

UNIT 3 (PINs 15-44-211-000 and 15-44-453-000)
Farmed Wetland Delineation Report

Ottawa Industrial Park
City of Ottawa, LaSalle County, Illinois

Project 25-1792

November 20, 2025

230 Woodlawn Avenue
Aurora, Illinois 60506

City of Ottawa
301 West Madison Street
Ottawa, IL 61350

Table of Contents

SUMMARY	3
1.0 INTRODUCTION	5
2.0 METHODS.....	5
2.1 Map and Aerial Photograph Review	5
2.2 Field Survey	5
2.2.1Vegetation.....	5
2.2.2Soil.....	6
2.2.3Hydrology.....	6
2.3 Farmed Wetland Determination Procedures	6
3.0 PROJECT DESCRIPTION.....	7
4.0 MAP AND AERIAL PHOTOGRAPH REVIEW	7
4.1 Site Location (Vicinity) Map (Exhibit 1).....	7
4.2 Wetland Delineation Map (Exhibit 2)	7
4.3 National Wetland Inventory Map (Exhibit 3).....	7
4.4 FEMA Flood Insurance Rate Map (Exhibit 4)	8
4.5 NRCS Web Soil Survey Map (Exhibit 5)	8
4.6 Google Earth Historical Aerial Imagery (Exhibit 6).....	8
5.0 FIELD INVESTIGATION	8
Data Point U3DP-1 (WETLAND).....	9
Data Point U3DP-2 (WETLAND).....	9
Data Point U3DP-3 (WETLAND).....	9
Data Point U3DP-4 (UPLAND)	9
5.1 Crop Compliance Review and Results.....	10
6.0 CONCLUSIONS.....	11

EXHIBITS

Exhibit 1 - Site Location (Vicinity) Map
Exhibit 2 - Farmed Wetland Delineation Map
Exhibit 3 - National Wetland Inventory Map
Exhibit 4 - FEMA Flood Insurance Rate Map
Exhibit 5 - NRCS Web Soil Survey Map
Exhibit 6 - Google Earth Historic Aerial Imagery and Potential Wetland Areas

APPENDIX

Appendix A – USACE Midwest Regional Data Sheets
Appendix B – AgACIS WETS Table for Ottawa
Appendix C – Unit 3 Photolog

SUMMARY

Fehr Graham performed a wetland delineation within Unit 3 of the Ottawa Industrial Park project area in accordance with the United States Army Corp of Engineers (USACE) *Wetland Delineation Manual* (1987) and the *Midwest Regional Supplement to 1987 Wetland Delineation Manual* (2010).

This project location appears in aerial imagery to have been agricultural in nature since at least 1958. Due to the significantly disturbed vegetation of the location with planted crops, the significantly disturbed hydrology with underlying drain tiles, and the significantly disturbed soils through tillage practices, typical wetland indicators could not be fully utilized for the project. Aerial imagery from 1999 through 2024 was used to determine “potential wetland areas” (PWAs) to be investigated for hydric soil conditions. Investigators looked for discolorations, visible saturation, and changes in vegetation that are persistent in more than 50% of the aerial images reviewed to determine a potential wetland area.

Four locations were chosen within Unit 3 of the Ottawa Industrial Park as PWAs for soil investigation. Data Points 1 and 2 (U3DP-1 and U3DP-2) were in northern areas, Data Point 3 (U3DP-3) was more centrally located, and Data Point 4 (U3DP-4) was in an area on the southern portion of the parcel. The first three data point locations were chosen as areas being either greener or darker in color on the historic aerial images retrieved from Google Earth. Data Point 4 (U3DP-4) was chosen based on its proximity to the nearby stormwater retention basin. None of the areas investigated were listed on the United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI). There is a small, circular polygon identified as Freshwater Emergent Wetland (PEM1Af) on the NWI Mapper on the southeastern quadrant, but upon field investigation this turned out to be a small, raised rock outcropping that was vegetated with invasive upland, facultative, and facultative-upland species. Hydric soils were encountered at U3DP-1, U3DP-2, and U3DP-3, but not at the southernmost data point of U3DP-4.

The following table describes the wetland areas identified during the on-site delineation based on hydric soils encountered. The acreage estimation of each wetland is calculated by overlaying the historical aerial imagery of spectral signatures present in >50% of the available images to generate a “common and recurring” wetland presence polygon.

Wetland	Area (sq ft)	Area (acres)	Length (ft)	Type
U3DP-1	111,514	2.56	N/A	Farmed Wetland
U3DP-2	33,106	0.76	N/A	Farmed Wetland
U3DP-3	23,958	0.55	N/A	Farmed Wetland

Though the USACE Rock Island District has not performed an official Jurisdictional Determination (AJD), it is believed that none of the wetlands of the project area are jurisdictional under the latest ruling from *Sackett v. Environmental Protection Agency*, 598 U.S. (2023). This decision ruled that Clean Water Act jurisdiction over an adjacent wetland requires that the adjoining body of water constitutes Waters of the United States (a relatively permanent body of water connected to traditional interstate navigable waters) and a continuous surface connection exists between the wetland and that water. Wetlands under this decision qualify only if they are “indistinguishable” from the Waters of the United States, with no clear demarcation between waters and wetlands.

The hydric soil wetland areas around U3DP-1, U3DP-2, and U3DP-3 are enclosed depressions surrounded by upland areas, and they have no continuous surface connection to the nearby drainage ditches, southern retention pond, or other Waters of the United States (WOTUS). The wetlands appear

to be isolated and do not drain into the Illinois River to the south of the project area. Therefore, it has been determined that these wetland areas are unlikely to be jurisdictional wetlands under the definitions set by the U.S. Army Corps of Engineers (USACE) and would instead be classified as community wetlands. An official, Approved Jurisdictional Determination (AJD) from the Army Corp Rock Island District is recommended for this property prior to its sale and development.

1.0 INTRODUCTION

The City of Ottawa (Client) contracted Fehr Graham to perform a wetland delineation on Unit 3 of the Ottawa Industrial Park property. The property is located on the south side of US-6, with a railroad track running along the western boundary of the project parcels, in Ottawa, IL. The Subject Property has an approximate central latitude of N41.348648 and a longitude of W-88.785341 (Exhibit 1). This assessment aimed to determine the presence or absence of jurisdictional wetlands before potential sale and development of the property. Fieldwork for the project was completed on October 22, 2025, by Matthew Drabik and Kelsey Bird of Fehr Graham. Aerial Photograph analysis was completed on October 21 and October 30, 2025, by Matthew Drabik of Fehr Graham, in addition to all the subsequent data entry, documentation, and report preparation.

The project area consists of two (2) irregular-shaped parcels of land totaling approximately 70.19 acres in an industrial-zoned area of Ottawa, Illinois and is currently agricultural land. The parcel index numbers (PINs) associated with these plots are 15-44-211-000 and 15-44-453-000. This project area has been agricultural in use since at least 1958. The project area is surrounded to the west by agricultural land, to the east by agricultural land, to the north by US-6 and residential properties, and to the south by a retention pond, railroad line, and drainage ditch.

2.0 METHODS

Fehr Graham performed a wetland delineation in accordance with the *USACE Wetland Delineation Manual* (1987) and the *Midwest Regional Supplement to 1987 Wetland Delineation Manual* (2010). The scope of work performed by Fehr Graham staff includes all the items listed below.

2.1 Map and Aerial Photograph Review

A preliminary site evaluation was performed to identify the physical setting of the project area utilizing aerial photographs and historical imagery provided by Google Maps and Google Earth, the National Wetland Inventory Mapping Tool (NWI), the Natural Resources Conservation Service (NRCS) Web Soil Survey, USGS Topographic Maps, and the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Mapping Tool (Firmette).

2.2 Field Survey

The project area was visually and physically observed to determine if any jurisdictional wetlands or Waters of the United States exist within the area of concern by examining the vegetation, soil, and hydrology. A USACE routine wetland delineation data sheet was completed for each data point. Data point locations were based on micro-topography, apparent changes in vegetation and landscape structure, and discoloration and visible saturation evident on historical aerial imagery.

To be considered a jurisdictional wetland, an area must meet minimum criteria in all three (3) categories: vegetation, soil, and hydrology. The following sections discuss these criteria.

2.2.1 Vegetation

The vegetation criteria for a wetland are met when more than 50% of the dominant plant species are classified as hydrophytic. Hydrophytes are plants that can grow in water or on a substrate that is at least periodically deficient in oxygen because of excessive water content. A *Regional List of Plant Species that Occur in Wetlands* has been prepared by the United States Fish and Wildlife Service (USFWS). Wetland plants are categorized into three classes based on wetland indicator status: 1) obligate wetland species, 2) facultative wetland species, or 3) facultative species.

However, the project area has significantly disturbed and problematic vegetation, as it has been

predominantly an agricultural field since at least 1958. Accordingly, vegetation could not be relied upon to determine which areas would be designated as wetland. Vegetation was still recorded at each data point, but corn (*Zea mays*) dominated most of the landscape.

2.2.2 Soil

The soil criterion for a wetland is met when the soils have been classified as hydric. Field indicators of hydric soils include a) organic soils, b) specific low chroma soil color (gleyed matrix with or without bright mottles), c) presence of a histic epipedon (high organic content in the surface horizon), d) presence of sulfidic material (the soil smells like hydrogen sulfide), e) aquic or peraquic moisture regime (the soil is saturated for long periods), and f) reduced soil conditions (soil contains reduced iron).

Soil borings were taken to a depth up to 40 inches below the existing grade when no restricting layer was present, and soil properties were recorded at locations of concern. However, shallow restrictive layers of un-weathered limestone bedrock were present at the central and southern data point locations (U3DP-3 and U3DP-4). Soil color (matrix) and redoximorphic features (if present) were determined using the Munsell Soil Color Charts (2009). Since the tilling of agricultural land mixed the surface layers of the soil and may cause compaction below, NRCS soil survey maps were used in conjunction with these soil profiles to determine hydric status. Soil profile descriptions were recorded for each data point.

2.2.3 Hydrology

The hydrology criterion for a wetland is met when the area is inundated either permanently or periodically at a maximum water depth of 6.6 feet, or the soil is saturated to the surface for at least 5% of the growing season. Indicators include drainage patterns, drift lines, sediment deposition, watermarks, stream gage data and flood prediction, historical records, visual observation of saturated soils, and inundation. Sub-surface drainage tiles prevalent throughout the project area created significantly disturbed hydrologic conditions which could not be fully relied upon to determine each data point's wetland status.

2.3 Farmed Wetland Determination Procedures

As of January 2005, the Natural Resource Conservation Service (NRCS) and USACE have withdrawn from the January 1994 *Memorandum of Agreement Between the Departments of Agriculture, Interior, and Army and Environmental Protection Agency Concerning the Delineation of Wetlands under Section 404 of the Clean Water Act and Subtitle B of the Food Security Act* (MOA), and the January 1995, *Illinois Interagency Implementation of the National Wetland MOA*. Therefore, NRCS no longer makes certified wetland determinations on agricultural lands where the land use changes to non-agricultural use.

However, USACE requires reviewing "five or more years of annual Farm Service Agency aerial photographs, or aerial photos from other sources (USDA/USGS/NAIP/Google), for wetness signatures listed in Part 513.30 of the National Food Security Act Manual". Fehr Graham used the precipitation data from the Ottawa 4SW, IL National Weather Services (WETS) Station to determine the appropriate Google Earth historic aerials to review. The aerials were examined on October 21, 2025, and October 30, 2025, using NRCS spectral response criteria and category definitions for wetland determinations.

Two *wet* months in 2010 and 2011, eight *normal* precipitation months in 2006, 2007, 2009, 2013, 2015, 2020, 2024, and 2024, and four *dry* months in 1999, 2005, 2005, and 2017 were examined to determine how frequently the signatures persist. If the signature occurred in at least 50% of the images examined, this area was determined to be a potentially farmed wetland and was investigated as a PWA.

Wetland Spectral Signatures for FSA Manual Evaluations are as follows:

- a. Ponding, flooding or saturation of sufficient duration to meet hydrology criteria.
- b. Drowned outcrops.
- c. Different vegetation tonal patterns.
- d. Greener areas in dry years.
- e. Differential planting dates.
- f. Crop stress.
- g. Differential cropping in the same parcel in irregular polygons.

3.0 PROJECT DESCRIPTION

The project area involves two irregular-shaped parcels of land encompassing roughly 70.19 acres along US Highway 6 in Ottawa, Illinois, just north of the Illinois River. The City of Ottawa initiated the wetland delineation for the project area.

The following describes the project areas investigated:

- a. **Northwestern potential wetland area** within the agricultural field was not identified on the NWI map; however, it was investigated based on discoloration and possible saturation in several aerial images.
- b. **Northeastern potential wetland area** within the agricultural field was not identified on the NWI map; however, it was investigated based on discoloration and possible saturation in several aerial images.
- c. **Central potential wetland area** was investigated based on discoloration and possible saturation in several aerial images. This potential wet area appeared to be isolated from other potential wetlands and was not present on many of the earlier historic aerial images.
- d. **Southern potential wetland area** was investigated due to its proximity to the nearby stormwater retention basin and the off-site drainage creek to the southeast.

Four data points and soil pits were sampled in the project area (**Exhibit 2**). Section 5.0 describes the field investigation.

4.0 MAP AND AERIAL PHOTOGRAPH REVIEW

Google Maps Imagery, USGS Topographic Maps, NWI mapping, NRCS Web Soil Survey, FEMA "Firmette," and Google Earth Historical Aerials were reviewed to evaluate conditions and whether any wetlands have been identified within the project area.

4.1 Site Location (Vicinity) Map (Exhibit 1)

A site location map depicting the project area on a USGS Ottawa, IL Quadrangle Map dated 2024 shows the Subject Property's location relative to the city of Ottawa, the Fox River, and the Illinois River. The topography of the area is flat with a very gradual slope to the south, towards the Illinois River.

4.2 Wetland Delineation Map (Exhibit 2)

This map shows the locations of the sampled data points, the potential wetland areas investigated in the field and their aggregate-acreage polygons, the artificial drainage basin along the southern edge of the Unit 3 parcel, and the outermost parcel lines of the project area. These data points were shot in with precision, commercial-grade GPS equipment.

4.3 National Wetland Inventory Map (Exhibit 3)

The USFWS conducted a wetland inventory of the wetland locations within the United States. That data

has been aggregated into a national data tool, the NWI Mapper. None of the investigated potential wetland areas were identified on the NWI Mapper. There is a small, circular polygon identified as Freshwater Emergent Wetland (PEM1Af) on the NWI Mapper within the southeastern quadrant, but upon field investigation, this turned out to be a small, raised rock outcropping that was vegetated with invasive upland, facultative, and facultative-upland species.

It should be noted that the NWI was compiled by reviewing high-altitude aerial photography over the last 30 years and may not accurately represent current conditions. Therefore, Fehr Graham field-investigated the presence of potential wetlands.

4.4 FEMA Flood Insurance Rate Map (Exhibit 4)

The FEMA Flood Mapping Tool produces a Firmette of the project site and surrounding area. The Firmette of the site is derived from the City of Ottawa FIRM Panel 17099C0535F, effective 7/18/2011. The project area is located entirely within Zone X – an “Area of Minimal Flood Hazard”.

4.5 NRCS Web Soil Survey Map (Exhibit 5)

The NRCS Soil Survey Map of the area was reviewed as a preliminary evaluation to identify soils within the project area. These soils were identified as hydric or non-hydric using the National Hydric Soils Database. The NRCS Soil Survey Map indicated several soil types in the project area. The majority of soil types across the project area were identified as hydric. Only the soils along the northern boundary of the project area were not classified as hydric soils. All of the potential wetland areas investigated occur within the mapped areas of Faxon Loam and Harpster Silty Clay Loam. The project area's soil predominantly consists of silty clay loam, silt loam, and loam. The general slopes of the soil units depicted range from 0% to 2%.

4.6 Google Earth Historical Aerial Imagery (Exhibit 6)

Historic aerial imagery was reviewed for eight (8) normal precipitation months, two (2) wet months, and four (4) dry months for wetland signatures. The aerials from the wet months were used to define the maximum extent of potential wetland areas to investigate. Dry-month aerials were referenced to determine where saturation is evident even during drought conditions. The investigated potential wetland areas (PWAs) were then surveyed based on soil characterizations in the field, and those areas were correlated with aerials to determine how much area (acres) is present in at least 50% of these aerials. “A farmed wetland is a wetland that prior to December 23, 1985, was manipulated and used to produce an agricultural commodity at least once before December 23, 1985, and on December 23, 1985, did not support woody vegetation, and met the following hydrologic criteria: If not a playa, pocosin, or pothole, experienced inundation for 15 consecutive days or more during the growing season or 10 percent of the growing season, whichever is less, in most years (50% chance or more)” (NRCS/USDA definition of a Farmed Wetland).

There are spectral signatures of potential wetlands of varying size near each data point throughout the years. These signatures were field investigated to determine if true hydric soil conditions exist at any location, which would indicate sufficient inundation and saturation to be qualified as a wetland.

5.0 FIELD INVESTIGATION

The field investigation aimed to determine whether any jurisdictional wetlands or Waters of the US existed within the project area and, if so, their approximate size and boundaries. Potential wetland areas encountered in the field were delineated using the *USACE Corps of Engineers Wetlands Delineation Manual* (1987) and the *Midwest Regional Supplement to the Wetland Delineation Manual* (2010).

Four data points were selected near areas displaying possible saturation in various historic aerial imagery.

Matt Drabik and Kelsey Bird performed the site investigation on October 22, 2025. Dominant plants, soil type, and evidence of wetland hydrologic indicators were recorded on USACE Wetland Delineation Data Sheets for the Midwest Regional Supplement. However, each indicator was significantly disturbed and problematic due to the agricultural nature of the property. The data sheets are included in **Appendix A**. A meander survey was conducted prior to choosing the sample point locations, and the vegetation present in each data point was typical of the project location.

The following are the results of the field survey:

Data Point U3DP-1 (WETLAND)

Data Point U3DP-1 was selected based on color contrasts from aerial imagery indicating possible saturation or a change in vegetative cover. Harvested vegetative remnants indicate that this location was dominated by corn (*Zea mays*). The soil identified here was a dark loam on top, underlain with a lighter gray, depleted loam and clay loam soils. Soil borings indicator A12 – “Thick Dark Surface” was ascribed to the soil matrix below the vegetative cover, down to 40 inches. Redox features were present in the soil past 32 inches. Only one secondary indicator of hydrology was present at this location, with saturation visible on aerial imagery. **This sampling area was within a wetland.**

Data Point U3DP-2 (WETLAND)

Data Point U3DP-2 was selected based on color contrasts from aerial imagery indicating possible saturation or a change in vegetative cover. Harvested vegetative remnants indicate that this location was dominated by corn (*Zea mays*). The soil identified here was a dark loam on top, underlain with a lighter gray, depleted clay loam and sandy loam soil. Soil borings indicator A12 – “Thick Dark Surface” was ascribed to the soil matrix below the vegetative cover, down to 29 inches. Prominent and distinct redox features were present in the soil past 19 inches. Only one secondary indicator of hydrology was present at this location, with saturation visible on aerial imagery. **This sampling area was within a wetland.**

Data Point U3DP-3 (WETLAND)

Data Point U3DP-3 was selected based on color contrasts from aerial imagery indicating possible saturation or a change in vegetative cover. Harvested vegetative remnants indicate that this location was dominated by corn (*Zea mays*). The soil identified here was a dark loam on top, underlain with depleted loam soils and redox features past 16 inches. A restrictive layer of unweathered limestone bedrock was encountered at 24 inches. Soil borings indicator A12 – “Thick Dark Surface” was ascribed to the soil matrix below the vegetative cover, down to 24 inches. Only one secondary indicator of hydrology was present at this location, with saturation visible on aerial imagery. **This sampling area was within a wetland.**

Data Point U3DP-4 (UPLAND)

Data Point U3DP-4 was selected based on its proximity to the southern retention pond and the off-site drainage creek to the southeast. No evidence of saturation was visible for this location on any of the historical aerial imagery reviewed. Harvested vegetative remnants indicate that this location was dominated by corn (*Zea mays*). The soil identified was loam, down to the restrictive layer of unweathered limestone bedrock at a depth of 16 inches. The value of the upper horizon soils identified here were noticeably higher than other soil profiles for the project area. No hydric soil criteria were met for this location, as the upper horizon did not meet the definition of a “Dark Surface.” There were also no depleted soil horizons encountered before the restrictive bedrock layer. No wetland hydrology indicators were encountered at this location. **This sampling area was within an upland area.**

5.1 Crop Compliance Review and Results

The results of the crop compliance examination are provided in **Table 1**. All the aerals were reviewed, and all potential wetland areas (PWAs) were indicated on historic aerial photographs (**Exhibit 6**). Potential farmed wetland areas are outlined in yellow and shown in each aerial.

Table 1: Farmed Wetland Historic Aerial Review and WETS Table

Year	Precipitation Evaluation Data based on Aurora WETS Table	Spectral Signature of Potential Wetland Areas (PWA)
1999	Dry	x
April 2005	Dry	x
June 2005	Dry	x
June 2006	Normal	
June 2007	Normal	
June 2009	Normal	x
June 2010	Wet	x
September 2011	Wet	x
May 2013	Normal	x
September 2015	Normal	x
September 2017	Dry	x
November 2020	Normal	x
June 2024	Normal	x
August 2024	Normal	x

“A farmed wetland is a wetland that prior to December 23, 1985, was manipulated and used to produce an agricultural commodity at least once before December 23, 1985, and on December 23, 1985, did not support woody vegetation, and met the following hydrologic criteria: If not a playa, pocosin, or pothole, experienced inundation for 15 consecutive days or more during the growing season or 10 percent of the growing season, whichever is less, in most years (50 percent chance or more)” (NRCS/USDA definition of a Farmed Wetland).

Based on the review of the historical aerial imagery of the project area provided through Google Earth Imagery, there were four potential wetland areas investigated within Unit 3. These areas were slightly darker, greener, or browner in various images and were field investigated to determine if hydric conditions exist. These depressional wetlands varied in size in each aerial. Overlapping and contrasting the aerals to determine the common intersection extent and correlating that data with soil findings in the field determined that the wetland areas totaled 2.56 acres (U3DP-1), 0.76 acres (U3DP-2) and 0.55 acres (U3DP-3). No hydric soils were found at U3DP-4, the location in close proximity to the stormwater retention pond and the southern edge of the project area. These final wetland areas were determined through a combination of field soil surveys and historical aerial reviews and are outlined in **Exhibit 2**.

6.0 CONCLUSIONS

The following table describes the wetland areas identified during the on-site delineation based on hydric soils encountered. The acreage estimation of each wetland is calculated by overlaying the historical aerial imagery of spectral signatures present in >50% of the available images to generate a “common and recurring” wetland presence polygon.

Wetland	Area (sq ft)	Area (acres)	Length (ft)	Type
U3DP-1	111,514	2.56	N/A	Farmed Wetland
U3DP-2	33,106	0.76	N/A	Farmed Wetland
U3DP-3	23,958	0.55	N/A	Farmed Wetland

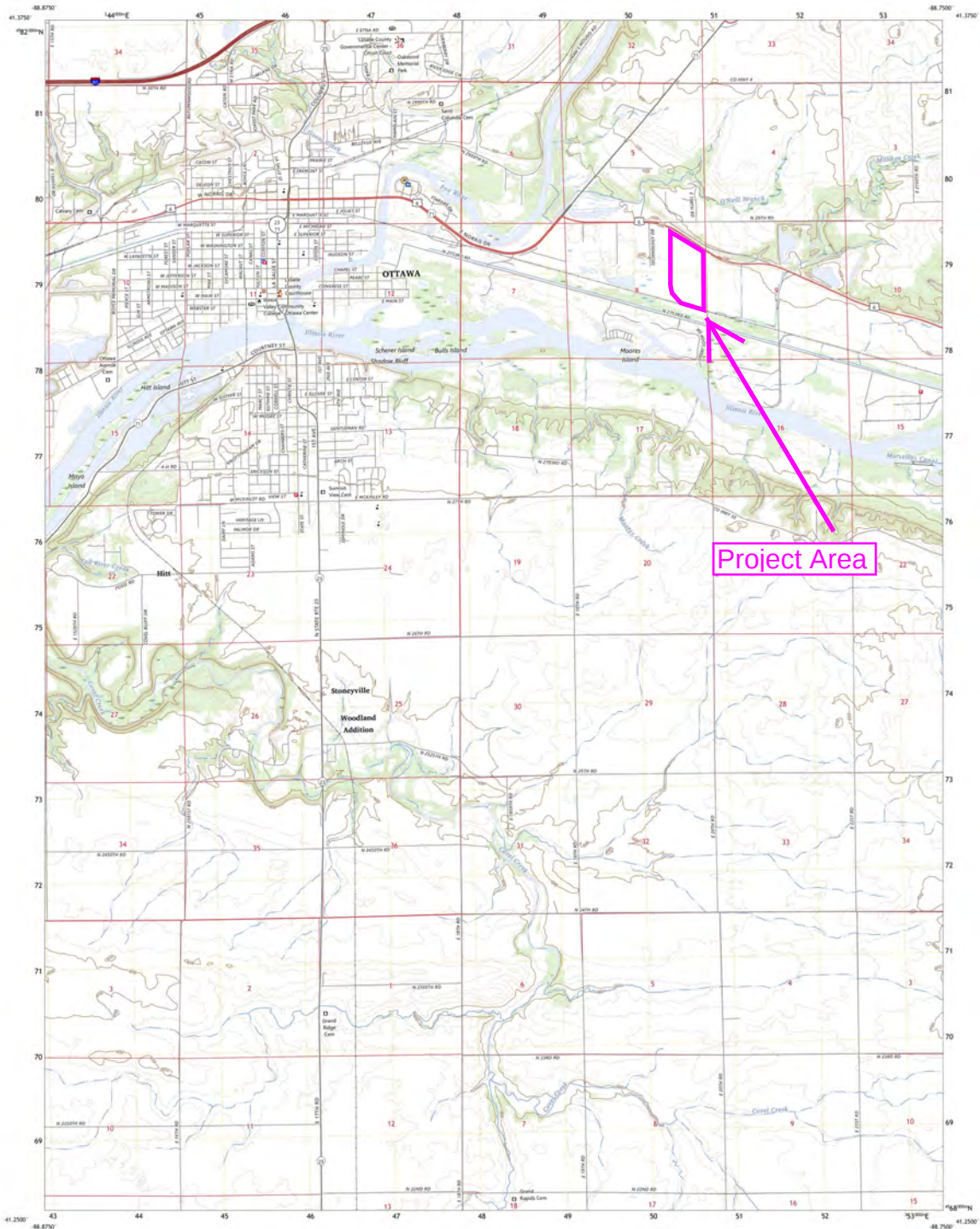
Though the USACE Rock Island District has not performed a jurisdictional determination, it is believed that none of the wetlands of the project area are jurisdictional under the latest ruling from Sackett v. Environmental Protection Agency, 598 U.S. (2023). This decision ruled that Clean Water Act jurisdiction over an adjacent wetland requires that the adjoining body of water constitutes Waters of the United States (a relatively permanent body of water connected to traditional interstate navigable waters) and a continuous surface connection exists between the wetland and that water. Wetlands under this decision qualify only if they are “indistinguishable” from the Waters of the United States, with no clear demarcation between waters and wetlands.

The hydric soil wetland areas around U3DP-1, U3DP-2, and U3DP-3 are enclosed depressions surrounded by upland areas, and they have no continuous surface connection to the nearby drainage ditches, southern retention pond, or other Waters of the United States (WOTUS). The wetlands appear to be isolated and do not drain into the Illinois River to the south of the project area. Therefore, it has been determined that these wetland areas are unlikely to be jurisdictional wetlands under the definitions set by the U.S. Army Corps of Engineers (USACE) and would instead be classified as community wetlands. An official, Approved Jurisdictional Determination (AJD) from the Army Corp Rock Island District is recommended for this property prior to its sale and development.

EXHIBITS

Exhibit 1

Site Location (Vicinity) Map



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84) Projection and
1:100,000 scale and International Transverse Mercator Zone 18T
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
jurisdiction may not be shown. Obtain permission before
entering private lands.

Source: USGS, August 2019 - October 2019
Map: U.S. Census Bureau, 2017
Hydrography: National Hydrography Dataset, 2015
Contours: National Elevation Dataset, 2019
Boundaries: Multiple sources; see metadata file 2023
Public Land Survey: National Wetlands Inventory, 2000
Wetlands: FWS National Wetlands Inventory, Not available



SCALE 1:24,000
CONTOUR INTERVAL 10 FEET
NORTH AMERICAN DATUM OF 1983
This map was produced in accordance with the
National Geospatial Program US Topo Product Standards.



OTTAWA, IL
2024

SITE LOCATION

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL
ILLINOIS DESIGN FIRM NO. 184-003525

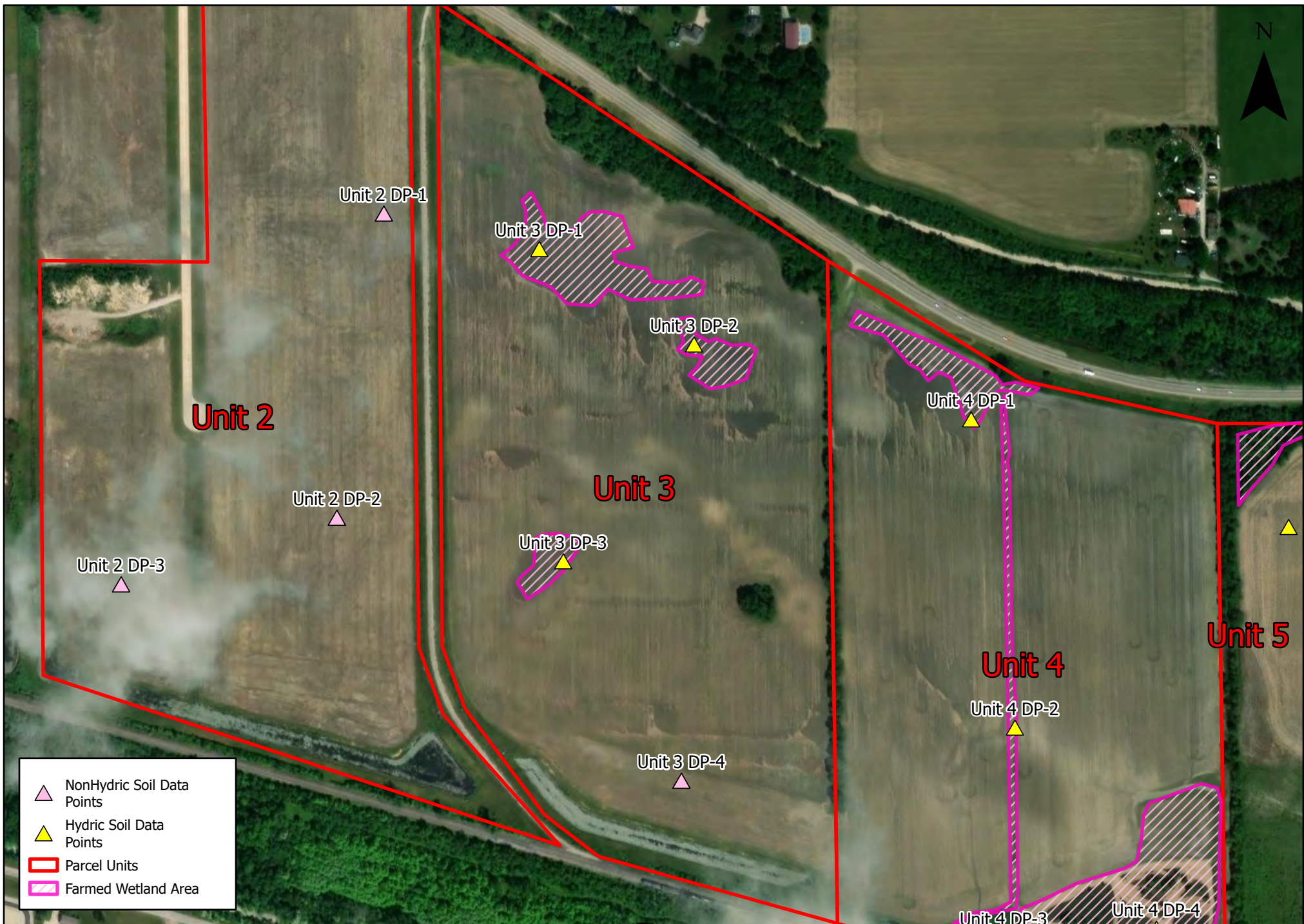
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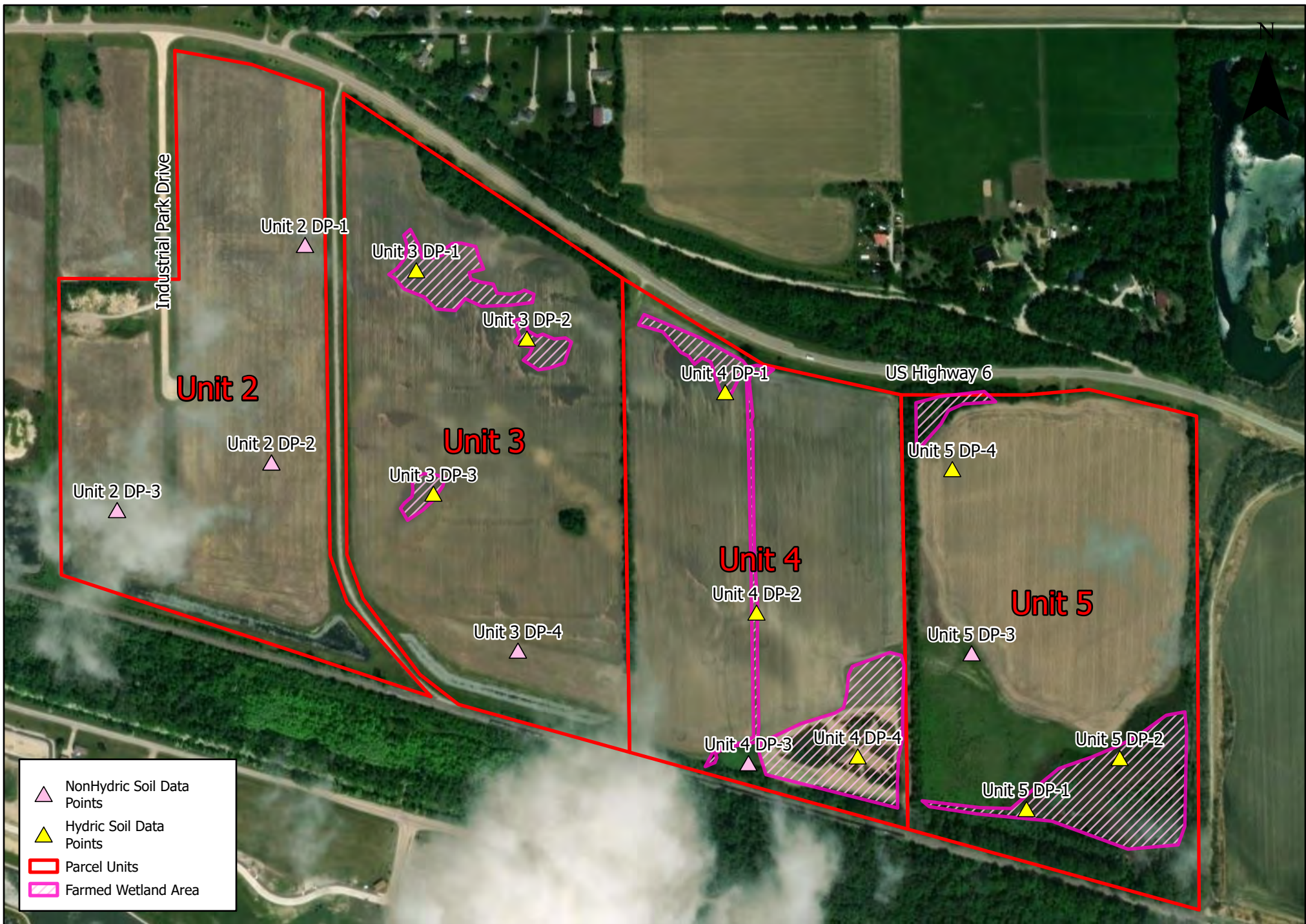
10/30/2025

ILLINOIS
IOWA
WISCONSIN

Exhibit 2

Farmed Wetland Delineation Map





- NonHydric Soil Data Points
- Hydric Soil Data Points
- Parcel Units
- Farmed Wetland Area

Exhibit 3

National Wetland Inventory Map



November 13, 2025

Wetlands

	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
			Freshwater Pond		Riverine

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

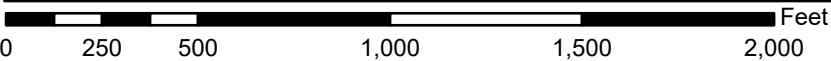
Exhibit 4

FEMA Flood Insurance Rate Map

National Flood Hazard Layer FIRMMette



88°47'27"W 41°21'8"N



1:6,000

88°46'49"W 41°20'41"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

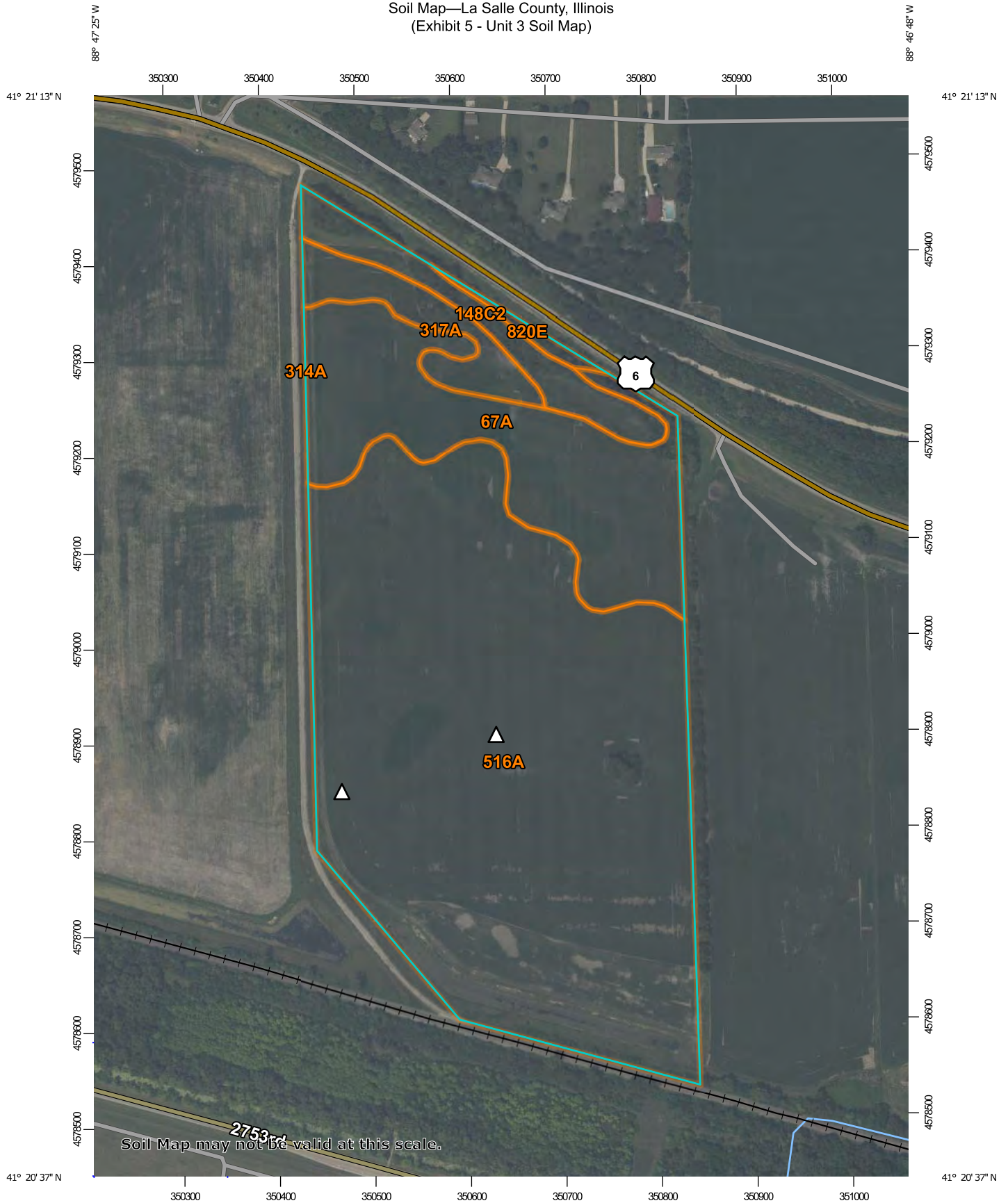
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **11/6/2025 at 4:49 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

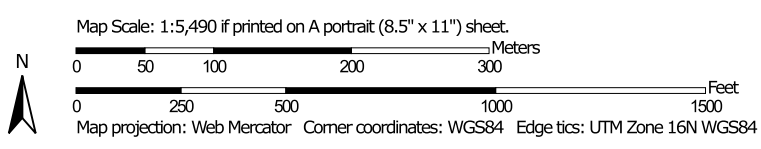
Exhibit 5

NRCS Web Soil Survey Map

Soil Map—La Salle County, Illinois
(Exhibit 5 - Unit 3 Soil Map)



Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: La Salle County, Illinois
Survey Area Data: Version 21, Aug 31, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 30, 2023—Sep 2, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
67A	Harpster silty clay loam, 0 to 2 percent slopes	14.2	19.8%
148C2	Proctor silt loam, 5 to 10 percent slopes, eroded	3.6	5.0%
314A	Joliet silt loam, 0 to 2 percent slopes	0.0	0.0%
317A	Millsdale silty clay loam, 0 to 2 percent slopes	3.2	4.4%
516A	Faxon loam, 0 to 2 percent slopes	50.3	70.2%
820E	Hennepin-Casco complex, 12 to 30 percent slopes	0.4	0.6%
Totals for Area of Interest		71.7	100.0%

Exhibit 6

Google Earth Historic Aerials and PWAs

1999

Write a description for your map.

Legend

Potential Wetland Area

N41°21'11.52"

Hawatha Pioneer Trl

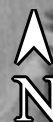
N 29th Rd

N 29th Rd

6

Google Earth

Image U.S. Geological Survey



1000 ft

April 2005

Write a description for your map.

Legend

Potential Wetland Area

N41°21'11.52"

N 29th Rd

N 29th Rd

6

Google Earth

Image U.S. Geological Survey



1000 ft



June 2005

Write a description for your map.

Legend

N 29th Rd

N 29th Rd

N41°21'11.52"

Potential Wetland Area



6

Google Earth

Image USDA/FPAC/GEO



1000 ft

June 2006

Write a description for your map.

Legend

N41°21'11.52"

Potential Wetland Area



6

Google Earth

Image USDA/FPAC/GEO



1000 ft

June 2007

Write a description for your map.

Legend

N41°21'11.52"

Potential Wetland Area



6

Google Earth

Image USDA/FFAC/GEO



1000 ft

June 2009

Write a description for your map.

Legend

N41°21'11.52"

Potential Wetland Area



6

Google Earth

Image USDA/FFAC/GEO



1000 ft

June 2010

Write a description for your map.

Legend

N41°21'11.52"

Potential Wetland Area



6

Google Earth

Image USDA/FFAC/GEO



1000 ft

September 2011

Write a description for your map.

Legend

Potential Wetland Area



N41°21'11.52"

N 29th Rd

N 29th Rd

6

Google Earth

Image USDA/FFAC/GEO

1000 ft



May 2013

Write a description for your map.

Legend

Potential Wetland Area



N41°21'11.52"

N-29th Rd

N-29th Rd

6

Google Earth

1000 ft



September 2015

Write a description for your map.

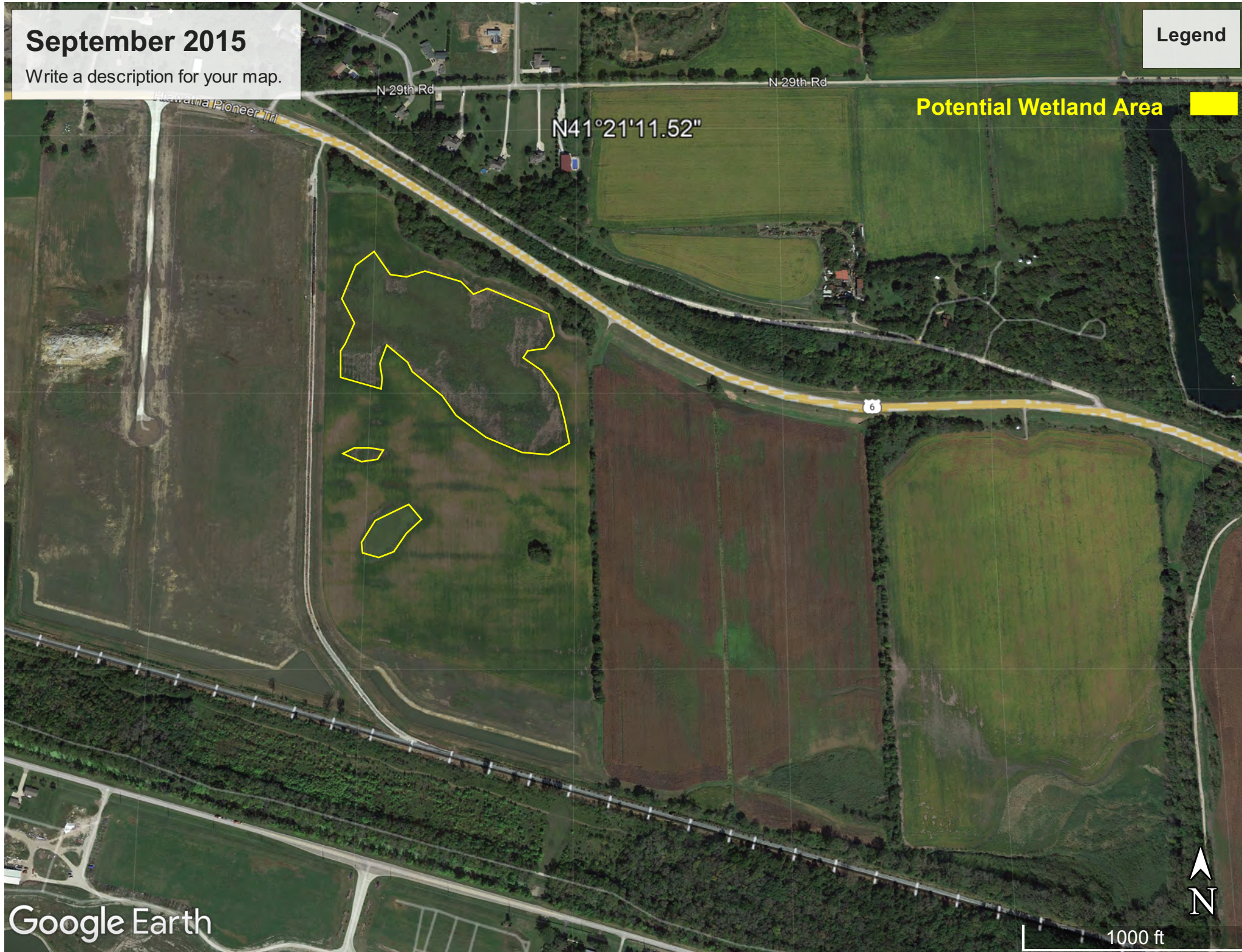
Legend

Potential Wetland Area

N41°21'11.52"

Google Earth

1000 ft



September 2017

Write a description for your map.

Legend

Potential Wetland Area



N41°21'11.52"

6

Google Earth

1000 ft



November 2020

Write a description for your map.

Legend

Potential Wetland Area



N41°21'11.52"

N 29th Rd

N 29th Rd

Hiawatha Pioneer Trl

6

Google Earth

Image © 2025 CNES / Airbus



1000 ft

June 2024

Write a description for your map.

Legend

Potential Wetland Area



N41°21'11.52"

6

Google Earth

Image © 2025 Airbus

1000 ft



Aug 2024

Write a description for your map.

Legend

Potential Wetland Area



N41°21'11.52"

N 29th Rd

N 29th Rd

Hawthorn Pioneer Trl

6

Google Earth



1000 ft

APPENDIX A

USACE Midwest Regional Data Sheets

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Ottawa Industrial Park Unit 3 City/County: Ottawa/LaSalle Sampling Date: 10/22/2025
 Applicant/Owner: City of Ottawa State: IL Sampling Point: Unit 3 DP-1
 Investigator(s): Matthew Drabik/Kelsey Bird Section, Township, Range: Sec 08 Twn 33N R 4E 3rd Meridian
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None
 Slope (%): 0-2 Lat: 41.350687 Long: -88.786393 Datum: NAD 83
 Soil Map Unit Name: 67A - Harpster silty clay loam 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 ☒	
Remarks: Agricultural field with tillage practices, drainage tiles, and planted/harvested corn		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				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.
Sapling/Shrub Stratum (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover				
Herb Stratum (Plot size: _____) 1. <u>Zea mays</u> <u>60</u> <u>Yes</u> <u>UPL</u> 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ _____ = Total Cover				
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ _____ = Total Cover				
Hydrophytic Vegetation Present? Yes _____ No ☒				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOILSampling Point: U3DP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-24"	10 YR 2/1	100					Loam	
24-32"	10 YR 3/1	90					Loam	
24-32"	10 YR 5/1	10					Loam	
32-40"	10 YR 5/1	90	10 YR 4/4	10	C	M	Cl Lo	

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

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1) ☐ Histic Epipedon (A2) ☐ Black Histic (A3) ☐ Hydrogen Sulfide (A4) ☐ Stratified Layers (A5) ☐ 2 cm Muck (A10) ☐ Depleted Below Dark Surface (A11) ☒ Thick Dark Surface (A12) ☐ Sandy Mucky Mineral (S1) ☐ 5 cm Mucky Peat or Peat (S3)	☐ Sandy Gleyed Matrix (S4) ☐ Sandy Redox (S5) ☐ Stripped Matrix (S6) ☐ Loamy Mucky Mineral (F1) ☐ Loamy Gleyed Matrix (F2) ☐ Depleted Matrix (F3) ☐ Redox Dark Surface (F6) ☐ Depleted Dark Surface (F7) ☐ Redox Depressions (F8) ☐ Coast Prairie Redox (A16) ☐ Dark Surface (S7) ☐ Iron-Manganese Masses (F12) ☐ Very Shallow Dark Surface (TF12) ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):	Hydric Soil Present? Yes ☒ No ☐
Type: _____ Depth (inches): _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required: check all that apply)	Secondary Indicators (minimum of two required)	
☐ 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) ☐ True Aquatic Plants (B14) ☐ 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) ☐ Gauge or Well Data (D9) ☐ Other (Explain in Remarks)	☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☒ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒	Depth (inches): _____	
Water Table Present? Yes ☐ No ☒	Depth (inches): _____	
Saturation Present? (includes capillary fringe) Yes ☐ No ☒	Depth (inches): _____	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Ottawa Industrial Park Unit 3 City/County: Ottawa/LaSalle Sampling Date: 10/22/2025
 Applicant/Owner: City of Ottawa State: IL Sampling Point: Unit 3 DP-2
 Investigator(s): Matthew Drabik/Kelsey Bird Section, Township, Range: Sec 08 Twn 33N R 4E 3rd Meridian
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None
 Slope (%): 0-2 Lat: 41.349741 Long: -88.784226 Datum: NAD 83
 Soil Map Unit Name: 67A - Harpster silty clay loam 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 ☒	
Remarks: Agricultural field with tillage practices, drainage tiles, and planted/harvested corn		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				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.
Sapling/Shrub Stratum (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover				
Herb Stratum (Plot size: _____) 1. <u>Zea mays</u> <u>60</u> <u>Yes</u> <u>UPL</u> 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ _____ = Total Cover				
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ _____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				
Hydrophytic Vegetation Present? Yes _____ No ☒				

SOIL

Sampling Point: U3DP-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12"	10 YR 2/1	100					Loam	
12-19"	10 YR 3/1	35					Cl Lo	
12-19"	10 YR 7/1	60	10 YR 4/3	5	C	M	Cl Lo	
19-24"	7.5 YR 5/6	55	2.5 Y 4/4	45	C	M	Cl Lo	
24-29"	10 YR 5/1	90	10 YR 4/4	10	C	M	Snd Lo	

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

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1) ☐ Histic Epipedon (A2) ☐ Black Histic (A3) ☐ Hydrogen Sulfide (A4) ☐ Stratified Layers (A5) ☐ 2 cm Muck (A10) ☐ Depleted Below Dark Surface (A11) ☒ Thick Dark Surface (A12) ☐ Sandy Mucky Mineral (S1) ☐ 5 cm Mucky Peat or Peat (S3)	☐ Sandy Gleyed Matrix (S4) ☐ Sandy Redox (S5) ☐ Stripped Matrix (S6) ☐ Loamy Mucky Mineral (F1) ☐ Loamy Gleyed Matrix (F2) ☐ Depleted Matrix (F3) ☐ Redox Dark Surface (F6) ☐ Depleted Dark Surface (F7) ☐ Redox Depressions (F8) ☐ Coast Prairie Redox (A16) ☐ Dark Surface (S7) ☐ Iron-Manganese Masses (F12) ☐ Very Shallow Dark Surface (TF12) ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):	Hydric Soil Present? Yes ☒ No ☐
Type: _____ Depth (inches): _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required: check all that apply)	Secondary Indicators (minimum of two required)	
☐ 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) ☐ True Aquatic Plants (B14) ☐ 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) ☐ Gauge or Well Data (D9) ☐ Other (Explain in Remarks)	☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☒ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ FAC-Neutral Test (D5)

Field Observations:			Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present?	Yes ☐ No ☒	Depth (inches): _____	
Water Table Present?	Yes ☐ No ☒	Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes ☐ No ☒	Depth (inches): _____	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Ottawa Industrial Park Unit 3 City/County: Ottawa/LaSalle Sampling Date: 10/22/2025
 Applicant/Owner: City of Ottawa State: IL Sampling Point: Unit 3 DP-3
 Investigator(s): Matthew Drabik/Kelsey Bird Section, Township, Range: Sec 08 Twn 33N R 4E 3rd Meridian
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None
 Slope (%): 0-2 Lat: 41.347921 Long: -88.786343 Datum: NAD 83
 Soil Map Unit Name: 516A - Faxon loam 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 ☒	
Remarks: Agricultural field with tillage practices, drainage tiles, and planted/harvested corn		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				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.
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)				
1. <u>Zea mays</u>	<u>60</u>	<u>Yes</u>	<u>UPL</u>	
2. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No ☒
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				

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

SOIL

Sampling Point: U3DP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-16"	10 YR 2/1	100					Loam	
16-24"	10 YR 5/1	95	7.5 YR 5/8	5	C	M	Loam	

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

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1)	☐ Coast Prairie Redox (A16)
☐ Histic Epipedon (A2)	☐ Dark Surface (S7)
☐ Black Histic (A3)	☐ Iron-Manganese Masses (F12)
☐ Hydrogen Sulfide (A4)	☐ Very Shallow Dark Surface (TF12)
☐ Stratified Layers (A5)	☐ Other (Explain in Remarks)
☐ 2 cm Muck (A10)	
☐ Depleted Below Dark Surface (A11)	
☒ Thick Dark Surface (A12)	
☐ Sandy Mucky Mineral (S1)	
☐ 5 cm Mucky Peat or Peat (S3)	
☐ Sandy Gleyed Matrix (S4)	
☐ Sandy Redox (S5)	
☐ Stripped Matrix (S6)	
☐ Loamy Mucky Mineral (F1)	
☐ Loamy Gleyed Matrix (F2)	
☐ Depleted Matrix (F3)	
☐ Redox Dark Surface (F6)	
☐ Depleted Dark Surface (F7)	
☐ Redox Depressions (F8)	

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

Restrictive Layer (if observed):	Hydric Soil Present?
Type: <u>Unweathered Limestone Bedrock</u>	Yes ☒ No ☐
Depth (inches): <u>24"</u>	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)
☐ High Water Table (A2)	☐ Surface Soil Cracks (B6)
☐ Saturation (A3)	☐ Aquatic Fauna (B13)
☐ Water Marks (B1)	☐ True Aquatic Plants (B14)
☐ Sediment Deposits (B2)	☐ Hydrogen Sulfide Odor (C1)
☐ Drift Deposits (B3)	☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)
☐ Sparsely Vegetated Concave Surface (B8)	☐ Gauge or Well Data (D9)
	☐ Other (Explain in Remarks)

Field Observations:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒	Depth (inches): <u> </u>	
Water Table Present? Yes ☐ No ☒	Depth (inches): <u> </u>	
Saturation Present? Yes ☐ No ☒	Depth (inches): <u> </u>	
(includes capillary fringe)		

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Ottawa Industrial Park Unit 3 City/County: Ottawa/LaSalle Sampling Date: 10/22/2025
 Applicant/Owner: City of Ottawa State: IL Sampling Point: Unit 3 DP-4
 Investigator(s): Matthew Drabik/Kelsey Bird Section, Township, Range: Sec 08 Twn 33N R 4E 3rd Meridian
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None
 Slope (%): 0-2 Lat: 41.345774 Long: -88.784323 Datum: NAD 83
 Soil Map Unit Name: 516A - Faxon loam 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 ☒	
Remarks: Agricultural field with tillage practices, drainage tiles, and planted/harvested corn		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)				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.
1. <u>Zea mays</u>	<u>60</u>	<u>Yes</u>	<u>UPL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No ☒
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				

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

SOIL

Sampling Point: U3DP-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7"	10 YR 3/1	100					Loam	
7-16"	10 YR 3/1	93	10 YR 4/3	7	C	M	Loam	

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

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1)	☐ Coast Prairie Redox (A16)
☐ Histic Epipedon (A2)	☐ Dark Surface (S7)
☐ Black Histic (A3)	☐ Iron-Manganese Masses (F12)
☐ Hydrogen Sulfide (A4)	☐ Very Shallow Dark Surface (TF12)
☐ Stratified Layers (A5)	☐ Other (Explain in Remarks)
☐ 2 cm Muck (A10)	
☐ Depleted Below Dark Surface (A11)	
☐ Thick Dark Surface (A12)	
☐ Sandy Mucky Mineral (S1)	
☐ 5 cm Mucky Peat or Peat (S3)	

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

Restrictive Layer (if observed): Type: <u>Unweathered Limestone Bedrock</u> Depth (inches): <u>16"</u>	Hydric Soil Present? Yes ☐ No ☒
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry-Season Water Table (C2)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ FAC-Neutral Test (D5)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)	
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)	

Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ☐ No ☒
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

APPENDIX B

AgACIS WETS Table for Ottawa

WETS Table

WETS Station: OTTAWA 4SW, IL													
Requested years: 1999 - 2024													
Month	Avg Max Temp	Avg Min Temp	Avg Mean Temp	Avg Precip	30% chance precip less than	30% chance precip more than	Avg number days precip 0. 10 or more	Avg Snowfall					
Jan	31.8	15.8	23.8	1.80	1.11	2.18	5	8.0					
Feb	36.0	17.9	27.0	1.62	0.94	1.97	4	6.8					
Mar	49.5	29.1	39.3	2.49	1.58	3.01	6	2.7					
Apr	62.8	39.7	51.3	3.48	2.31	4.17	8	0.5					
May	73.1	50.9	62.0	4.51	3.41	5.26	9	0.0					
Jun	81.4	60.4	70.9	4.28	2.85	5.13	7	-					
Jul	84.2	64.3	74.2	3.71	2.49	4.43	6	-					
Aug	83.0	62.2	72.6	3.92	2.46	4.73	6	-					
Sep	78.5	54.6	66.5	3.01	1.36	3.67	5	-					
Oct	65.4	42.8	54.1	3.02	1.76	3.67	6	0.1					
Nov	50.8	31.9	41.4	2.11	1.28	2.54	5	1.1					
Dec	37.2	21.2	29.2	2.04	1.21	2.47	5	5.0					
Annual:					31.81	38.92							
Average	61.2	40.9	51.0	-	-	-	-	-					
Total	-	-	-	35.99			71	-					
GROWING SEASON DATES													
Years with missing data:	24 deg = 0	28 deg = 0	32 deg = 0										
Years with no occurrence:	24 deg = 0	28 deg = 0	32 deg = 0										
Data years used:	24 deg = 26	28 deg = 26	32 deg = 26										
Probability	24 F or higher	28 F or higher	32 F or higher										
50 percent *	3/27 to 11/15: 233 days	4/4 to 10/31: 210 days	4/20 to 10/20: 183 days										
70 percent *	3/23 to 11/20: 242 days	3/30 to 11/5: 220 days	4/16 to 10/25: 192 days										
* Percent chance of the growing season occurring between the Beginning and Ending dates.													
STATS TABLE - total precipitation (inches)													
Yr	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annl
1889	0.85	0.55	1.74	1.23	5.39	2.82	3.58	1.76	0. 60	2. 71	3.38	2.12	26. 73
1890	1.94	1.40	3.32	1.60	3.98	6.87	0.34	2.00	3. 74	1. 51	3.03	1.75	31. 48
1891													
1892					13.09	10.56	M4.92	0.81	2. 56	0. 63	2.48	M1. 84	36. 89
1893	2.20	M3.03	M3.30	5.23	1.95	2.49	1.02	0.77	2. 29	1. 10	M2. 18	2.16	27. 72
1894	2.38	1.58	2.57	1.51	4.01	3.03	0.80	1.75	7. 18	1. 63	2.09	M1. 19	29. 72
1895	M1.22	0.70	0.82	2.02	1.06	1.02	4.79	2.26	1. 47	1. 16	M4. 77	5.77	27. 06
1896	M1.47	1.65	1.32	M3.38	4.24	2.22	M7.45	2.43	M7. 06	0. 17	M3. 43	0.28	35. 10
1897	M5.98	1.71	4.47	1.88	0.99	6.90	M2.99	0.74	1. 89	0. 46	4.37	1.74	34. 12

1898	5.24	2.38	M5.21	3.12	M6.42	5.80	1.30	4.31	5. 90	4. 73	M2. 88	1.42	48. 71
1899	M0.63	M2.10	3.21	M1.51	5.08	1.42	5.70	3.02	2. 15	2. 53	1.46	M2. 03	30. 84
1900	M1.60	M4.53	2.91	1.53	M5.70	1.96	4.53	M6.74	2. 26	2. 24	3.16	0.31	37. 47
1901	1.76	2.10	3.51	0.61	2.15	2.67	5.47	0.81	3. 20	0. 91	1.49	2.09	26. 77
1902	0.63	1.41	4.89	2.55	5.64	10.51	10.49	4.40	6. 76	1. 87	4.29	2.01	55. 45
1903	1.13	2.35	3.10	5.08	4.19	3.78	1.94	4.90	6. 03	1. 43	0.46	1.91	36. 30
1904	2.54	1.80	4.87	3.93	3.00	1.89	5.14	3.58	3. 27	0. 26	0.08	1.86	32. 22
1905	1.55	1.93	2.09	5.15	3.68	3.39	1.68	4.12	2. 13	M1. 85	2.01	1.70	31. 28
1906	2.07	2.26	2.02	1.63	2.37	2.64	1.45	4.57	5. 09	1. 23	2.63	1.22	29. 18
1907	5.25	0.15	2.55	2.69	4.84	2.50	6.92	4.49	4. 94	1. 00	1.96	1.79	39. 08
1908	0.86	1.53	3.87	3.48	8.17	1.77	3.05	2.03	0. 35	0. 65	1.79	0.99	28. 54
1909	0.98	3.65	1.64	5.19	2.57	3.69	2.95	3.59	4. 08	1. 71	2.57	3.02	35. 64
1910	2.78	0.98	0.42	3.28	5.28	1.25	0.67	3.91	6. 23	1. 25	0.74	0.98	27. 77
1911	1.80	2.13	1.80	3.91	2.64	1.71	1.60	6.28	6. 88	2. 61	2.28	2.15	35. 79
1912	0.27	1.14	1.17	3.30	6.13	2.09	3.28	5.68	2. 86	M5. 26	2.02	1.18	34. 38
1913	1.80	3.00	3.87	2.09	6.71	2.36	2.17	2.98	2. 10	2. 70	1.80	0.59	32. 17
1914	1.77	1.10	2.35	1.28	4.06	2.53	0.66	2.33	2. 87	3. 17	0.40	1.92	24. 44
1915	1.86	2.13	1.01	0.75	5.63	2.10	7.30	2.80	4. 88	0. 86	1.95	0.82	32. 09
1916	3.03	0.59	1.92	0.86	3.90	7.37	0.08	1.05	1. 54	4. 75	2.48	1.34	28. 91
1917	M0.00	0.34	0.12	M0.00	M0.00	2.69	1.70	3.03					7.88
1918				2.36	4.58	1.87	1.71	4.27	2. 27	3. 18	2.33	M0. 00	22. 57
1919	0.42	2.02	3.55	M0.00							2.94	0.62	9.55
1920	1.61	0.13	4.77	5.79	3.53	1.92	0.89	1.55			1.19	2.12	23. 50
1921	0.71	0.32	3.98	4.27	2.15	2.87	1.11	6.38	6. 87				28. 66
1922		0.92	2.91	2.57	6.39	0.43	3.21	1.63	3. 37	2. 08	2.01	1.32	26. 84
1923	M0.24	1.30	M3.06	1.03	4.40	2.47	1.36	3.26	3. 22	3. 72	1.64	2.19	27. 89
1924	1.32	1.59	2.16	1.54	2.36	6.40	4.40	11.21	4. 35	0. 56	0.60	1.98	38. 47
1925	0.36	1.71	0.80	2.72	1.46	3.34	1.95	1.08	2. 88	2. 95	3.00	0.99	23. 24
1926	0.99	2.60	2.60	3.16	3.41	4.11	8.20	2.68	14. 28	1. 38	4.54	0.61	48. 56
1927	0.95	2.24	2.28	7.11	4.49	4.01	1.07	6.57	3. 56	3. 40	4.65	1.99	42. 32
1928	0.38	1.50	0.99	2.23	2.33	5.10	3.56	3.65	1. 45	3. 01	4.36	2.11	30. 67
1929	3.39	0.54	2.98	6.57	2.16	4.18	2.78	2.58	2. 39	2. 86	1.36	0.63	32. 42
1930	2.01	2.11	1.40	4.42	1.30	2.57	0.90	0.94	2. 45	2. 95	2.32	0.22	23. 59
1931	0.70	0.88	2.49	2.19	4.03	5.18	1.24	3.60	4. 11	4. 64	4.07	2.39	35. 52
1932	2.41	1.14	2.34	1.16	3.14	2.29	3.58	6.34	1. 83	3. 89	0.60	3.16	31. 88

1933	1.84	1.14	3.01	3.42	5.02	1.40	1.80	2.30	2.84	1.83	0.64	0.92	26.16
1934	0.78	0.50	0.85	1.02	0.44	2.87	2.53	2.02	4.81	1.37	4.77	1.09	23.05
1935	2.26	2.00	2.75	1.87	6.43	5.53	3.21	6.91	3.26	0.98	5.29	1.16	41.65
1936	1.19	1.14	1.06	1.71	2.35	0.70	1.07	3.80	9.16	2.11	0.90	3.65	28.84
1937	2.56	1.19	1.20	5.76	2.68	3.69	1.01	3.22	0.52	1.90	0.88	1.36	25.97
1938	2.69	2.26	3.47	3.81	4.65	6.82	5.49	2.83	5.06	1.40	1.42	0.89	40.79
1939	2.23	2.39	3.12	2.66	3.55	5.47	5.77	3.90	0.81	4.17	0.82	0.41	35.30
1940	1.24	1.03	1.23	2.75	5.19	2.06	0.74	M4.73	0.75	1.98	2.19	1.16	25.05
1941	2.62	0.97	2.29	3.29	3.83	4.56	2.22	2.79	6.97	9.67	1.71	1.28	42.20
1942	1.02	2.97	3.91	2.60	2.32	2.72	7.41	5.65	3.91	1.34	3.85	2.79	40.49
1943	2.14	1.20	1.95	5.70	8.33	M3.32	2.74	4.49	2.33	1.33	1.51	0.44	35.48
1944	0.60	1.93	5.46	6.44	2.85	4.11	1.29	2.87	3.41	1.21	0.77	1.28	32.22
1945	1.15	1.30	2.49	5.49	6.81	3.64	0.25	4.58	8.19	1.03	2.79	2.36	40.08
1946	2.38	0.71	3.28	0.66	5.54	4.63	1.42	1.96	1.73	3.28	3.16	2.39	31.14
1947	2.06	0.31	2.59	7.64	6.37	4.79	2.32	1.59	3.02	2.76	2.34	1.85	37.64
1948	1.23	1.78	6.79	1.45	2.75	4.33	4.33	1.54	3.88	0.96	1.67	3.54	34.25
1949	3.72	2.09	M2.18	1.91	1.70	2.65	5.11	6.12	1.63	1.60	0.51	5.41	34.63
1950	3.34	2.45	1.44	9.67	1.16	5.06	3.68	0.27	2.65	0.97	1.34	0.97	33.00
1951	1.93	2.52	3.11	4.12	4.92	3.88	4.85	M2.76	M3.42	M2.22	2.12	2.16	38.01
1952	1.57	0.60	3.53	3.59	3.56	5.52	M1.51	3.02	1.17	0.70	2.73	2.02	29.52
1953	1.36	1.04	2.82	2.47	2.47	2.30	5.06	1.59	2.84	1.28	0.66	2.61	26.50
1954	1.37	2.12	5.62	4.69	2.54	3.96	3.95	5.43	0.58	M4.53	1.71	1.66	38.16
1955	1.61	2.48	1.05	4.70	4.07	4.43	6.17	3.25	1.39	4.15	1.88	0.53	35.71
1956	0.37	2.10	0.50	4.27	2.18	3.44	3.49	2.69	0.31	0.31	0.87	1.53	22.06
1957	2.71	1.29	1.83	7.15	4.00	M2.69	2.92	2.57	1.20	2.94	2.58	2.72	34.60
1958	1.12	0.89	0.29	2.86	2.52	7.42	14.85	4.20	1.87	1.83	1.54	0.65	40.04
1959	1.38	2.45	3.58	3.04	M2.83	2.48	4.85	2.35	4.89	4.06	2.07	2.36	36.34
1960	2.42	2.32	1.06	3.82	3.74	5.04	2.06	5.89	1.88	1.45	0.75	0.47	30.90
1961	0.26	0.88	3.36	1.98	1.44	3.55	5.08	2.88	11.76	2.88	2.22	2.55	38.84
1962	2.62	1.84	2.67	1.77	3.35	2.02	5.22	1.37	2.11	2.91	1.08	0.27	27.23
1963	1.23	0.67	3.80	2.93	2.70	3.42	4.56	2.00	1.09	0.41	1.64	0.82	25.27
1964	1.17	0.56	3.59	5.20	1.00	4.12	4.65	1.23	3.42	0.01	1.93	1.31	28.19
1965	4.81	1.29	2.99	6.66	2.24	1.29	1.75	7.48	5.68	0.95	1.32	3.79	40.25
1966	1.57	1.64	1.64	3.92	6.82	1.30	2.46	2.81	1.27	2.04	4.66	2.78	32.91

1967	1.66	0.82	2.39	6.50	1.79	3.54	2.95	1.47	3. 33	5. 34	2.29	2.55	34. 63
1968	0.96	1.26	1.41	2.62	2.85	6.10	3.07	1.25	3. 73	0. 80	3.94	3.11	31. 10
1969	2.15	0.15	1.75	4.44	2.86	5.19	6.39	3.44	1. 54	4. 89	1.17	1.01	34. 98
1970	1.02	1.01	2.01	6.30	7.79	10.55	4.08	2.91	9. 86	3. 65	1.18	0.66	51. 02
1971	1.03	2.16	1.18	1.44	1.39	2.49	1.93	0.95	1. 76	1. 47	1.36	5.34	22. 50
1972	1.23	0.93	2.43	2.97	4.32	8.50	4.22	10.76	3. 45	2. 85	2.56	2.68	46. 90
1973	1.28	1.01	5.15	4.15	4.23	3.70	5.88	1.35	2. 89	3. 92	1.18	3.85	38. 59
1974	3.44	1.79	2.21	3.56	7.23	7.32	2.09	2.55	2. 83	1. 25	2.92	2.27	39. 46
1975	2.55	2.40	1.93	6.67	3.58	8.18	3.08	4.87	1. 85	2. 45	1.83	2.09	41. 48
1976	0.68	1.52	5.59	4.17	3.78	1.54	2.90	2.24	3. 02	2. 36	0.44	0.46	28. 70
1977	0.65	0.48	4.10	1.62	2.76	4.07	1.84	5.44	9. 60	3. 91	1.59	1.86	37. 92
1978	0.98	0.49	1.28	4.12	4.21	4.78	4.27	2.17	5. 34	1. 99	2.67	3.73	36. 03
1979	3.12	1.18	5.55	5.37	2.96	2.07	3.86	8.86	0. 91	1. 27	2.48	2.54	40. 17
1980	0.62	1.49	2.42	3.04	3.35	3.21	M1.68	5.73	5. 14	2. 16	0.89	2.22	31. 95
1981	0.33	2.01	0.59	7.18	5.75	4.64	5.20	6.63	M3. 39	1. 46	1.97	1.09	40. 24
1982	2.16	0.91	4.27	4.74	4.15	5.14	9.67	1.21	1. 25	1. 77	5.76	5.48	46. 51
1983	0.45	1.41	M3.56	5.61	4.87	5.42	0.37	6.19	3. 97	1. 65	M5. 08	2.21	40. 79
1984	0.60	1.69	4.53	4.76	4.23	1.82	2.17	2.39	2. 82	2. 48	4.10	2.97	34. 56
1985	1.90	2.65	5.57	0.98	1.82	3.34	2.66	2.86	1. 53	3. 19	9.66	1.84	38. 00
1986		2.08	0.84	1.09	4.95	4.60	6.19	2.00	5. 46	5. 16	1.52	1.05	34. 94
1987	1.28	T	2.11	2.13	6.10	2.12	3.22	7.22	5. 48	1. 25	3.98	4.28	39. 17
1988	1.30	M0.45	2.93	M2.32	2.34	0.29	2.38	3.00	2. 10	1. 93	4.28	M0. 81	24. 13
1989	0.39	M1.30	0.69	M2.33	2.15	2.16	3.22	2.30	8. 33	1. 28	1.55	0.51	26. 21
1990	1.46	M0.81	3.49	1.74	6.44	7.14	6.55	5.61	0. 72	3. 24	4.99	2.83	45. 02
1991	1.08	0.39	3.80	4.39	6.78	1.00	0.46	2.15	4. 15	8. 35	2.74	1.93	37. 22
1992	1.88	1.04	1.20	1.58	0.27	1.34	9.79	2.41	5. 82	0. 49	5.23	3.38	34. 43
1993	3.06	1.31	3.12	3.89	2.69	6.70	4.90	5.41	5. 19	1. 14	2.31	1.86	41. 58
1994	M1.20	1.87	0.96	2.25	1.41	4.45	1.78	4.04	2. 34	1. 57	5.72	2.45	30. 04
1995	3.03	0.60	1.58	6.05	6.78	M2.19	2.47	2.42	0. 95	4. 52	2.91	0.34	33. 84
1996	0.93	0.27	0.59	1.83	5.87	4.20	6.28	0.36	2. 50	3. 09	1.82	M0. 82	28. 56
1997	1.68	4.76	M0.59	1.82	2.29	1.92	1.83	5.10	2. 52	2. 67	1.98	1.64	28. 80
1998	2.06	1.68	3.13	3.38	4.80	8.08	3.12	1.91	2. 20	5. 28	1.87	1.73	39. 24
1999	1.94	0.42	1.07	3.87	4.64	3.70	1.27	2.29	3. 46	0. 85	0.36	2.46	26. 33
2000	1.01	0.73	1.43	4.10	3.72	7.86	3.51	3.08	3. 86	2. 59	2.60	M1. 41	35. 90

2001	1.11	1.65	0.74	2.64	3.84	3.60	4.88	M3.13	4.77	5.66	2.38	1.07	35.47
2002	1.60	0.97	1.50	5.05	4.99	3.22	1.96	4.46	M1.27	1.80	0.83	0.48	28.13
2003	0.31	0.41	1.26	1.31	5.85	2.17	5.28	1.76	3.68	2.47	4.83	1.59	30.92
2004	0.49	0.90	4.01	2.06	5.33	1.84	2.89	6.95	0.71	3.26	3.49	1.51	33.44
2005	4.42	1.66	1.49	1.93	1.31	2.20	3.14	1.89	2.02	0.30	2.30	1.22	23.88
2006	2.25	1.23	2.96	2.85	4.26	2.96	2.52	6.00	5.28	3.53	3.17	2.22	39.23
2007	2.10	1.64	5.41	M1.31	M1.24	4.34	5.96	14.27	0.56	2.87	T	2.56	42.26
2008	2.29	3.15	1.20	3.66	3.75	M1.97	6.87	2.56	7.99	2.25	M0.98	4.50	41.17
2009	0.79	2.00	6.20	5.47	4.66	4.28	3.52	5.85	1.31	6.73	M1.45	M3.90	46.16
2010	1.15	1.07	2.89	2.07	5.60	9.23	1.29	2.05	2.63	1.13	2.26	2.51	33.88
2011	M0.69	2.90	1.03	6.22	6.14	5.74	M1.13	M3.37	M3.51	1.57	4.72	2.29	39.31
2012	1.10	1.20	1.44	1.19	M4.35	2.25	1.84	M3.05	M2.30	M3.23	M0.88	1.36	24.19
2013	M3.30	2.48	1.89	M3.11	4.95	5.11	0.87	2.74	1.49	3.46	2.29	2.64	34.33
2014	2.26	M1.84	2.46	4.11	M4.79	5.16	3.48	6.39	2.72	2.45	M1.72	M0.87	38.25
2015	1.23	1.69	0.64	3.52	6.69	9.29	3.50	2.24	2.99	1.64	6.06	M5.88	45.37
2016	M1.20	M1.29	4.55	M2.69	4.12	6.36	M5.79	6.93	1.91	M1.00	2.40	M0.33	38.57
2017	2.27	M0.21	M3.54	M8.81	3.38	1.46	M4.17	2.91	0.01	6.64	2.17	M0.19	35.76
2018	1.38	M3.94	1.61	1.11	4.22	5.42	2.17	4.65	2.80	M3.26	M1.10	1.74	33.40
2019	2.90	M2.44	2.65	3.97	10.35	M4.91	4.59	3.28	10.44	M4.61	1.55	1.53	53.22
2020	3.09	0.80	M1.13	3.92	5.87	M3.36	5.66	0.50	5.13	1.65	1.55	1.86	34.52
2021	1.88	1.84	2.22	1.94	4.54	M7.14	2.68	M1.92	1.14	7.79	0.52	M1.99	35.60
2022	M0.35	2.70	3.74	3.12	3.18	2.37	4.41	M4.11	1.79	1.89	1.22	2.96	31.84
2023	2.30	2.68	1.95	1.09	2.57	0.87	6.65	2.11	3.36	4.86	0.81	2.45	31.70
2024	3.49	0.22	4.49	6.80	2.96	4.43	6.30	3.45	1.13	0.94	3.21	1.48	38.90
2025	0.79	0.80	3.45	2.92	2.12	2.46	6.00	2.19	1.39	M1.71			23.83

Notes: Data missing in any month have an "M" flag. A "T" indicates a trace of precipitation.

Data missing for all days in a month or year is blank.

Creation date: 2025-10-30

APPENDIX C

Unit 3 Photolog



1. Dark soils area around U3DP-1



2. Soil profile in U3DP-1



3. Soil profile of in U3DP-2



4. Area around U3DP-3.



5. Redox concentrations in U3DP-3



6. Area around U3DP-4.



7. Soil profile of U3DP-4



8. Drainage ditch and culvert along eastern boundary of Unit 3.



9. Railroad track and depressional ditch along the western boundary of Unit 3.



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