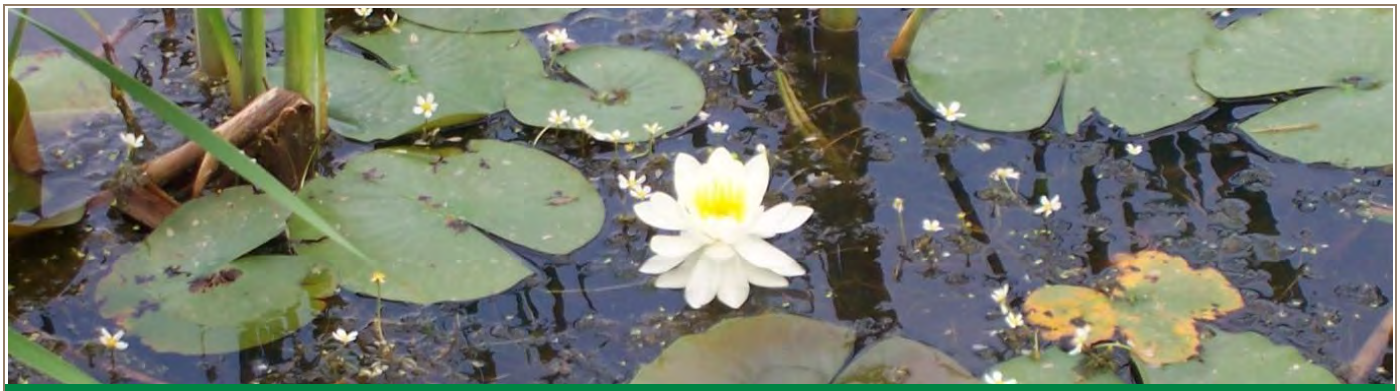

Water Resources Delineation Report

~34 Acres, Powers Road, Kane County, Huntley, Illinois

December 5, 2025

Prepared for:

ILSolar08 LLC
330 Goethe St.
Chicago, Illinois 60610

Prepared by:
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317-558-8545

DAVEY Resource Group

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Appendices

Executive Summary

The 34-acre study area is located south of Powers Road in Kane County, Huntley, Illinois. A regulated water resources delineation was performed by Patrick Ewbank and Kelly Volansky on November 17, 2025. The delineation was conducted under normal conditions (Appendix I).

Water resources identified within the study area include one ephemeral unnamed stream totaling 207 linear feet and one pond totaling 0.48 acres (Table 1). The stream drains to the north from the agricultural field into the pond. The ordinary high water mark (OHWM) measured approximately two feet wide by one inch deep and was likely formed from erosion caused by rainfall and runoff from the agricultural field to the south. The stream bottom consists of silt. The pond appears to collect surface flow from the surrounding areas and was surrounded by trees. The pond and the stream do not appear to have a hydrological connection to a Traditionally Navigable Water of the United States that would fall under the jurisdiction of the United States Army Corps of Engineers (USACE).

A map of the location and size of the water resources identified on site are shown in Appendix A.

Table 1. Regulated Water Resources Delineated on Site

ID	Type	Latitude	Longitude	Connectivity to Waters of the U.S.[1]	Total Area within Study Area (Acres)
UNT to Pond	Ephemeral	42.1399681 °N	88.4179782°W	Isolated	207 Lf
Pond	Emergent	42.1394149 °N	88.4179689°W	Isolated	0.48 Ac

[1] The final determination of a wetlands' connectivity to Waters of the U.S. is made by the US Army Corps of Engineers.

Introduction

Study Area Location and Description

The 34-acre study area is located south of Powers Road in Kane County, Huntley, Illinois. (Appendices B and C).

The study area consists of agricultural and forested land (Appendix D). Surrounding land includes housing developments to the east and south, and a distribution warehouse to the west.

Secondary Source Information

The study area is located in S9, T42N, R7W on the USGS 7.5' topographic map (Appendix E). The study area is 910 feet above sea level.

The Federal Emergency Management Agency (FEMA) National Flood Hazard Layer Firmette map indicates the study site exists in an 'Area of Minimal Flood Hazard" (Appendix F).

A National Wetlands Inventory (NWI) map shows an onsite wetland located along the northwestern boundary of the study area that corresponds with the pond. This wetland is contiguous with NWI wetlands located to the immediate west (Appendix G). The onsite NWI wetland is a Palustrine Unconsolidated Bottom Permanently Flooded Excavated Wetland (PUHBx).

The United States Department of Agriculture Natural Resources Conservation Service Web Soil Survey map shows the soil types located on and adjacent to the site (Appendix H). The *Hydric Soils of the United States* (1991) was reviewed to determine potential hydric soils identified within the study area. Table 2 provides a list of soil types mapped for the site.

Table 2. Soil Types Mapped for the Site

Map Unit	Soil Description	Hydric Determination[1]
103A	Houghton Muck, 0-2% slopes	Yes
152A	Drummer silty clay loam, 0 – 2% slopes	Yes
219A	Millbrook silt loam, 0-2% slopes	No
323D2	Casco loam, 6-12% slopes	No
327C2	Fox silt loam, 4-6% slopes	No
327D2	Fox loam, 6-12% slopes	No
570B	Martinsville silt loam, 2-4% slopes	No
969F	Casco-Rodman complex, 20-30% slopes	No
1103A	Houghton muck, undrained, 0-2% slopes	Yes
W	Water	

1. As determined by The Hydric Soils of the United States (1991).

Methodology

The Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (US Army Corps of Engineers 2012) were used in delineating wetlands within the study area. Water resources were delineated on November 17, 2025. The delineation fieldwork, boundary mapping, and data analysis were performed by Patrick Ewbank and Kelly Volansky. Vegetation,

soils, and wetlands maps were prepared using ArcGIS™ PRO v.3.2.2. Photo points, data points, streamlines, open water, and wetland areas were mapped and collected using ESRI Field Maps and an integrated GPS.

Streams are identified as linear, flowing water features with a defined bed and bank. Streams are classified as ephemeral, intermittent, or perennial based upon flow regime. Ephemeral streams have flowing water only during, and for a short duration after, precipitation events. Intermittent streams have flowing water during certain times of the year, when groundwater and rainfall provide water for stream flow.

During dry periods intermittent streams may not have flowing water. Perennial streams have flowing water year-round, receiving water from groundwater and rainfall runoff.

Wetlands are identified based on three criteria: vegetation, soils, and hydrology. An area must meet all three criteria to be considered a jurisdictional wetland. Sampling points were established in the field to determine wetlands boundaries. Data sheets reporting the results of soils, vegetation, and hydrology analyses were completed for each sampling point (Appendix L).

Soil samples were obtained to determine the extent of hydric soils on the site. A standard Munsell soil color chart was used to determine the hue, value, and chroma of each soil sample. Soil samples were taken to a depth to adequately make a hydric soil determination. Criteria established by the National Technical Committee for Hydric Soils (1991) were used to determine hydric soils.

Wetland hydrology was characterized during the delineation. Inundation and/or soil saturation were noted for each sample point. Other hydrological indicators, including watermarks, drift lines, sediment deposits, wetlands drainage patterns, blackened leaves, morphological indicators, iron/manganese concretions, and oxidized root zones within the upper soil layers, were documented, if observed.

Quantitative vegetation data were collected at each sampling point. Dominance was estimated by percent areal cover. Four strata were considered for each sample point—trees, saplings/shrubs, herbs, and woody vines. Trees were defined as any woody plant having a diameter at breast height (DBH) greater than 3.0 inches. Saplings and shrubs were those woody plants with a DBH of less than 3.0 inches and greater than 3.2 feet in height. Thirty-foot-radius plots were used for trees and vines; 15-foot-radius plots were used for saplings and shrubs; and 5-foot-radius plots were used for herbs.

Any species within a stratum comprising 20% or more of the total plot areal cover was considered to be dominant. Dominant species within all strata were then added to determine the percentage of wetlands vegetation for each sample point. The wetlands vegetation criterion was met if greater than 50% of the dominant vegetation was indicative of wetlands conditions.

Plants with an indicator status of obligate (OBL), facultative wetland (FACW), or facultative (FAC) are considered to be indicative of wetlands conditions. Plants with an indicator status of facultative upland (FACU) or upland (UPL) are considered to be indicative of upland conditions. Plants that could only be identified to genus were sometimes assigned an indicator status based on the professional judgment of Davey Resource Group. These plants were classified as wetlands indicator species (WIS) or upland indicator species (UIS). See Appendix K for a more detailed explanation of wetlands vegetation indicator statuses.

Wetlands that are hydrologically connected to traditional navigable waters of the United States are considered non-isolated and fall under the federal jurisdiction of the U.S. Army Corps of Engineers (USACE).

are considered non-isolated and fall under the federal jurisdiction of the U.S. Army Corps of Engineers (USACE).

Results

Streams

One ephemeral stream that measured 207 linear feet was identified on site. The average Ordinary High Water Mark (OHWM) was two feet wide by one inch deep and was likely formed from erosion caused by rainfall and runoff from the agricultural field to the south. The stream bottom consists of silt. The stream drains to the north from the agricultural field into the pond. Photographs showing the water resources are included in Appendix J. The pond appears to collect surface flow from the surrounding areas and was surrounded by trees. The pond and the stream do not appear to have a hydrological connection to a Traditionally Navigable Water of the United States that would fall under the jurisdiction of the United States Army Corps of Engineers (USACE).

Open Water

One pond was identified on site that totaled 0.48 acres. The pond appears to collect surface flow from the surrounding areas and was surrounded by trees. The pond and the stream do not appear to have a hydrological connection to a Traditionally Navigable Water of the United States that would fall under the jurisdiction of the United States Army Corps of Engineers (USACE).

Wetlands

No wetlands were identified within the study area. Two data points were recorded within the study area. One point was taken in the southwest boundary where vegetation was found to be hydrophytic, however soils did not meet any indicators. Another point was taken in the wooded area in the northwest portion of the study area. This point met the criteria for hydrophytic vegetation, but did not meet soils or hydrology.

Conclusions

Water resources identified within the study area include one ephemeral unnamed stream totaling 207 linear feet and one pond totaling 0.48 acres (Table 1). The stream drains to the north from the agricultural field into the pond. The ordinary high water mark (OHWM) measured approximately two feet wide by one inch deep and was likely formed from erosion caused by rainfall and runoff from the agricultural field to the south. The stream bottom consists of silt. The pond appears to collect surface flow from the surrounding areas and was surrounded by trees. The pond and the stream do not appear to have a hydrological connection to a Traditionally Navigable Water of the United States that would fall under the jurisdiction of the United States Army Corps of Engineers (USACE).

All water resource studies conducted by Davey Resource Group are objective and based strictly on professional judgment. Davey Resource Group and its employees have no vested interest in this property or the proposed project. Appendix M contains references used in the creation of this report.

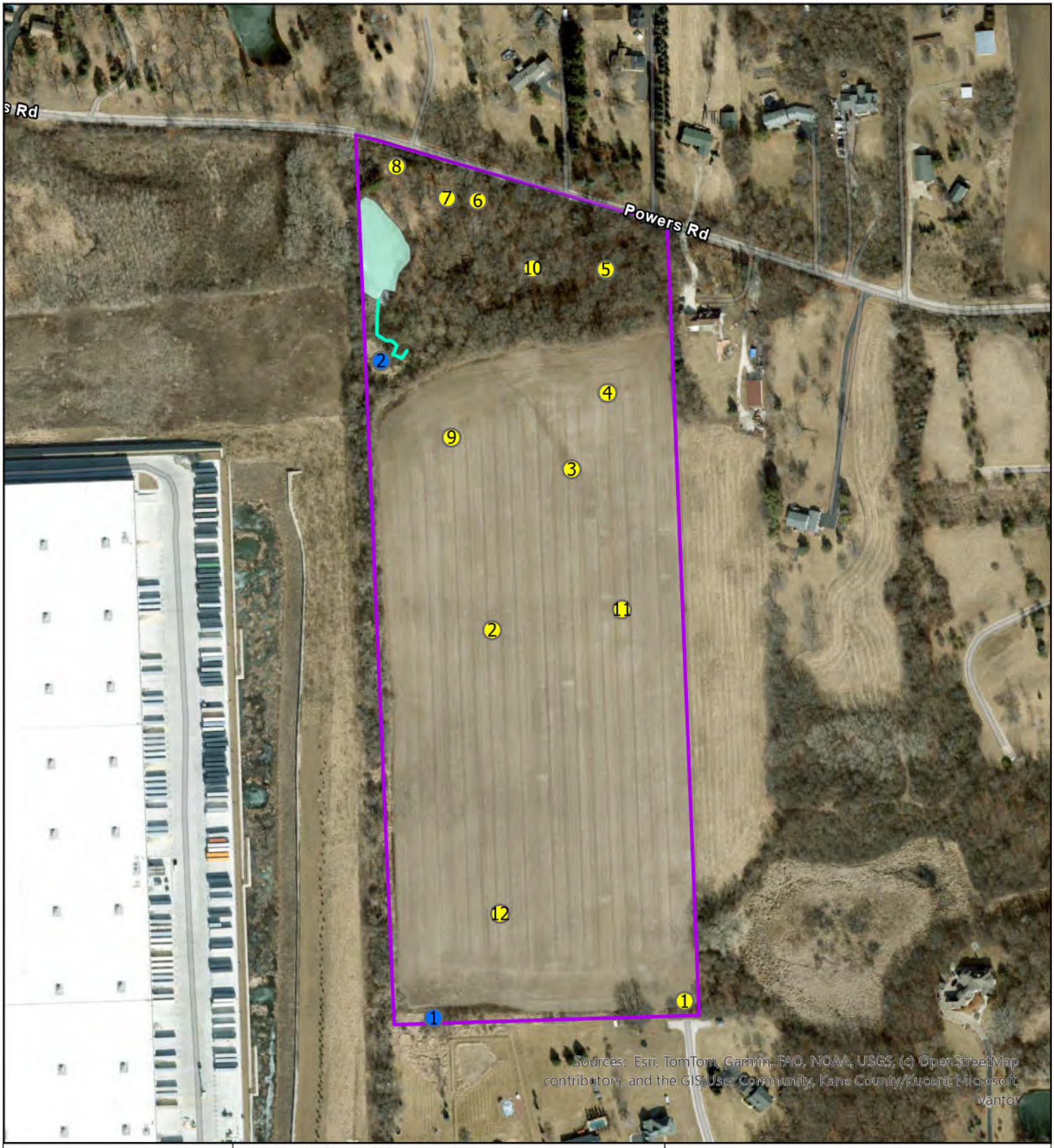
All wetland delineations must be verified by USACE or the Illinois Environmental Protection Agency to be considered official. The wetland delineation conducted onsite is reflective of

environmental conditions at the time the fieldwork was performed. Wetlands are dynamic natural systems; therefore, boundaries may change slightly over time.

Permitting

Impacts to the water resources identified above whether federally or state regulated may require notification and authorization through USACE or the State of Illinois Environmental Protection Agency. Permits required may include Section 401/404, Regional or Nationwide General Permit (RGP & NWP), or an Individual Permit. Non-jurisdictional waters may be regulated by the state.

Appendix A: Mapped Water Resources



DAVEY Resource Group

Site Location: Powers Road, Kane County, Huntley, Illinois

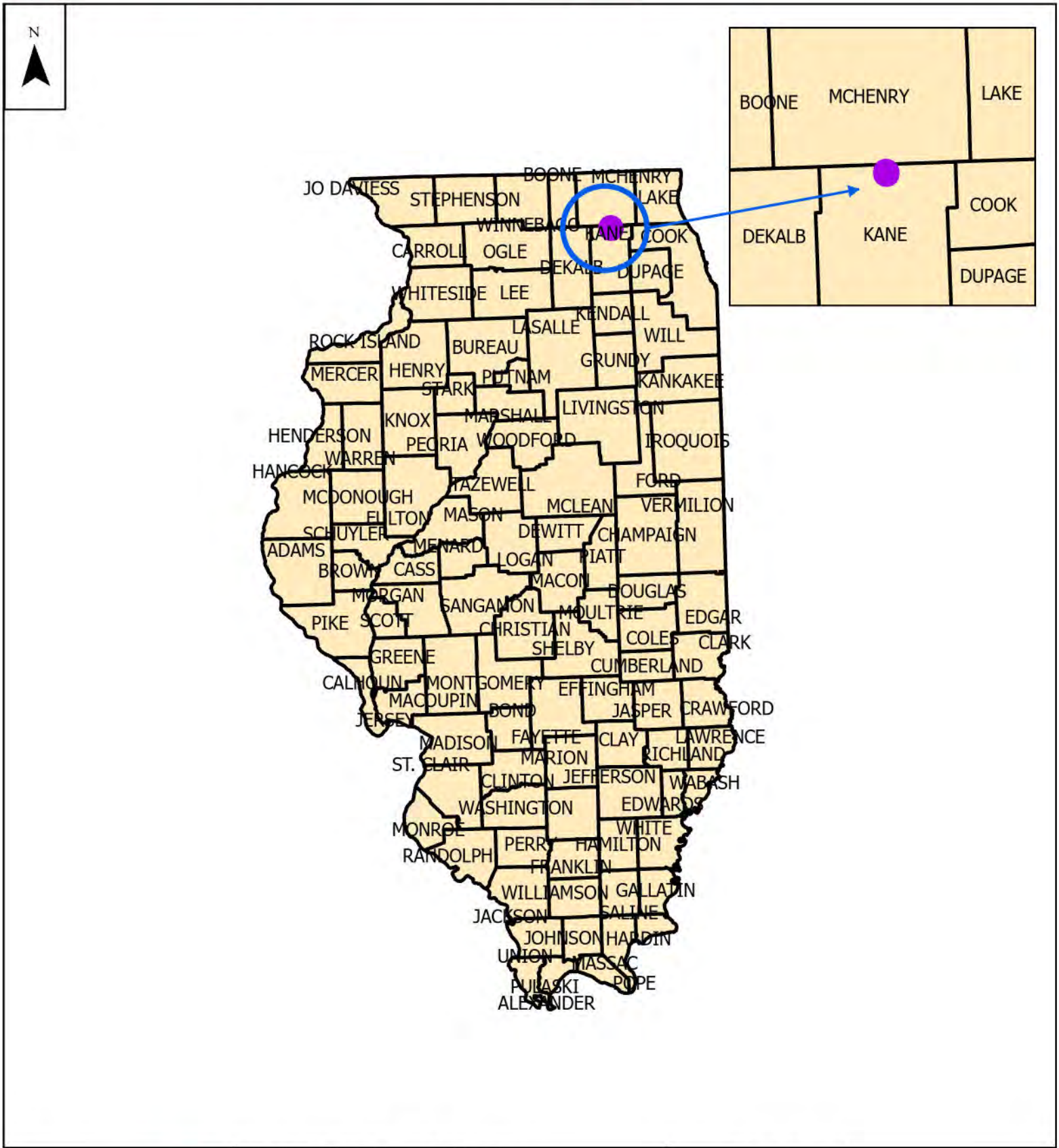
Sources: Esri World Imagery Hybrid. Imagery Date 2021.

Date: November 17, 2025

Legend

- Photo Point
- Data Point
- Stream
- Study Area
- Open Water

Appendix B: Study Area on Illinois County Map



DAVEY Resource Group

Site Location: Powers Road, Kane County, Huntley, Illinois

Sources: Esri USGS Topographic Map
Date 2021

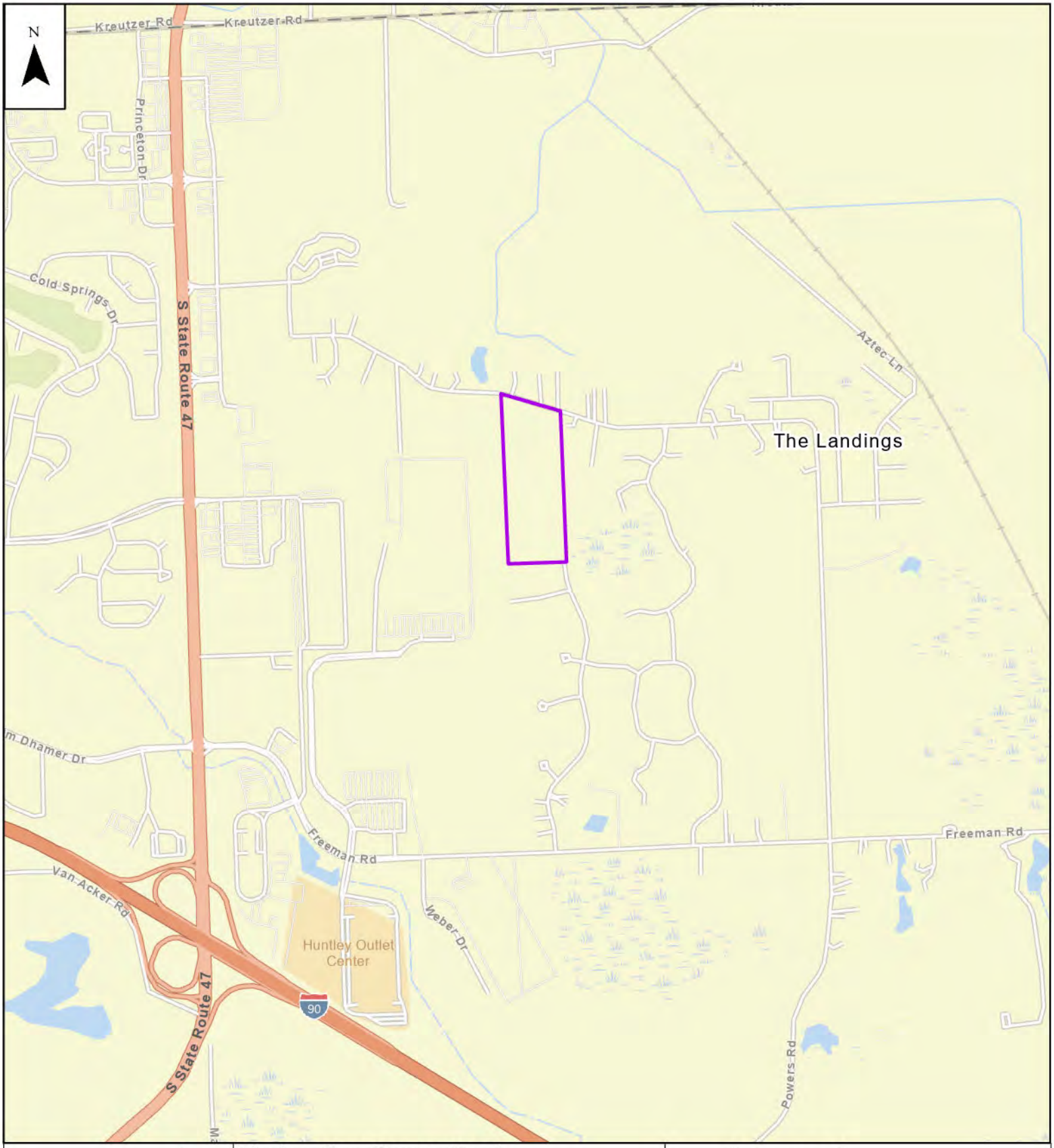
Date: November 17, 2025

0 50 100 200 Miles

Legend

- Study Area
- Illinois_Counties

Appendix C: Study Area Location on Highway Map



DAVEY Resource Group

Site Location: Powers Road, Kane County, Huntley, Illinois

Sources: Esri Streets Map
Date 2025

Date: November 17, 2025

Miles
0 0.28 0.55 1.1

Legend

Study Area

Appendix D: Study Area on Aerial Photograph Map

DAVEY Resource Group

Site Location: Powers Road, Kane County, Huntley, Illinois

Sources: Esri USGS Topographic Map
Date 2021

Date: November 17, 2025

Miles
0 0.1 0.2 0.4

Legend

Study Area

Appendix E: Study Area on USGS Topographic Map

DAVEY Resource Group

Site Location: Powers Road,
Kane County, Huntley, Illinois

Sources: Esri USGS Topographic Map
Date 2021

Date: November 17, 2025

0 0.1 0.2 0.4 Miles

Legend

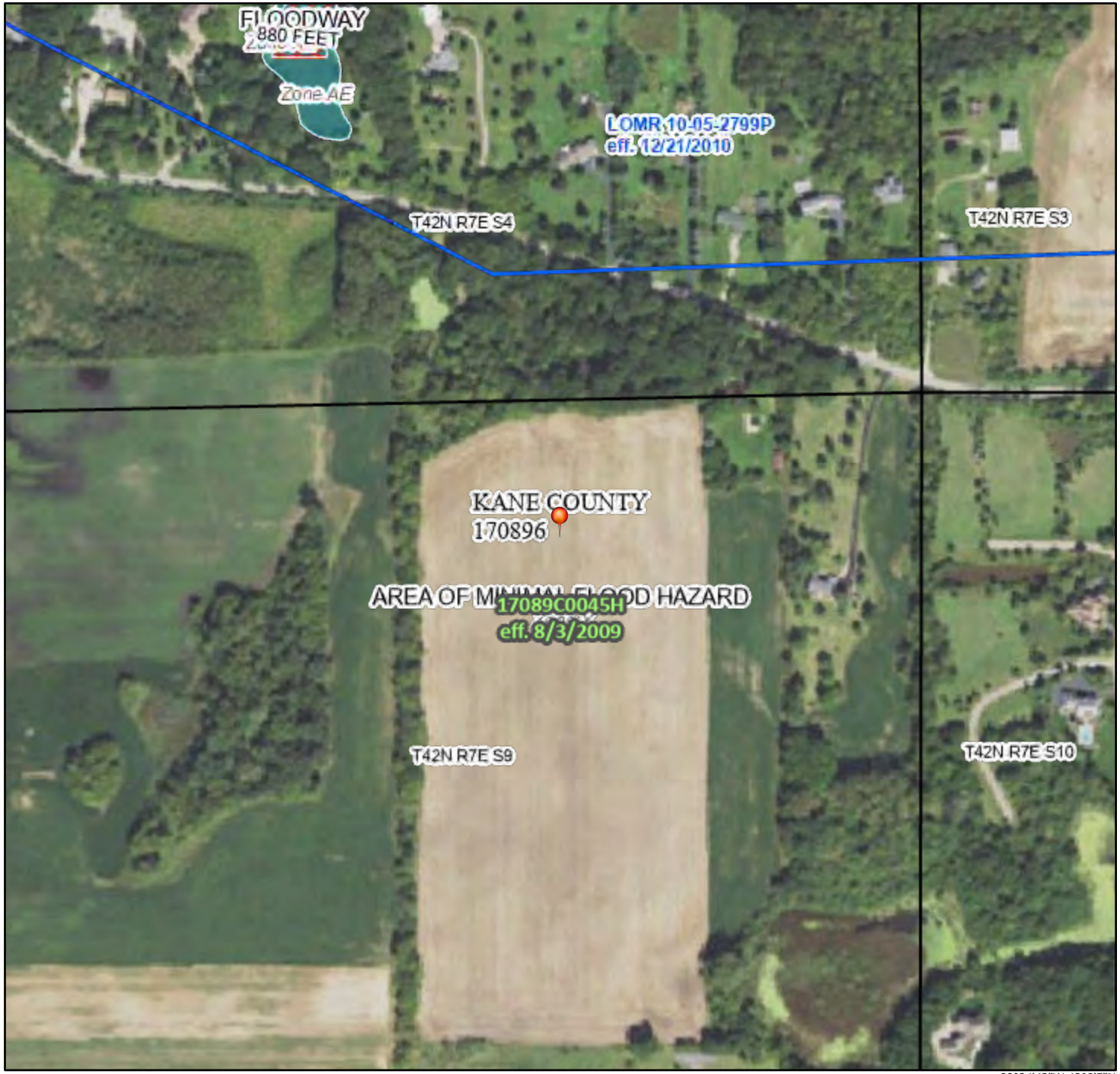
Study Area

Appendix F
FEMA Firmette Map

National Flood Hazard Layer FIRMette

FEMA

88°25'19"W 42°8'32"N



88°24'42"W 42°8'5"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

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
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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 12/3/2025 at 4:47 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.

Appendix G: Study Area Location on National Wetland Inventory Map

DAVEY Resource Group

Site Location: Obetz Road, Hamilton Township, Franklin County, Ohio

Sources: Esri World Imagery Hybrid. Imagery Date 2021.

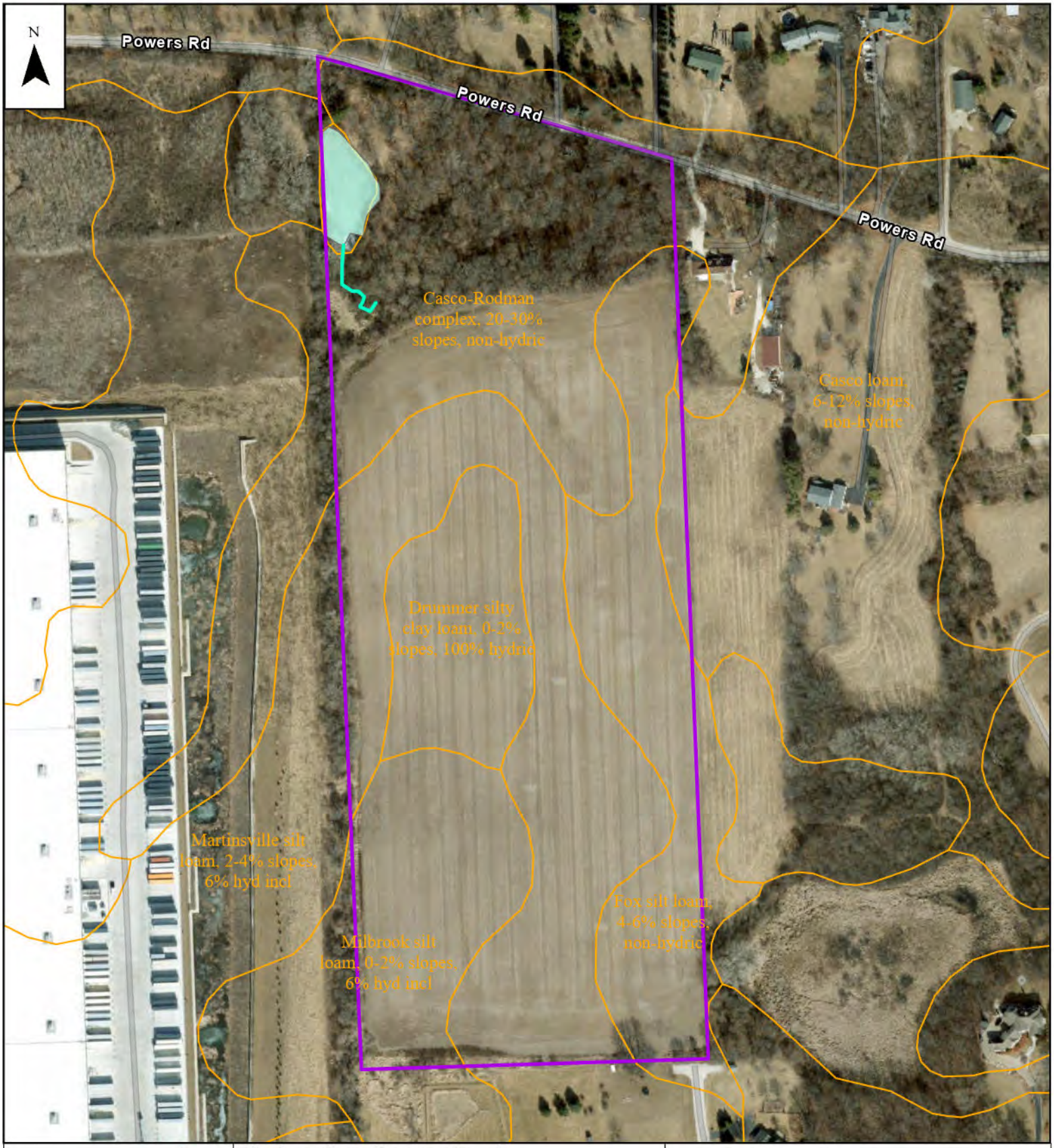
Date: November 17, 2025

0 0.07 0.15 0.3 Miles

Legend

- Study Area
- NWI

Appendix H: Study Area on Soil Survey Map



DAVEY Resource Group

Site Location: Powers Road, Kane County, Huntley, Illinois

Sources: Esri World Imagery Hybrid
Date 2021

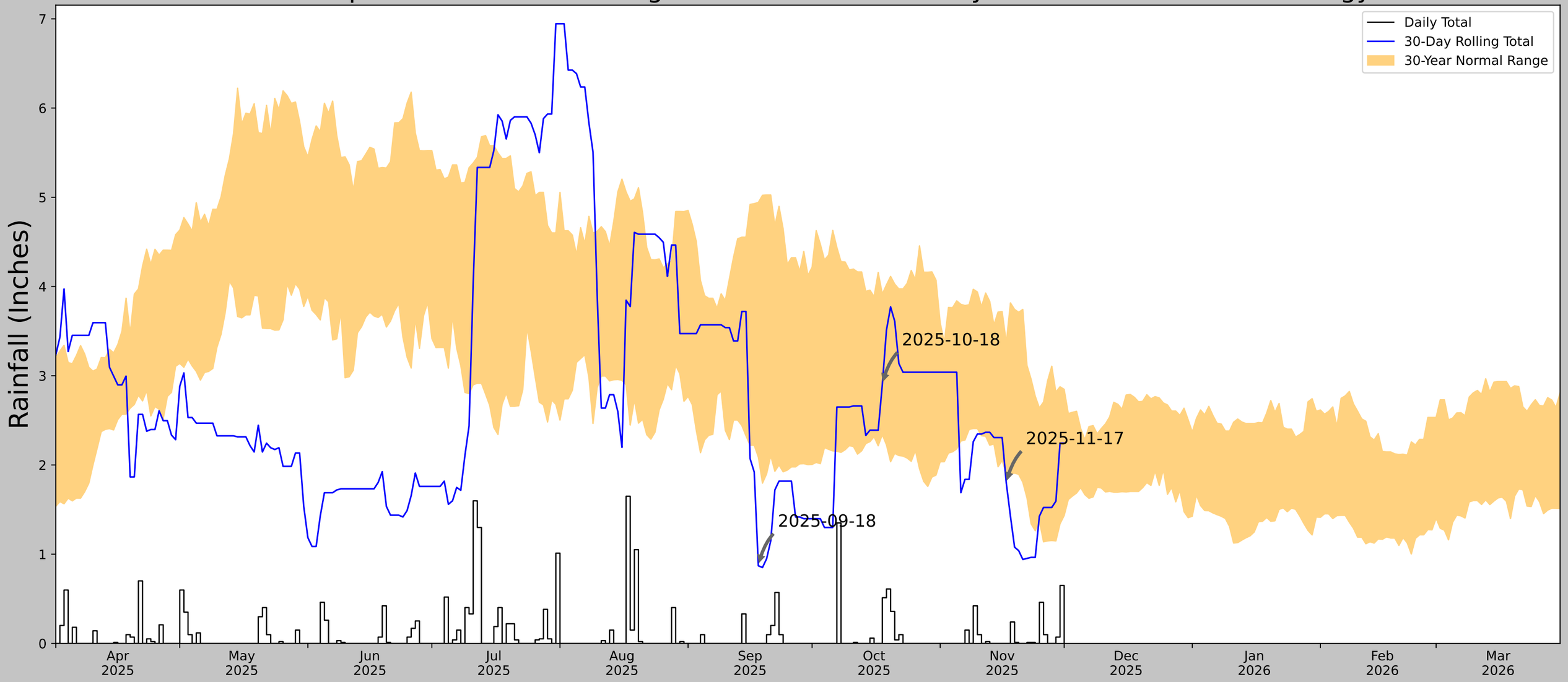
Date: November 17, 2025

0 0.05 0.1 0.19 Miles

Legend

- Study Area
- Stream
- Open Water
- Soils

Appendix I
Antecedent Precipitation Tool



Coordinates	42.1378, -88.4167
Observation Date	2025-11-17
Elevation (ft)	927.909
Drought Index (PDSI)	Moderate drought (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-17	1.900394	3.370866	1.795276	Dry	1	3	3
2025-10-18	2.33937	3.916142	2.901575	Normal	2	2	4
2025-09-18	2.088189	4.942914	0.870079	Dry	1	1	1
Result							Drier than Normal - 8

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.

ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
ELGIN WATER	42.0628, -88.2861	745.079	8.466	182.83	5.358	11227	88
ELGIN 1.9 NE	42.0606, -88.264	807.087	1.144	62.008	0.586	5	0
ELGIN 0.9 WSW	42.0366, -88.3056	830.053	2.068	84.974	1.106	14	0
ELGIN 0.9 WSW	42.0355, -88.3053	819.882	2.128	74.803	1.117	0	2
ELGIN 2.3 WNW	42.0531, -88.3294	824.147	2.32	79.068	1.227	14	0
ELGIN 1.0 S	42.0256, -88.2885	777.887	2.573	32.808	1.242	17	0
STREAMWOOD	42.0256, -88.1783	818.898	6.099	73.819	3.195	76	0

Appendix J
Subject Property Photographs (11/17/2025)

Photo point 1, facing north

Photo point 1, facing east

Photo point 1, facing south

Photo point 1, facing west

Photo point 2, facing north

Photo point 2, facing east

Photo point 2, facing south

Photo point 2, facing west

Photo point 3, facing north

Photo point 3, facing east

Photo point 3, facing south

Photo point 3, facing west

Photo point 4, facing north

Photo point 4, facing east

Photo point 4, facing south

Photo point 4, facing west

Photo point 5, facing north

Photo point 5, facing east

Photo point 5, facing south

Photo point 5, facing west

Photo point 6, facing north

Photo point 6, facing east

Photo point 6, facing south

Photo point 6, facing west

Photo point 7, facing north

Photo point 7, facing east

Photo point 7, facing south

Photo point 7, facing west

Photo point 8, facing north

Photo point 8, facing east

Appendix B Continued

Photo point 8, facing south

Photo point 8, facing west

Photo point 9, facing north

Photo point 9, facing east

Photo point 9, facing south

Photo point 9, facing west

Appendix B Continued

Photo point 10, facing north

Photo point 10, facing east

Photo point 10, facing south

Photo point 10, facing west

Photo point 11, facing north

Photo point 11, facing east

Photo point 11, facing south

Photo point 11, facing west

Photo point 12, facing north

Photo point 12, facing east

Photo point 12, facing south

Photo point 12, facing west

Appendix B Continued

Data point 1, facing north

Data point 1, facing east

Data point 1, facing south

Data point 1, facing west

Data point 2, facing north

Data point 2, facing east

Data point 2, facing south

Data point 2, facing west

Appendix K
Vegetation, Hydrology, and Soils Data Sheets

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Horizon Powers IL 2025 City/County: Kane County Sampling Date: 2025-11-17

Applicant/Owner: Horizon Solar State: Illinois Sampling Point: 1

Investigator(s): Patrick Ewbank, Kelly Volansky Section, Township, Range: S09 T42N R7E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): None Slope %: 0-2

Subregion (LRR or MLRA): L 95 Lat: 42.13491491 Long: -88.41774991 Datum: WGS 84

Soil Map Unit Name: 219A - Millbrook 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.)

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 Visible 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: 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. Salix interior	35	✔	FACW
2. Acer negundo	5		FAC
3. Lonicera maackii	5		UPL
4.			
5.			
6.			
7.			
	45 =Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Phalaris arundinacea	100	✔	FACW
2. Solidago gigantea	5		FACW
3.			
4.			
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	0	x 1 =	0
FACW species	140	x 2 =	280
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	5	x 5 =	25
Column Totals:	150 (A)		320 (B)

Prevalence Index = B/A = 2.13

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 - 10	10YR 3/3	100					Loam	
8 - 20	10YR 3/3	98	7.5YR 4/6	2	C	M	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)
- ___ Iron Monosulfide (A18)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ 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)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ 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**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Horizon Powers IL 2025 City/County: Kane County Sampling Date: 2025-11-17

Applicant/Owner: Horizon Solar State: Illinois Sampling Point: 2

Investigator(s): Patrick Ewbank, Kelly Volansky Section, Township, Range: S09 T42N R7E

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

Subregion (LRR or MLRA): L 95 Lat: 42.13927875 Long: -88.41798644 Datum: WGS 84

Soil Map Unit Name: 969F - Casco-Rodman complex, 20 to 30 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.)

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 Visible 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. Acer negundo	25	✔	FAC
2. Lonicera maackii	20	✔	UPL
3. Cornus alba	3		FACW
4.			
5.			
6.			
7.			
	48 =Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Phalaris arundinacea	100	✔	FACW
2.			
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: 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	103	x 2 =	206
FAC species	25	x 3 =	75
FACU species	0	x 4 =	0
UPL species	20	x 5 =	100
Column Totals:	148 (A)		381 (B)

Prevalence Index = B/A = 2.57

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)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 6	10YR 3/2	100					Silt Loam	a lot of roots
6 - 10	10YR 5/3	90	7.5YR 4/6	10	C	PL/M	Sand	
10 - 20	10YR 2/1	90	10YR 4/1	10	D	M	Mucky Sand	
-								
-								
-								
-								
-								
-								
-								
-								

[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)
- ___ Iron Monosulfide (A18)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ 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)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**) Thin
- ___ Dark Surface (S9) (**LRR K, L**)
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- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

Appendix L
Definition of Wetlands Vegetation Indicator Status (from Lichvar et al 2016)

Obligate Wetlands (OBL). Almost always is a hydrophyte, rarely in uplands.

Facultative Wetlands (FACW). Usually is a hydrophyte but occasionally found in uplands.

Facultative (FAC). Commonly occurs as either a hydrophyte or non-hydrophyte.

Facultative Upland (FACU). Occasionally is a hydrophyte but usually occurs in uplands.

Obligate Upland (UPL). Rarely is a hydrophyte, almost always in uplands.

Species for which little or no information was available to base an indicator status were assigned a no indicator (NI) status. An asterisk (*) after the indicator status indicates that the indicator status was based on limited ecological information.

The wetlands indicator categories should not be equated to degrees of wetness. Many obligate wetlands species occur in permanently or semi-permanently flooded wetlands, but a number of obligates also occur, and some are restricted to wetlands that are only temporarily or seasonally flooded. The facultative upland species include a diverse collection of plants that range from weedy species adapted to exist in a number of environmentally stressful or disturbed sites (including wetlands), to species in which a portion of the gene pool (an ecotype) always occurs in wetlands. Both the weedy and ecotype representatives of the facultative upland category occur in seasonally and semi-permanently flooded wetlands.

Davey Resource Group has added two additional indicators for situations when plants can only be identified to genus. A Wetlands Indicator Species (WIS) is a plant that is most likely obligate wetlands, facultative wetlands, or facultative. An Upland Indicator Species (UIS) is a plant that is most likely indicative of upland or facultative upland conditions. These additional indicators are used when species identification is not possible. A variety of factors are part of the UIS and WIS assignments. Indicator statuses of all locally occurring members of the genus in question are considered, as are the health and size of the population and the indicator status of nearby plants.

Appendix M
References

Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. *Technical Report Y-87-1*. United States Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.

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