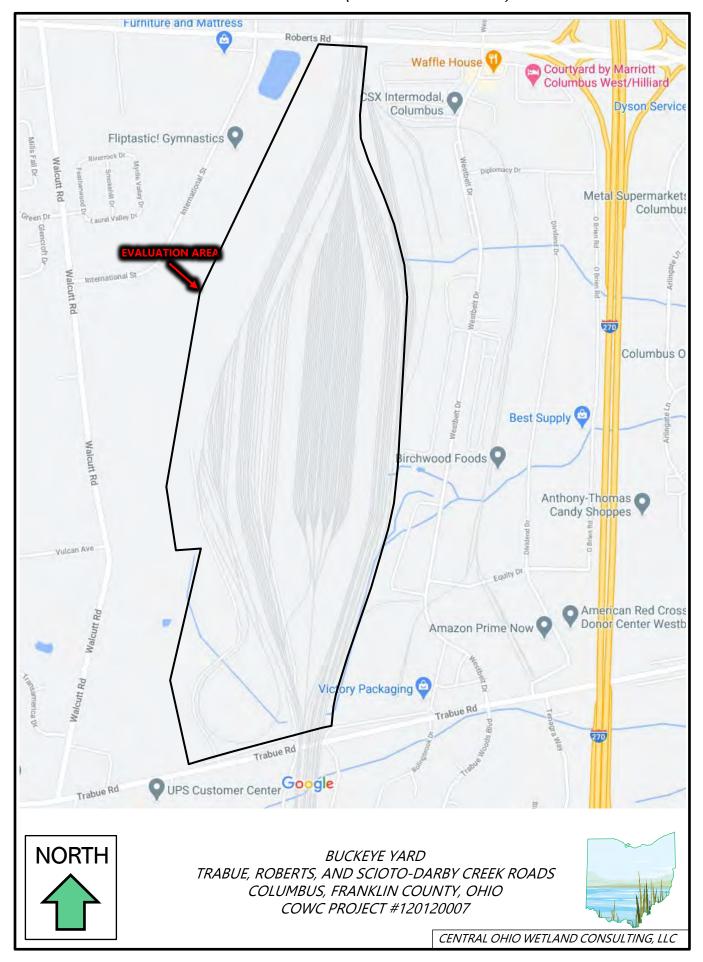
#### GENERAL LOCATION MAP OF EVALUATION AREA



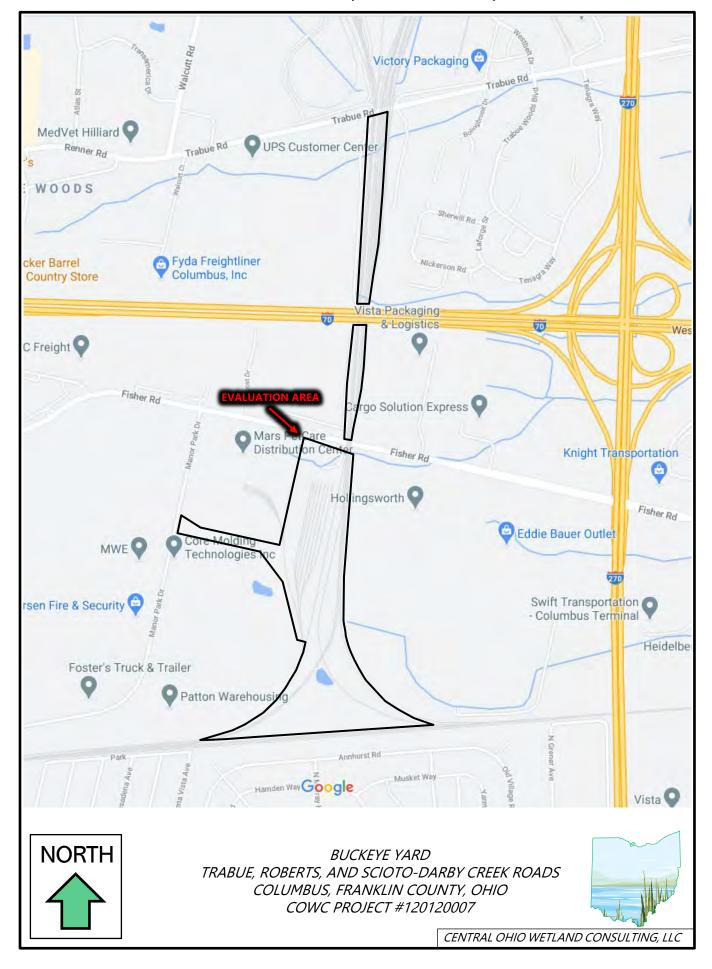
#### LOCATION MAP OF EVALUATION AREA (NORTH SECTION)



#### LOCATION MAP OF EVALUATION AREA (CENTRAL SECTION)



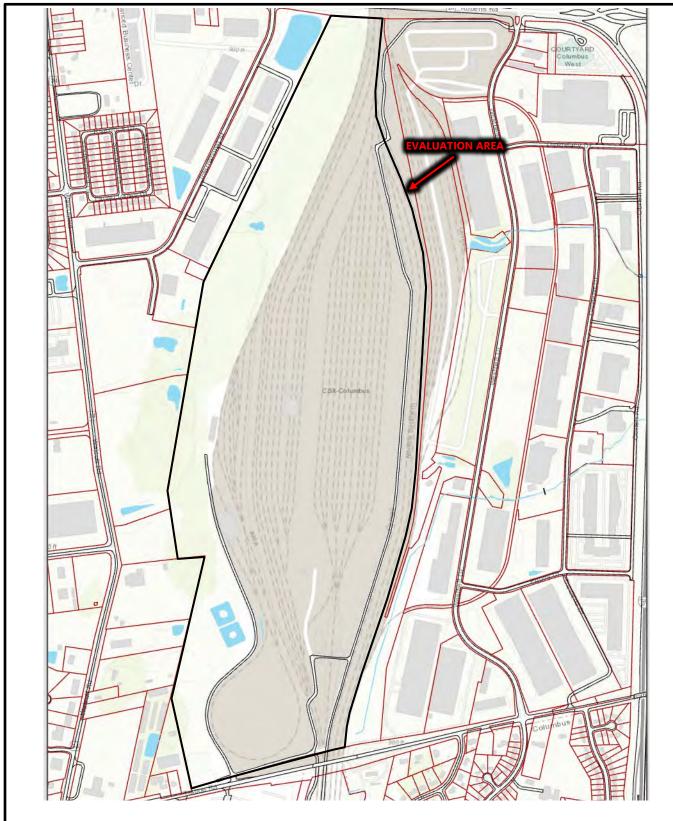
#### LOCATION MAP OF EVALUATION AREA (SOUTH SECTION)



## FRANKLIN COUNTY AUDITOR GIS MAP (NORTH SECTION)



# FRANKLIN COUNTY AUDITOR GIS MAP (CENTRAL SECTION)

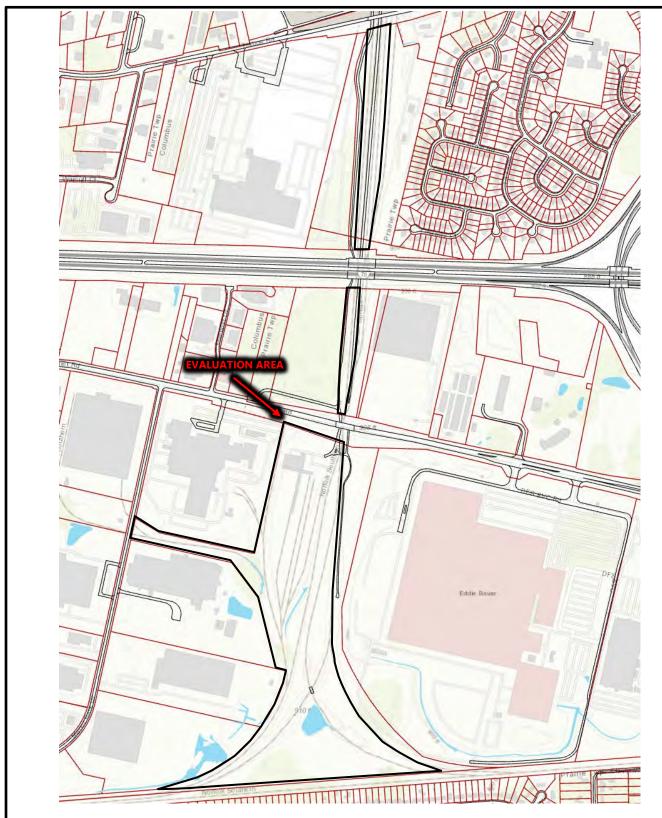




BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007



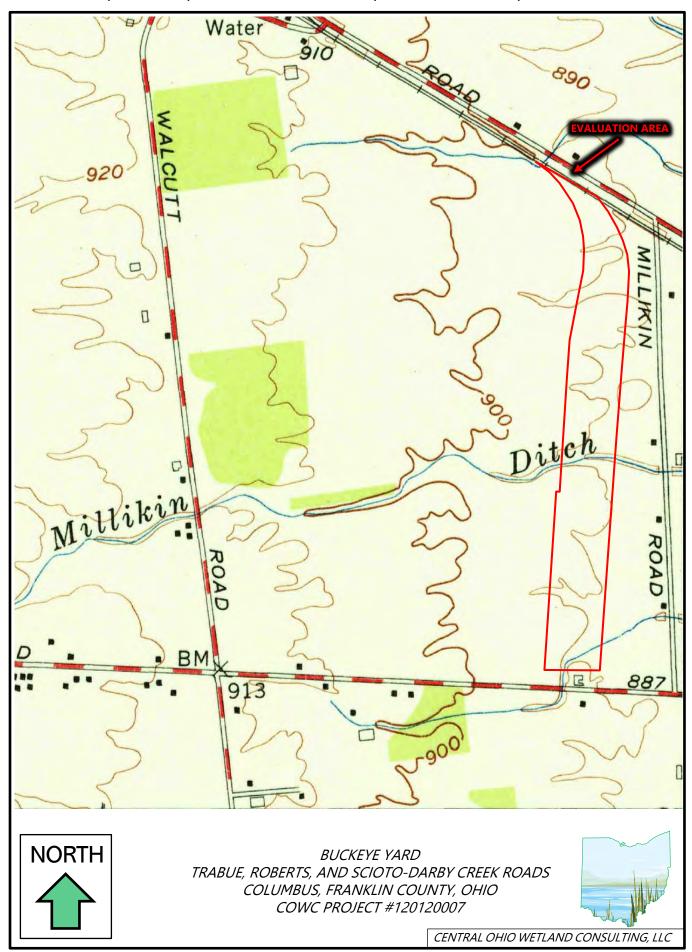
# FRANKLIN COUNTY AUDITOR GIS MAP (SOUTH SECTION)





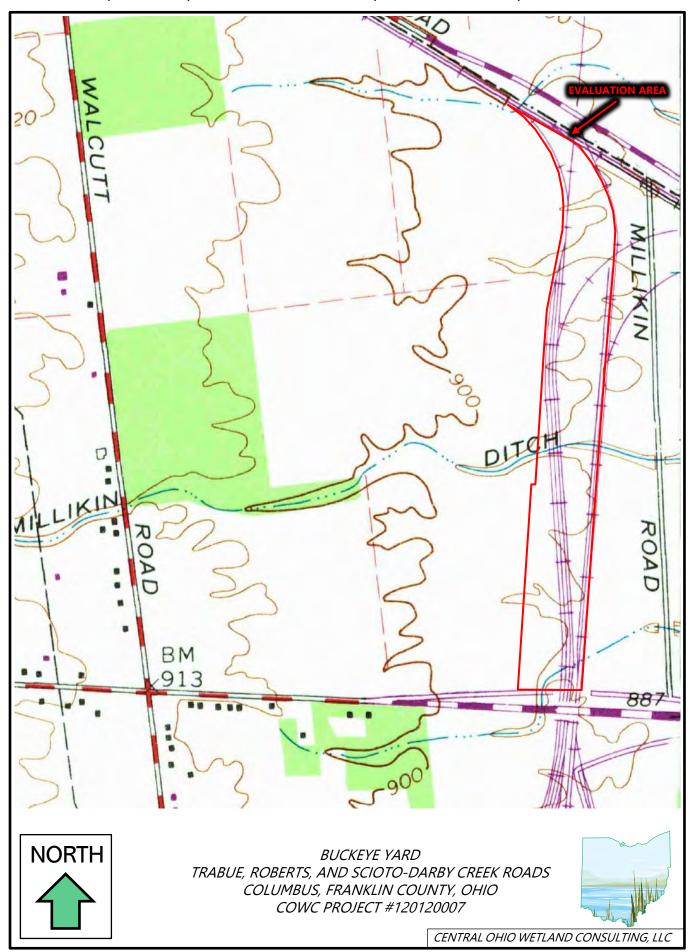
BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

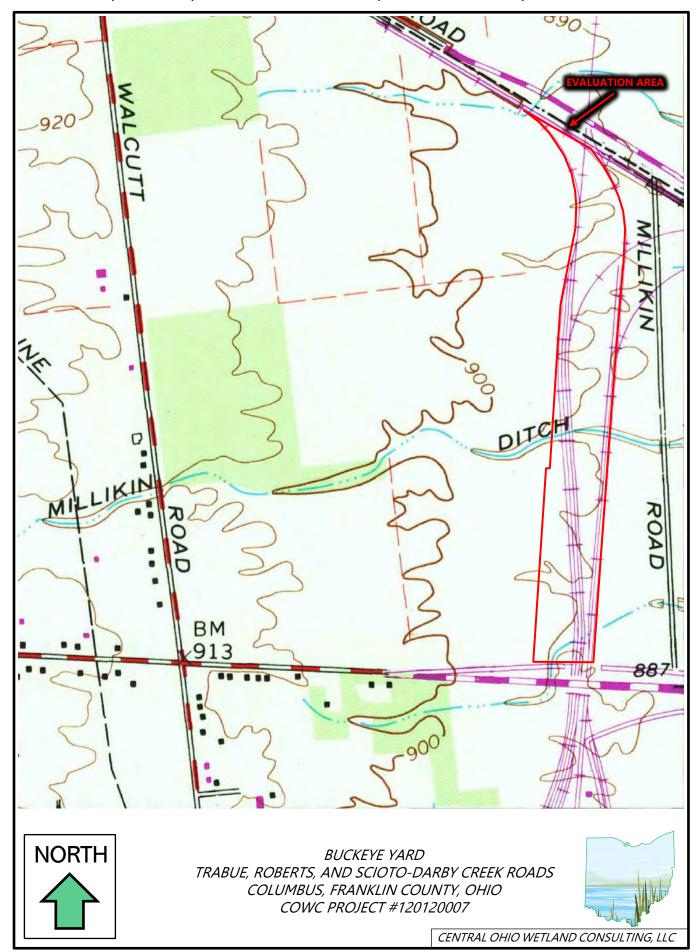


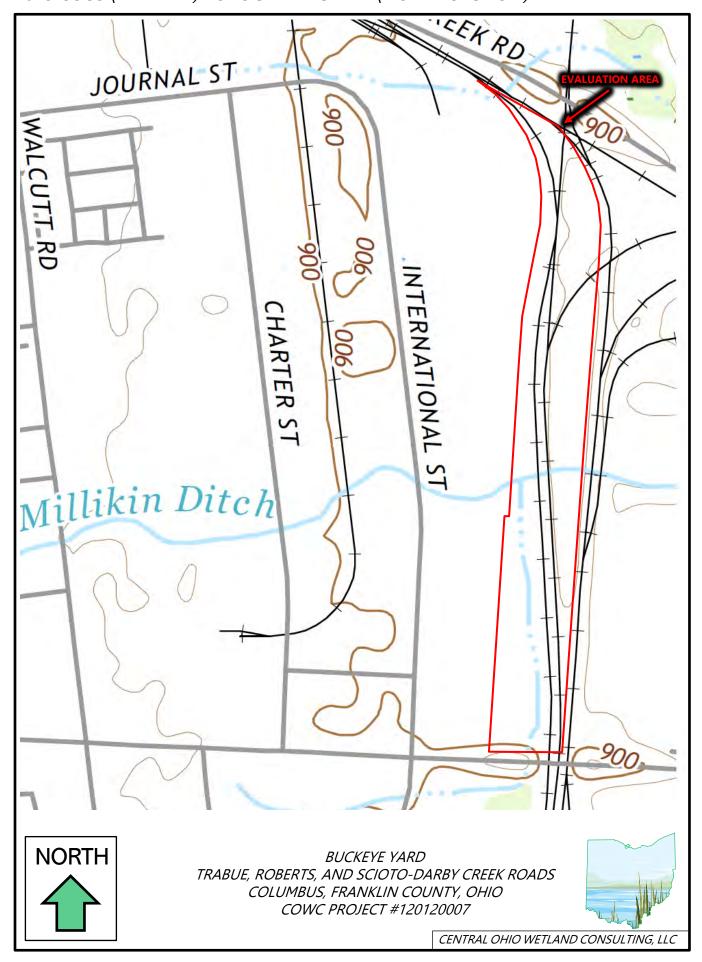


## 1966 USGS (HILLIARD) TOPOGRAPHIC MAP (NORTH SECTION)

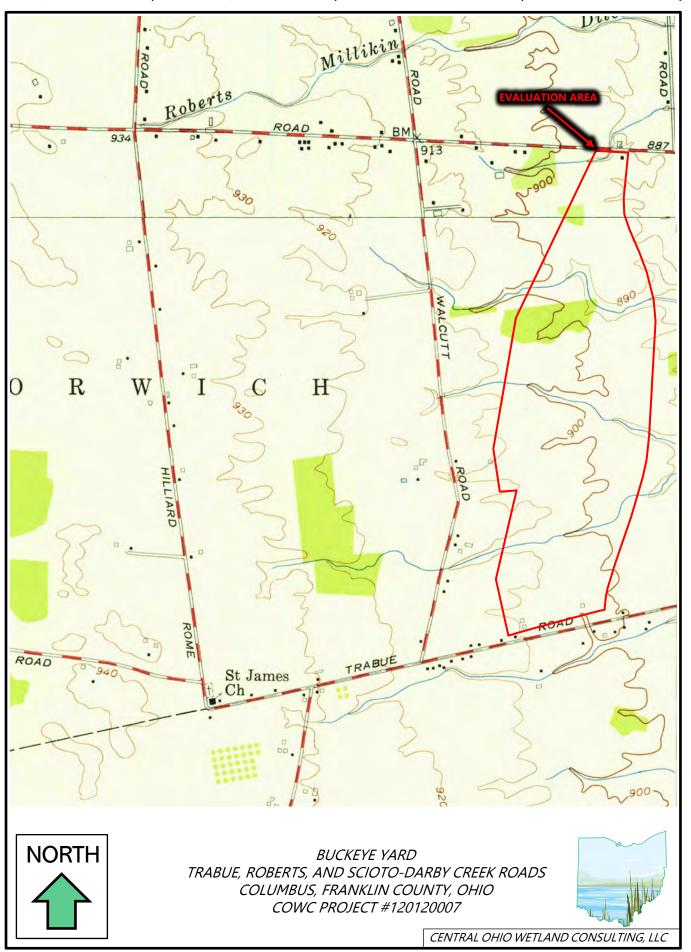




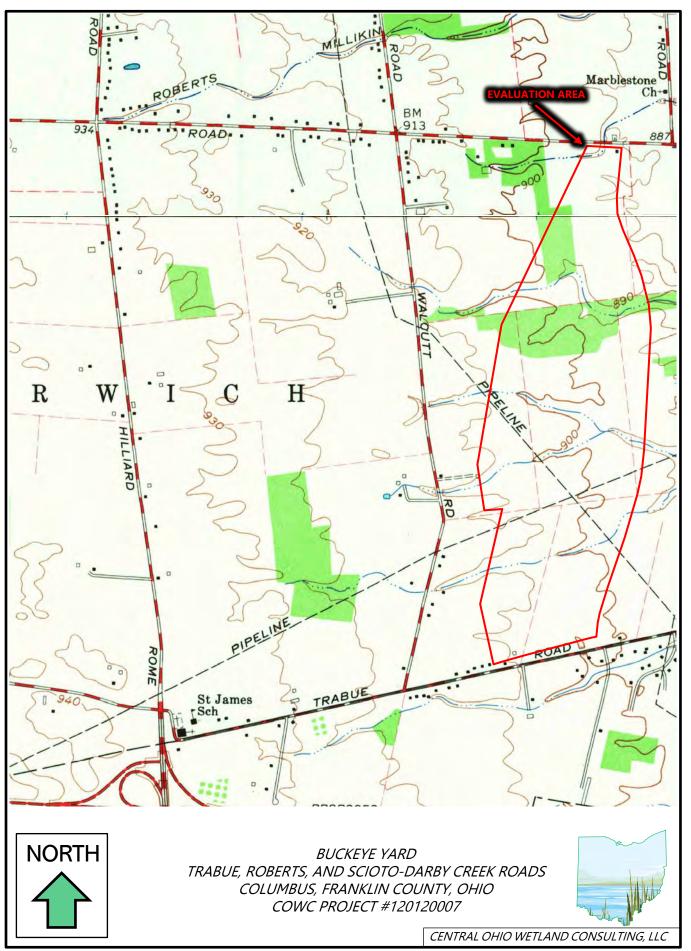




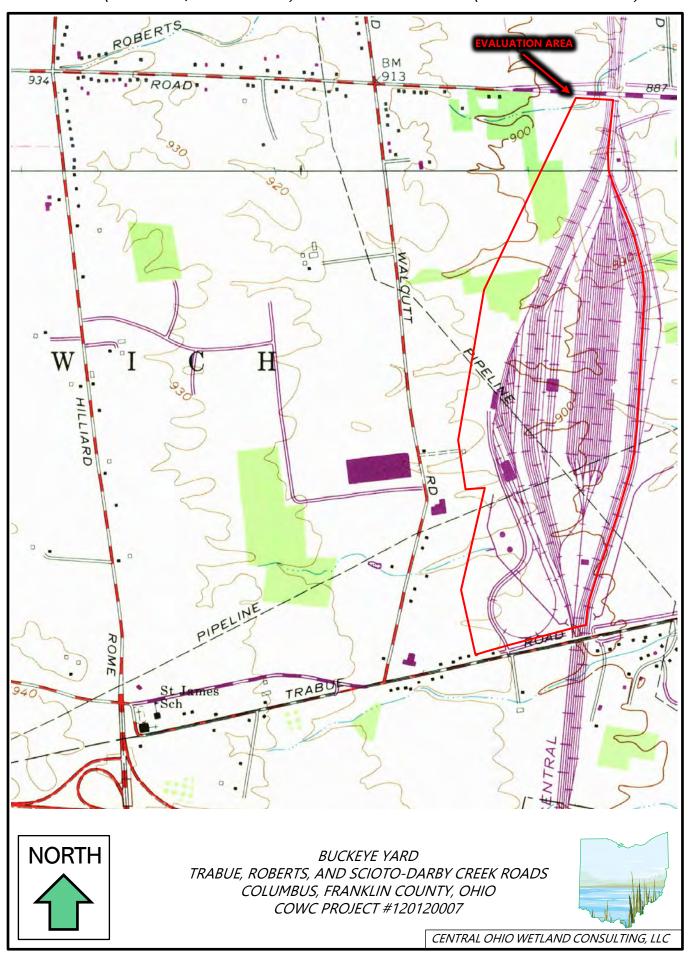
## 1954/1955 USGS (HILLIARD/GALLOWAY) TOPOGRAPHIC MAP (CENTRAL SECTION)



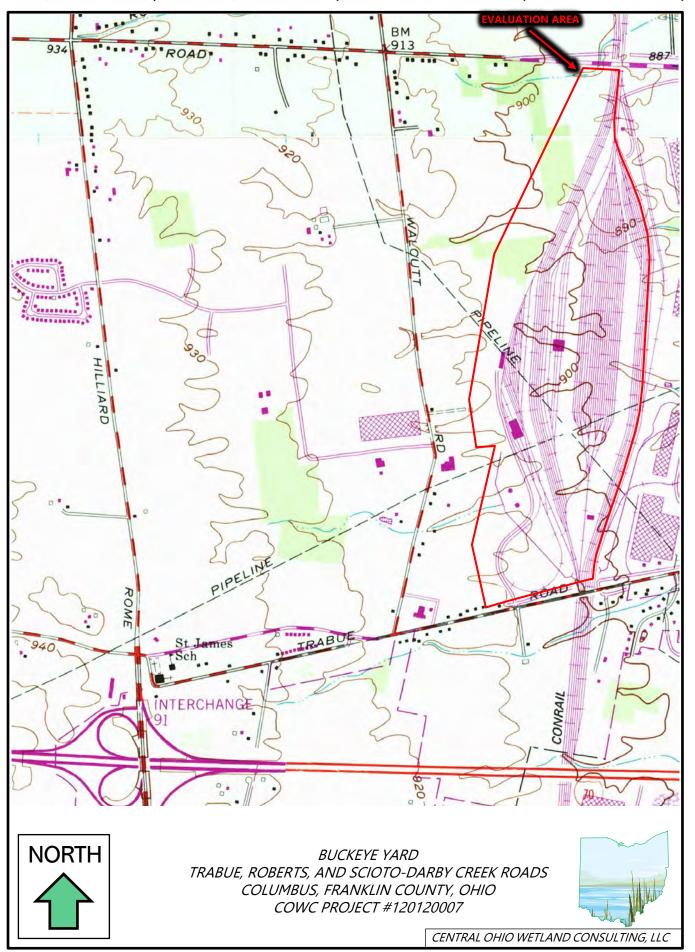
## 1966 USGS (HILLIARD/GALLOWAY) TOPOGRAPHIC MAP (CENTRAL SECTION)



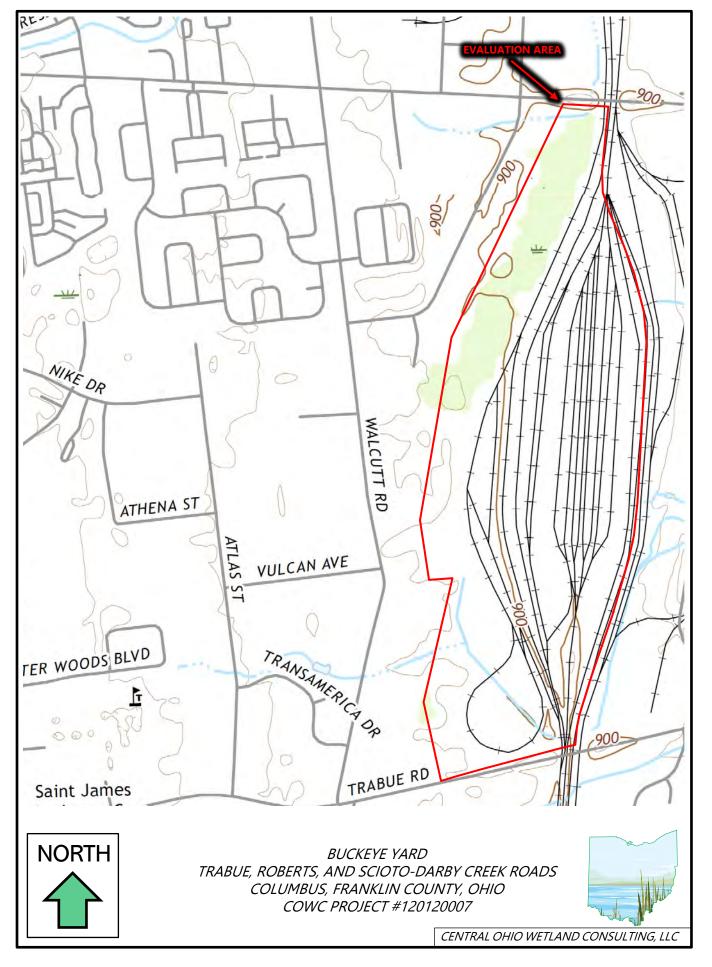
# 1973 USGS (HILLIARD/GALLOWAY) TOPOGRAPHIC MAP (CENTRAL SECTION)

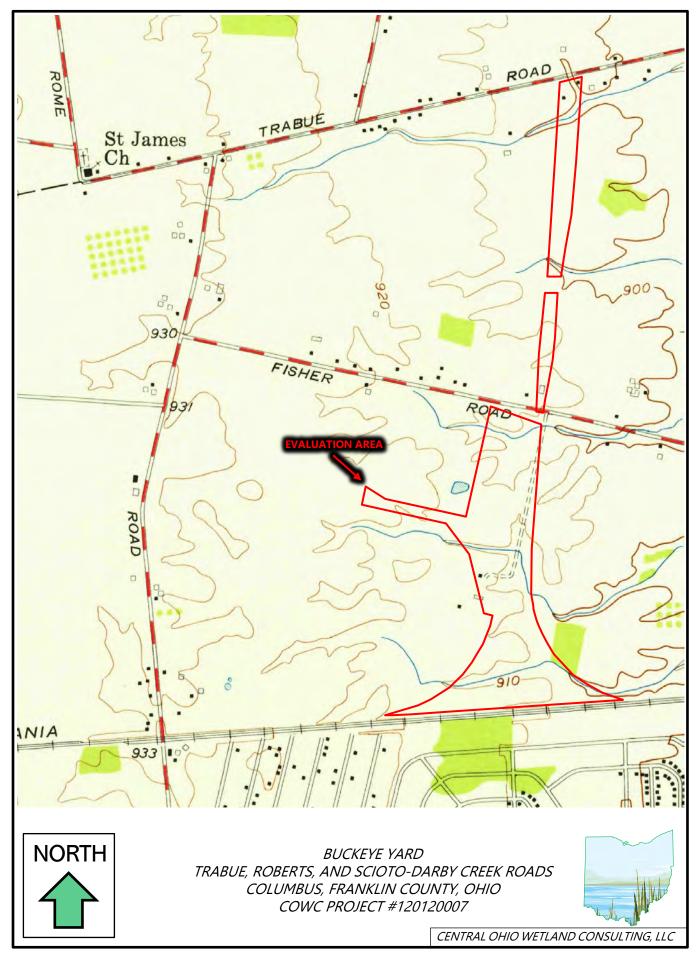


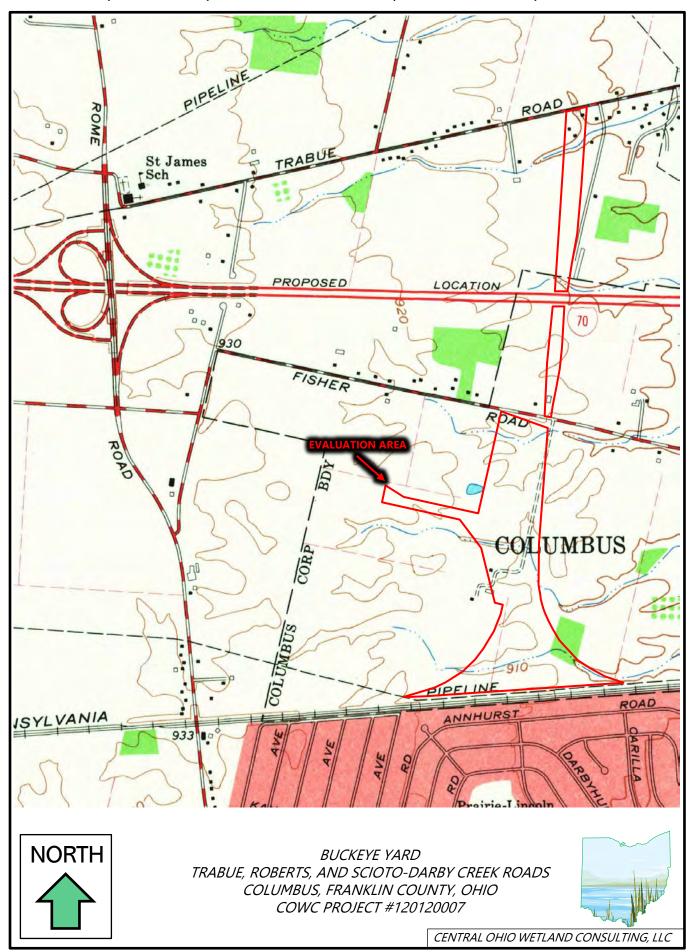
## 1980/1981 USGS (HILLIARD/GALLOWAY) TOPOGRAPHIC MAP (CENTRAL SECTION)

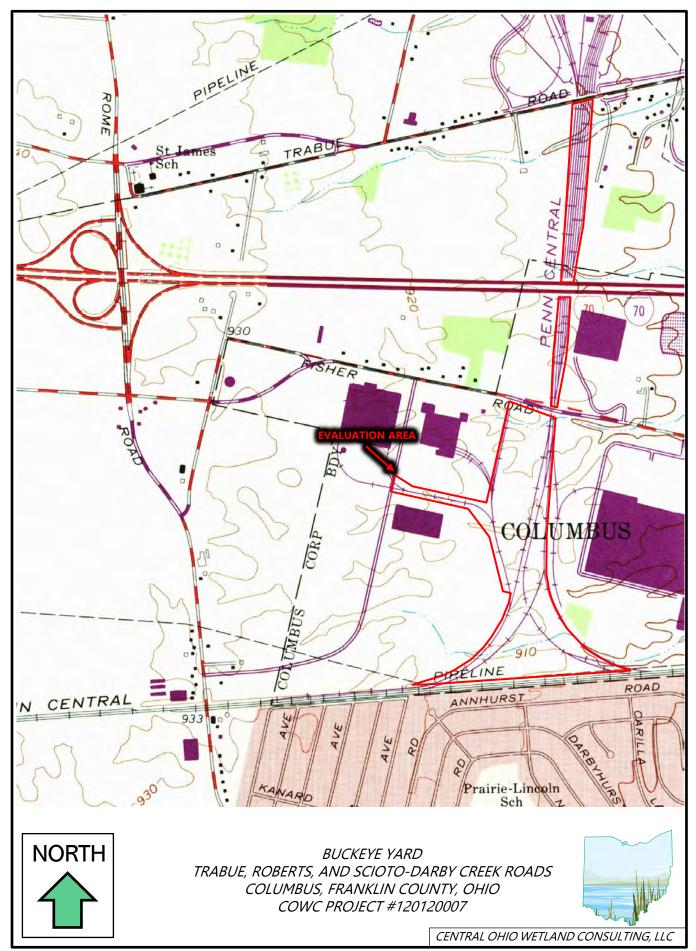


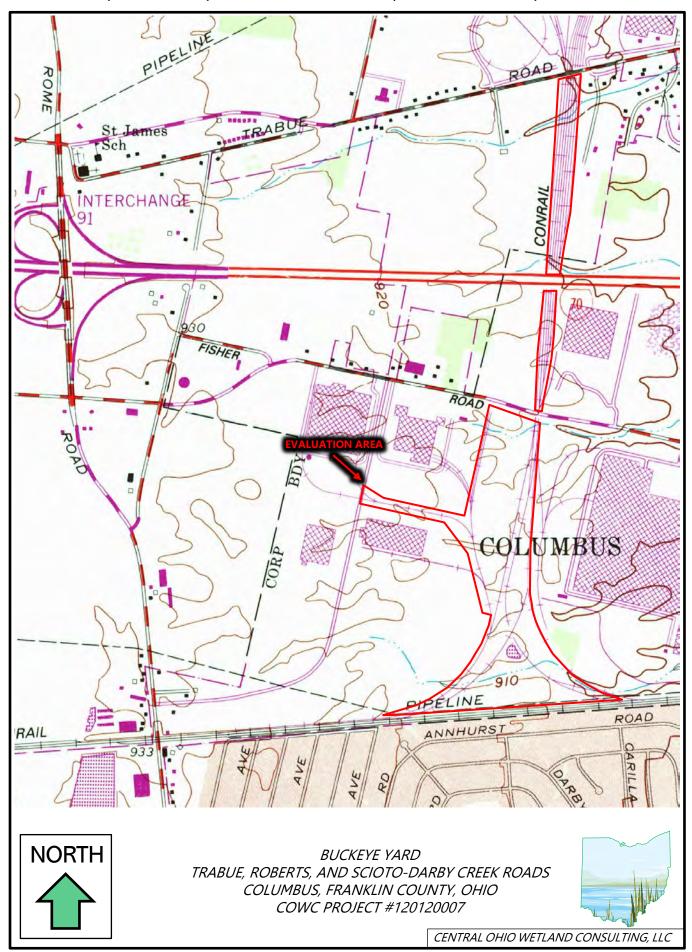
#### 2019 USGS (HILLIARD/GALLOWAY) TOPOGRAPHIC MAP (CENTRAL SECTION)

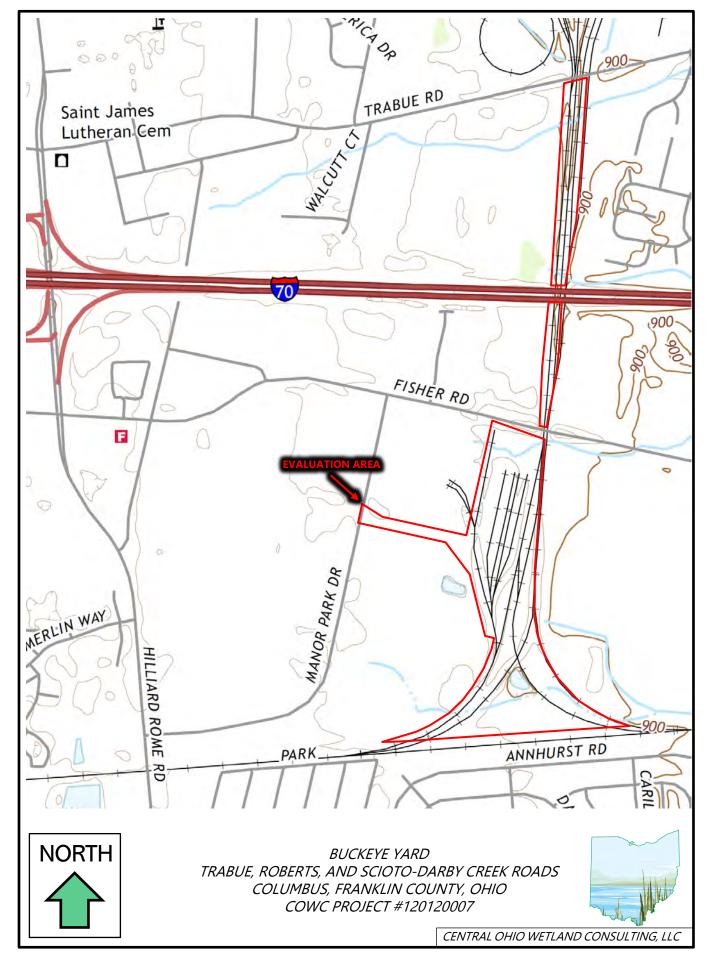




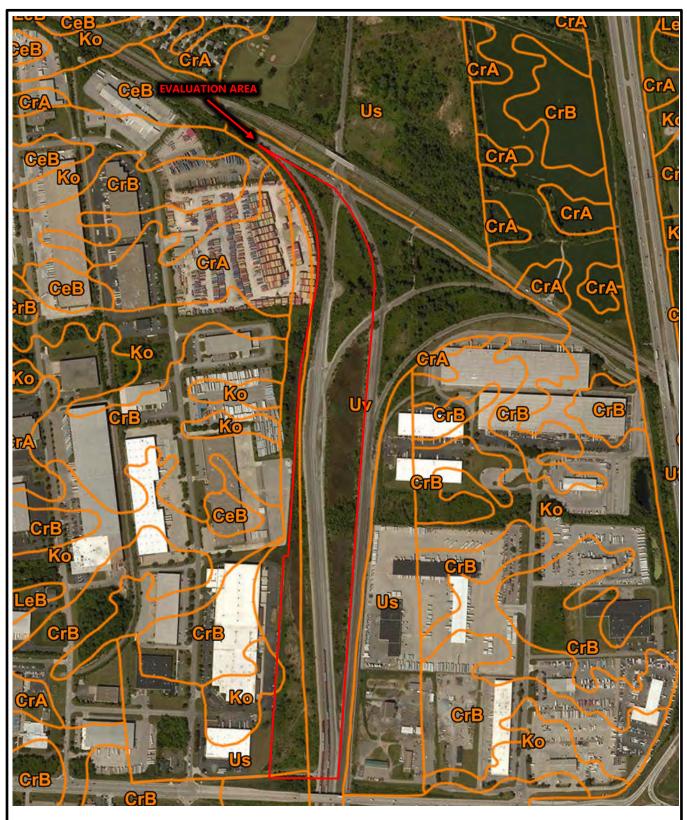








## USDA WEB SOIL SURVEY MAP (NORTH SECTION)

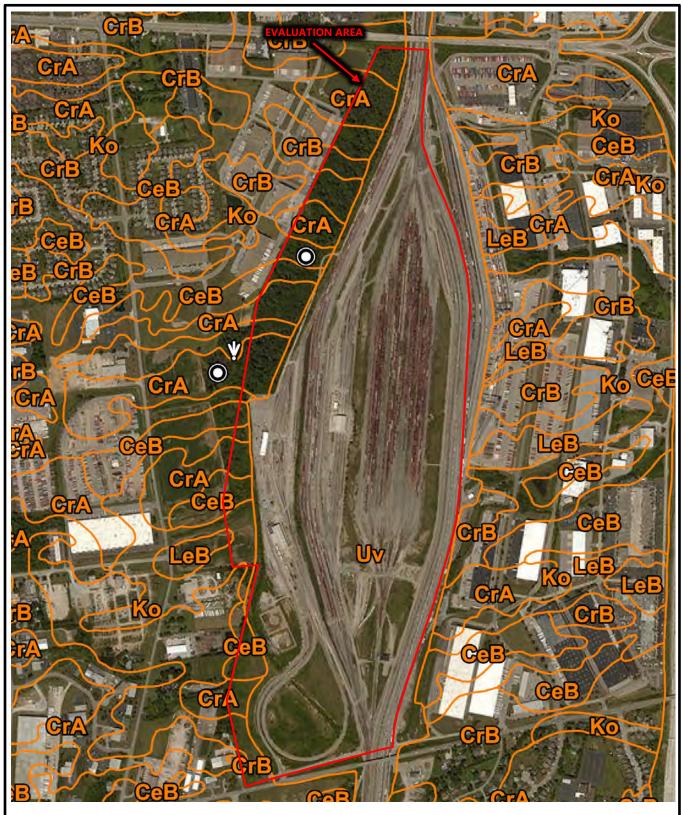




BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007



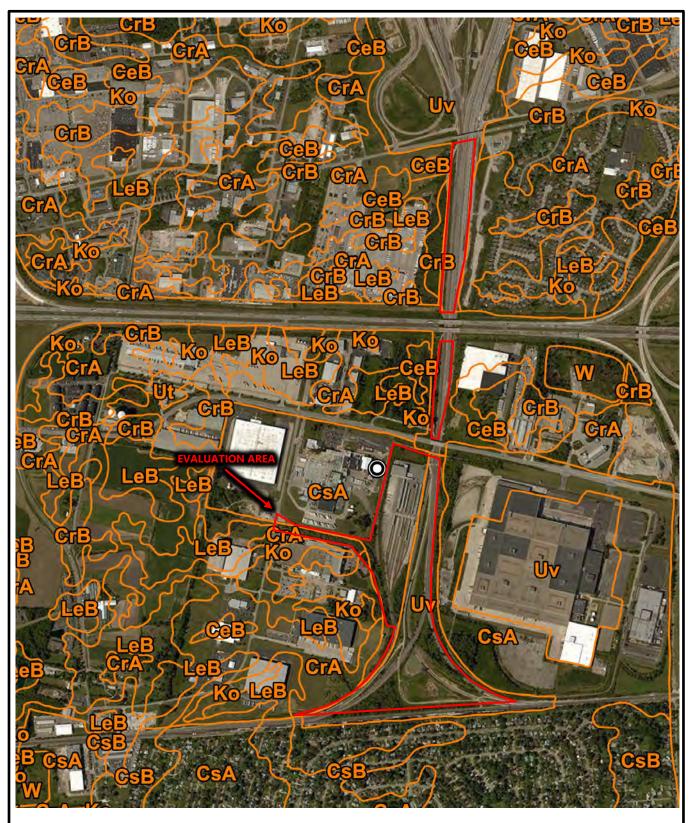
## USDA WEB SOIL SURVEY MAP (CENTRAL SECTION)





BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007

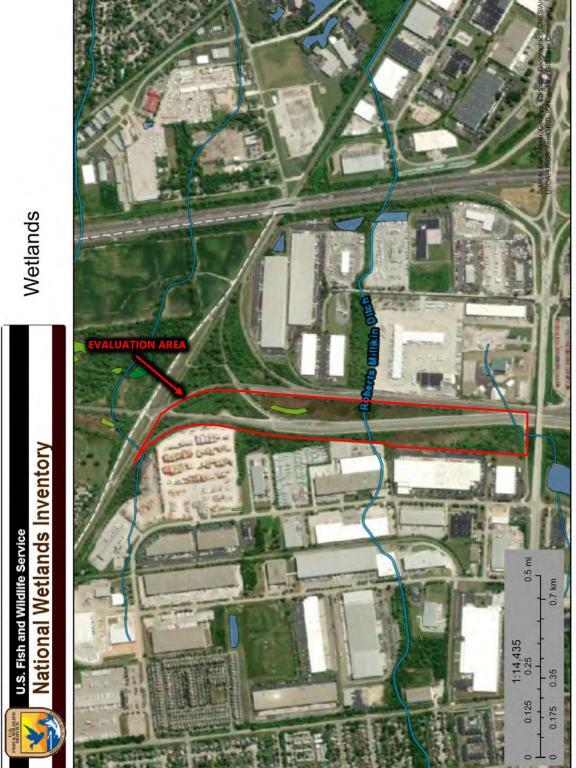






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007





This map is for general reference only. The US Fish a Service is not responsible for the accuracy or currentr base data shown on this map. All wetlands related dat be used in accordance with the layer metadata found Wetlands Mapper web site.

Riverine

November 20, 2020

Netlands

Estuarine and Marine Deepwater

Freshwater Forested/Shrub Wetland Freshwater Emergent Wetland

Freshwater Pond

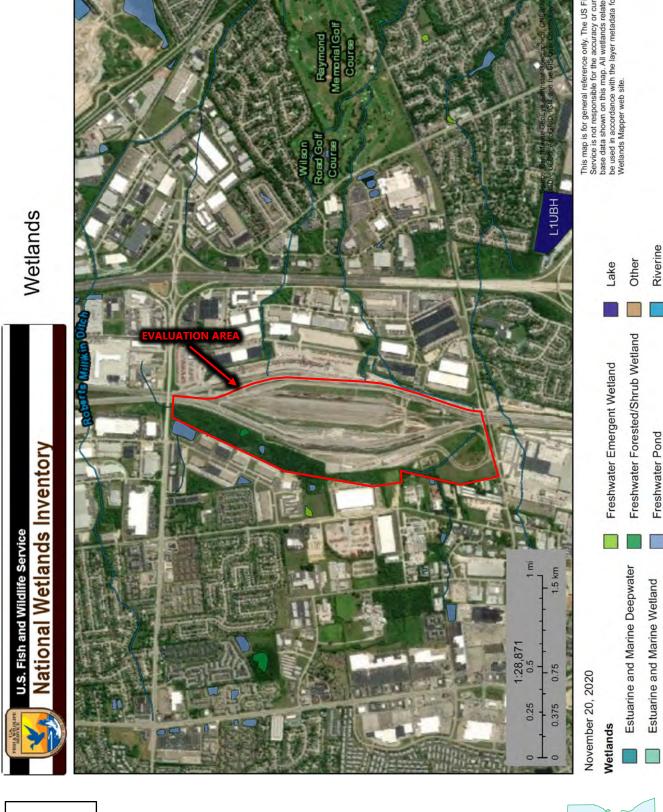
Estuarine and Marine Wetland

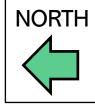
**BUCKEYE YARD** TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007





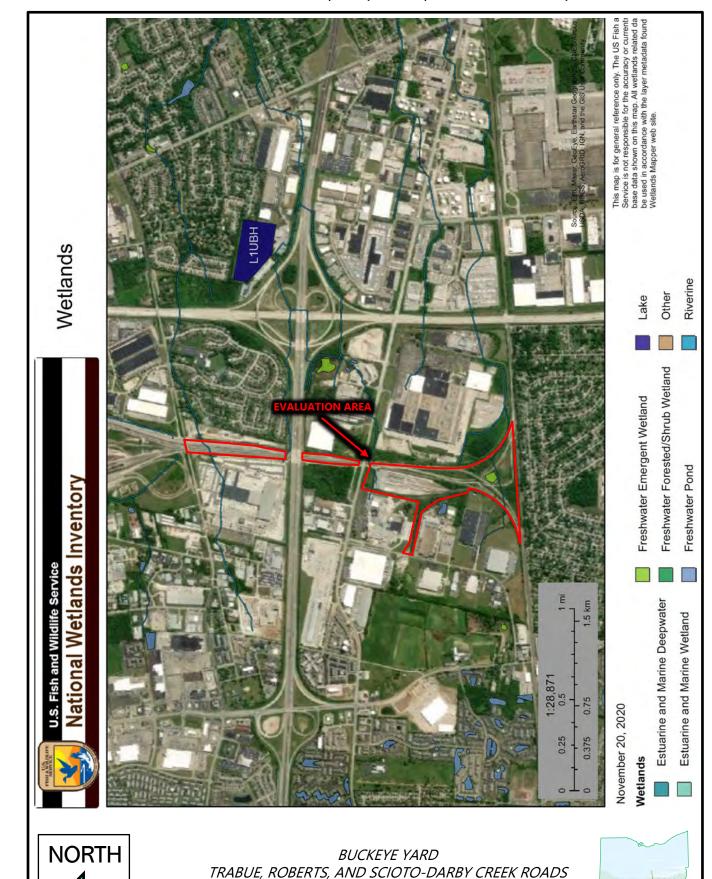
NORTH





BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

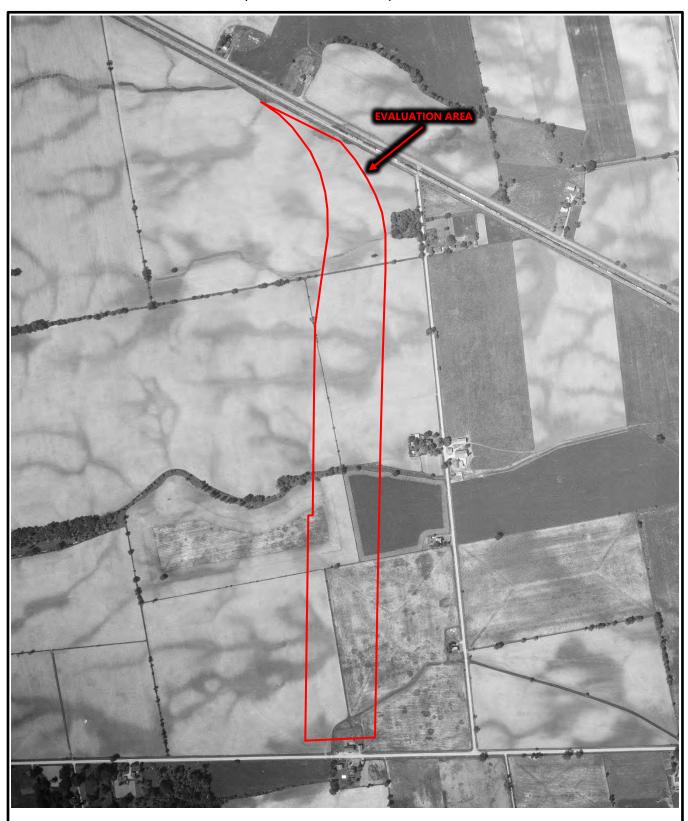




COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007

APPENDIX 2	

## 1956 AERIAL PHOTOGRAPH (NORTH SECTION)

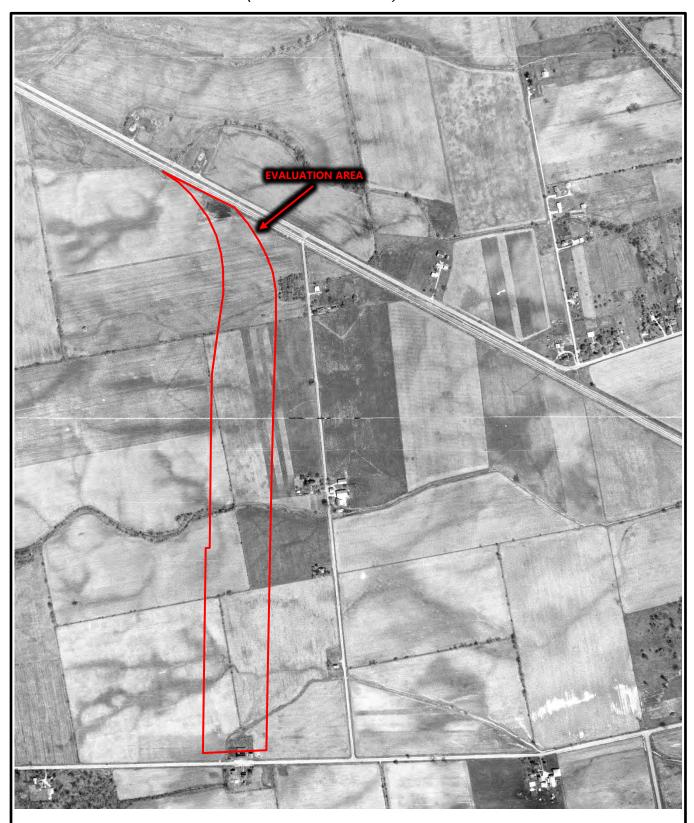




BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007



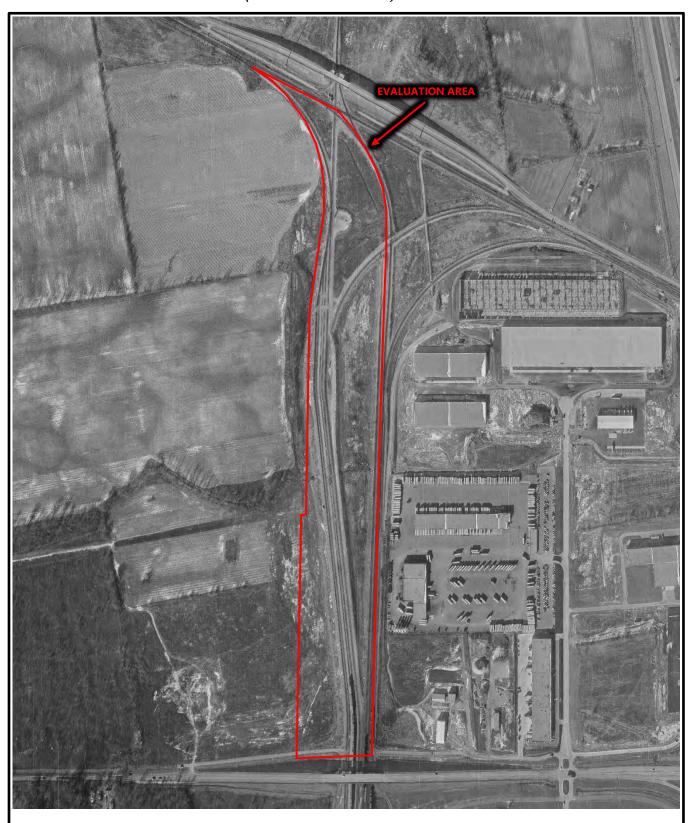
# 1964 AERIAL PHOTOGRAPH (NORTH SECTION)





BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

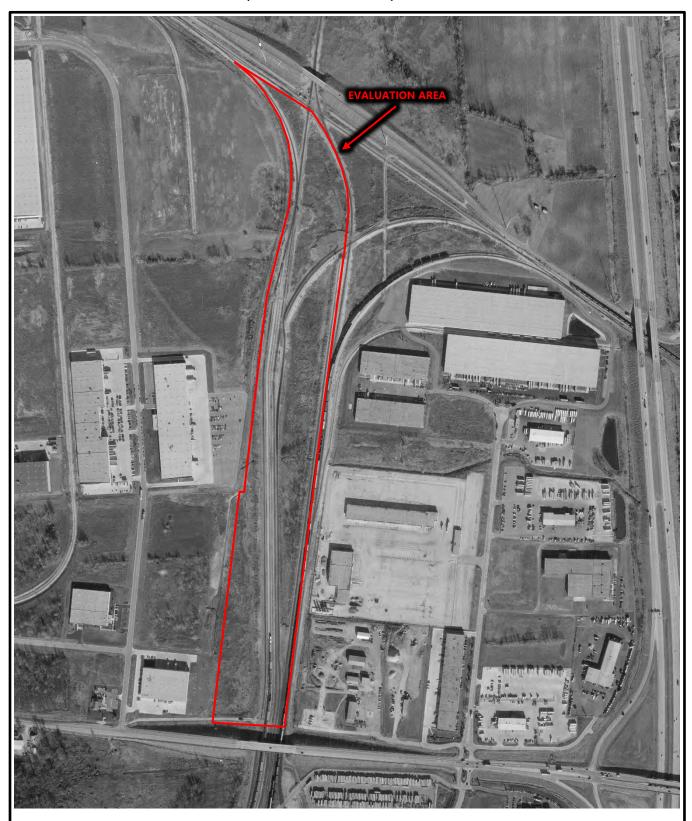






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

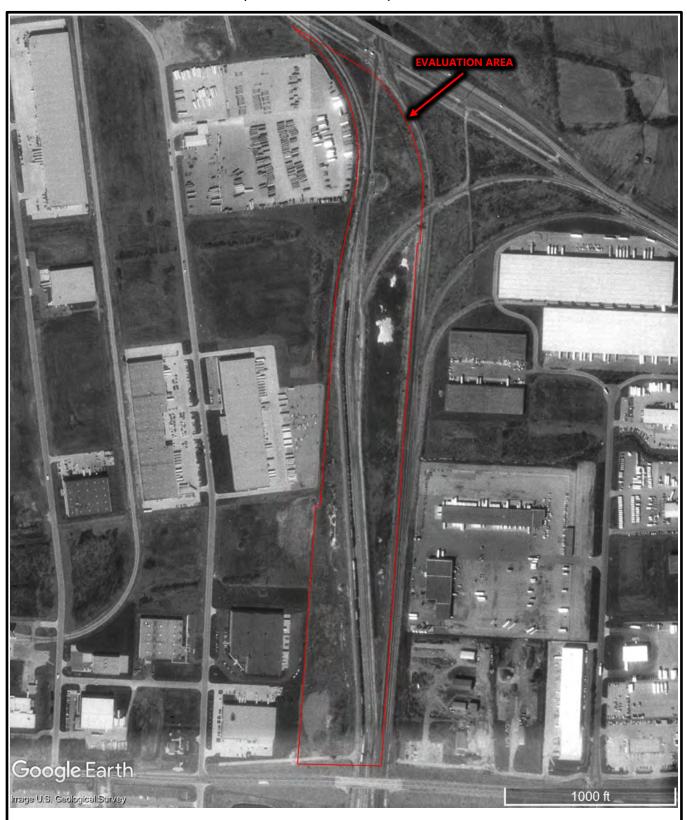






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

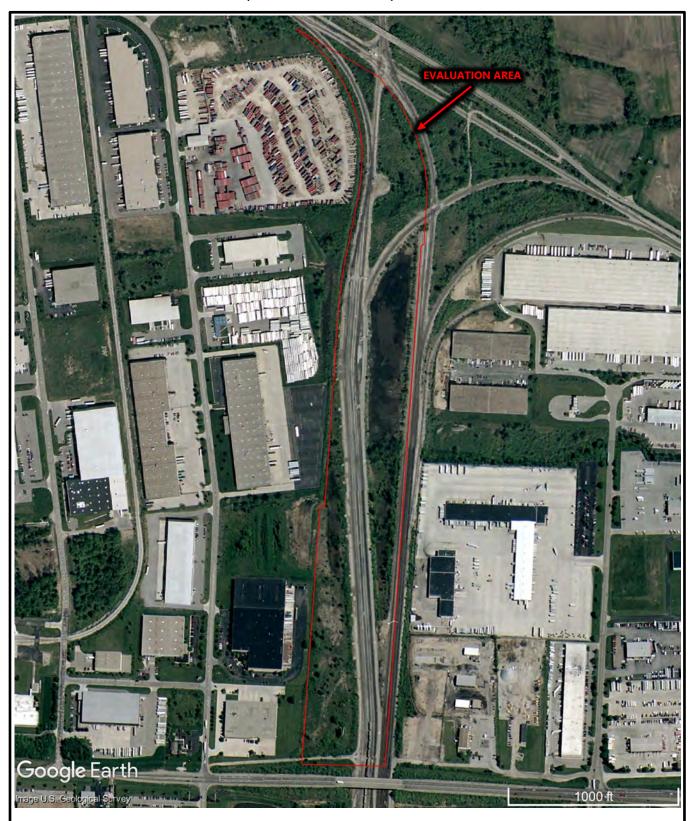






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

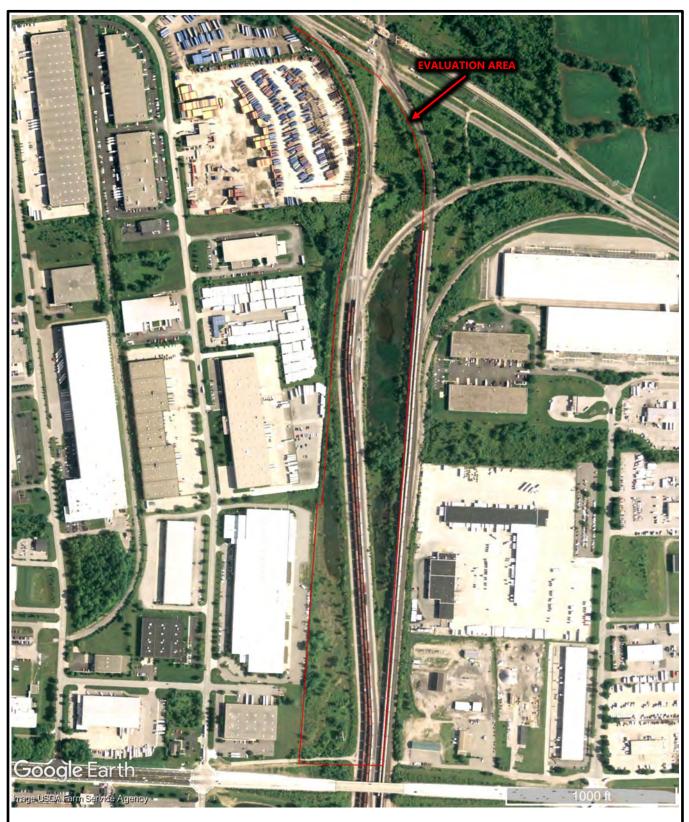






BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007

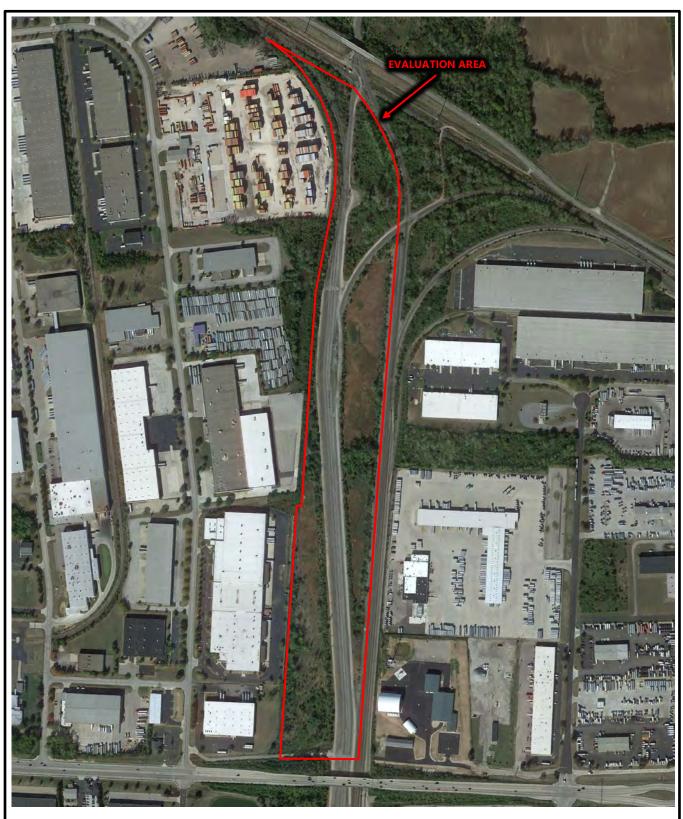






BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007

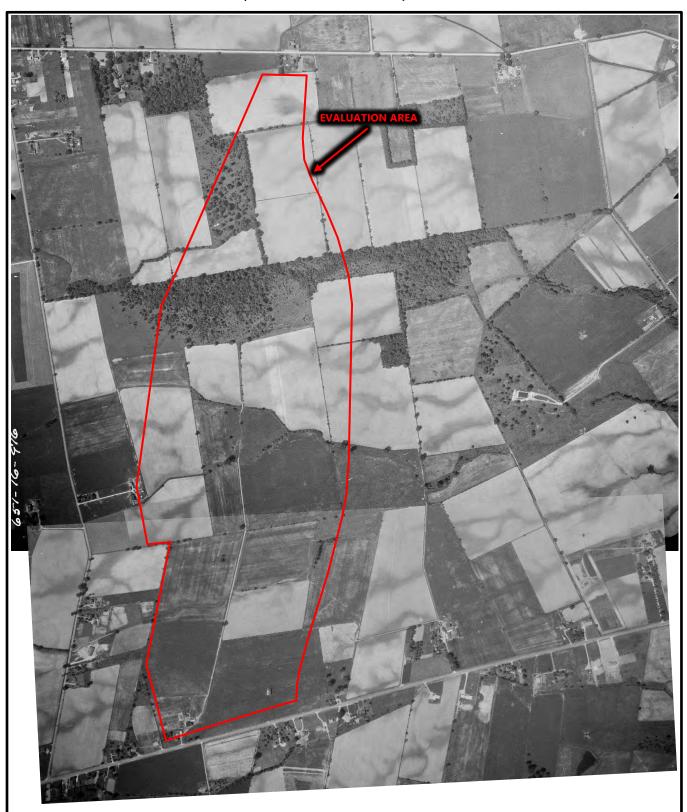






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

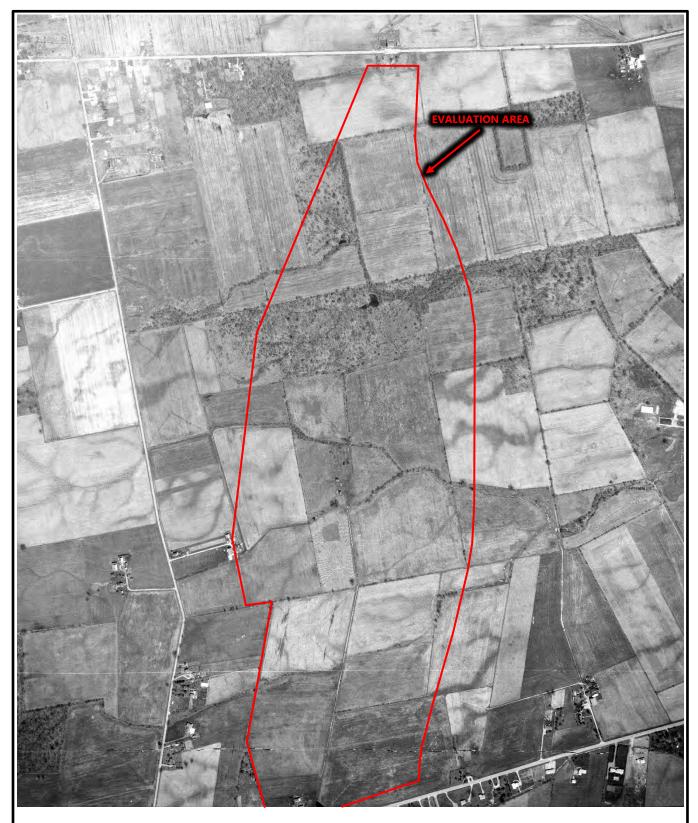






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

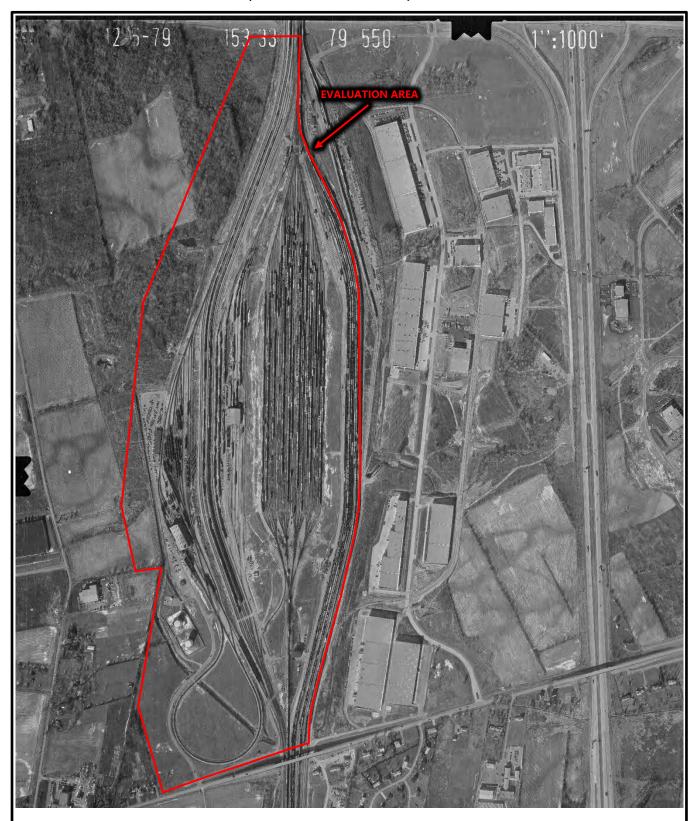






BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007

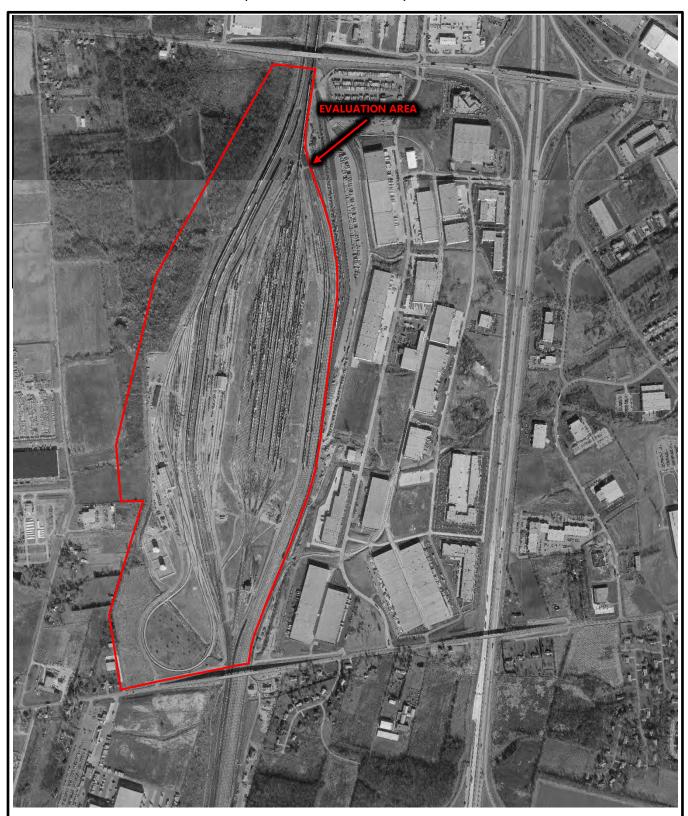






BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007

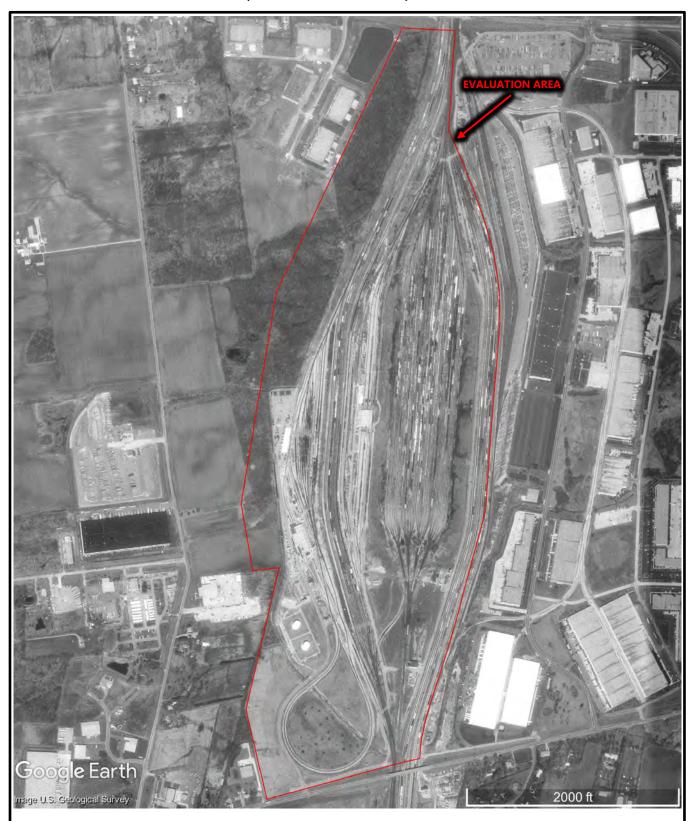






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007







BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007







BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

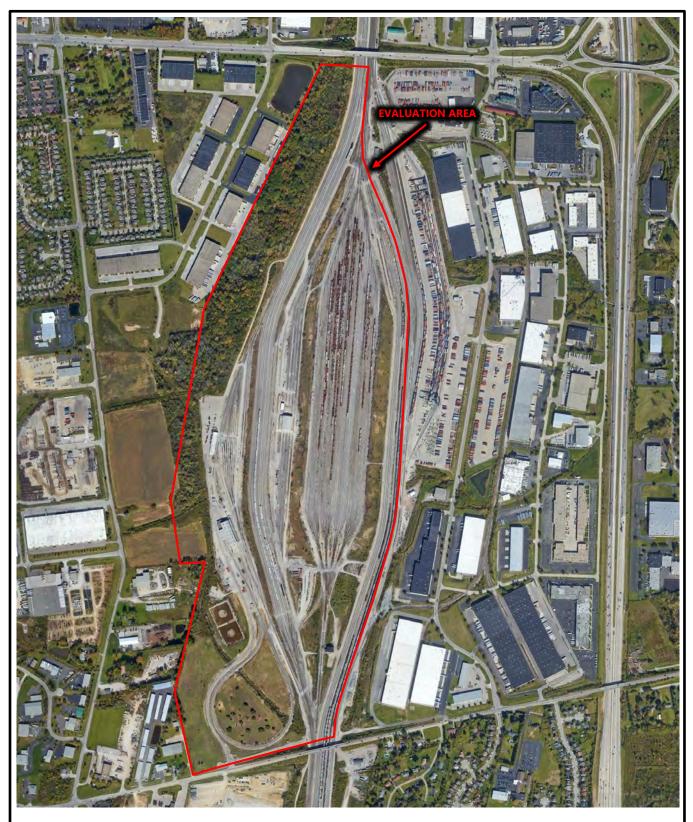






BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007

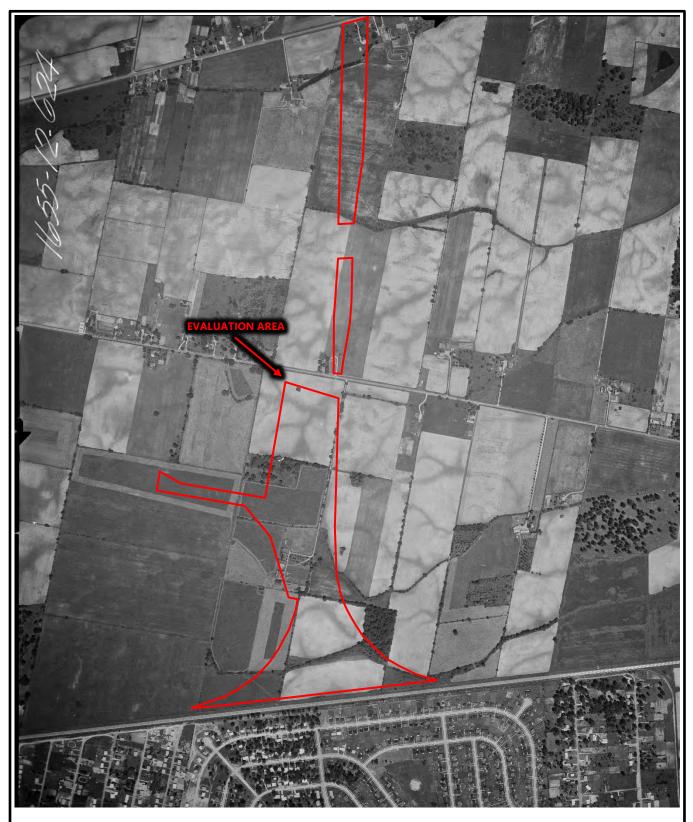






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

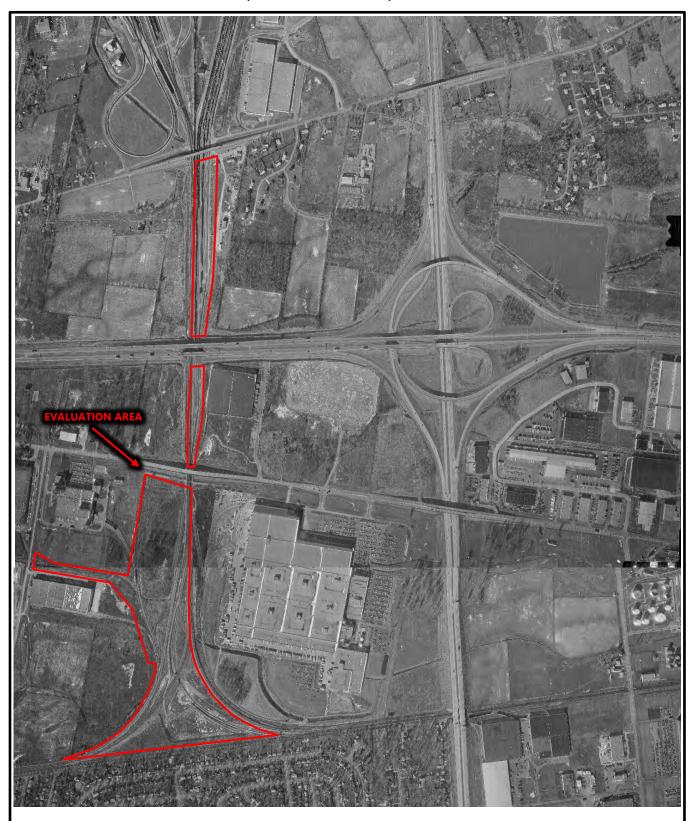






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

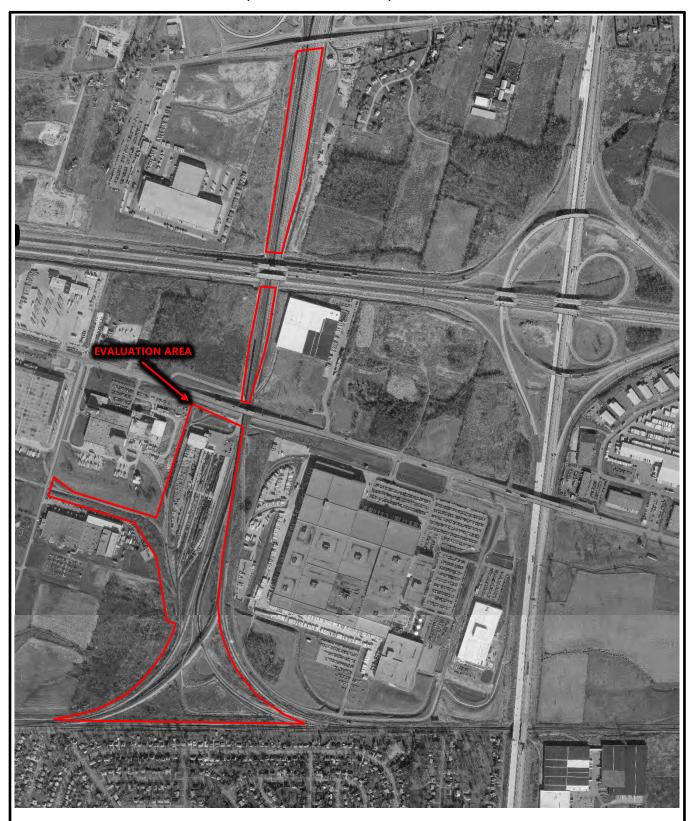






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007

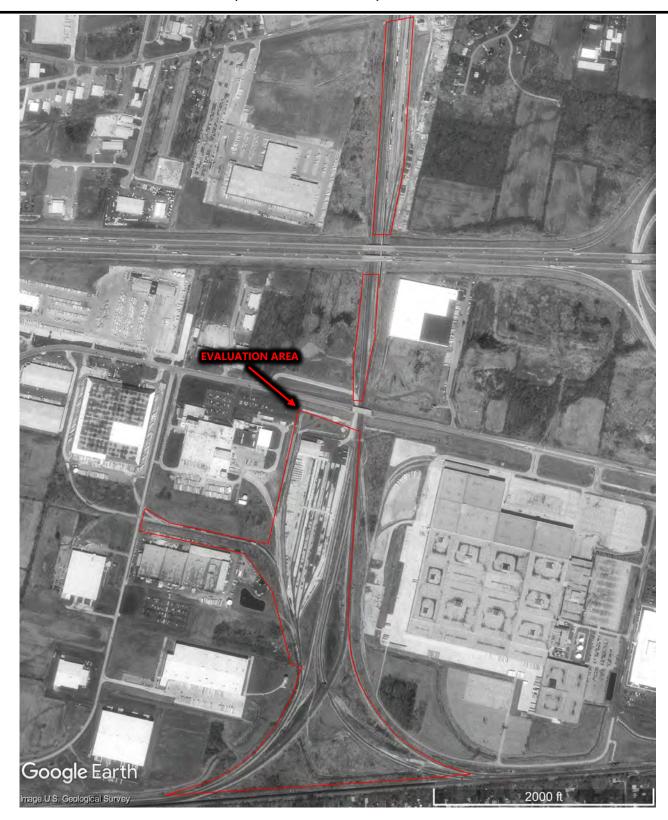






BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007







BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007







BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007







BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007







BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007



# APPENDIX 3

# WETLAND DELINEATION MAP (NORTH SECTION)





BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007



# STREAM DELINEATION MAP (NORTH SECTION)

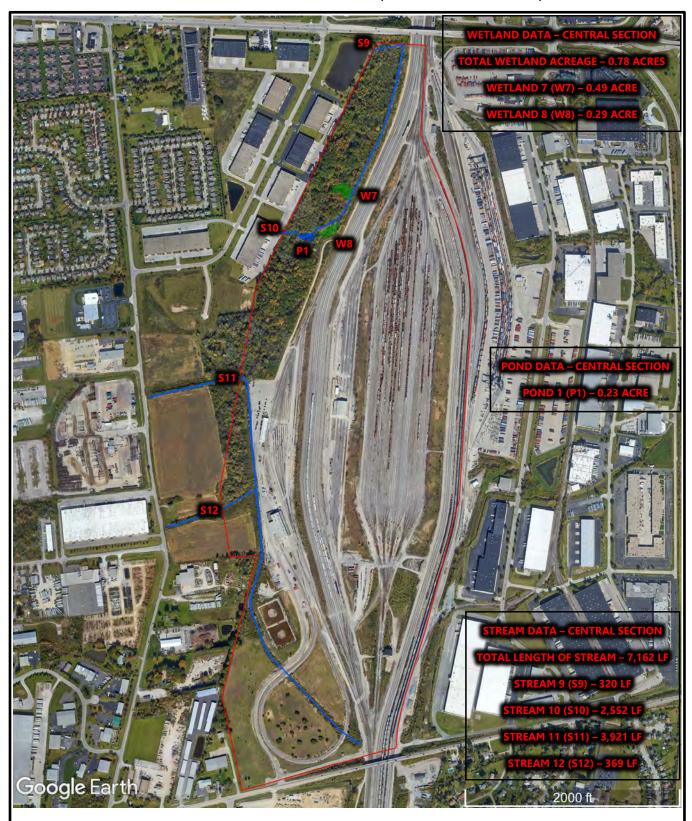




BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007



### WETLAND AND STREAM DELINEATION MAP (CENTRAL SECTION)





BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007



# WETLAND AND STREAM DELINEATION MAP (SOUTH SECTION)





BUCKEYE YARD
TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS
COLUMBUS, FRANKLIN COUNTY, OHIO
COWC PROJECT #120120007



Wetland 1

Site: B	uckeye `	Yard Ra	iter(s): Matt Kaminski		<b>Date:</b> 4/9/2021
2	2	Metric 1. Wetland Area	a (size).		
max 6 pts.	subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2ha  10 to <25 acres (4 to <10.1ha) (4 or <10.2 or	4 pts) ots) (2pts)		
1	3	Metric 2. Upland buffe	rs and surroundi	ng land use.	
max 14 pts.	subtotal	MEDIUM. Buffers average 25m NARROW. Buffers average 10n VERY NARROW. Buffers average 25m VERY LOW. 2nd growth or olde LOW. Old field (>10 years), shri	64ft) or more around wetland per to <50m (82 to <164ft) around wen to <25m (32ft to <82ft) around wen to <25m (32ft to <82ft) around wetland elect one or double check and aver forest, prairie, savannah, wildlitub land, young second growth foutlal, fenced pasture, park, consein	imeter (7) vetland perimeter (4) wetland perimeter (1) perimeter (0) erage. fe area, etc. (7) vest. (5) rvation tillage, new fallo	w field. (3)
10	13	Metric 3. Hydrology.			
max 30 pts.	subtotal	Recovered (7)	ater (3) stream) (5) ne and assign score.  gime. Score one or double check heck all disturbances observed	Part of wetland/up Part of riparian or Puration inundation/satu Semi- to permane Regularly inundat Seasonally inundat Seasonally saturat and average.	in (1) ake and other human use (1) bland (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl check. ently inundated/saturated (4) ed/saturated (3) ated (2) tted in upper 30cm (12in) (1)
,		Recovering (3) Recent or no recovery (1)	tile dike weir stormwater input	filling/grading road bed/RR track dredging other	<u> </u>
14	27	Metric 4. Habitat Alter	ration and Develop	oment.	
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or of None or none apparent (4) Recovered (3)  ✓ Recovering (2) Recent or no recovery (1)	ü		
		4b. Habitat development. Select only one Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1)			
ſ		4c. Habitat alteration. Score one or doubl  None or none apparent (9)  Recovered (6)  Recovering (3)  Recent or no recovery (1)	heck all disturbances observed mowing grazing clearcutting	shrub/sapling rem herbaceous/aqual sedimentation	
su	27	age	selective cutting woody debris removal toxic pollutants	dredging farming nutrient enrichme	nt
last revised	1 Februa	ry 2001 jjm			

0:1-			11 - )			<b>D</b> - 1 - 4/0/000	4
Site:	Buckeye	Yard Ra	ter(s): Ma	att Kan	ninski	<b>Date:</b> 4/9/202	<u> </u>
	27 subtotal first pa 27 subtotal		lands.  and-unrestricted restricted restricted Popenings) (10)	d hydro	ology (10) gy (5)		
		Significant migratory songbird/v					
T	,	Category 1 Wetland. See Ques	stion 1 Qualitat	ive Rat	ing (-10)		
2	29	Metric 6. Plant comm	unities,	inte	rspersion, microto	pography.	
max 20 pts.	subtotal	6a. Wetland Vegetation Communities.	Vegeta	tion C	ommunity Cover Scale		
		Score all present using 0 to 3 scale.	0		Absent or comprises <0.1ha (0.24	71 acres) contiguou	s area
		Aquatic bed	1		Present and either comprises sma	all part of wetland's	
		1 Emergent			vegetation and is of moderate q	uality, or comprises	а
		1 Shrub			significant part but is of low qual	lity	
		Forest	2	2	Present and either comprises sign	nificant part of wetlar	nd's
		Mudflats			vegetation and is of moderate q	uality or comprises a	a small
		Open water			part and is of high quality		
		Other	3	3	Present and comprises significant	part, or more, of we	etland's
		6b. horizontal (plan view) Interspersion.			vegetation and is of high quality		
		Select only one.	-		rogotation and to or might quality		
		High (5)	Narrati	ve Des	cription of Vegetation Quality		
		Moderately high(4)	lo		Low spp diversity and/or predomir	nance of nonnative c	or .
		Moderate (3)	.0	"	disturbance tolerant native spec		
		Moderately low (2)	mo	hc	Native spp are dominant compone		
		Low (1)	1110	Ju	although nonnative and/or distu	_	
		None (0)			can also be present, and specie		
		6c. Coverage of invasive plants. Refer			moderately high, but generally w	-	
		to Table 1 ORAM long form for list. Add			threatened or endangered spp	•	
		or deduct points for coverage	hiç	nh.	A predominance of native species		
		Extensive >75% cover (-5)	THE	ا ال <del>و</del>	and/or disturbance tolerant nativ		
		` ′			absent, and high spp diversity a	• •	•
		Moderate 25-75% cover (-3)					•
		Sparse 5-25% cover (-1)			the presence of rare, threatened	i, or endangered spr	<u>)</u>
		Nearly absent <5% cover (0)	N4al£l.a	4 6	Name Water Class Overlife:		
		Absent (1)			Open Water Class Quality		
		6d. Microtopography.	0		Absent <0.1ha (0.247 acres)		
		Score all present using 0 to 3 scale.	1		Low 0.1 to <1ha (0.247 to 2.47 ac		
		0 Vegetated hummucks/tussucks			Moderate 1 to <4ha (2.47 to 9.88	acres)	
		O Coarse woody debris >15cm (6		3	High 4ha (9.88 acres) or more		
		O Standing dead >25cm (10in) db					
		1 Amphibian breeding pools		<u> </u>	phy Cover Scale		
			0		Absent		
			1		Present very small amounts or if n	nore common	
					of marginal quality		
			2	<u>,                                     </u>	Present in moderate amounts, but	-	
					quality or in small amounts of hi		
	<b>-</b>		3	3	Present in moderate or greater an	nounts	
					and of highest quality		

**End of Quantitative Rating. Complete Categorization Worksheets.** 

Wetland 2

Site: Buckeye Yard	Rater(s): Matt Kaminski		<b>Date:</b> 4/9/2021
Metric 1. Wetland A	rea (size).		
max 6 pts. subtotal Select one size class and assign scor >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20 cm) 10 to <25 acres (4 to <10.10 cm) 3 to <10 acres (1.2 to <4ha)  √ 0.3 to <3 acres (0.12 to <1.10 cm) 0.1 to <0.3 acres (0.04 to <1.10 cm)	0.2ha) (5 pts) ha) (4 pts) ) (3 pts) 2ha) (2pts)		
Metric 2. Upland bu	ffers and surround	ding land use.	
MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers average VERY NARROW. Buffers average VERY LOW. 2nd growth or LOW. Old field (>10 years) MODERATELY HIGH. Res	m (164ft) or more around wetland 25m to <50m (82 to <164ft) arour e 10m to <25m (32ft to <82ft) arou average <10m (<32ft) around wetl	perimeter (7) and wetland perimeter (4) und wetland perimeter (1) and perimeter (0) average. ildlife area, etc. (7) h forest. (5) aservation tillage, new fallo	
Metric 3. Hydrology			
max 30 pts. subtotal  3a. Sources of Water. Score all that High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface Perennial surface water (lak 3c. Maximum water depth. Select on >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in)			

Sito: F	), , alcay a	Vand Dator	(c): N-#1/-	- main alsi	<b>Date:</b> 4/9/2021
Site: E	вискеуе	Yard Rater	(S): Matt Ka	aminski	Date: 4/9/2021
; su	28 btotal first pa	Ī _	_		
0	28	Metric 5. Special Wetlan	ids.		
max 10 pts.	subtotal	Check all that apply and score as indicated.  Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-t Lake Plain Sand Prairies (Oak Open Relict Wet Prairies (10) Known occurrence state/federal thre Significant migratory songbird/water Category 1 Wetland. See Question	estricted hydrol nings) (10) eatened or enda fowl habitat or 1 Qualitative R	angered species (10) usage (10) ating (-10)	
4	32	Metric 6. Plant commun	ities, inte	erspersion, microto	pography.
max 20 pts.	subtotal	J 6a. Wetland Vegetation Communities.	Vegetation	Community Cover Scale	
		Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.24	171 acres) contiguous area
		Aquatic bed	1	Present and either comprises small	
		1 Emergent		vegetation and is of moderate of	
		Shrub		significant part but is of low qua	-
		1 Forest	2	Present and either comprises sign	•
		Mudflats	_	vegetation and is of moderate of	
		Open water		part and is of high quality	
		Other	3	Present and comprises significant	nart or more of wetland's
		6b. horizontal (plan view) Interspersion.	Ü	vegetation and is of high quality	
		Select only one.		vegetation and is of high quality	
		High (5)	Narrative De	escription of Vegetation Quality	
		Moderately high(4)	low	Low spp diversity and/or predomi	nance of nonnative or
		Moderate (3)	IOW	disturbance tolerant native spec	
		Moderately low (2)	mod	Native spp are dominant compone	
			IIIOG		=
		Low (1)		although nonnative and/or distu	
		None (0)		can also be present, and specie	•
		6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add		moderately high, but generally with reatened or endangered spe	wo presence or rare
			la i ada	threatened or endangered spp	ith managetive and
		or deduct points for coverage	high	A predominance of native species	
		Extensive >75% cover (-5)		and/or disturbance tolerant nativ	
		Moderate 25-75% cover (-3)		absent, and high spp diversity a	
		Sparse 5-25% cover (-1)		the presence of rare, threatened	d, or endangered spp
		Nearly absent <5% cover (0) Absent (1)	Mudflat and	I Open Water Class Quality	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 ac	cres)
		1 Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88	acres)
		0 Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more	
		0 Standing dead >25cm (10in) dbh		•	
		1 Amphibian breeding pools	Microtopog	raphy Cover Scale	
			0	Absent	
			1	Present very small amounts or if	more common
				of marginal quality	
			2	Present in moderate amounts, bu	t not of highest
				quality or in small amounts of hi	
			3	Present in moderate or greater ar	nounts
	•			and of highest quality	
32				, , ,	

End of Quantitative Rating. Complete Categorization Worksheets.

Wetland 3

Site: B	uckeye `	/ard Rater(s): Matt Kaminski Date: 4/9/2021
2	2	Metric 1. Wetland Area (size).
max 6 pts.	subtotal	Select one size class and assign score.    >50 acres (>20.2ha) (6 pts)   25 to <50 acres (10.1 to <20.2ha) (5 pts)   10 to <25 acres (4 to <10.1ha) (4 pts)   3 to <10 acres (1.2 to <4ha) (3 pts)   0.3 to <3 acres (0.12 to <1.2ha) (2pts)   0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)   <0.1 acres (0.04ha) (0 pts)
1	3	Metric 2. Upland buffers and surrounding land use.
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one and assign score. Do not double check.  WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)  MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)  NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)  VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)  2b. Intensity of surrounding land use. Select one or double check and average.  VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)  LOW. Old field (>10 years), shrub land, young second growth forest. (5)  MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)  HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)
22	25	Metric 3. Hydrology.
max 30 pts.	subtotal	3a. Sources of Water. Score all that apply.  High pH groundwater (5)  Other groundwater (3)  Precipitation (1)  Seasonal/Intermittent surface water (3)  Perennial surface water (lake or stream) (5)  3c. Maximum water depth. Select only one and assign score.  >0.7 (27.6in) (3)  0.4 to 0.7m (15.7 to 27.6in) (2)  <0.4m (<15.7in) (1)  Seasonally inundated (2)  Seasonally saturated in upper 30cm (12in) (1)  Seasonally inundated in upper 30cm (12in) (1)  Seasonally saturated in upper 30cm (12in) (1)  Modifications to natural hydrologic regime. Score one or double check and average.
		None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1) Recovering (3) Recovering (4) Recovering (4) Recovering (5) Recovering (5) Recovering (6) Recovering (6) Recovering (7) Recoveri
15	40	Metric 4. Habitat Alteration and Development.
max 20 pts.	subtotal	<ul> <li>4a. Substrate disturbance. Score one or double check and average.  None or none apparent (4)  Recovered (3)  Recovering (2)  Recent or no recovery (1)</li> <li>4b. Habitat development. Select only one and assign score.  Excellent (7)  Very good (6)  Good (5)</li> </ul>
		Moderately good (4)  Fair (3)  Poor to fair (2)  Poor (1)  4c. Habitat alteration. Score one or double check and average.  ✓ None or none apparent (9)  Recovered (6)  Check all disturbances observed  Recovered (6)  shrub/sapling removal
ſ		Recovering (3) Recent or no recovery (1)
SII	40	woody debris removal farming toxic pollutants nutrient enrichment
last revised		

Cito. 5		Pote	#/a\1		Doto: 4/0/2021
Site: B	Buckeye	Yard Rate	r(s): Matt Ka	minski	<b>Date:</b> 4/9/2021
Ī		1			
	40				
	btotal first pa				
Su	biolai iiisi pa	_			
0	40	Metric 5. Special Wetla	nas.		
max 10 pts.	subtotal	Check all that apply and score as indicated.			
		Bog (10)			
		Fen (10)			
		Old growth forest (10)			
		Mature forested wetland (5)  Lake Erie coastal/tributary wetland	Luprostricted byd	rology (10)	
		Lake Erie coastal/tributary wetland		=	
		Lake Plain Sand Prairies (Oak Ope	-	-9 <b>,</b> (-)	
		Relict Wet Prairies (10)	ogo/ (.o/		
		Known occurrence state/federal th	reatened or enda	ngered species (10)	
		Significant migratory songbird/water			
		Category 1 Wetland. See Questio	n 1 Qualitative Ra	ating (-10)	
		Metric 6. Plant commun	nities inte	erspersion, microto	nography.
2	42				pograpiij.
max 20 pts.	subtotal	] 6a. Wetland Vegetation Communities.	Vegetation (	Community Cover Scale	
		Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.24	71 acres) contiguous area
		Aquatic bed	1	Present and either comprises small	
		1 Emergent		vegetation and is of moderate q	
		1 Shrub		significant part but is of low qua	lity
		Forest	2	Present and either comprises sign	nificant part of wetland's
		Mudflats		vegetation and is of moderate q	uality or comprises a small
		Open water		part and is of high quality	
		Other	3	Present and comprises significant	
		6b. horizontal (plan view) Interspersion.		vegetation and is of high quality	
		Select only one. High (5)	Narrative De	escription of Vegetation Quality	
		Moderately high(4)	low	Low spp diversity and/or predomin	nance of nonnative or
		Moderate (3)		disturbance tolerant native spec	
		Moderately low (2)	mod	Native spp are dominant compone	ent of the vegetation,
		Low (1)		although nonnative and/or distu	rbance tolerant native spp
		None (0)		can also be present, and specie	•
		6c. Coverage of invasive plants. Refer		moderately high, but generally v	v/o presence of rare
		to Table 1 ORAM long form for list. Add	la i arla	threatened or endangered spp	idla manusadi sa ama
		or deduct points for coverage  Extensive >75% cover (-5)	high	A predominance of native species and/or disturbance tolerant nativ	
		✓ Moderate 25-75% cover (-3)		absent, and high spp diversity a	
		Sparse 5-25% cover (-1)		the presence of rare, threatened	
		Nearly absent <5% cover (0)			, <u>9</u>
		Absent (1)	Mudflat and	Open Water Class Quality	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 ac	<del></del>
		0 Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88	acres)
		O Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more	
		0 Standing dead >25cm (10in) dbh 1 Amphibian breeding pools	Microtopoai	aphy Cover Scale	
			0	Absent	
			1	Present very small amounts or if r	more common
				of marginal quality	
			2	Present in moderate amounts, but	
				quality or in small amounts of hi	
	1		3	Present in moderate or greater an	nounts
40				and of highest quality	

End of Quantitative Rating. Complete Categorization Worksheets.

Wetland 4

Site: B	uckeye `	Yard R	ater(s): Matt Kaminski		<b>Date:</b> 4/9/2021
2	2	Metric 1. Wetland Are	ea (size).		
max 6 pts.	subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2l  10 to <25 acres (4 to <10.1ha)  3 to <10 acres (1.2 to <4ha) (3  0.3 to <3 acres (0.12 to <1.2ha  0.1 to <0.3 acres (0.04 to <0.12  <0.1 acres (0.04ha) (0 pts)	(4 pts) 3 pts) a) (2pts)		
1	3	Metric 2. Upland buffe	ers and surroundi	ng land use.	
max 14 pts.	subtotal	MEDIUM. Buffers average 25r NARROW. Buffers average 10 VERY NARROW. Buffers average 25r Intensity of surrounding land use. S VERY LOW. 2nd growth or old LOW. Old field (>10 years), sh MODERATELY HIGH. Reside	164ft) or more around wetland per m to <50m (82 to <164ft) around v 0m to <25m (32ft to <82ft) around rage <10m (<32ft) around wetland	rimeter (7) vetland perimeter (4) I wetland perimeter (1) I perimeter (0) erage. ife area, etc. (7) orest. (5) rvation tillage, new fallo	w field. (3)
11	14	Metric 3. Hydrology.			
max 30 pts.	subtotal	3a. Sources of Water. Score all that appropriate (a)  Whigh pH groundwater (b)  Other groundwater (c)  Precipitation (c)  Seasonal/Intermittent surface water (lake of colors)  3c. Maximum water depth. Select only of colors (c)  >0.7 (27.6in) (c)  >0.4 to 0.7m (15.7 to 27.6in) (c)    3e. Modifications to natural hydrologic results (c)  None or none apparent (c)  Recovered (c)  Recovering (c)  Recovery (c)	water (3) or stream) (5) 3d. I one and assign score.	Part of wetland/up Part of riparian or Duration inundation/satu Semi- to permane Regularly inundat Seasonally inundat Seasonally satura	in (1) ake and other human use (1) bland (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl check. ently inundated/saturated (4) ed/saturated (3) ated (2) sted in upper 30cm (12in) (1)
			weir stormwater input	dredging  ✓ other culvert	
13	27	Metric 4. Habitat Alte	ration and Develo	pment.	
max 20 pts.	subtotal	4a. Substrate disturbance. Score one of None or none apparent (4)  Recovered (3) Recovering (2) Recent or no recovery (1)  4b. Habitat development. Select only on Excellent (7) Very good (6)			
	27	Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1)  4c. Habitat alteration. Score one or double	ble check and average.  Check all disturbances observed mowing grazing clearcutting selective cutting woody debris removal	shrub/sapling rem herbaceous/aqua sedimentation dredging farming	
su	btotal this pa	<u></u> age	toxic pollutants	nutrient enrichme	nt
last revised	1 Februa	ry 2001 jjm			

Site:	Buckeye	Yard		Rater(s):	Matt Ka	minski	Date: 4/9/2021
		1	·				
	27						
\$	subtotal first pa	age					
0	27	Metric	5. Special W	etlands.			
max 10 pts.	subtotal		t apply and score as indic	cated.			
			g (10) n (10)				
			growth forest (10)				
			ture forested wetland (5)			(40)	
			ke Erie coastal/tributary w ke Erie coastal/tributary w		-	· · ·	
			ce Plain Sand Prairies (O		-	-97 (-7	
			lict Wet Prairies (10)				
			own occurrence state/fed nificant migratory songbi				
			tegory 1 Wetland. See C			• , ,	
0	25	Metric	6. Plant com	munitie	s, inte	erspersion, microto	pography.
-2	25				•	•	
max 20 pts.	subtotal		Vegetation Communities	. <u>Ve</u>		Community Cover Scale	
			sent using 0 to 3 scale. uatic bed		<u>0</u> 1	Absent or comprises <0.1ha (0.24) Present and either comprises small	
			ergent			vegetation and is of moderate of	
		Shi				significant part but is of low qua	•
			rest dflats		2	Present and either comprises sign vegetation and is of moderate of	
		Ор	en water			part and is of high quality	
		Oth			3	Present and comprises significant	
		Select only or	al (plan view) Interspersio ne.	n. <u> </u>		vegetation and is of high quality	
			h (5)	Na	rrative De	escription of Vegetation Quality	
			derately high(4) derate (3)		low	Low spp diversity and/or predomined disturbance tolerant native specific sp	
			derate (3) derately low (2)		mod	Native spp are dominant component	
			v (1)			although nonnative and/or distu	
			ne (0) e of invasive plants.  Refe	۵r		can also be present, and species moderately high, but generally was	
			RAM long form for list. A			threatened or endangered spp	•
			nts for coverage		high	A predominance of native species	
			ensive >75% cover (-5) derate 25-75% cover (-3)	)		and/or disturbance tolerant nativals absent, and high spp diversity a	
			arse 5-25% cover (-1)			the presence of rare, threatened	-
			arly absent <5% cover (0 sent (1)		ıdflat and	Open Water Class Quality	
		6d. Microtope	` '	1010	0	Absent <0.1ha (0.247 acres)	
			sent using 0 to 3 scale.	_	1	Low 0.1 to <1ha (0.247 to 2.47 ac	
			getated hummucks/tussu arse woody debris >15cn		3	Moderate 1 to <4ha (2.47 to 9.88 High 4ha (9.88 acres) or more	acres)
			inding dead >25cm (10in	· · ·		Trigit 4tia (0.00 acres) or more	
			phibian breeding pools			raphy Cover Scale	
				_	<u>0</u> 1	Absent Present very small amounts or if r	more common
						of marginal quality	noro commun
					2	Present in moderate amounts, bu quality or in small amounts of hi	•
				_	3	Present in moderate or greater ar	
0.5	7					and of highest quality	
25							

**End of Quantitative Rating. Complete Categorization Worksheets.** 

Wetland 5

Site: Buckeye	Yard R	Rater(s): Matt Kaminski		<b>Date:</b> 4/9/2021
3 3	Metric 1. Wetland Are	ea (size).		
max 6 pts. subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2  10 to <25 acres (4 to <10.1ha)  3 to <10 acres (1.2 to <4ha) (3  0.3 to <3 acres (0.12 to <1.2ha)  0.1 to <0.3 acres (0.04 to <0.1  <0.1 acres (0.04ha) (0 pts)	) (4 pts) 3 pts) a) (2pts)		
1 4	Metric 2. Upland buff	ers and surroundi	ng land use.	
max 14 pts. subtotal	MEDIUM. Buffers average 25 NARROW. Buffers average 1 VERY NARROW. Buffers average 25 Lotensity of surrounding land use. Some very Low. 2nd growth or ol Low. Old field (>10 years), some MODERATELY HIGH. Reside	(164ft) or more around wetland per im to <50m (82 to <164ft) around wetland on to <25m (32ft to <82ft) around erage <10m (<32ft) around wetland	rimeter (7) wetland perimeter (4) d wetland perimeter (1) d perimeter (0) rerage. ife area, etc. (7) prest. (5) ervation tillage, new fallo	w field. (3)
	Metric 3. Hydrology.	r pasture, row cropping, mining, co	mstruction. (1)	
12   16	metric of Tryanology.			
max 30 pts. subtotal	3a. Sources of Water. Score all that ap High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface Perennial surface water (lake of the sum o	water (3) or stream) (5) 3d. one and assign score.	Part of wetland/up Part of riparian or Duration inundation/satu Semi- to permane Regularly inundat Seasonally inundat	in (1) ake and other human use (1) bland (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl check. ently inundated/saturated (4) ed/saturated (3)
	3e. Modifications to natural hydrologic	egime. Score one or double chec		100 III upper 000III (12III) (1)
	None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)	Check all disturbances observed ditch tile dike weir stormwater input	point source (nons filling/grading road bed/RR track dredging other_culvert	
13 29	Metric 4. Habitat Alte	eration and Develo	pment.	
max 20 pts. subtotal	4a. Substrate disturbance. Score one of None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1)  4b. Habitat development. Select only of Excellent (7)			
	Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1)  4c. Habitat alteration. Score one or dou	uble check and average		
		Check all disturbances observed mowing grazing clearcutting	shrub/sapling rem herbaceous/aquat	
29 subtotal this p.		selective cutting woody debris removal toxic pollutants	dredging farming nutrient enrichme	nt
last revised 1 Februa	· ·			

Site: E	) u alkaya	Yard Rater	(e): N=# I	a mai malvi	<b>Date:</b> 4/9/2021
Site. B	вискеуе	rard	( <b>5).</b> Matt K	aminski	Date. 4/3/2021
		1			
	29				
	htatal finat na				
su	btotal first pa	<u>-</u>			
0	29	Metric 5. Special Wetlan	as.		
max 10 pts.	subtotal	Check all that apply and score as indicated.			
		Bog (10)			
		Fen (10)			
		Old growth forest (10)			
		Mature forested wetland (5)		da-1- m. (40)	
		Lake Erie coastal/tributary wetland-u	-	· · · ·	
		Lake Plain Sand Prairies (Oak Open	•	logy (5)	
		Relict Wet Prairies (10)	957 (157		
		Known occurrence state/federal thre	atened or enda	angered species (10)	
		Significant migratory songbird/water	fowl habitat or	usage (10)	
		Category 1 Wetland. See Question	1 Qualitative R	Rating (-10)	
	0.7	Metric 6. Plant communi	ities. int	erspersion, microto	pography.
-2	27		,	,	, p = 9, p y -
max 20 pts.	subtotal	da. Wetland Vegetation Communities.	Vegetation	Community Cover Scale	
		Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.24	171 acres) contiguous area
		Aquatic bed	1	Present and either comprises small	
		1 Emergent		vegetation and is of moderate of	
		Shrub		significant part but is of low qua	-
		Forest Mudflats	2	Present and either comprises sign vegetation and is of moderate of	
		Open water		part and is of high quality	dailty of comprises a small
		Other	3	Present and comprises significan	t part, or more, of wetland's
		6b. horizontal (plan view) Interspersion.		vegetation and is of high quality	
		Select only one.			
		High (5)		escription of Vegetation Quality	
		Moderately high(4) Moderate (3)	low	Low spp diversity and/or predomi	
		Moderately low (2)	mod	Native spp are dominant compon	
		✓ Low (1)	mod	although nonnative and/or distu	_
		None (0)		can also be present, and specie	
		6c. Coverage of invasive plants. Refer		moderately high, but generally w	v/o presence of rare
		to Table 1 ORAM long form for list. Add		threatened or endangered spp	
		or deduct points for coverage	high	A predominance of native species	
		Extensive >75% cover (-5)  Moderate 25-75% cover (-3)		and/or disturbance tolerant nati absent, and high spp diversity a	
		Sparse 5-25% cover (-1)		the presence of rare, threatened	•
		Nearly absent <5% cover (0)	M. delat and	<u> </u>	
		Absent (1)	0	Absent <0.1ha (0.247 acres)	
		6d. Microtopography.  Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 acres)	cres)
		0 Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88	
		O Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more	<del></del>
		0 Standing dead >25cm (10in) dbh			
		1 Amphibian breeding pools		raphy Cover Scale	
			0	Absent	
			1	Present very small amounts or if of marginal quality	
			2	Present in moderate amounts, bu quality or in small amounts of h	
			3	Present in moderate or greater ar	mounts
27				and of highest quality	
27					

End of Quantitative Rating. Complete Categorization Worksheets.

Wetland 6

Site: B	uckeye `	Yard Rater(s): Matt Kaminski Date: 4/9/2021
2	2	Metric 1. Wetland Area (size).
max 6 pts.	subtotal	Select one size class and assign score.    >50 acres (>20.2ha) (6 pts)   25 to <50 acres (10.1 to <20.2ha) (5 pts)   10 to <25 acres (4 to <10.1ha) (4 pts)   3 to <10 acres (1.2 to <4ha) (3 pts)   0.3 to <3 acres (0.12 to <1.2ha) (2pts)   0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)   <0.1 acres (0.04ha) (0 pts)
1	3	Metric 2. Upland buffers and surrounding land use.
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one and assign score. Do not double check.    WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)   MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)   NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)   VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)  2b. Intensity of surrounding land use. Select one or double check and average.   VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)   LOW. Old field (>10 years), shrub land, young second growth forest. (5)   MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)   WIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)
12	15	Metric 3. Hydrology.
max 30 pts.	subtotal	3a. Sources of Water. Score all that apply.  High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5)  Maximum water depth. Select only one and assign score.  >0.7 (27.6in) (3)  0.4 to 0.7m (15.7 to 27.6in) (2)  <0.4m (<15.7in) (1)  3b. Connectivity. Score all that apply.  100 year floodplain (1) Part of wetland/upland (e.g. forest), complex (1) Part of riparian or upland corridor (1)  3d. Duration inundation/saturation. Score one or dbl check Regularly inundated/saturated (4) Regularly inundated/saturated (3) Seasonally inundated (2) Seasonally saturated in upper 30cm (12in) (1)  3e. Modifications to natural hydrologic regime. Score one or double check and average.
,		None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)  Check all disturbances observed ditch lile lile liling/grading road bed/RR track dredging other culvert
13	28	Metric 4. Habitat Alteration and Development.
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or double check and average.  None or none apparent (4)  Recovered (3)  Recovering (2)  Recent or no recovery (1)  4b. Habitat development. Select only one and assign score.  Excellent (7)  Very good (6)  Good (5)  Moderately good (4)  Fair (3)  Poor to fair (2)
		Poor (1) 4c. Habitat alteration. Score one or double check and average.
su last revised	28 btotal this pa	
iasi revised	ı reprua	ry z∪∪ r jjin

0:4		Datas	(-)-		D-4 4/0/2024
Site: E	Buckeye	Yard Rater	(S): Matt K	aminski	<b>Date:</b> 4/9/2021
su	28 btotal first pa	_	. da		
0	28	Metric 5. Special Wetlan	ius.		
max 10 pts.	subtotal	Check all that apply and score as indicated.  Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-r Lake Erie coastal/tributary wetland-r Lake Plain Sand Prairies (Oak Open Relict Wet Prairies (10) Known occurrence state/federal thre Significant migratory songbird/water Category 1 Wetland. See Question	estricted hydro nings) (10) eatened or enda fowl habitat or 1 Qualitative R	angered species (10) usage (10) ating (-10)	
-2	26	Metric 6. Plant commun	ities, int	erspersion, microto	ppography.
max 20 pts.	subtotal	J 6a. Wetland Vegetation Communities.	Vegetation	Community Cover Scale	
		Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.24	471 acres) contiguous area
		Aquatic bed	1	Present and either comprises small	
		1 Emergent		vegetation and is of moderate of	
		Shrub		significant part but is of low qua	
		Forest	2	Present and either comprises sign	•
		Mudflats	_	vegetation and is of moderate of	
		Open water		part and is of high quality	quality of comprisce a cinali
		Other	3	Present and comprises significan	t nart or more of wetland's
		6b. horizontal (plan view) Interspersion.	Ü	vegetation and is of high quality	
		Select only one.		vegetation and to or might quality	<u>'</u>
		High (5)	Narrative D	escription of Vegetation Quality	
		Moderately high(4)	low	Low spp diversity and/or predomi	nance of nonnative or
		Moderate (3)	IOW	disturbance tolerant native spec	
		Moderately low (2)	mod	Native spp are dominant compon	
		<b>—</b>	mou		_
		✓ Low (1)		although nonnative and/or distu	
		None (0)		can also be present, and specie	
		6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add		moderately high, but generally with reatened or endangered spo	w/o presence or rare
		or deduct points for coverage	high	threatened or endangered spp  A predominance of native species	s with poppative eng
		Extensive >75% cover (-5)	nign	and/or disturbance tolerant nati	
				•	
		Moderate 25-75% cover (-3) Sparse 5-25% cover (-1)		absent, and high spp diversity a the presence of rare, threatened	
		Nearly absent <5% cover (0)		the presence of fare, threatened	u, or endangered spp
		Absent (1)	Mudflat and	Open Water Class Quality	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 ac	cres)
		<ul><li>0 Vegetated hummucks/tussucks</li></ul>	2	Moderate 1 to <4ha (2.47 to 9.88	3 acres)
		O Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more	
		0 Standing dead >25cm (10in) dbh			
		1 Amphibian breeding pools	Microtopog	raphy Cover Scale	
			0	Absent	
			1	Present very small amounts or if of marginal quality	more common
			2	Present in moderate amounts, bu quality or in small amounts of h	
			3	Present in moderate or greater ar	
	ľ		3	_	nounto
26				and of highest quality	

End of Quantitative Rating. Complete Categorization Worksheets.

Wetland 7

Site: B	uckeye `	Yard Rat	ter(s): Matt Kaminski		<b>Date:</b> 4/13/2021
		·			
2	2	Metric 1. Wetland Area	(size).		
max 6 pts.	subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2ha)  10 to <25 acres (4 to <10.1ha) (4  3 to <10 acres (1.2 to <4ha) (3 pts)  0.3 to <3 acres (0.12 to <1.2ha) (3  0.1 to <0.3 acres (0.04 to <0.12ha)  <0.1 acres (0.04ha) (0 pts)	pts) s) 2pts)		
7	9	Metric 2. Upland buffer	rs and surroundir	ng land use.	
max 14 pts.	subtotal	2a. Calculate average buffer width. Select WIDE. Buffers average 50m (164 WIDE. Buffers average 25m t NARROW. Buffers average 10m VERY NARROW. Buffers average 2b. Intensity of surrounding land use. Select VERY LOW. 2nd growth or older LOW. Old field (>10 years), shrul MODERATELY HIGH. Residenti. HIGH. Urban, industrial, open pa	4ft) or more around wetland perito <50m (82 to <164ft) around witto <25m (32ft to <82ft) around ge <10m (<32ft) around wetland ect one or double check and aver forest, prairie, savannah, wildlift land, young second growth foial, fenced pasture, park, conser	meter (7) retland perimeter (4) wetland perimeter (1) perimeter (0) erage. re area, etc. (7) rest. (5) vation tillage, new fallo	w field. (3)
17	26	Metric 3. Hydrology.			
max 30 pts.	subtotal	3a. Sources of Water. Score all that apply.  High pH groundwater (5) Other groundwater (3)  Precipitation (1) Seasonal/Intermittent surface wat Perennial surface water (lake or s 3c. Maximum water depth. Select only one >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2)  <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regir None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)	ter (3) stream) (5) 3d. E and assign score.  me. Score one or double check eck all disturbances observed ditch tile dike	Part of wetland/up Part of riparian or Puration inundation/satu Semi- to permane Regularly inundati Seasonally inundati Seasonally satura and average.  point source (none filling/grading road bed/RR track	n (1) ake and other human use (1) aland (e.g. forest), complex (1) upland corridor (1) ration. Score one or dbl check. ntly inundated/saturated (4) ed/saturated (3) ated (2) ted in upper 30cm (12in) (1)
		Motric 4 Habitat Altors	weir stormwater input	dredging other	
17	43	Metric 4. Habitat Altera	ation and Develop	Jilleilt.	
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or do None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1)  4b. Habitat development. Select only one a Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1)	and assign score.		
		4c. Habitat alteration. Score one or double			<del></del>
ĺ	43	None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)	eck all disturbances observed mowing grazing clearcutting selective cutting woody debris removal	shrub/sapling rem herbaceous/aquat sedimentation dredging farming	
		」	toxic pollutants	nutrient enrichme	nt
last revised	btotal this pa	·			

Site: E	Buckeye	Yard Rater	(S): Matt Ka	aminski	Date: 4/13/2021
	· · · · ·				
	43				
SL	ubtotal first pa	_	-I -		
0	43	Metric 5. Special Wetlan	as.		
max 10 pts.	subtotal	Check all that apply and score as indicated.			
		Bog (10) Fen (10)			
		Old growth forest (10)			
		Mature forested wetland (5)			
		Lake Erie coastal/tributary wetland-u		=	
		Lake Erie coastal/tributary wetland-n	-	ogy (5)	
		Lake Plain Sand Prairies (Oak Open Relict Wet Prairies (10)	iligs) (10)		
		Known occurrence state/federal thre	atened or enda	ngered species (10)	
		Significant migratory songbird/water		• , ,	
		Category 1 Wetland. See Question		- ,	
6	49	Metric 6. Plant communi	ities, into	erspersion, microto	pography.
0					
max 20 pts.	subtotal	6a. Wetland Vegetation Communities.		Community Cover Scale	<b>1</b> -1
		Score all present using 0 to 3 scale.  Aquatic bed	0	Absent or comprises <0.1ha (0.24) Present and either comprises sm	
		Emergent	'	vegetation and is of moderate of	
		Shrub		significant part but is of low qua	
		1 Forest	2	Present and either comprises sign	
		Mudflats		vegetation and is of moderate of	quality or comprises a small
		Open water Other	3	part and is of high quality  Present and comprises significan	t part, or more, of wetland's
		6b. horizontal (plan view) Interspersion.		vegetation and is of high quality	
		Select only one.			
		High (5)		escription of Vegetation Quality	nance of nannative ar
		Moderately high(4)  Moderate (3)	low	Low spp diversity and/or predomi disturbance tolerant native spec	
		Moderately low (2)	mod	Native spp are dominant compon	
		Low (1)		although nonnative and/or distu	
		None (0)		can also be present, and specie	-
		6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add		moderately high, but generally threatened or endangered spp	w/o presence of rare
		or deduct points for coverage	high	A predominance of native species	s, with nonnative spp
		Extensive >75% cover (-5)	J	and/or disturbance tolerant nati	
		Moderate 25-75% cover (-3)		absent, and high spp diversity a	
		Sparse 5-25% cover (-1) Nearly absent <5% cover (0)		the presence of rare, threatene	d, or endangered spp
		Absent (1)	Mudflat and	Open Water Class Quality	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 ac	
		0 Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88	3 acres)
		1 Coarse woody debris >15cm (6in) 0 Standing dead >25cm (10in) dbh	3	High 4ha (9.88 acres) or more	
		0 Amphibian breeding pools	Microtopog	raphy Cover Scale	
			0	Absent	
			1	Present very small amounts or if of marginal quality	
			2	Present in moderate amounts, but quality or in small amounts of h	_
			3	Present in moderate or greater ar	mounts
40				and of highest quality	

**End of Quantitative Rating. Complete Categorization Worksheets.** 

Wetland 8

Site: Buckeye	Yard Ra	ater(s): Matt Kaminski		<b>Date:</b> 4/13/2021
1 1	Metric 1. Wetland Are	a (size).		
max 6 pts. subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2h  10 to <25 acres (4 to <10.1ha)  3 to <10 acres (1.2 to <4ha) (3  0.3 to <3 acres (0.12 to <1.2ha)  0.1 to <0.3 acres (0.04 to <0.12  <0.1 acres (0.04ha) (0 pts)	na) (5 pts) (4 pts) pts) ) (2pts)		
7 8	Metric 2. Upland buffe	ers and surroundi	ng land use.	
max 14 pts. subtotal	MEDIUM. Buffers average 25m NARROW. Buffers average 10 VERY NARROW. Buffers aver 2b. Intensity of surrounding land use. So VERY LOW. 2nd growth or old LOW. Old field (>10 years), sh MODERATELY HIGH. Resider	64ft) or more around wetland per n to <50m (82 to <164ft) around w m to <25m (32ft to <82ft) around age <10m (<32ft) around wetland	imeter (7) vetland perimeter (4) wetland perimeter (1) perimeter (0) erage. fe area, etc. (7) rest. (5) rvation tillage, new fallor	w field. (3)
15 23	Metric 3. Hydrology.	, , , , , , , , , , , , , , , , , , , ,	( )	
max 30 pts. subtotal	3a. Sources of Water. Score all that app High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface w Perennial surface water (lake o 3c. Maximum water depth. Select only o >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2)  <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic results. None or none apparent (12) Recovered (7)	vater (3) r stream) (5) 3d. E ne and assign score.	Part of wetland/up Part of riparian or Duration inundation/satu Semi- to permane Regularly inundati Seasonally inundati Seasonally satura	n (1)  ake and other human use (1)  aland (e.g. forest), complex (1)  upland corridor (1)  ration. Score one or dbl check.  ntly inundated/saturated (4)  ed/saturated (3)  ated (2)  ted in upper 30cm (12in) (1)
	Recovering (3) Recent or no recovery (1)	tile dike weir  ✓ stormwater input	filling/grading road bed/RR track dredging other	,
15 38	Metric 4. Habitat Alter	ration and Develo <sub>l</sub>	oment.	
max 20 pts. subtotal	4a. Substrate disturbance. Score one or None or none apparent (4)  Recovered (3) Recovering (2) Recent or no recovery (1)  4b. Habitat development. Select only one Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1)	e and assign score.		
	4c. Habitat alteration. Score one or doub	ble check and average. Check all disturbances observed		
38	Recovered (6) Recovering (3) Recent or no recovery (1)	mowing grazing clearcutting selective cutting woody debris removal toxic pollutants	shrub/sapling rem herbaceous/aquat sedimentation dredging farming nutrient enrichmer	ic bed removal
subtotal this p	· _			

Site: Buckeye Yard Rater(s): Matt Kaminski	<b>Date:</b> 4/13/2021
	- Juitor
38	
subtotal first page	
0 Metric 5. Special Wetlands.	
max 10 pts. subtotal Check all that apply and score as indicated.	
Bog (10) Fen (10)	
Old growth forest (10)	
Mature forested wetland (5)	
Lake Erie coastal/tributary wetland-unrestricted hydrology (10)	
Lake Erie coastal/tributary wetland-restricted hydrology (5)  Lake Plain Sand Prairies (Oak Openings) (10)	
Relict Wet Prairies (10)	
Known occurrence state/federal threatened or endangered species (10)	
Significant migratory songbird/water fowl habitat or usage (10)	
Category 1 Wetland. See Question 1 Qualitative Rating (-10)	
Metric 6. Plant communities, interspersion, micr	otopograpny.
max 20 pts. subtotal 6a Wetland Vegetation Communities Vegetation Community Cover Scale	
	a (0.2471 acres) contiguous area
Aquatic bed 1 Present and either comprise	
	rate quality, or comprises a
Shrub significant part but is of lo	
' ' ' '	es significant part of wetland's erate quality or comprises a small
Open water part and is of high quality	
	nificant part, or more, of wetland's
6b. horizontal (plan view) Interspersion. vegetation and is of high of Select only one.	quality
High (5) Narrative Description of Vegetation Qua	ality
Moderately high(4) low Low spp diversity and/or pre	
Moderate (3) disturbance tolerant native	•
Moderately low (2) mod Native spp are dominant co	r disturbance tolerant native spp
	species diversity moderate to
6c. Coverage of invasive plants. Refer moderately high, but gene	
to Table 1 ORAM long form for list. Add threatened or endangered or deduct points for coverage high A predominance of native s	
	nt native spp absent or virtually
Moderate 25-75% cover (-3) absent, and high spp dive	rsity and often, but not always,
	atened, or endangered spp
Nearly absent <5% cover (0) Absent (1) Mudflat and Open Water Class Quality	
6d. Microtopography.  0 Absent <0.1ha (0.247 acre-	<u> </u>
Score all present using 0 to 3 scale.  1 Low 0.1 to <1ha (0.247 to 2)	<u> </u>
O Vegetated hummucks/tussucks 2 Moderate 1 to <4ha (2.47 to	
0 Coarse woody debris >15cm (6in) 3 High 4ha (9.88 acres) or mo 0 Standing dead >25cm (10in) dbh	ore
0 Amphibian breeding pools Microtopography Cover Scale	
0 Absent	
1 Present very small amounts of marginal quality	or if more common
2 Present in moderate amour	its, but not of highest
quality or in small amount	<u> </u>
3 Present in moderate or great	ater amounts
38 and of highest quality	

**End of Quantitative Rating. Complete Categorization Worksheets.** 

Wetland 9

Site: B	uckeye `	/ard Rater(s): Matt Kaminski Date: 4/12/2021
2	2	Metric 1. Wetland Area (size).
max 6 pts.	subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2ha) (5 pts)  10 to <25 acres (4 to <10.1ha) (4 pts)  3 to <10 acres (1.2 to <4ha) (3 pts)  0.3 to <3 acres (0.12 to <1.2ha) (2pts)  0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)  <0.1 acres (0.04ha) (0 pts)
1	3	Metric 2. Upland buffers and surrounding land use.
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one and assign score. Do not double check.  WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)  MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)  NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)  VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)  2b. Intensity of surrounding land use. Select one or double check and average.  VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)  LOW. Old field (>10 years), shrub land, young second growth forest. (5)  MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)  HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)
22	25	Metric 3. Hydrology.
max 30 pts.	subtotal	3a. Sources of Water. Score all that apply.  High pH groundwater (5)  Other groundwater (3)  Precipitation (1)  Seasonal/Intermittent surface water (3)  Perennial surface water (lake or stream) (5)  3c. Maximum water depth. Select only one and assign score.  >0.7 (27.6in) (3)  0.4 to 0.7m (15.7 to 27.6in) (2)  <0.4m (<15.7in) (1)  3e. Modifications to natural hydrologic regime. Score one or double check and average.  3b. Connectivity. Score all that apply.  100 year floodplain (1)  Part of wetland/upland (e.g. forest), complex (1)  Part of riparian or upland corridor (1)  Semi- to permanently inundated/saturated (4)  Regularly inundated/saturated (3)  Seasonally saturated in upper 30cm (12in) (1)  Seasonally saturated in upper 30cm (12in) (1)
,		None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)  Check all disturbances observed  ditch lile liling/grading road bed/RR track dredging other_culvert
8	33	Metric 4. Habitat Alteration and Development.
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or double check and average.  None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1)  4b. Habitat development. Select only one and assign score. Excellent (7) Very good (6) Good (5) Moderately good (4)
		Fair (3) Poor to fair (2) Poor (1)
[	33	4c. Habitat alteration. Score one or double check and average.  None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1) Recent or no recovery (1) Recovering (3) Recovering (4) Recovering (4) Recovering (5) Recovering (6) Recovering (7) R
	btotal this pa	
last revised	1 Februa	ry 2001 jjm

Cito	Buckeye	V- a-l	Rater(s):	NA - 11 1Z -		Date: 4/12/2021
Site.	вискеуе	Yaro	Kater(S).	Matt Kar	minski	Date. 4/12/2021
		1				
	33					
	subtotal first pa					
	Subtotal III'st pa	Ť	<i>l</i> = 41 = = 1 =			
0	33	Metric 5. Special W	vetianas.			
	. subtotal	]				
max 10 pts	. Subtotal	Check all that apply and score as inc Bog (10)	dicated.			
		Fen (10)				
		Old growth forest (10)				
		Mature forested wetland (	5)			
		Lake Erie coastal/tributary	,	ricted hydro	ology (10)	
		Lake Erie coastal/tributary	wetland-restrict	ed hydrolo	ogy (5)	
		Lake Plain Sand Prairies (	Oak Openings)	(10)		
		Relict Wet Prairies (10)				
		Known occurrence state/fe			• , ,	
		Significant migratory song			• , ,	
	1	Category 1 Wetland. See			= : :	
1	34	Metric 6. Plant con	nmunitie	s, inte	erspersion, microto	pograpny.
max 20 pts	. subtotal	6a. Wetland Vegetation Communitie	es. <u>Ve</u>	-	ommunity Cover Scale	
		Score all present using 0 to 3 scale.		0	Absent or comprises <0.1ha (0.24	
		Aquatic bed		1	Present and either comprises small	
		1 Emergent 1 Shrub			vegetation and is of moderate of significant part but is of low qua	
		Forest		2	Present and either comprises sign	-
		Mudflats		_	vegetation and is of moderate of	
		Open water			part and is of high quality	
		Other		3	Present and comprises significan	t part, or more, of wetland's
		6b. horizontal (plan view) Interspers	ion.		vegetation and is of high quality	1
		Select only one.				
		High (5)	Na		scription of Vegetation Quality	
		Moderately high(4)  Moderate (3)		low	Low spp diversity and/or predomi disturbance tolerant native spec	
		Moderate (3)  Moderately low (2)		mod	Native spp are dominant compon	
		✓ Low (1)			although nonnative and/or distu	=
		None (0)			can also be present, and specie	
		6c. Coverage of invasive plants. Re			moderately high, but generally w	w/o presence of rare
		to Table 1 ORAM long form for list.	Add		threatened or endangered spp	
		or deduct points for coverage		high	A predominance of native species	
		Extensive >75% cover (-5	,		and/or disturbance tolerant nation	
		Moderate 25-75% cover (-1)	-3)		absent, and high spp diversity a the presence of rare, threatened	
		Nearly absent <5% cover	(0)		the presence of fare, threatened	a, or cridarigered app
		Absent (1)		dflat and	Open Water Class Quality	
		6d. Microtopography.		0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to 3 scale.		1	Low 0.1 to <1ha (0.247 to 2.47 ac	cres)
		0 Vegetated hummucks/tuss		2	Moderate 1 to <4ha (2.47 to 9.88	3 acres)
		0 Coarse woody debris >15	· · · · · · · · · · · · · · · · · · ·	3	High 4ha (9.88 acres) or more	
		0 Standing dead >25cm (10	•	rotor	anhy Cover Soals	
		1 Amphibian breeding pools	Wild		aphy Cover Scale Absent	
				<u>0</u> 1	Present very small amounts or if	more common
				•	of marginal quality	note common
				2	Present in moderate amounts, bu	t not of highest
					quality or in small amounts of h	_
	_			3	Present in moderate or greater ar	nounts
3/1					and of highest quality	

End of Quantitative Rating. Complete Categorization Worksheets.

Wetland 10

Site: B	uckeye `	Yard   Rater(s): Matt Kaminski   L	<b>Date:</b> 4/12/2021
1	1	Metric 1. Wetland Area (size).	
max 6 pts.	subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2ha) (5 pts)  10 to <25 acres (4 to <10.1ha) (4 pts)  3 to <10 acres (1.2 to <4ha) (3 pts)  0.3 to <3 acres (0.12 to <1.2ha) (2pts)  10 to <0.3 acres (0.04 to <0.12ha) (1 pt)  <0.1 acres (0.04ha) (0 pts)	
2	3	Metric 2. Upland buffers and surrounding land use.	
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one and assign score. Do not double check.  WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)  MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)  NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)  VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)  2b. Intensity of surrounding land use. Select one or double check and average.  VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)  LOW. Old field (>10 years), shrub land, young second growth forest. (5)  MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow  HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)	<i>t</i> field. (3)
12	15	Metric 3. Hydrology.	
max 30 pts.	subtotal	Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5) Part of wetland/upla Part of wetland/upla Part of riparian or u Part of wetland/upla Part of wetland/upla Part of wetland/upla	ke and other human use (1) and (e.g. forest), complex (1) upland corridor (1) ation. Score one or dbl check. utly inundated/saturated (4) d/saturated (3)
		<ul> <li>3e. Modifications to natural hydrologic regime. Score one or double check and average.</li> </ul>	ed in upper 30cm (12in) (1)
		None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1) Recovering (3) Recovering (4) Recovering (4) Recovering (4) Recovering (4) Recovering (5) Recovering (6) Recovering	cormwater)
7	22	Metric 4. Habitat Alteration and Development.	
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or double check and average.  None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1)	
		4b. Habitat development. Select only one and assign score.  Excellent (7)  Very good (6)  Good (5)  Moderately good (4)  Fair (3)  Poor to fair (2)  Poor (1)	
		4c. Habitat alteration. Score one or double check and average.	
	22 btotal this pa	<u> </u>	c bed removal
last revised	i i enius	ary 2001 jjili	

0:4					<b>D</b> 4 4/40/0004
Site:	Buckeye	Yard Rate	<b>er(s):</b> Matt I	Kaminski	<b>Date:</b> 4/12/2021
0 max 10 pts.	22 22 22 subtotal	Metric 5. Special Wetla  Check all that apply and score as indicated.  Bog (10) Fen (10)			
	1	Old growth forest (10)  Mature forested wetland (5)  Lake Erie coastal/tributary wetlan  Lake Erie coastal/tributary wetlan  Lake Plain Sand Prairies (Oak Open Relict Wet Prairies (10)  Known occurrence state/federal to Significant migratory songbird/wata Category 1 Wetland. See Questi	d-restricted hydroenings) (10)  hreatened or end ter fowl habitat on	dangered species (10) or usage (10) Rating (-10)	ronography
2	24	Metric 6. Plant commu		•	opograpny.
max 20 pts.	subtotal	6a. Wetland Vegetation Communities.	Vegetation	n Community Cover Scale	
		Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.	
		Aquatic bed	1	Present and either comprises si	
		1 Emergent		vegetation and is of moderate	
		1 Shrub		significant part but is of low qu	•
		Forest	2	Present and either comprises si	-
		Mudflats		vegetation and is of moderate	quality or comprises a small
		Open water		part and is of high quality	
		Other	3	Present and comprises significa	ant part, or more, of wetland's
		6b. horizontal (plan view) Interspersion.		vegetation and is of high quali	ity
		Select only one.			
		High (5)	Narrative	Description of Vegetation Quality	
		Moderately high(4)	low	Low spp diversity and/or predor	
		Moderate (3)		disturbance tolerant native sp	
		Moderately low (2)	mod	Native spp are dominant compo	
		Low (1)		although nonnative and/or dis	<u> </u>
		None (0)		can also be present, and spec	
		6c. Coverage of invasive plants. Refer		moderately high, but generally	
		to Table 1 ORAM long form for list. Add		threatened or endangered sp	•
		or deduct points for coverage	high	A predominance of native speci	
		Extensive >75% cover (-5)	riigii	and/or disturbance tolerant na	
		` ′			
		Moderate 25-75% cover (-3)		absent, and high spp diversity	-
		Sparse 5-25% cover (-1)		the presence of rare, threaten	ed, or endangered spp
		Nearly absent <5% cover (0)	NA (E)	- 1 O Watan Olara O 116 -	
		Absent (1)		nd Open Water Class Quality	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47	<u> </u>
		0 Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.8	38 acres)
		O Coarse woody debris >15cm (6in	·	High 4ha (9.88 acres) or more	
		0 Standing dead >25cm (10in) dbh			
		1 Amphibian breeding pools	Microtopo	graphy Cover Scale	
			0	Absent	
			1	Present very small amounts or i of marginal quality	f more common
			2	Present in moderate amounts, b	out not of highest
			_	quality or in small amounts of	<u> </u>
			3	Present in moderate or greater	
	7		3	and of highest quality	amounto
ا ما	1			and or highest quality	

**End of Quantitative Rating. Complete Categorization Worksheets.** 

Wetland 11

Site: Buckeye	Yard	Rater(s): Matt Kaminski		<b>Date:</b> 4/12/2021		
Metric 1. Wetland Area (size).						
2 2	Wethic I. Wethand Al	ea (Size).				
max 6 pts. subtotal	Select one size class and assign score  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20  10 to <25 acres (4 to <10.1h  3 to <10 acres (1.2 to <4ha)  0.3 to <3 acres (0.12 to <1.2  0.1 to <0.3 acres (0.04 to <0.4)  <0.1 acres (0.04ha) (0 pts)	n.2ha) (5 pts) na) (4 pts) (3 pts) tha) (2pts)				
2 4	Metric 2. Upland but	fers and surroundi	ng land use.			
max 14 pts. subtotal	MEDIUM. Buffers average 2 NARROW. Buffers average 2 VERY NARROW. Buffers a  2b. Intensity of surrounding land use. VERY LOW. 2nd growth or LOW. Old field (>10 years), MODERATELY HIGH. Resi	n (164ft) or more around wetland per 25m to <50m (82 to <164ft) around v 10m to <25m (32ft to <82ft) around verage <10m (<32ft) around wetland	rimeter (7) wetland perimeter (4) d wetland perimeter (1) d perimeter (0) verage. ife area, etc. (7) prest. (5) vervation tillage, new fallo	ow field. (3)		
22 26	Metric 3. Hydrology		noudouon. (1)			
max 30 pts. subtotal	3a. Sources of Water. Score all that a High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surfactor Perennial surface water (laktor) 3c. Maximum water depth. Select onl 90.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (1) 3e. Modifications to natural hydrologic None or none apparent (12)	e water (3) e or stream) (5) 3d. If y one and assign score.  (2) regime. Score one or double check Check all disturbances observed	Part of wetland/up Part of riparian or Duration inundation/satu Semi- to permane Regularly inundat Seasonally inundat Seasonally satura k and average.	in (1) lake and other human use (1) pland (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl check. ently inundated/saturated (4) ted/saturated (3) ated (2) ated in upper 30cm (12in) (1)		
	Recovered (7) Recovering (3) Recent or no recovery (1)	ditch tile dike weir stormwater input	point source (non- filling/grading road bed/RR track dredging other_beaver da	k		
17 43	Metric 4. Habitat Alt	eration and Develo	pment.			
max 20 pts. subtotal	4a. Substrate disturbance. Score one None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1)  4b. Habitat development. Select only Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3)					
43 subtotal this p	Poor to fair (2) Poor (1)  4c. Habitat alteration. Score one or do None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)	Check all disturbances observed mowing grazing clearcutting selective cutting woody debris removal toxic pollutants	shrub/sapling rem herbaceous/aqua sedimentation dredging farming nutrient enrichme	tic bed removal		

Sito:	Buckeye	Vard	Rater(s):	Mott Kon	nin alci	<b>Date:</b> 4/12/2021
Site.	Бискеуе	Talu	italei(3).	Matt Kar	HIHSKI	Date. William
		1				
	43					
•	subtotal first pa	age				
	T .	Metric 5. Special V	Votlande			
0	43	Weth C 3. Special V	vetianus.	•		
max 10 pts.	subtotal	Check all that apply and score as in-	dicated			
		Bog (10)	dicated.			
		Fen (10)				
		Old growth forest (10)				
		Mature forested wetland (	,			
		Lake Erie coastal/tributary		-		
		Lake Erie coastal/tributary  Lake Plain Sand Prairies		-	gy (5)	
		Relict Wet Prairies (10)	(Oak Openings)	(10)		
		Known occurrence state/f	ederal threatene	d or endan	gered species (10)	
		Significant migratory song	bird/water fowl l	nabitat or u	sage (10)	
	,	Category 1 Wetland. See	Question 1 Qua	alitative Rat	ting (-10)	
9	52	Metric 6. Plant con	nmunitie	s, inte	rspersion, microto	pography.
9	"				•	
max 20 pts.	subtotal	6a. Wetland Vegetation Communition			ommunity Cover Scale	
		Score all present using 0 to 3 scale.	_	<u>0</u>	Absent or comprises < 0.1ha (0.24	
		Aquatic bed 1 Emergent		'	Present and either comprises sma vegetation and is of moderate q	
		1 Shrub			significant part but is of low qua	•
		1 Forest		2	Present and either comprises sign	nificant part of wetland's
		Mudflats			vegetation and is of moderate q	uality or comprises a small
		1 Open water	_	3	part and is of high quality	nort or more of wetlends
		Other  6b. horizontal (plan view) Interspers	— sion	3	Present and comprises significan vegetation and is of high quality	
		Select only one.			vogotation and io or mgm quanty	
		High (5)	Na	rrative Des	scription of Vegetation Quality	
		Moderately high(4)		low	Low spp diversity and/or predomi	
		Moderate (3)  Moderately low (2)		mod	disturbance tolerant native spec Native spp are dominant component	
		Low (1)		mou	although nonnative and/or distu	•
		None (0)			can also be present, and specie	
		6c. Coverage of invasive plants. Re			moderately high, but generally v	
		to Table 1 ORAM long form for list.	Add		threatened or endangered spp	
		or deduct points for coverage  Extensive >75% cover (-5	3	high	A predominance of native species and/or disturbance tolerant native	
		Moderate 25-75% cover (	,		absent, and high spp diversity a	• • • • • • • • • • • • • • • • • • • •
		✓ Sparse 5-25% cover (-1)	,		the presence of rare, threatened	
		Nearly absent <5% cover				
		Absent (1)	Mu		Open Water Class Quality	
		6d. Microtopography.  Score all present using 0 to 3 scale.		0 1	Absent <0.1ha (0.247 acres) Low 0.1 to <1ha (0.247 to 2.47 ac	erec)
		0 Vegetated hummucks/tus		2	Moderate 1 to <4ha (2.47 to 9.88	
		1 Coarse woody debris >15		3	High 4ha (9.88 acres) or more	<del></del>
		1 Standing dead >25cm (10				
		1 Amphibian breeding pools	S Mi		aphy Cover Scale	
			_	0 1	Absent Present very small amounts or if r	nore common
				'	of marginal quality	
			_	2	Present in moderate amounts, bu	<u> </u>
					quality or in small amounts of hi	
	7			3	Present in moderate or greater ar and of highest quality	nounts
52					and of highest quality	

**End of Quantitative Rating. Complete Categorization Worksheets.** 

Wetland 12

Site: B	uckeye `	Yard Rater(s): Matt Kaminski Dat	<b>te:</b> 4/12/2021
2	2	Metric 1. Wetland Area (size).	
max 6 pts.	subtotal	Select one size class and assign score.  >50 acres (>20.2ha) (6 pts)  25 to <50 acres (10.1 to <20.2ha) (5 pts)  10 to <25 acres (4 to <10.1ha) (4 pts)  3 to <10 acres (1.2 to <4ha) (3 pts)  0.3 to <3 acres (0.12 to <1.2ha) (2pts)  0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)  <0.1 acres (0.04ha) (0 pts)	
2	6	Metric 2. Upland buffers and surrounding land use.	
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one and assign score. Do not double check.  WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)  MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)  NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)  VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)  2b. Intensity of surrounding land use. Select one or double check and average.  VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)  LOW. Old field (>10 years), shrub land, young second growth forest. (5)  MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field  HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)	d. (3)
18	24	Metric 3. Hydrology.	
max 30 pts.	subtotal	Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5)  3c. Maximum water depth. Select only one and assign score.  3c. Maximum water depth. Select only one and assign score.  3c. Maximum water depth. Select only one and assign score.  3c. Maximum water depth. Select only one and assign score.  3c. Maximum water depth. Select only one and assign score.  3c. Semi- to permanently in Regularly inundated/sa Seasonally inundated/sa Seasonally inundated (seasonally saturated in Seasonally saturated in Seasonall	nd other human use (1) (e.g. forest), complex (1) nd corridor (1) n. Score one or dbl check. nundated/saturated (4) turated (3) 2)
		None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1) Recovering (3) Recovering (4) Recovering (4) Recovering (4) Recovering (4) Recovering (4) Recovering (5) Recovering (5) Recovering (6)	water)
9	33	Metric 4. Habitat Alteration and Development.	
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or double check and average.  None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1)	
		4b. Habitat development. Select only one and assign score.  Excellent (7)  Very good (6)  Good (5)  Moderately good (4)  Fair (3)  Poor to fair (2)  Poor (1)	
Γ		4c. Habitat alteration. Score one or double check and average.  None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)  Recovering (3) Recent or no recovery (1)  Recovering (3) Recent or no recovery (1)  Recovering (3) Recovering (4) Recovering (5) Recovering (6) Recovering (7) Recovering (7) Recovering (8) Recovering (8) Recovering (9) R	d removal
su	33	woody debris removal farming toxic pollutants nutrient enrichment	
last revised	·		

0:40.		. Det	/-\		Data : 4/12/2021			
Site:	Buckeye	Yard Rat	er(s): Matt	Kaminski	Date: 4/12/2021			
	33							
	subtotal first pa	ge						
0	33	Metric 5. Special Wetla	ands.					
max 10 pts.	subtotal	Check all that apply and score as indicated						
		Bog (10)						
		Fen (10) Old growth forest (10)						
		Mature forested wetland (5)						
		Lake Erie coastal/tributary wetlar	nd-unrestricted h	ydrology (10)				
		Lake Erie coastal/tributary wetland-restricted hydrology (5)						
		Lake Plain Sand Prairies (Oak Openings) (10)						
	Relict Wet Prairies (10)  Known occurrence state/federal threatened or endangered species (10)							
	Significant migratory songbird/water fowl habitat or usage (10)							
		Category 1 Wetland. See Quest		• , ,				
		Metric 6. Plant commu	ınities, in	terspersion, micro	topography.			
2	35				topog.upy.			
max 20 pts.	. subtotal	6a. Wetland Vegetation Communities.	Vegetatio	n Community Cover Scale				
		Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0				
		Aquatic bed	1	Present and either comprises				
		1 Emergent 1 Shrub		vegetation and is of moderal significant part but is of low				
		Forest	2	Present and either comprises				
		Mudflats			te quality or comprises a small			
		Open water		part and is of high quality				
		Other	3	_	cant part, or more, of wetland's			
		6b. horizontal (plan view) Interspersion. Select only one.	-	vegetation and is of high qua	ality			
		High (5) Narrative Description of Vegetation Quality						
		Moderately high(4)	low	Low spp diversity and/or predo				
		Moderate (3)	<del></del>	disturbance tolerant native s	•			
		Moderately low (2)	mod	Native spp are dominant comp	=			
		Low (1) None (0)		can also be present, and spe	isturbance tolerant native spp ecies diversity moderate to			
		6c. Coverage of invasive plants. Refer		moderately high, but genera				
		to Table 1 ORAM long form for list. Add		threatened or endangered s				
		or deduct points for coverage	high	A predominance of native spe				
		Extensive >75% cover (-5)  Moderate 25-75% cover (-3)		and/or disturbance tolerant r absent, and high spp diversi				
		Sparse 5-25% cover (-1)		the presence of rare, threate				
		Nearly absent <5% cover (0)		<u> </u>				
		Absent (1) Mudflat and Open Water Class Quality						
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	7 \			
		Score all present using 0 to 3 scale.  O Vegetated hummucks/tussucks	1	Low 0.1 to <1ha (0.247 to 2.47 Moderate 1 to <4ha (2.47 to 9				
		0 Coarse woody debris >15cm (6ir		High 4ha (9.88 acres) or more				
		0 Standing dead >25cm (10in) dbh	· —	,	<del></del> ,			
		1 Amphibian breeding pools Microtopography Cover Scale						
			0	Absent	r if more commen			
			1	Present very small amounts of of marginal quality	i ii more common			
			2	Present in moderate amounts,	, but not of highest			
				quality or in small amounts o	of highest quality			
T	<del>-</del>		3	Present in moderate or greate	r amounts			
	1			and of highest quality				

**End of Quantitative Rating. Complete Categorization Worksheets.** 

# APPENDIX 4





BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007



CENTRAL OHIO WETLAND CONSULTING, LLC





BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007



CENTRAL OHIO WETLAND CONSULTING, LLC





BUCKEYE YARD TRABUE, ROBERTS, AND SCIOTO-DARBY CREEK ROADS COLUMBUS, FRANKLIN COUNTY, OHIO COWC PROJECT #120120007



CENTRAL OHIO WETLAND CONSULTING, LLC



Photo 1 – Southerly view of former rail lines on the North Section of the evaluation area.



Photo 2 – Typical view of former rail lines and adjacent brushy areas on the North Section of the evaluation area.



Photo 3 – Southerly view across waste land areas on the southwest part of the North Section of the evaluation area.



Photo 4 – Northerly view of dense brushy areas on the northeast part of the North Section of the evaluation area.



Photo 5 – Southerly view of Wetland 1 on the North Section of the evaluation area.



Photo 6 – Southwesterly view of Wetland 2 on the North Section of the evaluation area.



Photo 7 – Northwesterly view across Wetland 3 on the North Section of the evaluation area. This wetland appears to have established due to beaver impoundments within a drainage ditch.



Photo 8 – Northerly view along Wetland 3 on the North Section of the evaluation area.



Photo 9 – Northerly view of Wetland 4 on the North Section of the evaluation area.



Photo 10 – Southerly view of Wetland 4 on the North Section of the evaluation area.



Photo 11 – Easterly view across Wetland 5 on the North Section of the evaluation area.



Photo 12 – Westerly view across the southern part of Wetland 5 on the North Section of the evaluation area.



Photo 13 – Northerly view of Stream 7 and Stream 8 on the North Section of the evaluation area. These ephemeral streams appear to partially drain Wetland 5.



Photo 14 – Southerly view across Wetland 5 on the North Section of the evaluation area.



Photo 15 – Northerly view across Wetland 6 on the North Section of the evaluation area.



Photo 16 – Easterly view along Stream 1 (Roberts Millikin Ditch) on the North Section of the evaluation area.



Photo 17 – Northeasterly view of two existing culvert pipes directing surface water from Stream 1 (Roberts Millikin Ditch) beneath elevated railroad lines.



Photo 18 – Westerly view at the continuation of Stream 1 (Roberts Millikin Ditch) upon exiting the culvert pipes depicted in Photo 17.



Photo 19 – Westerly view of Stream 1 (Roberts Millikin Ditch) on the North Section of the evaluation area.



Photo 20 – Westerly view of Stream 1 (Roberts Millikin Ditch) on the North Section of the evaluation area.



Photo 21 – Southerly view of former railroad lines on the Central Section of the evaluation area.



Photo 22 – Northeasterly view of former railroad lines and waste areas between tracks on the Central Section of the evaluation area.



Photo 23 – Northerly view of former railroad lines on the Central Section of the evaluation area.



Photo 24 – Southerly view of former railroad lines and brushy land on the southern part of the Central Section of the evaluation area.



Photo 25 – Southerly view along a cleared utility corridor on the west central part of the Central Section of the evaluation area.



Photo 26 – Typical view of dense vegetation comprising the wooded western portions of the Central Section of the evaluation area.



Photo 27 – Typical view of dense vegetation comprising the wooded western portions of the Central Section of the evaluation area.



Photo 28 – Westerly view along Stream 9 on the Central Section of the evaluation area.



Photo 29 – Westerly view at the origination of Stream 9. This culvert pipe discharges surface water from a west adjoining storm water management pond.



Photo 30 – Southwesterly view at the west adjoining storm water management pond directing surface water to Stream 9.

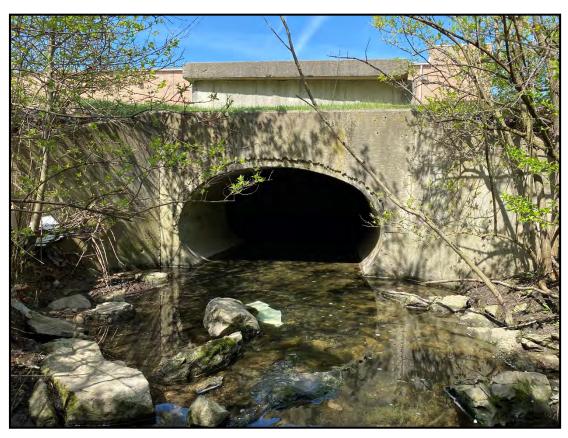


Photo 31 – Westerly view at the beginning of Stream 10 on the Central Section of the evaluation area.



Photo 32 – Northeasterly view across Pond 1 on Central Section of the evaluation area. This pond impounds Stream 10.



Photo 33 – Southwesterly view across Pond 1 on Central Section of the evaluation area. This pond impounds Stream 10.

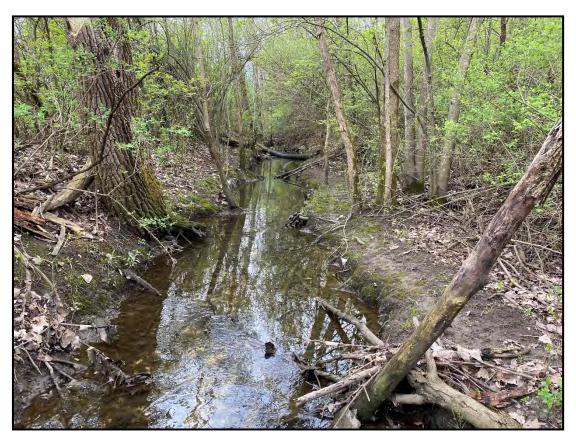


Photo 34 – Southerly (upstream) view along Stream 10 on Central Section of the evaluation area.



Photo 35 – Northerly (downstream) view along Stream 10 on Central Section of the evaluation area.



Photo 36 – Northeasterly view of the confluence of Stream 9 with Stream 10 on the northwest part of the Central Section of the evaluation area.



Photo 37 – Southerly view of Wetland 7 on the Central Section of the evaluation area.



Photo 38 – Easterly view of Wetland 7 on the Central Section of the evaluation area.



Photo 39 – Typical view of wooded areas to the north, south, and west of Wetland 7 on the Central Section of the evaluation area.



Photo 40 – Southwesterly view of Wetland 8 on the Central Section of the evaluation area.



Photo 41 – Northeasterly view of Wetland 8 on the Central Section of the evaluation area.



Photo 42 – Easterly view of Stream 11 as it enters the Central Section of the evaluation area from the west.



Photo 43 – Northwesterly view of Stream 11 on the Central Section of the evaluation area.



Photo 44 – Southeasterly view of Stream 11 as it crosses the southwest part of the Central Section of the evaluation area.

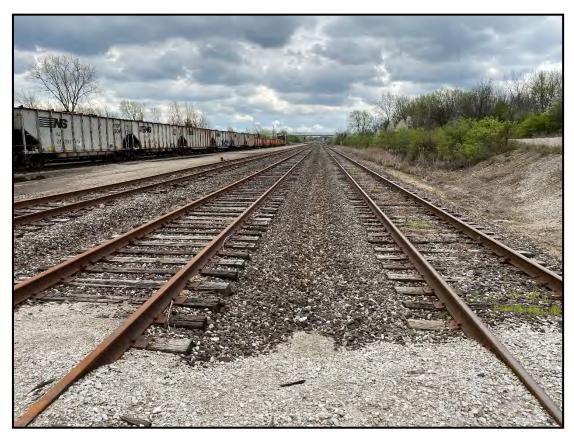


Photo 45 – Southerly view along former rail lines comprising the north part of the South Section of the evaluation area.



Photo 46 – Easterly view along Stream 13 as it enters the South Section of the evaluation from the west, beneath Manor Park Drive.



Photo 47 – Westerly view along Stream 13 on the South Section of the evaluation area.



Photo 48 – Southeasterly view along Stream 13 on the South Section of the evaluation area.



Photo 49 – Southwesterly view of Wetland 11 on the South Section of the evaluation area. This wetland appears to have established due to beaver impoundments within Stream 13.



Photo 50 – Northwesterly view of Wetland 11 on the South Section of the evaluation area.



Photo 51 – Westerly view of Wetland 11 on the South Section of the evaluation area.



Photo 52 – Northerly view of Wetland 10 on the South Section of the evaluation area.



Photo 53 - Northerly view of Wetland 9 on the South Section of the evaluation area



Photo 54 – Northerly view across vacant waste land on the southern part of the South Section of the evaluation area.



Photo 55 – Typical view of densely vegetated areas on the southwest part of the South Section of the evaluation area.



Photo 56 – Easterly view of Pond 2 on the South Section of the evaluation area.



Photo 57 – Northwesterly view of Wetland 12 on the South Section of the evaluation area. This wetland appears to have established due to beaver impoundments within a drainage ditch.



Photo 58 – Easterly view of Wetland 12 on the South Section of the evaluation area. This wetland appears to have established due to beaver impoundments within a drainage ditch.



Photo 59 – Westerly view of eastern part of Wetland 12 on the South Section of the evaluation area.



Photo 60 – Easterly view at the termination point of Wetland 12 on the South Section of the evaluation area.



Photo 61 – Northerly view of vacant waste land on the South Section of the evaluation area.

# ATTACHMENT C MITIGATION CREDITS LETTER



123 South Broad Street, Suite 238 P.O. Box 369 Lancaster, Ohio 43130 T: (740) 654-4016 F: (740) 689-0890

November 4, 2022

Mr. Burak Gursel Simson Strong-Tie Co., Inc. 5956 W. Positas Blvd. Pleasanton, CA 94588

RE: Wetlands Mitigation for the Buckeye Yard Expansion site located at 2600 International Street, Columbus Ohio 43228

ACCT NO. SCIO-179

Dear Mr. Gursel:

The Stream + Wetlands Foundation received on November 4, 2022, an amended purchase agreement for the Buckeye Yard Expansion site. As per the terms of the updated purchase agreement, the previously paid deposit payment of \$32,175 (Check #749648) reserves 4.2 acres of non-forested wetland mitigation credits, from our Huntington In-Lieu Fee Program.

The remaining balance of \$198,825 is due within 30 days of the permit issuance date. If you do not receive your permit within the 6-month reservation period, an additional deposit payment will be required as per the terms of our agreement.

Thank you very much for allowing Stream + Wetlands Foundation to assist you with the wetlands mitigation needs of this project. Should you need further assistance, please feel free to call anytime.

Sincerely,

Vincent E. Messerly, P.E.

President

Cc: Lindsay Hanna, MAD Scientist & Associates, via email



# ATTACHMENT D AGENCY LETTERS



MARY MERTZ, DIRECTOR

Office of Real Estate
John Kessler, Chief
2045 Morse Road – Bldg. E-2
Columbus, OH 43229
Phone: (614) 265-6621
Fax: (614) 267-4764

June 14, 2022

Lindsay Hanna MAD Scientist Associates, LLC 253 N. State St, Suite 101 Westerville, OH 43081-2560

Re: 22-0545; Buckeye Yard Expansion

**Project:** The proposed project involves permitting services for the SST facility expansion at the Buckeye Yard.

**Location:** The proposed project is located in Norwich Township, Franklin County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

**Natural Heritage Database:** A review of the Ohio Natural Heritage Database indicates there are no records of state or federally listed plants or animals within one mile of the specified project area. Records searched date from 1980.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area.

Fish and Wildlife: The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that Best Management Practices be utilized to minimize erosion and sedimentation.

The entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these species of bats predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the

leaves. However, these species are also dependent on the forest structure surrounding roost trees. If trees are present within the project area, and trees must be cut, the DOW recommends cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH ≥ 20 if possible. If trees are present within the project area, and trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 through August 15, prior to any cutting. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the "OHIO DIVISION OF WILDLIFE GUIDANCE FOR BAT SURVEYS AND TREE CLEARING". If state listed bats are documented, DOW recommends cutting only occur from October 1 through March 31. However, limited summer tree cutting may be acceptable after consultation with the DOW (contact Eileen Wyza at Eileen.Wyza@dnr.ohio.gov).

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "Range-wide Indiana Bat Survey Guidelines." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Eileen Wyza for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range of the following listed mussel species.

#### Federally Endangered

clubshell (*Pleurobema clava*) rayed bean (*Villosa fabalis*)

northern riffleshell (Epioblasma torulosa rangiana)

snuffbox (Epioblasma triquetra)

purple cat's paw (Epioblasma o. obliquata)

#### Federally Threatened

rabbitsfoot (Quadrula cylindrica cylindrica)

#### State Endangered

elephant-ear (*Elliptio crassidens crassidens*)

pocketbook (*Lampsilis ovata*)

long solid (*Fusconaia maculata maculate*)

washboard (Megalonaias nervosa)

Ohio pigtoe (*Pleurobema cordatum*)

#### State Threatened

black sandshell (*Ligumia recta*)

pondhorn (*Uniomerus tetralasmus*)

fawnsfoot (Truncilla donaciformis)

threehorn wartyback (Obliquaria reflexa)

Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species.

The project is within the range of the following listed fish species.

State Endangered

goldeye (*Hiodon alosoides*) shortnose gar (*Lepisosteus platostomus*) Iowa darter (*Etheostoma exile*) spotted darter (*Etheostoma maculatum*) northern brook lamprey (*Ichthyomyzon fossor*) tonguetied minnow (*Exoglossum laurae*) popeye shiner (*Notropis ariommus*)

#### State Threatened

lake chubsucker (*Erimyzon sucetta*)
Tippecanoe darter (*Etheostoma tippecanoe*)
paddlefish (*Polyodon spathula*)

The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.

The project is within the range of the American bittern (*Botaurus lentiginosus*), a state endangered bird. Nesting bitterns prefer large undisturbed wetlands that have scattered small pools amongst dense vegetation. They occasionally occupy bogs, large wet meadows, and dense shrubby swamps. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, the project is not likely to impact this species.

The project is within the range of the black-crowned night-heron (*Nycticorax nycticorax*), a state-threatened bird. Night-herons are so named because they are nocturnal, conducting most of their foraging in the evening hours or at night, and roost in trees near wetlands and waterbodies during the day. Night herons are migratory and are typically found in Ohio from April 1 through December 1 but can be found in more urbanized areas with reliable food sources year-round. Black-crowned night-herons primarily forage in wetlands and other shallow aquatic habitats, and roost in trees nearby. These night-herons nest in small trees, saplings, shrubs, or sometimes on the ground, near bodies of water and wetlands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the lark sparrow (*Chondestes grammacus*), a state endangered bird. This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the least bittern (*Ixobrychus exilis*), a state threatened bird. This secretive marsh species prefers dense emergent wetlands with thick stands of cattails, sedges, sawgrass or other semiaquatic vegetation interspersed with woody vegetation and open water. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the sandhill crane (*Grus canadensis*), a state threatened species. Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. On breeding grounds they require a rather large tract of wet meadow, shallow marsh, or bog for nesting. If grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through august 31. If this habitat will not be impacted, this project is not likely to have an impact on this species.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

Water Resources: The Division of Water Resources has the following comment.

The <u>local floodplain administrator</u> should be contacted concerning the possible need for any floodplain permits or approvals for this project.

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew at <a href="mike.pettegrew@dnr.ohio.gov">mike.pettegrew@dnr.ohio.gov</a> if you have questions about these comments or need additional information.

Mike Pettegrew Environmental Services Administrator

## **United States Department of the Interior**



#### FISH AND WILDLIFE SERVICE

Ecological Services 4625 Morse Road, Suite 104 Columbus, Ohio 43230 (614) 416-8993 / FAX (614) 416-8994



November 4, 2022

Re: Buckeye Yard Project Code: 2023-0001366

Dear Ms. Hanna:

The U.S. Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

<u>Federally Threatened and Endangered Species</u>: Due to the project type, size, location, and the proposed implementation of seasonal tree cutting (clearing of trees ≥3 inches diameter at breast height between October 1 and March 31) to avoid impacts to the endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (*Myotis septentrionalis*), we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, coordination with the Service should be initiated to assess any potential impacts.

Section 7 Coordination: If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus is it important to conserve the functions and values of the remaining wetlands in Ohio (<a href="https://epa.ohio.gov/portals/47/facts/ohio\_wetlands.pdf">https://epa.ohio.gov/portals/47/facts/ohio\_wetlands.pdf</a>). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

Thank you for your efforts to conserve listed species and sensitive habitats in Ohio. We recommend coordinating with the Ohio Department of Natural Resources due to the potential for the proposed project to affect state listed species and/or state lands. Contact Mike Pettegrew, Acting Environmental Services Administrator, at (614) 265-6387 or at <a href="mailto:mike.pettegrew@dnr.state.oh.us">mike.pettegrew@dnr.state.oh.us</a>.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or ohio@fws.gov.

Sincerely,

Patrice Ashfield Field Office Supervisor



# Application for Section 401 Water Quality Certification Division of Surface Water 401 Water Quality Certification and Isolated Wetland Permitting Unit

Section 1: Applicant (Project Proponent) and Consultant/Agent Information									
	Applicant (Proj	ect Proponent)	Consultant/Agent						
Company/Agency Name:	Simpson Strong-Tie		MAD Scientist Associates						
Address:	5956 W. Las Positas Blvd, P	Pleasanton, CA 94588	253 N. State Street Suite 101, Westerville, OH 43081						
Contact Name/Title:	Burak Gursel/Acquisition Ma	anager	Lindsay Hanna/Project Scientist						
Contact Phone:	(925) 560-9000		(614) 818-9156						
Alternate Phone:									
Contact FAX:									
Contact Email:	bgursel@strongtie.com		Lindsay@madscientistassociates.net						
Technical Contact:	Spencer Brown								
Technical Phone:	(614) 307-4245								
Technical Email:	sbrown@lincolnconstruction	.com							
Section 2: Project Infor	mation								
A. Project Name: Simpson	Strong-Tie Buckeye Yard Ex	pansion							
B. Has a pre-filing (pre-app	plication) meeting request								
been submitted?		X Yes □	No						
401 Pre-application Review	wer: Boyles Date of pre	-filing meeting request sub	mittal: 07/06/2022						
administration, manufacturin warehouse space is needed Based on capacity needs, a parking will need to be consulding must be spaced 10 needed for the Site. Based of to the configuration of wetlan without impacting onsite were Based on building needs, W	C. Brief Project Description: Simpson Strong Tie (SST) is a manufacturer of metal hangers used in various types of construction including but not limited to joist hangers and deck hangers. The company currently has approximately 284,000 SF of building under roof serving administration, manufacturing and warehousing needs of their Hilliard Ohio plant. Due to the increase in demand for these products, additional warehouse space is needed in order to satisfy demand.  Based on capacity needs, a minimum of 230,000 square feet (sq. ft.) will be required for building construction. In addition, 115,975 sq. ft. of parking will need to be constructed to accommodate the increase in personnel employed at the facility. As per City regulations, the new building must be spaced 10 feet away from existing infrastructure, and stormwater retention with a capacity of 323,704 cubic feet (cf) is needed for the Site. Based on these requirements for proposed development, a total of 19.79 acres is needed for completing this project. Due to the configuration of wetlands onsite, there is not a section of contiguous acreage that could accommodate the proposed development without impacting onsite wetlands.  Based on building needs, Wetlands 4 and 6 are expected to be impacted. Both wetlands were assessed using the ORAM (Ohio Rapid Assessment Method) and assigned scores of 25 and 26, respectively, which identifies them as Category 1 wetlands. These types of wetlands								
D. Construction Start Date	e: 03/01/2023 End Date: 1	1/30/2024							
E. Is any portion of the act	tivity complete now?	☐ Yes 🗵	No						
Is this an "After-The-Fact"	permit application?	☐ Yes 🗵	No						
Description of completed activities and its impact on the waters of the state.:									
F. Coordinates LATITUDE: 40.006278 LONGITUDE: -83.128316									
G. Project Address: 2600 International St, Columbus, OH 43228									
Location Description: Old railyard behind the current Simpson Strong-Tie facility									
ZIP Code(s): 43228									
County(ies):		Township(s):							
Franklin									
H. 8 or 12 Digit HUC Numb	oer:	I. Watershed Name:							
050600011204		Hayden Run-Scioto River							

05	0600	0011205			Dry Run-Scioto F	River				
J.	U.S.	Army Corps of Engineers Dis	tric	t: Huntington						
K.	Pro	posed impacts to "waters of t	he s	tate":						
		Beach Nourishment		Blasting			Breakwater			Bulkhead
		Bridge/Culvert		Dam			Dredge		$\times$	Fill
		Groin/Jetty		Levees/Berms			Mine Through			Revetment
		Bank Stabilization		Stream Channe	elization		Stream Relocation	1		Water Body Crossing
		Weirs		Other						
L.	Oth	er water related permits issue	d or	required incl	ude:					
		Individual 404 Permit								
		Nationwide Permit								
		Section 9 Permit								
		Section 10 Permit								
		Isolated Wetland Permit								
		NPDES Permit								
		Permit to Install								
		Regional General Permit								
		ODNR Permit								
		Oil & Gas Storm Water General Pe	ermit							
Se	ctic	on 3: Fees								
Ar	e yo	u exempt from fees?					Yes	■ No (If YE)	ES, I	eave fee section blank)
Ar	e yo	u a County, Township, or Mur	nicip	al Corporatio	n?		Yes	⋉ No		
If Y	ES.	, fee cap is \$5,000.00 instead o	of \$2	25,000.00						
Аp	plic	ation Fee =						\$200	0.00	
Re	viev	v Fees								
		nd Acres Impacted			2.75 x \$5			\$1,375		
		ittent Stream Linear Feet Impa		d	0 x \$1	0.00	=	\$0	0.00	(\$200 minimum fee)
1		nial Stream Linear Feet Impac	ted		0 x \$1			\$0	0.00	(\$200 minimum fee)
La	ke C	Cubic Yards Impacted			0 x \$3			\$0	0.00	
					Total Revi			\$1,375		
					Fee + Total Revie		•	\$1,575		
		Oue with the 401 WQC Applica					-	\$887		
					ance (1/2 of Rev			\$687	'.50	
		SE MAKE FEE CHECK PAYAB			RER, STATE OF	ОНІ	0"			
		on 4: Submitted Documenta								
Ch	_	all documents/items that hav		en submitted	•					
	×	Submitted Pre-filing Meeting Requ								
Up	load	I File(s): SST-OEPA Meeting for	Pre	liminary Applic	cation 7.6.22.pdf					
		Proposed Lake Impacts Table								
		Proposed Stream Impacts Table								
	×	Proposed Wetland Impacts Table								

Additional Impact Tables									
Water Delineation Report	Water Delineation Report								
Upload File(s): Wetland Delineation Report.pdf									
Site Photographs									
Ohio Rapid Assessment Method (ORAM) Forms	Ohio Rapid Assessment Method (ORAM) Forms								
Habitat Evaluations									
Biological Sampling Information									
☑ US Army Corps of Engineers Jurisdictional Determination									
Upload File(s): LTR2022-365.pdf, PJD_Summary_LRH-2022-00365-SCR.pdf									
US Army Corps of Engineers Public Notice or Provisional Nationwide Permit									
Mohio Department of Natural Resources - Natural Heritage Database Request									
Upload File(s): Environmental Review_ MAD Scientist - Buckeye Yard Expansion Comments (1).pdf									
US Fish & Wildlife Service - Threatened and Endangered Species Coordination									
Upload File(s): USFWS response.pdf									
X Proposed Project Antidegradation Analysis									
Upload File(s): Box 23.pdf									
Proposed Project Mapping									
X Proposed Mitigation Plan									
Upload File(s): Proposed Mitigation.pdf, Request for a Type II Variance from the City of Columbus Stormwater drainage Manual_Simp Strong-Tie_22Nov9_red.pdf	son								
Section 5: Applicant and Agent Signature									
I hereby designate and authorize the agent/consultant identified in Section 1 to act on my behalf in the processing of this application, and to furnish, upon request, supplemental information in support of the application:									
Application is hereby made for a Section 401 Water Quality Certification. The project proponent hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief. The project proponent hereby requests that the certifying authority review and take action on the CWA 401 certification request within the applicable reasonable period of time.									
Applicant Name: Title:									
Lindsay Hanna Project Scientist	Project Scientist								
Signature: Date:	Date:								
Electronically submitted by Lbhanna Electronically submitted on 12/17/2022									



# Application for Section 401 Water Quality Certification - Proposed Lake Impacts Division of Surface Water 401 Water Quality Certification and Isolated Wetland Permitting Unit

			Preferred Alternative			
Water Body ID	Coastal Erosion Area?	Impact Type	Cubic Yards of Fill/Dredged Material	Lakeward Extent (linear ft.)	Shoreline Impacted (linear ft.)	Placement of Dredged Material
No records found						

Rev. 5/2014; Application ID: 44157344 Page 1 of 1



# Application for Section 401 Water Quality Certification - Proposed Stream Impacts and Mitigation Division of Surface Water 401 Water Quality Certification and Isolated Wetland Permitting Unit

Section 1: Streams Onsite and Proposed Impacts											
							Preferred Alternative				
Stream ID	Jurisdictional?	Flow	Aquatic Life Use Designation in 3745-1	Existing Use?	Onsite (linear ft.)	Impact Length (linear ft.)		Impact Type			
No records fou	No records found										
	Section 2: Proposed Stream Mitigation (Check All That Apply) Preferred Alternative										
☐ In-L	ieu Fee Progran	1	ILF S	ponsor:							
Num	Number of Stream Credits: Number of Buffer Credits:										
☐ Proc	of of Reservatio	n?									
☐ On-	Site Permittee-R	esponsible M	litigation								
Res	toration		Aqua	tic Life Use:		line	ear feet:				
☐ Crea	ation		Aqua	tic Life Use:		line	ear feet:				
☐ Pres	servation		Aqua	tic Life Use:		line	ear feet:	Buffer Width Linear Feet:			
☐ Enhancement Aquatic Life Use: linear feet:											
Existing Aquatic Life Use					ife Use:	Enl	hancement A	ctivity:			
☐ Othe	er										
Other Descrip	Other Description:										

Rev. 5/2014; Application ID: 44157344 Page 1 of 1



Restoration

# Application for Section 401 Water Quality Certification - Proposed Wetland Impacts and Mitigation Division of Surface Water 401 Water Quality Certification and Isolated Wetland Permitting Unit

Section 1: Wetlands Onsite and Proposed Impacts										
Wetland ID	ORAM	Category	Cat.	Ohio EPA Reviewer	Acreage		Preferred Alte			
	Score		Verified by	who Verified	Onsite	Impact A	•	Impact Type		
			Ohio EPA?			Forested	Non			
Wetland 1	29.0	1	Yes	Boyles	0.44	0.00	0.00	Other		
Wetland 4	25.0	1	No		1.67	0.00	2.00	Fill		
Wetland 2	32.0	2	No		0.56	0.00	0.00	Other		
Wetland 6	26.0	1	No		1.57	0.00	1.00	Fill		
Wetland 5	27.0	1	No		4.75	0.00	0.00	Other		
Wetland 3	42.0	2	No		2.19	0.00	0.00	Other		
Wetland 7	23.0	1	No		0.06	0.00	0.00	Other		
Wetland Acreage Totals		11.24	0.00	3.00						
Totals: Category 1 Wetlands		8.49	0.00	3.00						
Totals: Category 2 Wetlands		2.75	0.00	0.00						
Totals: Category 3 Wetlands		0.00	0.00	0.00						
Subtotals: Te	emporary					0.00	0.00			
Subtotals: Pe	ermanent					0.00	3.00			
				Section 2: Prop	posed Wetland	Mitigation (Check All That A	pply) Preferred Alternative			
□ w	etland Mitig	gation Bank	(	Number o	of Forested Cre	dits:	Type of Credits	s (if applicable):		
М	itigation Ba	nk:		Number o	umber of Non-Forested Credits:			Type of Credits (if applicable):		
Number of			nber of Buffer Credits: Type of Cr			dits (if applicable):				
☐ Pi	Proof of Reservation?									
In-Lieu Fee Program  ILF Sponsor: Stream + Wetlands Foundation										
Number of Wetland Credits: 4.2 Number of			of Buffer Credit	s:						
⊠ Pı	▼ Proof of Reservation?									
Upload File(s	Jpload File(s): SCIO-179 Simpson Manufacturing Co. Inc. 11.2.22 deposit payment verification letter.pdf									
On-Site Permittee-Responsible Mitigation										

Rev. 5/2014; Application ID: 44157344 Page 1 of 2

Acres:

Type of Wetland:

☐ Creation	Type of Wetland:	Acres:	
☐ Preservation	Type of Wetland:	Acres:	
☐ Enhancement	Type of Wetland:	Acres:	
Other			
Other Description:			

Rev. 5/2014; Application ID: 44157344

# APPENDIX C

Economic Analysis for Offsite Alternative



# MARKET OPTIONS





# CBRE

#### RYAN DEANGELIS

Senior Vice President +1 916 492 6975 rvan.deanaelis@cbre.com

#### MATTHEW LEHMAN

Vice President +1 614 430 5051 matthew lehman@chre.com

#### MICHAEL MULLADY

Executive Vice President +1 614 430 5030 michael.mullady@cbre.com

#### **WESTON DEVORE**

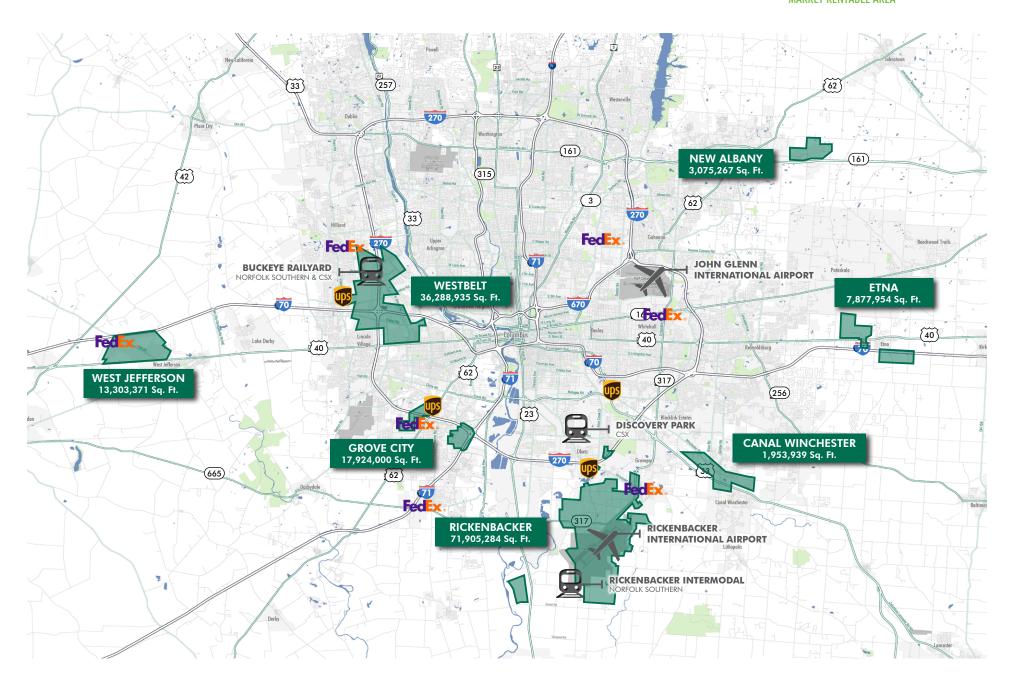
Vice President +1 614 430 5031 weston.devore@cbre.com

#### DISCLAIMER

CBRE © 2021 All Rights Reserved. All information included in this letter/proposal pertaining to CBRE, Inc.—including but not limited to its operations, employees, technology and clients—is proprietary and confidential and supplied with the understanding that such information will be held in confidence and not disclosed to any third party without CBRE's prior written consent. This letter/proposal is intended solely as a preliminary expression of general intentions, is for discussion purposes only, and does not create any agreement or obligation by CBRE to negotiate or continue negotiations. CBRE shall have no contractual obligation with respect to the matters referred to herein unless and until a definitive, fully-executed agreement has been delivered by the parties. Prior to delivery of a definitive executed agreement, and without any liability to the other party, either party may (1) propose different terms from those summarized herein, (2) enter into negotiations with other parties and/or (3) unilaterally terminate all negotiations with the other party hereto. Photos herein are the property of their respective owners. Use of these images without the express written consent of the owner is prohibited. CBRE and the CBRE logo are service marks of CBRE, Inc. All other marks displayed on this document are the property of their respective owners, and the use of such logos does not imply any affiliation with or endorsement of CBRE.

### INDUSTRIAL MARKET OVERVIEW

# 276,015,075 SQ. FT.



## COLUMBUS INDUSTRIAL LABOR CONCENTRATION

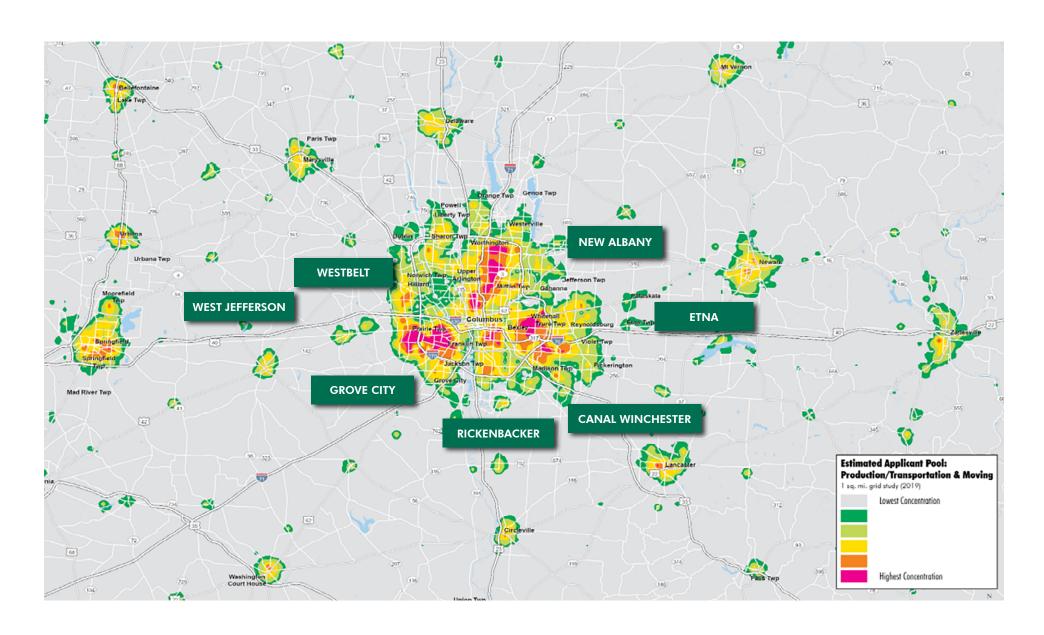
4.90%
COLUMBUS UNEMPLOYMENT RATE

~18.59%
EMPLOYMENT GROWTH SINCE 2010

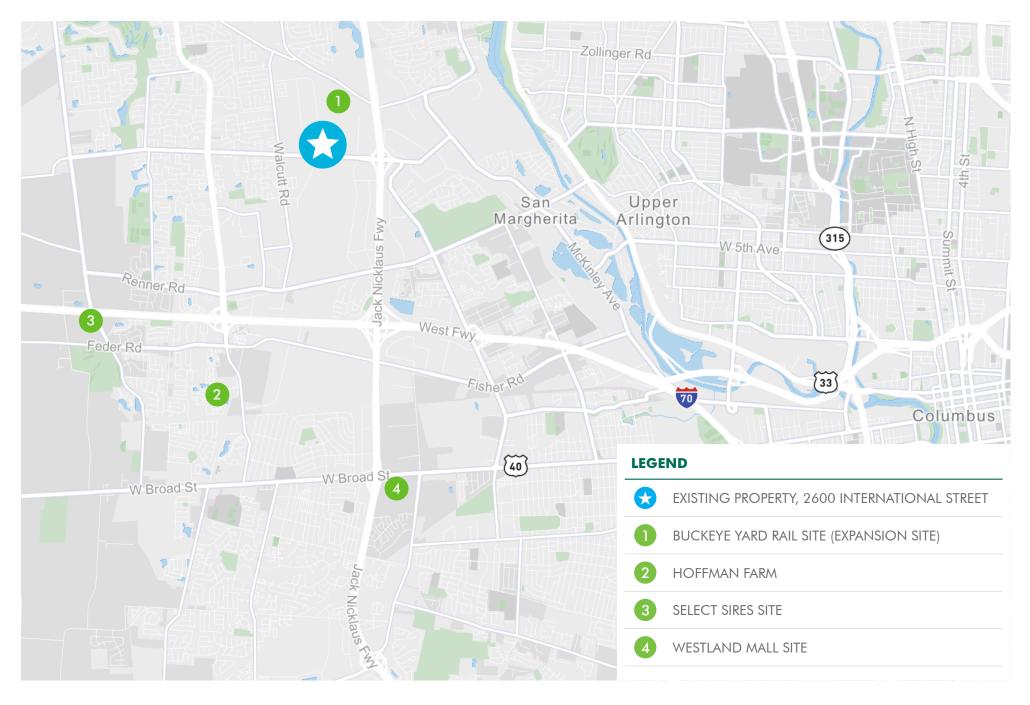
**51.00%**LABOR PARTICIPATION RATE

\$18.11/HR
AVERAGE MANUFACTURING WAGES

\$16.55/HR
AVERAGE LOGISTICS WAGES



## LAND AVAILABILITIES



# COMPARISON OF PROPOSED ECONOMIC TERMS

		0	2	3	4	
		BUCKEYE YARD RAIL SITE (EXPANSION SITE)	HOFFMAN FARM COLUMBUS, OH	SELECT SIRES DEVELOPMENT	WESTLAND MALL	
	SUBMARKET	Westbelt (Current Facility)	WEST COLUMBUS	West Side	West Side	
	DEVELOPER	Land Owned by Xebec	TPA Group	VanTrust	Trident Capital	
SITE	CURRENT SITE STATUS	Industrial use land Contiguous with the Existing Manufacturing facility Parcel	Greenfield development site. In the process of due diligence to purchase, annexation, zoning, incentives negotiations, and entitlement	This is a Greenfield Land Site currently listed for Sale and Development. We have engaged a development partner, Van Trust to investigate the development potential of this site on Simpson's behalf with the ultimate goal of receiving a formal proposal on the site for a new facility.	This is the former Westland Mall location which is now slated for redevelopment.  Trident is currently in contract to purchase this site from the current owners.	
INFORMATION	PROPOSED BUILDING SIZE (SQ. FT.)	Simpson could construct a 200,000 Sq. Ft. addition	622,500 Sq. Ft.	570,000 Sq. Ft.	500,000 Sq. Ft.	
	EXPANSION CAPABILITY	TBD. A 200,000 Sq. Ft. Expansion appears to be feasible subject to proper due diligence of the site.	This Building will not have expansion capabilities due to the site constraints	Expandable by 313,500 Sq. Ft.	Expandable by + 300,000 Sq. Ft.	
	LARGEST SIZE ACHIEVABLE (SQ. FT.)	TBD	622,500 Sq. Ft. (we recommend maximizing the initial footprint)	883,500 Sq. Ft.	+/- 800,000	
	SITE SIZE WITHOUT EXPANSION (ACRES)	40 Acres	+/- 27 Acres	70 Acres	+/- 50 Acres	
	SITE SIZE WITH EXPANSION (ACRES)	40 Acres	+/- 27 Acres	70 Acres	+/- 50 Acres	
DEAL STRUCTURE	PROPOSED DEAL TYPE	The Land behind the Existing Factory is approximately 40 Acres and includes inactive rail lines. The strategy would be to Purchase the Land Site for expansion of the existing Building. This site will need to be fully vetted as to its suitability for future Industrial development during the Acquisition/Due Diligence phase of the purchase. Items to vet would be wetland impact and environmental contamination issues.  Simpson as owner of the Ground would be able to self perform an expansion of its existing facility. The additional ground could be suitable for vehicle/trailer parking, or could be potentially disposed through sale to other interested neighbors who have not yet been contacted.	The ownership is proposing a merchant build with Simpson purchasing the shell property upon completion	A proposal on this site has not yet been received. The developer Van Trust is currently investigating the Site for Suitability to Develop. Due to its location at the edge of Columbus, infrastructure may be challenging.	A proposal on this site has not yet been received. However, based on previous proposals from this developer, this site could be developed as a merchant building with a closing of the property upon the substantial completion of the base building shell.	
	PROPOSED LEASE PAYMENT START DATE  FIRST YEAR LEASE RATE (\$/SQ. FT. NNN)  FIRST YEAR LEASE PAYMENTS TOTAL NNN	N/A - this would be a Simpson-owned land site for expansion of the existing manufacturing facility.	Not Proposed	Still Researching this site - No Proposal Yet	A lease of the Property is likely not needed.	
	PROPOSED CLOSING DATE TO PURCHASE THE PROPERTY	The Property is Currently in Contract with Xebec for purchase from Norfolk Southern Railroad. The closing is expected to occur in 2021. The property could be acquired in 60 to 90 Days from Contract Execution	Timing to purchase is To Be Determined, TPA is currently acquiring the property. Closing in 2021		The date of the Seller's closing is yet to be determined. Upon closing of the Trident Purchase,	
PURCHASE OF THE PROPERTY	PROPOSED PURCHASE PRICE  PROPOSED PURCHASE PRICE WITH MAX EXPANSION CAPABILITY	The 40 Acre Site would be Acquired for \$275,000 to \$300,000 Per Acre = \$11M to \$12M	\$76.00/Sq. Ft. or \$47,310,000  The 40 Acre Site would be Acquired for \$275,000 to \$300,000 Per Acre = \$11M to \$12M	Still Researching this site - No Proposal Yet		
	PROPOSED PURCHASE PRICE \$/SQ. FT.		\$76.00/Sq. Ft.			
TI INCLUDED IN THE PROPOSED PRICING	TI ALLOWANCE INCLUDED (\$/SQ. FT.)  TI ALLOWANCE INCLUDED (TOTAL)	Not Applicable	Scope of Shell Delivery to be Negotiated	Still Researching this site - No Proposal Yet	Still Researching this site - No Proposal Yet	
SIMPSON'S CONSTRUCTION	PROPOSED SIMPSON CONSTRUCTION START DATE	Upon Simpson's Closing on the Land.	Upon Closing, the building shell will be constructed by TPA to Simpson's specifications	Unknown	Unknown	
SIMPSON'S EXISTING PROPERTY	NOTES REGARDING THE EXISTING PROPERTY: 2600 INTERNATIONAL STREET	This Scenario would allow the continued use of the Existing Facility on International Street	Not proposed		This Developer has expressed an interest in purchasing the Existing Simpson building as a component of this transaction	
	NOTES:	We would anticipate that a 200,000 Sq. Ft. Addition could be accomplished at \$70.00 to \$80.00/Sq. Ft. \$14M to \$16M	Although no TI was Proposed, we would expect to have room to negotiate a greater scope within the offered pricing. This property is currently under contract to purchase by the national developer - TPA Group.	The Site presents challenges to development.	This is a newly available site on the market and the Developer is currently in contract to purchase the site	

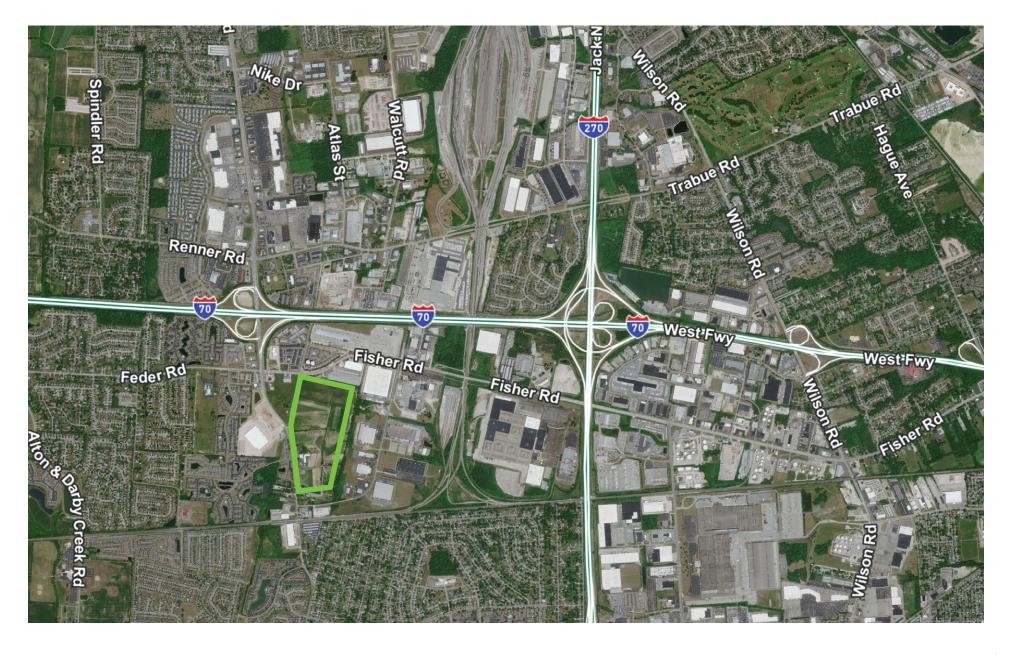
## BUCKEYE YARD RAIL SITE



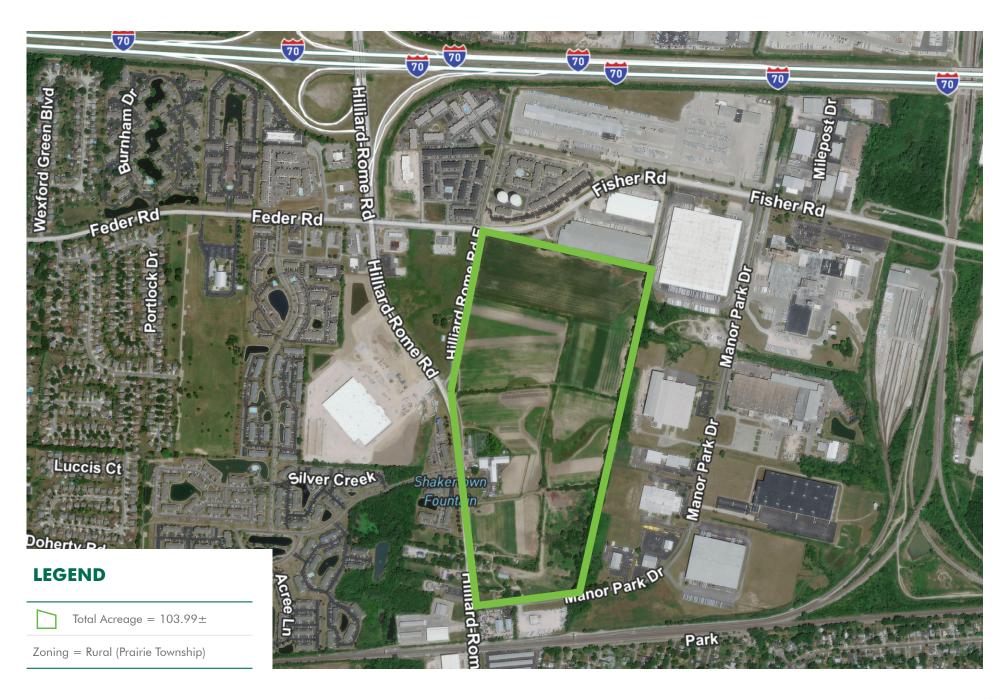
## BUCKEYE YARD RAIL SITE



# 10 HOFFMAN FARM, 800 HILLIARD ROME ROAD



## 10 HOFFMAN FARM, 800 HILLIARD ROME ROAD



## 1 HOFFMAN FARM, 800 HILLIARD ROME ROAD



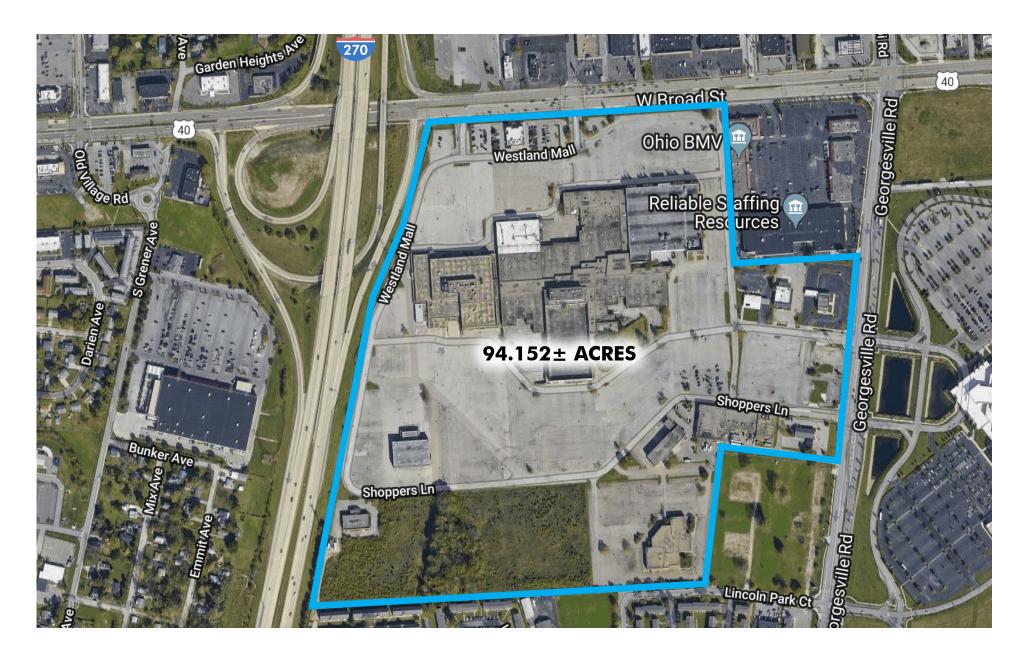
# 3 SELECT SIRES SITE



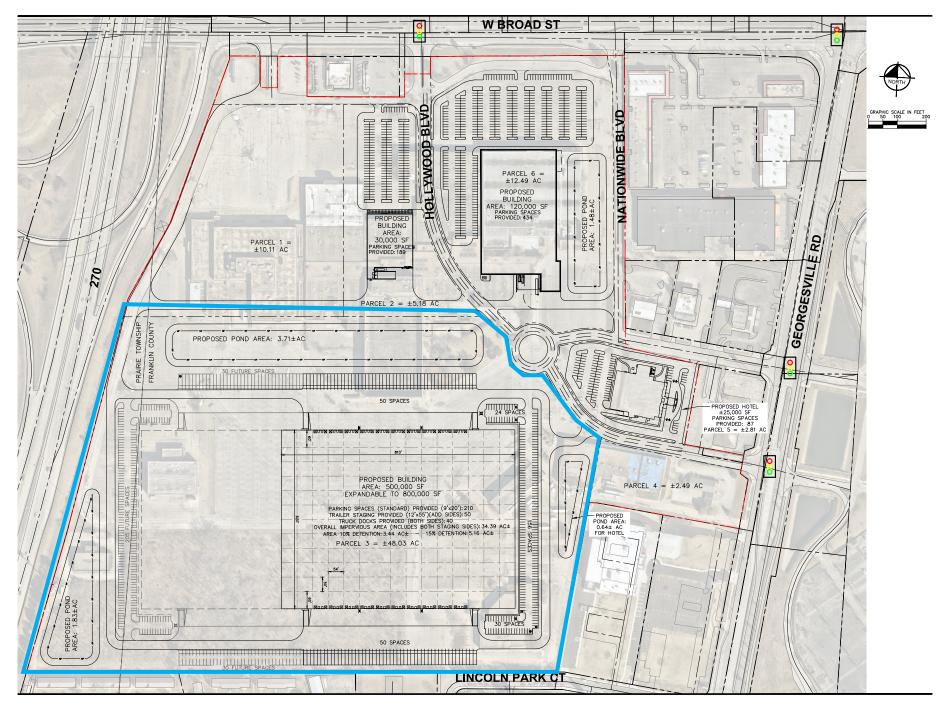
# 3 SELECT SIRES SITE

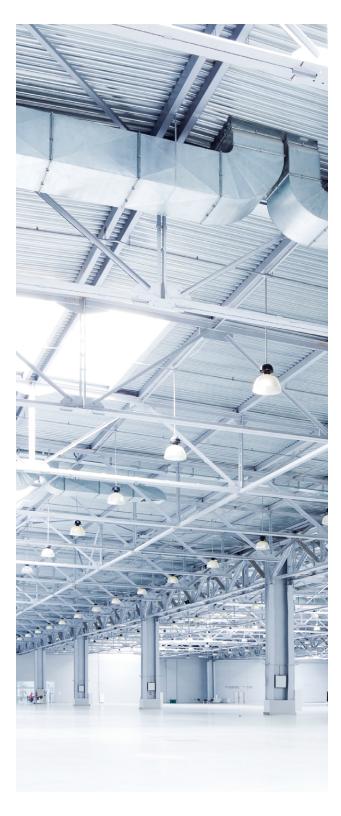


# 4 WESTLAND MALL SITE



## WESTLAND MALL SITE





### PREPARED BY

### RYAN DEANGELIS

Senior Vice President +1 916 492 6975 ryan.deangelis@cbre.com

#### MATTHEW LEHMAN

Vice President +1 614 430 5051 matthew.lehman@cbre.com

### MICHAEL MULLADY

Executive Vice President +1 614 430 5030 michael.mullady@cbre.com

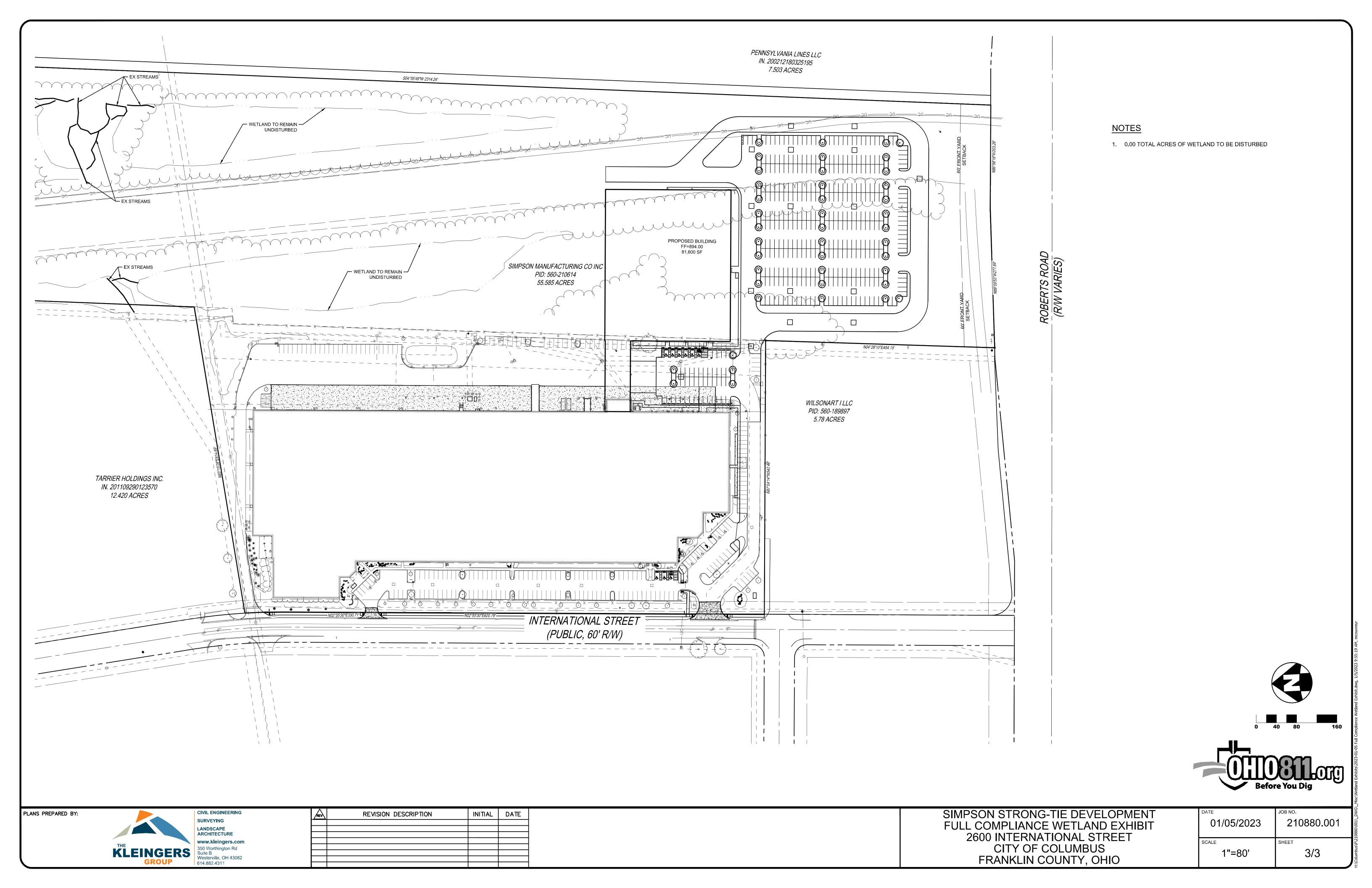
### **WESTON DEVORE**

Vice President +1 614 430 5031 weston.devore@cbre.com

CBRE © 2021 All Rights Reserved. All information included in this letter/proposal pertaining to CBRE, Inc.—including but not limited to its operations, employees, technology and clients—is proprietary and confidential and supplied with the understanding that such information will be held in confidence and not disclosed to any third party without CBRE's prior written consent. This letter/proposal is intended solely as a preliminary expression of general intentions, is for discussion purposes only, and does not create any agreement or obligation by CBRE to negotiate or continue negotiations. CBRE shall have no contractual obligation with respect to the matters referred to herein unless and until a definitive, fully-executed agreement has been delivered by the parties. Prior to delivery of a definitive executed agreement, and without any liability to the other party, either party may (1) propose different terms from those summarized herein, (2) enter into negotiations with other parties and/or (3) unilaterally terminate all negotiations with the other party hereto. Photos herein are the property of their respective owners. Use of these images without the express written consent of the owner is prohibited. CBRE and the CBRE logo are service marks of CBRE, Inc. All other marks displayed on this document are the property of their respective owners, and the use of such logos does not imply any affiliation with or endorsement of CBRE.

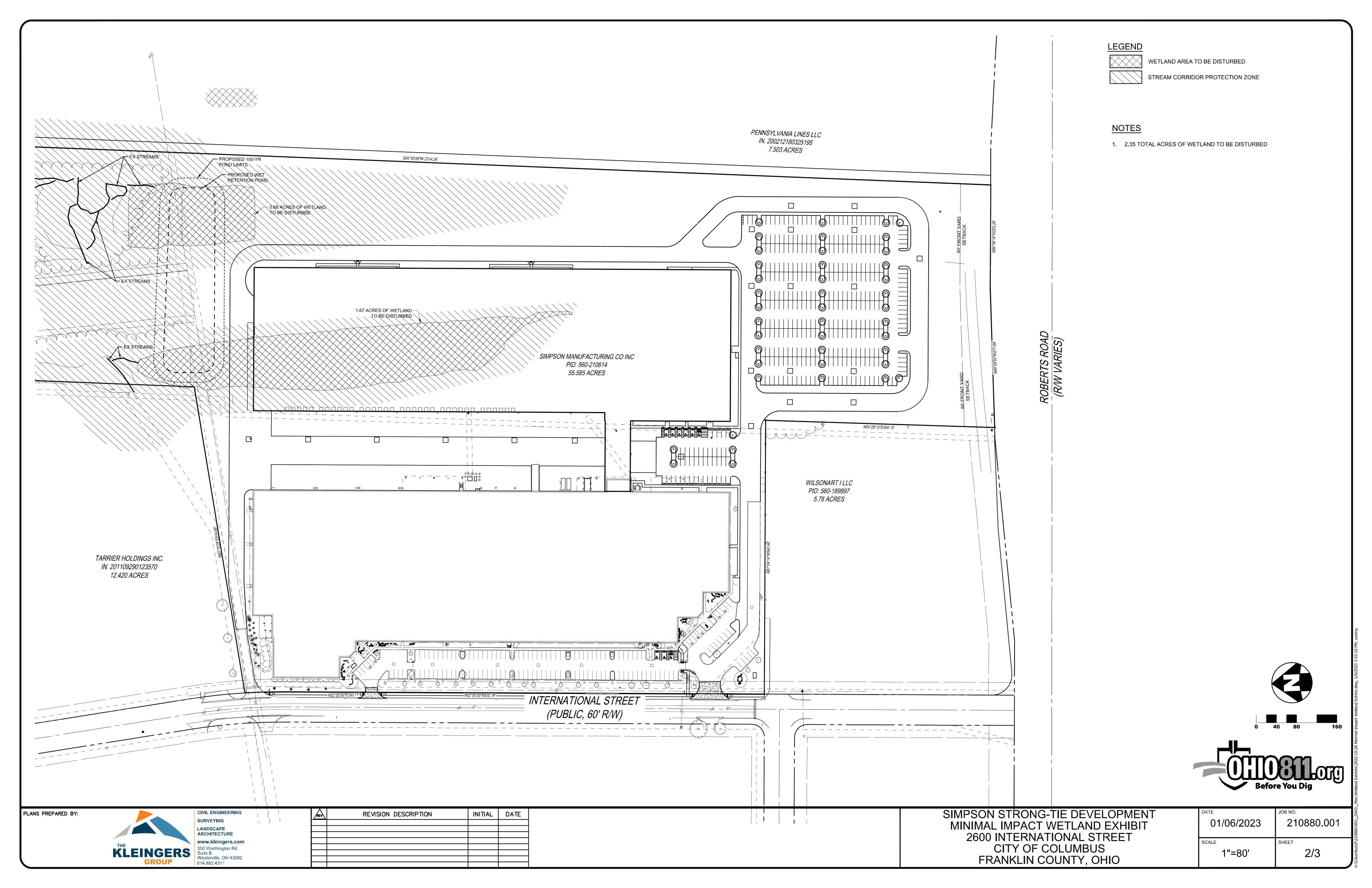
# APPENDIX D

Full Compliance Alternative



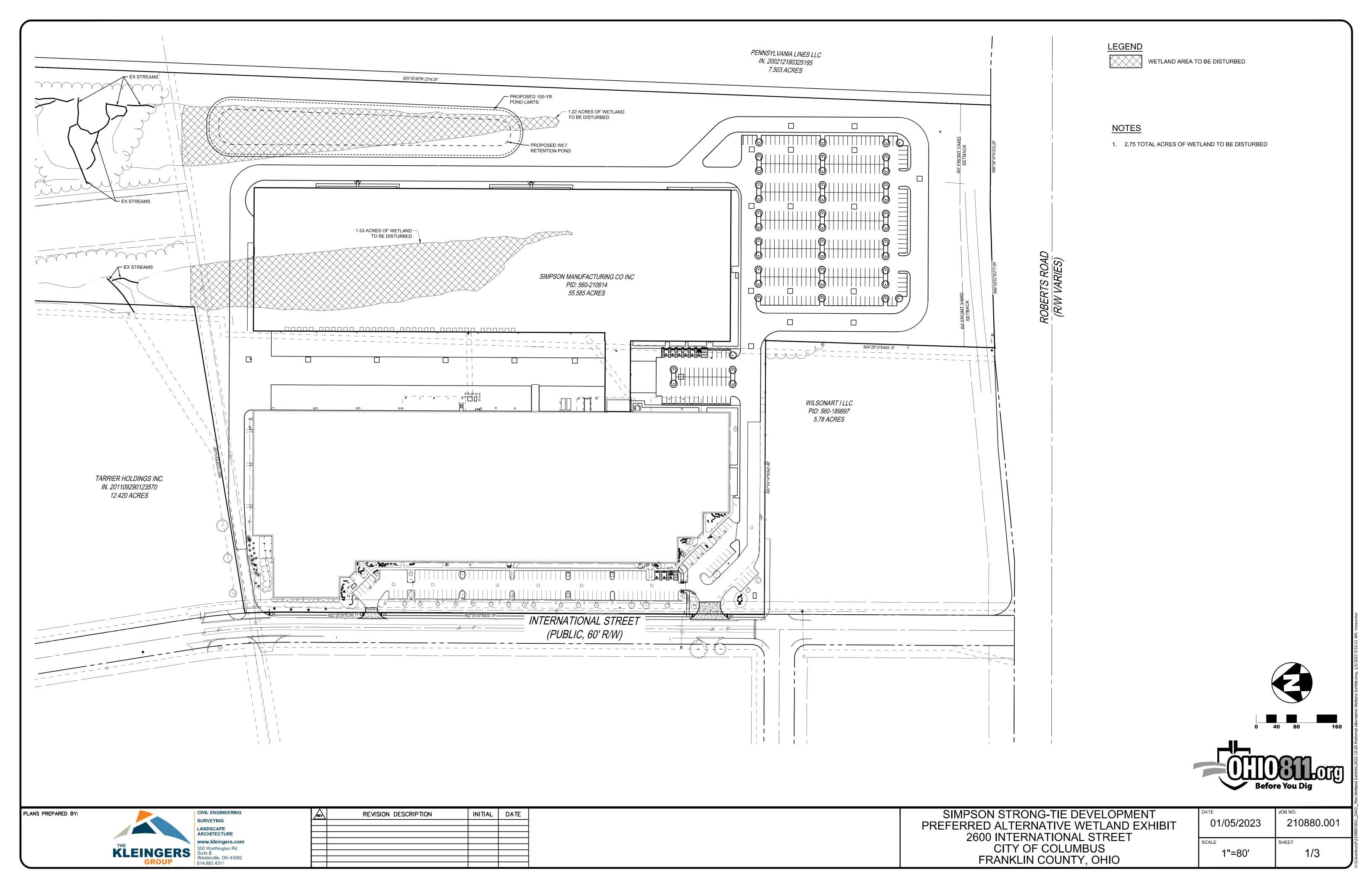
## APPENDIX E

Minimal Impact Alternative



## APPENDIX F

Preferred Alternative



## APPENDIX F

Historic Aerials





