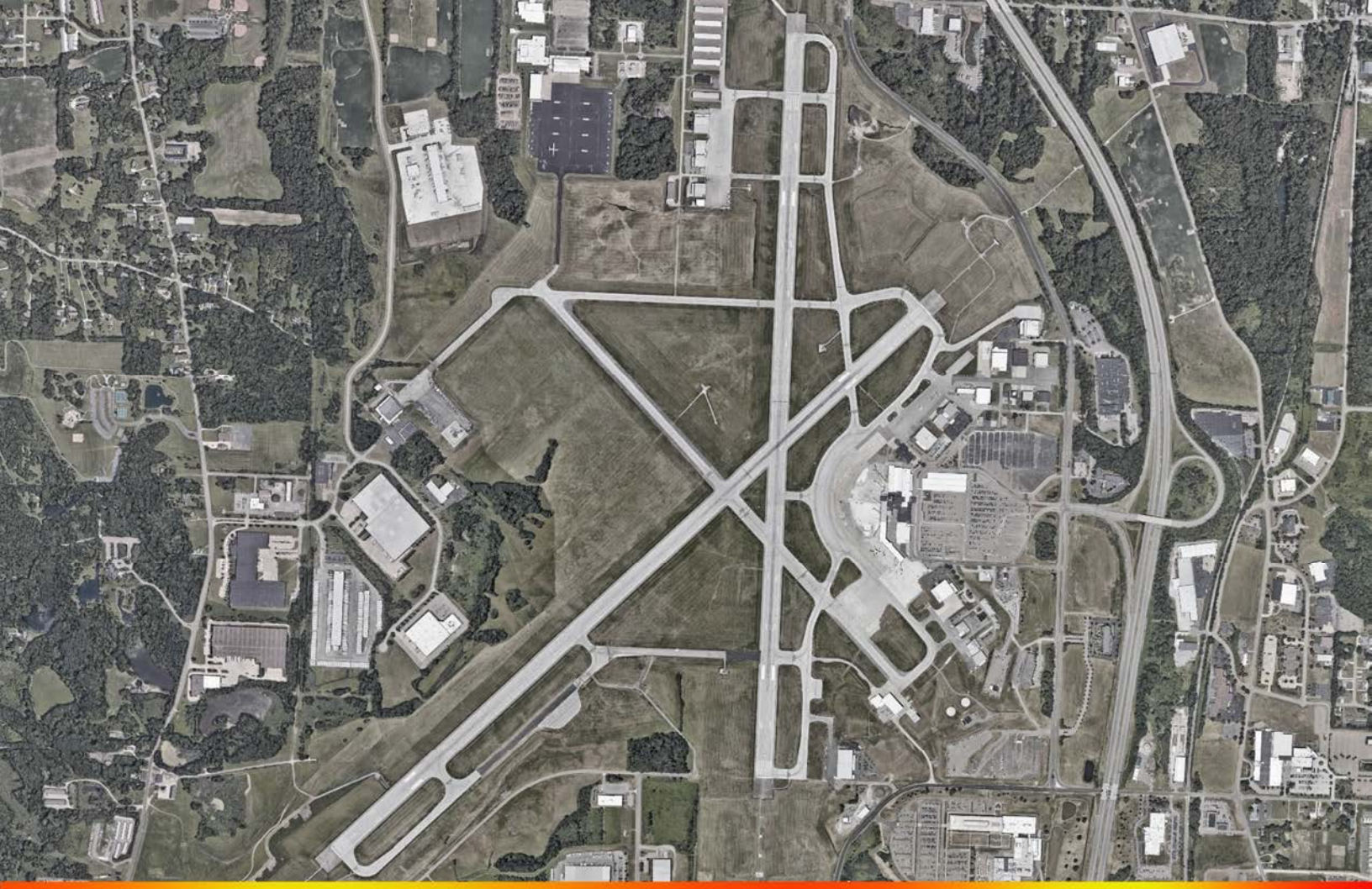

DRAFT ENVIRONMENTAL ASSESSMENT

WEST SIDE HANGAR DEVELOPMENT

Akron Canton Airport (CAK)

Prepared for:
Akron Canton Regional Airport Authority
5400 Lauby Road NW
North Canton, Ohio 44720

Prepared by:
CHA Consulting, Inc.
1501 North Marginal Road, Suite 200
Cleveland, Ohio 44114

AUGUST 2025

Notice of Availability for Draft Environmental Assessment (EA)
Westside Hangar Development
Akron Canton Airport

Notice is hereby given that the Akron Canton Airport Authority, in coordination with the U.S. Department of the Interior's Office of Surface Mining Reclamation & Enforcement and the Federal Aviation Administration, intends to develop hangars on airport property, south of West Airport Drive. Pursuant to the National Environmental Policy Act (NEPA), a Draft Environmental Assessment (EA) has been prepared to disclose the environmental impacts of the proposed development. The Draft EA can be viewed and downloaded from the following link: https://www.akroncantonairport.com/home/business/opportunities/bidsrfps/

Public comments on the Draft EA may be submitted by mail to Mr. Mark Heckroth, ENV SP, CHA Consulting, Inc., 1501 North Marginal Road, Suite 200, Cleveland, Ohio 44114 or to mheckroth@chasolutions.com. Any comments on the Draft EA must be received by close of business on September 23, 2025

DRAFT ENVIRONMENTAL ASSESSMENT

West Side Hangar Development

Akron Canton Airport (CAK)
North Canton, Ohio

U.S. DEPARTMENT OF INTERIOR
OFFICE OF SURFACE MINING RECLAMATION & ENFORCEMENT (OSMRE)
As Lead Federal Agency pursuant to the National Environmental Policy Act of 1969

AUGUST 2025

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LIST OF ACRONYMS & ABBREVIATIONS

AEDT	Airport Environmental Design Tool
ALP	Airport Layout Plan
AMLER	Abandoned Mine Land Economic Revitalization
AOA	Airport Operations Area
APE	Area of Potential Effects
BCC	Birds of Conservation Concern
BMP	Best Management Practice
C&D	construction and demolition
CAA	Clean Air Act
CAK	Akron Canton Airport
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CGP	Construction General Permit
CO	Carbon Monoxide
COC	Community of Comparison
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
CZMP	Coastal Zone Management Program
dBA	A-weight decibel
dbh	Diameter at Breast Height
DMRM	Division of Mineral Resource Management
DNL	Day-Night Average Sound Level
DOI	United States Department of Interior
DOT	United States Department of Transportation
DPF	Diesel Particulate Filter
DSA	Detailed Study Area
EA	Environmental Assessment
ECHO	Enforcement and Compliance History Online
EIS	Environmental Impact Statement
EO	Executive Order
EPA	United States Environmental Protection Agency
FAA	Federal Aviation Administration
FBOs	Fixed Base Operators
FHWA	Federal Highway Administration
FEMA	Federal Emergency Management Agency
FIRMs	Flood Insurance Rate Maps
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
GA	General Aviation
GAV	Ground Access Vehicles
GHG	Greenhouse Gas
GSA	Generalized Study Area
IPaC	Information for Planning and Consultation
LUST	Leaking Underground Storage Tank
LWCF	Land and Water Conservation Fund
Lmax	Maximum Sound Level
MOVES	EPA Motor Vehicle Emissions Simulator
NAAQS	National Ambient Air Quality Standards
nm	Nautical Miles

NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act of 1966
NLEB	Northern Long-eared Bat
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NPL	National Priorities List
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
O_3	Ozone
ODNR	Ohio Department of Natural Resources
OHC	Ohio History Connection
ORAM	Ohio Rapid Assessment Methodology
OSMRE	Office of Surface Mining Reclamation and Enforcement
Pb	Lead
PEM	Palustrine emergent wetland
PM 2.5	Fine Particulate Matter
PM	Particulate Matter
ppb	Parts Per Billion
RCRA	Resource Conservation and Recovery Act
SCR	Selective Catalytic Reduction
SF	Square Foot
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SPA	Source Protection Areas
SPCC	Spill Prevention, Control, and Countermeasure
SSA	Sole Source Aquifer
SWPPP	Stormwater Pollution Prevention Plan
TAF	Terminal Area Forecast
USC	United States Code
USDA	U.S. Department of Agriculture
USFWS	United States Fish & Wildlife Service
UST	Underground Storage Tank
VOC	Volatile Organic Compound
WQC	Water Quality Certification
WQV	Water Quality Volume
WOTUS	Waters of the United States

1.0 INTRODUCTION

The Akron Canton Regional Airport Authority (Authority or Sponsor) is proposing to construct a general aviation/corporate hangar area with associated vehicular parking, apron area, stormwater containment, and utility improvements on federally obligated airport property at the Akron Canton Airport (CAK). The Authority would be constructing a 12,000-square foot (SF) hangar and associated 17,000-square yard apron area with connection to existing Taxiway D1. The Authority would enter ground leases with two separate developers to construct two additional hangars (36,000 & 45,000 SF).

The Ohio Department of Natural Resources (ODNR), Division of Mineral Resource Management (DMRM), Abandoned Mine Land Program in cooperation with the United States Department of Interior (DOI), Office of Surface Mining Reclamation and Enforcement (OSMRE) is the lead federal agency for the project. The ODNR, DMRM is a state administered, federally funded program through the DOI, OSMRE. In 2024, the Airport Sponsor was awarded a grant through the Abandoned Mine Land Economic Revitalization (AMLER) program. The AMLER Program, managed by the OSMRE, aims to transform legacy coal mining sites into productive uses through economic and community development. This program provides funding to states and Tribes with significant abandoned mine land issues, supporting projects that promote sustainable economic growth and community revitalization. The grant allows the construction of a 12,000 SF hangar at CAK; therefore, the DOI/ODNR has approval authority over the proposed 12,000 SF hangar.

According to the Federal Aviation Administration (FAA) approved Exhibit 'A' Property Map, the entire proposed hangar development area would be located on airport property purchased with federal funds. Therefore, according to Section 743 of the *FAA Reauthorization Act of 2024* (H.R. 3935), the FAA retains authority to approve changes to the Airport Layout Plan (ALP) for any proposed development on land previously acquired with federal funds. Therefore, the FAA retains ALP approval authority over the entire development action (three hangars and apron) at CAK. To satisfy FAA NEPA requirements, the FAA would adopt this EA after being approved by the DOI.

Since there would be federal actions by multiple federal agencies with this proposed project, this Environmental Assessment (EA) is being prepared. An EA is a document prepared for a proposed Federal or federally funded action, in compliance with the requirements set forth by the National Environmental Policy Act of 1969 (NEPA), as codified in 42 U.S.C. § 4321 et seq. The purpose of this EA is to investigate, analyze, and disclose any potential impacts of the Proposed Action and any reasonable alternatives. Depending upon whether certain environmental thresholds of significance are met, this EA may either lead to a Finding of No Significant Impact (FONSI) or require an Environmental Impact Statement (EIS). This EA has been prepared in accordance with FAA Order 1050.1F: *Environmental Impacts: Policies and Procedures* and its Desk Reference, and OSMRE's *Procedures for Implementing the National Environmental Policy Act (NEPA)*. This EA was also prepared pursuant to other Federal and state laws relating to the quality of the natural and human environments.

On February 25, 2025, the United States Council on Environmental Quality (CEQ) issued an interim final rule in the Federal Register titled *Removal of National Environmental Policy Act Implementing Regulations*. The Interim Final Rule removed CEQ's regulations implementing the NEPA from the Code of Federal Regulations (CFR). It concluded that CEQ regulations implementing NEPA are not judicially enforceable or binding. The FAA has elected to continue to follow their policies and procedures implementing NEPA at FAA Order 1050.1F to meet the agency's obligations under NEPA, 42 U.S.C. §§ 4321 et seq.

The format and content of this EA conform to the requirements of Section 102(2)(c) of the National Environmental Policy Act of 1969 (NEPA, Title 42 U.S.C. 4321-4370). The content of each section of this EA is summarized below:

Chapter 1: Introduction

Chapter 2: Purpose & Need

Chapter 3: Alternatives

Chapter 4: Affected Environment & Environmental Consequences

Chapter 5: Public Involvement

Chapter 6: List of Preparers

1.1 Airport Overview

CAK is a public use airport located in northeast Ohio midway between the cities of Akron and Canton (see **Figure 1-1**). The Airport sits on approximately 2,400 acres of property in the City of Green, located in southern Summit County, although a small portion of both runways extend southward into Stark County. The Airport is within 11.5 miles of the cities of Akron, Canton, and Massillon and is approximately 35 miles south of Cleveland. The Airport is accessible directly from Interstate 77, which provides access south to Canton and north to Akron and Cleveland. The Authority is the Airport Sponsor formed by Summit and Stark counties under Section 308 of the Ohio Revised Code.

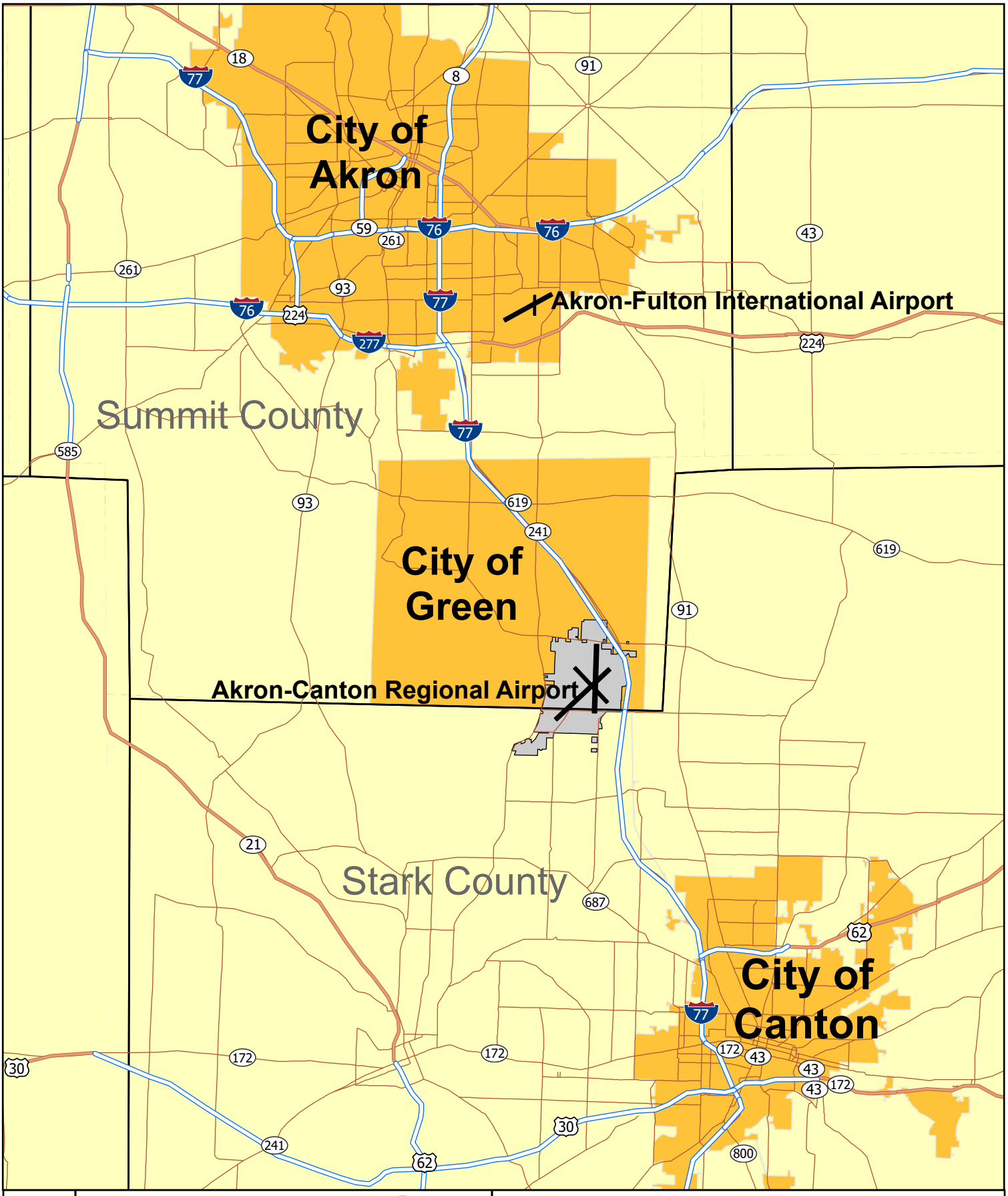
The existing airfield configuration at CAK consists of two active runways: Runway 5/23 and Runway 1/19. Runway 5/23 serves as the primary air carrier runway and is constructed of grooved, bituminous pavement (asphalt). A runway extension project completed in November 2010 made the total runway length 8,204 feet. Runway 1/19 serves as the secondary air carrier runway, is constructed of grooved, bituminous pavement (asphalt), and is 7,601 feet long after a 2003 runway extension. A third runway, Runway 14/32, was primarily used for general aviation (GA) traffic but was decommissioned in 2005 and converted to Taxiway K.

CAK currently has two Fixed Base Operators (FBOs) on the airfield: Castle Aviation, Inc. and AvFlight, Inc. These FBOs offer fuel sales, hangar space for aircraft, maintenance, passenger and cargo charter services, and concierge services for corporate aircraft. Castle Aviation currently has an 80,000-square-foot facility on the south side of the airfield east of Runway 1/19. AvFlight currently occupies approximately 34,000 square feet in Buildings 4 and 5 in the terminal area just north of the passenger terminal building.

The project area is located on the north side of the Airport, west of Runway 1/19, south of the West Airport Road General Aviation, and north of Taxiway D (see **Figure 1-2**). Aviation land use primarily surrounds the area. Some site features include airfield pavement, maintained grass, and hangars.

1.2 Description of the Proposed Action

The Proposed Action includes a general aviation/corporate hangar development area that would contain three (3) corporate hangars, a new apron area, entrance road improvements, vehicular parking area, stormwater management, and extension of utilities (see **Figure 1-3**).



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CHA

AKRON-CANTON AIRPORT

Figure 1-1:
Vicinity Map
Akron-Canton Regional Airport
Akron, Ohio

1' = 15,000"

CHA No. 098529

Source Data
Service Layer Credits

Date Saved: 7/1/2025, 8548

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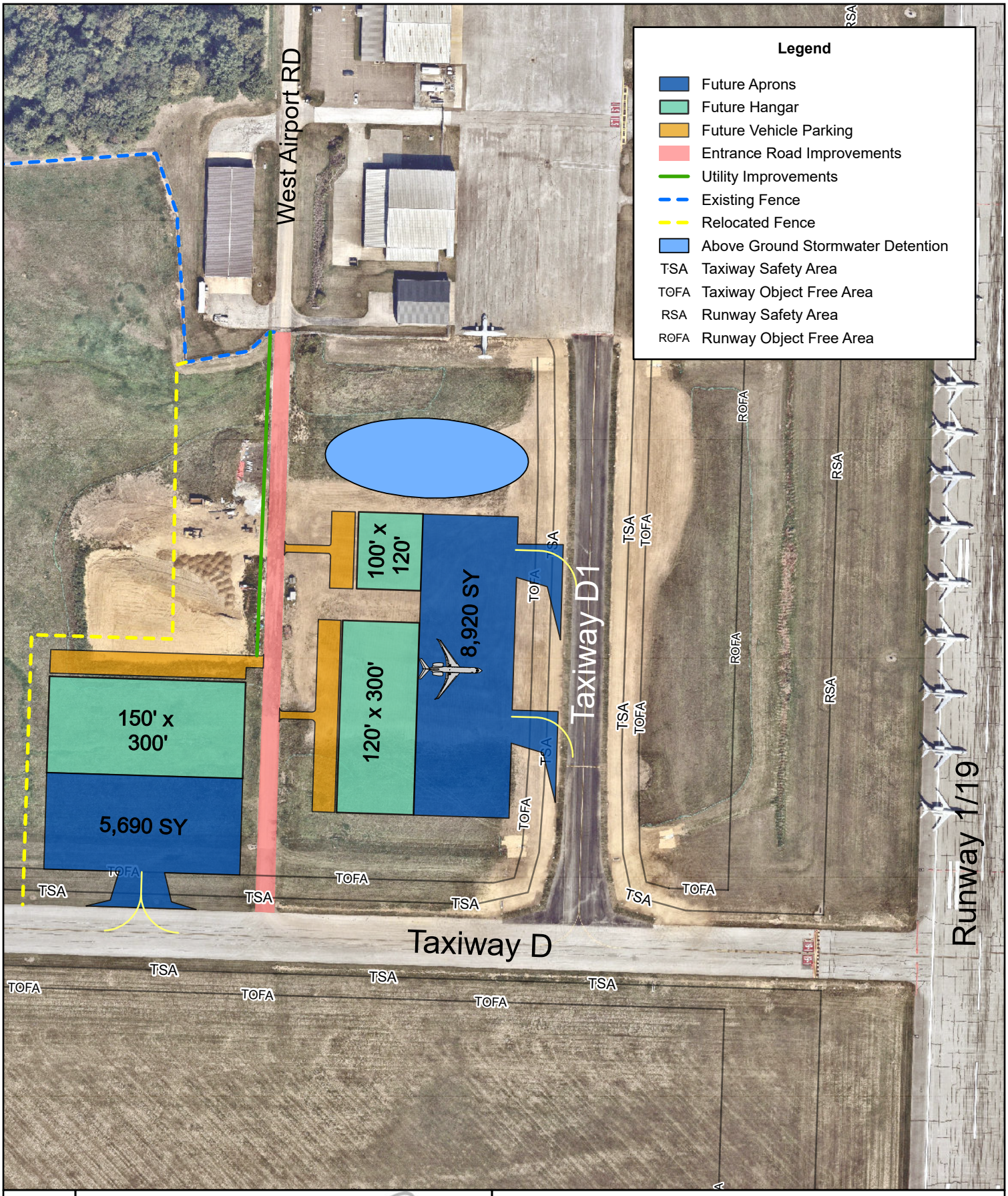
AKRON-CANTON AIRPORT

Figure 1-2: Location Map

Akron-Canton Regional Airport
Akron, Ohio

1' = 1,900"	CHA No. 098529	*Source Data* *Akron-Canton Airport Layout Plan*

Date Saved: 7/1/2025, 8548



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AKRON-CANTON AIRPORT

Figure 1-3: Sponsor's Proposed Action

Akron-Canton Regional Airport
Akron, Ohio

1' = 200"	CHA No. 098529	*Source Data Service Layer Credits*

Date Saved: 7/1/2025, 8548

- 12,000 SF corporate hangar (would be constructed by the Authority w/funds through ODNR)
- Approximately 8,920 SY of apron area with connection to Taxiway D1 (would be constructed by the Authority through the State of Ohio's One Time Strategic Community Investment Fund) and another 5,690 SY of apron area with connection to Taxiway D.
- 45,000 SF corporate hangar (would be constructed by a private developer via a ground lease with the Authority)
- 36,000 SF corporate hangar (would be constructed by a private developer via a ground lease with the Authority)

In addition, the entrance road would be improved, vehicular parking would be constructed, utilities (water, electric, sanitary) would be extended south along the entrance road, the existing Airport Operations Area (AOA) fence would be relocated and extended, and stormwater management facilities would be constructed.

1.3 Requested Federal Actions

The Authority, as owner and operator of the Airport, is requesting federal action from the following agencies:

- DOI, OSMRE administered by ODNR's DMRM Abandoned Mine Land Program Actions:
  - Environmental approval for federal assistance to implement the construction of the 12,000 SF hangar
- Federal Aviation Administration (FAA) Actions:
  - Unconditional approval of the ALP depicting the Proposed Action pursuant to 49 U.S.C. §§ 40103(b) and 47107(a)(16).
  - Evaluation under Title 14 CFR Part 77, Objects Affecting Navigable Airspace; and 14 CFR Part 157, Notice of Construction, Alteration, Activation, and Deactivation of Airports.

1.4 Timeframe for the Proposed Action

The Authority expects to begin construction in 2026.

2.0 PURPOSE AND NEED

Pursuant to NEPA, OSMRE implementing NEPA regulations, and FAA Orders 1050.1F, an EA must include a description of the purpose of a proposed action and why it is needed. The purpose and need for the proposed action serve as the foundation for the identification of reasonable alternatives to the proposed action and the comparative evaluation of the impacts of the project. For an alternative to be considered viable and carried forward for detailed evaluation within the NEPA process and this EA, it must address the needs described in the following sections.

2.1 Purpose

The purpose of the Sponsor's Proposed Action is to provide a hangar area to accommodate corporate jet aircraft to meet existing and anticipated future demand at CAK. The proposed action is intended to increase hangar capacity and provide complementary facilities, including aprons, access roads, utilities, and tenant parking.

2.2 Need

The Sponsor's Proposed Action is needed based on limited hangar capacity for corporate jet aircraft, the overall demand for corporate hangar storage, and economic development of the Airport.

2.2.1 Additional Corporate Hangar Capacity

The 80,000-square-foot hangar, recently constructed by Castle Aviation, is nearly full and is expected to be at capacity by the end of 2025. The Airport currently has no other aircraft hangar vacancies and has reached its current capacity for transient GA/corporate aircraft parking, driving demand for new aeronautical development on available land.

2.2.2 Hangar Demand

Under current conditions, the corporate hangar demand cannot be met as there are no available corporate hangars to accommodate larger jet aircraft at the Airport. Local businesses have expressed interest in basing jet aircraft at the Airport, and both FBOs have expressed interest in additional hangar space, in addition to a flight school not currently located at CAK. The Airport has been unable to accommodate these potential tenants due to insufficient hangar space and lack of developed landside areas. As business aircraft owners cannot consider basing their aircraft at an airport lacking the infrastructure to accommodate them, it is important to anticipate business aviation demand and provide for associated facilities.

2.2.3 Economic Development

The proposed project is also needed to promote, accommodate, and enhance general aviation and economic development at the Airport. An increase in revenue from the growth in aircraft would eventually reduce overall costs for the Airport's commercial service airlines. This economic impact could increase the number of commercial flights operating from CAK, lower the cost of enplaned passengers, and provide more access to the surrounding community.

3.0 ALTERNATIVES

Chapter 3 describes the alternatives considered to meet the Purpose and Need. FAA Order 1050.1F, Sections 6.1.1 and 6-2.1.d require that the EA identify reasonable alternatives, include alternatives that the approving official would consider, and indicate the preferred alternative. The EA must also provide rationale for eliminating alternatives that were removed from further study.

3.1 Alternative 1: Construct Westside Hangar Development – Option 1

Alternative 1 would construct three corporate hangars varying in size, a 17,000 SY apron with connection to Taxiway D1, vehicular parking areas for each hangar, improvements to the entrance road, the extension of utilities, and the relocation of the AOA fence (see **Figure 3-1**). As part of Alternative 1, the 12,000 SF hangar (constructed by the Authority) would be located south of the other two corporate hangars, which would be developed privately.

3.2 Alternative 2: Construct Westside Hangar Development – Option 2

Alternative 2 would also construct three corporate hangars varying in size, however, two of the proposed hangars and associated aprons would have connection to Taxiway D1 and the third hangar would face south and have connection to Taxiway D (see **Figure 3-2**). The northern portion of the proposed development area would be utilized for aboveground stormwater detention. Like Alternative 1, the development would add vehicular parking areas, improvements to the entrance road, and the relocation of the Airport Operations Area (AOA) fence.

3.3 Alternative 3: No Build Alternative

To satisfy the intent of NEPA and other special purpose environmental laws, a No Action alternative is carried forward in the analysis of environmental consequences. As part of the No Action alternative, the actions described in either alternative would not occur. Although not always reasonable, feasible, or practicable, the No Build alternative is a required alternative under NEPA and serves as the baseline for assessing future conditions and impacts.

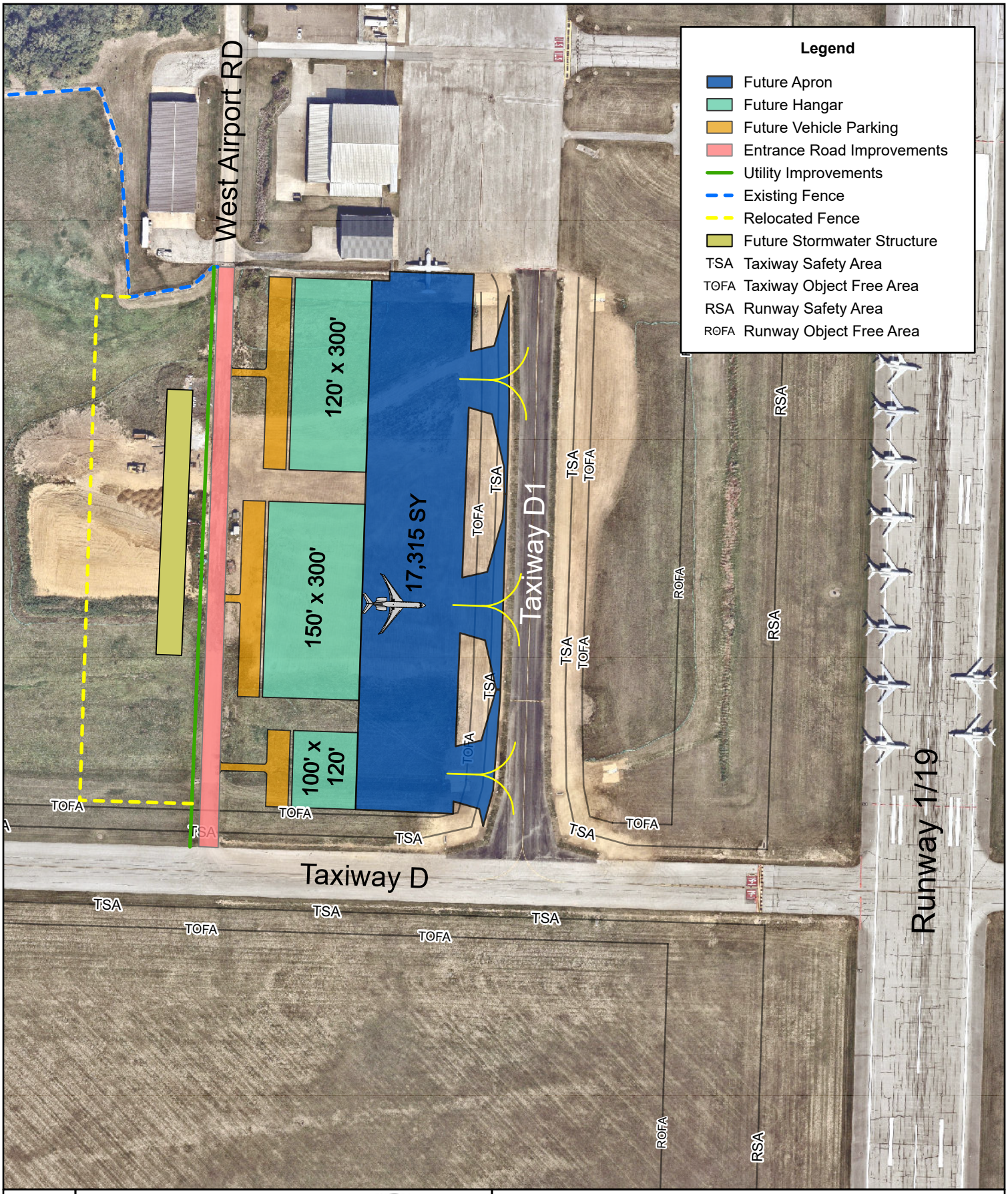
3.4 Sponsor's Preferred Alternative

The Authority's preferred alternative is Alternative 2. This alternative was selected as the preferred alternative based on the proposed schedule of hangar development, as it is expected that the privately developed hangars would be developed ahead of the 12,000 SF hangar.

The preferred alternative would include the following:

- 12,000 SF corporate hangar (funded by DOI, OSMRE)
- 8,920 SY apron area with connection to Taxiway D1
- 5,690 SY apron area with connection to Taxiway D
- 45,000 SF corporate hangar
- 36,000 SF corporate hangar

In addition, the entrance road would be improved, vehicular parking would be constructed, utilities (water, electric, sanitary) would be extended south along the entrance road, the existing AOA fence would be relocated and extended, and stormwater management facilities would be constructed on the west side of the entrance road.



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1' = 200"

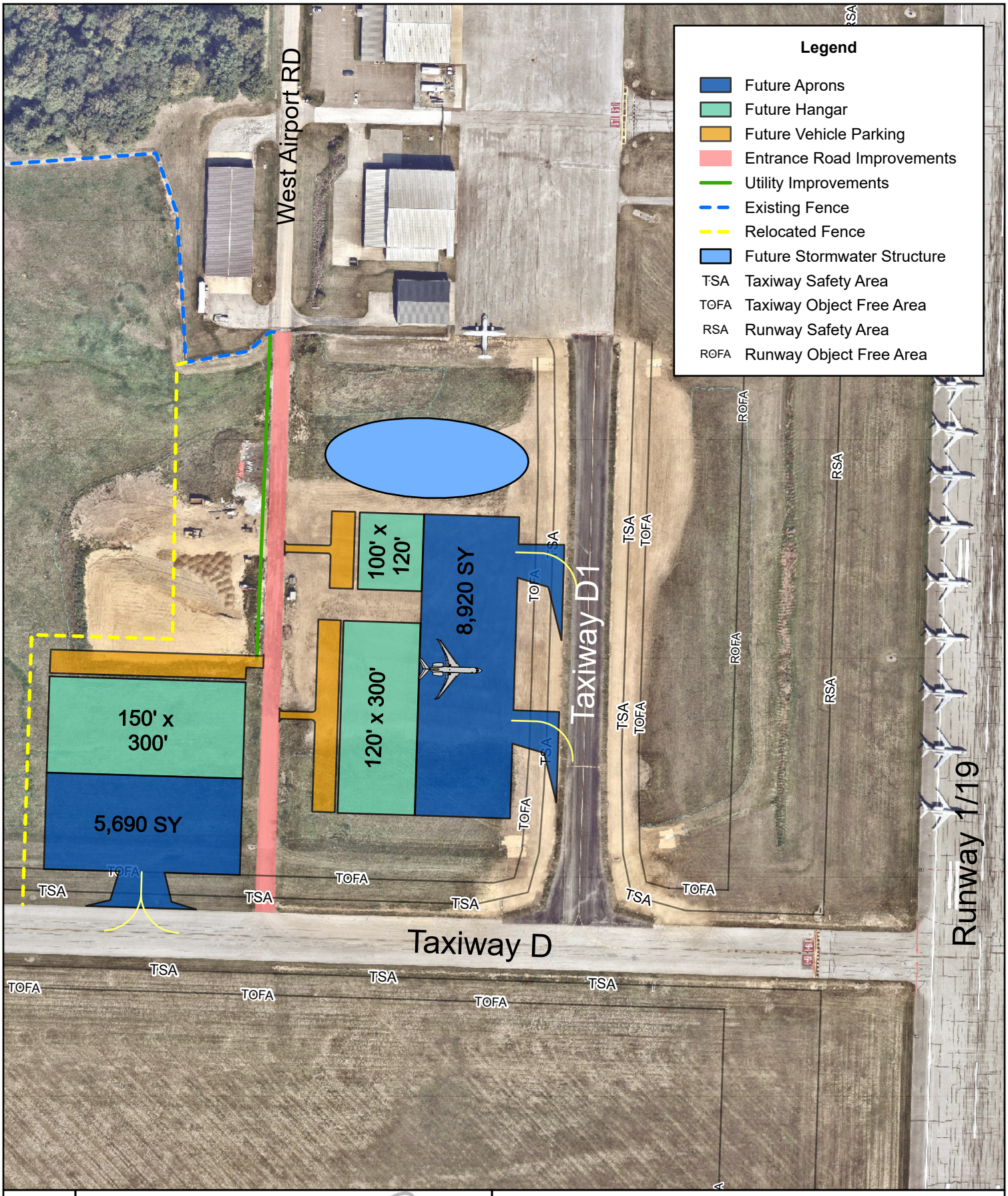
CHA No. 098529

AKRON-CANTON AIRPORT

Figure 3-1:
Alternative 1: Westside Hangar Development
Akron-Canton Regional Airport
Akron, Ohio

Source Data
Service Layer Credits

Date Saved: 7/1/2025, 8548



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AKRON-CANTON AIRPORT

Figure 3-2:
Alternative 2: Westside Hangar Development
Akron-Canton Regional Airport
Akron, Ohio

1' = 200"	CHA No. 098529	*Source Data* *Service Layer Credits*

Date Saved: 7/1/2025, 8548

4.0 AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES

This chapter describes the affected environment and environmental consequences associated with the Proposed Project and its alternatives. The Affected Environment section describes the airport environment and the environmental resources that would be directly or indirectly affected. The Environmental Consequences section evaluates the impacts that would result from the construction and operation of the Proposed Project or its alternatives to determine if the impacts, with any proposed mitigation, would be significant. Consistent with the FAA Order 1050.1F Desk Reference, the following impact categories are addressed:

- Air Quality
- Biological Resources
- Climate*
- Coastal Resources
- Department of Transportation Act, Section 4(f) Properties
- Farmlands
- Hazardous Materials, Solid Waste, and Pollution Prevention
- Historical, Architectural, Archaeological, and Cultural Resources
- Land Use
- Natural Resources and Energy Supply
- Noise & Land Use Compatibility
- Socioeconomics and Children's Environmental Health & Safety Risks
- Visual Effects
- Water Resources (Wetlands, Surface Waters, Groundwater, Floodplains, and Wild & Scenic Rivers)

*Pursuant to the January 29, 2025, US DOT memorandum "*Implementation of Executive Orders (EO) Addressing Energy Climate Change Diversity and Gender*," the EA will not include any diversity discussion and will not consider greenhouse gas (GHG) emissions in the NEPA documentation.

4.1 Study Area

Two study areas were defined for the purpose of assessing the potential direct and indirect effects of the alternatives on environmental resources. The Detailed Study Area (DSA) identifies the areas that may be physically disturbed by the development of the Proposed Action. The Generalized Study Area (GSA) includes the areas surrounding the Proposed Action that are not physically disturbed but account for resources that may be affected by the Proposed Action. Both study areas are shown on **Exhibit 4-1** and are further described below:

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AKRON-CANTON AIRPORT

Figure 4-1:
Study Areas
Akron-Canton Regional Airport
Akron, Ohio

1' = 1,900"

CHA No. 098529

Source Data
Akron-Canton Airport Layout Plan

Date Saved: 7/1/2025, 8548

4.1.1 Detailed Study Area

The DSA is located on the north side of the Airport, west of Runway 1/19, south of the West Airport Road General Aviation area, and north of Taxiway Delta. Aviation land use primarily surrounds the area. Site features include airfield pavement, maintained grass, wetlands, and hangars.

4.1.2 Generalized Study Area

The Generalized Study Area (GSA) is the area that could be impacted indirectly, which varies by resource category. For this project, the GSA is contained to airport property.

4.1.3 Environmental Resources Not Affected

Of the environmental impact categories defined in FAA Order 1050.1F, the following resources have been eliminated from further consideration because they do not exist within or near the DSA and will not be carried forward in the EA. The following resources were not carried forward with any type of analysis as these resources do not exist within the DSA.

- Coastal Resources
- Section 4(f) resources
- Land & Water Conservation Fund, Section 6(f) resources
- Wild & Scenic Rivers
- Groundwater
- Floodplains

4.1.3.1 Coastal Resources

The U.S. Congress recognized the importance of meeting the challenge of continued growth in the coastal zone by passing the Coastal Zone Management Act (CZMA) in 1972. One of the programs outlined by the CZMA is the National Coastal Zone Management Program (CZMP). This voluntary partnership is between the federal government and coastal and Great Lakes states and territories. Under this program, state governments design unique coastal zone management programs, which are subsequently approved by the National Oceanic and Atmospheric Administration (NOAA). Once the programs have been approved, the CZMA requires that any federal actions that could have a reasonably foreseeable impact on a state's coastal zone, even if the action occurred outside of the designated coastal zone, be consistent with the approved coastal management program for that state. The goal of the Act is to "*preserve, protect, develop, and, where possible, to restore or enhance the resources of the nation's coastal zone*." There are no coastal resources present within or in the vicinity of the GSA.

4.1.3.2 Department of Transportation Act, Section 4(f) Resources

Section 4(f) of the U.S. Department of Transportation (DOT) Act of 1966 [recodified in 1983 as Title 49, Section 303(c) of the USC] provides for the protection of publicly owned recreational resources and requires the analysis of potential impacts on these resources arising from DOT actions. Resources protected under Section 4(f) include public parks and recreation areas, wildlife and waterfowl refuges, or management areas of national, state, or local significance. Section 4(f) also applies to historic sites of national, state, or local significance as determined by the official that has jurisdiction over these historic resources. Such sites include those listed or eligible for inclusion in the National Register of Historic Places (NRHP) and those identified by appropriate state or local agencies as having historic significance. There are no publicly owned parks,

recreation areas, or wildlife or waterfowl refuges within the DSA that would be impacted directly or within the GSA that may be impacted.

4.1.3.3 Land & Water Conservation Fund (LWCF), Section 6(f) Resources

The U.S. Land and Water Conservation Fund Act of 1965 established the Land and Water Conservation Fund (LWCF), which was created to preserve, develop, and assure accessibility to outdoor recreational resources. Section 6(f) of this Act prohibits the conversion of lands purchased with LWCF monies to non-recreational use. A review of 6(f) properties on the LWCF website revealed no properties within or adjacent to the DSA.

4.1.3.4 Water Resources (Wild & Scenic Rivers)

The Federal regulatory program protecting wild and scenic rivers is the Wild and Scenic Rivers Act, administered by the National Park Service. According to the National Wild and Scenic River System map, no Wild and Scenic Rivers are present near the DSA. The National Park Service Nationwide Rivers Inventory was also reviewed for the presence of river segments believed to possess features that make them a candidate for inclusion in the National Wild and Scenic River System. However, there were no segments surrounding the DSA. Surface waters are not found within the study area.

4.1.3.5 Water Resources (Groundwater)

A significant impact on groundwater would exist if the action exceeded groundwater quality standards established by federal, state, and local agencies or contaminated an aquifer used for public water supply. According to the USEPA desktop[1], no sole source aquifers exist within the GSA. The Ohio Source Water Protection Program does not have any Protection Areas (SPA) within the GSA.

4.1.3.6 Water Resources (Floodplains)

EO 11988 defines floodplains as "*lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, including, at a minimum, the area subject to a one percent or greater chance of flooding in a given year."* The intent of Order 11988 is to ensure that floodplains and floodways are kept clear of obstructions and facilities that could restrict or increase flow rates or volumes during flood conditions. Encroachment is defined as any action that would cause the 100-year water surface profile to rise by one foot or more.

FEMA has adopted the 100-year floodplain as the base flood for floodplain management. Both federal and state laws regulate development within floodplains and floodways. According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRMs) panel number 39153CO29OE, dated July 20, 2009, no 100-year or 500-year floodplains are within the DSA.

[1] https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b

4.2 Air Quality

4.2.1 Regulatory Context

In accordance with the Clean Air Act (CAA) Amendments of 1990, all areas within Ohio are designated with respect to compliance, or degree of noncompliance, with the National Ambient Air Quality Standards (NAAQS). NAAQS have been established for carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM)[2], and lead (Pb) (see **Table 4-1**). These designations are either "attainment," "nonattainment," or "unclassifiable."

Table 4-1. National Ambient Air Quality Standards

Pollutant	Primary/Secondary	Averaging Time	Level	Form
Carbon Monoxide (CO)	Primary	8-hour	9 ppm	Not to be exceeded more than once per year
		1-hour	35 ppm	
Lead (Pb)	Primary & Secondary	3-month average	0.15 µg/m^3	Not to be exceeded
Nitrogen Dioxide (NO_2)	Primary	1-hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	Primary & Secondary	1-year	53 ppb	
Ozone (O_3)	Primary & Secondary	8-hour	0.070 ppm	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Particulate Matter ($PM_{2.5}$)	Primary	1-year	12.0 µg/m^3	Annual mean, averaged over 3 years
	Secondary	1-year	15.0 µg/m^3	98th percentile, averaged over 3 years
	Primary & Secondary	24-hour	35 µg/m^3	Not to be exceeded more than once per
Particulate Matter (PM_{10})	Primary & Secondary	24-hours	150 µg/m^3	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide (SO_2)	Primary	1-hour	75 ppb	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	Secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year

Source: U.S. EPA; CFR, Title 40, Part 50, Section 121

[2] Particulate matter is classified by the aerodynamic diameter of the particles. Coarse particulate matter has a diameter of 10 microns or less (PM_{10}). Fine particulate matter has a diameter of 2.5 microns or less ($PM_{2.5}$).

An area with air quality better than the NAAQS is designated as “attainment,” while an area with air quality worse than the NAAQS is designated as “non-attainment.” Non-attainment areas are further classified as extreme, severe, serious, moderate, and marginal. An area may be designated as unclassifiable when there is a lack of data to form a basis for attainment status.

A maintenance area describes the air quality designation of an area previously designated nonattainment by the USEPA and subsequently meets attainment after emissions are reduced. Such an area remains designated as maintenance for a period of up to 20 years, at which the state can apply for re-designation to attainment, provided that the NAAQS remained in attainment throughout the maintenance period. Certain requirements apply in the maintenance area to ensure continued compliance with the NAAQS.

4.2.2 Affected Environment

The project area is within Summit County, which is a part of the Greater Metropolitan Cleveland Intrastate Air Quality Control Region (40 CFR 81, Subpart B, §81.122). According to the U.S. Environmental Protection Agency (EPA) Green Book, Summit County is in attainment for all criteria pollutants except ozone and $PM_{2.5.}$

4.2.2.1 2008 8-hour Ozone

The region was designated as nonattainment for the 2008 8-hour ozone standard; however, on January 6, 2017, the USEPA determined that the area had reached the 2008 8-hour ozone standard, and the region was redesignated to maintenance. As such, the area operates under a maintenance plan for 8-hour ozone. The maintenance plan remains in effect and contains future year emissions budgets under which the maintenance area can demonstrate that attainment of NAAQs can be achieved. The ozone precursor pollutants are volatile organic compounds (VOC) and nitrogen oxides (NOx).

4.2.2.2 2015 8-hour Ozone

In 2015, Summit County, Ohio, was classified as a marginal nonattainment area for 8-hour ozone, as the County did not meet the 2015 8-hour ozone standard of 70 parts per billion (ppb).

4.2.2.3 Particulate Matter

On November 13, 2009, the USEPA designated Summit County as a nonattainment area for the 2006 24-hour fine particles (PM2.5) standard. Due to progress made under the State Implementation Plan (SIP), the region was redesignated to maintenance for the 2006 NAAQS on September 18, 2013[3].

4.2.3 Environmental Consequences

4.2.3.1 Significance Threshold

Two primary regulations apply to air quality: NEPA and the CAA. The need for an air quality assessment to satisfy NEPA depends on the nature of the project, the project area’s non-attainment status, and the size of the airport. Under NEPA, the impact of a proposed action on air

[3] https://dam.assets.ohio.gov/image/upload/epa.ohio.gov/Portals/27/sip/Nonattain/78_FR_57270.pdf

quality must be assessed by evaluating the impact of the proposed action on conformance with the NAAQS. The CAA amendments of 1990 include provisions to ensure emissions from Federally funded actions within non-attainment areas comply with the goals and objectives of the State Implementation Plans (SIP) for the state where the project is located.

As provided in FAA Order 1050.1F, an action would cause significant air quality impacts if pollutant concentrations were to exceed one or more of the NAAQS, as established by the EPA under the CAA for any of the time periods analyzed or to increase the frequency or severity of any such existing violations.

4.2.3.2 Alternative 1: Westside Hangar Development – Option 1

Alternative 1 would not include development actions that would result in a change in aircraft operations or fleet mix at the CAK, nor would the project induce growth in passenger levels; however, an operational analysis was completed for the number of ground access vehicles (GAV) to access the new development.

General Conformity refers to the specific requirements under Section 176(c) of the CAA for Federal agencies other than the Federal Highway Administration and the Federal Transit Administration. The applicability of the General Conformity Rule is dependent on whether construction emissions would affect attainment as outlined in the SIP. The threshold levels, or *de minimis* levels, for each pollutant were established under the CAA to determine if a proposed action could affect attainment status. Therefore, a construction emissions inventory was also prepared (see **APPENDIX A**).

The proposed construction may include the disturbance and movement of soil, concrete, and asphalt and generate various forms of solid waste and debris. Emissions associated with excavation, site preparation, paving, and other construction activities include dust from exposed soils and haul roads and exhaust from construction vehicles and equipment. The types and amounts of emissions generated would vary in time and location depending on the operation, the level of activity, and the local weather conditions.

Emissions from additional GAV trips were estimated using the EPA Motor Vehicle Emissions Simulator (MOVES) model, version 5.0. Due to the Airport's location in Summit County and Stark County, the default vehicle mix for each county was used to produce emission factors (pounds per mile). The additional GAV mileage was conservatively estimated using 100 daily round-trips in the peak year and an average round-trip distance of 60 miles.

Activity factors for construction activities were estimated using the Airport Construction Emissions Inventory Tool (ACEIT) published by the Airport Cooperative Research Program in Report 102. ACEIT estimates the construction equipment activity that would be required based on the type and amount of construction being performed. This activity is used with emission factors for construction and other mobile vehicles to estimate the emissions that would result during the project's construction. Emission factors for non-road equipment were obtained from MOVES. ACEIT has been configured with default construction equipment assignments based on the type of construction activity being performed. ACEIT includes an activity rate for each piece of equipment and activity. For example, 18 hours of concrete truck operation is assumed for every 10,000 square feet of building area. The estimated equipment runtime is used with the equipment engine size and MOVES 5.0 emission factors to estimate total construction emissions. The estimated project emissions are summarized in **Table 4-2**.

Table 4-2. Alternative 1 Emissions

Source (tons/year)	NO_X	CO	VOC	SO_2	PM_{10}	$PM_{2.5}$	CO_2	CH_4	N_2O
GAV Emissions	0.55	6.57	0.22	0.01	0.01	0.01	975	0.02	0.02
Construction Emissions	6.40	34.8	1.33	0.04	0.26	0.25	8,759	0.12	0.14
Total	6.95	41.4	1.55	0.05	0.27	0.26	9,733	0.15	0.16
de minimis Threshold	**50**	**N/A**	**50**	**N/A**	**N/A**	**100**	**N/A**	**N/A**	**N/A**

Source: CHA (2025)

Potential air quality emissions from construction would be limited to short-term increases in fugitive dust, particulates, and localized pollutant emissions from construction vehicles and equipment. All construction equipment would be properly maintained and outfitted with emission-reducing exhaust equipment. Diesel construction vehicles typically use selective catalytic reduction (SCR) and/or diesel particulate filters (DPF) to control emissions as required by USEPA emission standards. Adherence to a Storm Water Pollution Prevention Plan (SWPPP) would mitigate any potential impacts from dust. The SWPPP would be prepared and approved prior to construction.

The emissions assessment demonstrates that Alternative 1 would not cause an increase in air emissions above the applicable *de minimis* thresholds. Therefore, the proposed project conforms to the SIP and the CAA and would not create any new violation of the NAAQS. Therefore, it can be concluded that Alternative 1 would not result in a significant air quality impact. No mitigation measures are required.

4.2.3.3 Alternative 2: Westside Hangar Development – Option 2

The emissions assessment conducted for Alternative 1 is valid for Alternative 2. Project components for both alternatives stay consistent with each layout; therefore, Alternative 2 would not cause an increase in air emissions above the applicable *de minimis* thresholds. Therefore, it can be concluded that Alternative 2 would not result in a significant air quality impact. No mitigation measures are required.

4.2.3.4 Alternative 3: No-Build Alternative

Under the No Action Alternative, the proposed project would not be constructed or operated in the future. Therefore, there would be no impact on air quality.

4.3 Biological Resources

4.3.1 Regulatory Context

Section 7(c) of the Endangered Species Act of 1973 (16 USC 1531 et seq.) requires that the potential impacts on rare, threatened, and endangered species of flora and fauna and their critical habitats be identified to avoid adverse impacts on these species. The U.S. Fish & Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) website and the State of Ohio online resources were utilized to determine the potential for impacts on rare, threatened, or endangered species.

Pursuant to the Migratory Bird Treaty Act of 1918 (16 USC §§703-712), it is illegal to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any

migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid federal permit. The Bald and Golden Eagle Protection Act (16 USC §668-668c) prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald and golden eagles, including their parts, nests, or eggs.

4.3.2 Affected Environment

4.3.2.1 Federally Protected Species

The IPaC website was reviewed in February 2025 for federally listed species (see **APPENDIX B**). The website indicated that the following species may occur or could potentially be affected by activities within the DSA:

- Indiana Bat (*Myotis sodalis*), Endangered
- Salamander Mussel (*Simpsonaias ambigua*), Proposed Endangered
- Monarch Butterfly (*Danaus plexippus*), Proposed Threatened

No critical habitat for these species has been identified within the DSA. The site is entirely contained within the existing AOA perimeter fence and is managed to minimize attractants to potentially hazardous wildlife. Due to this management, little to no appropriate habitat for listed species or any wildlife exists within the DSA. Managed turf and an existing road comprise most of the DSA, with small emergent wetland areas also found within.

According to the USFWS, the Indiana bat (*Myotis sodalis*) requires specific habitats for different seasons. During winter, they hibernate in caves and mines and in the summer months (from early April to late September), they roost in forests, preferring large trees with loose or exfoliating bark. These trees provide the necessary structure for the bats to roost under the bark. Preferred roost trees are typically greater than 9 inches in diameter at breast height (dbh), with larger trees (over 20 inches dbh) being especially favored. These roosts are usually located in forest openings, at the forest edge, or in areas where the canopy allows some sunlight to reach the roost tree. Proximity to water is also important, as roosts are often found within 0.6 miles of a water source. Maternity colonies, where females raise their young, are particularly dependent on these specific habitat features. As no critical habitat or suitable summer habitat was identified within or adjacent to the project area, and no tree clearing was proposed as part of the project, the USFWS did not require the completion of any determination keys for the Indiana bat.

Monarch butterflies can be found in a variety of habitats where they rely on obligate milkweed (primarily Asclepias spp.) as a host plant during breeding season and as a food source. Due to the ongoing mowing for wildlife management at the Airport, the DSA does not include a suitable habitat for the Monarch Butterfly.

The salamander mussel is an aquatic species of mollusk and is only found in free-flowing rivers and lakes. No such habitat exists within or adjacent to the DSA.

Correspondence received on April 23, 2025 and June 9, 2025 from USFWS stated "*Due to the project, type, size, and location, we do not anticipate adverse effects to federally endangered, threatened, or proposed species or proposed or designated critical habitat.*" (see **APPENDIX B**).

4.3.2.2 Migratory Birds

The IPaC identified a list of Birds of Conservation Concern (BCC) that may be affected by the proposed project. These species are listed below:

- Bald Eagle (*Haliaeetus leucocephalus*)
- Belted Kingfisher (*Megaceryle alcyon*)
- Black-billed Cuckoo (*Coccyzus erythropthalmus*)
- Blue-winged warbler (*Vermivora cyanoptera*)
- Bobolink (*Dolichonyx oryzivorus*)
- Canada Warbler (*Cardellina canadensis*)
- Chimney Swift (*Chaetura pelagica*)
- Eastern Meadowlark (*Sturnella magna*)
- Eastern Whip-poor-will (*Antrostomus vociferus*)
- Evening Grosbeak (*Coccothraustes vespertinus*)
- Golden Eagle (*Aquila chrysaetos*)
- Lesser Yellowlegs (*Tringa flavipes*)
- Long-eared Owl (*Asio otus*)
- Pectoral Sandpiper (*Calidris melanotos*)
- Prairie Warbler (*Setophaga discolor)*
- Red-headed woodpecker (*Melanerpes erythrocephalus*)
- Rose-breasted Grosbeak (*Pheucticus ludovicianus*)
- Semipalmated Sandpiper (*Calidris pusilla*)
- Short-billed Dowitcher (*Limnodromus griseus*)
- Wood Thrush (*Hylocichla mustelina*)

The managed landscape and impervious surface within the DSA do not support plant or animal diversity nor provide suitable nesting or stopover habitat for any of the migratory bird species of concern. The emergent wetlands within the DSA are specifically managed to reduce the potential to attract hazardous wildlife and, therefore, do not provide suitable habitat for migrating shorebirds.

4.3.2.3 State Protected Species

The Ohio Department of Natural Resources (ODNR) has legal authority over Ohio's fish and wildlife, including developing and updating a list of Ohio's threatened and endangered species per Ohio Revised Code 1531.25. This list is further broken down into flora (plants) and fauna (animals) and can be sorted by county. The species lists for both plants and animals for Summit County, Ohio, are included in **APPENDIX B**

As the listed species are determined at the county level, many listed species have specific habitat requirements not found within or adjacent to the DSA. Direct coordination with the ODNR was

completed based on the proposed action, which completed an inter-disciplinary review of the project actions. The Ohio Natural Heritage Database indicates no observational records over the past 45 years of state or federally listed plants or animals within one mile of the specified project area.

The Division of Fish and Wildlife identified multiple bat species whose ranges include the proposed project area, including 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. All of these bat species utilize similar habitat during the summer months, roosting in trees behind loose or exfoliating bark, in crevices or cavities, or sheltered within clumps of leaves and are also dependent on the forest structure surrounding the roost trees. During the winter months, all of the species utilize hibernaculum caves to shelter in large numbers. As no forested areas or individual trees exist within the project area and no hibernaculum is located within 0.25 miles of the project area, the proposed action is not likely to impact these bat species.

Several aquatic species were identified, whose ranges include the proposed project area. These species include the Iowa darter (*Etheostoma exile*), a state endangered fish; the pugnose minnow (*Opsopoeodus emiliae*), a state endangered fish; the western banded killifish (*Fundulus diaphanus menona*), a state endangered fish; the lake chubsucker (*Erimyzon sucetta*), a state threatened fish; and the paddlefish (*Polyodon spathula*), a state threatened fish. As no suitable aquatic habitat exists within or adjacent to the project area, the project is not likely to impact on these species.

Two species of reptiles, the smooth green snake (*Opheodrys vernalis*), a state endangered species, and the spotted turtle (*Clemmys guttata*), a state threatened species, were also identified as having ranges that overlap the project area. However, there is unlikely to be any impact on either of these species due to the location, the type of habitat within the project area, and the nature of the proposed action.

The range of the northern harrier (*Circus hudsonius*), a state endangered bird, includes the project area. A common migrant and winter species in Ohio, the harrier hunts rodents and other small animals over grassland areas. While this species is occasionally seen hunting over airports around the state, the vegetation management practices within the AOA discourage the development of the prey base they hunt and reduce the likelihood of their presence during migration. Nesting during the summer months is rarer and requires extensive and specific habitat (large marshes or grasslands). Appropriate nesting habitat is not found within or adjacent to the DSA; thus, the proposed action would not likely impact this species.

4.3.3 Environmental Consequences

4.3.3.1 Significance Threshold

According to FAA Order 1050.1F, Desk Reference, a significant impact on biological resources occurs when the USFWS or the National Marine Fisheries Service determines a federal action would likely jeopardize a federally listed threatened or endangered species or would result in the destruction or adverse modification of federally designated critical habitat.

4.3.3.2 Alternative 1: Westside Hangar Development – Option 1

Alternative 1 would not alter any critical habitats. Because of the unlikelihood of their presence in the area, pursuant to Section 7 of the Endangered Species Act, the proposed project is not likely to affect federal or state protected species.

4.3.3.3 Alternative 2: Westside Hangar Development – Option 2

Alternative 2 is not likely to affect federal or state protected species given the proposed action takes place in the same location, with the same project components, as Alternative 1.

4.3.3.4 Alternative 3: No-Build Alternative

Under the No Action Alternative, there would be no construction and, therefore, no significant impact on biological resources.

4.4 Farmlands

4.4.1 Regulatory Context

Farmlands are defined as those agricultural areas considered important and protected by federal, state, and local regulations. These significant farmlands include all pasturelands, croplands, and land considered prime, unique, or of statewide or local importance. The Farmland Protection Policy Act (FPPA) (7 USC 4201-4209) of 1984 was implemented to protect and preserve farmland for agricultural use as part of the 1980 Farm Bill (PL 97-98, Title XV, Subtitle I; 7 USC 4201-4209). This policy, however, does not apply to land already committed to urban development or water storage, regardless of its importance as defined by the United States Department of Agriculture (USDA)-Natural Resource Conservation Service (NRCS). The FPPA and its implementing regulations (7 CFR § 657.5) define prime, unique, statewide, and locally important farmlands as:

- **Prime farmland**: farmland with the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops
- **Unique farmland**: farmland that is classified as producing high-value food and fiber crops
- **Statewide and locally important**: farmland that has been designated as “important” by either a state government, by county commissioners, or by an equivalent elected body

4.4.2 Affected Environment

According to the Natural Resource Conservation Service (NRCS) Web Soil Survey, multiple soil types identified as prime farmland are mapped within the DSA (see **Figure 4-2**). Soil types and farmland classifications of soils within the study area are shown below in **Table 4-3**.

Table 4-3. Existing Soil Classifications

Soil	Symbol	Rating
Bogart loam, 0 to 2 percent slopes	BgA	All areas are prime farmland
Canfield-Urban land complex, 2 to 6 percent slopes	CfB	Not prime farmland
Chili silt loam, 2 to 6 percent slopes	CpB	All areas are prime farmland

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AKRON-CANTON AIRPORT

Figure 4-2:
Soils Map
Akron-Canton Regional Airport
Akron, Ohio

1' = 150"

CHA No. 098529

Source Data
USDA Web Soil Survey

Date Saved: 7/1/2025, 8548

Chili silt loam, 6 to 12 percent slopes	CpC	Not prime farmland
Loudonville-Urban land complex, rolling	LuC	Not prime farmland
Sebring silt loam, 0 to 2 percent slopes	Sb	Prime farmland if drained
Udorthents, sanitary landfill	Uf	Not prime farmland

Source: NRCS Web Soil Survey, October 2024

4.4.3 Environmental Consequences

4.4.3.1 Significance Threshold

According to FAA Order 1050.1F, a significant impact would occur if the total combined score on the Form AD-1006: *Farmland Conversion Impact Rating Form* is in a range between 200 and 260 points.

4.4.3.2 Alternative 1: Westside Hangar Development – Option 1

According to the NRCS Web Soil Survey for Summit County, Bogart loam, 0 to 2 percent slopes (BgA) and Chili silt loam, 2 to 6 percent slopes (CpB) are prime farmland and located within the DSA. Although the Sponsor's Proposed Action is located within areas classified as prime farmland, the proposed improvements are entirely within airport property on lands committed to urban development. Coordination with the U.S. Department of Agriculture stated that the project is exempt from the Farmland Policy Protection Act (FPPA) due to already being committed to urban development. Given that Alternative 1 would not convert active agricultural production to non-agricultural use; therefore, there would be no significant impact on farmland.

4.4.3.3 Alternative 2: Westside Hangar Development – Option 2

Alternative 2 consists of the same study area as Alternative 1. As previously stated, prime farmland is located within the DSA. However, the proposed action would not convert active agricultural production to non-agricultural use; therefore, there would be no significant impact on farmland.

4.4.3.4 Alternative 3: No-Build Alternative

The No-Action Alternative would not impact prime, unique, or statewide-important soils.

4.5 Hazardous Materials, Solid Waste, & Pollution Prevention

4.5.1 Regulatory Context

Hazardous materials, solid waste, and pollution prevention include an evaluation of the waste streams, potential hazardous materials, and pollution prevention procedures used at the Airport. Hazardous materials, including hazardous waste and hazardous substances, petroleum, and natural gas substances and materials, if present within the DSA, may present a risk to human health and the environment. Hazardous and solid waste is regulated under federal law by the Resource Conservation and Recovery Act (RCRA). RCRA established the framework for the proper generation, storage, treatment, and disposal of hazardous and non-hazardous solid waste to prevent potential threats to human health and the environment. RCRA also regulates new products (e.g., fuels) and waste materials stored in underground storage tanks (USTs). At operating facilities where improperly managed hazardous waste was released or threatens to be

released, EPA or a state agency may pursue a RCRA Corrective Action. For abandoned, uncontrolled, hazardous waste sites, the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) establishes liability, including emergency remediation costs, for those parties determined to be responsible. CERCLA also established a fund to pay for the cleanup of sites when no responsible party is identified. Additionally, CERCLA directed EPA to create the National Priorities List (NPL) of Superfund sites or sites prioritized by known or threatened releases of hazardous substances, pollutants, or contaminants into the environment. The NPL includes the most serious uncontrolled or abandoned hazardous waste sites in the United States.

4.5.2 Affected Environment

A review of online environmental resources was conducted to identify sites within the GSA. The results of this review are summarized below (see **Figure 4-3**). The online Ohio and EPA resources that were reviewed include the following:

- Ohio EPA Resources
- EPA National Priorities List (NPL) Where You Live Map
- EPA Cleanups in My Community
- EPA Enforcement and Compliance History Online (ECHO)
- EPA NEPAssist
- EPA RCRAInfo
- EPA UST Finder

4.5.2.1 National Priorities List (NPL) Sites

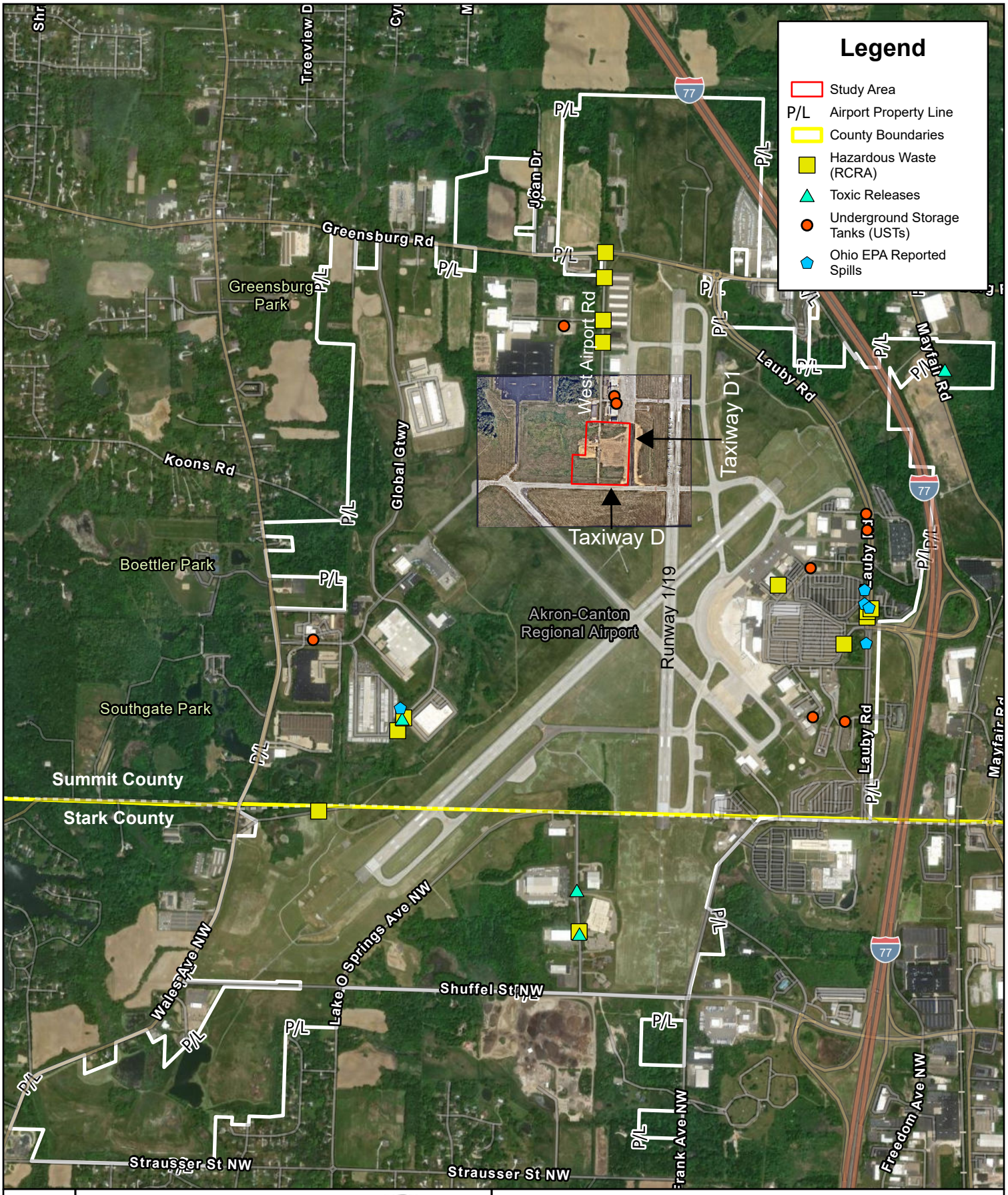
A search for National Priorities List (NPL) sites using the USEPA's NEPAssist determined no NPL sites within the GSA.

4.5.2.2 Ohio EPA Reported Spills

A review of the Ohio EPA website identified no reported spills within the DSA. **Figure 4-3** shows the location of five reported spills within the GSA.

4.5.2.3 RCRA Hazardous Waste Sites

Any facility with hazardous waste activities regulated under RCRA must provide information to the Ohio EPA, Division of Environmental Response & Revitalization, and it must then be submitted to USEPA and maintained in a national program management and inventory system, RCRAInfo. Regulated hazardous waste activities include hazardous waste generators that generate or accumulate hazardous waste in amounts above thresholds for conditional exemption; transporters of hazardous waste; and permitted treatment, storage, or disposal facilities. A search of the RCRAInfo records using USEPA's Enforcement and Compliance History Online (ECHO) tool identified no contaminated sites within the DSA. Fourteen active RCRA facilities and eight inactive RCRA facilities were within the GSA. Four toxic releases were also recorded on the NEPAssist website. There have been no reported RCRA violations with the latest report occurring in 2023. Lastly, nine locations on airport property contain underground storage tanks (USTs). Most of the USTs are closed and there have not been reports of Leaking USTs (LUSTs) (refer to Figure 4-3).



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AKRON-CANTON AIRPORT

Figure 4-3: Hazardous Materials

Akron-Canton Regional Airport
Akron, Ohio

1' = 1,900"	CHA No. 098529	*Source Data* *Akron-Canton Airport Layout Plan, NEPAssist, EnviroAtlas, Ohio EPA, UST Finder*

Date Saved: 7/1/2025, 8548

4.5.2.4 Solid Waste

Solid waste collected from the Airport is stored in numerous dumpsters and compactors on the airport property. Most of the dumpsters and compactors are emptied daily, and others are emptied as needed. Solid waste generated at the Airport is collected by Waste Management and disposed of off airport in accordance with local and state regulations. Several solid waste landfills with sufficient capacity to accept the remaining waste from the Airport exist in the vicinity of CAK. The local municipal solid waste landfill, Akron Transfer Station Landfill, has remaining permitted capacity. Numerous other permitted municipal solid waste management landfills, land clearing and inert debris landfills, construction and demolition (C&D) landfills, and hazardous waste collection centers exist in Summit County and surrounding counties.

4.5.3 Environmental Consequences

4.5.3.1 Significance Threshold

The FAA has not established a significance threshold for hazardous materials, solid waste, or pollution prevention; however, an effect on any of the listed criteria below would need to be evaluated for the potential for significant adverse effects.

- Impact on a contaminated site
- Violate hazardous waste or solid waste management laws and regulations
- Produce hazardous waste
- Produce solid waste that would exceed local capacity
- Adverse effects on human health and the environment

4.5.3.2 Alternative 1: Westside Hangar Development – Option 1

Encountering existing hazardous waste, using hazardous materials, generating hazardous and solid waste, and implementing potential pollution prevention are evaluated below.

Hazardous Materials
The Sponsor's Proposed Action would not violate regulations, involve a known contaminated site, produce hazardous waste, generate a different type or quality of solid waste, use a different collection method, or exceed local capacity, and it would not adversely affect human health and the environment. No known areas of concern with the potential to encounter hazardous materials or contaminated subsurface media exist within the DSA.

Solid Waste
Solid waste, including construction and demolition debris and non-hazardous waste, would be generated from the demolition of existing pavements and minor structures. Contractor(s) working on site would be required to remove and properly dispose of all waste materials that may result from construction activities. Solid waste generated during construction would be transported and recycled or disposed of as directed by the appropriate authorities. Waste would be managed and disposed of in accordance with federal, state, and local regulations. Upon completion of construction, the generation of municipal solid waste is not expected to be significant. The solid waste associated with Alternative 1 is not expected to exceed local or regional landfill capacities.

Pollution Prevention
Potential pollutants could be released into the environment during demolition, construction, and operation of Alternative 1. During design, a SWPPP for construction activities would be developed

and approved prior to construction. If a contractor plans to store fuel or other oils on site during construction in sufficient quantities, they would be required to prepare and fully implement a Spill Prevention, Control, and Countermeasure (SPCC) plan to prevent, respond to, and clean up spills. The Airport currently has an approved stormwater permit, airport SWPPP, and airport SPCC plan. Upon completion of Alternative 1, the Airport would incorporate the infrastructure improvements into its SPCC plan (if applicable) and SWPPP and address pollution prevention through stormwater management, proper storage of materials, good housekeeping practices, and implementation of applicable stormwater best management practices for maintenance activities.

Based on the information presented above, there would not be significant impacts from hazardous materials or solid waste and proper pollution prevention would be in place during construction and in operation.

4.5.3.3 Alternative 2: Westside Hangar Development – Option 2

Alternative 2 would not have significant impacts to or from hazardous materials, solid waste, or pollution prevention. Like Alternative 1, the Sponsor's Proposed Action would not violate regulations, involve a known contaminated site, produce hazardous waste, generate a different type or quality of solid waste, use a different collection method, or exceed local capacity, and it would not adversely affect human health and the environment. Upon completion of construction, the generation of municipal solid waste is not expected to be significant. The solid waste associated with Alternative 2 is not expected to exceed local or regional landfill capacities. A SPCC plan would also be required as part of Alternative 2.

4.5.3.4 Alternative 3: No-Build Alternative

Under the No Action Alternative, there would be no impact associated with potentially disturbing or encountering unidentified hazardous materials and solid waste on site.

4.6 Historical, Architectural, Archeological, and Cultural Resources

4.6.1 Regulatory Context

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies to consider the effects of their undertakings on historic properties and, if necessary, to consult with the State Historic Preservation Office (SHPO) and other parties to develop and evaluate alternatives and modifications to the undertaking that could avoid or minimize potential impacts on historic resources. The Ohio History Connection (OHC) is the SHPO in Ohio responsible for maintaining historical, archaeological, and cultural resource sites throughout the state and regulating Section 106 of the NHPA.

4.6.2 Affected Environment

The Area of Potential Effects (APE) is defined in 36 CFR 800.16(d) as the "*geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties if such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking*."

The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking (36 CFR § 800.16(d)). The APE must include all direct and reasonably foreseeable indirect effects. Although the NHPA regulations do not define the

term “indirect effect,” the FAA typically uses the term to refer to noise and visual impacts that do not physically alter historic resources. Because this type of impact often covers a much larger area but does not have the potential to affect below-ground resources, the FAA normally defines separate APEs for direct and indirect effects.

The area with the potential for ground disturbance due to construction activities, approximately 14 acres, was considered the Direct APE. The Direct APE is the same as the DSA shown in **Exhibit 3-1**. Since the Proposed Action is limited to on-airport property hangar development, located in an area with existing hangars and other airport facilities, and there would be no noise or visual impacts from the Proposed Action, an indirect APE was not developed.

4.6.2.1 Identification of Historic Properties with the Direct APE

A cultural resources desktop review and field walk was completed for the project in December 2024 (see **APPENDIX C**). The cultural resources desktop review revealed no previously documented archaeological sites or cultural resource surveys located in the vicinity of the project area. A review of historical maps did not depict any potential historic resources within or adjacent to the Project area. Examination of aerial imagery did not reveal any landscape features that would identify prehistoric earthworks or historic structures in the project area. Additionally, the most recent aerial imagery shows a significant amount of ground surface disturbance in the project area.

Information provided by the OHC reveals that the project area has not been subjected to a history/architectural investigation. The research identified a total of seven previously recorded historic structures located in a one-mile search radius of the DSA. Two of the seven previously recorded historic resources are located approximately 0.5 miles from the DSA. The two resources are houses constructed between 1940 and 1945. None of the previously recorded historic resources are listed in or considered eligible for listing in the NRHP. These resources are also not within the viewshed of the DSA.

4.6.3 Environmental Consequences

4.6.3.1 Significance Threshold

According to FAA Order 1050.1F, the FAA does not have a threshold for significant impacts for this resource category; however, it has identified factors to consider when evaluating the “context and intensity” of potential impacts. Factors include, but are not limited to, situations in which the proposed action or alternative(s) would result in a finding of Adverse Effect through the Section 106 process.

4.6.3.2 Alternative 1: Westside Hangar Development – Option 1

Early coordination with the Ohio History Connection was initiated on January 21, 2024. OHC correspondence received on February 11, 2025, February 18, 2025, and July 7, 2025, stated that “*Based on a review of our database and records, previous disturbances to the project area, and the scope of the project, it is the SHPO’s opinion that, as proposed, the project would have no effect on historic properties.”* Full correspondence can be found in **APPENDIX C**.

The potential to encounter undisturbed archaeological deposits is minimal, as the DSA is highly disturbed from previous development. If archaeological artifacts or human remains are uncovered during construction, construction in the immediate area would be stopped, and the OHC would be notified immediately. Neither direct nor indirect impacts on historic or cultural resources would

occur if Alternative 1 were implemented. Therefore, it can be concluded that there would be no significant impact on historic architectural, archaeological, or cultural resources.

4.6.3.3 Alternative 2: Westside Hangar Development – Option 2

OHC correspondence received (see **APPENDIX C**), stated that "*Based on a review of our database and records, previous disturbances to the project area, and the scope of the project, it is the SHPO's opinion that, as proposed, the project would have no effect on historic properties."* If archaeological artifacts or human remains are uncovered during construction, construction in the immediate area would be stopped, and the OHC would be notified immediately. Neither direct nor indirect impacts on historic or cultural resources would occur if Alternative 2 were implemented. Therefore, it can be concluded that there would be no significant impact on historic architectural, archaeological, or cultural resources.

4.6.3.4 Alternative 3: No-Build Alternative

The No Action Alternative would not impact on historic, archaeological, architectural, or cultural resources.

4.7 Land Use

4.7.1 Regulatory Context

Pursuant to Title 49 U.S.C. 47106(a)(1), airport sponsors are required to provide assurances that a proposed action is consistent with existing land use plans. The regulations recognize that certain inconsistencies between the proposed federal action and any approved state or local plan or law may exist. Where an inconsistency exists, the NEPA document should describe the extent to which the agency would reconcile its action.

4.7.2 Affected Environment

According to the Future ALP, land use within the project area is designated as future general aviation development. A review of the ALP revealed that land uses surrounding CAK include a mix of commercial, industrial, recreational, public, and residential uses. Although residential uses are not typically considered compatible with airports, the residential areas surrounding CAK are generally protected by land and roadway buffers. Most of CAK's property is within the City of Green in Summit County, except for the southernmost portion of the airfield, which extends into Jackson Township in Stark County.

A review of existing zoning designations was conducted in the City of Green, where the Airport has its own zoning district – B-5 Airport Commerce. The city created this district to accommodate airport-related business activities, including but not limited to hotels, car rental facilities, restaurants, and other compatible uses, such as commercial, industrial, office, public, or institutional. In Jackson Township, most airport property is zoned I1 – Industrial, while some undeveloped parcels are zoned RR – Rural Residential, R1 – Single Family Residential, or B3 – Commercial Business. The residential areas are undeveloped and buffered by industrial zones.

4.7.3 Environmental Consequences

4.7.3.1 Significance Threshold

The FAA has not established a significance threshold for land use, and the FAA has not provided

specific factors to consider in making a significance determination for land use. An inconsistency with surrounding land uses and zoning by itself does not automatically result in a significant impact. The determination that significant impacts exist in the land use impact category is normally dependent on the significance of other impacts. The compatibility of a Proposed Action's existing and planned land uses is usually associated with noise impacts. In addition to the impacts of noise on land use compatibility, other potential impacts of FAA actions may also affect land use compatibility (such as disruption or relocation of communities, induced socioeconomic impacts, or land uses protected under Section 4(f) of the USDOT Act.

4.7.3.2 Alternative 1: Westside Hangar Development – Option 1

The proposed construction would occur entirely on airport property and be compatible with the existing Airport environment. The alternative would be consistent with future Airport plans and would not cause any land use incompatibilities or inconsistencies with local off-Airport land use plans. In addition, it would not create a new wildlife attractant or create an obstruction to navigational airspace per 14 CFR Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace*. Therefore, Alternative 1 would not change the land use in or around the DSA and would not cause significant land use impacts. However, the ALP is required to be updated so that the Proposed Action is accurately depicted.

4.7.3.3 Alternative 2: Westside Hangar Development – Option 2

Alternative 2 would not change the land use in or around the DSA and would not cause significant land use impacts because, like Alternative 1, the proposed project would occur entirely on airport property and be compatible with the existing Airport environment. The ALP would be required to be updated so that the Proposed Action is accurately depicted.

4.7.3.4 Alternative 3: No-Build Alternative

As part of the No Action alternative, there would be no change to the land use in or around the DSA, and it would not cause significant land use impacts.

4.8 Natural Resources & Energy Supply

4.8.1 Regulatory Context

This section describes the existing conditions and significance threshold(s) pertaining to natural resources and energy supply. This section also describes the proposed project's potential effects on natural resources and energy supply compared to the effects of the No Action Alternative.

4.8.2 Affected Environment

Airport operations require energy in the form of electricity, natural gas, aviation fuel, diesel fuel, and gasoline to power, cool, heat, and provide lighting. According to the Utility Assessment completed as part of the Master Plan Update in 2015, First Energy of Ohio is the electric provider, and Enbridge is the natural gas provider for CAK. The City of North Canton supplies potable water to CAK. According to airport personnel, energy and water constraints are irrelevant in this service area.

4.8.3 Environmental Consequences

4.8.3.1 Significance Threshold

FAA Order 1050.1F does not establish a significance threshold for natural resources or energy supply. Normally, an impact would be considered significant when the construction or operation of a proposed action causes the demand for limited consumable natural resources and energy to exceed available or future supplies.

4.8.3.2 Alternative 1: Westside Hangar Development – Option 1

Generally, CAK is in an urbanized area with adequate access to natural resources and energy supply for airport operations, including airport construction projects. Natural resources, such as sand, gravel, and steel, would be necessary for the construction. Both on-road and off-road equipment and water would be necessary for construction practices. This temporary and minimal usage of energy and natural resources is not expected to significantly impact natural resource use or energy supply. Alternative 1 would also require electricity usage during operations. Utilities are readily available on site; however, they would have to be extended to the south to reach the proposed hangar sites. It is not anticipated that any upstream utility improvements or additional capacity would be needed to accommodate Alternative 1. Therefore, it can be concluded that Alternative 1 would have no significant impact on natural resources or energy supply.

4.8.3.3 Alternative 2: Westside Hangar Development – Option 2

Natural resource and energy consumption for Alternative 2 would require the same amount as Alternative 1. Electricity during operations would be required but it is not anticipated that any upstream utility improvements or additional capacity would be needed to accommodate Alternative 2. Therefore, it can be concluded that Alternative 2 would have no significant impact on natural resources or energy supply.

4.8.3.4 Alternative 3: No-Build Alternative

Under the No Action Alternative, the Proposed Action would not occur; therefore, the consumable natural resources or an increase in energy usage would be consistent with the general operation of the Airport.

4.9 Noise & Land Use Compatibility

4.9.1 Regulatory Context

The FAA utilizes 14 CFR Part 150: *Airport Noise Compatibility Planning's* land use compatibility guidelines to determine compatibility with most land uses. These guidelines are consistent with land use compatibility guidelines developed by other federal agencies such as the USEPA and the United States Department of Housing and Urban Development. The analysis of the local development of airport plans, noise compatibility policies, and the development of plans are regulated by FAA laws and regulations, including the *Aviation Safety and Noise Abatement Act of 1979* (Title 49 U.S.C. 47501 et seq.) and the *Airport and Airway Improvement Act of 1982* (49 U.S.C. 47101 et seq.). FAA Order 1050.1F provides the FAA's policies and procedures to ensure agency compliance with NEPA.

4.9.2 Affected Environment

To evaluate aircraft noise, the FAA has an approved computer model, the Airport Environmental Design Tool (AEDT), that simulates aircraft activity at an airport. AEDT first defines a network of reference points to measure noise at ground level around the airport. Flight tracks and aircraft performance profiles are created within the program based on operational conditions. AEDT then selects the shortest distance from each flight track to each reference point and computes the noise exposure generated by each aircraft operation. Adjustments are applied for airport climate and environmental characteristics, atmospheric acoustic attenuation, aircraft thrust variations, and time of operation. Night-time operations, those occurring between the hours of 10:00 p.m. and 7:00 a.m., are attributed a 10-decibel penalty (perceived as twice as loud).

The noise exposure levels for each aircraft are then summed at each reference point to provide a day-night average noise level (DNL). DNL is a 24-hour logarithmic average sound level expressed in A-weighted decibels (dBA), as approved by the FAA. The cumulative noise exposure levels at all reference points are then used to plot noise exposure contours for selected DNL values and superimposed onto a base map. Noise contours generated by the AEDT represent outdoor noise levels and depict generally expected average daily noise exposure at a relative location rather than noise levels for a single aircraft event. Noise exposure on any one day may be greater or less than the average day. A DNL of 65 dBA is the noise level at which noise-sensitive land uses (residences, churches, schools, libraries, and nursing homes) become significantly impacted. According to the FAA guidelines, below DNL 65 dBA, all land uses are determined to be compatible with airport noise.

A Part 150 Noise Compatibility Study was completed for CAK in 2015, which indicated there are no non-compatible land uses, noise-sensitive buildings, or other properties that Part 150 requires to be identified for compatibility purposes within the 65 DNL.

4.9.3 Environmental Consequences

4.9.3.1 Significance Threshold

According to the FAA, a significant noise impact would occur when an action increases aircraft noise by DNL 1.5 dB or more for a noise-sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level or that would be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase when compared to the No Action alternative for the same timeframe.

4.9.3.2 Alternative 1: Westside Hangar Development – Option 1

It is expected that the hangar development would be completed in 2026. As stated, the Airport would be building a 12,000-SF hangar and would lease that space to a potential flight school currently operating at CAK. The two larger hangars would be constructed by private developers who would negotiate a ground lease with the Airport. Discussions with airport staff revealed that one of the corporate hangars would accommodate aircraft currently based at CAK (aircraft that spend most of the year operating in/out of CAK), while the other hangar would be constructed by an avionics company that would conduct routine maintenance.

Aircraft Noise

Alternative 1 may slightly increase daily operations by the operators coming to CAK for maintenance; however, Alternative 1 would not result in any changes in flight track locations, flight profiles, or runway use. As previously stated, the Part 150 study concluded there was no non-

compatible land use within the 65 DNL at the time of that study. At the time of the Part 150 study, CAK had over 834,000 passenger boardings and over 81,000 operations. A review of the January 2025 FAA Terminal Area Forecast (TAF) indicates that CAK's existing enplanements and operations are 320,608 and 47,724, respectively. Since the operations today are half of what they were during the Part 150 study, which documented no non-compatible land uses within the 65 DNL, it can be concluded that those contours have gotten relatively smaller over the last 10 years. Therefore, the addition of an avionics company that may attract an additional 5-10 operations of general aviation corporate jet activity a week would not cause a significant impact on the noise or land use compatibility.

Construction Noise

Implementation of Alternative 1 would result in unavoidable temporary construction noise, during daytime hours only, from equipment such as excavators, backhoes, pavement saws, graders, asphalt pavers, concrete trucks, compressors, and other miscellaneous equipment. **Table 4-4** depicts an estimate of the typical maximum sound level energy at 50 feet from various types of construction equipment that are likely to be used during the construction of Alternative 1. The total sound energy would be a product of a machine's sound level, the number of such machines in service, and the average time they operate.

Table 4-4. Typical Construction Equipment Noise

Equipment Type	Typical Maximum Sound Level (Lmax) in dB @ 50 feet
Excavator	85
Asphalt Paver	85
Pickup Truck	55
Roller	85
Concrete Truck	85
Dozer	85
Front end Loader	80
Excavator	85
Backhoe	80
Tractor Trailer	74
Scraper	85
Dump Truck	84

Source: FWHA Construction Noise Handbook[4]

Construction noise would temporarily increase sound levels; however, these temporary impacts would be limited to the immediate vicinity of the proposed construction. Typically, pavement removal and grading operations are the noisiest, with such equipment generating noise levels as high as 75 to 85 dB within 50 feet of its operation. The proposed construction is expected to take

[4] https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm

approximately six months. The Federal Highway Administration (FHWA) typically considers 85 dBA as an appropriate residential noise limit during daytime and evening hours (7:00 a.m. to 10:00 p.m.) for construction activities. Distance rapidly diminishes noise levels; therefore, it is anticipated that construction noise is not likely to exceed the FHWA's residential noise limits for construction activities, given that the DSA is surrounded by airport, industrial, and commercial land uses. The closest residential land use is approximately 1 mile to the west along Massillon Road. As such, it is anticipated that noise from construction equipment would likely not be discernible from other background noise sources, such as aircraft movements, roadway noise, and adjacent industrial and commercial land uses. Therefore, the temporary noise impacts due to construction activity would not be significant.

4.9.3.3 Alternative 2: Westside Hangar Development – Option 2

It is expected that the hangar development for Alternative 2 would be completed in 2026. As previously discussed, daily operations may slightly increase with Alternative 2 due to the operators coming to CAK for maintenance; however, this increase would not result in any changes to flight track locations, flight profiles, or runway use. Given there was no non-compatible land use at the time of the Part 150 study, it can be concluded that the addition of an avionics company would not cause a significant impact on noise or land use compatibility.

Temporary daytime construction noise for Alternative 2 would occur from the use of equipment such as excavators, backhoes, pavement saws, graders, asphalt pavers, concrete trucks, compressors, and other miscellaneous equipment. The proposed construction is expected to take approximately 6 months and noise level increases would be temporary. Noise levels would not exceed appropriate residential noise limits and would likely not be discernible from other background noise sources. Therefore, the temporary noise impacts due to construction activity would not be significant.

4.9.3.4 Alternative 3: No-Build Alternative

Under the No Build Alternative, there would be no temporary construction noise.

4.10 Socioeconomics & Children's Environmental Health and Safety Risks

4.10.1 Regulatory Context

Socioeconomics, with respect to NEPA, is used to describe aspects of a project that are either social or economic in nature. All federal agencies should conduct a socioeconomic analysis if economic and/or social effects relate to other environmental resource categories because of the Proposed Action and alternative(s). This analysis would include an evaluation of how elements of the human environment, such as population, employment, housing, and public services, may be impacted. If the acquisition of real property or displacement of people would occur because of the Proposed Action, the standards contained in the *Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970*, 42 U.S.C. § 61 et seq., and implementing regulations found at Title 49 CFR Part 24, would be implemented.

As stated previously, pursuant to the January 29, 2025, US DOT memorandum "*Implementation of Executive Orders Addressing Energy Climate Change Diversity and Gender*," the EA will not include low-income or minority population analysis as Executive Order 12898: *Federal Actions to Address EJ in Minority and Low-Income Populations* and Executive Order 14096: *Revitalizing our Nation's Commitment to EJ for All* were canceled on January 20, 2025.

EO 13045 directs federal agencies to analyze their policies, programs, activities, and standards for any environmental health or safety risks that may disproportionately affect children.

4.10.2 Affected Environment

4.10.2.1 Socioeconomics

U.S. Census Bureau data shows that the GSA is contained to Census Tract 5314.07. Census tract 5329.99 is adjacent to the GSA, northeast of Vietnam Veterans Memorial Highway. Since the southern part of the Airport is in Stark County, Census Tract 7113.24 was also evaluated (see **Figure 4-4**).

Table 4-5. Study Area Census Tract Information (Summit County)

	Summit County	Census Tract 5314.07	Census Tract 5329.99
Total Population	538,087	2,792	5,865
Minority Persons	138,995	122	323
Percent Minority	25.83%	4.37%	5.51%
Low Income	66,926	152	483
Percent Low Income	12.65%	5.46%	8.24%
Percent Under 18 years old	23%	31.3%	20.1%
Median Income	71,016	94,904	103,661

Source: U.S. Census, 2023 ACS Survey (5-year Estimates)

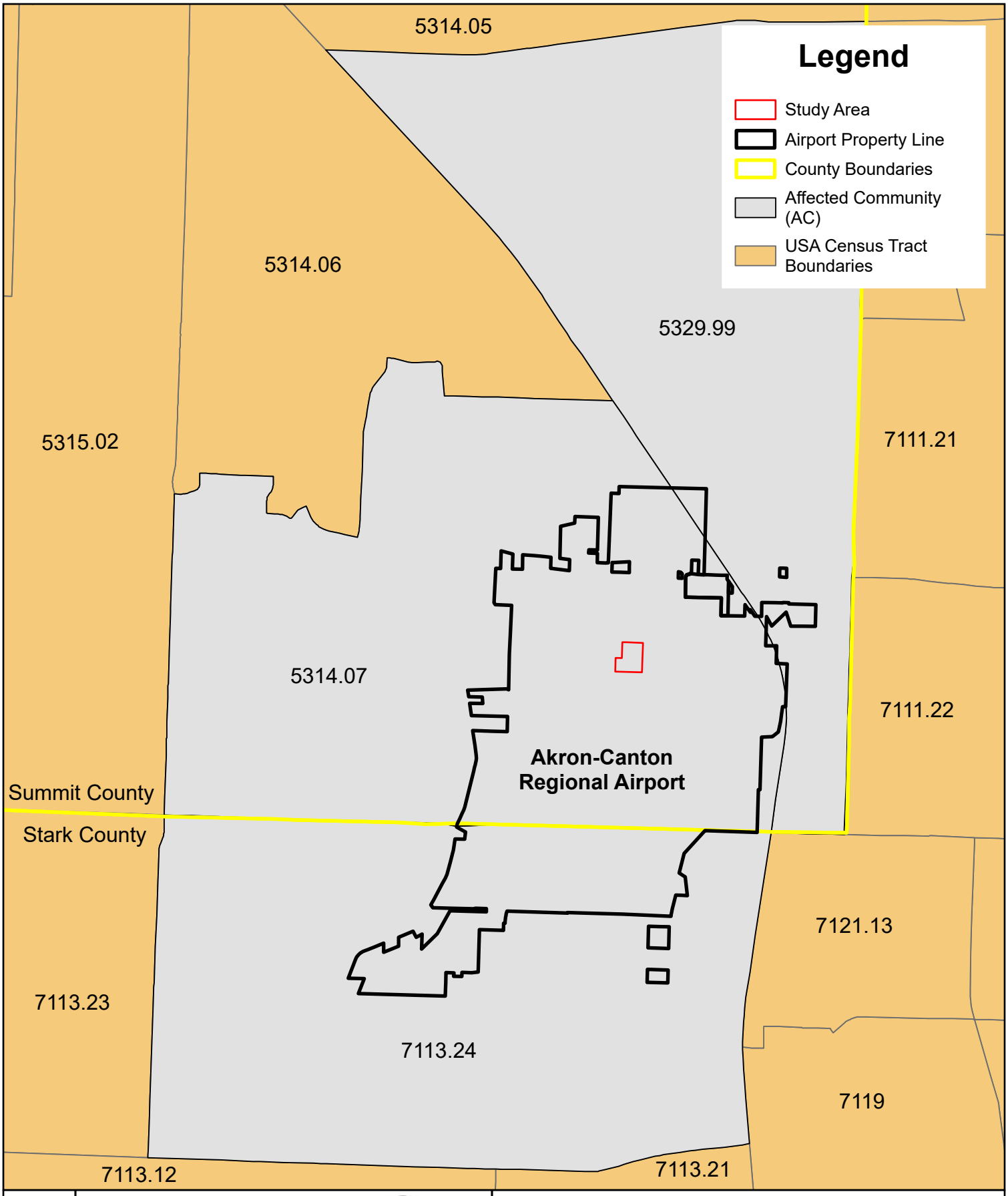
Table 4-6. Study Area Census Tract Information (Stark County)

	Stark County	Census Tract 7113.24
Total Population	373,764	5,084
Minority Persons	58,534	373
Percent Minority	15.66%	7.34%
Low Income	46,553	221
Percent Low Income	12.74%	4.35%
Percent Under 18 years old	23.9%	26.6%
Median Income	65,740	108,382

Source: U.S. Census, 2023 ACS Survey (5-year Estimates)

4.10.2.2 Children's Environmental Health & Safety Risk

Schools and daycare centers can potentially expose a child to increased environmental health risks because of a higher concentration of children in these locations. A desktop review revealed that there are currently no children's facilities, such as schools, daycares, or parks, within or adjacent to the DSA.



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AKRON-CANTON AIRPORT

Figure 4-4:
Census Tracts
Akron-Canton Regional Airport
Akron, Ohio

1' = 4,000"

CHA No. 098529

Source Data
Akron-Canton Airport Layout Plan, United States Census Bureau

Date Saved: 7/1/2025, 8548

4.10.3 Environmental Consequences

4.10.3.1 Significance Threshold

Socioeconomic Impacts
The FAA has not established a significant threshold for socioeconomics; however, in general, the significance of socioeconomic impacts is determined by the magnitude and duration of the impacts, whether beneficial or adverse. According to FAA Order 1050.1F, potential impacts to consider include:

- Causing extensive relocation of housing when sufficient replacement housing is unavailable.
- Dividing or disrupting an established community.
- Causing extensive relocation of businesses would cause economic hardship.
- Disrupting local traffic patterns and substantially reducing the levels of service of roads serving an airport and its surrounding communities.
- Producing a substantial loss of the community tax base.

Executive Order 14154: *Unleashing American Energy* (January 20, 2025), and a Presidential Memorandum: *Ending Illegal Discrimination and Restoring Merit-Based Opportunity* (Jan. 21, 2025), require the Department to strictly adhere to the NEPA (42 U.S.C. §§ 4321 et seq). Further, such Order and Memorandum repeal Executive Orders 12898 (February 11, 1994) and 14096 (April 21, 2023). Because Executive Orders 12898 and 14096 have been repealed, complying with such Orders is a legal impossibility. The Office of Surface Mining Reclamation and Enforcement verifies that it has complied with the requirements of NEPA, including the Department's regulations and procedures implementing NEPA at 43 C.F.R. Part 46 and Part 516 of the Departmental Manual, consistent with the President's January 2025 Order and Memorandum. The Office of Surface Mining Reclamation and Enforcement has also voluntarily considered the Council on Environmental Quality's rescinded regulations implementing NEPA, previously found at 40 C.F.R. Parts 1500-1508, as guidance to the extent appropriate and consistent with the requirements of NEPA and Executive Order 14154.

Children's Environmental Health & Safety Risks
The FAA has not established a significant threshold for children's environmental health and safety risks. However, potential impacts from other environmental categories should be assessed to determine if they can lead to a disproportionate health or safety risk to children.

4.10.3.2 Alternative 1: Westside Hangar Development – Option 1

Alternative 1 would not require the relocation of residential units or businesses, nor would it disrupt local traffic patterns or substantially reduce the levels of service on local roadways. Alternative 1 could increase employment to supply workforce in the new space; however, this would not result in a population increase relative to the large size of the workforce that currently exists. The only other direct effect would be temporary construction employment and expenditure in the local community. These impacts are expected to be beneficial, and the economic activity generated by the temporary construction activity can be absorbed within the existing community infrastructure. Alternative 1 would not cause any impacts on surrounding communities, shift of any business or economic activity, population movement, or shift in a community.

There are no residential land uses, daycare facilities, preschools, or schools within the DSA or GSA. Alternative 1 does not have the potential to lead to a disproportionate health or safety risk to children.

4.10.3.3 Alternative 2: Westside Hangar Development – Option 2

Alternative 2 would not disrupt local traffic patterns or relocate residential units or businesses. Temporary employment would occur during construction, which would be beneficial to the local economy. Alternative 2 would not cause any impacts on surrounding communities, shift of any business or economic activity, population movement, or cause a shift in a community. There are no residential land uses, daycare facilities, preschools, or schools within the DSA or GSA. Alternative 2 does not have the potential to lead to a disproportionate health or safety risk to children.

4.10.3.4 Alternative 3: No-Build Alternative

Under the No Build Alternative, construction would not occur. Therefore, there would be no impacts on surrounding communities, shift of any business or economic activity, population movement, or shift in a community. However, there would be no beneficial temporary construction employment or expenditure in the local community. There would also be no disproportionate health or safety risks to children.

4.11 Visual Effects

4.11.1 Regulatory Context

Some visual resources are protected under Federal, state, or local regulations. According to FAA Order 1050.1F, these resources include, but are not limited to, Federal, state, or local scenic roadways/byways; Wild and Scenic Rivers, National Scenic Areas; protected rails; and biological resources; and features protected under other Federal, state, or local regulations. In addition to NEPA, laws protecting resources that may be affected by visual effects include Section 106 of the NHPA, Section 4(f) of the DOT Act, the Wild and Scenic Rivers Act, and the Coastal Zone Management Act. In addition, there may be state and local regulations, policies, and zoning ordinances that apply to visual effects. According to 1050.1F Desk Reference Chapter 13 (Visual Effects), visual effects are broken into two categories: (1) light emissions and (2) visual resources and visual character. The following subsections describe the existing condition of these categories within the affected environment.

4.11.2 Affected Environment

Light emissions include any light that emanates from a light source into the surrounding environment. Some typical sources of light emissions within and near the DSA include Airport facilities (including lighting for navigation), taxiways and aprons, and light fixtures associated with aprons or taxiway pavement. These sources of light emissions are consistent with that of an on-airport, urban area.

The visual resources include buildings, sites, traditional cultural properties, and other natural or artificial landscape features that are visually important or have unique characteristics. Important or unique landscape features are not present within the DSA. The affected environment's visual character is closely tied to the land use in the area. As discussed previously, land uses surrounding the project area are primarily a mix of commercial, industrial, recreational, public, and residential uses.

4.11.3 Environmental Consequences

4.11.3.1 Significance Threshold

According to FAA Order 1050.1F, the FAA must evaluate the Proposed Project Modification's visual effects. According to 1050.1F Desk Reference Chapter 13 (Visual Effects), visual effects are broken into two categories: (1) light emissions and (2) visual resources and visual character. The FAA has not established a significance threshold for visual effects; however, the FAA has identified factors to consider when evaluating the context and intensity of potential environmental impacts. For light emissions, the factors to consider include, but are not limited to, the following:

- "*The degree to which the action would have the potential to create annoyance or interfere with normal activities from light emissions"; and*
- *"The degree to which the action would have the potential to affect the visual character of the area due to the light emissions, including the importance, uniqueness, and aesthetic value of the affected visual resources*."

Factors to consider when evaluating the context and intensity of potential environmental impacts for visual resources and visual character include, but are not limited to, the following factors:

- "*The degree to which the action would have the potential to affect the nature of the visual character of the area, including the importance, uniqueness, and aesthetic value of the affected visual resources."*
- *"The degree to which the action would have the potential to contrast with the visual resources and/or visual character in the study area."*
- *"The degree to which the action would have the potential to block or obstruct the views of visual."*

4.11.3.2 Alternative 1: Westside Hangar Development – Option 1

Alternative 1 would include the installation of lighting to proposed vehicular parking areas and the apron to enhance safety. Alternative 1 would also introduce lighting through a construction staging area, construction vehicles, and related construction equipment. To avoid negative impacts, construction would occur during daylight hours when practical. No impact on light emissions would occur because of Alternative 1.

Visual resources and visual character impacts are normally related to a decrease in the aesthetic quality of an area resulting from development, construction, or demolition. Impacts on visual resources and visual character caused by construction would be temporary. Alternative 1 would not have a significant impact on visual resources and visual character.

4.11.3.3 Alternative 2: Westside Hangar Development – Option 2

Although the apron and hangar layout for Alternative 2 is slightly different, the amount of new lighting would be similar to Alternative 1. Lighting would also be introduced through a construction staging area, construction vehicles, and related construction equipment. When feasible, construction would occur during daylight hours to avoid negative impacts. No impact on light emissions would occur because of Alternative 2.

Visual resources and visual character would stay consistent with development in the area. Any impact on these resources or character during construction would be temporary. Alternative 2 would not have a significant impact on visual resources and visual character.

4.11.3.4 Alternative 3: No-Build Alternative

Under the No Action Alternative, no construction would occur, no new light sources would be required, and there would be no impact from light emissions. In addition, there would be no significant impact on the visual character of the study area.

4.12 Water Resources

Water resources are important in providing drinking water and supporting recreation, transportation and commerce, industry, agriculture, and aquatic ecosystems. In accordance with the FAA 1050.1F Desk Reference Section 14, water resources include wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers. As discussed in Section 4.1.3, since there are no floodplains, sole source aquifers, SPA, or wild and scenic rivers in the DSA, those resource categories were not carried forward. Therefore, this section is limited to wetlands, waters of the U.S. and stormwater.

4.12.1 Regulatory Context

Section 404 of the Clean Water Act (CWA) regulates the discharge of dredged material, placement of fill material, or certain types of excavation, which may result in more than incidental fallback material, within Waters of the United States (WOTUS). Section 404 grants the U.S. Army Corp of Engineers regulatory authority to issue permits for these actions. WOTUS includes territorial seas and traditional navigable waters, tributaries, lakes, ponds, and impoundments of jurisdictional waters and adjacent wetlands. The CWA defines wetlands as areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Section 401 of the CWA requires any applicant requesting a CWA permit for activities resulting in a discharge to WOTUS to provide the federal permitting agency with a Section 401 Water Quality Certification (WQC) from the state. The 401 WQC ensures that the federal permit meets the state water quality standards. A federal permit cannot be granted unless a Section 401 WQC is applied for and received from the state. Within the State of Ohio, the Ohio EPA Division of Surface Water is the regulatory agency for this certification.

In compliance with the provisions of the federal Water Pollution Control Act, as amended (33 U.S.C. Section 1251) and the Ohio Water Pollution Control Act [ORC Chapter 6111], dischargers of stormwater from sites where construction activity is being conducted are authorized by the Ohio EPA to discharge from the outfalls at the sites and to the receiving surface waters of the state identified in their Notice of Intent (“NOI”) application form on file with Ohio EPA. This permit requires a submittal of a complete NOI application form and development (and submittal, if applicable) of a complete SWPPP.

4.12.2 Affected Environment

4.12.2.1 Wetlands & Waters of the U.S.

A wetland delineation of the DSA was completed in February 2025 and updated in June 2025. The study area was evaluated using the *USACE Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast*. Sampling points were collected for potential wetlands and upland areas. Wetland habitat was documented using the Ohio EPA's Ohio Rapid Assessment Methodology (ORAM). The delineation identified 0.323 acres of jurisdictional emergent wetlands and 0.162 acres of non-jurisdictional emergent wetlands within the study area for a total of 0.656 acres (see **Figure 4-5** and **Table 4-7**). Additionally, water conveyances were observed within the study area. No other surface water features were observed in the study area. Photographs, wetland data forms, and qualitative habitat assessment forms can all be found in **APPENDIX D.** A description of each wetland is below.

Wetland 1 is a palustrine emergent (PEM) wetland located in the northwestern corner of the study area and appears to be hydrologically connected through a non-jurisdictional conveyance (NJC) to a WOTUS flowing off site. Wetland 1 is 0.198 acres. The ORAM score was 13.5, indicating a low-quality Category 1 wetland.

Wetland 3 is also a PEM located in the southwestern portion of the study area and is also hydrologically connected through an NJC to a WOTUS (drainage ditch system to Zimber Ditch). Wetland 3 is approximately 0.078 acres, and the ORAM score was 21 (Category 1).

Wetland 5 is also a (PEM) located in the southwestern and northwestern corner of the study area on the west side of the access road. It is also hydrologically connected through an NJC and offsite wetlands to a WOTUS (drainage ditch system to Zimber Ditch). This wetland is approximately 0.218 acres but also appears to extend outside the study area.

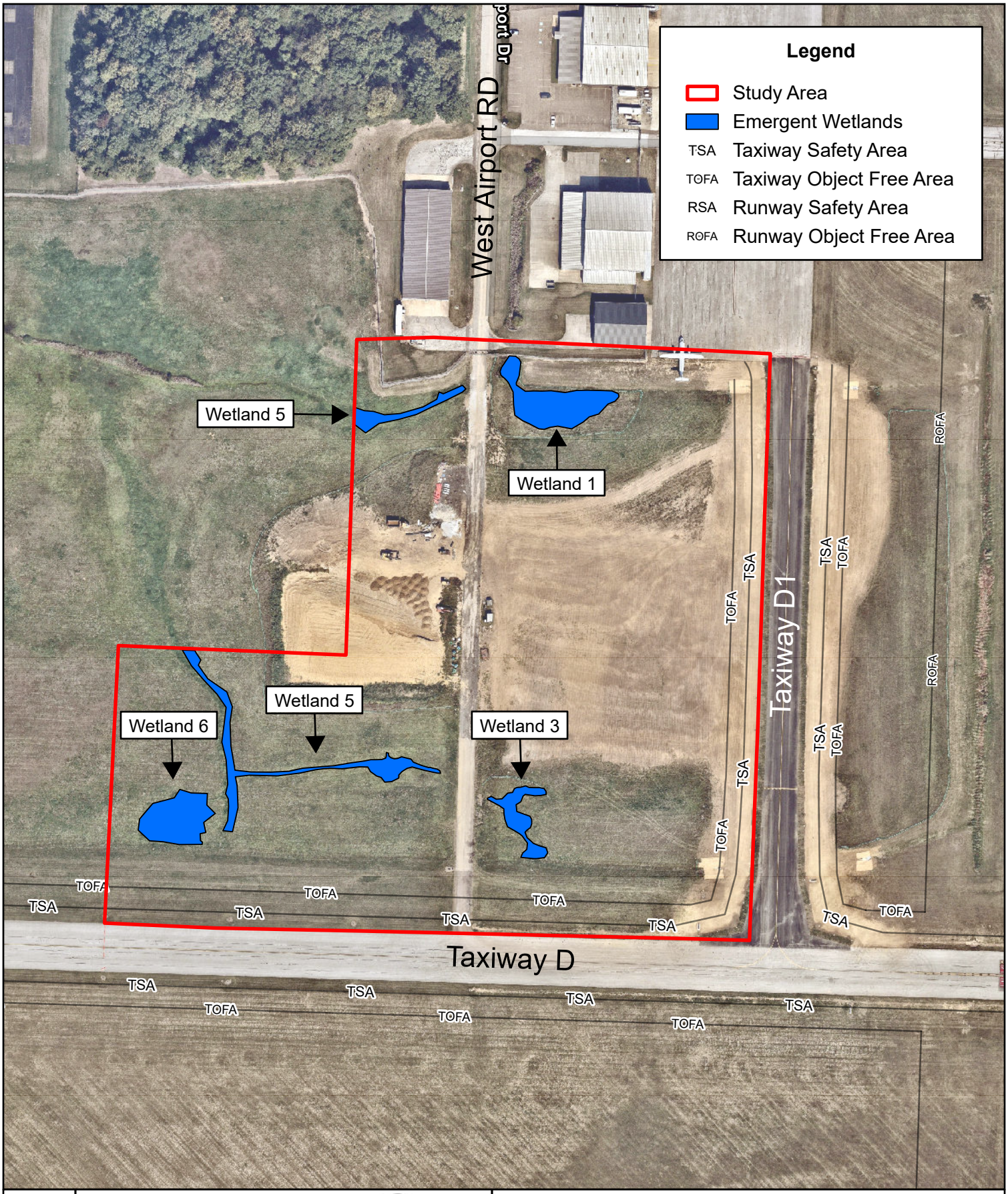
Wetland 6 is in the southwestern corner of the study area and appeared to be hydrologically isolated and a surface water connection to WOTUS was not observed.

Table 4-7. Wetlands Within Study Area

Wetland ID	Jurisdictional	ORAM Score	Acreage within Study Area
Wetland 1	Yes	13.5 (Category 1)	0.198
Wetland 3	Yes	21 (Category 1)	0.078
Wetland 5	Yes	21 (Category 1)	0.218
Wetland 6	No	18 (Category 1)	0.162
		TOTAL	**0.656**

Source: *Preliminary Jurisdictional Waters Delineation*, Stone Environmental (2025)

Wetlands 1, 3, and 5 demonstrate a surface hydrological connection downstream to a jurisdictional waterbody; therefore, all three wetlands would likely be subject to USACE jurisdiction under Section 404 of the Clean Water Act. A pre-JD was submitted to the USACE Huntington District in July 2025 and was received August 15, 2025 (see **APPENDIX D**).



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AKRON-CANTON AIRPORT

Figure 4-5:
Existing Wetlands & Waters of the US
Akron-Canton Regional Airport
Akron, Ohio

1' = 200"

CHA No. 098529

Source Data
STONE Preliminary Jurisdictional Waters Delineation

Date Saved: 7/8/2025, 8548

4.12.2.2 Existing Stormwater

According to the *Surface Drainage Study for Akron-Canton Airport* (Woolpert, 2023), CAK is located between two USGS HUC-12 watersheds: headwaters of the Tuscarawas River (050400010101) for the northern portion of airport property and the West Branch Nimishillen Creek (050400010504) for the southern half. The Airport currently has 16 outfalls. Runoff from the outfalls that drain the DSA flows northward off airport property via a natural open channel that crosses the Interstate 77 (Vietnam Veterans Memorial) Highway and ultimately flows into the Tuscarawas River. The existing study area contains two channels and is made up of three (3) different subbasins (see **Figure 4-6**). Most of the site drains north through open channels and enclosed pipes.

4.12.3 Environmental Consequences

4.12.3.1 Significance Threshold

According to FAA Order 1050.1F, Desk Reference, wetlands would be significantly impacted if the Sponsor's Proposed Action were to result in the following:

- Adversely affects the function of a wetland relative to the quality and quantity of municipal water supplies and maintenance of natural systems.
- Substantially alter the hydrology necessary to sustain a wetland.
- Substantially reduce the ability of a wetland to retain floodwater or storm runoff.
- Promote the development of secondary activities that would cause the circumstances listed above.

Pursuant to FAA Order 1050.1F, Desk Reference, a significant impact on surface waters would exist if the action were to impact water quality standards established by federal, state, local, or tribal regulatory agencies.

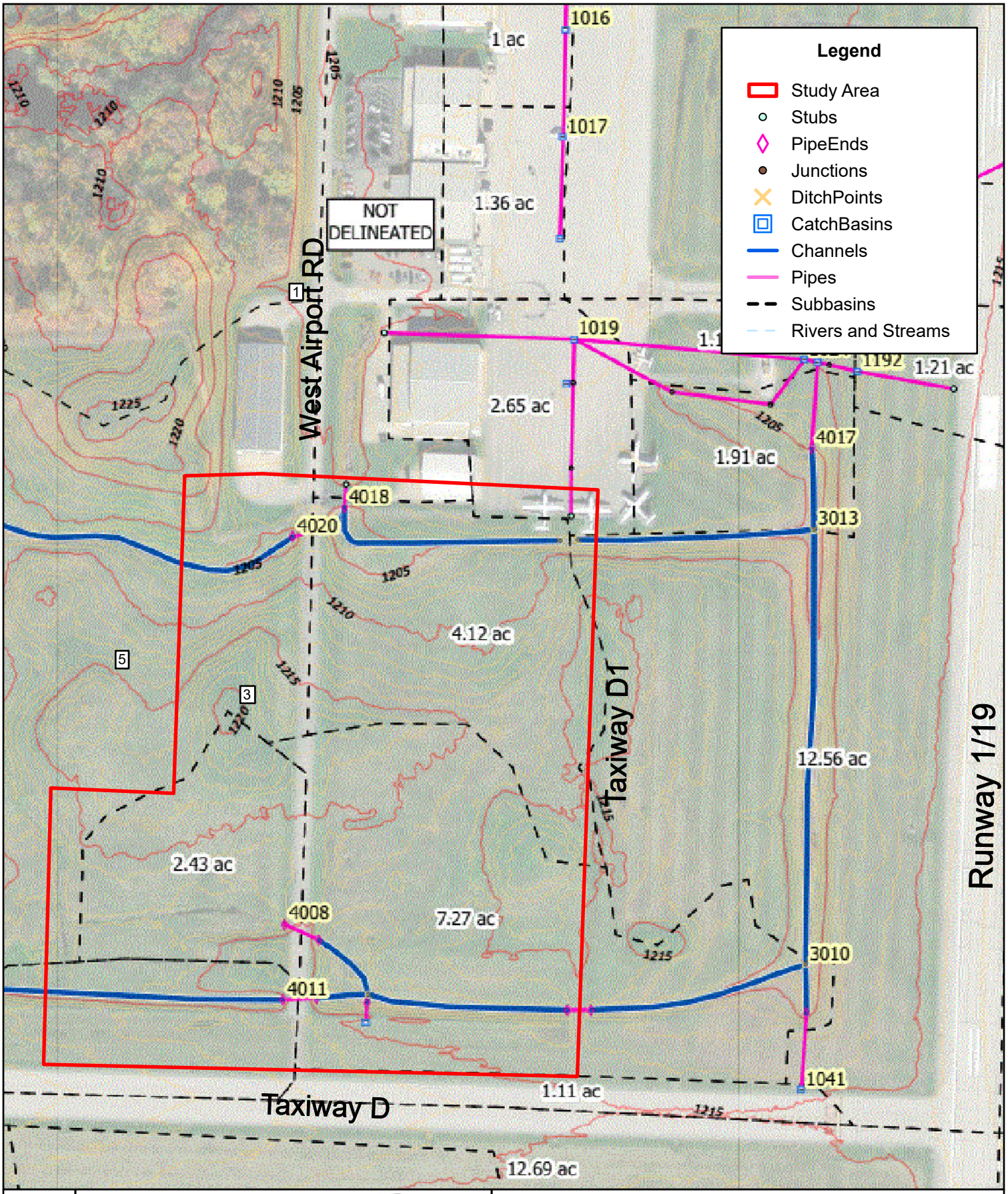
4.12.3.2 Alternative 1: Westside Hangar Development – Option 1

Alternative 1 would impact approximately 0.276 acres of PEM wetlands (Wetland 1 and 3) (see **Figure 4-7**). These impacts would be permanent due to the excavation and grading activities for the apron, buildings, and vehicular parking lots.

Based on a review of USACE and Ohio EPA permitting guidelines, the proposed wetland impacts would be less than 0.5 acres; therefore, a Nationwide Permit (NWP) would be required. However, mitigation would also be required since the impacts are greater than 0.1 acres. It is anticipated that NWP 39: Commercial & Institutional Developments would be utilized. The discharge must not cause the loss of greater than 0.5 acres of non-tidal waters of the United States. This NWP does not authorize discharges of dredged or fill material into non-tidal wetlands adjacent to tidal waters. As the proposed impacts are less than 0.5 acres and the wetlands are not Category 3, Section 401 Water Quality Certification submission would not be required for Ohio EPA. The wetland is anticipated to be mitigated at a ratio of 2:1; therefore, credits would be purchased, or an in-lieu fee for 0.552 acres would be paid. Given the lack of high-quality wetland impacts and mitigation requirements, the impacts to Wetlands from Alternative 1 are not significant.

4.12.3.3 Alternative 2: Westside Hangar Development – Option 2

Alternative 2 would impact approximately 0.218 acres of PEM wetlands (see **Figure 4-8**). A wetland permit application would not be submitted until preliminary engineering is complete (site



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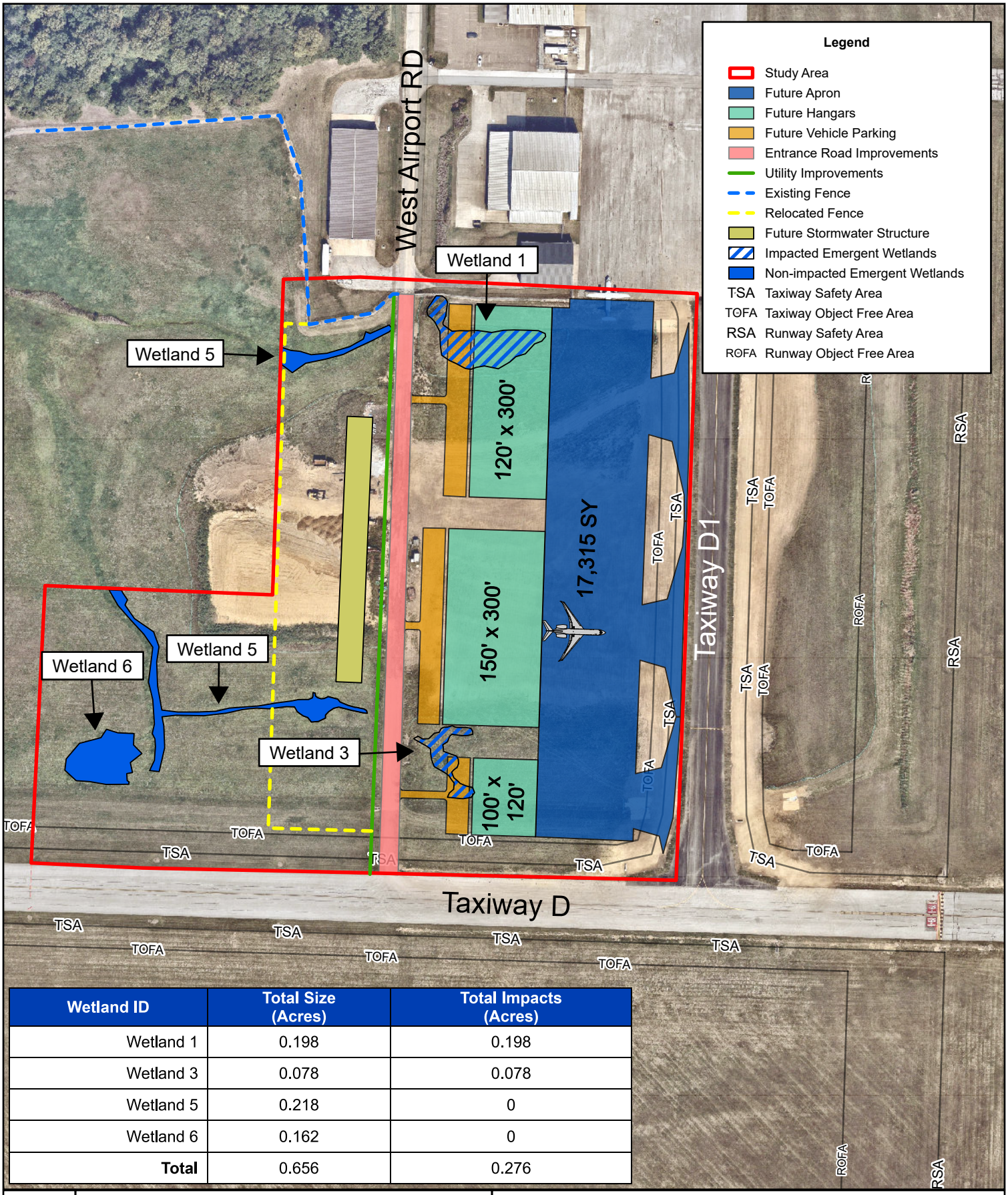
AKRON-CANTON AIRPORT

Figure 4-6:
Existing Stormwater Infrastructure
Akron-Canton Regional Airport
Akron, Ohio

1' = 200"	CHA No. 098529	*Source Data* *Surface Drainage Study for Akron-Canton Airport (Woolpert, 2023)*

Date Saved: 7/1/2025, 8548



Wetland ID	Total Size (Acres)	Total Impacts (Acres)
Wetland 1	0.198	0.198
Wetland 3	0.078	0.078
Wetland 5	0.218	0
Wetland 6	0.162	0
Total	0.656	0.276

N

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AKRON-CANTON AIRPORT

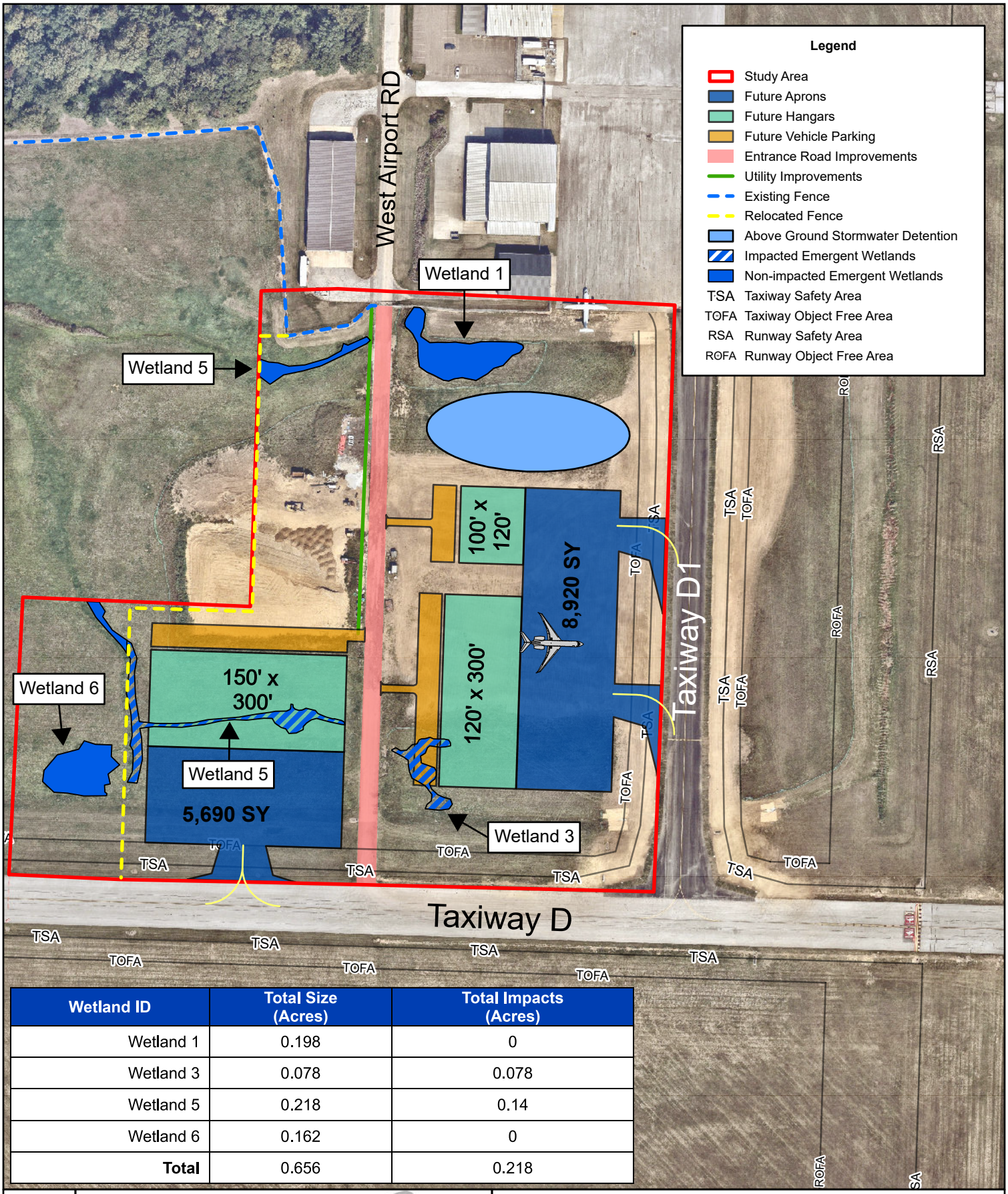
Figure 4-7:
Alternative 1 Wetland Impacts
Akron-Canton Regional Airport
Akron, Ohio

1' = 200"

CHA No. 098529

Source Data
STONE Preliminary Jurisdictional Waters Delineation

Date Saved: 7/8/2025, 8548



Wetland ID	Total Size (Acres)	Total Impacts (Acres)
Wetland 1	0.198	0
Wetland 3	0.078	0.078
Wetland 5	0.218	0.14
Wetland 6	0.162	0
Total	0.656	0.218

N

AKRON-CANTON AIRPORT

Figure 4-8:
Alternative 2: Wetland Impacts
Akron-Canton Regional Airport
Akron, Ohio

1' = 200"

CHA No. 098529

Source Data
STONE Preliminary Jurisdictional Waters Delineation

Date Saved: 7/8/2025, 8548

graded with limits of disturbance and building elevations set). At this time, it is anticipated that the Airport would submit one application for the entire development of Alternative 2, which would impact approximately 0.218 acres of wetland. These impacts on Wetland 3 and Wetland 5 would be permanent due to the excavation and grading activities for the apron, buildings, and vehicular parking lots.

The proposed wetland impacts would be less than 0.5 acres, but more than 0.1 acres; therefore, an NWP and mitigation would be required for Alternative 2. Like Alternative 1, it is anticipated that NWP 39: Commercial & Institutional Developments would be utilized. The wetland mitigation would be at a ratio of 2:1; therefore, credits would be purchased, or an in-lieu fee for 0.436 acres would be paid. Given the lack of high-quality wetland impacts and mitigation requirements, the impact of Alternative 2 to wetlands is not significant.

4.12.3.4 Alternative 3: No-Build Alternative

Under the No-Build Alternative, there would be no impact on wetlands, and no permitting would be required. In addition, no impervious surface would be added, and no construction SWPPP would be required.

4.12.3.5 Mitigation

Because there are potential and unavoidable impacts on wetlands, mitigation would be required for the Proposed Action to avoid significant impacts. The conceptual mitigation plan is to use wetland banking and/or in lieu fee programs to mitigate these identified impacts. Wetland banking allows the Airport Authority to purchase wetland bank credits from an approved wetland mitigation bank. Credits from an approved bank can also be purchased to satisfy the permit-required mitigation. The Airport does not lie within the service area of an active wetland mitigation bank; therefore, the required credits would be purchased through the Stream and Wetlands Foundation in-lieu fee program within the Upper Muskingum Service Area. At the time of writing, the cost per acre of wetland credit is estimated to be approximately $70,000 per acre, resulting in an anticipated mitigation cost for the proposed action of approximately $30,500.

Alternative 2 would also be regulated under Ohio EPA's construction stormwater program. During design, a construction SWPPP and a Notice of Intent (NOI) for coverage under the Ohio EPA General NPDES Permit for Stormwater Associated with Construction Activities (CGP) would be submitted. The SWPPP would be submitted to the City of Green for review and approval before commencing construction. Since Alternative 2 includes the creation of impervious areas, the SWPPP would need to include permanent, post-construction Best Management Practices (BMPs) in accordance with the ODNR Rainwater and Land Development Manual and the City of Green's local ordinances. In addition, since the proposed action would disturb more than one (1) acre, the NOI would also be required to provide treatment for the Water Quality Volume (WQv) and use runoff reduction practices to retain the WQv on-site or seek off-site approval. A conceptual post-construction BMP would include several approved hydrodynamic separators to pre-treat the stormwater runoff. These units would then be discharged to an above ground stormwater detention that is located directly north of the 12,000 SF hangar. The stored runoff would be slowly released over a 24 to 48 period to the existing stormwater conveyance system on the north side of the DSA. This system is currently an open channel system that would need to be piped within the project limits due to the planned development.

4.13 Cumulative Impacts

According to the FAA Order 1050.1F Desk Reference, cumulative impacts are defined as "*the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions*." Cumulative impacts can be viewed as the total combined impacts on the environment of the Proposed Action or alternative(s) and other known or reasonably foreseeable actions. Reasonably foreseeable actions should not be limited to those from actual proposals but must also include impacts from actions being contemplated. Only those resources that could be incrementally affected by the Proposed Action and other actions within the same geographic area and time would be analyzed. On its own, the Sponsor's Proposed Action (Alternative 2), as documented throughout this EA, would not cause a significant impact on any of the resource categories. Projects at the Airport that have occurred within the past three years (2022-2024), are currently underway, or are reasonably foreseeable within the next three years (2026-2029) have been reviewed for cumulative impacts.

4.13.1 Past, Present, and Reasonably Foreseeable Projects

Projects included in the cumulative impact analysis were identified through a review of the most recent Airports Capital Improvement Plan for CAK and coordination with airport staff. Projects at the Airport that have occurred within the past three years (2022-2024), are currently underway (2025), or are reasonably foreseeable within the next three years (2026-2029) are listed below.

Project Completed in the Past Three Years (2022-2024)

- Terminal Rehabilitation (2022)
- Hotspot: Taxiway C/H Removal & Taxiway H Relocation (new D1) (2024)
- Expand Airfield Lighting Vault (2024)
- Hotspot: Remove Taxiway K/Relocate Taxiway J/Construct Taxiway J1 (2024)
- Passenger Boarding Bridge Replacement Gates 1 & 2 (2024)

On-going Projects (2025)

- Runway 1/19 electrical & lighting improvements
- Taxiway F TSA improvements (Lighting, grading, and drainage)
- Passenger Boarding Bridge Replacement (Gates 4 & 5)

Projects within the next 3-years (2026-2029)

- Runway 1/19 Rehabilitation
- NW General Aviation Apron Rehabilitation
- Runway 5/23 Rehabilitation
- Taxiway 'A' Rehabilitation

4.13.2 Potential Cumulative Impacts

The following describes potential cumulative impacts for each environmental category of interest.

- **Air Quality:** The Sponsor's Proposed Action includes construction activity that would temporarily increase air emissions. Since the temporary increase in emissions would be below applicable *de minimis* levels, no cumulative emissions are anticipated. As shown in **Table 4-2,** there would be no cumulative impacts on air quality when combining the Sponsor's Proposed Action with other past, present, or reasonably foreseeable projects.
- **Water Resources:** The construction of the Proposed Action would temporarily affect stormwater runoff water quality due to increased sediment and siltation from ground disturbance associated with construction activities. However, all construction activities associated with the Proposed Action would abide by the site-specific SWPPP and implement standard BMPs to ensure discharges of pollutants to nearby water resources would be minimized or exceed applicable water quality standards. Since over 1 acre would be disturbed, a post-construction permanent BMP would be required. The Proposed Action's expansion of impervious surface area would also impact wetlands.

  The wetland loss would be mitigated through wetland banking or an in-lieu fee program. Other past, present, and reasonably foreseeable future projects likely would be required to mitigate the loss of any wetlands and provide for the management of stormwater runoff. Based on the level of impact to WOTUS, the project would be required to obtain NWP 39. No construction would commence until the appropriate NWP permit is received. Therefore, the Proposed Action is not anticipated to have significant individual or cumulative impacts on water resources.

When combined with past, present, or reasonably foreseeable projects, the cumulative impacts of the Sponsor's Proposed Action are not significant.

5.0 PUBLIC OUTREACH

When conducting the NEPA process for the preparation of an EA, the airport sponsor is encouraged to begin early coordination with the proper federal, state, tribal, and local agencies, including surrounding municipalities, to determine any possible environmental concerns. This section documents those efforts.

5.1 Early Agency Coordination

Several agencies and organizations were consulted as part of the NEPA early coordination process. These agencies include the following:

- U.S. Department of the Interior, U.S. Fish & Wildlife Services (IPaC)
- U.S. Environmental Protection Agency
- U.S. Department of Agriculture, NRCS
- U.S. Army Corp of Engineers, Huntington District
- Federal Aviation Administration, Detroit Airport District Office
- Ohio Environmental Protection Agency
- Ohio History Connection (Ohio SHPO)
- Ohio Department of Natural Resources
- City of Green Planning Commission
- City of Green Historical Commission

These regulatory agencies and stakeholders were asked to review the Proposed Action for potential impacts on resources under their jurisdiction. The letters included figures depicting the study limits. Agencies were asked to submit any specific concerns they had with the project, any available technical information that would aid in the development of the EA, or any permitting or mitigation requirements that would be necessary for implementation. Agency responses were received and are included in **APPENDIX B**

5.2 Draft EA

The Draft EA was made available for review via a public Notice of Availability (NOA), which was published in the Akron Beacon Journal on DAY, MONTH, 2025. The Draft EA was also made available at the following locations:

- Electronic copies: https://www.akroncantonairport.com/home/business/public-info/
- Hard copies were made available at the following address: Green Branch Library, 4046 Massillon Road, Uniontown, Ohio 44685

Written comments received before Month, Day, 2025 with responses to each comment, will be found in **APPENDIX E** when the Final EA is published.

6.0 LIST OF PREPARERS

Table 6-1 identifies the individuals primarily responsible for preparing this EA and those who provided an independent review of this EA. The list is organized by company or organization and provides a summary of everyone's responsibilities.

Table 6-1. List of Preparers

Preparer	Title	Responsibility
Akron Canton Airport Authority		
Lisa Dalpiaz	VP of Air Service & Business Development	Document Review
Duane Dunn	VP of Landside, Planning & Infrastructure	Document Review
Ohio Department of Natural Resources		
Chad Kinney	AML North Region Manager	Document Review
Federal Aviation Administration		
Misty Peavler	Environmental Protection Specialist	Document Review
CHA Consulting, Inc.		
Mark Heckroth, ENV SP	Senior Project Manager	Project Management, Quality Control, Alternatives
Ashley Koutropoulos, ENV SP	Environmental Planner	Graphics, EA Author
Adam French	Senior Aviation Planner	Alternatives
Simon Davies, ENV SP	Senior Principal Scientist	Biological Resources, EA Author
Kevin Morris	Senior Scientist	Construction Emissions
Stone Environmental		
Frank Carvino	Environmental & Cultural Manager	Cultural Resources
Scott Ross, PWS, CPESC	Environmental Services Manager	Wetlands & Waters of the US

APPENDIX A

Construction Emissions Analysis

Akron-Canton Airport (CAK)
West Side Hangar Development
Environmental Assessment – Air Quality Documentation

The proposed project was evaluated under the Aviation Emissions and Air Quality Handbook (Handbook) published by the Federal Aviation Administration (FAA)[1]. The air quality assessment process is outlined in Section 4.

The first step of the process is to determine the need for the assessment based on four factors:

1. Project Definition
2. FAA Involvement
3. Emissions Increase
4. Ambient Air Quality

1. Project Definition

The purpose of the project modification is to construct three hangars at Akron-Canton Airport (CAK). Associated apron space, employee parking, fencing, and access road improvements would also be constructed.

Most of the airport property is located in the City of Green, Summit County, OH. A portion of the airport property is located in Jackson Township, Stark County, OH. The project location is wholly within Summit County.

2. FAA Involvement

The project modification requires FAA approval of modifications to the Airport Layout Plan (ALP).

3. Emissions Increase

Although the project would not increase the airport capacity, the number of ground access vehicle (GAV) trips would be expected to increase. Temporary increases in emissions would also occur during construction activities.

4. Ambient Air Quality & General Conformity Applicability

The project is located in Summit County, OH. Air quality designations regarding attainment with the National Ambient Air Quality Standards (NAAQS) were obtained from the Environmental Protection Agency (EPA) Green Book[2].

Summit County is designated by the EPA as a serious nonattainment area for the 2015 8-hour ozone standard. Summit County is also designated as a maintenance area for the 2008 8-hour ozone standard and the 2006 fine particulate matter ($PM_{2.5}$) standard. Summit County is designated as an attainment area for all other pollutants.

Federal actions in non-attainment and maintenance areas may be subject to the General Conformity requirements of 40 CFR 93, Subpart B. In serious ozone non-attainment areas, projects are exempt from the requirements of Subpart B when the estimated project emissions

[1] https://www.faa.gov/regulations_policies/policy_guidance/envir_policy/airquality_handbook/files/airquality_handbook_version_4.pdf
[2] https://www.epa.gov/green-book

for NO_X and VOC are each less than 50 tons per year. In $PM_{2.5}$ maintenance areas, projects are exempt when the estimated project emissions are less than 100 tons/year. Potential emissions of other pollutants are not subject to Subpart B.

Based on these factors and the flowchart in Figure 4-1 of the Handbook, the level of assessment required was determined to be an emission inventory for additional ground access vehicle trips and construction emissions.

Emission Inventory Methodology

The project would not increase the airport capacity. Only emissions from additional GAV trips and construction activities would be caused as a result of the project.

Ground Access Vehicles

Emissions from additional GAV trips were estimated using the EPA Motor Vehicle Emissions Simulator (MOVES) model, version 5.0. Due to the airport's location in Summit County and Stark County, the default vehicle mix for each county was used to produce emission factors (pounds per mile). The additional GAV mileage was conservatively estimated using 100 daily round-trips in the peak year and an average round-trip distance of 60 miles.

Construction

Activity factors for construction activities were estimated using the Airport Construction Emissions Inventory Tool (ACEIT) published by the Airport Cooperative Research Program in Report 102[3]. ACEIT estimates the construction equipment activity that would be required based on the amount of construction being performed. This activity is used with emission factors for construction and other mobile vehicles to estimate the emissions that would result during construction of the project. Emission factors for nonroad equipment were obtained from MOVES.

ACEIT has been configured with default construction equipment assignments based on the type of construction activity being performed. ACEIT includes an activity rate for each piece of equipment and activity. For example, 18 hours of concrete truck operation is assumed for every 10,000 square feet of building area. The estimated equipment runtime is used with the equipment engine size and MOVES 5.0 emission factors to estimate total construction emissions.

Seven major construction activities in ACEIT were identified as part of the project:

- Access Road
- Apron (GA)
- Fencing
- Hangar Building
- Landscaping
- Parking Lot
- Site Work

[3] http://www.trb.org/ACRP/Blurbs/170234.aspx

For these construction activities, ACEIT estimates the equipment use based on the cost of the project and the area being demolished, rehabilitated, or constructed. The total cost of the project is estimated at $17 million dollars.

The total area of the project is approximately 14 acres. This area was used for estimating emissions from site work activities. The total apron area is expected to be approximately 156,000 sq. ft. The total hangar footprint is expected to be 93,000 sq. ft. The total parking area was estimated as 24,000 sq. ft. The access road improvement area was assumed to be a 30'-wide road with a length of 800 feet. The length of new fencing was estimated as 1,000 feet.

The estimated equipment types and activities may be edited by the user. For the purposes of this analysis the default options were used, with one exception. Estimated equipment activity for hangar buildings is based on an area of 10,000 sq. ft. The default activity levels for hangar buildings were multiplied by 9.3 to adjust activity levels to the total building area of 93,000 sq. ft.

Conclusion

The project would not cause permanent increases in air or local traffic. Potential emission increases from ground access vehicles and temporary increases in emissions from construction activities were estimated using the ACEIT application and are shown in the table below.

Contaminants included in the emission inventory were nitrogen oxides (NO_X), carbon monoxide (CO), volatile organic compounds (VOC), sulfur dioxide (SO_2), particulate matter less than 10 microns (PM_{10}), particulate matter less than 2.5 microns ($PM_{2.5}$), carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Details of the emission inventory calculations are attached in Appendix A. The estimated project emissions are summarized below.

Contaminant (tons/yr)	NO_X	CO	VOC	SO_2	PM_{10}	$PM_{2.5}$	CO_2	CH_4	N_2O
GAV Emissions	0.55	6.57	0.22	0.01	0.01	0.01	975	0.02	0.02
Construction Emissions	6.40	34.8	1.33	0.04	0.26	0.25	8,759	0.12	0.14
Total	6.95	41.4	1.55	0.05	0.27	0.26	9,733	0.15	0.16
Exemption Threshold	50	N/A	50	N/A	N/A	100	N/A	N/A	N/A

The estimated emissions from the project are below the applicable General Conformity exemption thresholds.

The estimated emissions from additional GAV trips and construction activities are not significant and support the determination of a Finding of No Significant Impact (FONSI) for the project.

Akron-Canton Airport (CAK)
West Side Hangar Development
Environmental Assessment - Air Quality Documentation
Appendix A

Ground Access Vehicle (GAV) Emissions

Emissions for Ground Access Vehicles (GAV) are estimated based on the EPA Motor Vehicle Emission Simulator (MOVES). The model was configured with default values for Summit County, Ohio for selected vehicle types (passenger car, passenger truck, light commercial truck, single unit short-haul truck, combination unit short-haul truck). The model output was used to calculate average lb/mi emission factors.

$$\frac{tons}{yr} = miles * \frac{lb}{mi} * \frac{1\ ton}{2000\ lbs}$$

	NOX	CO	VOC	SO2	PM10	PM2.5	CO2	CH4	N2O
lb/mi	5.0E-04	6.0E-03	2.0E-04	5.5E-06	1.1E-05	1.0E-05	8.9E-01	2.0E-05	2.2E-05

100	assumed average new daily trips
36,500	estimated yearly new trips
60	miles, assumed trip round distance
2,190,000	estimated new GAV miles

	NOX	CO	VOC	SO2	PM10	PM2.5	CO2	CH4	N2O
tons/yr	0.55	6.57	0.22	0.01	0.01	0.01	975	0.02	0.02

Construction Emissions

The Airport Construction Emissions Inventory Tool (ACEIT) was used to estimate hours of operation and load factors for construction equipment. MOVES was used to obtain emission factors for nonroad equipment based on the equipment class and engine horsepower (HP). Emissions from onroad activity estimated by ACEIT were estimated using the MOVES emission factors above.

		g/hp-hr								
Equipment	Avg HP	NOX	CO	VOC	SO2	PM10	PM2.5	CO2	CH4	N2O
90 Ton Crane	300	0.328	0.081	0.024	0.0014	0.017	0.017	531	0.002	0.002
Aerial Lift	75	2.744	0.557	0.095	0.002	0.065	0.063	596	0.012	0.012
Asphalt Paver	175	0.688	0.218	0.039	0.001	0.053	0.051	537	0.003	0.003
Backhoe	100	1.998	1.566	0.277	0.002	0.254	0.247	695	0.009	0.009
Bob Cat	75	3.263	1.624	0.325	0.002	0.238	0.230	695	0.017	0.017
Bulldozer	175	0.312	0.092	0.014	0.001	0.022	0.022	537	0.001	0.001
Chain Saws	11	2.989	251	6.081	0.006	0.135	0.125	1,044	0.850	0.850
Chipper/Stump Grinder	100	1.378	0.572	0.051	0.002	0.094	0.091	596	0.004	0.004
Compacting Equipment	6	4.184	2.467	0.838	0.002	0.241	0.233	594	0.074	0.074
Concrete Pump	11	4.184	2.468	0.838	0.002	0.240	0.233	594	0.074	0.074
Concrete Truck	600	0.153	0.037	0.012	0.001	0.009	0.009	537	0.001	0.001
Curb/Gutter Paver	175	0.688	0.218	0.039	0.001	0.053	0.051	537	0.003	0.003
Distributing Tanker	600	0.153	0.037	0.012	0.001	0.009	0.009	537	0.001	0.001
Dozer	175	0.312	0.092	0.014	0.001	0.022	0.022	537	0.001	0.001
Dump Truck (12 cy)	600	0.153	0.037	0.012	0.001	0.009	0.009	537	0.001	0.001
Excavator	175	0.238	0.070	0.011	0.001	0.017	0.016	537	0.001	0.001
Flatbed Truck	600	0.153	0.037	0.012	0.001	0.009	0.009	537	0.001	0.001
Fork Truck	100	1.288	0.501	0.040	0.002	0.082	0.079	596	0.003	0.003
Front Loader	100	1.998	1.566	0.277	0.002	0.254	0.247	695	0.009	0.009
Grader	300	0.198	0.053	0.014	0.001	0.012	0.012	537	0.001	0.001
Grout Mixer for Mortar	600	2.309	0.579	0.129	0.002	0.080	0.078	531	0.006	0.006
Grub the site down 2'-0	40	2.547	0.299	0.095	0.002	0.025	0.024	596	0.013	0.013
High Lift	100	1.378	0.572	0.051	0.002	0.094	0.091	596	0.004	0.004
Hydroseeder	600	1.062	0.410	0.061	0.002	0.057	0.055	537	0.003	0.003
Loader	175	0.474	0.160	0.025	0.001	0.041	0.039	537	0.002	0.002
Log Chipper	100	1.378	0.572	0.051	0.002	0.094	0.091	596	0.004	0.004
Man Lift	75	2.744	0.557	0.095	0.002	0.065	0.063	596	0.012	0.012
Masonry Saw	40	2.557	0.309	0.097	0.002	0.027	0.026	596	0.013	0.013
Material Deliveries	600	0.153	0.037	0.012	0.001	0.009	0.009	537	0.001	0.001
Mulcher	100	1.378	0.572	0.051	0.002	0.094	0.091	596	0.004	0.004
Off-Road Truck	600	0.153	0.037	0.012	0.001	0.009	0.009	537	0.001	0.001

Other General Equipment	175	0.727	0.228	0.041	0.001	0.056	0.054	537	0.003	0.003
Pickup Truck	600	0.153	0.037	0.012	0.001	0.009	0.009	537	0.001	0.001
Pumps	11	4.184	2.468	0.838	0.002	0.240	0.233	594	0.074	0.074
Roller	100	1.139	0.374	0.027	0.002	0.063	0.061	596	0.002	0.002
Scraper	600	0.499	0.178	0.029	0.001	0.030	0.029	537	0.002	0.002
Seed Truck Spreader	600	0.153	0.037	0.012	0.001	0.009	0.009	537	0.001	0.001
Skid Steer Loader	75	4.152	3.201	0.671	0.002	0.513	0.498	694	0.021	0.021
Small Dozer	175	0.312	0.092	0.014	0.001	0.022	0.022	537	0.001	0.001
Surfacing Equipment (Grooving)	25	3.764	1.497	0.352	0.002	0.172	0.167	595	0.031	0.031
Survey Crew Trucks	600	0.153	0.037	0.012	0.001	0.009	0.009	537	0.001	0.001
Ten Wheelers	600	0.153	0.037	0.012	0.001	0.009	0.009	537	0.001	0.001
Tool Truck	600	0.153	0.037	0.012	0.001	0.009	0.009	537	0.001	0.001
Tractor Trailer- Material Delivery	600	0.153	0.037	0.012	0.001	0.009	0.009	537	0.001	0.001
Tractors/Loader/Backhoe	100	1.998	1.566	0.277	0.002	0.254	0.247	695	0.009	0.009
Trowel Machine	600	1.407	0.561	0.083	0.002	0.077	0.075	537	0.004	0.004
Vibratory Compactor	6	4.210	2.519	0.834	0.002	0.252	0.244	588	0.072	0.072
Water Truck	600	0.153	0.037	0.012	0.001	0.009	0.009	537	0.001	0.001

$$\frac{tons}{yr} = hours * load\ factor * HP * \frac{g}{HP - hr} * \frac{1\ lb}{453\ g} * \frac{1\ ton}{2000\ lbs}$$

			tons/yr								
Equipment	Hours	Load Factor	NOX	CO	VOC	SO2	PM10	PM2.5	CO2	CH4	N2O
90 Ton Crane	1,860	0.43	8.7E-02	2.1E-02	6.3E-03	3.7E-04	4.5E-03	4.5E-03	1.4E+02	5.3E-04	5.3E-04
Asphalt Paver	28	0.59	2.2E-03	6.9E-04	1.2E-04	4.7E-06	1.7E-04	1.6E-04	1.7E+00	1.0E-05	1.0E-05
Backhoe	3,096	0.21	1.4E-01	1.1E-01	2.0E-02	1.4E-04	1.8E-02	1.8E-02	5.0E+01	6.7E-04	6.7E-04
Bob Cat	24	0.21	1.4E-03	6.8E-04	1.4E-04	8.3E-07	9.9E-05	9.6E-05	2.9E-01	7.1E-06	7.1E-06
Bulldozer	40	0.59	1.4E-03	4.2E-04	6.5E-05	6.5E-06	1.0E-04	9.9E-05	2.4E+00	5.3E-06	5.3E-06
Chain Saws	104	0.7	2.6E-03	2.2E-01	5.4E-03	5.6E-06	1.2E-04	1.1E-04	9.2E-01	7.5E-04	7.5E-04
Chipper/Stump Grinder	64	0.43	4.2E-03	1.7E-03	1.5E-04	5.0E-06	2.8E-04	2.8E-04	1.8E+00	1.1E-05	1.1E-05
Compacting Equipment	24	0.43	2.9E-04	1.7E-04	5.7E-05	1.5E-07	1.6E-05	1.6E-05	4.1E-02	5.0E-06	5.0E-06
Concrete Pump	112	0.43	2.4E-03	1.4E-03	4.9E-04	1.3E-06	1.4E-04	1.4E-04	3.5E-01	4.3E-05	4.3E-05
Concrete Truck	1,023	0.59	6.1E-02	1.5E-02	4.6E-03	5.7E-04	3.7E-03	3.6E-03	2.1E+02	2.5E-04	2.5E-04
Curb/Gutter Paver	48	0.59	3.8E-03	1.2E-03	2.1E-04	8.1E-06	2.9E-04	2.8E-04	2.9E+00	1.7E-05	1.7E-05
Distributing Tanker	46	0.59	2.7E-03	6.7E-04	2.1E-04	2.5E-05	1.7E-04	1.6E-04	9.6E+00	1.1E-05	1.1E-05
Dozer	578	0.59	2.1E-02	6.0E-03	9.4E-04	9.4E-05	1.5E-03	1.4E-03	3.5E+01	7.7E-05	7.7E-05
Dump Truck (12 cy)	1,450	0.59	8.7E-02	2.1E-02	6.5E-03	8.0E-04	5.3E-03	5.1E-03	3.0E+02	3.5E-04	3.5E-04
Excavator	142	0.59	3.8E-03	1.1E-03	1.8E-04	2.3E-05	2.7E-04	2.6E-04	8.7E+00	1.4E-05	1.4E-05
Flatbed Truck	720	0.59	4.3E-02	1.0E-02	3.3E-03	4.0E-04	2.6E-03	2.5E-03	1.5E+02	1.8E-04	1.8E-04
Fork Truck	7,208	0.59	6.0E-01	2.3E-01	1.9E-02	7.7E-04	3.8E-02	3.7E-02	2.8E+02	1.5E-03	1.5E-03
Front Loader	40	0.21	1.8E-03	1.4E-03	2.6E-04	1.8E-06	2.4E-04	2.3E-04	6.4E-01	8.6E-06	8.6E-06
Grader	26	0.59	1.0E-03	2.7E-04	7.3E-05	7.2E-06	6.3E-05	6.2E-05	2.7E+00	4.8E-06	4.8E-06
Grout Mixer for Mortar	1,116	0.59	1.0E+00	2.5E-01	5.6E-02	7.1E-04	3.5E-02	3.4E-02	2.3E+02	2.5E-03	2.5E-03
Grub the site down 2'-0	40	0.59	2.7E-03	3.1E-04	9.9E-05	1.6E-06	2.6E-05	2.5E-05	6.2E-01	1.3E-05	1.3E-05
High Lift	4,092	0.59	3.7E-01	1.5E-01	1.3E-02	4.4E-04	2.5E-02	2.4E-02	1.6E+02	9.9E-04	9.9E-04
Hydroseeder	72	0.59	3.0E-02	1.2E-02	1.7E-03	4.3E-05	1.6E-03	1.6E-03	1.5E+01	9.2E-05	9.2E-05
Loader	164	0.59	8.8E-03	3.0E-03	4.6E-04	2.7E-05	7.6E-04	7.3E-04	1.0E+01	3.9E-05	3.9E-05
Log Chipper	40	0.43	2.6E-03	1.1E-03	9.6E-05	3.1E-06	1.8E-04	1.7E-04	1.1E+00	7.0E-06	7.0E-06
Man Lift	5,672	0.21	2.7E-01	5.5E-02	9.4E-03	1.6E-04	6.4E-03	6.2E-03	5.9E+01	1.1E-03	1.1E-03
Masonry Saw	1,116	0.59	7.4E-02	9.0E-03	2.8E-03	4.6E-05	7.8E-04	7.6E-04	1.7E+01	3.7E-04	3.7E-04

Material Deliveries	74	0.59	4.4E-03	1.1E-03	3.3E-04	4.1E-05	2.7E-04	2.6E-04	1.6E+01	1.8E-05	1.8E-05
Mulcher	40	0.43	2.6E-03	1.1E-03	9.6E-05	3.1E-06	1.8E-04	1.7E-04	1.1E+00	7.0E-06	7.0E-06
Off-Road Truck	72	0.59	4.3E-03	1.0E-03	3.3E-04	4.0E-05	2.6E-04	2.5E-04	1.5E+01	1.8E-05	1.8E-05
Other General Equipment	1,162	0.43	7.0E-02	2.2E-02	4.0E-03	1.4E-04	5.4E-03	5.2E-03	5.2E+01	3.2E-04	3.2E-04
Pickup Truck	1,768	0.59	1.1E-01	2.6E-02	8.0E-03	9.8E-04	6.4E-03	6.2E-03	3.7E+02	4.3E-04	4.3E-04
Pumps	22	0.43	4.8E-04	2.8E-04	9.6E-05	2.5E-07	2.8E-05	2.7E-05	6.8E-02	8.5E-06	8.5E-06
Roller	342	0.59	2.5E-02	8.3E-03	6.0E-04	3.6E-05	1.4E-03	1.4E-03	1.3E+01	5.4E-05	5.4E-05
Scraper	94	0.59	1.8E-02	6.5E-03	1.1E-03	5.4E-05	1.1E-03	1.1E-03	2.0E+01	8.9E-05	8.9E-05
Seed Truck Spreader	16	0.59	9.6E-04	2.3E-04	7.2E-05	8.9E-06	5.8E-05	5.6E-05	3.4E+00	3.9E-06	3.9E-06
Skid Steer Loader	430	0.21	3.1E-02	2.4E-02	5.0E-03	1.6E-05	3.8E-03	3.7E-03	5.2E+00	1.6E-04	1.6E-04
Small Dozer	24	0.59	8.5E-04	2.5E-04	3.9E-05	3.9E-06	6.1E-05	5.9E-05	1.5E+00	3.2E-06	3.2E-06
Surfacing Equipment (Grooving)	36	0.59	2.2E-03	8.8E-04	2.1E-04	1.3E-06	1.0E-04	9.8E-05	3.5E-01	1.8E-05	1.8E-05
Survey Crew Trucks	104	0.59	6.2E-03	1.5E-03	4.7E-04	5.8E-05	3.8E-04	3.7E-04	2.2E+01	2.5E-05	2.5E-05
Ten Wheelers	40	0.59	2.4E-03	5.8E-04	1.8E-04	2.2E-05	1.4E-04	1.4E-04	8.4E+00	9.8E-06	9.8E-06
Tool Truck	1,674	0.59	1.0E-01	2.4E-02	7.6E-03	9.3E-04	6.1E-03	5.9E-03	3.5E+02	4.1E-04	4.1E-04
Tractor Trailer- Material Delivery	2,836	0.59	1.7E-01	4.1E-02	1.3E-02	1.6E-03	1.0E-02	1.0E-02	5.9E+02	6.9E-04	6.9E-04
Tractors/Loader/Backhoe	482	0.21	2.2E-02	1.7E-02	3.1E-03	2.2E-05	2.8E-03	2.8E-03	7.8E+00	1.0E-04	1.0E-04
Trowel Machine	74	0.59	4.1E-02	1.6E-02	2.4E-03	4.5E-05	2.2E-03	2.2E-03	1.5E+01	1.2E-04	1.2E-04
Vibratory Compactor	96	0.43	1.1E-03	6.9E-04	2.3E-04	5.9E-07	6.9E-05	6.7E-05	1.6E-01	2.0E-05	2.0E-05
Water Truck	2,880	0.59	1.7E-01	4.2E-02	1.3E-02	1.6E-03	1.0E-02	1.0E-02	6.0E+02	7.0E-04	7.0E-04
Construction Off-road tons/yr			3.61	1.37	0.21	0.01	0.20	0.19	3,797	0.01	0.01

11,150,000 estimated construction vehicle on-road miles

	NOX	CO	VOC	SO2	PM10	PM2.5	CO2	CH4	N2O
Construction On-road tons/yr	2.79	33.45	1.12	0.03	0.06	0.06	4,962	0.11	0.12
Total Construction tons/yr	6.40	34.82	1.33	0.04	0.26	0.25	8,759	0.12	0.14

	NOX	CO	VOC	SO2	PM10	PM2.5	CO2	CH4	N2O
Total tons/yr	6.95	41.39	1.55	0.05	0.27	0.26	9,733	0.15	0.16

APPENDIX B

Agency Early Coordination Responses

AGENCY COORDINATION

As part of the NEPA early coordination process, several agencies and organizations were consulted in December 2024 via letters and attached mapping. These agencies included the following:

- U.S. Department of the Interior, U.S. Fish & Wildlife Services (IPaC)
- U.S. Environmental Protection Agency
- U.S. Department of Agriculture, NRCS
- U.S. Army Corp of Engineers, Huntington District
- Federal Aviation Administration, Detroit Airport District Office
- Ohio Environmental Protection Agency
- Ohio History Connection (Ohio SHPO)
- Ohio Department of Natural Resources
- City of Green Planning Commission
- City of Green Historical Commission

These regulatory agencies and stakeholders were asked to review the Proposed Action for potential impacts on resources under their jurisdiction. An example letter is contained in this appendix along with each response. In February 2025, the Sponsor decided to add the entire apron and additional hangars to the EA. An update to the Sponsor's Proposed Action was then distributed to the same agencies that offered comments on the first package distributed in December 2024. A copy of that coordination is also part of this appendix.

December 19, 2024

Mr. Mike Pettegrew
Ohio Department of Natural Resources
Office of Real Estate & Land Management
2045 Morse Road, Building E-2
Columbus, Ohio 43229
environmentalreviewrequest@dnr.ohio.gov

Re: **Agency Scoping for West Side Hangar Development**
Environmental Assessment
Akron Canton Airport (CAK)
Green, Ohio

Mr. Pettegrew:

The Akron Canton Regional Airport Authority (Sponsor) is preparing an Environmental Assessment (EA) for the proposed West Side Hangar Development (the Proposed Action) at the Akron Canton Airport (CAK), City of Green, Summit County (see **Figure 1**). The Ohio Department of Natural Resources (ODNR), Division of Mineral Resource Management (DMRM), Abandoned Mine Land Program in cooperation with the United States Department of Interior (DOI), Office of Surface Mining Reclamation and Enforcement (OSMRE) is the lead federal agency for the project. The ODNR, DMRM is a state administered, federally funded program through the DOI, OSMRE. In 2024, the Airport Sponsor was awarded a grant through this program for economic development to construct a hangar at CAK.

The Proposed Action includes the development of a 12,000 square-foot hangar with associated vehicular parking, apron area, and utility improvements. The EA will analyze two build alternatives (see **Figure 2 & 3**) and a no-build alternative. Although the apron for the proposed hangar will be included in the analysis, it is not being funded by the DOI, OSMRE program and is funded under a separate grant from the Ohio Department of Transportation.

The project area is located on the north side of the airport (40° 55’ 19.51” N; 81° 26’ 38.05” W) west of Runway 1/19, south of the West Airport Road General Aviation, and north of Taxiway Delta. The area is primarily surrounded by aviation land uses. Some of the site features include airfield pavement, maintained grass, and hangars. The study team is currently undertaking a preliminary jurisdictional wetland/waters delineation and a cultural resources review.

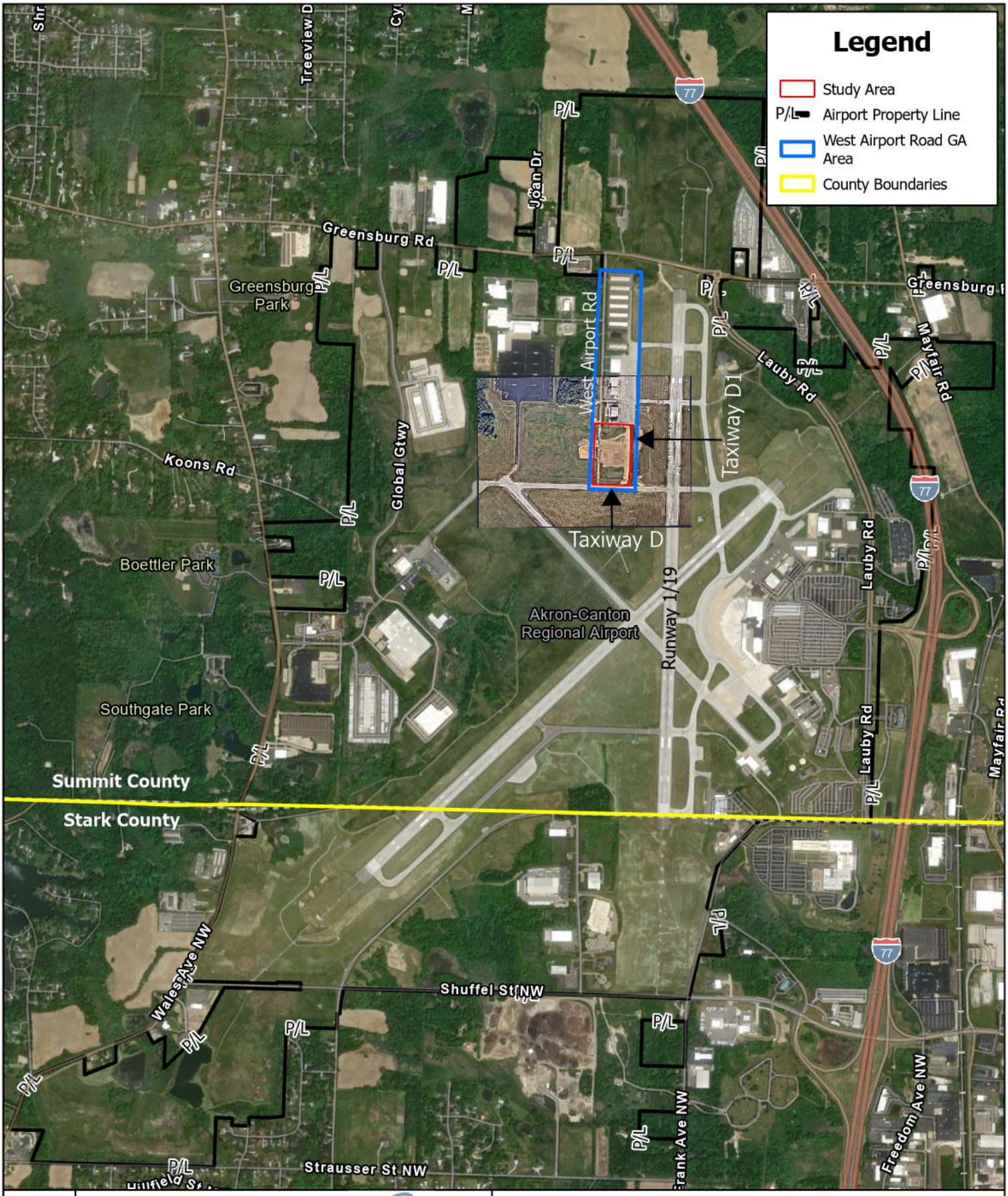
The EA document will be prepared in accordance with the OSMRE’s *Procedures for Implementing the National Environmental Policy Act (NEPA)* and Federal Aviation Administration (FAA) Order 1050.1F: *Environmental Impacts: Policies & Procedures* and associated Desk Reference.

As part of this agency coordination process, the Sponsor is requesting your comments and identification of any areas of concern related to the Proposed Action. If no reply has been received within 30-days, it will be indicated in the EA document that your agency has no comment on the Sponsor's Proposed Action. We hope the information contained herein is sufficient for you to complete your evaluation. Should you have any questions, please contact me at (216) 273-8638 or mheckroth@chasolutions.com.

Sincerely,

Mark Heckroth, ENV SP
Manager, Aviation Environmental Planning

Cc: Lisa Dalpiaz, CAK
Duane Dunn, CAK



N

CHA

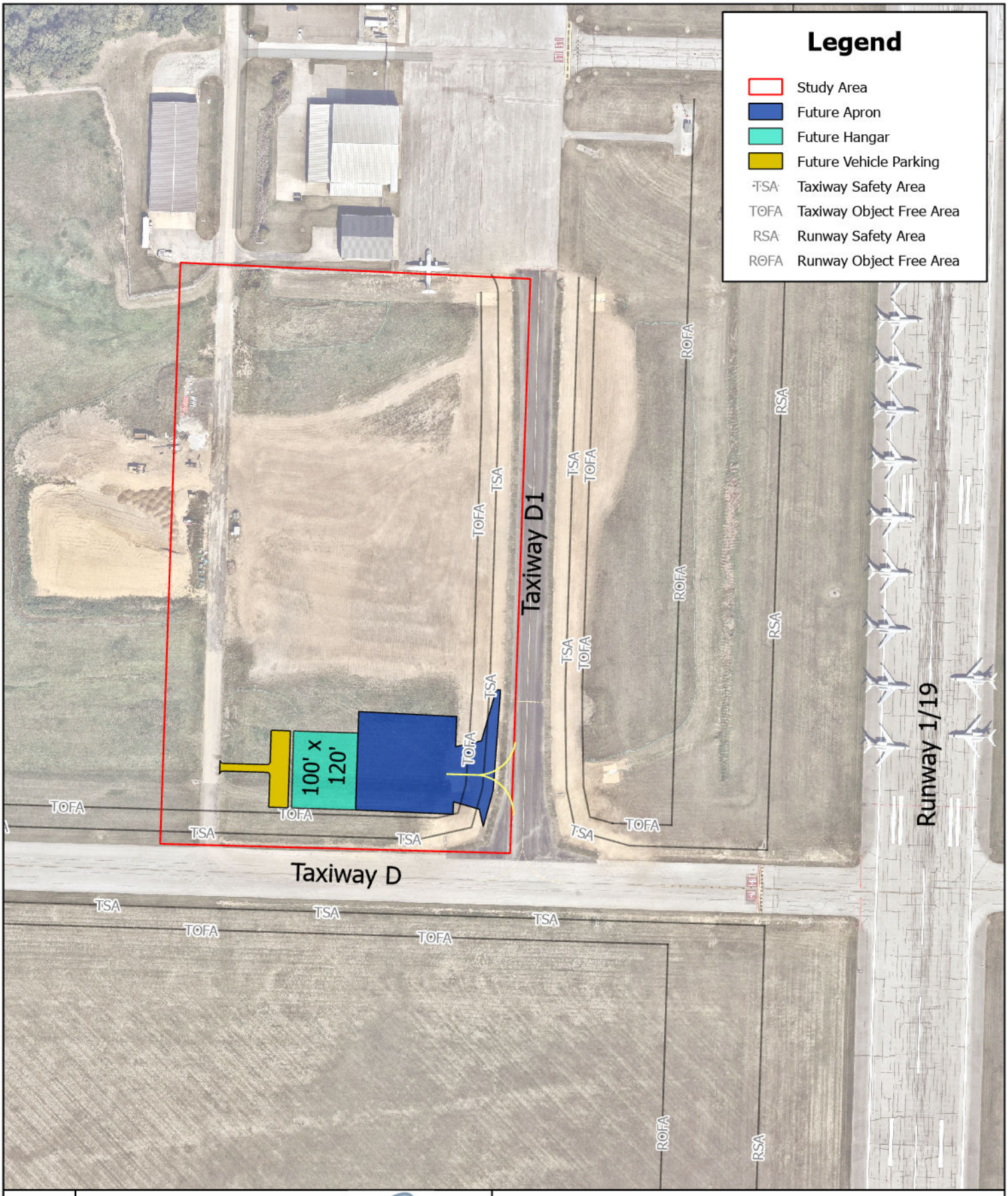
AKRON-CANTON AIRPORT

Figure 1: Location Map

Akron-Canton Regional Airport
Akron, Ohio

1' = 1,900"	CHA No. 098529	*Source Data* *Service Layer Credits*

Date Saved: 12/19/2024, 8548



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CHA

AKRON-CANTON AIRPORT

Figure 2

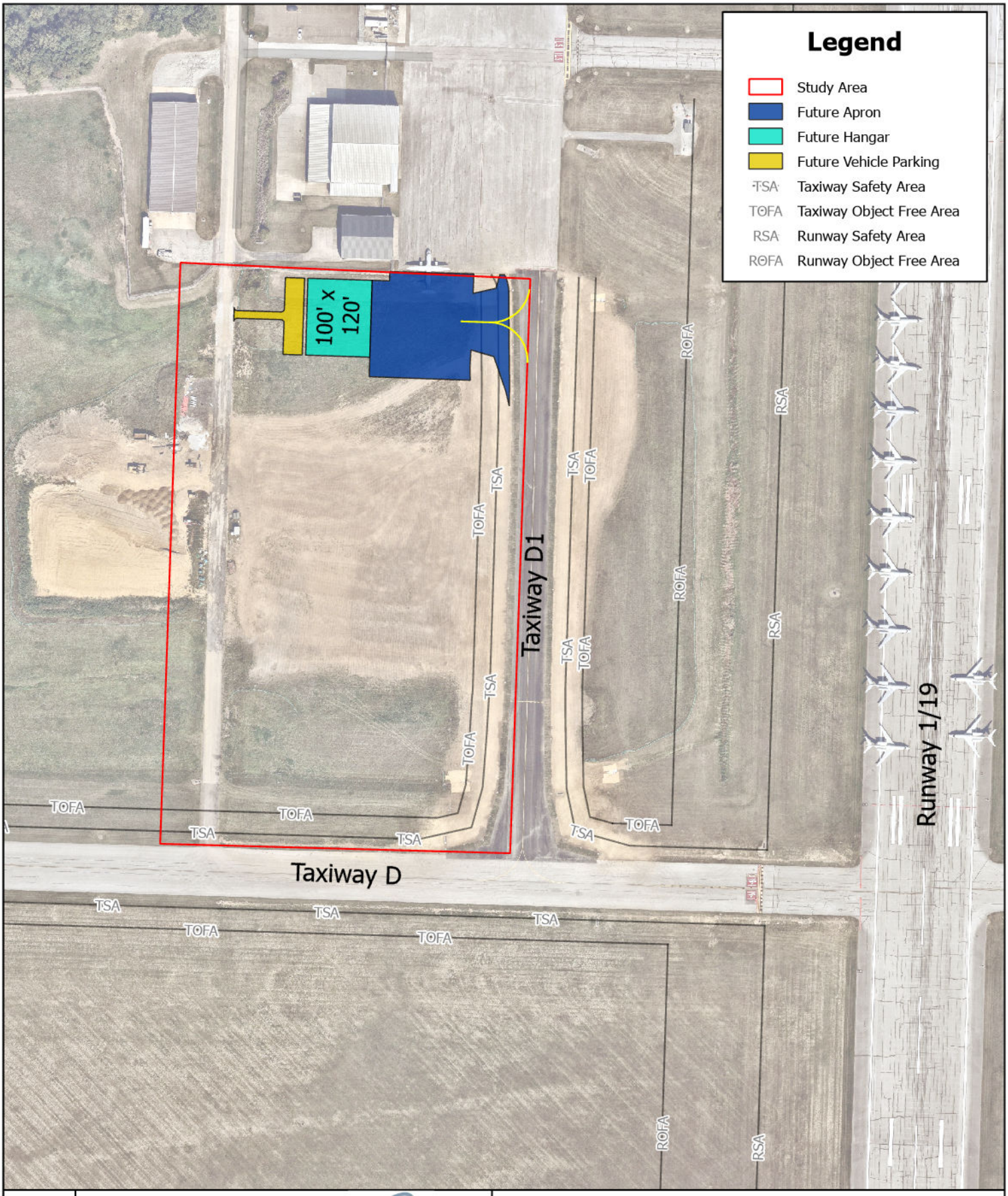
Akron-Canton Regional Airport
Akron, Ohio

1' = 200"

CHA No. 098529

Source Data
Service Layer Credits

Date Saved: 12/19/2024, 8548



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AKRON-CANTON AIRPORT

Figure 3

Akron-Canton Regional Airport
Akron, Ohio

1' = 200"

CHA No. 098529

Source Data
Service Layer Credits

Date Saved: 12/19/2024, 8548

Heckroth, Mark

From: Osborne, Kayla N CIV USARMY CELRH (USA) <Kayla.N.Osborne@usace.army.mil>
Sent: Friday, December 20, 2024 9:09 PM
To: Heckroth, Mark
Subject: [--EXTERNAL--]: RE: NEPA Scoping Letter

Hi Mark,

Based on a search of our database, it appears a jurisdictional determination was completed for this site previously. We will maintain the same file number for the project site, LRH-2017-815-TUS.

Thanks,

Kayla N. Osborne
Regulatory Project Manager
North Branch
U.S. Army Corps of Engineers
Huntington District
502 8th Street
Huntington, WV 25701
304-399-5850 (office)
304-932-5361 (mobile)
304-399-5085 (fax)
Kayla.N.Osborne@usace.army.mil

From: Spagna, Teresa D CIV USARMY CELRH (USA) <Teresa.D.Spagna@usace.army.mil>
Sent: Friday, December 20, 2024 9:32 AM
To: Heckroth, Mark <MHeckroth@chasolutions.com>; DLL-CELRH-WEB Permits <LRH.Permits@usace.army.mil>
Cc: Osborne, Kayla N CIV USARMY CELRH (USA) <Kayla.N.Osborne@usace.army.mil>
Subject: RE: NEPA Scoping Letter

Good morning, Mark,
This request has been assigned to Kayla Osborne. You can reach Kayla at 304-399-5210 or by email at kayla.n.adkins@usace.army.mil. Kayla will follow up with an assigned file number.
Thank you,
Teresa Spagna
Chief, North Branch

From: Heckroth, Mark <MHeckroth@chasolutions.com>
Sent: Thursday, December 19, 2024 5:40 PM
To: DLL-CELRH-WEB Permits <LRH.Permits@usace.army.mil>
Subject: [Non-DoD Source] NEPA Scoping Letter

Good afternoon. Please find the attached early coordination letter for hangar development at Akron Canton Airport in Ohio.

Thank you. We appreciate your review.

Heckroth, Mark

From: Daniel.Bogoevski@epa.ohio.gov
Sent: Thursday, December 26, 2024 9:19 AM
To: Heckroth, Mark
Cc: megan.oravec@epa.ohio.gov
Subject: [--EXTERNAL--]: RE: NEPA Scoping Letter

Hi Mark,

Thanks for reaching out about the proposed hangar construction at the Akron-Canton airport. I can only speak for Ohio EPA's stormwater program. If the project disturbs 1 or more acre of land, the project is regulated under Ohio EPA's construction stormwater program. You would need to develop a stormwater pollution prevention plan (SWP3) and submit a Notice of Intent (NOI) for coverage under the Ohio EPA General NPDES Permit for Stormwater Associated with Construction Activities (CGP). The SWP3 would need to be submitted to City of Green for review and approval before commencing construction. The City of Green's local requirements can be more stringent than those in the CGP.

Because the project includes the creation or redevelopment of impervious area, the SWP3 will need to include permanent, post-construction BMPs in accordance with the CGP and City of Green's local ordinances. Projects where the larger common plan of development or sale disturbs 2 or more acres are required to provide a practice from Table 4a or 4b to treat the Water Quality Volume (WQv), use runoff reduction practices to retain the WQv on-site or seek approval for off-site mitigation of post-construction requirements from Ohio EPA prior to submittal of an NOI. The SWP3 needs to include a stand-alone long-term maintenance plan for the selected post-construction BMP(s). You can read more about these requirements in the CGP at Stormwater Discharges from Small and Large Construction Activities - General Permit | Ohio Environmental Protection Agency and the companion specification manual Rainwater and Land Development | Ohio Environmental Protection Agency.

Redevelopment of areas with prior industrial land use can pose special concerns and these concerns should be considered when developing the SWP3. Although I am not aware of any specific issues with this project location, you should check with Megan Oravec at megan.oravec@epa.ohio.gov or (330) 963-1168 in our Division of Environmental Response and Revitalization to determine if they are aware of any special concerns with the project location.

If you have further questions about the stormwater program, please feel free to contact me at (330) 963-1145.

Sincerely,

Ohio Environmental Protection Agency

Dan Bogoevski
Environmental Supervisor – Division of Surface Water
Northeast District Office
2110 E. Aurora Rd.
Twinsburg, Ohio 44087
D: 330.963.1145

daniel.bogoevski@epa.ohio.gov

The State of Ohio is an Equal Opportunity Employer and Provider of ADA Services.

From: Heckroth, Mark <MHeckroth@chasolutions.com>
Sent: Thursday, December 19, 2024 5:41 PM
To: Bogoevski, Daniel <Daniel.Bogoevski@epa.ohio.gov>
Subject: NEPA Scoping Letter

Good afternoon. Please find the attached early coordination letter for hangar development at Akron Canton Airport in Ohio.

Thank you. We appreciate your review.

Mark Heckroth, **ENV SP**
Section Manager – Aviation Environmental
Senior Project Manager
CHA
Office: (216) 273-8638
Cell: (216) 904-6283
mheckroth@chasolutions.com
www.chasolutions.com

Please note my email address has changed

Finding a better way.

Follow Us On:

Heckroth, Mark

From: Baker, Steven - FPAC-NRCS, OH <steven.baker@usda.gov>
Sent: Friday, January 3, 2025 10:10 AM
To: Heckroth, Mark
Subject: RE: [--EXTERNAL--]: NEPA Scoping Letter
Attachments: USDA_12192024.pdf

Thanks for the clarification Mark. As a note, prime farmland is not dependent on use, only soils mapping. That being said, I can see this project is exempt from the Farmland Policy Protection Act (FPPA) due to already being committed to urban development. If you decide you need a form stating that, feel free to send me a 1006 for me to check the box if this email does not suffice. (All agencies seem to differ a little on that one)

The FPPA does not provide any permission to go ahead with a project, simply shows where federal dollars will impact prime farmland and allows projects the opportunity to formulate alternatives if possible. That being said, even if this were a non-exempt project, there would be no alternative and the form would simply be filed in your system and I would add it to the tally of all projects by agency at the end of the year.

Call me with any questions,

Steve Baker
SSS – OH NRCS
614-255-2483
Steven.baker@usda.gov

From: Heckroth, Mark <MHeckroth@chasolutions.com>
Sent: Friday, January 3, 2025 9:18 AM
To: Baker, Steven - FPAC-NRCS, OH <steven.baker@usda.gov>
Subject: RE: [--EXTERNAL--]: NEPA Scoping Letter

Hi Steve – we were expecting general comments that the project will have no impact. Although a good portion of the site does include prime farmland, it's not actively farmed (given it's location on an airport) and generally zone for General Industrial. If you need us to complete the 1006 and submit for your review, let me know and we can do that.

Thanks,
Mark

Mark Heckroth, ENV SP
Office: (216) 273-8638
Cell: (216) 904-6283

From: Baker, Steven - FPAC-NRCS, OH <steven.baker@usda.gov>
Sent: Thursday, January 2, 2025 10:43 AM

To: Heckroth, Mark <MHeckroth@chasolutions.com>
Subject: [--EXTERNAL--]: NEPA Scoping Letter

Hi Mark,

Had this forwarded to me. Are you looking for an FPPA (Prime Farmland) form?

Steve Baker
SSS – OH NRCS
614-255-2483
Steven.baker@usda.gov

Good afternoon. Please find the attached early coordination letter for hangar development at Akron Canton Airport in Ohio.

Thank you. We appreciate your review.

Mark Heckroth, **ENV SP**
Section Manager – Aviation Environmental
Senior Project Manager
CHA
Office: (216) 273-8638
Cell: (216) 904-6283

Heckroth, Mark

From: Peavler, Misty (FAA) <misty.peavler@faa.gov>
Sent: Monday, January 6, 2025 10:44 AM
To: Heckroth, Mark; Renato Camacho
Cc: Radtke, Jana (FAA); McBurrows, Evonne (FAA)
Subject: [--EXTERNAL--]: RE: NEPA Early Coordination - CAK West Side Hangar Development

Good Morning,

Based on a cursory review, we have determined there is federal action and we will be sending a Determination of Authority in a separate email. This also means NEPA is required for the FAA.

Please reach out with any questions.

Thanks,

MISTY PEAVLER | ENVIRONMENTAL PROTECTION SPECIALIST
Federal Aviation Administration
Detroit Airports District Office
FAA Great Lakes Region Airports Division
Misty.Peavler@faa.gov
Office: (734) 229-2906

From: Heckroth, Mark <MHeckroth@chasolutions.com>
Sent: Thursday, December 19, 2024 5:47 PM
To: Peavler, Misty (FAA) <misty.peavler@faa.gov>
Subject: NEPA Early Coordination - CAK West Side Hangar Development

Good afternoon. Please find the attached early coordination letter for hangar development at Akron Canton Airport in Ohio.

Thank you. We appreciate your review.

Mark Heckroth, **ENV SP**
Section Manager – Aviation Environmental
Senior Project Manager
CHA
Office: (216) 273-8638
Cell: (216) 904-6283
mheckroth@chasolutions.com
www.chasolutions.com

Heckroth, Mark

From:	Radtke, Jana (FAA) <Jana.Radtke@faa.gov>
Sent:	Monday, January 6, 2025 1:02 PM
To:	Renato Camacho
Cc:	Heckroth, Mark; McBurrows, Evonne (FAA); Peavler, Misty (FAA)
Subject:	[--EXTERNAL--]: CAK - Determination of ALP Authority_West Side Hangar Development

Good Afternoon,

Based upon the documentation provided, the proposed west side hangar development would appear to be located on Parcel 2809144. Per the Exhibit A, this parcel was previously acquired with federal funds.

Under Section 743 of the Reauthorization Act of 2024, the FAA retains authority to approve changes to the ALP for any proposed development on land previously acquired with federal funds. Therefore, the FAA retains ALP authority over the proposed west side hangar development at CAK. A Partial ALP Update and aeronautical study will be required.

If you have any questions, please let us know.

Thanks,
Jana

Jana Radtke
Community Planner
Federal Aviation Administration
Detroit Airports District Office
734.229.2916
Jana.Radtke@faa.gov

From: Heckroth, Mark <MHeckroth@chasolutions.com>
Sent: Thursday, December 19, 2024 5:47 PM
To: Peavler, Misty (FAA) <misty.peavler@faa.gov>
Subject: NEPA Early Coordination - CAK West Side Hangar Development

Good afternoon. Please find the attached early coordination letter for hangar development at Akron Canton Airport in Ohio.

Thank you. We appreciate your review.

Mark Heckroth, **ENV SP**
Section Manager – Aviation Environmental
Senior Project Manager
CHA
Office: (216) 273-8638
Cell: (216) 904-6283

Department of Natural Resources
ohiodnr.gov

Mike DeWine, *Governor*
Jon Husted, *Lt. Governor*
Mary Mertz, *Director*

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

January 15, 2025

Mark Heckroth
Clough, Harbour, & Associates Consulting, Inc.
1501 North Marginal Road, #200
Cleveland, Ohio 44114

Re: 24-1989_West Side Hangar Development

Project: The proposed project involves the development of a 12,000 square-foot hangar with associated vehicular parking, apron area, and utility improvements.

Location: The proposed project is located in Greensburg, Summit 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 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 Iowa darter *(Etheostoma exile),* a state endangered fish, the pugnose minnow (*Opsopoeodus emiliae*), a state endangered fish, the western banded killifish (*Fundulus diaphanus menona*), a state endangered fish, the lake chubsucker (*Erimyzon sucetta*), a state threatened fish, and the paddlefish (*Polyodon spathula*) a state threatened fish. The DOW recommends no in-water work in perennial streams from March 15 to 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 smooth greensnake (*Opheodrys vernalis*), a state endangered species. This species is primarily a prairie inhabitant, but also found in marshy meadows and roadside ditches. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the spotted turtle (*Clemmys guttata*), a state threatened species. This species prefers fens, bogs and marshes, but also is known to inhabit wet prairies, meadows, pond edges, wet woods, and the shallow sluggish waters of small streams and ditches. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus hudsonius*), 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.

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 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.*

DEPARTMENT OF THE ARMY
HUNTINGTON DISTRICT, CORPS OF ENGINEERS
502 EIGHTH STREET
HUNTINGTON, WEST VIRGINIA 25701-2070

REPLY TO ATTENTION OF

January 28, 2025

Regulatory Division
North Branch
LRH-2017-815-TUS

ACCEPTING OF COOPERATING AGENCY RESPONSIBILITY

Mark Heckroth
CHA Solutions
1501 North Marginal Road, Suite 200
Cleveland, Ohio 4414

Dear Mark Heckroth:

I refer to the agency scoping letter received on December 19, 2024 requesting comments for consideration in the Akron Canton Regional Airport Authority preparation of an Environmental Assessment for the proposed West Side Hanger Development Project located at the Akron Canton Airport in Green, Summit County, Ohio. The proposed project has been assigned the following file number: LRH-2017-815-TUS. Please reference this file number on all future correspondence related to the subject proposal.

The United States Army Corps of Engineers' (Corps) authority to regulate waters of the United States is based on the definitions and limits of jurisdiction contained in 33 CFR Part 328 and 33 CFR Part 329. Section 404 of the Clean Water Act (Section 404) requires a Department of the Army (DA) permit be obtained prior to discharging dredged and/or fill material into waters of the United States, including wetlands. Section 10 of the Rivers and Harbors Act of 1899 (Section 10) requires a DA permit be obtained for any work in, on, over, or under a navigable water.

The Corps accepts your invitation to serve as a cooperating agency. We look forward to working with you during the preparation of the Environmental Assessment for the proposed project. Based on a preliminary review of the provided information, the proposed project may require authorization under Section 404. In this regard, to ensure the information presented in any National Environmental Policy Act (NEPA) document is adequate to fulfill the Corps' statutory requirements, including the requirements of Section 404(b)(1) of the Clean Water Act (40 CFR Part 230) and the Corps' public interest review (33 CFR § 320.4), the Corps requests the topics listed in **Enclosure 1** be included in the scoping and evaluation of any submitted NEPA document.

A delineation should be conducted on the project site to determine the presence of waters of the United States (e.g., rivers, tributaries, ditches, ponds, wetlands, impoundments). Please be advised that the Corps has supplemented the 1987 Wetland Delineation Manual with new data forms and indicators that must be used for any data collection for wetland delineations. A copy of the regional supplements can be found at:

https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/reg_supp/.

Activities subject to regulation under Section 404 and/or Section 10 may be authorized by a General Permit or an Individual Permit (IP). General Permits are issued nationwide or regionally for a category or categories of activities that are either similar in nature and cause only minimal individual and cumulative adverse impacts (Nationwide and Regional General Permits). There are currently 57 Nationwide Permits (NWPs) with 32 general conditions used by the Corps to authorize projects resulting in minimal individual and cumulative adverse impacts. There are 41 NWPs that are valid until March 14, 2026 and can be found at: https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll15/id/3010. There are also 16 NWPs that are also valid until March 14, 2026 and can be found at: https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll15/id/1757. It is recommended that applicants use the pre-construction notification form (ENG Form 6082).

Activities that do not qualify for authorization under the General Permit program may qualify for authorization by a Standard IP. Authorization under an IP may be obtained only through application (ENG Form 4345) with the Corps. These permits are issued for activities that have more than minimal adverse impacts to waters of the United States and evaluation of each permit application involves more thorough review of the potential environmental effects of the proposed activity upon the public interest. The Corps may not issue a permit if the proposed project is not in the public interest, is not in compliance with the United States Environmental Protection Agency's Section 404(b)(1) guidelines (this does not apply to Section 10 of the Rivers and Harbors Act of 1899 only activities), is not in compliance with other laws (such as Section 401 of the Clean Water Act, NEPA, Fish and Wildlife Coordination Act, Endangered Species Act, National Historic Preservation Act), would result in significant degradation of the aquatic environment (net after mitigation), or if the proposed mitigation is not determined to be adequate.

We are available for pre-application consultation upon request. Please reference **Enclosure 2** for a list of information that should be provided prior to or during the pre-application consultation. If you have any questions regarding the information in this letter or the enclosures, please contact Kayla Osborne of the North Branch by phone at 304-399-5850, by mail at the above address, or by email at kayla.n.osborne@usace.army.mil.

Sincerely,

Teresa Spagna

Teresa D. Spagna
Chief, North Branch

Enclosures

Enclosure 1 – Corps Request for Items to be Scoped and Evaluated in the NEPA Document

1) **Purpose and Need for the Project**. The NEPA document should clearly describe the purpose and need for the proposed project.

2) **Aquatic Resource Identification**. The NEPA document should include a site-specific identification of all aquatic resources within the proposed project areas. The identification should include a description of any streams, open water areas, and wetlands. The identification of aquatic resources within the on-site and off-site project areas should be based on field observations and field data. The identification should include a wetland delineation foreach site prepared in accordance with the Corps' 1987 Wetland Delineation Manual and any applicable Regional Supplement. This information would be required to determine the effects of the project on aquatic resources.

3) **Avoidance and Minimization**. A fundamental precept of the Corps' Regulatory Program under Section 404 of the Clean Water Act is that the discharge of dredged and/or fill material into waters of the United States will be avoided and minimized, where it is practicable to do so. A Section 404 of the Clean Water Act permit may only authorize the least environmentally damaging practicable alternative. An alternative is practicable if it is available and capable of being done after taking into consideration cost, logistics and existing technology in light of overall Project purposes. The NEPA document should evaluate how the project was designed to avoid and minimize the discharge of dredged and/or fill material into waters of the United States. The alternatives analysis section of the NEPA document should analyze on-site avoidance and minimization alternatives and avoidance and minimization alternatives for any off-site borrow, spoil, or mitigation areas.

4) **Compliance with the Section 404(b)(1) Guidelines**. The Section 404(b)(1) Guidelines(Guidelines) are the substantive criteria used in evaluating discharges of dredged and/or fill material under Section 404 of the Clean Water Act. The Guidelines are published at 40 CFR Part 230. The fundamental precept of the Guidelines is that discharges of dredged and/or fill material into waters of the United States, including wetlands, should not occur unless it can be demonstrated that such discharges, either individually or cumulatively, will not result in unacceptable adverse effects on the aquatic ecosystem. Subpart B of the Guidelines establishes the four (4) conditions which must be satisfied in order to make a finding that a proposed discharge of dredged and/or fill material complies with the Guidelines. These conditions generally state:

a. No discharge of dredged and/or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.

b. No discharge of dredged or fill material shall be permitted if it:

i Causes or contributes, after consideration of disposal site dilution and dispersion, to violations of any applicable State water quality standard;
ii Violates any applicable toxic effluent standard or prohibition under section307 of the Act;

iii Jeopardizes the continued existence of species listed as endangered or threatened under the Endangered Species Act of 1973, as amended, or results in likelihood of the destruction or adverse modification of a habitat which is determined by the Secretary of Interior or Commerce, as appropriate, to be a critical habitat under the Endangered Species Act of 1973, as amended; or

iv Violates any requirement imposed by the Secretary of Commerce to protect any marine sanctuary designated under title III of the Marine Protection, Research, and Sanctuaries Act of 1972.

c. No discharge of dredged and/or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States. Under these Guidelines, effects contributing to significant degradation considered individually or collectively, include:

i. Significant adverse effects of the discharge of pollutants on human health or welfare, including but not limited to effects on municipal water supplies, plankton, fish, shellfish, wildlife, and special aquatic sites;

ii. Significant adverse effects of the discharge of pollutants on life stages of aquatic life and other wildlife dependent on aquatic ecosystems, including the transfer, concentration, and spread of pollutants or their byproducts outside of the disposal site through biological, physical and chemical processes;

iii. Significant adverse effects of the discharge of pollutants on aquatic ecosystem diversity, productivity, and stability. Such effects may include, but are not limited to, loss of fish and wildlife habitat or loss of the capacity of a wetland to assimilate nutrients, purify water, or reduce wave energy; or

iv. Significant adverse effects of discharge of pollutants on recreational, aesthetic and economic values.

d. No discharge of dredged and/or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem.

Findings of significant degradation related to the proposed discharge are based upon appropriate factual determinations, evaluations, and tests required by Subparts B and G of the Guidelines, after consideration of subparts C through F, with special emphasis on the persistence and permanence of the effects outlined in those subparts.

The NEPA document should provide a sufficient analysis to determine compliance with the Guidelines.

5) **Corps Public Interest Review Factors**. The Corps must evaluate the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Among the factors that must be evaluated as part of the Corps' public interest review include: conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplains values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, energy needs, safety, food and fiber production, mineral needs, water quality, considerations of property ownership, air and noise impacts, and, in general, the needs and

welfare of the people (See 33 CFR § 320.4). These factors should be scoped and evaluated in the NEPA document.

Conservation (33 CFR § 320.4(p))	Broadly defined, conservation is the planned management of natural resources in order to prevent or minimize exploitation, destruction, or neglect. Identify direct, indirect, and cumulative adverse and beneficial effects. Describe whether the proposed project would exploit natural resource materials or otherwise affect them. Describe what type of aquatic resources are located on site. Provide a summary of the measures incorporated into the project design to protect the natural resources in the area of the proposed action. These measures may include, as applicable, preservation of avoided aquatic resources and buffers, restoration of land use, plans for both minimizing impacts and enhancing fish and wildlife environmental values, protections for parks and historic lands, surface and ground-water quality protections, etc. Describe the proposed compensatory mitigation.
Economics (33 CFR § 320.4(q))	Identify direct, indirect, and cumulative adverse and beneficial effects within scope of analysis on economics. Describe how the economic benefits of the proposed project would be important to the local community and contribute to needed improvements in the local economic base, affecting such factors as temporary and permanent employment, tax revenues, community cohesion, community services, and property values.
Aesthetics (33 CFR § 320.4(e)	Identify direct, indirect, and cumulative adverse and beneficial effects within scope of analysis on economics. Describe the general aesthetics of the project site in its current state and how they would change as a result of implementing the proposed project. Explain whether any historic properties, archeological resources, including Indian religious or cultural sites, and such other areas as may be established under federal or state law for similar and related purposes would be affected by the proposed project. Describe the development trend of the surrounding area. Describe how the viewshed would change.
Wetlands (33 CFR § 320.4(b))	Discuss existing conditions, functions and services of the wetlands proposed to be impacted, expected changes, and compensatory mitigation. Consider state regulatory laws or programs for classification and protection of wetlands. Identify direct, indirect, and cumulative adverse and beneficial effects within scope of analysis on wetlands.
Historic Properties (33 CFR § 320.4(e)	Consideration must be given to effect of action on the areas that possess historic, cultural, scenic, conservation, recreational or similar values aforementioned values. Identify direct, indirect, and cumulative adverse and beneficial effects within scope of analysis, taking into account mitigation measures, on historic properties. Provide recognition of values reflected by state/regional/local land-use classifications or federal controls/policies. Indicate whether the action is consistent with and avoids significant adverse impacts on values or purposes for which classifications, controls, or policies were established. Include determinations of impact and any required consultation for compliance with Section 106 of the National Historic Preservation Act, including tribal consultation done for prehistoric resources.
Flood Hazards (33 CFR § 320.4(k))	Identify adverse and beneficial impacts of proposed action and other alternatives, taking into account the scope of analysis. Describe whether the proposed activity is expected to impact structures used to reduce flood risks. Describe whether the proposed activity is expected to result in flood hazards.
Floodplain Hazards (33 CFR § 320.4(l)	Identify direct, indirect, and cumulative adverse and beneficial effects within scope of analysis, taking into account mitigation measure, on floodplain values. Indicate if the proposed project is located within a FEMA mapped and/or local floodplain or the floodplain of a waterway. Indicate if there are expected to be any detrimental impacts, even if constructed outside of the floodplain.
Water Quality (33 CFR § 320.4(d))	Identify direct, indirect, and cumulative adverse and beneficial effects within scope of analysis, taking into account mitigation measures, on water quality. Indicate whether the proposed project will increase or decrease suspended sediments, turbidity, and pollutants, or result in changes to chemical composition.
Water Supply and Conservatio	Indicate the location of municipal and public water supplies. Identify direct, indirect, and cumulative adverse and beneficial effects within scope of analysis, taking into account mitigation measures, on water supply and conservation. Indicate if the proposed project is

n (33 CFR § 320.4(m))	expected to affect the quality or quantity of any water supply. Locations of drinking water source protection areas associated with public water supply intakes, including the name of the public water supply, can be found at the following link: https://oepa.maps.arcgis.com/apps/webappviewer/index.html?id=3b39e11ba7fc43c3b41801e3580e6d21
Fish and Wildlife	Identify direct, indirect, and cumulative adverse and beneficial effects within scope of analysis, taking into account mitigation measures on fish and wildlife values (results of Fish and Wildlife Coordination Act and Endangered Species Act consultations, habitat fragmentation, water quality effects, loss of transportation corridors and impacts to food chain). Category 3 Wetlands: As determined through use of the latest approved version of the Ohio Environmental Protection Agency's Ohio Rapid Assessment Method wetland evaluation form. Ohio Stream Designations: Exceptional Warmwater Habitat, Cold Water Habitat, Seasonal Salmonid, or any equivalent designation; or water bodies with an antidegradation category of Superior High Quality Water, Outstanding National Resource Water, or Outstanding State Waters as determined by the Ohio Environmental Protection Agency. The current list of these rivers and tributaries can be found on the Ohio Environmental Protection Agency website at: http://www.epa.ohio.gov/dsw/rules/3745_1.aspx. These designations can be found under the aquatic life use of the rivers and tributaries within its basin and under the "Anti-deg Rule #05." Shellfish beds in Ohio include concentrations of freshwater mussels. All native mussels are protected in the State of Ohio (Section 1533.324 of the Ohio Revised Code). In addition, 12 federally listed species occur in the state and are protected by the ESA (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). Additionally, the salamander mussel (*Simpsonaias ambigua*) is proposed to be listed as an endangered species and designate critical habitat. https://www.federalregister.gov/documents/2023/08/22/2023-17668/endangered-and-threatened-wildlife-and-plants-endangered-species-status-for-salamander-mussel-and?utm_source=federalregister.gov&utm_medium=email&utm_campaign=subscription+mailing+list All rivers and tributaries that contain mussels or potential mussel habitat must be surveyed prior to any proposed streambed disturbance. Currently accepted protocol and supporting materials can be found on the Ohio Department of Natural Resources' website: https://ohiodnr.gov/wps/portal/gov/odnr/buy-and-apply/special-use-permits/collecting-research/ohio-mussel-surveyor The removal of trees ≥ three (3) inches diameter at breast height. These trees may provide suitable roosting, foraging, or traveling habitat for the federally listed endangered Indiana bat, the federally-listed threatened northern long-eared bat, and proposed endangered tricolored bat. Indicates effects to these bats and coordination efforts conducted with the United States Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act.
Navigation (33 CFR § 320.4(o)	Indicate if the proposed activity would be located within or near a navigable water of the United States (such as the Ohio River). Identify direct, indirect, and cumulative adverse and beneficial effects within scope of analysis, taking into account mitigation measures, on recreational navigation. Indicate whether the proposed project would result in a navigation hazard or obstruction. Indicate if any minimization measures to minimize effects to recreational navigation.
Recreation	Applications may involve areas that possess historic, cultural, scenic, conservation,

(33 CFR § 320.4(e))	recreational or similar values. Consideration must be given to effect of action on the aforementioned values. Identify direct, indirect, and cumulative adverse and beneficial effects within scope of analysis, taking into account mitigation measures, on recreation. Indicate whether there is expected to be a decrease or increase in recreation. Indicate whether the proposed project is consistent with, and avoids significant adverse impacts on values or purposes for which classifications, controls, or policies were established.
Safety (33 CFR § 320.4(k))	Identify direct, indirect, and cumulative adverse and beneficial effects within scope of analysis, taking into account mitigation measures, on safety. Indicate whether the proposed construction activities are expected to result in safety hazards. Indicate if the proposed project is expected to improve the safety of structures/fills. Indicate how the proposed project may be required to demonstrate compliance with dam safety criteria or have been designed by qualified persons.
Mineral Needs	Identify direct, indirect, and cumulative adverse and beneficial effects within scope of analysis, taking into account mitigation measures, on mineral needs.
Energy Needs (33 CFR § 320.4(n)	Identify direct, indirect, and cumulative adverse and beneficial effects within scope of analysis, taking into account mitigation measures. Indicate if the proposed project would increase energy consumption in the area, and what effect that consumption would have on energy needs.
Food and Fiber Production	Identify adverse and beneficial impacts of proposed action and other alternatives on food and fiber production, taking into account the scope of analysis. Indicate whether the project area consists of prime and unique farmland or farmland of state or local importance.
Land Use (33 CFR § 320.4(j))	Identify direct, indirect, and cumulative adverse and beneficial effects within scope of analysis, taking into account mitigation measures, on land use.
Shore Erosion and Accretion (33 CFR § 320.4(g))	Erosion is the process by which the surface of the earth is worn away by the action of water, glaciers, winds, waves, etc. Accretion is the slow addition to land by deposition of water-borne sediment. Identify direct, indirect, and cumulative adverse and beneficial effects within scope of analysis, taking into account mitigation measures, on shore erosion and accretion. Indicate the flow of water on-site and in the watershed, any expected increased velocities in waterflow, any expected impacts of structures or obstructions, any expected impacts upstream and downstream, and ways to prevent or lessen impacts.
Consideration of Property Ownership (33 CFR § 320.4(g))	Indicate if the proposed project was originally not appropriate (e.g., cause damage to property of others, affect public health and safety, contrary to the public interest), and how the applicant modified the proposed project to protect property. Indicate if the proposed project would acquire, relocate, remove or otherwise substantially affected public bridges, parks, recreation areas, schools or water supplies. Provide evaluation of activities near USACE federal projects to ensure compatible with purpose.
Needs and Welfare of the People (33 CFR § 320.4(j))	Indicate whether the proposed project would result in a better quality of life for the neighborhood, community, or region and if basic necessities would be improved. Indicate if infrastructure would be improved.
General Environmental Concerns (33 CFR § 320.4(p))	Identify direct, indirect, and cumulative adverse and beneficial effects within scope of analysis, taking into account mitigation measures, on environmental concerns (not included as specific PIR factors or in 404(b)(1) Guidelines (e.g., activities affecting Coastal Zones, noise, dust, traffic and transportation patterns, Clean Air Act Conformity, cand baseflow.)

6) **Effects to Aquatic Resources**. The NEPA document should quantify the anticipated impacts to waters of the United States, both temporary and permanent, resulting from activities within the Corps' jurisdiction. For rivers and streams, the quantity should be described in linear feet and in acreage. For wetlands, the quantity should be described by

acreage. The NEPA document should also describe the wetland classification (e.g., palustrine, forested, scrub-shrub, or emergent). The NEPA document should differentiate between permanent and temporary impacts and describe any permanent conversion in the wetland classification (e.g., palustrine forested to palustrine emergent, etc.).

7) **Cumulative and Indirect Effects**. The cumulative and indirect impacts on aquatic resources resulting from the project should be scoped and evaluated in the NEPA document.

8) **Off-Site Areas**. The NEPA document should include an analysis of the environmental effects to any off-site borrow, spoil, or mitigation areas.

9) **Compliance with Other Federal Laws and Executive Orders**. The NEPA document should document compliance with:

a. Section 7 of the Endangered Species Act;

To obtain the most up to date information on federally threatened and endangered species applicants are encouraged to utilize the USFWS's Information for Planning and Consultation System (IPaC) found at https://ecos.fws.gov/ipac/

The United States Fish and Wildlife Service, Ohio Ecological Services Field Office may be contacted at:

Address: 4625 Morse Road, Suite 104
Columbus, Ohio 43230
Email: ohio@fws.gov
Phone: (614) 416-8993

The Ohio Mussel Survey Protocol may be found at the following link:

https://ohiodnr.gov/wps/portal/gov/odnr/buy-and-apply/special-use-permits/collecting-research/ohio-mussel-surveyor

The federal applicant must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional Endangered Species Act section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under Section 7 of the Endangered Species Act.

b. Section 106 of the National Historic Preservation Act;

The Ohio National Register of Historic Places can be found at the following link: https://www.ohiohistory.org/preserve/state-historic-preservation-office/nationalregister

Requesting comments directly from the Ohio History Connection State Historic Preservation (SHPO) on the effect the proposed regulated activity may have on historic properties. The Ohio History Connection SHPO may be contacted at:

Address: Ohio History Center
800 E. 17th Ave.
Columbus, Ohio 43211
Phone: (614) 297-2300
Email: info@ohiohistory.org

When needed to evaluate effects to historic properties, the applicant is encouraged to consult with professionals meeting the Professional Qualification Standards as set forth in the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716) during this data gathering process. These professionals can assist with compiling the project information discussed above and should provide recommendations as to whether the proposal has the potential to affect historic properties and if further effort is needed to identify or assess potential effects to historic properties.

The federal applicant must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under Section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with Section 106.

c. Section 401 of the Clean Water Act;

The Ohio Environmental Protection Agency may be contacted at:

Address: Lazarus Government Center
50 W Town St. Suite 700
Columbus, Ohio 43215
Phone: (614) 644-2001
Information pertaining to the Ohio Environmental Protection Agency water quality certification (WQC) program, including the Section 401 Clean Water Act WQC application form, can be obtained at the following link:
https://www.epa.state.oh.us/dsw/#113292723-programs

d. Section 402 of the Clean Water Act;

e. Migratory Bird Treaty Act and Bald Eagle and Golden Eagle Protection Act;

The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether ''incidental take'' permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

f. Archaeological Resources Protection Act;
g. Native American Graves Protection and Repatriation Act;
h. Fish and Wildlife Act of 1956, Fish and Wildlife Coordination Act;
i. Other acts protecting fish and wildlife resources;
j. Section 408 of the Rivers and Harbors Act;

If the proposed activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a ‘‘USACE project’’), no Department of the Army Section 404 or 10 authorizations will be granted until the appropriate Corps office issues the Section 408 permission or completes its review to alter, occupy, or use the USACE project.

k. Executive Orders (EO). The NEPA document must describe compliance with applicable EOs.

Enclosure 2 – Pre-Application Consultation

1) A complete written description of the project and all proposed activities (Delineation/Estimation of waters of the United States within the proposed project area, conceptual site plans for the overall project and approximate impacts to waters of the United States, and coordinates for the site(s)).
2) A written meeting agenda with goals and objectives.
3) One copy of a United States Geological Survey quadrangle map with the site clearly outlined to scale.
4) One color copy of an aerial photograph of the site.
5) One copy of the appropriate United States Soil Conservation Service map(s) with the site clearly outlined to scale.
6) One set of color photographs depicting the entire project area, mounted on 8.5” x 11”paper and accompanied by a map showing the location and direction from which each photograph was taken.
7) If applicable, the potential applicant shall also include a copy of any floodplain mapping such as a FEMA flood insurance map with the site clearly outlined to scale.

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: 02/24/2025 21:51:39 UTC
Project Code: 2025-0060203
Project Name: West Side Hangar Development

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: 2025-0060203
Project Name: West Side Hangar Development
Project Type: Airport - New Construction
Project Description: The Akron Canton airport is planning for the construction of aircraft storage hangars and associated aircraft movement areas (taxilane and aircraft aprons), road improvements to an existing surface road, and the relocation of a portion of the existing airport perimeter fence.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.921859,-81.44365698720716,14z

Counties: Summit County, Ohio

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 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.

---

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* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered

CLAMS

NAME	STATUS
Salamander Mussel *Simpsonaias ambigua* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6208	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. 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: Akron city
Name: Simon Davies
Address: 201 N. Illinois Street
Address Line 2: Suite 800
City: Indianapolis
State: IN
Zip: 46204
Email sdavies@chacompanies.com
Phone: 3176947654

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Aviation Administration

Heckroth, Mark

From:	Heckroth, Mark
Sent:	Tuesday, February 18, 2025 9:14 AM
Cc:	Lisa Dalpiaz
Subject:	Akron Canton Airport - Westside Hangar Development EA
Attachments:	Figure 1-3 Sponsor's Proposed Action.pdf

Thank you again for responding to the early coordination letters sent out for an Environmental Assessment being prepared for hangar and apron development at Akron Canton Airport. The original letter send to you described the project as a 12,000 SF hangar and associated apron. After discussions with the Airport, two additional hangars and a full build out of the apron are also ripe for decision and therefore are now included in the Sponsor's Proposed Action. It should be noted that the Direct Study Area did not change as the two additional hangars and apron would be located within the original study area.

New Proposed Action (see attached)

- 12,000 SF hangar
- 45,000 SF hangar
- 36,000 SF hangar
- 17,000 SY apron
- Vehicular parking
- Airport Operations Area (AOA) fence relocation
- Utility improvements
- Access road improvements

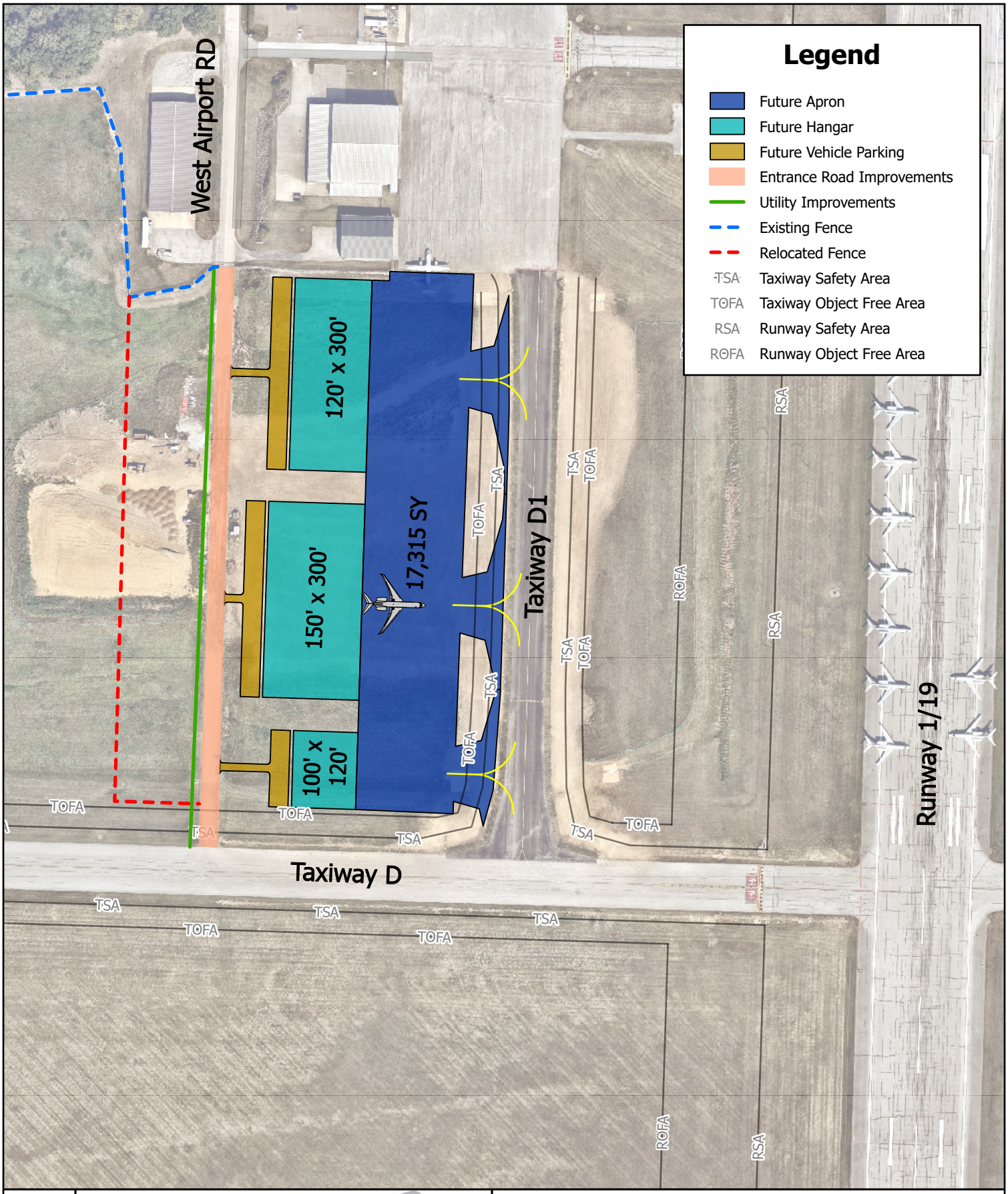
Thank you again for responding to our original EA coordination letters. If you would like to offer any additional comments based on the new Proposed Action, please email me those comments at mheckroth@chasolutions.com

Thank you,
Mark

Mark Heckroth, **ENV SP**
Section Manager – Aviation Environmental
Senior Project Manager
CHA
Office: (216) 273-8638
Cell: (216) 904-6283
mheckroth@chasolutions.com
www.chasolutions.com

Please note my email address has changed

Finding a better way.



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CHA

AKRON-CANTON AIRPORT

Figure 1-3: Sponsor's Proposed Action

Akron-Canton Regional Airport
Akron, Ohio

1' = 200"	CHA No. 098529	*Source Data* *Service Layer Credits*

Date Saved: 2/13/2025, 8548

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

April 23, 2025

Project Code: 2025-0060203

Dear Mr. Davies:

The U.S. Fish and Wildlife Service (Service) 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 effects to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

Federally Threatened and Endangered Species: Due to the project, type, size, and location, we do not anticipate adverse effects to federally endangered, threatened, or proposed species or proposed or designated critical habitat. If there are any project modifications during the term of this action, or additional information for listed or proposed species or their critical habitat becomes available, or if new information reveals effects of the action that were not previously considered, then please contact us for additional project review.

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

Heckroth, Mark

From:	Heckroth, Mark
Sent:	Thursday, June 5, 2025 4:53 PM
To:	Ohio, FW3; Davies, Simon
Cc:	Eileen Wyza; Matthew.Stooksbury@dnr.ohio.gov
Subject:	RE: [--EXTERNAL--]: Re: [EXTERNAL] Project Review Request - IPaC #2025-0060203
Attachments:	2025-0060203.pdf; Figure 3-1 Alternative 1.pdf; Figure 3-2 Alternative 2 .pdf

Good afternoon,

You responded to a proposed hangar project at CAK back in April 2025 (letter attached). At that time, the preferred alterative that was presented to you was Alternative 1 (see attached). The airport has now developed a second option (Alternative 2) that has become the preferred alternative. As you can see, the detailed study area has expanded about 3 acres to the west to accommodate the new hangar layout. We are writing you to confirm that your response is still valid and our Section 7 coordination is complete. If you have any questions please email me or call me at 216-904-6283.

Thank you,
Mark

Mark Heckroth, ENV SP
Office: (216) 273-8638
Cell: (216) 904-6283

Heckroth, Mark

From: Ohio, FW3 <ohio@fws.gov>
Sent: Monday, June 9, 2025 10:19 AM
To: Heckroth, Mark; Davies, Simon
Cc: Eileen Wyza; Matthew.Stooksbury@dnr.ohio.gov
Subject: Re: [--EXTERNAL--]: Re: [EXTERNAL] Project Review Request - IPaC #2025-0060203

Thank you for checking in with us. We have no additional comments on the preferred alternative and no additional consultation is necessary.
Sincerely,
Megan Seymour
Wildlife Biologist

From: Heckroth, Mark <MHeckroth@chasolutions.com>
Sent: Thursday, June 5, 2025 4:52 PM
To: Ohio, FW3 <ohio@fws.gov>; Davies, Simon <SDavies@chasolutions.com>
Cc: Eileen Wyza <eileen.wyza@dnr.ohio.gov>; Matthew.Stooksbury@dnr.ohio.gov <Matthew.Stooksbury@dnr.ohio.gov>
Subject: RE: [--EXTERNAL--]: Re: [EXTERNAL] Project Review Request - IPaC #2025-0060203

Good afternoon,

You responded to a proposed hangar project at CAK back in April 2025 (letter attached). At that time, the preferred alterative that was presented to you was Alternative 1 (see attached). The airport has now developed a second option (Alternative 2) that has become the preferred alternative. As you can see, the detailed study area has expanded about 3 acres to the west to accommodate the new hangar layout. We are writing you to confirm that your response is still valid and our Section 7 coordination is complete. If you have any questions please email me or call me at 216-904-6283.

Thank you,
Mark

Mark Heckroth, ENV SP
Office: (216) 273-8638
Cell: (216) 904-6283

APPENDIX C

Section 106 Coordination

In reply refer to:
2025-SUM-63845

July 7, 2025

Mark Heckroth, ENV SP
CHA
mheckroth@chasolutions.com

RE: Akron-Canton Airport (CAK) West Side Hangar Development Project, Summit County, Ohio

Dear Mr. Heckroth:

This letter is in response to the correspondence received June 5, 2025, regarding the proposed Akron-Canton Airport (CAK) West Side Hangar Development Project located in Summit County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The proposed project includes the construction of three (3) hangars, two (2) aprons, three (3) parking areas, and entrance road improvements within the Akron-Canton Airport in Summit County, Ohio. The Area of Potential Effect (APE) is the approximately fourteen (14)-acre area shown on Figure 3-2: Alternative 2 included with the submission. According to our records, there are no known archaeological sites, eligible or listed historic properties or districts, or cemeteries located within or adjacent to the APE. A review of available aerial imagery showed several periods of disturbance, including grading and filling, within the APE. It is unlikely that intact archaeological sites are located within the APE. No archaeological survey is recommended.

Based on the information provided, it is our office's opinion that the project, as proposed, will have no effect on historic properties. No further coordination is required for the project unless the scope of work changes or archaeological resources are discovered during the implementation of the project. In such a situation, this office should be contacted, as required by 36 CFR § 800.13. If you have any questions concerning this review, please contact me via email at cgullett@ohiohistory.org. Thank you for your cooperation.

Sincerely,

Catherine Gullett, Project Reviews Coordinator - Archaeology
Resource Protection and Review
State Historic Preservation Office

RPR Serial No. 1109376

"Please be advised that this is a Section 106 decision. This review decision may not extend to other SHPO programs."

Heckroth, Mark

From:	Heckroth, Mark
Sent:	Thursday, June 5, 2025 4:56 PM
To:	Bridget Roddy
Subject:	RE: [--EXTERNAL--]: Re: Akron Canton Airport - Westside Hangar Development EA
Attachments:	2025SUM63845_1106931_SHPO Review Letter_NP.pdf; Figure 3-1 Alternative 1.pdf; Figure 3-2 Alternative 2 .pdf

Hello again Bridget. You responded to a proposed hangar project at CAK back in February 2025 (attached). At that time, the preferred alterative that was presented to you was Alternative 1 (see attached). The airport has now developed a second option (Alternative 2) that has become the preferred alternative. As you can see, the detailed study area has expanded about 3 acres to the west to accommodate the new hangar layout. We are writing you to confirm that your response is still valid and our Section 106 coordination is complete. If you have any questions please email me or call me at 216-904-6283.

Thank you!

Mark

Mark Heckroth, ENV SP
Office: (216) 273-8638
Cell: (216) 904-6283

From: Bridget Roddy <broddy@ohiohistory.org>
Sent: Tuesday, February 18, 2025 11:30 AM
To: Heckroth, Mark <MHeckroth@chasolutions.com>
Cc: ldalpiaz@akroncantonairport.com
Subject: [--EXTERNAL--]: Re: Akron Canton Airport - Westside Hangar Development EA

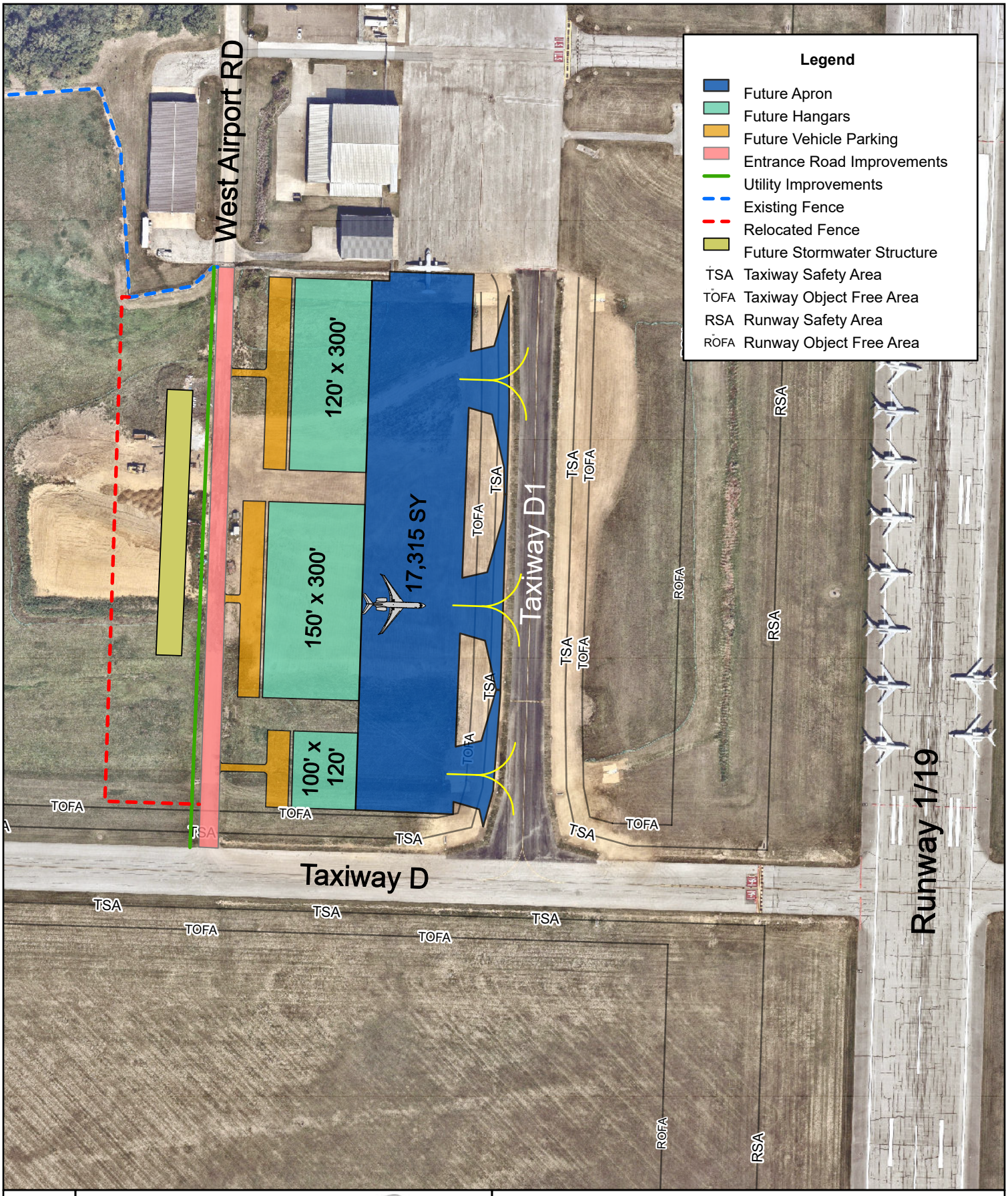
Hello Mark,

Thank you for providing this additional information regarding the Akron-Canton Airport (CAK) West Side Hanger Development project (2025-SUM-63845). Although there has been a change in the scope of work, the APE has not changed, and therefore we still agree with our original determination; our previous letter still stands. Thank you.

Best,

Bridget Roddy, RPA | Project Reviews Manager-Archaeology

Resource Protection and Review



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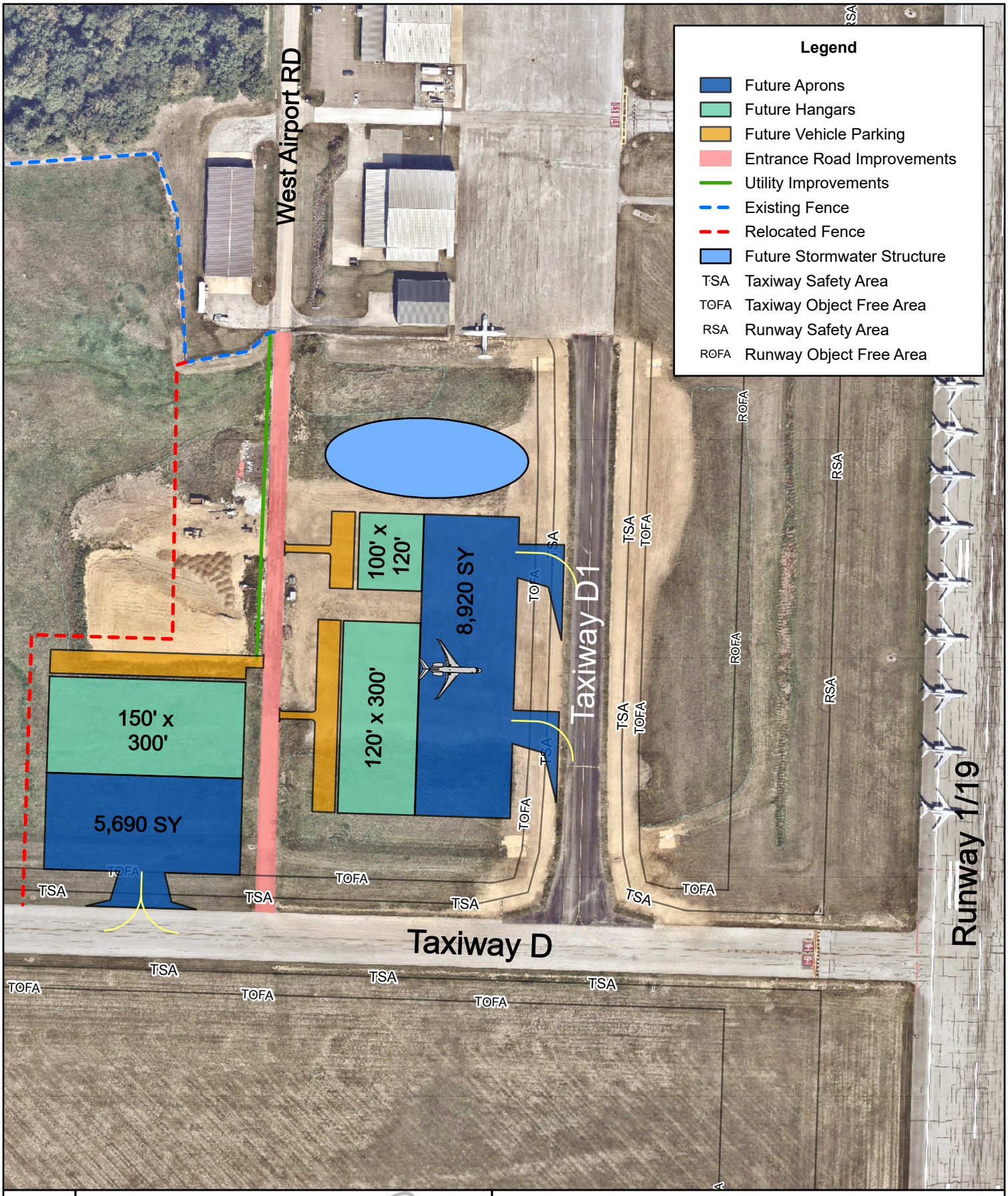
AKRON-CANTON AIRPORT

Figure 3-1:
Alternative 1: Westside Hangar Development

Akron-Canton Regional Airport
Akron, Ohio

1' = 200"	CHA No. 098529	*Source Data Service Layer Credits*

Date Saved: 4/24/2025, 8548



N

CHA

AKRON-CANTON AIRPORT

Figure 3-2:
Alternative 2: Westside Hangar Development
Akron-Canton Regional Airport
Akron, Ohio

1' = 200"

CHA No. 098529

Source Data
Service Layer Credits

Date Saved: 4/24/2025, 8548

Heckroth, Mark

From: Bridget Roddy <broddy@ohiohistory.org>
Sent: Tuesday, February 18, 2025 11:30 AM
To: Heckroth, Mark
Cc: ldalpiaz@akroncantonairport.com
Subject: [--EXTERNAL--]: Re: Akron Canton Airport - Westside Hangar Development EA

Hello Mark,

Thank you for providing this additional information regarding the Akron-Canton Airport (CAK) West Side Hanger Development project (2025-SUM-63845). Although there has been a change in the scope of work, the APE has not changed, and therefore we still agree with our original determination; our previous letter still stands. Thank you.

Best,

Bridget Roddy, RPA | Project Reviews Manager-Archaeology
Resource Protection and Review
State Historic Preservation Office
Ohio History Connection | 800 E. 17th Ave., Columbus, OH 43211-2474
p. 614-298-2000 | f. 614.298.2037 | broddy@ohiohistory.org

Did you know the Ohio SHPO now accepts electronic-only submissions for state and/or federal review under Section 106 and ORC 149.53? Please send your submissions to section106@ohiohistory.org.

The Ohio History Connection's mission is to spark discovery of Ohio's stories. Embrace the present, share the past and transform the future.

From: Heckroth, Mark <MHeckroth@chasolutions.com>
Sent: Tuesday, February 18, 2025 9:13 AM
Cc: Lisa Dalpiaz <ldalpiaz@akroncantonairport.com>
Subject: Akron Canton Airport - Westside Hangar Development EA

Thank you again for responding to the early coordination letters sent out for an Environmental Assessment being prepared for hangar and apron development at Akron Canton Airport. The original letter send to you described the project as a 12,000 SF hangar and associated apron. After discussions with the Airport, two additional hangars and a full build out of the apron are also ripe for decision and therefore are now included in the Sponsor's Proposed Action. It should be noted that the Direct Study Area did not change as the two additional hangars and apron would be located within the original study area.

New Proposed Action (see attached)

- 12,000 SF hangar
- 45,000 SF hangar
- 36,000 SF hangar
- 17,000 SY apron
- Vehicular parking
- Airport Operations Area (AOA) fence relocation
- Utility improvements
- Access road improvements

In reply refer to:
2025-SUM-63845

February 11, 2025

Mark Heckroth, ENV SP
Section Manager-Aviation Environmental
Senior Project Manager
CHA
Email: MHeckroth@chasolutions.com

RE: **Section 106 Review: Akron-Canton Airport (CAK) West Side Hanger Development, Summit County, Ohio**

Dear Mr. Heckroth:

This letter is in response to the correspondence received on January 21, 2025, regarding the above-mentioned project in Summit County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The proposed project will construct a 12,000 square foot hanger with associated vehicular parking, apron area, and utility improvements. The direct Area of Potential Effect (APE) totals approximately 11-acres. According to our records, no historic properties, districts, above-ground resources, or previously recorded archaeological sites are documented within the APE.

Based on a review of our database and records, previous disturbances to the project area, and the scope of the project, it is the SHPO's opinion that, as proposed, the project would have no effect on historic properties. Therefore, no further coordination is required for this project unless the scope of work changes or archaeological resources are discovered during the course of the project. In such a situation, this office should be contacted as required by 36 CFR § 800.13. If you have any questions concerning this review, please contact me via email at broddy@ohiohistory.org. Thank you for your cooperation.

Sincerely,

Bridget C. Roddy

Bridget C. Roddy, Project Reviews Manager-Archaeology
Resource Protection and Review
State Historic Preservation Office

RPR Serial No. 1106931

"Please be advised that this is a Section 106 decision. This review decision may not extend to other SHPO programs."

January 21, 2025

Ms. Kristen Koehlinger
Department Manager
Ohio History Connection
State Historic Preservation Office
800 E. 17th Avenue
Columbus, Ohio
section106@ohiohistory.org

Re: **Section 106 Consultation Initiation**
Westside Hangar Development
Akron Canton Airport (CAK)
Green, Ohio

Dear Ms. Koehlinger:

The Akron Canton Regional Airport Authority (Sponsor) is preparing an Environmental Assessment (EA) for the proposed West Side Hangar Development (the Proposed Action) at the Akron Canton Airport (CAK), City of Green, Summit County (see **Figure 1**). The Ohio Department of Natural Resources (ODNR), Division of Mineral Resource Management (DMRM), Abandoned Mine Land Program in cooperation with the United States Department of Interior (DOI), Office of Surface Mining Reclamation and Enforcement (OSMRE) is the lead federal agency for the project. The ODNR, DMRM is a state administered, federally funded program through the DOI, OSMRE. In 2024, the Airport Sponsor was awarded a grant through this program for economic development to construct a hangar at CAK.

The Proposed Action includes the development of a 12,000 square-foot hangar with associated vehicular parking, apron area, and utility improvements. The EA will analyze two build alternatives (see **Figure 2 & 3**) and a no-build alternative. Although the apron for the proposed hangar will be included in the analysis, it is not being funded by the DOI, OSMRE program and is funded under a separate grant through the State of Ohio's One Time Strategic Community Investment Fund

The project area is located on the north side of the airport (40° 55’ 19.51” N; 81° 26’ 38.05” W) west of Runway 1/19, south of the West Airport Road General Aviation, and north of Taxiway Delta. The area is primarily surrounded by aviation land uses. Some of the site features include airfield pavement, maintained grass, and hangars. The study team is currently undertaking a preliminary jurisdictional wetland/waters delineation and a cultural resources review.

The EA document will be prepared in accordance with the OSMRE’s *Procedures for Implementing the National Environmental Policy Act (NEPA)* and Federal Aviation Administration (FAA) Order 1050.1F: *Environmental Impacts: Policies & Procedures* and associated Desk Reference.

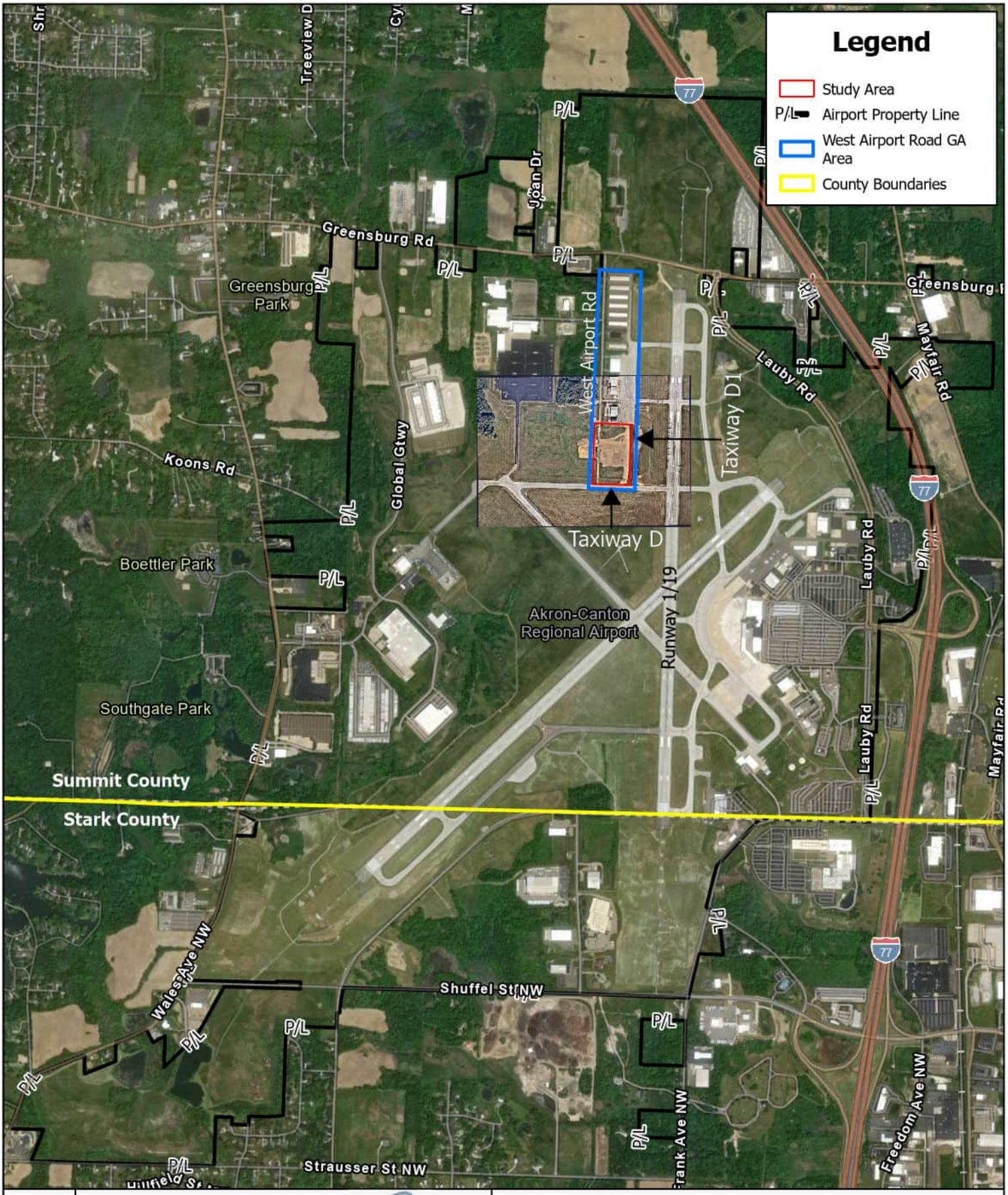
The Sponsor's Proposed Action is an undertaking under Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA), and as such, therefore we are initiating the Section 106 consultation process consistent with the NHPA and its implementing regulations (36 CFR §800) on the federal agencies' behalf. This Section 106 review is being coordinated with the NEPA process, pursuant to 36 CFR 800.8(a). Through this coordination, the NEPA scoping process and other public notices and meetings will be used to solicit participation from the public and other stakeholders and to seek input and information regarding the identification of, and potential effects to, historic properties associated with this undertaking.

We have prepared a Cultural Resources Evaluation and the Section 106 Review, Project Summary Form, which both are attached. Should you have any questions, please contact me at (216) 273-8638 or mheckroth@chasolutions.com.

Sincerely,

Mark Heckroth, ENV SP
Manager, Aviation Environmental Planning

Attachments: Ohio Section 106 Project Information Form
Cultural Resources Desktop Review Memo



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CHA

AKRON-CANTON AIRPORT

Figure 1: Location Map

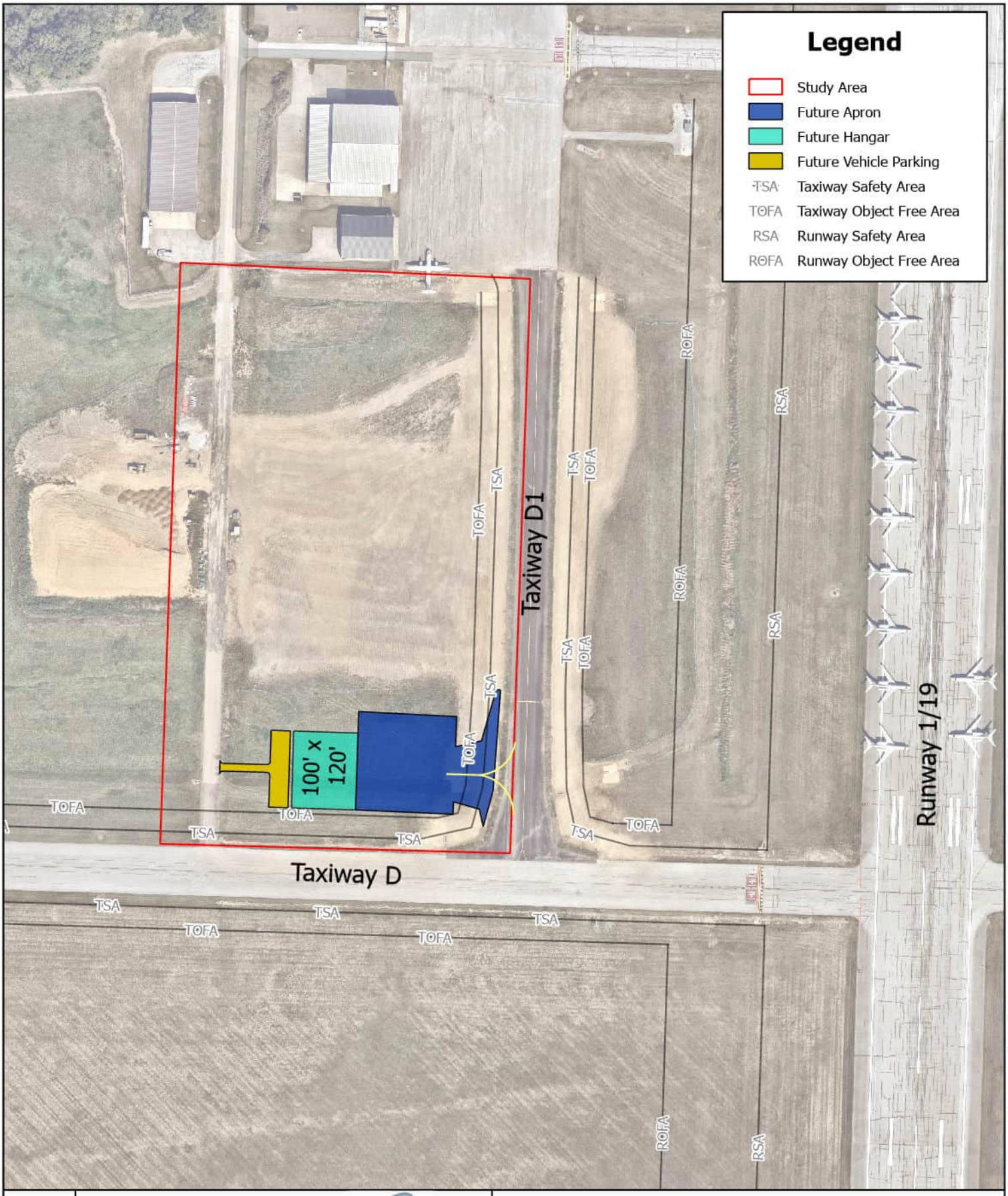
Akron-Canton Regional Airport
Akron, Ohio

1' = 1,900"

CHA No. 098529

Source Data
Service Layer Credits

Date Saved: 12/19/2024, 8548



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CHA

AKRON-CANTON AIRPORT

Figure 2

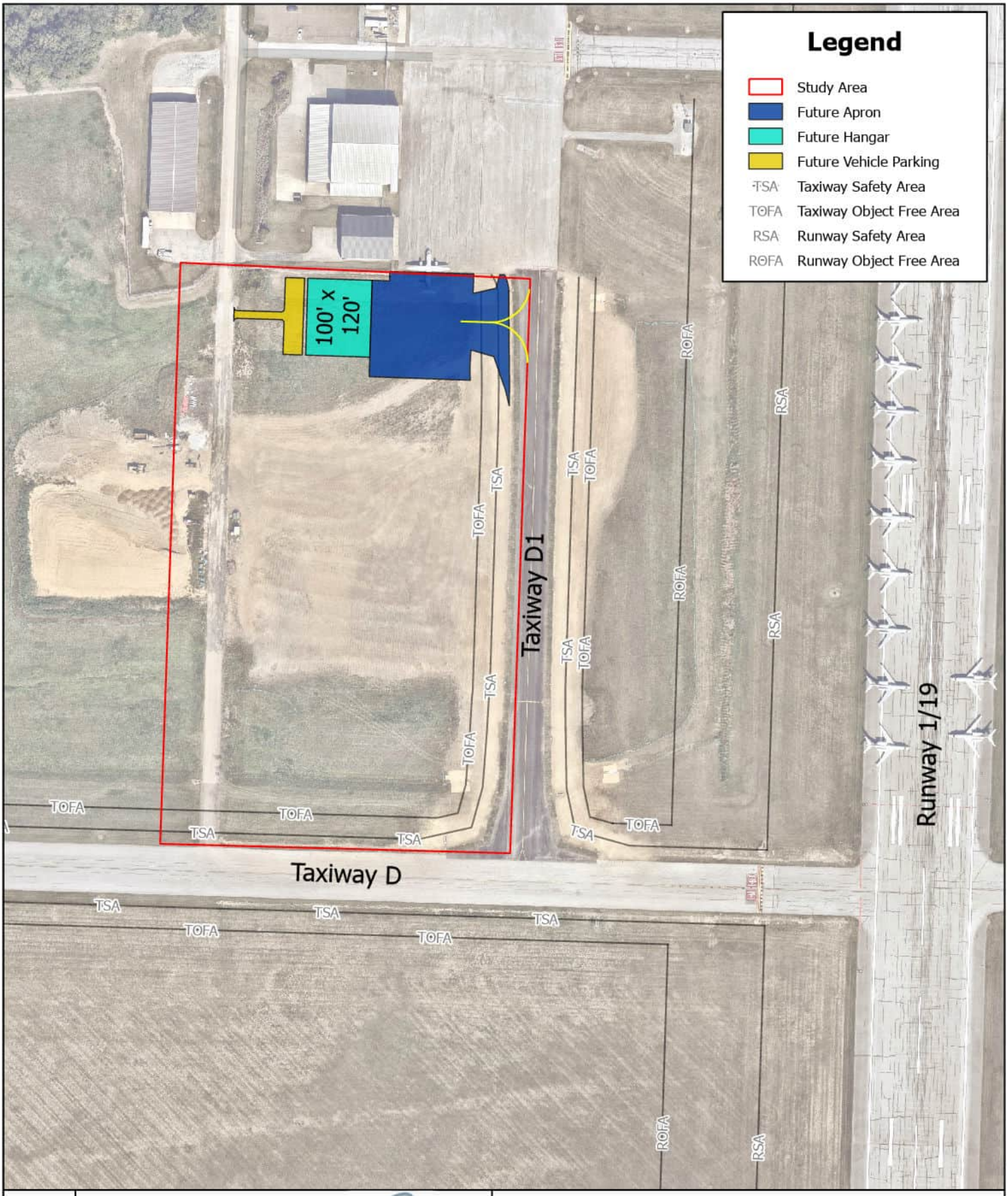
Akron-Canton Regional Airport
Akron, Ohio

1' = 200"

CHA No. 098529

Source Data
Service Layer Credits

Date Saved: 12/19/2024, 8548



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CHA

AKRON-CANTON AIRPORT

Figure 3

Akron-Canton Regional Airport
Akron, Ohio

1' = 200"

CHA No. 098529

Source Data
Service Layer Credits

Date Saved: 12/19/2024, 8548

OHIO HISTORIC PRESERVATION OFFICE:
RESOURCE PROTECTION AND REVIEW

Section 106 Review - Project Summary Form

For projects requiring a license from the Federal Communications Commission, please use FCC Forms 620 or 621. DO NOT USE THIS FORM.

SECTION 1: GENERAL PROJECT INFORMATION

All contact information provided must include the name, address and phone number of the person listed. Email addresses should also be included, if available. Please refer to the Instructions or contact an OHPO reviewer (mailto:Section106@ohiohistory.org) if you need help completing this Form. Unless otherwise requested, we will contact the person submitting this Form with questions or comments about this project.

Date: **January 21, 2025**

Name/Affiliation of person submitting form: **Mark Heckroth, CHA Consulting, Inc.**

Mailing Address: **1501 North Marginal Road, Suite 200, Cleveland, Ohio**

Phone/Fax/Email: **216-904-6283**

A. Project Info:

1. This Form provides information about:
   New Project Submittal:
   YES

   Additional information relating to previously submitted project:
   NO

   OHPO/RPR Serial Number from previous submission:
   N/A

2. Project Name (if applicable): **Akron-Canton Airport (CAK) West Side Hanger Development Project**

3. Internal tracking or reference number used by Federal Agency, consultant, and/or applicant to identify this project (if applicable): 24-1238-005

B. Project Address or vicinity: **Akron-Canton Airport**

C. City/Township: **Green**

D. County: **Summit**

Federal Agency and Agency Contact. *If you do not know the federal agency involved in your project, please contact the party asking you to apply for Section 106 Review, not OHPO, for this information*. *HUD Entitlement Communities acting under delegated environmental review authority should list their own contact information.*

The Ohio Department of Natural Resources (ODNR), Division of Mineral Resource Management (DMRM), Abandoned Mine Land Program in cooperation with the United States Department of Interior (DOI), Office of Surface Mining Reclamation and Enforcement (OSMRE) is the lead federal agency for the project. The ODNR, DMRM is a state administered, federally funded program through the DOI, OSMRE

E. Type of Federal Assistance. *List all known federal sources of federal funding, approvals, and permits to avoid repeated reviews.*

Federal funding from DOI, OSMRE

F. State Agency and Contact Person (if applicable): **Chad Kinney, ODNR**

G. Type of State Assistance: **None**

H. Is this project being submitted at the direction of a state agency **solely** under Ohio Revised Code 149.53 or at the direction of a State Agency? *Answering yes to this question means that you are sure that no federal funding, permits or approvals will be used for any part of your project, and that you are seeking comments only under ORC 149.53.*

NO

I. Public Involvement- Describe how the public has been/will be informed about this project and its potential to affect historic properties. Please summarize how they will have an opportunity to provide comments about any effects to historic properties. (This step is required for all projects under 36 CFR § 800.2): **Unknown**

J. Please list other consulting parties that you have contacted/will contact about this project, such as Indian Tribes, Certified Local Governments, local officials, property owners, or preservation groups. (See 36 CFR § 800.2 for more information about involving other consulting parties). Please summarize how they will have an opportunity to provide comments: **No other parties identified at this time**

SECTION 2: PROJECT DESCRIPTION AND AREA OF POTENTIAL EFFECTS (APE)

Provide a description of your project, its site, and geographical information. You will also describe your project's Area of Potential Effects (APE). Please refer to the Instructions or contact an OHPO reviewer if you need help with developing the APE or completing this form.

For challenging projects, provide as much information as possible in all sections, and then check the box in Section 5.A. to ask OHPO to offer preliminary comments or make recommendations about how to proceed with your project consultation. This is recommended if your project involves effects to significant historic properties or if there may be challenging procedural issues related to your project. Please note that providing information to complete all Sections will still be required and that asking OHPO for preliminary comments may tend to delay completion of the review process for some projects.

A. Does this project involve any Ground-Disturbing activity: **YES**
(If **Yes**, you must complete all of Section 2.A. If **No**, proceed directly to Section 2. B.)

1. General description of width, length and depth of proposed ground disturbing activity:
Proposed construction activity includes future development of a new approximately 12,000 square-foot hangar with associated vehicular parking, apron area, and utility improvements.

2. Narrative description of previous land use and past ground disturbances, if known:
Mapping and aerial imagery show the project area as previously disturbed due to construction activity associated with the existing airport.

3. Narrative description of current land use and conditions:
Presently the project area is occupied by the existing Akron-Canton Airport.

4. Does the landowner know of any archaeological resources found on the property?
NO If yes, please describe:

B. Submit the exact project site location on a USGS 7.5-minute topographic quadrangle map for all projects. Map sections, photocopies of map sections, and online versions of USGS maps are acceptable as long as the location is clearly marked. Show the project's Area of Potential Effects (APE). It should be clearly distinguished from other features shown on the map:
1. USGS Quad Map Name: **North Canton 7.5'**

2. Township/City/Village Name: **North Canton**

C. Provide a street-level map indicating the location of the project site; road names must be identified and legible. Your map must show the exact location of the boundaries for the project site. Show the project's Area of Potential Effects (APE). It should be clearly distinguished from other features shown on the map: **see attached**

D. Provide a verbal description of the APE, including a discussion of how the APE will include areas with the potential for direct and indirect effects from the project. Explain the steps taken to identify the project's APE, and your justification for the specific boundaries chosen: **see attached**

E. Provide a detailed description of the project. This is a critical part of your submission. Your description should be prepared for a cold reader who may not be an expert in this type of project. The information provided must help support your analysis of effects to historic properties, not other types of project impacts. Do not simply include copies of environmental documents or other types of specialized project reports. If there are multiple project alternatives, you should include information about all alternatives that are still under active consideration: **see attached**

SECTION 3: IDENTIFICATION OF HISTORIC PROPERTIES

Describe whether there are historic properties located within your project APE. To make that determination, use information generated from your own Background Research and Field Survey. Then choose one of the following options to report your findings. Please refer to the Instructions and/or contact an OHPO reviewer if you are unsure about how to identify historic properties for your project.

If you read the Instructions and you're still confused as to which reporting option best fits your project, or you are not sure if your project needs a survey, you may choose to skip this section, but provide as much supporting documentation as possible in all other Sections, then check the box in Section 5.A. to request preliminary comments from OHPO. After reviewing the information provided, OHPO will then offer comments as to which reporting option is best suited to document historic properties for your project. Please note that providing information to complete this Section will still be required and that asking OHPO for preliminary comments may tend to delay completion of the review process for some projects.

Recording the Results of Background Research and Field Survey:

A. **Summary of discussions and/or consultation with OHPO** about this project that demonstrates how the Agency Official and OHPO have agreed that no Field Survey was necessary for this project (typically due to extreme ground disturbance or other special circumstances). Please **attach copies** of emails/correspondence that document this agreement. You must explain how the project's potential to affect both archaeological and historic resources were considered.

B. **A table that includes the minimum information** listed in the OHPO Section 106 Documentation Table (which is generally equivalent to the information found on an inventory form). This information must be printed and mailed with the Project Summary Form. To provide sufficient information to complete this Section, you must also include summary observations from your field survey, background research and eligibility determinations for each property that was evaluated in the project APE.

C. **OHI (Ohio Historic Inventory) or OAI (Ohio Archaeological Inventory) forms**- New or updated inventory forms may be prepared using the OHI pdf form with data population capabilities, the Internet IForm, or typed on archival quality inventory forms. To provide sufficient information to complete this Section, you must include summary observations from your field survey and background research. You must also include eligibility determinations for each property that was evaluated in the project APE

D. **A historic or archaeological survey report** prepared by a qualified consultant that meets professional standards. The survey report should meet the Secretary of the Interior's Standards and Guidelines for Identification and OHPO Archaeological Guidelines. You may also include new inventory forms with your survey, or update previous inventory forms. To complete this section, your survey report must include summary observations

from your field survey, background research and eligibility determinations for each property that was evaluated within the APE.

E. **Project Findings**. Based on the conclusions you reached in completing Section 3, please choose one finding for your project. There are (mark one):
   Historic Properties Present in the APE:
   No Historic Properties Present in the APE:

SECTION 4: SUPPORTING DOCUMENTATION

This information must be provided for all projects.

A. Photographs must be keyed to a street-level map, and should be included as attachments to this application. Please label all forms, tables and CDs with the date of your submission and project name, as identified in Section 1. You must present enough documentation to clearly show existing conditions at your project site and convey details about the buildings, structures or sites that are described in your submission. Faxed or photocopied photographs are not acceptable. See Instructions for more info about photo submissions or 36 CFR § 800.11 for federal documentation standards.
   1. Provide photos of the entire project site and take photos to/from historic properties from/towards your project site to support your determination of effect in Section 5.
   2. Provide current photos of all buildings/structures/sites described.

B. Project plan, specifications, site drawings and any other media presentation that conveys detailed information about your project and its potential to affect historic properties.

C. Copies or summaries of any comments provided by consulting parties or the public.

SECTION 5: DETERMINATION OF EFFECT

A. **Request Preliminary Comments.** For challenging projects, provide as much information as possible in previous sections and ask OHPO to offer preliminary comments or make recommendations about how to proceed with your project consultation. This is recommended if your project involves effects to significant historic properties, if the public has concerns about your project's potential to affect historic properties, or if there may be challenging procedural issues related to your project. Please be aware that providing information in all Sections will still be required and that asking OHPO for preliminary comments may tend to delay completion of the review process for some projects.

   1. We request preliminary comments from OHPO about this project:
      Yes

   2. Please specify as clearly as possible the particular issues that you would like OHPO to examine for your project (for example- help with developing an APE, addressing the concerns of consulting parties, survey methodology, etc.): **This is a new undertaking and we are initiating consultation to determine what, if any, type of cultural resource investigations OHPO would recommend being conducted on the project area.**

B. **Determination of Effect.** If you believe that you have gathered enough information to conclude the Section 106 process, you may be ready to make a

determination of effect and ask OHPO for concurrence, while considering public comments. Please select and mark one of the following determinations, then explain the basis for your decision on an attached sheet of paper:

No historic properties will be affected based on 36 CFR § 800.4(d) (1). Please explain how you made this determination:

No Adverse Effect [36 CFR § 800.5(b)] on historic properties. This finding cannot be used if there are no historic properties present in your project APE. Please explain why the Criteria of Adverse Effect, [36 CFR Part 800.5(a) (1)], were found not to be applicable for your project:

Adverse Effect [36 CFR § 800.5(d) (2)] on historic properties. Please explain why the criteria of adverse effect, [36 CFR Part 800.5(a) (1)], were found to be applicable to your project. You may also include an explanation of how these adverse effects might be avoided, reduced or mitigated:

Please send completed form and supporting documentation to our office through the section106@ohiohistory.org e-mail address. Note that file size is limited to 30 MB. The Ohio SHPO has a federally mandated review time of 30 calendar day. To check your submission was received and logged in for our review, please visit https://www.ohiohistory.org/preserve/state-historic-preservation-office/hpreviews/section-106-project-status.

January 21, 2025
24-1238-005

To: Mr. Mark Heckroth
CHA Consulting, Inc.
mheckroth@chasolutions.com

Re: Cultural Resources Desktop Review
Akron-Canton Airport (CAK) West Side Hanger Development Project
North Canton, Summit County, Ohio

CAP-STONE & Associates, Inc., dba Stone Environmental Engineering & Science (STONE) on behalf of CHA Consulting, Inc. (CHA), is initiating consultation regarding the approximately 11-acre CAK West Side Hanger Development "Project" located on the property of the Akron-Canton Airport in North Canton, Summit County, Ohio (Figures 1, 2a and 2b, Appendix A). STONE understands the Project is being funded under a Department of Interior (DOI), Office of Surface Mining Reclamation and Enforcement (OSMRE) Grant being administered by the Ohio Department of Natural Resources (ODNR). In support of that effort, this letter and the attached Section 106 Project Summary Form serves as a written request to determine the level of interest that the Ohio Historic Preservation Office (OHPO) has in the Project.

1. PROJECT DESCRIPTION

The Project location is being evaluated for future development of a new approximately 12,000 square-foot hangar. with associated vehicular parking, apron area, and utility improvements. Although the apron for the proposed hangar will be included in the analysis, it is not being funded by the DOI, OSMRE program and is funded under a separate grant through the State of Ohio's One Time Strategic Community Investment Fund.

2. AREA OF POTENTIAL EFFECTS (APE)

Based on information provided to STONE, we presume the Project Area of Potential Effects (APE) will be limited to the 11-acre footprint of the Project, which includes the limits of construction, herein the "Project area." The Project area is part of an active airport with the Project area itself consisting mostly of a maintained field with an access road running north to south along the western portion. The surrounding area is composed of the airport complex and infrastructure, residential development, commercial businesses, and municipal structures (Figure 2, Appendix A).

3. PREVIOUSLY DOCUMENTED CULTURAL RESOURCES

Background research was conducted in December 2024, to identify previously recorded cultural resources within a one-mile search radius surrounding the Project area. Background research of Ohio History Connection (OHC) documents was conducted electronically via an OHPO request

form, which includes data covering National Register of Historic Places (NRHP) listings and districts, historic inventories, archaeological inventories, previously surveyed areas and cemeteries. Background research results provided by OHC staff consisted of an electronic map (pdf) summarizing the previously described data along with geolocated GIS (shp) files showing the location of the data.

Background research did not identify any previously recorded archaeological sites in the Project area. However, a total of nine previously recorded archaeological sites were located in the one-mile search radius (Figure 3, Appendix A and Table 1). The information provided by the OHC data request is limited, nevertheless, in general, the temporal affiliation is divided between sites with five sites having prehistoric affiliations, two sites with historic affiliations, and two multicomponent sites with both prehistoric and historic affiliations. The data summary provided by the OHC does not indicate if these archaeological sites have been determined eligible for NRHP listing. Therefore, although previous consultants may have recommended these sites as not eligible, at the present time the NRHP eligibility of the sites is regarded as unassessed without further data from the OHC.

Table 1 - Previously recorded archaeological sites within a one-mile radius of the Project area.

Site No.	Temporal Affiliation	Site Type	Site Dimensions Sq. meter(s)	NRHP Eligibility
33SU0300	Prehistoric	Open Site	1	Unknown
33SU0301	Historic c. 19th to 20th Centuries	Open Site	2500	Unknown
33SU0305	Prehistoric and Historic	Open Site	6400	Unknown
33SU0308	Historic	Open Site	1	Unknown
33SU0309	Prehistoric	Open Site	1	Unknown
33SU0310	Prehistoric and Historic	Open Site	338	Unknown
33SU0311	Prehistoric	Open Site	1	Unknown
33SU0344	Prehistoric	Open Site	15	Unknown
33SU0613	Late Archaic	Open	1	Unknown

A review of previously conducted cultural resource survey identified four investigations in the one-mile search radius surrounding the Project area (Figure 3, Appendix A and Table 2). None of the surveys included the Project area. The four surveys were completed for a variety of project types with two projects (Gibbs 1999 and Bastianini et al. 2004) were associated with the Akron-Canton Airport, one development project (Bush 1980), and one survey (Mayon et al. 1998) for a utility pipeline.

Table 2 - Previously recorded Cultural Resource Surveys within a one-mile radius of the Project area.

Author	Year	Title	Affiliation	NADB No.
Gibbs, Kevin	1999	A Phase I Literature Review and Archaeological Reconnaissance Survey for the Proposed Akron-Canton Airport Improvements in Jackson Township, Stark County, and Green Township, Summit County, Ohio	ASC Group, Inc.	14604
Maymon, Jeffrey H., et al	1998	Interim Report on Archeological Survey of the Proposed Independence Pipeline Corridor through Defiance, Henry, Wood, Seneca, Huron, Ashland, Wayne, Stark, Summit, and Columbiana Counties, Ohio. Volume I	R. Christopher Goodwin and Associates, Inc.	15951
Bastianini, Keith R., et al	2004	Phase I Cultural Resource Investigations for the Akron-Canton Regional Airport Authority Runway 5-23 Safety Area Improvement, North of Canton, Green Township, Summit County, and Jackson Township, Stark County	Baker & Associates	16500
Bush, David R	1980	Archaeological Survey of the Proposed Franklin - Green 20 Facilities Plan, Franklin and Green Townships, Summit County, Ohio	David R. Bush	18644

Information provided by the OHC reveals that that Project area has not been subjected to a history/architectural investigation in the past. Research identified a total of seven previously recorded historic structures located in a one-mile search radius around the Project area (Figure 3, Appendix A). Of the seven previously recorded historic resources, two resources (SUM0300320 and SUM0300420) are located less-than 0.5-mile northwest of the Project area. The two resources are houses, constructed between 1940 and 1945. None of the previously recorded historic resources are listed in or considered eligible for listing in the NRHP.

Table 3 - Previously recorded historic structures adjacent to the Project area.

OHI No./ Name	Address	Date of Construction	Style / Type of Resource	NRHP Eligibility
SUM0300320	2724 Greensburg Rd	1940	Tudor/English Revival, Dwelling	Not Eligible
SUM0300420	2734 Greensburg Rd	1945	Colonial Revival, Dwelling	Not Eligible
SUM0317820	2377 Greensburg Rd	1870	Vernacular, Dwelling	Not Eligible
SUM0317920	2677 Greensburg Rd	1870	Vernacular, Dwelling	Not Eligible
SUM0318020	3167 Greensburg Rd	1845	Greek Revival, Dwelling	Not Eligible
SUM0370220	2449 Greensburg Rd	1930	Vernacular, Dwelling	Not Eligible
SUM0370320	2429 Greensburg Rd	1942	Vernacular, Dwelling	Not Eligible

Background data provided by the OHC indicates no cemeteries are located in the Project area or within the one-mile search radius (Figure 3, Appendix A).

A review of the Mills' (1914) *Archaeological Atlas of Ohio,* depicts 41 prehistoric sites in Summit County. These sites include: 21 mounds, two village sites, one cemetery, one petroglyph, three catches, one rock shelter, one burial site, and 11 enclosure locations. None of the prehistoric sites are located in the vicinity of the Project area. No sites are located within a one-mile radius of the Project area. The closest resource, a petroglyph, is located approximately 5.8-mile northwest of the Project area (Figure 4, Appendix A). The closest known trail to the Project area is Trail 5, known as the Cuyahoga-Muskingum trail, which runs north to south through Summit County, to the west of the Project area (Figure 5, Appendix A).

4. LAND USE HISTORY

The 1856 Map of Summit County depicts the Project area is split between two parcels owned by David Reum and H. Treesh with no structures or roadways shown in the vicinity of the Project area (Figure 6, Appendix A). The 1874 Combination Atlas of Summit County, continues to show the Project area split between two parcels, owned by Daniel Marker and the Heirs of J. Longby Pepple with no development in the vicinity of the Project area (Figure 7, Appendix A). The USGS 1901 Canton 15-minute topographic map shows no structures or other roadways in the Project area (Figure 8, Appendix A). The 1910 Atlas of Summit County again shows the Project area split between two parcels, owned by Anthony Stoner and J. Lauby (Figure 9, Appendix A). The USGS 1958 North Canton 7.5-minute topographic map shows the Project area adjacent to the Akron-Canton Airport, with no structures, roadways, or airport infrastructure in the Project area (Figure 10, Appendix A).

The first image of the Project area is from a 1947 aerial photograph which appears to show the early construction of the Akron-Canton Airport with ground surface disturbance visible in portions of the Project area (Figure 11, Appendix B). A 1960 aerial photograph provides a view of the Project area within the boundaries of the Akron-Canton Airport with portions of the Project area appearing to turn fallow and wooded (Figure 12, Appendix B). Aerial photographs from 1965, 1970, and 1975 continues to show the Project area turning into a fallow wooded portion of the airport (Figures 13–15, Appendix B). By 1980 the airport has expanded and includes new buildings and roadways to the north of the Project area, while the Project area itself has turned completely wooded (Figure 16, Appendix B). A 1985 aerial photograph shows disturbances in portions of the wooded Project area (Figure 17, Appendix B). Aerial photographs from 1990 and 1995 show the airport continues to develop around the Project area, but the Project area itself remains wooded (Figure 18–19, Appendix B). Little change to the Project area is noticeable between the 1995 and 2000 aerial images (Figure 20–21, Appendix B). By a 2006 aerial image the Project area appears to be undergoing clearing and by 2009 the entire Project area is appears open (Figure 22–23, Appendix B). Little change is shown between 2009 and 2012, but by a 2016 aerial image, an access road is running north to south through the western portion of the Project area (Figure 24–25, Appendix B). An aerial image from September 2024, shows recent construction activity and a new access runway connecting the support buildings and the active runways (Figure 26, Appendix B).

5. CONCLUSION

The cultural resources desktop review revealed no previously documented archaeological sites or cultural resource surveys located in the vicinity of the Project area. Review of historical maps does not depict any potential historic resources within or adjacent to the Project area. Examination of aerial imagery did not reveal any landscape features that would identify prehistoric earthworks or historic structures in the Project area. Additionally, the most recent aerial imagery shows a significant amount of ground surface disturbance in the Project area.

REFERENCES CITED

Mills, William C.
1914 Archaeological Atlas of Ohio. F. J. Heer, Columbus, OH.

Paul, Hosea.
1856 *Map of Summit County, Ohio*. Matthews & Taintor, Philadelphia, PA.

Tackabury, Mead, & Moffett
1874 *Combination Atlas Map of Summit County, Ohio*. Tackabury, Mead, & Moffett, Philadelphia, PA.

United States Geological Survey (USGS)
1901 *Canton*. 15' Quadrangle.
1958 *North Canton*. 7.5' Quadrangle.

Unknown
1910 *Atlas of Summit County*. Unknown pub. Accessed at: https://www.ohiohistory.org/wp-content/uploads/2022/01/Atlas_of_Summit_County_1910.pdf

CLOSING

If you have questions or need additional information, please do not hesitate to contact Frank Carvino at (614) 865-1874 or at frankcarvino@stoneenvironmental.com

Sincerely,
CAP-STONE & Associates, Inc., dba Stone Environmental Engineering & Science

Frank Carvino, RPA
Principal Investigator

Mary Sharrett, PE, CPESC
President

Submitted: 1 electronic copy (PDF)
Enclosures:
Appendix A – Figures
- Figure 1. Topographic Map
- Figure 2a. Aerial Map – 2017
- Figure 2b. Aerial Map – 2024
- Figure 3. OHPO Map showing Cultural Resources
- Figure 4. 1914 Mills Archaeological Atlas
- Figure 5. 1914 Mills Archaeological Atlas
- Figure 6. 1856 Map of Summit County
- Figure 7. 1874 Atlas of Summit County
- Figure 8. 1901 USGS 15-minute Canton Quadrangle
- Figure 9. 1910 Atlas of Summit County
- Figure 10. 1958 USGS 7.5-minute North Canton Quadrangle

Appendix B – Aerial Imagery:
- Figures 11 through 26

APPENDIX A

FIGURES

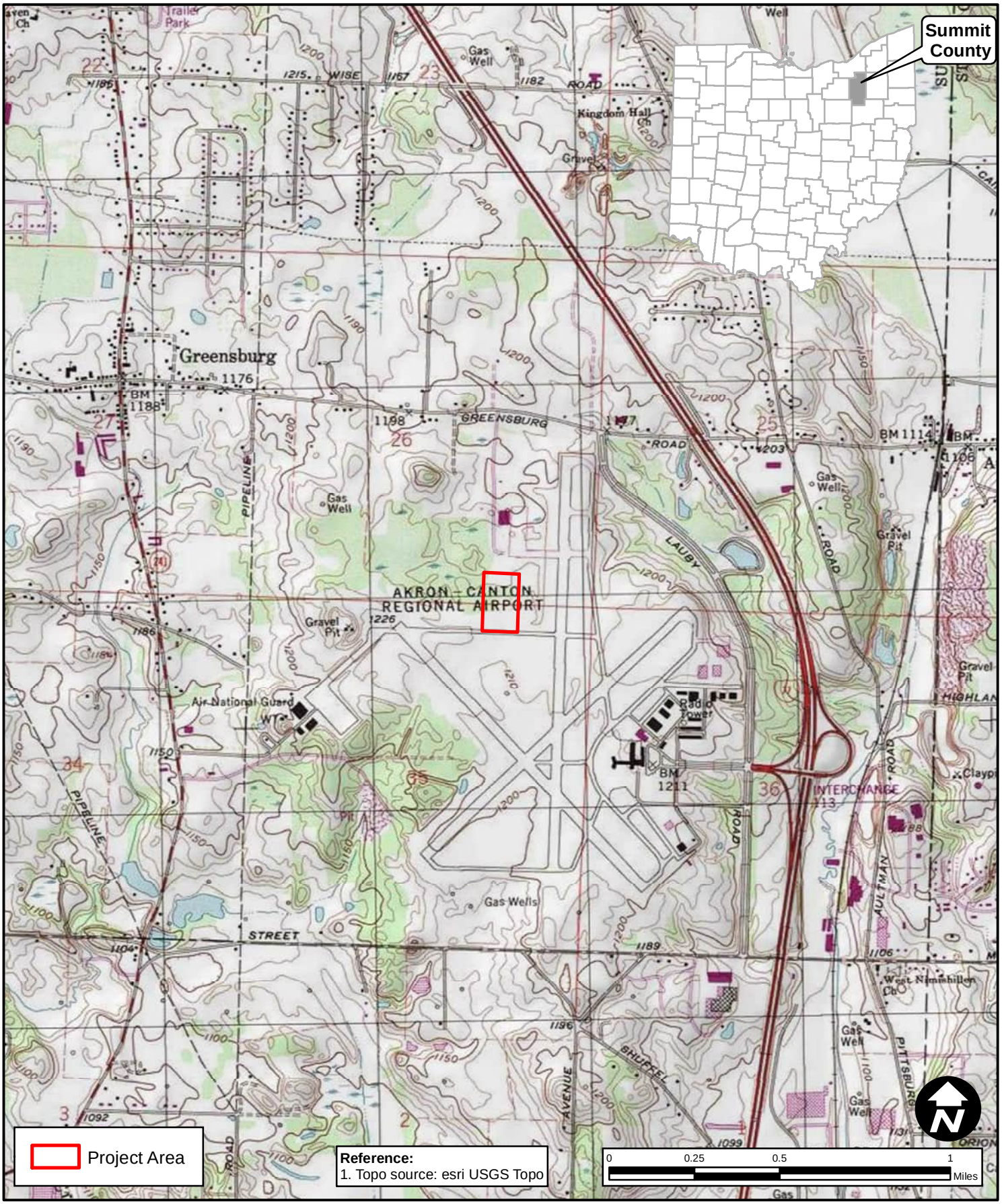


Figure 1

Topographic Map

CAK West Side Hanger Development
North Canton, Summit County, Ohio

Project: 24-1238-005

STONE ENVIRONMENTAL, ENGINEERING & SCIENCE

Date: December 20, 2024

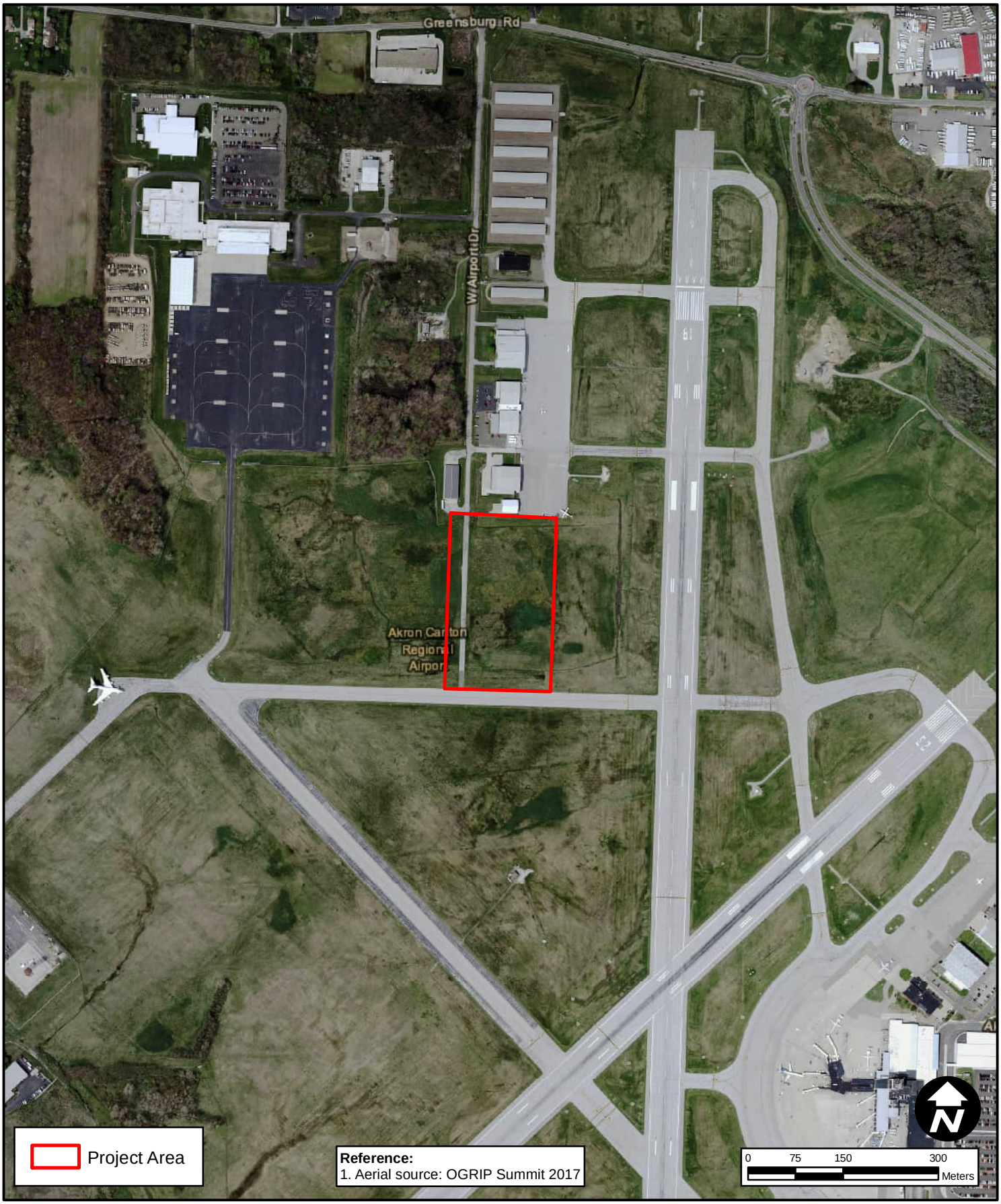


Figure 2a

Aerial Map - 2017

CAK West Side Hanger Development
North Canton, Summit County, Ohio

STONE ENVIRONMENTAL, ENGINEERING & SCIENCE

Project: 24-1238-005

Date: December 20, 2024

Project Area

0 45 90 180
Meters

Figure 2b

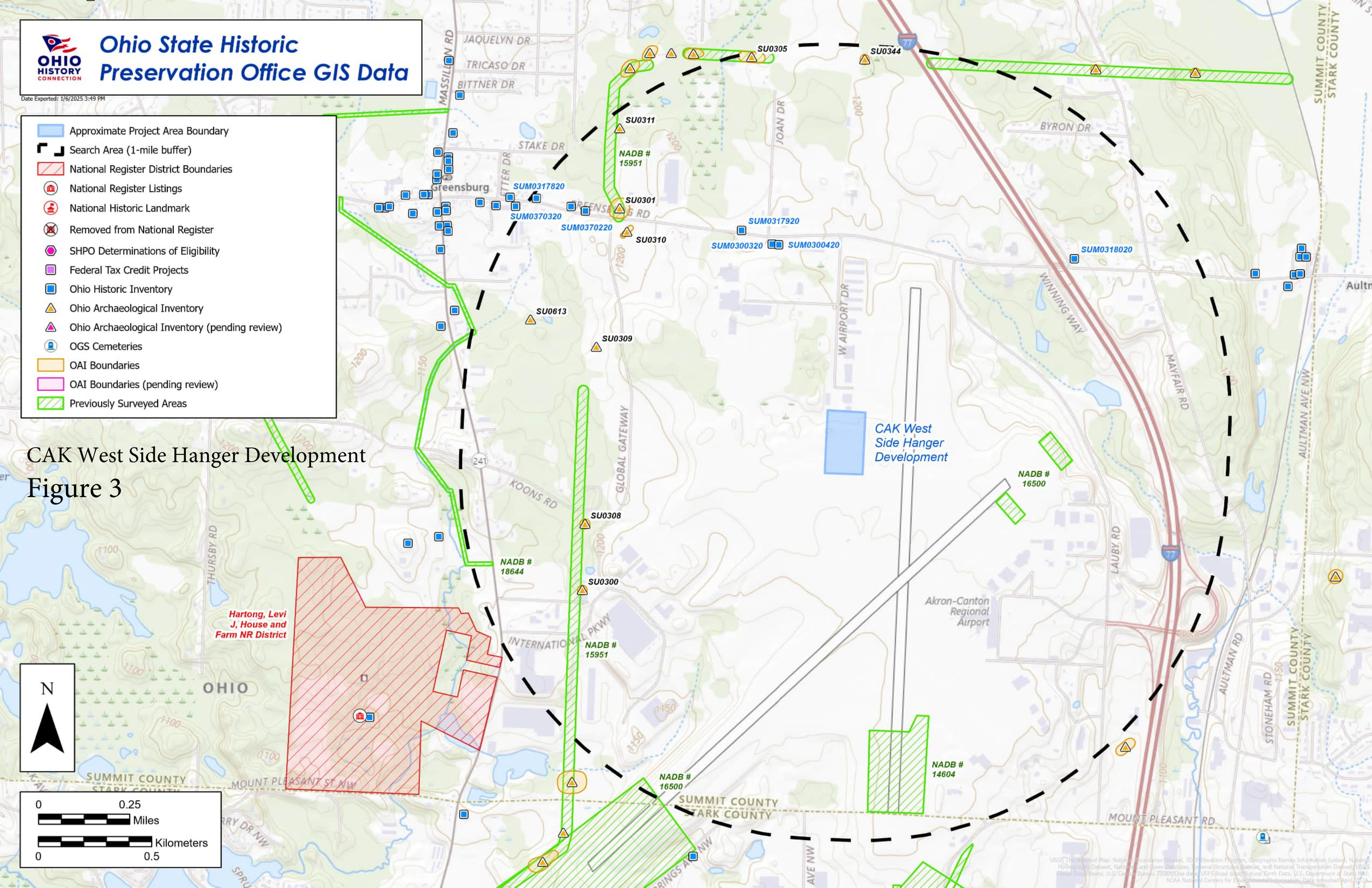
Aerial Map - 2024

CAK West Side Hanger Development
North Canton, Summit County, Ohio

STONE ENVIRONMENTAL, ENGINEERING & SCIENCE

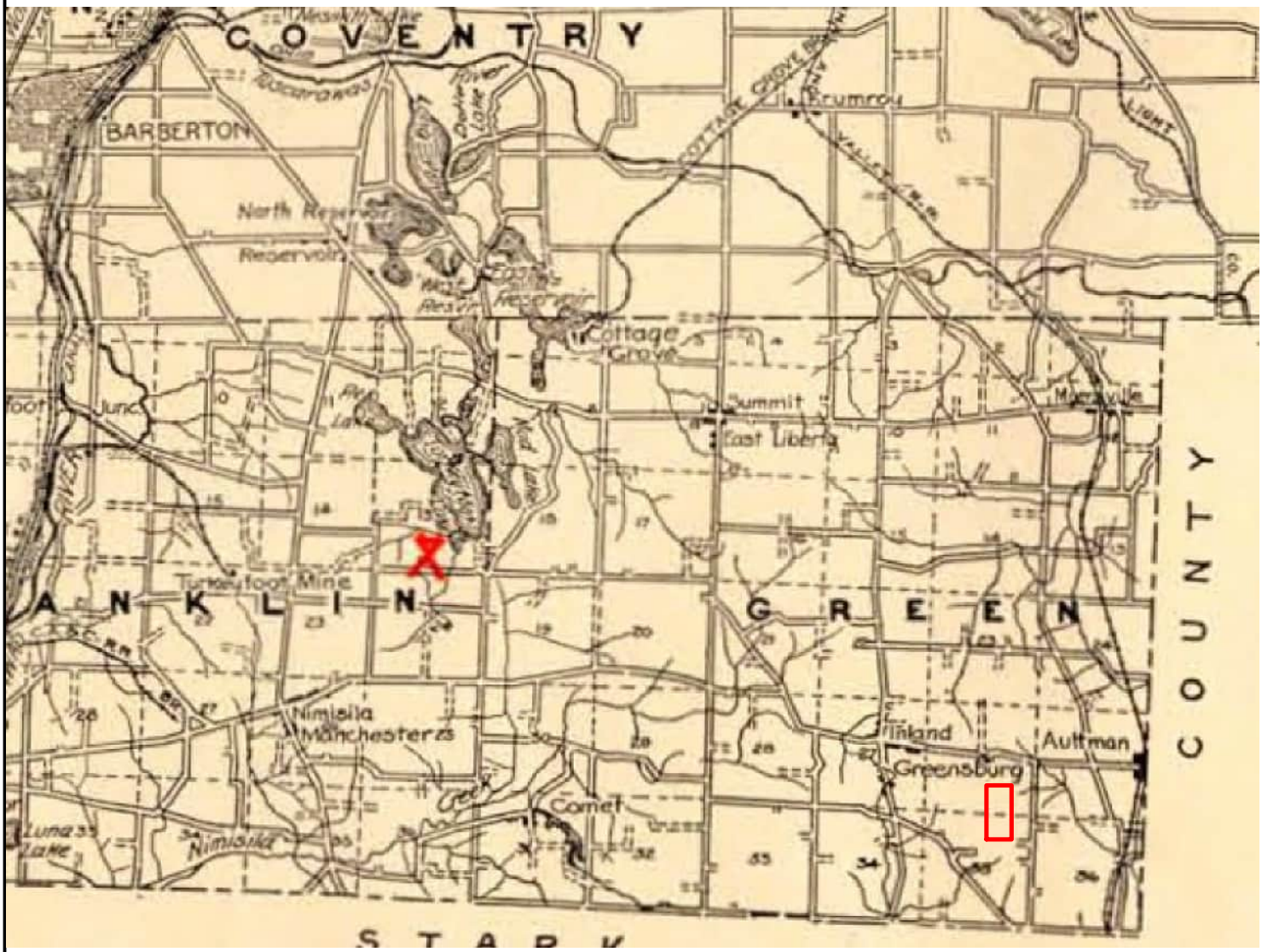
Project: 24-1238-005

Date: January 16, 2024



CAK West Side Hanger Development

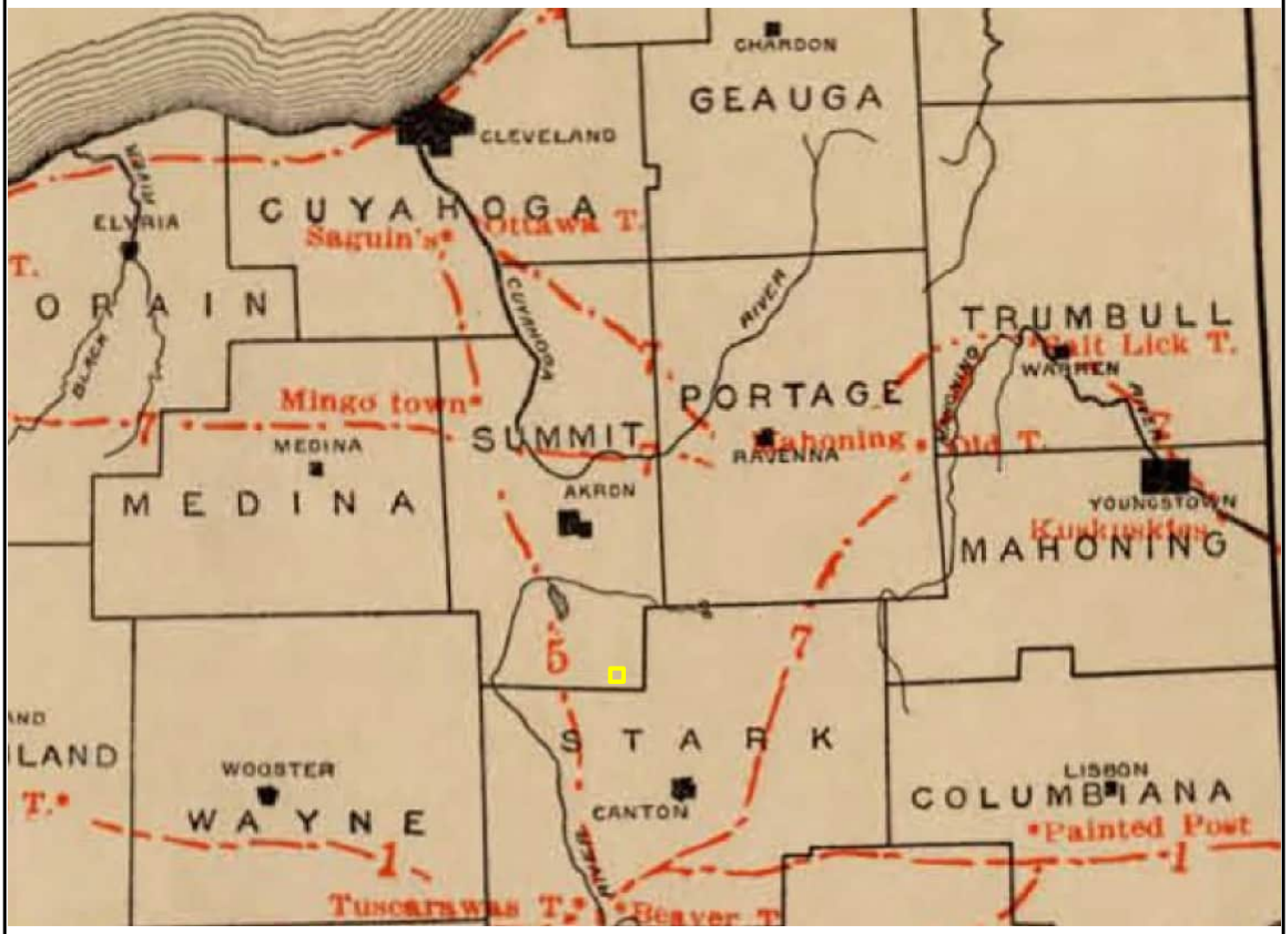
Figure 3



Approximate Project Location

Not to scale

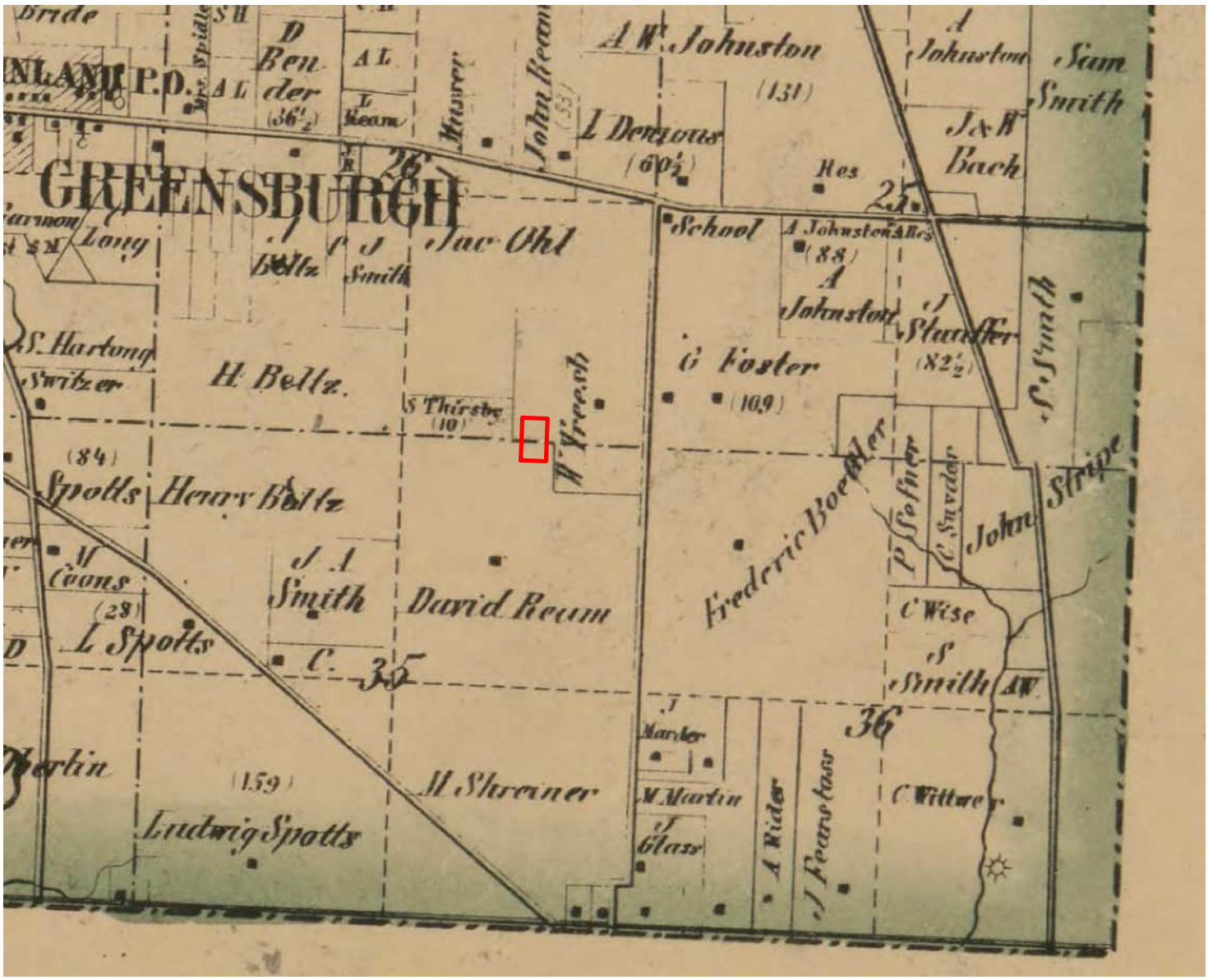
Figure 4	Map of Summit County (Mills 1914) CAK West Side Hanger Development North Canton, Summit County, Ohio	STONE ENVIRONMENTAL, ENGINEERING & SCIENCE
Project: 24-1238-005		Date: December 20, 2024



Approximate Project Location

Not to scale

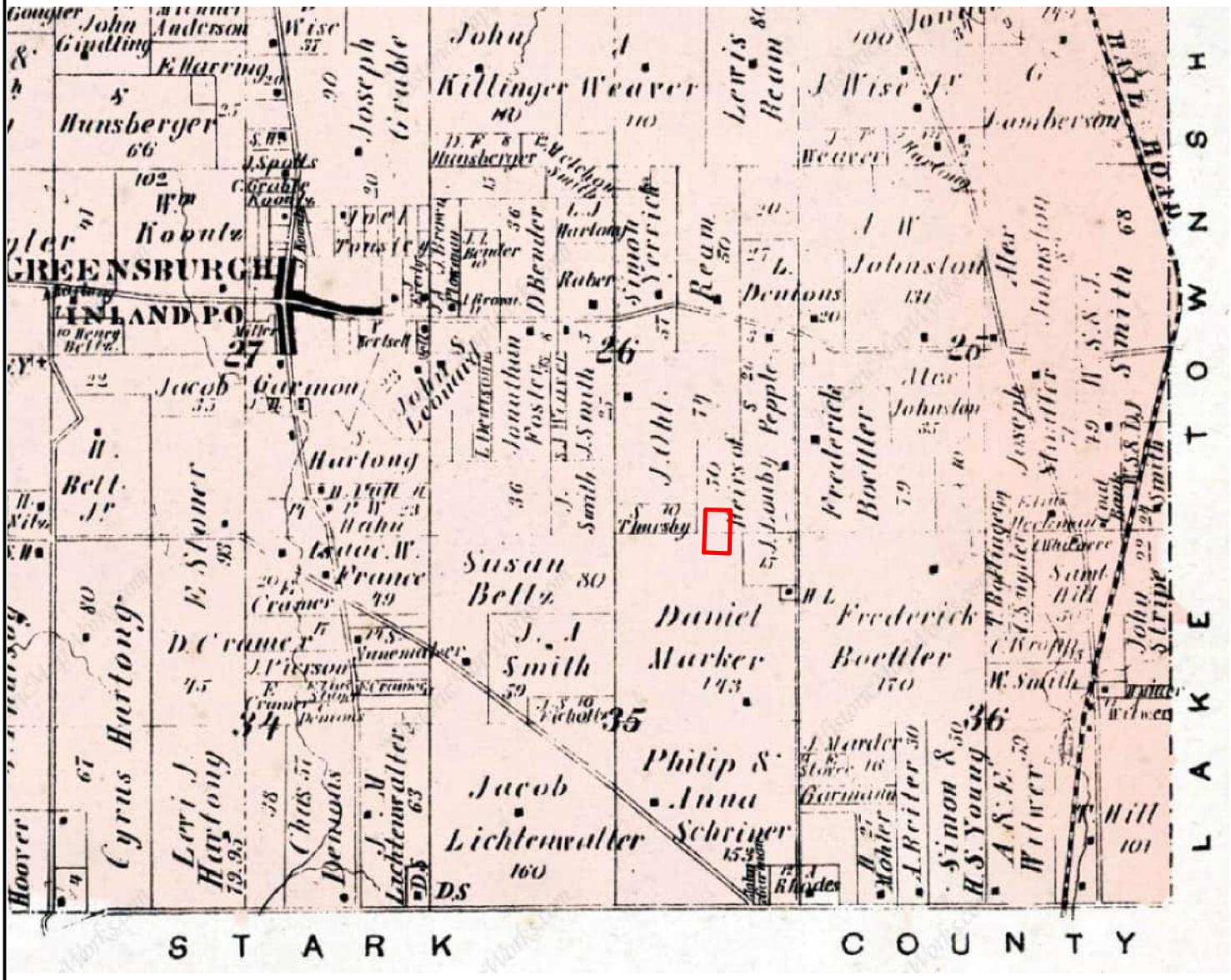
Figure 5	**Map of Summit County (Mills 1914)** CAK West Side Hanger Development North Canton, Summit County, Ohio	STONE ENVIRONMENTAL, ENGINEERING & SCIENCE
Project: 24-1238-005		Date: December 20, 2024



Approximate Project Location

Not to scale

Figure 6	Summit County (Paul 1856)	STONE ENVIRONMENTAL, ENGINEERING & SCIENCE
Project: 24-1238-005	CAK West Side Hanger Development North Canton, Summit County, Ohio	Date: December 20, 2024



Approximate Project Location

Not to scale

Figure 7	Summit County (Tackabury et al. 1874)	STONE ENVIRONMENTAL, ENGINEERING & SCIENCE
Project: 24-1238-005	CAK West Side Hanger Development North Canton, Summit County, Ohio	Date: December 20, 2024

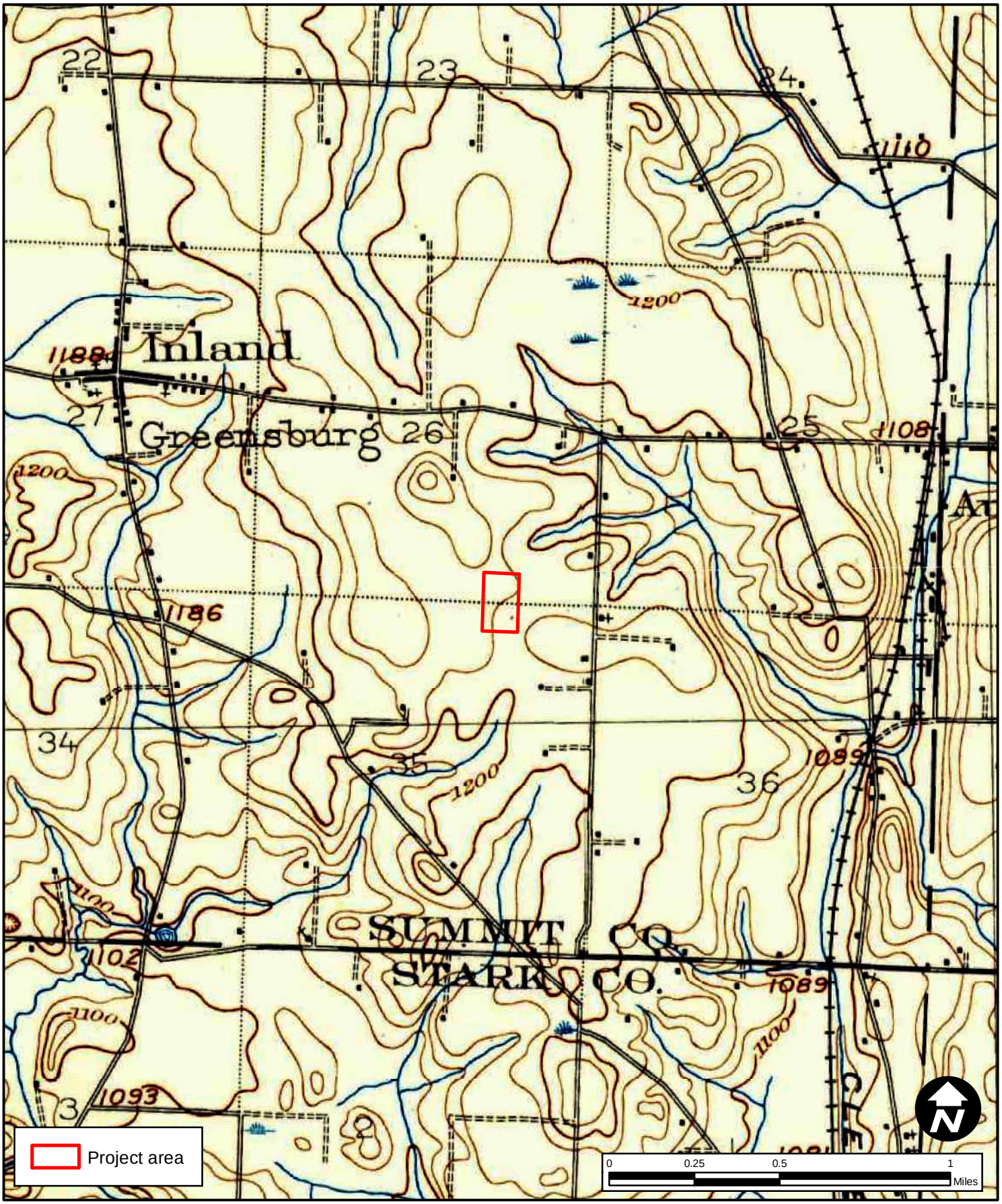


Figure 8	**USGS 15' Canton 1901** CAK West Side Hanger Development North Canton, Summit County, Ohio	STONE ENVIRONMENTAL, ENGINEERING & SCIENCE
Project: 24-1238-005		Date: November 17, 2024

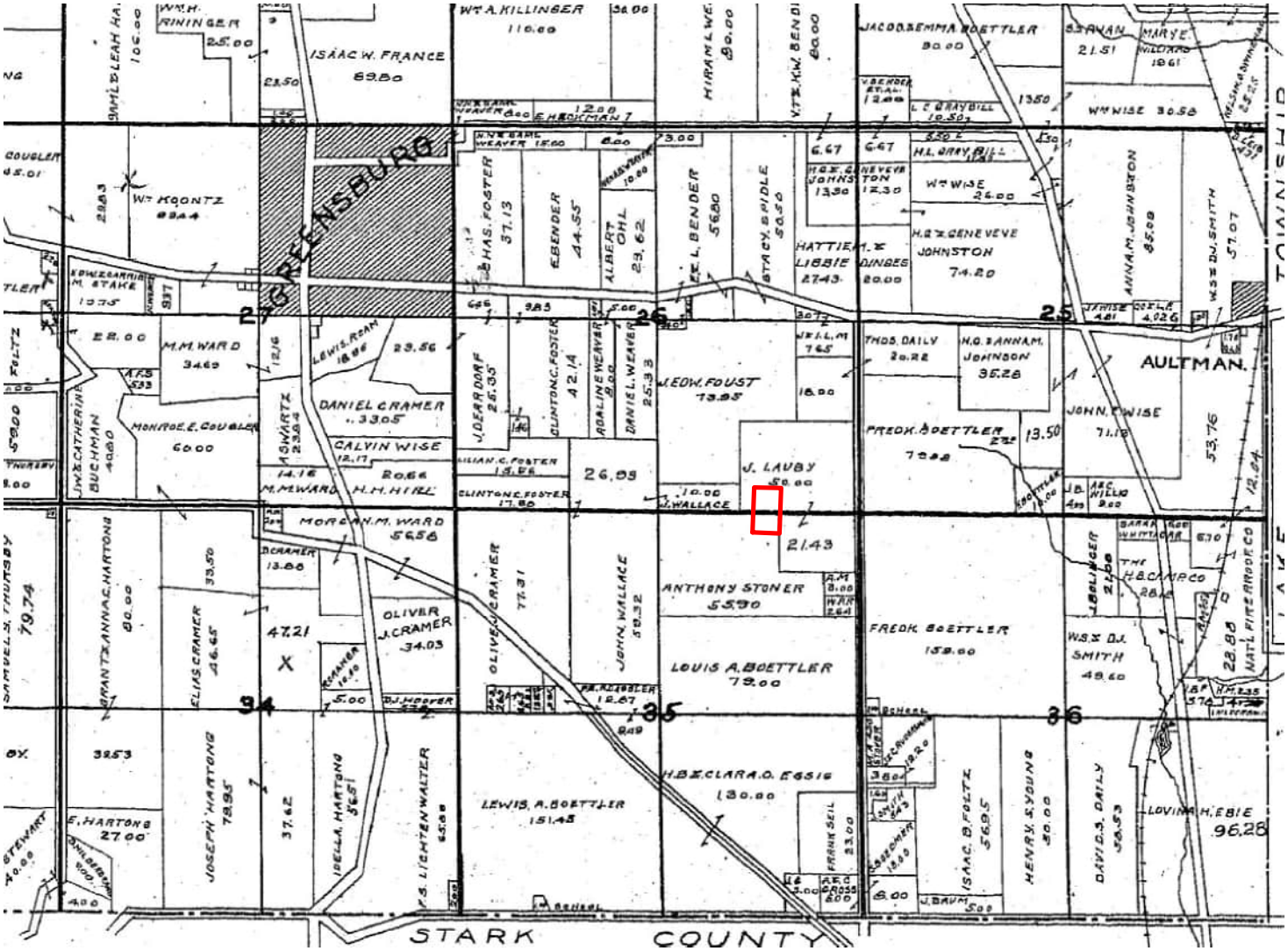


Figure 9	Summit County (Unknown 1910) CAK West Side Hanger Development North Canton, Summit County, Ohio	STONE ENVIRONMENTAL, ENGINEERING & SCIENCE
Project: 24-1238-005		Date: December 20, 2024

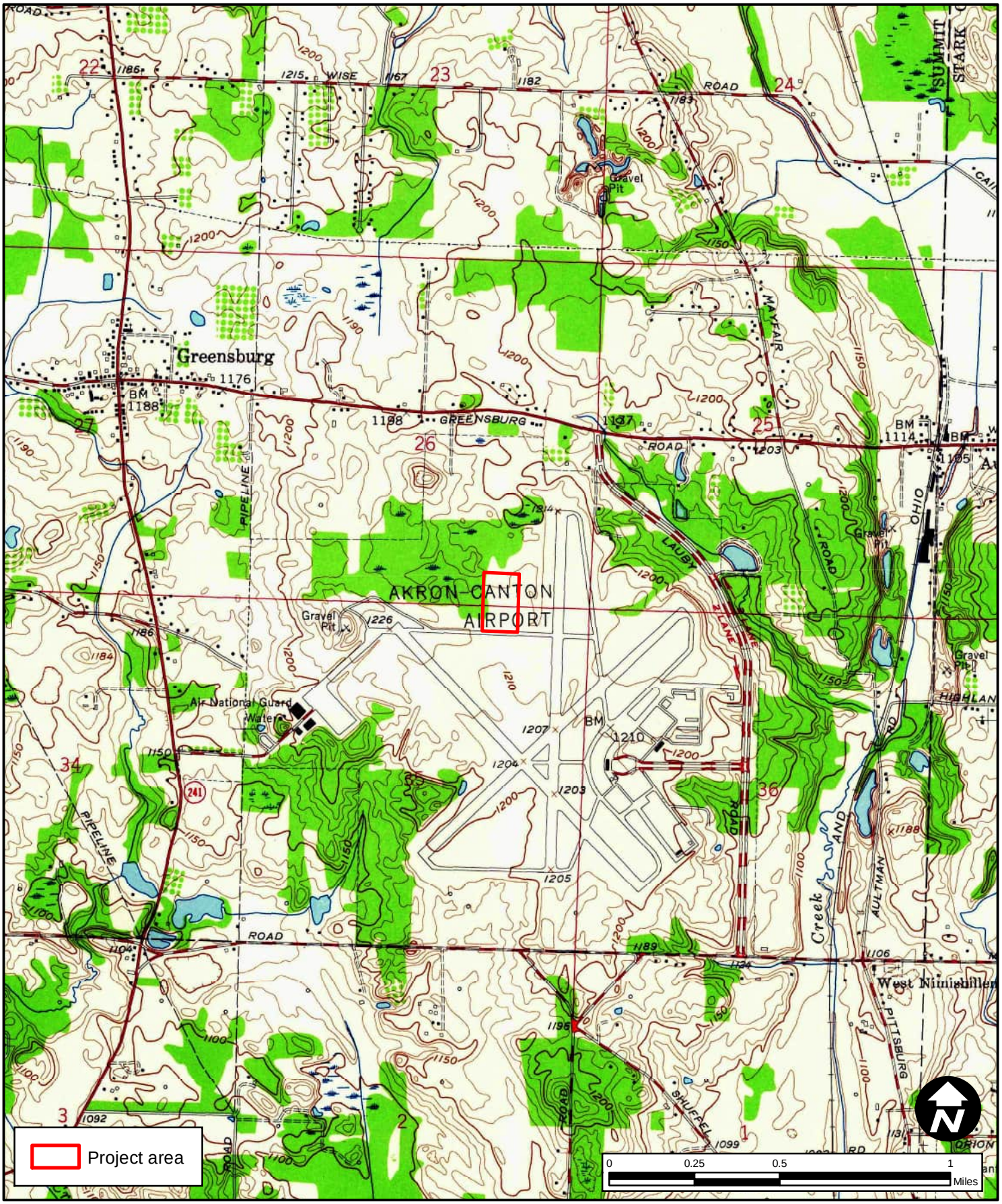


Figure 10	**USGS 7.5' North Canton 1958** CAK West Side Hanger Development North Canton, Summit County, Ohio	STONE ENVIRONMENTAL, ENGINEERING & SCIENCE
Project: 24-1238-005		Date: November 17, 2024

APPENDIX B

AERIAL IMAGERY

Figure 11. Portion of 1947 aerial photograph with Project area (ODOT 1947).

Figure 12. Portion of 1960 aerial photograph with Project area (ODOT 1960).

Figure 13. Portion of 1965 aerial photograph with Project area (ODOT 1965).

Figure 14. Portion of 1970 aerial photograph with Project area (ODOT 1970).

Figure 15. Portion of 1975 aerial photograph with portion of Project area (ODOT 1975).

Figure 16. Portion of 1980 aerial photograph with Project area (ODOT 1980).

Figure 17. Portion of 1985 aerial photograph with Project area (ODOT 1985).

Figure 18. Portion of 1990 aerial photograph with Project area (ODOT 1990).

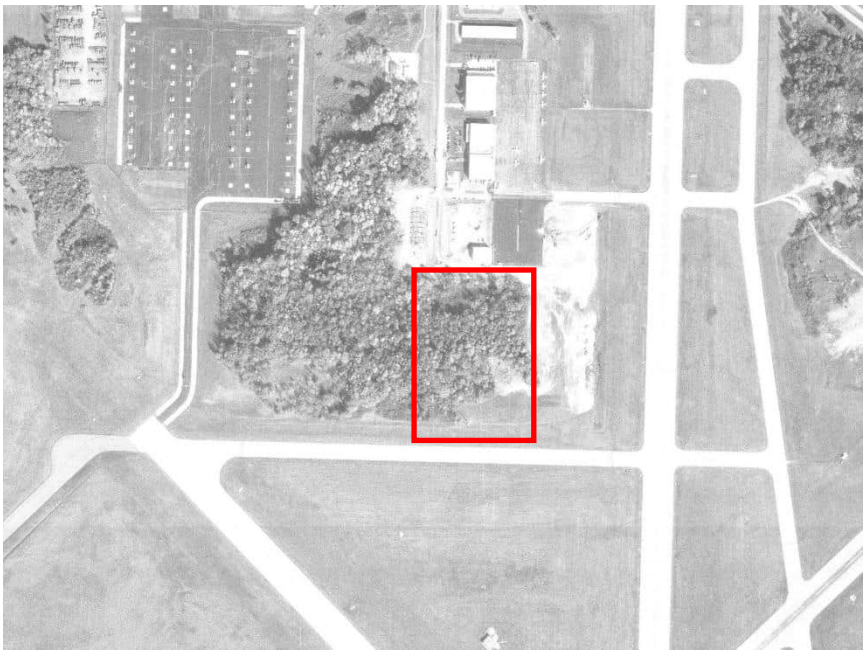


Figure 19. Portion of 1995 aerial photograph with Project area (ODOT 1995).

Figure 20. Portion of 2000 aerial photograph with Project area (ODOT 2000).

Figure 21. Portion of 2006 aerial photograph with Project area (Google Earth).

Figure 22. Portion of 2009 aerial photograph with Project area (ODOT 2009).

Figure 23. Portion of 2012 aerial photograph with Project area (Google Earth).

Figure 24. Portion of 2014 aerial photograph with Project area (Google Earth).

Figure 25. Portion of 2023 aerial photograph with Project area (Google Earth).

Figure 26. Portion of 2024 aerial photograph with Project area.

APPENDIX D

Wetland & Waters of the U.S. Report

DEPARTMENT OF THE ARMY
HUNTINGTON DISTRICT, CORPS OF ENGINEERS
502 EIGHTH STREET
HUNTINGTON, WEST VIRGINIA 25701-2070

REPLY TO
ATTENTION OF

August 13, 2025

Regulatory Division
North Branch
LRH-2017-815-TUS-Unnamed tributary (UNT) West Branch Nimishillen Creek

PRELIMINARY JURISDICTIONAL DETERMINATION

Duane Dunn
Akron-Canton Airport
5400 Lauby Road NW
North Canton, Ohio 44720

Dear Duane Dunn:

I refer to the *Preliminary Jurisdictional Waters Delineation, CAK West Side Hanger Development, North Canton, Summit County, Ohio* dated July 2025, completed on your behalf by CAP-STONE & Associates, Inc., dba Stone Environmental Engineering and Science, and submitted by CHA Consulting, Inc. You have requested preliminary jurisdictional determination (JD) for potentially jurisdictional aquatic resources on the approximately 17.2-acre site located at the Akron-Canton Airport in North Canton, Summit County, Ohio at approximately 40.9221 latitude, -81.4436 longitude. Your JD request has been assigned the following file number: LRH-2017-815-TUS-UNT West Branch Nimishillen Creek. Please reference this number on all future correspondence related to this JD request.

The United States Army Corps of Engineers' (Corps) authority to regulate waters of the United States is based on the definitions and limits of jurisdiction contained in 33 CFR Part 328 and 33 CFR Part 329. Section 404 of the Clean Water Act (Section 404) requires a Department of the Army (DA) permit be obtained prior to discharging dredged and/or fill material into waters of the United States, including wetlands. Section 10 of the Rivers and Harbors Act of 1899 (Section 10) requires a DA permit be obtained for any work in, on, over or under a navigable water.

Based upon a review of the information provided, this office has determined four (4) wetlands (W-1 – 0.198 acre, W-3 – 0.078 acre, W-5 – 0.218 acre, and W-6 – 0.162 acre) are located within the preliminary JD review area. The aquatic resources identified above and on the enclosed preliminary JD form may be waters of the United States in accordance with the Regulatory Guidance Letter for JDs issued by the Corps on October 31, 2016 (Regulatory Guidance Letter No. 16-01). As indicated in the guidance, this preliminary JD is non-binding and cannot be appealed (33 CFR § 331.2), and only provides a written indication that waters of the United States, including wetlands, may be present on-site.

You have declined to exercise the option to obtain an approved JD in this instance and at this time for the above aquatic resources. However, for the purposes of the determination of impacts, compensatory mitigation, and other resource protection measures for activities that require authorization from this office, the above aquatic resources will be evaluated as if they are waters of the United States.

Enclosed please find a copy of the preliminary JD form. If you agree with the findings of this preliminary JD and understand your options regarding the same, please sign and date the preliminary JD form and return it to this office within 30 days of receipt of this letter. You should submit the signed copy to Kayla Osborne of the North Branch at kayla.n.osborne@usace.army.mil or to the following address:

United States Army Corps of Engineers
Huntington District
Attn: North Branch
502 Eighth Street
Huntington, West Virginia 25701

This determination has been conducted to identify the limits of the Corps' Section 404 jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are United States Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

A copy of this letter will be provided to the Ohio Environmental Protection Agency (Ohio EPA) and your agent, Simon Davies with CHA Consulting, Inc. We are available for pre-application consultation. If you have any questions concerning the above, please contact Kayla Osborne of the North Branch at 304-399-5850, by mail at the above address, or by email at kayla.n.osborne@usace.army.mil.

Sincerely,

Lydia Fach
Regulatory Project Manager
North Branch

Enclosures

cc:
Rachel Secrest, Ohio EPA (via email)
Simon Davies, CHA Consulting, Inc. (via email)

U.S. Army Corps of Engineers (USACE)

PRELIMINARY JURISDICTIONAL DETERMINATION (PJD)

For use of this form, see Sec 404 CWA, Sec 10 RHA, Sec 103 MPRSA; the proponent agency is CECW-COR.

Form Approved - OMB No. 0710-0024 Expires 2024-04-30

DATA REQUIRED BY THE PRIVACY ACT OF 1974

Authority 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 Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

Principal Purpose The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the review area that may be subject to federal jurisdiction under the regulatory authorities referenced above.

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 or FOIA request as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in any resulting jurisdictional determination (JD), which may be made available to the public on the District's website and/or on the Headquarters USACE website.

Disclosure Submission of requested information is voluntary; however, if information is not provided, the request for a JD cannot be evaluated nor can a PJD be issued.

The Agency Disclosure Notice (ADN)

The public reporting burden for this collection of information, 0710-0024, is estimated to average 25 minutes 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 whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. 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.

SECTION I - BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: 2025-07-10

B. NAME AND ADDRESS OF PERSON REQUESTING PJD:

Duane Dunn
Akron-Canton Airport
5400 Lauby Road NW
North Canton, Ohio 44720

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

Huntington District, CAK West Side Hanger Development JD, LRH-2017-815-TUS-UNT West Branch Nimishillen Creek

D. PROJECT LOCATION AND BACKGROUND INFORMATION:

(*USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES*)

State: Ohio County/Parish/Borough: Summit City: North Canton

Center coordinates of site (*lat/long in degree decimal format*): Latitude: 40.9221 ° Longitude: -81.4436 °

Universal Transverse Mercator: X: 462653.789168, Y: 4530209.411306

Name of nearest waterbody: UNT West Branch Nimishillen Creek

E. REVIEW PERFORMED FOR SITE EVALUATION (*CHECK ALL THAT APPLY*):

☒ Office (*Desk*) Determination. Date: 2025-08-13

☐ Field Determination

Date(s):

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

	Site Number	Latitude (*decimal degrees*)	Longitude (*decimal degrees*)	Estimated amount of aquatic resource in review area (*acreage and linear feet, if applicable*)	Type of aquatic resource (*i.e., wetland vs. non-wetland waters*)	Geographic authority to which the aquatic resource "may be" subject (*i.e., Section 404 or Section 10/404*)
	W-1	40.9229	-81.4442	0.198 acre	wetland	Section 404

	Site Number	Latitude (*decimal degrees*)	Longitude (*decimal degrees*)	Estimated amount of aquatic resource in review area (*acreage and linear feet, if applicable*)	Type of aquatic resource (*i.e., wetland vs. non-wetland waters*)	Geographic authority to which the aquatic resource "may be" subject (*i.e., Section 404 or Section 10/404*)
	W-3	40.9211	-81.4442	0.078 acre	wetland	Section 404
	W-5	40.9213	-81.4449	0.218 acre	wetland	Section 404
	W-6	40.9210	-81.4462	0.162 acre	wetland	Section 404

1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.

2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD or no JD whatsoever, which do not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the USACE has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD or reliance on no JD whatsoever; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of USACE permit authorization based on a PJD or no JD whatsoever constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the USACE will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there *"may be"* waters of the U.S. and/or that there *"may be"* navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

F. SUPPORTING DATA. Data reviewed for PJD (*check all that apply)*

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

☒ Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:

Map: CAP-STONE & Associates, Inc. has completed the Preliminary Jurisdictional Waters Delineation, CAK West Side Hanger Development, North Canton, Summit County, Ohio dated July 2025, on behalf of Akron-Canton Airport (JD Report, Jul 2025)

☒ Data sheets prepared/submitted by or on behalf of the PJD requestor.

☒ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report.

Rationale: _____

☐ Data sheets prepared by the USACE:

☐ Corps navigable waters' study:

☐ U.S. Geological Survey Hydrologic Atlas:

☒ USGS NHD data.

☒ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name:

Figure 1 - Project Location Map (JD Report, Jul 2025)

☒ USDA Natural Resources Conservation Service Soil Survey.

Citation: Figure 2 - Soil Map (JD Report, Jul 2025)

☒ National Wetlands Inventory map(s).

Cite Name: Figure 3 - USFWS NWI and USGS NHD Map (JD Report, Jul 2025)

☐ State/Local Wetland Inventory map(s):

☒ FEMA/FIRM maps:

Figure 4 - FEMA NFHZ Map (JD Report, Jul 2025)

☐ 100-year Floodplain Elevation is: _____. (National Geodectic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (*Name & Date*): Figure 5 - Jurisdictional Waters Map and Figure 6 - Photo Locations Map (JD Report, Jul 2025)

or ☒ Other (*Name & Date*): Appendix B (JD Report, Jul 2025)

☐ Previous determination(s). File no. and date of response letter:

☐ Other information (*please specify*):

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the USACE and should not be relied upon for later jurisdictional determinations.

Name of Regulatory Staff Member Completing PJD	Date	Signature of Regulatory Staff Member Completing PJD
Kayla Osborne, Regulatory Project Manager	2025-08-13	Kayla Osborne
Name of Person Requesting PJD	Date	Signature of Person Requesting PJD *(REQUIRED, unless obtaining the Signature is Impracticable*

[1] Districts may establish timeframes for requester to return signed PJD forms. If the requester does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

STONE
ENVIRONMENTAL, ENGINEERING & SCIENCE

July 2, 2025
24-1238-005

Mr. Mark Heckroth
CHA Consulting, Inc.
1501 North Marginal Road, Suite 200
Cleveland, OH 44114
MHeckroth@chasolutions.com

Re: Preliminary Jurisdictional Waters Delineation
CAK West Side Hanger Development
North Canton, Summit County, Ohio

Dear Mr. Heckroth,

In accordance with your authorization, STONE has conducted a Preliminary Jurisdictional Waters Delineation for the above-referenced project. A report of our findings is herewith submitted.

Based on our preliminary assessment, the following resources are present within the study area:

- 0.656 acres of emergent wetlands

If you have any questions about this submittal, please contact us at (614) 865-1874.

Sincerely,

CAP-STONE & Associates, Inc., dba
Stone Environmental Engineering & Science

Alex Brown
Staff Scientist

Scott Ross, PWS, CPESC
Ecological Services Manager

Enclosure: PJWD Report

ENVIRONMENTAL, ENGINEERING & SCIENCE

PRELIMINARY JURISDICTIONAL WATERS DELINEATION

CAK West Side Hanger Development
North Canton, Summit County, Ohio

Prepared for:
CHA Consulting, Inc.
1501 North Marginal Road, Suite 200
Cleveland, Ohio 44114

Prepared by:
CAP-STONE & Associates, Inc., dba
Stone Environmental Engineering and Science
3700 Corporate Drive, Suite 125
Columbus, Ohio 43231

March 18, 2025 (Revised July 2, 2025)
24-1238-005

TABLE OF CONTENTS

Section Page

APPENDICES

1. INTRODUCTION

1.1 Project Location and Description

A Preliminary Jurisdictional Waters Delineation (PJWD) has been completed by CAP-STONE & Associates, Inc., dba Stone Environmental Engineering and Science (STONE) for the CAK West Side Hanger Development project. The project study area is approximately 17.2 acres and is located within the Akron-Canton Airport in North Canton, Summit County, Ohio (40.9221° N, -81.4436 ° W). Surrounding land use is primarily commercial use. A Project Location Map (Figure 1) is included in Appendix A.

1.2 Limitations

The conclusions presented herein are professional opinions based on the information contained in this report and are specific to the study area investigated and information provided by others. The findings of this report are applicable and representative of the conditions encountered on the dates of this assessment and may not represent conditions subsequent to the field study. These conclusions represent STONE's professional opinion based on knowledge and experience with the United States Army Corps of Engineers (USACE) and Ohio Environmental Protection Agency (EPA) regulatory guidance documents and published methodology. These conclusions are subject to review and revision by the USACE and Ohio EPA.

2. REGULATORY BACKGROUND

Jurisdictional surface waters (e.g., streams, wetlands, ponds, lakes, etc.) are regulated by the USACE and Ohio EPA. Section 404 and Section 401 of the Clean Water Act (CWA) provide the framework for the aforementioned agencies to implement the regulatory programs.

Section 404 of the CWA regulates the discharge of dredged material, placement of fill material, or certain types of excavation, which may result in more than incidental fallback material, within Waters of the United States (WOTUS). Section 404 grants the Secretary of the Army, through the Chief of Engineers, regulatory authority to issue permits for these actions. WOTUS include territorial seas and traditional navigable waters, tributaries, lakes, ponds, and impoundments of jurisdictional waters and adjacent wetlands. Wetlands are defined by the CWA as areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Section 401 of the CWA requires any applicant requesting a CWA permit for activities resulting in a discharge to WOTUS to provide the federal permitting agency with a Section 401 Water Quality Certification (WQC) from the state. The 401 WQC ensures that the federal permit meets the state water quality standards. A federal permit cannot be granted unless a Section 401 WQC is applied for, and received, from the state. Within the State of Ohio, the Ohio EPA Division of Surface Water's 401 WQC Section is the regulatory agency for this certification. State laws and rules have been created in order to implement Section 401 and regulate impacts to WOTUS and waters of the state, which includes isolated wetlands.

According to Section 404 of the CWA, a permit must be acquired from the USACE to authorize discharge of dredge or fill material into WOTUS. The USACE has established several Nationwide Permits (NWPs) to expedite the permitting process for common discharges which have been determined to have minimal individual or cumulative impacts on the environment. Ohio EPA Section 401 water quality certifications have been pre-approved for the NWPs. The NWP process typically requires two to four months for completion. Several criteria/limitations are associated with NWPs and can be discussed in further detail if it is determined that the on-site jurisdictional waters will be impacted by future site development. If NWP limitations are exceeded, typically an individual Section 404/401 permit must be obtained. Surface water features that are determined to be isolated (not WOTUS) may be subject to Ohio laws and regulations (e.g., Ohio Revised Code, Section 6111 – Isolated Wetland Permitting).

It is understood that isolated wetland permitting was previously completed by others for two wetlands that were impacted in the project area prior to February 2025. The Ohio EPA authorized the isolated wetland general permit (Level One, Ohio EPA ID 228345W) on January 10, 2023. Prior to the isolated wetland permitting, the USACE issued a combined Preliminary and Approved Jurisdictional Determination on March 23, 2018 (USACE ID LRH-2017-815-TUS-UNT to West Branch Nimishillen Creek).

3. LITERATURE REVIEW

3.1 Soils

The United States Department of Agriculture (USDA) Natural Resource Conversation Service (NRCS) soil survey data for the study area are listed below in Table 3-1. The Soil Map (Figure 2) is included in Appendix A.

Table 3-1: Soil Map Units Within the Study Area

Soil Map Unit Symbol	Mapping Unit Name	Hydric Rating Percentage
BgA	Bogart loam, 0 to 2 percent slopes	<1%
CfB	Canfield-Urban land complex, 2 to 6 percent slopes	<1%
CpB	Chili silt loam, 2 to 6 percent slopes	<1%
CpC	Chili silt loam, 6 to 12 percent slopes	<1%
LuC	Loudonville-Urban land complex, rolling	<1%
Sb	Sebring silt loam, 0 to 2 percent slopes	66-99%
Uf	Udorthents, sanitary landfill	<1%

3.2 USGS Topography

The study area is depicted on the Project Location Map (Appendix A – Figure 1) which includes the United States Geological Survey (USGS) topographic mapping. The topography of the study area is relatively flat. Elevations range from approximately 1,204 feet above mean sea level (MSL) in the northern portion of the study area to 1,223 feet above MSL in the central portion of the study area.

3.3 National Wetlands Inventory Mapping

According to the United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Map (Appendix A – Figure 3), there are no features located in the study area.

3.4 USGS NHD Mapping

There are no USGS National Hydrography Dataset (NHD) features mapped in the study area (Appendix A – Figure 3).

3.5 Ohio EPA Watershed & Designated Use Information

The study area is located within the West Branch Nimishillen Creek Watershed (HUC 12: 050400010503). There are no streams located within the study area that contain an Ohio EPA Designated Use.

3.6 Floodplain Mapping

The Federal Emergency Management Agency (FEMA) National Flood Hazard Zones mapping does not depict any floodplain or floodway within the study area (Appendix A – Figure 4).

3.7 Threatened & Endangered Species Review

State Listed Species

CHA Consulting, Inc. requested an Ohio Department of Natural Resources (ODNR) environmental review to identify potential threatened and endangered (T&E) species that could be impacted by the project. ODNR provided comments on January 15, 2024, as summarized below:

- The study area is within the range of two state and federally endangered bat species: Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*); and, two state endangered bat species: little brown bat (*Myotis lucifugus*) and tricolored bat (*Perimyotis subflavus*). ODNR recommends seasonal tree clearing (October 1 through March 31) for trees that will be removed for the project.
- The project is within the range of the Iowa darter *(Etheostoma exile),* a state endangered fish, the pugnose minnow (*Opsopoeodus emiliae*), a state endangered fish, the western banded killifish (*Fundulus diaphanus menona*), a state endangered fish, the lake chubsucker (*Erimyzon sucetta*), a state threatened fish, and the paddlefish (*Polyodon spathula*) a state threatened fish. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.
- The project is within the range of the smooth greensnake (*Opheodrys vernalis*), a state endangered species. This species is primarily a prairie inhabitant, but also found in marshy meadows and roadside ditches. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.
- The project is within the range of the spotted turtle (*Clemmys guttata*), a state threatened species. This species prefers fens, bogs and marshes, but also is known to inhabit wet prairies, meadows, pond edges, wet woods, and the shallow sluggish waters of small streams and ditches. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

- The project is within the range of the northern harrier (*Circus hudsonius*), 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 Natural Heritage Database has no data at or within one mile of the project area.

Due to the potential of impacts to federally listed species, as well as to state listed species, ODNR recommends that this project be coordinated with the USFWS if impacts will not be avoided.

Federally Listed Species

STONE obtained information from the USFWS Information for Planning and Consultation (IPaC) website to review federally listed species that may be affected by the proposed project. According to the IPaC information, dated June 30, 2025, federally listed species with known or expected ranges within the project area include:

- Indiana bat – Endangered
- Salamander mussel (*Simpsonaias ambigua*) – Proposed Endangered
- Monarch butterfly (*Danaus Plexippus*) – Proposed Threatened

No Critical Habitats were identified in the project area.

A copy of the IPaC letter (USFWS Project Code: 2025-0116021), dated June 30, 2025 is included in Appendix D.

4. METHODOLOGY

STONE ecologists performed on-site assessments of the study area on February 4 and June 18, 2025. The study area is approximately 17.2 acres. A hand-held Global Positioning System (GPS) unit capable of submeter accuracy was used to record sampling points and determine boundaries of the aquatic resources.

The study area was evaluated using the *USACE Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast*. Sampling points were collected for potential wetlands and upland areas. Wetland habitat was documented using the Ohio EPA's Ohio Rapid Assessment Methodology (ORAM).

5. RESULTS

STONE identified 0.656 acres of emergent wetlands in the study area. Wetland details are summarized in Table 5-1. The delineated resources are depicted on the Jurisdictional Waters Map (Figure 5, Appendix A). Additionally, non-jurisdictional conveyances (NJCs) were observed within the study area (connecting the wetlands to WOTUS). The NJCs provided a

surface water connection to WOTUS and were identified as non-jurisdictional features. No other surface water features were observed in the study area. Representative photographs of the wetlands and study area are included in Appendix B. Wetland data forms and qualitative habitat assessment forms (ORAM) are included in Appendix C.

*Note: A wetland delineation was previously completed by others in 2017 for a portion of the current study area. Four wetlands (Wetlands 1 through 4) were identified in the project area. The delineated wetlands were subsequently reviewed by the USACE and a combined Preliminary and Approved Jurisdictional Determination was issued by the USACE on March 23, 2018 (USACE ID LRH-2017-815-TUS-UNT to West Branch Nimishillen Creek). Isolated wetland permitting (Isolated Wetland General Permit – Level One, Ohio EPA ID 228345W) was also completed by others for the project area in 2023 for impacts to two wetlands (Wetlands 2 and 4). In order to retain the previous Wetland IDs, we have used the same IDs for Wetlands 1 and 3. Wetlands 2 and 4 (delineated in 2017 by others) were not observed in the study area during this PJWD. Additional wetlands that were delineated in the western portion of the current study area are identified as Wetland 5 and Wetland 6.

Table 5-1: Wetlands Identified within Study Area

Wetland ID	Cowardin Habitat Classification[1]	ORAM Category (Score)	Latitude	Longitude	Jurisdiction	Acreage within Study Area
W-1	PEM	1 (13.5)	40.9229	-81.4442	WOTUS	0.198[2]
W-3	PEM	1 (21)	40.9211	-81.4442	WOTUS	0.078
W-5	PEM	1 (19)	40.9213	-81.4449	WOTUS	0.218[2]
W-6	PEM	1 (18)	40.9210	-81.4462	Isolated	0.162
					TOTAL	0.656

[1]PEM = Palustrine Emergent
[2]Wetland extends outside of the study area

W-1 (PEM) is located in the northwestern corner of the study area and appeared to be hydrologically connected to WOTUS. W-1 had a surface water connection to an NJC that flowed into a drainage ditch system connected to Zimber Ditch. Zimber Ditch is a tributary to West Branch Nimishillen Creek. Dominant plant species included common reed (*Phragmites australis*), lamp rush (*Juncus effusus*), limestone-meadow sedge (*Carex granularis*), and reed canary grass (*Phalaris arundinacea*). The ORAM score for W-1 was 13.5 (Category 1).

W-3 (PEM) is located in the southwestern portion of the study area and appeared to be hydrologically connected to WOTUS. W-3 had a surface water connection to W-5. W-5 appeared to have a surface water connection to W-1 through off-site wetlands and NJCs. W-1 appeared to have a surface water connection to Zimber Ditch and West Branch Nimishillen Creek. Dominant plant species included creeping-jenny (*Lysimachia nummularia*), curly

dock (*Rumex crispus*), limestone-meadow sedge, and Kentucky blue grass (*Poa pratensis*). The ORAM score for W-3 was 21 (Category 1).

W-5 (PEM) is located in the southwestern and northwestern portions of the study area and appeared to be hydrologically connected to WOTUS. W-5 appeared to have a surface water connection to W-1 through off-site wetlands and NJCs. W-1 appeared to have a surface water connection to Zimber Ditch and West Branch Nimishillen Creek. Dominant plant species included creeping-jenny, reed canary grass, swamp smartweed (*Persicaria hyrdopiperoides*), farewell-summer (*Symphyotrichum lateriflorum*), red fescue (*Festuca rubra*), and rough-stalk blue grass (*Poa trivialis*). The ORAM score for W-5 was 19 (Category 1).

W-6 (PEM) is located in the southwestern corner of the study area and appeared to be hydrologically isolated and a surface water connection to WOTUS was not observed. Dominant plant species included reed canary grass, creeping-jenny, and fox sedge (*Carex vulpinoidea*). The ORAM score for W-6 was 18 (Category 1).

6. CONCLUSIONS

STONE identified 0.656 acres of emergent wetlands in the study area. Wetlands W-1, W-3, and W-5 appeared to be connected to WOTUS by NJCs, culverts, and drainage ditches. The NJCs provided a surface water connection to WOTUS and were identified as non-jurisdictional features. Wetland W-6 appeared to be hydrologically isolated and a surface water connection to WOTUS was not observed. No other surface water features were observed during the on-site assessment.

Since the USACE has authority to determine and/or verify the geographical boundaries of wetlands and other WOTUS, this investigation is termed "preliminary." USACE verification (also referred to as a Jurisdictional Determination "JD") may be required for completion of CWA Section 404, Section 401, and/or isolated wetland permitting. It is the responsibility of any party that intends to discharge dredge or fill material into jurisdictional waters of the U.S. to comply with all applicable regulations.

A wetland delineation was previously completed by others in 2017 for a portion of the current study area. Four wetlands (Wetlands 1 through 4) were identified in the project area. The delineated wetlands were subsequently reviewed by the USACE and a combined Preliminary and Approved Jurisdictional Determination was issued by the USACE on March 23, 2018 (USACE ID LRH-2017-815-TUS-UNT to West Branch Nimishillen Creek). Isolated wetland permitting (Isolated Wetland General Permit – Level One, Ohio EPA ID 228345W) was also completed by others for the project area in 2023 for impacts to two wetlands (Wetlands 2 and 4). Wetlands 2 and 4 (delineated in 2017 by others) were not observed in the study area during this PJWD.

7. REFERENCES

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APPENDIX A

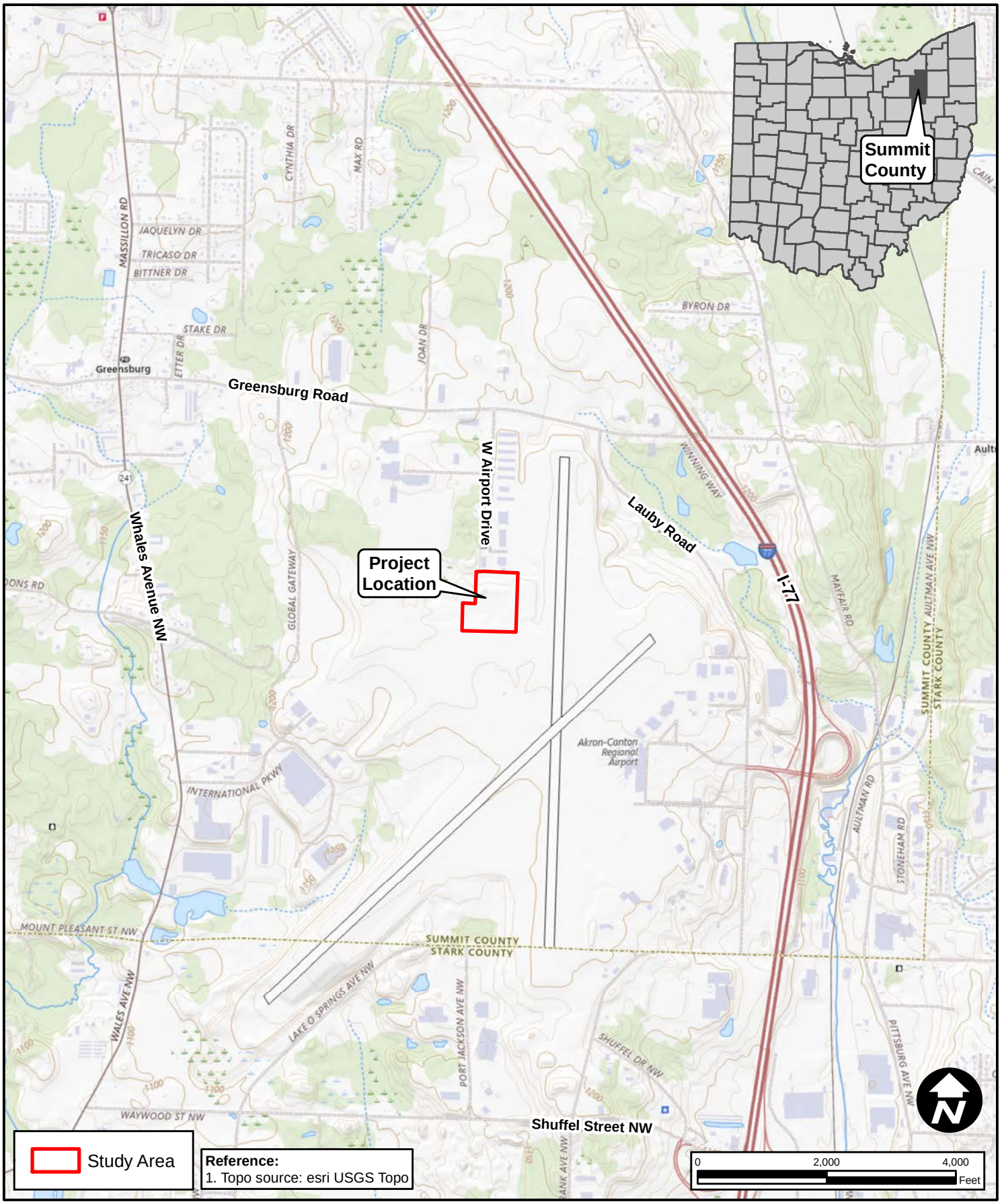

Figure 1

PROJECT LOCATION MAP

CAK West Side Hanger Development
North Canton, Summit County, Ohio

Project: 24-1238-005

STONE ENVIRONMENTAL, ENGINEERING & SCIENCE

Date: June 30, 2025

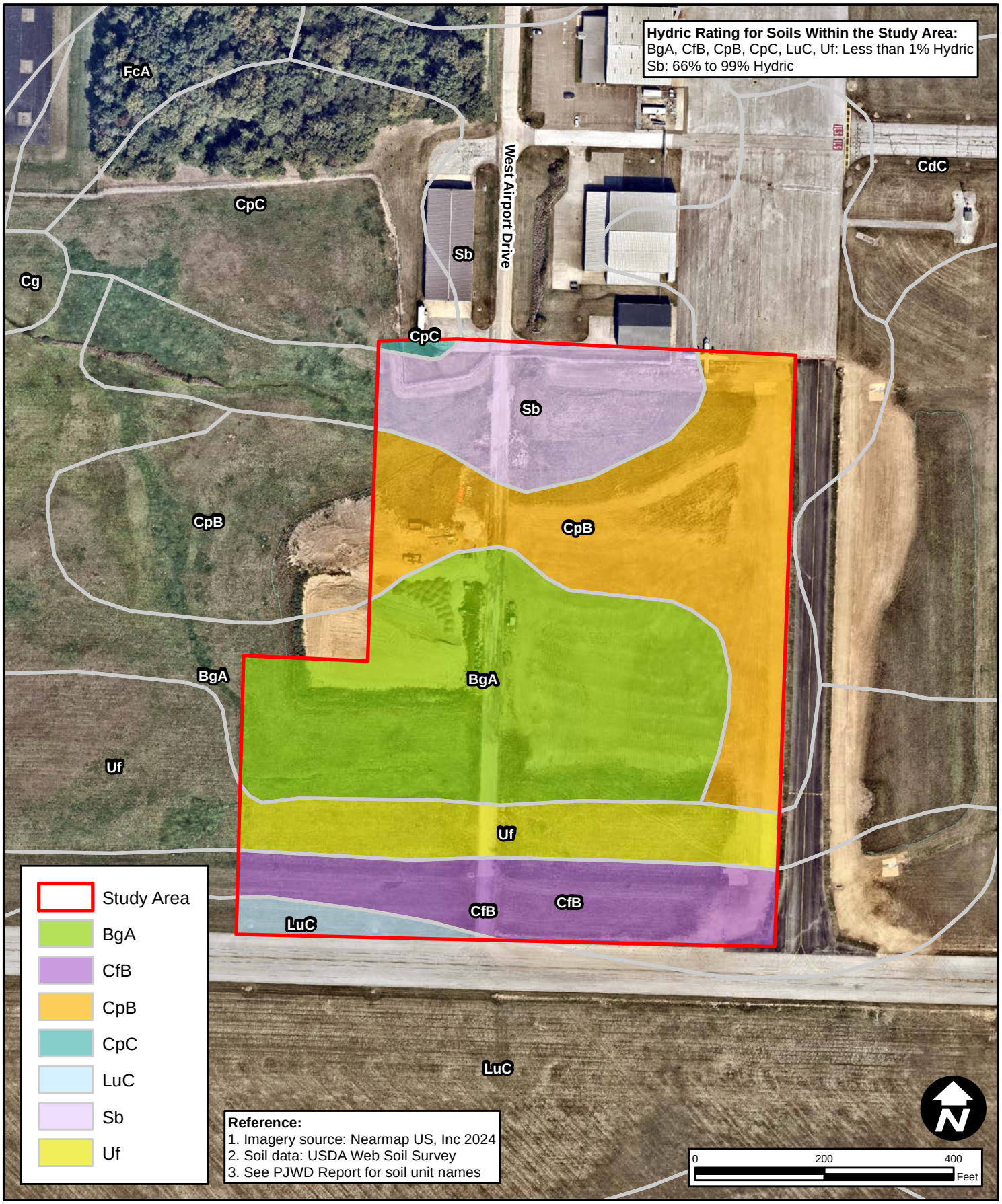

Figure 2

SOIL MAP

CAK West Side Hanger Development
North Canton, Summit County, Ohio

Project: 24-1238-005

STONE ENVIRONMENTAL, ENGINEERING & SCIENCE

Date: June 30, 2025

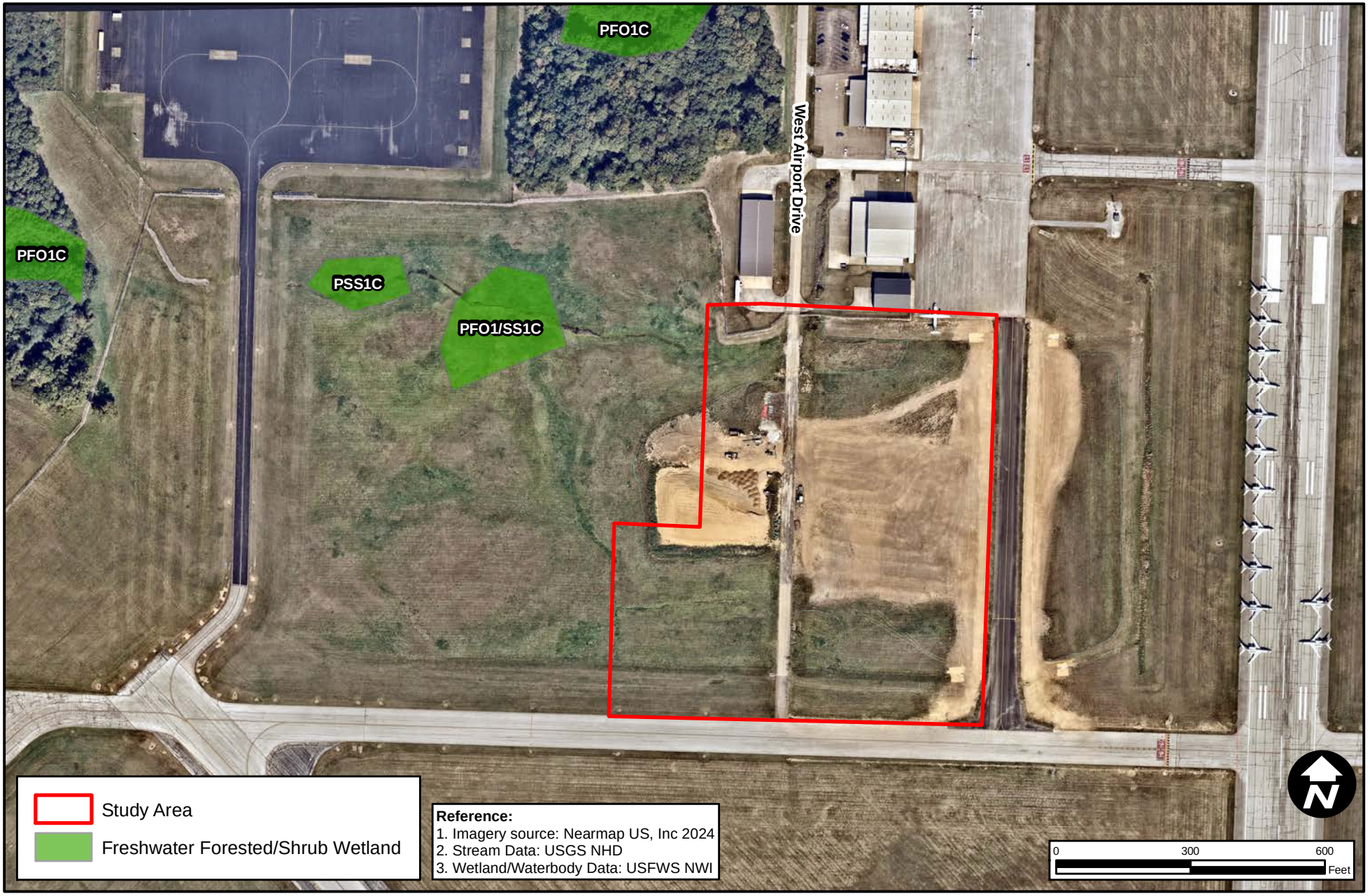

Figure 3

USFWS NWI AND USGS NHD MAP

CAK West Side Hanger Development
North Canton, Summit County, Ohio

STONE ENVIRONMENTAL, ENGINEERING & SCIENCE

Project: 24-1238-005

Date: June 30, 2025

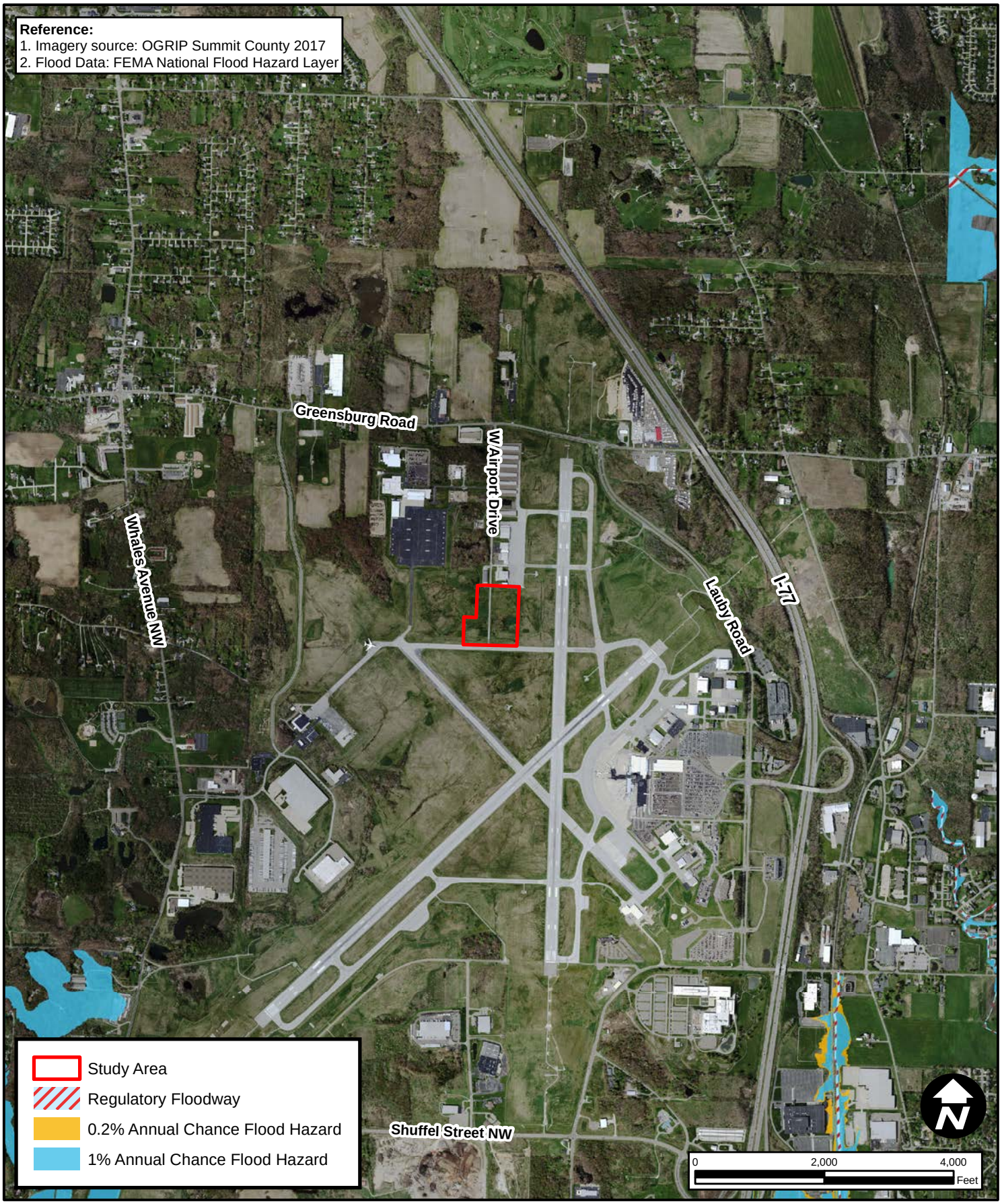

Figure 4

FEMA NFHZ MAP

CAK West Side Hanger Development
North Canton, Summit County, Ohio

STONE ENVIRONMENTAL, ENGINEERING & SCIENCE

Project: 24-1238-005

Date: June 30, 2025

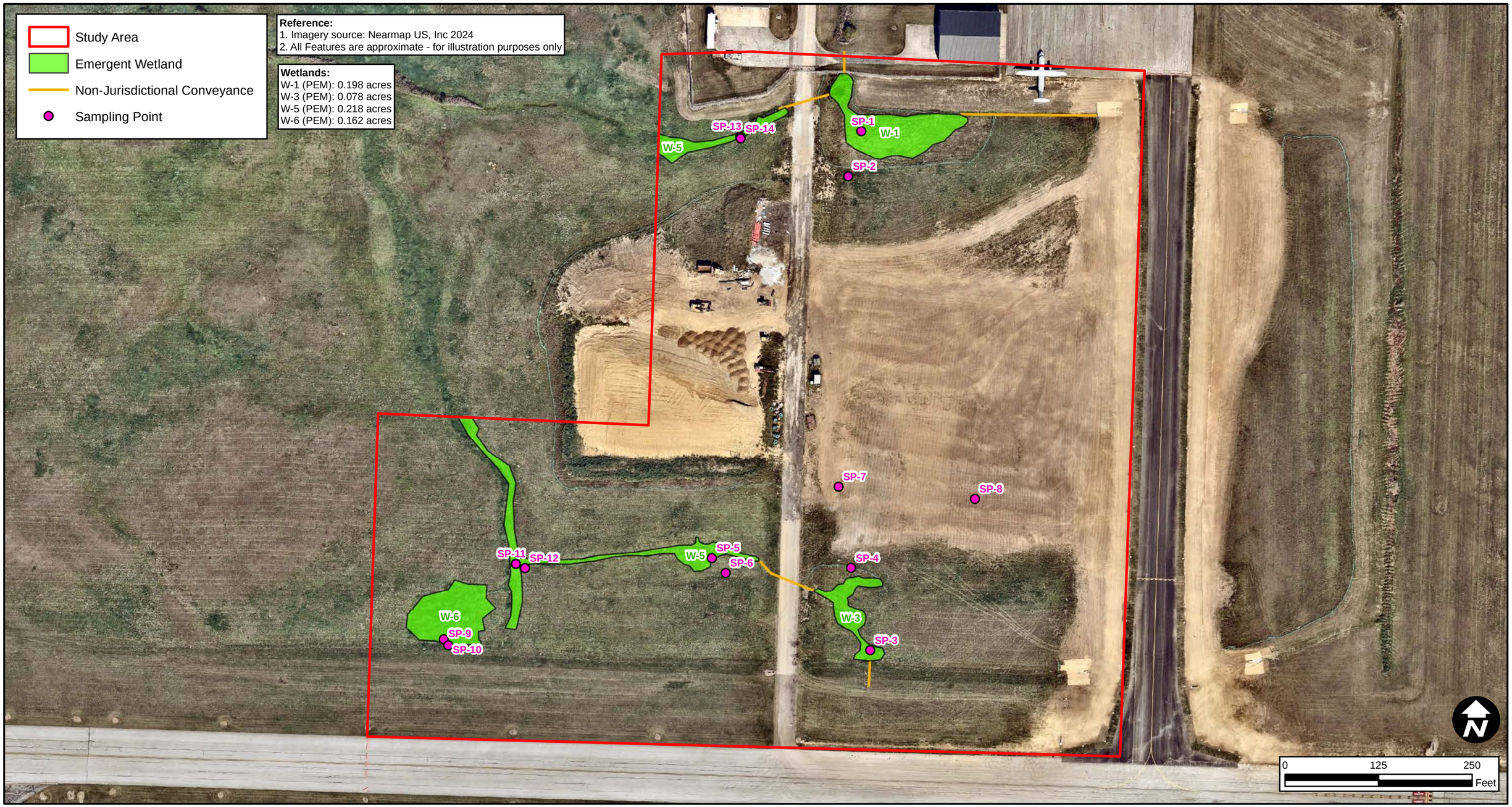

Figure 5	**JURISDICTIONAL WATERS MAP** CAK West Side Hanger Development North Canton, Summit County, Ohio	STONE ENVIRONMENTAL, ENGINEERING & SCIENCE
Project: 24-1238-005		Date: June 30, 2025

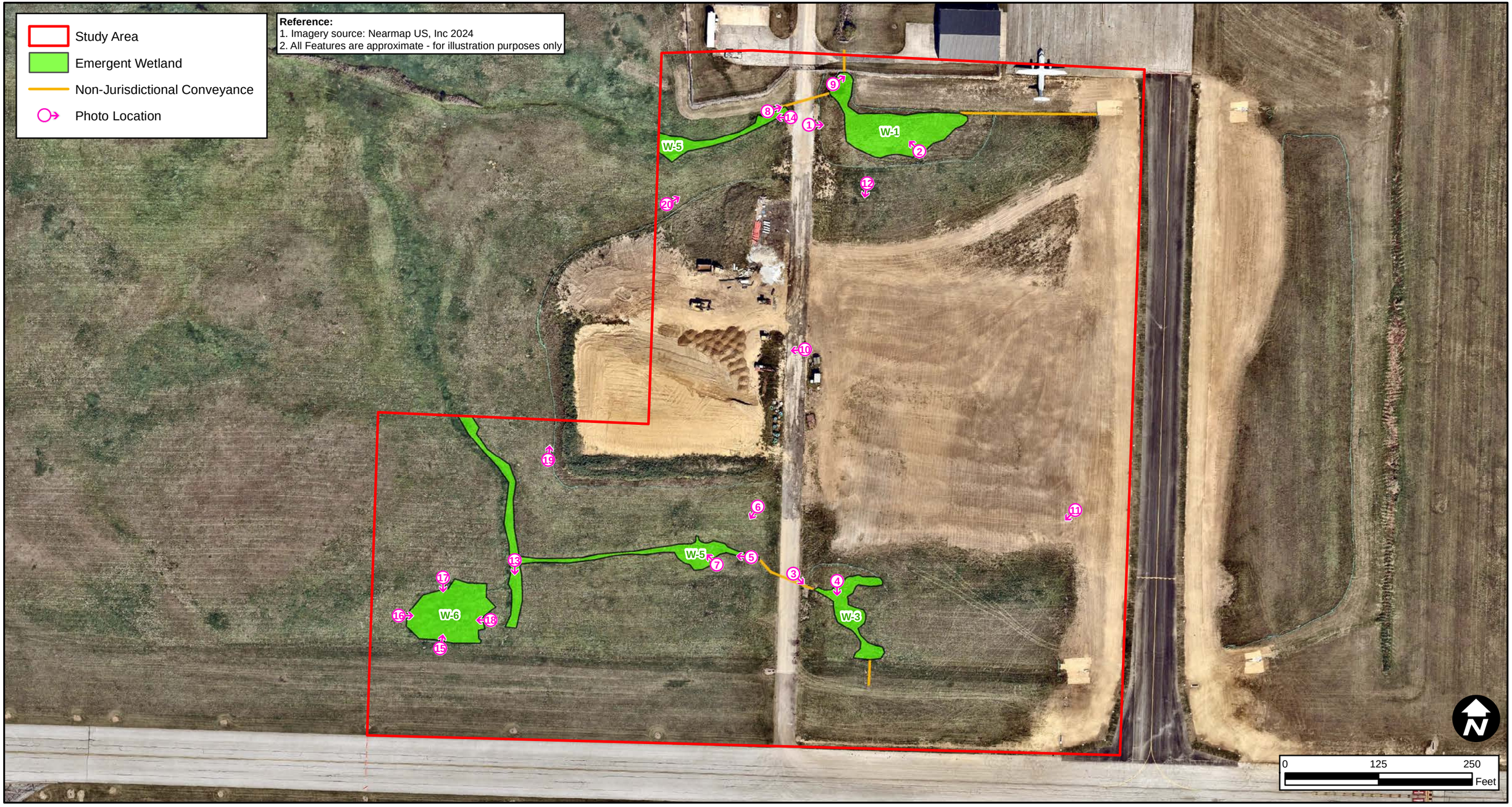

Figure 6	**PHOTO LOCATIONS MAP** CAK West Side Hanger Development North Canton, Summit County, Ohio	STONE ENVIRONMENTAL, ENGINEERING & SCIENCE
Project: 24-1238-005		Date: June 30, 2025

APPENDIX B

1 – W-1 (PEM), looking east.

2 – W-1 (PEM), looking west.

3 – W-3 (PEM), looking east.

4 – W-3 (PEM), looking south.

5 – W-5 (PEM), looking west.

6 – W-5 (PEM), looking southwest.

7 – W-5 (PEM), vegetation.

8 – Culvert under West Airport Drive to W-1 (PEM).

9 – Culvert inlet connecting W-1 (PEM) to drainage ditches.

10 – Stockpiled topsoil, west of West Airport Drive, facing west.

11 – Upland area in the southeastern portion of the site, facing southwest.

12 – Upland area in the northwestern portion of the site, facing south.

13 – W-5 (PEM) in the central portion of the study area, facing south.

14 – W-5 (PEM) in the northern portion of the study area, facing west.

15 – W-6 (PEM), facing north.

16 – W-6 (PEM), facing east.

17 – W-6 (PEM), facing south.

18 – W-6 (PEM), facing west.

19 – Area southwest of the stockpiled soil, facing north.

20 – Area north of the stockpiled soil, facing northeast.

APPENDIX C

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CAK West Side Hanger Development City/County: Canton/Summit County Sampling Date: 2025-02-04

Applicant/Owner: CAK State: Ohio Sampling Point: 1

Investigator(s): Alex Brown (STONE) Section, Township, Range: S26 T12N R9W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1

Subregion (LRR or MLRA): R 139 Lat: 40.9229 Long: -81.4442 Datum: NAD 83

Soil Map Unit Name: Sb - Sebring silt loam, 0 to 2 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No ____	**Is the Sampled Area within a Wetland?** **Yes ✔** **No ____**
Hydric Soil Present?	Yes ✔	No ____	
Wetland Hydrology Present?	Yes ✔	No ____	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

W-1 (PEM)Snow melt appeared to contribute to hydrology.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ✔ Surface Water (A1)
- ✔ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ✔ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✔ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✔ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✔	No ____	Depth (inches): 1
Water Table Present?	Yes ✔	No ____	Depth (inches): 3
Saturation Present? (includes capillary fringe)	Yes ✔	No ____	Depth (inches): 0

Wetland Hydrology Present? Yes ✔ No ____

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: 1

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Phragmites australis	30	✔	FACW
2. Phalaris arundinacea	25	✔	FACW
3. Juncus effusus	15		OBL
4. Carex granularis	10		FACW
5. Poa pratensis	10		FACU
6. Festuca rubra	5		FACU
7. Symphyotrichum lateriflorum	5		FAC
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15	
FACW species	65	x 2 =	130	
FAC species	5	x 3 =	15	
FACU species	15	x 4 =	60	
UPL species	0	x 5 =	0	
Column Totals:	100	(A)	220	(B)

Prevalence Index = B/A = 2.20

Hydrophytic Vegetation Indicators:

✔ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

✔ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

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

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ✔ **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 2	10YR 3/2	100					Silty Clay Loam	
3 - 12	10YR 3/1	95	10YR 3/4	5	C	M	Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✔ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CAK West Side Hanger Development City/County: Canton/Summit County Sampling Date: 2025-02-04

Applicant/Owner: CAK State: Ohio Sampling Point: 2

Investigator(s): Alex Brown (STONE) Section, Township, Range: S26 T12N R9W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1

Subregion (LRR or MLRA): R 139 Lat: 40.9227 Long: -81.4443 Datum: NAD 83

Soil Map Unit Name: Sb - Sebring silt loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes ✔	No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks: (Explain alternative procedures here or in a separate report.)

Upland sampling point for W-1 (PEM)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: 2

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Poa pratensis	40	✔	FACU
2. Festuca rubra	30	✔	FACU
3. Daucus carota	15		UPL
4. Cirsium arvense	5		FACU
5. Symphyotrichum pilosum	5		FACU
6. Trifolium repens	5		FACU
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	85	x 4 =	340
UPL species	15	x 5 =	75
Column Totals:	100 (A)		415 (B)

Prevalence Index = B/A = 4.15

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

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

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ____ No ✔

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 3	10YR 4/4	100					Silty Clay Loam	
4 - 12	10YR 5/1	85	10YR 5/4	15	C	M	Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CAK West Side Hanger Development City/County: Canton/Summit County Sampling Date: 2025-02-04

Applicant/Owner: CAK State: Ohio Sampling Point: 3

Investigator(s): Alex Brown (STONE) Section, Township, Range: S26 T12N R9W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 0

Subregion (LRR or MLRA): R 139 Lat: 40.9211 Long: -81.4442 Datum: NAD 83

Soil Map Unit Name: Uf - Udorthents, sanitary landfill NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No ____	**Is the Sampled Area within a Wetland?** Yes ✔ No ____
Hydric Soil Present?	Yes ✔	No ____	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes ✔	No ____	

Remarks: (Explain alternative procedures here or in a separate report.)

W-3 (PEM)Snow melt appeared to contribute to hydrology.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ✔ Surface Water (A1)
- ✔ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✔ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✔ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✔	No ____	Depth (inches): 0.5
Water Table Present?	Yes ✔	No ____	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes ✔	No ____	Depth (inches): 0

Wetland Hydrology Present? Yes ✔ No ____

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: 3

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Lysimachia nummularia	30	✔	FACW
2. Poa pratensis	25	✔	FACU
3. Carex granularis	20	✔	FACW
4. Rumex crispus	15		FAC
5. Festuca rubra	10		FACU
6.			FACW
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.66 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	50	x 2 =	100
FAC species	15	x 3 =	45
FACU species	35	x 4 =	140
UPL species	0	x 5 =	0
Column Totals:	100 (A)		285 (B)

Prevalence Index = B/A = 2.85

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

✔ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

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

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ✔ **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 3	10YR 4/2	100					Silty Clay Loam	
4 - 12	10YR 5/1	70	10YR 5/4	30	C	M	Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CAK West Side Hanger Development City/County: Canton/Summit County Sampling Date: 2025-02-04

Applicant/Owner: CAK State: Ohio Sampling Point: 4

Investigator(s): Alex Brown (STONE) Section, Township, Range: S26 T12N R9W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1

Subregion (LRR or MLRA): R 139 Lat: 40.9213 Long: -81.4443 Datum: NAD 83

Soil Map Unit Name: BgA - Bogart loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

Upland sampling point for W-3 (PEM)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: 4

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Poa pratensis	50	✔	FACU
2. Festuca rubra	30	✔	FACU
3. Daucus carota	10		UPL
4. Glechoma hederacea	5		FACU
5. Prunella vulgaris	5		FAC
6. Cirsium arvense	5		FACU
7.			
8.			
9.			
10.			
11.			
12.			
	105 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	90	x 4 =	360
UPL species	10	x 5 =	50
Column Totals:	105 (A)		425 (B)

Prevalence Index = B/A = 4.04

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

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

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✔

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 16	10YR 2/2	100					Silt Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CAK West Side Hanger Development City/County: Canton/Summit County Sampling Date: 2025-02-04

Applicant/Owner: CAK State: Ohio Sampling Point: 5

Investigator(s): Alex Brown (STONE) Section, Township, Range: S26 T12N R9W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 0

Subregion (LRR or MLRA): R 139 Lat: 40.9213 Long: -81.4449 Datum: NAD 83

Soil Map Unit Name: BgA - Bogart loam, 0 to 2 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No ____	**Is the Sampled Area within a Wetland?** **Yes ✔** **No ____**
Hydric Soil Present?	Yes ✔	No ____	
Wetland Hydrology Present?	Yes ✔	No ____	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

W-5 (PEM)Snow melt appeared to contribute to hydrology.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ✔ Surface Water (A1)
- ✔ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✔ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ✔ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✔ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✔ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✔	No ____	Depth (inches): 2
Water Table Present?	Yes ✔	No ____	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes ✔	No ____	Depth (inches): 0

Wetland Hydrology Present? Yes ✔ No ____

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: 5

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Lysimachia nummularia	35	✔	FACW
2. Poa trivialis	15	✔	FACW
3. Festuca rubra	15	✔	FACU
4. Symphyotrichum lateriflorum	10		FAC
5. Rumex crispus	10		FAC
6. Phalaris arundinacea	10		FACW
7.			
8.			
9.			
10.			
11.			
12.			
	95 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.66 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	60	x 2 =	120
FAC species	20	x 3 =	60
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	95 (A)		240 (B)

Prevalence Index = B/A = 2.52

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

✔ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ✔ **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 4	10YR 3/3	100					Sandy Clay Loam	
5 - 12	10YR 5/1	95	10YR 5/4	5	C	M	Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CAK West Side Hanger Development City/County: Canton/Summit County Sampling Date: 2025-02-04

Applicant/Owner: CAK State: Ohio Sampling Point: 6

Investigator(s): Alex Brown (STONE) Section, Township, Range: S26 T12N R9W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 0

Subregion (LRR or MLRA): R 139 Lat: 40.921316 Long: -81.444933 Datum: NAD 83

Soil Map Unit Name: BgA - Bogart loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

Upland sampling point for W-5 (PEM)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: 6

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Poa pratensis	70	✔	FACU
2. Festuca rubra	30	✔	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

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

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 14	10YR 2/2	100					Silt Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CAK West Side Hanger Development City/County: Canton/Summit County Sampling Date: 2025-02-04

Applicant/Owner: CAK State: Ohio Sampling Point: 7

Investigator(s): Alex Brown (STONE) Section, Township, Range: S26 T12N R9W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1

Subregion (LRR or MLRA): R 139 Lat: 40.9216 Long: -81.4443 Datum: NAD 83

Soil Map Unit Name: BgA - Bogart loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil ✔, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes ✔	No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks: (Explain alternative procedures here or in a separate report.)

Upland sampling pointArea previously filled/disturbed

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: 7

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Poa pratensis	45	✔	FACU
2. Festuca rubra	35	✔	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	80 (A)		320 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

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

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ____ No ✔

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 4	10YR 3/3	100					Silty Clay Loam	
5 - 12	10YR 5/1	85	10YR 5/4	15	C	M	Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CAK West Side Hanger Development City/County: Canton/Summit County Sampling Date: 2025-02-04

Applicant/Owner: CAK State: Ohio Sampling Point: 8

Investigator(s): Alex Brown (STONE) Section, Township, Range: S26 T12N R9W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 0

Subregion (LRR or MLRA): R 139 Lat: 40.9215 Long: -81.4437 Datum: NAD 83

Soil Map Unit Name: BgA - Bogart loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil ✔, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes ✔	No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks: (Explain alternative procedures here or in a separate report.)

Upland sampling pointArea previously filled/disturbed

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: 8

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Herb Stratum (Plot size: 5 ft r)			
1. Poa pratensis	45	✔	FACU
2. Festuca rubra	35	✔	FACU
3. Rumex crispus	5		FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	85 = Total Cover		

Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	85 (A)		335 (B)

Prevalence Index = B/A = 3.94

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

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

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✔

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 2	10YR 3/3	100					Sandy Clay Loam	
3 - 6	10YR 5/1	85	10YR 5/4	15	C	M	Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Gravel

Depth (inches): 7

Hydric Soil Present? Yes ✔ No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CAK West Side Hanger Development City/County: Canton/Summit County Sampling Date: 2025-06-18

Applicant/Owner: CAK State: Ohio Sampling Point: 9

Investigator(s): Alex Brown (STONE) Section, Township, Range: S35 T12N R9W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1

Subregion (LRR or MLRA): R 139 Lat: 40.921085 Long: -81.446299 Datum: NAD 83

Soil Map Unit Name: Uf - Udorthents, sanitary landfill NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No ____	**Is the Sampled Area within a Wetland?** **Yes ✔** **No ____**
Hydric Soil Present?	Yes ✔	No ____	
Wetland Hydrology Present?	Yes ✔	No ____	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

W-6 (PEM)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ✔ Surface Water (A1)
- ✔ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✔ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✔ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✔ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✔	No ____	Depth (inches): 2
Water Table Present?	Yes ✔	No ____	Depth (inches): 12
Saturation Present? (includes capillary fringe)	Yes ✔	No ____	Depth (inches): 0

Wetland Hydrology Present? Yes ✔ No ____

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: 9

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Herb Stratum (Plot size: 5 ft r)			
1. Lysimachia nummularia	35	✔	FACW
2. Phalaris arundinacea	30	✔	FACW
3. Carex vulpinoidea	10		OBL
4. Juncus effusus	5		OBL
5. Symphyotrichum lateriflorum	5		FAC
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	85 = Total Cover		

Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	65	x 2 =	130
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	85 (A)		160 (B)

Prevalence Index = B/A = 1.88

Hydrophytic Vegetation Indicators:

✔ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

✔ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

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

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ✔ **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 12	10YR 2/2	95	10YR 4/6	5	C	M	Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✔ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CAK West Side Hanger Development City/County: Canton/Summit County Sampling Date: 2025-06-18

Applicant/Owner: CAK State: Ohio Sampling Point: 10

Investigator(s): Alex Brown (STONE) Section, Township, Range: S35 T12N R9W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 3

Subregion (LRR or MLRA): R 139 Lat: 40.921062 Long: -81.446278 Datum: NAD 83

Soil Map Unit Name: Uf - Udorthents, sanitary landfill NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

Upland sampling point for W-6 (PEM)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: 10

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Poa pratensis	35	✔	FACU
2. Festuca rubra	25	✔	FACU
3. Fragaria virginiana	15		FACU
4. Glechoma hederacea	10		FACU
5. Convolvulus arvensis	5		
6. Cirsium arvense	2		FACU
7.			
8.			
9.			
10.			
11.			
12.			
	92 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	87	x 4 =	348
UPL species	0	x 5 =	0
Column Totals:	87 (A)		348 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

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

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✔

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 6	10YR 3/3	100					Silty Clay Loam	
6 - 16	10YR 4/3	60	10YR 4/6	20	C	M	Silty Clay Loam	
6 - 16			10YR 5/4	20	C	M	Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CAK West Side Hanger Development City/County: Canton/Summit County Sampling Date: 2025-06-18

Applicant/Owner: CAK State: Ohio Sampling Point: 11

Investigator(s): Alex Brown (STONE) Section, Township, Range: S35 T12N R9W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 0

Subregion (LRR or MLRA): R 139 Lat: 40.921358 Long: -81.445946 Datum: NAD 83

Soil Map Unit Name: BgA - Bogart loam, 0 to 2 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** **Yes ✔** **No _____**
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes ✔	No _____	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

W-5 (PEM)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ✔ Surface Water (A1)
- ✔ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ✔ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✔ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✔ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✔ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✔	No _____	Depth (inches): 4
Water Table Present?	Yes ✔	No _____	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes ✔	No _____	Depth (inches): 0

Wetland Hydrology Present? Yes ✔ No _____

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: 11

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Herb Stratum (Plot size: 5 ft r)			
1. Phalaris arundinacea	40	✔	FACW
2. Juncus effusus	10		OBL
3. Polygonum hydropiperoides	5		
4. Alisma subcordatum	2		OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	57 = Total Cover		

Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	12	x 1 =	12
FACW species	40	x 2 =	80
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	52 (A)		92 (B)

Prevalence Index = B/A = 1.76

Hydrophytic Vegetation Indicators:

✔ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

✔ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

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

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ✔ **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 12	10YR 2/2	95	10YR 4/6	5	C	M	Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✔ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CAK West Side Hanger Development City/County: Canton/Summit County Sampling Date: 2025-06-18

Applicant/Owner: CAK State: Ohio Sampling Point: 12

Investigator(s): Alex Brown (STONE) Section, Township, Range: S35 T12N R9W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 2

Subregion (LRR or MLRA): R 139 Lat: 40.921342 Long: -81.445903 Datum: NAD 83

Soil Map Unit Name: BgA - Bogart loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✔ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✔

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks: (Explain alternative procedures here or in a separate report.)

Upland point for W-5 (PEM)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: 12

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Herb Stratum (Plot size: 5 ft r)			
1. Festuca rubra	35	✔	FACU
2. Poa pratensis	30	✔	FACU
3. Plantago lanceolata	15		FACU
4. Taraxacum officinale	10		FACU
5. Daucus carota	5		UPL
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	95 = Total Cover		

Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:
OBL species	0	x 1 = 0
FACW species	0	x 2 = 0
FAC species	0	x 3 = 0
FACU species	90	x 4 = 360
UPL species	5	x 5 = 25
Column Totals:	95 (A)	385 (B)

Prevalence Index = B/A = 4.05

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

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

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✔

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 6	10YR 4/4	100					Silty Clay Loam	
6 - 14	10YR 4/4	70	10YR 4/6	15	C	M	Silty Clay Loam	
6 - 14			10YR 4/1	15	D	M	Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CAK West Side Hanger Development City/County: Canton/Summit County Sampling Date: 2025-06-18

Applicant/Owner: CAK State: Ohio Sampling Point: 13

Investigator(s): Alex Brown (STONE) Section, Township, Range: S26 T12N R9W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 0

Subregion (LRR or MLRA): R 139 Lat: 40.922915 Long: -81.444838 Datum: NAD 83

Soil Map Unit Name: Sb - Sebring silt loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✔ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✔

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** **Yes ✔** **No _____**
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes ✔	No _____	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

W-5 (PEM)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ✔ Surface Water (A1)
- ✔ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ✔ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✔ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ✔ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✔ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✔	No _____	Depth (inches): 12
Water Table Present?	Yes ✔	No _____	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes ✔	No _____	Depth (inches): 0

Wetland Hydrology Present? Yes ✔ No _____

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: 13

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Phalaris arundinacea	40	✔	FACW
2. Persicaria hydropiperoides	35	✔	OBL
3. Carex frankii	20		OBL
4. Typha angustifolia	10		OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	105 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	65	x 1 =	65
FACW species	40	x 2 =	80
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	105 (A)		145 (B)

Prevalence Index = B/A = 1.38

Hydrophytic Vegetation Indicators:

✔ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

✔ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

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

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ✔ **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 12	10YR 2/1	95	10YR 4/6	5	C	M	Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✔ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CAK West Side Hanger Development City/County: Canton/Summit County Sampling Date: 2025-06-18

Applicant/Owner: CAK State: Ohio Sampling Point: 14

Investigator(s): Alex Brown (STONE) Section, Township, Range: S26 T12N R9W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 0

Subregion (LRR or MLRA): R 139 Lat: 40.922908 Long: -81.444836 Datum: NAD 83

Soil Map Unit Name: Sb - Sebring silt loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✔ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✔

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks: (Explain alternative procedures here or in a separate report.)

Upland point for W-5 (PEM)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: 14

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Herb Stratum (Plot size: 5 ft r)			
1. Festuca rubra	35	✔	FACU
2. Poa pratensis	25	✔	FACU
3. Phalaris arundinacea	15		FACW
4. Plantago lanceolata	10		FACU
5. Cirsium arvense	5		FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90 = Total Cover		

Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	75	x 4 =	300
UPL species	0	x 5 =	0
Column Totals:	90 (A)		330 (B)

Prevalence Index = B/A = 3.66

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

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

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✔

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 6	10YR 4/3	100					Silty Clay Loam	
6 - 16	10YR 4/3	90	10YR 5/4	10	C	M	Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

Background Information

Name:	Alex Brown
Date:	02/04/2025
Affiliation:	Stone Environmental Engineering & Science
Address:	3700 Corporate Drive, Suite 125, Columbus, Ohio 43231
Phone Number:	(614) 865-1874
e-mail address:	alexbrown@stoneenvironmental.com
Name of Wetland:	W-1
Vegetation Communit(ies):	PEM
HGM Class(es):	Depression

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

Refer to PJWD report

Lat/Long or UTM Coordinate	40.9229°N -81.4442°W
USGS Quad Name	North Canton
County	Summit
Township	City of Green
Section and Subsection	S26 T12N R9W
Hydrologic Unit Code	N/A
Site Visit	02/04/2025
National Wetland Inventory Map	refer to report
Ohio Wetland Inventory Map	N/A
Soil Survey	refer to report
Delineation report/map	refer to report

Name of Wetland: W-1	
Wetland Size (acres, hectares):	0.198 acres

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

Refer to PJWD report

*Delineated acreage in study area -- estimated total wetland area: 0.198 acres.

Comments, Narrative Discussion, Justification of Category Changes:

Refer to PJWD report

Final score : 13.5	**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.

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), http://www.dnr.state.oh.us/dnap . The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

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

8b	**Mature forested wetlands**. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES ☐ Wetland should be evaluated for possible Category 3 status. Go to Question 9a	NO ☑ Go to Question 9a
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 elevation, or along a tributary to Lake Erie that is accessible to fish?	YES ☐ Go to Question 9b	NO ☑ Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES ☐ Wetland should be evaluated for possible Category 3 status Go to Question 10	NO ☐ Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES ☐ Go to Question 9d	NO ☐ Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES ☐ Wetland is a Category 3 wetland Go to Question 10	NO ☐ Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES ☐ Wetland should be evaluated for possible Category 3 status Go to Question 10	NO ☐ Go to Question 10
10	**Lake Plain Sand Prairies (Oak Openings)** Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES ☐ Wetland is a Category 3 wetland. Go to Question 11	NO ☑ Go to Question 11
11	**Relict Wet Prairies**. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES ☐ Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	NO ☑ 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: CAK West Side Hanger Development	Rater(s): AB	Date: 02/04/2025

Metric 1. Wetland Area (size).

1 (max 6 pts.) | 1 (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)
- [x] 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.

1.5 (max 14 pts.) | 2.5 (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)
- [x] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average. Please enter score.

1.5

- [ ] 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)
- [x] 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.

6 (max 30 pts.) | 8.5 (subtotal)

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [ ] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [ ] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [x] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

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)
- [x] <0.4m (<15.7in) (1)

3d. Duration inundation/saturation. Score one or dbl check.

2

- [ ] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [x] Seasonally inundated (2)
- [ ] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average. Please enter score.

1 (metric 3e average)

- [ ] None or none apparent (12)
- [ ] Recovered (7)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [x] ditch
- [ ] tile
- [ ] dike
- [ ] weir
- [ ] stormwater input
- [ ] point source (nonstormwater)
- [x] filling/grading
- [ ] road bed/RR track
- [ ] dredging
- [ ] other_____

Metric 4. Habitat Alteration and Development.

6 (max 20 pts.) | 14.5 (subtotal)

4a. Substrate disturbance. Score one or double check and average. Please enter score.

2 (metric 4a average)

- [ ] None or none apparent (4)
- [ ] Recovered (3)
- [x] 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)
- [x] Poor (1)

4c. Habitat alteration. Score one or double check and average. Please enter score.

3 (metric 4c average)

- [ ] None or none apparent (9)
- [ ] Recovered (6)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [x] mowing
- [ ] grazing
- [ ] clearcutting
- [ ] selective cutting
- [ ] woody debris removal
- [ ] toxic pollutants
- [ ] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [ ] sedimentation
- [ ] dredging
- [ ] farming
- [ ] nutrient enrichment

14.5 (subtotal this page)

last revised 1 February 2001 jjm

ORAM v. 5.0 Field Form Quantitative Rating

Site: CAK West Side Hanger Development	Rater(s): AB	Date: 02/04/2025

14.5
subtotal first page

Metric 5. Special Wetlands.

0 (max 10 pts.) | 14.5 (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, microtopography.

-1 (max 20 pts.) | 13.5 (subtotal)

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic bed
- [1] Emergent
- [ ] Shrub
- [ ] Forest
- [ ] Mudflats
- [ ] Open water
- [ ] Other_____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high(4)
- [ ] Moderate (3)
- [ ] 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

Phragmites australis

- [ ] 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

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	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 either 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, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	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
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

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 and of highest quality

13.5
Final Score

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet W-1

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES ☐ NO ☑	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES ☐ NO ☑	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES ☐ NO ☑	If yes, Category 3.
	Question 4. Significant bird habitat	YES ☐ NO ☑	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES ☑ NO ☐	If yes, Category 1.
	Question 6. Bogs	YES ☐ NO ☑	If yes, Category 3.
	Question 7. Fens	YES ☐ NO ☑	If yes, Category 3.
	Question 8a. Old Growth Forest	YES ☐ NO ☑	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES ☐ NO ☑	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES ☐ NO ☐	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES ☐ NO ☐	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES ☐ NO ☐	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES ☐ NO ☑	If yes, Category 3
	Question 11. Relict Wet Prairies	YES ☐ NO ☑	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	1	
	Metric 2. Buffers and surrounding land use	1.5	
	Metric 3. Hydrology	6	
	Metric 4. Habitat	6	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-1	
	TOTAL SCORE	13.5	Category based on score breakpoints 1

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES ☐ Wetland is categorized as a Category 3 wetland	NO ☑	Is quantitative rating score *less* than the Category 2 scoring threshold (*excluding* gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-categorized 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 *greater* than the Category 2 scoring threshold *(including* 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?	YES ☑ 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	NO ☑ 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
	☑	☐	☐

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name:	Alex Brown
Date:	02/04/2025
Affiliation:	Stone Environmental Engineering & Science
Address:	3700 Corporate Drive, Suite 125, Columbus, Ohio 43231
Phone Number:	(614) 865-1874
e-mail address:	alexbrown@stoneenvironmental.com
Name of Wetland:	W-3
Vegetation Communit(ies):	PEM
HGM Class(es):	Depression

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

Refer to PJWD report

Lat/Long or UTM Coordinate	40.9211°N -81.4442°W
USGS Quad Name	North Canton
County	Summit
Township	City of Green
Section and Subsection	S26 T12N R9W
Hydrologic Unit Code	N/A
Site Visit	02/04/2025
National Wetland Inventory Map	refer to report
Ohio Wetland Inventory Map	N/A
Soil Survey	refer to report
Delineation report/map	refer to report

Name of Wetland: W-3	
Wetland Size (acres, hectares):	0.078 acres

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

Refer to PJWD report

*Delineated acreage in study area -- estimated total wetland area: 0.078 acres.

Comments, Narrative Discussion, Justification of Category Changes:

Refer to PJWD report

Final score : 21 **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.

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), http://www.dnr.state.oh.us/dnap . The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

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

8b	**Mature forested wetlands**. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES ☐ Wetland should be evaluated for possible Category 3 status. Go to Question 9a	NO ☑ Go to Question 9a
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 elevation, or along a tributary to Lake Erie that is accessible to fish?	YES ☐ Go to Question 9b	NO ☑ Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES ☐ Wetland should be evaluated for possible Category 3 status Go to Question 10	NO ☐ Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES ☐ Go to Question 9d	NO ☐ Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES ☐ Wetland is a Category 3 wetland Go to Question 10	NO ☐ Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES ☐ Wetland should be evaluated for possible Category 3 status Go to Question 10	NO ☐ Go to Question 10
10	**Lake Plain Sand Prairies (Oak Openings)** Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES ☐ Wetland is a Category 3 wetland. Go to Question 11	NO ☑ Go to Question 11
11	**Relict Wet Prairies**. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES ☐ Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	NO ☑ 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: CAK West Side Hanger Development	**Rater(s):** AB	**Date:** 02/04/2025

Metric 1. Wetland Area (size).

0 (max 6 pts.) | 0 (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)
- [x] <0.1 acres (0.04ha) (0 pts)

Metric 2. Upland buffers and surrounding land use.

3 (max 14 pts.) | 3 (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)
- [x] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average. Please enter score.

3.0 (metric 2b 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)
- [x] 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.

7 (max 30 pts.) | 10 (subtotal)

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [ ] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [ ] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [x] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

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)
- [x] <0.4m (<15.7in) (1)

1

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [ ] Seasonally inundated (2)
- [x] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average. Please enter score.

3 (metric 3e average)

- [ ] None or none apparent (12)
- [ ] Recovered (7)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [x] ditch
- [ ] tile
- [ ] dike
- [ ] weir
- [ ] stormwater input
- [ ] point source (nonstormwater)
- [ ] filling/grading
- [ ] road bed/RR track
- [ ] dredging
- [ ] other_____

Metric 4. Habitat Alteration and Development.

8 (max 20 pts.) | 18 (subtotal)

4a. Substrate disturbance. Score one or double check and average. Please enter score.

4 (metric 4a average)

- [x] 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)
- [x] Poor (1)

Comments:

4c. Habitat alteration. Score one or double check and average. Please enter score.

3 (metric 4c average)

- [ ] None or none apparent (9)
- [ ] Recovered (6)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [x] mowing
- [ ] grazing
- [ ] clearcutting
- [ ] selective cutting
- [ ] woody debris removal
- [ ] toxic pollutants
- [ ] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [ ] sedimentation
- [ ] dredging
- [ ] farming
- [ ] nutrient enrichment
- [ ] other:

18 (subtotal this page)

last revised 1 February 2001 jjm

ORAM v. 5.0 Field Form Quantitative Rating

Site: CAK West Side Hanger Development	**Rater(s):** AB	**Date:** 02/04/2025

18
subtotal first page

Comments:

Metric 5. Special Wetlands.

0 max 10 pts. | 18 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, microtopography.

3 max 20 pts. | 21 subtotal

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic bed
- [1] Emergent
- [ ] Shrub
- [ ] Forest
- [ ] Mudflats
- [ ] Open water
- [ ] Other_____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high(4)
- [ ] Moderate (3)
- [ ] 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

1

- [ ] 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

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	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 either 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, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	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
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

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 and of highest quality

21
Final Score

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES ☐ NO ☑	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES ☐ NO ☑	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES ☐ NO ☑	If yes, Category 3.
	Question 4. Significant bird habitat	YES ☐ NO ☑	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES ☑ NO ☐	If yes, Category 1.
	Question 6. Bogs	YES ☐ NO ☑	If yes, Category 3.
	Question 7. Fens	YES ☐ NO ☑	If yes, Category 3.
	Question 8a. Old Growth Forest	YES ☐ NO ☑	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES ☐ NO ☑	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES ☐ NO ☐	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES ☐ NO ☐	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES ☐ NO ☐	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES ☐ NO ☑	If yes, Category 3
	Question 11. Relict Wet Prairies	YES ☐ NO ☑	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
	Metric 2. Buffers and surrounding land use	3	
	Metric 3. Hydrology	7	
	Metric 4. Habitat	8	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	3	
	TOTAL SCORE	21	Category based on score breakpoints: 1

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES ☐ Wetland is categorized as a Category 3 wetland	NO ☑	Is quantitative rating score *less* than the Category 2 scoring threshold (*excluding* gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-categorized 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 *greater* than the Category 2 scoring threshold *(including* 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?	YES ☑ 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	NO ☑ 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
	☑	☐	☐

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name:	Alex Brown
Date:	06/18/2025
Affiliation:	Stone Environmental Engineering & Science
Address:	3700 Corporate Drive, Suite 125, Columbus, Ohio 43231
Phone Number:	(614) 865-1874
e-mail address:	alexbrown@stoneenvironmental.com
Name of Wetland:	W-5
Vegetation Communit(ies):	PEM
HGM Class(es):	Depression

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

Refer to PJWD report

Lat/Long or UTM Coordinate	40.9213°N -81.4449°W
USGS Quad Name	North Canton
County	Summit
Township	City of Green
Section and Subsection	S26 T12N R9W
Hydrologic Unit Code	N/A
Site Visit	06/18/2025
National Wetland Inventory Map	refer to report
Ohio Wetland Inventory Map	N/A
Soil Survey	refer to report
Delineation report/map	refer to report

Name of Wetland: W-5	
Wetland Size (acres, hectares):	0.218 acre*

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

*Delineated acreage in study area

Total wetland area is estimated to be less than 2.0 acres

Comments, Narrative Discussion, Justification of Category Changes:

Refer to PJWD report

Final score : 19 **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.

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), http://www.dnr.state.oh.us/dnap . The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

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

8b	**Mature forested wetlands**. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES ☐ Wetland should be evaluated for possible Category 3 status. Go to Question 9a	NO ☑ Go to Question 9a
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 elevation, or along a tributary to Lake Erie that is accessible to fish?	YES ☐ Go to Question 9b	NO ☑ Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES ☐ Wetland should be evaluated for possible Category 3 status Go to Question 10	NO ☐ Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES ☐ Go to Question 9d	NO ☐ Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES ☐ Wetland is a Category 3 wetland Go to Question 10	NO ☐ Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES ☐ Wetland should be evaluated for possible Category 3 status Go to Question 10	NO ☐ Go to Question 10
10	**Lake Plain Sand Prairies (Oak Openings)** Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES ☐ Wetland is a Category 3 wetland. Go to Question 11	NO ☑ Go to Question 11
11	**Relict Wet Prairies**. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES ☐ Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	NO ☑ 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: CAK West Side Hanger Development	**Rater(s):** AB	**Date:** 06/18/2025

Metric 1. Wetland Area (size).

2 (max 6 pts.) | 2 (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)
- [x] 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.

3 (max 14 pts.) | 5 (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)
- [x] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average. Please enter score.

3.0 metric 2b 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)
- [x] 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.

7 (max 30 pts.) | 12 (subtotal)

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [ ] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [ ] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [x] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

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)
- [x] <0.4m (<15.7in) (1)

1

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [ ] Seasonally inundated (2)
- [x] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average. Please enter score.

3 metric 3e average

- [ ] None or none apparent (12)
- [ ] Recovered (7)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [ ] ditch
- [ ] tile
- [ ] dike
- [ ] weir
- [ ] stormwater input
- [ ] point source (nonstormwater)
- [ ] filling/grading
- [ ] road bed/RR track
- [ ] dredging
- [ ] other_____

Metric 4. Habitat Alteration and Development.

8 (max 20 pts.) | 20 (subtotal)

4a. Substrate disturbance. Score one or double check and average. Please enter score.

4 metric 4a average

- [x] 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)
- [x] Poor (1)

Comments:

4c. Habitat alteration. Score one or double check and average. Please enter score.

3 metric 4c average

- [ ] None or none apparent (9)
- [ ] Recovered (6)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [x] mowing
- [ ] grazing
- [ ] clearcutting
- [ ] selective cutting
- [ ] woody debris removal
- [ ] toxic pollutants
- [ ] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [ ] sedimentation
- [ ] dredging
- [ ] farming
- [ ] nutrient enrichment
- [ ] other:

20 subtotal this page

last revised 1 February 2001 jjm

ORAM v. 5.0 Field Form Quantitative Rating

Site: CAK West Side Hanger Development	**Rater(s):** AB	**Date:** 06/18/2025

20
subtotal first page

Comments:

Metric 5. Special Wetlands.

0 max 10 pts. | 20 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, microtopography.

-1 max 20 pts. | 19 subtotal

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic bed
- [1] Emergent
- [ ] Shrub
- [ ] Forest
- [ ] Mudflats
- [ ] Open water
- [ ] Other_____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high(4)
- [ ] Moderate (3)
- [ ] 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.

- [0] Vegetated hummucks/tussucks
- [0] Coarse woody debris >15cm (6in)
- [0] Standing dead >25cm (10in) dbh
- [1] Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	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 either 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, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	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
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

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 and of highest quality

19
Final Score

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

W-5

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES ☐ NO ☑	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES ☐ NO ☑	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES ☐ NO ☑	If yes, Category 3.
	Question 4. Significant bird habitat	YES ☐ NO ☑	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES ☑ NO ☐	If yes, Category 1.
	Question 6. Bogs	YES ☐ NO ☑	If yes, Category 3.
	Question 7. Fens	YES ☐ NO ☑	If yes, Category 3.
	Question 8a. Old Growth Forest	YES ☐ NO ☑	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES ☐ NO ☐	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES ☐ NO ☐	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES ☐ NO ☐	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES ☐ NO ☑	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES ☐ NO ☑	If yes, Category 3
	Question 11. Relict Wet Prairies	YES ☐ NO ☑	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	2	
	Metric 2. Buffers and surrounding land use	3	
	Metric 3. Hydrology	7	
	Metric 4. Habitat	8	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-1	
	TOTAL SCORE	19	Category based on score breakpoints: 1

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES ☐ Wetland is categorized as a Category 3 wetland	NO ☑	Is quantitative rating score *less* than the Category 2 scoring threshold (*excluding* gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-categorized 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 *greater* than the Category 2 scoring threshold *(including* 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?	YES ☑ 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	NO ☑ 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
	☑	☐	☐

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name:	Alex Brown
Date:	06/18/2025
Affiliation:	Stone Environmental Engineering & Science
Address:	3700 Corporate Drive, Suite 125, Columbus, Ohio 43231
Phone Number:	(614) 865-1874
e-mail address:	alexbrown@stoneenvironmental.com
Name of Wetland:	W-6
Vegetation Communit(ies):	PEM
HGM Class(es):	Depression

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

Refer to PJWD report

Lat/Long or UTM Coordinate	40.9210°N -81.4462°W
USGS Quad Name	North Canton
County	Summit
Township	City of Green
Section and Subsection	S26 T12N R9W
Hydrologic Unit Code	N/A
Site Visit	06/18/2025
National Wetland Inventory Map	refer to report
Ohio Wetland Inventory Map	N/A
Soil Survey	refer to report
Delineation report/map	refer to report

Name of Wetland: W-6	
Wetland Size (acres, hectares):	0.162 acre

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

Refer to PJWD report

Comments, Narrative Discussion, Justification of Category Changes:

Refer to PJWD report

Final score : 18 **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.

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), http://www.dnr.state.oh.us/dnap . The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

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

8b	**Mature forested wetlands**. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES ☐ Wetland should be evaluated for possible Category 3 status. Go to Question 9a	NO ☑ Go to Question 9a
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 elevation, or along a tributary to Lake Erie that is accessible to fish?	YES ☐ Go to Question 9b	NO ☑ Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES ☐ Wetland should be evaluated for possible Category 3 status Go to Question 10	NO ☐ Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES ☐ Go to Question 9d	NO ☐ Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES ☐ Wetland is a Category 3 wetland Go to Question 10	NO ☐ Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES ☐ Wetland should be evaluated for possible Category 3 status Go to Question 10	NO ☐ Go to Question 10
10	**Lake Plain Sand Prairies (Oak Openings)** Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES ☐ Wetland is a Category 3 wetland. Go to Question 11	NO ☑ Go to Question 11
11	**Relict Wet Prairies**. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES ☐ Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	NO ☑ 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: CAK West Side Hanger Development	**Rater(s):** AB	**Date:** 06/18/2025

Metric 1. Wetland Area (size).

1 (max 6 pts.) | 1 (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)
- [x] 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.

3 (max 14 pts.) | 4 (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)
- [x] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average. Please enter score.

3.0 (metric 2b 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)
- [x] 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.

7 (max 30 pts.) | 11 (subtotal)

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [ ] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [ ] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [x] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

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)
- [x] <0.4m (<15.7in) (1)

1

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [ ] Seasonally inundated (2)
- [x] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average. Please enter score.

3 (metric 3e average)

- [ ] None or none apparent (12)
- [ ] Recovered (7)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [ ] ditch
- [ ] tile
- [ ] dike
- [ ] weir
- [ ] stormwater input
- [ ] point source (nonstormwater)
- [ ] filling/grading
- [ ] road bed/RR track
- [ ] dredging
- [ ] other_____

Metric 4. Habitat Alteration and Development.

8 (max 20 pts.) | 19 (subtotal)

4a. Substrate disturbance. Score one or double check and average. Please enter score.

4 (metric 4a average)

- [x] 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)
- [x] Poor (1)

Comments:

4c. Habitat alteration. Score one or double check and average. Please enter score.

3 (metric 4c average)

- [ ] None or none apparent (9)
- [ ] Recovered (6)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [x] mowing
- [ ] grazing
- [ ] clearcutting
- [ ] selective cutting
- [ ] woody debris removal
- [ ] toxic pollutants
- [ ] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [ ] sedimentation
- [ ] dredging
- [ ] farming
- [ ] nutrient enrichment
- [ ] other:

19 (subtotal this page)

last revised 1 February 2001 jjm

ORAM v. 5.0 Field Form Quantitative Rating

Site: CAK West Side Hanger Development	**Rater(s):** AB	**Date:** 06/18/2025

19
subtotal first page

Comments:

Metric 5. Special Wetlands.

0 max 10 pts. | 19 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, microtopography.

-1 max 20 pts. | 18 subtotal

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic bed
- [1] Emergent
- [ ] Shrub
- [ ] Forest
- [ ] Mudflats
- [ ] Open water
- [ ] Other_____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high(4)
- [ ] Moderate (3)
- [ ] 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.

- [0] Vegetated hummucks/tussucks
- [0] Coarse woody debris >15cm (6in)
- [0] Standing dead >25cm (10in) dbh
- [1] Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	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 either 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, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	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
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

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 and of highest quality

18
Final Score

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES ☐ NO ☑	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES ☐ NO ☑	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES ☐ NO ☑	If yes, Category 3.
	Question 4. Significant bird habitat	YES ☐ NO ☑	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES ☑ NO ☐	If yes, Category 1.
	Question 6. Bogs	YES ☐ NO ☑	If yes, Category 3.
	Question 7. Fens	YES ☐ NO ☑	If yes, Category 3.
	Question 8a. Old Growth Forest	YES ☐ NO ☑	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES ☐ NO ☐	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES ☐ NO ☐	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES ☐ NO ☐	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES ☐ NO ☑	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES ☐ NO ☑	If yes, Category 3
	Question 11. Relict Wet Prairies	YES ☐ NO ☑	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	1	
	Metric 2. Buffers and surrounding land use	3	
	Metric 3. Hydrology	7	
	Metric 4. Habitat	8	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-1	
	TOTAL SCORE	18	Category based on score breakpoints: 1

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES ☐ Wetland is categorized as a Category 3 wetland	NO ☑	Is quantitative rating score *less* than the Category 2 scoring threshold (*excluding* gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-categorized 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 *greater* than the Category 2 scoring threshold *(including* 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?	YES ☑ 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	NO ☑ 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
	☑	☐	☐

End of Ohio Rapid Assessment Method for Wetlands.

APPENDIX D

Department of Natural Resources
ohiodnr.gov

Mike DeWine, *Governor*
Jon Husted, *Lt. Governor*
Mary Mertz, *Director*

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

January 15, 2025

Mark Heckroth
Clough, Harbour, & Associates Consulting, Inc.
1501 North Marginal Road, #200
Cleveland, Ohio 44114

Re: 24-1989_West Side Hangar Development

Project: The proposed project involves the development of a 12,000 square-foot hangar with associated vehicular parking, apron area, and utility improvements.

Location: The proposed project is located in Greensburg, Summit 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 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 Iowa darter *(Etheostoma exile),* a state endangered fish, the pugnose minnow (*Opsopoeodus emiliae*), a state endangered fish, the western banded killifish (*Fundulus diaphanus menona*), a state endangered fish, the lake chubsucker (*Erimyzon sucetta*), a state threatened fish, and the paddlefish (*Polyodon spathula*) a state threatened fish. The DOW recommends no in-water work in perennial streams from March 15 to 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 smooth greensnake (*Opheodrys vernalis*), a state endangered species. This species is primarily a prairie inhabitant, but also found in marshy meadows and roadside ditches. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the spotted turtle (*Clemmys guttata*), a state threatened species. This species prefers fens, bogs and marshes, but also is known to inhabit wet prairies, meadows, pond edges, wet woods, and the shallow sluggish waters of small streams and ditches. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus hudsonius*), 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.

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 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: 06/30/2025 21:45:50 UTC
Project Code: 2025-0116021
Project Name: CAK West Side Hanger Development

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 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.

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. Requests for additional technical assistance or consultation from the Ohio Field Office should be submitted following guidance on the following page https://www.fws.gov/office/ohio-ecological-services/request-project-review. 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: 2025-0116021
Project Name: CAK West Side Hanger Development
Project Type: Airport - New Construction
Project Description: The project site is being evaluated for future development.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.9225153,-81.44408939594015,14z

Counties: Summit County, Ohio

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 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* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered

CLAMS

NAME	STATUS
Salamander Mussel *Simpsonaias ambigua* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6208	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. 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

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APPENDIX E

Draft EA Comments

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