ATTACHMENT B

BURNS McDONNELL

UPPER ARLINGTON NCHP PIPELINE REPLACEMENT PROJECT

# Ecological Field Survey Report

Project Number: 182522

Date: September 22, 2025

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# 1.0 Introduction

Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) was retained by NiSource to provide a wetland delineation and habitat assessment for the Upper Arlington North Columbus High Pressure (NCHP) Pipeline Replacement Project (Project) located in Columbus and Upper Arlington, Franklin County, Ohio (Figure 1, Appendix A). The purpose of the field work was to document conditions and confirm the presence or absence of the environmental features (wetlands, waterbodies, potential habitat for Threatened and Endangered species). The following sections provide information on the proposed Project and summarizes the completed ecological field survey.

The Project consists of the installation of approximately 4.6 miles of 20-inch pipeline replacement, a station design, and five later connections to five district existing stations. Work will begin north of the intersection of Northam Road and Northwest Boulevard. The Project continues north until it reaches the proposed Postlewaite Station along Postlewaite Road. Workspaces will include installation portions of the Project, equipment access, and other laydown/staging areas, as needed. The ecological survey included all Project related activity and potential workspaces encompassing approximately 83 acres (Survey Area).

# 2.0 Methods

The following discussions summarize the methods used for the review of existing data, wetland delineation, and habitat assessment.

## 2.1 Existing Data Review

Burns & McDonnell reviewed available background information for the Project prior to conducting a site visit. This available background information included the 2023 U.S. Geological Survey (USGS) 7.5 minute topographic maps (Northwest Columbus, Ohio quadrangle), U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps, National Agriculture Imagery Program (NAIP) aerial photography (2022), USGS National Hydrography Dataset (NHD), Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NHFL), and U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) 2019 Soil Survey Geographic (SSURGO) digital data for Franklin County, Ohio. Figures 2 and 3 in Appendix A depict this data.

The presence of environmental resources based only on aerial, NWI, and NHD maps or other background information cannot be assumed to be an accurate assessment of the location and extent of jurisdictional resources and species habitat. Identification criteria differ between the USFWS, USGS, and the U.S. Army Corps of Engineers (USACE). As a result, wetlands, streams or other water resources shown on a NWI or NHD map may not be under the jurisdiction of the USACE, and all USACE-jurisdictional resources are not always included on NWI and NHD maps. Furthermore, potential species habitat cannot be identified without conducting a field visit. Therefore, a field visit was conducted to identify any environmental resources that may be present.

## 2.2 Wetland Delineation

A Burns & McDonnell wetland scientist completed a wetland delineation of the Survey Area on May 14 and June 20, 2025. The Survey Area included the areas where proposed Project activities would occur. The delineation was completed in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual (1987 Manual) and the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region – Version 2.0 (Regional Supplement). If wetlands are identified within the Project, sample plots are established at multiple locations and Wetland Determination Data Forms from the Regional Supplement are completed to characterize the wetlands within the Survey Area. Vegetation, soil conditions, and hydrologic indicators are recorded at the sample plots. Locations of identified features were surveyed using a sub-meter-accurate global positioning system (GPS) unit. Photographs were taken onsite and are included in Appendix B (Photographs 1 through 12).

## 2.3 Wetland Evaluation

Each delineated wetland within the Survey Area is assessed and assigned a category using the Ohio Rapid Assessment Method (ORAM) for Wetland Categorization. According to Ohio Administrative Code, Category 1 wetlands have minimal habitat and minimal hydrological and recreational functions. These wetlands do not provide critical habitat for threatened or endangered species. Category 2 wetlands have moderate wildlife habitat or hydrological or recreational functions. Category 2 wetlands are dominated by native vegetation but generally do not contain threatened or endangered species habitat. Category 3 wetlands have superior

habitat or hydrological or recreational functions. These wetlands often provide habitat for threatened or endangered species.

The State of Ohio affords different levels of protection to wetlands based on wetland quality. If wetlands are identified within the Project, the Quantitative Rating pages from the ORAM 10-page form for Wetland Categorization are completed and a preliminary ORAM score for each wetland within the Survey Area is determined.

## 2.4 Stream Evaluation

The Survey Area was inspected for streams and other Water of the United States (WOTUS). Streams are identified by the presence of a defined bed and bank and an ordinary high-water mark (OHWM). An assessment of habitat in flowing waters was performed for streams located within the Survey Area using the Ohio Environmental Protection Agency (Ohio EPA) Qualitative Habitat Evaluation Index (QHEI) or Headwater Habitat Evaluation Index (HHEI). The QHEI Field Sheets are included in Appendix C.

## 2.5 Protected Species

In May and July 2025, the USFWS Information for Planning and Consultation (IPaC) report and the Ohio Department of Natural Resources (ODNR) County lists were researched for federal, and state protected species present within and near the Survey Area. Project initial review request letters were also sent to the USFWS and ODNR in May and July 2025. Two responses were submitted along with project alignment changes. Responses were received from the USFWS and ODNR in May, June and July 2025. Please refer to Appendix D for the official IPaC, county lists, and agency letters/responses.

A desktop and onsite habitat assessment was performed to identify potential habitat of federally and state-listed species within the Survey Area. A general bat habitat survey to identify potential roost habitat trees (i.e. trees larger than 3 inches in diameter breast height (dbh) that also displayed characteristics such as loose bark, hollows, sloughing, and crevasses) within forested habitat of the Survey Area was conducted. The Survey Area was also assessed for the presence of potential habitat that could support other listed species.

# 3.0 Results

The following sections describe the results of the existing data review, completed wetland delineation, and habitat assessment.

## 3.1 Existing Data Review

The existing USGS topographic maps were reviewed to familiarize Burns & McDonnell wetland personnel with the topography and potential locations of wetlands and other waterbodies (Appendix A, Figure 2). The USGS topographic maps indicate the Survey Area is mostly flat with some steeper slopes around the NHD stream lines. USFWS NWI data shows no NWI wetlands within the Survey Area. USGS NHD data depicts six streams crossing the Survey Area. This includes Turkey Run which has one mapped FEMA 100-year floodplain and floodway associated with the stream and is present in the Survey Area (Appendix A, Figure 3). Aerial imagery indicates the Survey Area consists of road right of way, commercial, and residential areas with some maintained grass and a few landscape trees (Appendix A, Figures 3 and 4).

The NRCS SSURGO digital data indicates that portions of nine soil map units are located in the Survey Area (Appendix A, Figure 3). Only one soil map unit (Ko) is a majority hydric at 90 percent hydric. Five of the soil map units (CfB, CrB, CsA, CsB, MkB) are a low five percent hydric. Soil map units identified within the Survey Area are listed below:

- CfB: Celina-Urban land complex, 2 to 6 percent slopes, 5% hydric
- CrB: Crosby silt loam, Southern Ohio Till Plain, 2 to 6 percent slopes, 5% hydric
- CsA: Crosby-Urban land complex, 0 to 2 percent slopes, 5% hydric
- CsB: Crosby-Urban land complex, 2 to 6 percent slopes, 5% hydric
- HeE2: Hennepin and Miamian loams, 18 to 25 percent slopes, eroded, non-hydric
- Ko: Kokomo silty clay loam, 0 to 2 percent slopes, 90% hydric
- MkB: Miamian silt loam, 2 to 6 percent slopes, 5% hydric
- M1D2: Miamian silty clay loam, 12 to 18 percent slopes, eroded, non-hydric
- MnC: Miamian-Urban land complex, 6 to 12 percent slopes, non-hydric

## 3.2 Field Survey

On May 14 and June 20, 2025, a Burns & McDonnell wetland scientist and GIS specialist conducted a wetland delineation and protected species habitat assessment of the Survey Area and recorded the location and extent of features identified within the Survey Area. Upland habitat within the Survey Area consists primarily of maintained roadside within residential urban areas. Typical vegetation within this upland maintained habitat consists of Kentucky bluegrass (*Poa pratensis*).

## 3.3 Delineated Areas

No wetlands and two streams were identified within the Survey Area during the delineation effort. The location of identified resources is shown in appendix A (Figure 4). The USACE's antecedent precipitation tool (APT) was used to determine if rainfall was within a normal range preceding and during the delineation (Appendix E). The APT indicated that the area was experiencing a drought regarding long term conditions but

was still categorized as having wetter than normal conditions at the time of both 2025 investigations. The 30-day rolling rainfall total was slightly above the 30-year normal range for rainfall on May 14 and within normal range on June 20, 2025.

### 3.3.1 Streams

Table 1 provides the size and type of each stream delineated within the Survey Area.

**Table 1: Streams Delineated Within the Survey Area**

| Stream ID/Name | Stream Type[a] | Length Within Survey Area (Feet) | Width (Feet) | QHEI Score |
|---|---|---|---|---|
| S01 / Turkey Run | Perennial-RPW | 17 | 12 | 53 |
| S02 | Perennial-RPW | 299 | 16 | 54 |

a - RPW = Relatively Permanent Water = tributaries that have flowing or standing water year-round or continuously during certain times of year.

Stream (S)01 or Turkey Run is a relatively permanent perennial stream (Appendix B, Photographs 1 and 2). A total of 17 feet of S01 was delineated within the Survey Area. S01 was approximately 12.0 feet wide, had a bank height of 5.0 feet, and a depth to OHWM of 1.5 feet. It achieved a QHEI score of 53. Using professional judgement, S01 or Turkey Run flows offsite to the east into the Olentangy River and should be considered jurisdictional and a WOTUS.

S02 is a relatively permanent unnamed perennial stream (Appendix B, Photographs 3 and 4). A total of 299 feet of S02 was delineated within the Survey Area. S01 was approximately 16.0 feet wide, had a bank height of 3.5 feet, and a depth to OHWM of 1.5 feet. It achieved a QHEI score of 54. Using professional judgement, flows offsite to the east into the Olentangy River and should be considered jurisdictional and a WOTUS.

### 3.3.2 Additional Features

One wetland (W01) and one stream (S03) were delineated offsite and outside of the Survey Area. These features were documented in Appendix A (Figure 4) and photographs are shown in Appendix B (Photos 5-7). They are located adjacent to the Advent Lutheran Church east of Kenny Road. These features are outside of the Survey Area and will not be impacted by the Project. Due to being outside the scope of this Project sample plots or assessments of these features were not completed. The locations were documented to show their proximity to the Project to help with the design process.

Two drainage features identified as ditch D01 and D02 were observed within the Survey Area. These features were documented in Appendix A (Figure 4) and photographs are shown in Appendix B (Photos 8-9). D01 is approximately 29 feet within the Survey Area. D02 is approximately 40 feet within the Survey Area. These ditches drain overland flow from road right of way, adjacent upland areas, and through culverts across the Survey Area. Using professional judgement, these features do not exhibit stream characteristics, do not connect to a WOTUS, and are not considered to be jurisdictional.

## 3.4 Protected Species

The USFWS IPaC report and the ODNR County lists (Appendix D) were researched for federal, and state protected species present within and near the Survey Area. Project initial review request letters were also sent to the USFWS and ODNR in May and July 2025. Responses were received from the USFWS in May and July 2025 and from the ODNR in June and July 2025. A summary of the USFWS and ODNR response is

provided below. State-listed plant species with records 25 years old or greater are not included as part of this discussion as such old species records are assumed to no longer exist. Listed species, and the designation of their listing, are identified in Table 2, below. If available, habitat types for the respective species are also listed in Table 2. No Critical Habitat for the species below was identified during the IPaC search.

No potential roost trees were identified within the forested portions of the Survey Area during the onsite habitat assessment. No trees had characteristics suitable for roosting such as cracks, crevices, and/or exfoliating bark. Although a species-specific survey was not conducted, no bats were observed while on-site. Many landscape trees are present within the road right of way. The USFWS and ODNR responses recommend seasonal tree clearing during the approved timeframe of October 1st through March 31st to avoid adverse effects to the listed bat species. If seasonal tree clearing is not possible, a summer presence/absence survey and further agency coordination may be required. No in-water work is anticipated, and therefore no impacts will occur to listed mussel or fish species according to both the USFWS and ODNR. Also, the USFWS states that due to the Project size, location and type they do not anticipate adverse impacts to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat.

The ODNR review of the Natural Heritage Database revealed data pertaining to valuable conservation features associated with seven species. This includes five state species of concern, one state potentially threatened, and one state endangered species recorded within one mile of the Project area. The state endangered species with records within one mile of the site is the Lark Sparrow (*Chondestes grammacus*). The ODNR Division of Wildlife (DOW) lists the project within the range of the sandhill crane (*Antigone canadensis*), a state threatened species that depends on primarily wetland habitat. Construction should be avoided in this habitat during the species' nesting period of April 1 through August 31. The project is also within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird that nests in native grasslands. Construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. Work within the habitats of these nesting birds is not expected. The ODNR lists the presence of the Little Brown Bat (*Myotis lucifugus*) recorded within the vicinity of the Project, summer tree cutting is not recommended. While additional summer surveys in the area would not constitute species presence/absence, limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW. The entire state of Ohio is within range of the Indiana bat, the northern long-eared bat, and the tri-colored bat. Trees with loose, shaggy bark or crevices, holes, or cavities, along with trees with a diameter-at-breast-height (dbh) of 20 or more should be conserved if possible. The DOW notes the project is within range of several state and federal threatened and endangered mussel species, but states that due to the project location, and that there is no in water work proposed in a perennial stream of sufficient size, the project is not likely to impact these species. The DOW notes the project is within range of several state and federal threatened and endangered fish species. The DOW recommends no in water work in perennial streams from March 15-June 30 to avoid impact to indigenous aquatic species and their habitat. ODNR's DOW also 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.

Burns & McDonnell performed a desktop review for potential hibernacula within the vicinity of the Project. The ODNR Division of Geological Survey Karst and Mine maps of Ohio did not identify any karst features or mines within the Project. No karst features are located near the Project. The closest mine is an active limestone surface mine located approximately 1.5 miles southwest of the Project.

**Table 2: Threatened and Endangered Species with Potential to be Within the Survey Area**

| Species | Status[a] | Habitat Type | Habitat Observed During Site Visit |
|---|---|---|---|
| Mammals | | | |
| Indiana Bat (*Myotis sodalis*) | FE, SE | Winter hibernacula includes caves or abandoned mines. Summer roosting habitat includes wooded areas containing dead or dying trees or living trees that have cracks, crevices, and/or exfoliating bark and a diameter-at-breast-height (dbh) of 5 inches or greater. Tend to forage within forest or along forest edges. | No |
| Northern Long-eared Bat (*Myotis septentrionalis*) | FE, SE | Winter hibernacula includes caves or abandoned mines. Summer roosting habitat includes wooded areas containing dead or dying trees or living trees that have cracks, crevices, and/or exfoliating bark and a diameter-at-breast-height (dbh) of 5 inches or greater. Tend to forage within forest or along forest edges. | No |
| Little Brown Bat (*Myotis lucifugus*) | SE | Winter hibernacula includes caves or abandoned mines. Summer roosting habitat includes wooded areas containing dead or dying trees or living trees that have cracks, crevices, and/or exfoliating bark and a diameter-at-breast-height (dbh) of 5 inches or greater. Tend to forage within forest or along forest edges. | No |
| Tricolored Bat (*Perimyotis subflavus*) | PE, SE | This bat roosts in live and dead leaf clusters. Winter hibernacula includes caves or abandoned mines, culverts, and abandoned water wells. Tend to forage in forests or along forest edges. | No |
| Bird | | | |
| Sandhill Crane (*Antigone canadensis*) | ST | Primarily breeds, migrates, winters, and forages in various wetland habitats. Habitats also include open grasslands such as harvested agriculture fields and marshy meadows. | No |
| Upland Sandpiper (*Bartramia longicauda*) | SE | Grasslands, including grazed and ungrazed pastures, and agricultural fields such as fallow and hay fields. | No |
| American Bittern (*Botaurus lentiginosus*) | SE | Freshwater and brackish marshes and swamps. | No |
| Lark Sparrow (*Chondestes grammacus*) | SE | Open grassy habitats with scattered trees and shrubs including orchards, fallow fields, open woodlands, mesquite grasslands, savanna, sagebrush steppe, and grasslands. | No |
| Least Bittern (*Ixobrychus exilis*) | ST | Freshwater or brackish marshes with tall grasses, cattails, and reeds. Winter in areas saltwater, brackish and freshwater wetlands. | No |
| Barn Owl (*Tyto furcata*) | ST | Open areas, forest edges, clearings, farmland, and cities. Hunting habitats are predominantly open landscapes. | No |
| Fish | | | |
| Lake Chubsucker (*Erimyzon sucetta*) | ST | Natural lakes, sluggish streams, along with marshes with dense aquatic vegetation and clear waters. | No |

| Species | Status[a] | Habitat Type | Habitat Observed During Site Visit |
|---|---|---|---|
| Iowa Darter (*Etheostoma exile*) | SE | Clean, clear, slow-moving waters such as lakes, ponds, and the backwaters of streams and rivers with vegetation. | No |
| Spotted Darter (*Etheostoma maculatum*) | SE | Found in the basin of the Ohio River and inhabits fast-flowing rocky riffles of medium-sized and smaller rivers, where there are many very large boulders or flat slabs of rock. | No |
| Shortnose Gar (*Lepisosteus platostomus*) | SE | Lakes, swamps, and the calm pools and backwaters of creeks and rivers. | No |
| Blacknose Shiner (*Notropis heterolepis*) | SE | Cool weedy creeks, small rivers, and lakes over sand. | No |
| Paddlefish (*Polyodon spathula*) | ST | Slow-moving, large, deep freshwater rivers and reservoirs. | No |
| Reptile | | | |
| Smooth Greensnake (*Opheodrys vernalis*) | SE | Lightly forested habitats, such as peat lands, pastures, bogs, marsh edges, and wet meadows. | No |
| Invertebrate | | | |
| Clubshell (*Pleurobema clava*) | FE, SE | Restricted mainly to headwater stretches of streams and small rivers. Prefers clean, loose sand and gravel. | No |
| Northern Riffleshell (*Epioblasma rangiana*) | FE, SE | Found in a variety of streams with firmly packed sand or gravel. | No |
| Rayed Bean (*Villosa fabalis*) | FE, SE | Smaller, headwater creeks, but it is sometimes found in large rivers and wave-washed areas of glacial lakes. Prefers gravel or sand substrates. | No |
| Salamander Mussel (*Simpsonaias ambigua*) | PE, ST | Requires habitat conditions that support mudpuppy (*Necturus maculosus*) populations, including clean, clear, flowing water, flat rocks and bedrock that provide crevice for shelter | No |
| Slippershell Mussel (*Alasmidonta viridis*) | ST | Headwaters, including intermittent creeks. | No |
| Elephant-ear (*Elliptio crassidens*) | SE | Strictly limited to big rivers, mainly Ohio River, in stable cobble and sand. | No |
| Snuffbox (*Epioblasma triquetra*) | SE | Small- to medium-sized creeks, inhabiting areas with a swift current, although it is also found in Lake Erie and some larger rivers. Adults often burrow deep in sand, gravel, or cobble substrates, except when they are spawning. | No |
| Pocketbook (*Lampsilis ovata*) | SE | Rivers and large creeks in stable sand and coble, although prefers a mix of gravel and sand with some silt or mud. Usually in moderately strong currents but can also exist in still water. | No |
| Washboard (*Megalonaias nervosa*) | SE | Inhabits small to large rivers, usually with slow currents and muddy to coarse gravel substrates. | No |

| Species | Status[a] | Habitat Type | Habitat Observed During Site Visit |
|---|---|---|---|
| Round Hickorynut (*Obovaria subrotunda*) | ST | From large rivers to small streams with moderate flow, along with lakes, with sand, gravel, and cobble substrates. | No |
| Rabbitsfoot (*Theliderma cylindrica*) | SE | Small to medium sized streams and some larger rivers. It occurs in shallow water areas along the bank and in shoals with reduced water velocity. | No |
| Pondhorn (*Uniomerus tetralasmus*) | ST | Quiet or slow-moving, shallow waters. Tolerant of poor water conditions. Sometimes found buried in fine silt and/or mud substrate. | No |
| Insects | | | |
| Monarch Butterfly (*Danaus plexippus*) | PT | Milkweed and flowering plants in a variety of habitats. Adults roost in trees near water, such as maple and conifers in the northern USA, and pecan and oak trees in the southern USA. | No |
| Stygian Shadowdragon (*Neurocordulia yamaskanensis*) | SE | Nymphs are found living in stream beds and utilize the nearby rocks and trees for emergence from exoskeletons before taking flight. | No |
| Plants | | | |
| Gattinger's-foxglove (*Agalinis gattingeri*) | ST | Dry roadsides, open woodlands, forest margins, mesic prairies, exposed ridges, and outcrops | No |
| Spreading Rock Cress (*Arabis patens*) | SE | Moist rocky woods, limestone outcrops, and shady riverbanks. | No |
| Cypress-knee Sedge (*Carex decomposita*) | SE | Very wet depressions in mixed swamp forests, most frequently on hummocks, exposed logs and peaty mounds. Found to be highly associated with buttonbush. | No |
| Showy Goldenrod (*Solidago speciosa*) | ST | Found in dry and sandy grasslands and fields, along with limestone barrens, oak savannas, open woods, and road embankments. | No |

(a) FE = Federally Endangered, FT = Federally Threatened, SE = State Endangered, ST = State Threatened, PE = Proposed Endangered (Federal), PT= Proposed Threatened (Federal).

Source: Ohio DNR State Listed Species by County Report for Franklin County, accessed May 13, 2025; USFWS ECOS Species by County Report for Franklin, Ohio, accessed May 13, 2025.

# 4.0 Summary

Burns & McDonnell conducted a wetland delineation and onsite habitat assessment within the Survey Area to identify protected species habitat, wetlands, and other waterbodies. Two perennial stream and two ditches were identified within the Survey Area. One wetland and one stream were identified just adjacent to and outside of the Survey Area. Additionally known records of the little brown are within the project vicinity and summer tree clearing is not recommended. Futhermore, if in water work is anticipated within perennial streams work may need to be avoided from March 15-June 30.

The USACE – Huntington District and the Ohio EPA regulate impacts to WOTUS and waters of the State (WOS), including wetlands and streams. If temporary or permanent fill will be placed in jurisdictional wetlands or streams that exceed 0.1 acre of impact, a Pre-Construction Notification will need to be submitted to the USACE Huntington District to receive coverage under Nationwide Permit 12 (NWP). General conditions of NWP 12 must be followed even if impacts are temporary or less than 0.1 acre. If impacts to WOS are proposed, then additional state permitting may be required. No suitable habitat that could support listed species was identified within the Survey Area.

On November 15, 2023, the U.S. Environmental Protection Agency and the USACE issued an update to the revised rules relevant for implementing either the 2023 rule or the pre-2015 regulatory regime. Based on this document, the USACE will use the "Relatively Permanent Standard" for determining if a tributary is jurisdictional. Relatively permanent waters (RPW) include tributaries that have flow or standing water year-round or continuously during certain times of year. RPWs do not include tributaries with flow or standing water for only a short duration in direct response to precipitation. "Direct response to precipitation" is intended to distinguish between episodic periods of flow associated with discrete precipitation events versus continuous flow for extended periods of time. With the new guidance, the USACE may no longer use the term "ephemeral streams". However, ephemeral streams are those tributaries that flow for short durations as a direct response to rain events and as such, based on the current guidance, are not RPWs.

On March 12, 2025, new regulation clarified that wetlands must have a direct, continuous surface connection to a larger body of water to qualify for federal protection. This emphasizes that wetlands are only regulated if they abut or touch another regulated waterbody. The new regulation excludes certain wetlands separated by natural barriers or those that only connect during seasonal flooding from being a WOTUS.

A USACE jurisdictional determination is recommended if wetland and stream impacts will occur to verify jurisdictional status and boundaries. If there are proposed impacts to regulated features, a non-notifying/self-certifying memo will be created to document any Project impacts below permitting thresholds and provide guidance on environmental compliance with the Clean Water Act. This package is for internal documentation purposes only and does not include agency submittal or review.

Coordination with USFWS and ODNR has been initiated in May 2025. The USFWS and ODNR responses recommend tree clearing be conducted between October 1st and March 31st to avoid impacts to bats. If tree clearing activities cannot be conducted during this timeframe additional agency coordination may be necessary. Furthermore, if tree clearing activities are required during the summer it is possible that the agencies could request additional surveys. No in water work is proposed and therefore no impacts will occur to listed aquatic species. No work within nesting bird species habitat is proposed and therefore no impacts will occur. If proposed impacts change further coordination may be necessary.

# Appendix A – Figures

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Service Layer Credits: USA Topo Maps: Copyright © 2013 National Geographic Society, i-cubed

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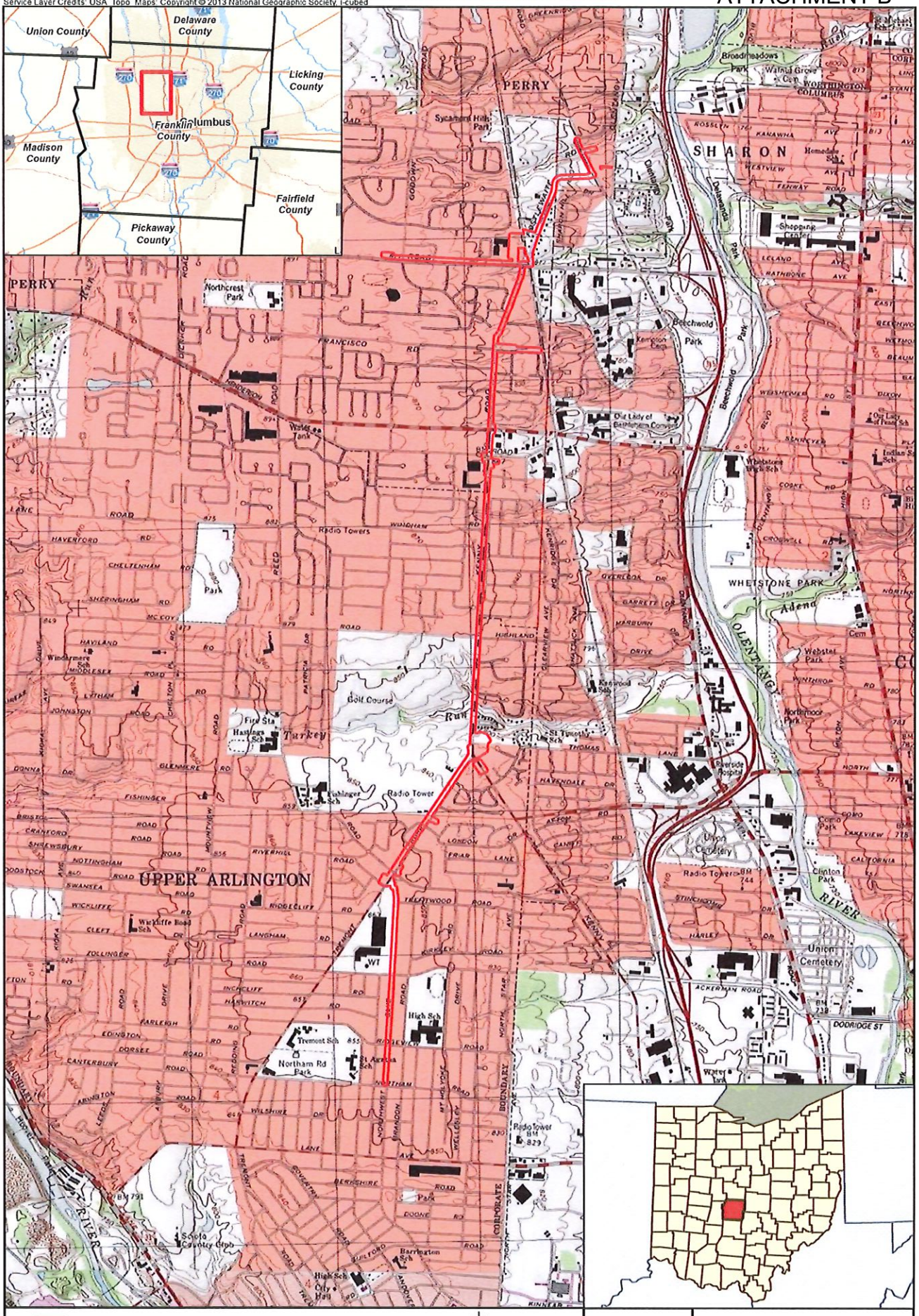


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Figure 1
Vicinity Map
Upper Arlington NCHP Pipeline
Replacement Project
NiSource
Franklin County, OH

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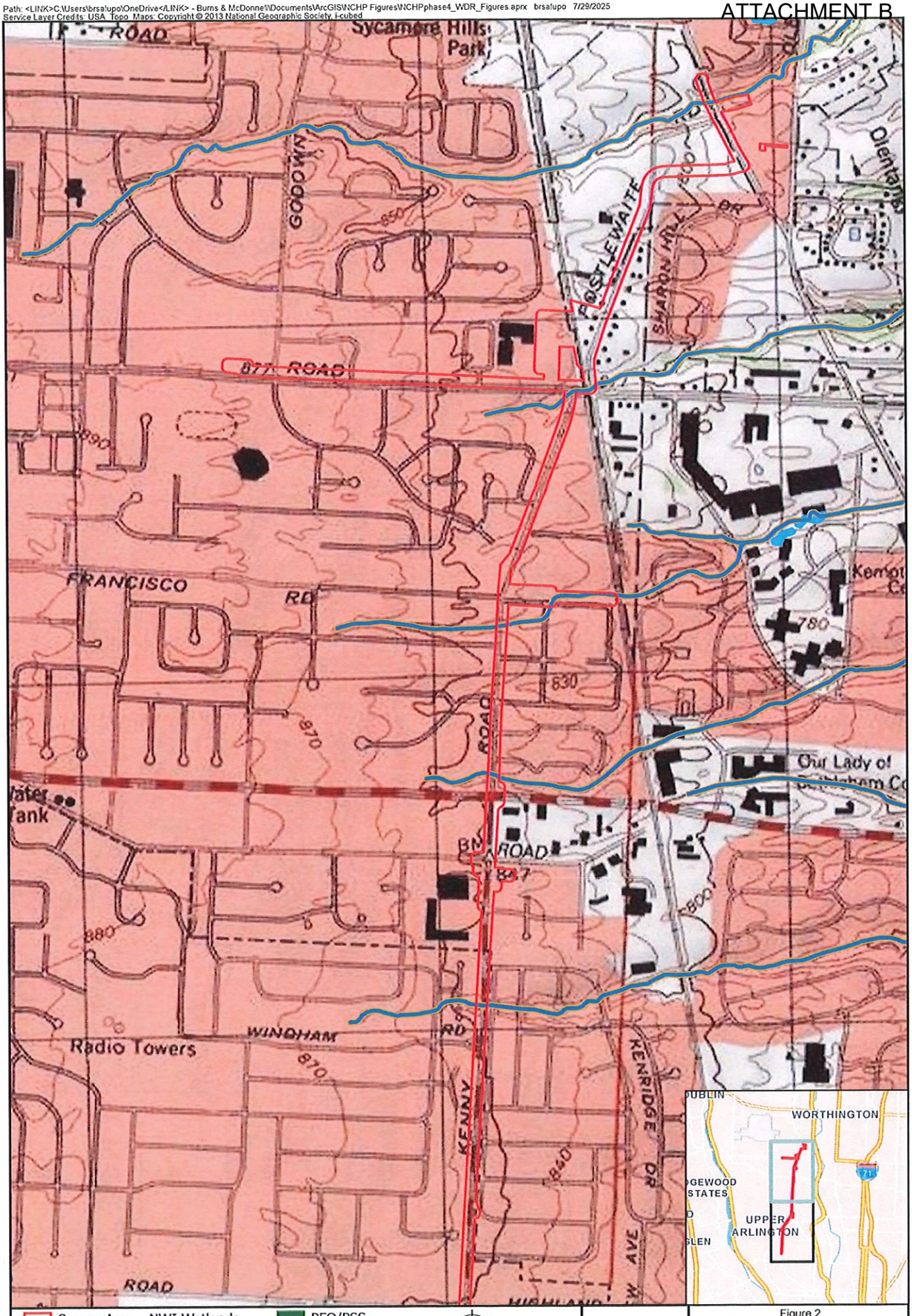


Figure 2
NWI, NHD, and Topographic Map
Upper Arlington NCHP Pipeline Replacement Project
NiSource
Franklin County, OH
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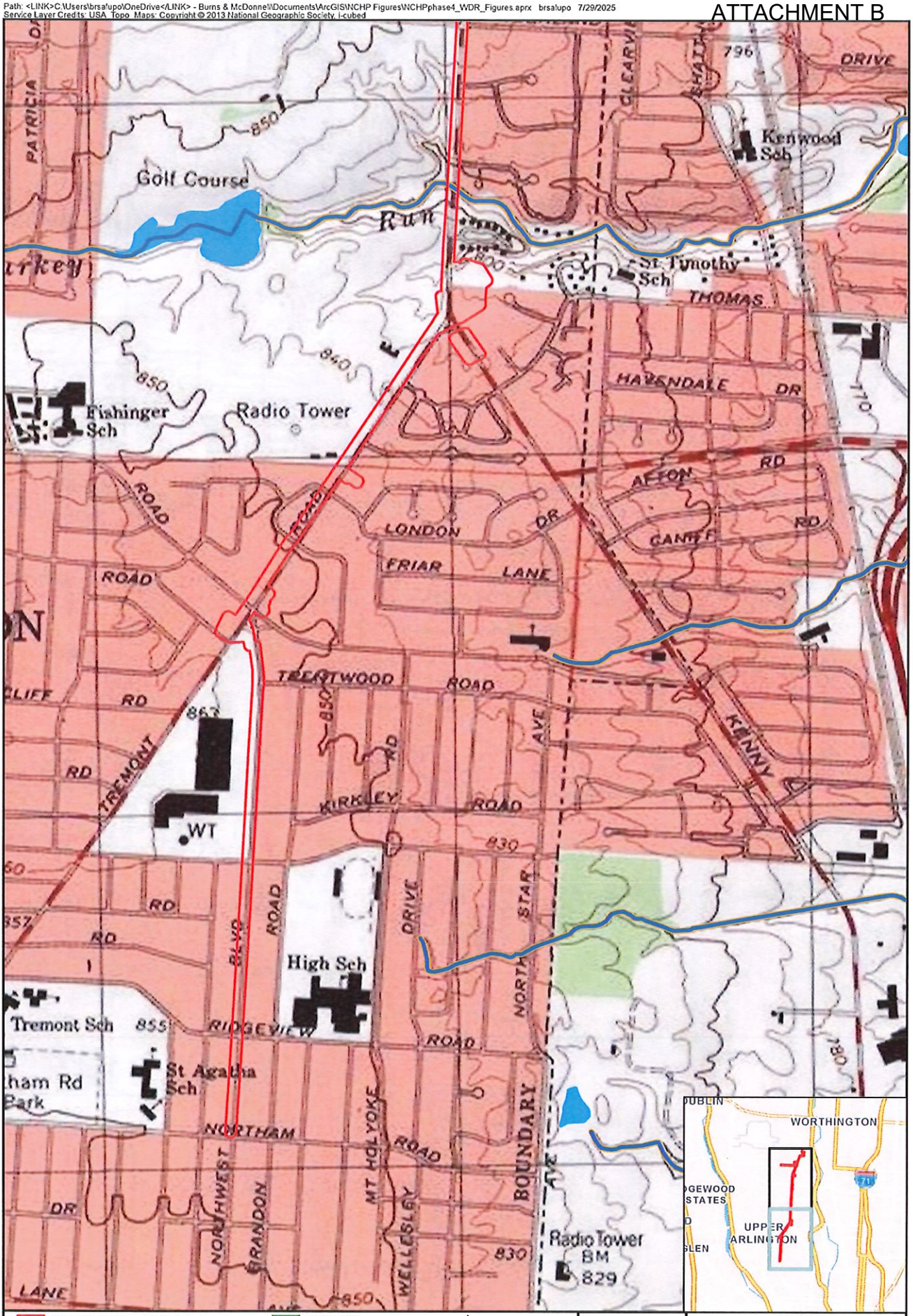


Figure 2
NWI, NHD, and Topographic Map
Upper Arlington NCHP Pipeline
Replacement Project
NiSource
Franklin County, OH
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Service Layer Credits: World Imagery, Maxar, Nearmap

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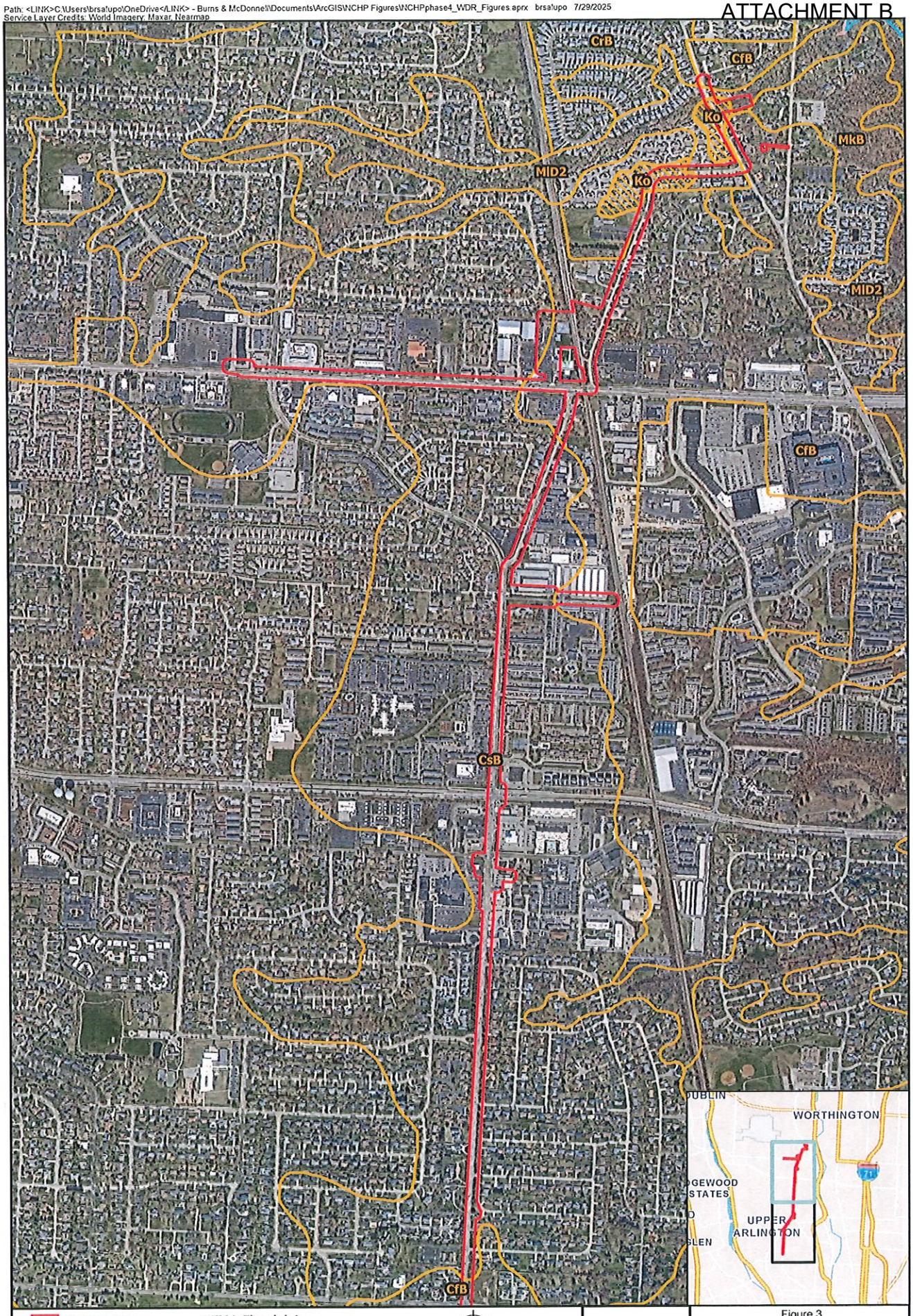


Figure 3
Soils and Floodplain Map
Upper Arlington NCHP Pipeline Replacement Project
NiSource
Franklin County, OH
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Service Layer Credits: World Navigation Map: Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, USFWS

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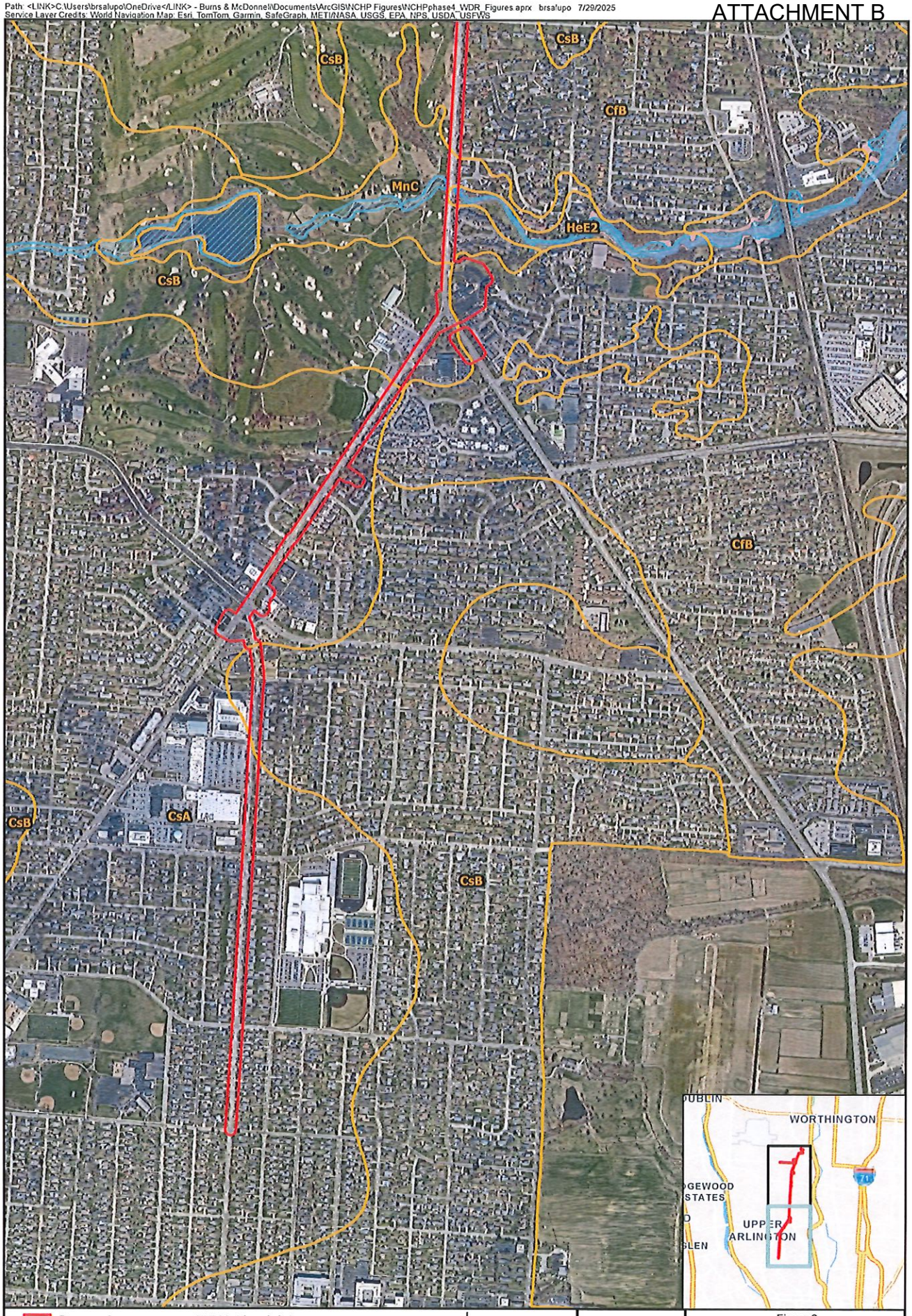
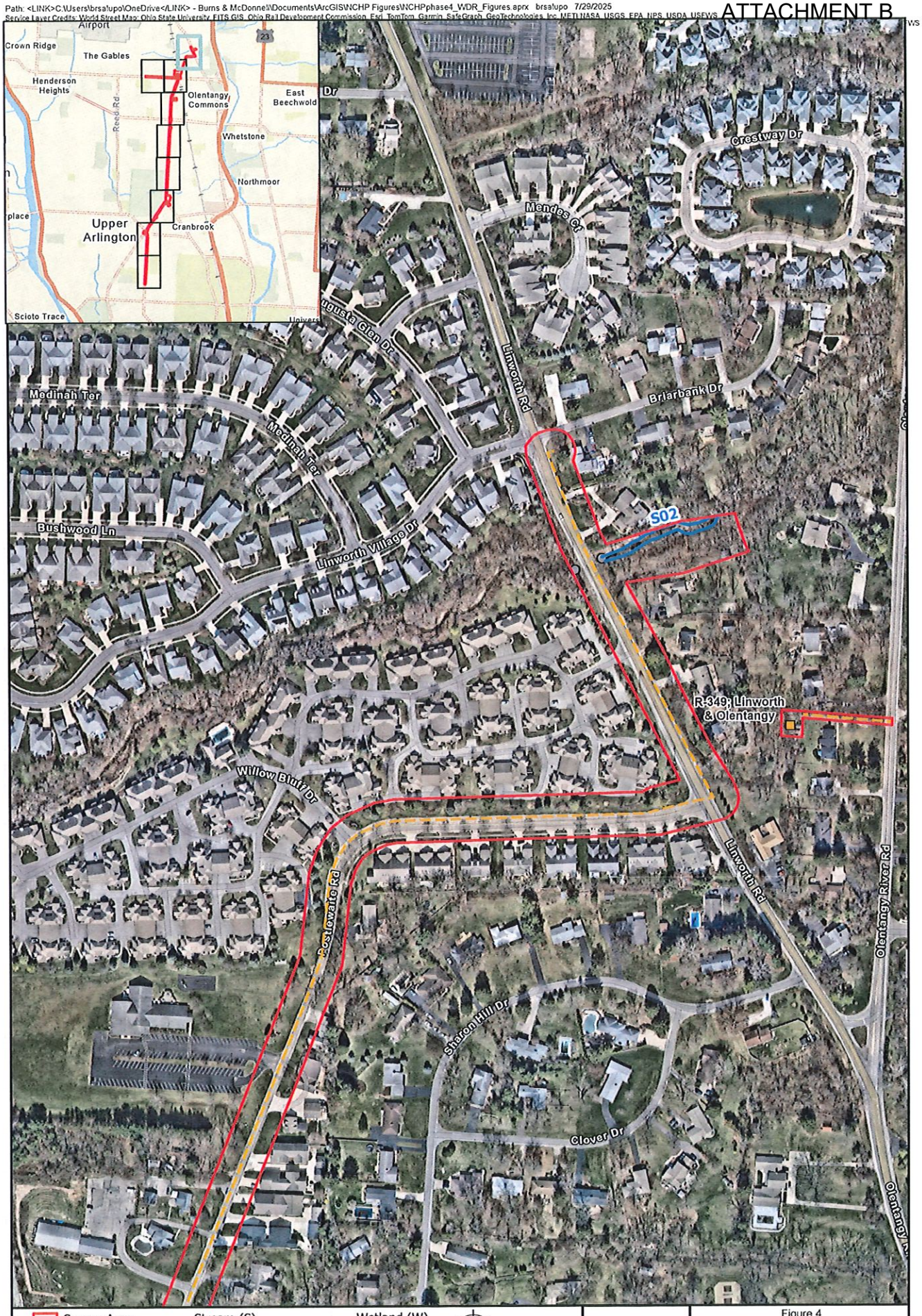



Figure 3
Soils and Floodplain Map
Upper Arlington NCHP Pipeline
Replacement Project
NiSource
Franklin County, OH
Page 2 of 2

Path: <LINK>C:\Users\brsalupo\OneDrive</LINK> - Burns & McDonnell\Documents\ArcGIS\NCHP Figures\NCHPphase4_WDR_Figures.aprx brsalupo 7/29/2025
Service Layer Credits: World Street Map, Ohio State University, FITS GIS, Ohio Rail Development Commission, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS




Survey Area
Proposed Workspaces
Pipeline Laterals
Pipeline Alignment

Stream (S)
Intermittent Stream
Perennial Stream
Culvert

Wetland (W)
PEM
Ditches (D)

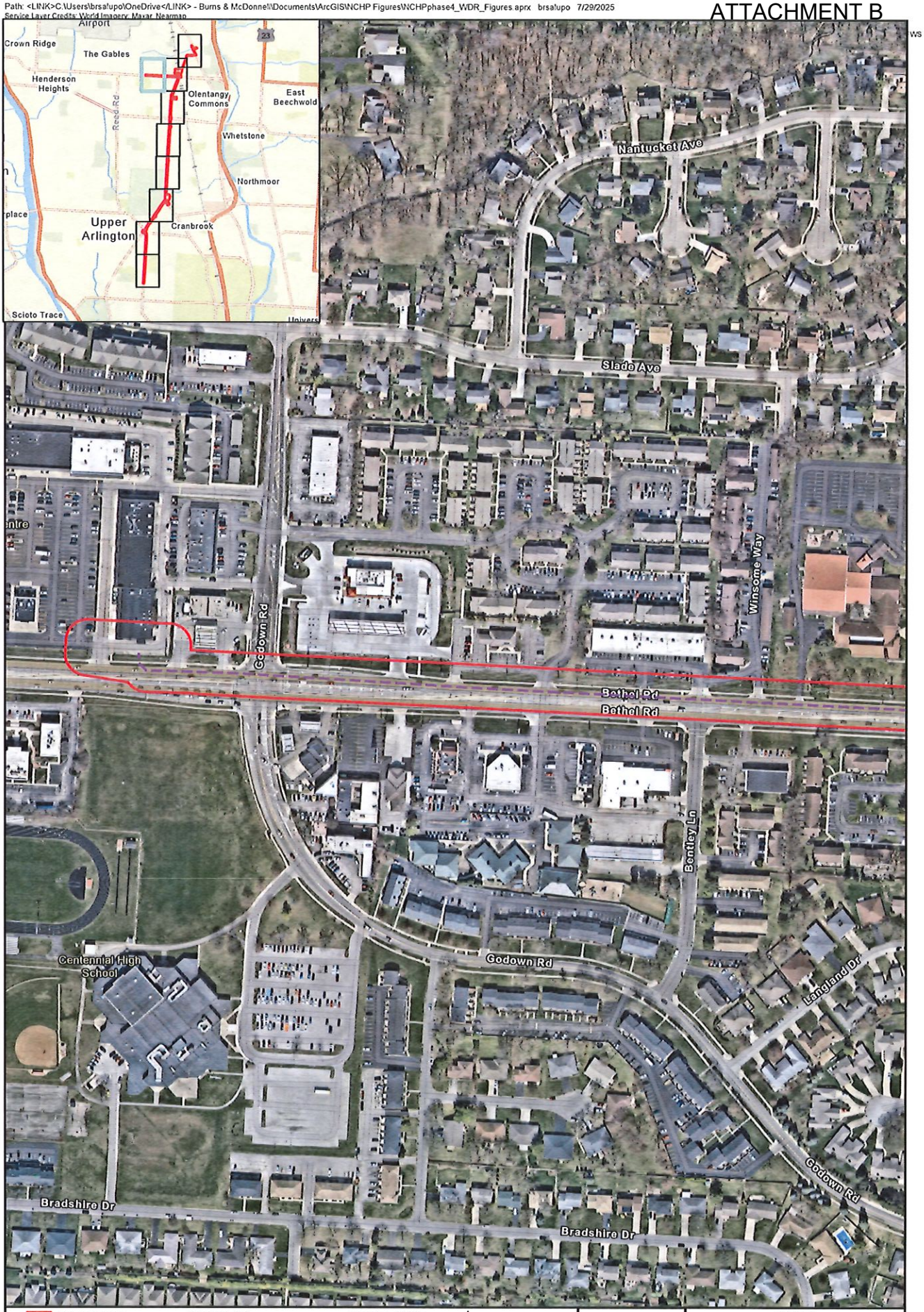
NORTH

200 100 0 200
Scale in Feet

BURNS McDONNELL

Figure 4
Wetland Delineation Map
Upper Arlington NCHP Pipeline Replacement Project
NiSource
Franklin County, OH
Page 1 of 9

ATTACHMENT B




BURNS McDONNELL

Figure 4
Wetland Delineation Map
Upper Arlington NCHP Pipeline Replacement Project
NiSource
Franklin County, OH
Page 2 of 9

Path: <LINK>C:\Users\brsalupo\OneDrive</LINK> - Burns & McDonnell\Documents\ArcGIS\NCHP Figures\NCHPphase4_WDR_Figures.aprx brsalupo 7/29/2025
Service Layer Credits: World Imagery, Maxar, Nearmap

ATTACHMENT B


Survey Area
Proposed Workspaces
Pipeline Laterals
Pipeline Alignment

Stream (S)
Intermittent Stream
Perennial Stream
Culvert

Wetland (W)
PEM
Ditches (D)

NORTH

200 100 0 200
Scale in Feet

BURNS McDONNELL

Figure 4
Wetland Delineation Map
Upper Arlington NCHP Pipeline
Replacement Project
NiSource
Franklin County, OH
Page 3 of 9

Path: <LINK>C:\Users\brsa\upo\OneDrive</LINK> - Burns & McDonnell\\Documents\ArcGIS\NCHP Figures\NCHPphase4_WDR_Figures.aprx brsa\upo 7/29/2025
Service Layer Credits: World Imagery, Maxar, Nearmap

ATTACHMENT B


Survey Area
Proposed Workspaces
Pipeline Laterals
Pipeline Alignment

Stream (S)
Intermittent Stream
Perennial Stream
Culvert

Wetland (W)
PEM
Ditches (D)

NORTH

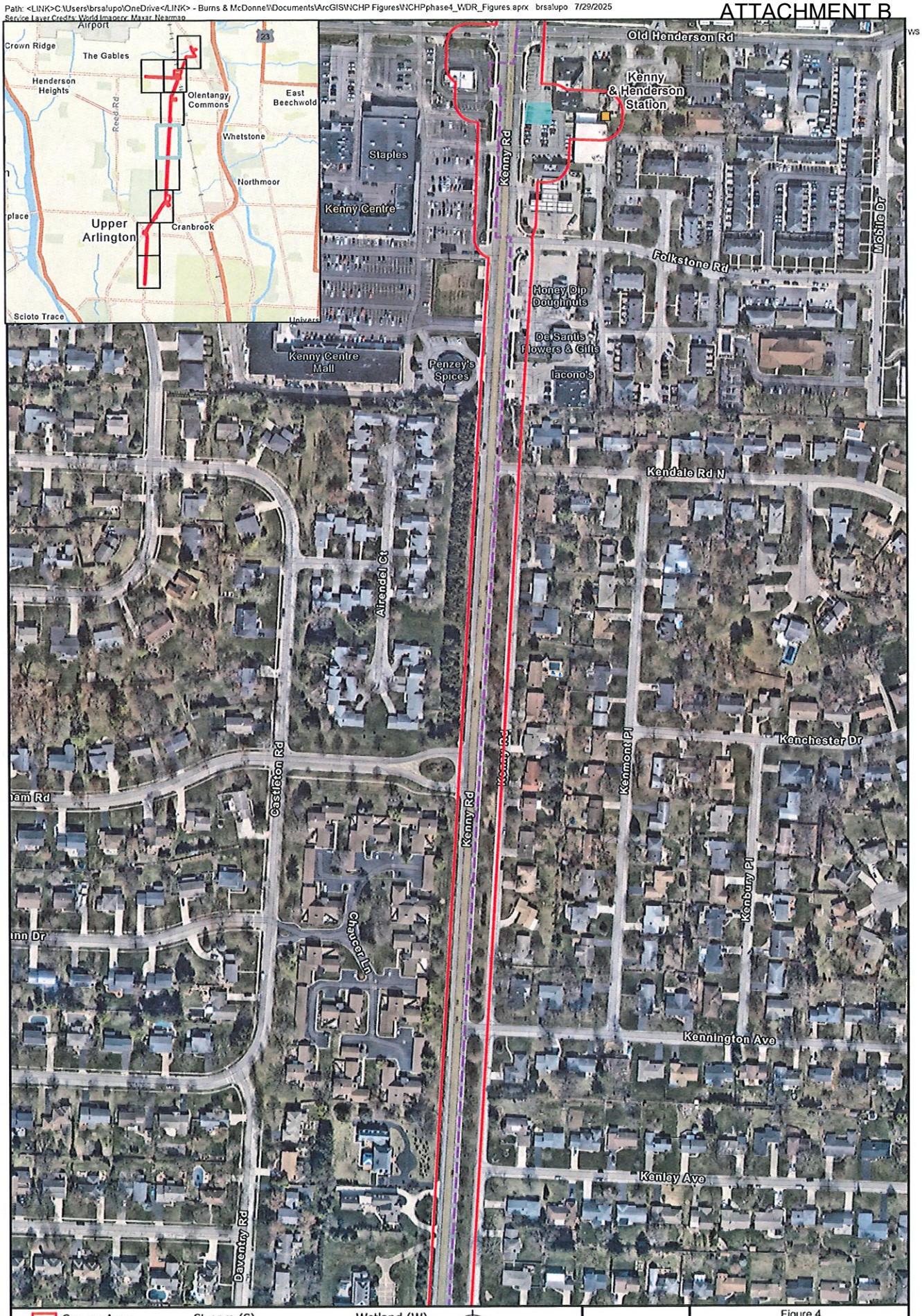
200 100 0 200
Scale in Feet

BURNS McDONNELL

Figure 4
Wetland Delineation Map
Upper Arlington NCHP Pipeline Replacement Project
NiSource
Franklin County, OH
Page 4 of 9

Path: <LINK>C:\Users\brsalupo\OneDrive</LINK> - Burns & McDonnell\Documents\ArcGIS\NCHP Figures\NCHPphase4_WDR_Figures.aprx brsalupo 7/29/2025
Service Layer Credits: World Imagery: Maxar, Nearmap

ATTACHMENT B




Survey Area
Proposed Workspaces
Pipeline Laterals
Pipeline Alignment

Stream (S)
Intermittent Stream
Perennial Stream
Culvert

Wetland (W)
PEM
Ditches (D)

NORTH

200 100 0 200
Scale in Feet

BURNS McDONNELL

Figure 4
Wetland Delineation Map
Upper Arlington NCHP Pipeline
Replacement Project
NiSource
Franklin County, OH
Page 5 of 9

Path: <LINK>C:\Users\brsalupo\OneDrive</LINK> - Burns & McDonnell\Documents\ArcGIS\NCHP Figures\NCHPphase4_WDR_Figures_PG5.aprx brsalupo 6/24/2025
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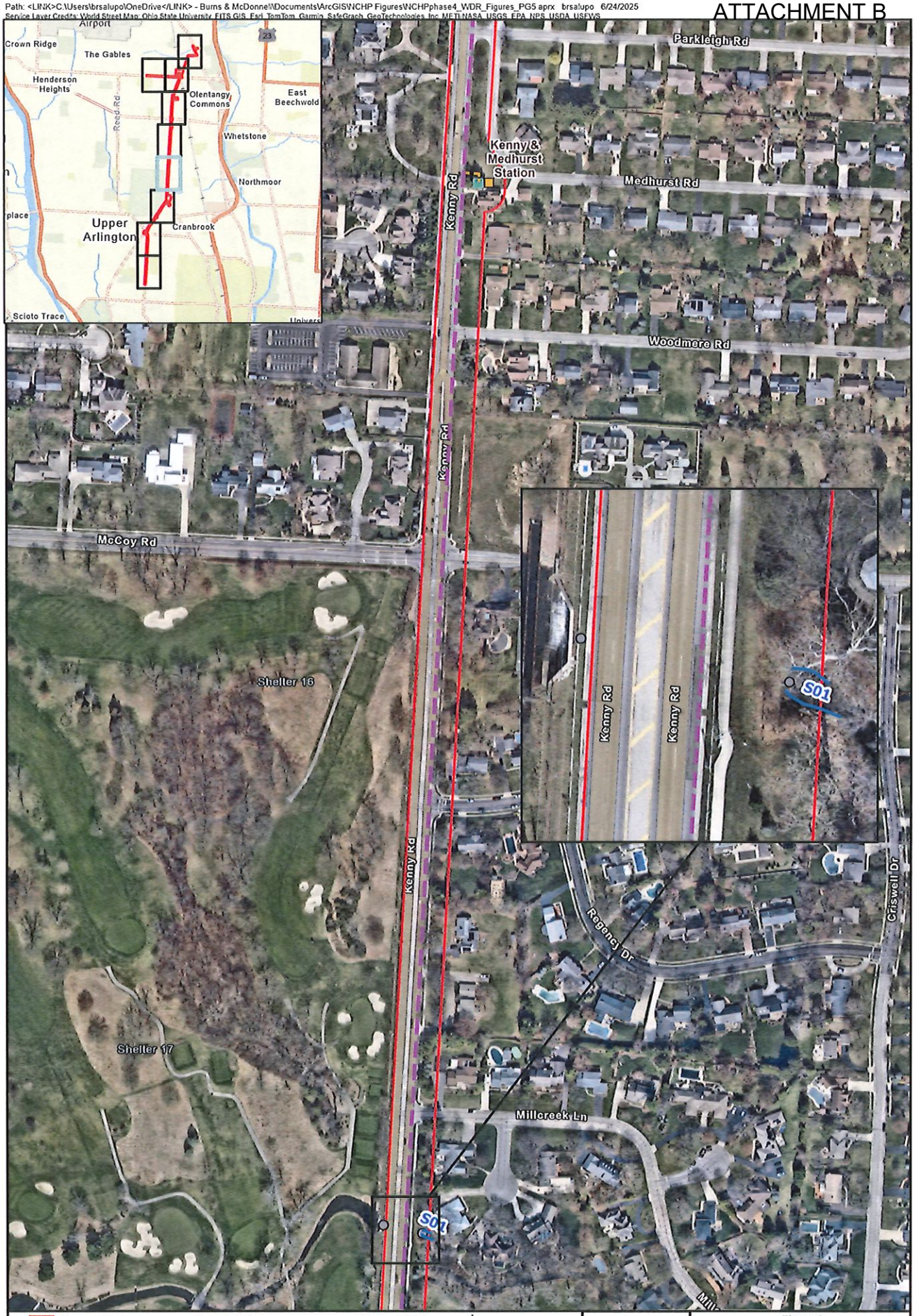


BURNS McDONNELL

Figure 4
Wetland Delineation Map
Upper Arlington NCHP Pipeline
Replacement Project
NiSource
Franklin County, OH
Page 6 of 9

Path: <LINK>C:\Users\brsa\upo\OneDrive</LINK> - Burns & McDonnell\Documents\ArcGIS\NCHP Figures\NCHPphase4_WDR_Figures_PG6.aprx brsa\upo 6/24/2025
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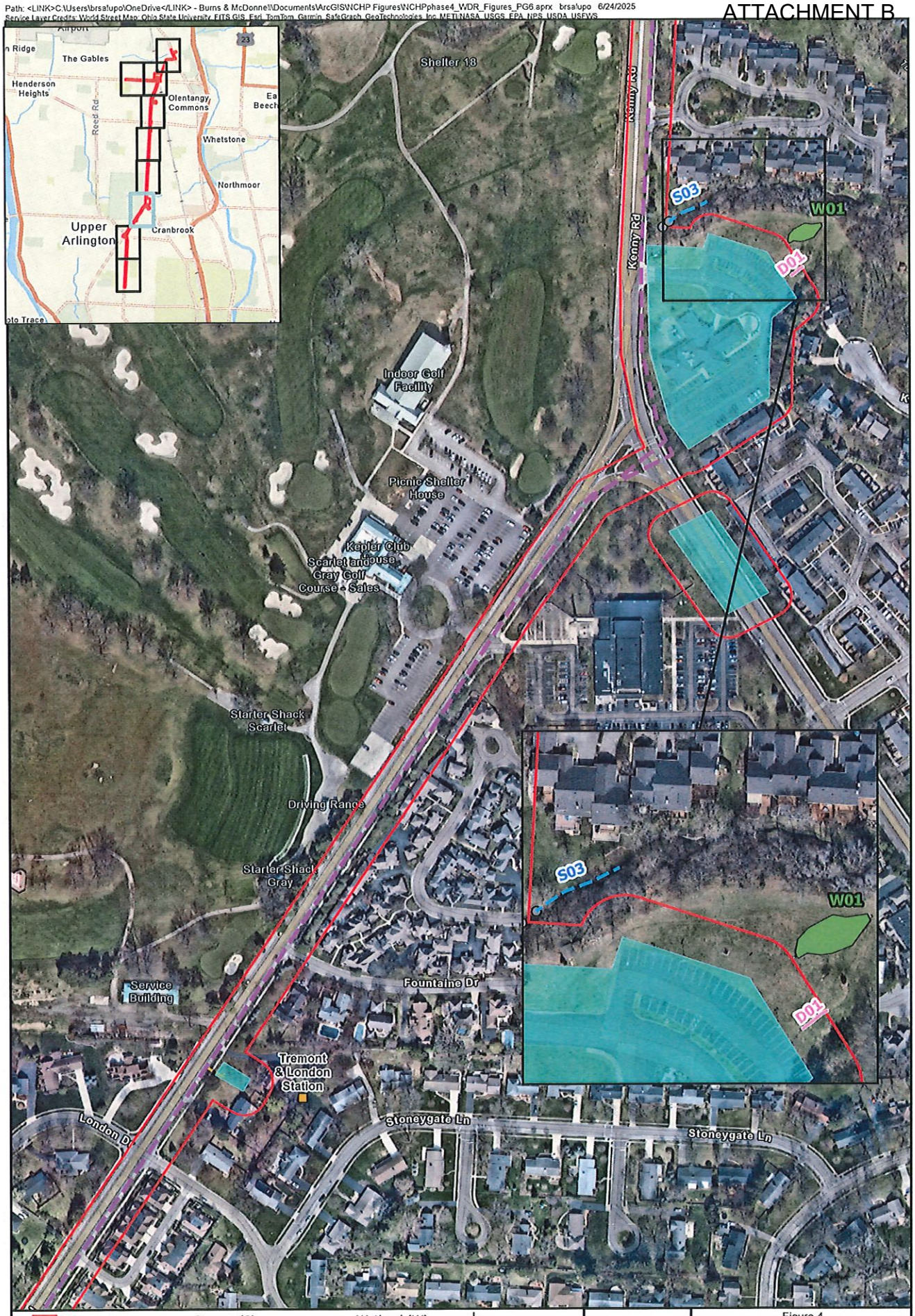



Survey Area
Proposed Workspaces
Pipeline Laterals
Pipeline Alignment

Stream (S)
Intermittent Stream
Perennial Stream
Culvert

Wetland (W)
PEM
Ditches (D)

NORTH

200 100 0 200
Scale in Feet

BURNS McDONNELL

Figure 4
Wetland Delineation Map
Upper Arlington NCHP Pipeline Replacement Project
NiSource
Franklin County, OH
Page 7 of 9

Path: <LINK>C:\Users\brsalupo\OneDrive</LINK> - Burns & McDonnell\Documents\ArcGIS\NCHP Figures\NCHPphase4_WDR_Figures.aprx brsalupo 6/24/2025
Service Layer Credits: World Imagery, Maxar, Nearmap

ATTACHMENT B


Survey Area
Proposed Workspaces
Pipeline Laterals
Pipeline Alignment

Stream (S)
Intermittent Stream
Perennial Stream
Culvert

Wetland (W)
PEM
Ditches (D)

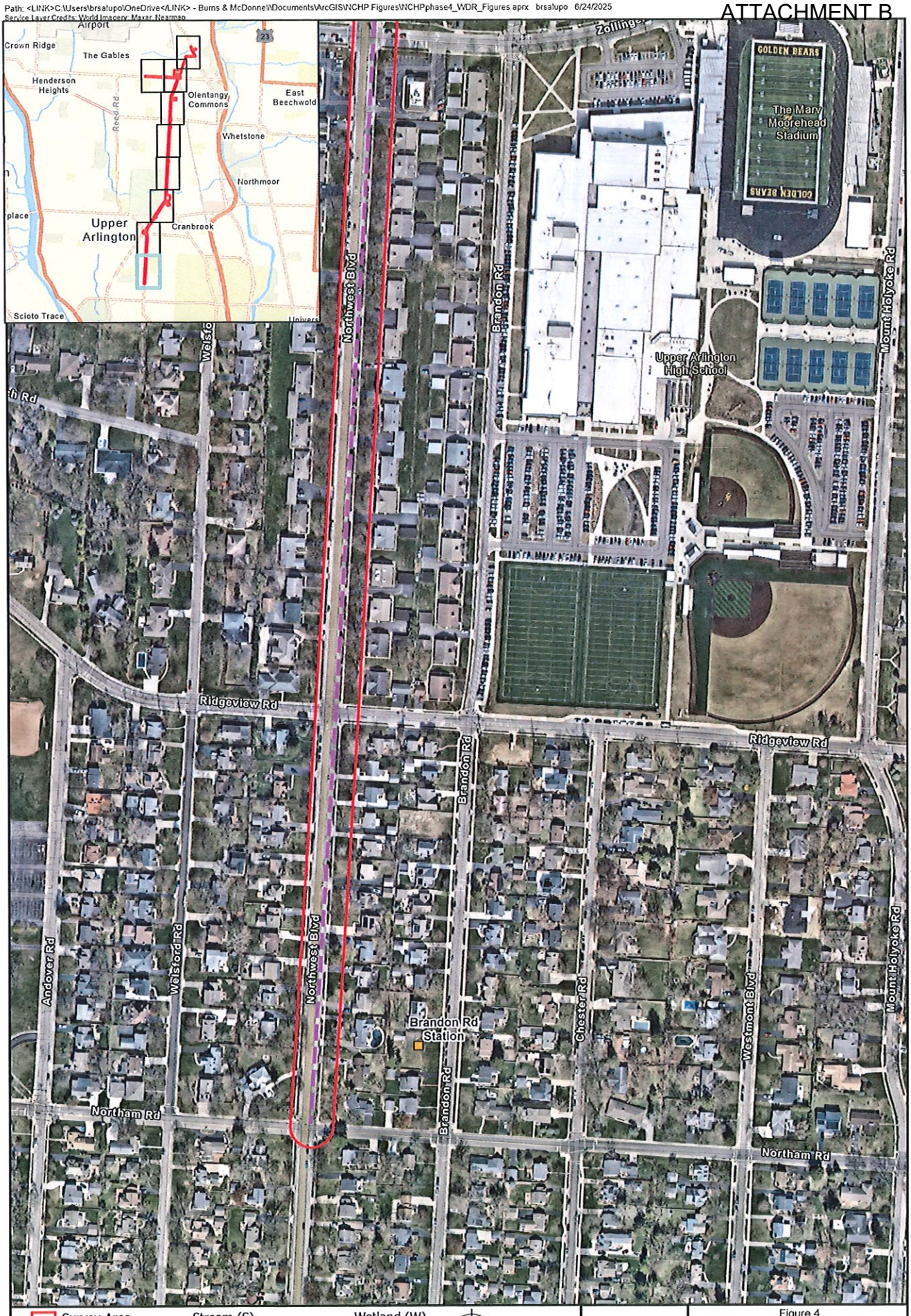
NORTH

200 100 0 200
Scale in Feet

BURNS McDONNELL

Figure 4
Wetland Delineation Map
Upper Arlington NCHP Pipeline Replacement Project
NiSource
Franklin County, OH
Page 8 of 9

Path: <LINK>C:\Users\brsalupo\OneDrive</LINK> - Burns & McDonnell\Documents\ArcGIS\NCHP Figures\NCHPphase4_WDR_Figures.aprx brsalupo 6/24/2025
Service Layer Credits: World Imagery, Maxar, Nearmap




Survey Area
Proposed Workspaces
Pipeline Laterals
Pipeline Alignment

Stream (S)
Intermittent Stream
Perennial Stream
Culvert

Wetland (W)
PEM
Ditches (D)

NORTH

200 100 0 200
Scale in Feet

BURNS McDONNELL

Figure 4
Wetland Delineation Map
Upper Arlington NCHP Pipeline Replacement Project
NiSource
Franklin County, OH
Page 9 of 9

# Appendix B – Photolog

Photo 1: View upstream of Perennial Stream (S)01 Turkey Run, facing northwest.

Photo 2: View downstream of Perennial S01 Turkey Run, facing southwest.

| | | |
|---|---|---|
| NiSource<br>Upper Arlington NCHP Pipeline Replacement Project | BURNS McDONNELL | Site Photographs<br>May 14 and June 20, 2025<br>Franklin County, OH |

Photo 3: View upstream of Perennial S02, facing west.

Photo 4: View downstream of Perennial S02, facing east.

Photo 5: View upstream of Intermittent S03 outside of the Survey Area, facing west.

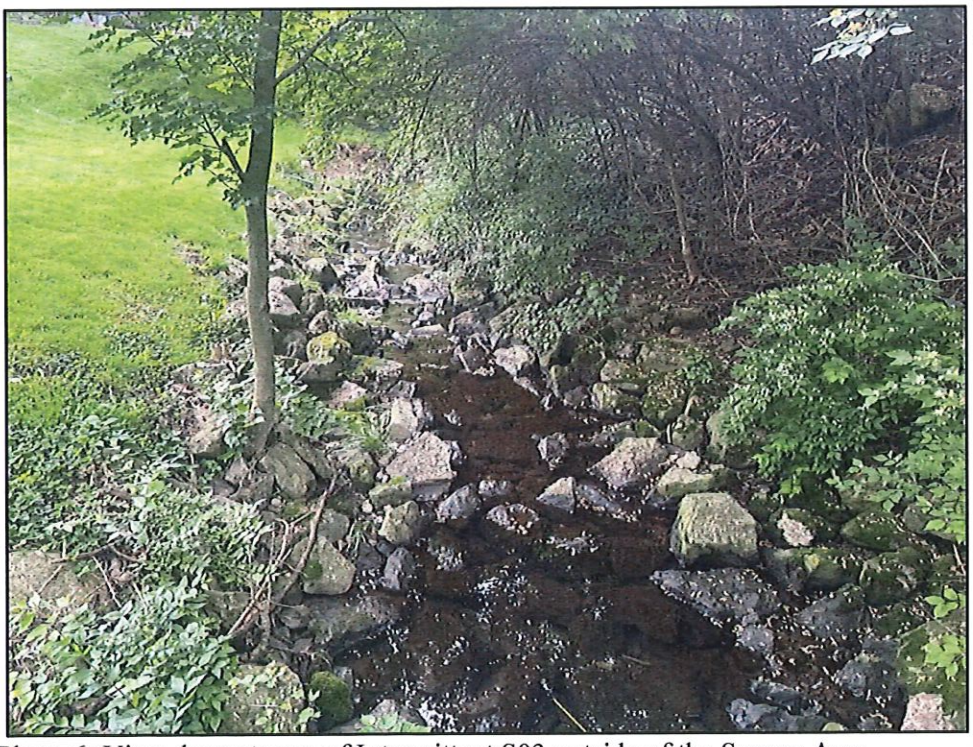


Photo 6: View downstream of Intermittent S03 outside of the Survey Area, facing east.

Photo 7: View of Wetland (W)01 outside of the Survey Area, facing northeast.

Photo 8: View of ditch (D)1, facing southwest.

Photo 9: View of D2, facing east.

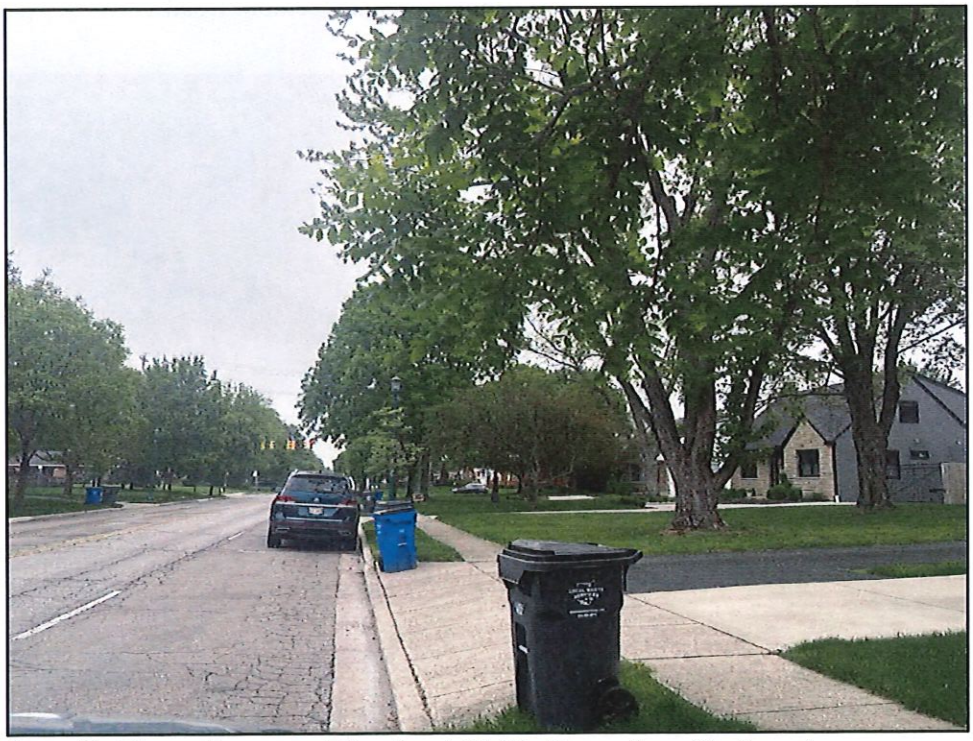


Photo 10: View of representative Road Right of way along Northwest Boulevard, facing north.

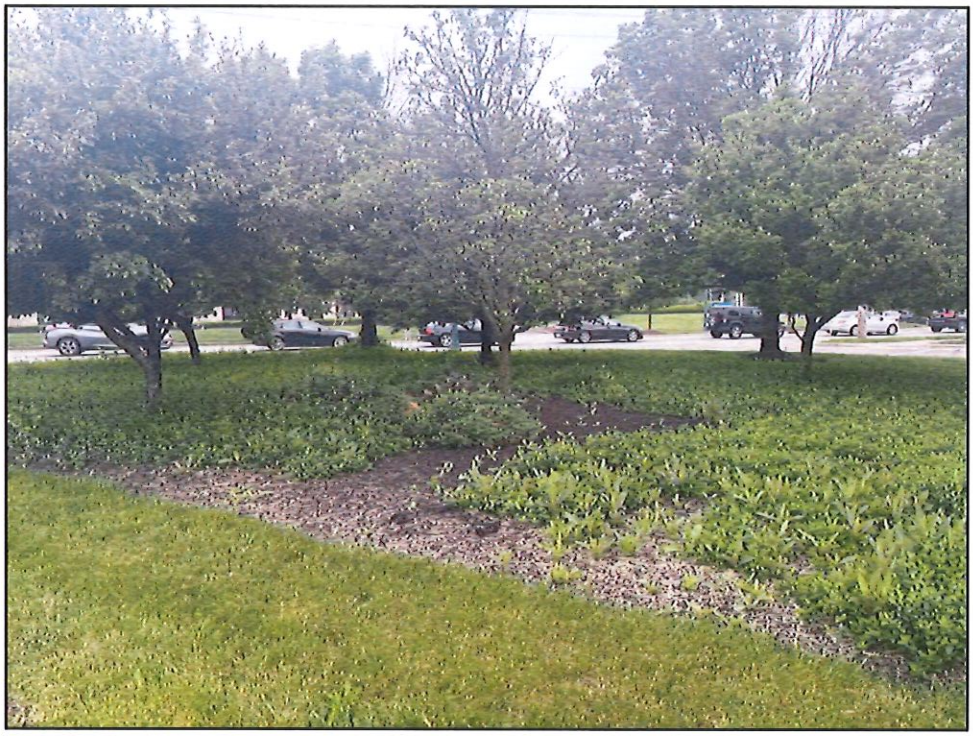


Photo 11: View of representative landscape trees and maintained grass within proposed workspace at the Northwest Boulevard and Tremont Road intersection, facing north.

Photo 12: View of maintained grass area at the proposed Postlewaite Station location, facing west.

Photo 13: View of representative paved area along Kenny Road, facing southwest.

Photo 14: View of representative existing station from Medhurst Road, facing southwest.

# Appendix C – QHEI Forms

ATTACHMENT B

# Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

OhioEPA

**QHEI Score:** 53

**Stream & Location:** Sol / Turkey Run **RM:** ___.__ **Date:** 05/14/06

**Scorers Full Name & Affiliation:** Ben Salupo, BMCD

**River Code:** ___-___-___ **STORET #:** _____ **Lat./Long.:** (NAD 83 - decimal °) __.____ /8_.____ Office verified location ☐

## 1] SUBSTRATE
Check *ONLY* Two substrate *TYPE BOXES*; estimate % or note every type present

| BEST TYPES | POOL | RIFFLE | OTHER TYPES | POOL | RIFFLE |
|---|---|---|---|---|---|
| ☐☐ BLDR /SLABS [10] | ___ | ___ | ☐☐ HARDPAN [4] | ___ | ___ |
| ☐☐ BOULDER [9] | 5 | ___ | ☐☐ DETRITUS [3] | ___ | ___ |
| ☐☒ COBBLE [8] | 25 | ___ | ☐☐ MUCK [2] | ___ | ___ |
| ☒☐ GRAVEL [7] | 35 | ___ | ☐☐ SILT [2] | 5 | ___ |
| ☐☐ SAND [6] | 25 | ___ | ☐☐ ARTIFICIAL [0] | ___ | ___ |
| ☐☐ BEDROCK [5] | ___ | ___ | (Score natural substrates; ignore sludge from point-sources) | | |

NUMBER OF BEST TYPES: ☒ 4 or more [2] ☐ 3 or less [0]

Check ONE (*Or 2 & average*)

**ORIGIN**
- ☐ LIMESTONE [1]
- ☒ TILLS [1]
- ☐ WETLANDS [0]
- ☐ HARDPAN [0]
- ☐ SANDSTONE [0]
- ☐ RIP/RAP [0]
- ☐ LACUSTURINE [0]
- ☐ SHALE [-1]
- ☐ COAL FINES [-2]

**QUALITY**

SILT
- ☐ HEAVY [-2]
- ☐ MODERATE [-1]
- ☒ NORMAL [0]
- ☐ FREE [1]

EMBEDDEDNESS
- ☐ EXTENSIVE [-2]
- ☐ MODERATE [-1]
- ☒ NORMAL [0]
- ☐ NONE [1]

*Comments*

*Substrate* 18 *Maximum 20*

## 2] INSTREAM COVER
Indicate presence 0 to 3: 0-Absent; 1-Very small amounts or if more common of marginal quality; 2-Moderate amounts, but not of highest quality or in small amounts of highest quality; 3-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water, large diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional pools.

- ___ UNDERCUT BANKS [1]
- 1 OVERHANGING VEGETATION [1]
- ___ SHALLOWS (IN SLOW WATER) [1]
- ___ ROOTMATS [1]
- ___ POOLS > 70cm [2]
- ___ ROOTWADS [1]
- 1 BOULDERS [1]
- ___ OXBOWS, BACKWATERS [1]
- ___ AQUATIC MACROPHYTES [1]
- ___ LOGS OR WOODY DEBRIS [1]

**AMOUNT** Check ONE (*Or 2 & average*)
- ☐ EXTENSIVE >75% [11]
- ☐ MODERATE 25-75% [7]
- ☒ SPARSE 5-<25% [3]
- ☐ NEARLY ABSENT <5% [1]

*Comments*

*Cover Maximum 20* 5

## 3] CHANNEL MORPHOLOGY
Check ONE in each category (*Or 2 & average*)

| SINUOSITY | DEVELOPMENT | CHANNELIZATION | STABILITY |
|---|---|---|---|
| ☐ HIGH [4] | ☐ EXCELLENT [7] | ☐ NONE [6] | ☒ HIGH [3] |
| ☐ MODERATE [3] | ☐ GOOD [5] | ☐ RECOVERED [4] | ☐ MODERATE [2] |
| ☒ LOW [2] | ☒ FAIR [3] | ☐ RECOVERING [3] | ☐ LOW [1] |
| ☐ NONE [1] | ☐ POOR [1] | ☒ RECENT OR NO RECOVERY [1] | |

*Comments*

*Channel Maximum 20* 9

## 4] BANK EROSION AND RIPARIAN ZONE
Check ONE in each category for *EACH BANK* (*Or 2 per bank & average*)

River right looking downstream

**EROSION** (L / R)
- ☒ ☒ NONE / LITTLE [3]
- ☐ ☐ MODERATE [2]
- ☐ ☐ HEAVY / SEVERE [1]

**RIPARIAN WIDTH** (L / R)
- ☐ ☐ WIDE > 50m [4]
- ☐ ☐ MODERATE 10-50m [3]
- ☒ ☒ NARROW 5-10m [2]
- ☐ ☐ VERY NARROW < 5m [1]
- ☐ ☐ NONE [0]

**FLOOD PLAIN QUALITY** (L / R)
- ☒ ☐ FOREST, SWAMP [3]
- ☐ ☐ SHRUB OR OLD FIELD [2]
- ☐ ☒ RESIDENTIAL, PARK, NEW FIELD [1]
- ☐ ☐ FENCED PASTURE [1]
- ☐ ☐ OPEN PASTURE, ROWCROP [0]

- ☐ ☐ CONSERVATION TILLAGE [1]
- ☐ ☐ URBAN OR INDUSTRIAL [0]
- ☐ ☐ MINING / CONSTRUCTION [0]

*Indicate predominant land use(s) past 100m riparian.*

*Comments*

*Riparian Maximum 10* 7

## 5] POOL / GLIDE AND RIFFLE / RUN QUALITY

**MAXIMUM DEPTH** Check ONE (*ONLY!*)
- ☐ > 1m [6]
- ☐ 0.7-<1m [4]
- ☒ 0.4-<0.7m [2]
- ☐ 0.2-<0.4m [1]
- ☐ < 0.2m [0]

**CHANNEL WIDTH** Check ONE (*Or 2 & average*)
- ☒ POOL WIDTH > RIFFLE WIDTH [2]
- ☐ POOL WIDTH = RIFFLE WIDTH [1]
- ☐ POOL WIDTH > RIFFLE WIDTH [0]

**CURRENT VELOCITY** Check ALL that apply
- ☐ TORRENTIAL [-1]
- ☐ VERY FAST [1]
- ☐ FAST [1]
- ☒ MODERATE [1]
- ☒ SLOW [1]
- ☐ INTERSTITIAL [-1]
- ☐ INTERMITTENT [-2]
- ☐ EDDIES [1]

*Indicate for reach - pools and riffles.*

**Recreation Potential**
***Primary Contact***
***Secondary Contact***
(circle one and comment on back)

*Comments*

*Pool / Current Maximum 12* 6

**Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species:** Check ONE (*Or 2 & average*). ☐ NO RIFFLE [metric=0]

**RIFFLE DEPTH**
- ☐ BEST AREAS > 10cm [2]
- ☐ BEST AREAS 5-10cm [1]
- ☒ BEST AREAS < 5cm [metric=0]

**RUN DEPTH**
- ☐ MAXIMUM > 50cm [2]
- ☒ MAXIMUM < 50cm [1]

**RIFFLE / RUN SUBSTRATE**
- ☒ STABLE (e.g., Cobble, Boulder) [2]
- ☐ MOD. STABLE (e.g., Large Gravel) [1]
- ☐ UNSTABLE (e.g., Fine Gravel, Sand) [0]

**RIFFLE / RUN EMBEDDEDNESS**
- ☐ NONE [2]
- ☒ LOW [1]
- ☐ MODERATE [0]
- ☐ EXTENSIVE [-1]

*Comments*

*Riffle / Run Maximum 8* 4

## 6] GRADIENT
( 57 ft/mi) ☐ VERY LOW - LOW [2-4] ☐ MODERATE [6-10] ☒ HIGH - VERY HIGH [10-6]

**DRAINAGE AREA** ( 1.76 mi²)

%POOL: 45 %GLIDE: 45 %RUN: 05 %RIFFLE: 05

*Gradient Maximum 10* 4

## A] SAMPLED REACH

Check ALL that apply

**METHOD**

- ☐ BOAT
- ☐ WADE
- ☐ L. LINE
- ☐ OTHER

**DISTANCE**

- ☐ 0.5 Km
- ☐ 0.2 Km
- ☐ 0.15 Km
- ☐ 0.12 Km
- ☐ OTHER

_____ meters

**STAGE**

| 1st -sample pass- | 2nd |
|---|---|
| ☐ HIGH | ☐ |
| ☐ UP | ☐ |
| ☐ NORMAL | ☐ |
| ☐ LOW | ☐ |
| ☐ DRY | ☐ |

**CLARITY**

| 1st --sample pass-- | 2nd |
|---|---|
| ☐ < 20 cm | ☐ |
| ☐ 20-<40 cm | ☐ |
| ☐ 40-70 cm | ☐ |
| ☐ > 70 cm/ CTB | ☐ |
| ☐ SECCHI DEPTH | ☐ |

1st pass _____ cm

2nd _____ cm

**CANOPY**

- ☐ > 85%- OPEN
- ☐ 55%-<85%
- ☐ 30%-<55%
- ☐ 10%-<30%
- ☐ <10%- CLOSED

## C] RECREATION

AREA DEPTH

*POOL:* ☐ >100ft² ☐ >3ft

*Comment RE: Reach consistency/* Is reach typical of steam?, *Recreation/* Observed - Inferred, *Other/* Sampling observations, Concerns, Access directions, etc.

## B] AESTHETICS

- ☐ NUISANCE ALGAE
- ☐ INVASIVE MACROPHYTES
- ☐ EXCESS TURBIDITY
- ☐ DISCOLORATION
- ☐ FOAM / SCUM
- ☐ OIL SHEEN
- ☐ TRASH / LITTER
- ☐ NUISANCE ODOR
- ☐ SLUDGE DEPOSITS
- ☐ CSOs/SSOs/OUTFALLS

## D] MAINTENANCE

Circle some & *COMMENT*

PUBLIC / PRIVATE / BOTH / NA
ACTIVE / HISTORIC / BOTH / NA
YOUNG-SUCCESSION-OLD
SPRAY / SNAG / REMOVED
MODIFIED / DIPPED OUT / NA
LEVEED / ONE SIDED
RELOCATED / CUTOFFS
MOVING-BEDLOAD-STABLE
ARMOURED / SLUMPS
ISLANDS / SCOURED
IMPOUNDED / DESICCATED
FLOOD CONTROL / DRAINAGE

## E] ISSUES

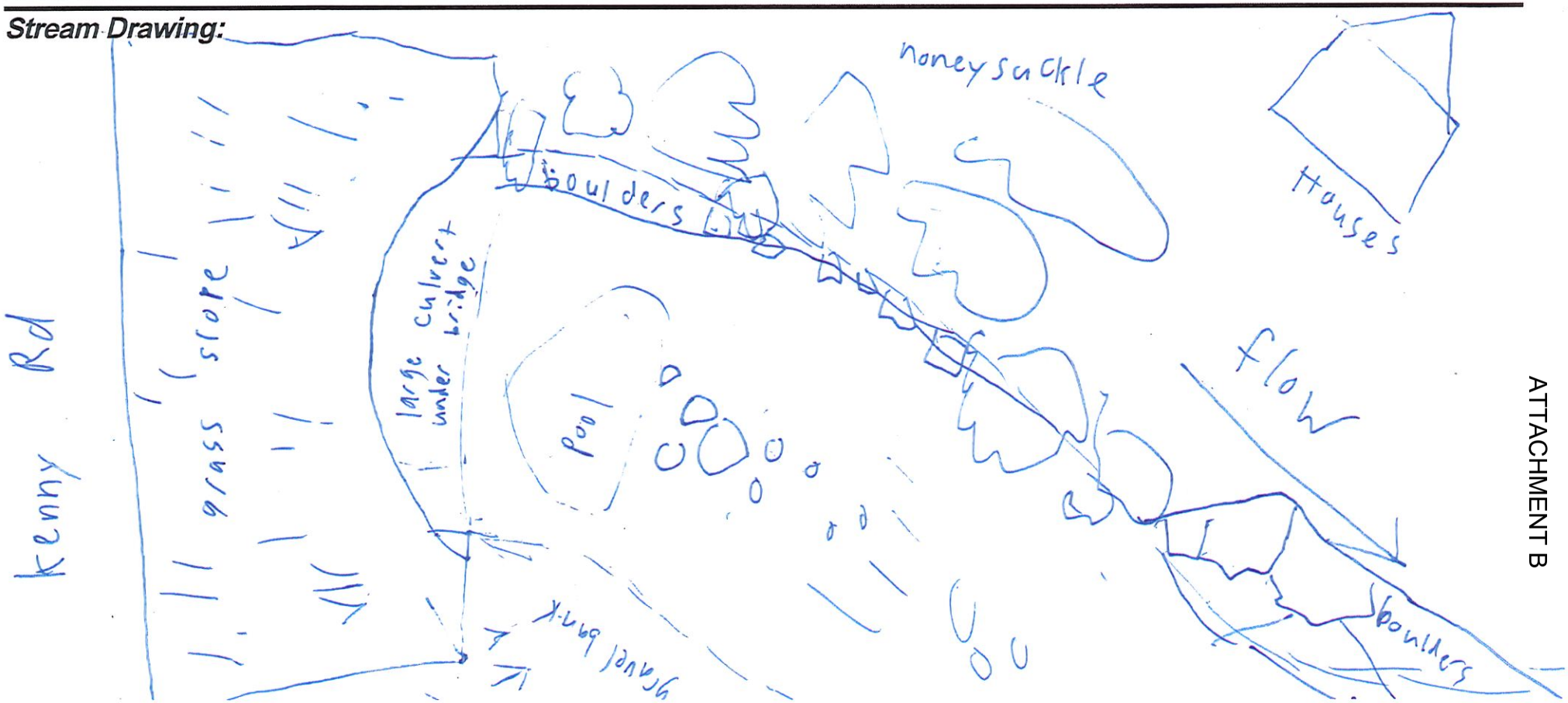
WWTP / CSO / NPDES / INDUSTRY
HARDENED / URBAN / DIRT&GRIME
CONTAMINATED / LANDFILL
BMPs-CONSTRUCTION-SEDIMENT
LOGGING / IRRIGATION / COOLING
BANK / EROSION / SURFACE
FALSE BANK / MANURE / LAGOON
WASH $H_20$ / TILE / $H_20$ TABLE
ACID / MINE / QUARRY / FLOW
NATURAL / WETLAND / STAGNANT
PARK / GOLF / LAWN / HOME
ATMOSPHERE / DATA PAUCITY

## F] MEASUREMENTS

- $\bar{x}$ width
- $\bar{x}$ depth
- max. depth
- $\bar{x}$ bankfull width
- bankfull $\bar{x}$ depth
- W/D ratio
- bankfull max. depth
- floodprone $x^2$ width
- entrench. ratio

*Legacy Tree:*

## Stream Drawing:




ATTACHMENT B

# Ohio EPA Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

**QHEI Score:** 54

Stream & Location: S02 RM: ___ Date 06/20/25

Scorers Full Name & Affiliation: Antonio Hernstein, BMCD

River Code: ___-___-___ STORET #: ___ Lat./Long.: (NAD 83 - decimal °) 40.07182 83.0310 Office verified location ☑

## 1] SUBSTRATE
Check ONLY Two substrate TYPE BOXES; estimate % or note every type present

| BEST TYPES | POOL | RIFFLE | OTHER TYPES | POOL | RIFFLE |
|---|---|---|---|---|---|
| ☐☐ BLDR/SLABS [10] | ___ | ___ | ☐☐ HARDPAN [4] | ___ | ___ |
| ☐☐ BOULDER [9] | 5 | ___ | ☐☐ DETRITUS [3] | ___ | ___ |
| ☐☐ COBBLE [8] | 20 | ___ | ☐☐ MUCK [2] | ___ | ___ |
| ☒☐ GRAVEL [7] | 30 | ___ | ☐☐ SILT [2] | 5 | ___ |
| ☐☒ SAND [6] | 40 | ___ | ☐☐ ARTIFICIAL [0] | ___ | ___ |
| ☐☐ BEDROCK [5] | ___ | ___ | (Score natural substrates; ignore sludge from point-sources) | | |

NUMBER OF BEST TYPES: ☒ 4 or more [2] ☐ 3 or less [0]

Check ONE (Or 2 & average)

ORIGIN: ☐ LIMESTONE [1] ☒ TILLS [1] ☐ WETLANDS [0] ☐ HARDPAN [0] ☐ SANDSTONE [0] ☐ RIP/RAP [0] ☐ LACUSTURINE [0] ☐ SHALE [-1] ☐ COAL FINES [-2]

QUALITY: ☐ HEAVY [-2] ☐ MODERATE [-1] ☒ NORMAL [0] ☐ FREE [1]

SILT / EMBEDDEDNESS: ☐ EXTENSIVE [-2] ☐ MODERATE [-1] ☒ NORMAL [0] ☐ NONE [1]

Substrate: 16 (Maximum 20)

Comments

## 2] INSTREAM COVER
Indicate presence 0 to 3: 0-Absent; 1-Very small amounts or if more common of marginal quality; 2-Moderate amounts, but not of highest quality or in small amounts of highest quality; 3-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water, large diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional pools.

| | | | |
|---|---|---|---|
| 1 UNDERCUT BANKS [1] | 1 POOLS > 70cm [2] | ___ OXBOWS, BACKWATERS [1] | |
| 2 OVERHANGING VEGETATION [1] | ___ ROOTWADS [1] | ___ AQUATIC MACROPHYTES [1] | |
| ___ SHALLOWS (IN SLOW WATER) [1] | 1 BOULDERS [1] | 1 LOGS OR WOODY DEBRIS [1] | |
| ___ ROOTMATS [1] | | | |

AMOUNT (Check ONE (Or 2 & average))
☐ EXTENSIVE >75% [11] ☒ MODERATE 25-75% [7] ☐ SPARSE 5-<25% [3] ☐ NEARLY ABSENT <5% [1]

Comments

Cover Maximum 20: 13

## 3] CHANNEL MORPHOLOGY
Check ONE in each category (Or 2 & average)

| SINUOSITY | DEVELOPMENT | CHANNELIZATION | STABILITY |
|---|---|---|---|
| ☐ HIGH [4] | ☐ EXCELLENT [7] | ☐ NONE [6] | ☒ HIGH [3] |
| ☐ MODERATE [3] | ☐ GOOD [5] | ☐ RECOVERED [4] | ☐ MODERATE [2] |
| ☒ LOW [2] | ☒ FAIR [3] | ☐ RECOVERING [3] | ☐ LOW [1] |
| ☐ NONE [1] | ☐ POOR [1] | ☒ RECENT OR NO RECOVERY [1] | |

Comments: 2 3 1 3

Channel Maximum 20: 9

## 4] BANK EROSION AND RIPARIAN ZONE
Check ONE in each category for EACH BANK (Or 2 per bank & average)

River right looking downstream

| EROSION (L R) | RIPARIAN WIDTH (L R) | FLOOD PLAIN QUALITY (L R) | |
|---|---|---|---|
| ☒ ☒ NONE / LITTLE [3] | ☐ ☐ WIDE > 50m [4] | ☐ ☒ FOREST, SWAMP [3] | ☐ ☐ CONSERVATION TILLAGE [1] |
| ☐ ☐ MODERATE [2] | ☐ ☒ MODERATE 10-50m [3] | ☐ ☐ SHRUB OR OLD FIELD [2] | ☐ ☐ URBAN OR INDUSTRIAL [0] |
| ☐ ☐ HEAVY / SEVERE [1] | ☐ ☐ NARROW 5-10m [2] | ☒ ☐ RESIDENTIAL, PARK, NEW FIELD [1] | ☐ ☐ MINING / CONSTRUCTION [0] |
| 3 | ☒ ☐ VERY NARROW < 5m [1] | ☐ ☐ FENCED PASTURE [1] | |
| | ☐ ☐ NONE [0] | ☐ ☐ OPEN PASTURE, ROWCROP [0] | |

Comments: 2 2

Indicate predominant land use(s) past 100m riparian.

Riparian Maximum 10: 7

## 5] POOL / GLIDE AND RIFFLE / RUN QUALITY

MAXIMUM DEPTH (Check ONE (ONLY!))
☐ > 1m [6] ☐ 0.7-<1m [4] ☐ 0.4-<0.7m [2] ☒ 0.2-<0.4m [1] ☐ < 0.2m [0]

CHANNEL WIDTH (Check ONE (Or 2 & average))
☐ POOL WIDTH > RIFFLE WIDTH [2] ☒ POOL WIDTH = RIFFLE WIDTH [1] ☐ POOL WIDTH < RIFFLE WIDTH [0]

CURRENT VELOCITY (Check ALL that apply)
☐ TORRENTIAL [-1] ☒ SLOW [1] ☐ VERY FAST [1] ☐ INTERSTITIAL [-1] ☐ FAST [1] ☐ INTERMITTENT [-2] ☐ MODERATE [1] ☐ EDDIES [1]
Indicate for reach - pools and riffles.

Recreation Potential: Primary Contact / Secondary Contact (circle one and comment on back)

Comments: 1 1 1

Pool / Current Maximum 12: 3

Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species: Check ONE (Or 2 & average). ☐ NO RIFFLE [metric=0]

| RIFFLE DEPTH | RUN DEPTH | RIFFLE / RUN SUBSTRATE | RIFFLE / RUN EMBEDDEDNESS |
|---|---|---|---|
| ☐ BEST AREAS > 10cm [2] | ☐ MAXIMUM > 50cm [2] | ☐ STABLE (e.g., Cobble, Boulder) [2] | ☐ NONE [2] |
| ☐ BEST AREAS 5-10cm [1] | ☒ MAXIMUM < 50cm [1] | ☒ MOD. STABLE (e.g., Large Gravel) [1] | ☐ LOW [1] |
| ☒ BEST AREAS < 5cm [metric=0] | | ☐ UNSTABLE (e.g., Fine Gravel, Sand) [0] | ☒ MODERATE [0] ☐ EXTENSIVE [-1] |

Comments

Riffle / Run Maximum 8: 2

## 6] GRADIENT
( 59 (f/mi)) DRAINAGE AREA ( 1.1 mi²)

☐ VERY LOW - LOW [2-4] ☐ MODERATE [6-10] ☐ HIGH - VERY HIGH [10-6]

%POOL: 10 %GLIDE: 5 %RUN: 45 %RIFFLE: 40

Gradient Maximum 10: 4

## A] SAMPLED REACH

Check ALL that apply

**METHOD**

- ☐ BOAT
- ☐ WADE
- ☐ L. LINE
- ☐ OTHER

**STAGE**

| 1st-sample pass-2nd | | |
|---|---|---|
| ☐ HIGH | ☐ |
| ☐ UP | ☐ |
| ☐ NORMAL | ☐ |
| ☐ LOW | ☐ |
| ☐ DRY | ☐ |

**DISTANCE**

- ☐ 0.5 Km
- ☐ 0.2 Km
- ☐ 0.15 Km
- ☐ 0.12 Km
- ☐ OTHER

**CLARITY**

| 1st –sample pass– 2nd | |
|---|---|
| ☐ < 20 cm | ☐ |
| ☐ 20-<40 cm | ☐ |
| ☐ 40-70 cm | ☐ |
| ☐ > 70 cm/ CTB | ☐ |
| ☐ SECCHI DEPTH | ☐ |

_____ meters

**CANOPY**

- ☐ > 85%- OPEN
- ☐ 55%-<85%
- ☐ 30%-<55%
- ☐ 10%-<30%
- ☐ <10%- CLOSED

1st pass _____ cm

2nd _____ cm

## C] RECREATION

AREA DEPTH

POOL: ☐>100ft² ☐>3ft

*Comment RE: Reach consistency/* Is reach typical of steam?, *Recreation/* Observed - Inferred, *Other/* Sampling observations, Concerns, Access directions, etc.

## B] AESTHETICS

- ☐ NUISANCE ALGAE
- ☐ INVASIVE MACROPHYTES
- ☐ EXCESS TURBIDITY
- ☐ DISCOLORATION
- ☐ FOAM / SCUM
- ☐ OIL SHEEN
- ☐ TRASH / LITTER
- ☐ NUISANCE ODOR
- ☐ SLUDGE DEPOSITS
- ☐ CSOs/SSOs/OUTFALLS

## D] MAINTENANCE

Circle some & *COMMENT*

PUBLIC / PRIVATE / BOTH / NA
ACTIVE / HISTORIC / BOTH / NA
YOUNG-SUCCESSION-OLD
SPRAY / SNAG / REMOVED
MODIFIED / DIPPED OUT / NA
LEVEED / ONE SIDED
RELOCATED / CUTOFFS
MOVING-BEDLOAD-STABLE
ARMOURED / SLUMPS
ISLANDS / SCOURED
IMPOUNDED / DESICCATED
FLOOD CONTROL / DRAINAGE

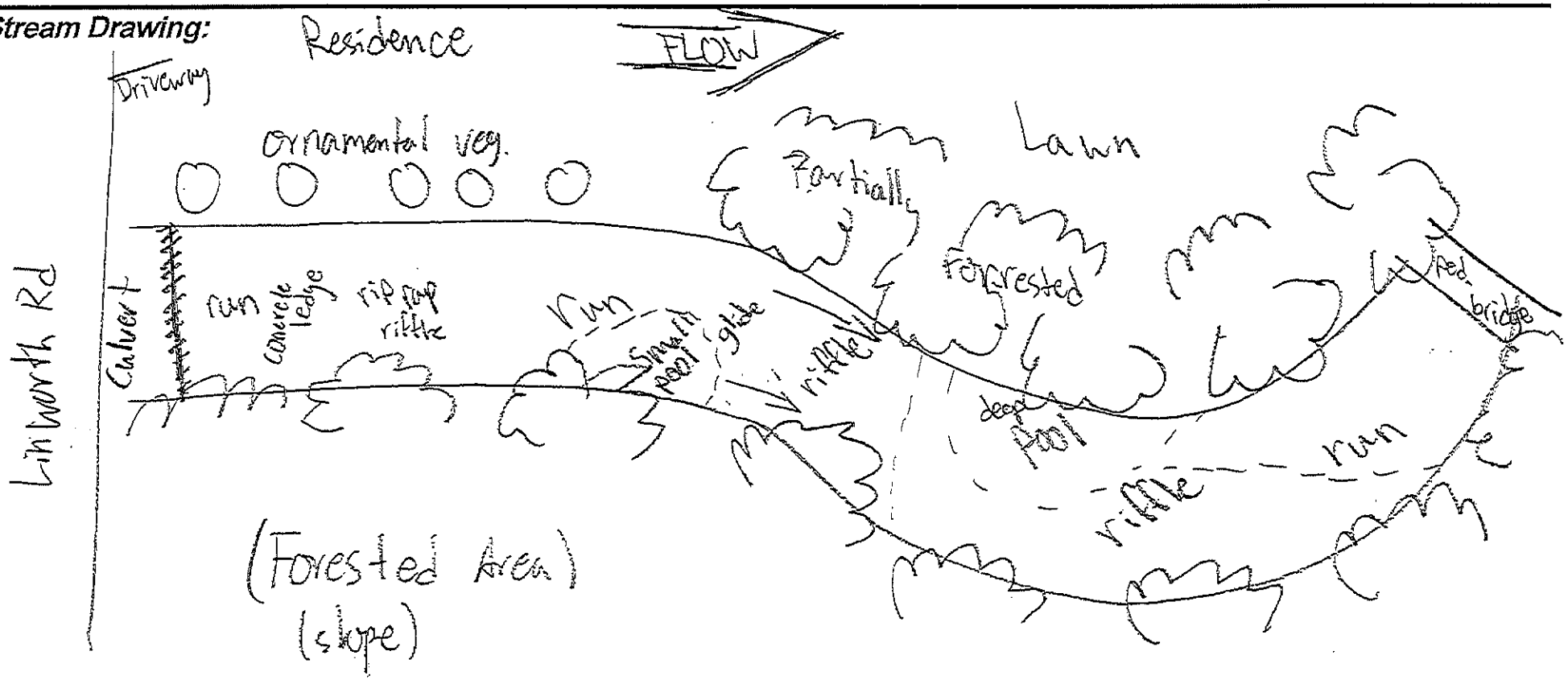
## E] ISSUES

WWTP / CSO / NPDES / INDUSTRY
HARDENED / URBAN / DIRT&GRIME
CONTAMINATED / LANDFILL
BMPs-CONSTRUCTION-SEDIMENT
LOGGING / IRRIGATION / COOLING
BANK / EROSION / SURFACE
FALSE BANK / MANURE / LAGOON
WASH $H_20$ / TILE / $H_20$ TABLE
ACID / MINE / QUARRY / FLOW
NATURAL / WETLAND / STAGNANT
PARK / GOLF / LAWN / HOME
ATMOSPHERE / DATA PAUCITY

## F] MEASUREMENTS

- $\bar{x}$ width
- $\bar{x}$ depth
- max. depth
- $\bar{x}$ bankfull width
- bankfull $\bar{x}$ depth
- W/D ratio
- bankfull max. depth
- floodprone $x^2$ width
- entrench. ratio
- *Legacy Tree:*

## Stream Drawing:




ATTACHMENT B

# Appendix D – Agency Correspondence and Species Lists

# 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

May 23, 2025

Project Code: 2025-0090358

Dear Mr. Hornstein:

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, endangered, and proposed species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

Federally Threatened and Endangered Species: The endangered Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) occur throughout the State of Ohio. The Indiana bat and northern long-eared bat may be found wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and breed that may also include adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, woodlots, fallow fields, and pastures. Roost trees for both species include live and standing dead trees $\geq$3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities. These roost trees may be located in forested habitats as well as linear features such as fencerows, riparian forests, and other wooded corridors. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves, rock crevices and abandoned mines.

Federally Proposed Species: On September 14, 2022, the Service proposed to list the tricolored bat (*Perimyotis subflavus*) as endangered under the ESA. The bat faces extinction due to the impacts of white-nose syndrome, a deadly disease affecting cave-dwelling bats across the continent. During spring, summer, and fall, this species roosts primarily among leaf clusters of live or recently dead trees, emerging at dusk to hunt for insects over waterways and forest edges. While white-nose syndrome is by far the most serious threat to the tricolored bat, other threats now have an increased significance due to the dramatic decline in the species' population. These threats include disturbance to bats in roosting, foraging, commuting, and over-wintering habitats. Mortality due to collision with wind turbines, especially during migration, has also been documented across their range. Conservation measures for the Indiana bat and northern long-eared bat will also help to conserve the tricolored bat.

*Seasonal Tree Clearing for Federally Listed Bat Species*: Should the proposed project site contain trees ≥3 inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, we recommend removal of any trees ≥3 inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats.

If implementation of this seasonal tree cutting recommendation is not possible, a summer presence/absence survey may be conducted for Indiana bats and northern long-eared bats. If Indiana bats and northern long-eared bats are not detected during the survey, then tree clearing may occur at any time of the year. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Ohio Field Office. Surveyors must have a valid federal permit. Please note that in Ohio summer mist net surveys may only be conducted between June 1 and August 15.

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 (https://epa.ohio.gov/portals/47/facts/ohio_wetlands.pdf). 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.

Due to the project type, size, and location, 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.

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, Environmental Services Administrator, at (614) 265-6387 or at mike.pettegrew@dnr.ohio.gov.

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,

Erin Knoll
Field Office Supervisor

cc: Matthew.Stooksbury@dnr.ohio.gov
Eileen.Wyza@dnr.ohio.gov

ATTACHMENT B

Department of Natural Resources
ohiodnr.gov

Mike DeWine, *Governor*
Jim Tressel, *Lt. Governor*
Mary Mertz, *Director*

**Office of Real Estate & Land Management**
Tara Paciorek - Chief
2045 Morse Road – E-2
Columbus, Ohio 43229-6693

June 11, 2025

Antonio Hornstein
Burns & McDonnell
530 West Spring Street, Suite 200
Columbus, Ohio 43215

**Re:** 25-0727_North Columbus High Pressure Pipeline Phase 4

**Project:** The proposed project involves the replacement of approximately 3.93 miles of 18 and 20-inch pipeline with 20-inch pipeline, a station rebuild with associated lateral connections, and four lateral connections to four district stations.

**Location:** The proposed project is located in Clinton 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:** The Natural Heritage Database has the following data within one mile of the project area:

American Sweet-flag (*Acorus americanus*), P
Lark Sparrow (*Chondestes grammacus*), E
Elktoe (*Alasmidonta marginata*), SC
Eastern Ringtail (*Erpetogomphus designatus*), SC
Wavy-rayed Lampmussel (*Lampsilis fasciola*), SC
Round Pigtoe (*Pleurobema sintoxia*), SC
Kidneyshell (*Ptychobranchus fasciolaris*), SC

Conservation status abbreviations are as follows: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; U = state status under review; X = presumed extirpated in Ohio; FE = federally endangered, and FT = federally threatened. The review was performed on the specified project area as well as an additional one-mile radius. Records searched date from 1980. Features searched include locations of rare and endangered plants and

animals determined to be of value to the conservation of their species, high quality plant communities, animal breeding assemblages, and outstanding geological features.

The species listed above are not recorded within the boundaries of the specified project area. However, please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for an 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 project is within the vicinity of records for, the little brown bat (*Myotis lucifugus*), a state endangered species. Because presence of a state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW (contact Eileen Wyza at Eileen.Wyza@dnr.ohio.gov).

In addition, 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 endangered 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 bat species 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. The DOW recommends tree 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.

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 & NORTHERN LONG-EARED 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 obliquata*)

Federally Threatened
rabbitsfoot (*Theliderma cylindrica*)

State Endangered
elephant-ear (*Elliptio crassidens crassidens*)
pocketbook (*Lampsilis ovata*)
long solid (*Fusconaia subrotunda*)
washboard (*Megalonaias nervosa*)
Ohio pigtoe (*Pleurobema cordatum*)

State Threatened
pondhorn (*Uniomerus tetralasmus*)
Salamander Mussel (*Simpsonaias ambigua*)

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*)
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 sandhill crane (*Antigone 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, the 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.

If the subject project is in a floodplain regulated by the Federal Emergency Management Agency (FEMA), the local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals. The FEMA National Flood Hazard Layer (NHFL) Viewer website can be utilized to see if the project is in a FEMA regulated floodplain. If the project is not in a FEMA regulated floodplain, then no further action is required.

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew (Environmental Services Administrator) at mike.pettegrew@dnr.ohio.gov if you have questions about these comments or need additional information.

***Expiration:*** *ODNR Environmental Reviews are typically valid for 2 years from the issuance date. If the scope of work, project area, construction limits, and/or anticipated impacts to natural resources have changed significantly from the original project submittal, then a new Environmental Review request should be submitted.*

# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ohio Ecological Services Field Office
4625 Morse Road, Suite 104
Columbus, OH 43230-8355
Phone: (614) 416-8993 Fax: (614) 416-8994

In Reply Refer To: 04/30/2025 16:42:15 UTC
Project Code: 2025-0090358
Project Name: NCHP Phase 4

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

**Migratory Birds**: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

# OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Ohio Ecological Services Field Office**
4625 Morse Road, Suite 104
Columbus, OH 43230-8355
(614) 416-8993

# PROJECT SUMMARY

Project Code: 2025-0090358
Project Name: NCHP Phase 4
Project Type: Pipeline - Onshore - Maintenance / Modification - Below Ground
Project Description: The Project involves the replacement of approximately 3.93 miles of 18 and 20-inch pipeline with 20-inch pipeline, a station rebuild with associated lateral connections, and four lateral connections to four district station.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.0317883,-83.05019697075248,14z


Counties: Franklin County, Ohio

# ENDANGERED SPECIES ACT SPECIES

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## MAMMALS

| NAME | STATUS |
|---|---|
| Indiana Bat *Myotis sodalis*<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/5949 | Endangered |
| Tricolored Bat *Perimyotis subflavus*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/10515 | Proposed Endangered |

## CLAMS

| NAME | STATUS |
|---|---|
| Clubshell *Pleurobema clava*<br>Population: Wherever found; Except where listed as Experimental Populations<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/3789 | Endangered |
| Northern Riffleshell *Epioblasma rangiana*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/527 | Endangered |
| Rayed Bean *Villosa fabalis*<br>There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/5862 | Endangered |
| Salamander Mussel *Simpsonaias ambigua*<br>There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/6208 | Proposed Endangered |

## INSECTS

| NAME | STATUS |
|---|---|
| Monarch Butterfly *Danaus plexippus*<br>There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/9743 | Proposed Threatened |

# CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

# IPAC USER CONTACT INFORMATION


| | |
|---|---|
| Agency: | Private Entity |
| Name: | Antonio Hornstein |
| Address: | 530 W Spring St |
| Address Line 2: | Ste 100 |
| City: | Columbus |
| State: | OH |
| Zip: | 43215 |
| Email | alhornstein1@gmail.com |
| Phone: | 3096425009 |

# Franklin County State Listed Animal Species

| Common Name | Scientific Name | Group | State Status | Federal Status |
|---|---|---|---|---|
| Blanchard's Cricket Frog | *Acris blanchardi* | Amphibian | Species of Concern | |
| Green-winged Teal | *Anas crecca* | Bird | Special Interest | |
| Sandhill Crane | *Antigone canadensis* | Bird | Threatened | |
| Great Egret | *Ardea alba* | Bird | Species of Concern | |
| Upland Sandpiper | *Bartramia longicauda* | Bird | Endangered | |
| American Bittern | *Botaurus lentiginosus* | Bird | Endangered | |
| Lark Sparrow | *Chondestes grammacus* | Bird | Endangered | |
| Least Bittern | *Ixobrychus exilis* | Bird | Threatened | |
| Yellow-crowned Night-heron | *Nyctanassa violacea* | Bird | Special Interest | |
| Prothonotary Warbler | *Protonotaria citrea* | Bird | Species of Concern | |
| Barn Owl | *Tyto alba* | Bird | Threatened | |
| Golden-winged Warbler | *Vermivora chrysoptera* | Bird | Special Interest | |
| Lyre-tipped Spreadwing | *Lestes unguiculatus* | Damselfly | Species of Concern | |
| Eastern Ringtail | *Erpetogomphus designatus* | Dragonfly | Species of Concern | |

Data from the Ohio Natural Heritage Database
Species reported extant in county since 1980
6/23/2023

ATTACHMENT B

Absence of a species on this list does not indicate absence from the county. The information contained in this list does not represent coordination with ODNR or fulfill NEPA or other federal/state requirements. All federally and/or state listed bat species have ranges that encompass the entire state and are not included on county lists. For further information on current listed species, please use the following link:

State Listed Species | Ohio Department of Natural Resources (ohiodnr.gov)

| Common Name | Scientific Name | Group | State Status | Federal Status |
|---|---|---|---|---|
| Stygian Shadowdragon | *Neurocordulia yamaskanensis* | Dragonfly | Endangered | |
| Lake Chubsucker | *Erimyzon sucetta* | Fish | Threatened | |
| Muskellunge | *Esox masquinongy* | Fish | Species of Concern | |
| Iowa Darter | *Etheostoma exile* | Fish | Endangered | |
| Spotted Darter | *Etheostoma maculatum* | Fish | Endangered | |
| Tippecanoe Darter | *Etheostoma tippecanoe* | Fish | Species of Concern | |
| Shortnose Gar | *Lepisosteus platostomus* | Fish | Endangered | |
| Blacknose Shiner | *Notropis heterolepis* | Fish | Endangered | |
| Paddlefish | *Polyodon spathula* | Fish | Threatened | |
| Deer Mouse | *Peromyscus maniculatus* | Mammal | Species of Concern | |
| American Badger | *Taxidea taxus* | Mammal | Species of Concern | |
| Elktoe | *Alasmidonta marginata* | Mollusk | Species of Concern | |
| Slippershell Mussel | *Alasmidonta viridis* | Mollusk | Threatened | |
| Purple Wartyback | *Cyclonaias tuberculata* | Mollusk | Species of Concern | |
| Elephant-ear | *Elliptio crassidens* | Mollusk | Endangered | |
| Northern Riffleshell | *Epioblasma rangiana* | Mollusk | Endangered | Endangered |

Data from the Ohio Natural Heritage Database
Species reported extant in county since 1980
6/23/2023

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State Listed Species | Ohio Department of Natural Resources (ohiodnr.gov)

| Common Name | Scientific Name | Group | State Status | Federal Status |
|---|---|---|---|---|
| Snuffbox | *Epioblasma triquetra* | Mollusk | Endangered | Endangered |
| Wavy-rayed Lampmussel | *Lampsilis fasciola* | Mollusk | Species of Concern | |
| Pocketbook | *Lampsilis ovata* | Mollusk | Endangered | |
| Creek Heelsplitter | *Lasmigona compressa* | Mollusk | Species of Concern | |
| Black Sandshell | *Ligumia recta* | Mollusk | Species of Concern | |
| Washboard | *Megalonaias nervosa* | Mollusk | Endangered | |
| Threehorn Wartyback | *Obliquaria reflexa* | Mollusk | Species of Concern | |
| Round Hickorynut | *Obovaria subrotunda* | Mollusk | Threatened | |
| Clubshell | *Pleurobema clava* | Mollusk | Endangered | Endangered |
| Round Pigtoe | *Pleurobema sintoxia* | Mollusk | Species of Concern | |
| Kidneyshell | *Ptychobranchus fasciolaris* | Mollusk | Species of Concern | |
| Salamander Mussel | *Simpsonaias ambigua* | Mollusk | Threatened | |
| Rabbitsfoot | *Theliderma cylindrica* | Mollusk | Endangered | Threatened |
| Fawnsfoot | *Truncilla donaciformis* | Mollusk | Species of Concern | |
| Deertoe | *Truncilla truncata* | Mollusk | Species of Concern | |
| Pondhorn | *Uniomerus tetralasmus* | Mollusk | Threatened | |

Data from the Ohio Natural Heritage Database
Species reported extant in county since 1980
6/23/2023

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State Listed Species | Ohio Department of Natural Resources (ohiodnr.gov)

| Common Name | Scientific Name | Group | State Status | Federal Status |
|---|---|---|---|---|
| Rayed Bean | *Villosa fabalis* | Mollusk | Endangered | Endangered |
| Rainbow | *Villosa iris* | Mollusk | Species of Concern | |
| Smooth Greensnake | *Opheodrys vernalis* | Reptile | Endangered | |
| Queensnake | *Regina septemvittata* | Reptile | Species of Concern | |

Data from the Ohio Natural Heritage Database
Species reported extant in county since 1980
6/23/2023

ATTACHMENT B

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State Listed Species | Ohio Department of Natural Resources (ohiodnr.gov)

# Franklin County State Listed Plant Species

| Common Name | Scientific Name | Last Observed | Category | State Status | Federal Status |
|---|---|---|---|---|---|
| American Sweet-flag | *Acorus americanus* | 1989 | Vascular Plant | P | |
| Gattinger's-foxglove | *Agalinis gattingeri* | 2017 | Vascular Plant | T | |
| Spreading Rock Cress | *Arabis patens* | 2022 | Vascular Plant | E | |
| Southern Hairy Rock Cress | *Arabis pycnocarpa* var. *adpressipilis* | 2023 | Vascular Plant | P | |
| Prairie False Indigo | *Baptisia lactea* | 2017 | Vascular Plant | P | |
| Prairie Brome | *Bromus kalmii* | 2019 | Vascular Plant | P | |
| Cypress-knee Sedge | *Carex decomposita* | 2006 | Vascular Plant | E | |
| Tall Larkspur | *Delphinium exaltatum* | 2008 | Vascular Plant | P | |
| One-sided Rush | *Juncus secundus* | 2012 | Vascular Plant | P | |
| Scaly Blazing-star | *Liatris squarrosa* | 2019 | Vascular Plant | P | |
| Showy Goldenrod | *Solidago speciosa* | 2019 | Vascular Plant | T | |
| Arbor Vitae | *Thuja occidentalis* | 2001 | Vascular Plant | P | |

**Data from the Ohio Natural Heritage Database**
**Species reported extant in county since 1980**
6/21/2023

Status:
X = Extirpated
E = Endangered
T = Threatened
P = Potentially Threatened
U = Undetermined

ATTACHMENT B

Absence of a species on this list does not indicate absence from the county. The information contained in this list does not represent coordination with ODNR or fulfill NEPA or other federal/state requirements.

| Common Name | Scientific Name | Last Observed | Category | State Status | Federal Status |
|---|---|---|---|---|---|
| Three-birds Orchid | *Triphora trianthophoros* | 1981 | Vascular Plant | P | |
| Rock Elm | *Ulmus thomasii* | 2010 | Vascular Plant | P | |

**Data from the Ohio Natural Heritage Database**

**Species reported extant in county since 1980**

6/21/2023

Status:

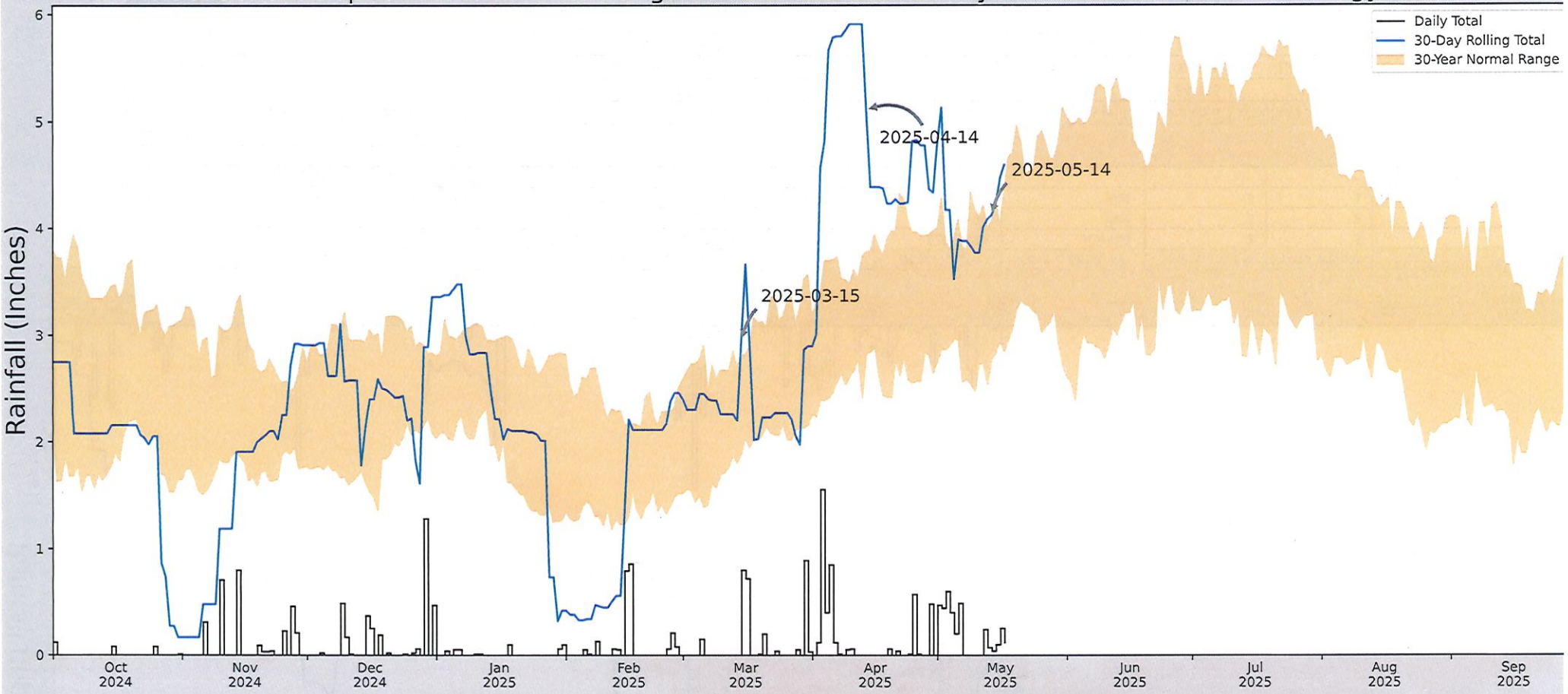
X = Extirpated
E = Endangered
T = Threatened
P = Potentially Threatened
U = Undetermined

ATTACHMENT B

Absence of a species on this list does not indicate absence from the county. The information contained in this list does not represent coordination with ODNR or fulfill NEPA or other federal/state requirements.

# Appendix E – Antecedent Precipitation Tool

# Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network




| | |
|---|---|
| Coordinates | 40.033677, -83.050921 |
| Observation Date | 2025-05-14 |
| Elevation (ft) | 817.548 |
| Drought Index (PDSI) | Moderate drought (2025-04) |
| WebWIMP $H_2O$ Balance | Wet Season |

| 30 Days Ending | 30th %ile (in) | 70th %ile (in) | Observed (in) | Wetness Condition | Condition Value | Month Weight | Product |
|---|---|---|---|---|---|---|---|
| 2025-05-14 | 2.764961 | 4.061811 | 4.122047 | Wet | 3 | 3 | 9 |
| 2025-04-14 | 2.819291 | 3.780315 | 5.106299 | Wet | 3 | 2 | 6 |
| 2025-03-15 | 1.880315 | 2.812205 | 2.944882 | Wet | 3 | 1 | 3 |
| Result | | | | | | | Wetter than Normal - 18 |

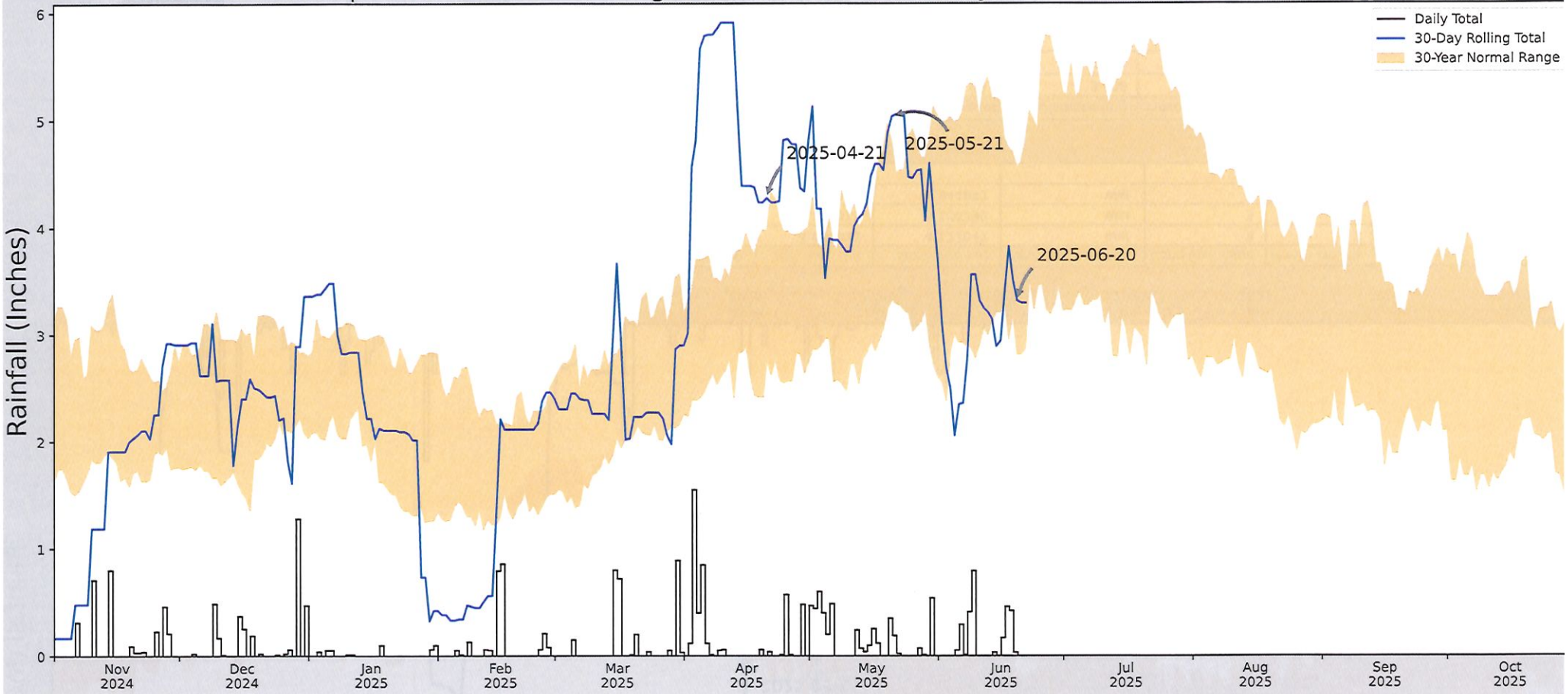
Figure and tables made by the **Antecedent Precipitation Tool** Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

| Weather Station Name | Coordinates | Elevation (ft) | Distance (mi) | Elevation Δ | Weighted Δ | Days Normal | Days Antecedent |
|---|---|---|---|---|---|---|---|
| COLUMBUS OHIO STATE UNIV AP | 40.0783, -83.0783 | 901.903 | 3.406 | 84.355 | 1.82 | 9659 | 89 |
| WORTHINGTON 1.3 SW | 40.0847, -83.0381 | 869.095 | 2.171 | 32.808 | 1.048 | 1 | 1 |
| COLUMBUS 5.4 NW | 40.0463, -83.0559 | 876.969 | 2.508 | 24.934 | 1.191 | 1 | 0 |
| DUBLIN 3.2 ENE | 40.1299, -83.0742 | 895.997 | 3.572 | 5.906 | 1.628 | 11 | 0 |
| WESTERVILLE | 40.1267, -82.9442 | 801.837 | 7.836 | 100.066 | 4.31 | 1681 | 0 |

ATTACHMENT B

## Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network




| | |
|---|---|
| Coordinates | 40.033677, -83.050921 |
| Observation Date | 2025-06-20 |
| Elevation (ft) | 817.548 |
| Drought Index (PDSI) | Mild drought (2025-05) |
| WebWIMP $H_2O$ Balance | Dry Season |

| 30 Days Ending | 30th %ile (in) | 70th %ile (in) | Observed (in) | Wetness Condition | Condition Value | Month Weight | Product |
|---|---|---|---|---|---|---|---|
| 2025-06-20 | 2.810236 | 4.55315 | 3.311024 | Normal | 2 | 3 | 6 |
| 2025-05-21 | 3.324803 | 4.801575 | 5.031496 | Wet | 3 | 2 | 6 |
| 2025-04-21 | 2.765354 | 3.970079 | 4.271654 | Wet | 3 | 1 | 3 |
| Result | | | | | | | Wetter than Normal - 15 |

Figure and tables made by the **Antecedent Precipitation Tool** Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

| Weather Station Name | Coordinates | Elevation (ft) | Distance (mi) | Elevation Δ | Weighted Δ | Days Normal | Days Antecedent |
|---|---|---|---|---|---|---|---|
| COLUMBUS OHIO STATE UNIV AP | 40.0783, -83.0783 | 901.903 | 3.406 | 84.355 | 1.82 | 9659 | 89 |
| WORTHINGTON 1.3 SW | 40.0847, -83.0381 | 869.095 | 2.171 | 32.808 | 1.048 | 1 | 1 |
| COLUMBUS 5.4 NW | 40.0463, -83.0559 | 876.969 | 2.508 | 24.934 | 1.191 | 1 | 0 |
| DUBLIN 3.2 ENE | 40.1299, -83.0742 | 895.997 | 3.572 | 5.906 | 1.628 | 11 | 0 |
| WESTERVILLE | 40.1267, -82.9442 | 801.837 | 7.836 | 100.066 | 4.31 | 1681 | 0 |

ATTACHMENT B


BURNS
McDONNELL